

2005

# City of Calais, Maine 2005 Comprehensive Plan

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# CITY OF CALAIS, MAINE



## THE 2005 COMPREHENSIVE PLAN



# **THE CITY OF CALAIS, MAINE**

## **2005 COMPREHENSIVE PLAN**

With revisions based on State Planning Office review for consistency with the Planning and Land Use Regulation Act

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## **A. EXECUTIVE SUMMARY**

### **Introduction**

This update to the 1992 Calais Comprehensive Plan is the product of many hours with a diverse group of individuals. The Comprehensive Plan Update Committee is composed of a cross section of the city of Calais itself. It includes small business owners, public safety personnel, City Councilors, city staff, Planning Board members, a city librarian, and interested citizens. In developing the plan, the committee and consultant received assistance and input from all city departments, local historians, local businesses and the public at large. The Committee wishes to express their appreciation for this assistance and looks forward with them to meeting the development and management challenges that the city faces in the years to come.

A comprehensive plan should guide the City through anticipated changes, helping accomplish things we want while avoiding things we do not want. Change is inevitable; preparation for change is only by design. With respect for its past and a clear eyed optimism for its future this Comprehensive Plan seeks to provide direction for the next 10 years of the city of Calais.

### **History and Culture**

The city of Calais has a wealth of historic and archaeological resources as a result of its location at the head of tide of the St. Croix River. The Downeast Heritage Center is a focal point for this rich heritage for both the city and the region. Many historic and archeological resources within the city are well known yet some remain undocumented and unprotected. The city will promote further documentation of its archeological resources and appreciation of its rich cultural heritage.

The Calais Free Library serves as the cultural center for the Calais area and it is enthusiastically supported by the community. Calais has a wide variety of recreational resources available to the public. Public parks, the St. Croix Golf Course, the Moosehorn Refuge, the city's several lakes, the St. Croix River and the expanses of open space provide many opportunities for outdoor recreation. Basketball, baseball, soccer and other events take place at the public schools and are open to the public. The Calais Recreation Department provides many recreational programs for all age groups. Many of the Department's programs are held at the Community Center Building.

The city is investing in the Waterfront Park as part of its downtown revitalization efforts. The Waterfront Walkway is part of the East Coast Greenway stretching from Key West Florida to Calais, Maine. In addition to this premier trail the city has an extensive network, including a section of the International Trail System, of snowmobile trails that are maintained by the Sunrise Snowmobile Club.

### **Population**

The population of Calais has decreased significantly over the long term, with a higher rate of decline seen in the past decade. In addition our population is aging. There are fewer school age children though this trend is being offset by increases in staffing at the international border since 2001. Like the rest of Washington County average household size is decreasing. Numbers of

retiree and perhaps single parent households are increasing. A seasonal influx of approximately 280 people increases demands on services and these individuals may account for some of the future increases in year-round population. The city will continue to make available demographic information to residents.

### **Natural Resources**

Calais currently offers protection to its natural resources with locally adopted shoreland zoning regulations, zoning and subdivision regulations. These ordinances were substantially re-written to implement policies developed in the 1992 Comprehensive Plan. They are and will be updated to be consistent with the requirements of state and federal regulations and to ensure that Calais retains its character as a maritime city. Protecting public shore and water access and maintaining a healthy balance between industry and natural beauty is crucial for future economic development. Investments will be made in infrastructure that increases access to and use of the city's waterfront. Water quality will be protected and improved through the continued educational, research and regulatory efforts of the city and local resource management agencies.

### **Economy**

The top four sectors of employment for Calais residents in order are 'Education, health and social services'; 'Manufacturing' and; 'Retail trade'. The next two most important sectors comprising roughly equal parts of the employment picture include 'Construction' and 'Public Administration'. Washington County as a whole is supported by the same top two sectors in order of economic importance: 'Education, health and social services', 'Manufacturing'. Retail trade holds a higher share of the employment picture in Calais than in Washington County where 'Agriculture, forestry, and fisheries, mining' ranks third in its contribution to economic activity. The residents of Calais have income levels comparable to residents of Washington County with a slightly greater proportion of residents in higher income categories. However, with the aging of our population, the size of our workforce will continue to decrease. The city will continue to encourage responsible commercial development through land use regulations, regional coordination and marketing.

Calais is a city whose economy has changed and continues to evolve. Calais 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 the Waterfront Development Plan; 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.

### **Housing**

Calais currently contains a wide range of housing types, including a predominance of single-family homes, and a number of mobile homes, multifamily and duplex units, rental units and subsidized units. Calais had a total of 1921 units in 2000, 8.35 percent more than it had in 1990. The total population level is expected to continue its decline over the next decade. While there

may not be a need to drastically increase the overall quantity of housing units, there does appear to be a need to assure an adequate supply of decent affordable housing. The State of Maine defines affordable housing as not costing more than 30% of household income. The data reviewed suggest that the cost of housing in Calais is affordable for most people in the community but that a sizable minority is paying more than they can afford or losing access as prices rise. The majority of people live in owner occupied single-family housing.

The City's housing needs are changing. The City's large number of older homes built prior to 1940 may be too large for today's smaller households and aging population. These structures require more maintenance and improvements, such as weatherization and new wiring, than newer homes. Housing costs also appear to be high for the City's very low and low-income households.

The existing zoning ordinance does not impose significant costs on the cost of building homes and the city is proposing several measures to improve the incentives and opportunities for construction of additional affordable units for the elderly and low income populations. There is a range of new housing in the town: mobile or manufactured homes are utilized often. The city recognizes the need for a comprehensive assessment of its housing stock in order to recommend necessary refurbishments to support demand for affordable units.

### **Transportation**

Transportation linkages in Calais consist of US Route 1 and the international border with St. Stephen, New Brunswick. Our city is reliant on its road network as the primary means of transportation movement. Therefore, local roads should provide safe, reliable access to work, school, stores, and residences. Overall, the roadways in Calais are in fair condition. Maintenance of roads was rated as one of the highest priorities for public investment in the survey of residents. Since MDOT has jurisdiction over most main roads in Calais, the city will continue to communicate and cooperate with that department. The city has a paving schedule for roads that are currently unpaved and requires all new roads to be constructed to municipal standards.

Calais will continue to work with its neighbors and the region to maintain a safe and efficient transportation network across the international border and as a regional service center to eastern Washington County.

### **Public Facilities and Services**

Calais has a wide variety of facilities and services provided by the public and private sectors. This is the heritage of a once much larger city 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 Calais well as costs drive towns to consider more cooperative ways to provide health care, education and emergency services to their communities.

### **Fiscal Capacity**

Calais has managed its finances well over the last five years and the mil rate has remained within

a consistent range. Over the years, the city has dedicated reserves totaling approximately \$364,000 in June 2004. The auditors recommend that the city carry 10% of the total city budget in reserve. Beginning in 2004 the city renewed its commitment to build the surplus to \$800,000.00 over the coming years. Consideration will be given to apportioning some of these resources among two new reserve accounts: 1) Designated Reserve Accounts 2) Capital 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 city is revising and updating a Capital Improvement Plan, as shown in Table I-8 above, to guide the city's capital investments. Infrastructure improvements are needed to upgrade public safety equipment, water and sewer facilities, and to support increased tourism including aggressive implementation of the downtown revitalization and waterfront development plans. These are included in the CIP. Private sector improvements are also needed including more restaurants, overnight accommodations, docking facilities for different types of pleasure craft.

### **Land Use**

Land use in Calais has changed significantly over the years. In 1900 the local population was over 7,500 and the waterfront was dotted with wharves. The city's current population is about 3,447 and all but one of the wharves are gone. 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 bordered by the river and South Street extending south through Milltown to the Moosehorn Wildlife Refuge.

The city made significant updates to the zoning districts in the city after the adoption of the 1992 Comprehensive Plan. The concentrated pattern of development, both commercial and residential, within the city center creates a city many residents enjoy as walkable and accessible. The proposed land use map in this update reflects the existing zoning map to a large degree. It also confirms input from survey respondents and the city council to support downtown revitalization and development, careful planning for development near the new international bridge and low impact recreational development of the city owned land at Nashs Lake.

### **City Survey**

In mid 2004 Calais residents completed a survey to give their views on important aspects of the city's future. The participation rate was high for surveys of this type and included a great deal of written input.

A summary of results of the Public Opinion Survey indicated that citizens like the small town feel of the community and that you can get around easily and quickly. Citizens appreciate the waterfront and the downtown and see both as the city's biggest asset. They like that Calais is an unhurried, safe community with historic charm, access to recreational trails and the river, and services that support the elderly, children and community.

Respondents indicated relatively high dissatisfaction with city water and sewer services noting



sometimes that they are too expensive. Concern was expressed over the need to improve dilapidated housing and support expressed for inspection of rental properties in building codes. In charted results and written comments there was very strong support to continue improving the waterfront and to seek businesses for both downtown retail and visitor services. Comments pointed to the need for overall economic development including warehousing, light industry and manufacturing. Respondents are generally satisfied with police protection but would like to see greater enforcement of laws to inhibit drug use.

Visions for the future of Calais ranged from extreme pessimism to buoyant optimism. Some see Calais going “downhill” toward abandonment while others see it as a dynamic leader with downtown businesses, an active waterfront and a hub for regional recreation. There was concern that without job opportunities Calais would become a retirement community. Many expressed support for the Unobsky School and the Washington County Community College and for the heritage tourism theme initiated by the construction of the Downeast Heritage Center.

**Map Disclaimer:**

The information used to create the maps in this Comprehensive Plan have 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. EMDC/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 EMDC/WCCOG harmless from and against any damage, loss, or liability arising from any use of the maps.

# Calais Comprehensive Plan

Map 1: Location of Calais in Washington County



New Brunswick, Canada

Area in square miles: 40.02  
(34.04 land, 5.98 water)

**Calais**

**Baileyville**

**Baring**

**Alexander**

**Robbinston**

**Meddybemps**

**Charlotte**

**Cooper**

**Perry**

**Pembroke**

**Pleasant Point**

**Eastport**

**Dennysville**

**No 14 Twp**

**Edmunds Twp**

**T18 ED BPP**

**Marion Twp**

Source: MEGIS

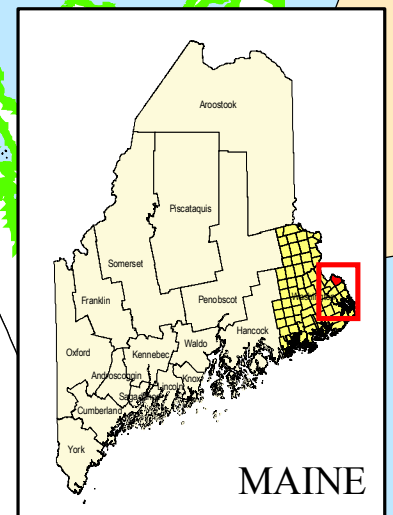
Map created: December, 2003



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(207) 454-0465  
Web site: [www.emdc.org/wccog.htm](http://www.emdc.org/wccog.htm)



0 1.25 2.5 5 Miles



See map disclaimer at end of the Executive Summary.

## **B. CULTURAL RESOURCES**

This section includes discussions about the civic, recreational and cultural life of Calais including the Calais Free Library, the churches and social organizations, recreational services and facilities, and the history of Calais and the St. Croix Valley.

### **HISTORIC RESOURCES**

The history of Calais is rich and varied with its physical environment always taking center stage.

#### **First Colonial Settlement in 1604**

Four hundred years ago the Frenchmen, Sieur de Mont and Samuel de Champlain, sailed from France with hopes of starting a French civilization in the new world. At that time only one other year-round settlement existed in Spanish Florida.

In June of 1604 the Frenchmen entered what is now the Passamaquoddy Bay and sailed up the river until they came to an island considered safe against Indian attack and close to abundant food sources. They named it Isle de la Croix (Island of the Holy Cross), Saint Croix Island after the formation of the river where the confluence of the main channel meets a large bay like a cross. The winter of 1604-05 proved particularly harsh and, in August of 1605, the few survivors left the island - and their dreams - to search for a more hospitable location to start their new settlement.

#### **Colonial Resettlement in the 1770s**

Over 150 years later Daniel Hill, from the Machias area, heard a report about the abundance of timber, fish, game, and that the St. Croix River was navigable for large vessels. In 1779, Hill visited, stayed and built the first house and, with other settlers, the first sawmill. "Thus Calais began. The settlement was made not by war nor with romance, but in sober reality. We cannot trace the influence, but there is no doubt that much that is good and right in our midst, came from these hardy, worthy woodsmen." (Reverend I. C. Knowlton, 1875).

#### **Survey and Sale of "Calais"**

Washington County was organized on June 25, 1789 and soon surveyed and divided into townships. "Calais" was Township Number 5 and contained 19,392 acres of timber, a valuable and marketable commodity. On June 27, 1789, Township No. 5 was sold, for 19¢ an acre, to Waterman Thomas of Waldoborough, Maine. Within a few years, Mr. Thomas sold one half of the township to Shubel Downes of Walpole, Massachusetts, one quarter to Edward H. Robbins of Milton, Massachusetts and one quarter to Abiel Woods. By the time the first census was taken in 1790, there were sixteen "white" inhabitants of Township Number 5.

#### **St. Croix River Established as International Boundary**

In 1783, John Jay, John Adams and Benjamin Franklin, along with their English counterparts, established in the Treaty of Paris that the St. Croix River would be the international boundary between the United States and Canada. However, with three rivers flowing into Passamaquoddy Bay, no one at that time was sure which one was actually the St. Croix River. A commission

was formed in 1792 to survey the region and determine which of these rivers was the true St. Croix, and thus the correct international boundary between the two nations. It was not until 1842, with the signing of the Webster-Ashburton Treaty, that the location of the St. Croix River was finally established and the boundary was marked as it stands today.

**Organization**

By 1800, Township Number 5 had grown to more than 100 residents and a more organized type of political structure was needed. In 1806, Township Number 5, by an Act of the Legislature and in accordance with the wishes of its people, received the name of "Calais". According to Reverend I.C. Knowlton in his book: Annals of Calais, Maine and St. Stephen, New Brunswick, the name of the French city of Calais was doubtless borrowed for the Maine town since was opposite the town of Dover Hill in New Brunswick, Canada as St. Stephen was called at the time. The St. Croix River formed the natural boundary between these two towns just as the English Channel separates England from France. Rev. Knowlton went on to state: "It is greatly to be regretted that the people on the other side of the river did not take the hint, and adopt the equally pretty and appropriate name of Dover, instead of the uneuphonious though pious cognomen of Saint Stephen."

As more families moved to Calais and businesses continued to increase, it became even more imperative that some form of government was needed to "raise money, construct highways, support schools and take care of the poor. Accordingly, a petition was sent to the General Court of Massachusetts, and an Act granting the power to incorporate the town was passed by the legislature and approved by the Governor on June 15, 1809. Thus, the political life of a town began."

**Boom Town in Boom Times**

In the 1820s and 1830s, Calais was the commercial center of the St. Croix Valley. The first ship was built in 1803 and over the next fifty years 250 more vessels were constructed in the busy Calais shipyards. By the end of the 1840s Calais grew to become the second leading port in Maine, ranking only behind Bangor on the Penobscot River. It was common for 1,200-1,400 ships per year to dock in Calais during this period. The market for St. Croix Valley lumber was international and ships left Calais for Europe, South America, Africa and the West Indies as well as the merchant ports of Boston and New York. On the return runs, exotic imports of silk, fruit, rum and furniture were brought to the St. Croix Valley from around the world. "It was in reference to this worldliness that a New York visitor said that Calais was certainly as sophisticated as New York itself." These were, indeed, the "boom" years for Calais.

**From a town to a city**

In 1850 - with a population of 4,640 people - Calais received its city charter, but it was not until 1851 that the first council and mayor took office. Thus 1851 marks the official beginnings of the City of Calais. In 1851 Calais was a thriving community with a population rising to the all-time high of 7,200 in 1900. Lumber was still the chief industry, but other businesses included a shoe factory, a wool pulling concern, a tannery, a granite works, the plaster mill, three box factories, two grist mills, a brick yard, a foundry, machine shops, several ship repair yards, a marine railway, dry docks, a sail loft, and several large lumber mills. A cotton mill was located in Milltown, New Brunswick, and employed 300 Calais citizens. Other commerce at the turn of the

century included nine hotels, two public opera houses, a business college, twelve churches, thirteen schools, eleven fraternal orders, a public library, and an electric street railway.

### **Red Beach Industrial Port**

Located on the St. Croix River near the Calais border with Robbinston, the community of Red Beach was once the hub of flourishing granite and plaster industries. During its heyday the Red Beach Granite Company employed 400 men and the Red Beach Plaster Company employed another 300. There were subsidiary businesses which employed additional numbers of people. Power for the mills was obtained by damming the Beaver Lake stream. Nashs Lake was dammed at its natural outlet so that a canal dug from Nashs Lake to Beaver Lake stream would provide additional water flowage for the mills' power supply. The Nashs Lake dam exists today.

In 1901 the State of Maine ranked first in the nation in terms of the value of granite produced with nearly 200 granite companies along the Maine coast. Maine's best red granite came from Red Beach. There was one main quarry, but several others were opened throughout the area. To hoist and move the pieces of granite, a huge derrick was built over the area to be quarried. Holes were drilled and blasted to free the pieces of stone. Teams of oxen, later, horses, moved the rough hewn pieces to sheds where they were chipped-in-the-rough, cut and polished, then transferred to the wharves for shipping. The granite mill itself was immense, all enclosed. The mill, cutting sheds, and polishing sheds were along the Mill Road close to the quarries.

The pillars at Boston's South Station are told to be of Red Beach granite. It is believed that the soldiers' monument in the Calais park came from the black granite of the Beaver Lake quarry. The milestones marking the ten miles from Calais to Red Beach are unpolished red granite as is the old landmark "the watering trough" once familiar at the entrance to the Carson Road, but now seen at the Pikes Park waterfront park. Many, many tombstones in local cemeteries are of the Red Beach granite.

Also in the former Red Beach industrial port Calais was home to the Red Beach Plaster Company. Built in 1847, it was destroyed by fire in 1926. Raw plaster rock, mined in Nova Scotia and New Brunswick, was shipped on company boats to Red Beach. Three types of plaster were created including regular plaster for building purposes, blue plaster for fertilizer, and fine plaster for Plaster of Paris and dental work. At its peak the company processed 100,000 barrels of plaster during a year. The site is now known as Plaster Mill Cove in Red Beach near the Saint Croix National Monument which marks the historic settlement of Champlain and DeMonts on St. Croix Island in 1604. There, along the edges of the cove, one can still see remains of the old wharves from which tons of granite and plaster were transported.

### **Ghosts of the Past**

From its peak in 1900, the population of Calais has declined in each successive decade. Shipbuilding, a major industry in Calais, ended with the introduction of steel hull ships. The last clipper ship was built in Calais in 1891. Thus, the primary source of capital for this region was slowly being transferred from Calais down the eastern seaboard to the fast growing urban centers further south. The population of Calais mirrored that of the nation with the shift from rural to urban areas. Harold Davis, a local historian of the area wrote in 1950: "Less than seventy years after the end of Calais' shipping, where the river once was home to forty wharves on the Maine

side alone, only ghost-like piles of stones now mark the rich history that came earlier. Only photographs hold the ships that once lined the wharves four abreast.”

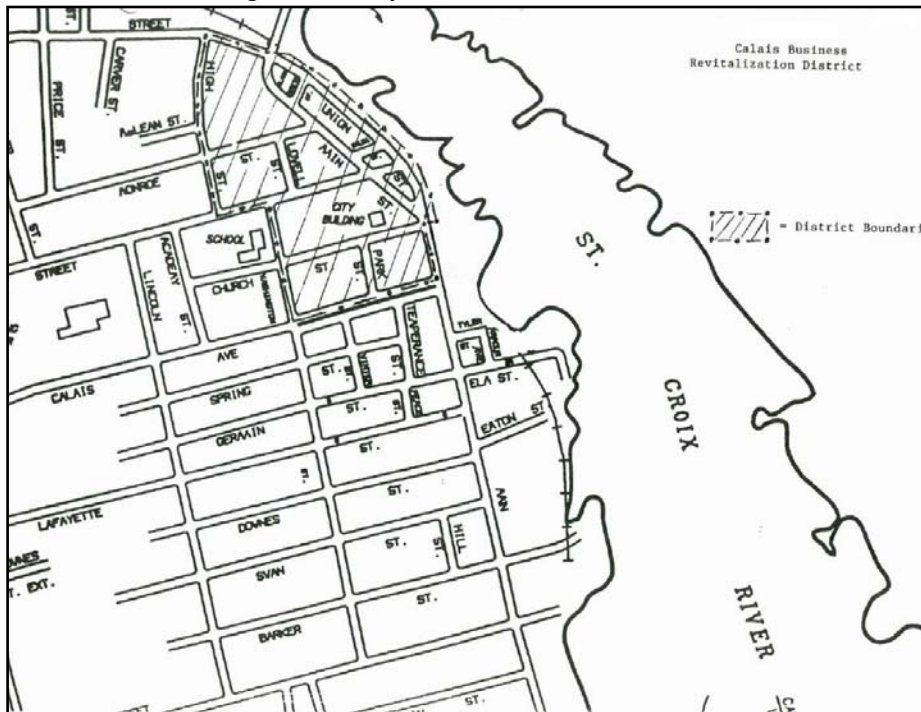
**Present and Future**

For a while, Calais has followed the same route as many other small towns in Maine – and the nation. The word “decline” accurately described many areas such as population, economic and even cultural. Now, the words heard most often in connection with Calais are similar to the phrase of Rev. Knowlton in 1875 that we have “much that is good and right in our midst” and it is now time to work with what we have and build up from there.

There are many recent and long-standing attractions on which Calais can capitalize: the new Downeast Heritage Museum which celebrates much of the 400 years of history of the St. Croix Valley; Devil’s Head, a coastal landmark and conservation area offers trails and water access; the 17,200 acre Moosehorn National Wildlife Refuge offers chances to view nature in an unspoiled environment; and the St. Croix River and other lakes in the region offer opportunities for recreation.

With the vibrant history of the St. Croix Valley, Calais is poised and ready to fully realize and appreciate its past and the value of sharing it along with its present-day unique characteristics.

Calais has a fine heritage that is well preserved and well represented by its old homes, downtown core, graveyards, mill sites and old stone walls. The Downeast Heritage Museum (DHM), on the waterfront in the historic downtown, is the centerpiece of this tradition. Built in the renovated railroad station, the DHM interprets and preserve the historical, cultural and natural resources in Calais and Washington County.



Surrounding the Downeast Heritage Museum is the Calais Business Revitalization District, depicted here. Standards of review within this district, administered by the Planning Board, promote and require materials, colors, techniques and structures that conform and harmonize with the historic architecture of existing structures. Removal of facades that cover

historic features is encouraged and repair of historic features is encouraged over their replacement.

Most of the buildings in this district were constructed after the fire of 1870, when Calais was a thriving shipbuilding and lumber port. The Calais Business Revitalization District includes many buildings listed on the National Register of Historic Places and other historic sites, landmarks, buildings, signs, and structures. This district was established as the Historical District Development Ordinance which became the Business District Revitalization Ordinance, Chapter 9 of the Land Use Codes in 1996.

Calais has three other historic districts, depicted on Map 3, Public Facilities – City Center, one that coincides partially with the Business Revitalization District and two others that are primarily residential. The National Register of Historic Places, administered by the National Park Service, is a listing of those buildings, districts, structures, objects and sites judged worthy of preservation for their historical, cultural or archaeological value. Currently, Calais has fourteen historic sites listed in the Register. They include the following all of which are depicted on Maps 2 – Public Facilities and 3 Public Facilities – City Center:

- Calais Historic District (See Map 3)
- Gilmore House, 316 Main Street
- Thomas Hamilton House, 78 South Street
- George Washburn House, 318 Main Street
- St. Anne’s Episcopal Church, 23 Church Street
- Theodore Jellison House, River Road
- Whitlocks Mill Light Station, South Bank of St. Croix River
- Holmes Cottage, 241 Main Street
- Dr. Job Holmes House, 247 Main Street
- McGlashan-Nickerson House, St. Croix Drive, Red Beach
- Joshua Pettigrove House, Off St .Croix Drive, Red Beach
- Calais Residential Historic District (See Map 3)
- Hinckley Hill Historic District (See Map 3)
- Calais Free Library, Union Street

Detailed maps depicting the three historic districts on parcel maps are available in the Code Enforcement Office in the City Building.

There are many other historic sites of local significance in Calais. Some are located within the historic districts above while others are scattered around the city. Along the waterfront, they include:

- Pikes Park at the City Waterfront Park, the site of E.C. Pikes public wharf;
- remains of old shipbuilding sites, dry dock, lumber and coal wharves;
- the Ledge Wharf remains, used for shipping granite and a ships store;
- the remains of breakwaters at the Ledge, designed to protect sailing vessels from going on the rocks at the edge of the channel; and
- the Ledge which includes the cemetery, school (Wilson district), and granite quarries.

Within the City are others including:

- the Civil War Memorial at Memorial Park on Main Street;
- the St. Croix No. 1 Fire House, for a while used as the Happy Gang Senior Citizen's Center and currently under restoration by the city, fire department and many volunteers;
- the Nichols House at 107 Union Street;
- the Sawyer House at 7 Calais Avenue; and
- the Calais Temperance House at the corner of Calais Avenue and Temperance Street.

Outside of the city center there are several others including:

- the community of Milltown that housed many sawmills and the rail line to ships on the Calais waterfront;
- the Bog Brook Community which had a school, stores, and church with an established graveyard; and,
- in the Red Beach Community, a school, churches, firehouse, cemetery, red granite quarries, polishing mills, water powered plaster mill and shipping wharves as well as the Red Beach granite quarries and Flowed Land Ponds.

While the City is aware of many of its historical treasures, a comprehensive inventory has not been completed.

### **SELECTED TIMELINE**

**1604 First** "white" settlers visited the area and settled on "St. Croix Island"

**1604 First** Christmas celebration held on the North American Continent was on Saint Croix Island

**1779 First** permanent "white settler, Daniel Hill, came to Township Number 5

**1780 First** sawmill was built on Porter's Stream

**1781 First** framed house was built by James Dyer

**1781 First** school was taught by John Barnard with 12 scholars

**1789 First** oxen were brought to Calais by Daniel Hill

**1791 First** store was kept by Joseph Porter at Ferry Point

**1803 First** vessel to be built in Calais was built by Paul Knight and called: "Liberty"

**1805 First** hotel was built and kept by Shubal Downes

**1806 First** post office was established and Stephen Brewer was the first postmaster

**1806 First** time the name of "Calais" was received by Township #5, by an Act of the General Court of Massachusetts

**1809 First** town government was organized; Calais was incorporated as a town



- 1810 First** regular town meeting was held, and the first money raised for town purposes was for the advancement of education. William Pike, Jarius Keene and Jones Dyer were chosen to represent the school committee. \$6,500 was voted for the support of the schools.
- 1822 First** lawyer was George Downes
- 1823 First** bridge was built in Milltown (section of Calais)
- 1826 First** church, the Congregational Church, was built on Calais Avenue
- 1827 First** bridge built at Ferry Point
- 1827 First** physician was Dr. Whipple
- 1828 First** Fire Company was organized on November 3rd with 33 members; William Goodwin was the captain.
- 1828 First** stage coach was run between Calais and Eastport by Mr. Mc Farland
- 1832 First** fire engine was the *Frontier*
- 1836 First** publication of the “Calais Advertiser” – local newspaper. First edited by James Shepherd Pike
- 1836 First** incorporation of a railroad (*Palmer & Machiasport*) in Washington County – bought by the Eastern Mill and Land Company, owned in part by John Whitney of Calais.
- 1839 First** railroad was completed between Calais and Milltown, but was used only for lumber cars hauled by horses
- 1841 First** Temperance society was formed
- 1847 First** telegraph lines were put up by the New Brunswick Telegraph Company
- 1850 First** incorporation of the Town of Calais to the “City of Calais”.
- 1851 First** city council meeting held and the election of the first mayor: George Downes.
- 1862 First** kerosene lamps were introduced
- 1870 First** “great” fire in Calais with loss of numerous Main Street buildings, including the “subscription” public library. Ships and wharves were also lost when the fire worked its way down to the shipyard. The estimated dollar loss for that time was” \$1,000.00.
- 1886 First** system of water works was established by the Maine Water Company
- 1888 First** electric lights were used on the streets (Sept. 6)
- 1892 First** free public library (Calais Free Library) was built and opened to the public on July 4, 1893
- 1894 First** electric street railroad began running between Calais and Milltown on July 4<sup>th</sup>

- 1906 First** opening of the Woodland Pulp and Paper Mill in Baileyville, Maine -employing numerous Calais residents
- 1947 First** class enters Calais Memorial High School
- 1956 First** patient admitted into the Calais Regional Hospital
- 1957 First** - actually – fourth – Ferry Point Bridge completed
- 1958 First** National Historic Site – Saint Croix Island – purchased by the National Park Service
- 1959 First** radio station (WQDY) begins operation
- 1970 First** opening of the Washington County Technical College
- 1978 First** Calais High School is built
- 1999 First** plans were started for the development of the Downeast Heritage Museum and celebrations to commemorate the 400<sup>th</sup> anniversary of the settlement of Saint Croix Island – all to take place in 2004

**SELECTED REFERENCES**

- Knowlton, Rev. I. C. 1875. Annals of Calais, Maine and St. Stephen, New Brunswick
- International Community on the St. Croix by Harold A. Davis, Orono, Maine: Maine Studies no.64, 1974.
- "A brief history of Calais, Maine" by Ed Boyd.
- "A Sense of Time & Place in the St. Croix Valley, Maine: An interpretive essay by David Eaton Mauk, 1976.

**ARCHAEOLOGICAL RESOURCES**

Archaeological resources include locations with evidence of the early presence of human beings, including the structures, artifacts, terrain features, graphics and/or remains of plants or animals. Archaeological resources refer to those resources found underground, and include those which are 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 much of Calais' coastline has sites that may prove to be archaeologically significant. There are six known prehistoric archaeological sites specifically identified by MHPC (96.03, 96.04, 96.7, 97.01, 97.02, and 97.10) within Calais along the banks of the St. Croix River. These areas include ruins of early mills, wharves, bridges; the Salmon Falls Indian Fishery, which is located one mile northwest of downtown Calais on the St. Croix River; the Ferry Point Indian Encampment and other early Indian sites. Site 97.10 on Devils Head is on the National Register. The first

permanent log home of Daniel Hill, built in 1793, located near what is now the Ferry Point Bridge, is also a significant site.

Many of the sites with archaeological potential are located within areas protected by shoreland zoning. The Calais 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. Professional archeological survey for the new international bridge and of Devils Head is complete.

There are 8 historic archeological sites located within Calais, according to the Maine Historic Preservation Commission (MHPC). These are summarized below:

Site Name	Type	Site Number
St. Croix Colony	French Settlement	ME 071-001
“Ernst T. Lee”	American wreck, schooner	ME 071-002
“Rose Standish”	American wreck, side-wheeler	ME 071-003
“Ventura”. “Venture”	Canadian wreck, schooner	ME 071-004
“Fannie Ellen”	American wreck, gas screw	ME 071-005
“Boston”	American wreck, schooner	ME 071-006
Wood’s Ice House	American icehouse	ME 071-007
“Leona”	Canadian wreck	ME 071-008

A map supplied by the MHPC, available in the City Building, depicts the location two of the sites, ME 071-001 and ME 071-007, that can still be located. Other than excavations by the National Park Service in the late 1940s and late 1960s on the St. Croix Island and limited work on a new International bridge site in 2000, no professional survey for historic archaeological sites has been conducted to date in Calais. Further such fieldwork could focus on sites relating to the first Euro-American settlement in the town the late 18<sup>th</sup> century.

The St. Croix Island International Historic Site is located near the southern border of Calais. This historic site, an island in the St. Croix River, is the location of the first American settlement north of Florida. A shoreside park is maintained by the National Park Service. For generations, the island was used by Indians for trade and storage. Sieur de Monts and his pilot, Samuel de Champlain, under a Royal Patent from King Henry IV of France left a group of men on the island to establish a settlement in 1604. After one winter on the island, the lack of drinking water, the exposure to the elements and crowded living conditions caused the survivors to relocate to Nova Scotia.

The St. Croix International Historic Site attracts visitors from both sides of the border. The island can only be reached by private boat. However, the park on Route 1 offers an excellent view of the island. Picnic areas, parking, shelter and an interpretive display of the history of St. Croix Island can be found at this location. The Red Granite Polishing Mills and Plaster Mill were also located in this vicinity.

**CULTURE/COMMUNITY EVENTS**

The city has numerous cultural and recreational facilities and programs. They are supported city government and by many local and regional civic organizations. Some of these include:

- American Legion
- St. Croix Historical Society
- Garden Club
- Knights of Pythias
- Veterans of Foreign Wars

There are also numerous celebrations in Calais round the year. Many are noted in the descriptions of the activities of the community organizations below.

**The Calais Free Library**

The Calais Free Library, built in 1892 and opened to the public on July 4, 1893, is located on Union Street adjacent to the newly constructed Downeast Heritage Museum on the beautiful St. Croix River. The Library acts as the cultural center for much of Washington County. There are two full-time librarians and two part-time librarians, plus a part-time custodian. The older section of the Library includes a section for young adults, a picture book section as well as the large “Chapter Book” room, which also houses the extensive juvenile collection of fiction, non-fiction and reference books. Both audios and videos are also available for youngsters of all ages. Downstairs in the older part of the library are the following sections: Mystery, Science Fiction, Western, Adult fiction and Biographies. The new addition to the Library was built in 1985 and it contains an administration office, an information and check-out counter, a non-fiction collection of books, reference materials, periodicals, audiocassettes, videocassettes and three public access computers, plus a computer for on-line access to the card catalogue.

The lower level of the Library has an Art Gallery, Genealogy Room and Safe Storage area. The very special collection – and much used at present – “Champlain Books” are located in this section of the Library. The Art Gallery has a show by a different artist each month; the diversity of art styles is a continuous delight to many people. The Genealogy Room and Safe Storage Area contain a unique collection of historic documents, scrapbooks, pictures, original cemetery and funeral home records, and numerous reels of microfilm of our local newspaper: “The Calais Advertiser” from 1836 to present. A special collection that includes books that are useful in genealogical research, and rare-out-of-print editions are also housed in this room. During the summer months numerous genealogists from both the United States and Canada travel to this Library to use the material located here to further their genealogical research. In an ongoing effort to preserve the history of this area, the public is encouraged to donate historical materials (scrapbooks, old photos, family histories) to the Library.

The annual circulation of books, periodicals, audiocassettes and videocassettes is around 40,000 items. The number of inter-library loan requests that are generated by patrons of the Calais Free Library ranks this library as one of the highest in the state. Now, the number of items requested by patrons of other libraries across the State of Maine has also increased dramatically – about

100 items a month are sent out to other libraries. Over a thousand books and other items are added to the collection each year. Patrons are from not only Calais, but from numerous communities surrounding Calais as well; they are drawn to this Library because of the quality service offered to them.

The Library has the following equipment: Computers including four public accesses, two for staff, and three for the new, on-line card catalog and circulation system; two electric typewriters; one microfilm reader/printer; one photocopier; and one fax machine.

The Calais Free Library is part of the state-wide system called: Maine InfoNet. This library is also part of the state-wide system of about 50 Maine libraries – public and academic – that use the on-line card catalog and circulation system called: Minerva.

**Future Needs of the Library:** The Children’s section of the Library needs to be totally renovated/revitalized. There is a need to follow the guidelines set up in the up-to-date, Preventive Maintenance Checklist and to install a security system. Staff need to keep abreast of the varied number of formats for books and other items including DVD’s and music CD’s. The library is overcrowded in the adult section and needs to consider expansion. An Endowment Fund for the Library is needed to address these and on-going needs.

### **The St. Croix Historical Society**

The St. Croix Historical Society has been active in preserving the photographic and verbal history of Calais. The Society operates a museum at the Holmes Cottage during the summer months and also creates a variety of historical exhibits. The Calais Free library maintains historical artifacts and documents for the Society in their safe storage area. The public is invited to attend the Society’s meetings and the lectures that are given about the history of the area.

### **Churches, Civic and Social Organizations**

Churches in the City include the Second Baptist Church (Church Street), the Wesleyan Church (North Street), St. Anne’s Episcopal Church (Church Street), the First Congregational Church (Calais Avenue), Church of God (Germain Street), Immaculate Conception (Calais Avenue), Kingdom Hall (North Street), Milltown Baptist Church (North Street), Seventh Day Adventist Church (Chapel Street), and the United Methodist Church (Main Street). The Methodist Homes has a meeting facility that is used by a number of groups including the Senior Citizens, church groups and the Audubon Society.

Civic and social organizations include the St. Croix Masons, the American Legion, and the Knights of Columbus, Rotary International, Lions and Lioness Clubs, Veterans of Foreign Wars, among others.

### **St. Croix Valley Healthy Communities**

One of 31 Healthy Maine Partnerships, St. Croix Valley Healthy Communities serves communities and schools in Alexander, Baileyville, Baring, Calais, Charlotte, Cooper, Crawford,

Dennysville, Eastport, Edmunds, Grand Lake Stream, Indian Township, Meddybemps, Pembroke, Perry, Pleasant Point, Princeton, Robbinston, Talmadge, Topsfield, Vanceboro and Waite. Its mission is to work with local people to reduce tobacco use, increase physical activity, and promote healthy eating habits for those living in the St. Croix Valley. Recent projects in support of this mission include:

- Life long physical activity program coordinated and implemented for communities and schools that provides free outdoor equipment to service area. Equipment includes skis, snowshoes, skates and kayaks.
- Community/school garden established in Calais
- Smoking policies adopted in Union 106 schools
- Honoring Active People program promotes physical activity among school and community members
- Vending machine and nutrition policies adopted in all union 106 schools
- After school physical and nutrition programs for both staff and students in union 106 schools
- Health education curriculums written in schools
- Establishment of a school based health center at Calais High School
- Hundreds of thousands of dollars worth of grant money received to promote physical activity, healthy eating habits, and tobacco prevention efforts throughout the service area.

**Recreational Programs and Facilities**

Calais has a wide variety of recreational resources available to the public. Public parks, the St. Croix Golf Course, the Moosehorn Refuge, the various lakes, and the St. Croix River provide many opportunities for outdoor recreation. The Calais Recreation Department is the hub for recreational activities for the greater Calais area. They provide youth and adult activities and organize and administer the county Junior High School (JHS) athletic programs, as well as run the JHS sports for Calais and Union 106 youth. The department also administers and cares for a number of excellent recreational facilities.

The Recreation Department has a full calendar of activities.

<b>Spring</b>	<b>Summer</b>	<b>Fall</b>	<b>Winter</b>
JHS baseball JHS softball Floor hockey Yoga Step aerobics Martial arts Co-ed adult softball Adult golf lessons	Calais day camp (8 weeks) Basketball camp (3) Cheerleading camp Baseball camp Wrestling camp Babe Ruth baseball American legion baseball Red Cross swim lessons Public swim (7 days/week) 5 mile road race drama babysitting course Major League soccer game USGA/LPGA golf program USTA youth tennis Adult tennis lessons Martial arts	JHS soccer JHS volleyball JHS Cross Country JHS gold 4-6 soccer league 1-3 soccer program drama program 4-6 cross country step aerobics martial arts	State cheerleading championship (Bangor) Weekend basketball tournaments (4 weekends) 3-4 basketball league 5-6 basketball league JHS boys basketball JHA girls basketball Open gyms (12 hours/week) H.S. Rec Basketball 7-8 basketball league step aerobics art class 4-8 wrestling 5-6 boys & girls travel basketball teams 7-8 boys & girls travel basketball teams 4-6 competition cheerleading squad 6-8 JHS competition cheerleading squad

The full-time Recreation Director supervises staff and schedules events that take place at the Calais Community Center, Calais High School, Elementary School, Washington County Community College, Bangor Auditorium, DiCenzo Athletic Complex, playgrounds (4) and outdoor basketball court.

A five-member advisory commission supports the operation of the Department. The commission's main function is to guide program development, to help determine the future needs, and to provide community and financial support for the Department's activities.

The City contributes \$95,000 a year towards operating expenses and minor capital improvements and the department raises about \$60,000 towards operating expenses.

Currently the department has completed all of its 15 year planned expansions, including a major level softball field with lights, another tennis court, a skate park, a baseball field, and the large playground at the complex. High on the present plans list is a new community center that will provide all activities that can be offered in a complete facility, such as pool tables, ping-pong, computer room, TV room, food area, exercise rooms, meeting rooms, gymnasium and theatre (state area).

Recreational facilities owned and managed by the city are summarized in the following table.

Facility	Location	Parcel Size	Available Facilities
Memorial Park	Route 1	3.5 acres	Playground, bandstand and a memorial to veterans
Calais Community Center	Academy/Church Streets	2 acres	Recreation Hall; gymnasium; office, meeting rooms
Calais Elementary School	Garfield Street	1 acre	Playground, multi-purpose/gym room
Calais High School	Route 1	5 acres	Baseball field, soccer field, three benches, and a gym
Nashs Lake	Located near center of the municipality	640 undeveloped acres	There are no immediate plans to develop this property and no permanent access to the land has been established. Currently, access is gained by an unpaved extension of Hardscrabble road.
Calais Post Office Park	North Street	.25 acres	Two benches. This park will adjoin a downtown park scheduled for construction in 2005.
Pikes Park	Along the St. Croix River		A paved boat ramp and 20 paved parking spaces. There is a wharf for boaters and fishermen, and benches.
Steamboat Street Ramp	Along the St. Croix River	1 acre	A gravel boat ramp
Thomas DiCenzo Athletic Complex	Calais Avenue	14 acres	Outdoor pool (75 by 140 feet), fields for baseball, Little League, soccer and softball; a full basketball court; three tennis courts; large playground; three baseball cages and a large skate park.
Milltown Park	Milltown	.5 acres	Basketball court; playground
Waterfront Park and Walkway	Near the business district	+/- 2 acres	Currently under construction. The area will have a lighted scenic waterfront area, access to the St. Croix River, and a path eight feet wide for walking and jogging. There will be picnic tables located on the landscaped grounds along with park benches. The old wharf located here will be preserved for its historic value. The park is being developed in accordance with the Department of Environmental Protection's guidelines for shoreland development. The walkway extends from Barker Street to Todd Street.

The Bureau of Parks and Recreation within the Maine Department of Conservation administers the following programs which make financial assistance available to municipalities:

The Public Boating Facilities Program, which provides funds to assist in the acquisition, development or improvement of public boat facilities;

The Snowmobile Trail Grant Program, which provides funds for the construction and maintenance of snowmobile trails;

The ATV Trail Grant Program, which provides funds for the construction and maintenance of all-terrain vehicle trails.

Based on the requirements of the growth management law, the Bureau reports that it will not be able to allocate funds from these programs to towns whose comprehensive plans and implementation programs do not at least contain policy statements which directly relate to the provision of public boating facilities, snowmobile trails, and ATV trails (grants to eligible private organizations and clubs are not affected by the law). If the local plan and implementation program do not support the provision of these recreation facilities, the Bureau reports that it would find it difficult to award financial assistance to the city for them. The comprehensive plan should contain an inventory of the sites and trails currently available, a discussion of any deficiencies and problems, and one or more policies and strategies identifying the City’s course of action with respect to these types of recreation facilities.

**Adequacy of Recreation Facilities**

The Maine Department of Economic and Community Development, Community Parks and Recreation Division published guidelines for types of 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. Analysis of this information, based on a Calais 2000 population of 3,447, shows that Calais provides, and has plans in place to provide, facilities that more than adequately serve its citizens.

<b>Guidelines for Recreation and Park Services for Municipalities with Populations between 2,500 and 5,000</b>	<b>Located In Calais?</b>	<b>Condition</b>	<b>Description/Location/Capacity</b>
<u>I. Administration</u>			
A. Recreation & Park Board or Committee	<b>Yes</b>	<b>n/a</b>	
B. Community Education/Recreation Combined School/Town Rec. Dept.	<b>Yes</b>	<b>n/a</b>	
<u>II. Leadership</u>			
<i>Summer Program:</i>			
Swimming Instructors	<b>Yes</b>	<b>n/a</b>	
Summer Recreation Director	<b>Yes</b>	<b>n/a</b>	
<i>Winter Program:</i>			
One Skating Rink Supervisor	<b>No</b>	<b>n/a</b>	Skating rink is located in neighboring St.



Guidelines for Recreation and Park Services for Municipalities with Populations between 2,500 and 5,000	Located In Calais?	Condition	Description/Location/Capacity
for each area			Stephen, NB
One general Program Supervisor (part time)	Yes	n/a	
<i>Year Round Program:</i>			
Full-time Recreation Director	Yes	n/a	
Part-time or Contractual Program Specialist	Yes	n/a	
<u>III. Program</u>			
Swimming Instruction	Yes	n/a	
Supervised Playground Program	Yes	n/a	Day camps
Senior Citizen Club	No	n/a	Projected for new community center
Teen Program	No	n/a	Projected for new community center
Skiing Instruction Program	No	n/a	
Ice Skating	Yes	n/a	
Community-wide Special Events	Yes	n/a	
Organized Community Music Group	No	n/a	
Arts & Crafts Programs	Yes	n/a	
Evening Adult Education & Recreation Programs	Yes	n/a	
Organized Dance Group	No	n/a	
Day Camp Program	Yes	n/a	
<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	B-D	4 playgrounds: Union Street D; Milltown B; DiCenzo complex B; Main Street Park D; Red Beach D
Community Recreation Area, 12-25 acres w/ball fields, tennis courts, swimming, ice skating, etc.	Yes	B	DiCenzo complex
Softball/Little League Diamond (0.75 per 1,000 pop.)	Yes	B	1 diamond
Basketball Court (0.50 per 1,000 pop.)	Yes	B	2.5 courts (Milltown; DiCenzo)
Tennis Court (0.67 per 1,000 pop.)	Yes	C	3 courts
Multi-purpose field: football, soccer, field hockey (0.50 per 1,000 pop.)	Yes	B	2 fields
Swim area to serve 3% to 5% of town pop.	Yes	C	Sufficient to serve 5% of population
Pool -27 sq. ft/water per user or Beach 50 sq. ft/water, 50 sq.ft./beach per user	Yes	C	
Ice Skating (5,000 s.f. per 1,000 pop.)	No	n/a	Have had in past; may reinstate; rink available in St. Stephen, N.B.
Playgrounds (0.50 per 1,000 pop.)	Yes	B-D	4 playgrounds
Horseshoe Courts	No	n/a	
Shuffleboard Courts	No	n/a	
Picnic Areas w/tables & grills (2 tables per 1,000 pop.)	Yes	B	Waterfront Park; 4 existing; could use 4 more
Outdoor Education Area or Nature Center	Yes	A	Potential exits at Devils Head and Nashs Lake; not yet developed

Guidelines for Recreation and Park Services for Municipalities with Populations between 2,500 and 5,000	Located In Calais?	Condition	Description/Location/Capacity
<i>Indoor Facilities:</i>			
School Facilities Available for Public Use	Yes	A	Elementary and High School; WCCC - B
Gym or Large Multi-Purpose Room (0.20 per 1,000 pop.)	Yes	B	3 gymnasiums; Community Center
Auditorium or Assembly Hall	Yes	C	1 - High School
Arts & Crafts Shops	No		
Teen Center	No		Future Plans – Community Center
Senior Citizens Center	No		Future Plans – part of Community Center
Game Rooms	No		Future Plans – Community Center
Public Library	Yes	B	
<u>V. Finance</u> (funds spent for operation and maintenance - not capital expenditures)			95,000 taxes; 60,000 raised
Minimum \$6/capita for part-time program			\$42/capita
<u>VI. Other town, state, non-profit and private recreation facilities or potential recreation sites in the area</u>			
Non-Profit - Calais Museum (St. Croix Historical Society) 0.25 acres			
Private - Keene’s Lake Campground 45 acres	Yes	A	Freshwater beach, changing facility, tent and vehicle sites, a full basketball court, horseshoe pits, playgrounds, picnic tables and a recreation hall.
Private - St. Croix Golf Course - 62 acres		B	9 hole golf course
Private - Snowmobile Trails		A	The Sunrise Snowmobile Club maintains an extensive network of snowmobile trails, including a section of the International Trail System, in Calais
State – Pikes Woods - 1 acre		A	Picnicking area with barbecue grills and covered picnic tables
Federal - Moosehorn Refuge, 4,524 acres	Yes	A	There are fifty miles of trails open to the public for hiking, snowmobiling and cross country skiing. Other activities include wildlife viewing, fishing, hunting, bird watching, canoeing, picnicking and snowshoeing. Guided tours are offered.
Federal - St. Croix Island International Historic Site - 14 acres	Yes	A	This park has a good view of St. Croix Island, a small sandy beach, a boat ramp, and picnic tables. St. Croix Island and Cochet Island are both open to the public and can be reached by boat.

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 shape and may need minor improvements within 5 years.
- D** Old facility that needs considerable maintenance within 2 years and/or significant renovation within 5 years.
- E** Very old facility that has outlived its usefulness or is in severe disrepair. This facility or equipment is unsafe or unsuitable and should be attended to very soon. Replacement may or may not be necessary (based on needs assessment).

**REGIONAL RECREATION**

Recreational resources in Washington County have a positive 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 Calais many retail businesses benefit from an influx of tourists to the region, especially during the summer.

Regional recreation facilities accessible to Calais residents and to visitors include wildlife refuges, parks, golf courses, picnic areas, public access to surface waters, and hiking (Pathfinders Walking Group: southeastern Washington County). 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. East Quoddy Lighthouse and Mulholland Lighthouse in Campobello, N.B.
4. Gleason's Cove Town Park in Perry: picnic sites, beach, fishing weirs, boat launch.
5. Herring Cove Provincial Park, Campobello, N.B: golf course, campground, playground, beach, hiking trails.
6. Devil's Head, Calais; hiking, overlooks of St. Croix River and St. Croix Island.
7. Machias Seal Island, seabird nesting site with puffin colony, boat tours from Cutler, Jonesport and New Brunswick.
8. Moosehorn National Wildlife Refuge: 16,000 acres west of Calais, 6,700 acres in Edmunds. Migratory birds, big game and 50 miles of trails.
9. 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.
10. Reversing Falls Town Park in Pembroke: 140 acres, trails and picnic area.
11. Robbinston Boat Landing and Picnic area.
12. 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.
13. St. Croix Country Club and Golf Course in Calais.
14. St. Croix Island International Historic Site at Red Beach in Calais. Overlooks St. Croix Island, site of historic French settlement in 1604.
15. Coastal and nature tours are available by kayak, motor vessel and windjammer in nearby towns.

## POLICIES AND IMPLEMENTATION

In order to support its strong civic and cultural institutions and to preserve the State's historic and archaeological resources the city of Calais has developed the following policies and implementation strategies:

<b>Goal 1: Promote and protect the availability of outdoor recreation opportunities for all Calais citizens, including access to surface waters</b>			
<b>Goal 2: Calais will preserve their own and the State's historic and archeological resources for future generations to enjoy and pass on to their children as they have been passed on to the present.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
<b>Existing and Future Recreational Needs</b>			
Address and rectify any existing or future recreational deficiencies.	Continue long-range planning for outdoor recreational needs of the community and make recommendations for addressing deficiencies and make improvements. Recommend priorities for action and establish cost estimates, when appropriate.	Recreation Committee	On-going
	Take advantage of any Federal, State, or other outside sources of funding (i.e. Maine Public Boating Facilities Program, Maine Snowmobile Trail Grant Program) to achieve outdoor Recreation objectives.	Recreation Committee; City Council; Community Development	On-going
	Pursue development of outdoor ice skating rink.	Recreation Committee	2005
	An expanded Community Center will be developed in a new or existing building.	City Council; Community Development	Short Term 2-5 years
	Maintain the summer day camp program	Recreation Department	2005
<b>Waterfront Park</b>			
Continue to develop the Waterfront Park as a focus of the downtown area.	Implement the recommendations of the Waterfront Master Plan (1999) and Waterfront Design Plan (2003)	City Council; Walkway Committee	On-going
Promote the park as a pleasing green space for visitors to stop and explore the downtown.	Integrate and promote the city waterfront with the Downeast Heritage Museum, the Calais Free Library and the Tourist Information Center.	City Council; Walkway Committee	On-going
	Develop and promote Calais' participation in the East Coast Greenway	City Council; Walkway Committee	On-going
<b>Public Access to Water Bodies</b>			
Ensure adequate public access to recreationally important water bodies.	Develop public access to the St. Croix River at Devils Head (pedestrian access) and to Nashs Lake (boat and pedestrian).	City Council; City Staff	3-5 years
	Publicize the location of public access facilities in local newspapers, flyers distributed to businesses selling fishing licenses, and at the State Tourist Information	City Council; City Staff; Chamber of	On-going

<b>Goal 1: Promote and protect the availability of outdoor recreation opportunities for all Calais citizens, including access to surface waters</b>			
<b>Goal 2: Calais will preserve their own and the State’s historic and archeological resources for future generations to enjoy and pass on to their children as they have been passed on to the present.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
	Center and Downeast Heritage Museum	Commerce	
<b>Community Participation</b>			
Encourage community participation in planning and maintaining parks and encourage public use of parks.	Increase the public’s awareness and pride in public parks by encouraging area schools to “adopt a park” and promote/expand the Community Pride Program.	City Council; City Staff; Chamber of Commerce; other civic organizations	On-going
	Encourage sponsorship of concerts, races, tournaments and other events to take place at City recreational facilities.	City Council; City Staff; Chamber of Commerce	
	Inform the community, via area newspapers and direct appeals to civic groups, of equipment needed at City Parks.	City Council; City Staff	
Promote the beautification of Calais	Encourage contributions to the city (i.e. benches, lights, monetary contributions, memorial Contributions, etc.).	City Council; City Staff	
<b>Nashs Lake and Devil Head Properties</b>			
Take advantage of the recreational, conservation and forestry opportunities of these two extraordinary Calais properties.	Develop a multi-use plan for each property that considers recreation, wildlife, conservation and model forest management practices.	City Council; appointed committees	2-5 years
	Develop adequate access to the Nashs Lake property, if possible. Include plan for development of existing city land for low impact use such as hiking, picnic tables, limited residential and water access.	City Council	On-going
<b>Community Forestry</b>			
Encourage proper management of community forest resources.	Seek funds (Project Canopy) to develop an urban street tree inventory and plan.	City Council	2004
	Seek grant money (UDDA; SBA; MFS; others) for tree planting	City Council; Community Development Office	2-5 years
	Adopt an ordinance to govern tree planting, care and maintenance.	City Council; Community Development Office	2-5 years
	Hire a licensed forester to conduct an assessment of the city’s non-urban forest resources.	City Council; Community Development Office	2005
<b>Recreational Requirements for New Development</b>			
Assure that new residential development has adequate open space nearby for recreational	Support implementation of Zoning and Subdivision Ordinance provisions that require developers of developments with more than	City Council; Planning Board	On-going

<b>Goal 1: Promote and protect the availability of outdoor recreation opportunities for all Calais citizens, including access to surface waters</b>			
<b>Goal 2: Calais will preserve their own and the State’s historic and archeological resources for future generations to enjoy and pass on to their children as they have been passed on to the present.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
purposes.	four new lots/units to provide recreationally usable open space.		
<b>Snowmobile Trails</b>			
Support the maintenance and improvement of the City’s snowmobile trails.	Seek municipal grants from the State’s Snowmobile Trail Fund to improve snowmobile trails in the area.	Sunrise Snowmobile Club/City Council	Ongoing
<b>Cultural Resources</b>			
Renovate/maintain existing cultural facilities	Renovate Children’s section of the Library; install security system.	City Council, Calais Free Library Trustees	Short Term 2-5 years
	Expand adult section of the Library	City Council; Calais Free Library Trustees	Long Term 5-10 years
<b>Historical and Archeological Resources</b>			
Protect and preserve known archaeological and historic sites.	Promote awareness of historic structures and artifacts including listing on the National Register of Historic Places.	Planning Board; Historical Society	Immediate
	Complete comprehensive inventories of the following: <ul style="list-style-type: none"> <li>▪ Prehistoric archaeological resources.</li> <li>▪ Historic archaeological resources.</li> <li>▪ Historical resources.</li> </ul>	Historical Society; ad-hoc committee	Short Term 2-5 years
	Take advantage of any outside sources of funding for professionally conducted inventories (i.e. State Planning money, Maine Historic Preservation Commission Certified Local Government Program and survey grants).	Historical Society; City Council	On-going
	Review list of properties on the National Register of Historic Places and examine opportunities for additional ones.	Historical Society; City Council	Short Term 2-5 years
	Continue to repair and restore City-owned buildings to maintain their historic character.	City Council	On-going
	Work in cooperation with the MHPC to protect identified historical and archaeological resources within Calais.	Planning Board; City Council	Immediate
Enhance community and visitor appreciation of the City’s and regions historical and archaeological heritage, including the international history and culture associated with the St. Croix River.	Support and promote the activities of the St. Croix Historical Society, the Downeast Heritage Museum and the Calais Free Library by making information available at the City Building and City web site on their activities.	City Council	On-going
	Explore development of an interpretive trail (and bridge for access across Beaver Stream)	City Council/ Historical	Immediate (within 2

<p><b>Goal 1: Promote and protect the availability of outdoor recreation opportunities for all Calais citizens, including access to surface waters</b></p>			
<p><b>Goal 2: Calais will preserve their own and the State’s historic and archeological resources for future generations to enjoy and pass on to their children as they have been passed on to the present.</b></p>			
Policy	Implementation Strategy	Responsibility	Timeframe
	to preserve understanding and appreciation of the Red Beach Granite mining and polishing works.	Society	years)
	Continue to support and participate in the International Festival.	City Council	On-going
	Continue to work cooperatively with St. Stephen and other St. Croix communities to develop a community-based display (brochure, etc.) network to interpret the St. Croix River’s history.	Community Development Office; Historical Society and Heritage Center	Immediate and as funding allows
	Continue to actively participate in the activities and efforts of local organizations in their efforts to preserve and interpret the St. Croix River’s history, culture, visual landscape, and natural heritage. Also, participate in their efforts to develop public access and a coordinated recreation program.	City Staff/ City Council	On-going
Ensure that archeological and historic sites are not unknowingly destroyed.	Potential areas and artifacts of historical and archaeological significance, especially along riverbanks and lakeshores, should be professionally surveyed and documented, and historical and archaeological sites and artifacts should be monitored	City Council; Historical Society	As funding allows
Formulate guidelines or land use controls to protect and preserve historic and archaeological resources if identified.	Review existing ordinances for protection of archeological sites.	Planning Board; Historical Society	Immediate
	Establish a mechanism for review of all construction or other ground disturbing activity within known prehistoric archeologically sensitive and historic archeologically sensitive areas.	Planning Board	Short-term (within 2 years)
	Zone significant archaeological sites, such as the Ferry Point Indian Encampment, as Resource Protection.		
	Where significant site disturbance is anticipated within areas identified in need of further survey the town will consider contacting MHPC for an opinion, and/or review of the construction areas by an MHPC-approved archeologist.	Planning Board	Short-term (within 2 years)
	Require developers to provide evidence that proposed developments will not negatively impact known archeological sites.	Planning Board	Immediate
	Require that development plans include a plan showing the preservation of known historic significant areas.	Planning Board	Immediate

**SUMMARY**

The city of Calais has a wealth of historic and archaeological resources as a result of its location at the head of tide of the St. Croix River. The Downeast Heritage Museum is a focal point for this rich heritage for both the city and the region. Many historic and archeological resources within the city are well known yet some remain undocumented and unprotected. The city will promote further documentation of its archeological resources and appreciation of its cultural heritage.

The Calais Free Library serves as another important cultural center for the Calais area and it is enthusiastically supported by the community. Calais has a wide variety of recreational resources available to the public. Public parks, the St. Croix Golf Course, the Moosehorn Refuge, the city's several lakes, the St. Croix River and the expanses of open space provide many opportunities for outdoor recreation. Basketball, baseball, soccer and other events take place at the public schools and are open to the public. The Calais Recreation Department provides many recreational programs for all age groups. Many of the Department's programs are held at the Community Center Building.

The city is investing in the Waterfront Park as part of its downtown revitalization efforts. The Waterfront Walkway is part of the East Coast Greenway stretching from Key West Florida to Calais, Maine. In addition to this premier trail the city has an extensive network, including a section of the International Trail System, of snowmobile trails that are maintained by the Sunrise Snowmobile Club.



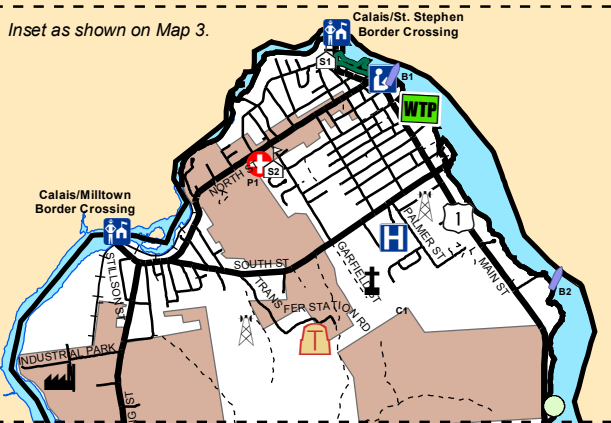


New Brunswick, Canada

# Calais Comprehensive Plan

## Map 2: Public Facilities

Inset as shown on Map 3.

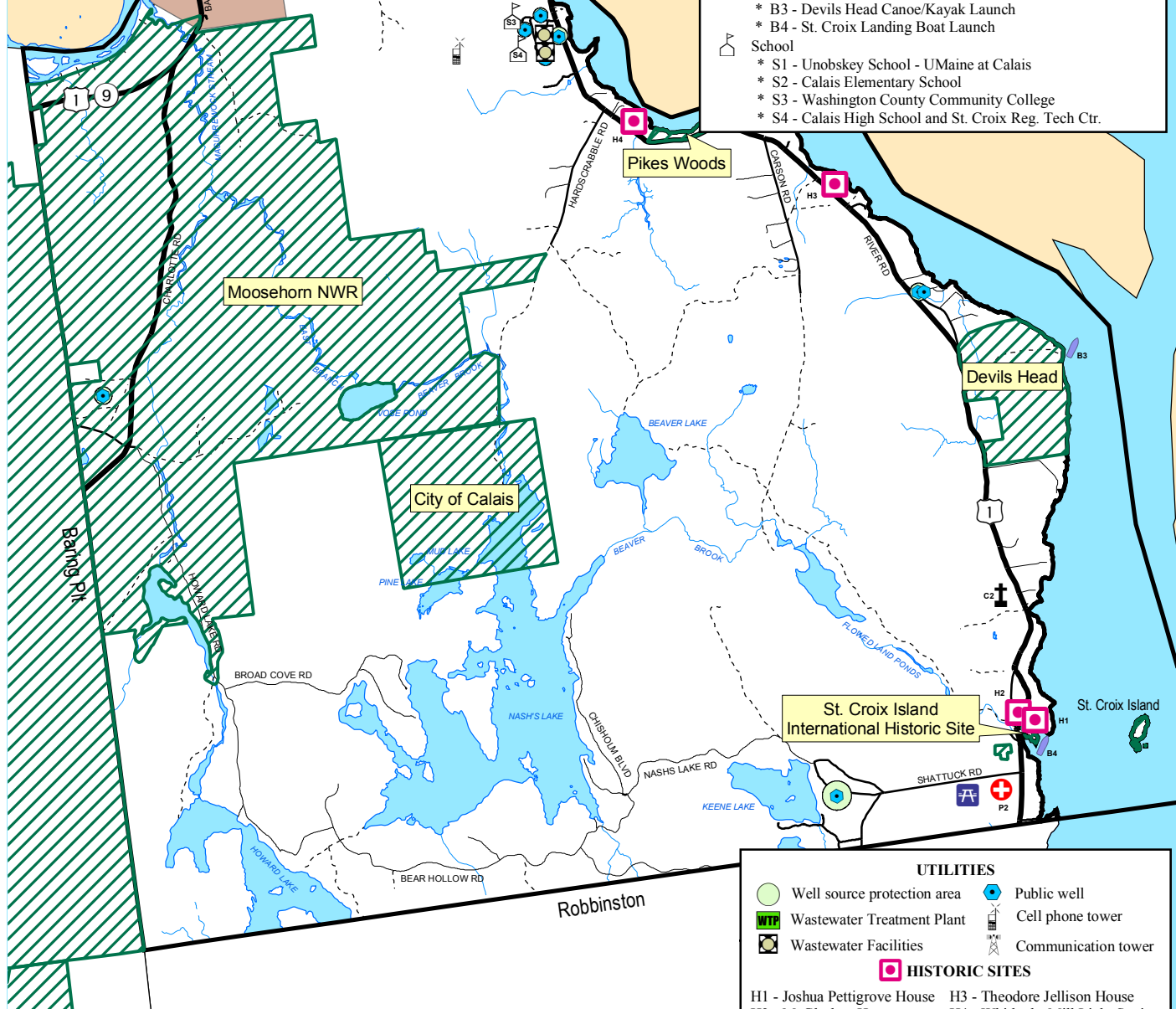


### LEGEND

- State roads
- Town roads
- Private roads
- - - Trail/Undeveloped roads
- ++ Active railroad
- Perennial streams
- Water
- Pine Tree Zones

### PUBLIC FACILITIES & SERVICES

- Calais Regional Hospital
  - Red Beach Recreation Area
  - Calais Industrial Park
  - Cemetery
  - Boat Launch
  - School
  - Calais Free Library
  - Transfer Station
  - Conservation Land
  - Public Safety
  - Historic Sites
- \* C1 - Calais Cemetery      \* P1 - Calais Public Safety Bldg  
 \* C2 - Red Beach Cemetery      \* P2 - Arthur Chisholm Station
- \* B1 - Pikes Park, Pier and Boat Launch  
 \* B2 - Steamboat Street Boat Launch  
 \* B3 - Devils Head Canoe/Kayak Launch  
 \* B4 - St. Croix Landing Boat Launch
- \* S1 - Unobskey School - UMaine at Calais  
 \* S2 - Calais Elementary School  
 \* S3 - Washington County Community College  
 \* S4 - Calais High School and St. Croix Reg. Tech Ctr.

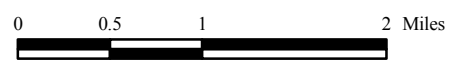


### UTILITIES

- Well source protection area
- Wastewater Treatment Plant
- Wastewater Facilities
- Public well
- Cell phone tower
- Communication tower

### HISTORIC SITES

- H1 - Joshua Pettigrove House
- H2 - McGlashen House
- H3 - Theodore Jellison House
- H4 - Whitlocks Mill Light Station



Washington County Council of Governments  
 Eastern Maine Development Corporation  
 PO BOX 631 \* Calais, ME 04619  
 (207) 454-0465  
 Web site: www.emdc.org/wccog.htm

Sources: City of Calais, SPO, ESRI, MEDWP, MEDOT and MEGIS  
 Map revised: October, 2004

See map disclaimer at end of the Executive Summary.

# Calais Comprehensive Plan

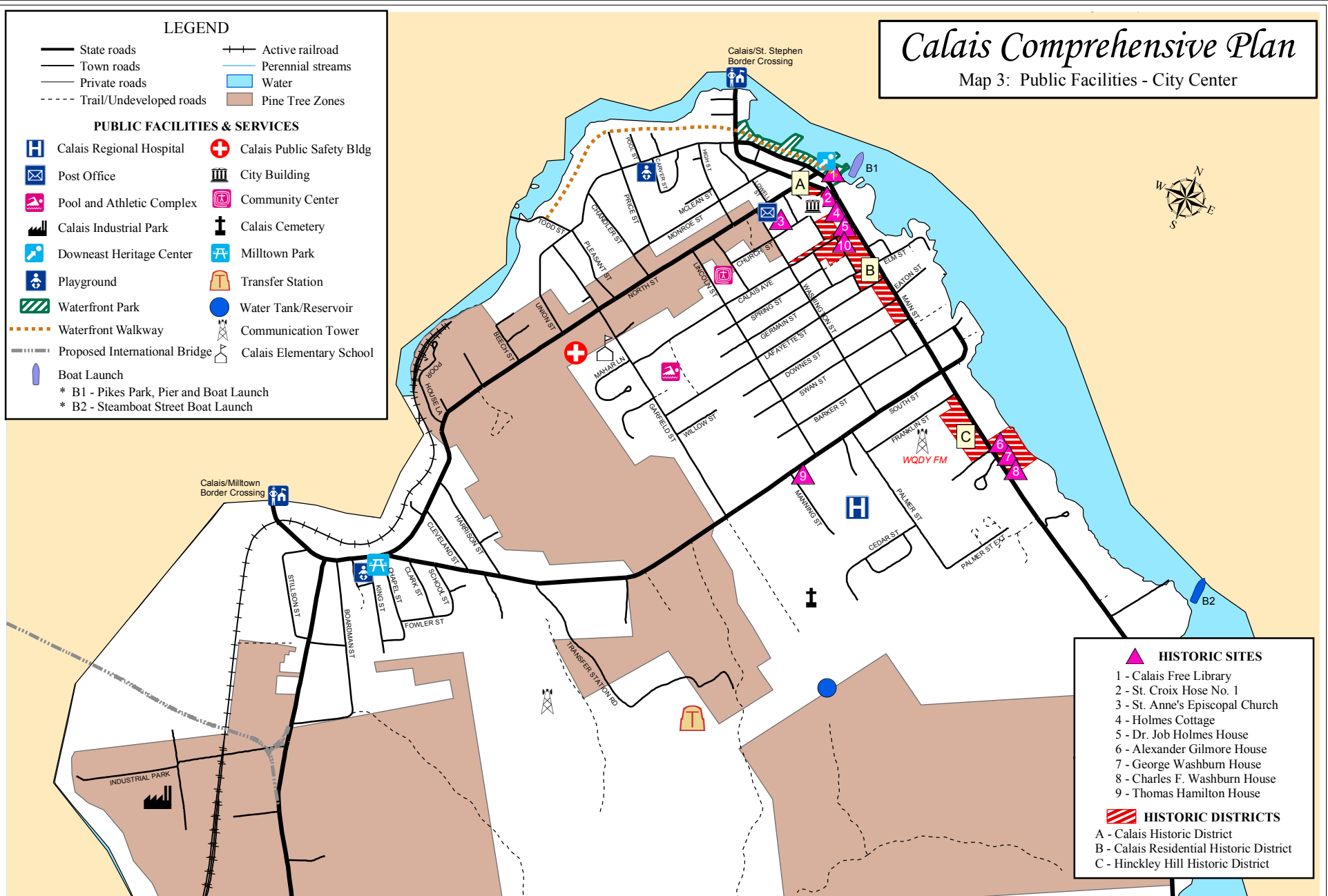
## Map 3: Public Facilities - City Center

### LEGEND

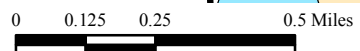
- State roads
- Town roads
- Private roads
- Trail/Undeveloped roads
- Active railroad
- Perennial streams
- Water
- Pine Tree Zones

### PUBLIC FACILITIES & SERVICES

- Calais Regional Hospital
  - Post Office
  - Pool and Athletic Complex
  - Calais Industrial Park
  - Downeast Heritage Center
  - Playground
  - Waterfront Park
  - Waterfront Walkway
  - Proposed International Bridge
  - Boat Launch
  - Calais Public Safety Bldg
  - City Building
  - Community Center
  - Calais Cemetery
  - Milltown Park
  - Transfer Station
  - Water Tank/Reservoir
  - Communication Tower
  - Calais Elementary School
- \* B1 - Pikes Park, Pier and Boat Launch  
\* B2 - Steamboat Street Boat Launch



- ### HISTORIC SITES
- 1 - Calais Free Library
  - 2 - St. Croix Hose No. 1
  - 3 - St. Anne's Episcopal Church
  - 4 - Holmes Cottage
  - 5 - Dr. Job Holmes House
  - 6 - Alexander Gilmore House
  - 7 - George Washburn House
  - 8 - Charles F. Washburn House
  - 9 - Thomas Hamilton House
- ### HISTORIC DISTRICTS
- A - Calais Historic District
  - B - Calais Residential Historic District
  - C - Hincley Hill Historic District



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Sources: City of Calais, ESRI, MEDOT and MEGIS  
 Map created: October, 2004

See map disclaimer at end of the Executive Summary.

## C. POPULATION

One hundred years ago, the population in Calais totaled 7,290 people and at the turn of the century the population was 7,655. This number began a steady decline over the years reaching 4,262 in 1980, 3,963 in 1990, and 3,447 in 2000 representing a 13.0 percent decrease between 1990 and 2000.

The ultimate goal of a comprehensive plan is to provide for a proper relationship between the city's future population and its environment. Accordingly, most phases of the plan are either dependent upon, or strongly influenced by, the size and composition of the city's future population.

### MIGRATION ANALYSIS

According to Census data during the last decade of the millennium, the population in Calais declined by 516 persons. This decrease can be attributed primarily to migration. During the 1990's, Calais recorded 561 deaths and only 465 births and a net out-migration of 420 people. This decline is shown in the formula below.

1990 Census Population = 3,963

Plus the number of births to Calais residents between 1990 and 2000 (465) = 4,428

Minus the number of deaths of Calais residents between 1990 and 2000 (561) = 3,867

Minus out-migration (420) to attain the 2000 Census Population = 3,447

### POPULATION STATISTICS

#### Population and Growth Rates

The following table shows the year-round population and growth rate by decade in Calais, Washington County and Maine since 1900. The overall trend in since 1900 (population 7,655) is a significant and continuous decline.

**Table C-1 POPULATION AND GROWTH RATES**

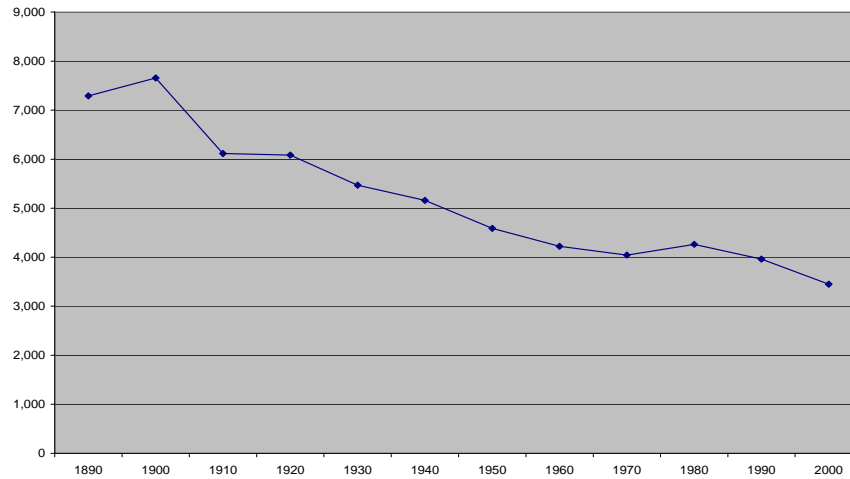
Year	Calais		Washington County		Maine	
	Number	% Change	Number	% Change	Number	% Change
2000	3,447	-13.02%	33,941	-3.87%	1,274,923	3.83%
1990	3,963	-7.0%	35,308	0.99%	1,227,928	9.18%
1980	4,262	5.4%	34,963	17.09%	1,124,660	13.37%
1970	4,044	-4.2%	29,859	-9.27%	992,048	2.35%
1960	4,223	-8.0%	32,908	-6.48%	969,265	6.07%
1950	4,589	-11.1%	35,187	-6.83%	913,774	7.85%
1940	5,161	-5.6%	37,767	-0.16%	847,226	6.25%
1930	5,470	-10.1%	37,826	-9.31%	797,423	3.83%
1920	6,084	-0.5%	41,709	-2.79%	768,014	3.45%

Year	Calais		Washington County		Maine	
	Number	% Change	Number	% Change	Number	% Change
1910	6,116	-20.1%	42,905	-5.14%	742,371	6.90%
1900	7,655	5.0%	45,232	1.7%	694,466	5.0%
1890	7,290	-	44,482	-	661,087	-

Source: U.S. Census Bureau

Population in the service centers of Calais and Eastport in eastern Washington County steadily declined since 1990 and at a greater rate than in the county as a whole.

Historical Population - Calais 1890-2000



Neighboring Baileyville saw an even greater loss in numbers while the neighboring smaller communities of Alexander and Robbinston remained stable or increased marginally.

**Table C-2 POPULATION OF CALAIS AND NEIGHBORING COMMUNITIES**

		1990	2000
Alexander	number	478	514
	GPY 90-00		0.75%
	% growth		7.53%
Baileyville	number	2031	1686
	GPY 90-00		-1.7%
	% growth		-16.99%
<b>Calais</b>	<b>number</b>	<b>3963</b>	<b>3447</b>
	<b>GPY 90-00</b>	<b>-</b>	<b>-1.30%</b>
	<b>% growth</b>	<b>-</b>	<b>-13.02%</b>
Eastport	number	1965	1640
	GPY 90-00	-	-1.65%
	% growth	-	-16.54%
Robbinston	number	495	525
	GPY 90-00	-	0.34%

		1990	2000
	% growth	-	0.61%
Washington County	number	35,308	33,941
	GPY 90-00	-	-0.39%
	% growth	-	-3.87 %
State	number	1,227,928	1,274,923
	% growth	-	3.83 %

Source: 1990 Census, 2000 Census

**Population Forecasts**

As the table and chart below depict, the State Planning Office predicts that the population of Calais will continue the decline that occurred in the 1990’s to 3,222 individuals by 2005, to 3,116 in 2010 and then to increase modestly to 3,163 individuals by 2015.

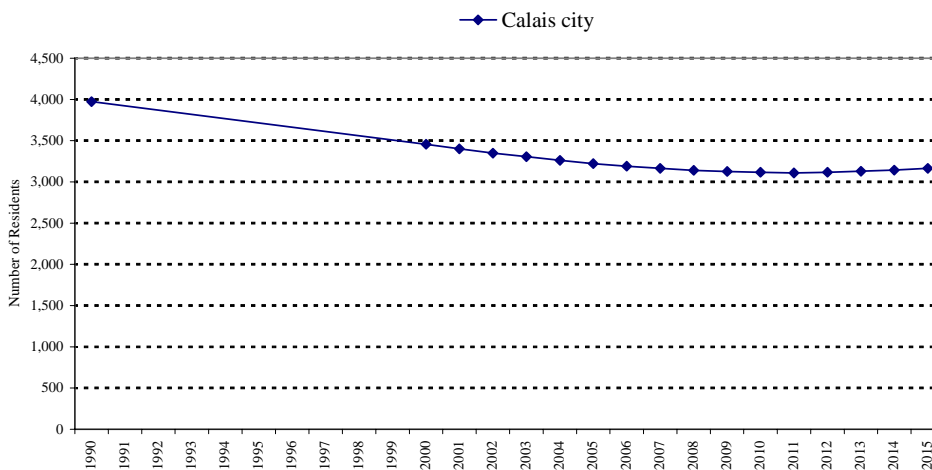
**Table C-3 POPULATION PROJECTIONS**

Year	Calais		Washington County		Maine	
	Number	% Change	Number	% Change	Number	% Change
2015	3,163	1.50%	33,111	2.47%	1,371,022	3.1%
2010	3,116	-3.30%	32,312	0.30%	1,330,117	-2.98%
2005	3,222	-6.50%	32,217	-5.09%	1,371,022	7.7%
2000	3,447		33,941	-3.87%	1,274,923	3.83%

Source: State Planning Office

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



Source: Maine State Planning Office analysis of 1990-2000 US Census Data

The city's population has contracted in the past 50 years. 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 to 50 years of population decline in Calais. During the 1990s, a decline of -1.30 percent per year occurred. If that trend continued, Calais would decrease to 2774 persons in 2015 (or 2673, using linear regression). If, however, a somewhat less precipitous annual rate of growth is observed (-0.49% to -0.50 percent per year) as occurred over the longer term from 1970 to 2000 or from 1950 to 2000 then the population of the city would decline to a number (3190-3193 individuals) nearer to the SPO projection (3163).

Changes in economic activity and land use, including new year-round residential development, will determine actual population growth over the next ten years. Since the 2000 census several changes in employment activity may have slowed or reversed this decline. Increases in staff at the international border<sup>1</sup> have occurred and the Washington County Psychiatric Associates facility, the Calais Children's Project, employs over one hundred individuals that were not employed at that facility at the time of the 2000 census. School enrollment figures indicate that the population declines projected by the State Planning Office which are based on the 2000 census need to be updated with this new activity. A modest population increase is most likely to occur over the next ten-year period. An analysis of recent building permit activity is provided in the chapter on housing.

**Table C-4 LINEAR REGRESSION AND GROWTH PER YEAR POPULATION PREDICTIONS**

Timeframe on which prediction is based	Average Growth Per Year (Non-Compounded)	Calais Population Predictions for the year 2015	
		Using Average Growth Per Year (NC)	Using Simple Linear Regression
1950-2000	-0.50%	3190	3371
1970-2000	-0.49%	3193	3302
1990-2000	-1.30%	2774	2673

### Seasonal Population

As a scenic, coastal community, seasonal development has an impact on our community. There are no state or federal statistics on seasonal population for Calais. However, the number of seasonal housing units in Calais rose from 68 in 1990 to 170 as reported in the 2000 Census. If the average household size for non-residents is 2.24 (see Table C-8), approximately 380 additional persons may reside in Calais seasonally. Visitors staying in short term rental accommodations associated with summer festivals also increase demands on local services; these issues are examined in the chapter on Economics and Employment. Given recent declines in the resident population, due to reduced employment opportunities and rising property values, it is anticipated that seasonal people who choose to stay year round will account for some of the

<sup>1</sup> A formal request for an estimate of the actual and projected increases of staff associated with expansion of facilities at the international border to a Public Affairs Officer at the Department of Homeland Security (DHS), made in July, 2004, included an explanation that the information was needed for the Calais Comprehensive Plan. The request explained that the need and intent was to appropriately plan for public facilities that would serve such employees in the area. The initial response from DHS was that they not willing to provide specific information for "security reasons". A request for a general estimate or range was made and never received a response.

future increases in population. More information on household composition and on the housing stock is presented in the housing section of this plan.

### Age Distribution

The following 2000 statistics compare population by age groups for the City of Calais, the county and the state.

**Table C-5 POPULATION BY AGE GROUPS 2000**

Age Group	Calais		Washington County		Maine	
	Number	Percent	Number	Percent	Number	Percent
Under 5 years	165	4.8	1727	5.1	70726	5.5
5 to 9 years	214	6.2	2176	6.4	83022	6.5
10 to 14 years	236	6.8	2363	7.0	92252	7.2
15 to 19 years	238	6.8	2403	7.1	89485	7.0
20 to 24 years	183	5.3	1813	5.3	69656	5.5
25 to 34 years	367	10.6	3812	11.2	157617	12.4
35 to 44 years	510	14.8	5114	15.1	212980	16.7
45 to 54 years	507	14.7	5048	14.9	192596	15.1
55 to 59 years	181	5.3	1960	5.8	68490	5.4
60 to 64 years	154	4.5	1669	4.9	54697	4.3
65 to 74 years	326	9.5	3085	9.1	96196	7.5
75 to 84 years	256	7.4	2065	6.1	63890	5.0
85 years and over	110	3.2	706	2.1	23316	1.8
Median age (years)	41.8	NA	40.5	NA	38.6	NA

Source: 2000 Census

Calais has slightly lower percentages of young residents and higher percentages of older residents than does Washington County or the state. The median age in Calais is 3.2 years higher than the state median age.

The median age of Calais' population increased 5.3 years (14.5%) between 1990 and 2000. Direct comparison of the 1990 and 2000 figures may contain a small margin of error. In the table below, the discrepancies occur in the following categories: 5 to 17 years versus 5 to 19 years and 18 to 64 years versus 20 to 64 years.

**Table C-6 CALAIS POPULATION BY AGE YEAR COMPARISONS**

Age Group	1990	Age Group	2000
Under 5 years old	249	Under 5 years old	165
5-17 years old	681	5-19 years old	688
18-64 years old	2,306	20-64 years old	1902
65 and above	727	65 and above	692
Median Age	36.5	Median Age	41.8

Source: 1990 Census, 2000 Census

The older segments of the city's population (number of residents aged 65 or above) have increased from 18% of the population in 1990 to 20% of the population in 2000. During the same time, the number of children under five years of age declined from 6.2 percent of the population to about 5 percent. The proportion of the school aged population remained about the same (between 17 and 20 percent) when you consider that the census groupings changed between 1990 and 2000 – from 5-17 year olds in 1990 to 5-19 year olds in 2000.

**Table C-7 CALAIS POPULATION BY GENDER**

Year	Female	%	Male	%	Total
2000	1,817	52.7	1,630	47.3	3,447
1990	2,070	52.2	1,893	47.8	3,963

Source: 1990 Census, 2000 Census

The distribution of females and males has remained about constant.

The average household size in Calais went down about 13% since 1990 indicating the presence of more households with fewer or no children. While this decrease was slightly lower than the trends of its regional service center communities, it was substantially higher than the county and the state. Given the increase in median age, it is likely that many of these households are 'empty nests' in which the children have grown up and moved out of Calais or households in which childless singles or couples moved into Calais.

**Table C-8 HOUSEHOLD SIZE**

Average Household Size and Growth Rate: 1990-2000			
		1990	2000
Alexander	Household Size	2.97	2.62
	GPY 90-00		-1.18%
	% growth		-11.78%
Baileyville	Household Size	2.64	2.32
	GPY 90-00		-1.21%
	% growth		-12.12%
<b>Calais</b>	<b>Household Size</b>	<b>2.44</b>	<b>2.24</b>
	<b>GPY 90-00</b>	<b>-</b>	<b>-0.82%</b>
	<b>% growth</b>	<b>-</b>	<b>-8.20%</b>
Eastport	Household Size	2.42	2.14
	GPY 90-00	-	-1.16%
	% growth	-	-11.57%
Robbinston	Household Size	2.55	2.61
	GPY 90-00	-	0.24%
	% growth	-	2.35%
Washington County	Household Size	2.55	2.34
	GPY 90-00	-	-0.82%
	% growth	-	-8.2%
State	Household Size	2.56	2.39



Average Household Size and Growth Rate: 1990-2000			
		1990	2000
	% growth	-	-6.6%

Source: 1990 Census, 2000 Census

As with the total population figures the smaller neighboring community of Robbinston saw increases in the number of households while the larger centers of Eastport, Calais and Baileyville declined. In contrast, even though the population of Alexander rose, its household size declined.

**Table C-9 NUMBER OF HOUSEHOLDS**

		1990	2000
Alexander	Number	161	196
	GPY 90-00	-	2.17%
	% growth	-	21.74%
Baileyville	Number	770	726
	GPY 90-00		-0.57%
	% growth		-5.71%
<b>Calais</b>	<b>Number</b>	<b>1,536</b>	<b>1,486</b>
	<b>GPY 90-00</b>	<b>-</b>	<b>-0.33%</b>
	<b>% growth</b>	<b>-</b>	<b>-3.26%</b>
Eastport	Number	797	750
	GPY 90-00	-	-0.59%
	% growth	-	-5.9%
Robbinston	Number	194	201
	GPY 90-00	-	0.36%
	% growth	-	3.61%
Washington County	Number	13418	14118
	GPY 90-00	-	0.52%
	% growth	-	5.22%
State	Number	465312	518200
	% growth	-	11.37%

Source: 1990 Census, 2000 Census

Reflecting the overall loss in population of 516 persons, the number of households in Calais declined also by 3.26%. Household size has decreased as empty nesters and retirees occupy more of the city's housing stock. Contrary to what occurred in Calais, Washington County saw an increase in the number of households despite a decline in population of 3.8 percent, which indicates the presence of more single person, single parent, and retiree households countywide.

**Table C-10 EDUCATION**

School Enrollment (aged 3 and up)	1990	1990 (% Pop)	2000	2000 (% Pop)
<b>Calais</b>	<b>942</b>	<b>23.7%</b>	<b>803</b>	<b>23.3%</b>
Washington County	8682	24.6%	8,044	23.7%
State	304,868	24.8%	321,041	25.2%

Source: 1990 Census, 2000 Census

In 2000, the city had a comparable percentage of school enrollment to the county and the state. School enrollment has declined in the city and county, but has increased statewide.

**Table C-11 PUBLIC SCHOOL ENROLLMENT OF CALAIS RESIDENTS**

School Year	Elementary	Secondary	Total Calais Residents	Total Enrollment
October, 2004	393	285	570	678
October, 2003	393	289	576	682
October, 2002	405	186	591	719
October, 2001	390	200	590	703
October, 2000	404	190	594	704
October, 1999	435	189	624	779
October, 1998	435	192	627	801

Source: Calais School Department and Maine Department of Education

The city's public school enrollment has declined by 2.72 percent at the elementary level but has increased by 50 percent at the secondary level in the last five years. This change reflects the shift of the Middle School enrollment from the elementary to the high school in 2003-2004. However it also reflects an increase in the school population or a slowing of the more precipitous declines in enrollment that occurred during the 1990's. Families associated with the increase in staffing at the international border since the 2000 census figures is expected to continue to counteract the loss of young families that has occurred throughout Washington County in recent years. There are no state statistics predicting future enrollment figures for the city. While some pupils are home-schooled in Calais, this accounts for only a minor part of the decrease in enrollment.

**Table C-12 2001-02 APPROVED HOME INSTRUCTION PUPILS**

CITY	KIND.	GR 1-8	GR 9-12	OTHER	TOTAL
Calais	-	7	1	0	8

Source: Maine DOE

**Table C-13 Trend in Home-Schooling**

Trend (# of Pupils)	1997-98	1998-99	1999-00	2000-01	2001-02
Calais	5	15	15	12	8

Source: Maine DOE

**Table C-14 EDUCATIONAL ATTAINMENT 2000**

	<b>Calais</b>	Eastport	Alexander	Baileyville	Robbinston	Washington Co. 2000	State 2000
	<b>Percent</b>	Percent	Percent	Percent	Percent	Percent	Percent
High School Graduate or higher	<b>84.6</b>	78	82.5	85.9	78.1	79.9	85.4
Bachelor's degree or higher	<b>11.5</b>	18.5	8.9	13.0	16.1	14.7	22.9

Note: Percent calculated from persons aged 25 and over.

Source: 2000 Census

The city’s levels of education in the Bachelor’s degree of higher level of attainment are lower than the surrounding communities, except Alexander, and lower than both the county and state averages. However, the High School Graduate or higher level of attainment is higher or comparable to nearby communities and both the County and the State.

**POLICIES AND IMPLEMENTATION**

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

<b>Goal: Calais 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>
Calais will actively monitor the size, characteristics and distribution of its population.	The city will gather all available population estimates, census data and other information concerning the number and characteristics of the city’s population.	City Manager; School Board	Immediate
	The city will maintain population information in appropriate files that are available in the city hall for use by the city Officers and by residents.	City Manager	Immediate
	The city will update the population information files every five years.	City Manager	Long-term
	The city will seek assistance in the collection and maintenance of this data from the Washington County Council of Governments, the designated census information	City Manager	On-going

<b>Goal: Calais 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>
	center for Washington County.		

**SUMMARY**

The population of Calais has decreased significantly over the long term, with a higher rate of decline seen in the past decade. In addition our population is aging. There are fewer school age children though this trend is being offset by increases in staffing at the international border since 2001. Like the rest of Washington County average household size is decreasing. Numbers of retiree and perhaps single parent households are increasing. A seasonal influx of approximately 280 people increases demands on services and these individuals may account for some of the future increases in year-round population. The city will continue to make available demographic information to residents.

## **D. NATURAL RESOURCES**

The natural resources in Calais contribute to the community's attractiveness as a place to work and to live. They include water resources, such as the St. Croix River and Nashs Lake, open spaces, and forest land; wildlife and fisheries; wetlands; and scenic resources.

### **LOCATION, TOPOGRAPHY AND GEOLOGY**

The city of Calais consists of approximately 23,699 acres or 37.03 square miles. Calais has a rolling topography with several mountains and numerous water bodies. The four highest points in Calais are Magurrewock Mountain in the northwest portion of the city, Elliott Mountain in the north, Mt. Seeall towards the center of the community, and Howard Lake Mountain in the south.

The topography of the city is a result of events that occurred during the last ice age at a time when ancient oceans extended over parts of the State, and glaciers scraped, scoured, and coated other areas with glacial tills, sands, and clay. Calais is characterized by till, thin drift, and glaciomarine deposits. Till, which makes up about 40 percent of the city, is a heterogeneous mixture of sand, silt, clay, and stones including many boulders deposited directly by glacial ice. The topography in these areas is generally a blanket deposit that conforms to the underlying bedrock topography. Thin drift, which makes up about 40 percent of the city's land area, consists of bedrock outcrops and/or thin surficial deposits. The topography here reflects the configuration of the bedrock surface, and ranges from smooth undulating hills to knobby terrain and high mountains. The Calais coastline is characterized by glaciomarine deposits. These deposits consist of silt, clay, sand and minor amounts of gravel. Sand is predominant in these areas. The topography is flat to gently sloping except where dissected by modern streams. See Map 4: Topography Steep Slopes and Flood Zones at the end of this section for general contour elevations.

### **LAND SUITABILITY FOR DEVELOPMENT**

#### **Soils**

"Soil survey" is a general term for systematic examination of soils in the field and laboratory. It involves describing, classifying, and mapping soil types, and then interpreting their suitability for various uses such as residential, commercial, agricultural and recreational. The Soil Survey Office of the Soil Conservation Service (SCS) located in Machias has analyzed the characteristics, behavior, distinctive properties and appropriate uses of each different soil type. This data can be found on soils maps of each community in Washington County.

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

The United States Department of Agriculture (USDA) Soil Conservation Service (SCS) has prepared soil classification maps for each state (STATSGO). The STATSGO classifications in Calais, Hermon-Brayton-Mondadnock (ME027), Lyman-Lamoine-Scantic (ME037), and Lyman-Dixfield-Marlow (ME035) are mapped on Map 5 - STATSGO Soils. This is the only digital soils information available in Washington County. These associations give general information about development potential but are mapped at too coarse a scale for local planning or site specific purposes. Very few areas of Calais or indeed of Maine in general, have large tracts of land that are ideal for residential development. The Natural Resources Conservation Service of the USDA has produced a handbook of Soil Survey Data for Growth Management in Washington County. This publication is available in the Calais city building along with the soils maps prepared by SCS at a scale of 1 inch = 2000 feet. It includes many tables that interpret the suitability of different soils for agricultural production, woodland productivity, erodability and low density development.

This last interpretation – rating of soil potential for low density urban development – is provided in the table below to guide the concentration of development outside of sewer area in Calais. 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 SOIL SUITABILITY FOR DEVELOPMENT**

Map Unit	Soil Name	Septics	Dwellings	Roads	Development
29X	Udorthents-Urban complex				
39M	Wonsqueak and Bucksport Soils, frequently flooded	Very Low	Very Low	Very Low	Very Low
39RC	Naskeag-Abram-Ricker Complex, 0-15% slopes, very stony				
39P	Bucksport and Wonsqueak soils	Very Low	Very Low	Very Low	Very Low
230C-D	Buxton Silt Loam, 8-15%	Medium	Medium	Medium	Medium
231B	Lamoine-Scantic Complex, 0-5%, very stony	Very Low	Medium	Medium	Low
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
238C (238D)	Marlow Fine Sandy Loam, 8-15%	Medium	Medium	High	Medium
240B	Elliottsville-Chesuncook Complex, 3-8%	Medium	High	High	High
241B	Chesuncook Silt Loam, 3-8%	High	High	High	High
241C	Chesuncook Silt Loam, 8-15%	Medium	Medium	Medium	Medium
245B	Telos Silt Loam, 3-8%	Very Low	Medium	Medium	Low
262B	Tunbridge-Lyman Complex, 3-8%	Medium	High	High	High

Map Unit	Soil Name	Septics	Dwellings	Roads	Development
262C	Tunbridge-Lyman Complex, 8-15%	Medium	Medium	Medium	Medium
263C	Tunbridge-Lyman-Abram Complex, 3-15%, very stony	Medium	Medium	Medium	Medium
271B	Dixfield-Colonel Complex, 3-8%, very stony	High	High	High	High
272B	Dixfield-Colonel, 3-8%	High	High	High	High
272C	Dixfield Fine Sandy Loam, 8-15%	Medium	Medium	Medium	Medium
273B (274B)	Brayton Fine sandy Loan, 0-5%, very stony	Very Low	Very Low	Low	Very Low
324A	Medomak and Wonsqueak Soils, Frequently Flooded	Very Low	Very Low	Very Low	Very Low
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
333A	Scantic-Biddeford Association, 0-3%	Very Low	Very Low	Very Low	Very Low
337C	Dixfield-Turnbridge-Colonel Complex, 3-15%, very stony	Medium	Medium	Medium	Medium
338C	Dixfield-Marlow-Turnbridge Complex, 3-15%, very stony	Medium	Medium	Medium	Medium
338D	Marlow-Tunbridge-Dixfield Complex, 8-30%, very stony	Very Low	Low	Medium	Very Low
339C	Dixfield-Marlow Association, 3-15%, very stony	Medium	Medium	Medium	Medium
340B	Telos-Elliottsville-Monarda Complex, 0-8%, very stony	Very Low	Medium	Medium	Low
340C	Chesuncook-Elliottsville-Telos Complex, 3-15%, very stony	Medium	Medium	Medium	Medium
345B	Telos-Chesuncook Complex, 0-8%, very stony	Very Low	Medium	Medium	Low
345C	Chesuncook-Telos Association, 3-15%, very stony	Medium	Medium	Medium	Medium
348B	Monarda-Telos Association, 0-8%, very stony	Very Low	Very Low	Low	Very Low
363C	Lyman-Tunbridge-Abram Complex, 3-15%, very stony	Low	Low	Medium	Low
363E	Lyman- Abram-Tunbridge Complex, 15-60%, very stony	Very Low	Very Low	Low	Very Low
364B	Naskeag-Tunbridge-Lyman Complex, 0-8%, very stony	Very Low	Medium	Medium	Low
366C	Skerry-Becket Association, 3-15%, very stony	Medium	Medium	Medium	Medium
371B	Dixfield-Colonel Complex, 0-8%, very stony	Very Low	Medium	Medium	Low
373B	Brayton-Colonel Association 0-8%, very stony	Very Low	Very Low	Low	Very Low
375B	Brayton-Colonel Association, 0-8%, extremely stony	Very Low	Very Low	Very Low	Very Low
377C	Skerry-Colonel-Tunbridge Complex, 0-15%, very stony	Medium	Medium	Medium	Medium

Source: USDA-NRSC Orono, ME–Soil Survey Data for Growth Management in Washington County, ME, 1997

These maps and data sheets are useful to the city to predict the sequence of development; develop future land use plans and update zoning; indicate areas where streets or sewers may be prohibitively costly; and identify where environmentally sensitive land should be protected. Soil survey maps do not eliminate the need for on-site sampling, testing, and the study of other relevant conditions (for example, pockets of different soils having completely different qualities may be present).

### Highly Erodible Soils

The removal of surface vegetation from large areas of land can cause erosion, which is a major contributor of pollution to surface waters. Highly erodible soils have a potential to erode faster than normal. 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 depicts the location of steep slopes in Calais.

### FARM AND FOREST LAND

Agriculture is a very limited land use in Calais. There are several parcels of land devoted to commercial agriculture including cranberry and blueberry production and tree farming. There are no parcels of land registered under the Farm and Open Space Law.

Calais' forests are important to its character and economy. The community forests are the predominant land cover and provide a pleasant rural character to the community. Approximately 90 percent of Calais is forested, consisting of a mixture of hardwoods and softwoods. Most of the Calais' forestland is owned by non-industrial landowners.

**Table D-2 SUMMARY OF TIMBER HARVEST INFORMATION**

Year	Selection Harvest Acres	Shelterwood Harvest Acres	Clearcut Harvest Acres	Total Harvest Acres	Change of Land use Acres	Number of Timber Harvests
1991	238	0	0	238	0	7
1992	265	0	0	265	0	7
1993	501	0	0	501	0	6
1994	820	80	124	1,024	9	11
1995	312	0	30	342	0	7
1996	244	0	48	292	33	10
1997	429	60	15	504	5	13
1998	409	96	58	563	26	11
1999	753	0	22	775	0	9
2000	393	0	13	406	0	9
2001	392	0	5	397	0	6
2002	58	0	10	68	0	5
<b>Totals</b>	<b>4814</b>	<b>236</b>	<b>325</b>	<b>5375</b>	<b>73</b>	<b>101</b>

The amount of forestland in Tree Growth provides an indication of the prevalence of commercial forestry occurring in Calais. The Tree Growth Tax Law allows for the assessment of forestland used primarily for commercial purposes, based on current use rather



than market value as long as the land is managed for timber production and remains as forest. In July 2004, there were 10,502.44 acres, or 141 parcels, listed in Tree Growth.

Approximately 2,669 acres were classified as softwood, 3,487.94 acres were classified as hardwood, and 4,345.50 acres were classified as mixed wood. This translates into an average parcel size of 400 acres. Land classified under the Tree Growth Tax Law constitutes 48 percent of the land area of the City.

Forest management for wildlife that includes timber harvesting is conducted with the Moosehorn National Wildlife Refuge, which consists of 4,524 acres within Calais. Many species of wildlife will only thrive in a young forest. In the past, wildfires periodically rejuvenated the forest. Nowadays, forest management programs on the Refuge serve to take the place of fire. Small clearcuts scattered throughout the forest provide openings and young bushy growth that serve as good and cover for many wildlife species. This management has resulted in dramatic increases in many species including woodcock, grouse, bear, and moose. Timber harvesting also provides local employment and a percentage of receipts from sales is returned to local communities.

The forestry industry in Calais and surrounding areas accounts for a good portion of the city's economy. Domtar in Woodland employs 554 people at one mill and Louisiana Pacific employs another 120 people at another facility. The timber harvesting and related transportation services needed to supply this wood employ about half again as many people as the mills. Many of the people working in the woods and mills live in Calais. There is also a significant underground economy in timber harvesting and tipping for Christmas wreaths, for which employment figures are unavailable.

An inventory of street and shade trees has not been prepared but would be helpful as part of efforts to revitalize downtown and augment recent investments in interpretive signs, welcome areas and street improvements.

## **WATER RESOURCES**

Calais is blessed with an abundance of good quality water resources. There are numerous streams, the St. Croix River and several lakes located within the boundaries of the city. Most are remotely located and very limited with respect to development. Lake access is mainly from unimproved dirt roads. The lakes in Calais have been little publicized or publicly utilized and/or developed. The St. Croix River forms as the City's northern and eastern border. The River is tidal through much of the City, with high tide stretching about 600 feet upstream of the Ferry Point Bridge. A more detailed examination of marine waters and marine resources are considered in the following section.

### **Watersheds**

A watershed is the land area in which runoff from precipitation drains into a body of water. The boundaries of the watersheds in Calais, also known as drainage divides, are shown on Map 6: Water Resources. The portion of the watershed that has the greatest potential to affect a body of water is its direct watershed, or that part which does not first drain through

upstream areas. Anything that can be transported by water will eventually reach and impact the quality of a water 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.

### Rivers, Streams and Brooks

There are numerous streams in Calais including Magurrewock Stream, Dead Meadow Stream, Beaver Brook, Interval Brook, Keenes Lake Outlet and East Stream, Beaver Brook, Interval Brook, Keenes Lake Outlet and East Branch. There are also many lakes including Nashs Lake, Keenes Lake, Beaver Lake, Vose Pond, Mud Lake, and Flowed Land Ponds. Howard Lake and Shattuck Lake are co-jurisdictional with Robbinston. There are approximately 16 camps on Keenes Lake, 50 camps on Nashs Lake, 2 camps on Beaver Lake and 13 camps on Howard Lake. There is also a commercial campground located on Keenes Lake. Documented surface water quality information is very limited. Inland surface water quality is high and most are rated by the Inland Fisheries and Wildlife (IFW) as being of high value for fisheries.

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. These classifications are defined by legislation, with Class AA being 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 designated uses ascribed to Maine's water quality classifications are provided in footnote 1 and the current classifications in Calais are as follows:

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<sup>1</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

The St. Croix River main stem from the outlet of Chiputneticook Lakes to its confluence with the Woodland Lake impoundment is Class A; from the Grand Falls Flowage between Route 1 (Princeton and Indian Township) and Black Cat Island is Class B; and the Woodland Lake impoundment and waters from the Woodland Dam to tidewater including all impoundments are Class C. The St. Croix River tributaries are Class B unless otherwise specified; all tributaries entering upstream from the dam at Calais are Class A unless otherwise classified; and Tomah Stream is Class AA.

### 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. Steep slopes with highly erodible soils are particularly susceptible to erosion. The Shoreland Zoning Ordinance, with revisions adopted by Calais in 2002 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.

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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).]
- B. The dissolved oxygen content of Class C water may be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. 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 142 per 100 milliliters or an instantaneous level of 949 per 100 milliliters. The board shall promulgate rules governing the procedure for designation of spawning areas. Those rules must include provision for periodic review of designated spawning areas and consultation with affected persons prior to designation of a stretch of water as a spawning area. [1989, c. 890, Pt. A, §40 (aff); Pt. B, §63 (amd).]
- C. Discharges to Class C waters may cause some changes to aquatic life, provided that the receiving waters shall be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community. [1985, c. 698, § 15 (new).] [1989, c. 890, Pt. A, §40 (aff); Pt. B, §63 (amd).]

The 100-year floodplains within Calais 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 during coastal storms. One hundred year floodplains, shown on Map 4: Topography, Steep Slopes and Flood Zones, are associated with the St. Croix River, Beaver Lake, East Branch, Carson Heath, Beaver Brook, Flowed Land Ponds, Pine Lake, Nashs Lake, Mud Lake, Keenes Lake, Shattuck Lake, Howard Lake, Magurrewock Stream and a number of other wetland areas. Flooding has not been a significant problem in Calais. Calais adopted a Floodplain Management Ordinance in 2000 that includes construction standards to minimize flood damage within the 200-year floodplain.

### **Wetlands**

The term "wetlands" is defined under both state and federal laws as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support prevalence of vegetation typically adapted for life in saturated soils." Wetlands include freshwater swamps, bogs, marshes, heaths, swales, and meadows.

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, boating, hunting, and environmental education.

The MDEP has identified wetlands located within Calais, as illustrated on Map 6: Water Resources. These wetlands were identified by aerial photo interpretation and 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 majority of freshwater wetlands are Class 3 alder swamps, and minor streams, many of which are spring fed, and serve as storm water storage, recharge areas and drainage systems.

### **Lakes, Phosphorus and Development**

The quality of our lakes as recreational resources, gems of natural beauty and coldwater fisheries is a result, at least in part, of their phosphorus content. Phosphorus controls the level of algae<sup>2</sup> production in lakes. The abundance of algae in the lake water determines the clarity of the water as well as the amount of well oxygenated, cold water available to cold water fish species (trout and salmon) in the summer months. Low phosphorus concentrations yield clear lakes with plenty of deep, cold water oxygen. Higher phosphorus concentrations cause lakes to be cloudy and oxygen may be severely depleted or eliminated from the deep, cold water in the summer months. Very high concentrations cause dense blooms of blue-green algae,

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<sup>2</sup> Algae are microscopic plants, which grow suspended in the open water of the lake or in concentrated clumps around the shallow margins of the lakeshore.

which turn the water a murky green and accumulate in smelly, decaying scums along the shoreline.

Phosphorus is a very common element typically associated with soil and organic matter. It gets into our lakes in a variety of ways. The rainfall that falls directly on the lake has some phosphorus dissolved in it and groundwater may contribute some phosphorus from septic systems around the shoreline. Most of the lake's phosphorus comes from stormwater runoff draining from the lake's watershed to the lake in tributary streams and drainage ways. The amount of phosphorus in the lake depends on what the stormwater runs over on its way to these streams and drainage ways. If the watershed, the land area draining to the lake, is forested, the phosphorus concentration in the lake will be low because the forest is an effective phosphorus sponge, and does not release its phosphorus readily to the stormwater. However, stormwater draining from developed land, whether residential, commercial or industrial, contains a lot of phosphorus. Since the portion of stormwater phosphorus that supports algae growth tends to be associated with small, lightweight soil particles, it is carried very easily and efficiently by stormwater and can be delivered to the lake from anywhere in the watershed. So, generally speaking, the more developed a lake's watershed is, the higher its phosphorus concentration will be.

For lakes with developed or developing watersheds, there are two requirements for keeping phosphorus low and water quality high. First, existing sources of phosphorus to the lake, particularly from soil erosion in the watershed and from inadequate shoreline septic systems on sandy or shallow soils, need to be minimized. The DEP has developed a manual, the Lake Watershed Survey Manual, to guide volunteers in identifying and characterizing watershed phosphorus sources with the assistance of professionals. DEP also has grant programs available to assist in funding these surveys and in fixing the problems identified by the surveys. Second, new additions of phosphorus to the lake that will result from residential and commercial growth in the watershed need to be minimized.

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate present water quality, track algae blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring data for Nashs Lake is available from 1991-2002. During this period, 2 years of basic chemical information was collected, in addition to Secchi Disk Transparencies (SDT). Nashs Lake is a noncolored lake (average color 16 SPU) with an average SDT of 7.3 m (24ft). The range of water column TP for Nashs Lake is 5-10 parts per billion (ppb) with an average of 8 ppb, while Chl<sub>a</sub> ranges from 2.4-2.5 ppb with an average of 2.5 ppb. Recent dissolved oxygen (DO) profiles show low DO depletion in deep areas of the lake. The potential is low for TP to leave the bottom sediments and become available to algae in the water column (internal loading). Oxygen levels below 5 parts per million stress certain cold water fish, and a persistent loss of oxygen may eliminate or reduce habitat for sensitive cold water species. In summary, the water quality of Nashs Lake is considered to be above average, based on measures of SDT, total phosphorus (TP), and Chlorophyll-a (Chl<sub>a</sub>). The potential for nuisance algae blooms on Nashs Lake is low.

Limited water quality monitoring data is available for two other lakes in Calais but for few parameters and sampling years. Secchi disk transparency data is available for Howard Lake in 1988 and for Keene Lake in 1995. Samples were also taken of late summer temperature and dissolved oxygen on Keene Lake in 1995.

**Evaluating New Development Proposals in Lake Watersheds** The DEP has developed a method, described in detail in the manual “Phosphorus Control in Lake Watersheds: A Technical Guide for Evaluating New Development”<sup>3</sup>, to evaluate whether or not a proposed development will add a disproportionate amount of new phosphorus to a lake. It provides a standard which limits the amount of phosphorus that a proposed new development can add to the lake and a means by which the development can be designed and evaluated to insure that it meets the standard for that lake. It principally addresses the long-term increase in stormwater phosphorus that occurs when land is converted from forest or field to residential, commercial or industrial development. Though the standards in this manual will greatly reduce potential long-term impacts on lake water quality, the standards do not totally prevent contributions of phosphorus from new development. Also, since these standards will likely not be applied to all new phosphorus sources in lake’s watershed, their implementation may not, by itself, be sufficient to prevent any noticeable decline in lake water quality. In order to insure that lake water quality is maintained, new development standards should be applied in conjunction with efforts to reduce or eliminate some of the most significant existing sources of phosphorus in the watershed.

**Phosphorus Allocations** - Table D-3 provides information for all of the lakes that have at least a part of their direct watershed located in Calais. The last column of the table indicates an estimated per acre phosphorus allocation, in pounds of phosphorus per acre per year (lb/acre/yr), for each lake watershed in town. This allocation serves as a standard for evaluating new development proposals. It is applied to the area of the parcel of land being developed to determine how much the development should be allowed to increase phosphorus loading to the lake. For instance, a development proposed on a 100 acre parcel in a lake watershed with a per acre allocation of 0.05 lb/acre/yr would be allowed to increase the annual phosphorus loading to the lake by 5 lb (0.05 X 100). If the projected increase in phosphorus loading to the lake from the development does not exceed this value, then it can safely be concluded that the development will not add an excessive amount of phosphorus to the lake.

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<sup>3</sup> Phosphorus Control in Lake Watersheds: A Technical Guide for Evaluating New Development - Part A of Chapter 3 in the technical guide describes how the DEP determines phosphorus allocations using the other information included in the spreadsheet. Part B of Chapter 3 describes how to estimate the increase in phosphorus loading to the lake that will result from new subdivision and commercial/industrial type developments. This is the same method that is used to evaluate development applications in lake watersheds that are submitted to DEP under the Site Location Law and the Stormwater Management Law. It is also used by many towns to evaluate applications for new development under their Subdivision and Site Review ordinances. Typically, this analysis is performed by the developer’s consultant, either an engineer, surveyor or soil scientist, though in some it is performed by the developer. DEP can provide assistance to local planning boards in reviewing these submittals as well as to the developer or his/her consultant in performing the analysis.

**Table D-3 PER ACRE PHOSPHOROUS ALLOCATIONS FOR CALAIS LAKES**

Water Body	Direct Drainage In Calais (acres)	Percent of Drainage In Calais	Area not available for devel't (acres)	Area available for devel't (AAD) (acres)	Growth Factor (GF)	Area likely to be developed (D=GFxAAD) (acres)	Lbs. Phosphorous allocated to towns share of watershed per ppb in lake (F)	Water Quality Category	Level of Protection H=high cold water fishery M=medium	Acceptable increase in lakes phosphorous concentration in ppb (C)	Lbs. Per acre phosphorous allocation (FC/D)
Beaver Lake	511	100	25	486	0.2	97	6.06	Moderate-Sensitive	M	1.00	0.062
Flowed Land Pond	679	100	0	679	0.2	136	10	Moderate-Sensitive	M	1.00	0.074
Howard Lake	647	18 <sup>4</sup>	35	612	0.25	153	8.18	Moderate-Sensitive	H	0.75	0.04
Keenes Lake	780	100	20	760	0.25	190	8.93	Moderate-Sensitive	H	0.75	0.035
Mud Lake	190	100	0	190	0.2	38	1.34	Moderate-Sensitive	M	1.00	0.035
Nashs Lake	3,694	85 <sup>5</sup>	200	3494	0.25	874	51.37	Good	H	1.00	0.059
Pennemaquan Lake	143	1 <sup>6</sup>	0	143	0.2	29	1.52	Moderate-Sensitive	H	0.75	0.04
Pine Lake	145	100	0	145	0.2	29	1.6	Moderate-Sensitive	M	1.00	0.055
Shattuck Lake	42	60 <sup>7</sup>	2	40	0.25	10	0.66	Moderate-Sensitive	H	0.75	0.05
Unnamed Pond	19	30 <sup>8</sup>	0	19	0.2	4	0.19	Moderate-Sensitive	M	1.00	0.05
Vose Pond	1,598	100	0	1598	0.2	320	25	Moderate-Sensitive	M	1.00	0.078

The state statute requiring towns to regulate land subdivisions (30-A MRSA §4401) lists phosphorus loading to great ponds as a specific review criteria (#18) that must be addressed before a subdivision permit is issued. The evaluation method described in the technical guide<sup>3</sup> provides a means of satisfying this review criteria that takes into consideration the specific sensitivity and limitations of each individual lake and its watershed, as expressed in the lakes per acre phosphorus allocation.

### Fishery Resources (Fresh Water)

The Maine Department of Inland Fisheries and Wildlife (IFW) has rated the lakes, ponds, and streams in Calais 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.

Nashs Lake, Keenes Lake, Shattuck Lake, and Howard Lake are rated as being high value fishery resources. The Maine Department of Inland Fisheries and Wildlife currently stocks the following waters and species on an annual basis:

Nashs Lake - landlocked salmon

Keenes Lake - brook trout

<sup>4</sup> located in Baring Plantation; 1.9% of drainage area in Baring Plantation  
1.2% of drainage area in Charlotte; 78.6% of drainage area in Robbinston

<sup>5</sup> 15.1% of drainage area is in Robbinston

<sup>6</sup> located in Charlotte; 32.2% of drainage area in Baring Plantation; 50.0% of drainage area in Charlotte; 1.5% of drainage area Meddybemps; 12.6% of drainage area in Pembroke; 2.7% of drainage area in Robbinston

<sup>7</sup> 40.0% of drainage area is in Robbinston

<sup>8</sup> located in Baring Plantation; 70.1% of drainage area in Baring Plantation

Shattuck Lake - brook trout  
Magurrewock Stream - brook trout

Nashs Lake's major tributary, Interval Brook, is both a spawning and nursery stream for brook trout and salmon and also supports a spawning run of the lake's smelts each spring. Interval Brook is thus rated as being of high value. Magurrewock Stream, an outlet of Howard Lake, is rated as high value.

Beaver Brook, an outlet for Nashs Lake, is rated as moderate value because of its population of native brook trout. The east branch of Magurrewock Stream supports native brook trout and is rated as moderate. There is an unnamed tributary at the western end of Keenes Lake that supports an important smelt spawning run each spring and is rated as having a high fisheries value. Because of its importance the Department has closed it to dipping of smelts by the public along with Interval Brook.

Nashs Lake, Keenes Lake, Howard Lake, Beaver Lake, Vose Lake, and Shattuck Lake are open to fishing and boating. Several of the lakes are not easily accessible. Freshwater fish that are found in Calais include brook trout, landlocked salmon, smallmouth bass, pickerel, white perch, yellow perch, hornpout, and sunfish.

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 and fisheries 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.

### **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 two sand and gravel aquifers within Calais. These areas have surficial deposits with moderate to good potential groundwater yield, generally between 10 and 50 gallons per minute. The larger area is bound by the St. Croix River on the west, the Magurrewock Stream on the south, Magurrewock Mountain on the east and South Street on the north. The smaller area is bound by the Maine Central Railroad, Route 1 and Magurrewock Stream. Depth to groundwater in these areas averages 6 feet. These aquifers and several public wells in Calais are depicted on Map 6: Water Resources. The Public Water Supply Sources in Calais include:



Table D-4 PUBLIC WATER SUPPLIES

Water System Name	Public Water Supply Type <sup>9</sup>	Source Name	Source Type	Location
Calais Water Dept	Community	DR. WELL 300' (WELL #1)	Groundwater	Calais
USFW Moosehorn National Wildlife Refuge	Non-Transient	DR WELL 150'	Groundwater	Calais
Keenes Lake Camping Ground	Transient	DR WELL 90'	Groundwater	Calais
Heslins Motel	Non-Transient	DR WELL 98'	Groundwater	Calais
Ice Cream Patch & Take-Out	Transient	DR WELL	Groundwater	Calais
Washington Cnty Tech #1	Non-Transient	DR WELL 160' St. Croix	Groundwater	Calais
Washington Cnty Tech #2	Non-Transient	DR. WELL 180'	Groundwater	Calais
Washington Cnty Tech #3	Non-Transient	Cafeteria 220'	Groundwater	Calais
Washington Cnty Tech #4	Non-Transient	Wood Harv 160'	Groundwater	Calais
Msu 106 Calais High School	Non-Transient	DR. WELL 250'	Groundwater	Calais
Calais Water Dept	Community	DR. WELL 300' (WELL #2)	Groundwater	Calais

Source: Maine Department of Human Services, Bureau of Health, Division of Health Engineering, Drinking Water Program; Jan 3/03

Map 6 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>9</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 CALAIS

COMMUNITY WATER SUPPLY											Risk Assessment is based on:
Risk of Contamination due to:	USFW Moosehorn NWR Dr well 150'	Heslins Motel Dr well 98'	Ice Cream Patch and Take out Dr well	Keenes Lake Campground Dr well 90'	Msu106 Calais High School	Wash Cty Community College #1	Wash Cty Community College #2	Wash Cty Community College #3	Wash Cty Community College #4	Calais Water Department <sup>10</sup>	
well type and site geology	Low	Moderate	Moderate	Moderate	Moderate	Low	Moderate	Moderate	Moderate		Well type; Overburden thickness
existing risk of acute contamination	Low	High + coliform test	Moderate Septic system within 300' of well	Low	Moderate Septic system within 300' of well	Moderate Septic system within 300' of well	Moderate Septic system within 300' of well	Moderate Septic system within 300' of well	High + coliform test; Septic system within 300' of well		Coliform test; nitrate test; septic systems within 300' of well
future risk of acute contamination	Low	Low	Low	Moderate Proprietor does not own or control all land within 300'	High Legal control is less than a 150 radius around well	Moderate Proprietor does not own or control all land within 300'	High Legal control is less than a 150 radius around well	High Legal control is less than a 150 radius around well	High Legal control is less than a 150 radius around well		Legal control of 150 foot radius around well; and 300 foot radius of property around the well
existing risk of chronic contamination					Low		Low	Moderate 4 potential sources of contamination incl. underground oil storage tank	Moderate 4 potential sources of contamination incl. underground oil storage tank		Detection of chronic chemical contaminants; # of potential contaminant sources around WHPA <sup>11</sup> ; distance to nearest significant potential source of contamination
future risk of chronic contamination					High		High	High	High		Legal control of entire WHPA; legal control of 2500 Phase II/V waiver radius <sup>12</sup>

<sup>10</sup> Data Not Available; Source Water Assessment for new Calais Water Department well in the Industrial Park is being conducted in the Spring-Summer of 2005.

<sup>11</sup> WHPA – Well Head Protection Area

<sup>12</sup> 2500 Phase II/V waiver radius – with control of land out to 2500 feet the Public Water Supply is waived from performing the full range of Phase II/V water quality tests – a significant savings for the operator.

The city will pursue the extension of public water supplies (from their current terminus at Steamboat St.) a mile south along Route 1 to serve the campus where the Community College and High School are located. Such an extension will address the moderate to high risks of contamination in the wells in that area as well as serve the proposed Pine Tree Zone and other commercial development south of the city center.

Since 1988, all well drillers have been required to submit an information form to the Maine Geological Survey (MGS) on wells drilled to supply potable water. In Calais, MGS has reviewed 32 wells with an average depth of 211 feet. Maximum depth was 420 feet; minimum depth was 90 feet.

The quality of municipal water delivered within the city has been plagued with problems related to odor, test and fixture staining. Please refer to the Public Facilities chapter for a full discussion of city efforts to correct these problems through replacement of old piping, water purification and other means.

There is one sand-salt storage area located within the City off North Street, by the Fire Department. It does not pose a significant threat to ground or surface waters.

## **MARINE WATERS AND RESOURCES**

The City's marine resources are those resources associated with coastal areas along the St. Croix River. The River serves as the eastern and northern boundary of the city of Calais and as an international border between the United States and Canada. Jurisdiction over the quantity of flow and water quality is shared by the U.S. townships and Canadian provinces within the St. Croix Watershed. The watershed drains approximately 1,633 square miles, and encompasses over 19 lake systems. The river flows southeasterly along the international boundary, before discharging into the Atlantic Ocean near Passamaquoddy Bay. The river is considered freshwater to a point approximately 600 feet upstream of the Ferry Point Bridge. Tidal influences are limited from further upstream migration by the numerous rapids and riffles.

The St. Croix River, downstream of the Ferry Point Bridge, serves as the coastal area for the city of Calais. From the Ferry Point Bridge, the river runs approximately 2.1 miles to Todd Point, 7 miles to Oak Bay, and 10.5 miles to the southeast border of Calais. The area between 600 feet upstream of Ferry Point Bridge and Todd Point is classified by the Maine Geological Survey as "Tidal/Fluvial". This section is under tidal influence but does not carry estuarine waters. A transition channel begins at Todd Point and continues for approximately one mile downstream. From this point down to Oak Bay, the area is classified as "Estuarine Channel". In this area, ocean and river water mix producing a salinity level between 0.5 and 30 parts per thousand.

Steep banks accompanied by long sloping mud flats are characteristic of the Calais coastal area. Width and depth of the river are greatly affected by tidal influences. During high tide, the river channel from bank to bank can exceed 2500 feet. The narrowest points, less than

750 feet from bank to bank, occur at Todd Point, The Narrows and The Ledge. The western half of the channel is generally less than 6 feet deep at low tide. Channel depth increases with downstream distance on the eastern half of the channel, from 6 feet to 30 feet deep.

Over 75 percent of land use within the watershed is characterized as forestry related. The waterway has been used for over a century by the forestry products industry. Many dams were constructed within the watershed for production of hydroelectric power. Years ago, the lower section of the river was clogged with sawmills and sawdust, while the upper section was being scoured by log drives. Mud flats were formed, in part, through accumulation of sand, gravel and organic materials deposited during the lumber and sawmill operations. In addition, the waters were used for disposal of raw sewage and industrial wastes. These uses contributed to water turbidity, nutrient overloading, the formation of soft river bottoms, and deposition of fine-grained sediments

### **Marine Water Quality**

The Maine Department of Environmental Protection classifies surface waters according to their desired use and water quality necessary to support that use. Water quality in the Calais coastal area is fair, and has significantly improved in the last 10 years. The Maine Department of Environmental Protection (DEP) has classified the Calais region of the St. Croix River as "SC". This rating means that the water quality is satisfactory for fishing, recreational boating and other similar uses. Primary water contact is not recommended. Water quality is characterized by elevated concentrations of suspended solids, bacteria and some ions and metals. Bacterial pollution directly downstream of Calais, measured in fecal coliform concentration, exceeds the legal Maine DEP limits. While fecal coliform concentrations decrease downstream, they are still too high for the direct harvest of major tidal clam beds.

Primary sources of water quality degradation upstream of Calais include the pulp and paper mill in Woodland and sewage effluent from the river communities. Pollution sources from the City of Calais include sewage effluent, storm water runoff and commercial activities. Water quality degradation has significantly decreased since the upgrading of municipal waste-water treatment systems, funded in 1976 by the Federal Clean Water Act. Continuing improvements to the public wastewater treatment systems are being undertaken by the river communities. Two old sewage treatment plants in St. Stephen, NB are now shut down and being decommissioned and a new plant became fully operational in 2004. Ongoing sewer system upgrades by Calais, and progressive sewer/stormwater line system upgrades by Calais and by St. Stephen, are expected to reduce bacterial levels in the river significantly.

Calais has five point source discharges including the sewage treatment plant and four overboard discharge permits. Non-point source pollution poses the greatest threat to water quality in Maine communities and Calais is no exception. The most significant contributing source comes from erosion and sedimentation as well as excessive run-off of nutrients. Additional contributing factors include animal wastes, fertilizers, sand and salt storage, waste lagoons, faulty septic systems, roadside erosion, leaking underground storage tanks, and hazardous substances.

### Fisheries (Marine)

Coastal fishes of primary significance in the Calais area are species that migrate between the St. Croix River and the ocean (Atlantic salmon, alewife, American eel), spend part of their lifecycle in the estuary (striped bass, rainbow smelt), or are permanently resident in the estuary (winter flounder).

Water quality improvements since the early 1970s led to efforts to restore native Atlantic salmon and alewife runs beginning in the early 1980s, with mixed success. An average of 20 adult Atlantic salmon now return to the St. Croix River annually, these the result of a juvenile stocking effort, and alewife numbers have declined from 2.6 million fish in 1987 to less than 1,300 fish in 2004 due to Maine legislation (Sec 1.12 MRSA s6134 passed by the Legislature on April 27, 1995) that has blocked them from much of their spawning habitat since 1995.

Other marine species of significance are the American lobster, sea scallop, spiny sea urchin, softshell clam and clam worm. Lobster and scallop are harvested commercially in the main section of the St. Croix estuary and clam worms are harvested commercially from intertidal mud flats along the length of the estuary. Softshell clam harvest is prohibited due to current bacteria levels.

The economic value of the coastal fisheries is considered fair to poor due to low stock levels and, for shellfish, bacterial pollution. Continued initiatives to reduce pollution levels may lead to an increased fisheries value in the future. Map 7, Marine Resources, depicts the location of Molluscan shellfish habitat, areas closed to shellfish harvest in 2003, anadromous and catadromous fish locations and historic locations of herring weirs.

### Shellfish Management

The entire estuary of the St. Croix River is closed to shellfishing and there are limited areas of molluscan shellfish habitat as depicted on Map 7 – Marine Resources.

### Commercial Fishing

As the Table D-6 describes, commercial fishing in Calais is of substantially less significance to the local economy than in many Washington County communities.

**Table D-6 FISHING PRESENCE IN WASHINGTON COUNTY**

Community	State License	Clam License	Total Per town	Clam Data Source
Winter Harbor	55	0	55	CEI Report
Gouldsboro	133	17	150	Town manager
Steuben	138	21	159	Town office
Milbridge	144	70	214	Town manager
Harrington	109	57	166	Jim Layton
Addison	151	40	191	CEI Report
Jonesport	191	73	264	CEI Report
Beals	191	12	203	From town clerk

Community	State License	Clam License	Total Per town	Clam Data Source
Jonesboro	79	44	123	From annual report
Roque Bluffs	41	58	99	From annual report/town clerk
Machias	88	0	88	No flats
East Machias	50	27	77	Town office
Machiasport	150	79	229	CEI Report
Cutler	87	43	130	Town office
Whiting	16	6	22	Town clerk
Trescott Twp.	7	n/a	7	State issues
Edmunds Twp.	8	n/a	8	State issues
Lubec	209	59	268	Town office
Eastport	43	4	47	CEI Report
Pembroke	58	35	93	Harbor master
Perry	39	22	61	Town clerk
Robbinston	8	0	8	Flats are closed
<b>Calais</b>	<b>12</b>	<b>0</b>	<b>12</b>	<b>No requests</b>
<b>Totals</b>	<b>2007</b>	<b>667</b>		

Source: Paths and Piers: A Study of Commercial Fishing Access in Downeast Maine Coastal Communities, Sunrise County Economic Council, April, 2003

However, data from the Department of Marine Resources, shown in Tables D-7 and D-8 indicate the number of residents holding marine resource licenses (dealers and harvesters) has increased slightly in the past five years and the number of commercial lobster tags registered to Calais residents rose until 2001 then declined in 2002 to levels seen in 1998.

**Table D-7 MARINE LICENSE HOLDERS IN CALAIS 1998 – 2002**

Type	License Year				
	1998	1999	2000	2001	2002
Residents Holding Marine Resource Licenses - Dealers	9	6	8	8	7
Residents Holding Marine Resource Licenses - Harvesters	16	16	16	17	22
Grand Total*	25	22	24	25	29

Source: Maine Department of Marine Resources, 2003

**Table D-8 COMMERCIAL LOBSTER TAGS REGISTERED TO CALAIS RESIDENTS**

# of Tags		1998	1999	2000	2001	2002	Grand Total*
Lobster							
L-A-1	LC1 – Class 1 commercial lobster license	95	100	140	390	290	1015
	LC2 – Class 2 commercial lobster license		500	500	500		1500
L-A-1 Total*		95	600	640	890	290	2515
L-A-5	LC2 – Class 2 commercial lobster license	600	800	770			2170
	LC3 – Class 3 commercial lobster license				880	800	1680
L-A-5 Total*		600	800	770	880	800	3850
L-B-5	LC2 - Class 2 commercial lobster license	500					500
L-B-5 Total*		500					500
Grand Total*		1195	1400	1410	1770	1090	6865

Source: Maine Department of Marine Resources, 2003

Target species (See Table D-9) appear to be limited to scallop and lobster or crab and the data indicate a few harvesters rely on this activity to supplement seasonal income.

**Table D-9 FISHING LICENSES IN CALAIS BY HARVEST SPECIES 1998-2002**

Count of License Types/Town	Dealers by Year					Harvesters by Year				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
License Type										
COMMERCIAL FISHING SINGLE OPERATOR						4			2	10
COMMERCIAL FISHING WITH CREW							2	2	2	
COMMERCIAL SHELLFISH									2	
LOBSTER MEAT PERMIT					2					
LOBSTER/CRAB APPRENTICE										2
LOBSTER/CRAB CLASS 1						8	8	8	8	8
LOBSTER/CRAB CLASS 11						4	4	4	2	
LOBSTER/CRAB CLASS 111									2	2
LOBSTER/CRAB NON-COMMERCIAL						4	6	6	8	10
LOBSTER/CRAB OVER AGE 70										
MARINE WORM DIGGING										
MUSSEL-DRAGGER										
RETAIL SEAFOOD	16	12	16	16	12					
SCALLOP-DIVER						4	2	2	2	2
SCALLOP-DRAGGER						2	2	2	2	6
SCALLOP, NON-COMMERCIAL						2	4	4	2	
SEA URCHIN- DIVER						4	4	4	2	2
SEA URCHIN-DRAGGER										2
WHOLESALE SEAFOOD, NO LOBSTERS	2									
WHOLESALE SEAFOOD, WITH LOBSTERS										
GRAND TOTAL*	18	12	16	16	14	32	32	32	34	44

Source: Maine Department of Marine Resources, 2003

The number of fishing boats registered to Calais residents is also indicative of an industry with a steady if slight increase.

**Table D-10 FISHING BOATS REGISTERED TO CALAIS RESIDENTS**

Count of Boats	Year					Grand Total*
Length	1998	1999	2000	2001	2002	
0			3		1	4
14	2	2		1	2	7
15	1	1				2
16			1	1		2
17			1	1	1	3
18	4	3	1			8
19		1		3	4	8
20			2	2	2	6
22	2	2	1			5
32	3	1				4
34				3	3	6
36	2	3				5
38		2	3	3	4	12
Grand Total	14	15	12	14	17	72

Source: Maine Department of Marine Resources, 2003

## Aquaculture

There are no aquaculture lease sites in Calais.

## Access to the Marine Resource

Although there is presently no appreciable shipping traffic into Calais, it was once an active port city. Calais historically served the lumber, granite and fur industries. A navigation channel was constructed by the U.S. Army Corps of Engineers, with initial dredging completed in 1916. The project provided a two mile long 12 foot deep channel followed by a two mile long 9 foot deep channel. The dredged area is located between Calais and Whitlocks Mill, and primarily accounts for the existing channel depth. The regional port for New Brunswick is still active, and attracts several ocean-going ships. Ship traffic is limited primarily to downstream of the Oak Bay inlet area.

Water dependent uses are minimal in the Calais coastal area. Commercial fishermen frequently use the channel for transportation of their goods. Recreational boat traffic is limited on the western portion of the channel. Tidal fluctuations impair docking and mooring accessibility. Small commercial and recreational boat traffic increases on the eastern portion, particularly around St. Croix Island. Public boat launches are located at Pikes Park, Steamboat Street Point and at the St. Croix International Historic Site. Organized public recreational activities include a “Rubber Ducky Race” and the “Crazy Raft Race”, both part of the Annual International Festival. Use of the waterfront is increasing with the development of Waterfront Park, the waterfront walkway and downtown revitalization efforts. As noted in the Public Facilities section the city received a Small Harbor Improvement Project grant to install floating dock facilities.

According to a recent study by the Sunrise County Economic Council, the city of Calais has more than 15.16 miles of coastline and is home to 12 commercial fishermen – see Table D-11. Access to the waterfront in Calais is provided at 2 commercial or private waterfront facilities, neither of which is dedicated to commercial fishing use. These public access points include the city owned ramps at Pikes Point and at Steamboat Point and are depicted on Map 3 – Calais Public Facilities. None of the current access is provided through private-owned piers and wharfs.

**Table D-11 CITY OF CALAIS BOAT ACCESS & WATERFRONT FACILITIES DATA**

<b>Access and Waterfront Facilities Data</b>	<b>Calais</b>
Miles of Coastline	15.16
Total Commercial resource harvesters	12
Fisheries impacted by loss of access	Clam
<b>Boat Access:</b>	
Total current boat access (moorings+berthing+slips+tie ups) commercial & recreational combined	10
Percent of total current boat access used by commercial fishermen	0%
<b>Facilities:</b>	
Number of commercial private & public waterfront facilities in 2002	2
Number of the commercial private & public waterfront facilities <u>dedicated</u> to commercial fishing use	0



<b>Access and Waterfront Facilities Data</b>	<b>Calais</b>
The percent of commercial fishing access that is achieved through private residence (pier/wharfs) that are owned or leased by fishermen.	0%
Number of "Other" access points (beaches, land, property crossing) not actual facilities.	0
The percent Population Change 1990-2000	-5%
The percent Change in Housing 1990-2000	16%
Annual taxes per acre in 2001	\$174.98
Land valuation per acre in 2001	\$2,049.61
<b>Waterfront Issues</b>	
Commercial Fishing access is a problem	No
Current threats to commercial fishing access	Infrastructure Deterioration
The town/city is planning to address commercial fishing access	Yes
The top 3 useful tools to address commercial fishing access were:	Property tax Relief Deeded Access Planning assistance
Commercial Fishing Access Vulnerability Rating	<b>7 (see text following table)</b>

*Source: Paths and Piers: A Study of Commercial Fishing Access in Downeast Maine Coastal Communities; January 2003, Sunrise County Economic Council submitted to the State Planning Office and the Maine Coastal Program*

The commercial fishing access vulnerability rating in the Paths and Piers study sought to evaluate the vulnerability of losing commercial fishing access within a community. Ratings were derived from a matrix that analyzed the following factors:

- Whether commercial fishing access is a community priority
- Whether or not a community has strong ordinances
- Whether or not a community has a dedicated fishing pier
- Development pressures
- Number of harvesters

Vulnerability ratings ranged from a low of 1 and a high of 7 with communities falling in the 1-3 category having the least vulnerability to a loss of commercial fishing access, those in the 4-5 category having a moderate vulnerability and those in the 5-7 range having the greatest vulnerability to loss of commercial fishing access. Calais, with a rating of 7 is thus highly vulnerable to loss of access without taking measure to correct specific access problems. The analysis in Table D-11 indicates that the city could improve commercial fishing access by improving infrastructure, providing property tax relief, obtaining planning assistance, and purchasing additional deeded access.

Responses to the public survey in May of 2004 indicated very strong support for the city to develop recreational facilities along the waterfront, and to invest in shore access and restoration and maintenance of the harbor.

## 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 is one such rarity in Calais.

**Table D-12 RARE OR EXEMPLARY BOTANICAL FEATURES IN CALAIS**

Scientific Name (Common Name)	Last Seen	State Rarity	Global Rarity	Legal Status	Habitat Description
SUAEDA MARITIMA SSP. RICHTI (RICH'S SEA-BLITE)	1940 08-01	S1	G5T3	SC	Salt-marshes and sea-stands.
<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.</p> <p>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.</p> <p>S3 - Rare in Maine (on the order of 20-100 occurrences).</p> <p>S4 - Apparently secure in Maine.</p> <p>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.</p> <p>G2 - Globally imperiled due to rarity (6 - 20 occurrences or few remaining individuals or acres) or other factors making it vulnerable to further decline.</p> <p>G3 - Globally rare (on the order of 20 - 100 occurrences).</p> <p>G4 - Apparently secure globally.</p> <p>G5 - Demonstrably secure globally.</p> <p>Note: Global ranks are determined by The Nature Conservancy.</p> <p>T - THREATENED: Rare and, with further decline, could become endangered; or federally listed as Endangered.</p> <p>SC - SPECIAL CONCERN: Rare in Maine, based on available information, but not sufficiently rare to be considered Threatened or Endangered.</p> <p>SX-Apparently extirpated in Maine (historically occurring species for which habitat no longer exists in Maine).</p> <p>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 (10/24/02)					

### 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 can result in the deterioration of habitats and diversity through habitat fragmentation and loss of open space and essential travel corridors.

The richest wildlife diversity in Calais is avian. Bald eagles (*Haliaeetus leucocephalus*) are common and nest on the St. Croix River and several inland lakes and rivers. See Map 8 - Critical Habitat.

The Moosehorn National Wildlife Refuge, just southwest of Calais, was established in 1937 as a refuge and breeding ground for migratory birds and other wildlife. It is the first in a

chain of migratory bird refuges that extends from Maine to Florida. The Refuge consists of two units: the Baring Unit covers 16,080 acres and is located off U.S. Route 1 southwest of Calais and the 6,665 acre Edmunds Unit borders the tidal waters of Cobscook Bay near Dennysville.

Approximately, 2,780 acres of the Edmunds Unit and 4,680 acres of the Baring Unit were set aside as Wilderness Areas by Congress. As part of the National Wilderness Preservation System these areas are granted special protection that will insure the preservation of their wilderness characteristics.

The Refuge is a highly glaciated expanse of rolling hills, large ledge outcrops, streams, lakes, bogs, and marshes. A diverse forest of aspen, maple, birch, spruce, and fir dominates the landscape and scattered stands of majestic white pine are common. The American woodcock and Eastern Flyway woodcock is intensely studied and managed at Moosehorn. The endangered bald eagle frequents the Refuge and in several pairs of eagles nest there. The woodlands of Moosehorn also abound with many other species including black bears, white-tailed deer, and moose. The Refuge also serves as an important breeding area and migration stop for a variety of waterfowl and other waterbirds including black ducks, wood ducks, ring-necked ducks, Canada geese, loons and ospreys.

**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 with may require special management considerations". According to MDIFW, Calais has four sites of essential wildlife habitat that support bald eagles including nesting territory that is occupied by eagles 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 Calais are illustrated on Map 9 - Critical Habitat and includes waterfowl/wading bird habitat.

In addition to the habitats that have been mapped by IF&W and mentioned above, other notable wildlife habitats in Calais include large, undeveloped habitat blocks and riparian habitats, and vernal ponds. Larger undeveloped blocks of forest and wetlands provide habitat for wide-ranging mammals such as bobcat and black bear, as well as for rarely-seen forest birds and a myriad of other wildlife species. Riparian areas offer habitat for many plants and animals and can also serve as wildlife travel corridors, as well as playing an important role in protection water quality, as noted in the plan.

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

In Calais there are a total of 2448.28 acres owned for public purposes. Of these, 441.38 are state owned, 391.31 are federally owned, and 1615.59 are owned by the city, made up mostly

of the 640 acres at Nashs Lake and the Devils Head Recreation Area. All are depicted on Map 2 – Calais Public Facilities. City ownership is split among conservation and park lands (Nashs Lake - 640 acres), the industrial park, a various public services and facilities (schools, public safety, cemeteries, water and sewer systems etc.). Additional public accesses, picnic areas and cemeteries are also noted on Maps 2 and 3.

## **NATURAL RESOURCE PROTECTION**

There are a variety of laws and legal incentives that protect the natural resources in Calais. There are also local and regional groups who protect these resources through scientific data gathering and education. Those of greatest significance are summarized below.

**Pertinent Federal and State Laws** – The federal and state laws that protect the natural resources of Calais include:

- 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 requirements for minimum lot size and minimum frontage on a water body. The minimum lot size requirement for a single- family residence is 20,000 square feet; the shoreland frontage requirement is 150 feet. The requirements for multi-family and other uses are based on the amount of sewage generated.

**Pertinent Local Laws** - At the local level, Calais has adopted minimum shoreland standards, as required by the State Mandatory Shoreland Zoning Act. Surface waters in Calais are also protected through the Plumbing Code and the local Subdivision Ordinance. Calais has a Floodplain Management Ordinance to protect the marine waterfront by restricting building to reduce flood damage and other problems. Calais last revised its shoreland zoning ordinance in 2002 and conducted a major revision of all land use codes in 1996; the zoning ordinance is now regularly updated.

**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.

Currently Calais has no acreage in the farmland program. To be eligible for the farmland program parcels 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.

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.

In 2004, Calais had 0 acres enrolled in this program.

- 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 2004, Calais had 141 parcels totaling 10,502.44 acres in tree growth tax status.

These programs enable farmers and other landowners to use their property for its productive use 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.

**Local and Regional Conservation and Protection Efforts** - The St. Croix International Waterway Commission was established by the State of Maine and Province of New Brunswick to protect and manage the St. Croix River's resources. The Commission completed the "Plan for Long-term Cooperative Management of the St. Croix International Waterway" in 1993 which set forth a cooperative riverway management strategy that involves federal, state and local levels of government, citizens and other groups. The principal management goals of the Commission are as follows:

1. Protect and enhance the Waterway's natural heritage: its scenic landscapes and waterscapes; its fish, wildlife, forest and plant resources; and its quality of air, land and water.
2. Preserve and realize additional benefits from the Waterway's cultural heritage: its significant history, its traditional economic and recreational bases, and its rural quality of life.
3. Identify and nurture new avenues for recreational and economic development compatible with the Waterway's natural and cultural values.
4. Establish priorities and a balance for growing demands on limited land and water resources along the Waterway, for the greatest long-term public benefit.

5. Strengthen government and public/private partnerships for effective planning and management to more equitably share the benefits and responsibilities of Waterway stewardship.

## POLICIES AND IMPLEMENTATION

The natural resources of Calais include the St. Croix River, eight lakes, extensive wetlands greater than 10 acres in size, numerous streams and brooks, two small sand and gravel aquifers, extensive fisheries and wildlife resources, including seventeen bald eagle nesting sites, only a subset of which (4 in 2004) may be actively occupied in any given year. A significant portion of the Moosehorn Wildlife Refuge is located within Calais and provides important habitat for migratory birds and other wildlife species.

Calais' natural resources receive some protection. The Shoreland Zoning Ordinance, recently revised to meet State mandates, provides some protection to the State-identified wetlands, all eight of the lakes and many of the streams. The bald eagle nesting sites are protected by the federal Endangered Species Act and the Maine Endangered Species Act. The sand and gravel aquifers also may not be receiving adequate protection.

In order to protect and preserve the natural resources within the city of Calais, the city will continue to update local land use regulations to maintain consistency with the minimum State of Maine requirements. The city has developed the following policies and implementation strategies to further protect and preserve the natural resources:

<b>Goal: Calais 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 when necessary to maintain compliance with minimum State and Federal regulations and reflect the local needs of the community	Planning Board; City Council	On-going
	Continue to promote the use of Best Management Practices for Stormwater Management and for Erosion and Sedimentation Control through education of the Planning Board, Code Enforcement Officer and city road crews.	Planning Board; City Council	On-going
	Pursue extension of public sewer services (from their current terminus at Steamboat St.) a mile south along Route 1 to serve the campus where the Community College and High School are located.	City Council	Short-term (within 2 years)
Ensure that water quality is sufficient to provide for the protection and propagation of fish, shellfish, and wildlife and provide for recreation in and on the water	Establish a water quality-testing program for the City's lakes, streams, brooks and the St. Croix River. Give the highest priority to those water bodies most important for recreation and as fisheries and wildlife resources.	DEP Volunteer Program	On-going
	Amend the Subdivision Regulations to	Planning	2005

<b>Goal: Calais 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>
	incorporate the DEP evaluation method (technical guide referenced in footnote 3) for phosphorous allocation in the city's lakes.	Board/ City Council	
	Encourage the further development of Lake Associations for Nashs, Keenes and Howard Lakes.	City Staff	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/Inter national Waterway Commission	On-going
Protect drinking water supplies.	Support efforts to replace piping to improve water quality within Calais.	City Council; Calais Water Department	On-going
	Assure adequate protection for groundwater resources that serve the City's public supply by developing and adopting a wellhead protection ordinance.	Planning Board/ City Council	2005
	Coordinate development of international bridge facilities so that design of drainage and substrate materials take wellhead protection measures into account, e.g. clay liners, drainage direction etc.	Planning Board	On-going
	Provide public water in areas of the city where risk of contamination is documented. Therefore, pursue extension of public water supplies (from their current terminus at Steamboat St.) a mile south along Route 1 to serve the campus where the Community College and High School are located.	City Council; Calais Water Department	Short-term (within 2 years)
	Make application, where eligible, to the Small Community Grant Program to upgrade any additional failing septic systems.	City Council	On-going
<b>Land Suitability</b>			
Ensure that development is located on land that is capable of supporting on-site water and septic systems in areas that are not served by centralized sewer and water services.	Continue to require a soil evaluation test prior to the issuance of a building permit in accordance with provisions in the Zoning and Subdivision Ordinances 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/City Council	On-going
	Direct development to areas with appropriate soils, slopes, and drainage conditions.	Planning Board	On-going
	Prevent/discourage development on floodplains and on steep slopes.	Planning Board	On-going

<b>Goal: Calais 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>
Affirm, as a matter of public policy, that sewage treatment through the City's treatment facilities is preferred over subsurface sewage disposal	Continue to include provisions in the Subdivision and Land Use Ordinances to require that new residences and businesses shall be served by City utility district lines when these lines are reasonably accessible to the property line of a new development	Planning Board/City Council	On-going
Ensure that new development preserves, to the greatest extent possible, the natural and cover and vegetation.	Continue to require in the Zoning and Subdivision Ordinances that developers 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/City Council	On-going
<b>Floodplains</b>			
Avoid problems associated with floodplain development and use along the City's Shorelands.	Continue to enforce the Shoreland Zoning Ordinance which prohibits residential, commercial and industrial structures in floodplains that are zoned Resource Protection.	Planning Board/City Council	On-going
	Continue to enforce the Floodplain Management Ordinance to discourage new residential, industrial, commercial and other significant development within 100 year floodplains.	Planning Board/City Council	Ongoing
<b>Marine Resources</b>			
Work to restore and maintain the water quality of the St. Croix River to allow for the broadest possible diversity of public and private users.	Encourage and support the upgrading of water treatment effluent and commercial/industrial effluent discharge quality with the goal of reclassification of the St. Croix receiving waters to allow for bodily contact.	City Council	On-going
	Continue to implement a water quality testing program to monitor storm water runoff and the River's overall health.	Wastewater Treatment Plant	On-going
	Identify areas along the coast which have high sediment erosion, and implement plans to reduce the erosion (i.e. bank stabilization, changes in land use or existing activities).	City Staff	On-going
	Encourage and support cooperation with State, Federal and International agencies/programs designed to improve the quality of the natural resources. Actively work through the St. Croix International Waterway Commission's programs. Seek Federal and State support for the Commission's activities.	City Staff/City Council	Ongoing
	Improve public information and education of the issues related to coastal management, and resource use. For example, involve local schools and Scouts in a "River Clean-up day" and sponsor "Maine Coastal Week" activities.	City Staff	On-going
Ensure that marine resources are not	Continue to require in Zoning Ordinance that prior to approval of non-residential marine	Planning Board/ City	On-going



<b>Goal: Calais 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>
adversely affected by future marine developments.	developments, developer's document the impact of the proposed project on the City's marine resources, and demonstrate that development effects will not be detrimental to those resources.	Council	
Maintain and improve public access to the St. Croix River.	Continue to maintain the City's existing access facilities and implement the 2002 Waterfront Development Plan	City Council/ City Staff	On-going
	Continue to develop public access to the St. Croix River at clam flats between the narrows and Devil's Head.	City Council/ City Staff	On-going
<b>Fish and Wildlife Habitat</b>			
Protect existing fish and waterfowl/wading bird habitats within the town mapped as Essential Habitat or Significant Habitat.	Review protection provisions in the Zoning Ordinance and Subdivision 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	Short-term (within 2 years)
	Make use of 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	On-going
	Encourage landowners to protect and preserve wildlife habitat, and utilize conservation programs to preserve undeveloped land.	City Council/City Staff	On-going
	Appoint an advisory committee to develop a use and conservation plan for Devils Head area.	City Council	2005
<b>Forest and Street Tree Resources</b>			
Seek Tree City USA designation for Calais.	Obtain resources to conduct a street tree inventory and recommend maintenance of existing canopy and additional trees.	City Council; Maine Forest Service	Short-term (within 2 years)
<b>Scenic Resources</b>			
Identify and preserve important scenic resources.	Conduct Citywide inventory to identify highly valued scenic resources. Utilize the scenic inventory to be completed by the St. Croix International Waterway Commission.	Planning Board/ Waterway Commission	Long Term
<b>Education and Traditional Use</b>			
Traditional maritime uses and activities will be protected and promoted.	Review Shoreland Zoning Ordinance to ensure affirmative support for marine and commercial marine related activities.	Planning Board	Immediate
Ensure continued wise use of the Calais coast including fishing-related industries, recreational and recreational-related industries.	Assure that land use regulations (i.e. Zoning and Shoreland Zoning Ordinances) permit a variety of uses along Calais' coastline and allow adequate space for water dependent uses.	City Council/ City Staff	On-going

<b>Goal: Calais 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 traditional use of lands and access to water are protected as development pressures increase.	Retain working waterfront as recreational pressures increase; develop facilities that serve both user groups; consider some separation of uses to ensure overall compatibility	City Council	Immediate (within two years)
	Identify areas in need of additional access.	City Council	Immediate
	Ensure there is adequate municipal mooring and anchoring areas and preserve areas best suited for moorings.	City Council	Immediate (within two years)
	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: <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 access across their property;</li> <li>• Purchasing rights of first refusal for access points or property of critical importance to the fishery;</li> <li>• Purchasing permanent easements or fee title to access points or property of critical importance to the fishery.</li> </ul>	City Council; Planning Board	Immediate (within 2 years)
Utilize financial incentive programs	Encourage landowners to participate in farm, open space and tree growth programs.	City Council CEO Planning Board	On-going

**SUMMARY**

Calais currently offers protection to its natural resources with locally adopted shoreland zoning regulations, zoning and subdivision regulations. These ordinances were substantially re-written to implement policies developed in the 1992 Comprehensive Plan. They are and will be updated to be consistent with the requirements of state and federal regulations and to ensure that Calais retains its character as a maritime city. Protecting public shore and water access and maintaining a healthy balance between industry and natural beauty is crucial for future economic development. Investments will be made in infrastructure that increases access to and use of the city’s waterfront. Water quality will be protected and improved through the continued educational, research and regulatory efforts of the city and local resource management agencies.



New Brunswick, Canada

# Calais Comprehensive Plan

## Map 4: Topography, Steep Slopes and Flood Zones

### LEGEND

- State roads
- Town roads
- Private roads
- Trail/Undeveloped roads
- Active railroad
- Perennial streams
- Water

### FLOOD ZONES

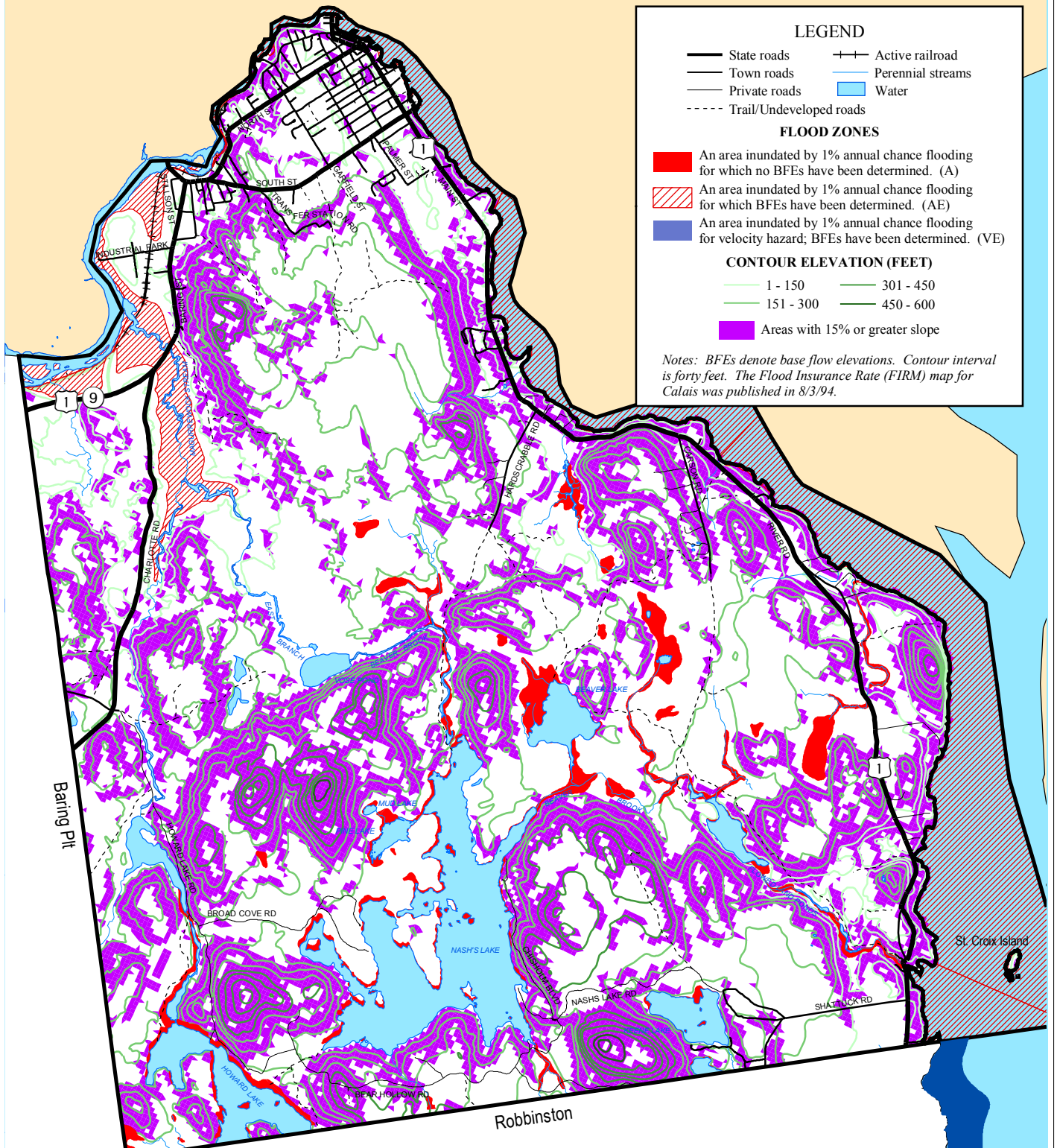
- An area inundated by 1% annual chance flooding for which no BFEs have been determined. (A)
- An area inundated by 1% annual chance flooding for which BFEs have been determined. (AE)
- An area inundated by 1% annual chance flooding for velocity hazard; BFEs have been determined. (VE)

### CONTOUR ELEVATION (FEET)

- 1 - 150
- 151 - 300
- 301 - 450
- 450 - 600

- Areas with 15% or greater slope

Notes: BFEs denote base flow elevations. Contour interval is forty feet. The Flood Insurance Rate (FIRM) map for Calais was published in 8/3/94.



Sources: USGS, NFIP/FEMA, ESRI, MEDOT and MEGIS  
Map revised: September, 2004

Washington County Council of Governments  
Eastern Maine Development Corporation  
PO BOX 631 \* Calais, ME 04819  
(207) 454-0465  
Web site: [www.emdc.org/wccog.htm](http://www.emdc.org/wccog.htm)



See map disclaimer at end of the Executive Summary.



New Brunswick, Canada

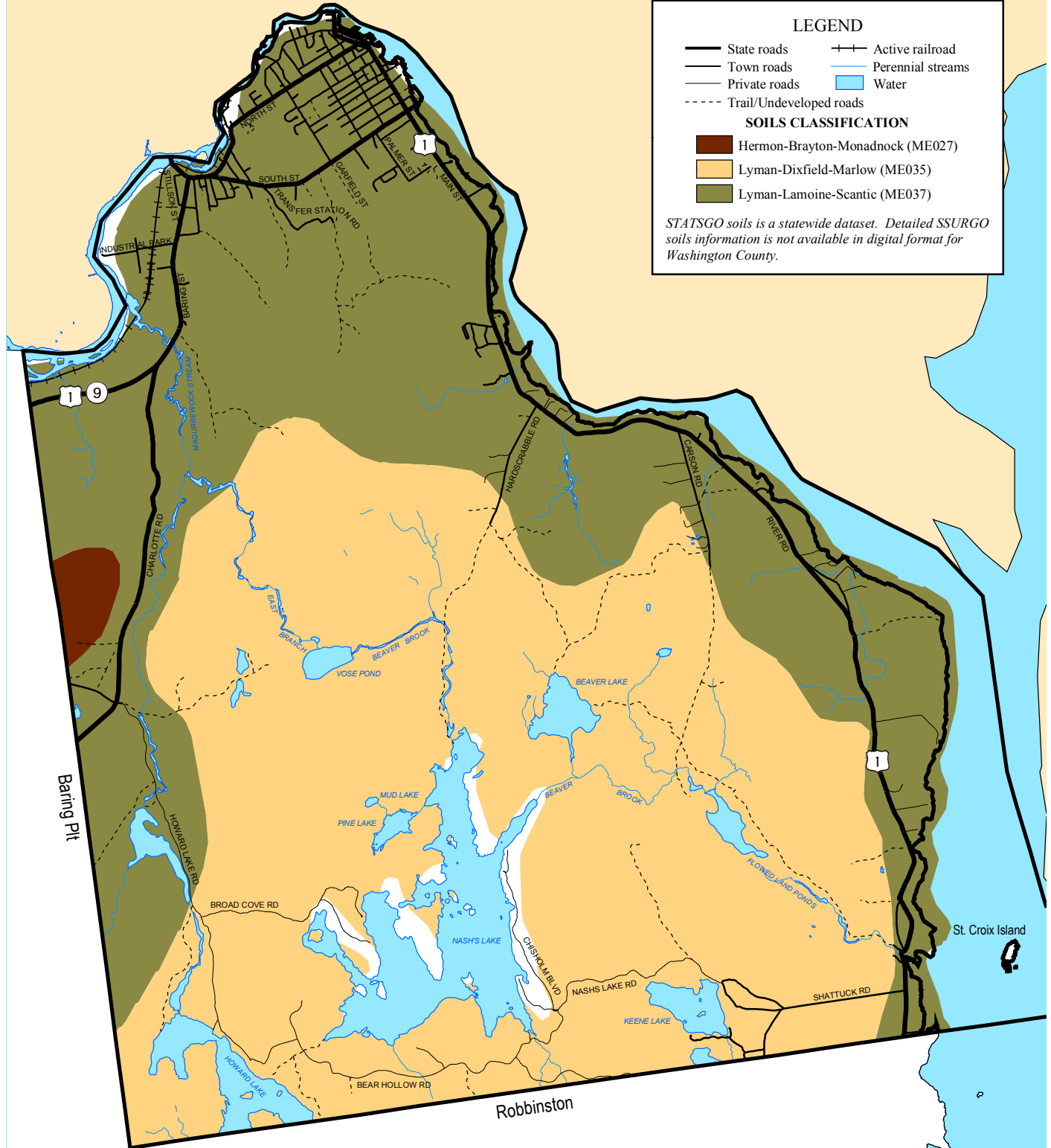
# Calais Comprehensive Plan

## Map 5: STATSGO Soils

- LEGEND**
- State roads
  - Town roads
  - Private roads
  - Trail/Undeveloped roads
  - Active railroad
  - Perennial streams
  - Water

- SOILS CLASSIFICATION**
- Hermon-Brayton-Monadnock (ME027)
  - Lyman-Dixfield-Marlow (ME035)
  - Lyman-Lamoine-Scatic (ME037)

STATSGO soils is a statewide dataset. Detailed SSURGO soils information is not available in digital format for Washington County.


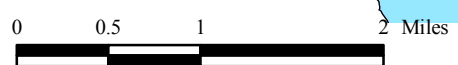


Baring Pit

Robbinston

St. Croix Island

Washington County Council of Governments  
 Eastern Maine Development Corporation  
 PO BOX 631 \* Calais, ME 04619  
 (207) 454-0465  
 Web site: [www.emdc.org/wccog.htm](http://www.emdc.org/wccog.htm)

Sources: USDA-NRCS, ESRI, MEDOT and MEGIS  
 Map revised: September, 2004

See map disclaimer at end of the Executive Summary.



New Brunswick, Canada

# Calais Comprehensive Plan

## Map 6: Water Resources

**LEGEND**

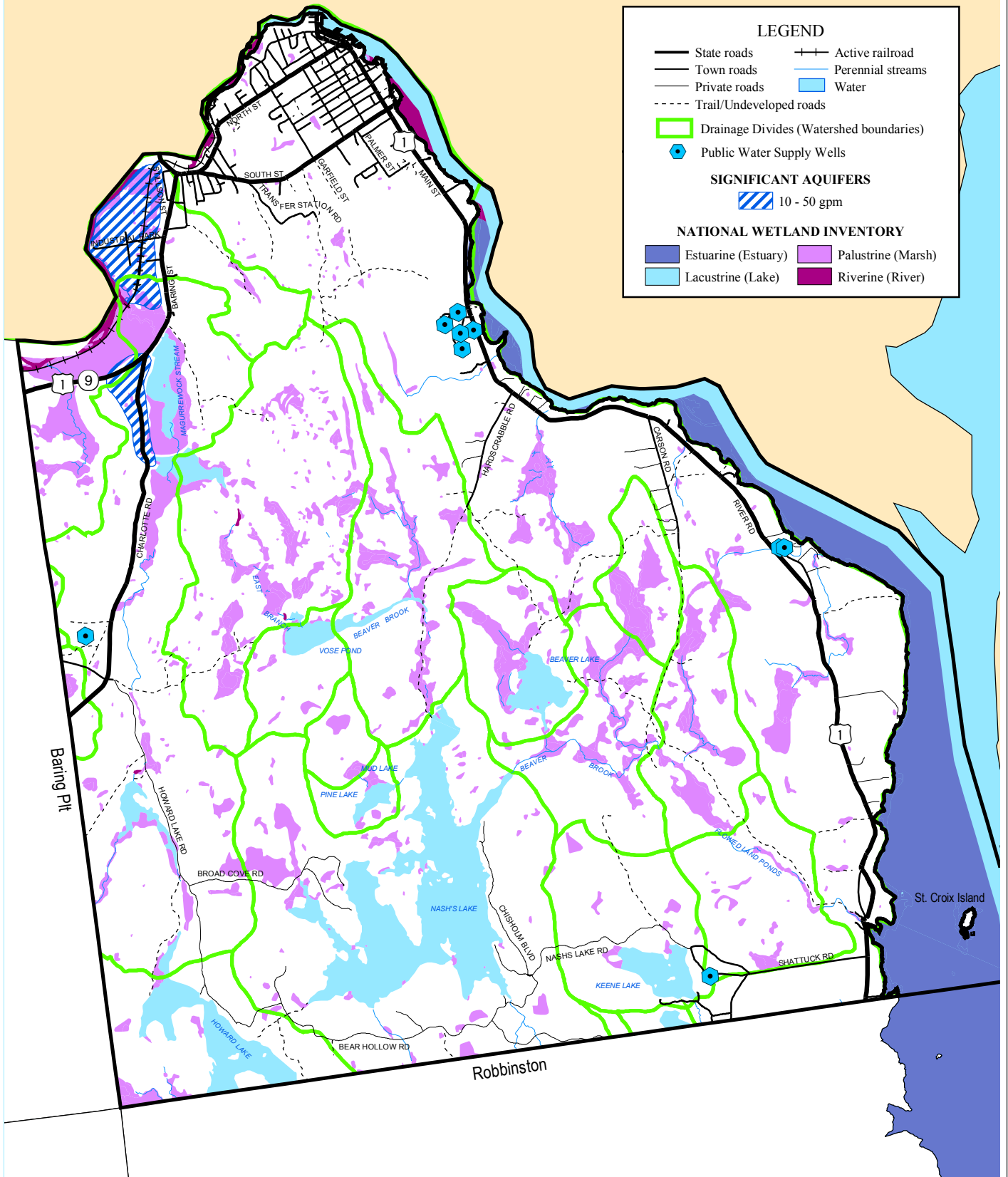
- State roads
- Town roads
- Private roads
- - - Trail/Undeveloped roads
- Active railroad
- Perennial streams
- Water
- Drainage Divides (Watershed boundaries)
- Public Water Supply Wells

**SIGNIFICANT AQUIFERS**


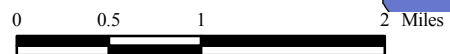
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**NATIONAL WETLAND INVENTORY**

- Estuarine (Estuary)
- Lacustrine (Lake)
- Palustrine (Marsh)
- Riverine (River)



Washington County Council of Governments  
 Eastern Maine Development Corporation  
 PO BOX 631 \* Calais, ME 04819  
 (207) 454-0465  
 Web site: [www.emdc.org/wccog.htm](http://www.emdc.org/wccog.htm)

Sources: MGS, USFWS, ESRI, MEDOT and MEGIS  
 Map revised: September, 2004

See map disclaimer at end of the Executive Summary.



New Brunswick, Canada

# Calais Comprehensive Plan

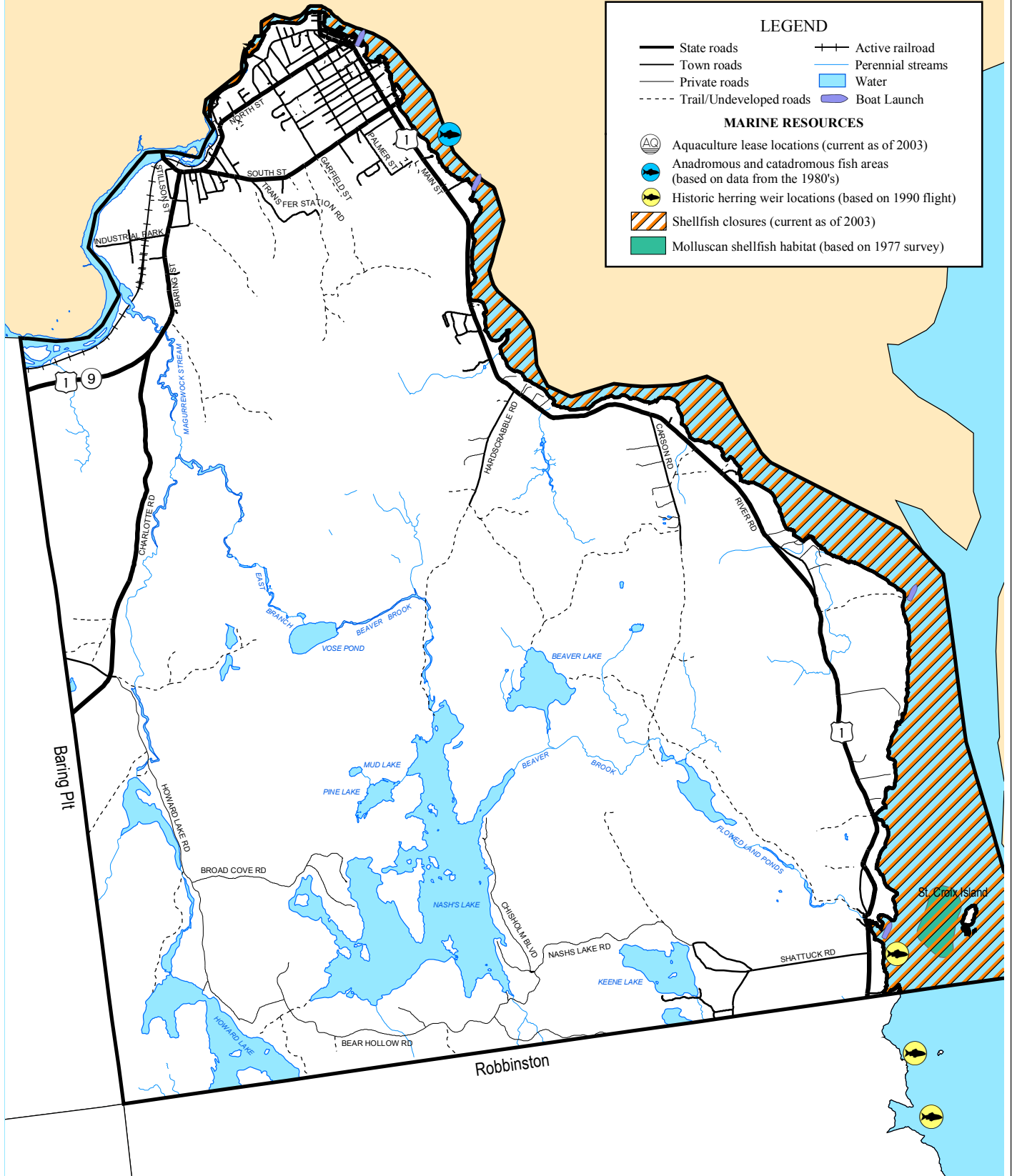
## Map 7: Marine Resources

### LEGEND

- State roads
- Town roads
- Private roads
- - - Trail/Undeveloped roads
- ++ Active railroad
- Perennial streams
- Water
- Boat Launch

### MARINE RESOURCES

- Aquaculture lease locations (current as of 2003)
- Anadromous and catadromous fish areas (based on data from the 1980's)
- Historic herring weir locations (based on 1990 flight)
- Shellfish closures (current as of 2003)
- Molluscan shellfish habitat (based on 1977 survey)



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Sources: City of Calais, MEMMR, ESRI, MEDOT and MEGIS  
 Map revised: September, 2004

See map disclaimer at end of the Executive Summary.

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New Brunswick, Canada

# Calais Comprehensive Plan

## Map 8: Land Cover

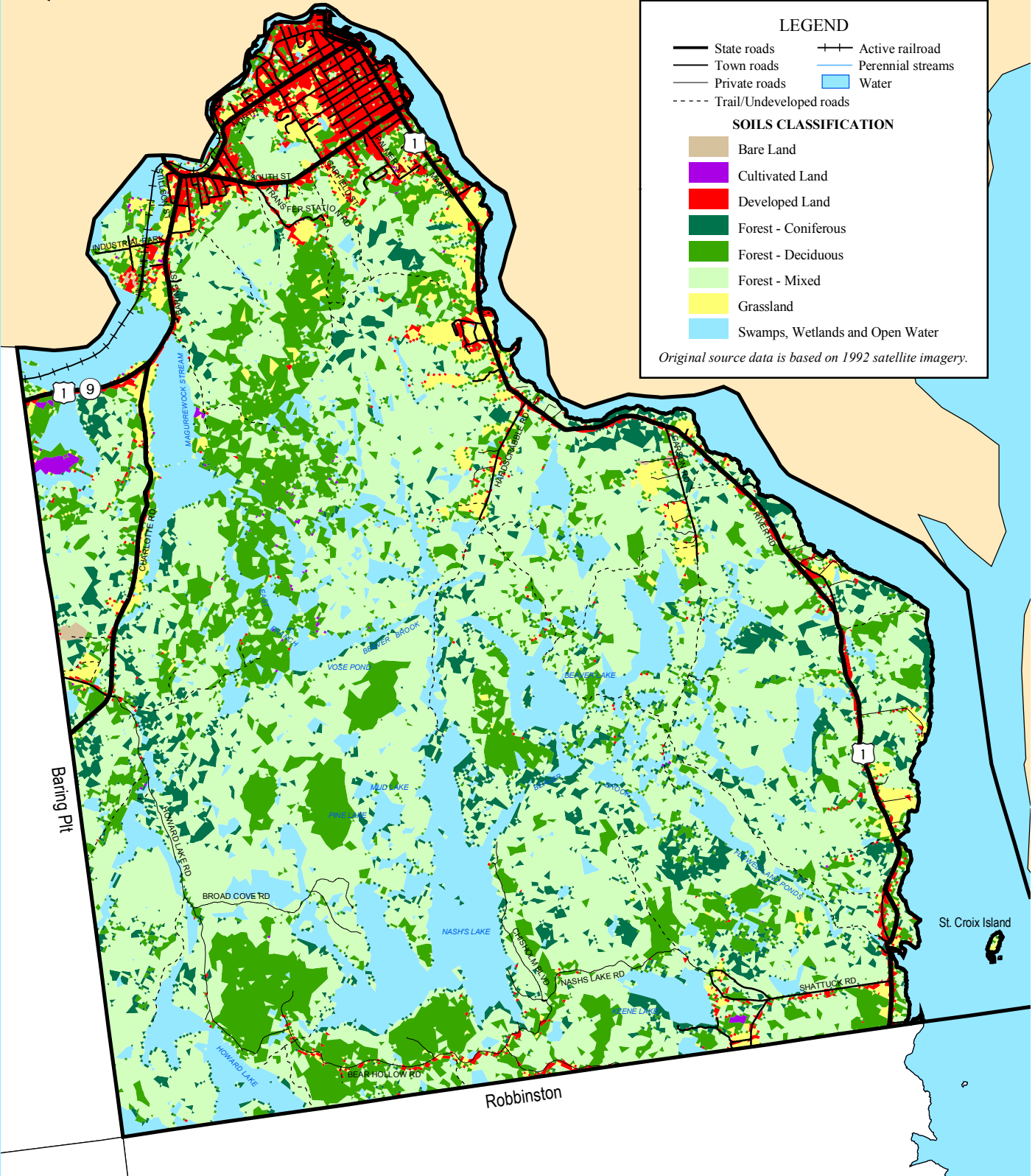
**LEGEND**

	State roads		Active railroad
	Town roads		Perennial streams
	Private roads		Water
	Trail/Undeveloped roads		


**SOILS CLASSIFICATION**

	Bare Land
	Cultivated Land
	Developed Land
	Forest - Coniferous
	Forest - Deciduous
	Forest - Mixed
	Grassland
	Swamps, Wetlands and Open Water

*Original source data is based on 1992 satellite imagery.*



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 Web site: [www.emdc.org/wccog.htm](http://www.emdc.org/wccog.htm)



Sources: GOMLC7 Land Cover and Wetlands of the Gulf of Maine. U.S. Fish & Wildlife Service, Gulf of Maine Program, ESRI and MEGIS  
 Map revised: September, 2004

See map disclaimer at end of the Executive Summary.



New Brunswick, Canada

# Calais Comprehensive Plan

## Map 9: Critical Habitat

**LEGEND**

— State roads	—+— Active railroad
— Town roads	— Perennial streams
— Private roads	Water
- - - Trail/Undeveloped roads	

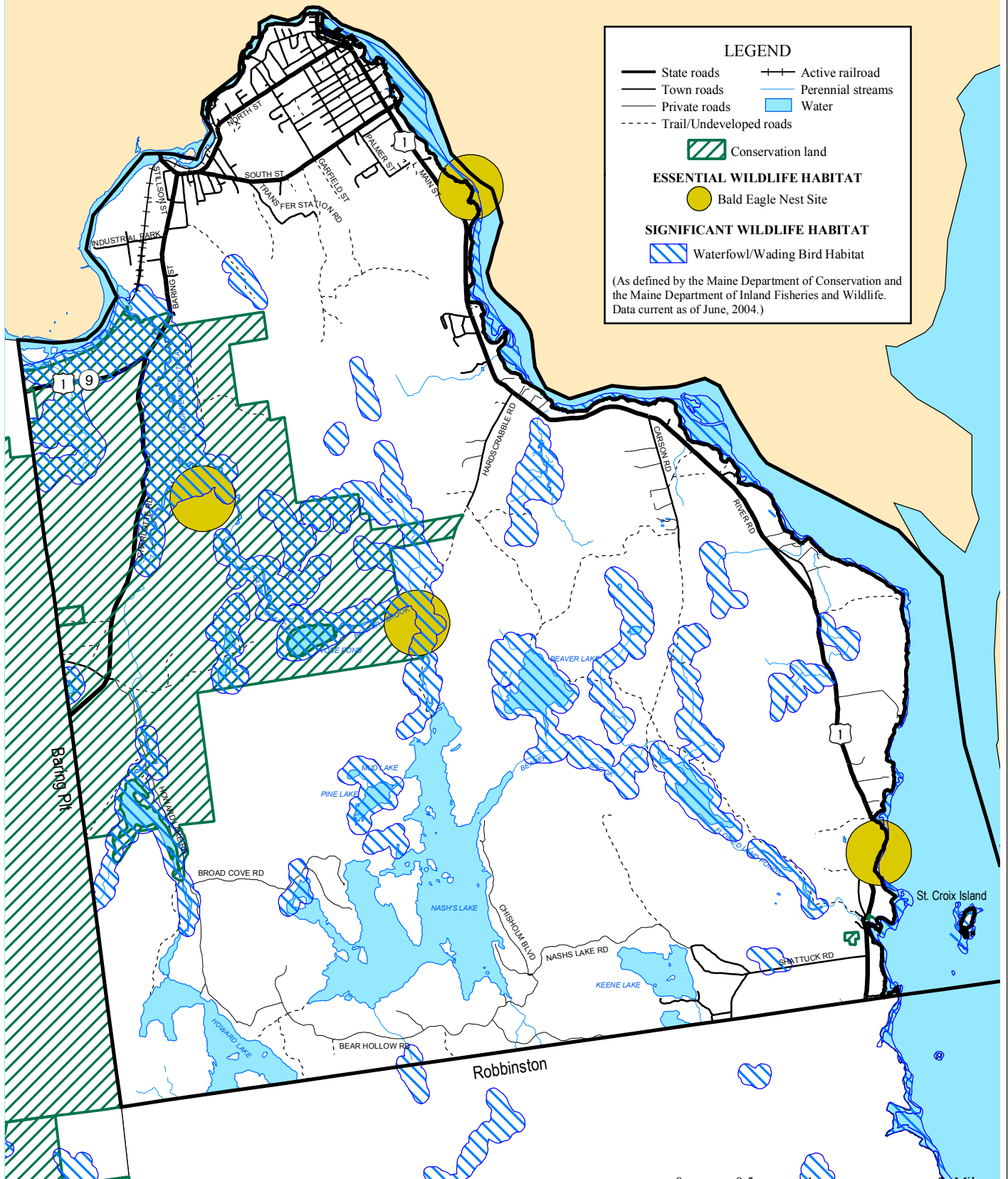
**ESSENTIAL WILDLIFE HABITAT**

- Bald Eagle Nest Site

**SIGNIFICANT WILDLIFE HABITAT**

- Waterfowl/Wading Bird Habitat

(As defined by the Maine Department of Conservation and the Maine Department of Inland Fisheries and Wildlife. Data current as of June, 2004.)



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**GIS SERVICES**  
 DATA CENTER



Sources: MNAP, MEIFW, ESRI, MEDOT and MEGIS  
 Map created: September, 2004

See map disclaimer at end of the Executive Summary.



## **E. EMPLOYMENT AND ECONOMY**

Calais' location on the St. Croix River made it an ideal site for the early settlers, and as the years passed, Calais became a prosperous shipbuilding and lumber-milling center. For the first half of the twentieth century, the economy of the City was based on the exportation of local natural resources such as lumber, granite, and fish.

Today, Calais is the sixth busiest port on the U.S.-Canada border and is dominated by retail, service, and construction businesses. The city has historically been a city of commerce and is recognized as the primary shopping center of eastern Washington County and Charlotte County, New Brunswick. There is a wide variety of retail stores in Calais. During the 1990s, total retail sales in Calais increased 31.2 per cent. Calais is also fortunate to be in close proximity to the Domtar mill in Woodland (Baileyville) which employs 565 people. Large employers within Calais include the Calais Regional Hospital, Thomas DiCenzo Inc., the Calais School Department, several extended care facilities, Shop'n Save, and the Washington County Community College. The Port of Eastport and Creative Apparel are two other major regional employers located in Eastport.

### **CALAIS BUSINESS AND EMPLOYMENT TODAY**

Calais is a regional shopping and service center for Washington County and parts of southern New Brunswick. The city has traditionally drawn many shoppers from Canada, although as the selection of goods available in New Brunswick has improved, the retail dynamics focus more on price. The 7% goods and services tax (implemented in Canada in 1994) applied to goods purchased by residents returning to Canada coupled with the very low value of the Canadian dollar severely dampened cross border shopping in recent years. This trend has improved in the past year as the US dollar has lost almost 25% of its value. However, the retail sector continues to be vulnerable to fluctuations in the value of the two currencies.

The loss of several buildings to fire has robbed Main Street of some of its vitality. The impending construction of the third bridge and the associated loss in traffic will not improve this situation. As the retail environment has declined along Main Street, many retailers have felt the pressure to relocate to Route One (North St.). A 1991 origin and destination survey of motorists using the existing Ferry Point and Milltown border crossings found that a significant portion (74%) of "through" trip motorists make an intermediate stop in either Calais or St. Stephen and that 88% of them do so to shop, eat or purchase fuel.

### **Downtown Revitalization**

City officials and local development groups have anticipated these dynamics and successfully garnered grant and program income to study and revitalize the waterfront and downtown area including program income from a CDBG investment fund to prepare a Conceptual Master Plan for the Calais Waterfront in 2002. In addition, funds from a CDBG Downtown Revitalization grant (\$400,000.00 granted in 2003) and the Municipal Investment Trust Fund (\$500,000 in 2003) will be used in a series of downtown public improvement projects to remove the vacant, burned, under utilized and/or non-historic buildings from downtown. In their place the city will

create parking and green space to open the historic part of downtown to the river. Plans include extensive landscaping, buried utilities, pedestrian walkways, retaining walls, and ADA accessibility between Main Street and the river and Downeast Heritage Museum.

Also in 2003 the city obtained a SHIP grant from the Department of Transportation (\$30,000) to construct transient docking facilities on the waterfront. These facilities will also provide docking and water access for an existing emergency boat (currently in dry dock upland) and for the Coast Guard to gain access to the border facilities.

While these efforts will improve the attractiveness of the downtown area additional measures are needed to ensure the motorists are aware of what the cities of St. Stephen and Calais have to offer. An Economic Impacts Study prepared by Dr. Charles Colgan as comment to the Environmental Assessment process indicate that the largest sector whose behavior would be changed by the new bridge is the through traveler who does not know Calais (or St. Stephen). He recommends that a series of signs are needed at “decision points” along the routes entering Calais or St. Stephen. The signs would indicate that the new border crossing is for commercial truck traffic with limited or no services and that the existing Milltown and Ferry Point crossings will also allow the traveler to reach the other side of the border and that services are available. Signs directing traffic into the downtown areas of both towns should include symbols, lists of services, business logos and so on. Coordinated signage also offers the opportunity for the two communities to promote one another and themselves.

In addition to these base factors, a new economy is developing around retirees and individuals who work remotely using the Internet. These individuals are not entirely dependent on local economic conditions for their income. However, their location decisions are based on quality of life factors like affordable real estate, low crime and clean natural surroundings, all of which are qualities in which Calais possesses a competitive advantage.

### Employers

Calais is an employment center for eastern Washington County (see Table E-1 below).

**Table E1 - PERSONS LIVING OUTSIDE CALAIS AND WORKING IN THE CITY**

Community	# - 1990	# - 2000
Alexander	54	74
Baileyville	184	192
Baring	65	53
Charlotte	34	55
Eastport	34	47
Meddybemps	34	37
Perry	33	55
Pembroke	30	51
Princeton	26	46
Robbinston	82	102
Unorganized Territories	37	40
Elsewhere	55	71
<b>Total</b>	<b>743</b>	<b>963</b>

SOURCE: U.S. Census

The largest local employers are Thomas DiCenzo and the Calais Regional Hospital with the potential of employing almost 500 employees. There are numerous other medium sized and smaller employers in the city representing a diverse cross section of entrepreneurs and established businesses.

**Table E2 - LOCAL EMPLOYERS – CITY OF CALAIS**

<b>Employer</b>	<b>Industry</b>	<b># of employees</b>
Calais Regional Hospital	General Medical and Surgical Hospital	200
Thomas Di Cenzo Inc	General Contractors-single-family House	100-249
Calais Children's Project	Group Home and Counseling	100-249
Border Electric	Electrical Work	50-99
Washington Co Community College Library	College	50-99
Laidlaw Transit Inc.	Bus Charter Service, Except Local	20-49
Eastern Maine Electric Co-op Inc.	Electric Services	20-49
Dead River Co.	Petroleum and Petroleum Whole; Gasoline Service Stations	20-49
Mingo's Evergreen Products Inc	Retail Nurseries, Lawn and Garden Shop	20-49
Marden's Surplus & Salvage	Department Stores	20-49
Calais IGA Foodliner	Grocery Stores	20-49
McDonald's (1 locations)	Eating Places	20-49
Calais Motor Inn	Hotels and Motels; Eating Places	20-49
Calais Elementary School	Elementary and Secondary Schools	20-49
Calais High School	Elementary and Secondary Schools	20-49
Calais Police Dept	Police Protection	20-49
Calais Fire Dept	Fire Protection	20-49
Lane Construction Corp	Highway and Street Construction, Except; Asphalt Paving Mixtures and Blocks	10-19
Calais Advertiser	Newspapers; Publishing, or Publishing: Advertising Agencies	10-19
US Post Office	United States Postal Service	10-19
Peace Bridge Brokerage	Arrangement of Transportation of Freight	10-19
A. N. Deringer Inc	Arrangement of Transportation of Freight	10-19
WQDY/WCRQ	Radio Broadcasting Stations	10-19
EBS Building Supplies	Lumber and Other Building Materials DE; Millwork; Lumber and Other Building Materials; Hardware Stores	10-19
Downeast Glass	Paint, Glass, and Wallpaper Stores; General Contractors-single-family House; Lumber and Other Building Materials De; Lumber and Other Building Materials	10-19
True Value Hardware	Hardware Stores; Men's and Boy's Clothing and Accessory; Women's Clothing Stores; Equipment Rental and Leasing	10-19
Hardwicks Ltd	Grocery Stores	10-19
Dunkin Donuts	Retail Bakeries; Eating Places	10-19
Pratt Chevrolet-Olds-Pontiac	Motor Vehicle Dealers (New and Used)	10-19
Wickachee Dining Room	Eating Places	10-19
Kwong-Wa	Eating Places	10-19
Carmen's Hometown Pizzeria Inc	Eating Places	10-19
Calais House of Pizza	Eating Places	10-19
Treworgy Pharmacy	Drug Stores and Proprietary Stores; Medical, Dental, and Hospital Equipment; Miscellaneous Retail Sales	10-19

<b>Employer</b>	<b>Industry</b>	<b># of employees</b>
Machias Savings Bank	National Commercial Banks; Savings Institutions, Federally Chartered; Functions Related to Depository Banking; Mortgage Bankers and Loan Correspondent	10-19
Calais Federal Savings & Loan	National Commercial Banks; Savings Institutions, Federally Chartered; Mortgage Bankers and Loan Correspondent	10-19
Milliken Insurance	Insurance Agents, Brokers, and Service	10-19
Hair Masters	Beauty Shops; Miscellaneous Personal Services	10-19
St Croix Medical Group	Offices and Clinics of Doctors of Medicine	10-19
Washington Place	Nursing and Personal Care Facilities	10-19
Remeliah House	Nursing and Personal Care Facilities	10-19
Sunrise County Homecare Svc	Home Health Care Services; Offices and Clinics of Health Practitioner; Individual and Family Services	10-19
Maine Indian Edu Schl District	Elementary and Secondary Schools	10-19
Human Services Dept	Administration of Social, Human Resource	10-19
US Fish & Wildlife Dept Svc	Land, Mineral, Wildlife, and Forest Co	10-19
Cousins Construction	General Contractors	5-9
Calais City Public Works	Highway and Street Construction	5-9
Androc Co	Plumbing, Heating and Air-conditioning	5-9
Riverside Electric	Electrical Work; Miscellaneous Home furnishings Stores	5-9
Bangor Daily News	Newspapers; Publishing, or Publishing	5-9
Down East Times	Newspapers; Publishing, or Publishing	5-9
Maine Tourism Assn	Travel Agencies	5-9
Norman G Jensen Inc	Arrangement of Transportation of Freight	5-9
Calais Computer Plus Satellite	Cable and Other Pay Television Service	5-9
PCT Communications	Electronic Parts and Equipment, Not El; Miscellaneous Retail Stores	5-9
Family Dollar	Retail	5-9
Movie Gallery	Video Rental	5-9
New England Controls	Industrial Supplies	5-9
Rick's Recycling	Scrap and Waste Materials	5-9
Calais Ace Home CTR	Hardware Stores; Paint, Glass, and Wallpaper Stores	5-9
Calais Irving Mainway	Grocery Stores	5-9
Calais Irving Convenience	Grocery Stores	5-9
First Stop Calais	Grocery Stores; Gasoline Service Stations	5-9
VIP Discount Auto Ctr	Auto and Home Supply Stores	5-9
Rier Auto Parts	Auto and Home Supply Stores	5-9
O'Briens's Quality Auto Care	Gasoline Service Stations; General Automotive Repair Shops; Automotive Services	5-9
Taylor's Furniture	Furniture Stores; Furniture Stores; Floor Covering Stores; Household Appliance Stores	5-9
Radio Shack	Radio, Television, and Consumer Electric	5-9
Subway Sandwiches & Salads	Eating Places	5-9
Bernardini's Restaurant	Eating Places	5-9
King China	Eating Places	5-9
Townhouse Restaurant	Eating Places	5-9
Chandler House Restaurant Inc	Eating Places	5-9
Rite Aid Pharmacy	Drug Stores and Proprietary Stores; Photofinishing Laboratories; Business Services	5-9
Ammex Warehouse Co	Liquor Stores	5-9
Calais Discount Liquor Store	Liquor Stores	5-9
Kendall's Jewelers	Jewelry Stores	5-9

<b>Employer</b>	<b>Industry</b>	<b># of employees</b>
First National Bank	National Commercial Banks; Trusts, Except Educational, Religious	5-9
Bangor Savings Bank	National Commercial Banks; Mortgage and Loan Correspondent; Trusts, Except Educational, Religious	5-9
Downeast Heritage Museum	Visitor Services and Interpretive Center	5-9
Mahan Real Estate	Real Estate Agents and Managers; Real Estate Agents and Managers	5-9
Unobskey School	Educational	5-9
International Motel	Hotels and Motels	5-9
Scott-Wilson Funeral Home	Funeral Service and Crematories;	5-9
State Cinemas	Motion Picture Theaters, Except Drive-	5-9
St Croix Country Club	Public Golf Courses	5-9
Down East Family Sports	Membership Sports and Recreation Clubs	5-9
Howard Fox Memorial Pool	Amusement and Recreation Services,	5-9
Calais OB-GYN	Offices and Clinics of Doctors of Medicine	5-9
Hallowell & MacMannis	Offices and Clinics of Optometrists	5-9
Calais Regional Hospital	Offices and Clinics of Health Practitioner	5-9
Fletcher & Mahar	Legal Services	5-9
Headstart-St Croix	Elementary and Secondary School; Child Day Care Services	5-9
St Croix Regional Tech Ctr	Elementary and Secondary Schools	5-9
Calais Superintendent-Schools	Elementary and Secondary Schools	5-9
Catholic Charities	Individual and Family Social Services	5-9
Sunrise Opportunities	Individual and Family Special Services; Carpentry Work	5-9
Calais Methodist Homes Inc	Social Services Operators of Apartment Buildings; Nursing and Personal Care	5-9
Knights of Columbus	Civic, Social, and Fraternal Association	5-9
City Manager	Executive Offices	5-9
Career Center	Administration of Social, Human Resource	5-9
Downeast EMS	Emergency Services	5-9
Curves	Physical Fitness Facilities	5-9
C & E Feeds	Farm Supplies	1-4
Bag-End Emporium	Family Clothing Stores	1-4
Bostonian Shoe Shop	Shoe Store	1-4
Donahue's Auto Supply	Auto and Home Supply Stores; Industrial and Commercial Machinery	1-4
Calais Tire & Auto Supply	Auto and Home Supply Stores; General Automotive Repair Shops	1-4
Milltown Texaco	Gasoline Service Stations	1-4
Cousco Building Supply	Lumber and Other Building	1-4
Sherwin-Williams	Paint, Glass, and Wallpaper Stores; Industrial Supplies	1-4
Border Town Subz	Eating Places	1-4
Down East Pizza	Eating Places	1-4
Calais Diner	Eating Places	1-4
Drop Anchor	Drinking Places (Alcoholic Beverages)	1-4
Sandwich Man	Eating Places	1-4
Schooner Restaurant	Eating Places	1-4
Nature's Pantry	Miscellaneous Food Stores	1-4
Calais Interior & Appliances	Furniture Stores; Floor Covering Stores	1-4
Red Beach Custom Flooring	Floor Covering Stores	1-4
Eastern Maine Appliances	Household Appliance Stores	1-4
J C Penney Co	Department Stores	1-4
Saint Croix Valley Antiques	Used Merchandise Stores	1-4

<b>Employer</b>	<b>Industry</b>	<b># of employees</b>
My Favorite Things	Jewelry Stores	1-4
Flowers By Janie	Florists	1-4
Cigaret Shopper	Tobacco Stores and Stands	1-4
St Croix Engraving	Miscellaneous Retail Stores, Coating, Engraving, and Allied Service; Business Services	1-4
United States Cellular	Miscellaneous Retail Stores	1-4
Bridges Brothers Inc	General Farms, Primarily Crop	1-4
Calais Veterinary Clinic	Veterinary Services for Animals	1-4
Paws Humane Society	Animal Specialty Services, Except Veterinarian	1-4
Coastline Builders Inc	General Contractors-single-family House	1-4
Bunny's Septic Svc	Plumbing, Heating and Air-conditioning	1-4
A & E Plumbing	Plumbing, Heating, and Air-conditioning; Repair Shops and Related Services	1-4
Cookson Charles E	Painting and Paper Hanging	1-4
Calais Press	Commercial Printing; Commercial Printing, Lithographic; Gift, Novelty, and Souvenir Shops	1-4
Gary's Taxi	Taxicabs	1-4
Town Taxi	Taxicabs	1-4
CDI Delivery	Local Trucking Without Storage	1-4
Down East Self Storage	General Warehousing and Storage	1-4
Blue Bird Ranch	General Warehousing and Storage	1-4
Travel Plus	Travel Agencies	1-4
Fritz Co	Transportation/Freight	1-4
Riverside Transport	Transportation /Freight	1-4
Livingston International Inc	Transportation/Freight	1-4
Clark Insurance	Insurance Agents, Brokers, and Service	1-4
Varney's Insurance Inc	Insurance Agents, Brokers, and Service	1-4
Sherrard Insurance	Insurance Agents, Brokers, and Service	1-4
Highpoint Associates	Operators of Apartment Buildings	1-4
King Appraisal	Real Estate Agents and Mangers	1-4
Clark Real Estate	Real Estate Agents and Managers	1-4
Olympia Fitness Ctr	Physical Fitness Facilities	1-4
Calais Recreation Dept	Amusement and Recreation Services, Not; Membership Sports and Recreation Clubs	1-4
U-Haul Co	Truck Rental and Leasing, Without Driv; Equipment Rental and Leasing, Not Else; Utility Trailer and Recreational Vehicle	1-4
Roger's Auto Body Shop	Top, Body, and Upholstery Repair Shops; Paint, Glass, and Wallpaper Stores	1-4
Lyons Towing	Automotive Services, Except Repair and	1-4
Julianna's Riverside Cottages	Business Services, Not Elsewhere Class	1-4
Calais Free Library	Libraries	1-4
Wilkinson, Peter, DO	Offices and Clinics of Doctors of Medicine	1-4
Hayward, Christopher, DO	Offices and Clinics of Doctors OF Medicine	1-4
Green, Nancy O, MD	Offices and Clinics of Doctors OF Medicine; Offices and Clinics of Health Practiti	1-4
Feiner, David, MD	Offices and Clinics oF Doctors of Medicine	1-4
Gould William, DDS	Offices and Clinics of Dentists	1-4
Emery, E Paul, DC	Offices and Clinics OF Chiropractors	1-4
Calais Family Eye Care	Offices and Clinics OF Optometrists; Optical Goods Stores	1-4

<b>Employer</b>	<b>Industry</b>	<b># of employees</b>
Community Health & Counseling	Psychiatric Hospitals	1-4
Community Health & Counseling	Home Health Care Services; Offices and Clinics of Health Practitioner; Psychiatric Hospitals	1-4
TLC Homecare of Calais	Health and Allied Services, Not Elsewhere; Medical; Dental, and Hospital Equipment; Chemicals and Allied Products, Not Elsewhere; Home Health Care Services	1-4
Downeaster Motel	Hotels and Motels	1-4
Heslin's Motel & Restaurant	Hotels and Motels	1-4
Mitchell & Mitchell	Legal Services	1-4
Dan Lacasse law Office	Legal Services; Offices of Bank Holding Companies	1-4
Churchill, John A.	Legal Services	1-4
St Croix Masonic Hall	Civic, Social, and Fraternal Association	1-4
American Legion	Civic, Social, and Fraternal Association; Social Services, Not Elsewhere Classified	1-4
Second Baptist Church	Religious Organizations	1-4
St. Anne's Episcopal Church	Religious Organizations	1-4
Seventh-Day Adventist Church	Religious Organizations	1-4
Saint Joseph Church	Religious Organizations	1-4
St .Croix Valley Assembly-God	Religious Organizations	1-4
First Congregational Church	Religious Organizations	1-4
Calais Church of God	Religious Organizations	1-4
Calais United Methodist Church	Religious Organizations	1-4
Immaculate Conception Church	Religious Organizations	1-4
Community Fellowship Church	Religious Organizations	1-4
Growing Concern	Horticulture and Landscaping	1-4
Little's Ships	Hobby/Retail	1-4
Colonial Process Equipment	Repair Shops and Related Services	1-4
Video 2000	Video Tape Rental	1-4
Calais City Clerk	Executive Offices	1-4
Motor Vehicle Registry	Legislative Bodies	1-4
Calais Water Co	Legislative Bodies	1-4
Calais City Sewage Plant	Legislative Bodies	1-4
District Court	Courts	1-4
Washington County Dist Atty	Legal Counsel and Prosecution	1-4
Calais Tax Collector	Public Finance, Taxation, and Monetary	1-4
Calais Tax Assessor	Public Finance, Taxation, and Monetary	1-4
US Veterans Affairs Dept	Administration of Veterans' Affairs, E	1-4

Source: Maine Career Center, 2003; Comprehensive Plan Update Committee

### **Light Industry and Services Sector**

The city has proposed three sites for inclusion in the new "Pine Tree Zone" structure created by the State for taxation purposes. These include the Calais Industrial Park; 500 acres on Route 1 south; and approximately 300 acres mid-town between the Walmart and Shop'n Save shopping center complex on South Street and the city public works facilities on North Street.

Respondents to the Comprehensive Plan survey consider the Pine Tree Zone activities important to the Calais economy with particular support for targeted technology<sup>1</sup> and manufacturing with somewhat less support for financial services. See Chapter K – City Survey Results.

### **Retail Trade**

The most significant success Calais has realized in its attempts to create a vibrant healthy community is the retail trade sector. This conclusion is borne out by the 31.2% increase in total taxable sales in Calais since 1990 while the county realized an overall increase of 18% (see Table E-13 below).

The largest retail operation in Calais is the Walmart supermarket. Most retail businesses have traditionally been year-round operations. There are several seasonal tourism based businesses in the downtown.

Since 1999, downtown revitalization has become an increasing priority for local residents and the city of Calais, with special emphasis placed on how the historic downtown could attract people, both visitors and residents, and contribute to generating jobs and investment.

The downtown buildings were constructed when the Calais economy was booming and pedestrian traffic was a way of life. Then, local people were dependent on the downtown retail stores and Calais also served as a regional shopping hub. Today, the local economy places Calais among the poorest cities in the United States; the local population has declined from a high of 7,655 in 1900 to 3,447 in 2000; median income has declined by 2.78% since 1989 (see Tables E7 and E8 below) and people living here and in adjacent communities often drive to Bangor to satisfy many of their shopping needs.

In the downtown area, businesses continue to blossom, some stay open and others soon close. Historically there were general stores, barber shops, banks, restaurants and hotels located along Main Street to capitalize on both waterfront and regional traffic. Of these types of businesses, several restaurants remain or have opened further south on Route 1 or along the two in-town arteries, South and North Street. Several motels are also no longer in the downtown, but located along the arterials, some still oriented to the waterfront as an amenity.

Policies and implementation measures to revitalize the downtown area are discussed in the Economic Development section 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 Community Development Block Grant and a Municipal Investment Trust Fund grant, both for Downtown Revitalization.

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<sup>1</sup> including biotechnology, information technology, marine technology, advanced technology for forestry and agriculture, and composite materials technology



A long-term commitment must be made to preserving improvements through sustained, designated funding for maintenance of the downtown infrastructure. Once the above projects are completed, and a maintenance program established, other public projects need to be identified and funded, based on their contribution to downtown revitalization, historic preservation and benefits to the community as a whole. Additional projects are suggested in the 2003 Waterfront Development Plan.

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.

### **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 should be created in the downtown. The TIF might work like this. A property owner chooses to make a \$10,000 improvement to his/her building. Within pre-defined rules of the TIF district, a portion of the additional tax generated by those investments are returned to the owner. The TIF rules may stipulate that the owner is to get 75 percent of the tax returned for five years, 50 percent for the next five, and 20 percent for the last five—a total of a 50 percent tax rebate for investing in the downtown.

Under TIF, the remaining additional tax revenues generated can be directed for use in the downtown marketing 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 city.

TIF is complex, but a valuable and flexible tool to encourage local development, and assistance in developing a TIF district is available from EMDC and the Maine Department of Economic and Community Development.

In addition to tax incentives that encourage development in the downtown core, the city could implement impact fees to discourage retail development from locating outside of downtown, particularly along Route 1 near the new international bridge.

### **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 Calais Labor Market Area (LMA) lost population in the last 20 years (-9.7% 1980-2000; -7.3% 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 Calais LMA of 16.9% in 2001 representing an increase of 1.5% since 1990.

Economic sectors in the Calais LMA that saw the largest growth in employment from 1998-2000 were Eating and Drinking Places, Educational Services and Food Stores. All three saw employment growth of greater than 10%, however average weekly wages were low (less than \$378/week). There are three sectors with high wages (greater than \$492/week) including Lumber and Wood Products, Paper and Allied Products and Trucking and Warehousing; however all three experienced stable or declining growth in employment. Likewise the Health Services sector has moderate wages (between \$379 and \$491/week) but experienced stable or declining growth in employment. Two other sectors, Automotive Dealers and Service Stations and General Merchandise Stores have low wages and are also experiencing stable or declining growth in employment.

Some Calais residents commute to jobs located in surrounding communities. With a mean travel time to work of 14.1 minutes Calais 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, Calais' workforce commutes primarily by private vehicle (82.4%). The second largest segment (8.1%) commutes by carpools, less than the average for the county (12.1%). The third largest segment walks bicycles to work.

Baileyville is home to the most significant regional employer (Domtar) for Calais residents.

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

Community	# - 1990	# - 2000
Baileyville	331	239
Baring	5	14
Charlotte	6	12
Eastport	18	56
Machias	0	43
Perry	0	14
Princeton	60	15

Community	# - 1990	# - 2000
Robbinston	0	2
Elsewhere in County	0	74
Outside County	73	80
<b>Total</b>	<b>493</b>	<b>547</b>

Many of the major Washington County regional employers are located in Calais and 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 Childrens 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
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

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 Calais and Washington County. The distribution of the labor force in Calais is similar to the county as a whole except that 7.8 percent of the city's residents were

unemployed, while countywide almost 5% were unemployed. The Census figure for the city, however, is considered by many residents to 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. There are some (2% of surveyed respondents) who also consider themselves under-employed, i.e. they would be working more hours for higher pay if the jobs were available. See Chapter L- Survey Results.

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

Labor Force Status: 2000 Subject	Calais		Washington County	
	Number	Percent	Number	Percent
<b>Persons 16 years and over</b>	<b>2,791</b>	<b>100</b>	<b>27,214</b>	<b>100.0</b>
In labor force	1,578	56.5	15,500	57.0
Civilian labor force	1,547	55.4	15,354	56.4
Employed	1,426	51.1	14,042	51.6
Unemployed	121	7.8	1,312	8.5
Armed Forces	31	1.1	146	0.5
Not in labor force	1,213	43.5	11,714	43.0

Source: US Census

The employed population for Calais and Washington County is described in Table E-7 by industry. The top three sectors of employment for Calais are 'Education, health and social services'; 'Manufacturing' and; and 'Retail trade'. The next two most important sectors comprising roughly equal parts of the employment picture include 'Construction' and 'Public Administration'. Washington County as a whole is supported by the same top two sectors in order of economic importance: 'Education, health and social services', 'Manufacturing'. Retail trade holds a higher share of the employment picture in Calais 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 INDUSTRY	Calais		Washington County	
	Number	Percent	Number	Percent
<b>Employed persons 16 years and over</b>	<b>1,426</b>	<b>100</b>	<b>14,042</b>	<b>100.0</b>
Agriculture, forestry, and fisheries, mining	17	1.2	1,531	10.9
Construction	111	7.8	944	6.7
Manufacturing	277	19.4	1,968	14.0
Wholesale trade	49	3.4	384	2.7
Retail trade	202	14.2	1,521	10.8
Transportation, warehousing, utilities info	34	2.4	581	4.1
Information	13	0.9	146	1.0
Finance, insurance, and real estate	67	4.7	433	3.1
Professional, scientific, management, administrative, and waste management services	23	1.6	438	3.1
Education, health and social services	331	23.2	3,694	26.3

Employment Characteristics: 2000	Calais		Washington County	
	Number	Percent	Number	Percent
<b>INDUSTRY</b>				
Arts, entertainment, recreation, accommodation and food services	121	8.5	779	5.5
Other services (except public administration)	80	5.6	642	4.6
Public administration	101	7.8	981	7.0
<b>CLASS OF WORKER</b>				
Private wage and salary workers	1,133	79.5	9,225	65.7
Government workers	204	14.3	2,882	20.5
Self-employed workers	89	6.2	1,886	13.4
Unpaid family workers	0	0	49	0.3

Source: US Census

The lack of public transportation in rural areas inhibits employment for many residents living on the margin. Residents of service centers like Calais 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

Calais' median household income decreased (-2.78%) since 1990 while median income in the county and state have risen by just below and just above 30% respectively. Median income in Calais was higher than the county in 1989 and is now slightly lower than the county as a whole. 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>2</sup>	2014 Projection
	1989	1999	2002 Est.	
Calais	\$25,326	\$24,623	\$26,523	\$22,866
Washington County	\$19,967	\$25,869	\$26,008	\$40,559
Maine	\$27,896	\$37,240	\$37,592	\$60,600

Source: U.S. Census

<sup>2</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.

**Table E9 - MEDIAN HOUSEHOLD INCOME CHANGE**

	1989-1999
Calais	-2.78%
Washington County	29.6%
Maine	33.5%

Source: U.S. Census

While the median household income in Calais is less than Washington County as a whole, the per capita income is slightly higher, another indication of the decrease in household size over the past decade.

**Table E10 - INCOME IN 1999: 2000 CENSUS**

	Calais		Washington County	
	Number	Percent	Number	Percent
<b>Households</b>	<b>1,490</b>	<b>100.0</b>	<b>14,119</b>	<b>100.0</b>
Less than \$10,000	265	17.8	2,515	17.8
\$10,000 to \$14,999	249	16.7	1,745	12.4
\$15,000 to \$24,999	239	16.0	2,579	18.3
\$25,000 to \$34,999	168	11.3	2,156	15.3
\$35,000 to \$49,999	148	9.9	1,833	13.0
\$50,000 to \$74,999	206	13.8	668	4.7
\$75,000 to \$99,999	122	8.2	318	2.3
\$100,000 to \$149,999	57	3.8	74	0.5
\$150,000 or more	36	2.4	120	0.8
Median household income (dollars)	24,623	-	25,869	-
Per capita income (dollars)	16,135	-	14,119	-

Source: U.S. Census

Sources of income for residents of Calais 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 6.2% of Calais' residents report self-employment income (see Table E-7), less than half the county average. A slightly higher percentage of residents in Calais collect social security income (almost 38.6%) than do residents of the county (34.0%), reflecting the large retiree population in Calais. Over 7% of Calais residents received public assistance, somewhat 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 E11 - INCOME TYPE IN 1999**

<b>Income Type in 1999</b> (Households often have more than one source of income, as seen here)	<b>Calais</b>		<b>Washington County</b>	
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
<b>Households</b>	<b>1,490</b>	<b>100</b>	<b>14,119</b>	<b>100</b>
With wage and salary income	951	63.8	10,162	72.0
With Social Security Income	575	38.6	4,795	34.0
With Supplemental Security income	110	7.4	949	6.7
With public assistance income	108	7.3	910	6.4
With retirement income	249	16.7	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 11 percent of Calais families were listed as having incomes below the poverty level, which included 100 families. This is lower than for the entire county but 31% of these families have children who are under 5 years of age.

**Table E12 - POVERTY STATUS IN 1999**

<b>Poverty Status in 1999</b>	<b>Calais</b>		<b>Washington County</b>	
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
<b>Below poverty level</b>				
<b>Individuals</b>	<b>559</b>	<b>16.8</b>	<b>6,272</b>	<b>19.0</b>
Persons 18 years and over	413	16.1	4,524	17.8
Persons 65 years and over	123	19.6	1,076	19.2
<b>Families</b>	<b>100</b>	<b>11.1</b>	<b>1,319</b>	<b>14.2</b>
With related children under 18 years	70	16.2	861	20.3
With related children under 5 years	31	24.6	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 E-13 presents information on taxable sales of consumer goods by sector in Washington County and the total amount of taxable sales for Calais. All figures are in real dollars, not adjusted for inflation, and represent only taxable sales.

Calais had an increase in total taxable sales (31.2%) for the period of 1997 to 2002 while the county saw an increase of just over 19%. Consumer sales constituted 98 percent of total taxable sales for Calais in 2000, a higher proportion than occurred at the county level (90%).

Table E13 - TAXABLE SALES (in thousands of dollars)

Selected Retail Sectors	Washington County			Calais		
	Annual Total Sales 1997	Annual Total Sales 2002	1997-2002 % Chg	Annual Total Sales 1997	Annual Total Sales 2002	1997-2002 % Chg
Business Operating	11,402.6	13,034.7	33.4%	1,021.70	1,646.60	61.2%
Building Supplies	21,905.9	23,544.8	18.6%	5,228.40	5,936.10	13.5%
Food Store	32,566.6	29,833.2	0.1%	7,657.40	5,390.20	-29.6%
General Merchandise	35,580.7	50,200.5	49.7%	29,522.30	45,092.40	52.7%
Other Retail	9,351.9	9,552.9	13.5%	2,593.30	3,347.80	29.1%
Auto Transportation	29,910.3	27,284.1	3.6%	8,169.10	11,747.10	43.8%
Restaurant/Lodging	23,299.4	25,338.6	16%	6,841.00	6,943.90	1.5%
Total Consumer Sales	152,733.2	165,722.4	18.2%	60,011.50	78,457.50	30.7%
Total Taxable Sales	164,017.4	178,788.8	19.3%	61,033.20	80,104.10	31.2%

Source: Maine Revenue Service

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**

A priority goal for Calais is the creation and retention of jobs. The city believes in regional cooperation for development and is an active participant in the Washington County Council of Governments, the Sunrise County Economic Council and the Saint Croix Economic Alliance.

**POLICIES AND IMPLEMENTATION**

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

The economic sectors that will help Calais reach those goals are development associated with the international border and the new bridge to be constructed in 2006-2007, light industry, and tourism, tied closely to concentrated downtown revitalization efforts.

This section provides the policies and implementation measures that Calais will follow toward its goal. It reproduces the downtown and waterfront revitalization efforts of the past three years and formally adopts their policy recommendations into the Comprehensive Plan.

<b>GOAL: Promote an economic climate that increases job opportunities and the overall well being of Calais.</b>			
Policy	Implementation Strategy	Responsibility	Timeframe
<b>Overall Economic Development</b>			
Expand existing business and industries, and attract new business and industry with the goal of creating good quality jobs for Calais residents.	Work with regional business development organizations (EMDC <sup>3</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.	City Staff/SEA	Ongoing
	Work with the Planning Board and other City bodies to assure that the City'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.	City 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.	City Staff/ City Council	Ongoing
	Continue to create jobs through the Revolving Loan Fund, which provides	City Staff/ Revolving Loan	Ongoing

<sup>3</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 Calais.</b>			
Policy	Implementation Strategy	Responsibility	Timeframe
	low interest leveraged loans to existing and prospective businesses in Calais.	Fund Board	
	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	City Staff/ City Council	Ongoing
	Investigate other techniques for stimulating commercial and industrial growth that are being used successfully in other communities.	City Staff	Ongoing
Coordinate with neighboring communities and regional entities on development opportunities and risks associated with the new international bridge.	Lead effort to study impacts of traffic patterns on development on transportation corridors and downtown areas of Calais and St. Stephen.	City Staff; WCCOG, SEA, EMDC, MDOT	2005
	Consider moratorium on development along Route 1 corridor until results of bridge impact study are complete.	City Council	2005
	Investigate zoning designations on Route 1 corridor near bridge that limit uses to transportation related services (brokerage, warehousing, fuel distribution and storage etc.).	City Council/ Planning Board	2005
	Control access along Route 1 near bridge entry to limit congestion and loss of business vitality in downtown area.	City Council/ Planning Board	2005
<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.	City Staff	Ongoing
	Attract new industry to the industrial park by working through the Pine Tree Development Zone, Chamber of Commerce and Local Realtors.	City Staff	Ongoing
	Explore additional Industrial zoning designations within Pine Tree Zone designated areas throughout the city.	City Staff; City Council; Planning Board	2005
	Market the tax increment financing to make improvements to the Industrial Park as additional tenants locate there.	City Staff	Ongoing
<b>Canada-U.S. Trade</b>			
Assist Calais business in taking advantage of the opportunities provided through Canada-U.S. Trade opportunities. Encourage Businesses to develop a long term, loyal Canadian clientele	Educate local businesses and industries on opportunities by working jointly with the Chamber of Commerce, Rotary, Washington County Community College and others to hold educational workshops with qualified speakers.	City Staff/Chamber	Ongoing

<b>GOAL: Promote an economic climate that increases job opportunities and the overall well being of Calais.</b>			
Policy	Implementation Strategy	Responsibility	Timeframe
	Lobby Congressional delegation for parity on cross border tax issues	City Staff/Chamber	Ongoing
<b>Downtown Revitalization</b>			
Encourage further economic Growth in the downtown by Continuing the revitalization efforts.	Explore various financial options including tax increment financing, to complete the revitalization of the downtown, along Main Street to the Ferry Point Bridge.	City Staff/City Council	2004
	Work to maintain the downtown's infrastructure and overall appearance in good condition.	Public Works/ Chamber of Commerce	Ongoing
	Pursue aggressive implementation of Waterfront Development Plan recommendations.	Public Works/ City Staff	Ongoing
<b>Tourism</b>			
Enhance tourism by promoting Calais' downtown retail businesses historic character, outdoor recreational amenities and scenic beauty.	Participate in regional tourism promotion efforts.	City Staff; Chamber of Commerce, Quoddy Bay/Fundy Isle Tourism Office, State Tourism Office, Calais Historical Society, Downeast Heritage Center, Maine DOT, WCCOG	Ongoing
	Support Downeast Heritage Museum as central focus as regional tourism efforts.	City Staff	On-going
	Develop a promotional brochure for Calais to be distributed at the City Building Library, Recreation Department, and at local businesses. Consider the construction of a kiosk that lists businesses, the Library, St. Croix Island, Nashs Lake, Devils Head and other points of interest Calais.	Chamber of Commerce	2005
	Encourage the use of blue travel directory signs from MDOT to signal restaurants, shopping, lodging and/or "gas ahead".	City Staff/City Council	Ongoing
	Encourage residents and business to take pride in their community and property in order to present Calais "at its best".	City Staff/City Council	Ongoing
	Support improvements to the Moosehorn National Wildlife Refuge and promote Moosehorn facilities development including trails, signage, interpretation and use.	City Staff/City Council/Friends of Moosehorn	2005
<b>Existing Businesses</b>			
Retain and acknowledge present	Continue to support the Chamber of	City Staff	Ongoing

<b>GOAL: Promote an economic climate that increases job opportunities and the overall well being of Calais.</b>			
Policy	Implementation Strategy	Responsibility	Timeframe
businesses in Calais by focusing on industry appreciation, education and technical assistance, where possible.	Commerce.		
	Work through the Pine Tree Development Zone and regional economic development groups to provide business assistance and improve access to financial resources.	City Staff/City Council	Ongoing
	Support the farmers market and efforts to expand its operations.	City Staff/City Council	2005
<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.	City Staff	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.	City Staff/Pine Tree Development Zone	Ongoing
<b>Site Plan Review</b>			
Ensure high quality commercial and industrial development through the site plan review process.	Continue implementation of 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.	City Council/Planning Board	On-going
	Promote vehicular and pedestrian connections among adjacent properties in commercial districts.	City Council/Planning Board	2005

## SUMMARY

The top four sectors of employment for Calais residents in order are 'Education, health and social services'; 'Manufacturing' and; 'Retail trade'. The next two most important sectors comprising roughly equal parts of the employment picture include 'Construction' and 'Public Administration'. Washington County as a whole is supported by the same top two sectors in order of economic importance: 'Education, health and social services', 'Manufacturing'. Retail trade holds a higher share of the employment picture in Calais than in Washington County where 'Agriculture, forestry, and fisheries, mining' ranks third in its contribution to economic activity. The residents of Calais have income levels comparable to residents of Washington County with a slightly greater proportion of residents in higher income categories. However, with the aging of our population, the size of our workforce will continue to decrease. The city

will continue to encourage responsible commercial development through land use regulations, regional coordination and marketing.

Calais is a city whose economy has changed and continues to evolve. Calais 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 the Waterfront Development Plan; 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.

## F. HOUSING

Calais is a city with a mixture of housing that dates back to a time when the city's population was far larger than it is today. Single family residences are the predominant housing type but multi-family units, mobile and pre-fabricated units, and larger institutional housing are also present. This section provides an inventory of the housing stock in Calais, and an analysis of the housing changes that have taken place within the City, surrounding communities and in Washington County and the State. Policies then seek to encourage affordable, decent housing opportunities for all Calais residents.

### HOUSING UNITS

#### Number of Units

In 2000, Calais had a total of 1,921 housing units. During the 1990s, the town recorded an 8.35 percent increase in its housing stock, compared to almost 15 percent for the county and 11 percent for the state. The increases in the number of housing units in other towns in the region reflect a movement away from the service center communities (Calais and Eastport) where taxation rates are often higher than the surrounding rural communities. The very high percentage increases in the smaller communities (Baring, Charlotte, Meddybemps and Perry) should recognize that these represent relatively small absolute increases due to their smaller comparative populations and could be the result of one or two large subdivisions since 1990. As noted in the Population Section, in the 1990s Calais experienced an 8.2 percent decline in average household size to 2.24 persons per household. Calais' population decreased 13.02% to 3447 persons between 1990 and 2000 and the ratio between total housing units and population went from 0.447 to 0.557 reflecting this decrease in household size.

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

	1990	2000	% Change
Alexander	326	359	10.1%
Baileyville	899	927	3.1%
Baring	114	146	28.1%
Charlotte	152	249	63.8%
<b>Calais</b>	<b>1,773</b>	<b>1,921</b>	<b>8.35%</b>
Meddybemps	133	176	32.3%
Eastport	1,046	1,061	1.43%
Robbinston	309	329	6.47%
Perry	421	529	25.65%
Washington County	19,124	21,919	14.6%
Maine	587,045	651,901	11.1%

Source: U.S. Census

Calais' population is forecast to decline further by 2010 and then to increase modestly to around 3,163 individuals by 2015. However, as noted in Chapter C – Population, employment at health and international border facilities since 2000 has increased, dampening the forecasted population decline. Building permit data indicate a modest amount of new construction and a very high level of renovation for additions, decks, sheds and so on.

**Table F-2 RESIDENTIAL BUILDING PERMITS – CONSTRUCTION TYPE**

	Seasonal	Year-Round	Stick-built	Mobile or Manufactured homes	sheds/ decks/ garages/ additions
1997	1	10	1	10	31
1998	-	8	1	7	23
1999	2	8	1	9	30
2000	3	3	2	4	20
2001	1	2	-	1	17
2002	-	7	3	4	19
2003	1	6	3	4	27
Total	9	45	11	39	167

Source: Calais building permits

Over 80 percent of the housing stock in Calais was built before 1970, higher than for the county or the state (roughly 70%). A much smaller proportion of the city's housing stock was built in the 1980s and 1990s, compared to the county and state. Maine's housing stock reflects the State's history and climate. Nationwide, Maine ranks first in the proportion (29%) of the housing stock that was built prior to 1940. Almost 33 percent of Washington County's stock dates prior to 1940, compared to almost 68 percent, or 1292 units, for Calais (see Table F-3). Many of these units are in substandard condition and in need of repair. Housing sales are currently strong to new residents associated with increases in border patrol and homeland security staff. Non-residents also purchase property for summer recreation. They are classified as seasonal residences but most are capable of year-round occupancy. Investment from newcomers and residents in renovation activity is improving the habitability and value of many older structures.

**Table F-3 YEAR STRUCTURE BUILT**

	Calais		Washington County		Maine
	Num.	%	Num.	%	%
1990 to March 2000	161	8.4	3,145	14.4	14.6
1980 to 1989	149	7.8	3,203	14.6	16.0
1970 to 1979	319	16.6	4,038	18.4	15.9
1940 to 1969	366	19.1	4,359	19.9	24.4
1939 or earlier	926	48.2	7,174	32.7	29.1
Total housing stock	1,921	100.0	21,919	100.0	100.0

Source: U.S. Census

It is important for Calais residents to be aware of existing rehabilitation funds and for renters to be aware of their rights to demand a certain level of maintenance by their landlords.

A static or modest increase in the number of housing units is anticipated over the next ten years. Of course, changes in land use and the economy will determine the actual growth.

### Structure Type and Characteristics

The distribution of housing types is an important indicator of affordability, density, and the character of the community. Housing units in structures are presented in Table F-4. In 2000, one-unit structures represented 65.8 percent of Calais housing units while multi-unit structures accounted for 24.2 percent of units and mobile homes and trailers accounted for 10 percent.

**Table F-4 HOUSING UNITS IN STRUCTURE**

	Calais				Washington County			
	1990		2000		1990		2000	
	Num.	%	Num.	%	Num.	%	Num.	%
One-unit	1,154	65.1%	1,264	65.8%	14,397	75.3%	17,080	78.0
Multi-unit	455	25.7%	465	24.2%	1,473	7.7%	1,931	8.8
Mobile Home trailer	235	13.3%	192	10%	3,254	17.0%	2,786	12.7
Total units**	1,773	100.0	1,921	100.0%	19,124	100.0%	21,919	100%

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

Calais has a limited share of mobile homes and trailers relative to its entire housing stock. The number of mobile homes and trailers decreased during the 1990s in Calais and now comprises 10 percent of the housing stock. Mobile homes and trailers are located on individual lots, with a few in small mobile home parks. Overall, the mobile homes in Calais are in fair to good condition and the pre-1976 mobile homes located in the city must meet the requirements of the International Building Code (IBC) and the State Electric Code. Table F-5 displays the percentage of total housing units by type of structure. The majority of Calais' housing units were single-family homes (65.8%), while 24.2 percent were duplexes or apartment units and 10.0 percent were mobile homes. As might be expected of a more urban community, Calais had a significantly higher percentage of duplexes and multifamily housing than any of the surrounding communities.

**Table F-5 TOTAL HOUSING UNITS\* BY TYPE OF STRUCTURE – 2000**  
**Calais and surrounding Communities**

	Single Family Homes	Duplex and Multi-family	Mobile Homes
	%	%	%
Baileyville	73.0	12.5	14.5
Baring Plantation	69.1	1.5	27.9
<b>Calais</b>	<b>65.8</b>	<b>24.2</b>	<b>10.0</b>
Charlotte	85.6	0.0	14.2
Meddybemps	93.4	0.0	6.6
Pembroke	80.1	4.6	15.2
Perry	84.0	0.8	14.4
Robbinston	81.5	0.8	13.8
Washington County	78.0	8.8	12.7
State of Maine	69.6	20.3	9.8

Source: U.S. Census, 2000 \* Includes year-round and seasonal housing units; excludes RV's, vans, boats



Table F-6 shows the proportional make-up of housing units by general physical condition. It indicates a small number of units in need of basic facility improvement and may underestimate the number of units where facilities exist but are in substandard condition. A complete housing assessment would be required to more fully understand individual needs.

**Table F-6 HOUSING CHARACTERISTICS**

<b>Calais Housing Characteristics</b>	<b>Number</b>	<b>Percent</b>
<b>Total housing units in 2000</b>	<b>1,921</b>	<b>100.0</b>
<b>ROOMS in 2000</b>		
1 room	82	4.3
2 rooms	78	4.1
3 rooms	225	11.7
4 rooms	360	18.7
5 rooms	391	20.4
6 rooms	381	19.8
7 rooms	168	8.7
8 rooms	62	3.2
9 or more rooms	174	9.1
<b>SELECTED CHARACTERISTICS in 2000</b>		
Lacking complete plumbing facilities	0	0.0
Lacking complete kitchen facilities	7	0.4
No telephone service	14	0.7
<b>HOUSE HEATING FUEL</b>		
Utility gas	0	0.0
Bottled, tank, or LP gas	34	1.8
Electricity	125	6.5
Fuel oil, kerosene, etc.	1,285	66.9
Coal or coke	0	0.0
Wood	36	1.9
Solar energy	0	0.0
Other fuel	6	0.3
No fuel used	0	0.0

Source: U.S. Census

## HOME OCCUPANCY

Home ownership is a good indicator of the overall standard of living in an area. Generally higher proportionate rates of home ownership relative to rental occupancy are indicative of stable communities where individual are able and prepared to invest in their properties.

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-7. A moderate rate of owner-occupied housing is typical of a city such as Calais with declining population as a result of

limited economic opportunities. In 1990 and 2000, the proportions of owner and renter-occupied housing units remained fairly stable at the county level but the proportion of renter occupied units increased in Calais relative to those occupied by owners. Since 2000 the housing market in Calais has rebounded with the increase in the number of staff at the border and owner occupancy figures may have rebounded to the levels of the previous census. Such stability is forecast to continue over the next decade.

**Table F-7 HOUSING TENURE**

TENURE	Calais				Washington County			
	1990		2000		1990		2000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Occupied housing units</b>	<b>1,536</b>	<b>100.0%</b>	<b>1,486</b>	<b>100.0%</b>	<b>13,418</b>	<b>100.0%</b>	<b>14,118</b>	<b>100.0%</b>
Owner-occupied housing units	1,055	68.7%	938	63.1%	10,568	78.8%	10,969	77.7%
Renter-occupied housing units	481	31.3%	548	36.9%	2,850	21.2%	3,149	22.3%

Source: U.S. Census

### Vacancy

The Census classifies seasonal or recreational homes as vacant because they are not typically occupied year-round. In 2000, 435 (22.6 percent) of the total housing units in Calais were vacant, an increase of almost 10 per cent. Of these vacant units only 35 per cent are used for seasonal, recreational or any purpose. The proportion of units that are vacant and not used seasonally is much higher in Calais than in the county as a whole. The trend in sales to new and non-resident purchasers is associated with renovations of these dwellings for year-round occupancy, seasonal and/or for retirement purposes.

The rental vacancy rate for Calais in 2000 was 17.7 percent, compared to 13.3 percent for Washington County. The data suggest an adequate supply of housing for purchase and rent. However, since 2000 occupancy of rental units in Calais has increased with additional employment associated with increase of staff at the international border and an additional 100 employees at the Calais Children's project. Vacancy in 2005 is likely to be substantially less than 17.7 percent. In fact Garfield apartments, a 10 unit subsidized rental facility, is looking to construct additional units.

**Table F-8 HOUSING OCCUPANCY**

OCCUPANCY	Calais				Washington County			
	1990		2000		1990		2000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>All housing units</b>	<b>1,773</b>	<b>100.0%</b>	<b>1,921</b>	<b>100.0%</b>	<b>19,124</b>	<b>100.0%</b>	<b>21,919</b>	<b>100.0%</b>
Occupied housing units	1,536	86.6%	1,486	77.3%	13,418	70.2%	14,118	64.4%
Vacant housing units	237	13.4%	435	22.6%	5,706	29.8%	7,801	35.6%
For seasonal, recreational or occasional use	68	28.7% (of vacant units)	154	35.0% (of vacant units)	4,046	70.1% (of vacant units)	5,374	66.9% (of vacant units)

Source: U.S. Census

The quality of existing rental units contributes to the high vacancy rate from the 2000 census and is still an issue. The survey (see Chapter K – City Survey Results) indicated strong support for upgrades to existing sub-standard housing as well as adding inspection of rental properties to the building codes.

## **HOUSING AFFORDABILITY**

The affordability of housing is of critical importance for any municipality. High costs are burdensome to individuals, to governments, and the economy of the area. 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 defined 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 miscalculates 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 city and County by State category, and relate this to average selling price of homes recently sold in Calais, 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 Calais belongs. We conclude that the city 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 also 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 2002 the family median income was \$28,500 for Washington County and \$26,523 for Calais. Using state guidelines, three income groups are considered in Calais for 2003:

**Table F-9 INCOME AND AFFORDABLE MONTHLY HOUSING PAYMENTS**

Washington County Households	Income Range	Percent of Households	Affordable monthly rent or mortgage payment
Extremely Low and Very Low income	Up to \$15,757	39.2%	Up to \$394
Low income	\$15,757 to \$25,211	3.1%	\$394 to \$630
Moderate income	\$25,211 to \$47,271	27.7%	\$630 to \$1,182

Source: MSHA, 2003

### Housing Selling Prices

To get an understanding of whether the population can afford housing at its current market price Table F-10 identifies what an affordable selling price would be for low and moderate income groups. As also noted in the Employment and Economy section of this plan, the percentage of extremely low and very low income families living in Calais is much higher than for the county. However, there are fewer low and moderate income families in Calais than in the county.

**Table F-10 HOUSEHOLD INCOME DISTRIBUTION & AFFORDABLE HOUSING SELLING PRICES, 2002**

Households by Income	Percent of Households		Affordable Selling Price	
	Calais	Washington County	Calais	Washington County
Extremely Low and Very Low Income <50% of Median HH Income	39.2%	24.7%	up to \$43,808	Up to \$56,300
Low Income <80% of Median HH Income	3.1%	16.8%	up to \$70,092	up to \$90,079
Moderate Income <150% of Median HH Income	27.7%	29.1%	up to \$131,424	up to \$121,774

Source: MSHA, Claritas

As Table F-11 shows the median value of housing for a sampling of homes in Calais was **\$70,700** in 2000. Thus, when compared to what is considered an affordable selling price in Table F-10, Calais housing is affordable for all but those in the extremely low and very low income groups in the community. However, the values in Table F-11 reflect only a part of the market (68% of owner occupied housing units) and not necessarily that part that is available to purchase.

**Table F-11 VALUE IN 2000: SPECIFIED OWNER-OCCUPIED HOUSING UNITS**

<b>Value in 2000: Specified owner-occupied housing units</b>	<b>Number</b>	<b>Percent</b>
Less than \$50,000	152	14.4%
\$50,000 to \$99,999	465	44.1%
\$100,000 to \$149,999	33	3.1%
\$150,000 to \$199,999	15	1.4%
\$200,000 to \$299,999	29	2.7%
\$300,000 or more	29	2.7%
Median (dollars)	\$70,700	-

Source: U.S. Census

Additional data on housing affordability is available at the housing market level. Calais is part of the larger Calais Housing Market and the MSHA reports that the housing affordability index in this housing market for the year 2002 was 1.15 (under 1.00 equals unaffordable; while over 1.00 equals affordable).

In 2002, the median home sale price was **\$71,200** in the Calais Housing Market, while the median income was \$29,351 in this housing market (\$26,523 for the city of Calais). The home price that could be afforded at the housing market median household income of \$29,351 was \$81,942. Thus those with incomes somewhat below the housing market median income can still afford to purchase homes of the median value. However, MSHA reports that the income needed to purchase the median home of \$71,200 is \$25,503 in Calais, which excludes 2,250 households (43.8%) in Calais.

The Statewide Multiple Listing Service (SMLS) recorded no house sales for Calais in 2002, nor any other sales for 1997 through 2001 (most Calais realtors are not members of SMLS and so their sales do not show up in the state data listings). Local realtors report an increase in sales in the last 2 years associated with increased staff at the international border. Prices fall into three ranges: older, smaller homes in need of renovation as low as \$28,000, another cluster in the range of \$49,000-65,000; and a third range of higher quality and larger homes between \$95,000 and 165,000. Waterfront property in particular has risen sharply in the last three years. Most sales are to individuals and families moving to Calais for employment and some younger families trading up to larger homes.

### **Owner Costs**

Table F-12 shows selected monthly owner costs as a percentage of household income for 694 of

the 1055 owner-occupied housing units in Calais in 1999. One hundred and seventy housing units had monthly owner costs of 30 percent or more of their household income. These data suggest that housing affordability is not an issue for most residents but does affect a sizable minority - at least 16 percent of total number of owner-occupied households (data in table F-12 represents only 66% of owner occupied households).

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

Percentage of Household Income	Owner Occupied Housing Units
Less than 15 %	286
15 to 19%	126
20 to 24 %	70
25 to 29 %	32
30 to 34 %	48
35 % or more	122
Not computed	10
Total units	694

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 2002, there were 207 project-based and 28 non-project based Section 8 Vouchers issued for rental housing in Calais.

For 182 out of 547 (33%) renter occupied units, more than 30% of household income is spent on housing costs, indicating this housing is not affordable for these tenants.

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

Percentage of Household Income	Renter Occupied Housing Units
Less than 20 %	141
20 to 24 %	78
25 to 29 %	102
30 to 34 %	52
35 % or more	130
Not computed	44
Total units	547

Source: U.S. Census

While the median rent in Calais is \$379 (see Table F-14) MSHA reports that the average rent including utilities for a 2 bedroom unit is \$552 per month in Calais and \$625 in the larger Calais housing market. The annual income needed to afford this rent is \$22,070 and \$25,003 respectively which is unaffordable for 46.8 % of renter households in Calais and for 57.2% of

renter households in the larger Calais housing market. These numbers account for the high numbers of subsidized units in the Calais area.

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

Rent	Number of Rental Units
Less than \$200	98
\$200 to \$299	88
\$300 to \$499	186
\$500 to \$749	131
\$750 or more	0
No cash rent	44
Median	\$379

Source: U.S. Census

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

The State of Maine Growth Management Act requires that every municipality "...shall seek to achieve a level of at least 10% of new residential development, based on a five-year historical average of residential development in the municipality, meeting the definition of affordable housing." As shown in Table F-2, during the seven-year period from 1997 to 2003 54 units were built. Thus, Calais would meet the requirement of the Act if the town sought to provide 5.4 low-income units in this period. Within this period, affordable housing, meeting State guidelines, was built in the form of modular/mobile housing, as 39 such units were put in place.

### **Affordable Housing Remedies**

While meeting the letter of the Growth Management Act has not proved difficult for Calais, there is a desire by residents to maintain and provide for affordable housing 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 city requires slabs, pitched roofs and skirting around the foundation of mobile homes. The city is currently removing the requirement for a slab in mobile home parks.
2. *Take steps to allow mobile homes and modular homes in more areas.* At present, the city has several zones where these types of units are allowed and present.
3. *Provide town sewer, water and roads to new parts of the city thus "opening up" land for new homes.* Calais is recommending extension of water and sewer to Hardscrabble Road on Route 1.

### **Housing Programs**

Calais has several facilities and developments that serve low and moderate income housing needs as well as some special needs populations. These are summarized below:

PROJECT NAME	NUMBER OF UNITS		
	Elderly	Family	Special Needs
Methodist Homes	90		
Calais Congregate Housing	24		
St. Croix Apartments	27		
High Point Apartments	10		
Garfield Apartments		10	
Calais Children’s Project			20
Washington County Association of Retarded Citizens – Elm St.			10
Washington County Association of Retarded Citizens – Calais Ave.			10
Hornbrook Apartments	12		
Hornbrook – Germain Street		4	
<b>Total</b>	<b>163</b>	<b>14</b>	<b>40</b>

While this is an impressive record, data provided above from the 2000 census and the Maine State Housing Authority (in 2002) indicate that 33 percent of renters and at least 16% of homeowners are paying greater than 30 per cent of their monthly income on housing. Furthermore, because of the relative age of housing within the city many housing units are in need of repair and renovation.

The city recognizes that it has a large elderly population, many of whom (18.8%) are at less than 60% of median income. The city will encourage accessory apartments, so-called ‘mother-in-law’ apartments, and will put language in proposed ordinances and building codes as needed to do so. Of two housing complexes in the city that serve the elderly, one allows single and low income tenants. There are waiting lists for units (at least 50 in 2004) to serve the elderly. Additional high quality units are needed for the elderly, single and family populations.

**Table F-15 AGE OF HOUSEHOLDER IN 2000 FOR CALAIS**

	Number	Percent
<b>Occupied housing units</b>	<b>1,486</b>	<b>100</b>
15 to 24 years	61	4.1
25 to 34 years	189	12.7
35 to 44 years	282	19.0
45 to 54 years	294	19.8
55 to 64 years	208	14.0
65 years and over	452	30.4

Source: U.S. Census

In addition to ensuring that local zoning ordinances do not significantly increase construction costs, the city will also compile a resource list on affordable housing programs. The resource list of affordable housing programs 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. Web resources will be used extensively.

Local, state, and federal governments have a number of different manners 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 City of Calais does not have a local housing authority, but construction availability and costs are monitored by the Code Enforcement Officer office. The work of a public welfare department is performed by the City Council, per city charter.

**POLICIES AND IMPLEMENTATION**

<b>Goal: Encourage and promote affordable, decent housing opportunities for Calais 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 city will compile information on programs and grants (CDBG housing assistance and rehabilitation programs) for the use of residents.	City Manager	Immediate
	The city will welcome and encourage participation in programs, grants and projects for the construction of subsidized housing whether within the city or the region including 1) grants to homeowners for improvements to energy efficiency, habitability; 2) sufficient, affordable housing options for its elderly citizens; and 3) provide transportation options to existing subsidized housing, and as a criteria in locating future housing.	City Council	Immediate
	The city will pursue grant funds to perform a comprehensive housing needs assessment including recommendations for renovation, remediation, demolition, and new construction.	City Council	Short Term
	Seek Community Development Block Grants or other federal or State funds if necessary, to rehabilitate substandard housing and/or demolish dilapidated vacant housing.	City Development Office/Economic Development Committee	Short Term
	Monitor the cost of housing in Calais to ensure the availability of affordable housing.	City Development Office/	On-going

<b>Goal: Encourage and promote affordable, decent housing opportunities for Calais residents.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
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 (allow roads with less the 24 feet of pavement)</li> </ul>	Planning Board/City Council	On-going
	Continue to implement time limits for review and approval of subdivisions	Planning Board/	On-going
	Continue to implement the one-stop permit system where multiple local reviews are necessary.	Planning Board	On-going
	Continue to allow a density bonus (such as 25%) if a certain percentage of units are affordable (such as 20%).	Planning Board	On-going
	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
	Allow a density bonus (such as 25%) if a certain percentage of units are affordable for the elderly (such as 20%).	Planning Board	On-going
<b>Codes and Regulation</b>			
Ensure that local codes and ordinances are enforced for the public health, safety and welfare.	Ensure that the code enforcement officer (CEO) works to address reported violations of local ordinances and State laws and regulations that affect health, safety or community conditions such as the automobile graveyard provisions, removal of unsafe or deteriorated buildings, replacement of driveway culverts, etc.	City Council; Code Enforcement Officer; Fire Department	Immediate
	Work with the planning board to address any need for modification to the existing land use regulations that may be appropriate in order to conform to current Comprehensive Plan.	CEO; Planning Board; City Council	On-going
	Work to correct all known failed or inadequate subsurface sewage disposal systems.	CEO; City Council	On-going
The zoning ordinance will not preclude the development of	The city will continue to encourage affordable housing opportunities by	City Council; Planning Board	Short-term (within 2

<b>Goal: Encourage and promote affordable, decent housing opportunities for Calais residents.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
affordable housing.	allowing a mixture of housing types, including accessory apartments.		years)
	Continue to allow mixed uses and mixed income housing within the residential areas of the city.	Planning Board	On-going
	Encourage senior citizen housing opportunities and provide residential areas that allow single and multi-family dwellings, as well as manufactured housing as supported by the Comprehensive Plan survey results.	Planning Board	On-going

**SUMMARY**

Calais currently contains a wide range of housing types, including a predominance of single-family homes, and a number of mobile homes, multifamily and duplex units, rental units and subsidized units. Calais had a total of 1921 units in 2000, 8.35 percent more than it had in 1990. The total population level is expected to continue its decline over the next decade. While there may not be a need to drastically increase the overall quantity of housing units, there does appear to be a need to assure an adequate supply of decent affordable housing. The State of Maine defines affordable housing as not costing more than 30% of household income. The data reviewed suggest that the cost of housing in Calais is affordable for most people in the community but that a sizable minority is paying more than they can afford or losing access as prices rise. The majority of people live in owner occupied single-family housing.

The City’s housing needs are changing. The City’s large number of older homes built prior to 1940 may be too large for today’s smaller households and aging population. These structures require more maintenance and improvements, such as weatherization and new wiring, than newer homes. Housing costs also appear to be high for the City’s very low and low-income households.

The existing zoning ordinance does not impose significant costs on the cost of building homes and the city is proposing several measures to improve the incentives and opportunities for construction of additional affordable units for the elderly and low income populations. There is a range of new housing in the town: mobile or manufactured homes are utilized often. The city recognizes the need for a comprehensive assessment of its housing stock in order to recommend necessary refurbishments to support demand for affordable units.

## G. TRANSPORTATION

The transportation network and the accessibility it provides is one of the primary determinants of the pattern of development within Calais. The system must provide access to areas outside as well as within the City. It must tie together the various facilities and uses and must remain efficient and functional to ensure the continued well being of the community.

Calais' transportation policies, such as those which might be incorporated into land use regulations and a capital improvements program, can help assure that future development does not increase traffic congestion or overtax existing roadways. Such policies can seek to assure that the transportation system functions cost effectively at acceptable levels and that development is encouraged in appropriate areas.

Calais is the sixth busiest port on the United States/Canadian border. Routes 1 and 9 are the two arterial highways serving the city. Route 1 connects Calais to points north and south and Route 9 is the City's transportation link to Bangor and Interstate 95. During the summer, tourists traveling to Canada increase the burden of traffic on streets.

### ROAD INVENTORY

In the early 1980's, the Maine Legislature authorized and directed the Department of Transportation (MDOT) to classify all public roads throughout the State. The classification system that was established was based on the principle that the roads which serve primarily regional or statewide needs should be the State's responsibility and roads which serve primarily local needs should be a local responsibility. In the last decade, the Maine Department of Transportation (MDOT), through its Local Roads Assistance Program, has attempted to assist municipalities in improving these roads to meet state and national safety design standards.

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

**State Highways** are usually arterials and are comprised of a system of connected highways throughout the State which serve arterial or through traffic. The State is responsible for all construction/reconstruction and maintenance on the 13.77 miles of arterial highway in Calais. Arterials include 13.36 miles of Route 1 between Robbinston and Baring town lines and .41 miles from the corner of Main Street and North Street to the Canadian border on the Ferry Point Bridge.

**State Aid Highways** are usually collectors and are roads that are not included in the system of State highways, but which serve as feeder routes connecting local service roads to the State highway system. The State is responsible for construction, reconstruction and summer maintenance of 4.67 miles of State Aid collectors. Collectors include 2.84 miles from the intersection of Route 1 and Route 307 to the Baring townline and 1.83 miles from the intersection of South Street and Route 1 to the Milltown Bridge.

**Local Roads** include all other public roads not included in the State highway or State aid

classification system. These roads are maintained entirely by the municipality, and based on the state system, serve primarily as local service roads which provide access to adjacent land. There are 31.39 miles of roads in this category.

A listing of all roads within the Calais with their classification, length, maintenance responsibility and overall condition can be found in Table G-1, their geographic location is shown on Map 3 Calais Streets and Public Facilities.

**Table G-1: ROADWAY INVENTORY**

Roadway	Arterial, Collector, Local, Public Easement, or Private	Length in Miles to nearest tenth	Owned by	Maintained by	Surface	Condition
Rte. 1	Arterial	7.76	State	City	Paved	Fair
Main St.	Arterial	1.88	State	City	Paved	Good
North St.	Arterial, Collector	1.91	State	City	Paved	Poor
Baring St.	Arterial	2.44	State	City	Paved	Fair
Ent to McDonald	Local	.01	Local	Private	Paved	Poor
Ent to Ames	Local	.01	Local	Private	Paved	Poor
Carson Rd	Local	1.05	Local	City	Paved	Fair
Shattuck Rd.	Local	1.32	Local	City	Paved	Fair
NNA: Rte.1, Rd 307 to TL, Calais-Baring Pt.	Collector	2.88	State	City	Paved	Poor
NNA: Rd. 565, End to Rte.1, Rd 565	Local	.11	Local	City	Paved	Fair
NNA: Rd. 567, End to Rte. 1, Rd 567	Local	.90	Local	City	Paved	Fair
NNA: Rd. 573, End to Rte. 1, Rd 573	Local	.08	Local	City	Paved	Fair
Moosehorn Rd.	Local	.42	Local	City	Paved	Good
South St.: South, Barker St. to North, South St.	Collector	1.65	State	City	Paved	Fair
South St.: South, Barker St. to North, South St.	Local	.07	Local	City	Paved	Fair
NNA: Hdq. Rd, Rd. 307, Rd. 1221 to Rd. 1221, Pw Ahd.	Local	1.33	Local	City	Gravel	Fair
Headquarters Rd.	Local	.43	Local	City	Gravel	Fair
Clark St	Local	.16	Local	City	Paved	Poor
School St.	Local	.14	Local	City	Paved	Poor
Cleveland St.	Local	.17	Local	City	Paved	Poor
Harrison St.	Local	.28	Local	City	Paved	Poor
Manning St.	Local	.19	Local	City	Paved	Fair
Lincoln St.	Local	.62	Local	City	Paved	Poor
Palmer St.	Local	.46	Local	City	Paved	Fair
Washington St.	Local	.61	Local	City	Paved	Fair
Chapel St.	Local	.27	Local	City	Paved	Fair
Garfield St.	Local	1.28	Local	City	Paved	Fair
Franklin St.	Local	.39	Local	City	Paved	Fair
Barker St.	Local	.62	Local	City	Paved	Fair
Swan St.	Local	.48	Local	City	Paved	Fair
Downes St.	Local	.46	Local	City	Paved	Poor
Hill St.	Local	.07	Local	City	Paved	Poor
Lafayette St.	Local	.67	Local	City	Paved	Fair

Roadway	Arterial, Collector, Local, Public Easement, or Private	Length in Miles to nearest tenth	Owned by	Maintained by	Surface	Condition
Germain St.	Local	.47	Local	City	Paved	Fair
Spring St.	Local	.33	Local	City	Paved	Fair
Calais Ave.: Calais Ave, Washington St. to Main St., Calais Ave	Local	.19	Local	City	Paved	Poor
Temperance St.	Local	.10	Local	City	Paved	Poor
Winter St.	Local	.11	Local	City	Paved	Fair
Peace St.	Local	.05	Local	City	Paved	Fair
Eaton St.	Local	.12	Local	City	Paved	Fair
Elm St.	Local	.12	Local	City	Paved	Fair
Armour St.	Local	.04	Local	City	Paved	Fair
Tyler St.	Local	.04	Local	City	Paved	Fair
Union St.: North, Union St. to Main, Union St,	Collector	.23	State	City	Paved	Fair
Union St.: North, Union St. to Main, Union St,	Local	.92	Local	City	Paved	Good
Pleasant St	Local	.22	Local	City	Paved	Poor
Chandler St.	Local	.26	Local	City	Paved	Fair
Monroe St.	Local	.41	Local	City	Paved	Fair
Price St.	Local	.29	Local	City	Paved	Poor
Pool St.	Local	.07	Local	City	Paved	Fair
Carver St.	Local	.08	Local	City	Paved	Poor
High St.	Local	.22	Local	City	Paved	Fair
McLean St.	Local	.07	Local	City	Paved	Fair
Steam Boat St.	Local	.17	Local	City	Paved	Poor
Calais Ave #2: Washington St., Calais Ave#2 to Main St.	Local	.19	Local	City	Paved	Poor
Calais Ave.: Garfield St. Calais Ave. to Calais Ave, Washington St.	Local	.47	Local	City	Paved	Poor
Church St.	Local	.31	Local	City	Paved	Fair
Sawyer St.	Local	.04	Local	City	Paved	Fair
Lowell St.	Local	.07	Local	City	Paved	Fair
Academy St.	Local	.16	Local	City	Paved	Fair
Beech St.	Local	.10	Local	City	Paved	Poor
Walnut St.	Local	.10	Local	City	Paved	Poor
Poor House La	Local	.17	Local	City	Paved	Fair
King St.	Local	.26	Local	City	Paved	Fair
Chase St.	Local	.10	Local	City	Paved	Fair
Boardman St	Local	.56	Local	City	Paved	Fair
Summer St.	Local	.10	Local	City	Paved	Fair
Stillson St.	Local	.30	Local	City	Paved	Fair
Whitlock St.	Local	.10	Local	City	Paved	Fair
Fowler St.	Local	.14	Local	City	Paved	Fair
Brooks St.	Local	.04	Local	City	Paved	Poor
Middle Ave.	Local	.07	Local	City	Paved	Good
Park St.	Local	.06	Local	City	Paved	Fair
Salem St.	Local	.04	Local	City	Paved	Fair
Blacksmith St.	Local	.03	Local	City	Paved	Fair

Roadway	Arterial, Collector, Local, Public Easement, or Private	Length in Miles to nearest tenth	Owned by	Maintained by	Surface	Condition
Whitney St.	Local	.10	Local	City	Paved	Good
River St.	Local	.07	Local	City	Paved	Fair
Todd St.	Local	.09	Local	City	Paved	Good
Former US 1	Local	.41	Local	City	Paved	Fair
Red Beach	Local	.41	Local	City	Paved	Fair
Palmer St. Ext	Local	.21	Local	City	Paved	Fair
WCVTI	Local	.23	Local	City	Paved	Fair
Industrial Park	Local	.41	Local	City	Paved	Fair
Mahar Lane	Local	.24	Local	City	Paved	Fair
Spruce St.	Local	.30	Local	City	Paved	Fair
Cedar St.	Local	.20	Local	City	Paved	Fair
City Bldg Way	Local	.03	Local	City	Paved	Fair
Transfer Sta Rd.	Local	.34	Local	City	Gravel	Fair
Dump Rd.	Local	.52	Local	City	Gravel	Fair
NNA: Lincoln St, Rd 1974 to Academy St. Rd 1974	Local	.06	Local	City	Paved	Fair
School Dr.	Local	.14	Local	City	Paved	Fair
Willow St. (formerly Downes St. Ext)	Local	.11	Local	City	Paved	Fair
NNA: TL, Calais-Baring Plt. To Rte.1, Rd. 1977	Local	.56	Local	City	Paved	Fair
NNA: TL, Calais-Baring Plt.to Calais, Rd.1979, End	Local	.70	Local	City	Paved	Fair
Goodall Heath	Local	2.87	Local	City	Paved	Good
NNA: Calais, Rd. 1987, Goodall Heath Rd to Calais, Rd. 1907, End	Local	.38	Local	City	Paved	Good
Magurrewock Rd	Local	2.38	Local	Private	Gravel	Good
WCTVI Rd. #1	Local	.25	Local	State	Paved	Fair
NNA: Calais, Rd.2144, End to Calais, Rte. 1, Rd. 2144	Local	.10	Local	City	Paved	Fair

## ROAD MAINTENANCE

Overall, the roadways in Calais are in fair condition. The city has an eight member highway department who systematically inspects and maintains culverts and roadways. The city works diligently with limited resources to maintain local roads.

The damage that does occur to our roads is largely the result of trucking activity. Harsh weather, which includes rapid changes in weather conditions, 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. As road weight limit postings are put in place, the conflict between road maintenance needs and the economic needs of local businesses are clear.

The city Highway Department conducts all snow plowing, salting and sanding each year for all city roads. 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 state reimburses the town about half the actual costs to the town for the State Roads that the town is mandated to maintain. Total yearly payment to Calais from DOT is \$46,000.00 (local road 31.39 miles + state aid minor collector miles 4.67 x 1200/mile = 43,272). 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. In addition, the \$46,000 figure represents the reimbursement amount plus other funds from MDOT to the city. The reimbursement to each town will not drop below the amount received in 1999, which for Calais was \$43,272.00.

The Maine DOT Local Roads Center provides a “Road Surface Management for Maine Towns” training program, including Road Surface Management System (RSMS) 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 city Council should investigate its use and adoption in Calais.

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.

Likewise, municipalities can use it to plan for anticipated improvements. The seven Regional Transportation Advisory Committees (RTACs) provide input to the Six-Year Plan and were asked to indicate major changes in their regions that affect the priorities of the prior Six-Year Plan. Calais is part of RTAC2. Projects located in Calais and included in the 2004-2009 6 Year Plan are listed below.

- Calais, Milltown Bridge over St. Croix River: *Bridge Replacement/Rehabilitation (wearing surface)*

Projects located in Calais and included in the 2004-2005 BTIP are listed below.

- Calais, *Cargo Port Development (Construction of warehousing and rail sidings at the new bridge crossing to facilitate cargo opportunities for the Port of Eastport)*
- Calais, South Street: *Highway Improvements (Highway reconstruction beginning at Manning Street and extending easterly 0.49 of a mile)*
- Calais, Main Street : *Maintenance Paving (beginning at Route 1 and extending northerly 0.20 of a mile)*
- Calais, Route 1: *Bridge Improvement (Preliminary engineering for a new border crossing between Route 1 and the Canadian border)*
- Calais, Route 1: *Level 2 Highway Resurfacing (beginning at South Street and extending northerly 0.66 of a mile)*



## TRAFFIC VOLUMES AND PATTERNS

Calais is a significant crossroad for commercial and visitor traffic. It includes two international border crossings and will develop a third within the next five years. Traffic congestion within Calais as a result of traffic waiting to go through Canadian Customs is a significant problem, particularly during the summer months. During the summer, especially on Canadian and American holiday week-ends, traffic can come to a halt on North and Main Streets such that it can take two hours to travel one mile from North Street to the border. As traffic increases, congestion on these streets will become worse.

The new bridge will decrease the heavy truck traffic that must traverse the narrow waterfront and in-town streets by routing it to the industrial park to the north of the city center. Trucks will then be able to connect easily with Route 9, a major east-west corridor. Trucks also travel the Route 1 corridor through Calais to pick up forest products from mills in Baileyville and deliver shipments to the port of Eastport 45 miles to the south.

Visitors also use the Route 9 “airline”<sup>1</sup> and the Route 1 corridor to reach the border crossing in Calais. There is concern that the new bridge will divert visitor traffic away from the historic downtown and the city is developing several land use, transportation and economic development policies to minimize this loss of visitor traffic.

Although the population of Washington County has decreased modestly during the 1990s, MDOT states that the total number of vehicle miles traveled in Washington 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 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.

Table G-2 shows average annual daily traffic (AADT) volume counts for the most recent year for which data is available. Annual average traffic volumes are determined by placing an automatic traffic recorder at a given location for 24 or 48 hours; the 24 or 48 hours are then factored for seasonal variation. The volumes shown below represent both through traffic and local activity.

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<sup>1</sup> The present day Route 9, between Bangor and Calais was originally planned in 1838-39 to carry soldiers to the border in the Aroostook war. The war never happened and the road remained unfinished until about 1857. It was opened as a mail route and touted as the “air line” road because you could travel so directly and quickly over high ground.

Table G-2 AVERAGE ANNUAL DAILY TRAFFIC VOLUMES

Roadway	Location Description	AADT in 1999
US 1	US 1 (Main St) @ CUL	4950
US 1	US 1 (Main St) NW/O South St	5650
US 1	US 1 (Baring St) S/O US 1 (North St)	11070
US 1	US 1 (Baring St) S/O Industrial Pk Rd @ CUL	10100
US 1	US 1 (North St) E/O Boardman	12710
US 1	US 1 (North St) NE/O South St	9540
US 1	US 1 (North ST) NE/O Union St	11350
US 1	US 1 (North St) NE/O Chandler St	11420
US 1	US 1 (Main St) SE/O Church St	6270
US 1	US 1 N/O IR 307	10050
US 1	US 1 SW/O IR 307	9130
US 1	US 1 SE/O IR 500	3090
US 1	US 1 SE/O IR 306	2840
Main St	Main St @ US Customs (on bridge)	8260
Main St	Main St S/O Union St	7090
00307	IR 307 SE/O US 1	1320
South St	South St SW/O US 1 (Main St)	4550
South St	South St E/O US 1 (North St)	4780
Lincoln St	Lincoln St NW/O South St	1300
Lincoln St	Lincoln St SE/O US 1 (North St)	1600
Lincoln St	Lincoln St NW/O Lafayette St	1440
Washington St	Washington St NW/O South St	1970
Washington St	Washington St SE/O US 1 (North St)	2980
Garfield St	Garfield St NW/O South St	2060
Garfield St	Garfield St SE/O US 1 (North St)	2610
Garfield St	Garfield St NW/O US (North St)	230
Downs St	Downs St SW/O Washington St	230
Lafayette St	Lafayette St SW/O US 1 (Main ST)	210
Lafayette St	Lafayette St NE/O Garfield St	240
Germaine St	Germaine St NE/O Washington St	280
Union St	Union St NW/O US 1 (North St)	1040
Union St	Union St E/O Main St (N Jct)	2130
Union St	Union St W/O Main St (N Jct)	1210
Union St	Union St W/O North St	2180
Union St	Union St N/O Chandler St	1190
Chandler St	Chandler St NW/O Monroe St	180
Monroe St	Monroe St NE/O Chandler St	610
High St	High St NW/O US 1 (North St)	560

Roadway	Location Description	AADT in 1999
Calais Ave	Calais Ave NE /O Lincoln St	670
Calais Ave	Calais Ave NE/O Garfield St	1280
North St	North St @ US Customs (on Bridge)	3320
Industrial Pk Rd	Industrial Pk Rd W/O US 1 (Baring St)	420

Source: Maine Department of Transportation

## LEVEL OF SERVICE

Traffic congestion lowers a roadway's level of service (LOS). LOS is a qualitative measure that characterizes operational conditions within a traffic stream and includes speed, travel times, freedom to maneuver, traffic interruptions, and the perceptions of motorists and passengers.

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.

Traffic volumes in Calais vary seasonally but there are several existing roadways where the LOS is rated poorly. Most parts of the city range from A (excellent) to B (good) as shown on Map10: Transportation Road Network: Level of Service but portions of North Street, Main Street through the downtown core, and Route 1 and 9 near the border with Baring are at or near maximum capacity. The worst stretches of road, with a level of service of E on North Street for example should experience the most relief and improvement from the decrease in truck traffic that will result from the new international bridge through the industrial park.

## 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: retrograde arterials, mobility arterial corridors, and all other state and state-aid roads. Due to the low volume of traffic in Washington County, there are no roads in the retrograde arterial category. However

Route 1 and 9 is a designated mobility corridor and comes under stricter access management standards.

To maintain and improve traffic flows, the Land Use section of this plan and future Land Use Ordinances will include access management performance standards that are in accordance with current law.

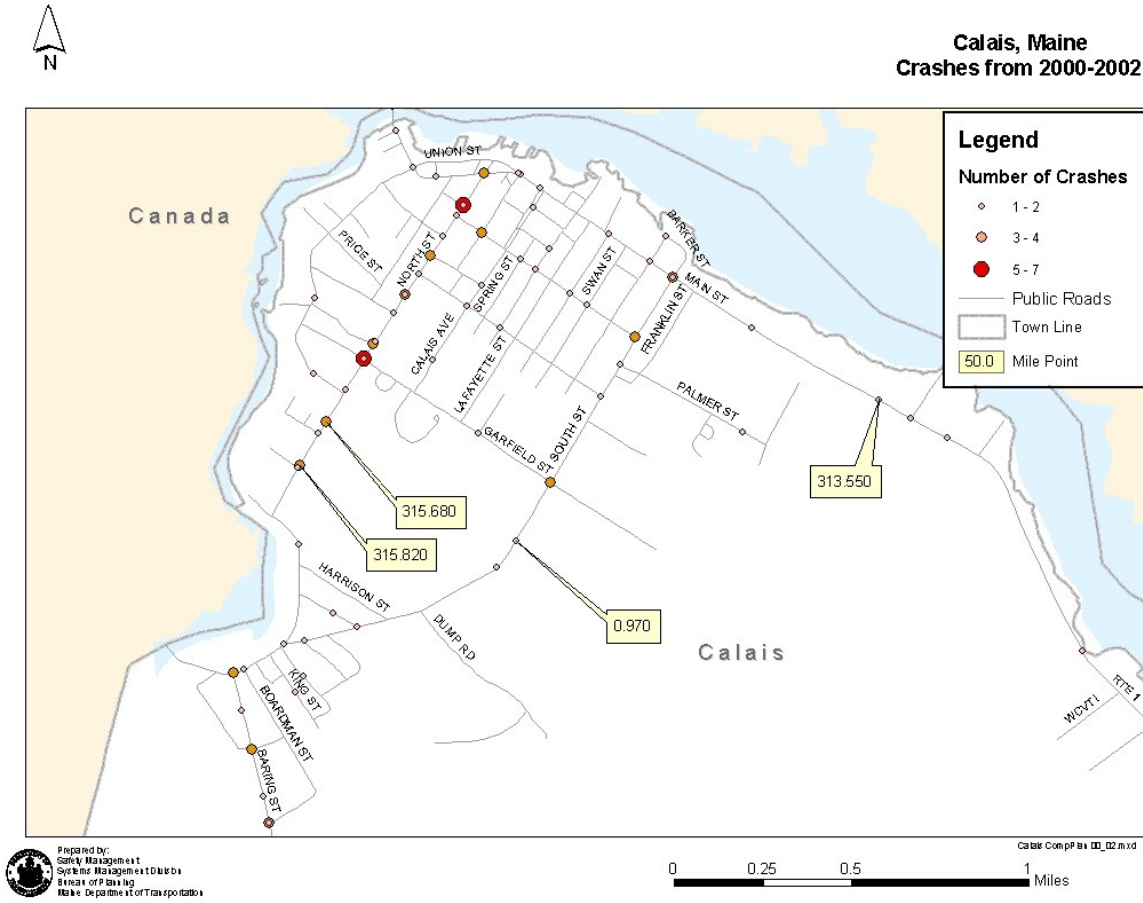
### **DANGEROUS INTERSECTIONS AND STRETCHES OF ROADS**

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. The Critical Rate Factor (CRF) is a comparison of the actual accident rate to the expected accident rate based on road type, vehicle miles traveled, and the statewide average accident ratio. A CRF greater than one, with more than eight accidents within a three year period, indicates an accident rate higher than should be expected at that location base on statewide data.

**Table G-3 HIGH ACCIDENT LOCATIONS (CRITICAL RATE FACTORS >1)**

<b>Primary Road Name</b>	<b>Street Name</b>	<b>CRF</b>	<b>Crash Year</b>	<b>Crash Type</b>
ST RTE 0009	MAIN ST	1.66	2000	Rear end/sideswipe
US 1	NORTH ST	1.49	1999	Intersection movement
RD INV 01475 29	LOWELL ST	1.13	1997	Intersection movement
US 1	NORTH ST	1.03	2001	Intersection movement
US 1	NORTH ST	1.00	1999	Ran off road
RD INV 01277 29	LINCOLN ST	1.00	1999	Intersection movement
MAINT C304J DIV 2	SOUTH ST	1.43	1997	Intersection movement
RD INV 01281 29	GARFIELD ST	1.41	1997	Intersection movement
US 1	NORTH ST	1.81	2002	Intersection movement
RD INV 01281 29	GARFIELD ST	1.49	2002	Intersection movement

The data reported in Table G-3 are depicted on the map below provided by the Maine DOT. Several other locally defined (see below) traffic hazard areas are also described in Table G-4 below.



According to MDOT data, from 2000 through 2002, there were 180 reported accidents in Calais. There were no fatalities. Two accidents involved serious personal injuries, others caused 36 moderate injuries, and 70 involved property damage in excess of \$5000.00. Fifty-two of the accidents were due in part to driver inattention or distraction; forty were due to illegal, unsafe speed; nine were due to driver inexperience; and six were alcohol or drug related. Thirteen accidents occurred in conditions of snow, fifteen during rain, sleet or hail, four were associated with severe crosswinds and two with smog, smoke or fog.

There are several locally identified traffic hazard areas that may need consideration. The following table describes the safety issues in each problem area and suggests possible solutions.

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

Intersection/Road	Safety Issue	Cause of Safety Issue	Possible Solutions
North Street	School children are bussed across North Street	No crossing guards or traffic signals to assist students trying to walk across North S	Provide a safe crossing for students

<b>Intersection/Road</b>	<b>Safety Issue</b>	<b>Cause of Safety Issue</b>	<b>Possible Solutions</b>
North and Washington Streets	Congestion; turning traffic	Large number of vehicles using the intersection	Traffic control such as a three-way stop, or a more clearly defined turning lane
Route 1 by Clarks Variety	Congestion; turning traffic		
Garfield and North St. intersection	Congestion; turning traffic		
Route 1 south at Cabbage Patch take-out	Congestion; turning traffic, no turning lane	Excessive speed and turning traffic into summer business	
North St. and Maine St. intersection	Confusion, delays, congestion	Traffic proceeding towards border (left onto Main St. from North St.) have no signal indicating that traffic coming through intersection is delayed from proceeding	Add a left turn arrow to signal pattern for traffic turning left onto Main St. from North St.
Junction of South and Main Streets (recently improved)	Inadequate turning room for traffic turning north on South St. from Route 1 south.	Inadequate road surface directional markings for traffic on South St. who are turning left onto Main St. (Route 1) to identify safe area to stop	Add a left turning lane on South Street with a stepped back a stop line in appropriate location (to allow right-turning traffic to proceed)

## **TRAFFIC CONTROL DEVICES**

There are three traffic lights in Calais. One controls traffic flow in the commercial area serving the plaza containing the Mardens and True Value hardware stores and the MacDonaldis restaurant across the street. The others control traffic flow at the junction of Route 1 and Main Street and at the Junction of South and North Streets.

## **BRIDGES**

The city has two bridges that cross the St. Croix River on which the international border sits. The main crossing is located at the terminus of Main Street downtown and is known as the Ferry Point Bridge. It is a steel girder structure that is rated by the MDOT in satisfactory to very good condition except for the substructure, rated in fair condition. The second crossing is located in Milltown and is known by the same name. As noted in the section above on Road Maintenance its wearing surface is forecast for resurfacing in the 2004-2005 biennial budget.

A third international bridge is proposed for construction in 2007. The new alignment within the Calais Industrial park consists of a bridge over the St. Croix River and a GSA-owned inspection facility within and adjacent to the Calais Industrial Park. Both are located in and adjacent to a largely undeveloped portion of the industrial park to minimize impacts to waterways, wetlands, and existing commercial and residential development and would consist of the construction of a new-GSA-owned facility on approximately 27 acres, a new separated grade crossing of the Calais Branch rail line within the industrial park and a new four-way signalized intersection with Route 1. Four travel lanes would be constructed through the GSA-owned inspection facility to a new, four-way intersection with Route 1. This four-lane highway would taper to match the existing two-lane section of Route 1. MDOT would develop an acquisition plan to help ensure that Route 1 could be widened to four lanes between the Calais Industrial Park and Route 9, a distance of approximately 5 miles, when traffic warrants.

Calais is taking the lead, along with the Saint Croix Economic Council, to seek planning and economic development funds to ensure that the city and the region can take full economic advantage of the opportunity provide by the new bridge. This will address impacts on the retail sectors of St. Stephen and Calais, particularly downtown where traffic currently circulates, as well as inter-modal issues and regional industrial park marketing opportunities.

## **PARKING FACILITIES**

The downtown area of Calais has approximately 500 parking spaces with another 300 located in the Mardens's store parking lot. Most of the parking spaces downtown are to accommodate retail stores but also include parking along the waterfront at the new Downeast Heritage Museum lot and the library. Several of these parking spaces are restricted for use by the handicapped including 5 in the Downeast Heritage Museum, 3 in the Municipal parking lot, 2 on Main Street, 1 at the library, 1 at he Maine Bureau of Tourism, and 1 in the Main Street parking lot. Area businesses have also designated parking spaces for handicapped drivers in their parking lots.

Many businesses on Main Street receive deliveries at their front entrances. These commercial vehicles block traffic, causing delays and create the potential for accidents to occur. At the present time merchants are asked not to have commercial deliveries on Main Street between 9 a.m. and 5 p.m.

Calais has two municipal parking lots adjacent to the business district. Both lots are rarely filled to capacity. Promoting both lots as convenient places to park could reduce the congestion on Main Street. Parking, outside of the business district, is adequate to meet the needs of the community.

## **PEDESTRIAN FACILITIES AND TRAILS**

Sidewalks are located throughout much of Calais' urban area. The sidewalks downtown and in parts of Milltown were improved as a part of the 2002 bond issue. Further sidewalk improvements are needed on South Street, particularly as part of the East-West Greenway, and on both sides of Main Street between Union and Monroe Streets. Additional, more formal,

connections are also needed to connect the downtown area with the waterfront walkway.

Currently, the Town's Zoning and Subdivision Ordinances requires sidewalks in new developments or subdivisions as recommended in the 1992 Comprehensive Plan and as adopted in revisions to the subdivision regulations in 1996.

The Sunrise Snowmobile club is active in the city and region (International Trail System) and maintains trails with two grooming machines.

## **PUBLIC TRANSPORTATION**

There are no public transit facilities in the city. The Washington Hancock Community Agency (WHCA) provides scheduled van and door-to-door on demand transportation from Eastport to Calais, Machias, 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, those with one or no available vehicles, and the elderly.

There are other private alternatives available to Calais residents. Two taxi services operate in Calais and West's 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, Perry Corner, the intersection of Route 1 and State Route 190, being the closest.

## **FERRY SERVICE**

There are no ferry services in Calais and none are needed or anticipated in the future.

## **AIRPORTS**

There are no airports located within Calais. The city is a member of the Princeton Regional Airport Authority, which serves the entire northern part of Washington County. There is also a local airport in St. Stephen. Recent inquiries and discussion about the need for a Calais municipal airport have been linked to support for economic development and homeland security. The city supports further study into the feasibility of development of a municipal airport in Calais.

Bangor is the location of the nearest international airport. The Bangor International Airport, 90 miles from Calais, offers both chartered and scheduled passenger flights to a number of points



within Maine, nationally and internationally. Freight operations are limited, with most cargo carried on scheduled domestic flights. Major shippers such as Federal Express and UPS and other smaller couriers provide service. An international airport is also located in St. John, New Brunswick.

Other regional airports include:

1. 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.
2. 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.
3. 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. 5,200-foot main runway.
4. Lubec Municipal Airport has a 2032-foot gravel/turf runway, with beacon, but no fueling services. Last rated by the state in good condition.
5. Machias Valley Airport has a 2909-foot runway and is used by private plane owners and in an emergency, by air ambulance services. Beacon, but no fueling services. Last rated by the state in good condition.

## **RAILROAD FACILITIES AND RAIL SERVICES**

Currently, one freight railroad, the Springfield Terminal Company, operates a line between Woodland and Calais. The depot for this line is located in Milltown. The Company's major user is DONTAR and could also serve Louisiana Pacific. The rail line crosses the St. Croix River and links with the Canadian Atlantic Railroad. This rail line runs northward and crosses back into Maine at Vanceboro.

The Calais Branch, which consists of 128 miles of track between Brewer and Calais was abandoned by Maine Central Railroad in 1985. This line is now owned by the State. It is recognized that regional municipal support as well as considerable state and federal funding would be needed to bring freight rail service back to Washington County. While on the surface, the loss of rail service might seem to be detrimental to the development of the port in Eastport, this may not be the case. The Port Authority Director states that setting up a marshaling area for trucks back on the mainland may be easier than in Eastport because more land is available. There are appropriate sites in both Perry and Charlotte or trucks could continue on to existing rail (inter-modal) facilities in Calais.

## **PORTS**

The Port of Eastport, 45 miles to the south of Calais, is the easternmost port facility in the United States. It is a deep water port with two piers, three berths and over 75,000 square feet of covered

storage. The outer berth can accommodate a ship of up to 900 feet in length. The naturally high tides in the Bays of Fundy and Passamaquoddy give the Estes Head Terminal a depth of 64 feet at mean low water and approach channels in excess of 100 feet. No dredging is required keeping maintenance costs low and consistent. With steady growth over the past decade it is the fastest growing facility in New England. In 2002 alone, the amount of tonnage passing through the port was around 280,000 tons, an increase above the average of 140,000 tons for the past five years.

Two grant programs from the Maine DOT could provide resources to the city to fund identified improvements at the pier, the breakwater and long the waterfront as identified in the Downtown Revitalization Plan. These include the Small Harbor Improvement Program (SHIP) which provides grants of up to \$250,000 for publicly owned facilities to improve floats, ramps, parking, dredging and other projects. Another program, the Boating Infrastructure Program (BIP) provides grants to improve piers, docks, marine facilities for transient work or recreational vessels 26' or longer. Eligibility is restricted to publicly owned facilities though it can extend to projects on privately owned facilities that have a public benefit. Calais received a \$50,000 SHIP grant in 2004 to install seasonal floating docks.

## **REGIONAL COORDINATION**

Map 11 – Regional Transportation Linkages depicts a proposed bridge and alternative corridor that could provide a through route from Eastport to Route 9 and Calais via Ayers Junction. This proposal is supported by the cities of Eastport and Calais, as they both update their Comprehensive Plans. The proposed alternative corridor would improve access to the mills in Baileyville and to the international border in Calais while reducing conflicts among commercial and visitor traffic. Scenic travel corridors (Routes 1 and 190) would be enhanced for visitor traffic and the Port and its large industrial customers in Baileyville, Calais and New Brunswick would be connected by an interior route that avoids segments of Route 1 serving high visitor traffic. The corridor could be served by rail at Ayers Junction or by road via Route 190

Achieving this vision of an alternative bridge and corridor will require much consultation and cooperation with surrounding communities and the Maine DOT. Calais seeks to initiate this discussion as a long term strategy that supports economic diversification and development within the industrial and tourism sectors of eastern Washington County.

## **Public Survey**

Survey questions asked respondents to indicate their highest priority for public investment in public facilities. Maintenance of roads was the highest priority of all public facilities in the survey among a community youth center, historical buildings and museums, recreational and several other facilities (see Chapter K. City Survey Results).

## **POLICIES AND IMPLEMENTATION**

The international border crossing in Calais creates transportation opportunities and challenges.

The new international bridge, proposed for completion in September 2006 will alleviate traffic congestion at the current boarder crossing and within the downtown but high truck traffic (including those carrying hazardous materials) passing through the downtown will persist for several more years.

Calais also needs to assure continued carrying capacity of its highways and streets by working with the Maine Department of Transportation, neighboring towns and others, and by implementing a comprehensive plan for road, bridge and sidewalk maintenance and improvements. The adequacy of new roads can be controlled through the city ordinances and regulations.

<b>Goal: Calais will encourage, promote and develop efficient and safe transportation facilities that will accommodate our city's anticipated growth and economic development.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
<b>Management and Maintenance</b>			
Support efforts to ensure adequate carrying capacity, maintenance and upgrading of existing Arterial and Collection Roads through access management provision of state law.	Continue to work annually with the Department of Transportation in the development of the State Transportation in the development of the Biennial Transportation Improvement Program, to ensure that adequate maintenance, upgrading, and traffic flow occurs on City arterials and collectors. Refer applicants to MDOT for necessary state Entranceway Permits	City Manager/ City Council	Ongoing
	Amend the Zoning and Subdivision Ordinances to include access management provisions aimed at maintaining the traffic carrying capacity on Route 1 at current speed limits, including: <ul style="list-style-type: none"> <li>▪ sight distance provisions</li> <li>▪ common entrances</li> <li>▪ enabling service road development and use</li> <li>▪ spaces between driveways and access points</li> <li>▪ number of access points/curb points</li> <li>▪ deceleration lanes</li> <li>▪ back lot access provisions</li> </ul>	Planning Board/ City Council	Immediate 2005
	Review zoning ordinance at junction of industrial park and Routes 1/9 to encourage industrial park development and maintain traffic carrying capacity at current limits.	Planning Board/ City Council	Immediate 2005
	Make specific recommendations for intersection improvements at the most hazardous intersections; coordinate closely with the Department of Transportation. Intersections that should be studied include North/Washington Streets and Main/North Streets. Develop interim truck traffic flow	City Manager/ City Council	Ongoing

<b>Goal: Calais will encourage, promote and develop efficient and safe transportation facilities that will accommodate our city's anticipated growth and economic development.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
	improvements once Downeast Heritage Museum is operating and before new international bridge is constructed.		
The city will plan for optimum use, construction, maintenance and repair of roads and sidewalks.	The Public Works Department will continue development of a multi-year road maintenance plan for the city, based in part on a recurring evaluation of roadways, culverts and sidewalks, which will be the basis for future allocation of road maintenance funds.	City Council; Public Works	On-going
	The city will continue to use training provided by the MDOT Local Roads Center and investigate adoption of the Road Surface Management System software to prioritize maintenance and construction of city roadways.	City Council; Public Works	Short-term (1-2 years)
<b>Inter-modal and Harbor Transportation</b>			
Support inter-modal transportation development in Calais.	Coordinate development within the industrial park and at the new border crossing to support inter-modal transfer of containers.	City Council/ City Staff	Ongoing
Support the provision of railroad service to the city of Calais.	Monitor the State's efforts to restore freight service on the Calais Branch between Brewer and Calais.	City Staff	Ongoing
Improve water access for recreational use and public safety.	Implement Waterfront Revitalization Plan to increase recreational access to channel; improve access for local fire rescue boat and coast guard to water; and explore federal financial support for dredging channel.	City Council/ City Staff	2005
	Implement SHIP grant pursue additional grant sources from MDOT to support improvements along the waterfront	City Council/ City Staff	Immediate
<b>Traffic Congestion-Border Crossings</b>			
Work with the State of Maine, Province of New Brunswick and City of St. Stephen to resolve traffic congestion problems associated with border crossings prior to international bridge construction.	Support aggressive schedule for September '07 bridge completion	City Council/City Staff	Ongoing
	Work with MDOT to route truck traffic away from Downeast Heritage Museum.	City Council/City Staff	Ongoing
	After new bridge is constructed, develop facilities to direct traffic into downtown Calais and St. Stephen using signage and visitor center at junction of Routes 1/9 and Industrial Park exit.	City Council/City Staff	Immediate 2005-2006
<b>Downtown Traffic Congestion</b>			

<b>Goal: Calais will encourage, promote and develop efficient and safe transportation facilities that will accommodate our city's anticipated growth and economic development.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
Take actions to reduce traffic congestion in the downtown. Include a study of parking availability in the downtown area.	Seek funds to undertake a traffic analysis of downtown that recommends ways to improve traffic flow and increase parking availability and accessibility; coordinate this work closely with the Department of Transportation. Support and direct travelers to border information radio station (96.5 FM).	City Council/ Police Dept.	Immediate 2005
	Improve signage for traffic circulation and parking.	City Council/ Chamber of Commerce	2005
	Seek input from retailers in downtown area.		Ongoing
	Appoint a permanent transportation committee to study transportation issues.	City Council/ Chamber of Commerce	2005
Create and maintain a pedestrian friendly atmosphere in the downtown.	Create an attractive pedestrian friendly atmosphere in the downtown by maintaining pedestrian amenities (e.g., sidewalks and cross walks) in good condition, giving pedestrians the right-of-way at crosswalks, and by improving access and signage to parking areas. Encourage businesses to maintain an attractive appearance. Improve linkages from City to trails (bike racks, signage etc.)	City Council/ Chamber of Commerce	2005
<b>Trail Development</b>			
Support pedestrian and bicycle use within Calais and to connect with regional trail systems.	Explore grant opportunities to improve trails and bike facilities. Promote connection to East Coast Greenway	City Council; RTAC	Short-term
	Include shoulders to accommodate bike travel when roads are reconstructed.	City Council; RTAC	On-going
<b>Public Transportation</b>			
Assure that there is adequate public transportation to meet the needs of the community.	Work with the Washington Hancock County Community Action Agency to assure Calais' residents are getting full benefit of the services offered.	City Staff	On-going
	Research need and demand for an intra-county bus transportation system (Eastport-Machias-Calais)	City Manager	Long Term
<b>Regional Coordination</b>			
The city will cooperate in the development of regional transportation policy.	Continue to support the regional transportation goals of the Washington County Pine Tree Development Zones, and Washington County Council of Governments.	City Council	On-going
	Participate on Region 2 Regional Transportation Advisory Committee (RTAC 2) or its successor committee and contribute to development of regional	City Council/City Staff	Ongoing

<b>Goal: Calais will encourage, promote and develop efficient and safe transportation facilities that will accommodate our city's anticipated growth and economic development.</b>			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
	transportation policy.		
	Establish a continuing dialogue between communities along Route 1 and Route 9; address maintenance, planning priorities, curb-cuts, and the impact of adjoining development along arterials.	City Staff	On-going
	Support regional port/truck/rail connections between Eastport and Calais including a new bridge from Eastport to the mainland and a non-coastal interior route to Calais.	City Council/City Staff	2005
	Study feasibility of need for Calais municipal airport	City Council/City Staff	2005
	Work with Town of Houlton to improve Route 1 between Calais and Houlton.	City Council/City Staff	2005
	Work with the Bangor Chamber of Commerce, the St. John Chamber of Commerce, the ME-NB Trade Corridor Committee and others to advocate further improvements to Route 9 (East-West) corridor.	City Council/City Staff	Ongoing

## SUMMARY

Transportation linkages in Calais consist of US Route 1 and the international border with St. Stephen, New Brunswick. Our city is reliant on its road network as the primary means of transportation movement. Therefore, local roads should provide safe, reliable access to work, school, stores, and residences. Overall, the roadways in Calais are in fair condition. Maintenance of roads was rated as one of the highest priorities for public investment in the survey of residents. Since MDOT has jurisdiction over most main roads in Calais, the city will continue to communicate and cooperate with that department. The city has a paving schedule for roads that are currently unpaved and requires all new roads to be constructed to municipal standards.

Calais will continue to work with its neighbors and the region to maintain a safe and efficient transportation network across the international border and as a regional service center to eastern Washington County.



New Brunswick, Canada

# Calais Comprehensive Plan

## Map 10: Transportation Road Network: Traffic Volumes and Safety

**LEGEND**

- +— Active railroad
- Private roads
- - - Trail/Undeveloped roads
- Perennial streams
- Water

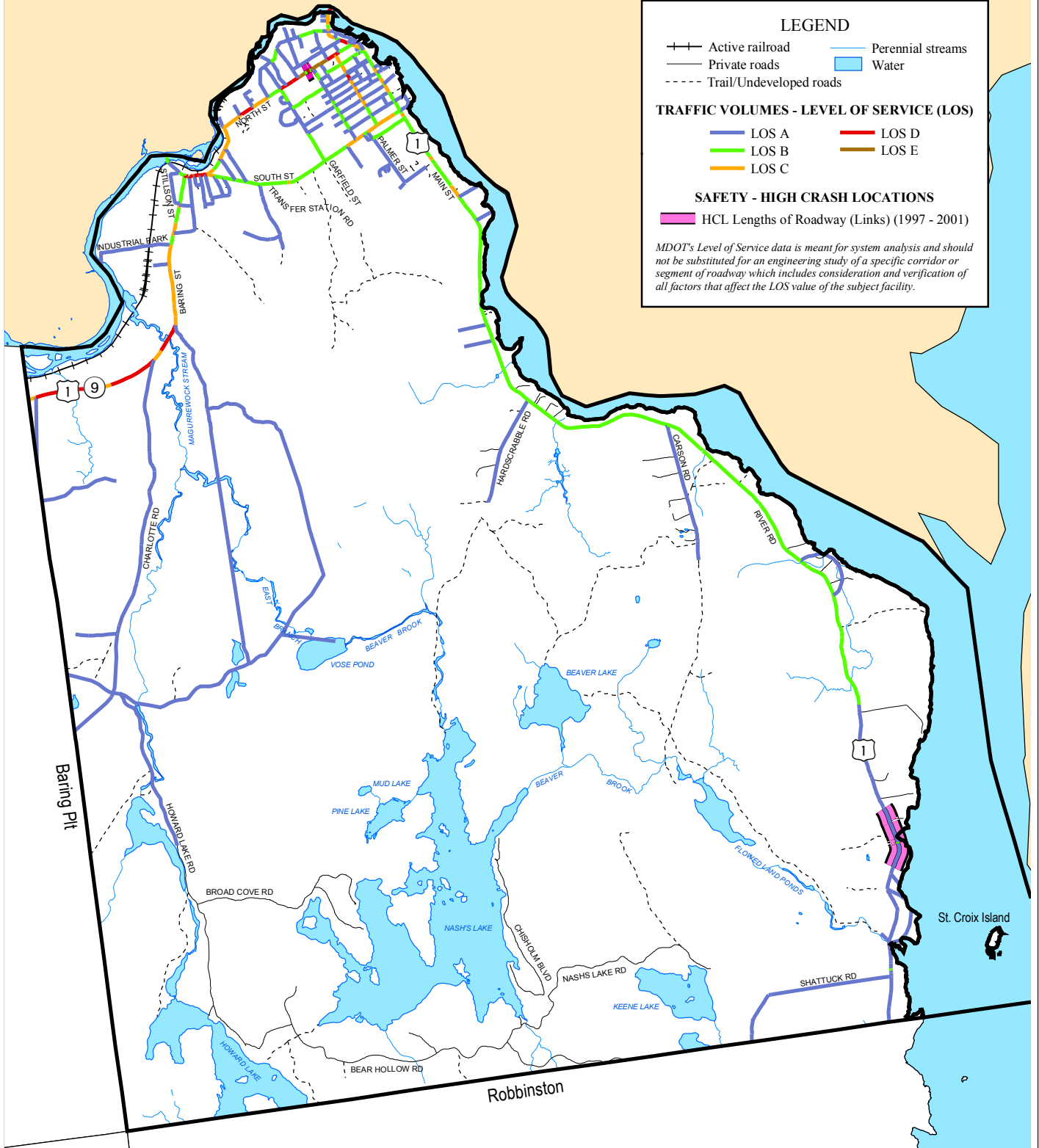
**TRAFFIC VOLUMES - LEVEL OF SERVICE (LOS)**

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E


**SAFETY - HIGH CRASH LOCATIONS**

- HCL Lengths of Roadway (Links) (1997 - 2001)

*MDOT's Level of Service data is meant for system analysis and should not be substituted for an engineering study of a specific corridor or segment of roadway which includes consideration and verification of all factors that affect the LOS value of the subject facility.*



Washington County Council of Governments  
 Eastern Maine Development Corporation  
 PO BOX 631 • Calais, ME 04619  
 (207) 454-0465  
 Web site: [www.emdc.org/wccog.htm](http://www.emdc.org/wccog.htm)




Sources: ESRI, MEDOT and MEGIS  
 Map revised: September, 2004

See map disclaimer at end of the Executive Summary.

# Calais Comprehensive Plan

## Map 11: Regional Transportation Linkages



Washington County Council of Governments  
Eastern Maine Development Corporation  
PO BOX 631 \* Calais, ME 04819  
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Sources: MDOT and MEGIS  
Map revised: September, 2004

See map disclaimer at end of the Executive Summary.



**H. PUBLIC FACILITIES AND SERVICES**

This section includes an examination of the City’s public works, municipal buildings, vehicle fleet, public water system, sewage treatment, solid waste, emergency and health care services, cemeteries, energy facilities, and educational facilities and services. Public recreational facilities are included in the Cultural Resources section.

Current facilities and services are described to determine if they adequately serve the city today and if they have the available capacity to serve the future needs based on anticipated growth and economic development for the next ten years. The goal of this section and the Fiscal Capacity chapter that follows is to plan, finance, and develop an efficient system of public facilities and services that will accommodate the city's future needs.

**GENERAL GOVERNMENT**

The government of the City of Calais consists of a six-member City Council and Mayor, elected at large, and a Manager system governed by a City Charter. The City was incorporated in 1851. The City Manager, as directed by the City Council, is responsible for general administration of the city. A single appointed assessor carries out property tax assessment. City administrative functions are located at the City Building at 11 Church Street.

**BOARDS AND COMMITTEES**

The City Council 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
- Community Development Committee
- Planning Board
- Sub-Committees of City Council
  - Public Works Committee
  - Finance Committee
  - Property Committee
  - Public Safety Committee
  - Welfare Committee
  - School Liaison Committee
  - Waterfront Development Committee

**Elected Boards**

- City Council
- School Board

The **Zoning Board of Appeals** hears grievances, variance requests, and administrative appeals. The **Finance Committee** is responsible for researching policy issues pertaining to the financial operations and status of the city. The **Property Committee** is responsible for researching policy issues pertaining to acquisitions and sale of Calais property. The **Public Safety Committee** is responsible for researching the city’s public safety services (police, fire, ambulance) issues. The **Public Works Committee** is responsible for researching policy issues pertaining to public

works, cemeteries, water department, and waste water treatment plant. The **Welfare Committee** is responsible for fulfilling the function of the Fair Hearing Authority as stipulated in the city's General Assistance Ordinance. The **School Liaison Committee** is responsible for attending School Board meetings and meeting with two school board members monthly for the purpose of better communication between the two groups.

The city'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, downtown revitalization ordinance (part of land use codes) 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.

## MUNICIPAL BUILDINGS, FACILITIES AND SERVICES

City offices are located in the City Building within the downtown district at 11 Church Street. The City Building was constructed at the turn of the 19<sup>th</sup> century and housed a district court house on the second floor until the 1970s. It is rich in history and centrally located but needs renovations in order to come into compliance with the Americans with Disabilities Act (elevator to second floor and basement). The cost of installing elevators is roughly estimated to be \$100,000.00. The basement should also be rehabilitated with primarily cosmetic improvements at a cost of approximately \$20,000. A list of city owned buildings is provided in Table H-1.

**Table H-1 Calais Municipal Buildings**

Building	Street Address	Construction	Year Built	# Stories	Square Feet
City Building	Church Street	Brick-Joist	1902	2	6,392
North Street Building (Public Works & Public Safety)	North Street	Frame	1969	1 & 2	12,100
Red Beach Fire Station	Shattuck Road	Butler	1969	1	1,200
Fire Training Facility	North Street	Concrete	1987	1	600
St. Croix #1 Historic Fire House	Church Street	Brick	1874	2	4,212
Library	Union Street	Brick	1892	1 & 2	5,000
Community Center	Academy Street	Block	1923	2	5,460
Water Department	North Street	Brick	1880s	1	2,046
Sewage Treatment Plant	Elm Street	Brick	1968	1	2,500
Pump Station	Baring Street	Steel	1968	Sub-Service	28
Pump Station	Poole Street	Steel	1968	Sub-Service	20
Pump Station	Main Street	Steel	1968	Sub-Service	20
Pump Station	Steamboat Street	Steel	1968	Sub-Service	28
Pump Station	King Street	Steel/Concrete	1968	Sub-Service	50
Pump Station	Union Station	Steel/Concrete	1968	Sub-Service	50
Pump Station	Calais Street	Concrete	1976	Sub-Service	50
Landfill Building	South Street	Frame	1975	1	405
Dog Pound	North Street	Frame	1986	1	460
Utility Building - Cemetery	South Street	Frame	1975	1	380
Railroad Building - Large	Main Street	Steel	1960	1	1,920
Coal Shed	Main Street	Wood	1980	1	865
Bandstand	Main Street	Frame	Rebuilt 1987	2	225

**Source: City Manager’s Office**

The Police, Fire and Public Works Departments are housed in the North Street Building. The building is inadequate due to lack of space and because of its location along busy Route 1. Emergency vehicles have difficulty responding to calls when traffic is heavy or backed up from the St. Stephens Bridge. The City will assess the need for separation or expansion or relocation of this mix of services in combination with the impacts that result from construction of the new international bridge.

The City also has a Fire Station/Substation located on Shattuck Road and a Fire Training Facility located on North Street. The Shattuck Road facility in Red Beach should be adequate for the foreseeable future but will need to be upgraded if there is a significant increase in development in the southern part of the city. While the North Street building was renovated in 2002-2003 it needs more space if it is to continue to support the regional ambulance service.

The St Croix No. 1 Fire Hall is located next to the City Building on Church Street. The building, which is nearly 120 years old, is in fair condition and needs considerable rehabilitation, including extensive weatherization, a new roof and a number of cosmetic improvements. The total cost simply to stabilize the building from further deteriorations could be approximately \$100,000. The city is actively working (local fundraising, grant preparation, interior cleaning) on rehabilitation and conversion of the building into a Historical Fire House/Museum. Grant requests for a CDBG Public Infrastructure funds were turned down in early 2004 and 2005. Respondents to the public survey indicated very strong support for seeking funds to renovate this historic structure.

The Calais Free Library, built in 1892 and opened to the public on July 4, 1893 is located on Union Street. It is a historically significant structure, in good condition, located adjacent to the newly constructed Downeast Heritage Museum on the beautiful St. Croix River. The library underwent significant restoration in 2002.

The Community Center, located on Academy Street, houses the Recreation Department. The building is in good shape, and received a new roof in the early 1990s. The Recreation Department would like to construct a new addition. The former Calais Middle School was abandoned in 2003 for use as a school and sold in 2004 to a local businessman. The City’s Water Department Building is a brick structure located on North Street and is currently used for storage and a shop by the Water Department. Options are being reviewed for alternative uses of this site and potential alternative locations for the Water Department operations.

The following is a list of the five largest parcels of undeveloped land owned by the city, with acreages given:

<b>Parcel</b>	<b>Approximate Acres</b>	<b>Block</b>	<b>Lot</b>
1. Industrial Park land	20	24	2
2. behind Public Works	40	11	9
3. Nashs Lake	600	32	66
4. Devils Head	300	21	5-8
5. adjacent to the transfer station	40	27	20

The city owns and manages several municipal recreational facilities that are described in Section B – Cultural Resources. Discussions on the sewage treatment plant and the schools are included later in this section.

**Public Safety**

**Fire Protection.** The City of Calais has two fire stations in operation, one in Red Beach and one at the North Street Building. The North Street Building, which also houses the Public Works and Police Departments is overcrowded and the City may want to consider relocating the Fire Department. The Department’s major pieces of equipment include:

<b>Equipment</b>	<b>Date of Replacement</b>
1985 E-1 Quint ladder truck	2010
1968 Mack pumper	2004 purchase 2005 delivery
1995 Ford rescue vehicle	2015
1976 4x4 Chevy pickup	ASAP
1990 Ford pumper	2015
1970 military vehicle (tanker)	2009

The Fire Department is staffed by 5 full-time and 25 volunteer positions. It has written mutual-aid agreements with St. Stephen, New Brunswick and Washington County, but also responds to calls from Baring Plantation, Robbinston, and other neighboring towns. Monthly training sessions are held for all Department members. The Department currently holds a Class 5/9 insurance rating (on a scale of 1 to 10 with “1” being the best). In order to improve this classification, Calais would need to add more manpower and equipment.

Another of the Department’s concerns is the number of trucks carrying hazardous materials and chemicals traveling through Calais. Shipments of caustic soda, liquid asphalt, bunker fuel, butane fuel, gasoline, kerosene, pesticides, herbicides, potassium chloride, hydrogen peroxide and various other chemicals are transported by commercial carriers through Calais. The city has a mutual aid agreement with the County hazardous materials response team to respond to any emergency caused by a chemical spill.

There were 117 alarms and 228 service calls responded to by the Fire Department in 1990. In 2003 this activity had more than doubled to 391 and 455 respectively, a substantial increase that is being handled by only one additional staff member over 1990 levels. If service calls continue to increase, additional personnel may be required.

Regional ambulance service is provided from the North Street Station (since 2000) which accounts for increases in staff and level of activity. Physical capacity at the building is stressed. Storage for at least 2 more vehicles is required as well as space for 24 hour staffing (2 more bedrooms are required).

**Police Protection.** The Calais Police Department is a 24 hour per day operation which employs seven full-time police officers, one school resource officer, four full-time dispatchers and one part-time reserve officers. The Department is housed at the North Street Building. Its facilities

include four holding cells, a dispatch office, chief’s office, bookkeeping room, conference room, lab and evidence room. The layout within the Department is often inconvenient due to the small rooms. The Department has 3 vehicles, a radio system, 2 computers and bullet-proof vests.

The Department works closely with the Sheriff’s Department, the State Police and the Border Patrol. In 1990, the Police Department answered 3,823 complaints as compared to 3,202 complaints in 1989. This demand had increased to 9383 complaints in 2003. Much of this increase is attributable to a pervasive prescription drug problem that was first noticed by the department in 1997. Due to the frequency of calls, there are many times when only one officer can respond to a call.

In addition to an overall increase in the number of complaints (more than double the amount of 13 years ago) recent offenses are more serious including robberies and homicide. The department has a 100% success rate with these more serious crimes but their investigation takes away from patrol and other complaint response. More serious offenses require investigation where time is of the essence in resolving problems. The department is in severe need of a detective to adequately respond to these problems.

E911 was introduced locally in the winter of 2003. The Chief, the City Manager, and the Postmaster provided a street naming and numbering plan basic to E911 implementation. Finding a particular home can be difficult: some house numbers are duplicated, many houses have no number. This is a problem not only for mail delivery, but also for emergency response. Establishment of an E911 system has improved the summoning of emergency services to households. Its cost is borne by a surcharge on all monthly telephone bills and benefits anyone needing emergency assistance.

**Public Works**

The Public Works Department maintains Calais roads and sewers, two cemeteries, the transfer station, storm drains, parks and other public property, and makes minor repairs to public buildings. This Department also maintains the city’s vehicles. The Public Works Department occupies forty percent of the North Street Building and employs eight full-time employees.

The Public Works Department has access to the following equipment: one bulldozer, one backhoe, and one sidewalk plow. Equipment owned by the city includes:

<b>Equipment</b>	<b>Date of Replacement</b>
1965 Caterpillar D-12 grader	ASAP
1993 GMC snowplow truck	2009
1999 GMC snowplow truck	2015
1981 Mack plow truck	2004
1985 Mack sand truck	ASAP
2002 International Plow truck	2018
1994 Caterpillar Loader	2009
1988 Chevrolet ¾ ton pickup truck	ASAP
1999 GMC one-ton pickup truck	2010-2012
2001 Vacall sweeper	2021

<b>Equipment</b>	<b>Date of Replacement</b>
1996 John Deere 544G loader	2016
1995 John Deere backhoe	2015
1991 John Deere 310 backhoe (transfer station)	2007
1986 John Deere 750 tractor; backhoe (Cemetery)	2004
1994 MT trackless sidewalk plow	2010

The Public Works Department has an excellent maintenance program that has increased the lifespan of equipment. The Public Works crew performs all minor repairs, maintenance, and painting of equipment.

The vast majority of the roads in Calais are public ways. The department maintains approximately 60 miles of road. Rights-of-way for these roads vary in width from 16.5 feet to 100 feet. Forty feet is the most commonly found width for streets.

**Cemetery and Parks**

The City of Calais has two cemeteries as depicted on Map 2 - Calais Public Facilities. The Calais Cemetery is located off of South Street and has approximately 5,500 grave sites on a 35 acre lot. Approximately 1,500 of these sites are maintained under a perpetual care agreement and an additional 1200 veteran sites are maintained by the city. Existing capacity is expected to be sufficient for the next ten years. The Down East section of the Calais Cemetery was opened in 1984 and contains 1000 lots. The Red Beach Cemetery, located off of Route One, is half the size of the Calais Cemetery. All of the lots in this cemetery have been sold. Expansion of the Red Beach Cemetery is being reviewed.

The Calais Cemetery Ordinance was implemented for the purpose of regulating the operation and use of public cemeteries in the city of Calais. This Ordinance contains information pertaining to the cemetery lay-out, lot sale, the use of lots, perpetual care, access to the cemetery, records of graves, and the payment of fees and charges. The City Manager and a committee of the City Council, consisting of three members, supervise the appropriation of funds for the city to manage and improve the cemeteries.

**Drinking Water Supply and Treatment**

The City has been obtaining water from its new groundwater wells located in the Industrial Park area since August of 2002. Prior to that, water had been purchased from St. Stephen, New Brunswick. The City of Calais Water Department provides water service to about 1351 connected customers. The new groundwater wells are currently able to provide 0.575 MGD (million gallons per day) of water to customers at full capacity and presently average 0.41 MGD. The City additionally has a 1.5 MGD reservoir on South Street that can supply water for a period of three days during average water use to the community. This reservoir also is used for peak flow fluctuations in the system during periods of flushing and for fire protection purposes. Public water service is available in the urban area of the community in a region encompassing about two square miles.

Iron and manganese occur naturally in the groundwater aquifer below the wells. The City has been operating a Pureflow water filtration plant on Niels Street prior to the distribution system in order to reduce the levels of both iron and manganese to below secondary drinking water standards. The Pureflow process uses chlorine to oxidize the iron and manganese to an insoluble form so that these compounds can be removed by the filtration media.

Even with the proper operation of the filtration process, the city has experienced complaints related to taste, odor, color and fixture staining properties of the new water supply. These complaints are related to the accumulation of iron and manganese in the water distribution system and old galvanized iron piping that is still utilized in many locations throughout the distribution system. The city has since employed an aggressive program of water main and hydrant flushing and other measures to improve the water quality served to the citizens of Calais.

In order to improve water supply and quality to specific locations in the community, the city is prioritizing water main replacement projects. These replacement projects will be conducted, as funding is available. The city will work towards replacing galvanized iron piping and inadequate sized supply piping and will upgrade piping as maintenance conditions warrant. The first round of pipe replacement projects will be completed in 2004 and include Carver Street, Downes Street above Lincoln Street, the North end of Lincoln Street from Calais Avenue and a short section of line on Calais Avenue. These water replacement projects were a priority due to the poor quality water in this area from galvanized iron piping corrosion. As these projects are completed, planning for other areas will be implemented based on available funding opportunities.

The city has evaluated several options for expanding water production. The existing wells have additional production capabilities. Once the production well's maximum capacity is defined, the city will consider expanding the existing well pumps as feasible. Currently, there is a large difference between the water that is pumped into the distribution system and the water that is billed for revenue. This difference is due in part to water main leaks and defective residential and commercial meters. The city's goal is to improve this gap in water loss to the levels recommended by the Public Utilities Commission. Once the actual water use is known, further work may be necessary to expand the water supplied by the two production wells. The city does not plan to continue drilling for additional well sources at this time as the current water supply appears to be sufficient.

### **Sewer**

Since 1969, the city has owned and operated a municipal wastewater collection and treatment infrastructure that provides sanitary sewer service to about 1250 connected users representing an estimated population of about 3100 people. The city's public sewer system contains about fifteen miles (81,000 LF) of sewer pipe. Public sewer service is available in the urban area of the community in a region encompassing about two square miles. The sewage is conveyed to the treatment plant for treatment by ten wastewater pumping stations. The treatment plant is now thirty-five years old and is located at the end of Elm Street. The plant is a conventional biological wastewater treatment facility that removes pollutants from the influent wastewater prior to its discharge into the St. Croix River as clean effluent. Wastewater infrastructure is a critical consideration for the city's comprehensive planning process.

Many of the city's sewers date back over one-hundred years and consist of vitrified clay pipe with open joints. Since some of the older lines are subject to high groundwater infiltration, the sewer system has always been the source of high, seasonal excess flows. In addition, some sections of the city's sewer system are combined and carry both sanitary flow and stormwater flow from street catchbasins, roof drains and cellar drains in the same pipes. As a result, the wastewater treatment plant is subject to periodic high flows from wet weather precipitation and snowmelt events. The interceptor sewer can carry more water to the treatment plant than it can process. This has resulted in the flooding of the wet well and headworks at the plant. The original plant combined sewer overflow (CSO) point was designed to bypass all excess storm flows above the plant's capacity out an overflow pipe. The CSO was blocked off in 1990 during a plant upgrade based on the belief that the flows into the plant had been sufficiently reduced. Because of the ongoing excessive flow conditions into the sewer system, the city will be working towards reopening and licensing a CSO at the plant until flows in the sewer system can be reduced to levels that the plant can handle. Since the city is classified as a CSO community, it must develop a CSO Master Plan that identifies an implementation plan and schedule for the eventual removal of all CSO activity. Future planning must consider sewer infrastructure improvements in order to reduce excessive flows. These decisions must be based on a Sewer System Evaluation Survey of the sewer system which leads to a determination of exact inflow sources and remediation project costs.

Ten wastewater pump stations are located in the sewer system to lift sewage up over natural topographical elevation features and to convey the sewage to the treatment plant.

Six of the ten pumping stations are now thirty-five years old and have been in service since the treatment plant was built. These stations include the King Street, Union Street, Poole Street, Main Street, South Street and Steamboat Street pumping stations. Of the ten pumping stations, three stations are currently under construction. These include the Union Street and King Street major central pump stations and the smaller ejector station located on Steamboat Street. These three stations have been problematic for many years and have been subject to DEP enforcement action due to unlicensed overflows. Each of these three stations also has a CSO overflow point which the city is currently working with the DEP to license. Three of the ten pump stations were added to the system in later years including the Calais Avenue station which was built in 1976, the Stillson Street station which was added in 1992 and the Wal-Mart pump station which came on-line in 1994. Each of these stations are submersible type stations. The Baring Street pump station was replaced in 1997 with a submersible station. The South Street ejector station has been problematic due to high flow events causing overflows at this station's CSO. This station is planned to be replaced within the next few years as funding is available. Future long term planning must consider replacing the ejector stations at Poole Street and Main Street in order to ensure that they are upgraded prior to their failure. The city must also plan for regular maintenance of all stations to ensure that all stations are operated to the extent of their capacity at all times.

The city operates a conventional biological wastewater treatment facility that converts raw sewage into clean effluent by passing the sewage through a series of unit processes. As the influent flows through each sequential unit process, a greater amount of pollutants are removed and the water becomes progressively cleaner. Many of these processes are now thirty-five years old and are obsolete or have failed due to a combination of poor maintenance practices and their age. From its startup, the plant was plagued with operating problems and has had difficulty



meeting its discharge licenses. Several studies of the plant were conducted including a technical audit in 1974 and a process evaluation of the plant in 1988.

The plant’s original unit processes were augmented by an upgrade to the facility in 1990. Several of the upgraded processes have also failed or are not sized properly. Because of this upgrade, the current licensed treatment plant design capacity is a total of 5.87 MGD through the secondary and stormwater systems. The design capacity of the secondary treatment plant system is presently 1.50 MGD. The interceptor coming into the plant can deliver higher flows which flood the plant.

The DEP has initiated enforcement action due to past maintenance and operational issues identified at the plant. The city will be receiving a DEP Consent Order related to these problems and the past pump station overflow issues. The city has recently completed an additional wastewater infrastructure facilities evaluation. This study was completed in order to conduct a more comprehensive study of all facets of the Calais wastewater treatment infrastructure. This report will be used to develop facilities upgrade plans for the Calais wastewater treatment infrastructure as funding is available. Over the past year, many significant improvements have been made to the city of Calais wastewater collection and treatment infrastructure. These improvements include upgraded staffing at the plant, implementation of a maintenance program, improved laboratory, sampling and safety practices, operations based on process control and improved record keeping.

**Solid Waste Disposal & Recycling**

Solid waste removal and transportation within the city is provided by private businesses. Following the landfill closure in 1995, the city has an agreement with Southwest Solid Waste of Laurence Station, New Brunswick who landfills the material at their facility some 23 miles from the city.

The city also operates a transfer station on South Street that accepts materials for recycling. The center accepts paper, cardboard, tin cans, glass, and aluminum. There are several very good reasons for recycling. Apart from conserving scarce resources and reducing the negative impacts of disposal, every ton recycled saves the taxpayers \$60 (\$CDN80).

**PUBLIC UTILITIES AND SERVICES**

**Mail Delivery.** The Calais Post Office (04619) is located on North Street in the United States Post Office building. Mail is delivered through use of post office boxes and by carrier.

**Electrical Service.** Eastern Maine Electric Cooperative

**Telephone Service.** Verizon

**Television, Cable, and Radio**

WLBY - Channel 2 (NBC affiliate) Bangor

WABI - Channel 5 (CBS affiliate) Bangor

**Newspapers**

Bangor Daily News (daily) Downeast Edition

Calais Advertiser (weekly)

**Television, Cable, and Radio**

WVII - Channel 7 (ABC affiliate) Bangor  
 Maine PBS- Channel 13 (PBS affiliate) Calais  
 Adelpia 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**

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  
 Saint Croix Courier (published in St. Stephen)

**Internet Providers.** There are a number of Internet service providers with the local access numbers. The City is actively involved in an assessment of telecommunications infrastructure in Washington County with the Washington County Council of Governments.

**HEALTH CARE**

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. CRH is the largest employer in Calais, employing close to 250 people. 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. Services offered at the Hospital include clinics in cardiology; ophthalmology; prosthetics-orthotics; blood pressure; and wound care. A variety of support groups are available for individuals and family members dealing with diabetes, cardiovascular disease and breast cancer. Out-patient services include laboratory procedures, physical therapy, occupational therapy, aquatic therapy, osteoporosis management and prevention, radiology, including fixed unit CT scan, mobile MRI and nuclear medicine, bone density testing, ultrasound exams and mammography, chemotherapy, day surgery, cardiac/pulmonary rehabilitation, nutritional counseling, home health care, and respiratory care procedures. A multi-specialty courtesy staff of 30 physicians and a variety of allied medical specialists compliment the 15 members of the Hospital's active medical staff. 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. WCPA operates the Calais Children's Project in a building owned by the city of Calais. The Calais Children's Project provides three different residential treatment environments and specialized care of children with a variety of behavioral problems.

SUNRISE OPPORTUNITIES, operates a 10-unit supervised living facility for mentally handicapped individuals. Also operate the Beckett Center, a facility that provides employment activities for the mentally handicapped.

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). Approximately 370 different clients are served in the Calais clinic each year.

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 Calais residents. Through a contract with Washington/Hancock Community Agency, EAA provides transportation in Calais 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 Calais 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 Calais 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.

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. Scheduled for completion in 2005, this facility will be attached to the Downeast Community Hospital and provide 30 beds for veterans needing assisted living facilities.

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.

**AMBULANCE SERVICE.** Emergency ambulance service is provided 24 hours a day by the Calais Division of Downeast EMS, the regional ambulance service provided by Washington County Emergency Medical Service Authority (WCEMSA). The service was created in December 2000 following the closure of the private Ambulance Service. The operation is fully licensed and provides care at the level of EMT, intermediate and Paramedic. The full time manning and advanced level is necessary to meet the demands of the growing elderly population and the distance to hospitals.

WCEMSA is a regional emergency ambulance service covering 25 communities in three counties. The service runs between 1,750 and 2,000 calls per year with 1310 of those calls originating out of the city. The service provides both emergency and transfer services, operating out of three full-time base stations plus relationships with two volunteer operations and first response units based in Alexander and Charlotte. The trademark of the service is the bright white ambulances marked "Downeast" EMS and displaying West Quoddy Headlight, the beacon of hope for a healthy community.

Extreme trauma cases are handled in the community through a working relationship between "Life Flight of Maine", Calais Regional Hospital, and the ambulance service.

**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 outpatient center for substance abuse on Beech Street and is planned to serve 300 clients.

## **EDUCATION**

The city of Calais is a member of School Union 106 which includes the towns of Alexander, Robbinston, Baring, and Crawford. The city and each town have elected school committees that oversee school affairs. The School Union maintains its own school system with 5 buildings (including the Alexander and Robbinston schools) and approximately 150 employees (including all substitutes).

Grades K-6 attend the Calais Elementary School on Garfield Street, and grades 7-12 attend the Calais High School, which is located on Route One South.

The Calais Middle School was abandoned in and was sold in 2004 in a local businessman. The existing High School and Elementary schools were expanded to accommodate former middle school students.

CALAIS ELEMENTARY SCHOOL. Built in 1963, with a new addition completed in 2004, the facility features classrooms for Grades K through 6, speech, gifted, library, art, music, computer, offices and a cafeteria/gymnasium combination. Enrollment in 1990 was 508; it declined to 390 in 2000; increased to 426 by 2003, with increase in staffing at the international border; and has decreased again to 390 in 2004.

CALAIS HIGH SCHOOL. Completed in 1977, the high school has a 500 student capacity, and was remodeled in 2004. In 1989, the Calais Regional Vocational Center was opened at the High School. The facilities are in excellent condition. It has a complete range of classrooms, shops, gymnasium, computer lab, home economics room, and cable TV broadcasting facilities.

Calais High School enrollment has declined slowly over the past 24 years: in 1980 it was 270; in 1990 it was 192; in 1998 it was 192, and in 2002 it was 186. Total enrollment decreased 15.6% between 1990 and 2002, going from 700 pupils to 591 pupils. However, with recent increases in economic activity in Calais as well as increases in staffing at the international border since 2002 total enrollment has increased by close to 100 students, a 16.1 percent increase in two years. Table H-2 contains enrollment information from 1998 to 2004 at the primary and secondary school level for Calais.

Table H-2 PUBLIC SCHOOL ENROLLMENT OF CALAIS RESIDENTS

School Year	Elementary	Secondary	Total
October, 2004	390	296	686
October, 2003	426	293	719
October, 2002	405	186	591
October, 2001	390	200	590
October, 2000	404	190	594
October, 1999	435	189	624
October, 1998	435	192	627

Source: Department of Education

Maine State Planning Office population projections suggest that there will be a 12.8 percent decrease in the number persons between the ages of 5 and 17 between 2004 and 2015. However, these forecasts are based on 2000 census data and do not account for the enrollment increases of the 2002-2004 period associated with increased staffing at the international border. Currently, there are three teachers per grade with an average student/teacher ratio of 19 to 1. With recent substantial improvements, it appears that the school systems' current physical capacity will be adequate for the foreseeable future. However the city will review capacity over time as demographics shift.

Census figures show that the number of Calais residents who are high school graduates (84.6%) is higher than that of Washington County (79.9%) and comparable to the State of Maine average (85.4%). However, the city ranks lower in college graduates (11.5%) than the County (14.7%), and substantially lower than the State (22.9%).

During the 1998/99 school year, the high school dropout rate was 5.62%. Since that time, it has dropped to a current rate of 0.34% in 2003. The decline in the number of students who drop out

is the result of a concerted effort by teachers and the administration to raise the aspiration of students attending the Calais High School.

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.

This should not be an issue of money, but of quality. Education is critical if the area’s children are to be equipped to complete in an increasingly technological world. This is vital to the economic and social future of the area.

Decline in high school enrollment over the past two decades at Shead High School in Eastport may be attributed to individual towns sending some or all of their tuition students to Calais High School or Washington Academy in East Machias. Discussion in recent months has examined the possibility of Eastport, Calais, Woodland, and the other towns in the area forming a Consolidated School District. Consolidation would allow a more varied curriculum, would cost the individual municipalities less, and should provide a higher quality education with more options.

The first step toward stronger schools must be for area towns to begin talking about the future of education, number of students, building needs, costs, and what kind of a system would best meet the area’s needs. Respondents to the public survey indicated very support for a regional high school with mixed opinions on where and when it should be located. See Chapter K - City Survey Results.

Dr. Steve Dawson’s Palmer Street School provides education for students in a 25 bed program known as the Calais Children’s Project.

**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**

<b>Subject</b>	<b>Shead High School</b>	<b>Lubec</b>	<b>Calais</b>	<b>Washington Academy</b>	<b>State</b>
Reading	537	544	<b>532</b>	537	540
Writing	529	539	<b>526</b>	529	536
Math	523	523	<b>523</b>	524	528
Science	524	529	<b>521</b>	526	527
Social Studies	524	530	<b>519</b>	529	530
Visual / Performing Arts	519	527	<b>516</b>	523	525
Health	535	536	<b>535</b>	535	538

**Other Educational Opportunities**

HEAD START is a comprehensive program for three to five year old children and their families. The Calais 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.

The FRANK BECKETT CENTER is a day program for adults with disabilities. The Center was established in 1985 and currently serves approximately 20 people from Washington County, about half of whom are from Calais. Work is currently in progress on a group home in Calais. The construction should be completed in the Spring of this year. The home will have a capacity of seven residents. Support staff will live at the group home and offer supervision and guidance.

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.

## **PUBLIC OPINION**

Respondents to the city survey in the Spring of 2004 expressed satisfaction with emergency services in the city overall. They also indicated general satisfaction with public works, city office services and city office hours. Fewer were happy with the water and sewer systems with many expressing dissatisfaction both to specific questions and in written comments. See Chapter K – City Survey Results, Section C, Facilities and Services.



## POLICIES AND IMPLEMENTATION STRATEGIES

<b>Goal: Calais 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>Local Facilities and Services</b>			
Ensure that Calais' public facilities continue to meet the needs of the community.  Assure that new 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.	Amend the Subdivision, Zoning and Street Design Ordinances, as necessary, to assure that developers are required to provide adequate facilities for their developments.	City Council	On-going
	Consider requiring a service payment in lieu of taxes from non-profit properties who regularly require public services	City Council	Short Term
Local facilities will be maintained or replaced to address immediate community needs with priority assigned systematically.	The city will address future capital funding needs for replacement items through the Capital Improvement Plan	City Manager; City Council; Budget Committee	Short-Term (2-5 years)
	Resolve the building capacity problems associated with the North Street Building and replace equipment noted as needing replacement "ASAP" in Capital Improvement Plan.	City Council/ City Manager	Short-Term (1-2 years)
	Improve coordination with the appropriate City 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; City Council	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	City Council; Water and Sewer Departments, Planning Board	Short-Term (2-5 years)
	Study feasibility of extending water/sewer down to serve the High School and the furthest extent of C-3 zoning (to junction of River and Hardscrabble Roads).	City Manager, Economic Development Director, City Council, Planning Board, Water & Sewer Depts	
The city will develop maintenance plans for existing and future facilities.	Maintenance plans to include city building; public works; water department, sewer plant and schools.	City Manager; City Council/ School Committee; School Department	On-going
	Funds will be appropriated yearly to adequately maintain facilities to minimize need for more expensive replacement	City Council; Finance Committee	On-going

<b>Goal: Calais 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>
	Consider development of Harbor Master position within city government	City Council	Short Term
Local facilities maintenance and replacement will be coordinated with Downtown Revitalization efforts.	Coordinate storm/sanitary separation with road improvements and any Waterfront Development improvements.	City Council; City Staff	Immediate
<b>Water Supply</b>			
Ensure that there is sufficient capacity in the water system to meet the future needs of Calais' residential, commercial; and industrial users.  Assure that the City's water supplies remain clean.	Continue to replace and upgrade the water distribution system.	Water Department/ City Council	On-going
	Develop a Wellhead Protection Ordinance	Planning Board/ City Council	Immediate
	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/ City Council	Short-Term (1-2 years)
<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 separate storm and sanitary sewers	City Council/ City 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/ City Council	Immediate
<b>Solid Waste Management</b>			
Provide adequate solid waste disposal for the citizens of Calais.	Continue to cooperate with the Southwest Solid Waste of Laurence Station, New Brunswick to dispose of solid waste.	City Council/ City Staff	On-going
	Form a recycling committee and develop a strategy for recycling in Calais.	City Manager	Short –term
	Educate school children and the general public on the importance of recycling, reduction and reuse.	School Dept.	On-going
	Establish/construct a burn pad for wood ad organic waste.		
<b>Emergency Services</b>			
Ensure that police, fire and ambulance services are adequate.	Annually review the Calais' fire, police and ambulance capabilities to determine whether they are meeting the City's needs, and make changes as appropriate.	City Manager and Department Heads	On-going

<b>Goal: Calais 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>
	Review Police Department and Fire Department staffing levels and operations.	City Manager and Department Heads	On-going
	Review public works/public safety facility needs in association with impacts of new international bridge.	City Manager; affected departments	3-5 years
	Implement city street naming and building numbering according to E911 system by end of 2004	City Manager	Immediate
	Continue to participate with Regional Ambulance Service	City Council/Downtown Ambulance Service	On-going
	Continue to participate in the regional approach to emergency response for hazardous materials and chemicals spills.	Fire & Police Departments/ City 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/ City Council	Immediate
<b>Schools</b>			
Assure that school facilities are adequate to meet the community's needs over the next decade.	Maintain the Calais Elementary School and High School in good condition	School Committee/ Superintendent	On-going
	Review current school facility needs, including building and recreation needs, and school capacity given recent increases in population from increased staffing levels at the international border.	City Manager/ School Board/ Superintendent	On-going
<b>Cemeteries</b>			
Ensure that the City 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, City-owned land to cemetery use, as appropriate.	City Manager	On-going
<b>Education about Services</b>			
Local services will be visible and understood by Calais citizens.	The city will continue to educate its citizens on the importance of recycling through the use of fliers, informational meetings and school programs.	City Manager; City Council; Chamber of Commerce	On-going
	Literature on the local recycling program will be made readily available to residents at the city office.	City 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.	City Council; Code Enforcement Officer; Health Officer	On-going
<b>Regional Coordination</b>			
The city will cooperate on the delivery of regional services and	Continue to provide 24 hour emergency services and support grant funding efforts	City Council	Short term

<b>Goal: Calais 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>
endeavor to achieve economies of scale where feasible.	for facility improvements and staff		
	Cooperate with WCCOG to share Capital Improvement Program needs with neighboring communities and coordinate major purchases where feasible.	City Manager; City Council	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.	City Council; City Manager; Union 106- School Boards Other regional Unions	Immediate

**SUMMARY**

Calais has a wide variety of facilities and services provided by the public and private sectors. This is the heritage of a once much larger city 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 Calais well as costs drive towns to consider more cooperative ways to provide health care, education and emergency services to their communities.

## **I. FISCAL CAPACITY**

The primary funding source for municipal government is property tax revenue. In order to maintain a consistent mil rate year to year, city government must operate in a manner that is fiscally responsible. Large fluctuations in the tax rate can cause public outcry and can also discourage economic development. Although the priorities of the city may change from one election year to another, stable municipal finances are always a fundamental responsibility of city government. As is the case with any business, the physical assets of Calais must be properly maintained through capital reserve accounts to protect the city's continued economic health.

The goal of this section, as with the Public Facilities section, is to plan for, finance, and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development, without placing an enormous burden on the city's taxpayers.

Between 1999 and 2003, municipal general fund revenues increased from \$8,057,795 million to \$9,271,798 and expenditures increased from \$8,051,121 to \$9,400,113. During that time, education showed the greatest dollar expenditure increase, an increase of over \$885,155.

Property tax revenue increased 21.9 percent between 1999 and 2003; valuation of the city rose 5.6 percent, and the property tax rate increased by 21.5 percent from \$0.023 per \$1,000 in 1999 to \$0.02795 per \$1,000 in 2004.

## **VALUATIONS**

As mentioned, the city's primary revenue source is through the taxation of real and personal property. These taxes are assessed to local property owners according to the fair market value of their property. This assessment is known as the municipal or city valuation and is determined by the local tax assessor.

According to city reports, Calais's total real and personal property valuation was \$115,751,990.00 in 1999 and had increased to \$122,229,900.00 in 2004. This equates to an approximate 5.6 percent increase.

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

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<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.

community. These sales are compared to the city's local assessed values to determine the assessment ratio or the percentage of market value that the city is assessing. The state's valuation is used to determine the amount of revenue sharing the city will receive and the portion of the county tax that the municipality will pay.

The state indicates that a city should be revalued at least once in every 10-year period. However, they also indicate that a revaluation must be performed when the assessment ratio falls below 70% of market value. The last city wide revaluation was conducted in 1996. The city's current state certified assessment ratio is 100 % of market value and therefore has no plans to conduct a revaluation in the near future.

### **Valuations and Taxes**

Calais' total valuation has increased 5.6 percent in the past six years from over \$115 million to over \$122 million. Real estate and personal property taxes have increased 28.3 percent from \$2.6 million to \$3.4 million, with the largest single year increase between 2003 and 2004 at 7.6 percent.

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

Tax Years	Total Valuation	% Change	Real Estate and Personal Property Taxes	% Change	Tax Rate	% Change	State Valuation Ratio (%)
1999	\$115,751,900	-	\$2,662,293.70	-	0.023	-	100%
2000	\$118,064,100	2	\$2,833,538.40	6.4	0.024	4.3	100%
2001	\$125,518,100	6.3	\$2,916,808.30	2.9	0.0245	2.1	100%
2002	\$119,630,500	-4.7	\$3,164,226.73	8.5	0.02645	8.0	100%
2003	\$120,000,600	0.3	\$3,174,015.31	0.3	0.02645	0	100%
2004	\$122,229,900	1.9	\$3,416,325.71	7.6	0.02795	5.7	100%

Source – Calais Municipal Valuation Returns

### **MIL RATE**

After the city's budget has been approved and all applicable state and local revenues are deducted from the approved expenditures, the city 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 city 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 city 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 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 1999 was \$0.023 and in 2004 was \$0.02795.

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. Calais was listed as number 151.

Table I-2 TAX BURDEN RANKINGS

<b>Municipality</b>	<b>Tax Paid as % of Median Income</b>	<b>1999 Burden Rank</b>
Lubec	6.61	15
Harrington	6.59	16
Eastport	6.56	17
Machias	5.78	35
Steuben	4.87	69
Jonesport	4.77	73
Milbridge	4.57	96
Addison	4.33	119
Columbia Falls	4.2	131
<b>Calais</b>	<b>4.03</b>	<b>151</b>
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 city of Calais from 1999 through 2003. Total revenue rose from \$8.6 million in 1999 to \$12.1 million in 2003. The largest revenue increases were from property taxes (21.9 percent increase), intergovernmental education (37.4 percent increase) and other intergovernmental transfers (275.6 percent increase). All other revenues rose 8.5 percent from \$1.7 million in 1999 to \$1.8 million in 2003.

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, planning board application fees, etc. Other financing sources include transfers from other funds, interest and municipal revenue sharing.

Table I-3 CITY OF CALAIS REVENUES 1999-2003

Revenues	1999	2000	2001	2002	2003
General Property Taxes	\$2,571,931	\$2,629,254	\$2,742,695	\$2,869,649	\$3,135,399
Nonproperty taxes and tax penalties	498,062	495,661	459,416	497,563	527,071
Charges for services and other	463,224	355,848	352,241	367,065	414,256
Intergovernmental education	3,830,132	3,871,773	4,537,283	5,037,434	5,261,100
Intergovernmental other	498,496	1,326,195	1,221,730	696,439	1,872,565
On behalf of payments-State of Maine	569,000	506,000	531,000	534,800	596,900
Investment income	83,763	93,392	94,358	60,054	43,404
Realized gain (loss) on investments	--	(515)	(648)	(1,211)	1,121
Unrealized gain on investments	--	(6,902)	10,050	229	6,188
Other income	50,919	67,426	261,249	219,266	133,264
Other income-education	29,979	7,992	40,867	13,476	116,555
<b>Total revenues</b>	<b>\$8,595,506</b>	<b>\$9,346,124</b>	<b>\$10,250,241</b>	<b>\$10,294,764</b>	<b>\$12,107,823</b>

Source: Calais City Reports

## Expenditures

Expenditures in the same five year period climbed from \$8.8 million in 1999 to \$13.5 million in 2003, an increase of 53.1 percent.

Education, with a dollar increase of over \$1.9 million represents the largest dollar expenditure increase. Even with this increase, education constitutes a smaller proportion of total expenditures, 54.2 percent, in 2003 than it did in 1999 when it constituted 61.8 percent of the total. The expenditures for city administration within this same period have remained fairly constant. Police Department expenditures has increased by 20.8 percent reflecting the significant increase in demand on their services, see Chapter H Public Facilities.



**Table I-4 CITY OF CALAIS EXPENDITURES 1999-2003 (includes capital expenditures)**

Expenses	1999	2000	2001	2002	2003
Current					
City Council	6,397	4,038	9,920	\$7,274	\$7,970
Administration, finance and development	418,809	397,583	443,214	403,908	412,839
Library	143,718	138,687	170,434	194,240	180,966
Parks and recreation	148,516	149,280	149,147	204,626	196,898
Police department	531,222	583,145	610,028	633,531	641,614
Ambulance service	15,500	15,500	50,500	18,067	60,000
Fire department	375,691	379,880	274,901	348,052	367,775
Public works- general	422,564	427,924	498,985	511,837	556,512
Public works-street lights	63,979	60,140	59,671	67,249	70,480
Public works-solid waste disposal	97,955	72,809	79,218	115,885	101,383
Public works-cemetery	64,944	68,740	65,671	69,218	63,061
Public buildings-North Street	31,531	34,487	32,399	31,770	37,557
Insurance	40,838	37,511	96,121	49,468	59,132
County	193,415	202,487	195,922	207,686	215,930
Education	5,389,790	5,388,107	5,752,387	6,832,015	7,324,647
On behalf of payments-State of Maine	569,000	506,000	531,000	534,800	596,900
Program	43,978	946,317	479,405	68,075	948,391
Miscellaneous	3,781	15,767	141,862	147,731	145,347
Debt service	25,761	24,846	12,163	--	10,615
Capital improvements	64,961	29,565	28,481	107,567	11,094
Capital outlay	182,140	22,783	3,334	355,994	1,513,340
Total expenditures	\$8,834,490	\$9,505,596	\$9,684,763	\$10,908,993	\$13,522,451

Source: Calais City Reports

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

**TABLE I-5 CITY OF CALAIS FUND BALANCE RECONCILIATION 1999-2003**

	1999	2000	2001	2002	2003
Total Expenditures	\$8,834,490	\$9,505,596	9,684,763	10,908,993	13,522,451
Excess (deficiency) of revenues over expenditures	(239,984)	(159,472)	565,478	(614,229)	(1,414,628)
<b>Other financing sources (uses)</b>					
Lease Proceeds	63,300	--	--	--	--
Operating transfers in	89,828	102,861	73,730	53,786	48,570
Note proceeds	--	--	--	247,100	1,300,000
Operating transfers out	(73,400)	(88,941)	(57,883)	(58,887)	(31,887)
Total other financing sources (uses)	79,728	13,920	15,847	241,999	1,316,683
Excess (deficiency) of revenues and other sources over expenditures and other uses	(159,256)	(145,552)	581,325	(372,230)	(97,945)
<b>Fund balance-beginning</b>	1,914,464	1,750,532	1,656,147	2,431,402	2,059,172
Restate prior year program expenditures	--	--	193,930	--	--
Restate prior year to reclassify expendable trust funds	--	51,167	--	--	--
Restate prior year to remove agency funds	(4,676)	--	--	--	--
<b>Fund balance-beginning, restated</b>	1,909,788	1,801,699	1,850,077	2,431,402	--
<b>Fund balance-ending</b>	\$1,750,532	\$1,656,147	\$2,431,402	\$2,059,172	\$1,961,227

Source: Calais City Reports

**Long Term Debt**

Table I-6 lists the outstanding bonds which comprise Calais' long term debt, as well as interest rates, maturity dates, total amounts and remaining balances. The total remaining balance as of June 2003 was \$4,706,628.

**TABLE I-6 CITY OF CALAIS MAJOR LONG TERM DEBT As of June 2004**

Lender	Purpose	Original Amount	Principal Balance 6/30/04
<b>General Obligation Bonds and Notes Payable</b>			
GMAC Commercial Mortgage	1981 Sewer	135,000	56,000
First National of Bar Harbor	Municipal Note	47,600	29,081
First National of Bar Harbor	Municipal Note	159,500	143,975
First National of Bar Harbor	Municipal Note	40,000	0
First National of Bar Harbor	Municipal Note	300,000	274,618
First National of Bar Harbor	Municipal Note	1,000,000	966,831
<b>Total General Obligation Bonds</b>			<b>1,470,505</b>
<b>Proprietary Funds Bonds Payable</b>			
GMAC Commercial Mortgage	1977 Sewer	400,000	45,000
GMAC Commercial Mortgage	1981 Water	630,000	230,000
GMAC Commercial Mortgage	1981 Water	810,000	262,000
Maine Municipal Bond Bank	2002 Sewer	2,350,000	2,128,006
Maine Municipal Bond Bank	1994 Water	265,300	204,794
Maine Municipal Bond Bank	1997 Water	122,600	55,412
First National Bank	2004-Water	50,000	50,000
<b>Total Proprietary Fund Bonds Payable</b>			<b>2,975,212</b>
<b>Total General Obligation and proprietary fund bonds and notes payable</b>			<b>4,445,717</b>
<b>Overlapping Debt</b>			
Washington County Debt	Proportionate Share (6.102%)		45,119
City of Calais School Trustees	Proportionate Share (100%)		677,535
<b>Grand Total including overlapping debt</b>			<b>5,168,371</b>

Table I-7 shows the ratio of long term debt to municipal valuation for the six year period from 1999-2004, 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
1999	3700	3,703,147	\$115,751,900	3.20%	\$1000.85
2000	3700	3,504,613	\$118,064,100	2.97%	\$947.19
2001	3700	3,322,633	\$125,518,100	2.65%	\$898.01
2002	3700	3,701,173	\$119,630,500	3.09%	\$1000.32
2003	3700	4,706,628	\$120,000,600	3.92%	\$1272.06
2004	3700	4,445,717	\$122,229,900	3.64%	\$1201.55

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 city’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 city’s overlapping debt to the County and the School is added to the long term debt ( $\$4,445,717 + 45,119 + 677,535 = 5,168,371$ ) the ratio of debt to assessed value is 3.64%, 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 2004 which impact the legal borrowing limitations placed on the city.

<u>Entity</u>	<u>Total Debt Issued</u>
City	\$ 1,470,505
Water	\$ 802,206
School	\$ 677,535
Sewer	\$2,173,006
County	\$45,119
<b>TOTAL</b>	<b>\$ 5,168,371</b>
Allowed Debt:	\$18,000,090

**CAPITAL IMPROVEMENT PLAN**

The comprehensive plan recognizes planned growth and a diverse mix of land uses within the city 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 city Manager and the city Council review and approve the funding requests.

**Past and Current Capital Expenditures**

The city has a centralized sewage treatment and water system and operates a solid waste transfer station. In 2002 a new water source was developed within Calais at a cost of approximately \$3 million.

There will be an ongoing need to make capital improvements to the city’s sewer and water systems. While the city has conducted an extensive waterline replacement program (~\$1 million

financed by various bonds and repaid by user fees), further work is needed to replace a number of older lines. During 2003 safety and compliance issues for the Sewer System were addressed. The need for a further Sewer Treatment Plant upgrade is currently being studied and work is expected in 2006. USDA Rural Development grant/loan funding has funded recent improvements.

The city 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 city have an ongoing program to make capital improvements to roads and to continue the street resurfacing program. The annual State Highway Grant should be dedicated to the street resurfacing program.

In the years 2002 and 2003 sidewalks were placed throughout the city. The Calais Free Library also underwent a significant restoration project in 2002. These two projects were financed by a 20 year bond for \$1 Million. The city owns an additional four older buildings, two of which have suffered deferred maintenance: the Water Department, and the Old Fire Station. The Calais City Building remains in use and has received basic maintenance. The Community Center also remains in use by the Recreation Department. In addition to these five older buildings, the North Street Public Safety Building received an upgrade in 2002 at a cost of approximately \$270,000 and the city continues to maintain a Fire Station in Red Beach (doors were replaced for a cost of approximately \$10,000).

In the past ten years the city has constructed a salt building (\$25,000), utility building at the transfer station (\$15,000) and a water filter building (\$500,000) at the new well site. The city also has continued to develop and maintain an athletic complex located on Calais Avenue at accost of approximately \$500,000 over the past ten years including a great deal of private fund raising.

In 1995, the city retrofitted its 1968 Mack Pumper. The bond associated with this project will be paid in 2005. In 2002, the city purchased a 2003 International 7500 Plow Truck. This truck which cost \$92,534.00 was financed through the city's Capital Equipment Reserve Fund (Term: 5 years, Annual Interest Rate: 5.32%). The city is purchasing a new fire truck for \$222,000.00 using \$189,000.00 in grant money and \$80,000.00 in city capital expenditure (see Table I-8 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 city has made a practice of making annual contributions to the capital equipment reserve account. Currently, the city is replenishing the account at a rate of approximately \$42,605 per year. Future capital equipment needs for the foreseeable future are listed in Table I-8. Given these anticipated needs, it is in the city's best interest to continue to make significant yearly contributions to the capital equipment reserve account. As of December 2004, there is \$36,636 in

the Capital Reserve Account. This Plan recommends that an increasing amount be contributed to the capital equipment reserve account each year to cover the anticipated capital expenditures. It is also recommended that the city keep a significant balance within the reserve account to cover the cost of any unauthorized capital needs.

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

DEPARTMENT/ AREA	ITEM	COST	PRIORITY <sup>2</sup>	RESPONSIBLE PARTY(ies)	FUNDING SOURCES
Public Safety	Police Cruisers	\$25,000/year	A	Police Department/city Council	Taxes,
Public Safety	Radio Improvements, Repeaters, Mobile Units, GPS units	\$10,000/year	A	city Departments	USDA, CDBG, Department of Commerce, Homeland Security, local taxes
All Departments	Computers	\$10,000/year	A	city Departments	taxes
Public Facilities	City Building- maintenance and upgrade (carpeting, re-painting, ceiling replacement, weatherization, technology upgrade)	\$3000-5000/ year	A	City Manager	Taxes
Public Facilities	St. Croix No 1 Fire House	\$500,000	A-B	City Council	CDBG; Maine Humanities Council; local fundraising
Public Facilities	North Street Building exhaust system	Outstanding debt plus \$40,000	A	City Council	bond
Public Facilities	City Building Handicapped Accessibility	\$100,000	A	City Council	CDBG
Public Facilities	Library renovations (children’s section, security)	\$42,000	B	City Council; Library Trustees	Capital Campaign, grants
Public Facilities	Library renovations (expand adult section)	\$200,000-300,000	C	City Council; Library Trustees	Capital Campaign; grants
Fire Department	Purchase and equip new Fire Truck	\$198,000 grant \$80,000USDA loan	A	Fire Department	USDA, CDBG, Fire Truck Reserve Account

<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)	\$12,000/unit/year	B	Public Works	Financing
Public Works	Bituminous Road Resurfacing	\$50,000/year	A	Public Works	Competitive bid/cooperative purchase/taxes/ State Highway Grant
Sewer System	Sewer Treatment Plant upgrade including on-going modernization and upgrades	\$6.5 million	B	Sewer Department	USDA, DEP, EPA, CDBG
Water System	On-going upgrades, modernization and pipe replacement	\$3 million	A	Water Department	USDA, CDBG
Waterfront Development	Phased implementation	Up to \$14 million	C	Economic Development	CDBG, TIF, USDA
Downtown Revitalization	Façade improvements, sidewalks, utility upgrades	\$400,000	B	Economic Development	CDBG
Public Facilities	Transfer Station upgrades and modernization	\$100,000	B	Public Works	Taxes, DEP
Fire Department	Used Brush truck	\$20,000	B	Fire Department	Taxes, grants
Planning and Economic Development	Digital parcel mapping	\$6,000-8,000	A	Community Development	OGIS grant
Recreation	Access, picnic area improvements at Nashs Lake	\$25,000	B	Public Works	Timber harvest, DoC
Recreation/ Cultural	Interpretative trail, bridge over Beaver Brook to Red Beach polishing works	\$10,000	B	Community Development	Maine Humanities Council, private foundations

CDBG: Community Development Block Grant

MITF: 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

Calais has managed its finances well over the last five years and the mil rate has remained within a consistent range. Over the years, the city has dedicated reserves totaling approximately \$364,000 in June 2004. The auditors recommend that the city carry 10% of the total city budget in reserve. Beginning in 2004 the city renewed its commitment to build the surplus to \$800,000.00 over the coming years. Consideration will be given to apportioning some of these resources among two new reserve accounts: 1) Designated Reserve Accounts 2) Capital 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 city is revising and updating a Capital Improvement Plan, as shown in Table I-8 above, to guide the city's capital investments. Infrastructure improvements are needed to upgrade public safety equipment, water and sewer facilities, and to support increased tourism including aggressive implementation of the downtown revitalization and waterfront development plans. These are included in the CIP. Private sector improvements are also needed including more restaurants, overnight accommodations, docking facilities for different types of pleasure craft.

## **J. LAND USE**

The City of Calais is located in the eastern portion of Washington County, approximately 100 miles east of the City of Bangor. It is bordered by Baring Plantation to the west, and the towns of Charlotte and Robbinston to the south and southeast, respectively. The City of St. Stephen in New Brunswick, Canada lies to the north across the St. Croix River.

The total land area contained within the corporate limits is 23,699 acres or 37.03 square miles. The population of the City has decreased from 4,262 in 1980 to 3,963 in 1990, and 3,447 in 2000 resulting in a population density of 115 persons per square mile.

Approximately 90 percent of the land area of the City is forested, and 10 percent is urban. Development in the City is heaviest in and around its business core and along Route 1. Growth has been greatest within and near the urban area. Land equipped with public water and sewer services is available within two out of the three proposed Pine Tree Development zones and an extension of both is proposed for the third. Recent development that has occurred outside water and sewer service areas has been primarily on land with river and lake frontage.

### **PAST DEVELOPMENT TRENDS**

The existing downtown is compact and highly urbanized reflecting a much denser concentration of commercial and residential structures associated with wharves along the waterfront at the turn of the 19<sup>th</sup> to 20<sup>th</sup> centuries. Incorporated as a town in 1806 and as a city in 1851 Calais experienced its greatest level of economic activity and population over a hundred years ago.

In the mid 1850s lumber was the chief industry but other businesses included a shoe factory, a wool pulling concern, a tannery, a granite works, the plaster mill, three box factories, two grist mills, a brick yard, a foundry, machine shops, several ship yards, a marine railway, dry docks, a sail loft, and several large lumber mills. Other commerce at the turn of the century included nine hotels, two public opera houses, a business college, twelve churches, thirteen schools, eleven fraternal orders, a public library, and an electric street railway.

From its peak in 1900, the population of Calais has declined in each successive decade. Shipbuilding, a major industry in Calais, ended with the introduction of steel hull ships. The last clipper ship was built in Calais in 1891. Thus, the primary source of capital for this region was slowly being transferred from Calais down the eastern seaboard to the fast growing urban centers further south. The population of Calais mirrored that of the nation with the shift from rural to urban areas.

However, the international border in Calais continues as a source of development vitality. Today, Calais is the sixth busiest port on the U.S.-Canada border and is dominated by retail, service, and construction businesses. The city has historically been a city of commerce and is still the primary shopping center of eastern Washington County and Charlotte County, New Brunswick. While there is a wide variety of retail stores in Calais the success of large department stores on highway commercial strips has robbed Main Street of some of its vitality. Commercial and second floor



residential vacancy in the downtown is high except where there is handicapped accessibility and a solid record of maintenance.

The impending construction of the third bridge and the associated loss in traffic will not improve this situation. As the retail environment has declined along Main Street, many retailers have felt the pressure to relocate to Route One (North St.).

City officials and local development groups have anticipated these dynamics and successfully garnered grant and program income to study and revitalize the waterfront and downtown area including program income from a CDBG investment fund to prepare a Conceptual Master Plan for the Calais Waterfront in 2002. In addition, funds from a CDBG Downtown Revitalization grant (\$400,000.00 granted in 2003) and the Municipal Investment Trust Fund (\$500,000 in 2003) will be used in a series of downtown public improvement projects to remove the vacant, burned, under utilized and/or non-historic buildings from downtown. In their place the city will create parking and green space to open the historic part of downtown to the river. Plans include landscaping, buried utilities, pedestrian walkways, retaining walls, and ADA accessibility between Main Street and the river and Downeast Heritage Museum.

Calais has also designated three Pine Tree Development Zones within the core of the city, depicted on Maps 2 and 3, to support new development within the city center.

Year-round residential land uses are concentrated in and around the urban area. There are also concentrations of year-round residences along Hardscrabble Road, Carson Road and Shattuck Road. Seasonal residences are located around the lakes and along the river.

## EXISTING LAND USE PATTERN

The existing land use pattern in Calais has not changed considerably since the 1992 Comprehensive Plan was written and adopted.

Land use is described in Table J-1 Existing Land Cover and on several maps in this document including Map 2 – Public Facilities, Map 3 – Public Facilities – City Center, Map 6 – Land Cover (from which the data in Table J-1 is derived) and Map 12 - Existing Zoning. The source data for Map 7 is 1993 satellite imagery and is a little out of date with respect to developed land but essentially reflects current conditions. It is however inaccurate with respect to a few items. For instance Bear Hollow Road does not have houses on it. Rather the satellite imagery appears to be picking up gravel pits and the road itself.

Table J-1 – EXISTING LAND COVER

Land Cover	Acreage	Percentage
Bare Ground	22.91	0.09%
Cultivated Land	47.15	0.18%
Developed Land	1031.46	4.03%
Forest - Coniferous	1774.93	6.93%

Land Cover	Acreage	Percentage
Forest - Deciduous	4312.44	16.84%
Forest - Mixed	11188.64	43.69%
Grassland	860.22	3.36%
Swamps/Wetlands/Open Water	6370.92	24.88%
Total	25608.66	100.00%

Source: Land Cover and Wetlands of the Gulf of Maine. U.S. Fish and Wildlife Service, Gulf of Maine Program and MEGIS 1993

Subdivision activity in Calais in the last 5 years has been minimal. Only one subdivision has received approval, Higgins Farm, for 6 lots that are 2 to 2 and ½ acres each. Two are now developed. Another subdivision for about 20 lots near the hospital was approved 10 years ago and now only half developed. A third subdivision on Nashs Lake was approved over 10 years ago and has been developed with 6 camps in the last 5 years.

Building permit data indicate a modest amount of new construction and a very high level of renovation for additions, decks, sheds and so on. This is consistent with a city with an aging housing stock much of which is worthy of restoration, located within historical neighborhoods and walking distance from city services.

Commercial and industrial development has occurred on the arterials within the city center including the Wal-Mart and Shop 'n Save shopping center on South Street and numerous retail, service and professional buildings on North Street all the way up to Baring Street in Milltown. Uses have changed in the industrial park in the last 10 years but with no overall decrease in site utilization. Along River Road the Washington County Community College has expanded with a new administration building and the high school is being renovated and expanded to accommodate the middle school grades who are no longer using the Middle School in the city center.

## DEVELOPMENT PRESSURE

There is very limited residential development pressure in Calais. Increases in population and school enrollment since the 2000 census have resulted in an active real estate market for homes in the higher end of the scale. Retirees, newcomers associated with increases in staff at the International border and those who can tele-commute to other regions of the country and world are choosing Calais for the long term. This interest is putting pressure on the sale of shorefront property and also increasing the renovation of older properties within the city. A great deal of renovation and expansion has occurred on existing housing within the city. But there are still many properties available in the \$50,000 and less category. There was very little subdivision activity in the last 5 years. However lots that have fresh or coastal waterfront move quickly.

As several national chain stores with franchise stores in Calais have gone bankrupt they were replaced by other retail establishments. Thus commercial buildings do not stay empty within the city. However, local developers and brokers are waiting to see what the development opportunities will be from the new international bridge.

## **ANTICIPATED FUTURE DEVELOPMENT TRENDS**

There are several positive indications of an improved and diversified economic base in Calais. New inspection and inter-modal facilities are anticipated in association with the new bridge as well as homeland security and, potentially, agricultural inspection facilities. It is not clear yet how many residents will be employed by this activity. Expanded inter-modal and shipping operations will be linked to increasing activity in Eastport whose port is now the second busiest in Maine. The Eastport Port Authority reported its best year in 2003, shipping out 323,786 tons.

The city seeks to strike a balance between the opportunities posed by the construction of the bridge, and of development near it, and retaining the vitality of existing businesses within the city and downtown. To this end commercial development near the bridge should be related to transportation and international commerce. Access management rules need to be strictly applied so that commercial traffic is not bottle-necked along Route 1. Signage should also indicate that the new bridge route is for commercial truck traffic with limited services and clearly direct traffic coming from Route 1 and 9 into the city in order to obtain services and reach another international bridge.

Several efforts to improve the downtown area are noted in this and in the Economics and Employment chapter of the plan. Education and coordination is also occurring among entrepreneurs and non-profit organizations to increase tourism and the creative economy. These efforts are geared toward maximizing the potential of the city's waterfront, historic past and the Downeast Heritage Museum.

## **PRESENT LAND USE REGULATIONS**

The city of Calais revised and adopted a comprehensive set of Land Use Codes in 1996 including the ordinances on zoning, subdivisions, floodplain management, shoreland zoning, business district revitalization, street opening and culvert, holding tanks, and telecommunication tower siting. The Land Use code also includes a building code.

Numerous strategies adopted in the 1992 Comprehensive Plan were implemented when the ordinances were updated in 1996. These strategies implemented a policy to encourage growth and development in and adjacent to urban areas where there is access to services by:

Permitting greater residential densities within the R-1 and R-2 districts and adjusting other standards to permit more flexibility in the siting of multi-family dwellings; reducing setback requirements in the R-1 and R-2 districts to permit the development of condominiums, townhouses, apartments and other buildings that share common walls; revising other dimensional requirements (i.e. minimum frontage, setback, lot coverage, etc.) to make them compatible with the existing development; allowing accessory apartments in larger homes that might otherwise be expensive to maintain or heat; relaxing density and dimensional requirements for affordable housing and cluster developments where permanent open space is provided and developments that are located on water and sewer within the urban districts; and reducing the minimum lot size for single family homes in areas where lots are traditionally smaller than 10,000 square feet.

Other strategies provided for transitional growth areas adjacent to existing urban areas to allow for future residential and light industrial growth. As a result the R-3 and C-3 districts were expanded along Route 1 between the existing urban area and Hardscrabble Road. In 2004 the

city continues this policy by recommending the extension of sewer and water services to this area.

Rural area designations were also clarified to include resource protection and rural areas. Within the rural residential areas developers of 5 or more lots were required to submit two sketch plans showing conventional and cluster plans with density bonuses given to cluster plans. In the Rural Residential and Farming (R-4) district the zoning ordinance also clarified permitted uses by:

limiting permitted uses to forestry, agriculture and related uses, single-family dwellings and manufactured housing, and home occupations; limiting special exception uses to outdoor recreational facilities; sand, gravel and earth removal; campgrounds; owner-operated grocery stores; and other similar uses; increasing the minimum lot size to 1 acre; and requiring that subdivisions of 5 or more units planned for a location on a numbered highway so that multiple driveways do not enter directly onto the highway and impede traffic flow.

Finally the standards in the site plan and subdivision ordinances were revised to make them clearer as more definitive by:

Including performance standards that cover buffers, storage of materials, preservation and maintenance of open space, extractive activities, amusement centers, boat/trailer storage, campgrounds, gasoline service stations, hotels/motels and inns, multi-family dwellings, mobile home parks, and noise control; site plan review requirements consisting preservation of landscape, traffic flow, access to and into the site, internal vehicular circulation, pedestrian circulation, environmental standards, open space requirements, water supply and sewage disposal, and landscaping and waste disposal; subdivision standards that address erosion control and stormwater drainage, impacts on City services and on natural and cultural resources, financial and technical capacity, cluster development, buffers, and impacts on highways; and performance guarantees and other ordinance provisions to assure that developers provide adequate facilities for their development.

These ordinances will be reviewed and revised to meet the requirements of Comprehensive Planning and Regulation Act for consistency with the 2004 Comprehensive Plan update. An examination of existing ordinances is a necessary next step if the goals of increasing industrial and Pine Tree Zone development, re-invigorating downtown and ensuring affordable housing for residents are to be achieved.

Shoreland Zoning Ordinance (Maine *Land Use Laws*, 1992) - 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 city of Calais received approval from the DEP for the latest revision to its Shoreland Zoning Ordinance in 2002.

Currently the local Shoreland Zoning Ordinance contains the following districts:

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

Floodplain Management Ordinance - Calais updated its floodplain management ordinance in December of 2000 and is a participating member of the National Flood Insurance Program thereby agreeing to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended).

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 (17-229 Maine Administrative Rules Chapter 299, Part A and B) - 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 but access management along State Route 1 is essential to ensure that commercial and international border traffic is not compromised by unregulated accesses that decrease the posted speeds.

The local plumbing inspector enforces the Maine State Plumbing Code – regulating the installation of plumbing fixtures and septic systems in accordance with the Maine State Law and the Subsurface Wastewater Disposal Rules and Regulations.

The state electrical inspector enforces the National Electrical Code requiring all electrical work in Calais to be consistent with applicable portions of the National Electrical Code.

The local building inspector enforces the BOCA - Building Officials Code of America (adopted in 1996) which includes the NFPA 101 – National Fire Protection Association regulations pertaining to Life Safety, Ingress, Egress and capacity provisions. The International Building Code (IBC) will be adopted in the future per State requirements.

## **AREAS UNSUITABLE FOR DEVELOPMENT**

There are areas within Calais that require special consideration based on the potential environmental impact that can result from various 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 are where flooding is frequent and can be severe. All construction must conform to the Calais Flood Hazard Development Ordinance. All uses are allowed if constructed properly. By definition, residential, maritime activities and businesses can 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 restricted and may require 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 restricted and may require review and approval by the pertinent State Agencies.

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

Slope - 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. The designation of growth areas is intended to direct development to areas most suitable for such growth and away from areas where growth and development would be incompatible with the protection of rural resources. In addition, growth areas are located close to municipal services to minimize the cost to the municipality for their delivery and maintenance. The designation of rural areas is intended to protect agricultural, forest, wildlife habitat, scenic areas, and other open space areas from incompatible development and uses and for the enjoyment and sustainable use by the people.

Calais will follow the two general growth and rural designations that were established when the 1995 Comprehensive Plan was adopted. These areas are shown on **Map 13 - Future Land Use** at the end of this section.

### **Growth Areas**

The purpose of the land use plan and map is to identify areas of appropriate size and location to accommodate future growth. 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. Proposed Growth and Rural areas are shown on **Maps 13: Proposed Land Use and 13b: Proposed Land Use – City Center** and are very similar to those proposed in the 1995 Comprehensive Plan and adopted in the 1996 zoning ordinance.

### **Urban Residence (R1)**

Well established neighborhoods within the city center primarily single family dwellings and low-density multi-family residential uses. Other permitted uses allowed if harmonious with a traditional pattern of residential development. Lot area minimum is 10,000 square feet or 20,000 if not on public sewer.

### **Urban Residence and Mobile Home (R2)**

Neighborhood residential development within the city center with a greater variety of housing

types than other residential zones including mobile homes, mobile home parks, congregate care, and multi-family units. Lot areas minimum is 10,000 square feet or 20,000 if not on public sewer.

### **Commercial and Institutional (C1)**

Commercial uses to which the public needs easy and frequent access. Centrally located within the city center with concentrations of commercial development, professional services and public services. There are no minimum lot area requirements in the C1 district. All are served by public water and sewer and within easy walking distance of municipal parking areas.

### **Retail and Service (C2)**

Commercial uses requiring large lot areas and immediate access to the area highway system such as shopping centers, drive-in facilities and auto sales and services. There is no minimum lot area in the C2 district. All are served by public water and sewer but much of the district is beyond easy access to public parking. Therefore a minimum lot size of 40,000 square feet is recommended.

### **Highway Commercial (C3)**

Commercial development in primarily undeveloped areas for uses which require highway access and large lots of land. Lot area minimum is 40,000 square feet.

### **Industrial (I1)**

Areas located in proximity to transportation and municipal services and where other conditions are favorable for industrial development but are not in conflict with residences and businesses. Lot area minimum is 40,000 square feet.

### **Light Industry, Wholesale and Transportation (I2)**

Areas conveniently located to transportation facilities for business activities which require extensive land area but do not require close proximity to the residential and commercial areas of the community or urban services. Locate to minimize conflict with residential or other businesses and reduce traffic congestions in those areas. Lot area minimum is 40,000 square feet.

### **Rural Areas**

The Rural Areas consists of those areas in Calais where limited new development will take place and where existing resources will be protected including forested lands, critical habitat, wetlands, scenic areas, and open space - land uses generally incompatible with intensive development. The land use districts proposed in the rural areas are described below and shown on **Map 13-Future Land Use**, at the end of this section.

### **Rural Residence**

Rural housing is areas of the city lacking urban services. Forms a transitional area between higher density city center and majority of remaining land area with rural and agricultural or forestry uses. Minimum lot area is 20,000 square feet.

### **Rural Residence and Farming**

Encompassing most of the area outside of the urban center, this district is intended for the kinds of uses which have predominated in rural New England; forestry and farming, farm residence, and a scattering of varied uses not inconsistent with a generally open, non-intensive pattern of land use. Public sewer and water is not feasible and lot area minimum is 40,000 square feet.

**Resource Protection**

Shorefront areas subject to floodings and other areas in which development would adversely affect water quality, productive habitat, biotic systems, or scenic values.

**Recreation and Open Space**

Undeveloped public lands that provide opportunities for walking, outdoor recreation, public access to surface waters.

**LAND USE AND ZONING PERFORMANCE STANDARDS**

Preserving and protecting the character of the city is vital to the continued stability of the local economy and to the well being of its residents. This can be done by encouraging growth in some areas and discouraging it in others, by clearly designating areas to be devoted to business and industry; other areas where a mixture of uses would contribute to the vitality of the city; and still others areas where various types of housing will be encouraged.

To be fair and effective ordinances 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 any revisions to the zoning ordinance will: (1) create a user friendly application and permitting process; (2) assign clear responsibility for review and approval to code enforcement; (3) develop clear and consistent guidelines for obtaining approval; and (4) require the use of soil, floodplain, and wetlands maps in conjunction with future development.

The city of Calais will review and revise its zoning ordinance to ensure that it continues to protect and preserve natural resources, property values, public safety including fire protection, health and welfare, provides for affordable housing and housing that is affordable, and ensures the proper development of the city. The city will monitor new residential development in the growth and rural areas of the city. Calais' goal is to have 70% of the new residential construction in the city to occur in the designated growth areas. If the percentage of residential development in the growth area drops below this goal within any 24 month period, the City Council will appoint a committee to review the zoning ordinance, subdivision ordinance, and other non-regulatory polices and make recommendations for changes to strengthen these items within 9 months of being approved.

The following table describes public issues or concerns and the associated performance standards that will guide revisions to the 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>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>Historic Districts/Scenic Vistas</i>	Use and expand ordinances to protect and preserve these defining community assets.
<i>Home Occupation</i>	Encourage home occupations with the minimum impact on existing neighborhoods.
<i>Industrial Performance Standards</i>	Ensure appropriate industrial development within designated areas of the community.
<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 including notice requirements and limits on timing of applications.
<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.
<i>Road Construction</i>	Develop 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 development.
<i>Signs</i>	Regulate 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.

### **Public Survey and Public Meeting results**

The results of the public survey in the Spring of 2004 indicate that respondents generally favor marine-based industries and boat building with far clearer support for installation of launching and docking facilities. There was very clear support for incentives for development to take place in the downtown and for similar incentives to support the creative economy (galleries, artisans, education) within the city. See Section K – Survey Results for extensive additional information about development preferences. Support for housing alternatives especially favored single family residences with fairly strong support for multi-family homes as well. Opinions on mobile home parks were mixed as is often the case and many support some restrictions on mobile homes. Subsidized housing in general was favored by most especially for the elderly. This support for elderly housing extended to an expressed need for non-subsidized units as well. Respondents recognize the need to upgrade existing sub-standard housing and strongly support adding inspection of rental properties to building codes.

The Comprehensive Plan Committee sought input from the public and the city Council in December, 2004 on three particular areas of the city in order to complete the district boundaries and definitions on Maps 13 and 13b that describe proposed land use in the city. The three areas include the city owned land at the north end of Nashs Lake, the residential portion of South Street near the hospital and commercial area, and the area along Route 1 where the new international bridge will be located.

The city-owned property at Nashs Lake is currently zoned recreation and open space and inquiries over the years suggested that it be used for residential purposes. All who spoke at the public meeting indicated support for the position that the property belongs to the city and the people of Calais and that it is an important community asset. The lake is pristine and the dam, in some ways, has more historical significance to Calais than St. Croix Island. Comments noted that the city needs better access to the lake but that it be low impact. With this input the Comprehensive Plan recommends low impact use of the city – owned land at Nashs Lake including a boat access, picnic area and trails.

The public discussion recognized that the are of South Street under review is narrow with no shoulders or sidewalks and that many lots in this area are too small for on-site parking if they were to be used for commercial use. Some noted that sufficient commercial land is also available on North Street and downtown and that several property owners have recently made significant investments upgrading their residences. Others noted that additional commercial traffic might also impede emergency vehicles that need to reach the hospital in this area. Changing the district to allow more commercial uses would therefore not only be unsafe but could lead to further draining of vitality from the downtown area. Proposed land use in this area will therefore continue as residential.

The area near the bridge was more difficult to reach a final decision. Public discussion indicated concern that development in this area not drain vitality from the downtown business areas. However others noted that restricting commercial activity entirely would push development out to Baring along Route 1. The city is spearheading a discussion with St. Stephen, NB and other communities in the St. Croix valley to discuss the regional impacts of the new international bridge on economic development. The city decided to leave the proposed districts as they are at present. Future options include limiting commercial uses to transportation related activities and services (warehousing, brokerage, oil and fuel services, etc.) but to not simply let the market dictate what takes place in the area. The city left the option open for a moratorium on development if necessary to complete on-going studies over the next few years in advance of the actual construction of the bridge.

## **REGIONAL COORDINATION**

Calais has physical boundaries with the municipalities of Robbinston and the unorganized plantation of Baring as well as strong physical and economic connections with St. Stephen NB. over the international bridge. Economic connections are also very strong among the other communities along the Route 9 and Route 1 transportation corridors including Alexander,

Baileyville, Perry and the Port in Eastport. Some of the larger regional communities have adopted town wide zoning including Baileyville and Eastport. Baring Plantation is regulated by the Land Use Regulation Commission.

Calais supports a regional approach to transportation planning that will ensure an efficient link to the port of Eastport including rail and highway transportation corridors and necessary auxiliary facilities, such as marshaling yards, in other communities. As the region draws more visitor traffic it is important to maintain and/or separate corridors for visitors and truck traffic.

The city's economy is intertwined with its neighbors and growing in significance as an employment center. In 1990 Calais employed 742 people from neighboring towns. By the year 2000 that number grew to 963. Neighboring communities will continue to be home to people employed in Calais. Likewise more individuals are now living in Calais and working in the surrounding region. In 1990 there were 496 people from Calais working in neighboring towns; by 2000 there were 547 individuals doing so.

Several surrounding communities send their children to Calais High School, including Alexander, Baring Plantation, Charlotte, Cooper, Crawford, Indian Township, Meddybemps, Pembroke, Perry, Pleasant Point and Robbinston. The Regional Technical and Vocational Center is co-located with the high school and serves students from Calais, Baileyville and Eastport. Over the years this has helped build understanding of common concerns.

The city of Calais participates actively in the following efforts and organizations:

- Washington County Emergency Medical Service Authority, the parent of Downeast EMS, the regional ambulance service providing coverage to 25 towns in three counties.
- Sunrise County Economic Council
- Maine's participation in the Gulf of Maine Initiative
- Washington County Solid Waste Management District
- Washington County Council of Governments
- Maine Municipal Association
- Downeast Resource Conservation Development District

## POLICIES AND IMPLEMENTATION STRATEGIES

Based on the concerns of Calais residents, as expressed through public meetings, local surveys and city officials, the city of Calais has developed the following policies and implementation strategies:

<b>Goal:</b> Encourage orderly growth and development in specific areas of the community, particularly downtown, while protecting Calais' rural character, making efficient use of public services and preventing sprawl.			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
<b>Encourage Development in Growth Areas</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	City Council; Planning Board	Immediate
	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.	City Council; 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 area.	City Council	Immediate
<b>Transitional Growth Areas</b>			
Provide an area adjacent to existing urban area for future residential and light industrial growth.	Extend water and sewer services to the R-2 and C-3 districts located along Route 1 between urban area and Hardscrabble Road	City Council	Long Term (3-5 years)
<b>Retain Character of Rural Areas</b>			
Strive to limit sprawl along Route 1 beyond Hardscrabble Road and other City roads where they extend into the outlying areas of Calais.	Resolve not to expand any existing commercial or urban (high density) residential growth districts further into rural areas – so as to limit sprawl, reduce traffic congestion and improve traffic safety along Route 1.	City Council	Immediate
Maintain the open space and rural character of outlying areas.	Continue to require residential developers of 5 or more lots in the R-4 and R-3 zones to submit two preliminary sketch plans. One conventional plan and one cluster plan (allow a density bonus for cluster development).	Planning Board	On-going
	Continue to utilize net buildable acreage calculations in subdivision and site plan ordinances to determine minimum lot size.	Planning Board	On-going
	If additional protection of rural areas appears necessary in the future, consider the following options:	Planning Board	As needed

<b>Goal:</b> Encourage orderly growth and development in specific areas of the community, particularly downtown, while protecting Calais’ rural character, making efficient use of public services and preventing sprawl.			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
	<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>		
<b>Mixed Uses</b>			
Permit a mix of compatible uses in a number of districts within the City, with the goal of reducing vehicle trips and vehicle trip lengths.	Permit corner grocery stores and other convenience stores within the city with additional standards to require sufficient parking and traffic flow as well as limiting the total number of such businesses within a neighborhood.	City Council; Planning Board	Short Term
	Permit residential uses in the upper floors of commercial districts	Planning Board	On-going
<b>Ordinances and Regulation</b>			
Develop necessary land (private and city-owned) use regulations, consistent with the goals and guidelines of this Comprehensive Plan.	Review 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.	Planning Board; Code Enforcement Officer; Board of Appeal	Short term (within 2 years)
Adopt a goal to have 70% of new residential construction in the city to occur in the designated growth area.	Track building permits and report annually to City Manager if the percentage of residential development in the growth area drops below this goal within any 24 month period.	Code Enforcement Officer; City 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 ; City Council	As needed.
Ensure that road access to backland (land that does not have frontage on a public road) is retained as land is developed.	Continue to 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 City standards (see Section 12.I.4 Road and Sidewalk Standards).	Planning Board	On-going
<b>Downtown Revitalization and Economic Development</b>			
Support downtown revitalization strategies for utilizing vacant downtown buildings.	Restrict first floors from residential use but allow them to accommodate other commercial uses (not just retail).	Planning Board; City Council	On-going
	Obtain permission from absentee landlords to allow empty windows to feature historic or artistic displays.	CEO	Immediate
Support retail and tourism based	Develop a downtown TIF <sup>1</sup> district with	CEO; Planning	Immediate

<sup>1</sup> 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

<b>Goal:</b> Encourage orderly growth and development in specific areas of the community, particularly downtown, while protecting Calais’ rural character, making efficient use of public services and preventing sprawl.			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
development in the downtown core and inhibit retail and “strip” development along Route 1 in compliance with state Access Management laws and the surveyed wishes of residents.	specific encouragement to businesses supporting the “creative economy” (artisans, galleries, restaurants).	Board; City Council	
	Support implementation of waterfront development plans including those specifically supported in the survey (performance stage on the triangle, recreational facilities, commercial development along the waterfront).	City Council	On-going
	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	City Council; Water and Sewer Departments	Short Term
	Develop secondary access road(s) and combine accesses among commercial and industrial uses along Route 1.	CEO; Planning Board; City Council	Immediate
<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; City Council	On-going
	Explore dredging of St. Croix channel.	Planning Board; City Council	On-going
	Preserve options for mooring and anchoring areas.	Planning Board; City Council	On-going
	Revise Shoreland Zoning Ordinance to include Maritime Dependant Activities Zone along the river.	City Council; Planning Board	Short-Term
	Consider development of fee structure from waterfront facilities to cover maintenance costs.	City Council	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.	City Council	Immediate
	Sell or lease suitable city-owned and private sites.	City Council	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.	City Council; City Manager	On-going

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.

<b>Goal:</b> Encourage orderly growth and development in specific areas of the community, particularly downtown, while protecting Calais' rural character, making efficient use of public services and preventing sprawl.			
<b>Policy</b>	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Timeframe</b>
	Ensure city ordinances do not inhibit construction of affordable housing.	City Council; City Manager	On-going
<b>Enforcement</b>			
Enforce ordinances fully and fairly.	Ensure ordinances contain proper legal language and definitions.	City Council	On-going
	Management and elected officials support the code enforcement department.	City Council	On-going
	Provide adequate time for the code enforcement officer to ensure compliance.	City Council	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 Washington County Council of Governments.	City Council	On-going
Support regional transportation enhancements (rail, air, bridge, road) that retain and develop the Calais industrial park	Participate in regional economic development effort to capitalize on positive impacts of new international bridge on Calais and Baileyville industrial parks and downtowns of Calais and St. Stephen, N.B.	State DOT; City Council, Ste. Croix Economic Alliance	On-going
	Support investment in rail development in Calais industrial park	City Council; Maine DOT	
	Work with other communities and legislators for continued (and accelerated) improvements by the Maine D.O.T. to Routes 1 and 9.	City Council	On-going

## SUMMARY

Land use in Calais has changed significantly over the years. In 1900 the local population was over 7,500 and the waterfront was dotted with wharves. The city's current population is about 3,447 and all but one of the wharves are gone. 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 bordered by the river and South Street extending south through Milltown to the Moosehorn Wildlife Refuge.

The city made significant updates to the zoning districts in the city after the adoption of the 1992 Comprehensive Plan. The concentrated pattern of development, both commercial and residential, within the city center creates a city many residents enjoy as walkable and accessible. The proposed land use map in this update reflects the existing zoning map to a large degree. It also confirms input from survey respondents and the city council to support downtown revitalization and development, careful planning for development near the new international bridge and low impact recreational development of the city owned land at Nashs Lake.



New Brunswick, Canada

# Calais Comprehensive Plan

## Map 12: Existing Land Use

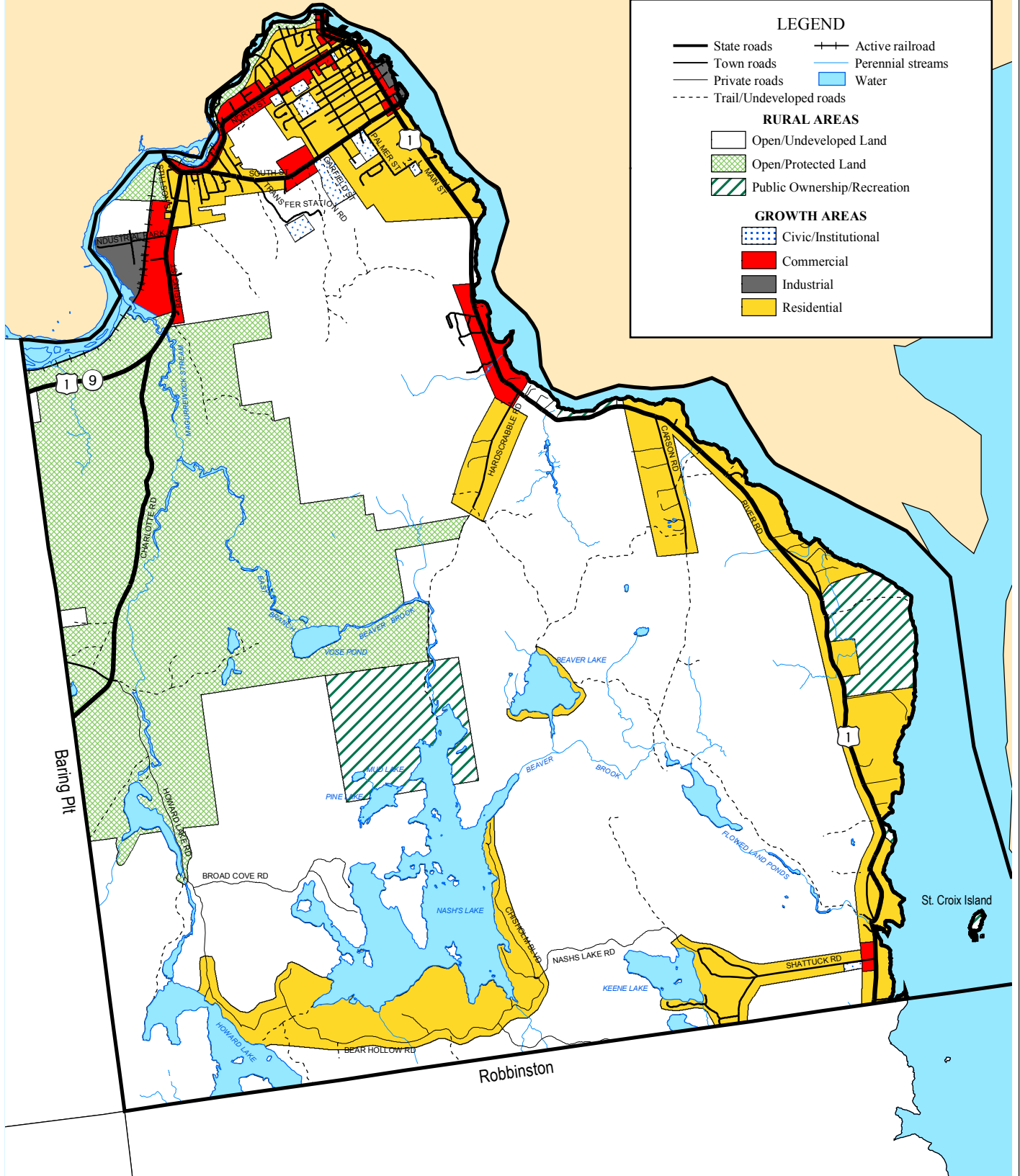
- LEGEND**
- State roads
  - Town roads
  - Private roads
  - - - Trail/Undeveloped roads
  - + + Active railroad
  - Perennial streams
  - Water

### RURAL AREAS

- Open/Undeveloped Land
- Open/Protected Land
- Public Ownership/Recreation

### GROWTH AREAS

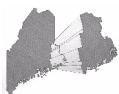
- Civic/Institutional
- Commercial
- Industrial
- Residential



Baring Pit

Robbinston

St. Croix Island



Washington County Council of Governments  
 Eastern Maine Development Corporation  
 PO BOX 631 \* Calais, ME 04619  
 (207) 454-0465  
 Web site: [www.emdc.org/wccog.htm](http://www.emdc.org/wccog.htm)



0 0.5 1 2 Miles

Sources: City of Calais, ESRI, SPO, MEDOT and MEGIS  
 Map revised: November, 2004

See map disclaimer at end of the Executive Summary.



# Calais Comprehensive Plan

## Map 12B: Existing Land Use - City Center

**LEGEND**

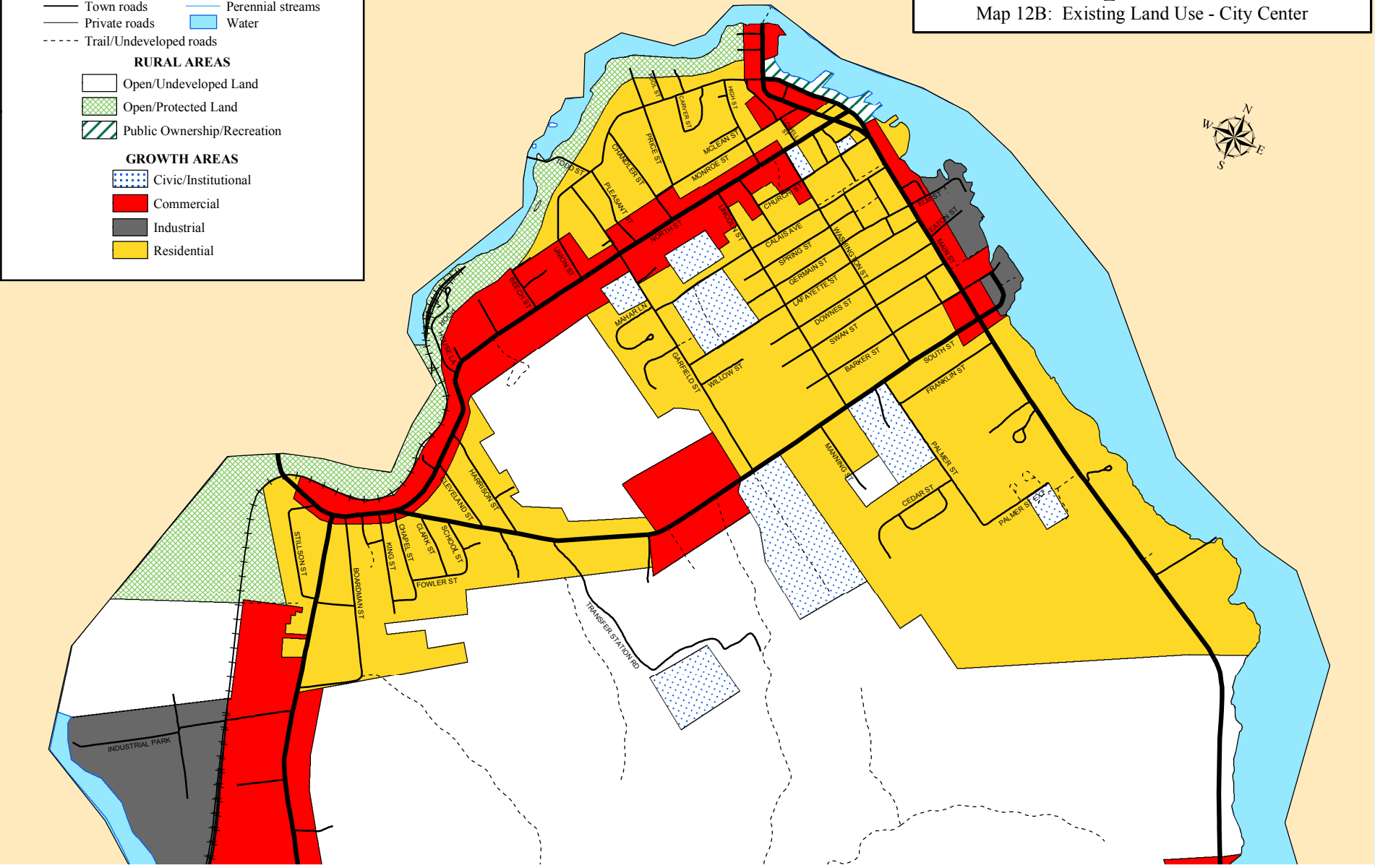
— State roads	—+— Active railroad
— Town roads	— Perennial streams
— Private roads	— Water
- - - - Trail/Undeveloped roads	

**RURAL AREAS**

□ Open/Undeveloped Land
▨ Open/Protected Land
▩ Public Ownership/Recreation

**GROWTH AREAS**

▤ Civic/Institutional
■ Commercial
■ Industrial
■ Residential



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**GIS SERVICES**  
**DATA CENTER**

See map disclaimer at end of the Executive Summary.

0 0.125 0.25 0.5 Miles

Sources: City of Calais, ESRI, SPO, MEDOT and MEGIS  
 Map revised: October, 2004



New Brunswick, Canada

# Calais Comprehensive Plan

## Map 13: Proposed Land Use

### LEGEND

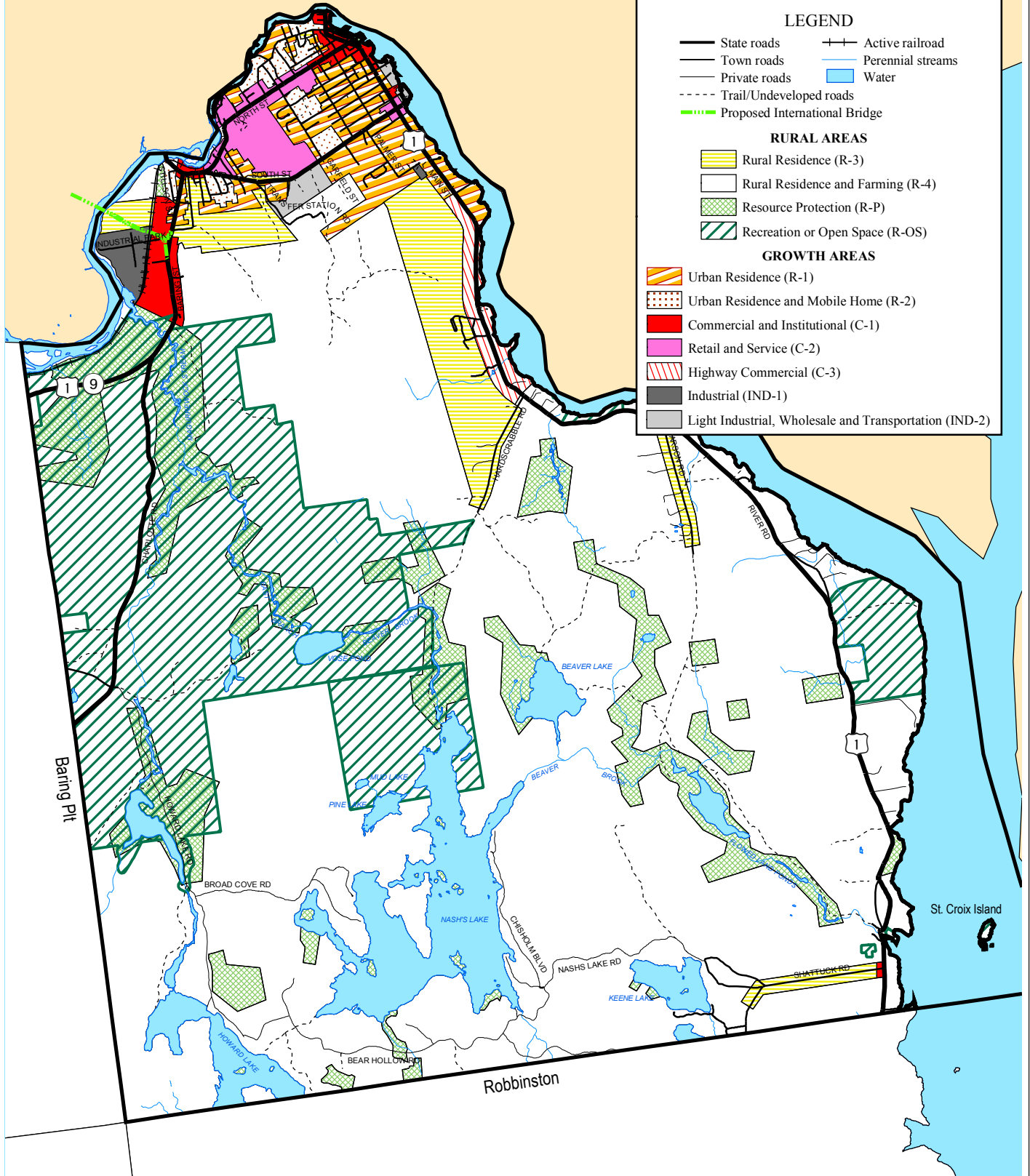
- State roads
- Town roads
- Private roads
- - - Trail/Undeveloped roads
- Active railroad
- Perennial streams
- Water
- Proposed International Bridge

### RURAL AREAS

- Rural Residence (R-3)
- Rural Residence and Farming (R-4)
- Resource Protection (R-P)
- Recreation or Open Space (R-OS)

### GROWTH AREAS

- Urban Residence (R-1)
- Urban Residence and Mobile Home (R-2)
- Commercial and Institutional (C-1)
- Retail and Service (C-2)
- Highway Commercial (C-3)
- Industrial (IND-1)
- Light Industrial, Wholesale and Transportation (IND-2)



Sources: City of Calais, Aerial Survey and Photo, Inc., ESRI, SPO, MEDOT and MEGIS  
 Map revised: November, 2004

See map disclaimer at end of the Executive Summary.

# Calais Comprehensive Plan

## Map 13B: Proposed Land Use - City Center

### LEGEND

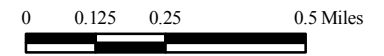
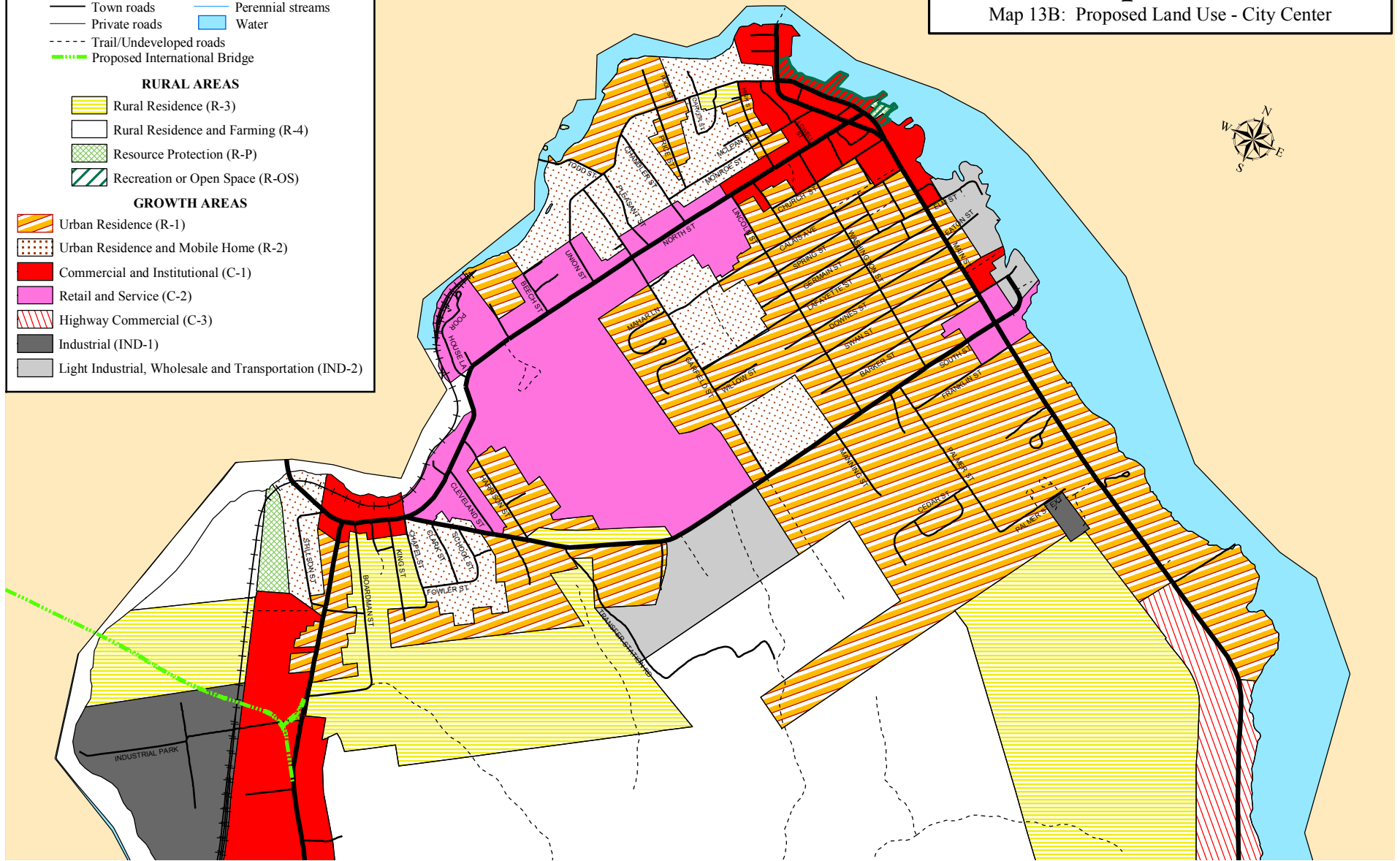
- State roads
- Town roads
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- - - Trail/Undeveloped roads
- Active railroad
- Perennial streams
- Water
- Proposed International Bridge

### RURAL AREAS

- Rural Residence (R-3)
- Rural Residence and Farming (R-4)
- Resource Protection (R-P)
- Recreation or Open Space (R-OS)

### GROWTH AREAS

- Urban Residence (R-1)
- Urban Residence and Mobile Home (R-2)
- Commercial and Institutional (C-1)
- Retail and Service (C-2)
- Highway Commercial (C-3)
- Industrial (IND-1)
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See map disclaimer at end of the Executive Summary.

Sources: City of Calais, Aerial Survey and Photo, Inc.,  
 ESRI, SPO, MEDOT and MEGIS  
 Map revised: December, 2004

## K. CITY SURVEY RESULTS

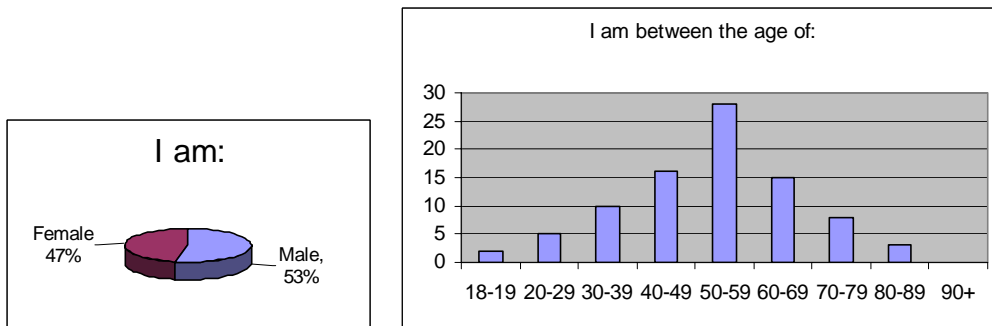
The survey that was distributed to city residents in February and March of 2004 is reproduced in Appendix A. There were 100 surveys mailed to a random number of households from the tax list. Numerous additional surveys were distributed around the city including the library, the post office, and several businesses and institutions with waiting rooms. Collection boxes were available at each site for respondents to return surveys. A total of 89 surveys were returned. There were many responses to the three open ended questions at the end of the survey as well as other written comments throughout the survey. All of the written responses are reproduced in Appendix A. Summaries of the written comments are noted with the charted data here and throughout the document as the issues they address are raised. The raw data is available at the town office and graphical summaries of the responses are provided here.

### SURVEY RESULTS

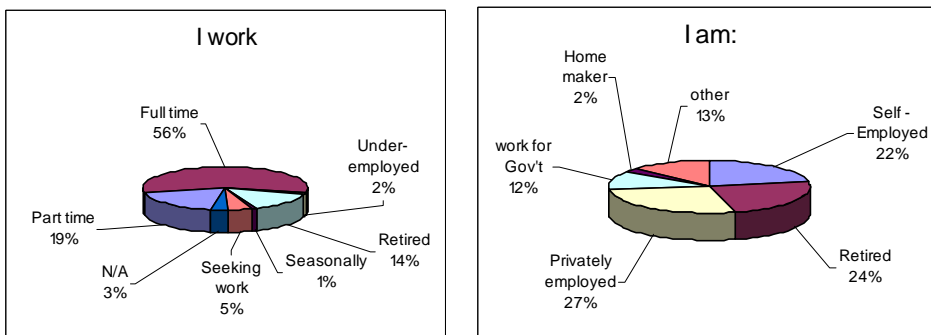
Survey results are presented here in charted form as the raw data is voluminous and not instructive.

#### A. General

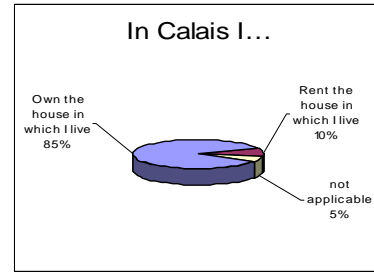
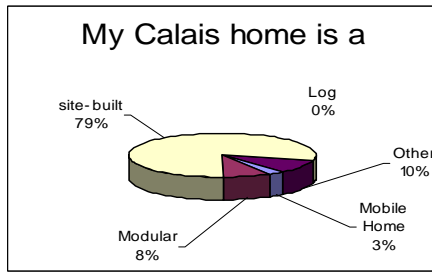
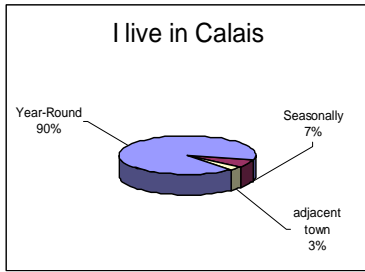
The cross section of survey respondents generally reflects the demographics in Calais except that it may be more heavily weighted to the opinions of those over 30 years of age.



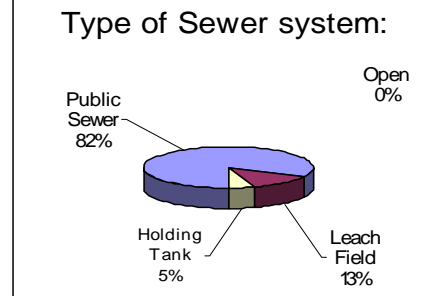
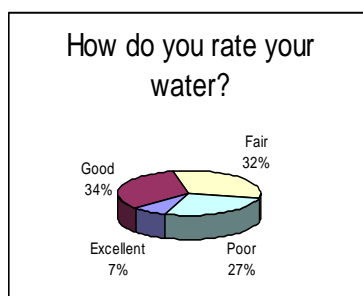
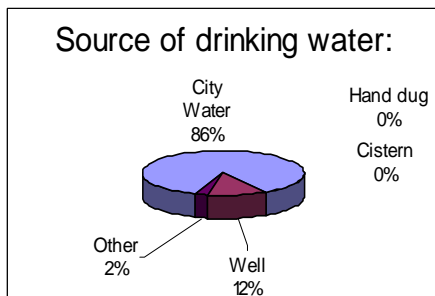
The large proportion of self-employed and retired residents is evident in the make-up of the respondents.



Respondents have lived in Calais all or most of their lives and most own their own home.



The vast majority of respondents use city water and public sewer. Satisfaction with city water is improving from water survey results of the previous year. This reflects improvements to the system, still on-going, since the source of the waster supply shifted from New Brunswick to wells in Calais.

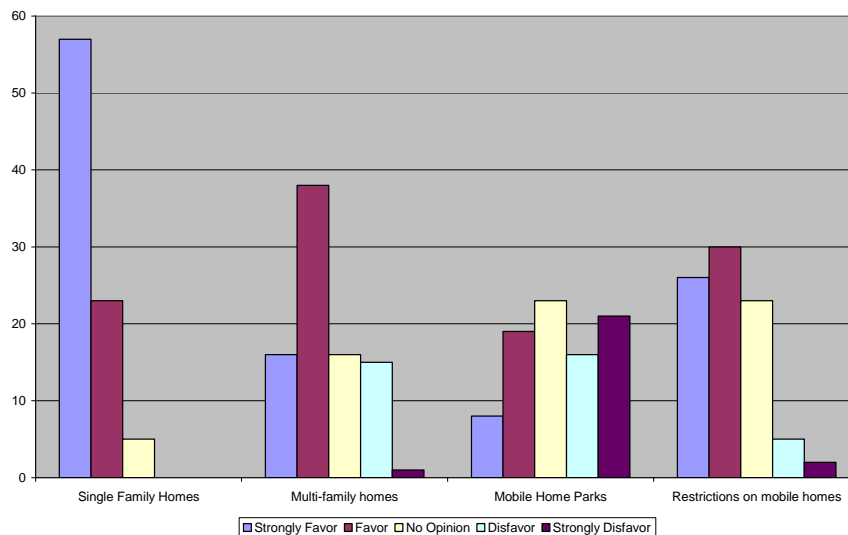


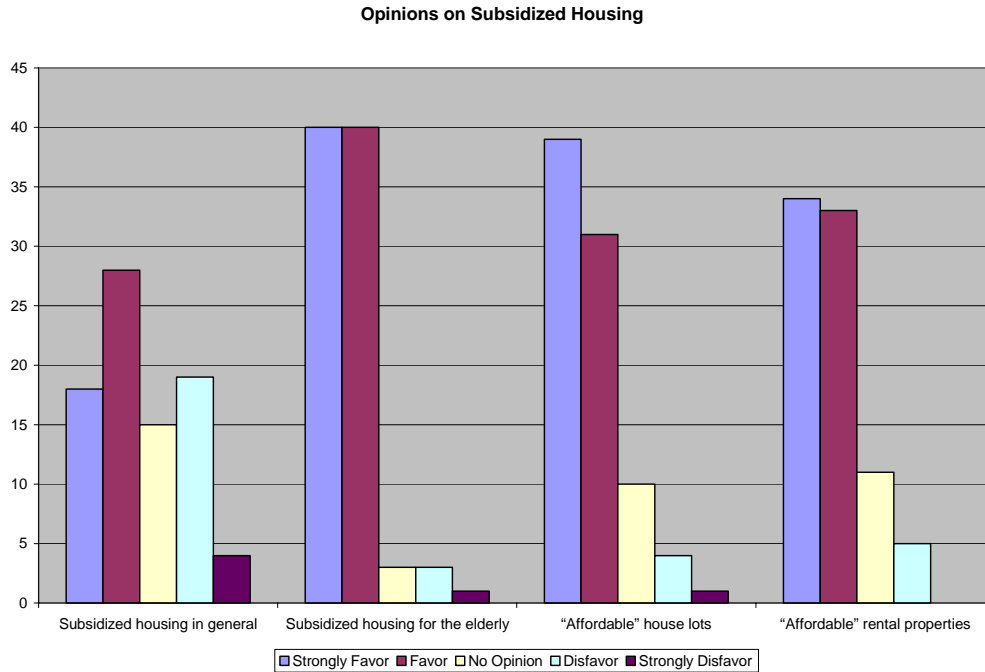
## B. Housing, Development and Preservation

### Housing

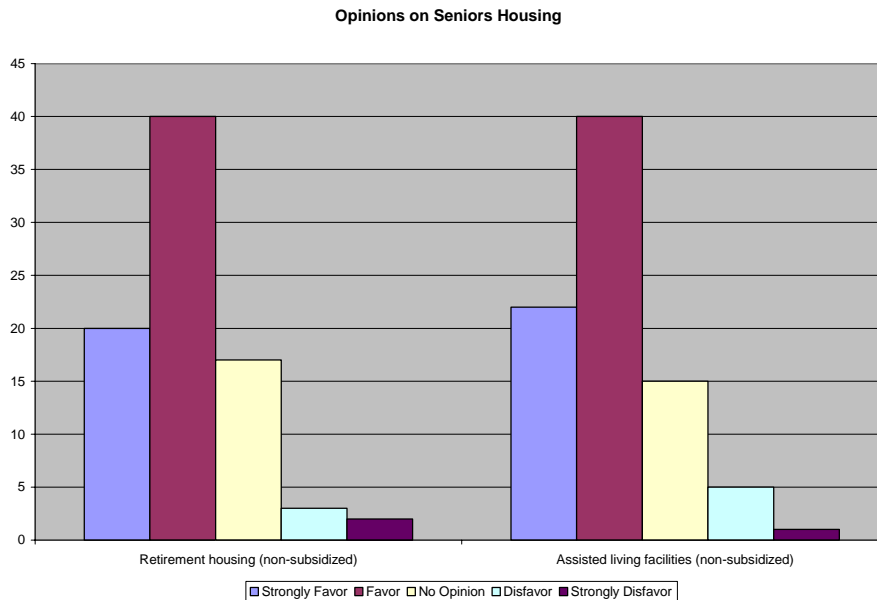
As in many Maine communities, respondents strongly support single-family housing. There is somewhat more support for mobile home parks and multi-family housing in Calais than in other communities reflecting the larger amount of these housing types in the city.

Opinions on Housing Type



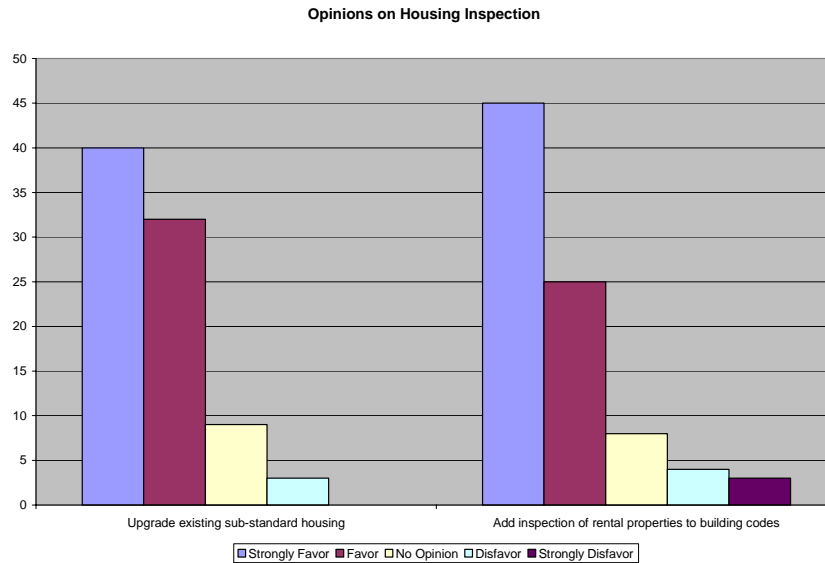


There is very strong support for “affordable” house lots, rental properties and subsidized housing, particularly for the elderly. While many wrote how much they liked the old and historic buildings and neighborhoods, others noted that dilapidated housing needed restoration.



In addition to elderly housing, respondents also see a need for assisted living facilities.

Concern about the condition of rental properties was evident in the very strong support expressed for inspection of rental properties and the need to upgrade sub-standard housing.

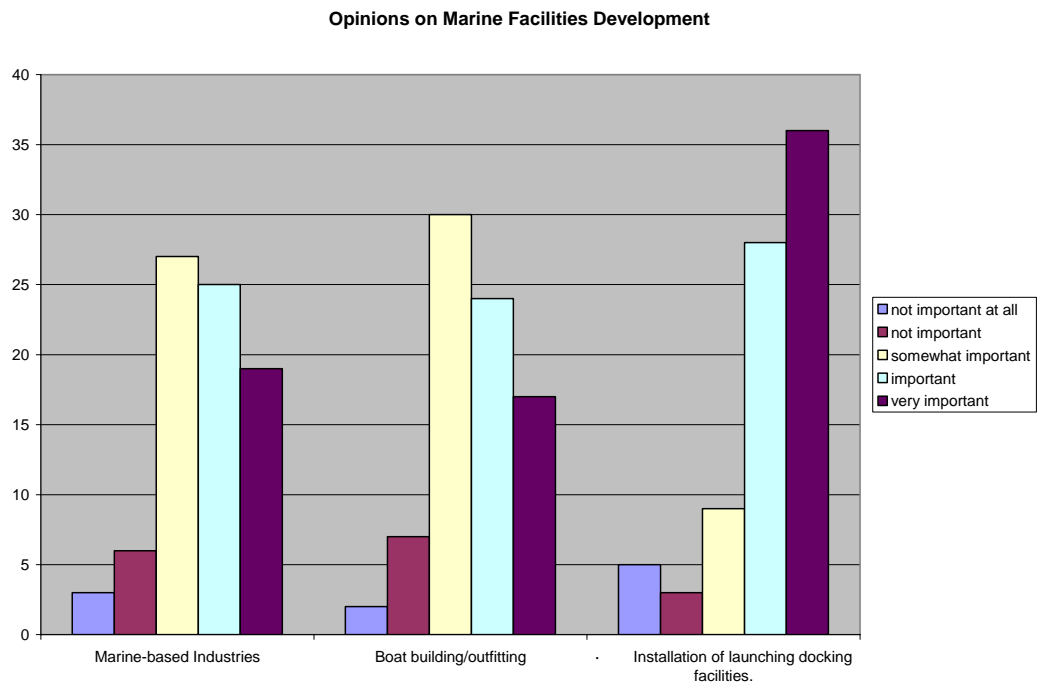


**Development**

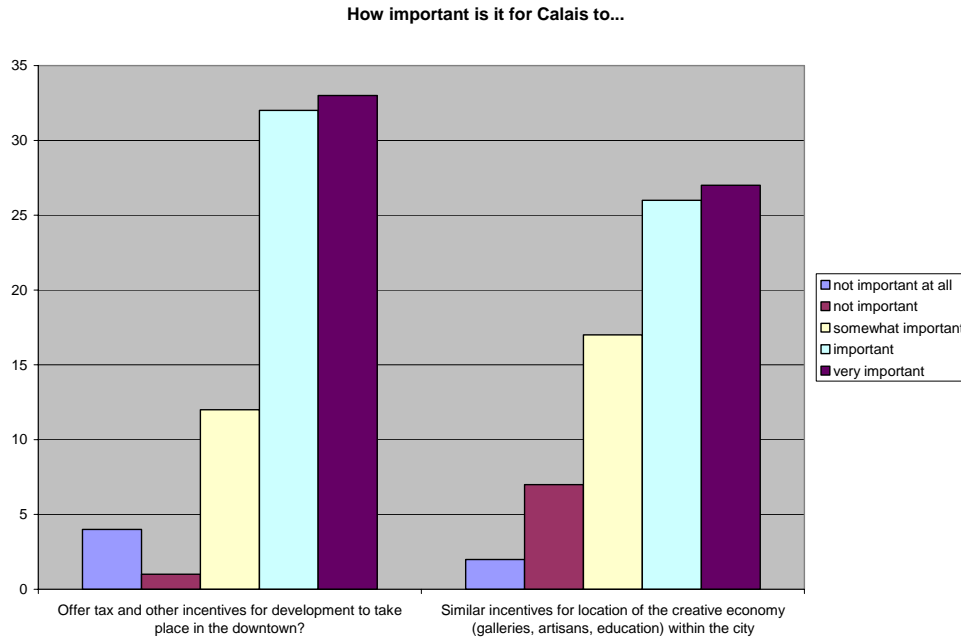
A wide variety of questions sought input on development types and opportunities. The lackluster response to the need for marine-based industries is indicative of the shift away from an industry that Calais left behind in an earlier century. However, respondents recognize the importance of water access facilities to their own enjoyment of the waterfront as well as to visitors.

Several written comments supported dredging of the Saint Croix River channel. Many more comments linked downtown revitalization to further waterfront improvements.

Support for downtown development is very strong. While some written comments expressed concern or discouragement at the loss of downtown vitality many others were very enthusiastic about the new and



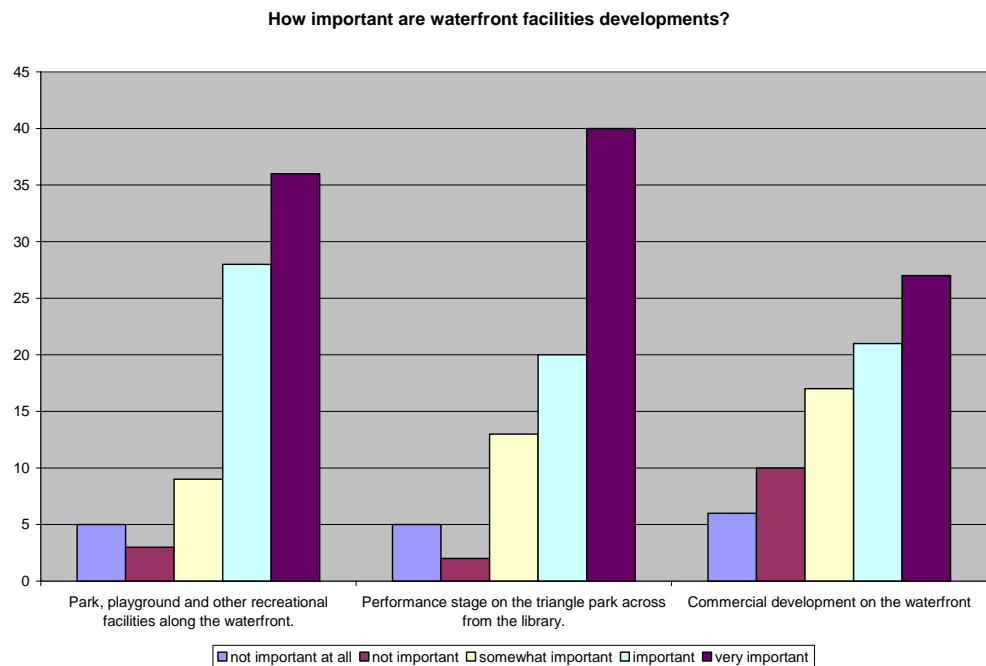
existing infrastructure including the library, the historic buildings and the Downeast Heritage Center. Many others said they liked and would preserve the small town atmosphere and “livability” of the city specifically indicating they like the sidewalks, lighting, waterfront walkway, and that “it takes five minutes to get to most places”.



The following chart describes responses to specific recommendations of the existing waterfront development plans. There was more enthusiasm for recreational facilities than commercial development.

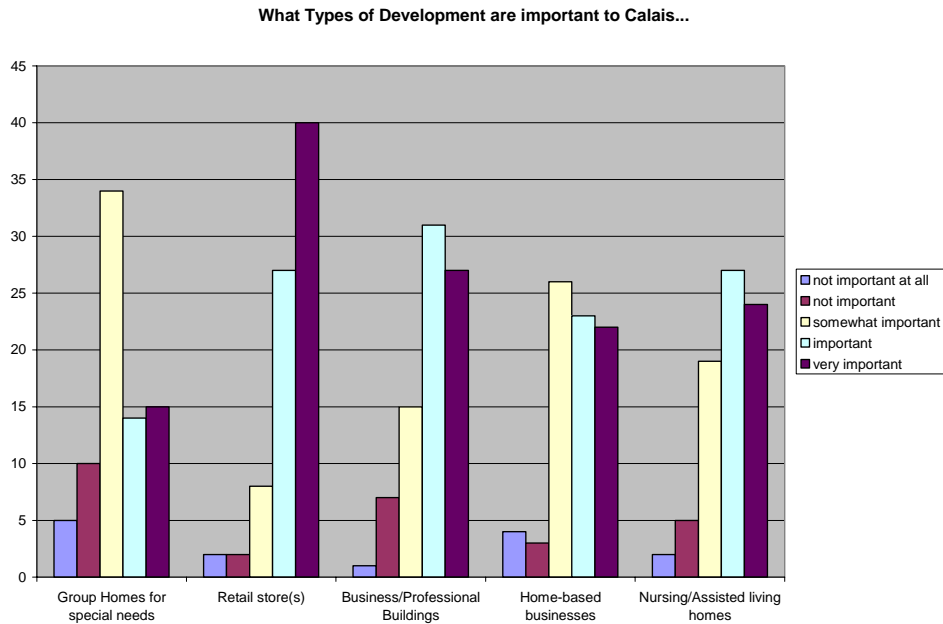
However, commercial development was still important and written comments suggested support for businesses that provide the ability to rent various types of watercraft, river cruises, a marina, restaurants, and artisan studios.

When asked about acceptable development types in general, respondents especially favor retail stores but also find business and

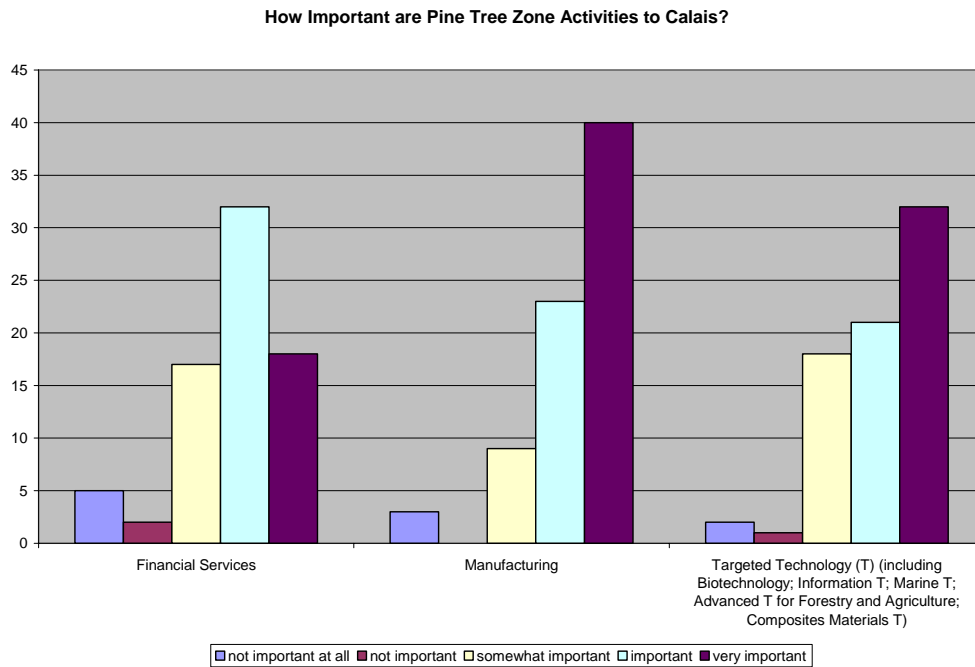




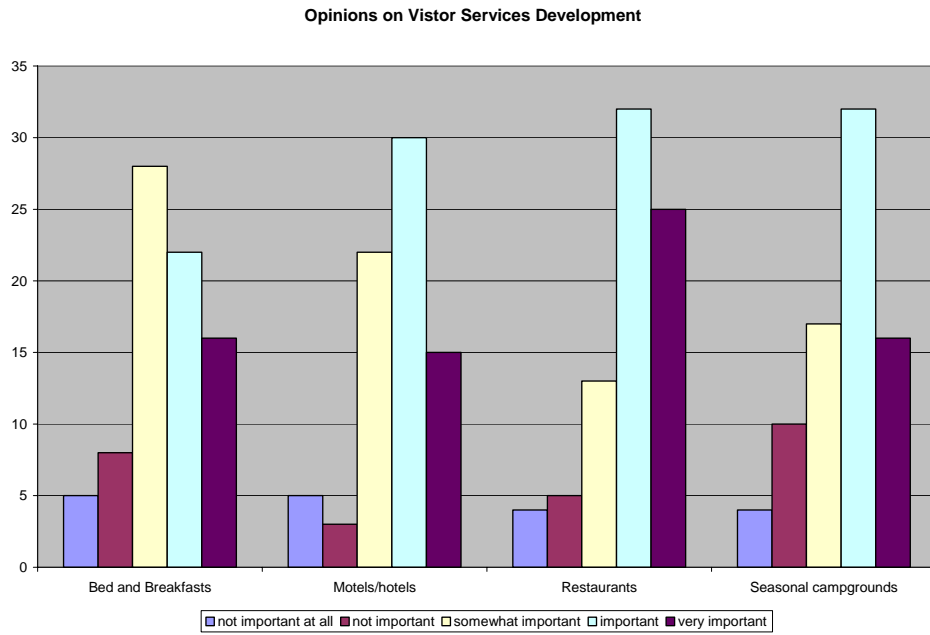
professional buildings, home-based businesses and assisted living homes to be important to the city’s economy.



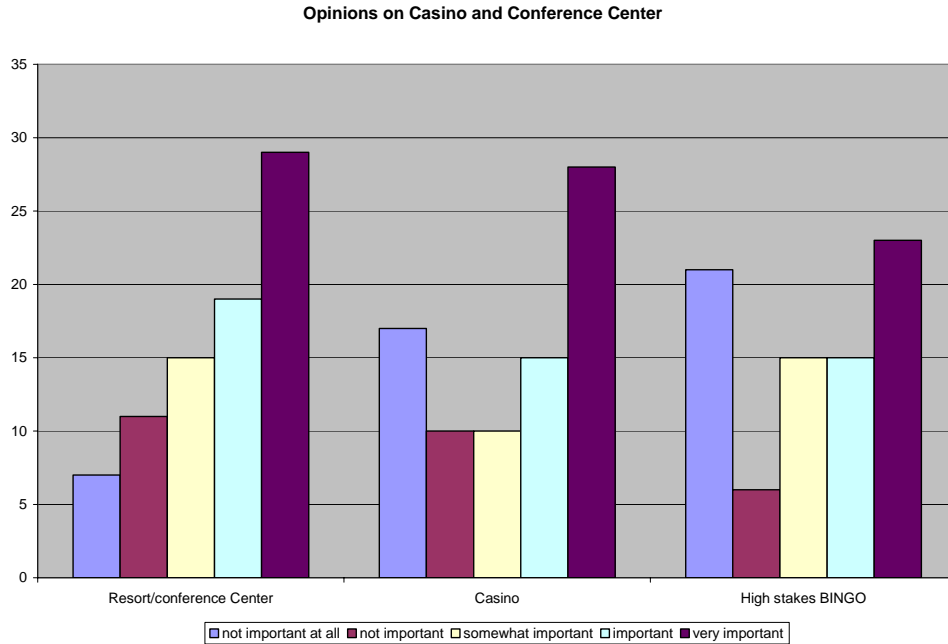
Support for Pine Tree Zone activities was strong, particularly for manufacturing activities and targeted technology industries with less enthusiasm for financial services.



Respondents also recognize the increasing importance of visitors and tourism to the local and regional economy.



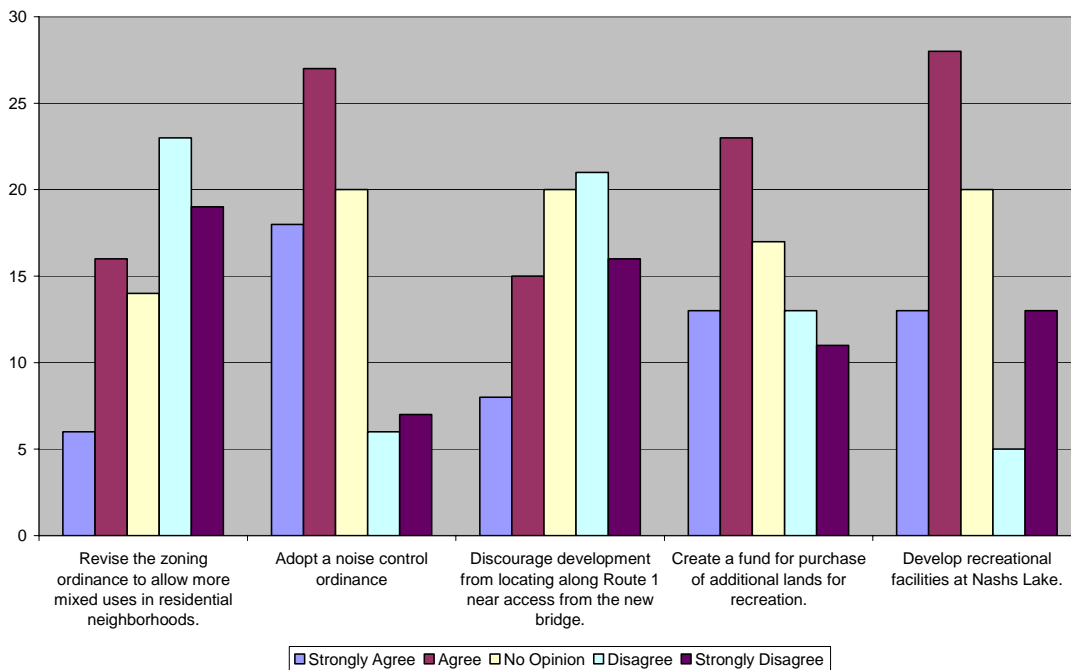
Reaction to the possibility of a resort and conference center was predominantly positive. However, opinions on a casino or high stakes bingo in the city demonstrate divided opinions at both extremes.



**Preservation, Planning and Land Use.**

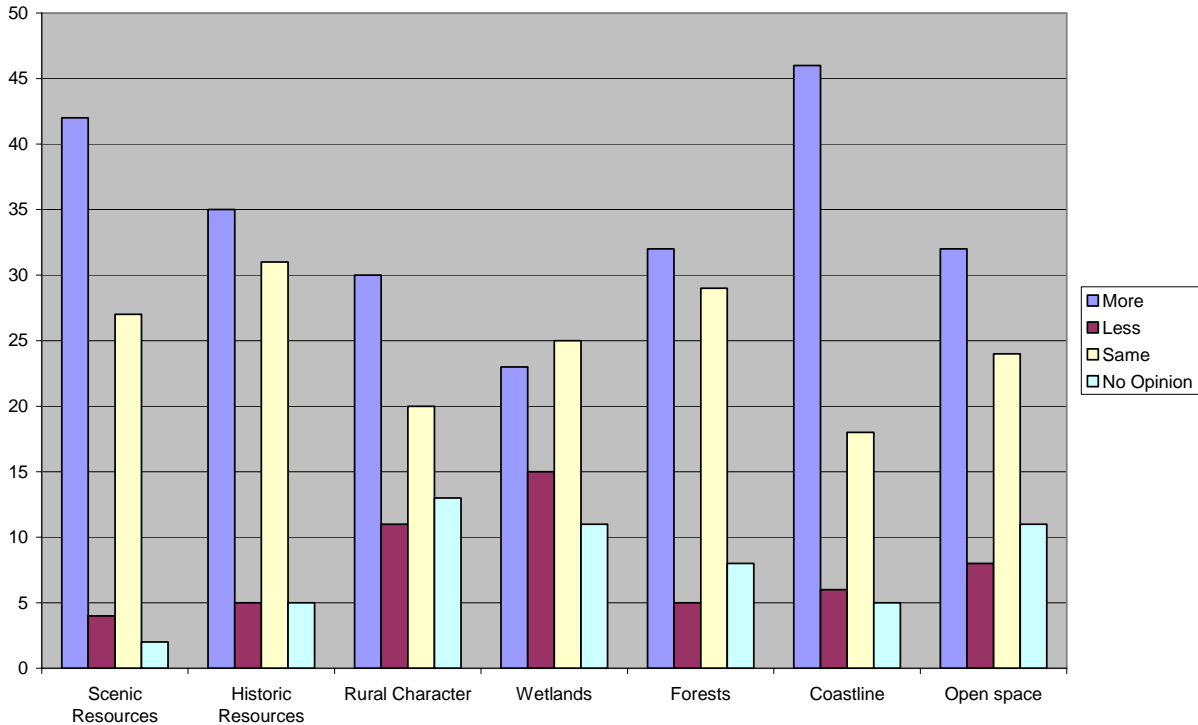
Opinions on regulation and development are mixed on some issues and very clear on others. Some form of noise control ordinance has clear support. Written comments noted cars racing with loud mufflers and stereo as problems. Development of recreational facilities at Nashs Lake has a lot of support. However, a minority is strongly opposed to the idea. Most disagreed with revising the zoning ordinance to allow more mixed uses in residential neighborhood. In addition, perhaps inconsistently with the strong support for downtown development, most disagree with discouraging development from locating along Rout 1 near the access from the new bridge. Thus, there was only support for incentives to locate a business downtown rather than regulation that would discourage those from developing outside of it.

**Opinions on Types of Regulation and Development Needed**



Respondents indicate that they are relatively content with the city’s efforts to preserve wetlands, forests and rural character although few would oppose additional preservation. More respondents support preserving coastline, historic and scenic resources and open space.

Opinions on Preservation

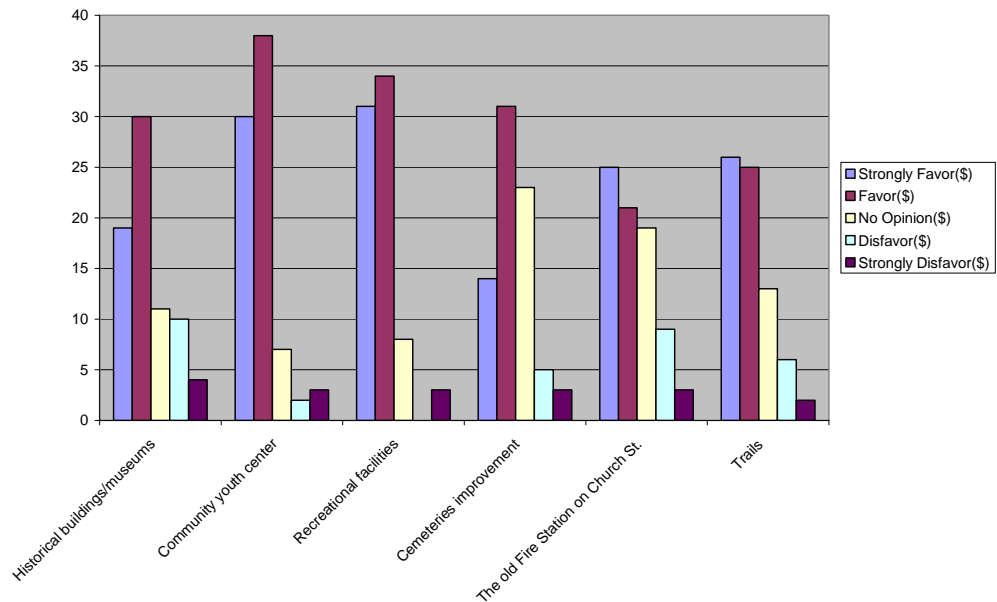


Public Investments

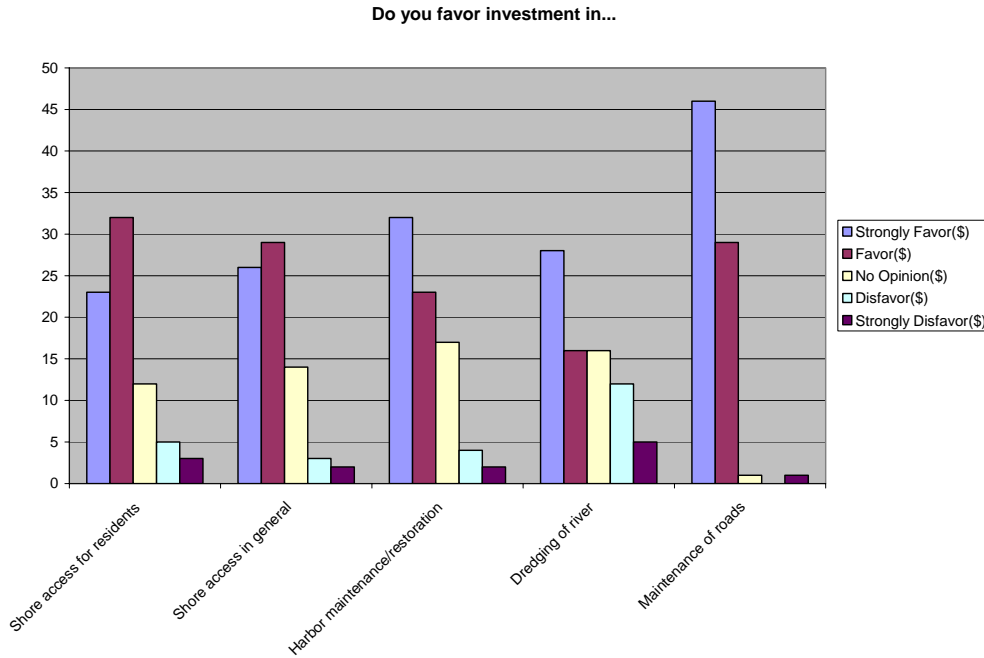
The next set of survey questions sought to understand how much taxpayers are prepared to spend or invest in their preservation priorities and in community services.

Respondents were asked how much they favored/disfavored investment in each item and then to mark an X beside their highest priorities. The single highest priority to respondents (25 votes) is maintenance

Do you favor investment in...

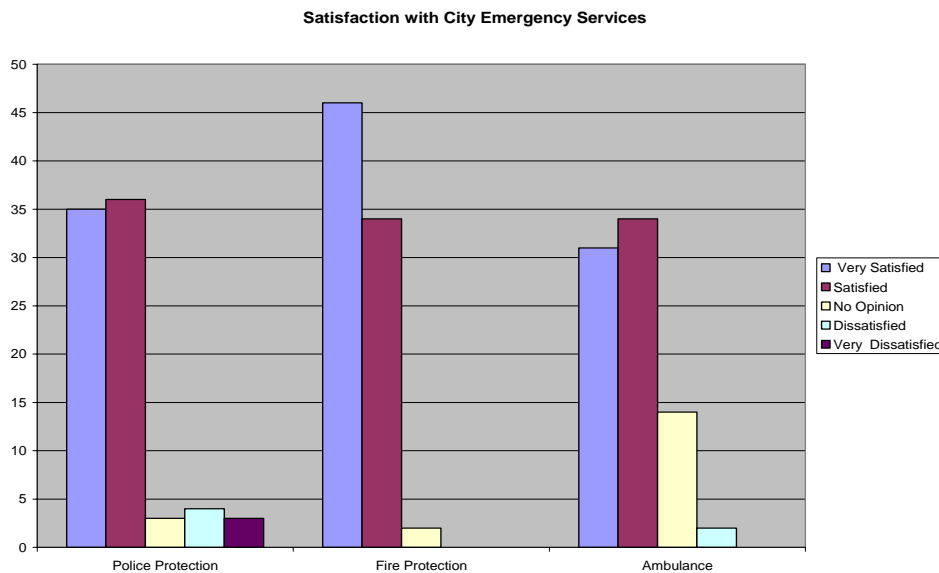


of roads. The next highest priority was a community youth center (18 votes). The next group of priorities included recreational facilities (13 votes), harbor maintenance and restoration (12 votes), and the old fire station on Church Street (12 votes). The final group where priorities were emphasized including dredging of the river (10 votes in favor; 1 vote disfavor), re-use of the middle school gym<sup>1</sup> (7 votes), historical buildings/museums (6 votes), shore access in general (5 votes), trails (5 votes), and shore access for residents (4 votes).



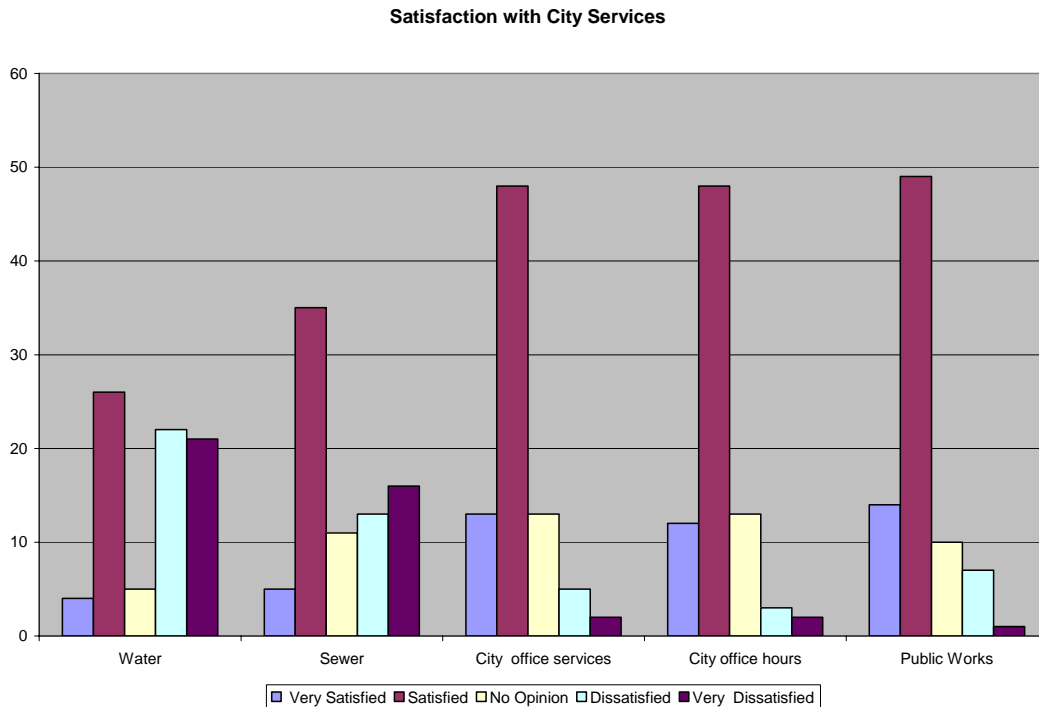
### C. Facilities and Services

Respondents were generally satisfied or very satisfied with emergency services.

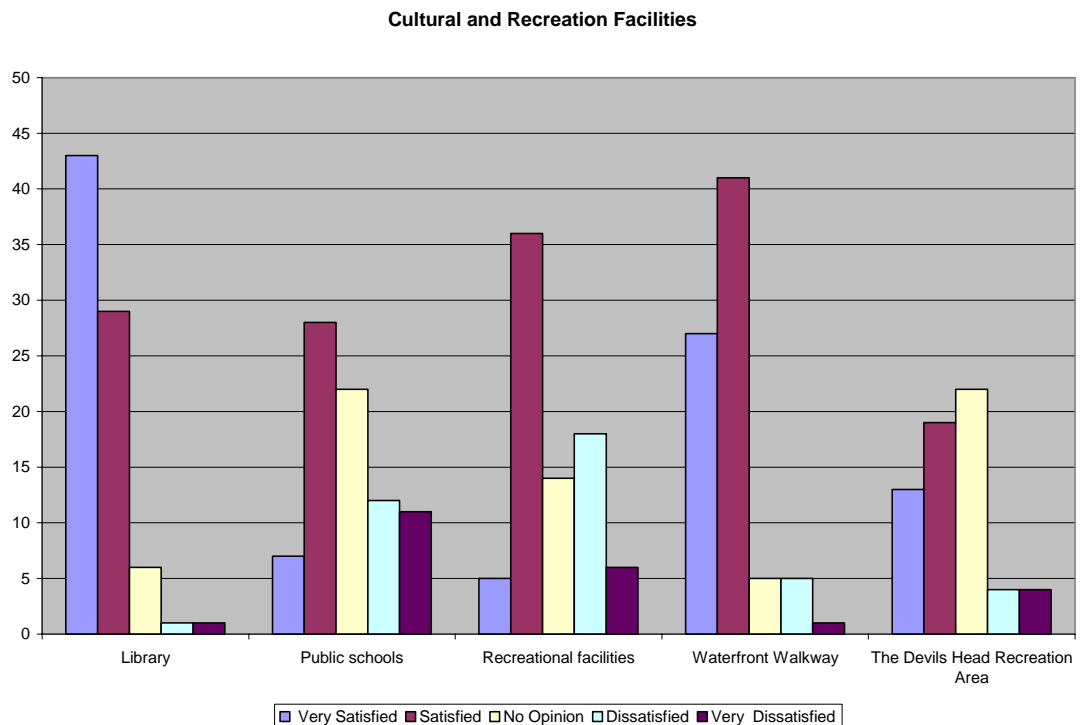


<sup>1</sup> Note that since the survey was distributed the city has sold the Middle School to a private investor.

Respondents are generally satisfy with Town services but expressed less satisfaction with sewer and water. Some written comments were especially critical of the quality of city water as well as of the cost of paying for it.

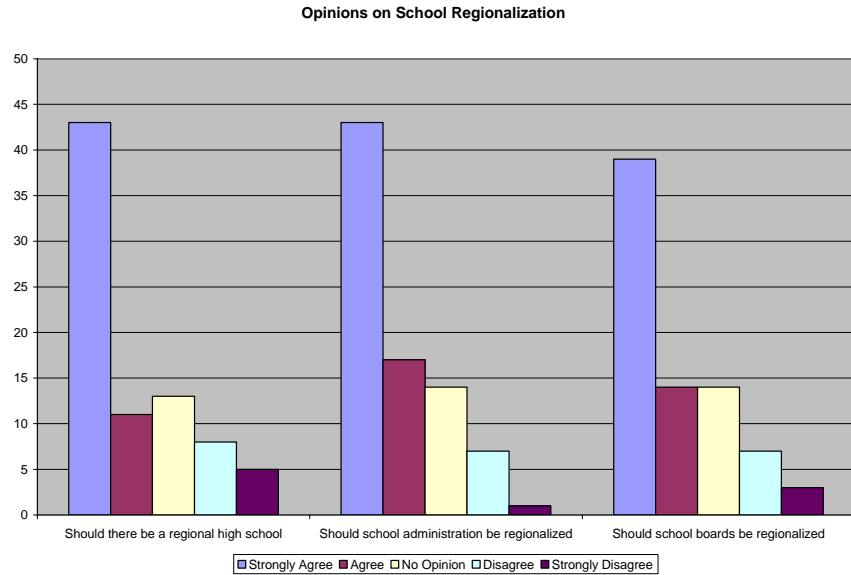


Respondents are especially appreciative of the library and the waterfront walkway and generally satisfied with other recreational and community facilities. It appears that many respondents have not yet visited Devils Head and so expressed no opinion.



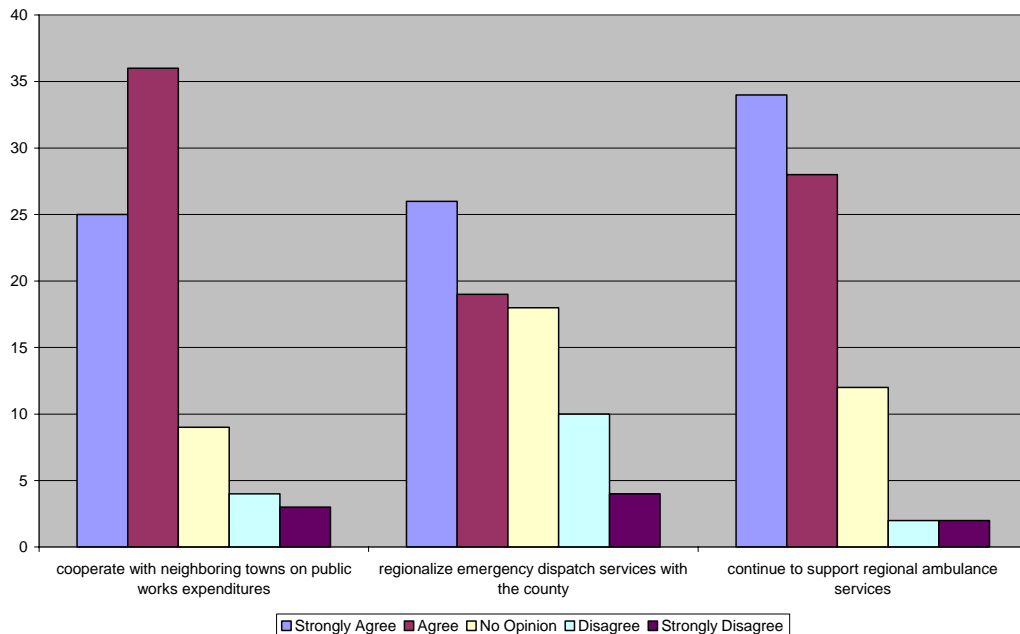
**Regionalism**

Several questions sought input on the need and value of greater regionalization of service delivery and coordination. Support for a regional high school and regional administration of schools was extremely high. Written comments varied on the location of a regional high school but the majority favored Baring presumably because of its proximity to both Calais and Woodland. Many expressed the need for a regional high school as soon as possible while others looked out 5-10 years given the very recent upgrades to Calais High School.

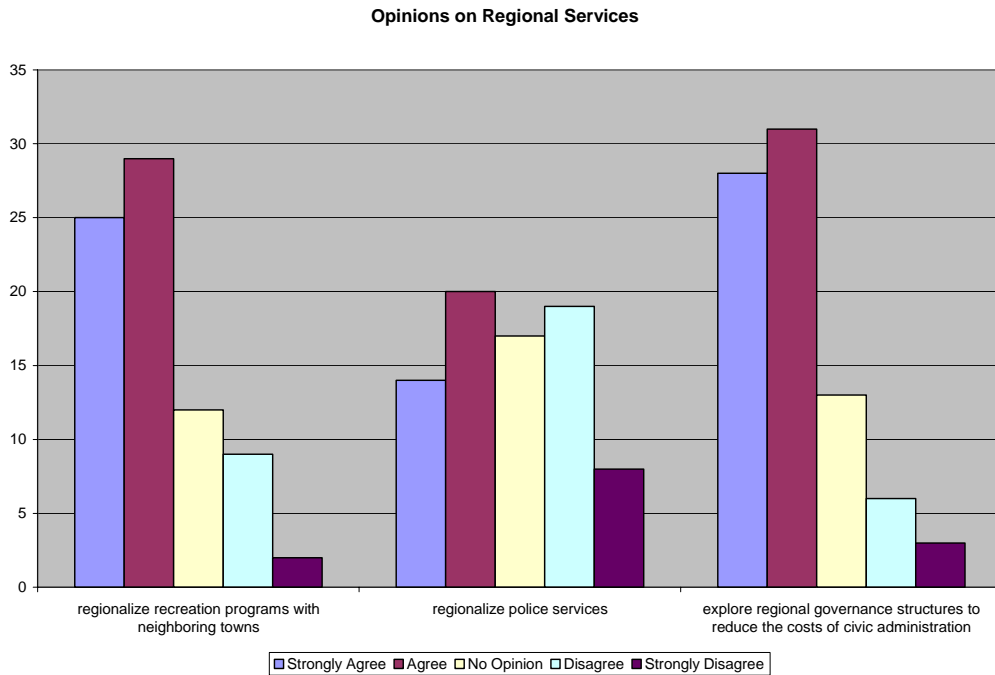


While willing to explore new governmental structures to reduce the cost of civic administration and to regionalize recreation programs, respondents have very mixed feelings about regionalizing police services. The Comprehensive Plan Committee expects that this is a reflection of concern over anticipated loss of local services and response time.

**Other Regional Services**



Support for continuation for current regional services coordination and collaboration is strong.



**SUMMARY**

In mid 2004 Calais residents completed a survey to give their views on important aspects of the city’s future. The participation rate was high for surveys of this type and included a great deal of written input.

A summary of results of the Public Opinion Survey indicated that citizens like the small town feel of the community and that you can get around easily and quickly. Citizens appreciate the waterfront and the downtown and see both as the city’s biggest asset. They like that Calais is an unhurried, safe community with historic charm, access to recreational trails and the river, and services that support the elderly, children and community.

Respondents indicated relatively high dissatisfaction with city water and sewer services noting sometimes that they are too expensive. Concern was expressed over the need to improve dilapidated housing and support expressed for inspection of rental properties in building codes. In charted results and written comments there was very strong support to continue improving the waterfront and to seek businesses for both downtown retail and visitor services. Comments pointed to the need for overall economic development including warehousing, light industry and manufacturing. Respondents are generally satisfied with police protection but would like to see greater enforcement of laws to inhibit drug use.

Visions for the future of Calais ranged from extreme pessimism to buoyant optimism. Some see Calais going “downhill” toward abandonment while others see it as a dynamic leader with downtown businesses, an active waterfront and a hub for regional recreation. There was concern that without job



opportunities Calais would become a retirement community. Many expressed support for the Unobsky School and the Washington County Community College and for the heritage tourism theme initiated by the construction of the Downeast Heritage Center.

**COMPREHENSIVE PLAN SURVEY FOR CALAIS, ME**

The City of Calais is updating its 1992 Comprehensive Plan and we need your input. Each adult in the city is encouraged to participate in the survey on an individual basis. **Your answers will help us develop a plan that gives consideration to what you want Calais to be today and on into the future. - PLEASE RESPOND BY APRIL 23, 2004 -**

Calais has seen many changes since its incorporation in 1851. Even in just the last fifty years, Calais has experienced many changes. We cannot stop change. However, we can choose to work to orchestrate change to be in the best interest of our community.

Please take a few minutes of your time to complete the enclosed survey. We would also like to hear from you regarding your recollections. For example: In the early 1960's Washington Street had five corner stores. Please feel free to include your recollections on a separate piece of paper to share with us. Again, thank you for taking the time to assist us in this very special planning project.

For this survey is to be really useful, please "speak your mind" in answering these questions. Please be as accurate and as thorough as possible. If you have any questions or if you need help in completing the survey, please feel free to contact any **member of the committee: Gail Wahl, chairman; Jim Porter, Marianne Moore, Robert P. Steadman, Butch Alexander, Judith Alexander, Rob Bailey, Marilyn Sotirelis, and Danny Carlow.** You may sign the form or you may leave the signature line blank, protecting your identity, as you wish. If you would be willing to assist even more fully in this project, please contact a member of the City Council or the chairman of the Comprehensive Planning Committee. The plan is expected to be ready for submission to the city council for its action in about 18 months.

**A. General - Please circle your response:**

- Circle one: I am *Male, Female*
- Circle one: I am 18-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70-79, 80-89, 90+
- Circle one or more:  
I am *Self-Employed, Retired, Privately employed, work for the Government, Home maker, other*
- Circle one or more:  
I work *Part time, Full time, Under- employed, Seasonally, Retired, Seeking work, N/A*
- I live in Calais: *Year-Round, Seasonally, or other please describe (WCCC, adjoining town):* \_\_\_\_\_
- How many years have you lived in Calais: *year round* \_\_\_\_\_ *seasonally* \_\_\_\_\_
- Circle one: My Calais home is a *Mobile Home, modular, site-built, log or Other*
- Circle one: In Calais I *Own or Rent* the house in which I live, *not applicable*
- Circle one: Source of drinking water: *City Water, Well, Hand dug, Cistern, other*
- Circle one: How do you rate your water? *Excellent, Good, Fair, Poor*
- Circle one: Type of Sewer system: *Public Sewer, Leach Field, Chambered, Holding Tank, Open*

**B. Housing, Development and Preservation**

Housing Do you favor or oppose development of the following in Calais – Please mark an "x" in the column that applies:

	Strongly Favor	Favor	No Opinion	Disfavor	Strongly Disfavor
Single Family Homes					
Multi-family homes					
Subsidized housing in general					
Subsidized housing for the elderly					
Retirement housing (non-subsidized)					
Assisted living facilities (non-subsidized)					
"Affordable" house lots					
"Affordable" rental properties					
Mobile Home Parks					
Restrictions on mobile homes					
Upgrade existing sub-standard housing					
Add inspection of rental properties to building codes					

**Development** Please rate the following types of development strategies on a scale from 1-5 where 1=not important at all and 5=very important in Calais? Please mark your opinion with an X.

	1 (not important at all)	2 (not important)	3(somewhat important)	4(important)	5 (very important)
Marine-based Industries					
Boat building/outfitting					
Pine Tree Zone supported activities such as:					
• Financial Services					
• Manufacturing					
• Targeted Technology (T) (including Biotechnology; Information T; Marine T; Advanced T for Forestry and Agriculture; Composites Materials T)					
Offer tax and other incentives for development to take place in the downtown?					
Similar incentives for location of the creative economy (galleries, artisans, education) within the city					
Group Homes for special needs					
Retail store(s)					
Business/Professional Buildings					
Home-based businesses					
Nursing/Assisted living homes					
Bed and Breakfasts					
Motels/hotels					
Resort/conference Center					
Casino					
High stakes BINGO					
Restaurants					
Seasonal campgrounds					
Public parking area(s)					
The waterfront development plan was adopted in 2003;					
• Please rate its importance to the city					
Please rate the following components of the waterfront plan:					
• Installation of launching docking facilities.					
• Park, playground and other recreational facilities along the waterfront.					
• Performance stage on the triangle park across from the library.					
• Commercial development on the waterfront					
• Other please describe:					

**L. Preservation, Planning and Land Use. Should the city...? Please mark your opinion with an X.**

	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Revise the zoning ordinance to allow more mixed uses in residential neighborhoods.					
Adopt a noise control ordinance					
Discourage development from locating along Route 1 near access from the new bridge.					
Create a fund for purchase of additional lands for recreation.					
Develop recreational facilities at Nashs Lake.					

Circle one. Should the City do more, less or the same to preserve...Please mark your opinion with an X.

	More	Less	Same	No Opinion
Scenic Resources				
Historic Resources				
Rural Character				
Wetlands				
Forests				
Coastline				
Open space				

Public investments: Do you favor or disfavor city **INVESTMENTS** in the following: Please mark with an X

**Please ALSO put a \* star beside your three highest priorities.**

	Strongly Favor(\$)	Favor(\$)	No Opinion(\$)	Disfavor(\$)	Strongly Disfavor(\$)
Historical buildings/museums					
Community youth center					
Recreational facilities					
Cemeteries improvement					
Shore access for residents					
Shore access in general					
Harbor maintenance/restoration					
Dredging of river					
The old Fire Station on Church St.					
Re-use the middle school and gymnasium					
Suggested use of Middle School:					
Maintenance of roads					
Trails					

**C. Facilities and Services.** Please indicate your level of satisfaction by marking an X in the column:

	Very Satisfied	Satisfied	No Opinion	Dissatisfied	Very Dissatisfied
City Departments:					
• Police Protection					
• Fire Protection					
• Ambulance					
• Water					
• Sewer					
• City office services					
• City office hours					
• Public Works					
• Library					
• Public schools					
• Recreational facilities					
Community Services and Facilities					
• Health Services					
• Adult education					
• Community-wide Events and Celebrations					
• Religion					
Recycling center/landfill					

	Very Satisfied	Satisfied	No Opinion	Dissatisfied	Very Dissatisfied
Road conditions					
Snow plowing					
Property tax level					
Waterfront Walkway					
The Devils Head Recreation Area					

Regionalism: Please indicate your level of agreement and comments on the following regional issues/services:

	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Should there be a regional high school					
Where should it be located					
How soon should it be implemented/constructed					
Should school administration be regionalized					
Should school boards be regionalized					
Should rail service be restored from Calais to Ayers Junction					
Should the city:					
• regionalize recreation programs with neighboring towns					
• regionalize police services					
• explore regional governance structures to reduce the costs of civic administration					
• cooperate with neighboring towns on public works expenditures					
• regionalize emergency dispatch services with the county					
• continue to support regional ambulance services					

**D. Opinion Poll** (attach separate sheet if you wish to extend your comments)

1. What are the things about the City of Calais that you like and would preserve?
2. What are the things about the City of Calais that you would like to see changed?
3. Describe how you see the City of Calais of the future.

Signature (optional): \_\_\_\_\_ Date: \_\_\_\_\_

By April 23<sup>rd</sup>, 2004 please return the completed survey questionnaire to the new City Office, 11 Church Street, or deposit it in any of several boxes located around the city (library, city hall) or mail it to the Comprehensive Planning Committee, PO Box 413 Calais ME 04619

*Distributed March-April 2004.*

## Written Comments on Surveys

The full transcript of written comments provided by the 89 respondents in the last part of the survey are reproduced here. As noted in Chapter L Town Survey Results summaries of the written comments are provided with the charted data and throughout the document as the issues they address are raised.

Comments were provided in response to some specific questions on the survey and by respondents who chose to underline their opinion:

### Restaurants-

- Good restaurants, not beer and fat
- Mexican

### Other- Please describe:

- The walkway is absolutely beautiful, take my dog there everyday..people need to be encouraged to “Poop-scoop.” Police officer on bike for safety and make sure people clean up after dogs.
- Need supporting entities for Heritage Center
- Need dredging of river (Army Engineers)
- Waterfront one of our main assets
- Shopping, shopping, shopping- stores like GAP, toy store, BOOK STORE!
- Sight seeing river cruises
- Artisan fairs along waterfront walkway, Sunday in the summer
- Maintenance of green spaces
- Anything to improve the downtown and waterfront
- In town warehousing facility for lease
- Waterfront should not be commercialized, it should be free and open to the public
- NEED stores for shopping
- Keep to Heritage Theme
- Under- adopt noise control:
- Noise-especially after 9PM – cars racing by the house with loud muffler and stereos blaring LOUDLY - High Street

### Suggested Use of Middle School:

- |  |   |
|--|---|
| • Professional offices or mini-mall                                | • Close it-too much money would have to be invested     |
| • Tear down-park in place of- gym still useable                    | • Recreational  |
| • Use as a school  | • Senior citizen apartments                             |
| • EYE SORE- get rid of it  | • Tear down and make park                               |
| • Take down entire Middle School Complex                           | • Tear it DOWN!   |
| • Drug treatment- residential                                      | • Veteran’s Home  |
| • Performance, continuing ed., events                              | • Recreation/ Community Center (2)                      |
| • Mixed use- rental offices/classrooms for non-profits and profits | • Tear down (2)   |
| • Restore for community uses                                       | • Housing, treatment center, mixed used, artist’s lofts |
| • Sell it!   | • Tear down and make green space                        |
|  | • None-demolish-park or business                        |

- Youth Center (4)
- Demolition
- Auditorium
- Tear it down and start over
- Office complex
- Arts?
- SELL IT!

<u>Sewer:</u>	<ul style="list-style-type: none"> <li>• Sewer over priced</li> <li>• Cost too high</li> </ul>
<u>Community Wide Events:</u>	<ul style="list-style-type: none"> <li>• Poor advertising of the Saint Croix Event</li> </ul>
<u>Library:</u>	<ul style="list-style-type: none"> <li>• Exceptional</li> <li>• Never open on Tuesday AM</li> </ul>
<u>Property Tax Level:</u>	<ul style="list-style-type: none"> <li>• Overtaxed!</li> </ul>
<u>Recycling center/landfill:</u>	<ul style="list-style-type: none"> <li>• Need to recycle glass</li> <li>• Needs to be open more</li> <li>• Bad bags, flimsy, don't hold enough</li> </ul>
<u>Waterfront Walkway:</u>	<ul style="list-style-type: none"> <li>• Needs extension to Route 1, Moosehorn</li> <li>• Doing a good job, great idea</li> <li>• Good project to keep up</li> </ul>
<u>Devil's Head:</u>	<ul style="list-style-type: none"> <li>• Needs more</li> <li>• Should have a resort area there combined with trails</li> <li>• Good project to keep up</li> </ul>
<u>Regionalism:</u>	<ul style="list-style-type: none"> <li>• On all- anything to reduce costs</li> </ul>

<u>Where should a Regional High School be located?</u>	<u>How soon should it be implemented/constructed?</u>
Baring – (9) Centrally Calais or Baring Calais or Charlotte Between Woodland and Calais No opinion Don't know Baring or other neutral area Baring-Calais-Robbinston Research for best location Charlotte (5) Baring or Charlotte Where ever is the most economical Does not matter Enlarge the one in Calais Not in vicinity of other schools Geographically, demographically suitable More studies to establish cost and need Calais (13)	10 years Next 5 years ASAP (20) 5-6 years NOW! Soon as needed As funding and need develops 3-5 years Within 5 years No-opinion Within 10 years Soon-next year or two '05 Within 5 years 10 years since just upgraded CHS Centrally- soon

## D. Opinion Poll

### 1. What are the things about the City of Calais that you like and would preserve?

- Proximity to Saint Croix River where Calais began- turn from commercial to recreational
- Not much-
- Whatever that old ballroom is above the Schooner
- Historic character of the community, preserve old buildings and neighborhoods
- It is small community city where we enjoy a quiet and unhurried way of life, much scenery and wildlife. ALL buildings on Main Street. Who wants to come into a city of parking lots and no stores on Main Street.
- Water access, and natural beauty, downtown, harbor.
- The river, the library, the quiet, the old buildings.
- More business- more opportunity for jobs.
- Main Street-
- Preserve the small town feeling...limit sprawl and bring exciting business to the downtown area.
- All historic residential and non-residential architecture- shading trees and urban vegetation
- Small town atmosphere (7)
- Small town atmosphere regardless of the path Calais takes I would like to see that preserved
- Voting for candidates- way of life
- All fire, police and public works
- The architecture-houses and the Main Street buildings, the non-glaring street lighting, attractive no-neon lighting, flowers, the library, heritage center, business
- The riverfront and the library
- Elderly housing, movie theater
- The Library is wonderful! Waterfront walkway. Extensive recreation programs.
- Our kids and their future here.
- Direct election of mayor, not appointed by city council. Slow paced living, balance of income sources.
- Safety of the community, parks, sense of small town. Unobskey School!!!!
- It takes five minutes to get to most places.
- Main Street needs more businesses...but the Treworgy side needs to be preserved, tear down the other side if you must to clear the view to the water and the Heritage Center.
- Small town appeal.
- Calais Free Library, Heritage Center, Mardens, downtown historic buildings, walkway, Devil's Head, waterfront.
- Friendly helpful people. Devil's Head, river walkway, Moosehorn, sidewalks.
- The older buildings, the library, the efforts towards creating and maintaining natural areas and trails.
- Small town atmosphere, the waterfront walkway, downtown.
- Waterfront. It needs maga improvement-this could be a huge draw.
- The downtown area.
- The historic parts.
- Ambulance services, scenery
- Small town atmosphere. (3)
- Helpfulness of city hall, medical ...? that is available, co-location with Saint Stephen.
- The history, natural beauty, fostered by the uniqueness of the river.
- The parks in town.
- Slow pace and great city services. Less politics on City council, still elect a mayor.



- Less negativism. Make sure if we keep the mayor position that the person understand our city manager/ city council form of government. If a mayor is unable to (or chooses not to) understand our form of government and goes on power trips that makes us look like fools, creates negativity, endangers projects, and leaves us open to lawsuits that there is a way to immediately remove them from the position of mayor by a two thirds vote of the entire council. They could still be a city council member, which is all the mayor is anyway. The ability to remove the title of mayor from someone with delusions of grandeur would go a long way toward protecting the city and would most likely curb inappropriate behavior.
- Calais should continue to increase utilization of the river. Dredging the Saint Croix would open the river to boat traffic and revenue. The Unobskey School MUST STAY!
- Being a border town.
- Calais Free Library. Calais Motor Inn pool. Mardens. Riverside walkway. PAWS. All the service organizations. Lack of development downriver.
- That I am a professional, single parent and I can afford to raise my family here.
- The downtown buildings. They need to be cleaned up. Perhaps have a nice hotel and offices in them.
- Quaintness, attractiveness
- Waterfront marine heritage
- Like the character of the old buildings downtown, small town life, knowing your neighbors, beautiful area.
- Redo older buildings and utilize them in any way that works....
- The location on the river and the beauty of the surrounding area.
- Historical sites. I feel that they give the city a certain charm they are torn apart to make way from something new, the city loses that charm.
- Historical sites
- Small community where you can enjoy a quiet unhurried way of life. Much scenery and wildlife. All buildings on Main Street- who wants to come to a city of all parking lots and no stores on Main Street.

## 2. What are the things about the City of Calais that you would like to see changed?

- Would like to see a city where people get along and work together. LEAVE OUT THE POLITICS!!
- Dilapidated houses fixed or restored, get rid of mobile housing in residential neighborhoods
- Taxes and water and sewer are too high. I own a home and am a single parent with a child but I am contemplating seriously moving because I can't afford living here on my income and that is not fair.
- Keep improving the waterfront. Make up for the lack of support to education over the past 25 years, step up and draw young families to the area with top notch schools and recreational opportunities geared to families. Get tough on drug users.
- City council and chamber of commerce to enhance city to better as in the past and present
- More businesses, a large college or university, a BOOK STORE, roads improved, schools and old school repaired.
- Like many Americans, we believe we are entitled! Examples include the site of the bridge. No community is entitled to be artificially supported.
- I would like to see the police force bust a few of these people selling the pills. They know who they are.
- Lower taxes – expand tax base
- Snow plowing(or lack there of), poor economics/lack of good jobs

- Don't like businesses moving from commercial areas into residential neighbors. With so many empty buildings in the downtown area, there is no need to add noise and/or traffic to neighborhoods.
- Taxes (lower), better street signs
- More and better Recreation facilities (including walking, biking paths) and activities (indoor/outdoor/seasonal) for people of all ages, improve health care facilities, more stores and businesses in commercial areas. ..North, South and Main Streets...improvements in housing and more job opportunities.
- Taxes, water/sewer – all too high. Would like to see the mayor working together with other city council members
- Need for economic growth. Too many vacant storefronts. Too few job opportunities. Need to improve the waterfront taking advantage of this important asset.
- I would rather pay a little higher taxes and receive services. Quality of life for me includes good police, fire, EMS, highways, services.
- Need something to keep the young people busy...do not like to drive by the parking lots and seeing them hang out there. It makes me wonder what the tourists think when they drive by.
- More access to the waterfront for boating, ability to rent canoes, kayaks, rowboats, bikes.
- Larger tax base of business
- More choices in retail
- Let YMCA or someone to take over the recreation department
- Develop a 3 season destination
- More industry
- The general apathy
- More year round businesses on Main Street. More emphasis on higher education-perhaps the schools need to improve public relations, promotions.
- More activities for teens, no hanging outs in parking lots.
- The school board should be less political and more about serving the community instead of serving its members.
- Better tasting water, downtown stores be used and cleaned up, need to make it attractive, more recreation, nice places to go out for evening fun.
- Continue to improve the waterfront area, improve facilities for children, playgrounds, etc. Spend more on schools so we can have textbooks, and resources in our schools. Bring in more retail...we need to support our small businesses who sell quality clothing
- Lower taxes/ regional schools and public works. Make Calais/ Saint Stephen one destination-promote with Saint Stephen.
- Greater opportunity for our elementary and middle school children. "The Good Ol' Boys" willing to share the wealth.
- Provincialism. Need more cultural events and venues. More opportunity for the 20+ generation to be involved in decision making.
- Remove the mayor position! Have a focus on small industry either health care or electronic or financial which would allow entry level income at a livable wage for young families. Less of a focus on tourism.
- Affordable detox and rehab, family counseling. Larger amounts of duty free for Canadian shoppers. Tax relief for property improvements.
- ATTITUDES OF THE PEOPLE! Lobby for the improvement of Route one from Perry to Calais.

- More training for unemployed. Make more people work for what they receive in benefits from the city, fed govt., etc. A few specialty shops, some discount shops like Freeport. Mardens is a great example.
- Improve the butt ugly downtown area, fill up storefronts
- How about repaving Calais Avenue, it is a mess now, plant more trees along the walk, it used to be a beautiful street. Repave the Johnson lot on Main Street, it could be a resting place for people shopping with tables, benches, grass and flowers- on the back fence a painting-maybe forest or a boat on the river. Repaint McAlister Block by repainting the bust of man, add words on building.
- Our taxes to be based on well kept property- resulting in lower taxes to give people incentive to keep their property up.
- The lack of appeal to young people of working age.
- The water quality-way too much use of chlorine- better use of funds- get more involved in tourism.
- Bring in discount stores to the empty stores on Main Street. They would be a destination point - along with the Heritage Center- they would bring back Canadians too. Someone contact Margante's Nest in Orono and see if they would bring one here, we have enough fast food places. A decent Mexican Restaurant would be great.
- Property taxes going down.
- More clearing by Pike's Woods so the lighthouse and river are more visible. More historical emphasis on existing buildings, no more "tearing down." Main Street revitalized would be great. Mistake to not relocate Fashion Bug.
- We waste water by having to run taps to clear residue- need a discount to cover this expense.
- We need to get rid of the hospital board and administrator. We need a board and administrator that is interested in the city and knows that the hospital is a resource for the city and actively works to be an economic engine for the city.
- Going back to a town might help. Lower real estate taxes. Need to attract more business and industry to the area- do more to keep our young people here- the city is turning into a retirement community. Receive more services for our tax dollars-such as garbage pick-up.
- More government and citizen coordinated transparency.
- More activity for youth, after school and weekends. Youth representation on boards. Rec dept.- children on poverty level should have preference since they would benefit more, citizens could sponsor children.
- A casino.
- We need manufacturing jobs soon!
- Attitude of the community regarding the improvements of this area. The apathy is very frightening! Need to develop economic improvement, improve waterfront, bring in experts in tourism.
- The K-12 schools, the quality of the water, the property taxes.
- The city needs to stop spending and look for more industry. Need to do something about the school budget-stop supplying health insurance to the whole family unless paid by the family.
- Assistance to low income homeowners to renovate, rehabilitate their housing
- A new bridge, more business, new people brought in, less wasting of money.
- Seasonal maintenance for all the sidewalks- which usually have frost heaves by spring. Sufficient street lighting to walk.
- Need to change the way people are dealt with when they come through the door of city hall.
- We could use a public facilities building for male and female somewhere near the waterfront.
- Water you can drink without gagging
- Lower taxes. Better drinking water.
- Most all....

- Elimination of truck through traffic. Elimination of warehouses along waterfront and main street. Revitalization of downtown with small businesses, relocation of gas stations and car dealers from the downtown.
- There are way too many substandard houses that bring down the value of real estate. We need to address this blight issue.

### 3. Describe how you see the City of Calais of the future.

- no comment (3)
- Open-lots of natural areas to sit, walk and enjoy. Downtown alive with small businesses-people shopping local stores. Busy harbor.
- Good sidewalks and parking, attractive buildings on Main Street, full of businesses, nice signs.
- Need stores for shopping-downtown.
- The same as it has been, maybe worse, the people and city council have NO vision
- As an attraction full of “Busy Ness” with a tax base for jobs, with a strong regional school offering a solid curriculum and advanced placement classes.
- I would hope to see it grow to a bustling border town with many opportunities and a travel destination.
- Calais has a large challenge ahead. It has to make the town someplace that will cause people to by-pass the new bridge and visit, we need restaurants, ports, waterfront development, etc.
- Hopefully a safe, clean, fun place that has lots to offer its citizens and tourists.
- There is no reason why Calais cannot draw tourists like Camden, Saint Andrews, and even Bar Harbor. Given our waterfront and scenic beauty. Calais a Downeast attraction for all economic groups capable of spending \$ in our area.
- I would love to see it grow and develop. I was born here and I would love to see it come back and be prosperous.
- Encourage and support the growth of the college . Plant trees. A center of trade and retail serving both sides of the border. A historic city, preserving and revitalizing its heritage. Inviting and attracting those who seek small town traditional and those who enjoy natural beauty. A city well organized by separating commercial-industrial functions from residential recreational and protected natural environment.
- We have started a Heritage Theme to attract tourists now we need to supply other attractions with the same theme. We arte too small to diversify. Other nature trails are a good plan. Could they walkway be extended to the Saint Croix lookout? A bike path? Encourage theater, a culture and heritage blend.
- Unless this community changes its focus in 10 years we will be less than we are now. Predicted 50% loss of population by 2017 (BDN). Community needs hope! More working poor. Need to invest in our infrastructure, namely educational opportunities, local schools, UNOBSKEY SCHOOL, WCCC. Time to think outside the box!
- A retirement community if we don’t get some good paying jobs to keep young people in the city.
- Fine, if we encourage education and waterfront development. We should try to attract a major industry like MBNA. We need to lower taxes or else we will lose population.
- Just like Eastport, abandoned.
- I won’t be here long term most likely...there isn’t enough to make me want to stay for the permanent long haul

- Calais will prosper if and when the Canadian dollar gets somewhat close to par. The Heritage Center is a wonderful addition. How will they sustain an interest the whole year with a fee involved? The new bridge may make Milltown a second downtown. Will Calais as a major shopping center survive? Will more chains and motels look our way?
- Bigger, better
- I would like to see the city retain small town character, but have more vitality- however retain individuality. Please do survey annually.
- A new international bridge is needed soon. Calais needs to encourage and support business- not run a business out of town for a few parking places.
- A retirement community unless things are brought in to create jobs that pay well to keep people in the area.
- There are too many empty buildings and businesses/retailers closing up to see a very bright or stable economic future.
- Bustling downtown with discount shops and small shops of novelties. Lower taxes with consolidation of high schools. A safe place for children and seniors- DRUG FREE. A small bus service. Also a river boat cruise that offered dinner and dancing.
- A draw for the area-both retail shopping and cultural
- As it stands now, dismal. The Downeast Heritage Center helps, but more is needed. The City Council needs fresh blood – be rid of special interest councilors.
- Unless jobs come to the area and taxes go down- probably a ghost town.
- A better and more aggressive coordination in unison with the citizens of the community to bring it into the next century.
- A retirement community if something isn't done to encourage business/industry.
- Hopefully improved. The waterfront/shoreline should be part of our salvation. However if shoreline property goes out of sight we may have difficulty attracting newer people.
- Status quo or a downward spiral.
- Haunted town, too many houses for sale
- If no industry is forthcoming and Domtar closes we will be in BIG Trouble. A casino, which Calais voted for would save us. Drugs, prostitution, and gambling are already here. If the poverty level were abolished these crimes would lessen. Have the Calais Regional Hospital disband the present Board of Directors and elect members in a municipal election.
- A retirement community.
- Develop a marina and area similar to Belfast/Camden area....bring in or develop shops, artisans, musicians, literate people who enjoy the waterfront and quaintness of area. Keep the "big box" stores out and develop small retail shops. Develop wonderful schools to draw people.
- Without more jobs and things to do I do not see the City of Calais as a fun place to visit. We need more business.
- Cultural center of Washington County
- It looks like we are going downhill fast. Need to add more building and business to add to tax base.
- In one word "Belfast." It is remarkable how that city has given itself a facelift during the past 10 years. True, MBNA played a major roll in all that has happened there but what a difference, especially the waterfront.
- Downhill from here unless some love is put into the town.
- Calais will be struggling to find that one thing will save Calais, so many years we have counted on the mills for support....I hope the city will embrace smaller projects, many of them that could make a difference, look for something unique
- Unless the level of services are maintained we will simply be a border crossing

- A hub for recreation
- An active waterfront with tours and cruises of the local area. Have city become a real destination area.
- Model city- waterfront access for boats, landing facility- Businesses and JOBS for ALL.
- Calais as a dynamic regional leader, small town atmosphere preserved.
- Develop waterfront. Push for Casino and/or high stakes Bingo
- At this time not very good. Poor-very poor outlook.
- I see the future of Calais as going downhill.
- Hopefully positive, risen from this “slump”

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 city of Calais has tailored these policies to the specific circumstances of Calais as they are raised in each of the major substantive areas (chapters) of this Comprehensive Plan. The city'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;
3. to support shoreline development that gives preference to water-dependent uses over other uses, that promotes public access to the shoreline, and that considers the cumulative effects of development on coastal resources;
4. to discourage growth and new development in coastal areas where, because of coastal storms, flooding, landslides, or sea-level rise, it is hazardous to human health and safety;
5. to encourage and support cooperative state and municipal management of coastal 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 reproduces the May 23, 2005 letter from Matt Nazar at the State Planning Office finding the Calais Comprehensive Plan to be consistent with the Planning and Land Use Regulation Act.

This version of the Comprehensive Plan contains the revisions referenced in Mr. Nazar's letter that finds the document consistent with the Planning and Land Use Regulation Act.



STATE OF MAINE  
EXECUTIVE DEPARTMENT  
MAINE STATE PLANNING OFFICE  
38 STATE HOUSE STATION  
AUGUSTA, ME 04333

JOHN ELIAS BALDACCI  
GOVERNOR

MARTHA E. FREEMAN  
DIRECTOR

May 23, 2005

Jim Porter, Assistant City Manager  
City of Calais  
P.O. Box 413  
Calais, ME 04619

Dear Mr. Porter:

The State Planning Office has received and reviewed the City's proposed modifications in a letter dated May 17, 2005. The changes to the City of Calais, Maine: The 2005 Comprehensive Plan are intended to address the inconsistencies and suggestions listed in SPO's April 16, 2005, finding letter. The proposed modifications address all of the inconsistencies and make the plan *consistent* with the Growth management Act. Congratulations. The City has done a fine job with this plan and we hope that it serves the residents of both the City and the region well.

Sincerely,

A handwritten signature in black ink, appearing to read "MNazar", written over a horizontal line.

Matthew Nazar, Director  
Land Use Program

Cc: Vinton Cassidy, Mayor, City of Calais  
Judy East, Washington County Council of Governments