

TOWN OF WHITING, MAINE



The Mill Pond at sunset

COMPREHENSIVE PLAN

2018

The Town of Whiting
2018 Comprehensive Plan

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A - VISION AND EXECUTIVE SUMMARY

The town of Whiting chose to update its 2004 Comprehensive Plan to update relevant statistics, to incorporate better digital mapping information, and to establish a sound policy basis for grant applications to support town needs and services.

EXECUTIVE SUMMARY

The purpose of a Comprehensive Plan is to provide a community with the information and a process to make choices about its future. The town of Whiting has involved its resident and non-resident community members in the development of this plan. It has also made use of extensive resources available through the US Census, several agencies of state government, the Washington County Council of Governments and geographic information system (GIS) mapping. The document will serve the town for a 10 to 12-year time horizon and, as a living document, will be revised and updated as new information and understanding develops.

Public Participation Summary

Community members were consulted through a town wide (resident and non-resident) survey and on-going invitations to participate in monthly meetings of the Comprehensive Plan Update Committee that spanned an 18-month period. The activities and draft documents of the Comprehensive Plan Committee were posted on the web site of the Washington County Council of Governments (<http://www.wccog.net/whiting-comprehensive-plan-update-2017-18.htm>) who provided consulting support to the town in the preparation of the Update.

The results of the survey are summarized in Chapter L – Town Survey Results and written comments are reproduced in their entirety in Appendix A – Town Survey and Written Comments. Survey input informs policy development in each chapter throughout the document.

A required element in any local Comprehensive Plan is a Vision Statement that summarizes the community's desired future community character in terms of economic development, natural and cultural resource conservation, transportation systems, land use patterns and its role in the region. A vision statement for the town was generated from the collective input provided by the survey, particularly written comments, and the development of the plan.

Town of Whiting Vision Statement

The town of Whiting envisions a future with many similarities to the present. The village center will continue to be the center of civic life where residents obtain local access to public and commercial services. There will be some growth within the village to provide more retail, food, and tourism-based services. The Whiting School will continue to provide primary school education. Regulations will be enforced and properties will be cleaned up to improve the town's aesthetic appeal. The mill pond will remain and also allow fish passage. Historic structures and cemeteries will be preserved and celebrated and the peaceful rural character of the community will endure. Route 1 will continue as both "Main Street" for the village and as the most important transportation corridor in the town and the coastal region of eastern Washington County. Whiting will cooperate with neighboring towns and with Maine DOT to add shoulders, turn-outs and passing lanes to increase mobility along

the corridor while also regulating access to minimize conflicts and ensure the safety of freight and commuters.

The following provides the summary of key findings and policies from each section of the document. Readers are directed specifically to the Policies and Implementation Strategies section for greater detail about the choices Whiting is making about its future growth and development.

History

Whiting is a small rural town in coastal Washington County with historical roots that date back to pre-revolutionary settlement. These follow prehistoric archeological activity that is documented along the shores of Rocky Lake. Like the rest of Washington County population grew steadily through the 1800s based on self-sufficient farming, a strong timber industry, shipbuilding, and more recently seafood processing. Many residents left for better land and western opportunity after the Civil War. Population went through a steady decline from the post-Civil War period until the 1970s. Many new residents arrived in the period between 1980 and 2010 associated with a back to the land movement, improved transportation infrastructure, and the lure of coastal property. Whiting has an active Historical Society that seeks to respect and maintain the integrity of its material and written history.

Key Findings and Highlights

Inventory and Analysis

- Since the 2003 Comprehensive Plan the Union Meeting House (153 US Route 1) was placed on the National Register of Historic Places
- There are 5 sites of potential historic significance and listing on the National Register of Historic Places.
- There are 5 sites of prehistoric archeological significance in Whiting associated with the shorelines of Rocky Lake.

Policy

- Whiting will protect and preserve known archaeological and historic sites and promote awareness of the history of Whiting.

Population

The population of Whiting grew substantially between 1980 and 2000 but has stabilized in the last 17 years, and our population is aging. There are fewer school age children and our town has seen a decrease in the average household size. Numbers of retiree and perhaps single parent households are increasing.

Key Findings and Highlights

Inventory and Analysis

- Whiting's population grew significantly between 1980 and 2000 and has leveled off with little or no growth in the last 5 years.
- Overall population is aging with an increase in median age of nearly 10 years since 1990 from 35.8 to 45.7.
- Household size is declining while the number of households is increasing as "empty nesters" and retirees occupy more of the town's housing stock.
- There are an increasing proportion of houses that are vacant as well as an increasing proportion that are used for seasonal, recreational or occasional use.
- School enrollment is declining but educational attainment is increasing.

Policy

- Whiting will actively monitor the size, characteristics and distribution of its population in collaboration with regional partners.

Natural Resources

The natural resources of Whiting are considerable, mostly grounded in forestlands. There is an extensive network of rivers, streams, impoundments, natural lakes and wetlands. These resources support a variety of rare and endangered species, deer wintering areas, and four Focus Areas of Statewide Ecological Significance. There is a short stretch of marine coastline in the southwest corner of the town where Route 191 traverses along the shoreline of Holmes Bay. Whiting's natural resources contribute significantly to its quality of life providing open spaces for wildlife and recreational opportunities such as fishing, boating, snowmobiling, hunting, canoeing, hiking, and cross-country skiing.

Key Findings and Highlights

Inventory and Analysis

- The majority of forest management operations between 1991-2014 are selection or shelter wood harvests with a few clear-cut operations. Only 157 acres out of close to 16,000 have changed use over the same time period.
- Most agricultural land in Whiting produces blueberries with some cranberry production.
- Whiting does not participate in the Federal Flood Insurance Program but is updating its Shoreland Zoning Ordinance to adhere to the 2015 DEP minimum guidelines.
- There are extensive networks of freshwater lakes, ponds, rivers and streams supporting habitat for a diverse range of avian, aquatic, terrestrial species several of which are rare or endangered as well as portions of four Focus Areas of Statewide Ecological Significance.
- There are several sand and gravel aquifers within Whiting that yield between 10 and 50 gallons per minute (GPM) and one community water supply located at the Elementary School.
- Three boat launches provide public access to Whiting's lakes.

Policy

- Whiting will develop and maintain ordinances to protect Whiting's natural resources as well as form partnerships to educate residents on value of natural resources.
- Encourage the use of prime farmland for commercial agriculture or forestry and support long-term economically viable and environmentally sustainable forest management within Whiting.

Economy and Employment

Whiting's economic base is rooted in its natural resources including maritime food and food processing, regional tourism, and exceptional shoreland and scenic beauty. Median incomes in Whiting are higher than in the rest of the county and poverty rates are lower. A single manufacturer, Looks Gourmet Food, provides most of the employment. However, there are also a variety of retail and service businesses supported by residents, visitors and second home owners. The vast majority of employed residents commute to regional service centers for work.

Key Findings and Highlights

Inventory and Analysis

- The number of jobs located within Whiting has increased from 6 in 2002, to 43 in 2015 with the location, after 2002, of the largest employer, Looks Gourmet Food. Other local employers are mostly small contractors and retail.
- Taxable sales data is only available at the Economic Summary Area (ESA) level. Whiting is part of the Machias ESA which has experienced modest growth in both total retail and consumer retail sales between 2011 and 2016.

- The top three sectors of employment for Whiting are ‘Management, business, science and arts occupations’; ‘Service occupations’ and; ‘sales and office occupations’
- With a mean travel time to work of 26.7 minutes Whiting residents are traveling further than the Washington County average (19.2 minutes).
- Whiting’s median household income in 2016 has increased considerably in the last few decades: by 154.7% since 1990 and by 88% since 2000; it now surpasses the median income for both the County and the State. However, very high margins of error in the American Community Survey persist in the analysis of economic conditions. The largest cohort of households, with incomes in the \$50,000-\$74,999 range of income includes 45 households, for instance, constitutes nearly one third of all Whiting households and its margin of error is +/-45.
- Nine and a half percent of Whiting families were listed as having incomes below the poverty level in 2016 about half the rate than for the entire county (18%).

Policy

- Develop land use ordinances to attract, enhance and support existing and future development, while minimizing impact of non-compatible uses.
- Provide support for roads, parks, public transportation or other infrastructure and activities that materially aid the town’s economy.
- Support those who are eligible for state, regional, or local public assistance programs.

Housing

As a rural town with a very small village center housing is widely dispersed along Route 1 and secondary roads. The State of Maine defines affordable housing as not costing more than 30% of household income. The data suggest that the cost of housing in Whiting is only affordable for about one-third of the population of Whiting and 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. There is no existing zoning ordinance and so it does not impose significant costs on the cost of building homes. The percentage of homes owned by those in the workforce is likely to decline further while the percentage of homes owned by retirees - both those from away and natives - will increase.

Key Findings and Highlights

Inventory and Analysis

- The age of the housing stock in Whiting is comparable to Washington County with 26.1% built before 1939 and 55% built before 1980.
- Eighty-one percent of the vacant housing units in Whiting are used for seasonal or recreational use, a reflection of the many shorefront properties located along Whiting’s several freshwater lakes and ponds.
- Whiting has a lower proportion of both mobile homes and trailers (~10 %) than in Washington County (12.2%) and of multi-unit structures (2%) than in Washington County (~8%).
- Monthly housing costs for about a third of Whiting households exceed 30% of monthly income: 35% of households paying a mortgage and 30.8% of those paying rent.
- Approximately 20% of households in Whiting are unable to afford the Median Home Price in the Machias LMA Housing Market
- Whiting has no facilities or developments to serve low and moderate income housing needs. The closest such facilities are located in Dennysville, East Machias, Lubec, and Machias.

Policy

- Encourage and promote affordable and workforce housing to support the community’s economic development.
- Pursue programs and regional agencies with access to grant funds that can assist in rehabilitation of existing, sub-standard housing stock.

- Ensure that any existing or future codes and ordinances encourage quality affordable housing and promote public health and safety.

GIS Mapping

GIS, or Geographical Information System, is a computer mapping system designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data. A geographic information system (GIS) lets us visualize, question, analyze, and interpret data to understand relationships, patterns, and trends.

GIS applications are tools that allow users to create interactive queries (user-created searches), analyze spatial information, edit data in maps, and present the results of all these operations on one or more maps. This enables people to more easily see, analyze, and understand patterns and relationships.

Key Findings and Highlights

Inventory and Analysis

- An online GIS mapping service (<http://gro-wa.org/planners-maps.htm>) is maintained as GIS data changes and provides Whiting access to their parcel maps and the spatial information available in the town.
- Efforts to maintain, update and provide Whiting's parcel mapping data to the UMM-GIS Services Center is rooted in the dynamic nature of spatial information and the speed with which our culture, economy, and infrastructure is changing.
- There are written and video training resources available geared to different learning styles and levels of experiences (<http://www.wccog.net/online-gis-written-instruction-guides.htm>)
- Several state agencies also maintain a variety of online web-viewer mapping tools including the Maine Drinking Water Program, the Maine Department of Transportation, and the Beginning with Habitat program

Policy

- Whiting will use current spatial information to inform its land use and transportation policy choices.

Transportation

Whiting residents must travel to adjoining communities for most work and shopping opportunities, so we are affected by the condition of many arterial roads in Washington County. Transportation linkages in town consist primarily of US 1 and State Routes 189 and 191. Our town relies on its road network as its primary transportation network. Therefore, local roads need to provide safe, reliable access to work, school, stores, and residences. Overall, our roadways are in good condition. Given limited funding and the significant expense, our town has done a noteworthy job of maintaining its roads. Continued proper and affordable maintenance of the road network in Whiting is in the best interests of all residents. All new roads, subject to subdivision review, must be constructed to specific standards. MDOT has jurisdiction over most main roads and bridges within Whiting, so the town will continue to communicate and cooperate with the department.

Key Findings and Highlights

Inventory and Analysis

- Overall Whiting's roads are in good condition.
- Average annual traffic counts have decreased in the last decade.
- Bridge Replacement of New Crane Bridge over the Orange River is proceeding over the 2018 construction season.

- Pedestrian safety measures are needed at Whiting Corner near the Elementary School.
- Whiting completed reconstruction of the Halls Mills culvert/bridge with funds from the “Grants for Stream Crossings Public Infrastructure Improvement Projects” program of the Maine Department of Environmental Protection.

Policy

- Support efforts to ensure adequate carrying capacity, maintenance and upgrading of existing Arterial and Collection Roads through access management provision of state law.
- Promote public health, protect natural and cultural resources, and enhance livability by managing land use in ways that maximize the efficiency of the transportation system and minimize increases in vehicle miles traveled.
- Plan for optimum use, construction, maintenance and repair of roads to create a safe and efficient transportation system.
- Meet the diverse transportation needs of residents (including children, the elderly and disabled) and through travelers by providing a safe, efficient, and adequate transportation network for all types of users.

Public Facilities and Services

Through proper maintenance and investment, Whiting’s public facilities and services have remained in good condition overall. Town residents have expressed a broad level of satisfaction with a wide range of these public facilities and services. Whiting has established a Capital Improvement Plan as further discussed in the fiscal capacity section and has reserve accounts for transportation and community facilities maintenance. Prudent management decisions at the local level have prevented the town from being forced to make large capital investments within one tax year.

Key Findings and Highlights

Inventory and Analysis

- Whiting’s fiscal year runs from July to June and the annual Town Meeting is held in September.
- Whiting owns three buildings, the Community Center containing the Town Office, Fire Department, and multi-purpose and meeting rooms, the Union Meeting House and the Whiting Village Elementary School.
- Municipal services are provided by a full time Administrative Assistant serving as Clerk, Treasurer and Registrar of Voters; other staff functions are provided by part time staff and contractors.
- Whiting has curbside garbage pick-up, but no central water or sewer system and no recycling facilities.
- Police protection is provided by the Washington County Sheriff and the State Police. Emergency response is provided by the Downeast Regional Emergency Response Service and the Machias Ambulance Service. E-911 is fully operational throughout the town.
- Whiting has a volunteer Fire Department with mutual aid agreements with several neighboring municipalities.
- The Whiting Village School serves elementary students; secondary students can attend the Machias Memorial High School or Washington Academy in East Machias.

Policy

- Local services will be efficiently maintained and will address community needs.
- Maintain/upgrade existing recreational facilities as necessary to meet current and future needs.
- Encourage recreational opportunities and increase public access to surface water.

Fiscal Capacity

Whiting has been doing very well in managing its finances over the last five years and the mil rate has increased slightly from 0.01295 in 2015 to 0.0134 in 2016. The substantial decreases in State revenue sharing and in tree growth reimbursements between 2010 and 2016 have been offset by

increases in excise taxes and property taxes. The town has prepared a Capital Improvement Plan that has prioritized public improvements over the next ten years.

Key Findings and Highlights

Inventory and Analysis

- Whiting had a total town-wide revaluation in 2010 and town's current state certified assessment ratio is 100% of market value
- Whiting's total real and personal property valuation nearly tripled from \$21,544,965 in 2001 when the last Comprehensive Plan was prepared to \$66,846,400 in 2015
- The mil rate in Whiting increased slightly from 0.01295 in 2015 to 0.0134 in 2016
- Nearly 50% of total expenditures went to education in 2016 as compared to about 46% in 2012.
- Between 2010 and 2016 State revenue sharing decreased by 9.2% and tree growth reimbursements decreased by 49.6%.

Policy

- The town has prepared a modest Capital Improvement Plan that has prioritized public improvements over the next ten years.

Land Use

Whiting is experiencing modest development pressure primarily along shoreland areas. Building permit data indicate a steady rate of home construction and a high level of renovation for additions, decks, sheds, and so on. There is limited retail and commercial development located in the Village area and associated with home-based businesses. Existing land use patterns - historical, recent and current - are reviewed and anticipated into the future. The recommended land use plan is shaped by this analysis, public survey input, and by the inventory and policies from each section of the comprehensive plan. This plan is intended to protect the character of the town and to direct residential, commercial, industrial and maritime activities to appropriate areas. It also seeks to support economic activity in the fishing industry and with a mixture of activities necessitated by seasonal and diverse rural livelihoods.

Key Findings and Highlights

Inventory and Analysis

- Historical activities such as shipbuilding and agriculture have shifted to shoreline residential development with much forestland and scattered blueberry production.
- Existing land uses constitute a mixture of residential, commercial and home occupational uses with a small concentration of higher density within the Whiting Village area and near the border with East Machias.
- The largest employer, Looks Gourmet Food, operates on the shore of Holmes Bay.
- Limited development pressure is most evident near the East Machias border and along lake and river shorelines.
- Whiting has experienced little or no population growth in the last 5 years and 81 percent of the vacant housing units in Whiting are used for seasonal or recreational use.
- A very modest growth rate in both residential and commercial activity is expected to continue into the near future.

Policy

- Whiting proposes three Growth Areas: Mixed Use (MU) in the Whiting Village and an area along US 1 at the East Machias border, and Medium Density Residential (R3) surrounding the village area; and 4 Rural Areas: Low Density Residential (R3), Resources Forestland/Residential (RF/R), Conservation District (CD), and Aquifer Protection Overlay District (APOD).

Town Survey

A survey in both paper and online format was circulated in the Fall of 2017. Paper copies of the survey were mailed to all property owners. Appendix A – Public Opinion Survey and Written Comments provides all of the written comments it generated as well as a copy of the blank survey.

This chapter provides charts and diagrams of the responses where respondents chose from among a variety of answer choices. Planning Committee members worked to encourage participation through word of mouth.

Key Findings and Highlights

Inventory and Analysis

- Typical for municipal surveys of this kind, respondents were disproportionately older, primarily year-round residents, and whether seasonal or year-round, longtime residents.
- Residents travel to many locations for work; most to Machias or Lubec, and many are retired.
- Respondents tended to support efforts to actively encourage growth in general and to encourage a) new commercial and retail development and b) affordable residential development in particular. They generally opposed the encouragement of new industrial development.
- Respondents expressed strong support for additional conservation of land in Whiting, clear support for the creation of more public parks, trails or boat launches, and very strong disagreement on the need for sidewalks in the village.
- There was broad based agreement on the use of regulations to protect the economic value of property and promotion of quality of life.
- Opinions are very mixed on whether Whiting should request full assessed taxation on conservation land but strongly in agreement with preserving scenic and historic/cultural sites.
- Many written comments expressed concern about properties with “junk all over the place”.
- Respondents are generally satisfied with road maintenance and street lighting; exceptionally satisfied with waste disposal services; satisfied with the protection and equipment of local and regional first responders; and very satisfied with town office staffing, facilities and services. Satisfaction with the elementary school and with recreation and community services was generally positive.
- Support was expressed for growth and development to be encouraged in the town center and near existing development.

Regional Coordination

Whiting is a rural community situated 102 miles to the northeast of Bangor, 34 miles to the southwest of the city of Calais, and 17 miles east of the county seat in Machias. Whiting shares a border with the towns of Cutler to the south, East Machias and Machiasport to the west, and the Unorganized Territories of Marion, Edmunds, and Trescott Townships to the north and east. Commercial retail activity is limited in Whiting. Retail services and employment are sought primarily from larger regional centers in Calais, Machias, and Bangor.

Key Findings and Highlights

Inventory and Analysis

- Regional transportation infrastructure within Whiting is limited to the Route 1 corridor, a significant pass through for freight and commuters.
- Whiting has one regional employer, Looks Gourmet Food, and the overwhelming majority of Whiting residents work outside of Whiting.
- Whiting is part of three (Cobscook Bay, Cutler Grasslands, Machias Bay) and fully contains one Focus Area of Statewide Ecological Significance (Orange River Complex).
- Elderly and low income Whiting households must travel/move to larger centers in Washington County to find affordable housing developments.
- The town of Whiting contracts both with the Washington County Emergency Medical Services Authority and with the town of Machias for ambulance services, participates in mutual aid with neighboring towns, and obtains police protection from the State Police and County Sheriff’s Department.
- Solid waste is shipped to the Marion Transfer Facility in Marion Township.
- Whiting contracts with an animal control officer on an on-call, stipend basis and utilizes the animal shelter in Machias.

- The Whiting Village School operates within AOS 96, which includes eight other schools.
- None of the adjacent organized municipalities (Cutler, East Machias, Machiasport) has adopted town wide zoning; however, the three neighboring unorganized territories (Edmunds, Marion, Trescott) have zoning administered by the Land Use Planning Commission.

Policy

- **Public Facilities:** Cooperate on the delivery of regional services and endeavor to achieve economies of scale where feasible.
- **Regional Development:** Participate in regional organizations that provide technical assistance and information about business support and regional economic development opportunities.
- Coordinate the town's land use strategies with other local and regional land use planning efforts.
- Advocate for infrastructure improvements to enhance the economic competitiveness of Whiting and Washington County.
- Encourage and support regional development efforts that promote affordable, workforce, and senior housing.
- **Regional Transportation:** Cooperate in the development of regional transportation policy.
- **Natural Resources:** Protect shared critical habitats.
- Ensure that water quality is sufficient to provide for the protection and propagation of fish, and wildlife and provide for recreation in and on the water.
- **Land Use:** Coordinate Whiting's land use strategies with other local and regional planning efforts to protect critical rural and natural resource areas.

Map Disclaimer:

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B - HISTORY AND ARCHEOLOGICAL RESOURCES

Whiting is a small rural town in coastal Washington County with historical roots that date back to pre-revolutionary settlement. These follow prehistoric archeological activity that is documented along the shores of Rocky Lake. Like the rest of Washington County population grew steadily through the 1800s based on self-sufficient farming, a strong timber industry, shipbuilding, and more recently seafood processing. Many residents left for better land and western opportunity after the Civil War. Population went through a steady decline from the post Civil War period until the 1970s. Many new residents arrived in the period between 1980 and 2010 associated with a back to the land movement, improved transportation infrastructure, and the lure of coastal property. Whiting has an active Historical Society that seeks to respect and maintain the integrity of its material and written history.

Summary of Key Findings

- Since the 2003 Comprehensive Plan the Union Meeting House (153 US Route 1) was placed on the National Register of Historic Places.
- There are 7 sites of potential historic significance and listing on the National Register of Historic Places.
- There are 5 sites of prehistoric archeological significance in Whiting associated with the shorelines of Rocky Lake.

The History of Whiting, Maine by Gladys Hall Forslund provides an in depth and intriguing description of the settlement and early life of our town, its residents and the region's development. Some of the key events from our past have been summarized in this section from that volume and from the recollections of Donald Look, Laura H. Dennison, and others.

First surveyed in 1785, Township 12 also was called Orangetown for the Orange River that runs through the village, and later was incorporated as Whiting. The township originally was granted to Colonel John Allan in 1788 on condition that 6,000 acres be reserved for people already living in the area, and 3,950 acres be reserved for veterans of the American Revolutionary War. The following families had lands reserved for their settlement: Delesdernier, Avery, Albee, Preble, Ayer, Flagg, Runnels, Dillaway, Edwards, Bryan, Nyles, Libby, and Harvey.

Colonel Allan played an important role in Revolutionary America and later exerted much influence on the affairs of Whiting and Maine, as a member of the State Legislature. Allan's descendants were also prominent in early Whiting history. Colonel Allan was highly successful in his contact with Indians and, as the historian William Kilby said in 1888, "had not the neutrality of the Penobscot, Passamaquoddy, St John and Micmac Indians been secured, the infant settlements in eastern Maine could have hardly maintained their existence."

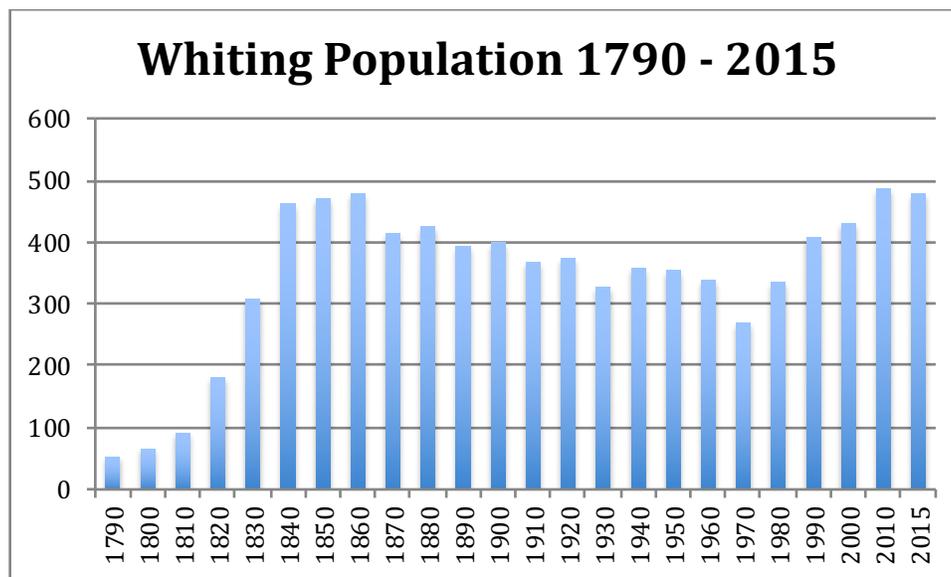
A scattering of settlers first established homes at Whiting Village on innermost Passamaquoddy Bay. Others actively attempted to inhabit the remote countryside near Gardner Lake where Ichabod Jones, Jonathan Longfellow and David Gardner established a double sawmill in 1770. Still others settled the shores of Eastern Bay in what is now the Holmes Bay region of Whiting.

Under a State Resolve of 1790, additional lands in Township 12 were granted to settlers "to be laid out so as best to include their improvements." Among these settlers were Major Lemuel

Trescott and Colonel John Crane, with grants of 200 acres each. Grants of 100 acres were given to these families: Ackley, Huntly, Gardner and Nickerson. The 1790 Census listed the following heads of households: Davis Bryant, John Crane, John Dowling, Thomas Harvey, Sarah Howe, Frederick Huntley, Jabez Huntley Jr., Izachar Nickerson, George Peck, and Lemuel Trescott.

The 1790 Census recorded 54 inhabitants in the township. The population climbed to a height of 479 in 1860 with some fluctuations since then and an overall trend downward to a minimum of 269 residents in 1970. Since then the population has somewhat rebounded to 430 residents in 2000.

Whiting – Historical Population



Source: US Census, American Community Survey 2010-2015 Estimate

In 1816 the township had listed for assessment only 12 houses and 8 barns located in the following areas:

Holmes Bay: Benajah Ackley, 1 house, 1 barn; Ellis Drew, 1 house, 1 barn; Samuel Ackley, 1 house

Gardner Lake : Enoch Hill, 1 house, 1 barn; Pearl Howe, 1 house, 1 barn; John Munson, 1 house; James Dowling, 1 house; John Dowling, 1 house

The Village: Isaac Crane, 1 house, 1 barn; Horatio Allan, 1 house, 1 barn; Abijah Crane, 1 house, 1 barn; John Allan, 1 house, 1 barn

The earliest families to inhabit the Gardner Lake area in the western portion of the town were located on the southern and eastern shores of Gardner Lake (sometimes also called Quaker Lake), which was named after David Gardner, a Quaker from Nantucket who very early had acquired land, and in connection with other men built a sawmill at the outlet of the lake. These

settlers included: Beverley, Boxwell, Chase, Crosby, Dowling, Davis, Gardner, Hill, Howe, Demmons, Huntley, West, and Munson. (Still later, families to come were Dwelley, Foster, Diamond, Stevens, Whitney, Griffin, Cates, Stoddard, and Hostetter.)

Long before they were incorporated as a town, residents held plantation meetings to see how best they could help themselves and each other. Plantation meetings were held in 1817 and 1818 at the house of Enoch Hill (on the hill behind the cemetery) and in 1819 at the schoolhouse, which had probably been quite newly built.

In 1819 the residents of Maine voted for separation from Massachusetts, with a vote in the township of 11-3 in support of this separation. In the following year, the State of Maine entered the Union.

In 1821 the settlers met again at Enoch Hill's house where they elected officers again. This time Pearl Howe was made Treasurer and Simeon Howe took the office of Town Clerk. At one of these early meetings there was not a piece of paper in town to record the minutes on. Then in 1825 (some of the settlers already had been at Gardner Lake close to forty years) the inhabitants petitioned the government to allow them to be incorporated as a town. Pearl Howe and Enoch Hill of Gardner Lake and 49 others signed the petition.

On February 15, 1825, Township 12 was incorporated into the Town of Whiting. Residents accepted the offer of prominent local landholder, Timothy Whiting to name the town after him, on condition that he give the town 400 acres, the revenue from which was to be used to fund the public school.

In November 1833 a Congregational Society was organized in Whiting. Three years later, a joint committee of the Congregational Society and the Methodist Episcopal erected the Union Meeting House. Both groups combined and shared the building, which they later named the Community Church of Whiting. Since that time the building has retained its character with few changes. The village cemetery is located behind the church and includes the gravesite of General John Crane, presumed to be the first white settler in the area. In his military career he was known for his participation in the Boston Tea Party.

Farming

Farming sustained the early inhabitants of Whiting. Farms averaged 100 acres with a variety of crops including oats, wheat, buckwheat, rye, potatoes and turnips. Before mechanization, oxen were used almost exclusively for farm work. Sheep raising was essential in early farming, with wool for clothing and meat supporting the diets of residents. On average there were 200 sheep in the town with a high of 274 in 1870. Sheep roamed freely, being distinguished by owner using earmarks.

It was common for settlers to lease land from land companies or non-residents, in addition to their own holdings, to expand production. The burden of these transactions fell upon the tax collector, as the lessee was responsible for taxes. Except for taxes, initially very little exchange of money occurred locally, with most transactions done through barter. To bring in money for their families to pay taxes and purchase the newly available abundance of consumer goods,

farmers in the late 1800s often sought work in mills, as loggers in the winter, by repairing roads, and by taking to the sea.

As the family farm lost self-sufficiency by 1900, specialization in poultry and dairy farming occurred on a limited basis in Whiting. By 1920 many family farms and fallow lands were consolidated by large landholders and put into blueberry production. This cash crop has become a mainstay in the county's agricultural base to the present day.

Industry

The lumber industry was a substantial part of the economy in our heavily forested region, as it was statewide. For those who couldn't get logging or mill jobs in Maine, some traveled to the Midwest to work as loggers on a seasonal basis. Many eventually decided to remain there and the town's population reflected this loss. Gardner Lake settlement had the greatest population loss, as it was the only community in town that did not have its own industry to help sustain local employment.

Hall's Mills and Holmes Bay each had one sawmill. In Holmes Bay, records show Edward Small, Thomas Colby and Timothy Whiting were assessed in 1816 for the mill there. Ownership of the mill changed several times, and by 1859 Solomon Seavey was the sole owner.

Whiting Village had several sawmills, gristmills, boatyards, and other marine businesses like an Alewife fishery, as well as blacksmithing and small mercantile stores. Local mill owners often operated these stores. Boynton and Estey built the largest of these stores in 1903 or 1904. Taverns and boardinghouses began to appear in the township as early as the 1830s. W.S. Peavy operated a hotel on the hill, which later housed a telephone exchange and Post Office. The Indian Lake Inn began around 1920 and had a popular dance hall.

Three families carried out considerable small boat business locally: the Chases, Dinsmores, and Wheelers. Shipbuilding at the Whiting shipyard, located on the south side of the Orange River near the rear of the Fred Gilpatrick property, began in 1825. Notable ships built here include the Quoddy Belle, a brigantine of 160 tons, launched in 1849 with cargo and 33 passengers on a trip around Cape Horn and eventually arriving at California. Interestingly, those in the lumber business often owned shares in one or more ships made from their lumber. Accordingly, at one time, there were 26 schooners, 13 vessels and 3 brigs under partial or full ownership of local residents.

In 1915 the town's current industrial base was formed when Willard Look and Elmer Look started a clam business at Holmes Bay. The business began as the direct result of Willard being refused by a dealer in western Washington County of twenty-five cents a barrel for clams he had dug. Willard later became sole owner and leased the Carroll Gardner plant in Eastport, which he operated in conjunction with the Holmes Bay business from 1925 to 1929.

In 1927, after graduating from Washington Academy in East Machias, Willard's son, Anthony M. Look, became affiliated with the firm. Other Look sons joined the canning company in ensuing years. Austin came into the business about 1934; Shirley joined in 1938; and by 1947 both Donald and Lynn were important partners in the successful venture.

The processing plant expanded in the 1930s to 2,160 square feet of working area. The current processing facility was constructed in 1960 and provides 9,600 square feet of working area and is Whiting's single largest employer. Clams, clam juice, fish spreads, lobster, fish chowder, hake, salmon, crab and shrimp are all processed at the Whiting facility.

In addition to managing a successful business, the Look family has been continually active in town affairs.

Transportation

Before the settlers arrived, Native Americans traveled between their seasonal camps and fishing grounds from Passamaquoddy Bay and Machias Bay using tidal bays, rivers and lakes. They were able to cross the watershed in Whiting via Whiting Bay, the Orange and East Machias rivers; Josh Pond; and the Orange, Sunken, and Gardner lakes. A short portage between Sunken Lake and Josh Pond was the only barrier to the water route. The development of carriage paths and later roads was slow and costly to local residents who were taxed to upgrade and maintain roadways. Many labored on the roads to work off their tax.

In 1822 local petitioners requested the assessors "to examine and lay out a road to Holmes Bay" and (other petitioners) asked for a road around Gardner Lake. Both plans were accepted, but the Holmes Bay Road was a problem in 1827 when the court cited the town for failure to build a bridge for that road. By 1835 a stagecoach road had been built from East Machias through the Gardner Lake Settlement, and north through Marion, Dennysville, and to Calais. In 1845 a road was constructed from Holmes Bay to Jeremiah Munson's on the County Road between East Machias and Lubec.

By the mid 1800s, town and county roads were established in their present locations. The main county road (now US 1 and SR 189) between East Machias and Lubec bisected Whiting. Secondary roads led to the settlements around Gardner Lake, Connecticut Mills, Roaring Lake, and Holmes Bay. In 1887 Whiting voted to build a road from Whiting Village to the Cutler town line. Portions of that roadway have survived.

Historic Buildings

The Maine Historic Preservation Commission (MHPC) maintains an inventory of important sites including buildings or sites on the National Registry of Historic Places (NRHP).

According to the Maine Historic Preservation Commission the following property is listed in the National Register of Historic Places:

- Union Meeting House, 153 US Route 1

The following property is eligible for listing in the National Register:

- Whiting Stone Dam, 160 US Route 1

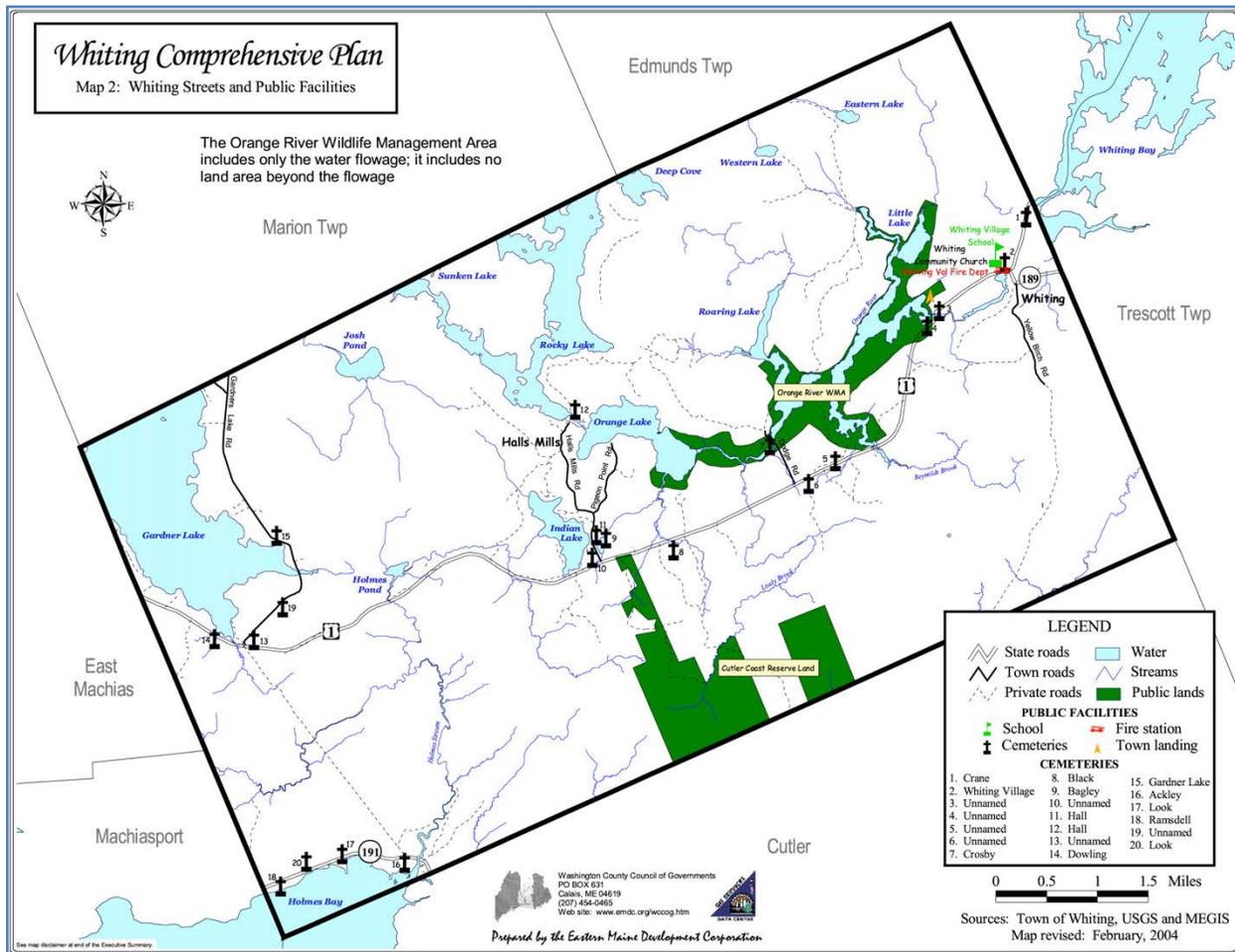
And, based on preliminary architectural survey data, the following farmsteads may be eligible for listing in the National Register as part of a rural historic district:

- 219, 212, 199, and 197 River Road.

According to MHPC a comprehensive survey of Whiting's above-ground historic resources is needed in order to identify other properties that may be eligible for nomination to the National Register.

Cemeteries

Cemeteries are also a cultural resource providing insight into the history of the community. An inventory of Whiting cemeteries and burial sites is shown on a map created for the 2002 Comprehensive Plan and depicted below.



Map 2 from the 2002 Whiting Comprehensive Plan noting names and locations of cemeteries in Whiting.

Archeological Sites

Two types of archaeological sites need consideration during Growth Management Planning: prehistoric archaeological sites (Native American, before European arrival) and historic archaeological sites (mostly European-American, after written historic records about 1600 A.D.).

The Maine Historic Preservation Commission (MHPC) is the central repository in the state for archaeological information. MHPC survey files include computer files, map sets, paper data forms, field notes, detailed unpublished reports, photographic archives, and published works. Archaeological files are accessible only with permission to protect sensitive archaeological sites and landowners' privacy. Summaries of sensitive archaeological information are made available for Growth Management planning. The standard of what makes an archaeological site worthy of preservation will normally be eligibility for, or listing in, the National Register of Historic

Places. Because the National Register program accommodates sites of national, state and local significance, it can include local values. Because of physical damage to a site and/or recent site age, some sites are not significant.

Prehistoric archeological sites include campsites or village locations, rock quarries and workshops (from making stone tools), and petroglyphs or rock carvings. Prehistoric archaeological site sensitivity maps are based on the current understanding of Native American settlement patterns (known site locations and professionally surveyed areas) within the portion of the state where the municipality is located. Most commonly, prehistoric archaeological sites are located within 50 m of canoe-navigable water, on relatively well-drained, level landforms. Some of the most ancient sites (>10,000 years old) are located on sandy soils within 200 m of small (not canoe-navigable) streams.

According to MHPC there are five known prehistoric archaeological sites located within Whiting, according to the Maine Historic Preservation Commission (MHPC). Four on the shore of Rocky Lake. The only professional archaeological survey has been done on the shores of Rocky Lake. No mapped archaeological data is available at present due to limited staff GIS capabilities at MHPC. MHPC further notes that the shorelines of all other lakes in Whiting, and the banks of the Orange River need professional archaeological survey.

Historic archaeological sites may include cellar holes from houses, foundations for farm buildings, mills, wharves and boat yards, and near-shore shipwrecks. Historic archaeological sites can be predicted most often by a review of historic records, maps and deeds. Settlement often focused on transportation corridors, first rivers, then roads as they were built. Archaeological sites from the first wave of European settlement in any town are likely to be significant (National Register eligible).

According to MHPC no historic archaeological sites have been documented for the town as of November 2016. MHPC further notes that no professional surveys for historic archaeological sites have been conducted to date in Whiting. Future archaeological survey should focus on the identification of potentially significant resources associated with the town's agricultural, residential, and industrial heritage, particularly those associated with the earliest Euro-American settlement of the town in the 18th and 19th centuries.

C - POPULATION

A fundamental element in Whiting's Comprehensive Plan is the town's population and how that population is changing over time. The ultimate goal of a comprehensive plan is to provide for a proper relationship between the town'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 town's future population.

Summary of Key Findings

- Whiting's population grew significantly between 1980 and 2000 and has leveled off to little or no growth in the last 5 years.
- Overall population is aging with an increase in median age of nearly 10 years since 1990 from 35.8 to 45.7.
- Household size is declining while the number of households is increasing as "empty nesters" and retirees occupy more of the town's housing stock.
- There are an increasing proportion of houses that are vacant as well as an increasing proportion that are used for seasonal, recreational or occasional use.
- School enrollment is declining but educational attainment is increasing.

POPULATION STATISTICS

Populations and Growth Rates

The following table shows the year-round population and growth rate by decade in Whiting, Washington County and Maine since the turn of the 19th century.

Table C-1 Population and Growth Rates

Year	Whiting		Washington County		Maine	
	Number	% Change	Number	% Change	Number	% Change
2015	478	-1.8%	31,625	-3.7%	1,329,453	0.1%
2010	487	13.3%	32,856	-3.2%	1,328,361	4.2%
2000	430	5.65%	33,941	-3.87%	1,274,923	3.83%
1990	407	21.49%	35,308	0.99%	1,227,928	9.18%
1980	335	24.54%	34,963	17.09%	1,124,660	13.37%
1970	269	-20.65%	29,859	-9.27%	992,048	2.35%
1960	339	-4.24%	32,908	-6.48%	969,265	6.07%
1950	354	-1.12%	35,187	-6.83%	913,774	7.85%
1940	358	9.48%	37,767	-0.16%	847,226	6.25%
1930	327	-12.57%	37,826	-9.31%	797,423	3.83%
1920	374	1.63%	41,709	-2.79%	768,014	3.45%
1910	368	-7.77%	42,905	-5.14%	742,371	6.90%
1900	399	-	45,232	-	694,466	-

Source: U.S. Census Bureau

The overall trend in Whiting is one of decline between 1900 and 1970, significant growth between 1979 and 1990, slower growth until 2000 and a leveling off of growth in the last 15 years. In the last 25 years Washington County has steadily lost population while Maine has grown though in far less robust fashion in the last 10 years.

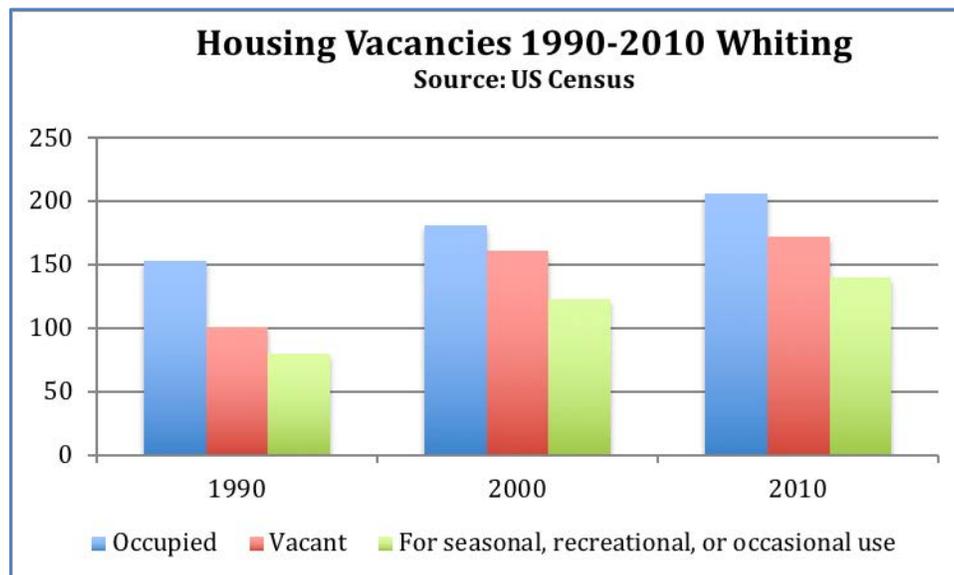
Population Forecasts

According to the Maine Office of Policy and Management projections the population of Whiting is predicted to continue to decline to 482 individuals by 2019, to 474 individuals by 2029, and to 467 by 2034, representing a projected decline of 3.1% from 2014 to 2034.

Whether this decline takes place or not depends on regional economic activity and whether the town sees any significant shifts from seasonal to year round residency.

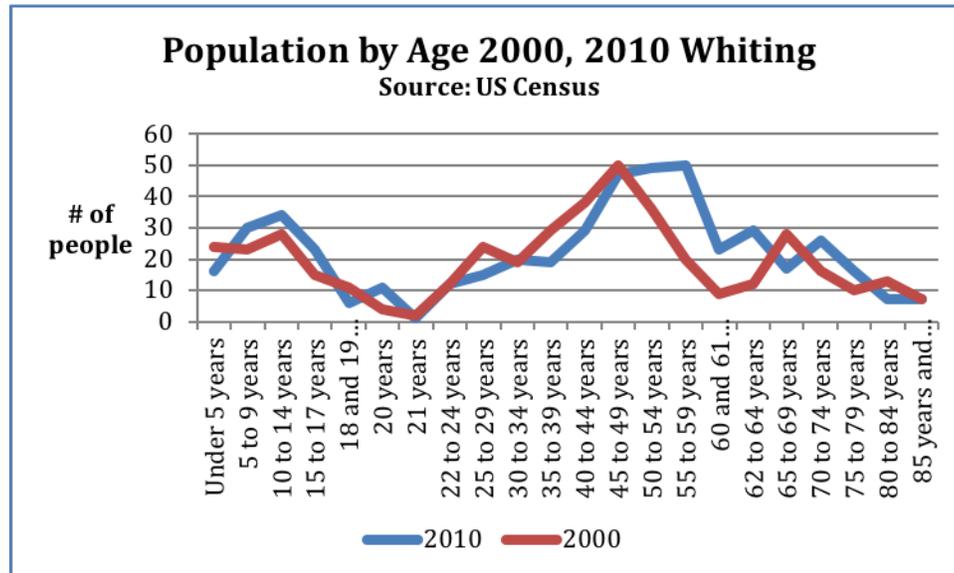
Seasonal Population

There are no state or federal statistics on seasonal population for Whiting. As a scenic, coastal community, seasonal development has a significant impact on our community. Based on a total of 140 seasonally vacant housing units reported in the 2010 Census (up from 80 in 1990), and estimating average household size for non-residents at 2.7, approximately 378 additional persons may stay in Whiting seasonally. Unfortunately, the American Community Survey does not track seasonally vacant housing so we cannot track this figure past the 2010 decennial census. Given recent reductions in growth of the resident population, due to reduced employment opportunities and rising property values, it is anticipated that seasonal people who choose to stay year round may account for 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 chart depicts the differences in age categories in Whiting between 2000 and 2010. Overall the population is getting older (median age increase of 4.7 years) due to an increase in the elderly population who are remaining in Whiting. While there is a decrease in the population of those who bear children there is however a minor increase in children under the age of 20.



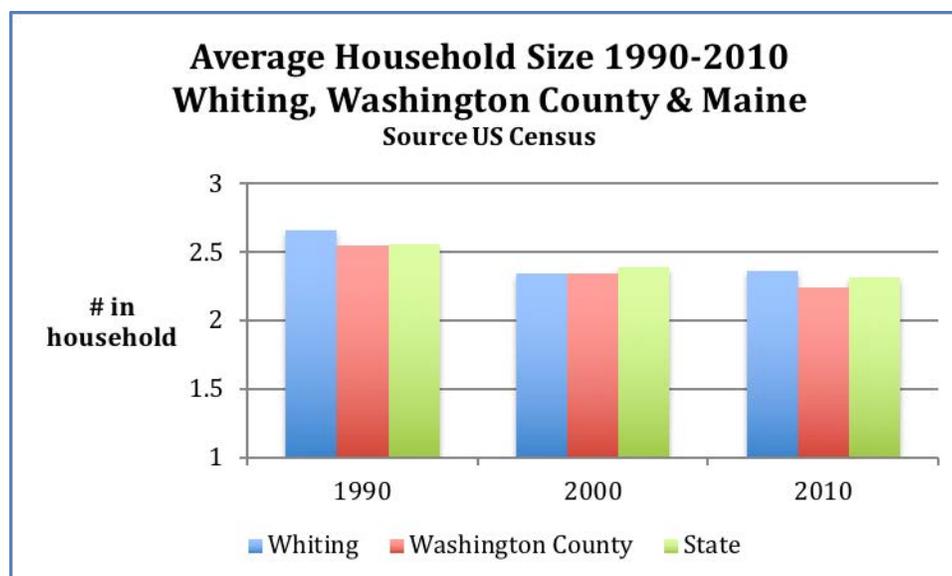
The median age of Whiting's population increased 4.7 years (10.9%) to 48 between 2000 and 2010 and is older than the median age in Washington County (46.1) and in Maine (42.7) in 2010.

Table C-3 Whiting Population by Age Year Comparisons

Age Group	1990	Age Group	2000	2010	2015	2015 margin of error
Under 5 years old	21	Under 5 years old	24	16	28	+/- 16
5-17 years old	92	5-19 years old	77	93	48	+/- 28
18-64 years old	245	20-64 years old	255	305	215	+/-108
65 and above	49	65 and above	74	73	84	+/-23
Median Age	35.8	Median Age	43.3	48.0	45.7	+/- 6.2

Source: 1990 Census, 2000 Census, 2010 Census, American Community Survey Estimate 2015

Mirroring the trend in Washington County and the state, household size in Whiting has decreased as empty nesters and retirees occupy more of the town's housing stock.



Not surprisingly the numbers of households in Whiting, the county and the state have increased since 1990 reflecting the presence of more single person, single parent, and retiree households.

Table C-6 Number of Households

	1990	2000	2010	2015
Whiting	153	181	206	n/a
Washington County	13,418	14,118	14,302	n/a
State	465,312	518,2000	557,219	n/a

Source: 1990 Census, 2000 Census

Both Whiting and Washington County saw an increase in the number of households despite declines in population also indicative of the presence of more single person, single parent, and retiree households countywide.

School Enrollment

Table C-7 Education

School Enrollment (aged 3 and up)	1990 # (% Pop)	2000 # (% Pop)	2006-2010 5 yr estimates # margin of error	2011-2015 5yr estimates # margin of error
Whiting	93 (24.5%)	88 (20.5%)	113 +/-44	64 +/- 24
Washington County	8,682 (24.6%)	8,044 (23.7%)	6,845 +/- 261	6,432 +/-190
State	304,868 (24.8%)	321,041 (25.2%)	311,441 +/-1,863	299,595 +/-1,916

Source: 1990 Census, 2000 Census, American Community Survey 2006-2010 and 2011-2015 5-year Estimates

School enrollment appears to be declining in Whiting compared to the County and the State. However American Community Survey 5-year estimates are the only available data after the 2000

census and the margins of error render it impossible to determine percentage enrollment rates. Thus comparisons of enrollment percentage rates are no longer possible over time.

Table C-8 Public School Enrollment of Whiting Residents

School Year	Elementary	Secondary	Total
October, 2016	40	18	58
October, 2015	49	19	68
October, 2014	30	n/a	-

Source: Maine Department of Education <http://www.maine.gov/doe/data/student/enrollment.html>

The town's public school enrollment has appeared to increase at the elementary level in the last 3 years. However data for resident enrollment is not available on the Department of Education website prior to 2015. Therefore the data in 2014 reflects only enrollment in the Whiting Elementary School and does not include Whiting residents who attend schools in other districts or municipalities.

Table C-11 Educational Attainment

	2000			2006-2010 ACS 5-ye Estimate			2011-2015 ACS 5-yr estimates		
	Whiting 2000	Washington County	Maine	Whiting	Washington County	Maine	Whiting	Washington County	State
	%	%	%	%	%	%	%	%	%
High School Graduate or higher	82.1	79.9	85.4	92.8% +/-5.4%	85.2% +/- 1.0%	89.8% +/- 0.2%	96.8% +/-2.7	87.7% +/- 0.8%	91.6% +/-0.2%
Bachelor's degree or higher	17.6	14.7	22.9	28.7% +/-9.4%	19.0% +/- 1.1%	26.5% +/-0.3%	39.4% +/-8	20.1% +/-1.1%	29.0% +/-0.4%

Source: 2000 Census, 2006-2011 American Community Survey 5-year Estimates; 2011-2015 American Community Survey 5-year Estimates

Educational attainment in Whiting has consistently exceeded that seen in all of Washington County since 2000. It was lower than that of the state of Maine in 2000 but rose to a level that exceeds the entire state by 2015 even when considering the margins of error in the American Community Survey data.

D - NATURAL RESOURCES

Whiting is a deeply rural community with several freshwater lakes, impoundments, and small streams and brooks. Except for scattered fields dedicated to small agricultural activities, mostly blueberry and cranberry cultivation, Whiting is a patchwork of forestland, shrub/scrubland, and wetlands. The water and forestlands provide an array of habitats that support bald eagles, wading bird and waterfowl habitat, deer wintering areas, and some rare species habitats. Whiting also has a short stretch of marine coastline in the southwest corner of the town where Route 191 traverses along the shoreline of Holmes Bay.

Whiting's natural resources contribute significantly to its quality of life. These resources provide open spaces for wildlife and recreational opportunities such as fishing, boating, snowmobiling, hunting, canoeing, hiking, and cross-country skiing.

Summary of Key Findings

- The majority of forest management operations between 1991-2014 are selection or shelter wood harvests with a few clear-cut operations. Only 157 acres out of close to 16,000 have changed use over the same time period.
- Most agricultural land in Whiting produces blueberries with some cranberry production.
- Whiting does not participate in the Federal Flood Insurance Program but is updating its Shoreland Zoning Ordinance to adhere to the 2015 DEP minimum guidelines in 2017.
- There are extensive networks of freshwater lakes, ponds, rivers and streams supporting habitat for a diverse range of avian, aquatic, terrestrial species several of which are rare or endangered as well as portions of four Focus Areas of Statewide Ecological Significance.
- There are several sand and gravel aquifers within Whiting that yield between 10 and 50 gallons per minute (GPM) and one community water supply located at the Elementary School.
- Three boat launches provide public access to Whiting's lakes.

Location

The Town of Whiting is located in the southeastern part of Washington County, Maine. Whiting is situated approximately 104 miles southeast of Bangor and is bordered on the north by Marion Township and Edmunds Township, on the east by Trescott Township, on the south by Cutler, and on the west by East Machias and Machiasport. The land area of the town is approximately 33,301 acres.

Geology and Topography

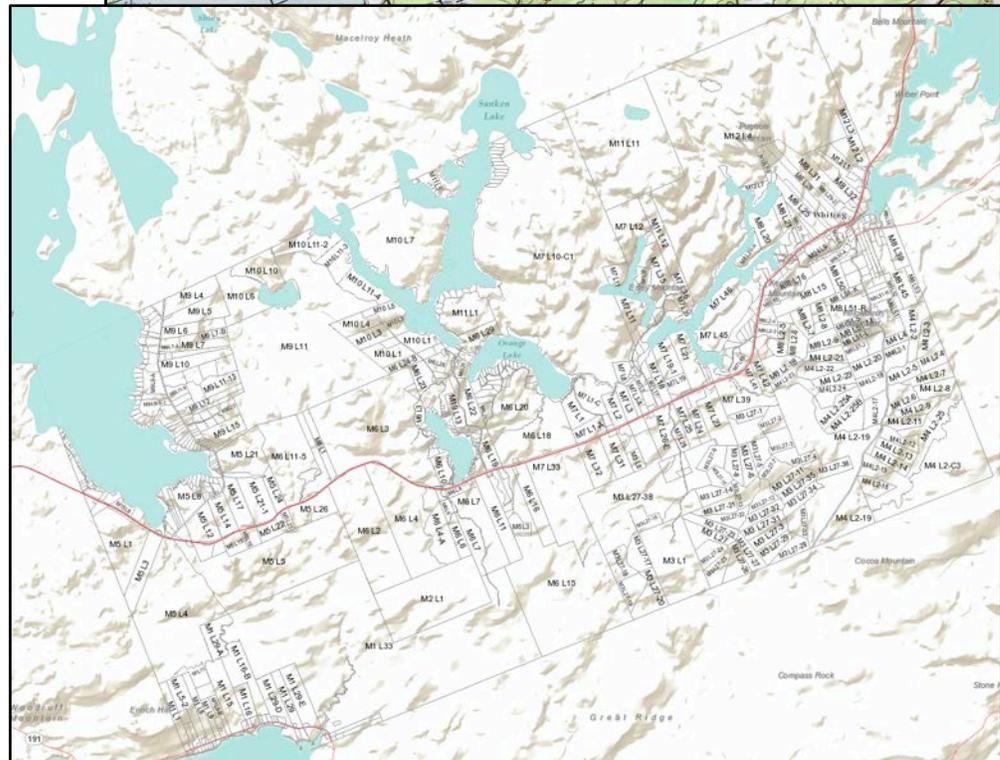
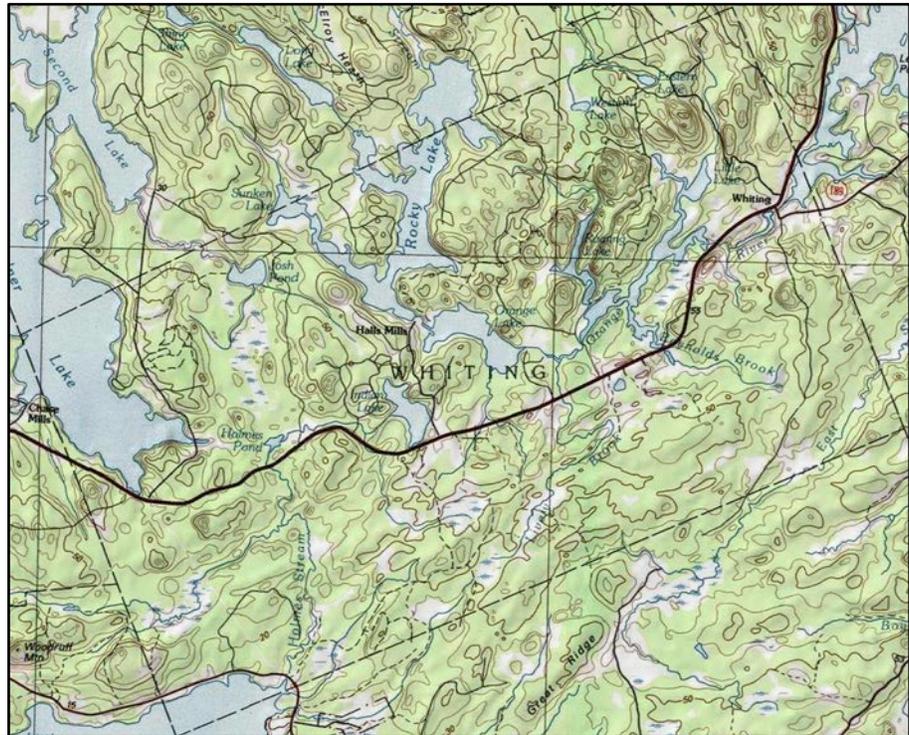
Whiting is located in a region of massive granite intrusion that was glaciated in the Wisconsin Ice Age. The glacier caused till (unsorted, poorly drained soil) to be deposited over the entire region. This poorly drained till formed bogs and ponds and altered the drainage pattern. The underlying granite caused the till to be more thickly deposited on the northwest sides of ridges. On the southeast sides, boulders were plucked and transported further south; thick till deposits are also found in bedrock valleys and depressions. The weight of the ice (in some places a mile thick) caused the land to be depressed in relation to the level of the sea. Marine sediments (silts and clays) were deposited in valleys and more sheltered locations. The release of pressure due to

the melting allowed the land to rise slowly. This explains the silt and clay deposits that are found at elevations of 100 feet or more. In some areas, isolated deposits of sand and gravel (ice contact and glacial outwash) also can be found. Coastal areas are sinking at a rate of about 3 feet per 100 years.

The surface topography can be described as rolling hills with steeper slopes facing generally southeast toward the coastline. The lowest point in town, at sea level, is along the shore of Holmes Bay where SR 191 progresses south from East Machias to the town of Cutler and the 3 highest points are Pughole Mountain (389 feet), Yellow Birch Mountain (323 feet) and the top of Ridge Road (292 feet). Screen shots of the Whiting Planners Map1 are provided here depicting a base map of the USGS

Topographic contours (top) and a terrain base map (bottom) showing the southeastern face of the steepest slopes.

Whiting is located in a county identified by the Environmental Protection Agency with predicted indoor radon screening levels from



¹ <http://www.arcgis.com/home/webmap/viewer.html?webmap=7b0cb187f0a842b2982e95bdf2b5df76&extent=-67.4966,44.6816,-67.032,44.8544>

2-4 pCi/L² (<https://www.epa.gov/radon/find-information-about-local-radon-zones-and-state-contact-information#radonmap>).

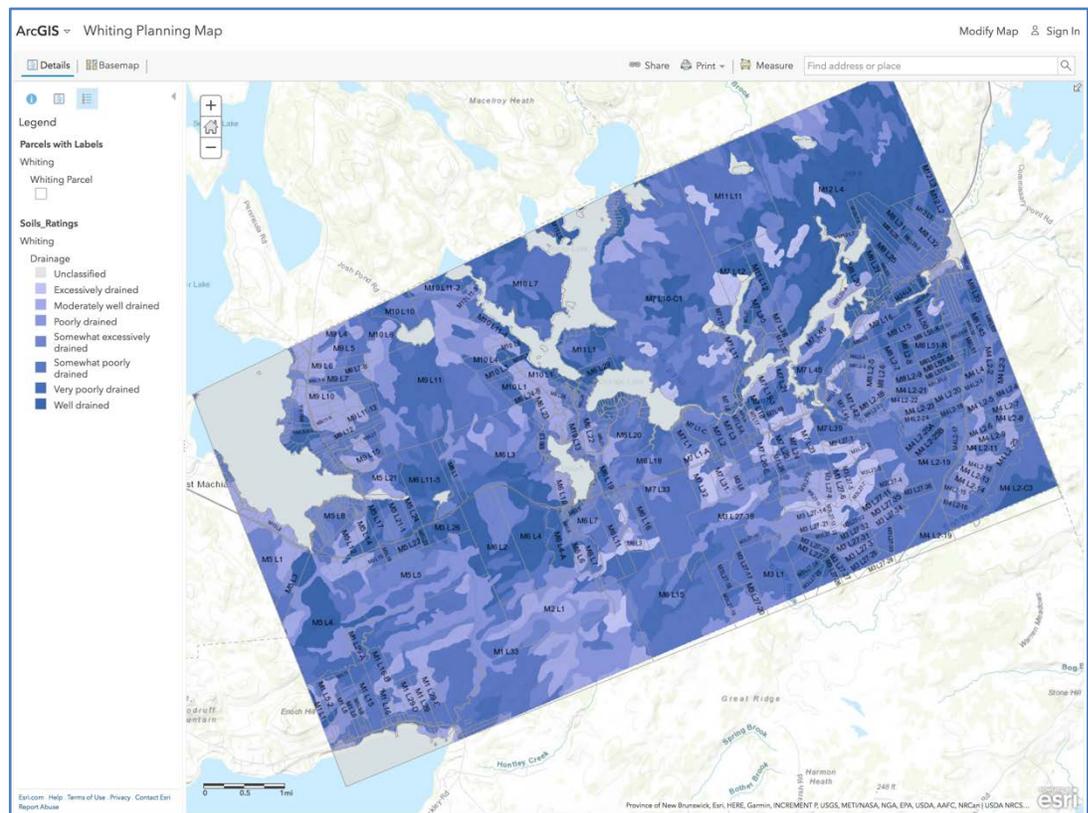
LAND SUITABILITY FOR DEVELOPMENT

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. While there are paper copies of these maps they are far more easily viewed using the online Planners maps referenced above and located here (<http://gro-wa.org/planners-maps.htm>).

Screen captures of the soils in Whiting are included below interpreted for Low Density Development, Farmland Classification (more detail described for this below in the section on Farmland) and for Drainage. See also GIS Mapping Chapter for information and instruction on how to view the attribute tables that provide detailed information on soils names, areas, and classifications.

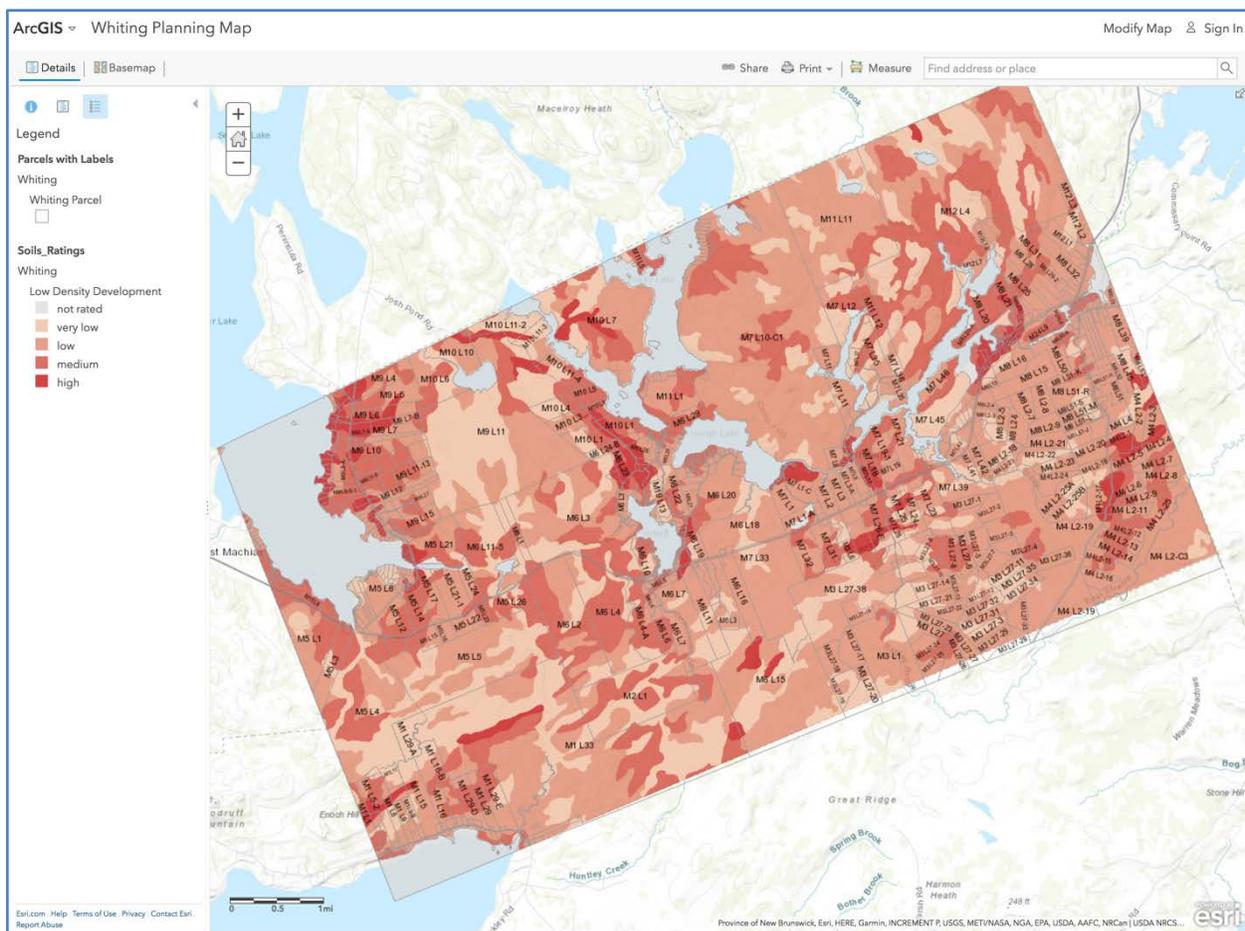
Very few areas of Whiting, or indeed of Maine in general, have large tracts of land that are ideal for residential development. The Natural Resources Conservation Service of the USDA has produced a handbook of Soil Survey Data for Growth Management in Washington



² Radon, like other radioactive materials, are measured in pCi/L. This stands for pico Curies per liter of air. A “pico Curie” is one-trillionths of a Curie. A Curie is equivalent to 37 Billion radioactive disintegrations per second. **Therefore one pico-Curie works out to 2.2 radioactive disintegrations per minute (dpm) in a liter of air.** A “Curie” is named after Marie Curie who developed the theory of *radioactivity* in the late 1800s. (<http://rhinj.com/radon-monmouth-middlesex-nj/>; https://en.wikipedia.org/wiki/Marie_Curie)

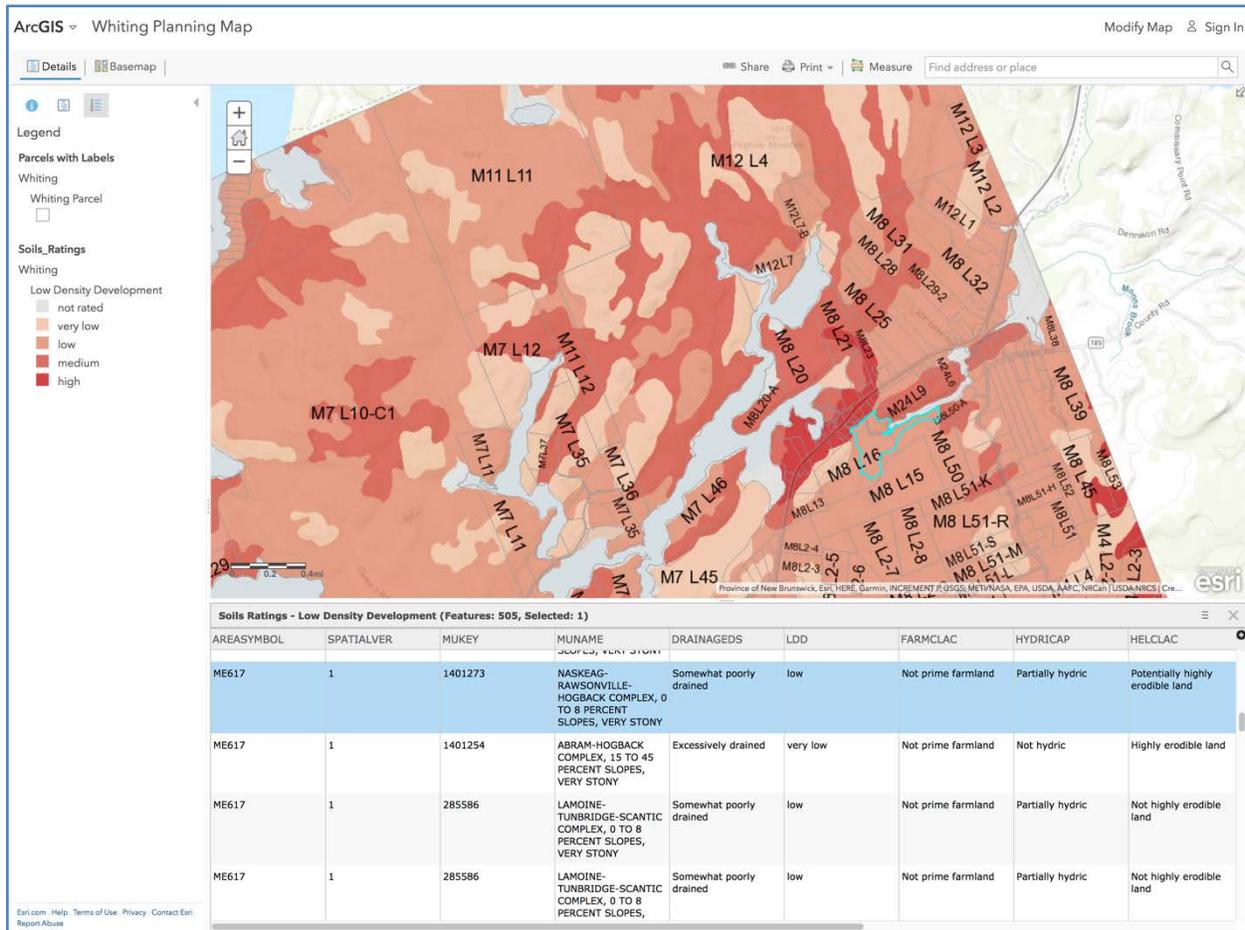
County (dated September 1997). This publication is available at the Whiting Town office along with soils maps at a scale of 1 inch = 2000 feet. It includes many tables that interpret the suitability of different soils for agricultural production, woodland productivity, erodability and low-density development.

This last interpretation – rating of soil potential for low density urban development – references the potential 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.



The GIS Mapping Chapter describes the steps one can take to view the attribute tables associated with any of the layers of information in the online GIS maps. A screen capture of the attribute table describing the Soil Potential Rating Classes for Low Density Development is provided below for illustration. Using this tool, it is possible to select, for instance, the Whiting parcel layer and the Township Soils layer and therefore to zoom to a view of a parcel-specific

soil suitability evaluation. Note that the soil that is highlighted on the map is also highlighted in the attribute table below.



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. Individuals can learn problems or development costs associated with a piece of land and the advantage of one piece of land over another prior to purchase. The information will help answer whether the site can support a septic system, if the basement will always be wet, if there is a high potential for erosion, and the bearing capacity of the soil.

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), but they are an important first step that should precede development decisions.

Highly Erodible Soils

The removal of surface vegetation from land usually results in erosion, a major contributor of pollution to lakes and ponds. Under such circumstances, highly erodible soils have a potential to erode much faster than normal. Rainfall and runoff, susceptibility to erosion, and the combined effects of slope length and steepness are taken into consideration when identifying highly erodible soils.

Most land use and development can and should take place 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.

FARM AND FORESTLAND

Maine's forests and forest industry play a vital role in the state's economy, especially in this region. Forested areas can provide habitats for abundant and diverse wildlife for the use and enjoyment of Maine citizens and visitors. Furthermore, forests protect the soil and water, and contribute to a variety of recreational and aesthetic experiences. Loss of forests can be attributed to development and to irresponsible harvesting techniques. When forests are fragmented, wildlife suffers and public access becomes more restricted. To optimize forestland use, forests should be managed and harvested sustainably.

Woodland Productivity

Soils rated by the Soil conservation Service as medium or above for woodland productivity qualify as prime forestland soils. This designation does not preclude the use of these lands for other purposes but only identifies the most productive forests. These soils are rated only for productivity; the rating does not consider management problems, such as erosion hazard, equipment limitations or seedling mortality.

Commercial Forestry

Commercial forestry is conducted in Whiting as described in the following table for the years 1991-2014 from data compiled in the confidential year-end landowner reports to the Maine Forest Service.

YEAR	Selection harvest, acres	Shelterwood harvest, acres	Clearcut harvest, acres	Total Harvest, acres	Change of land use, acres	Number of active Notifications
1991	269	40	55	364	0	7
1992	369	8	115	492	0	5
1993	269	54	110	433	0	9
1994	395	45	59	499	0	6
1995	258	38	55	351	0	9
1996	1489	20	123	1632	0	8
1997	109	0	2	111	0	5
1998	124	0	0	124	0	6
1999	458	0	0	458	0	20
2000	1585	97	0	1682	0	20
2001	997	720	0	1717	0	17
2002	2842	1020	0	3862	0	12
2003	40	1400	10	1450	0	16
2004	194	129	0	323	8	17
2005	590	0	0	590	1	12
2006	440	5	0	445	0	16

YEAR	Selection harvest, acres	Shelterwood harvest, acres	Clearcut harvest, acres	Total Harvest, acres	Change of land use, acres	Number of active Notifications
2007	22	1	0	23	90	18
2008	313	40	0	353	12	18
2009	45	0	0	45	0	11
2010	119	44	10	173	0	11
2011	26.5	13	0	39.5	9.25	13
2012	149	234	0	383	5	12
2013	126	13	0	139	13	14
2014	106	134	1	241	19	20
Total	11,334.5	4,055	540	15,929.5	157.25	302
Average	472	169	23	664	7	13

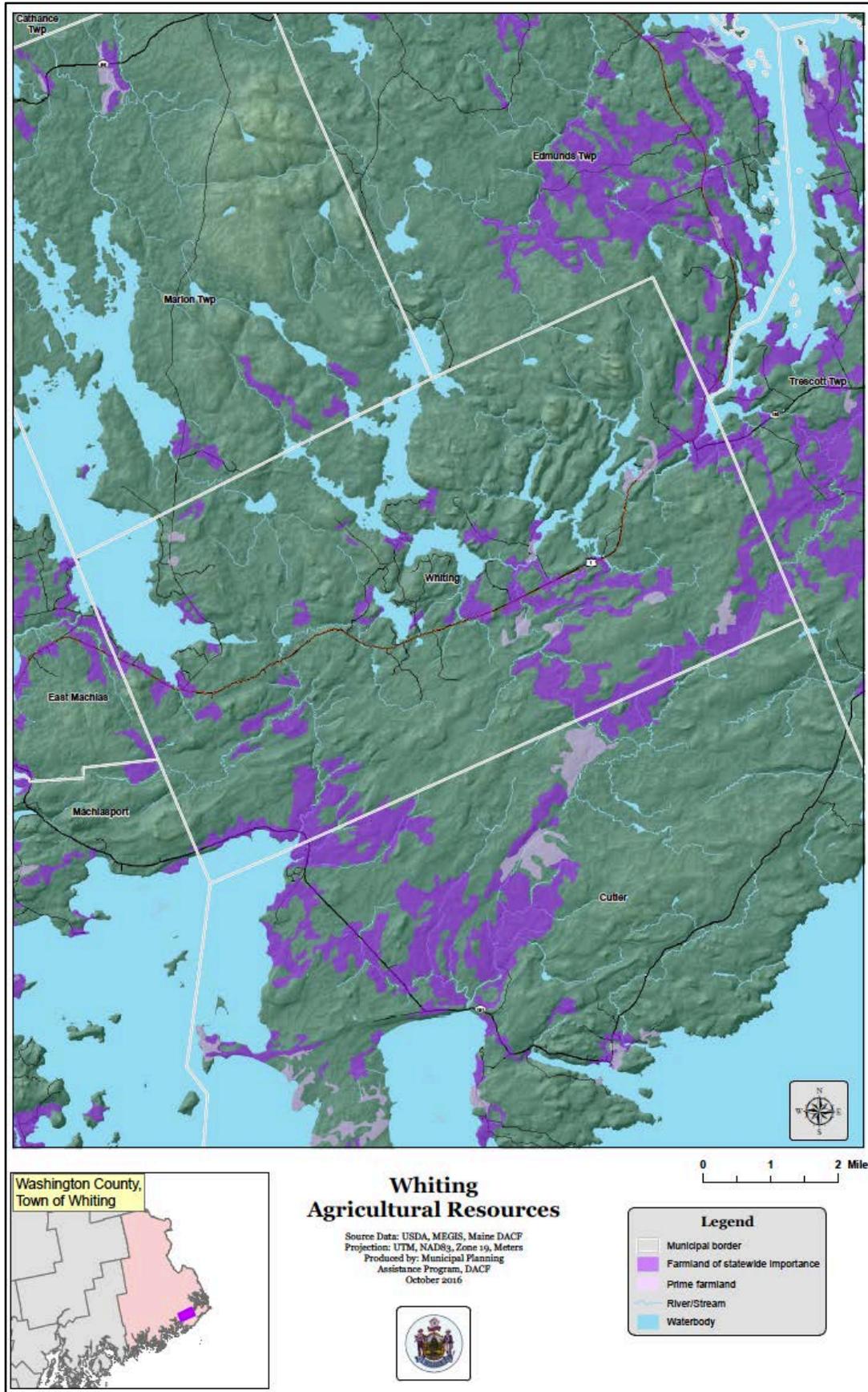
Source: Year-end Landowner Reports to the Maine Forest Service; Department of Agriculture, Conservation and Forestry. 2016 Note: to protect confidential landowner information, data is reported only where three or more landowner reports reported harvesting in the town.

The vast majority of forest management over the 24-year period was conducted by selection or shelterwood harvest with a few clearcut operations. Only 157 acres out of close to 16,000 have changed use over the same time period.

Prime Farmland (Includes Blueberry Land)

The U.S. Department of Agriculture defines prime farmland as the land that is best suited to producing food, feed, forage, fiber, and oilseed crops. It has the soil quality, growing season, and moisture supply needed to produce a sustained high yield of crops while using acceptable farming methods. Prime farmland is also often targeted as prime property for low-density residential development. Very little of the soils in Whiting are listed as Prime Farmland, the exception being one type of Dixfield soils. There are also extensive areas of soils deemed of statewide importance to agriculture. Soils of agricultural importance are depicted on the map on the following page. The vast majority of agricultural land in Whiting is centered on blueberry land. Specific information about the soils on a property can be obtained here:

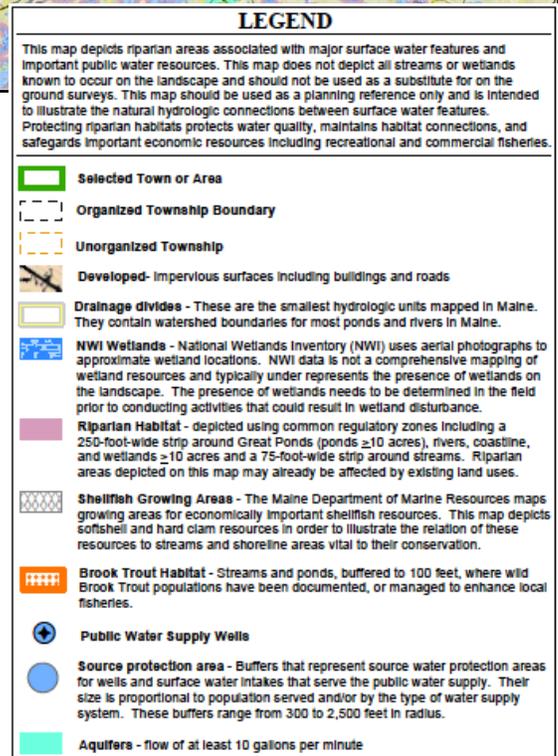
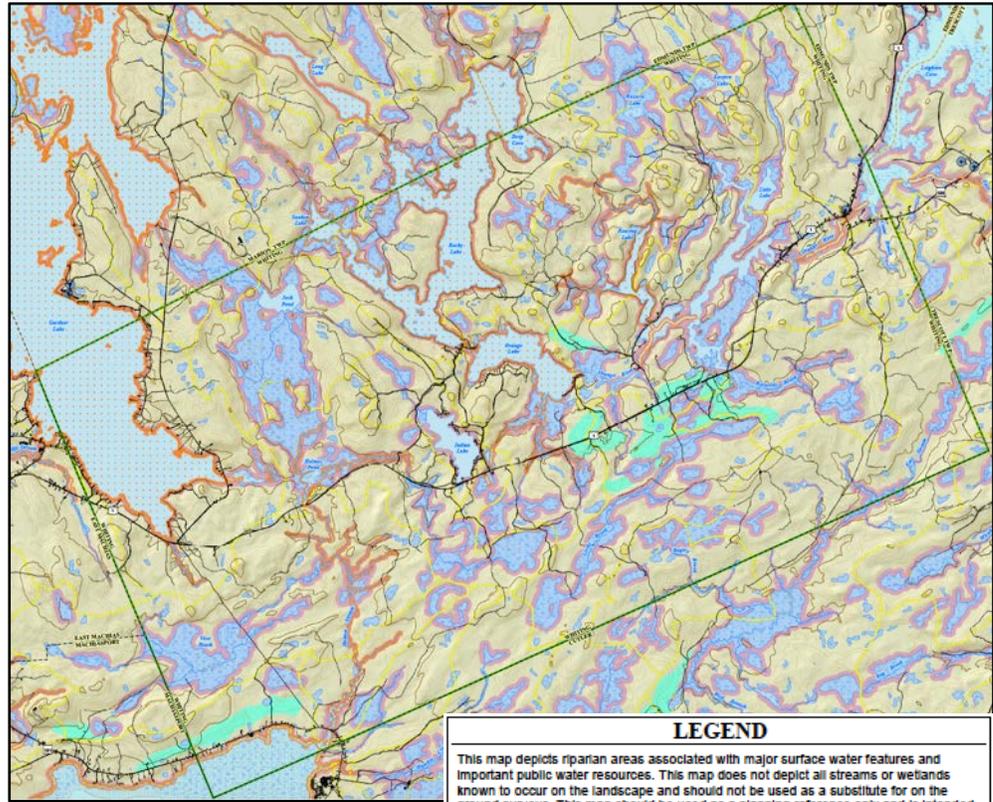
- 1) <http://websoilsurvey.nrcs.usda.gov/app/> USDA Natural Resource Conservation Service Web Soil Survey site.
- 2) <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm> Soils for a property by its mailing address.
- 3) http://soils.usda.gov/survey/printed_surveys/state.asp?state=Maine&abbr=ME Archived County Soil Survey data



WATER RESOURCES

The water resources of Whiting are vital to the community for recreation, recreational and some commercial fishing, and tourism. The tidal waters of Holmes Bay provide access to shellfishing however there are no wharves or piers to saltwater in Whiting. The freshwater wetlands serve as storm water recharge areas and wildlife habitat. A more detailed examination of marine waters and marine resources is considered in the following section.

The image at right provides a screen capture of the Water Resources & Riparian Habitat Map from the Beginning With Habitat map series provided in poster format and delivered to the Whiting Planning Board in early 2017. The legend for the map is provided below. Note that a review of this information is available to the Planning Board (on large format maps) and the inventory and analysis of Whiting's water and habitat resources that continues throughout this chapter is based on maps that can be expanded to provide full visibility. In addition as specific resources are analyzed more detailed zoomed-in images are provided in the text.



Watersheds

A watershed is the land area in which runoff from precipitation drains into a specific body of water. The boundaries of Whiting's watersheds, also known as drainage divides, are shown on the image (and larger scale map available to the Planning Board) at right. 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. Development activities, such as house and road construction and timber harvesting, disturb the land that drains to a lake by streams and

groundwater. Disturbed and developed lands contribute pollutants and other substances (e.g., silt) to water bodies, degrading water quality. Activity anywhere in the watershed, even several miles away, has the potential to impact the water quality of our streams, rivers, ponds and lakes.

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 closure of shellfishing areas. Steep slopes with highly erodible soils are particularly susceptible to erosion. The Whiting Shoreland Zoning Ordinance is currently being updated to meet the requirements of the minimum statewide standards as issued in January of 2015.

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 and open space and outdoor recreation without interfering with their emergency overflow capacity. Flooding can cause serious destruction of property. Activities that increase paved or impervious surfaces can change the watercourse, water quantity, and rate of runoff on floodplains, possibly creating flooding impacts downstream.

The Town of Whiting does not participate in the Federal Flood Insurance Program. Federal Emergency Management Agency (FEMA) issued new preliminary Federal Insurance Rate Maps (FIRMs) in 2016 that identify the 100-year floodplains. As a non-participating town Whiting did not receive any updated information from this initiative. A base flood is that flood having a one percent chance of being equaled or exceeded in any given year. It is commonly called the 100-year flood. Therefore a base flood elevation would be defined as the elevation to which a body of water could be expected to rise during a 100-year flooding event.

Enrollment in the National Flood Insurance Program would help to reduce the risk of property loss through proper permitting of all floodplain development and the availability of flood insurance. As a participating community every property owner and renter in Whiting would be eligible to purchase flood insurance, regardless of their location. Floodplain insurance is required as a condition of a loan for structures in a floodplain. Additionally towns participating in the NFIP are eligible to apply for funds (on a competitive basis) under the 404 Post Disaster Hazard Mitigation Grant program. Also, in the event of a presidentially declared disaster, residents of participating municipalities would have access to forms of disaster assistance that are not available in non-participating communities.

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 ... adapted for life in saturated soils." Wetlands include freshwater swamps, bogs, marshes, heaths, swales, and wet/bottom land meadows.

Wetlands are important to the public health, safety, and well being because they filter silt and pollutants, reduce flooding, serve as aquifer discharge areas, and provide critical habitats for a wide range of fish and wildlife. Wetlands 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 Maine Department of Inland Fisheries and Wildlife has identified wetlands located within Whiting using National Wetlands Inventory (NWI) data. NWI uses aerial photographs to approximate wetland locations. As the legend on the Beginning With Habitat maps indicates “NWI data is not a comprehensive mapping of wetland resources and typically under represents the presence of wetlands on the landscape”. Field verification of the location and boundaries of any wetlands should be undertaken prior to development.

Lakes, Ponds, Rivers and Streams

The Town of Whiting has a wonderful diversity of freshwater lakes, ponds, rivers and streams. None are classified by Maine DEP as threatened with pollution levels above state and federal acceptable levels, or as eutrophic, which results in a system that lacks sufficient oxygen needed to support fish stocks and other aquatic life. The variety of water bodies in Whiting are listed in the following table along with the terrestrial and aquatic habitats they provide.

Water body	Characteristics	Provides habitat for	
		Terrestrial species:	Aquatic species:
Rivers, streams and brooks			
<i>Orange River</i>	marshy, shallow, and warm; adjoining upland wildlife habitats	wood duck, black duck, both teal, ring-necked duck, and mergansers; common loon; American bittern; birds of prey; many songbirds; moose, deer, bear, beaver, otter, and mink	Brown trout; moderate value as salmonid fishery
<i>Holmes Stream</i>	Small estuarine stream draining into Holmes Bay	black ducks, wood ducks, many species of songbirds; moose, bear, deer,	Brook trout; sea run trout
<i>Lively Brook</i>	tributary of the Orange River and also a warmwater	woodcock, black duck, wood duck, both teal, American Bittern, and many songbirds, especially warblers and sparrows; beaver, otter, mink, moose, deer	
<i>Reynolds Brook</i>	tributary of the Orange River	wood ducks, black ducks, ring-necked ducks, Least and American Bitterns; fisher, otter, and mink.	
<i>Blacks Brook</i>		black ducks, ring-necked ducks; wood ducks, both teal, and mergansers. American Bitterns have nested here for over 40 years; Least Bitterns and Rails. Many songbirds, especially sparrows and warblers, some for nesting. Pied-billed grebes; several hawks; beaver, otter, mink	Brook trout?
<i>East Stream</i>		shorebirds, many species of songbirds, snipe, woodcock, eagles, osprey, other birds of prey (especially owls), and waterfowl - breeding, resting, feeding, and migrants. Moose, deer, fox, bobcat, and bear.	wild brook trout

Water body	Characteristics	Provides habitat for	Aquatic species:
<i>Wheatfield Brook</i>		Terrestrial species: moose, bear, deer, otters, mink, weasels, wood ducks, black ducks, and many species of songbirds	
<i>Josh Stream</i>	warm water fishery	ducks (especially wood ducks), American Bittern, snipe, woodcock, rails, many species of songbirds, many birds of prey, moose, fisher, bear, deer, mink, otter, beaver and weasels	pickerel and yellow perch
<i>Crane's Brook</i>		woodcock, grouse, and many species of songbirds as well as snowshoe hares, red foxes, deer, beaver, mink, otter,	
Lakes and Ponds			
<i>Rocky Lake</i>	cold-water fishery	common loons (breeding), eagles, ospreys, ducks (especially black duck, wood duck, both teal), and shorebirds. Woodcock, rails, snipe, and many species of songbirds; deer, bear, moose, otter, beaver, mink, fisher, fox	stocked with Brown Trout salmonid fishery; smallmouth bass; pickerel; wild brook trout enter the lake from Rocky Lake Stream.
<i>Eastern Lake</i>		waterfowl, rails, eagles, ospreys, loons; mammals and fur bearers.	salmonid fishery
<i>Gardner Lake</i>	cold-water and warmwater fisheries; most heavily-developed lake in the area	Woodcock, grouse (both species), many songbirds, and all the usual mammals	landlocked salmon
<i>Holmes Pond</i>	warm water fishery	many songbirds and some waterfowl	pickerel
<i>Indian Lake</i>	cold-water fishery	breeding loons; Birds of prey and waterfowl	stocked with brook trout; smallmouth bass
<i>Josh Pond</i>	warm water fishery	ducks, loons, many songbirds, grouse, eagles, and ospreys; Otters, mink, and beaver; moose, bear, woodcock	pickerel
<i>Little Lake</i>	part of the Orange River; warm and shallow	wood ducks, black ducks, ring-necked ducks, loons, and many songbirds; shorebirds and wading birds. Moose, bear, otters, mink, and other mammals.	pickerel
<i>Orange Lake</i>	Warmwater fishery	Common Bitterns and ducks (black duck, wood duck, ring-necked duck, and mergansers); moose, otter, deer, bear, fisher, hare, mink, and weasels	brown trout; salmonid
<i>Roaring Lake</i>	remote lake that receives very little recreational use	Loons, black ducks, wood ducks, ring-necked ducks, mergansers, American Bitterns; Breeding and migrant songbirds, rails, snipe, and shore birds; moose, fisher, marten, bobcats, hare, deer, bear, otter, both species of grouse, and woodcock	salmonid
<i>Western Lake</i>		Same as Eastern and Roaring Lakes	wild brook trout

Sources: 2002 Comprehensive Plan Committee; 2016 Beginning with Habitat map data; IF&W Fisheries Biologist

The Town is currently replacing a culvert at Halls Mills on the Orange River. Upon completion the culvert will better mimic natural conditions and being constructed at 1.2 times bank width;

this will improve its capacity to allow large flow volumes in extreme precipitation events and allow fish passage.

Lakes, Phosphorus and Development

The quality of freshwater lakes as recreational resources, gems of natural beauty and fisheries is a result, at least in part, of their phosphorus content. Phosphorus controls the level of algae³ 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, 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.

For lakes with developed or developing watersheds, there are two requirements for keeping phosphorus low and water quality high. First, minimize 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. 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, minimize new additions of phosphorus to the lake that will result from residential and commercial growth in the watershed.

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"⁴, to evaluate whether or not a proposed development

³ 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.

⁴ 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

will add a disproportionate amount of new phosphorus to a lake. It provides a standard that 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 the lake's watershed, their implementation may not, by itself, be sufficient to prevent a noticeable decline in lake water quality. In order to ensure 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 – The Table below provides information for all of the lakes that have at least a part of their direct watershed located in Whiting. 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, than it can safely be concluded that the development will not add an excessive amount of phosphorus to the lake.

Maine DEP has provided phosphorous coefficient information for the following lakes and ponds in Whiting.

Appendix C

Per Acre Phosphorus Allocations
for Selected Maine Lakes

Updated 11/8/10

Lake Name	Town in which development is located	Direct Watershed Area in Town (acres) DDA	Area not available for development (acres) ANAD	Area available for development (acres) AAD	GF	Expected developed area (acres) D	(lbP/y) F	Water Quality Category WQC	LOP	C	FC	Per acre phosphorus allocation (lb/acre/yr) P	Small Watershed Threshold (acres) SWT
Eastern Lake	Whiting	192	20	172	0.15	26	1.85	mod-sensitive	m	1.00	1.85	0.072	6
Gardiner Lake	Whiting	1961	200	1761	0.25	440	43.39	good	h	1.00	43.39	0.099	110
Holmes Pond	Whiting	2060	200	1860	0.15	279	14.42	mod-sensitive	m	1.00	14.42	0.052	70
Indian Lake	Whiting	593	60	533	0.25	133	8	mod-sensitive	h	0.75	6.00	0.045	33
Josh Pond	Whiting	1564	100	1464	0.2	293	13.64	mod-sensitive	m	1.00	13.64	0.047	73
Little Lake	Whiting	793	50	743	0.15	111	7.36	mod-sensitive	m	1.00	7.36	0.066	28
Orange Lake	Whiting	1670	160	1510	0.2	302	23.59	mod-sensitive	h	0.75	17.69	0.059	76
Roaring Lake	Whiting	1598	100	1498	0.15	225	12.23	mod-sensitive	m	1.00	12.23	0.054	56
Second Lake	Whiting	311	20	291	0.15	44	3.17	mod-sensitive	h	0.75	2.38	0.054	11
Sunken and Rocky Lakes	Whiting	2154	150	2004	0.2	401	27.03	mod-sensitive	m	1.00	27.03	0.067	100
Unnamed Pond	Whiting	158	10	148	0.15	22	1.41	mod-sensitive	m	1.00	1.41	0.064	6
Western Lake	Whiting	180	10	170	0.15	26	1.76	mod-sensitive	m	1.00	1.76	0.069	6

Source: Maine DEP Stormwater Best Management Practices Manual. 2010.

<http://www.maine.gov/dep/land/stormwater/stormwaterbmps/index.html>

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.

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. Below are the designated uses ascribed to Maine's water quality classification:

Class AA - Drinking water supply, recreation in and on the water, fishing, navigation and a natural and free flowing habitat for fish and other aquatic life.

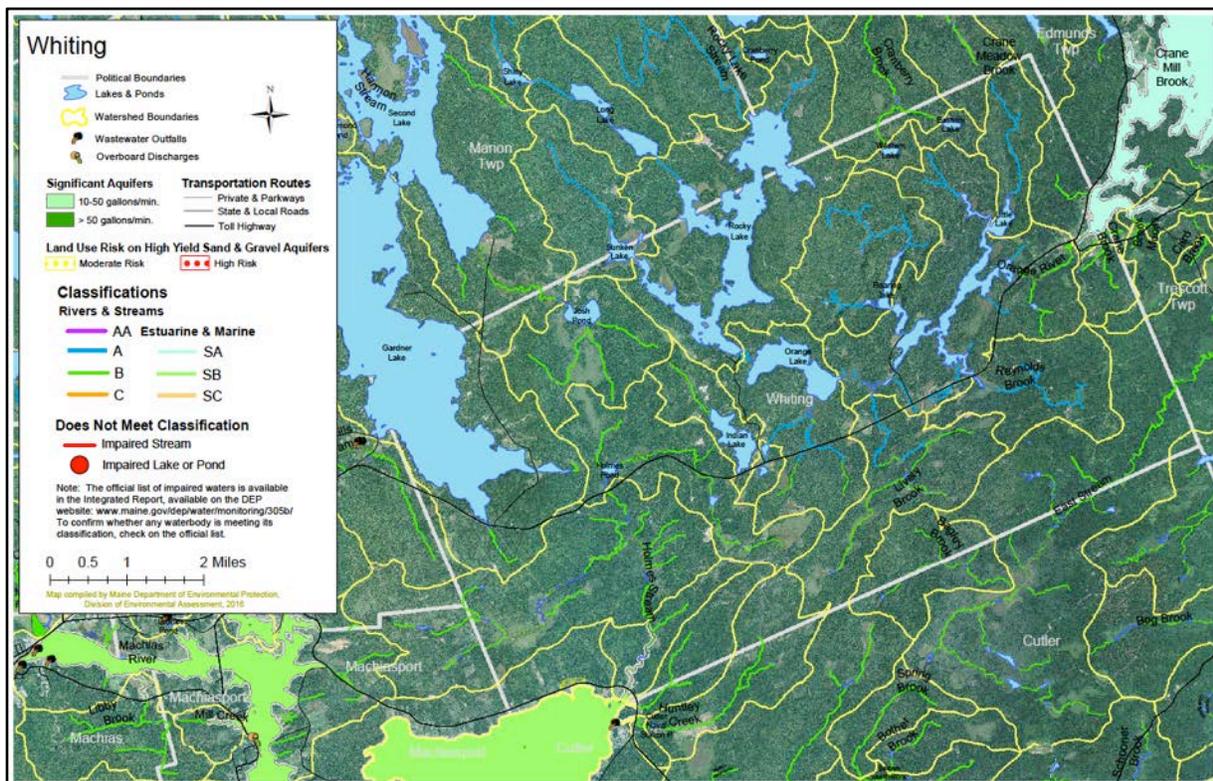
Class A - Drinking water supply, recreation in and on the water, fishing, industrial process and cooling water supply; hydroelectric power generation, navigation, and unimpaired habitat for fish and other aquatic life.

Class B - Drinking water supply, recreation in and on the water, fishing, industrial process and cooling water supply; hydroelectric power generation, navigation, and unimpaired habitat for fish and other aquatic life.

Class C - Drinking water supply, recreation in and on the water, fishing, industrial process and cooling water supply; hydroelectric power generation, navigation, and a habitat for fish and other aquatic life.

The waters within Whiting are classified by DEP as follows:

Waterway	Classification
The Orange River and its tributaries, including Reynolds and Lively Brooks, above the highway bridge on US 1	Class A
All other waters	Class B



Source: Maine DEP, Division of Environmental Assessment, 2016

Threats to water quality come from point and non-point discharges. Point source pollution is discharged directly from a specific site such as a municipal sewage treatment plant or an industrial outfall pipe. Point sources are also any pipe that discharges to surface water. There are

no point sources or licensed Overboard Discharge Permits within the town of Whiting (Source: <http://www.maine.gov/dep/gis/datamaps/index.html#blwq> Overboard Discharges (Data Refreshed Daily)).

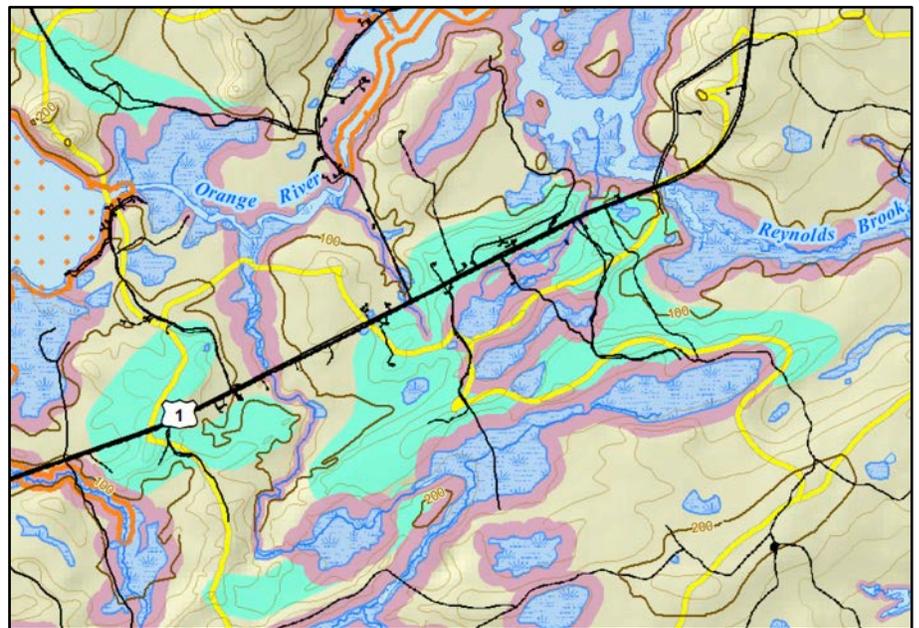
Non-point source pollution poses the greatest threat to water quality in Maine communities and Whiting is no exception. The most significant contributing source comes from erosion and sedimentation as well as excessive run-off of nutrients. Additional contributing factors include animal wastes, fertilizers, sand and salt storage, waste lagoons, faulty septic systems, roadside erosion, leaking underground storage tanks, and hazardous substances. Identification and regulation of these sites is important in safeguarding both surface and ground waters.

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 often 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 several sand and gravel aquifers within Whiting, as shown on the image of Wetland and Riparian Habitats on Page 7 of this chapter. The aquifers, the largest of which is located in the central part of town, mostly south of US 1, yield between 10 and 50 gallons per minute (GPM). Close up screen captures of the location of this aquifer and another along the shore of Holmes Bay are provided at right. The aquifers are shaded in green in the screen captures.



There is one public water supply, a non-transient, non-community type of supply⁵, in Whiting located at the Elementary School. An aerial photo of the Whiting Village Center is depicted at right including the 1000-foot Public Drinking Water Supply Well buffer encircling the public water source (Source: Maine Drinking Water Program and Google Earth, May 2017).



The Maine Drinking Water Program follows an EPA-approved assessment matrix to determine the risk of contamination at a public water source due to its 1) well type and site geology; 2) existing and future risk of acute contamination and 3) existing and future risk of chronic contamination. Accordingly, the risk of contamination in the community water supplies in Whiting is provided below.

Risk of Contamination due to:	Community Water Supply	Risk Assessment is based on:
		Msad 77 Whiting Village School BEDROCK WELL 300' deepened in 1995
well type and site geology	Moderate	Well type; Overburden thickness unknown
existing risk of acute contamination	High	Positive Coliform test; septic systems within 300' of well
future risk of acute contamination	High	Legal control 150 foot radius around well is unknown or; and no legal control at 300 foot radius of property around the well
existing risk of chronic contamination	Moderate	Detection of chronic chemical contaminants; # of potential contaminant sources around WHPA ⁶ ; distance to nearest significant potential source of contamination within 300 feet: an above ground storage tank (including home heating)
future risk of chronic contamination	High	No Legal control of entire WHPA; nor any legal control of 2500 Phase II/V waiver radius ⁷

Source: Source Assessment Report - Source Water Assessment Program; Maine Bureau of Human Services, Bureau of Health, Division of Health Engineering, Drinking Water Program, April 15, 2003

⁵ *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.

⁶ WHPA – Well Head Protection Area

⁷ 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 maps (screen captured above) provided by the Beginning With Habitat program and posted at the town office can be used to identify surface sites that are unfavorable for storage or disposal of wastes or toxic hazardous materials. Sand and gravel aquifers generally store and yield a higher quantity and quality of groundwater than do bedrock wells. However, sand and gravel aquifers usually have a more permeable recharge area that is located closer to the ground surface than bedrock wells. As a result, wells drilled into sand and gravel aquifers will become contaminated more easily and impact a greater volume of water than wells drilled into bedrock.

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. Thus, it is important to take measures to prevent contamination before it occurs. 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, agricultural run-off of chemicals and auto salvage yards.

MARINE RESOURCES

Shellfishing and worming in Whiting is available only in Holmes Bay, the outlet of the Orange River onto Whiting Bay, and Whiting Bay. The Orange River is home to anadromous fish (Salmon, Sea-run Trout, river herring and blueback herring) that return from the sea to the rivers where they were hatched in order to breed. See the Critical Natural Resources subsection below for more information on Atlantic Salmon. Catadromous Fish (like eels: fish that spend most of their lives in fresh water but migrate to salt water to breed) are also found in the Orange River.

No major harbor facilities (wharves, docks, piers, mooring areas, etc.) are located within Whiting. Local fishermen use facilities in Edmunds and Lubec. There are no public access points to Holmes Bay within Whiting. There is only one unimproved right of way (at the head of the tide) in Whiting behind the Whiting Store.

CRITICAL NATURAL RESOURCES

Maine Natural Areas Program

The Natural Areas Program of the Maine Department of Conservation is responsible for documenting areas that support rare, threatened, or endangered plant species and rare or exemplary natural communities.

Rare or Exemplary Botanical Features - Rare and exemplary botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. The Maine Natural Areas Program documented the Mixed Graminoid Shrub Marsh (Grassy Shrub Marsh) in Whiting. **Characteristic plants are shown at right (Source: Maine Natural Areas Program, 2016).** The Mixed Graminoid Shrub Marsh is rated S-5: demonstrably secure in

Characteristic Plants

These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

Sapling/shrub

Bog willow*
Buttonbush*
Meadowsweet*
Mountain holly
Red osier dogwood*
Speckled alder*
Sweetgale*
Winterberry

Dwarf Shrub

Leatherleaf*
Sweetgale*

Herb

Beaked sedge*
Black bulrush*
Bluejoint*
Expanded bulrush*
Few-seeded sedge*
Marsh St. Johnswort*
Royal fern*
Sensitive fern*
Three-way sedge*
Wool-grass*
Yellow loosestrife*

Bryoid

Sphagnum mosses*

Associated Rare Plants

Comb-leaved mermaid-weed
Featherfoil
Hollow joe-pye weed
Red-root flatsedge
Tall beak-rush

Associated Rare Animals

Black-crowned night-heron
Blanding's turtle
Least bittern
Ribbon snake
Sedge wren
Short-eared owl
Spotted turtle

Maine. Its habitat is mineral-soil marshes in various settings, some by beaver dams, others in temporarily to semi permanently flooded basins. The vegetation will vary depending on the topography of the basin; tall graminoids are common, and may be mixed with shrubs. Whiting is also home to a very small section of Tall Grass Meadow natural community on Bagley Brook along the southern border of Whiting within the Cutler Public Reserve lands in the town of Cutler.

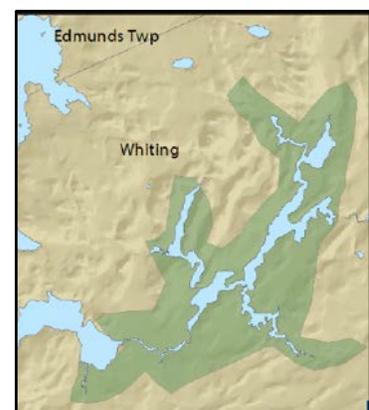
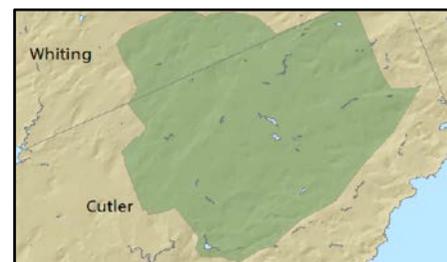
Wildlife Habitats

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.

Whiting is part of three and fully contains one **Focus Areas of Statewide Ecological Significance**; they include:

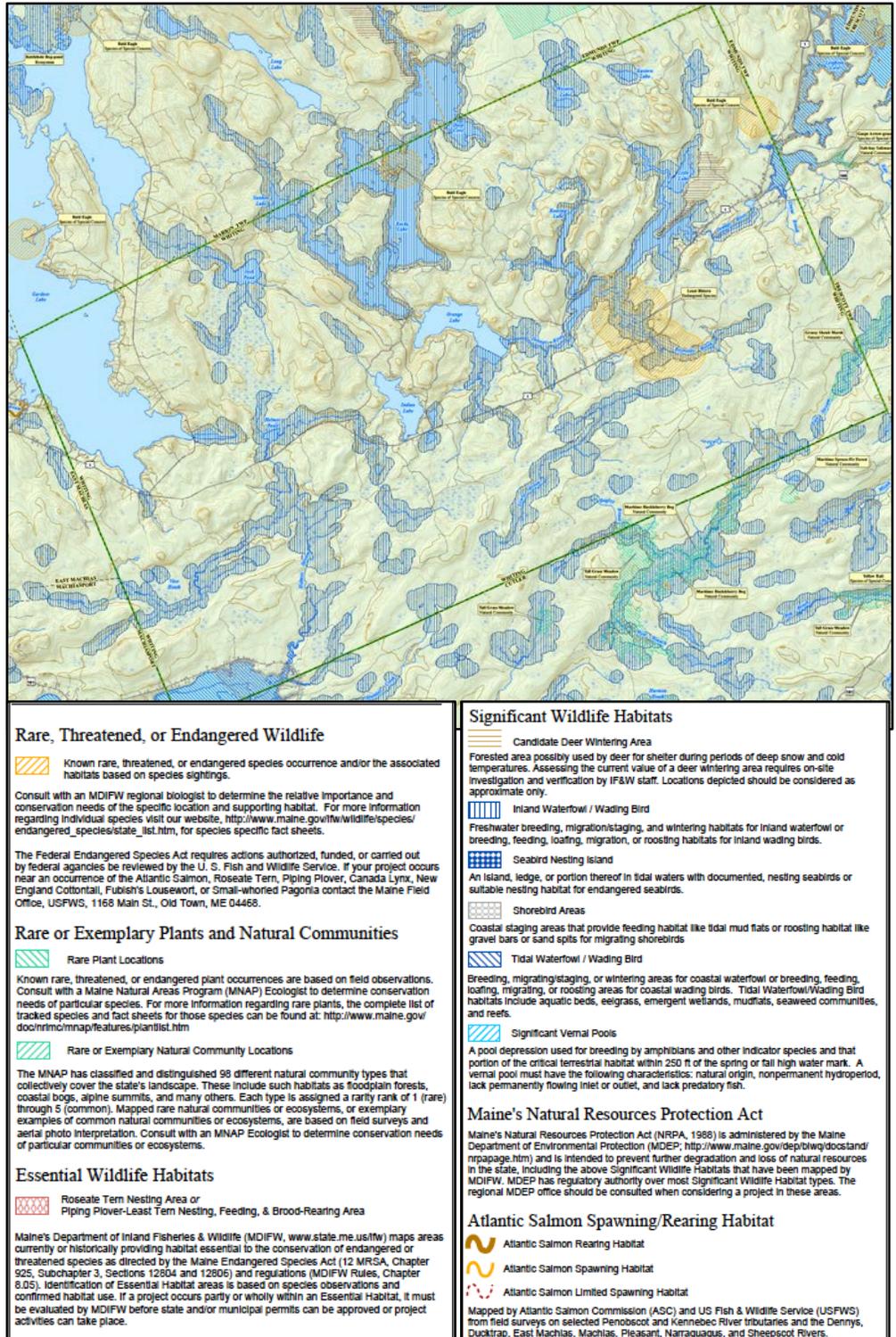
- **Cobscook Bay** – Cobscook Bay has the highest density of nesting bald eagles in the northeastern United States. The bay’s waters are exceptionally productive and host a high diversity of plant and animal species. In Cobscook Bay, the tide rises and falls an extraordinary 24 feet. Each tide brings a fresh supply of nutrients from the ocean. The nutrients support growth of seaweeds and algae, which are eaten by shellfish and other animals. During spring and fall migrations, thousands of shorebirds use Cobscook Bay as a stopover for resting and feeding.
- **Cutler Grasslands** - The Cutler Grasslands Focus Area encompasses several peatlands, small ponds, meandering stream drainages, and one of the largest known “bluejoint meadow” natural communities in Maine. The streams and wetlands provide over 2,000 acres of mapped habitat for inland waterfowl and wading birds as well as other wildlife species. These open habitats are embedded within forested stands of varying degrees of past disturbance, ranging from early successional aspen groves to a spruce stand over 100 years old.
- **Machias Bay** – not mapped in Whiting; primary focus area is in Cutler (Kelley Heath) and Machiasport (Larrabee Heath) but includes the shoreline of Holmes Bay in Whiting
- **Orange River** -This 600+ acre complex of wetlands and uplands is one of the region’s more important Inland Wading Bird and Waterfowl Habitats, providing undisturbed nesting habitat and undisturbed, uncontaminated feeding areas that are essential for maintaining viable waterfowl and wading bird populations. Two rare bird species, the Endangered least bittern and the Special Concern bald eagle have been documented in the focus area as well.

Source: Maine Natural Areas Program, 2016.



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". The Maine Department of Inland Fisheries and Wildlife (MDIFW) identify these sites. In summary, any project within the Essential Habitat that requires a state or municipal permit, or uses public funding, requires IF&W review. The Essential Habitat includes land within 1/4 mile of the identified site. This consultation rarely stops development, but projects may be modified to protect the eagles. The screen shot above and its respective legend below depict the High Value Plant and Wildlife Habitats provided on Map 2 of the Beginning with Habitat map set provided to Whiting by the Department of Inland Fisheries and Wildlife. As noted above this map set is in large poster format and available at the town office. While the digital data on the map cannot be posted to the online Planners Maps the analysis that follows below uses the data along with zoomed-in screen shots of specific features.

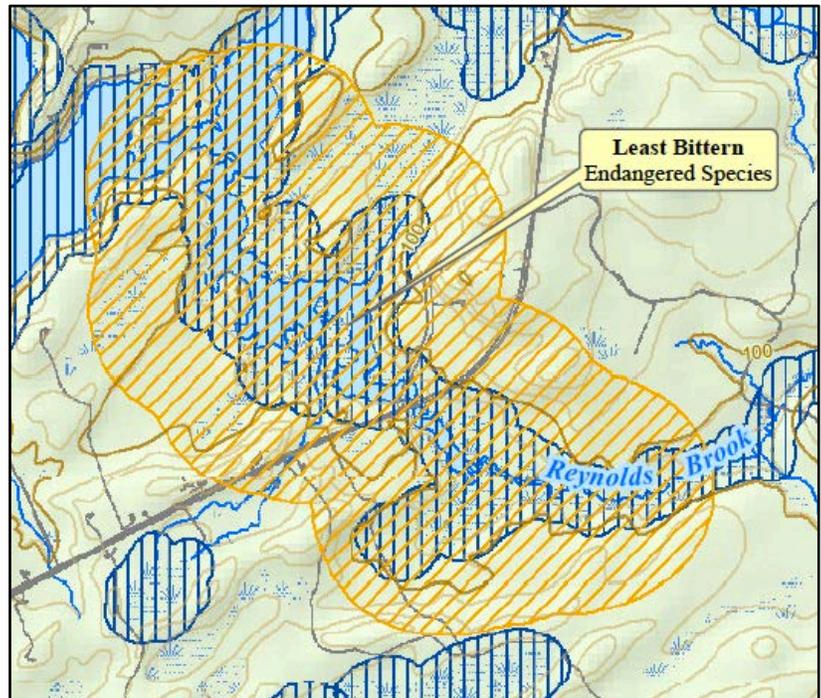


According to MDIFW, Whiting has two sites of essential wildlife habitat that support the bald eagle (*Haliaeetus leucocephalus*), a Species of Special Concern, including nesting territory that is occupied by eagles during at least one of the three most recent years and intact for two consecutive years. See screen capture of portion of Map 2 - High Value Plant and Animal Habitat from Whiting's Beginning with Habitat map set below.



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 Whiting are illustrated on Map 2 - High Value Plant and Animal Habitat from Whiting's Beginning with Habitat map set and include deer wintering areas, shorebird areas, tidal waterfowl/wading bird habitat and inland waterfowl/wading bird habitat. The shorebird areas, tidal waterfowl/wading bird habitat are found in Holmes Bay and Leighton Cove near the village; the inland waterfowl/wading bird habitat is found in all of the lakes, streams and rivers in Whiting except the main basin of Orange Lake, Gardner Lake and Indian Lake; the majority of the deer wintering area is shown in the screen capture above south west of Little Lake.

Rare, Threatened, or Endangered Wildlife - In addition to Essential and Significant Habitat, MDIFW tracks the status, life history, conservation needs, and occurrences for species that are endangered, threatened or otherwise rare. Whiting supports habitat for one endangered species in Maine, the Least Bittern (*Ixobrychus exilis*) located along Reynolds Brook and a portion of the Orange River where Reynolds Brook merges with its impoundment.



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

Accordingly, it is unlawful to angle, take, or possess any Atlantic salmon from all Maine waters (including coastal waters). Regarding the above-mentioned rivers, any salmon incidentally caught must be released immediately, alive and uninjured. Atlantic salmon must not be removed from the waters. Fishing for Landlocked Atlantic Salmon (*Salmo salar*) also known as Sebago Salmon and Quananiche, is permitted throughout Maine under general fishing regulations.

NATURAL RESOURCE PROTECTION

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

Pertinent Federal and State Laws:

- Maine Mandatory Shoreland Zoning - Whiting has chosen along with scores of rural towns to have the Maine Forest Service administer and enforce the statewide timber management standards of the Mandatory Shoreland Zoning Act (38 M.R.S.A., Section 438-B) in the shoreland zone in Whiting.
- Subdivision Control Law Title 30-A Section 4401 et seq. defines criteria that planning boards must consider in the review of proposed subdivisions, including factors that relate to environmental concerns.
- 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 Location 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 100 feet. The requirements for multi-family and other uses are based on the amount of sewage generated.
- Maine Endangered Species Act – regulates the designation and protection of endangered species including disallowing municipal action from superseding protection under the Act.
- The Forest Practices Act - regulates the practice of clear cutting by setting regeneration and clear cut size requirements.

Pertinent Local Laws

At the local level, Whiting is currently revising the minimum shoreland standards, as required by the State Mandatory Shoreland Zoning Act. Surface waters in Whiting are also protected through the Plumbing Code and local Subdivision Regulations. This Comprehensive Plan recommends a review of the Land Use Ordinance to provide further protection to the water resources on which the economy depends.

Pertinent Tax Incentive Programs

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

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

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

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.

According to Municipal Valuation Return as of April 1, 2016 Whiting had 16 parcels constituting 751 acres enrolled in the open space program and 8 parcels constituting 120 acres in the farmland 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. No parcels were withdrawn from the either program in 2015.

According to Municipal Valuation Return as of April 1, 2016 Whiting had 106 parcels constituting 14,364 acres in tree growth tax status. In 2015 one parcel was withdrawn from the program providing \$14,441 to the Town as a result of penalties assessed.

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.

- Current Use Valuation of Certain Working Waterfront Land (Title, Section 1131, et seq.) provides for the valuation of land on the basis of its use as working waterfront.

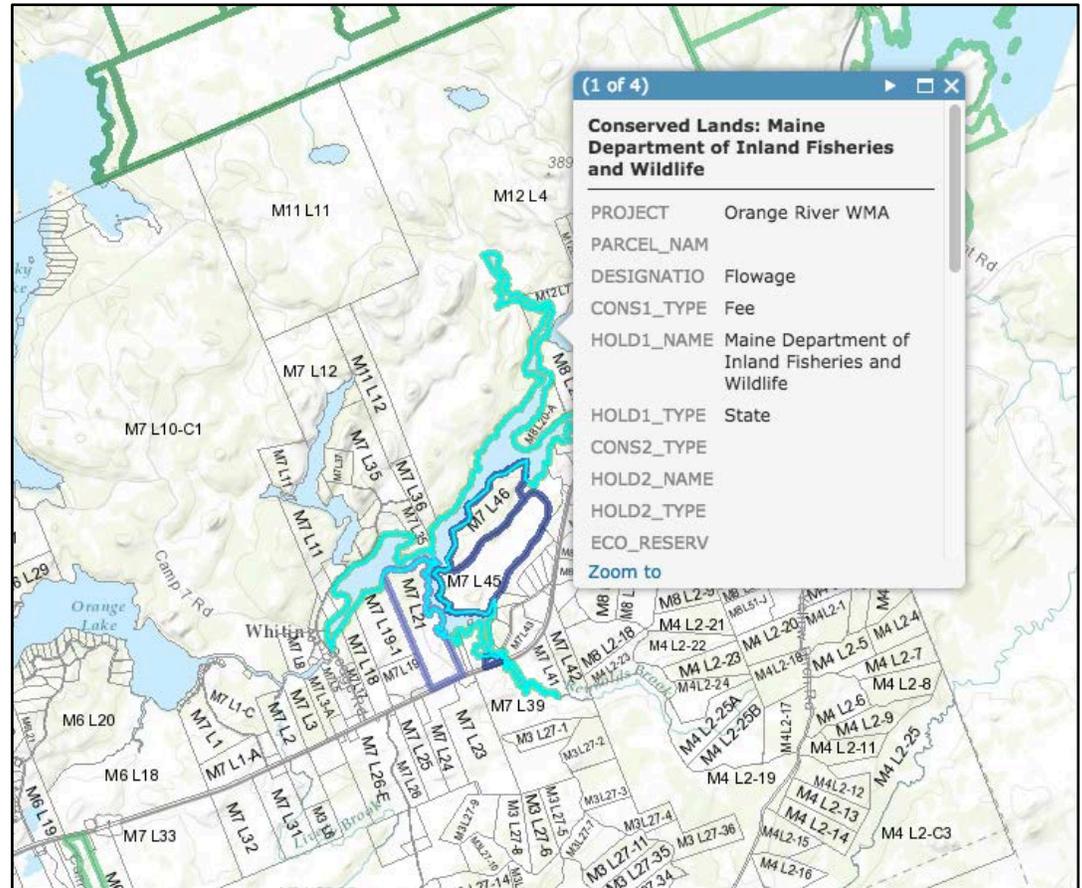
The Working Waterfront tax law requires that all enrolled properties must abut tidal water or be located within the intertidal zone. While there is no minimum lot size requirement for this program, current use taxation under this program applies only to land. It does not apply to structures such as wharves, piers, or lobster pounds. For the purposes of current use taxation on working waterfront property, “working waterfront” is defined as land providing access to or in support of the conduct of commercial fishing activities. In 2017, Whiting did not have any properties enrolled in this program.

The Maine Farmland Registration Program is designed to protect the farmers' right to farm their land. Upon registration, a farmer, including blueberry farmers, is guaranteed a 50-foot buffer zone between the productive fields and new incompatible development, such as residential development. The Farmland Registration Program also lets new and potential abutter know that a working farm is next door.

STATE PARKS AND PUBLIC RESERVE LANDS

There are no state parks in Whiting. The Orange River Wildlife Management Area, managed by the Maine Inland Fisheries and Wildlife Department, includes approximately 588 acres of flowage; see screen capture at right of Whiting Planners Map with the Orange River WMA

selected and information from attribute table opened. The Cutler Coast Public Reserved Land, managed by the Maine Bureau of Parks and Lands, extends from Cutler into Whiting. Access to this state managed 12,000-acre unit (909 acres of which are located in Whiting) is from US 191 in Cutler. In addition, Edmunds Township, next to Whiting to the north, is home to the 888-acre



Cobscook Bay State Park as well as the 6,700-acre Moosehorn National Wildlife Refuge. These two larger public holdings are also visible by accessing the online Whiting Planners map (<http://www.arcgis.com/home/webmap/viewer.html?webmap=7b0cb187f0a842b2982e95bdf2b5df76&extent=-67.4966,44.6816,-67.032,44.8544>).

PUBLIC ACCESS POINTS

There are three boat-landing facilities within the town; all three are owned by the Maine Department of Inland Fisheries and Wildlife. One provides access to the Orange River, from the Landing Road off Playhouse Lane, a half-mile or so west of the town center; it is lightly used. The Quoddy Regional Land Trust (now the Downeast Coastal Conservancy) acquired this land and has guaranteed public access to the boat landing.

There are two other boat launches, one from a short road leading off Halls Mills Road to Rocky Lake and another providing access to Indian Lake on land with frontage on Spruce Point Lane as it runs adjacent to US 1. Improved boat landing facilities exist on Gardner Lake in nearby East Machias.

E - EMPLOYMENT AND ECONOMY

Whiting is a small rural community with an economic base that is rooted in its natural resources including maritime food and food processing, regional tourism, and exceptional shoreland and scenic beauty. Median incomes in Whiting are higher than in the rest of the county and poverty rates are lower. A single manufacturer, Looks Gourmet Food, provides most of the employment. However, there are also a variety of retail and service businesses supported by residents, visitors and second home owners. The vast majority of employed residents commute to regional service centers for work.

Summary of Key Findings

- The number of jobs within Whiting employing those who do not live in Whiting has increased from 6 in 2002, to 43 in 2015 due primarily to a new and now largest employer, Looks Gourmet Food. Other local employers are mostly small contractors and retail.
- Taxable sales data is only available at the Economic Summary Area (ESA) level. Whiting is part of the Machias ESA which has experienced modest growth in both total retail and consumer retail sales between 2011 and 2016.
- The top three sectors of employment for Whiting are ‘Management, business, science and arts occupations’; ‘Service occupations’ and; ‘sales and office occupations’
- With a mean travel time to work of 26.7 minutes Whiting residents are traveling further than the Washington County average (19.2 minutes).
- Whiting’s median household income in 2016 has increased considerably in the last few decades: by 154.7% since 1990 and by 88% since 2000; it now surpasses the median income for both the County and the State. However, very high margins of error in the American Community Survey persist in the analysis of economic conditions. The largest cohort of households, with incomes in the \$50,000-\$74,999 range of income includes 45 households, for instance, constitutes nearly one third of all Whiting households and its margin of error is +/-45.
- Nine and a half percent of Whiting families were listed as having incomes below the poverty level in 2016 about half the rate than for the entire county (18%).

WHITING BUSINESS AND EMPLOYMENT TODAY

As a small rural community Whiting has a very limited economic base. There is one manufacturer, Looks Gourmet Food Company, that is located on Holmes Bay. Looks is the largest employer in Whiting and also supports employment from individuals outside of the town. There are a few businesses clustered along Route 1 within the village. They provide services like fuel and convenience food as well as visitor services for travelers staying in the Downeast region and those heading to Lubec and across the border into Canada. As depicted on the charts of the inflow and outflow of job on the following page, the vast majority of employed Whiting residents commute to jobs in surrounding towns or over the Internet. In addition to the service businesses in the village there are contractors who operate from their homes and from establishments along Route 1. Those who work from their homes and online 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, cultural opportunities within the region, low crime and clean natural surroundings, all of which are qualities in which Whiting possesses a competitive advantage.

Local Employers

Employment data for a town as small as Whiting can be unavailable and have high margins of error. The charts at right are provided to describe general inflows and outflows of employment. They are created by a mapping tool created by the US Census called “On The Map”

(<http://onthemap.ces.census.gov/>). Three snapshots are provided for the years 2002, 2011 and, the most recent available, 2015. In all 3 years of data, the vast majority of employment for Whiting residents is provided outside of Whiting’s boundaries. The number of jobs in Whiting has increased from 6 in 2002, to 43 in 2015. Employment outside of Whiting for Whiting residents has also increased from 78 in 2002 to 154 in 2015 with a significant increase to 246 jobs in 2011. This is likely an anomaly as the data from 2002 and 2015 are likely more reliable for the following 3 reasons:

1. On The Map does not have data from 2010 because the decennial census no longer asked questions at this level of detail.
2. The 2002 data is based on the full 2000 Census when the full decennial census did include questions at this level of detail.
3. Both the 2011 data and the 2015 data are from the American Community Survey. However, the 2015 data is based on estimates from a full comparison of two 5-year estimates while the 2011 data is based on only one cycle of 5-years estimates. Thus the 2015 data may have a smaller margin of error.

The largest employer, Looks Gourmet Food, did not exist when the 2002 data were assembled (based on the 2000 Census). Other local employers are mostly small contractors and retail. The following table is compiled from data available from the Interactive Employer Locator (<http://www.maine.gov/labor/cwri/employers2.html>) after review, update and additions by the Comprehensive Plan Committee.

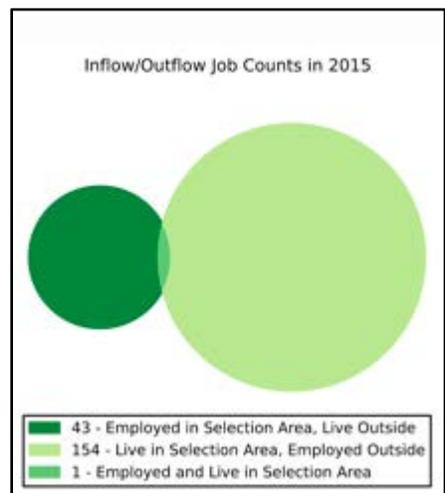
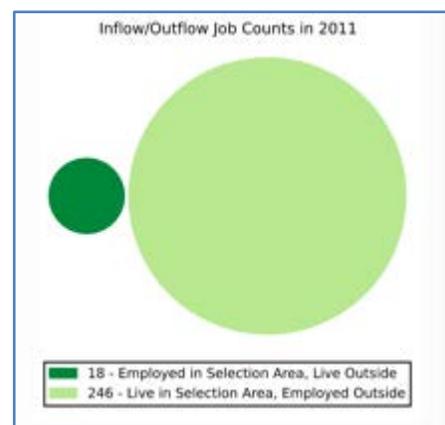
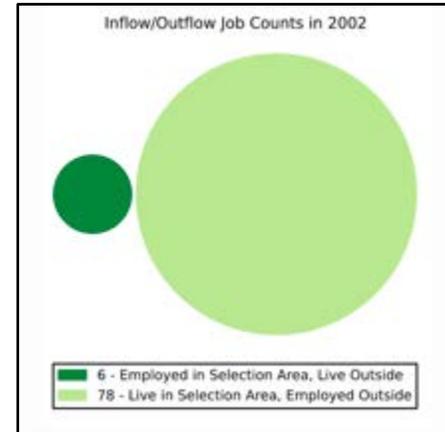


Table E1 - LOCAL EMPLOYERS – TOWN OF WHITING

Employer	Industry/Business Description	# of Full Time Employees
Berries-N-Trees	Trucking	1-4
East Coast Driving School	Driving Instruction	1-4
Curtis Construction	General Contractor, Trucking, Groundwork	1-4
Dan Hall	Excavation contractor	1-4
Gatcomb Plumbing & Heating	Plumbing Contractors	5-9
Gilpatrick's Firewood & Logging	Wood processing and lumber	
H & S Trucking and Construction Inc.	Excavating Contractors; Oil distribution; Land Management/Development; Trucking	5-9
Hope Bible Fellowship	Churches	1-4
Lighthouse Digest Magazine	Publishers-Magazine (mfrs) and online retail	1-4
Look's Gourmet Food Co	Canning (mfrs)	20-49
Orange River Artisans	Pottery and retail sales	1-4
Paul Gaddis	Forester	1-4
Peter Hall	Wood contractor	1-4
Peter Hall and Robert Curtis	Snow plowing	1-4
Puffin Pines Country Gift Store	Gift Shops	1-4
Three Angels Seventh-Day Adventist	Churches	1-4
US Post Office	Post Offices	1-4
Whiting Bay Family Medicine	Physicians & Surgeons	1-4
Whiting Store	Grocers-Retail	5-9
Whiting Town Office	Government Offices-City, Village & Twp	1-4
Whiting Village School	Schools	5-9
Spencer Construction (Jacob)	General Contractor	5-9
Spencer's Specs (Stephen)	General Contractor	1-4
The Towne Fryer	Specialty food sales	1-4

Source: Interactive Employer Locator (<http://www.maine.gov/labor/cwri/employers2.html>) as modified and updated by Whiting Comprehensive Plan Update Committee

Retail Trade

Taxable sales data, assembled by the Maine Revenue Services, is only available at the Economic Summary Area (ESA) level, i.e. at time of writing the Report on Maine Town Sales *since* 2007 is “currently unavailable” (see <http://www.maine.gov/revenue/research/sales/homepage.html>). The town of Whiting is part of the Machias Economic Summary area that includes 14 municipalities (see list at right). As Whiting is such a small contributor to this large ESA an analysis of trends within this larger ESA is not particularly relevant to economic conditions within the town.

MACHIAS ESA
Bucks Harbor
Cutler
E Machias
Jacksonville
Larrabee
Machias
Machiasport
Marshfield
Northfield
Roque Bluffs
Starboard
Wesley
Whiting
Whitneyville

To provide a general picture of Total Retail Sales in the Machias ESA relative to the ESAs in all of Eastern Maine the following table indicates a generally upward, if modest, trend from 2011 to 2016.

Economic Statistical District / Area		Annual Totals						Annualized Percentage Change		
		2011	2012	2013	2014	2015	2016	2011-2016	2011-2016	2015-2016
EASTERN ME	BAR HARBOR	\$243,911	\$257,288	\$267,739	\$281,724	\$304,615	\$337,160	6.69%	38.23%	10.66%
	BLUE HILL	\$75,031	\$74,023	\$78,904	\$79,753	\$78,927	\$86,925	2.99%	15.85%	10.13%
	CALAIS	\$105,276	\$105,214	\$108,500	\$109,046	\$109,255	\$118,540	2.40%	12.60%	8.50%
	EASTPORT	\$19,894	\$20,733	\$20,939	\$21,616	\$20,730	\$21,751	1.80%	9.33%	4.92%
	ELLSWORTH	\$413,308	\$415,365	\$431,465	\$448,200	\$471,822	\$505,386	4.10%	22.28%	7.11%
	JONESPORT	\$43,154	\$43,596	\$44,507	\$46,229	\$46,663	\$52,766	4.10%	22.27%	13.08%
	MACHIAS	\$50,347	\$48,726	\$49,233	\$50,358	\$50,808	\$56,182	2.22%	11.59%	10.58%
EASTERN ME Total		\$950,921	\$964,944	\$1,001,288	\$1,036,926	\$1,082,818	\$1,178,710	4.39%	23.95%	8.86%

Source: Maine Revenue Services (<http://www.maine.gov/revenue/research/sales/homepage.html>) 2017

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).

Consumer Retail Sales, the total taxable retail sales to consumers, over the same time horizon (2011-2016) also show a modest upward trend.

Economic Statistical District / Area		Annual Totals						Annualized Percentage Change		
		2011	2012	2013	2014	2015	2016	2011-2016	2011-2016	2015-2016
EASTERN ME	BAR HARBOR	\$233,707	\$246,668	\$259,964	\$274,238	\$297,281	\$330,720	7.19%	41.51%	11.25%
	BLUE HILL	\$67,661	\$67,314	\$72,662	\$73,026	\$73,088	\$81,044	3.68%	19.78%	10.88%
	CALAIS	\$96,648	\$99,529	\$101,835	\$101,752	\$102,649	\$111,900	2.97%	15.78%	9.01%
	EASTPORT	\$19,035	\$20,123	\$20,417	\$21,051	\$20,354	\$21,392	2.36%	12.39%	5.10%
	ELLSWORTH	\$389,826	\$393,716	\$405,956	\$423,728	\$450,740	\$485,200	4.47%	24.47%	7.65%
	JONESPORT	\$38,054	\$38,973	\$40,831	\$41,759	\$42,128	\$48,129	4.81%	26.48%	14.25%
	MACHIAS	\$47,224	\$45,667	\$46,080	\$47,019	\$47,535	\$52,490	2.14%	11.15%	10.42%
EASTERN ME Total		\$892,154	\$911,989	\$947,745	\$982,573	\$1,033,775	\$1,130,875	4.86%	26.76%	9.39%

Source: Maine Revenue Services (<http://www.maine.gov/revenue/research/sales/homepage.html>) 2017

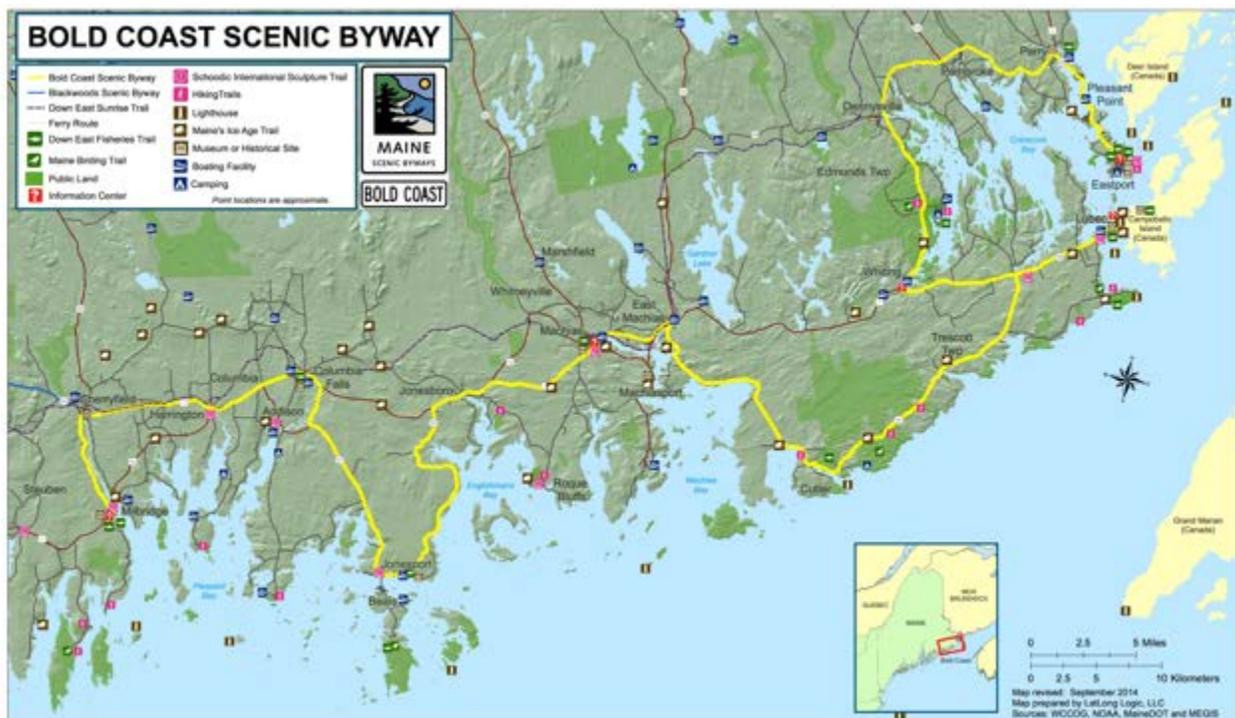
Most retail businesses are year-round operations. People living here and in adjacent communities' either shop online or drive to Calais, Machias, Ellsworth, or Bangor to satisfy most if not all their shopping needs and their desire for shopping as a social experience.

Tourism and Seasonal Homes

Tourism has always played a role in the economy of Whiting and is expected to play a much larger role in the future. Nature and cultural based tourism is growing in popularity and Whiting has all of the ingredients for success in this market including extensive lakefront property and exceptional scenic beauty. As noted in the Housing chapter eighty-one percent of the vacant housing units in Whiting are used for seasonal or recreational use. Second home owners demand a wide variety of services from the local economy including snow removal, land management, fuel and other convenience goods, contracted services, and caretaking.

Since 2004 Whiting has participated in regional efforts to promote tourism. The Bold Coast Scenic Byway traverses the Holmes Bay portion of the town and includes the village center. Businesses within the town also continue to collaborate with regional organizations like Downeast & Acadia Regional Tourism and the Washington County Council of Governments to create permanent bicycle tourism routes – the Bold Coast Scenic Bikeway – in Washington County by supporting bike-friendly businesses and communities.

Regional festivals in the summer bring visitors to Whiting. The festivals are located in towns along the Washington County coast and include several 4th of July festivals, the Downeast Birding Festival in the entire region, Bold Coast Sea and Sky Festival, the Bay of Fundy International Marathon in Lubec, the Blueberry Festival and Margarett Days in Machias, and others on Campobello Island in Canada.

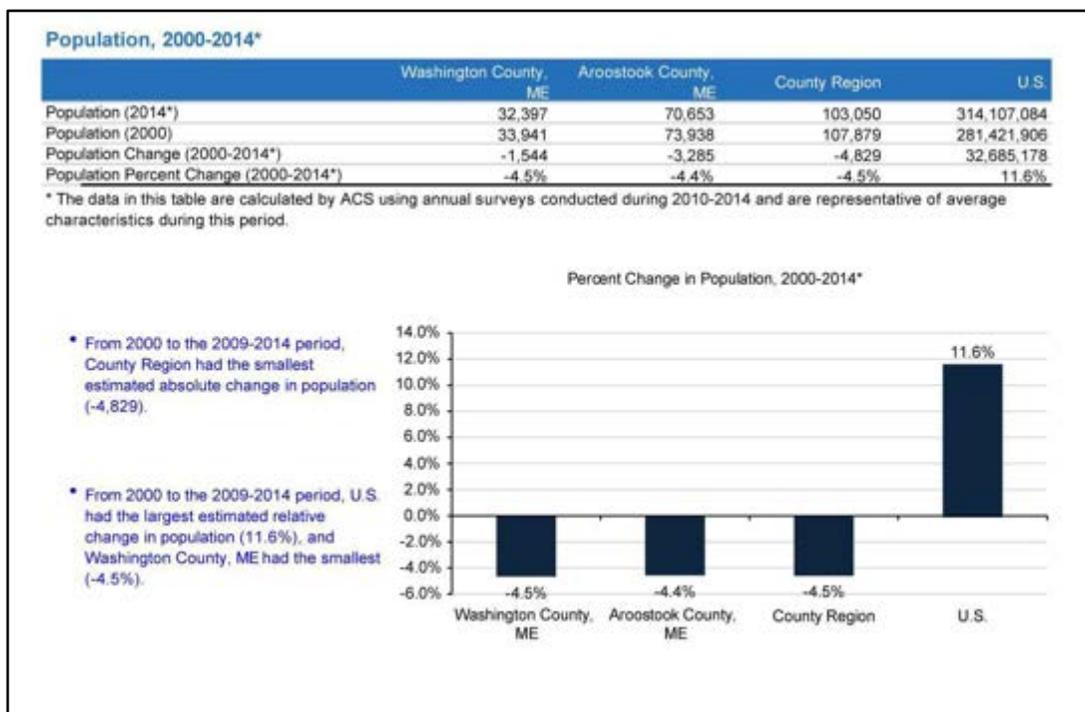


Source: <http://boldcoastbyway.com/byway-route/>

REGIONAL ECONOMY

Traditionally, Washington County has been one of the most depressed counties in New England. 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 2016 Comprehensive Economic Development Strategy (CEDS) prepared for the Aroostook-Washington Economic Development District (AWEDD) the biggest challenge facing the AWEDD is workforce related, due to the loss of population as depicted in the chart below.



Source: Aroostook-Washington Economic Development District Comprehensive Economic Development Strategy 2016-2017.

The 18 to 44 year old age cohort is the workforce lifeblood and is hovering at 30% of the total population; a level below which economists tell us our local/regional economy is no longer sustainable. When the pool of younger workers drops below this 30% threshold, companies struggle to find the workers needed to operate their business; eventually causing them to either close or relocate.

The second issue creating a sense of constraint in Northern and Eastern Maine is our energy cost burden. The region's citizens and businesses survive in a region with twice the national average cost burden for energy. Since energy is the primary input to life and economic performance our region faces a greater barrier than many regions in the US. The cost burden is driven by an 80% use of heating oil, 16 cents per Kw for electricity and a low household income as a result of a constrained economy.

The AWEDD regional vision is included in the CEDS document:

Our region is a place of abundant natural resources that is reflected in the beauty of our

landscape and the potential for economic and social prosperity it offers. We value the individuality and endurance of our people while recognizing the strong sense of community and place that sustains us. We will create economic growth by focusing on sectors that best leverage these assets and by working to develop policies that promote private sector investment; while at the same time, retaining the quality of life that makes the region special.

A full rewrite of the CEDs document is underway in 2017-2018 by the Northern Maine Development Commission. Additional information on the Regional Economy is also provided in the *Regional Coordination* chapter.

Commuting to Work

Some Whiting residents commute to jobs located in surrounding communities. With a mean travel time to work of 26.7 minutes Whiting residents are traveling further than the Washington County average (19.2 minutes; see Table E-2). This commuting distance has not change since 2010 and, given Whiting's location relative to the service centers of Machias, Calais and Lubec, is not expected to decrease in the future.

According to the Census, Whiting's workforce commutes primarily by private vehicle (83.4%). The second largest segment (8.6%) commutes by carpools, lower than the average for the county (13.6%). The third largest segment works at home.

Table E-2 COMMUTING TO WORK: 2010 and 2012-2016 ACS Estimate

	Whiting				Washington County			
	2010		2012-2016 estimate		2010		2012-2016 estimate	
COMMUTING TO WORK	#	%	#	%	#	%	#	%
Workers 16 years and over	231	100.0	151	100.0	13,408	100.0	12,591	100.0
Drove alone	174	75.3	126	83.4	9,771	72.9	9,247	73.4
In carpools	28	12.1	13	8.6	1,808	13.5	1,714	13.6
Using public transportation	0	0.0	0	0.0	55	0.4	34	0.3
Walked	0	0.0	0	0.0	738	5.5	717	5.7
Other means	5	2.2	0	0.0	163	1.2	160	5.7
Worked at home	24	10.4	12	7.9	873	6.5	719	5.7
Mean Travel time to work (minutes)	26.8	--	26.7	--	19.0	--	20.3	--

Source: US Census 2010; American Community Survey Estimate 2012-2016

Some of the major Washington County regional employers are shown in Table E-3. The Whiting Comprehensive Plan Committee and their consultant question the accuracy of the estimated number of employees that are highlighted in the following table provided by the Interactive Employer Locator (<http://www.maine.gov/labor/cwri/employers2.html>). All of the highlighted estimates are significantly higher than local experience and knowledge suggests.

Table E3 – REGIONAL EMPLOYERS (GREATER THAN 50 EMPLOYEES)

Business	Industry	Location	~ # or range of Employees
Army National Guard Recruiter	Public Administration	Calais	50-99 ⁸
Bay Ridge Elementary School	Educational Services	Cutler	50-99
C & D Corp	Wholesale Trade/Fruits & Vegetables	Deblois	250-499
Calais Children's Project	Health Care and Social Assistance	Calais	100-249
Calais Day Treatment Center	Health Care and Social Assistance	Calais	100-249
Calais IGA Foodliner	Retail Trade/Grocers	Calais	100-249
Calais Regional Hospital	Health Care and Social Assistance	Calais	250-499
Calais School Dept.	Public School	Calais	50-99
Cherry Point Products Inc.	Wholesale Trade/Seafood	Milbridge	50-99
Child & Family Opportunities	Educational Services	Machias	100-249
Dore's Evergreen	Retail Trade	Perry	100-249
Dorr Lobster Co Inc.	Retail Trade/Lobsters	Milbridge	100-249
Down East Community Hospital	Health Care and Social Assistance	Machias	250-499
Down East Corrections Dept ⁹	Public Administration	Machiasport	50-99
Eastern Maine Electric Co-op	Electric Services	Calais	20-49
Hannaford Supermarket	Retail Trade/Grocers	Machias	50-99
Human Services Department	Public Administration	Machias	50-99
Jasper Wyman & Son	Manufacturing/Canning	Cherryfield	50-99
Local Net	Information/Internet Service	Machias	100-249
Machias Savings Bank	Finance and Insurance/Banks	Machias	50-99
Maine Veterans Homes	Health Care and Social Assistance	Machias	50-99
Maine Wild Blueberry Co	Food Processing	Machias / Cherryfield	100-249
Marshall's Health Care Facility	Health Care and Social Assistance	Machias	50-99
Regional Medical Center at Lubec	Health Care and Social Assistance	Lubec	100-249
Tradewinds	Retail Trade/Grocers	Calais	100-249
University of Maine at Machias	Educational Services	Machias	100-249
UPS Customer Center	Professional and Technical Services	Baileyville	50-99
US Naval Communication Unit	Public Administration	Cutler	100-249
Walmart Supercenter	Retail Trade	Calais	100-249
Washington Academy	Educational Services	East Machias	50-99
Woodland Pulp LLC	Manufacturing/Paper	Baileyville	250-499
Worcester Wreath Co	Manufacturing	Harrington	250-499

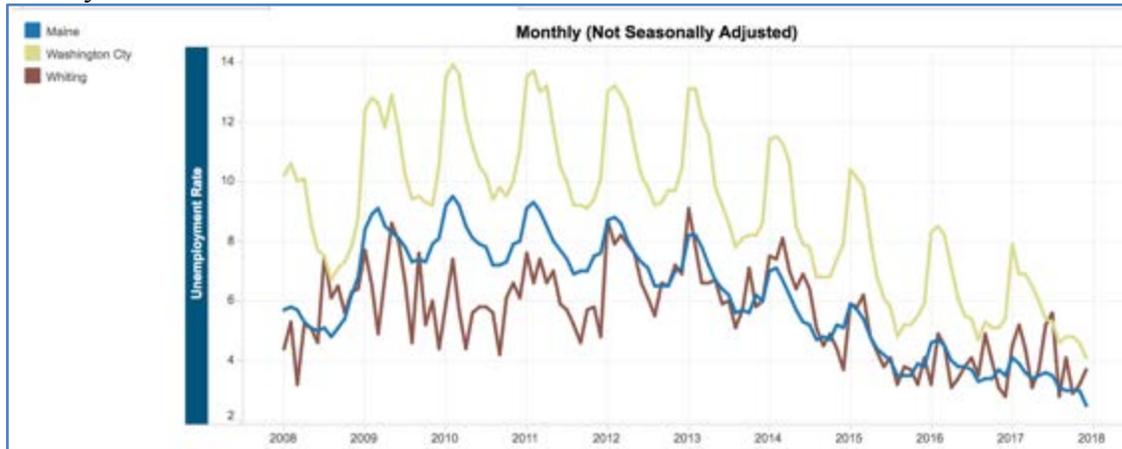
Source: Interactive Employer Locator (<http://www.maine.gov/labor/cwri/employers2.html>)

⁸ All **highlighted estimates**, provided by the Interactive Employer Locator, in this table are significantly higher than what the Whiting Comp Plan Committee and their consultant believe to be the case.

⁹ As of writing Downeast Correctional Facility was operating under a cloud of whether and how long it would remain open.

LABOR FORCE AND EMPLOYMENT STATISTICS

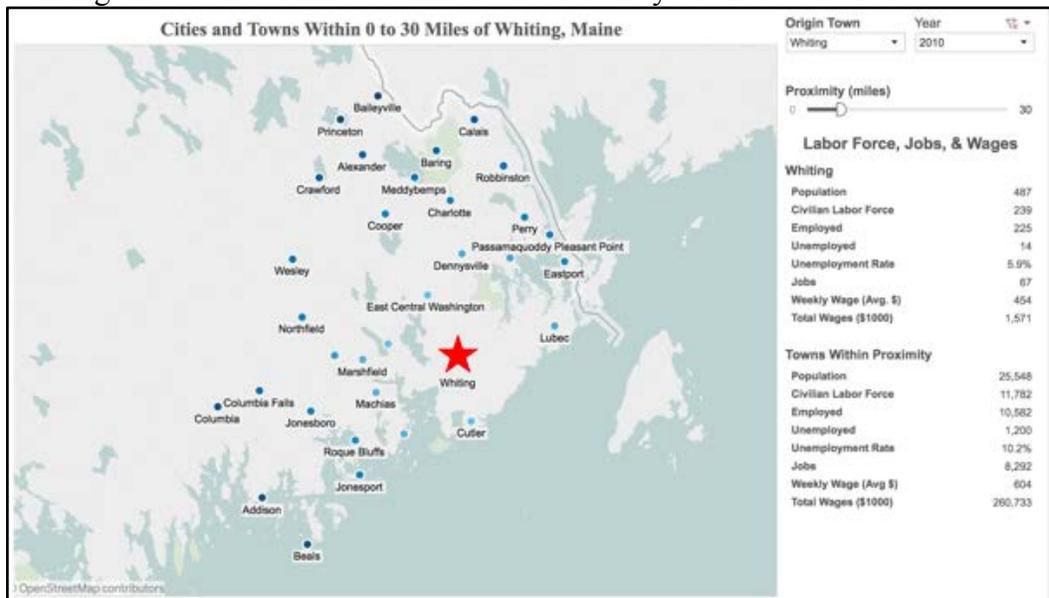
The labor force is defined as all persons who are either employed or are receiving unemployment compensation. According to the Maine Department of Labor the distribution of the labor force in Whiting is similar to the County as a whole. While unemployment throughout the country has decreased since 2008, Whiting has experienced lower unemployment rates than in Washington County as a whole.



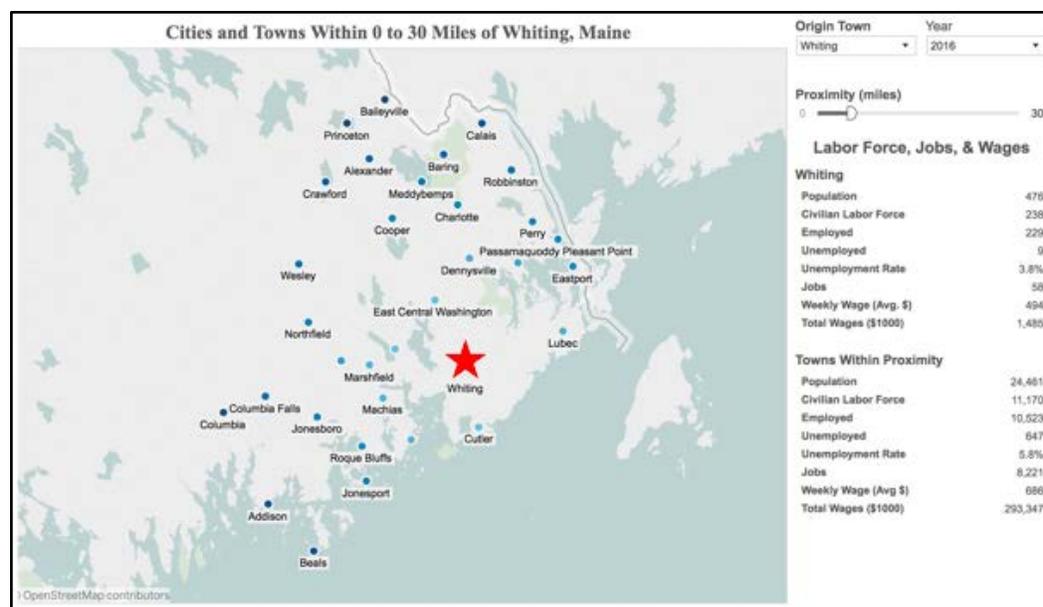
Source: Maine Department of Labor, Labor Force Statistics by Geography, 2017 (not seasonally adjusted) <http://www.maine.gov/labor/cwri/laus2.html>

There is a significant reliance on seasonal, agricultural, marine, and craft-based work in rural areas. The seasonal nature of such work is less likely to be reported. In fact, a significant informal economy exists, especially in natural resource-based jobs, in which residents’ supplement reported incomes with seasonal wages.

The two figures below provide a visual and tabular view of the labor force, including total population, total civilian labor force and the employed and unemployed population and rate, in Whiting and towns within a 30-mile radius for the years 2010 and 2015.



Source: Maine Center for Workforce Research and Information (<http://www.maine.gov/labor/cwri/laus4.html>)



Source: Maine Center for Workforce Research and Information (<http://www.maine.gov/labor/cwri/laus4.html>)

The employed population for Whiting and Washington County is described in Table E-4 by occupation. The top three sectors of employment for Whiting are ‘Management, business, science and arts occupations’; ‘Service occupations’ and; ‘sales and office occupations’.

Table E4 - EMPLOYMENT – OCCUPATION, 2016

Employment Occupation: 2016	Whiting			Washington County		
	Number	%	Margin of Error	Number	%	Margin of Error
Employed persons 16 years and over	149	100	39	12,917	1000	250
Management, business, science, and arts occupations	56	37.6	23	3,656	28.3	1280
Service occupations	26	17.4	16	2,651	20.5	178
Sales and office occupations	24	16.1	13	2,409	18.6	204
Natural resources, construction, and maintenance occupations	21	14.1	14	2,407	18.6	168
Production, transportation, and material moving occupations	22	14.8	11	1,794	13.9	131
Class of worker						
Private wage and salary workers	98	65.8	+/-34	8,497	65.8%	+/-255
Government workers	28	18.8	+/-19	2,359	18.3%	+/-167
Self-employed in own not incorporated business workers	23	15.4	+/-13	2,041	15.8%	+/-148
Unpaid family workers	0	0.0	+/-10	20	0.2%	+/-12

Source: American Community Survey 5-year Estimates 2012-2016

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

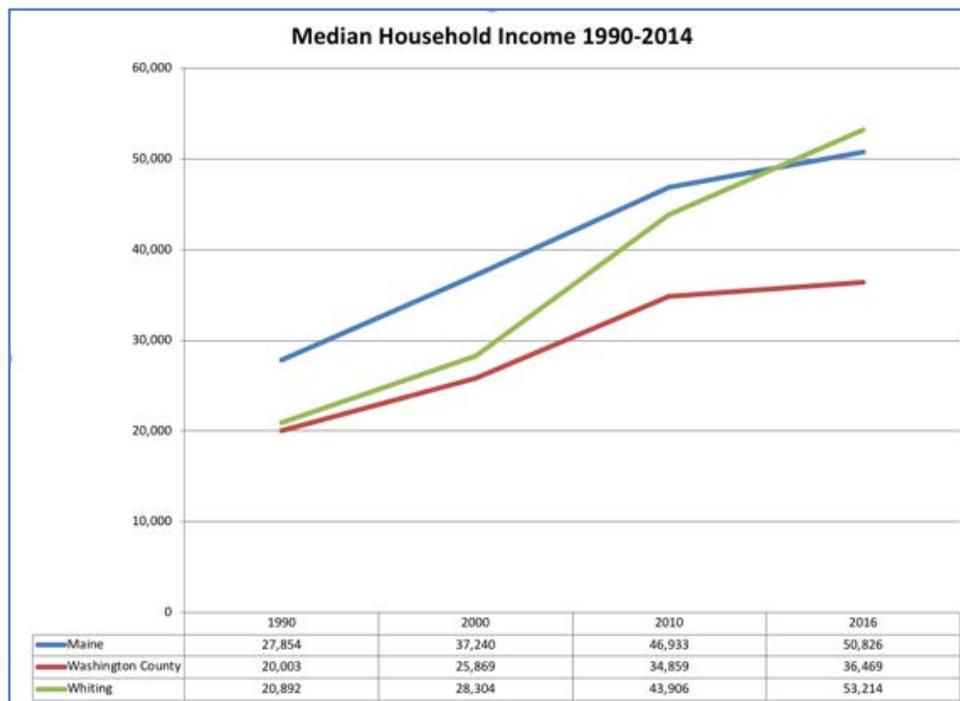
underemployed in a minimum wage job, some cannot maintain a vehicle particularly for severe winter conditions.

Another regional labor force issue for business expansion in many rural regions across the country as well as 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.

The work release program that operates out of the Downeast Correctional Facility provides a significant number of workers for regional employers as well as a reliable source of work and training for inmates at the facility. In particular inmates who may experience the transportation and substance abuse issues noted above are bussed to the place of employment. Many are hired by the regional businesses upon their release.

INCOME

Whiting's median household income increased considerably in the last few decades. Incomes in 2016 increased by 154.7% since 1990 and by 88% since 2000 and now surpass the median income for both the County and the State.



Source: US Census Bureau, Decennial Census American Community Survey 5-year estimates

Again however, the margins of error in the American Community Survey must be taken into account when drawing conclusions about this increase in median household income. Note in the following table for instance, that the largest cohort of households with incomes in the \$50,000-\$74,999 range of income includes 45 households. This is nearly one third of all Whiting households and the margin of error is +/-45. Likewise, the margin of error in each of the

remaining high-income households is also the same number as the reported number of households in that cohort.

Table E5 – HOUSEHOLDS BY INCOME IN 2016

	Whiting			Washington County		
	2016			2016		
	#	%	Margin of Error	#	%	Margin of Error
Households	150	100.0	+/-27	14,065	100.0	+/-285
Less than \$10,000	9	6.0%	+/-7	1,268	9.0%	+/-136
\$10,000 to \$14,999	6	4.0%	+/-5	1,147	8.2%	+/-133
\$15,000 to \$24,999	14	9.3%	+/-11	2,096	14.9%	+/-170
\$25,000 to \$34,999	33	22.0%	+/-13	1,868	13.3%	+/-131
\$35,000 to \$49,999	7	4.7%	+/-7	2,353	16.7%	+/-178
\$50,000 to \$74,999	45	30.0%	+/-45	2,714	19.3%	+/-178
\$75,000 to \$99,999	16	10.7%	+/-16	1,281	9.1%	+/-95
\$100,000 to \$149,999	18	12.0%	+/-18	939	6.7%	+/-101
\$150,000 to \$199,999	2	1.3%	+/-2	209	1.5%	+/-49
\$200,000 or more	0	0.0%	+/-0	190	1.4%	+/-52
Median household income (dollars)	53,214	-	+/-12,323	39,549	-	+/-1,206
Per capita income (dollars)	25,009	-	+/-3,751	23,113	-	+/-1,176

Source: American Community Survey 2012-2016 5 Year Estimates

Sources of income for residents of Whiting and Washington County in 2016 are derived primarily (65.8%) from wage and salaried positions (see Table E-4 above), income that 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. The American Community Survey 5-year estimates in 2016 indicate 15.4% of Whiting's residents report self-employment income, essentially the same as the county average of 15.8%. Roughly the same percentage of residents in Whiting collect social security income (43.3%) as do residents of the county (42.3%), reflecting the large retiree population in Whiting. Over 10% of Whiting residents received public assistance, more than the county average of 7.3%. 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 AND BENEFITS IN 2016

Income and Benefits (Households often have more than one source of income, as seen here)	Whiting			Washington County		
	#	%	Margin of Error	#	%	Margin of Error
Households	150	100.0	+/-27	14,065	100	+/-285
With earnings	107	71.3	+/-22	9,490	67.5	+/-239
With Social Security Income	65	43.3	+/-17	5,947	42.3	+/-175
With retirement income	40	26.7	+/-15	3,052	21.7%	+/-132
With Supplemental Security income	7	4.7	+/-5	1,396	9.9	+/-151
With cash public assistance income	16	10.7	+/-11	1,022	7.3	+/-150
With Food Stamps/SNAP benefits in the past 12 months	33	22.0	+/-13	3,347	23.8	+/-196

Source: American Community Survey 2012-2016 5 Year Estimates

In 2016, the average poverty threshold for a family of four persons was \$24,600 in the contiguous 48 states (U.S. DHHS). Nine and a half percent of Whiting families were listed as having incomes below the poverty level in 2016. This is lower than for the entire county (18%).

Table E12 - POVERTY STATUS IN 2016

Poverty Status in 2016 Below poverty level	Whiting		Washington County	
	Percentage	Margin of Error	Percentage	Margin of Error
All People	9.5%	+/-4.6	18.0%	+/-1.0
Persons 18 years and over	11.0%	+/-5.7	17.0%	+/-0.9
Persons 65 years and over	7.5%	+/-6.4	11.0%	+/-1.3
Families	6.4%	+/-4.5	12.4%	+/-1.2
With related children under 18 years	0.0%	+/-35.3	20.0%	+/-2.5
With related children under 5 years	0.0%	+/-56.6	27.8%	+/-6.3

Source: American Community Survey 2012-2016 5 Year Estimates

F - HOUSING

Whiting is a rural town with a very small village center and widely dispersed housing along Route 1 and secondary roads. Housing represents the major investment of most individuals. Housing, and especially its affordability, is very important to the well being of residents. The goal of this section is to document housing conditions and encourage affordable, decent housing opportunities for all Whiting residents.

Summary of Key Findings

- The age of the housing stock in Whiting is comparable to Washington County with 26.1% built before 1939 and 55% built before 1980.
- Eighty-one percent of the vacant housing units in Whiting are used for seasonal or recreational use, a reflection of the many shorefront properties located along Whiting's several freshwater lakes and ponds.
- Whiting has a lower proportion of both mobile homes and trailers (~10 %) than in Washington County (12.2%) and of multi-unit structures (2%) than in Washington County (~8%).
- Monthly housing costs for about a third of Whiting households exceed 30% of monthly income: 35% of households paying a mortgage and 30.8% of those paying rent.
- Approximately 20% of households in Whiting are unable to afford the Median Home Price in the Machias LMA Housing Market
- Whiting has no facilities or developments to serve low and moderate income housing needs. The closest such facilities are located in Dennysville, East Machias, Lubec, and Machias.

HOUSING UNITS

Number of Units

In 2015, Whiting had a total of 352 housing units. Between 2000 and 2010 the town saw a 10.5% increase in housing units, higher than the percentage increase in the nearby service centers of Machias and Lubec and in Washington County and statewide. Since 2010, the growth in the number of housing units has slowed in Whiting, the county and statewide. In the nearby service centers of Lubec and Machias the number of units has also remained about the same. There are high margins of error in the American Community Survey 5 Year estimates but it is still indicative of very weak housing markets, minimal construction of new units, and/or demolition of older units.

Table F-1 TOTAL NUMBER OF HOUSING UNITS

	1990	2000	2010	% Change 2000-2010	2015 with ACS margins of error
Machias	1043	1125	1114	-1.0%	1111 +/-65
Whiting	254	342	378	10.5%	352 +/- 35
Lubec	1014	1063	1147	7.9%	1197+/- 62
Washington County	19,124	21,919	22,926	4.6%	23,014
Maine	587,045	651,901	714,270	9.6%	724,685

Source: U.S. Census, American Community Survey 2011-2015 5 Year Estimates

As noted in the Population Chapter, Whiting's year-round population was growing before 2010 but has declined in the past several years. Average household size is also shrinking. Seasonal population however is increasing as seen by an increase to 140 seasonally vacant housing units in 2010, up from 80 in 1990. Whiting's population is forecast to decline further to 482 individuals by 2019 and to 467 by 2034. Building permit data indicate a steady rate of home construction and a high level of renovation for additions, decks, sheds and so on.

Table F-2 RESIDENTIAL BUILDING PERMITS – CONSTRUCTION TYPE

	New Homes (stick built)	Mobile Homes	Commercial /Industrial	Additions / decks & entryways / storage sheds / garages
2012	4	1	3	14
2013	4	2	1	11
2014	1		1	9
2015	1	2	4	11
2016	2			10
2017	3		1	8
Total	15	5	10	63

Source: Whiting Town Clerk, 2017

Maine's housing stock reflects the State's history and climate. Nationwide, Maine ranks first in the proportion (25.2%) of the housing stock that was built prior to 1940. The age of the housing stock in Whiting is comparable to Washington County with 26.1% built before 1939. Over half (55%) of Whiting's housing stock was built before 1980. Some of these units are in substandard condition and in need of repair. While some of the worst are no longer inhabited there are some in need of assistance with respect to foundation work, heating systems and basic structural repair. Housing sales are predominantly to new residents and non-residents who use the properties for summer recreation. They are classified as seasonal residences but most are capable of year-round occupancy. Investment from newcomers and residents in renovations is improving the habitability and value of many older structures. A gradual 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.

Table F-3 YEAR STRUCTURE BUILT - 2015

	Whiting		Washington County		Maine	
	%	Margin of Error	%	Margin of Error	%	Margin of Error
2010 or later	0.0%	+/-5.5	0.7%	+/-0.2	0.8%	+/-0.1
2000-2009	17.6%	+/-6.1	9.9%	+/-10.8	12.4%	+/-0.2
1980 to 1999	27.3%	+/-10.7	31.1%	+/-1.4	27.8%	+/-0.4
1960 to 1979	18.7%	+/-8.8	23.0%	+/-1.3	21.8%	+/-0.3
1940 to 1959	10.2%	+/-6.2	10.0%	+/-0.8	12.0%	+/-0.2
1939 or earlier	26.1%	+/-8.1	25.2%	+/-1.1	25.2%	+/-0.2

Source: U.S. Census; American Community Survey 3 and 5 year Estimates

Many older homes contain unhealthy materials, such as mold, lead paint, and asbestos. From the 1930s until the 1980s many products containing asbestos were used in house construction. It is fire-retardant, and a thermal and acoustic insulator. However, exposure to asbestos can cause fibrotic lung disease and lung cancer, and harms respiratory function. The mold found in older

homes can also affect respiration. Lead paint used in homes before 1980 can deteriorate into lead dust and paint chips, and can cause brain damage when inhaled or swallowed, especially in children under six.

Unhealthy Housing Can Lead to Disease	
Housing Issue	Human Health Issue
Mold, Dust, Animal Dander/Hair	Asthma
Paint Dust, Chips (pre-1978 painted surfaces)	Lead Poisoning
Garbage, Housecleaning procedures	Pests (rats, mice, insects)
Leaking Roof or Basement = Mold, Mildew	Respiratory illness
Unvented basement (geology specific)	Radon Gas
Well Drinking Water (untreated)	Bacterial Disease; Arsenic Exposure; Radon Exposure;
Holes (windows, walls, roof) = Pests	Bacterial Infections; Asthma; Rabies; Reaction to Insect Stings
Unvented gas, wood, or oil appliances	Carbon Monoxide Poisoning; Respiratory Distress

(Source: Al May, Downeast Public Health Coordinator, Maine CDC, 2014)

Structure Type

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 2016, one-unit structures represented 88 percent of Whiting housing units while mobile homes and trailers accounted for just over 10 percent. This is a lower proportion of mobile homes than in Washington County. Whiting has a much lower proportion of few multi-unit structures (2%) than in Washington County (~8%) and their number has remained steady over the last 16 years.

Table F-4 HOUSING UNITS IN STRUCTURE

	Whiting				Washington County					
	2000		2010		2000		2010		2016	
	#	%	ACS Est. & Margin of error	ACS Est. & Margin of error	#	%	ACS Est. & Margin of error	%	ACS Est. & Margin of error	%
One-unit	283	87.1	316 +/- 46	307 +/- 40	14,397	75.3	18,420 +/-388	78.0	18,352 +/- 298	79.9
Multi-unit	2	0.6	4 +/- 6	6 +/- 8	1,473	7.7	1,863 +/-424	8.8	1,877 +/- 385	7.9
Mobile Home trailer	40	12.3	27 +/- 15	37 +/- 17	3,254	17.0	2,643 +/-240	12.7	2818 +/- 209	12.2
Total units	325	100	347 +/- 48	350 +/- 38	19,124	100	22,926 +/- 187	100	23,075 +/- 176	100

Source: U.S. Census; 2006-2010 and 2012-2016 American Community Survey 5 Year Estimates

Mobile homes and trailers are located on individual lots, not in mobile home parks. Overall, Whiting's mobile homes are in good condition and the pre-1976 mobile homes must meet the requirements of the International Building Code (IBC) and the State Electric Code.

HOME OCCUPANCY

Home ownership is a good indicator of the overall standard of living in an area.

One way to trace home ownership change over time is to compare owners and renters as a proportion of total occupied housing. Whiting has a higher rate of owner occupancy (~89%) than throughout the county (76%). The proportions of owner and renter-occupied housing units at the local and county level have remained fairly stable over the past 16 years. Such stability is forecast to continue over the next decade.

Table F-6 HOUSING TENURE

	Whiting				Washington County					
	2000		2010	2016	2000		2010		2016	
	#	%	ACS Est.& Margin of error	ACS Est.& Margin of error	#	%	ACS Est.& Margin of error	%	ACS Est.& Margin of error	%
Occupied housing units	181	100	207 +/- 41	150 +/- 27	13,418	100	14,177 +/- 303	100	14,065 +/- 285	100
Owner-occupied housing units	158	87.3	166 +/- 34	132 +/- 27	10,568	78.8	10,797 +/- 282	76.15	10,693 +/- 252	76.0
Renter-occupied housing units	23	12.7	41 +/- 27	18 +/- 10	2,850	21.2	3,380 +/- 259	23.8	3,372 +/- 242	24.0

Source: US Census; 2006-2010 and 2012-2016 American Community Survey 5 Year Estimates

Vacancy

The Census classifies seasonal or recreational homes as vacant because they are not typically occupied year-round. In 2016, 200 (57.1 percent) of Whiting's total housing units were vacant. The trend in sales to non-resident purchasers is associated with renovations of these dwellings to seasonal and/or for retirement purposes. As noted in the population chapter, 140 (81%) of Whiting's vacant units were for seasonal or recreational use. This occupancy rate for seasonal purposes is a reflection of the many shorefront properties located along Whiting's several scenic freshwater lakes and ponds. Increases in seasonal housing are expected to continue, especially as vacant housing is purchased and renovated for seasonal or retirement purposes within the downtown and on shorefront properties in Whiting. The rental vacancy rate for Whiting in 2016 was 10.7% (+/- 15.8 %), compared to 13.3 percent for Washington County. The margin of error in the 2012-2016 American Community Survey 5 Year Estimate is very high so it is difficult to conclude whether there is an adequate supply of housing for purchase and rent.

Table F-7 HOUSING OCCUPANCY

	Whiting				Washington County					
	2000		2010	2016	2000		2010		2016	
	#	%	ACS Est.& Margin of error	ACS Est.& Margin of error	#	%	#	%	ACS Est.& Margin of error	%
All housing units	342	100	347 +/- 48	350 +/- 38	19,124	100	23,001	100	23,075 +/- 176	100
Occupied housing units	181	52.9	207 +/- 41	150 +/- 27	13,418	70.2	14,302	62.2	14,065 +/- 285	60.9
Vacant housing units	161	25.1	140 +/- 38	200 +/- 39	5,706	29.8	8,699	37.8	9,010 +/- 229	39.0

Source: 2000 and 2010 US Census; 2006-2010 and 2012-2016 American Community Survey 5 Year Estimates

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 Growth Management Act 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 and, as noted elsewhere, the margins of error in the American Community Survey, the only place where this data is now compiled, are very high for small rural towns like Whiting. Third, the value of a house based on tax assessment, does not always accurately reflect market value. 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, municipal 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 so permit.

Given these data limitations, 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 Whiting belongs.

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 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. The data below indicate that monthly housing costs for many Whiting households exceed 30% of monthly income, 35% paying a mortgage and 30.8% of those paying rent.

Whiting	#	Margin of Error	%	Households paying > 30% of income on housing
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME (SMOCAPI)				
Housing units with a mortgage (excluding units where SMOCAPI cannot be computed)	80	+/-19	80	
Less than 20.0 percent	34	+/-15	42.5%	
20.0 to 24.9 percent	6	+/-5	7.5%	
25.0 to 29.9 percent	12	+/-8	15%	
30.0 to 34.9 percent	16	+/-13	20%	
35.0 percent or more	12	+/-7	15%	35%
Housing unit without a mortgage (excluding units where SMOCAPI cannot be computed)	58	+/-17	58	
Less than 10.0 percent	22	+/-10	37.9%	
10.0 to 14.9 percent	18	+/-11	31%	
15.0 to 19.9%	3	+/-4	5.2%	
20.0 to 24.9 percent	6	+/-5	10.3%	
25.0 to 29.9 percent	2	+/-2	3.4%	
30.0 to 34.9 percent	1	+/-3	1.7%	
35.0 percent or more	6	+/-4	10.3%	12%
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI)				
Occupied units paying rent (excluding units where GRAPI cannot be computed)	13	+/-10	13	
Less than 15.0 percent	0	+/-9	0%	
15.0 to 19.9 percent	4	+/-3	30.8%	
20.0 to 24.9 percent	0	+/-9	0%	
25.0 to 29.9 percent	5	+/-9	38.5%	
30.0 to 34.9 percent	0	+/-9	0%	
35.0 percent or more	4	+/-3	30.8%	30.8%

Source: US Census; American Community Survey 2012-2016 5-Year Estimates

Data on housing affordability is not available for Whiting. Data are only available for larger towns, at the housing market level, and county-wide. Whiting is part of the Machias Labor Market Area (LMA) Housing Market. The Maine State Housing Authority (MSHA) reports that the housing affordability index in the Machias LMA Housing Market for the year 2016 was 1.52 (under 1.00 equals unaffordable; while over 1.00 equals affordable).

Homeownership Affordability Index		Median Home Price ¹	Median Income ²	Income Needed to Afford Median Home Price	Home Price Affordable to Median Income
<u>Year</u>	<u>Index</u>				
Machias, ME LMA Housing Market					
2012	1.02	\$106,000	\$31,742	\$31,238	\$107,712
2013	1.17	\$105,000	\$36,157	\$30,780	\$123,340
2014	1.59	\$82,000	\$37,457	\$23,539	\$130,488
2015	1.58	\$88,500	\$39,844	\$25,221	\$139,816
2016	1.52	\$91,500	\$40,607	\$26,703	\$139,141
Lubec	0.69	\$160,450	\$33,646	\$48,846	\$110,521
Milbridge	0.82	\$139,500	\$33,622	\$41,037	\$114,293
Maine	0.97	\$184,000	\$50,990	\$52,545	\$178,552
Machiasport	1.01	\$145,500	\$42,935	\$42,515	\$146,939
Jonesport	1.42	\$85,000	\$35,087	\$24,725	\$120,623
Machias	1.44	\$79,950	\$36,691	\$25,505	\$115,013
Machias, ME LMA Housing Market	1.52	\$91,500	\$40,607	\$26,703	\$139,141
Addison	1.84	\$93,000	\$48,087	\$26,097	\$171,364
East Machias	1.88	\$80,750	\$44,778	\$23,849	\$151,614
Harrington	2.79	\$50,000	\$41,370	\$14,821	\$139,563
Cherryfield	3.21	\$45,000	\$43,876	\$13,665	\$144,485

Source: Maine State Housing Authority, 2016 Housing Facts for Machias LMA Housing Market

<u>Location</u>	Households Unable to Afford Median Home		Total Households	Median Home Price ¹	Income Needed to Afford Median Home	
	<u>Percent</u>	<u>Number</u>			<u>Annual</u>	<u>Hourly</u>
Lubec	68.7%	499	726	\$160,450	\$48,846	\$23.48
Milbridge	56.4%	348	617	\$139,500	\$41,037	\$19.73
Maine	52.5%	296,838	564,989	\$184,000	\$52,545	\$25.26
Machiasport	49.5%	187	377	\$145,500	\$42,515	\$20.44
Machias	36.3%	335	921	\$79,950	\$25,505	\$12.26
Jonesport	34.5%	197	571	\$85,000	\$24,725	\$11.89
Machias, ME LMA Housing Market	32.9%	2,397	7,295	\$91,500	\$26,703	\$12.84
East Machias	25.9%	142	549	\$80,750	\$23,849	\$11.47
Addison	22.4%	116	517	\$93,000	\$26,097	\$12.55
Harrington	18.3%	75	410	\$50,000	\$14,821	\$7.13
Cherryfield	8.2%	46	557	\$45,000	\$13,665	\$6.57

Source: Maine State Housing Authority, 2016 Housing Facts for Machias LMA Housing Market

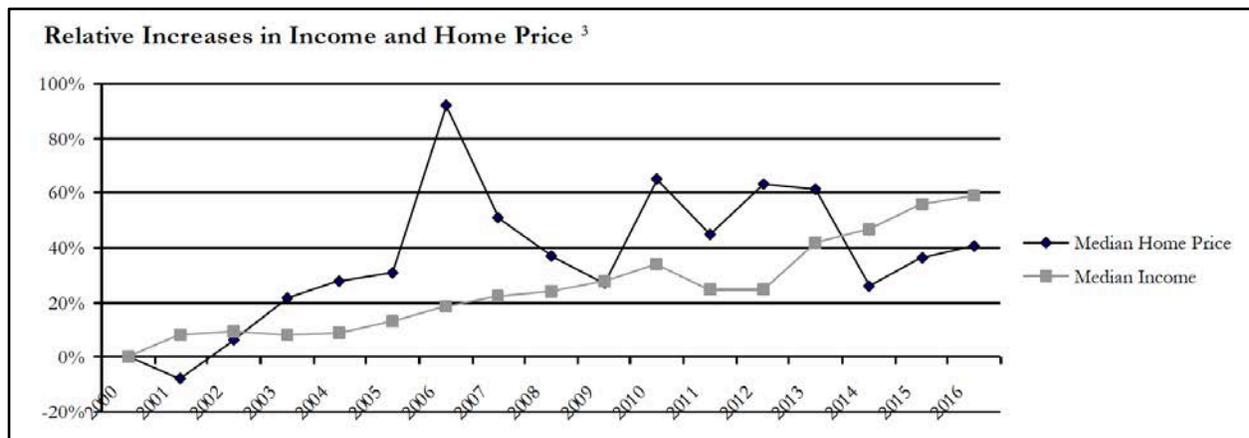
Based on MSHA figures, in 2016 the median income needed to afford the Median Home was \$26,703 for the Machias LMA Housing Market. Median income in Whiting in 2016 was \$53,214 (2002-2016 American Community Survey 5 year Estimates). A review of the percentage of households within the cohorts below the median income of \$53,214 (2002-2016 American Community Survey 5 year Estimates) indicates that approximately 20% of households in Whiting are unable to afford the Median Home Price in the Machias LMA Housing Market. This is lower than the percentage of households who are unable to afford the Median Home Price in the entire Machias LMA Housing Market (33.3%) – see following chart from the Maine State Housing Authority in 2016.

Unattainable Homes as a Percentage of Homes Sold			
<u>Location</u>	<u>Percentage of Unattainable Homes</u>	<u>Affordable Homes Sold</u>	<u>Unattainable Homes Sold</u>
Lubec	64.3%	5	9
Milbridge	57.1%	6	8
Maine	52.8%	9,555	10,689
Machiasport	46.7%	8	7
Jonesport	40.0%	9	6
Machias, ME LMA Housing Market	33.3%	132	66
Addison	25.0%	9	3
Harrington	20.0%	12	3
Machias	18.2%	18	4
East Machias	16.7%	15	3
Cherryfield	0.0%	11	0

Source: Maine State Housing Authority, 2016 Housing Facts for Machias LMA Housing Market

Housing Selling Prices

Data from MSHA show that the median house price dropped significantly in the Machias LMA Housing Market in the 2 years following the housing bubble of 2007 and the economic depression of 2008. By 2014 median income increased above the median home price and by 2016 MSHA data indicates that about one third of the homes sold were unattainable for households in the Machias LMA Housing Market.



Source: Maine State Housing Authority, 2015 Housing Facts for Machias LMA Housing Market

Renter Occupied Housing Affordability

Data from MSHA on renter occupied units describes an unaffordable rental market for those below median income. Only year-round rentals are considered, as seasonal housing rentals are not reported. Rental rates 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. Like the Homeownership Affordability Index, the Rental Affordability Index is the ratio of 2-bedroom Rent Affordable at Median Renter Income to Average 2-Bedroom Rent. An index of less than 1 means the area is generally unaffordable – i.e. a renter household earning area median renter

income could not cover the cost of an average 2-bedroom apartment (including utilities) using no more than 30% of gross income.

Rental Affordability Index						
	<u>Year</u>	<u>Index</u>	<u>Average 2 BR Rent (with utilities)⁴</u>	<u>Renter Household Median Income²</u>	<u>Income Needed to Afford Average 2 BR Rent</u>	<u>2 BR Rent Affordable to Median Income</u>
Machias, ME LMA Housing Market	2012	0.66	\$820	\$21,806	\$32,810	\$545
	2013	0.71	\$826	\$23,444	\$33,056	\$586
	2014	0.74	\$801	\$23,611	\$32,021	\$590
	2015	0.77	\$827	\$25,328	\$33,091	\$633
	2016	0.70	\$911	\$25,379	\$36,456	\$634
Machias, ME LMA Housing Market		0.70	\$911	\$25,379	\$36,456	\$634
Maine		0.85	\$872	\$29,588	\$34,873	\$740

Furthermore, this lack of affordability in the Machias LMA Housing Market has persisted for the for the past 15 years. The chart below depicts the relative increase in renter income and the average 2 bedroom rent with the Y-axis as an index defined as the ratio of the annual value to the year 2000 value. As above, renter household data is not available for Whiting but is depicted for the entire Machias LMA Housing Market.



3: The Y axis is an index defined as the ratio of the annual value to the year 2000 value.

Source: Maine State Housing Authority, 2016 Housing Facts for Machias LMA Housing Market

Renter Households Unable to Afford Average 2 Bedroom Rent						
<u>Location</u>	<u>Households Unable to Afford Average 2 BR Rent</u>		<u>Total Renter Households</u>	<u>Average 2 BR Rent (with utilities)⁴</u>	<u>Income Needed to Afford Average 2 BR Rent</u>	
	<u>Percent</u>	<u>Number</u>			<u>Annual</u>	<u>Hourly</u>
Machias, ME LMA Housing Market	65.8%	1,162	1,766	\$911	\$36,456	\$17.53
Maine	57.4%	92,705	161,601	\$872	\$34,873	\$16.77

Source: Maine State Housing Authority, 2016 Housing Facts for Machias LMA Housing Market

The Maine State Housing Authority concludes that nearly two-thirds of the renter households in the Machias LMA Housing Market are unable to afford the average 2-Bedroom rent. In Whiting

however, the American Community Survey 2011-2015 5-Year Estimates for “gross rent as a percent of household income” (tabulated in Table F-8 above) indicate that 30.8% of households are paying more than 30% of their monthly income in rent. Given the large margins of error in the ACS the reality is likely somewhere between the MSHA figure of two-thirds and the ACS estimate of 30.8% of households who find their rentals unaffordable.

Affordability and the Growth Management Act

The State of Maine Growth Management Act requires that every municipality “...shall seek to achieve a level of 10% of new residential development, based on a five-year historical average of residential development in the municipality, meeting the definition of affordable housing.” As shown in Table F-2 at the start of this chapter, during the four-year period from 2012 to 2017 twenty housing units were built. Thus, Whiting would meet the requirement of the Act if the town sought to provide 2 low-income units in this period. Within this period, affordable housing, meeting State guidelines, was built in the form of modular/mobile housing, as 5 such units were put in place.

Affordable Housing Remedies

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

1. *Relaxed zoning ordinances and building code requirements that tend to increase building costs.*
Whiting does not currently have zoning requirements.
2. *Take steps to allow mobile homes and modular homes in more areas.*
At present the town does not limit the location of these types of units and one quarter of all units constructed in the past 7 years were mobile or modular units.
3. Provide town sewer, water and roads to new parts of the town thus “opening up” land for new homes.
Whiting is too small of a community to justify the expense of constructing town sewer facilities. Likewise, the housing market is not robust enough to justify opening up new roads to development.

Housing Programs

Whiting has no facilities or developments to serve low and moderate income housing needs. The closest such facilities are located in Dennysville, East Machias, Lubec, and Machias, and as summarized below:

Property Name and Address	Housing Type				Units accessible	Type of Assistance ¹			Contact Information
	Elderly		With disabilities	Family/All		Income Based Rent	Rent restricted	Unit	
	and older	and older							
Dennysville									
Dennysville Heights Shipyards Road		•	•				•	Sunrise Opportunities (207) 255-8596 www.sun-rise.tv	
Dennysville Housing RR 1 Box 205		•	•		1-1 br 1-2 br	•		Sunrise Opportunities (207) 255-8596 www.sun-rise.tv	
East Machias									
Hadley's Lake Apts. Old Hadley Lake Road		•	•		1-1 br	•		Stanford Management LLC (207) 772-3399 www.stanfordmanagement.com	
Lubec									
Bayview Park 103 Main Street		•	•		2-2 br	•		C&C Realty Management (207) 621-7700 or 1-866-621-7705 www.ccrealtymanagement.com	
Quoddy View Apts. 1 Emery Circle		•	•		2-1 br	•		C&C Realty Management (207) 621-7700 or 1-866-621-7705 www.ccrealtymanagement.com	
Sunrise Apts. 25 Hallett Circle		•	•		2-1 br	•		C&C Realty Management (207) 621-7700 or 1-866-621-7705 www.ccrealtymanagement.com	
Machias									
Jerrold's Place Apts. 2 Valley View Road				•		•		Hughes Associates (207) 561-4700 www.hughesrs.com	
Louise Gardner Apts. 91 Court Street		•	•			•		C. S. Management (207) 498-8332	

Source: Maine State Housing Authority, 2014

Housing and an Aging Population

As more fully described in the Population Chapter the town recognizes that it has a large elderly population, many of whom are at less than 60% of median income. Indeed ~27% of occupied housing units, and 9% of rental units are composed of people over 65 years of age. People over 65 are more likely than the rest of the population to be retired and on fixed incomes.

Table F-15 AGE OF HOUSEHOLDER IN 2010 FOR WHITING

	Number	Percent		Number	Percent
Owner Occupied housing units	173	100	Renter Occupied housing units	33	100
15 to 24 years	1	.06	15 to 24 years	4	12.1
25 to 34 years	11	6.4	25 to 34 years	5	15.2
35 to 44 years	17	9.8	35 to 44 years	5	15.2
45 to 54 years	49	28.3	45 to 54 years	8	24.2
55 to 64 years	49	28.3	55 to 64 years	8	24.2
65 years and over	46	26.6	65 years and over	3	9.1

Source: 2010 U.S. Census

A compounding problem for low income seniors living in some of the oldest housing stock in the nation is the cost of inefficient heating systems and poorly insulated homes.

About 85% of Washington County residents heat with number 2 fuel oil. There is minimal natural gas infrastructure, and not much use of a number of alternative fuels, such as wood pellets, solar, and geothermal heat pumps. More weatherization, retrofits for inefficient boilers, and greener fuels are needed. Some of this is being accomplished through a number of programs. From 2008 to 2012, Washington Hancock Community Agency completed 295 weatherization jobs in Washington County. The number of weatherizations completed between 2013 and 2017 was 115 in Washington County. The decrease from the 2008-2012 period is due to the end of American Recovery and Reinvestment Act (AKA “stimulus funding”) funding.

In addition to facing inefficient heating and weatherization issues many seniors live in houses they have inhabited for years, which are not "senior friendly" in terms of architecture and location. Older houses are often two and three stories with bedrooms and bathrooms located up a flight of stairs. More one-floor single-family houses are needed for the elderly and disabled. Most single family houses in Washington County are not single level. The elderly often have poorer leg strength and balance than the general population, and thus, cannot readily climb stairs. Stair lifts help, but for the wheel chair bound, they require a senior to transfer to another wheelchair or walker on the next level, which can cause falls. One-floor living housing options greatly help seniors' mobility and safety, yet relatively few houses in Washington County are single level.

The elderly, as well as people with disabilities, require more accessibility, which is usually not part of housing design. Accessibility features include entranceway ramps, doorways wide enough to accommodate wheelchairs, and specially designed bathrooms and kitchens.

An “in-law” apartment can provide first floor housing and enable a senior to live semi-independently with family, who can provide them with some assistance, and are close-by for medical emergencies. In-law apartments often also have an interior connection to the main house. Whiting does not have a zoning ordinance and does not restrict construction of in-law apartments throughout the town.

Elder Care: At Home – Long Term Facility - Education

Many elderly are in need of in-home assistance, but live independently. These services extend the length of quality time that a senior can live at home. Advanced elderly often need assistance with everyday tasks, such as eating and dressing, but cannot afford, or do not want to live in assisted living facilities. In addition, they can be frail and prone to falls, and/or have undiagnosed dementia. Many of this age can no longer drive, and need transportation to shopping and medical facilities. The elderly who do not need 24 hour care, can obtain far less expensive in-home services than through living in an assisted living facility.

For seniors who do require 24-hour care, in-home care costs can be exorbitant. Seniors living at home, but requiring some visiting home care can expect to pay approximately \$22 per hour for a home health aide in Maine, whereas the average cost in the United States is \$19 per hour. (Source: <http://www.payingforseniorcare.com>)

Both the elderly and their families need to better understand age related illnesses and the medical and social services available to seniors. National statistics indicate that 50% of the population over 85 have or will develop dementia. Education is needed in Washington County on the dangers of frail seniors falling, and the many age related illnesses.

Long-term care facilities in Washington County include a range of care levels from shared quarters in facilities with a few apartments and one caretaker to full service nursing homes. The Assisted Living Federation of America defines assisted living as "a senior living option that combines housing, support services and health care, as needed". Assisted living facilities offer full-time food and shelter, transportation, as well as a variety of care levels (I - IV) to assist elderly, and others in need, with personal care. Washington County has 260 beds available for assisted living, none are located in Whiting.

There are many seniors in need of some level of assisted living. The average cost of a one-bedroom assisted living apartment in the state of Maine is \$54,000, the fourth highest in the nation, and unaffordable to residents of Washington County without some form of subsidy. (Source: <http://assistedlivingtoday.com/p/assisted-living/>)

Medicare does not cover assisted living unless people reach a certain inability to care for themselves and is transitioning from a hospital to a nursing home for rehabilitation. To be eligible for Medicaid coverage for nursing home care, patients must be unable to care for themselves, and meet income and financial asset limitations to qualify as impoverished. Even with Medicaid, assisted living that is not at a nursing home level is not covered. Thus, there are empty beds in nursing homes in Washington County, and many "fall through the cracks". There are also limitations for hospice care, which can only be covered for persons with six months or less left to live.

To improve the current situation nursing home facilities and other long-term health care providers need to negotiate nursing home coverage with the Maine Department of Health and Human Services since it the administrators of the federal Medicaid program.

For complete aging in place, from active independent seniors up to nursing home level, there is no facility in Washington County.

Programs for an Aging Population

(following section taken from A Regional Plan for Sustainable Housing in Washington County, East, J. and T. Hill, 2014)

At Home Downeast (WHCA)

Aging in Place is a national non-profit program, implemented in 60 locations around the United States. In Washington and Hancock Counties, it is offered through the Washington Hancock Community Agency. It has been implemented in Hancock County, but not yet in Washington County. It is a member based, volunteer supported program, offering a number of in-home services for seniors, to help enable them to live in their homes longer. It is modeled on the village concept, in that people living in their own homes in close proximity to each other, band together to form a self-directed community organization to meet the needs of seniors.

The program addresses senior isolation, by bringing services to seniors, and has a strong base of community and volunteer support. This program is tailored to each community, but has similar guiding principles.

The program is funded by membership fees, often paid by adult children of elderly in the program. Donations and grants also fund the program.

Eligibility Requirements: The program has an age requirement, but is available to all income levels, with membership by fee on a sliding scale.

Services offered by this program include:

- household and yard chores, with the manual work often done by volunteers;
- assistance with technology;
- some transportation;
- assurance that appointments are kept;
- nurse visits every few days; and
- home safety assessments, relative to carpets, stairs, and handrails.

(Sources: WHCA website: [http://www.whcacap.org/at-home-downeast/Hancock/about.php](http://www.whcacap.org/at-home-downeast/ Hancock/about.php); GROWashington/Aroostook Sustainable Housing Work Team minutes: <http://gro-wa.org/sustainable-housing-agendas-and-minutes>)

Eastern Area Agency on Aging

The Maine Association of Area Agencies on Aging includes a set of non-profit programs operating in different areas of Maine, funded in part, by Maine Department of Health and Human Services, and in part by donations. The Eastern Area Agency on Aging (EAAA) is the program servicing Washington County, as well as Hancock, Penobscot, and Piscataquis Counties. In operation since 1974, EAAA has a professional staff offering programs that provide general volunteer assistance to seniors including:

- emergency meals for free and meals for sale at \$4/meal;
- several other kinds of nutrition services;
- several hundred Amish heaters to low income families;
- safe, affordable handy people to do manual labor (raking, shoveling);
- information assistance and free legal services for the elderly; and
- support and education to individuals caring for family members, especially regarding dementia.

EAAA also partners with other organizations to provide additional services, including:

- Senior Care Coordination;
- Step by Step Fall Prevention Program;
- Legal Services for the Elderly; and
- EZ FIX, a minor home repair program for seniors.

In addition to emergency meals, EAAA offers the “Nutrition Program” (formerly known as “Meals for Me”), which serves hot lunches to persons 60 and over at 45 Community Cafes (some at senior living facilities) in the Counties it serves. EAAA’s “Meals on Wheels” program, also delivers hot lunches to homebound seniors who are unable to cook a meal themselves.



John Cox Sr. serves free lunches in a subsidized elderly apartment complex in Machias, through the EAAA “Nutrition Program” Photo Source: *New York Times*

(Sources: EAAA website: Website: <http://www.eaaa.org/>; Volunteer Maine website: <http://volunteer.truist.com/me/org/219249.html>; GROWashington/Aroostook minutes; Dir. of “Nutrition Program” in Machias)

Senior Companions (Maine Sea Coast Mission and U. Maine Coop. Extension)

This program serves frail older adults, adults with disabilities, those with terminal illnesses, and caregivers in need of respite. Active individuals, aged 60 and older, are provided with a stipend to assist seniors in need. They provide homebound adults with companionship, and assist with simple chores and transportation. This program also coordinates with food pantries, where volunteers provide meals for persons in need.

The following goals have been defined for this program:

- to provide cost effective alternatives to institutionalization by encouraging the independence of Maine’s older adult population;
- to promote a high quality of life for Senior Companions and their clients;
- to provide a formal structure within which Senior Companions come together to attain a common understanding of the services they provide;
- to recognize and reward the efforts of Senior Companion volunteers; and
- to help Maine people to improve their lives through an educational process that uses research-based knowledge focused on community issues and needs.

(Sources: Senior Companions website: http://www.seacoastmission.org/senior_companions.html; GROWashington/Aroostook Sustainable Housing Work Team minutes: <http://gro-wa.org/sustainable-housing-agendas-and-minutes>)

Catholic Charities Housing Services; a.k.a. Homemaker Services

This Catholic Charities program, also known as Homemaker Services, is a state-wide program that connects support services to those in need. It enables seniors and people with disabilities, to stay longer in their homes, especially those on limited incomes. Services are professionally supervised, and are provided by a team of para-professionals, who help with a variety of tasks. Services include:

- emergency help and food,
- counseling,
- child care,
- housekeeping,
- grocery shopping,
- laundry,
- transportation, and
- incidental help with personal hygiene and dressing.

Eligibility: This program services individuals, families, and children in need, regardless of faith or ability to pay.

(Sources: website for Maine Aging and Disability Services: <http://www.maine.gov/dhhs/oads/aging/long-term/homemaker.shtml>; GROWashington/Aroostook Sustainable Housing Work Team minutes: <http://gro-wa.org/sustainable-housing-agendas-and-minutes>)

Support and Services at Home (U.S. Dept. of Health and Human Services)

This federal program is aimed at supporting elderly people who want to stay in their homes, rather than moving to nursing homes or other long-term care facilities. It has been implemented successfully in Vermont, which can serve as a model for implementation in other areas.

Medicaid (U.S. Dept. of Health and Human Services)

Medicaid is a federal entitlement program that provides medical services to eligible low income persons. In Maine, Medicaid is known as “Maine Care”. The Maine Department of Health and Human Services administers this federal health insurance program at the state level. This program relates to housing by subsidizing “cost of care” for people living in a medical facility, who meet the eligibility requirements. Medical facilities include: nursing homes, residential care facilities, cost reimbursed boarding homes, or adult family care homes. Some people who are eligible to live in a nursing home may get services in their own home instead.

Eligibility Requirements:

- Unless clients’ income is set aside for a living-at-home spouse, they must use most of their income to pay for care.
- Income caps: countable income of \$958 per month for one elderly or disabled person, or \$1,293 for two, as of 2013.
- To receive benefits while living in a nursing home, there are minimum thresholds for medical and dementia conditions.

Services Include:

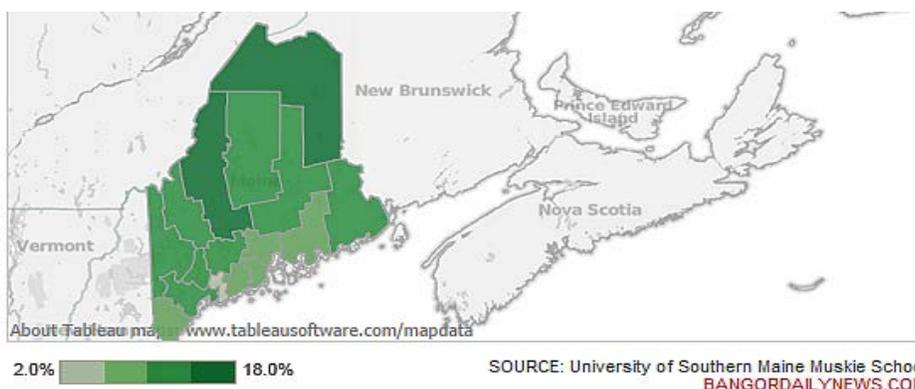
- Adult Day Health,

- Care Coordination Services,
- Environmental Modifications,
- Financial Management Services,
- Homemaker Services,
- Home Health Services,
- Personal Support Services,
- Personal Emergency Response System Services,
- Transportation Services,
- Respite Services, and
- Skills Training.

For residents living in a nursing home, another benefit package provides additional services, including: cost of the room, food, routine supplies and equipment, and nursing care. For residents living in other residential care facilities, a benefits package includes a number of medical services, plus hospice. Sources: federal website: <http://www.medicaid.gov/>; Maine website: <https://www.maine.gov/dhhs/mainecare.shtm>

Medicare (U.S. Dept. of Health and Human Services)

Medicare is health insurance for people 65 or older, and people under age 65 with certain disabilities. This program helps to pay for medical services, hospitalization, hospice, prescription drugs, and home health care. Thus, for elderly, it can either help pay for nursing home residency, or for medical services at home. There are several parts to Medicare plans. Part A affects living in long-term care facilities. Most people 65 or older are automatically eligible for Part A, with no monthly payment.



Eligibility requirements for Part A include:

- Nursing home stay must be for an illness diagnosed during a hospital stay or for the main cause of a hospital stay.
- Hospice facility benefits are only available for terminally ill persons with less than six months to live.

Medicare Advantage Plans, Part C, are an alternative to traditional Medicare, in that they are public / private partnerships approved by Medicare, but run by private companies. (Sources: <https://www.medicare.gov/>; <http://www.maine.gov/dhhs/>)

G - GIS MAPPING

GIS, or Geographical Information System, is a computer mapping system designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data. A geographic information system (GIS) lets us visualize, question, analyze, and interpret data to understand relationships, patterns, and trends.

GIS applications are tools that allow users to create interactive queries (user-created searches), analyze spatial information, edit data in maps, and present the results of all these operations on one or more maps. This enables people to more easily see, analyze, and understand patterns and relationships.

Summary of Key Findings

- An online GIS mapping service (<http://gro-wa.org/planners-maps.htm>) is maintained as GIS data changes and provides Whiting access to their parcel maps and the spatial information available in the town
- Efforts to maintain, update and provide Whiting's parcel mapping data to the UMM-GIS Services Center is rooted in the dynamic nature of spatial information and the speed with which our culture, economy, and infrastructure is changing.
- There are written and video training resources available geared to different learning styles and levels of experiences (<http://www.wccog.net/online-gis-written-instruction-guides.htm>).
- Several state agencies also maintain a variety of online web-viewer mapping tools including the Maine Drinking Water Program, the Maine Department of Transportation, and the Beginning with Habitat program.

STATUS OF GIS MAPPING CAPABILITY

There are no municipalities in Washington County with the resources or staff to maintain an in-house GIS mapping system. To address this reality of both economy and capacity the Washington County Council of Governments (WCCOG), in partnership with the University of Machias GIS Service Center and Laboratory, has developed online GIS mapping capacity for all Washington County towns¹⁰. This online service is maintained and updated as GIS data changes and thus provides towns' access to their parcel maps and the spatial information available in their town. The Planners maps serve the needs of municipal and regional Comprehensive Plan maps as well as parcel-specific information for development review.

¹⁰ Online GIS Mapping – Frequently Asked Questions <http://www.wccog.net/online-gis-mapping-faqs.htm>

Public Parcel Viewer <http://gro-wa.org/public-parcel-viewer.htm>

Planners Maps <http://gro-wa.org/planners-maps.htm>

GIS Maps Instruction Guides (Paper) <http://gro-wa.org/gis-map-instruction-guides.htm>

Online GIS Mapping Instructional Videos <http://www.wccog.net/online-gis-mapping-instructional-videos.htm>

Paper vs. Digital Maps <http://gro-wa.org/paper-vs-digital-maps.htm>

Status of Comprehensive Plans with the Growth Management Law <http://gro-wa.org/helping-washington-county-plan-its-future.htm>

In addition to the customized online mapping tools provided by the WCCOG/UMM-GIS partnership, several state agencies maintain a variety of online web-viewer mapping tools. Some digital information, such as Maine Department of Transportation construction scheduling, is only available using these online tools.

Another state agency, the Maine Department of Inland Fisheries and Wildlife, only provides information about critical habitat at the time of the Comprehensive Plan dataset. While the WCCOG has advocated on multiple occasion that this information be made available in digital format so that it can be incorporated into the online Planners maps we have not been successful to date. Therefore, Planning Boards and Comprehensive Plan Committees are directed to this information using screen shots of the large poster format maps (also provided in PDF format) within various chapters of the Comprehensive Plans.

Encouraging Whiting to Use Online GIS services

This Chapter and the recommended policy that encourages towns to maintain, update and provide their parcel mapping data to the UMM-GIS Services Center is rooted in the dynamic nature of spatial information and the speed with which our culture, economy, and infrastructure is changing. Encouraging towns to develop their expertise in using online GIS information is based on the following several factors:

1. Spatial information can change significantly over the customary timeline (10-12 years) of a Comprehensive Plan. Thus, the practice of creating static point-in-time Comprehensive Plan maps may inform current policy development but can provide only general depictions at “greater than 20,000 feet” and is of virtually no utility for parcel-specific development review over time.
2. Visual imagery of the variety of GIS mapping products can support policy development throughout the Comprehensive Plan.
3. Online resources provide economical access to the spatial information available to the town of Whiting for this Comprehensive Plan as well as for on-going development review.
4. Instructions (in several learning modes) are provided¹¹ to Planning Boards and Code Enforcement Officers in the same place where the maps are posted to enable use of online GIS mapping tools by municipal personnel that can experience regular turnover in duties.

Student Training and Workforce Development

The WCCOG partnership with the GIS Service Center at the University of Maine at Machias (UMM) has operated for over a decade. Dr. Tora Johnson and her students in the GIS Program are working on GIS Degree, as well as Certificate and Associates in Science programs. Their course work has, and continues to, directly support many municipal and regional projects in Washington County. It provides students with immediate real-world application of their skills to help them find employment upon graduation. It also provides extraordinary mapping and analysis services to Washington County communities at little or no cost. The courses contributing to this include:

- *GIS I and GIS II foundational courses*
- *Community Applications in GIS*

¹¹ By the on-going partnership between the Washington County Council of Governments (WCCOG) and the University of Machias GIS Service Center and Laboratory (see links in Foot note 1 above).

- *Municipal Applications in GIS*
- *Remote Sensing and Image Analysis*
- *Advanced Projects in GIS*
- *Web-Based Maps, Applications & Services, and*
- *GIS Internships and Work Study credits.*

When municipalities contract with WCCOG to prepare their Comprehensive Plans, they are benefiting from the WCCOG/UMM-GIS Center partnership. Municipalities also commonly contract directly with the GIS Service Center for parcel mapping, parcel map updates, and emergency management planning maps, among many other projects.

(Former) Comprehensive Plan Map Set

The maps commonly included in a Comprehensive Plan are listed below.

- Location of Whiting in Washington County
- Public Facilities (including Recreation)
 - Always the entire municipality and often an expanded version for a village or city center
 - Combined with Transportation in some of the most rural municipalities
- Topography, Steep Slopes and Floodplains
- Waterways and Wetlands
- Soils Classifications
 - Depicts soils suitability classifications for septic systems, roads, and low-density development; also depicts Prime agricultural soils and soils of statewide significance to agriculture.
- Marine Resources (where applicable)
 - Place Names, Public Access and Marine Resources in some communities
- Land Cover
- Critical Habitat
- Transportation
- Current Land Use
 - Current Zoning also depicted where available
- Proposed Land Use (also called Future Land Use)
 - the entire municipality and often an expanded version for the village or city center

A great deal of the information depicted on these maps is available through statewide servers from the Maine Office of GIS. For a variety of reasons these statewide servers do not or cannot provide some of this information. For instance, locally derived information can be missing such as cemeteries and commonly used names for points of access or orientation. Residents of the towns of Beals and Machiasport, both exemplary Downeast fishing communities, refer to several beaches, bays, points of land, and small islands as points of reference, often navigational, when discussing planning issues. A map created for each town in 2004 and 2009 respectively names those points of access and reference.

It is also common when reviewing spatial information for Comprehensive Plan Committees to find errors in the location of public facilities either because the spatial layer is out of date (eg. the town office moved) or simply inaccurate (eg. the Post office is on the north side of the road and not the

south). In these cases, WCCOG works with the individual community to correct the inaccuracies and/or create new spatial layers on a town-by-town basis.

As noted above, some statewide data, such as the Beginning with Habitat information that describes Critical Habitats, is not posted online on statewide servers. Instead it is provided in digital format to the UMM-GIS Service Center and to WCCOG. When conducting Comprehensive Planning this information is provided to the municipality in a series of large poster sized paper maps. The series of maps include 3 primary maps and 3 supplementary maps as follows:

- Map 1 - Water and Riparian Habitat
- Map 2 – High Value Plant and Animal Habitat
- Map 3 – Undeveloped Habitat Blocks and Connectors among Conserved Land
- Supplementary Map 7 – Wetlands Characterization
- Supplementary Map 8 – USFWS¹² Priority Trust Species
- Regional Map – Building a Regional Landscape

These poster-sized maps can be useful to the Planning Board and the Code Enforcement Officer when reviewing development permit applications. The WCCOG recommends that they be posted on the wall of the town office within easy access to the Planning Board and CEO.

Planning Board and Code Enforcement Officer Training with Online Maps

As referenced in footnote 1 above, there are several training resources available that are geared to different learning styles. The written instruction guides (<http://gro-wa.org/gis-map-instruction-guides.htm>) cater to those who like to have a printed (or on-screen PDF) document to study and refer to when they work. Alternatively, the instructional videos (<http://www.wccog.net/online-gis-mapping-instructional-videos.htm>) are provided in short (3-6 minute) formats. Any user is able to determine their level of competence from beginner to intermediate to advanced. Obviously, the videos also allow any user to refresh their memory if they do not use the tools over several months and have forgotten the finer details.

Finally, there is a survey that is open at all times to provide feedback so that the WCCOG/UMM-GIS partnership can improve the online interface and experience based on user feedback.

¹² United States Fish and Wildlife Service

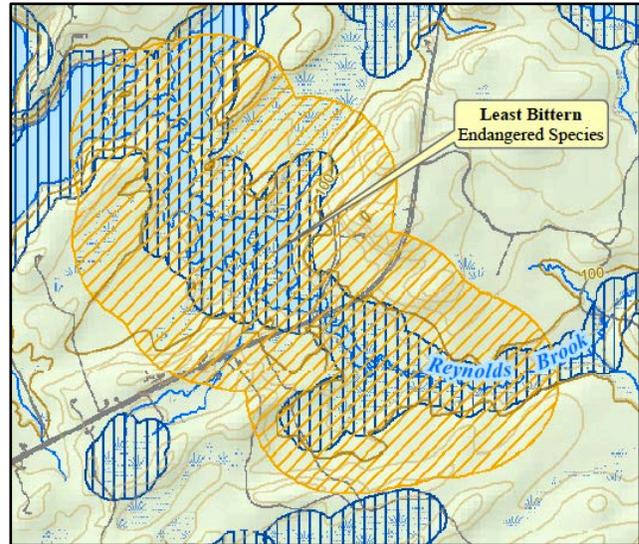
Shifting from Paper to Online Maps in Comprehensive Plans

The result of the shift from paper to online maps is to completely abandon creation of town wide maps centered around the themes of Comprehensive Plan chapters. Readers are instead provided with screen shots of the various and detailed output of the variety of mapping tools. Thus, in the Transportation chapter the text provides information about how to access the MDOT web viewer and the screen shot at right describes the location of planned construction, and depicts the detail behind the map (the attribute table) so that the timing of future construction is available to the town (example from Columbia Falls).

The screenshot displays the MaineDOT Public Map Viewer interface. On the left, a search bar shows the location "Columbia Falls, Washington County" with coordinates 44.693181, -67.735691 (98.62 ft.). Below the search bar, a "Features Found:" section lists "Most Recent Highway Treatment" and "Projects - Awaiting Kick-Off" (1). A detailed attribute table for project 023358.00 is shown, including fields for "Constr Begin - Actual", "Constr Begin - Forecast", "Constr Complete - Actual", "Constr Complete - Forecast", "Description" (Charolette Area 2019 LCP), "Development Lead" (MAINEDOT), "Kick Off - Actual", "Kick Off - Forecast" (8/1/2018), "Lead Unit" (HIGHWAY PROGRAM), "Phone" (624-3480), "PIN" (023358.00), "Program Manager" (Brad Foley), "Project Length (mi)" (59.46), "Project Title" (CHARLOTTE, AREA 2019 LCP), "PSN" (73875), "Scope" (LIGHT CAPITAL PAVING), "Total Estimated Cost" (\$1,301,000), and "Project Manager" (Emory Lovely). The main map area shows a topographic map of Columbia Falls, Washington County, with various project layers overlaid. A legend on the right side of the map lists "Added Layers" and "Basemap Layers". The "Added Layers" section includes "Projects - Construction Phase", "Projects - Design-Permitting Phase", "Projects - Construction Complete", "Projects - Awaiting Kick-Off", and "Most Recent Highway Treatment". The "Basemap Layers" section includes "Highway Construction", "Highway Rehabilitation", "Highway Preservation Paving", and "Highway Light Capital Paving". The map also shows a scale of 1:66736 and a 1mi scale bar.

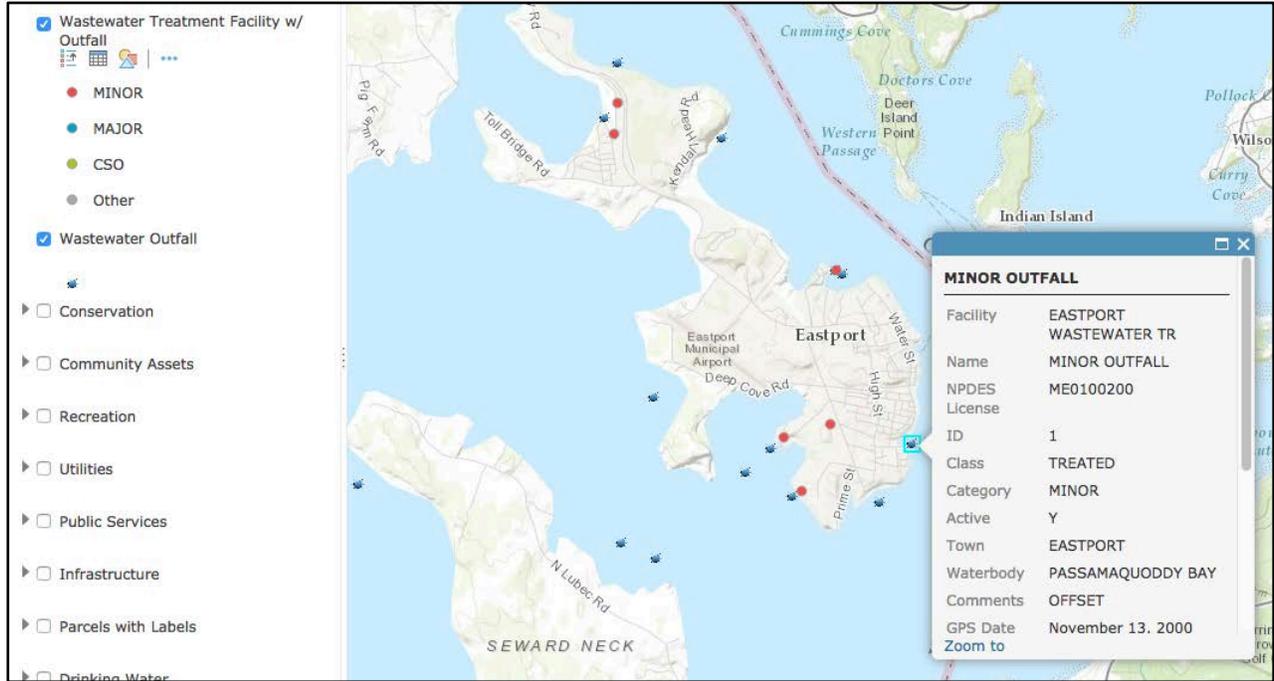
As noted above, the WCCOG would prefer that the Beginning With Habitat data were available through the Maine Office of GIS servers so that it could be available to the online Planners maps (<http://gro-wa.org/planners-maps.htm>). However, abandoning the creation of a single town wide map that depicts the spatial subject matter of each chapter does have a few benefits when depicting Critical Habitat information. First, a single town wide map of critical habitat, often depicted on an 8.5 by 11-inch piece of paper, is relatively useless when determining the location of the Critical Habitats. Second, by inserting a screen capture of zoomed-in areas of Critical Habitat, taken from the large poster (also PDF) format maps, into the discussion in the Natural Resources Chapter it is possible to:

- See the Critical Habitat in particular areas relative to other known points of interest and provide assistance with interpreting the map legends.
- Remind the Comprehensive Plan Committee, Planning Board and Code Enforcement Officer to actually pull out those large format maps, put them on the wall where they can be seen and use them for development review.
- Consider their actions in the context of regionally significant natural resources such as those described in Statewide Focus Areas of Ecological Significance.



As with the MaineDOT map viewer, this approach to Comprehensive Plan maps uses the chapter text to explain a little more about the true value of GIS mapping. GIS maps are not just pretty snap

shots in time. It is the data behind almost any GIS map that provides the vast majority of its value. For instance, when depicting an inventory of point source discharge influences on water quality the screen shot of the online Planners tool can show the location of the discharge, the information box that provides details about it, and the additional map contents that can be turned on or off in any particular area (Eastport example provided below).



The Maine Drinking Water Program also provides a web viewer for municipalities to see mapped spatial information and data about public water supplies. A screen capture of their service is provided in the Natural Resources chapter. This service requires creation of a user name and password which can inhibit its use by some less experienced users.

GIS mapping tools and the information they provide to municipalities is evolving much faster than the 10-12 year time horizon of a local Comprehensive Plan. Even for small rural municipalities who cannot afford the staff, equipment, or software to run to GIS mapping products, there are several available alternatives. The Online Planners and Parcel Maps provided by the WCCOG/UMM-GIS partnership provide access to up-to-date spatial information and its background attribute data. Training on how to use it, depict it on alternative base map projections, see and analyze the data behind it, print it, share it, and add to it with local information, is provided in several learning styles and levels of expertise. A variety of web-based mapping tools are also provided by several Maine state departments.

This chapter provides examples of these tools. However, the individual chapters of this Comprehensive Plan provide many more examples of what they provide and how to use them in ways that both are specific to Whiting while simultaneously providing the inventory on which this Comprehensive Plan is being updated.

H - TRANSPORTATION

Communities depend on well-maintained transportation systems. Accessibility to transportation is one of the primary factors in the location of businesses and residents within Whiting. Safe streets, efficient street design, and transportation linkages affect the economic viability of our businesses, the overall safety and convenience of our residents, as well as property values. The goal of this section is to plan for efficient maintenance and improvement of our transportation facilities and services in order to accommodate anticipated development.

Summary of Key Findings

- Overall Whiting's roads are in good condition.
- Average annual traffic counts have decreased in the last decade.
- Bridge Replacement of New Crane Bridge over the Orange River is proceeding over the 2018 construction season.
- Pedestrian safety measures are needed at Whiting Corner near the Elementary School.
- Whiting completed reconstruction of the Halls Mills culvert/bridge with funds from the "Grants for Stream Crossings Public Infrastructure Improvement Projects" program of the Maine Department of Environmental Protection.

ROAD INVENTORY

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

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

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

There are 10.94 miles of arterial, 2.4 miles of collector and 7.70 miles of local public roads in the town. A listing of all roads within the Whiting with their classification, length, maintenance responsibility and overall condition can be found in Table 1. Their geographic location is illustrated on the screen capture of the Whiting Planners Map, with e911 roads selected, after the following table.

Table H-1: ROADWAY INVENTORY

Roadway	Arterial, Collector, Local, Public Easement, or Private	Length in Miles	Owned by	Maintained by	Surface	Condition
US 1	Minor Arterial	10.94	State	State	Paved	Good/Fair/Poor
SR 189: Lubec Rd	Major Collector	0.61	State	State	Paved	Good
SR 191: Cutler Rd	Major Collector	1.79	State	State	Paved	Poor
Andrews Ln	Private	0.18	Private	Private Owner		
Barney Field Rd	Private	1.38	Private	Private Owner		
Bean Heath Rd	Private	1.05	Private	Private Owner		
Birch Haven Dr	Private	0.11	Private	Private Owner		
Bisson Way	Private	0.03	Private	Private Owner		
Blueberry Ln	Private	0.67	Private	Private Owner		
Bumpy Ln	Private	0.08	Private	Private Owner		
Campbell Rd	Private	1.00	Private	Private Owner		
Cardinal Ln	Private	0.18	Private	Private Owner		
Cedar Ln	Private	0.09	Private	Private Owner		
Cemetery Rd	Private	0.16	Private	Private Owner		
Chamberlain Ln	Private	0.04	Private	Private Owner		
Corey Ln	Private	0.08	Private	Private Owner		
Dinsmore Ln	Private	0.15	Private	Private Owner		
Dodge Rd	Local	1.49	Town	Town	Paved/Gravel	Good
Gaddis Rd	Private	0.46	Private	Private Owner		
Gardner Lake Rd	Local	3.19	Town	Town	Paved	Good
Halls Mill Rd	Local	1.61	Town	Town	Paved	Good
Hilltop Ln	Private	0.05	Private	Private Owner		
Hopkins Ln	Private	0.13	Private	Private Owner		
Icehouse Rd	Private	0.05	Private	Private Owner		
Kamway Dr	Private	0.13	Private	Private Owner		
Lakeside Dr	Private	0.18	Private	Private Owner		
Landing Rd	Local	0.18	Town	Town	Dirt	Good
Little Lake Rd	Private	0.89	Private	Private Owner		
Lookum Ln	Private	0.08	Private	Private Owner		
Loon Ln	Private	0.17	Private	Private Owner		
Mahar Ln	Private	0.65	Private	Private Owner		
McLaughlin Ln	Private	0.05	Private	Private Owner		
Munson Head Rd	Private	0.67	Private	Private Owner		
Old Wharf Rd	Private	0.02	Private	Private Owner		
Orange Lake Rd	Private	0.89	Private	Private Owner		
Pearl's Beach Rd	Private	0.18	Private	Private Owner		
Playhouse Ln	Local	0.31	Town	Town	Paved	Fair
Quiet Cove Ln	Private	0.24	Private	Private Owner		
Rabbit Ln	Private	0.22	Private	Private Owner		

Roadway	Arterial, Collector, Local, Public Easement, or Private	Length in Miles	Owned by	Maintained by	Surface	Condition
Raven Ln	Private	0.05	Private	Private Owner		
Ridge Rd	Private	1.08	Private	Private Owner		
Robyn's Nest Ln	Private	0.08	Private	Private Owner		
Seafarer Cove Rd	Private	0.17	Private	Private Owner		
Southern Cove Rd	Private	0.31	Private	Private Owner		
Spring Hill Dr	Private	0.31	Private	Private Owner		
Spruce Point Ln (Old US 1)	Local	0.48	Town	Town	Paved; broken	Poor
Waverly Ln	Local	0.20	Private	Private Owner		
Yellow Birch Rd	Local	1.41	Town	Town	Paved Gravel	Good

Maintenance

Overall, Whiting's roadways are in good condition with a few locations in need of attention including:

- Playhouse Lane (to be used when the Crane Bridge is replaced),
- sections of US Route 1 (between Reynolds Brook and the Orange River; the village to the town line: with Trescott), and
- all of Route 191 within Whiting.

The town arranges for the services of their own Road Commissioners and local contractors to periodically assess the condition of roads, culverts and bridges.

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 businesses is clear. Most roads were not originally engineered for the weight they now carry. If money were no concern, the best course of action would be to rebuild each of the major service roads. That, however, is not economically feasible. Nevertheless, State Route 9 provides a good example of how effective reconstruction can improve a roadway. Considering the traffic volumes on US 1, a similar reconstruction of this roadway is worth pursuing.

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

The town contracts by open bid for snow plowing, salting and sanding in three-year contracts on town roads and State-aid roads. The cost is covered from tax appropriations. In addition, Whiting maintains a Road Reserve Account to cover planned for as well as unanticipated expenses

associated with transportation infrastructure maintenance and repair. Past funding by annual appropriation was for \$10,000 per year. As noted in the Fiscal Capacity chapter State revenue sharing declined by 9% between 2012 and 2016 and constituted approximately 21% of the annual transportation budget in 2016.

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. It is 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 Selectmen should investigate its use and adoption in Whiting.

Traffic Volumes and Patterns

MDOT estimates the average annual daily traffic volume (AADT) of most state and state aid roadways. Traffic counts taken every few years help the state calculate changes in traffic volume so that road improvements can be designed and built accordingly to handle those changes. AADT volumes do not reflect seasonal variations in traffic or daily peak traffic volume. Instead, AADT volumes help us understand the overall growth or decline of traffic on a roadway and the pattern of traffic on our road networks.

Transportation linkages in Whiting consist primarily of US 1, SR 189 and SR 191. US 1 bisects the entire east-west length of our town, while SR 189 extends eastward to Lubec, and SR 191 cuts through Whiting along Holmes Bay between the towns of Machiasport and Cutler. Table 2 shows AADT counts for 1999 (from the 2003 Comprehensive Plan) and from the two most recent years for which data is available.

Table H-2 – Traffic Volumes

Roadway	Location Description	AADT in 1999	AADT in 2012	AADT in 2015
US 1	US 1: west of State Route 189	2140	2000	1960
SR 189	State Route 189: east of US 1	2180	2040	2170
US 1	US 1: NE of State Route 189	n/a	1620	1500
US 1	US 1: E of Halls Mills Road	n/a	1960	n/a
IR 457	Dodge Road north of US 1	n/a	n/a	40

Source: Maine Department of Transportation 2002; 2017

Traffic Control Devices

MDOT has installed a blinking yellow warning light and sign on both US 1 approaches to the Village School to indicate reduced speed limits during school hours.

Shoulders

Stretches of US 1 in Whiting have paved shoulders on both sides of the road, but most of US 1, SR 189, and SR 191 do not have paved shoulders. Paved shoulders make the road safer, allow an area that is more useful for temporary maintenance of vehicles, provide increased

opportunities for faster vehicles to pass slow-moving vehicles, offer safer opportunities for pedestrian travel, and allow easier and safer travel for the increased numbers of bicyclists touring the town. The town recommends that Maine DOT install paved shoulders along Whiting's roads during all road reconstruction projects.

Bridges

The town has five bridges, of which the State is responsible for four: two on US 1, one on SR 189 and one on SR 191. The bridges and culverts in town are in good condition, but the road surfaces over them need repairs or replacing. As noted above the town arranges for the services of their own Road Commissioners and local contractors to periodically assess the condition of roads, culverts and bridges. All are structurally sound at present; however, the Old Crane Bridge, Old US 1 Bridge, is currently being replace by Maine DOT. The Dodge Rd Bridge is a town bridge.

Whiting is completing reconstruction of the Halls Mills culvert/bridge with funds from the "Grants for Stream Crossings Public Infrastructure Improvement Projects" program of the Maine Department of Environmental Protection. The reconstruction project is designed to increase the resilience of the public infrastructure to withstand extreme precipitation events as well as to improve the stream width and bed characteristics to improve aquatic habitat.

Parking Facilities

Present parking needs are met by existing on-street parking along roadways in our village area, the municipal lot, and in private lots. At current rates of growth, it is anticipated that current parking facilities will meet town needs for the next ten-year period.

Pedestrian Facilities

Presently, there are no sidewalks in Whiting. To increase the safety of Whiting's children, sidewalks are recommended along US 1 in the vicinity of the school. Maine DOT has indicated that when US 1 is paved in the village they will add paved shoulders.

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, and 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 on our roadways, our town has no roads in the retrograde or mobility corridor categories of roadways, which come under stricter access management standards.

Highway Corridor Priority and Customer Service Level

MaineDOT prioritizes programs and projects according to a two-part methodology that categorizes highway assets according to their Highway Corridor Priority (HCP) and Customer

Service Level (CSL). There are 6 Priority levels based on a 2014 inventory of highway assets. These are summarized below.

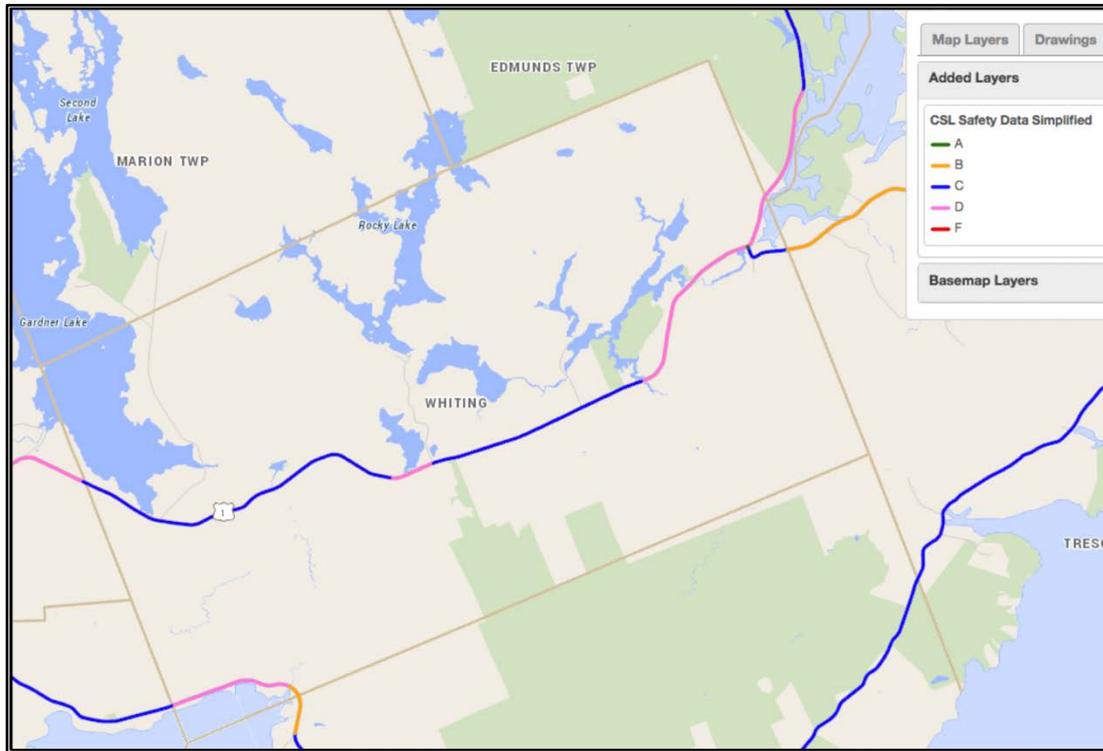
Highway Corridor Priority (HCP)				
The first part of the method, the <i>Highway Corridor Priority (HCP)</i> , categorizes our highway assets into six levels of priorities.				
Highway Corridor Priority	Miles	% Miles	% Traffic	Example (click on thumbnail to view image)
Priority 1	1751	7%	42%	The Interstate, Brewer-Calais Rte 9, Newport-Gilead Rte 2, Houlton-Madawaska Rte 1 
Priority 2	965	4%	12%	The National Hwy System, Caribou-Ft. Kent Rte 161, Bangor-Greenville Rte 15, Ellsworth-Eastport Rte 1, Lewiston-Bethel Rte 11/26/td> 
Priority 3	1884	8%	16%	Manchester-Farmington Rte 17, Saco-Fryburg Rte 5, Lincoln-Vanceboro Rte 6, Sherman-Ft. Kent Rte 11 
Priority 4	2077	9%	9%	Major Collectors not included above (including 3 miles of marine highway) 
Priority 5	2385	10%	8%	Minor Collectors not included above (including 73 miles of marine highway) 
Priority 6	14451	62%	13%	Local Roads & Streets 

Whiting contains no Priority 1 highways and one Priority 2 highway, US Route 1. The Customer Service Level (CSL) measures the state's highway assets (Priority 1-5) in three areas. The CSL uses customer-focused engineering measures to track highway (1) Safety, (2) Condition and (3) Serviceability, and grades them similar to a report card (A-F). The table below lists the individual measure that make up the overall service level grade.

Safety	Condition	Service
Crash History	Ride Quality	Posted Road
Pavement Rutting	Pavement Condition	Posted Bridge
Paved Roadway Width	Roadway Strength	Congestion
Bridge Reliability	Bridge Condition	

Customer Service Levels (CSLs) are given ratings on the following scales:
Grading System (A=Excellent, B=Good, C=Fair, D=Poor, F=Unacceptable)

CSL Indicators (Safety, Condition & Service). A screen capture (from the Maine DOT Map Viewer (<http://www.maine.gov/mdot/about/assets/search/>) of the Customer Service Levels for Whiting's roads is provided below.



The most recent MaineDOT Work Plan covers the period from 2017-2018-2019. **Work Plan** entries for Whiting include, at a total estimated cost of \$3.2 million:

- Bridge Replacement of New Crane Bridge over the Orange River located 0.07 of a mile north of Playhouse Lane

Additional projects in the Work Plan for MaineDOT Region 2 described variously as “highway preservation paving: light pavement treatment” and “highway safety and spot improvements include 3 continuous segments in Whiting as follows:

- Reconstruction: starting at a point 0.78 miles North of Dodge Road extending northerly for 1.1 miles
- Rehabilitation: extending 1.6 miles to a point 4.0 miles south of the Whiting/Edmunds Townline
- Reconstruction: extending North 2.43 miles to a point 0.2 miles from Bridge#3171

Dangerous Intersections and Stretches of Road

MDOT provides a web-based map

(<https://mdotapps.maine.gov/MaineCrashPublic/PublicQueryMap>) that allows users to query the number and types of crashes within their community in one year or over several years. A screen capture of all crash types over the period 2012 – 2017 is provided below. Note that the user can click on a cluster of crashes and then click on an individual crash to obtain details about date, injury level, and cause as depicted in the second image on the following page.

MaineDOT Maine Public Crash Query Tool

Home | Statistics | High Crash Locations | **IMPORTANT: User Notes** | Advar

Set Search Criteria

All/All Types of Crash Crashes - Year: 2012 To 2017 City or Town: Whiting Cluster Markers

Number of crashes returned: **92** Number of crashes mapped: **91**

Map Satellite

Now that you have created a query and viewed the map results, simply modify the search criteria again to create a new set of crashes to map.

Step 1: Select a location (i.e. state-wide, city/town, county OR a police dept.)

State-Wide City/Town

County Police Dept.

Whiting x

Step 2: Select single year or multi-year.

Single Year Multi-Year

Step 3: Select Year(s).

2012 2017

Step 4: Select Type of Crash.

All Types of Crash

Step 5: Select what to view.

All Crashes

Fatal Crashes

Injury Crashes

Property Damage Only Crashes

Step 6: Submit Query. Press the button below to submit your query and view results.

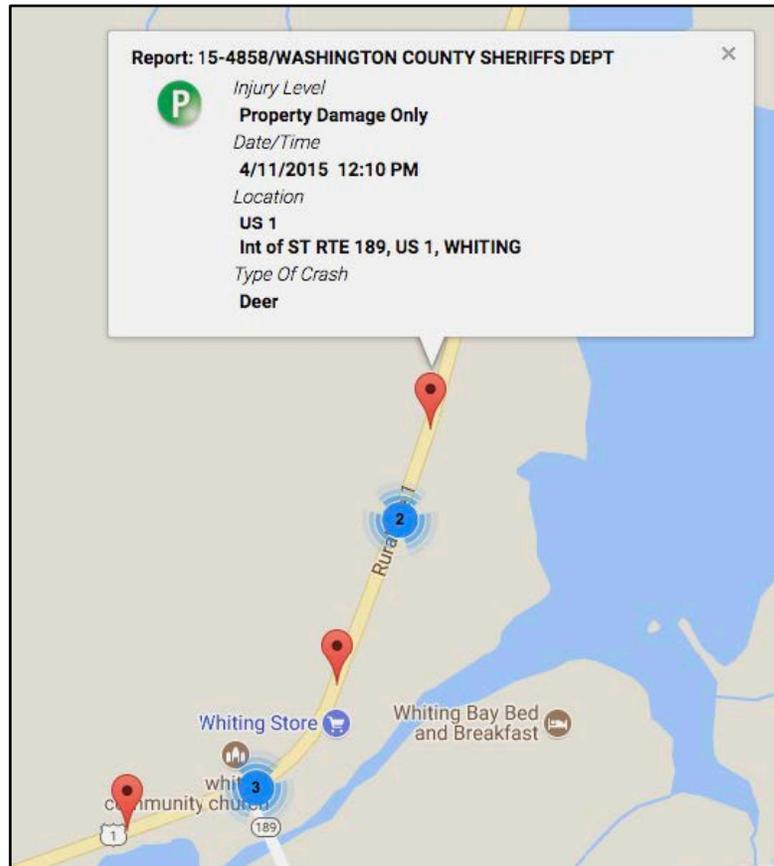
Submit Query

Map showing crash data points for Whiting, Maine. The map includes labels for Rocky Lake, Cobscook Bay State Park, Rural Pte. 1, and Cutler Rd. Crash data points are represented by blue and yellow circles with numbers, indicating the number of crashes at each location. A red pin is also visible on the map.

The details provided in this database support the conclusions of residents regarding several areas as more dangerous than others. Speeding problems are found particularly on US 1 through Whiting village and along Route 191. The chief reason for this is seen as a lack of enforcement of the existing speed limits. Also, there are some safety issues regarding school children playing beside, or crossing, US 1 near the Village School.

The town sees several locations as presenting potential safety problems:

1. The intersection of Route 1 and Route 189. This intersection is cause for concern due to speeding along Route 1, passing on Route 1 within the intersection, and because of cars not stopping at the stop sign when entering Route 1 from Route 189. The town would like a blinking light school sign on Route 189 to alert drivers approaching Route 1. The town would also like better signage on Route 1, for vehicles approaching Route 189 from the north, to indicate that their left turn is past the island.
2. Due to blind spots and speeding problems, there is a need for speed limit signs along the Dodge Road, Gardner Lake Road, and Halls Mill Road.
3. Egress onto Route 1 from Chamberlain Lane, the Dodge Road, Gardner Lake Road, Halls Mill Road, and from the church property about a mile and a half west of the village center is problematic due to sight distance and speed issues. Consideration should be given to installation of “blind intersection” signs and, in the case of private property, moving the egress to another location.
4. Drivers turning left from Route 189 onto Yellow Birch Road have insufficient sight distance to motorists coming from the village toward Lubec. Solutions include restricting left turn entirely for motorists heading toward the village and/or better signage indicating hazards (blind and severe turn) to motorists heading toward Lubec.



PUBLIC TRANSPORTATION

Public transit facilities are only available at the regional level. The Washington Hancock Community Agency (WHCA) provides transportation to medical appointments for MaineCare recipients (<https://www.whcacap.org/transportation/transportation-assistance.php>). These services are provided to income eligible persons and are typically children in state custody, welfare clients, Medicaid patients with medical appointments, the elderly and disabled, or people

needing transportation to Meals for Me. Most of the longer trips are for medical services: shorter trips are to local doctors, pharmacies, and groceries. Users of this service are mostly families living below poverty level, people with mobility limitations, people with one or no available vehicles, and the elderly. WHCA also coordinates a volunteer driver program.

SunRides Community Transit (<https://www.whcacap.org/transportation/public-bus-schedule.php>) is open to the general public for a fee and is free on a first come first served basis for seniors. Also coordinated by WHCA SunRides Community Transit includes a scheduled van and door-to-door on demand transportation from Whiting to Machias, Ellsworth, and Bangor.

West Transportation provides a scheduled bus service for Washington County offers daily service from Calais to Bangor, round trip. Western Washington County communities receive public bus service and social service 52 weeks a year. The Bangor/Calais route operates daily year round. Pick up points are at various locations throughout the county. In Whiting the pick up point is in the Village near the Community Building.

Airports

There are no airports or public airfields within town. Primary regional airports include:

1. Bangor International Airport, 105 miles distant from the village center, provides national and international commercial passenger and freight services, as well as civil defense operations. 11,441-foot main runway. Car rental services are available.
2. Deblois Flight Strip, off State Route 193, has a 4,500-foot runway but no beacon or fueling services. Last rated by the state in good condition.
3. Eastport Municipal Airport has a 4000-foot runway and provides limited charter and instructional services. Beacon and fueling services. Last rated by the state in good condition.
4. Hancock County - Bar Harbor Airport in Trenton is the nearest airport with regularly scheduled passenger commercial service. In addition to daily commuter service to Boston, Massachusetts, charter service is offered. Car rental services are available. 5,200-foot main runway. Last rated by the state in excellent 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 fair condition.
6. Princeton Municipal Airport has two runways, the larger of which is 3999 feet, and is used primarily by private businesses and recreational fliers. Beacon, but no fueling services. Last rated by the state in fair condition.

Railroad Facilities and Rail Services

Rail service from Bangor East to Calais was discontinued in 1986. A management plan for the Ellsworth-Ayers Junction portion of this line was adopted in 2006 to renovate and preserve the corridor for rail in the event it becomes feasible. In the interim the corridor is being managed as the Downeast Sunrise Trail, a multimodal trail. The East Coast Greenway is a bicycle and walking trail planned to extend from Key West, Florida to Calais, Maine, which may use some rail line right-of-ways. There also are efforts to expand freight rail service in Washington County, particularly in the Calais and Eastport areas with connections to the international rail network through Canada. Passenger rail service in the State has been given a boost recently with

the reinstatement of passenger service between Boston and Portland with a recent expansion to Brunswick and plans for extension further up the mid-coast.

Ports

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

I - PUBLIC FACILITIES AND SERVICES

This section reviews Whiting's current public facilities and services to determine if they meet our needs today and if they have the capacity to serve our town for the next 10 years. The goal of this section is to plan for, finance, and develop an efficient system of public facilities and services that will accommodate the town's future needs.

Summary of Key Findings

- Whiting's fiscal year runs from July to June and the annual Town Meeting is held in September.
- Whiting owns three buildings, the Community Center containing the Town Office, Fire Department, and multi-purpose and meeting rooms, the Union Meeting House and the Whiting Village Elementary School.
- Municipal services are provided by a full time Administrative Assistant serving as Clerk, Treasurer and Registrar of Voters; other staff functions are provided by part time staff and contractors.
- Whiting has curbside garbage pick-up, but no central water or sewer system and no recycling facilities.
- Police protection is provided by the Washington County Sheriff and the State Police. Emergency response is provided by the Machias Ambulance Service. E-911 is fully operational throughout the town.
- Whiting has a volunteer Fire Department with mutual aid agreements with several neighboring municipalities.
- The Whiting Village School serves elementary students; secondary students can attend the Machias Memorial High School or Washington Academy in East Machias.

GENERAL MUNICIPAL ADMINISTRATION

Whiting is part of State Senate District 4, State House District 133, and U.S. Congressional District 2. The town has a selectpersons/town meeting form of government with a town clerk responsible for the day-to-day operations. All municipal departments have capital reserve accounts for equipment replacement and building maintenance. The three-member board of selectpersons serves staggered three-year terms and typically meets the second Monday of each month, or as needed. The town's fiscal year ends on June 30 and approval for the budget is achieved through the annual town meeting/election held in September.

Boards and Committees

The Board of Selectmen appoints long term, short term and project committees as needed. The following committees serve the town:

- Board of Selectmen/Assessors
- Board of Appeals
- Budget Advisory Committee
- Comprehensive Plan Committee
- Planning Board
- School Committee
- Shellfish Committee

The board of appeals hears grievances regarding variance requests. The board of assessors hears grievances regarding tax abatements. The budget advisory committee works with the board of selectpersons and town employees to prepare the annual budget for town meeting. The planning board consists of 5 members and 2 alternates. Monthly meetings are held to review site plans for any development proposals. The planning board also reviews shoreland zoning and wetlands issues for compliance with state and local regulations.

Municipal Building/Facilities

The Community Building, constructed in 1987, is 2,610 square feet, situated on 1.5 acres, on US 1 in the Village. The Town Office, Fire Station, storage facilities, and a multipurpose room used for community events and school gym classes are located in the Community Building. The town also owns the Whiting Village School and the Union Meeting House.

The Community Building serves us well, but it is anticipated that the construction of an additional public facility might be warranted. The Fire Station may need more space and there is a desire to reduce the town's insurance liability, which is high because the town hosts community events in a building that is shared with the Fire Department.

MUNICIPAL SERVICES

Administrative Assistant

The Administrative Assistant is responsible for administering the town's routine business and one person serves the roles of clerk, tax collector, treasurer, and registrar of voters. All employees and contractors report directly to the Selectmen. Staffing also includes several part-time employees including the following: deputy clerk, constable, road commissioner, health officer, and fire chief. Whiting also contracts for services including a certified code enforcement officer, animal control officer, local health officer, and an assessing agent.

Highway Department, Transfer Facility and Solid Waste Management

Whiting contracts for year round road maintenance.

There are no landfills or waste transfer facilities within Whiting. A private contractor provides weekly solid waste curbside pick-up services for the town, or the residents may take their trash to the transfer station/recycling facility in Marion. The town has no recycling facility. The Marion Transfer Station accepts some recyclables depending on fluctuations in the recyclables markets. The town of Machias also no longer accepts recyclable from non-contract towns including Whiting.

Water Supply

The town does not have a central public water system. There is a public water supply serving the Whiting Village Public School and the Union Meeting House as described in the Natural Resources chapter. Residents and businesses depend upon their own on-site dug or drilled wells and springs for all water needs. Some residents also use water from a spring on the Dodge Road, a short distance north of US Route 1. These sources have adequately met our needs and are projected to continue to do so for the foreseeable future. Throughout Washington County, the natural occurrence of arsenic in bedrock necessitates regular testing of wells for this and other contaminants.

Septic Systems, Overboard Discharges, and Sewer Systems

The town does not have a municipal sewerage system. Disposal is by on-site wastewater systems (septic tanks and leach fields). According to Maine DEP there are no overboard discharges (OBD's) in Whiting. Nearly all residents and businesses depend upon private septic systems. Because of our dependence upon wells and springs for drinking water, it is crucial to install, upgrade where necessary, and maintain adequate septic/sewage disposal systems. The minimum standards for the installation of septic disposal systems established by the State of Maine must be observed. Lots with no public water supply or public sewage disposal systems must meet the State minimum size of 20,000 square feet or approximately one-half acre.

Stormwater Management System

Whiting's stormwater system consists primarily of roadside ditches, catch basins and culverts. Sub-surface stormwater drainage pipes are located along US 1. The system, although functional, is old. The state owns and maintains the system located along US 1, while the town is responsible for the rest.

Police Protection

The Washington County Sheriffs' Office and the State Police provide police protection. The County Sheriff's Office provides the dispatching services for emergency services. Whiting's crime rate is lower than many other communities in its vicinity and the statistics show that it is among the safer areas in Maine. Whiting employs an animal control officer and enforces the local shellfish ordinance.

Fire Protection

The Whiting Fire Department is a non-profit corporation, partially funded by town appropriations. The Fire Station, located in the Community Building, serves the surrounding towns as well as Whiting. The department includes around fifteen volunteers, with no full-time members. Whiting has mutual aid agreements with the surrounding towns of East Machias and Lubec and the Unorganized Territories of Trescott and Edmunds. The Mill Pond provides water for fire protection in the Village. Whiting has no fire hydrants. The department's large equipment includes one pumper (1980 International - 1000 gallons), two trucks (1979 5 ton 809 series army truck – 2500 gallons; 1970 Dodge pick-up – 250 gallons), and one tanker (1992 Freightliner – 2300 gallons).

Emergency Services

Whiting does not have its own ambulance service. Instead the Downeast Regional Emergency Response Service, with facilities in Dennysville and Lubec, serves the eastern part of town, including the Village. For the western part town, including Holmes Bay and the Gardner Lake area, the Machias Ambulance Service of the Down East Community Hospital provides coverage. Given the costs of ambulance services and the low and dispersed population of our town and region, it is recognized that regional cooperation is essential to ensure adequate ambulance coverage to our residents.

Enhanced 9-1-1

The Emergency Services Communication Bureau has assisted Whiting in the physical addressing of all properties. E-911 is fully operational throughout the town. E-911 service automatically

displays a caller's address on a computer screen at a call-answering center and the caller's number can automatically be redialed if the line is disconnected.

Cemeteries

Whiting has a total of 20 cemeteries, including family plots. None of these cemeteries is town-owned. The following is a listing of the largest cemeteries, their location and acreage:

Table I-1 Whiting Cemeteries

Name	Location	Acreage+/-
Whiting Village Cemetery	Village US 1	2
Gardners Lake Cemetery	Gardners Lake Rd	1/8
Mary Look Cemetery	Holmes Bay SR 191	3/4

Our cemeteries contain tombstones dating back to the early 1800s. It is anticipated that enough land remains to meet local needs for the next ten years and beyond.

RECREATION, CULTURAL AND COMMUNITY

Whiting does not have a Recreation Department. Regional programs are organized through regional volunteer efforts. The community generally feels that, given regional accessibility, the town's recreational programs and facilities are adequate for its current population.

Local Recreational Facilities

The Maine Department of Conservation has published guidelines for the types of recreational facilities that municipalities should seek to develop and maintain. The guidelines are based upon a town's population. In table G-1 these guidelines and the facilities and services found locally are shown, as well as the condition and brief description of those facilities.

Guidelines for Recreation and Park Services for Municipalities with Populations under 1,000	Located In Whiting?	Condition	Description/Location/Capacity
<u>I. Administration</u>			
Recreation and Park Committee or Board	No		
<u>II. Program</u>			
Swimming Instruction	No	--	Note: Swimming pool and instruction is available at University of Maine Machias
Community-wide Special Events	Yes	--	Periodic Community events at Town Hall and at the Union Meeting House
<u>III. Facilities</u>			
<u>Outdoor Facilities</u>			
Community Recreation Area, 12-25 acres w/ball fields, tennis courts, swimming, ice skating, etc.	No		
Softball Diamond (0.75 per 1,000 pop.)	Yes	C	One small unimproved baseball field at the Village School
Ice Skating (5,000 s.f. per 1,000 pop.)	Yes	--	Skating on lakes and ponds
Picnic Areas w/tables & grills (2 tables per 1,000 pop.)	Yes	B	Picnic area located on Route 1 at Reynolds Brook

Guidelines for Recreation and Park Services for Municipalities with Populations under 1,000	Located In Whiting?	Condition	Description/Location/Capacity
Indoor Facilities			
Gym or Large Multi-Purpose Room (0.20 per 1,000 pop.)	Yes	B	Community Building: One half basketball court
Auditorium or Assembly Hall	Yes	B	Community Building, Same as above.
Public Library	No		Public libraries available in neighboring towns
IV. Finance (funds for operation and maintenance - not capital)	Yes	--	Funding through town appropriations
Minimum \$6 per capita minimum for part-time			

Condition Classification System:

Grade Classification

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

Regional Recreational Facilities

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 Whiting, many retail businesses benefit from an influx of tourists to the region, especially during the summer.

Regional recreation facilities accessible to Whiting's 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. Cutler Coast Public Reserved Land, Bold Coast Trails: maintained by the State, contains ten miles of hiking trails and three walk-in campsites.
4. Edmunds boat landing.
5. East Plummer Island Preserve and the Mistake Island Preserve in Jonesport, both managed by the Nature Conservancy.
6. East Quoddy Lighthouse and Mulholland Lighthouse in Campobello, N.B.
7. Gleason's Cove Town Park in Perry: picnic sites, beach, fishing weirs, boat launch.
8. Great Cove Golf Course in Roque Bluffs: 9-holes, 1,700 yards long.

9. Great Wass Island Preserve in Beals: 1540 acres of boreal forest, peat bogs, and coastline managed by the Nature Conservancy.
10. Herring Cove Provincial Park, Campobello, N.B: golf course, campground, playground, beach, hiking trails.
11. Jonesboro Wildlife Management Area: 726 acres.
12. Jasper Beach in Buck's Harbor, Machiasport.
13. Lubec Municipal Marina.
14. Machias Seal Island, seabird nesting site with puffin colony, boat tours from Cutler, Jonesport and New Brunswick.
15. Moosehorn National Wildlife Refuge: 16,000 acres west of Calais, 6,700 acres in Edmunds. Migratory birds, big game and 50 miles of trails.
16. Petit Manan National Wildlife Refuge in Steuben: 3,335 acres on the mainland with hiking trails, several islands, and a variety of birds
17. Quoddy Head State Park in Lubec: 532 acres, easternmost point in the U.S., high rocky cliffs with extensive walking trails and views of Canada. The park features 4.5 miles of hiking trails, extensive forests, two bogs, diverse habitat for rare plants, and the red-and-white striped lighthouse tower of West Quoddy Head Light.
18. Reversing Falls Town Park in Pembroke: 140 acres, trails and picnic area.
19. Robbinston Boat Landing and Picnic area.
20. Roque Bluffs State Park: 2300-foot beach, picnic tables, grills, trails and playground.
21. Roosevelt-Campobello International Park in Campobello, N.B. A 2,800-acre park that includes the cottage and the grounds where Franklin Roosevelt and his family vacationed, as well as a large natural area with many nature trails and look-out points. The Island also has a Provincial tourist information center.
22. Shackford Head State Park in Eastport. A 90-acre undeveloped peninsula with protected coves, a bold headland, and hiking trails.
23. St. Croix Country Club and Golf Course in Calais.
24. St. Croix Island International Historic Site at Red Beach in Calais. Overlooks St. Croix Island, site of historic French settlement in 1604.
25. Coastal and nature tours are available by Kayak and motor vessels in nearby towns.

Whiting has no snowmobile trails that are formally a part of Maine's Interconnecting Trail System (ITS). Nonetheless, the town has private dirt roads and trails that are used by snowmobilers and all terrain (ATV) riders. The town is not and will not be responsible for establishing or maintaining snowmobile or ATV trails.

Culture and Community Events

The Community Building is the venue for many town and social events, such as community breakfasts, potluck suppers, group yard sales, and charitable fundraisers.

Community Organizations and Services

Whiting Historical Society
Quilting Club
Parent-Teacher Committee

Churches

Hope Bible Fellowship, US 1 toward East Machias

Society of Friends Meeting House (Quaker), SR 189
Three Angels 7th Day Adventist Church on Route 1

EDUCATION

AOS 96

The Alternative Organizational Structure or AOS 96, established in 2010, provides for the education of pupils in the towns of Cutler, East Machias, Jonesboro, Machias, Machiasport, Marshfield, Northfield, Roque Bluffs, Wesley, Whiting, and Whitneyville. AOS 96 operates the following schools, one of which is located in Whiting:

Table I-2 Schools

School Name - Municipality	Enrolled Pupils April 2017	Grades
Bay Ridge Elementary School - Cutler	54	Pre-K - 8
Elm Street Elementary School – East Machias	217	Pre-K - 8
Fort O'Brien Elementary School - Machiasport	39	Pre-K - 8
Jonesboro Elementary School - Jonesboro	58	Pre-K - 8
Machias Memorial High School - Machias	130	9 - 12
Rose M. Gaffney Elementary School – Machias	353	Pre-K - 8
Wesley Elementary School - Wesley	6	K - 8
Whiting Village Elementary School - Whiting	31	Pre-K - 8

The above table includes all resident pupils attending these schools on April 1, 2017. For secondary education, students from Whiting may attend Machias Memorial High School or Washington Academy in East Machias and possibly other high schools on an individual basis.

The Whiting Village School is located in an older building that has been renovated over the years and accommodates the school population adequately. School-age population trends over the last 30 years project a decline in school enrollment.

Higher Education

The Washington County Vocational Institute was established in 1969 and became the 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 six institutions in the Maine Community College System. Programs train students for employment in several diverse occupations - from construction and mechanical trades to food service and business studies; several of these programs matriculate 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 college is accredited by the New England Association of Schools and Colleges. Enrollment in 2017 was approximately 450 students.

The UNIVERSITY OF MAINE AT MACHIAS (<http://www.umm.maine.edu>) is one of seven campuses of the University of Maine System. Less than an hour from Eastport, UMM offers Bachelor and Associate degrees in a wide range of subjects including business education and administration, recreation management, biology, environmental studies, English, and history. More than 1,000 students are enrolled at UMM, with a faculty to student ratio of 1 faculty

member for every 13 students. The average class size is 17 students. UMM offers several Distance Degree Programs allowing convenient and affordable education.

HEALTH CARE

WHITING BAY FAMILY MEDICINE, located on US 1 in the Village, is a privately owned medical practice operated by Julia Arnold, M.D. Dr. Arnold is a Board Certified Family Practitioner. Her practice emphasizes well-child exams, sports physicals, annual gynecological exams for women, and complete annual physicals for men and women. Dr. Arnold also provides complete prenatal care and obstetrics.

Regional Health Resources

CALAIS REGIONAL HOSPITAL, <http://www.calaishospital.org>, 30 miles to the north, has 25 acute care beds and 8 skilled nursing beds, a 16-physician active medical staff, and a courtesy staff of 30 physicians. Calais Regional Hospital opened a new \$9 million modern facility in July 2006.

DOWNEAST COMMUNITY HOSPITAL, <http://www.dech.org> DECH, is located in Machias 45 miles to the west of Eastport. It is a 25-bed 24-hour acute care facility and has an active medical staff of 41 practitioners.

EASTERN MAINE MEDICAL CENTER, <http://www.emmc.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.

REGIONAL MEDICAL CENTER IN LUBEC, <http://www.rmcl.org/> is a federally qualified health center that provides outpatient primary care services in its Lubec and East Machias clinics. Core clinical services include family medical, dental, mental health counseling, laboratory, podiatry, school-based health clinics, and patient education services.

MAINE COAST MEMORIAL HOSPITAL, <http://www.mcmhospital.org/> is located in Ellsworth and provides a 64-bed full service hospital including emergency, primary and specialty care, acute inpatient, diagnostic, and surgical services. Outreach programs such as support groups and on-going health classes are also offered.

PUBLIC UTILITIES AND SERVICES

Electrical Service: Emera Maine

Telephone Service: Consolidated Communications

Cellular Telephone: US Cellular

Table I-3 Area Media

Television, Cable, and Radio	Newspapers
WLBS - Channel 2 (NBC affiliate) Bangor	Bangor Daily News (daily)
WABI - Channel 5 (CBS affiliate) Bangor	Calais Advertiser (weekly)
WVII - Channel 7 (ABC affiliate) Bangor	Machias Valley News Observer (weekly)
Maine PBS- Channel 13 (PBS affiliate) Calais	Ellsworth American (weekly)
Pine Tree Cable	Countywide

WQDY (1230 AM & 92.7 FM) Calais	Quoddy Tides (twice monthly) Eastport
WALZ (95.3 FM) Calais and Machias	
WMED (89.7 FM) (NPR affiliate) Calais	
WSHD (91.7 FM) Eastport	
WCRQ (102.9 FM) Calais	

Note: Radio stations based outside of Washington County are not shown.

Internet Providers:

Internet service providers that offer a range of high speed broadband services include Axiom Communications Inc. Spectrum, Direct TV, DISH Network.

Mail Delivery

The Whiting Post Office (04691) has been located in its present location on US 1 in the Village since 1980. Whiting has had a post office in the Village since the mid 1800s. The U.S. Postal Service leases its facility and has window hours of 11:30-3:30 Monday through Friday with limited Saturday hours. Although many residents have a post office box, part of the mail is delivered through a rural carrier for home delivery.

J - FISCAL CAPACITY

The primary funding source for municipal government is property tax revenue. In order to maintain a consistent mil rate year to year, town government must operate in a manner that is fiscally responsible. Large fluctuations in the tax rate can cause public concern and can also discourage economic development. Although the priorities of our town may change from one year to another, stable municipal finances are always a fundamental responsibility of town government. It is important for Whiting to handle diligently all yearly expenditures while at the same time planning for the town's long-term objectives. As is the case with any business, the physical assets of Whiting must be properly maintained through capital reserve accounts to protect the town'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 town's taxpayers.

The majority of the financial information for this section was taken from town reports.

Summary of Key Findings

- Whiting had a total town-wide revaluation in 2010 and town's current state certified assessment ratio is 100% of market value
- Whiting's total real and personal property valuation nearly tripled from \$21,544,965 in 2001 when the last Comprehensive Plan was prepared to \$66,846,400 in 2015
- The mil rate in Whiting increased slightly from 0.01295 in 2015 to 0.0134 in 2016
- Nearly 50% of total expenditures went to education in 2016 as compared to about 46% in 2012.
- Between 2010 and 2016 State revenue sharing decreased by 9.2% and tree growth reimbursements decreased by 49.6%.

VALUATIONS

Taxes are assessed to local property owners according to the fair market value of their property. This assessment is known as the municipal or town valuation and is determined by the assessors through the assessing agent.

According to the town report, Whiting's total real and personal property valuation was **\$66,846,400 in 2015** a near tripling in value from **\$21,544,965 in 2001**.

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. However, in many communities the number of exempt properties is increasing, which decreases the municipal tax base. Since exemptions are established by statute, the town has virtually no choice but to grant an applicable exemption. Often, in such a case as a real estate transfer to a tax-exempt

organization, the town has little notice that the property will seek exempt status and then the town must deal with the impact on the upcoming budget. As the amount of these exemptions increases, it becomes very difficult for the community to maintain a constant tax rate.

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

Whiting had a total town-wide revaluation in 2010 and town's current state certified assessment ratio is 100% of market value. The state indicates that a town should be revalued at least once in every 10-year period. However, they also indicate that a revaluation must be preformed when the assessment ratio falls below 70% of market value.

Mil Rate

After the town's budget has been approved and all applicable state and local revenues are deducted from the approved expenditures, the town arrives at the dollar amount that will be raised through tax revenues. This amount is called the net commitment or appropriation. The assessing agent arrives at a valuation for each taxable property in the town and the taxpayers are assessed their share of the tax burden through a mathematical calculation. The total appropriation is then divided by the total taxable or assessed valuation of the town to arrive at the minimum tax rate. This rate is usually expressed in dollars per thousand-dollars of valuation, or in decimal form, commonly referred to as the mil rate. The difference between the amount that is actually 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 2016 was .0134 and in 2015 was 0.01295.**

MUNICIPAL REVENUES AND EXPENDITURES

Revenues

The table below shows the major sources of municipal revenue for calendar years 2012 through 2016. Intergovernmental revenues consist of road maintenance funds and state park, tree-growth, veteran and homestead reimbursements. Departmental revenues are those dollars that are received through departmental user fees, photocopy charges, planning boards application fees, etc. Local revenues consist of general assistance funds, insurance dividends, sale of town property, boat excise taxes, and interest on investment. Other financing sources include transfers from other funds, interest and municipal-state revenue sharing.

Total revenues increased slightly (a total of only 15%) over the past five years. As a percent of revenues, property taxes increased from 84% to 86% during this period. State Revenue sharing

decreased by 9.2% of total revenues and tree growth reimbursement decreased substantially more, by 49.6%. These declines in State revenues were offset by the increase in property taxes and a 34% increase in excise taxes and a 56% increase in interest and lien fees collected.

Table J-2: Town of Whiting Revenues 2012-2016

Income	2012	2013	2014	2015	2016
Property Tax & Homestead Exemptions	\$759,011	\$853,000	\$849,716	\$879,623	\$872,413
State Revenue Sharing	\$18,419	\$18,923	\$14,211	\$15,646	\$16,725
Excise Taxes	\$83,740	\$90,056	\$92,249	\$102,836	\$112,052
Tree Growth Reimbursement	\$18,260	\$13,547	\$9,770	\$10,367	\$9,206
Boat Excise Taxes	\$1,496	\$1,100	\$1,057	\$1,090	\$1,143
Interest & Lien Fees Collected	\$4,358	\$3,141	\$5,157	\$9,430	\$6,805
Interest Earned	\$2,783	\$1,572	\$1,086	\$767	\$850
Grants				\$40,000	
Permits, Fees and Other Revenues	\$12,057	\$556	\$597	\$8,015	\$73
TOTALS	\$900,124	\$981,895	\$973,843	\$1,067,774	\$1,019,267

Source: Whiting Town Reports

Expenditures

The table below illustrates the amount of money expended for each of the major departments within the town of Whiting for calendar years 2012 through 2016.

Nearly 50% of total expenditures went to education in 2016 as compared to about 46% in 2012. Total expenditures decreased 4% from 2012 to 2016, while education expenses increased 8.4% and general government expenses decreased 2.2% over this period. Expenditures are affected yearly, not only by the local budget but also by the amount of state revenue sharing. It is difficult to predict municipal expenditures for the next ten years. Demands for services, county assessments, valuation, population, and many other factors all enter the very political process of determining expenditures every year.

Table J-3: Town of Whiting Expenditures 2012-2016

Expenses	2012	2013	2014	2015	2016
General Government	\$113,223	\$93,060	\$121,020	\$116,903	\$110,741
Public Safety	\$32,525	\$31,281	\$27,868	\$36,564	\$38,619
Solid Waste	\$44,420	\$48,375	\$45,546	\$44,932	\$48,973
Public Transportation	\$211,740	\$102,470	\$56,488	\$207,891	\$76,709
Education	\$471,653	\$509,376	\$496,871	\$460,113	\$511,181
Unclassified	\$3,293	\$14,995	\$33,239	\$13,091	\$48,161
Assessments	\$152,140	\$152,102	\$154,807	\$159,204	\$155,534
TOTALS	\$1,028,994	\$951,659	\$935,839	\$1,038,698	\$989,918

Source: Whiting Town Reports

CAPITAL IMPROVEMENT PLAN

A primary implementation strategy for any Comprehensive Plan 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. Capital items can include equipment and machinery, buildings, real property, utilities and long-term contracts and are funded through the establishment of financial reserves. Capital improvements differ from operating expenses or consumables. The expense of consumables is ordinarily budgeted as operations. Capital improvements generally have the following characteristics: they usually have an acquisition cost of \$10,000 or more; usually do not recur annually; have a useful life of 3 or more years; and they result in fixed assets.

Capital improvements are prioritized each year in the budget process based on the availability of funds and the political will of the community. A complete CIP describes expected yearly investment and allows for both changes in priorities and reduction of available funds. The CIP is intended to prevent an unavoidable capital improvement from occurring in a single fiscal year. The unexpected purchase of a sizeable improvement can overburden the tax rate and cause large fluctuations in tax bills from year to year.

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, a Budget Committee in cooperation with the Selectmen review the funding requests and make a recommendation for town meeting review. Whiting maintains Capital Reserve Accounts for several categories of expenses including operations, forest fire, fire department, forest fire insurance, roads, community center equipment and tax anticipation.

The capital improvements identified below 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 2 to 5 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 5 to 10 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 10- year time frame of the current plan.

Projects previously mentioned and identified throughout this comprehensive plan and existing reserve accounts and have been incorporated into the table below.

Table J-4: Capital Improvement Plan

Department	Item	Costs	Priority	Responsibility	Funding Sources
Public Safety	Expand Fire Department with another bay in the Community Building	\$100,000	C	Fire Dept.	FEMA Aid to Firefighters; Local Taxes
Culture and Recreation	Develop an additional Boat Landing and Public Beach	\$120,000- \$250,000	C	Selectmen	Grants and Local Taxes
General Government	Pave Town Parking Lot	\$50,000+	B	Selectmen	Local Taxes
Public Safety	Acquire New Fire Department Trucks	\$300,000	A	Fire Dept.	FEMA Aid to Fire; Local Taxes

K - LAND USE

Final decisions on land use are based upon the information found in the inventory and analysis within the preceding sections of this comprehensive plan. Existing land use patterns - historical, recent and current - are reviewed and anticipated into the future. The recommended land use plan is shaped by this analysis and by the inventory and policies from each section of the comprehensive plan.

Summary of Key Findings

- Historical activities such as shipbuilding and agriculture have shifted to shoreline residential development with much forestland and scattered blueberry production.
- Existing land uses constitute a mixture of residential, commercial and home occupational uses with a small concentration of higher density within the Whiting Village area and near the border with East Machias.
- The largest employer, Looks Gourmet Food, operates on the shore of Holmes Bay.
- Limited development pressure is most evident near the East Machias border and along lake and river shorelines.
- Whiting has experienced little or no population growth in the last 5 years and 81 percent of the vacant housing units in Whiting are used for seasonal or recreational use.
- A very modest growth rate in both residential and commercial activity is expected to continue into the near future.
- Whiting proposes three Growth Areas: Mixed Use (MU) in the Whiting Village and an area along US 1 at the East Machias border, and Medium Density Residential (R3) surrounding the village area; and 4 Rural Areas: Low Density Residential (R3), Resources Forestland/Residential (RF/R), Conservation District (CD), and Aquifer Protection Overlay District (APOD).

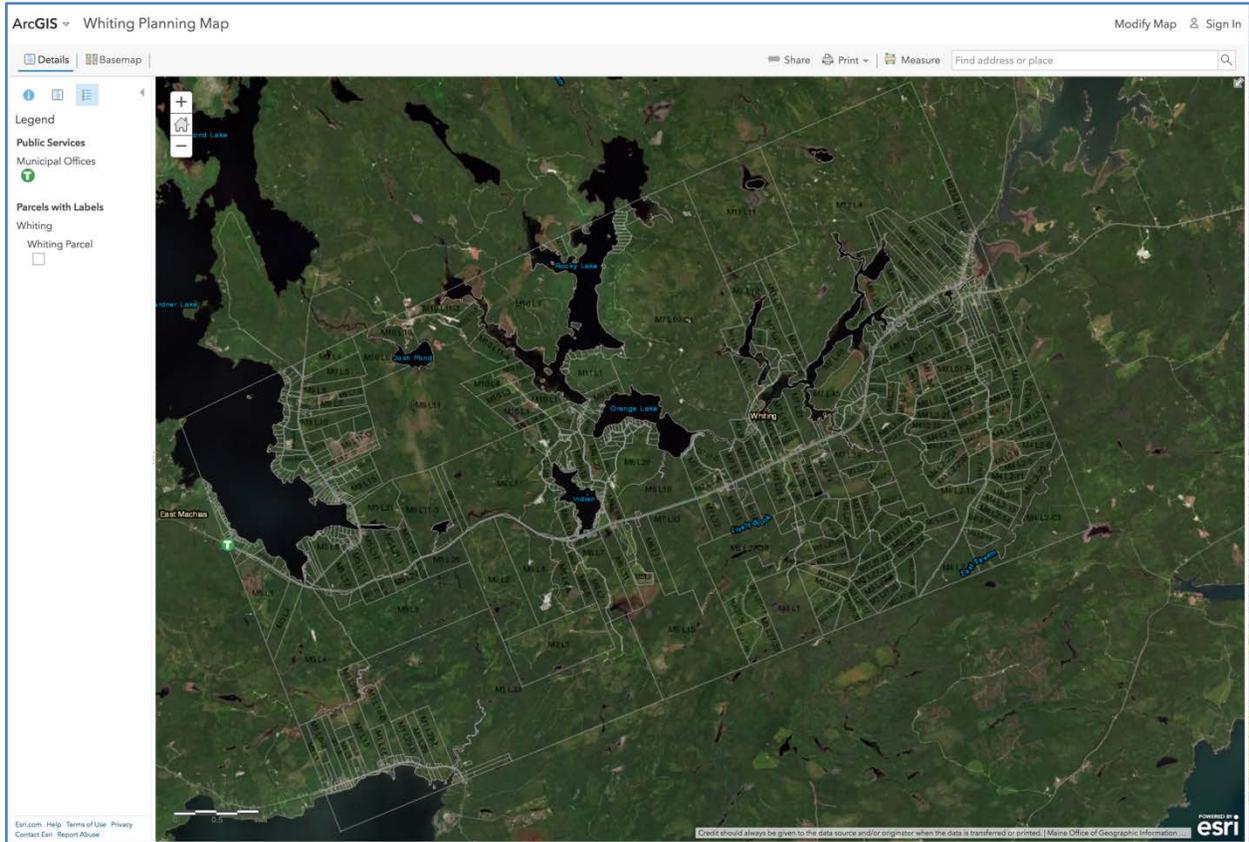
PAST DEVELOPMENT

Historically, Whiting's development consisted of a marine based economy, including shipbuilding that existed along the rivers and waterfront, and agricultural activities that occurred in the rural back lands. Most recent development in Whiting has taken place along lakefronts, as seasonal and year-round homes have been built in shoreland areas. At the turn of the current century Whiting experienced the liquidation of industrial forestlands and their conversion to large lot residential subdivisions. This is evident in the current land use pattern described in the following pages.

EXISTING LAND USE

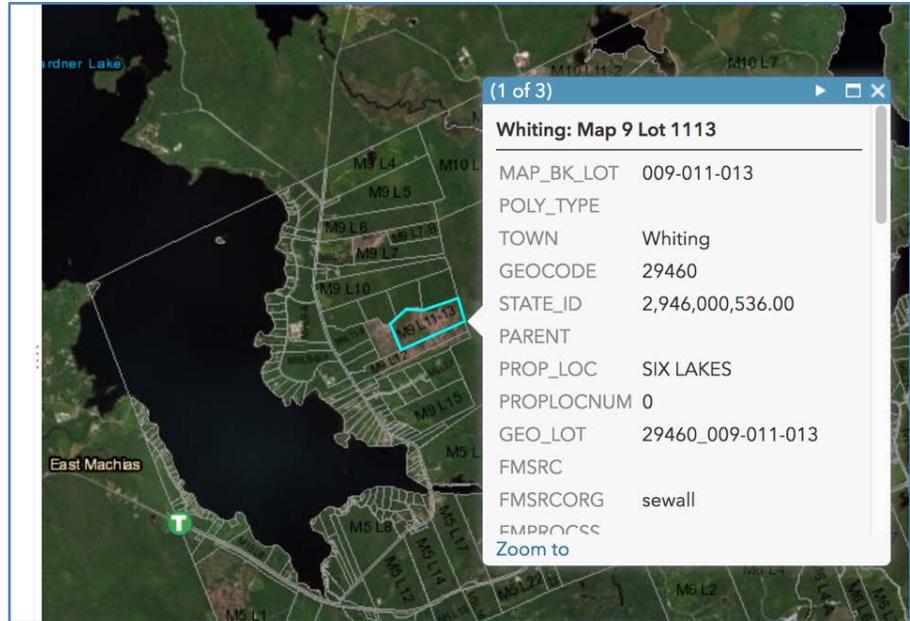
Whiting's existing land use patterns are viewable on some example maps on the following pages and in detail, particularly when an aerial photo base map is employed, using the online Planners maps (<http://gro-wa.org/planners-maps.htm>) for Whiting. Whiting's village area is composed of some residential, public, and commercial uses. The majority of the village area contains small lots and varied setbacks. The areas northeast and west of the village, along US 1, are a mixture of commercial, residential and home occupational uses. Toward Trescott, a mixture of uses, primarily large lot residential, is located along SR 189. Mixed residential and commercial development is concentrated on US 1 near the East Machias border. Along Holmes Bay, Look's Gourmet Food is the main commercial/industrial use. Residential development also is spread

along SR 191. The remainder of the town is mostly forest, wetlands (including important open marshes), residences, and farm and blueberry land combined with some businesses. A screen capture of the online Planners map output for the entire town is provided below using an aerial photo base map and the parcel layer that shows the pattern of large lot development in the southeastern portion of the town and the many smaller lots that surround the freshwater lakes north of Route 1.

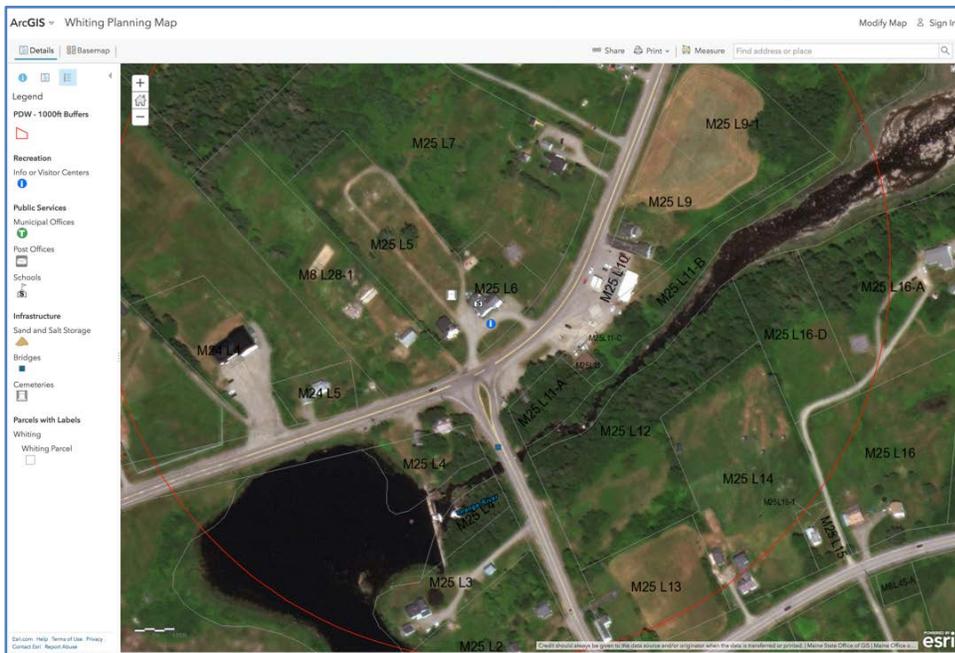


Online maps provide residents as well as the Planning Board and Code Enforcement Officer with the capability to more closely examine current land use on individual lots or in sub areas of the town.

For instance, a large parcel near Gardner Lake (shown at right with the pop up box of the selection tool visible) appears as some kind of open land on the town wide map above. By clicking the “zoom to” option in the pop-up box it is possible to see that open land on the parcel is recently harvested forest land (see screen capture at right).

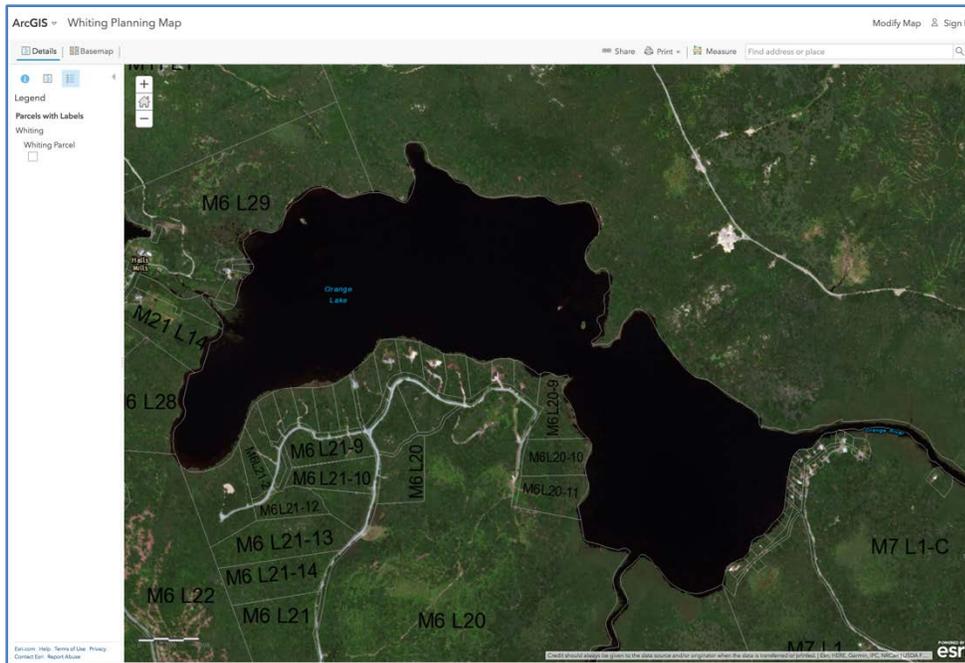


Likewise, the online maps can be used to examine the mixed use pattern of development in the Village (first screen capture below) where additional map contents can be added to the area of focus, or to take a closer look at the small and large lots surrounding various lakeshores.



(second screen capture of Indian Lake below).

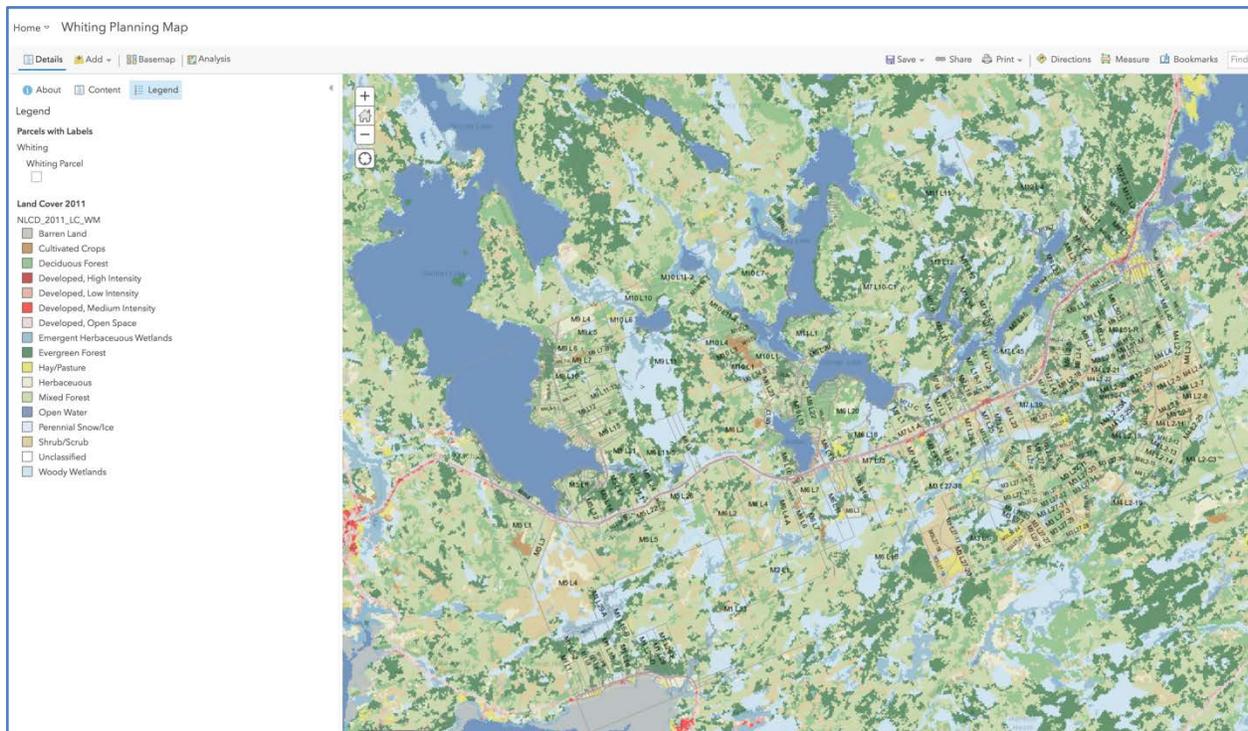
Note that, as screen captures, these images provide only an impression on what can be viewed with far greater ease at multiple scales by using the online Planners Mapping tool¹³.



¹³ <http://gro-wa.org/planners-maps.htm>

In addition to using the aerial photo as a base map, the Whiting Planners Map can depict the 2011 National Land Cover Database, a classification schemes based primarily on Landsat data along with ancillary data sources, such as topography, census and agricultural statistics, soil characteristics, wetlands, and other land cover maps.

A screen shot depicting the land cover for the entire town of Whiting is shown below. As with all of the Planners maps the user can zoom into a particular portion of the town or a particular parcel to observe greater detail.



DEVELOPMENT PRESSURE

Whiting has experienced limited commercial growth along the US 1 corridor, including home based businesses established to take advantage of the traffic that uses this main road. This growth is most evident near the East Machias border and in the Village. Whiting's village area is similar to many other rural villages in Maine. There is the possibility that businesses will locate on US 1 toward East Machias, away from the central village area and municipal services. Most new residential development has occurred along the shores of Gardner Lake, Rocky Lake, and Holmes Bay. While camps often are built for seasonal use, many have been converted for use year-round. This trend is likely to continue.

Growth has been limited along US 1 between the Village and the East Machias border in part because of the approximately four mile break in Emera Maine's domestic power service. Because of the town's geography and population distribution, resident children attend several elementary schools, some in neighboring towns.

Anticipated Future Development Trends

Results of the town survey indicate that the townspeople want the character of the town to

remain the same. As noted in the Population and Housing Chapters the year-round population has experienced little or no growth in the last 5 years and 81 percent of the vacant housing units in Whiting are used for seasonal or recreational use, a reflection of the many shorefront properties located along Whiting's several freshwater lakes and ponds. Building permit data from 2012 through 2017 indicate a steady rate (15 building permits since 2012) of home construction and a high level (63 building permits since 2012) of renovation for additions, decks, sheds and so on. There were 10 commercial/industrial building permits issued since 2012 including four in 2014 and only one since then. A very modest growth rate in both residential and commercial activity is expected to continue into the near future.

PRESENT LAND USE REGULATIONS

Currently the state and Town of Whiting have a number of land use regulations for which municipal boards and officials must follow. These 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".

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. Whiting has recently updated its Shoreland Zoning Ordinance to comply with the Maine DEP Guidelines issued in 2015. Currently the local Shoreland Zoning Ordinance contains the following districts:

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

These districts are depicted on the official Shoreland Zoning map posted in the Town Office and viewable on the Planners Maps posted online (<http://gro-wa.org/planners-maps.htm>) for Whiting.

Floodplain Management Ordinance – Whiting does not participate in the National Flood Insurance Program and thus does not to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended).

Town of Whiting Planning Board Standards for Reviewing Land Subdivisions – The town has its own subdivisions regulations (most recently revised/adopted March 26, 2007) that extend the minimum requirements of state law particularly in terms making the processes fit conditions in Whiting.

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 Whiting to be consistent with applicable portions of the National Electrical Code.

Areas Unsuitable for Development

There are areas within Whiting that are not suitable for development or areas that require special consideration based on the potential environmental impact as the result of various land use activities. Land use activities within these areas require stricter regulation than in other areas or, in some circumstances, prohibition. Failure to give proper consideration to these situations will cause problems for both people and the town's natural resources. These areas include:

Floodplains - These are areas located in the flood prone areas of Whiting. Flooding is frequent and use should be limited to those activities that are unharmed by flooding, such as agriculture, forest and some types of recreation. It should be noted that the actual floodplain of a stream would usually be more extensive than the areas shown having floodplain soils.

Water Resources/Wetlands - These are areas that fall under the Shoreland Zoning Laws. Development in these areas may not be possible. If it is, it would require review and approval by the pertinent State Agencies.

Critical 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 - These are areas in Whiting that would have limited development because of poor soils. Larger lot sizes would be required in order to meet the requirements of the Maine State Plumbing Laws.

Slope - These are areas within Whiting that have a slope greater than 15 percent. These slopes preclude extensive development because of problems with erosion, runoff, and construction limitation such as allowable road grades, suitability for septic sewage disposal, and stability of foundation. Also, note that the Maine Plumbing Code does not permit septic systems on a slope greater than 25 percent.

PROPOSED LAND USE

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.

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 the Future Land Use Map at the end of this section.

Whiting proposes three Growth Areas: the Whiting Village, including a mixed use and a higher density residential area, and an area along US 1 at the East Machias border.

Mixed Use District (MU)

The purpose of these districts is to minimize the potential for sprawl and retain the unique character of these sections of the community. A mixture of land use and development activity currently exists including residential, home based business occupations, business, commercial, retail, limited industrial, marine, and public service. There is no municipal water or sewerage service in any area of town. These districts will include areas that could serve as high-density residential and commercial uses in Whiting.

The town's future land use ordinance will specify the types and sizes of commercial uses allowed. Performance standards will be developed within the land use ordinance to include access requirements, parking, landscaping, signage, as well as design criteria to ensure attractive development. The schedule of uses will be consistent with current and existing development. State law requires that municipalities provide areas for the location of mobile home parks within their borders. A mobile home park may be located in one of Whiting's Mixed Use areas, provided the park meets all the requirements of the town's mobile home park performance standards that will be developed as part of its Land Use Ordinance. Soil capacity will determine the minimum lot size in this district. Soil potential ratings are available in the town office and are brought to the attention of anyone asking for a Subdivision or a Building Permit Application. For reference, the State's minimum lot size is 20,000 square feet with a minimum road frontage of 150 feet. Lot size in the MU Districts may be larger if soil potential ratings and site-specific soil analyses require a larger area to accommodate the development's siting.

Residential Medium Density (R2)

The purpose of this district is to allow residential development on lots typical of a rural village center. Density is one residence on 1 to 2 acres with a road frontage requirement of 200 feet. The areas proposed for this district are near the village center as supported by responses and comments in the survey completed for this Comprehensive Plan. Home occupations will be allowed, however large scale commercial, industrial, governmental, and institutional structures will be prohibited.

Rural Areas

Whiting's rural areas consist of agricultural land, forested land, wetlands, scenic areas, and open space - land uses generally incompatible with intensive development. Open space is defined as land that is not developed and not forested, such as fields, so-called barrens, etc. The town's rural areas include its Rural District (R), the Conservation District (CD), and the Aquifer Protection Overlay District (APOD). The latter two deserve maximum protection from intensive

development to protect the natural resources therein. These districts are shown on the Future Land Use Map at the end of this section.

Residential District (R3)

The purpose of this district is to maintain the rural character of the town and to provide for single family residential dwellings with larger lot sizes. Generally, minimum lot sizes will be 2 or more acres and road frontage requirements will be 400 feet to help maintain the rural character of the district. However, cluster residential development that maintains large tracts of undeveloped land will be encouraged in this district. All subdivision development proposals within this district will be encouraged to submit a cluster plan, as well as a conventional plan, for the Planning Board's consideration. Density bonus provisions for cluster developments will be included within the Land Use Ordinance to encourage the preservation of rural land. Development regulations will encourage residential development to occur on existing roads or on newly-constructed roads following existing road patterns. Developers are responsible for proper road construction and maintenance in this district.

Resources Forestland/Residential District (RF/R)

The purpose of this district is to maintain the rural character of the town, to protect agricultural and forestry uses, to provide open spaces, and to provide for single family residential dwellings with larger lot sizes.

Commercial agriculture and commercial forestry operations are permitted, as well as limited business use. Most rural households have anywhere from 1-4 jobs, businesses, or careers that support them through a calendar year. A few examples of such jobs include home accounting, blueberry raking, cabinetry, personal services like hair care, clamming, craft making, farming, fishing, hunting, quilting, tipping, small engine repair, wreath making, and Internet-based businesses. The town recognizes this. Future ordinances, therefore, will allow a mixture of uses in the Resources Forestland/Residential District, including home occupations. In general, though, large scale commercial, industrial, governmental, and institutional structures will be prohibited. The town will develop performance-based standards that limit or buffer noise, traffic generation, and other impacts or nuisances within residential areas in this district.

Conservation District (CD)

The purpose of this district is to preserve the town's most critical natural resources from development - due to their special environmental sensitivity. This district includes areas in which development may adversely affect water quality, protective habitat, biological ecosystems, significant agricultural land, and scenic and natural values. The CD directly mirrors areas of significant wildlife habitat described in the Natural Resources Chapter and on the Beginning With Habitat maps provided in large poster format and PDF format during this Comprehensive Planning process. The shoreland zoning ordinance already includes provisions for resource protection. Indeed, the majority of the area proposed for Conservation on the Proposed Land Use Map is already designated in the Resource Protection District of the Shoreland Zoning Ordinance. Additional areas proposed for Conservation include those that mirror critical habitat of rare plants and exemplary communities, and habitat for state listed species (endangered or of concern), where these are not already in public or conservation ownership. This district is not suitable for intensive development, although single family residences and selected small non-residential facilities for educational, scientific, or nature interpretation purposes - and necessary

roads - may be permitted by the Planning Board. Existing development would be “grandfathered” as well.

New single family residences will be allowed. Multi-family residential, commercial, industrial, governmental, and institutional structures will be prohibited.

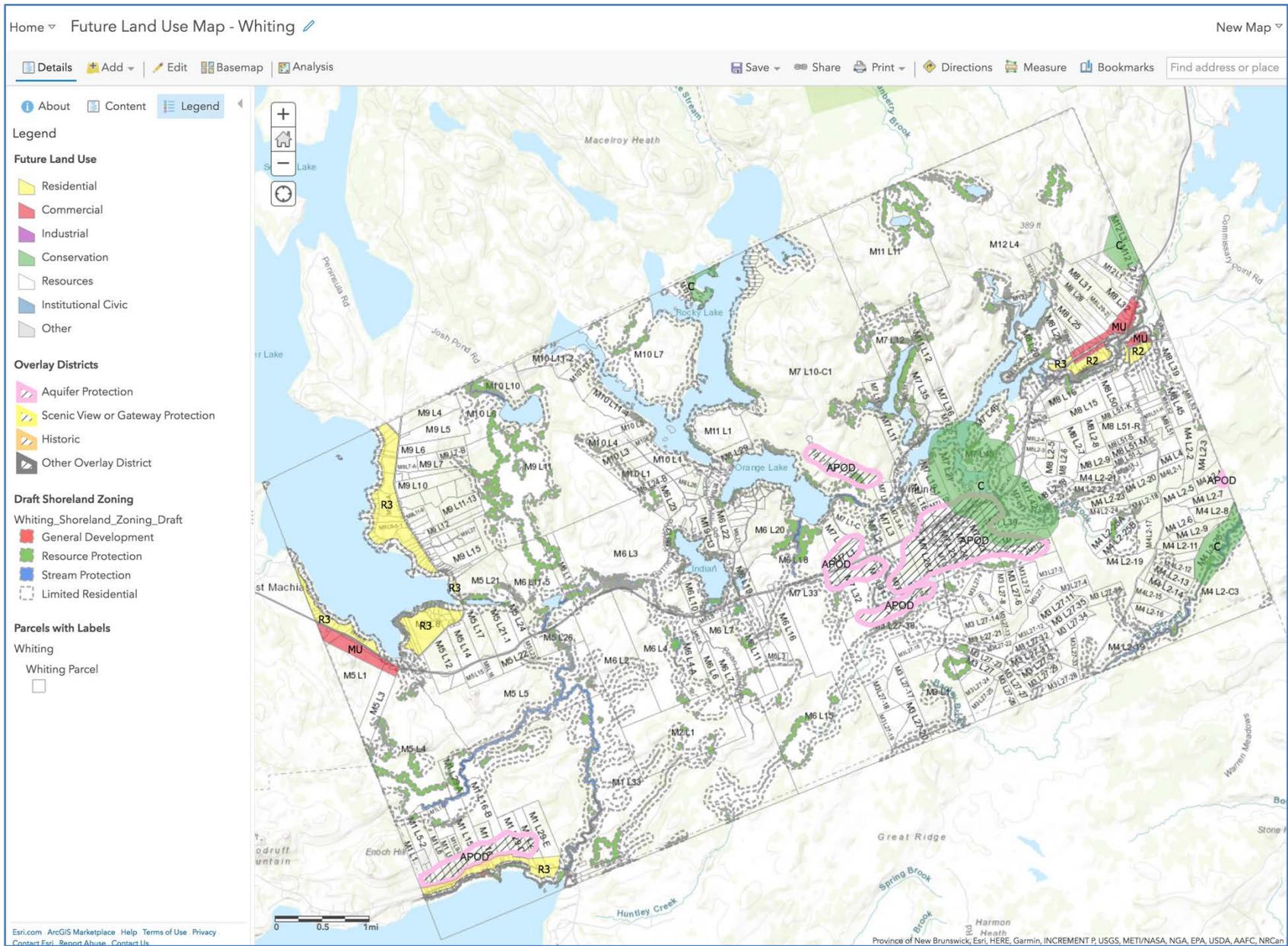
Aquifer Protection Overlay District (APOD)

The purpose of this district is to preserve the town’s principal sand and gravel aquifers and protect them from damage due to development - due to their contribution to existing or future drinking water supplies. This district includes areas in which development may adversely affect water quality. This district is not suitable for intensive development, although single family residences and selected small non-residential facilities for educational, scientific, or nature interpretation purposes - and necessary roads - will be permitted by the Planning Board. Existing development would be “grandfathered” but multi-family residential, and commercial and industrial uses that could contaminate aquifers (fuel storage and transfer, heavy industrial for example) will be prohibited.

The Future Land Use Map for Whiting is provided on the following page. As with all of the online Whiting Planners maps, the Planning Board, Code Enforcement Officer or any user can zoom in to get a closer look at the future land use districts relative to other features on the map. The Shoreland Zoning districts in particular are far clearer and more visible when the user zooms into a small, magnified portion of the map. The District names, descriptions, symbols and whether they are Growth or Rural Areas is defined in the following table.

Future Land Use Plan Districts for Whiting

District Name	Description	Legend Reference (Map Symbol)	Growth or Rural Area	Color
Residential Medium Density	1 residence/1-2 acres	Residential (R2)	Growth	Yellow
Residential Low Density	1 residence/+2-many acres	Residential (R3)	Rural	Yellow
Commercial Downtown/Village Mixed Use	City and village centers; combination of business and residential uses	Commercial (MU)	Growth	Red
Resources Forestlands/Residential	Forestland and low density residential	Resources	Rural	No color (white)
Conservation	Critical Habitat and/or Conserved Lands	Conservation (C)	Rural	Green
Aquifer Protection Overlay District	Areas above sand and gravel aquifers as identified by the Maine Geological Service	Aquifer Protection (APOD)	Rural	Pink outline/diagonal lines



LAND USE AND ZONING PERFORMANCE STANDARDS

Preserving and protecting the character of Whiting is vital to the continued stability of the local economy and to the well-being of its residents. Growth should be guided so the town can prosper and at the same time “stay Whiting”. 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 town; and still others areas where various types of housing will be encouraged.

The people of Whiting have expressed support to actively encourage growth in general and to encourage a) new commercial and retail development and b) affordable residential development in particular. They generally opposed the encouragement of new industrial development. Support was expressed for growth and development to be encouraged in the town center and near existing development. A complete summary of survey results is provided in Chapter N – Public Survey Results and in Appendix A. There was broad based agreement on the use of regulations to protect the economic value of property and promotion of quality of life.

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.

Likewise, the comprehensive plan should not create costly enforcement issues for the town. However, effort must be made by the town to ensure that land-use ordinances are enforced. Whiting townspeople recognize that ultimate goals of growth management are to direct the development and use of our land to the extent necessary to protect the public health, safety, well-being, natural resources, and property values of our community. The value of any ordinance depends on how well it is enforced. To achieve better enforcement, two issues are important: (1) educating residents about the requirements of local and state regulations, and (2) providing adequate time for the code enforcement officer to ensure compliance. The land use ordinance must provide the code enforcement officer with proper legal language and definitions, and management and elected officials also must support the code enforcement department.

Therefore, any 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 mapped natural resources information in conjunction with future development. It is recognized that site specific information can and should qualify mapped information if it is more accurate than what is depicted on the mapped layers. This can often be the case with property tax lines, wetland delineations, and soil suitability analysis.

To this end, the Town of Whiting will create land use and/or zoning ordinances 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 town. The following table describes public issues or concerns and the associated performance standards that will guide revisions to the zoning ordinance:

Public Issue or Concern:	Performance Standard:
<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.

The planning board, code enforcement officer, board of appeal, and board of selectmen will review annually the land use ordinance, shoreland zoning ordinance, subdivision regulation, mobile home park ordinance, and floodplain management ordinance to determine any required changes and to ensure the ordinances and regulations are consistent with the Plan. In the review, they will determine whether changes in the minimum requirements of state or federal laws would require local amendment of the land use regulations. In order to educate residents on local land use ordinances, a list of all local ordinances and when they are applicable should be developed and made available to the public. The town is required to notify and involve all citizens in the development and amendment of local ordinances.

L. REGIONAL COORDINATION

Whiting is a rural community situated 102 miles to the northeast of Bangor, 34 miles to the southwest of the city of Calais, and 17 miles east of the county seat in Machias. Whiting shares a border with the towns of Cutler to the south, East Machias and Machiasport to the west, and the Unorganized Territories of Marion, Edmunds, and Trescott Townships to the north and east. Commercial retail activity is limited in Whiting. Retail services and employment are sought primarily from larger regional centers in Calais, Machias, and Bangor.

Comprehensive planning recognizes the importance of regional cooperation. The land uses in one community can impact another community, particularly when that land use is located near municipal boundaries. Machiasport has a locally adopted Comprehensive Plan that is consistent with state law, Cutler is updating its 1992 Comprehensive Plan, and the Comprehensive Plan in East Machias was no longer consistent with the Growth Management Act in 2010. A Regional Plan for the Washington County Unorganized Territories was adopted in 2016 that proposed new zoning opportunities for the three Unorganized Territories of Marion, Edmunds and Trescott. None of the neighboring organized towns have adopted a town-wide land use or zoning ordinance.

Whiting has included analyses of regional issues in the areas of:

- Transportation
- Economic development
- Energy use and production
- Housing
- Emergency planning
- Public facilities
- Natural resources
- Land use
- Public Health
- Adaptation to climate change

Summary of Key Findings

- Regional transportation infrastructure within Whiting is limited to the Route 1 corridor, a significant pass through for freight and commuters.
- Whiting has one regional employer, Looks Gourmet Food, and the overwhelming majority of Whiting residents work outside of Whiting.
- Whiting is part of three (Cobscook Bay, Cutler Grasslands, Machias Bay) and fully contains one Focus Area of Statewide Ecological Significance (Orange River Complex).
- Elderly and low income Whiting households must travel/move to larger centers in Washington County to find affordable housing developments.
- The town of Whiting contracts both with the Washington County Emergency Medical Services Authority and with the town of Machias for ambulance services, participates in mutual aid with neighboring towns, and obtains police protection from the State Police and County Sheriff's Department.
- Solid waste is shipped to the Marion Transfer Facility in Marion Township.
- Whiting contracts with an animal control officer on an on-call, stipend basis and utilizes the animal shelter in Machias.
- The Whiting Village School operates within AOS 96, which includes eight other schools.
- None of the adjacent organized municipalities (Cutler, East Machias, Machiasport) has adopted town wide zoning; however, the three neighboring unorganized territories (Edmunds, Marion, Trescott) have zoning administered by the Land Use Planning Commission.

REGIONAL TRANSPORTATION

Roads

As a community with limited services and employment, the main artery in Whiting, Route 1 serves as a pass through for freight and commuters as well as a destination in the Whiting center. Route 1 therefore serves as both “Main St.” and a regional collector highway.

Transportation linkages in Whiting consist of US Route 1 that cuts across the center of the town in an east-west direction (even though Route 1 is technically a north-south route). There is an area of dispersed residential and light commercial development in Whiting Village where Route 189, serving Lubec and Campobello Island, intersects with Route 1. Route 1 reaches East Machias just outside of its village area and intersects with Route 191. Whiting residents on Holmes Bay must travel through East Machias to reach the Whiting section of Route 191. Overall, roadways in Whiting are in good condition.

Although the population of Washington County has decreased modestly from 1990 to 2010, MDOT states that the total number of vehicle miles traveled in our County has increased by over 13 percent. Most roads are not congested now, but there is a need to protect them from future degradation and the significant taxpayer expense of adding remedial capacity. The Town should ensure that access management standards are used to keep the Level of Service (LOS) on Route 1 from deteriorating.

It is important that Whiting continue to participate in regional transportation planning efforts. Municipalities can cooperate with neighboring communities and regional committees. The 3 largest communities in southern Washington County – Eastport, Machias and Milbridge - have particularly significant transportation linkages that are all dependent on a shared labor force, large retail services (in Calais), regional education and health services, and the deep-water port facilities in Eastport.

Whiting has and will continue to participate in regional Corridor Management Planning initiatives including the Downeast Coastal Corridor, the Coastal Canadian Corridor, the Eastern Interior (Route 6) Corridor (see <http://www.wccog.net/corridor-planning.htm>) and the East-West Highway, as outlined in chapter K-Transportation. These regional corridor-planning initiatives provide the opportunity to encourage residential, commercial and industrial development and promote tourism in locations that support local development goals while retaining efficient transportation mobility. Corridor management plans outline the appropriate locations for sound access management techniques such as frontage roads, shared driveways, intersections, turning lanes and signals.

A Route 1 Mobility and Safety Analysis prepared by the Washington County Council of Governments in 2007 identifies three primary strategies for separating freight from commuter and tourist traffic including:

- Improved turning access to facilitate separation of commuter and through-traffic
- Additional Scenic pull-offs to facilitate separation of tourist and freight traffic, and
- The addition of passing lanes

Along the approximately 100-mile corridor between Steuben and downtown Calais, the [Route 1 Mobility and Safety Analysis](#) identified **16 locations where roadway improvements for turning access** are needed. This report recommends that MDOT make necessary roadway

improvements for turning access at all 16 identified locations. We also identified **11 potential sites for scenic pull-outs** to facilitate separation of tourist and freight traffic; and **26 potential locations for passing lanes**. This report recommends development of four additional scenic pull-outs; and at least four passing lanes in each direction. Five options for passing lanes are identified in the town of Whiting (see maps at <http://www.wccog.net/transportation-planning.htm>).

Trails

Regionally connected trails include both ATV and snowmobile trails. Volunteers in Whiting help to maintain these trails.

The Down East Sunrise Trail (DEST) is a 90-mile regional trail, inaugurated in sections starting in 2009 for multiple users including bicyclists, walkers, ATV riders, snowmobilers and cross-country skiers. Following the former Calais Branch railway corridor, it forms an east-west corridor to which numerous other snowmobile and ATV trails can connect. DEST heads north in East Machias and travels west of Gardner Lake and north of several lakes in Whiting.

Public Transportation

Whiting has limited public transportation options. West's Bus Service offers daily round trip service from Calais to Bangor with stops along Route 1. The Washington Hancock Community Agency (WHCA) provides scheduled van and door-to-door on demand transportation for clients referred to them by the State of Maine Department of Human Services.

WHCA transportation services are provided to income-eligible clients, children in state custody, welfare clients, Medicaid patients with medical appointments, the elderly and disabled, or people needing transportation to Meals for Me. Transportation is also available for members of the general public on a space-available basis. Most of the longer trips are for medical services: shorter trips are to local doctors, pharmacies and groceries.

The general public is theoretically free to schedule rides with WHCA, although less than six percent of the current ridership is unsubsidized fare-paying customers. The average worker cannot use Sun Rides as a commuter service, because:

- a) General-public riders are taken on a space-available basis only, so even a ride scheduled well in advance will be bumped if the transit vehicle is at capacity with contracted clients;
- b) Unsubsidized fares are too high for low-wage workers to use the service on a daily basis; and
- c) Demand-response systems serve some rural communities just one day a week, with fluctuating departure and arrival times.

Workforce Transportation

The sporadic nature of demand-response service eliminates public transit as an option for rural workers with inflexible hours, shift workers, and those with on-call or overtime work responsibilities.

West's Transportation operates the other public transit service in Washington County. This incorporated firm has adopted a public-private partnership model. It receives federal transit funding to operate a daily fixed-route (i.e., scheduled) public service between Calais and Bangor and back via US-1 and US-1A, as well as several smaller intercity fixed routes, and it also markets its services to social service agencies (particularly for the longer trips to Ellsworth and Bangor). Thus, the ridership on West's Transportation routes is a mix of general public and contracted agency clients, and any revenues in excess of operating expenses generate corporate profits.

Fixed-route transit service is a much more predictable and reliable transportation mode for rural workers, and many workers would be willing to spend an hour or more of commute time each morning and evening in return for predictable and reliable daily transportation. However, West's current fixed routes and schedules are too limited to accommodate the average 8-to-5 workers, let alone those on shift work or non-standard schedules.

As currently configured, neither WHCA's Sun Rides service nor West Transportation's fixed-route service adequately meet the needs of the rural workforce in Washington County.

Transit Improvements

Innovative strategies and practices could greatly enhance the current level of service for all transit operations in Washington County, particularly in their capacity to serve working-age adults. The current emphasis on agency-contracted clients can be attributed to a chronically inadequate federal transit funding formula, offset by fairly generous contract reimbursement incentives that help to ensure the availability of rides for social service agency clients.

At present, the "public" best served by the rural public transportation system is a very narrow subset of the total population. This is true all over the United States, not just in Washington County. However, other transit agencies have found ways of increasing their efficiency and ridership that might work in Washington County. This assumes, of course, that the agencies delivering the transit services (currently WHCA and West's Transportation) are willing to undergo changes – some minor, some fairly radical – to their current operations, in return for potential increases in ridership and efficiency. The current externally governed MaineCare brokerage system pays transit providers with a very small portion of the client reimbursement fees to get to medical appointments. Both agencies may be operating too close to a financial break-even point to risk expanding their services to accommodate workforce transit, even if the changes are likely to produce greater efficiencies and enhanced revenues over time.

Notwithstanding these barriers, several alternative service ideas from other places are summarized below. They all have some potential to expand access to public transportation and workforce development in Washington County.

- "Fixed-schedule" service – combines the convenience of demand-response service with a published daily schedule, making it more predictable and reliable for general public riders
- Immediate-response "Dial-A-Ride" service (works best as a community-based system in relatively compact population centers, with a strong local volunteer base if volunteer drivers are used)
- Establish transit stops at formal and informal "Park and Ride" lots

- Ride-sharing and vanpooling programs, often using GIS to match drivers to riders; some vanpool programs are “self-organized” by a group of employees living in the same general area
- Innovative use of transit scheduling software
- Child-oriented transit service: hire a transit attendant to escort young children on rides to daycare/school/appointments, thus allowing the parent(s) to work
- Dues-paying, 24-7 non-profit ride service with incentives for pre-scheduling, flexible scheduling, and shared rides; successfully operating in Portland and surrounding communities (eg. <http://www.gomaine.org/>)
- Provide easy-load bike racks on ALL vehicles in the public transit fleet.

Airports

There are no municipal airports in Whiting. Primary regional airports include:

1. Bangor International Airport, provides national and international commercial passenger and freight services, as well as civil defense operations. 11,441-foot main runway. Car rental services are available.
2. Deblois Flight Strip, off State Route 193, has a 4,000-foot runway but no beacon or fueling services. Last rated by the state in poor condition.
3. Eastport Municipal Airport has a 4000-foot runway and provides limited charter and instructional services. Beacon and fueling services. Last rated by the state in good condition.
4. Hancock County - Bar Harbor Airport in Trenton is the nearest airport with regularly scheduled passenger commercial service. In addition to daily commuter service to Boston, Massachusetts, charter service is offered. Car rental services are available. 5,200-foot main runway.
5. Lubec Municipal Airport has a 2032-foot gravel/turf runway, with beacon, but no fueling services. Last rated by the state in good condition.
6. 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.
7. Princeton Municipal Airport has two runways, the larger of which is 3999 feet, and is used primarily by private businesses and recreational fliers. Beacon, but no fueling services. Last rated by the state in poor condition.

Railroad Facilities and Rail Services

Abandoned rail lines stretch across Washington County and are generally in poor condition, as passenger service stopped nearly fifty years ago and freight service stopped in the mid-1980s. Recent efforts have created recreational trails along abandoned rail lines and rights-of-way through our County. As noted above in the section on trails, the Downeast Sunrise Trail is an 90-mile multi-use trail on the exempt Calais Branch rail line corridor from Ellsworth to Ayers Junction. The Management Plan for the Calais Branch specifies that if rail becomes a feasible use of the corridor then the Downeast Sunrise trail will no longer be the primary use of the corridor. The East Coast Greenway is a bicycle and walking trail planned to extend from Key West, Florida to Calais, Maine, which also uses the rail line rights-of-way.

There are efforts to expand freight rail service in Washington County, particularly in the Calais and Eastport areas with connections to the (formerly) PanAM railroad lines that cross into Canada and back into Maine to reach the western part of the state across the Route 6 corridor in northern Washington County. Passenger rail service in the State has increased with the reinstatement of passenger service between Boston and Portland and, more recently up to Brunswick, Maine.

Ports

There are no port facilities in Whiting. The deepwater Port of Eastport at Estes Head, 27 miles south of Whiting, is of critical importance to current and future economic activity in the region. Eastport has the greatest natural depth of water of any port on the east coast of the United States and as the easternmost port in the United States, is significantly closer to Europe. With 100 feet of water on approach channels, 64 feet of water at the pier at low tide and more than sufficient space to turn the largest ships afloat, Eastport is uniquely positioned and naturally endowed to accommodate any size vessel existing or planned. The port has two piers, three berths, with a low tide depth of 40 feet, and over 75,000 square feet of covered storage. The outer berth can accommodate a ship up to 900 feet in length. There is also a municipal breakwater in downtown Eastport for use by smaller vessels.

REGIONAL ECONOMIC DEVELOPMENT

Whiting is tied into the regional economy of Washington County. Whiting residents obtain goods and services from service center communities like Calais, Machias, and, to some extent, Ellsworth and Bangor. Some residents also rely on these centers for employment. Thus, their well-being is tied to fluctuations in the entire region's economy.

Recent closures of the Louisiana Pacific plant and the closure/re-opening/sale/renovation of the Woodland Pulp LLC (formerly Domtar) mill (both located in Baileyville) affected residents in Whiting and many surrounding communities. Responses to these shifts vary and include retraining, returning to school, taking early retirement and doing other related work. Some younger workers left the area but many of all ages remain. Many are simply travelling further for employment and working several jobs.

The St Croix Tissue Mill in Baileyville completed a \$120 million renovation in 2016 from fine paper to tissue manufacturing. The renovated mill produces over 120,000 tons of tissue per year. It is the largest employer in Washington County employing over 300 individuals. Their affiliate, Woodland Pulp, is located in the same industrial complex along the St Croix River. It produces a bleached Kraft pulp manufactured using hardwood chips from Maine and New Brunswick. This pulp is sold worldwide with approximately one-third used by St Croix Tissue.

As noted in *Chapter E Economy*, the overwhelming majority of Whiting residents (from 2002-2015) work outside of Whiting. A new regional employer, Looks Gourmet Food, employs people for the town and the region, increasing the number of jobs serving those from outside Whiting from 6 in 2002 to 43 in 2015. Another 143 jobs employ Whiting residents outside of Whiting's boundaries.

Brownfields Assessment and Redevelopment

A regional driver of economic renewal comes from the Washington County Brownfields Assessment program that has operated since 2009 with a regional advisory committee and USEPA Brownfields Assessment funds through the Washington County Council of Governments (<http://www.wccogbrownfields.com>). Brownfields are defined as real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

Since 2009 the Washington County Brownfields Program has conducted site assessments on over 30 properties throughout Washington County. Redevelopment/reuse is complete on 20 of those sites and several more are under active redevelopment. There is a pending inventory of at least another 50 sites. By definition Brownfields assessment is needed on properties with a commercial/industrial history.

WCCOG staff and the regional advisory committee rank sites for use of public funds according multiple criteria and place an emphasis on redevelopment potential. With their history of use Brownfields sites are often in the very best locations for redevelopment; they are located in downtown centers, near existing infrastructure, at the junction of arterial highways, in historic structures, and on municipal waterfronts. Redevelopment of abandoned residential, commercial, and industrial properties fosters a sense of vibrancy, promotes diversity, and expands the experience of community. Infill erases signs of emptiness and decay and allows existing natural areas to continue providing forest products, wildlife habitat, land for sports and recreation, and a continued sense of a rural landscape.

Community Economic Development Strategy (CEDs)

In July of 2011, Washington and Aroostook Counties were combined in a realignment of the seven Economic Development Districts (EDDs) in Maine. The purpose of this realignment was to better represent natural economies. The linkage between Aroostook and Washington counties is based on many similar attributes and unique assets – some of them with great promise and some with serious challenges. This new Economic Development District is called the Aroostook Washington Economic Development District (AWEDD) and the Comprehensive Economic Development Strategy (CEDs) that is required for all EDDs was completed in July of 2013. A new CEDs is being developed for adoption in the spring of 2018. The previous five-year CEDs can be downloaded on the GROWashington-Aroostook web site here: <http://gro-wa.org/region-wide-resources>.

Aroostook Washington Economic Development District (AWEDD) has great potential to leverage its natural resource base and environment, its hardworking people, its proximity to Canada and Europe, and its inherent economic resiliency. Those that live here are individuals and families that have become “survivors” – doing whatever is necessary to secure adequate food, shelter and clothing in a very rural location with an extreme winter climate. However, mere survival is not good enough and regional leaders are committed to a transformation that will reverse the economic and social decline of the past three decades.

After a slight rebound in manufacturing, specifically in forest products, 2015-16 has seen a downturn in lumber prices, and increased challenges on biomass energy plants. Covanta closed plants in Washington County and ReEnergy in Aroostook County is facing the loss of out of state contracts at the end of 2017.

The biggest challenge facing the AWEDD is workforce related, due to the loss of population. Aroostook and Washington counties have been trending downward in population, median age, median household income and percentage of total population in the workforce for the past four decades. All of these issues are directly related to the continuing out-migration of young working-age people (20-44-year-olds) from the region that results in 1) loss of business due to recruitment issues, 2) less entrepreneurship, and 3) loss of services (healthcare and schools,

most directly). Immediate actions need to be taken to retain our young people and lure others to the region; and it must be an initiative that includes and engages all aspects of our communities— business, educational and governmental.

Mobilize Maine, an asset-based strategic planning process, offers an effective process for accomplishing this positive change. It engages local and regional business leaders to establish measurable goals that are then linked to assets (natural, business and human resources), job creation, and business expansion from within the region. The foundational premise is that business, municipal and non-profit leaders have the capacity to lead economic change if it is based on regional assets that are in our control. Using the Mobilize Maine process, the 2013 Community Economic Development Strategy (CEDS) for the AWEDD has identified the economic sectors that offer the best opportunity, and are investigating, defining and initiating business activities in those clusters that will improve wages and create new jobs to achieve the goals of the strategy. Driving the strategies in the CEDS is the following regional vision:

AWEDD Regional Vision

Our region is a place of abundant natural resources that is reflected in the beauty of our landscape and the potential for economic and social prosperity it offers. We value the individuality and endurance of our people while recognizing the strong sense of community and place that sustains us. We will create economic growth by focusing on sectors that best leverage these assets and by working to develop policies that promote private sector investment; while at the same time, retaining the quality of life that makes the region special.

The following Opportunities and Challenges drive the CEDS regional vision:

Opportunities:

- Very active international border with Canada that offers significant economic opportunity for business expansion and more meaningful cross-cultural engagement.
- Expanded shipping opportunities at the Port of Eastport (deepest port on the U.S. east coast), especially to European biomass market.
- Available (and increasing) tillable cropland, much of it suitable for organic use.
- Expanding and diversifying value-added wood products that will leverage the most concentrated wood resource in the U.S.
- Utilization of our renewable and alternative energy resources in wind, tidal, biomass and compressed natural gas.
- Expanding value-added processing of crop and marine resources.
- Potential of mining in northern Maine.
- Expanded utilization of higher education resources.
- Expanding Maine Military Authority's bus refurbishment expansion to aid Loring Commerce Centre employment.
- Light manufacturing at former Cutler Naval Station.

Challenges:

- Lowering energy costs for business and industry.
- Broadband availability/access to high speed internet.
- Mitigating distance to market through more effective/efficient transportation.
- Limitations on local economy's ability to support more businesses/service providers.
- Inability to capture more tourism visitors.
- Reversing the prevalent negative mindset and aversion to risk-taking/trying something new.

- Lack of rail infrastructure connection to Port of Eastport.
- Small number of “leaders” in the region.
- General lack of business acumen/sophistication and lack of entrepreneurial training and assistance.
- Accessing Canadian market.

AWEDD’s approach to asset based economic development focuses on the regions competitive strengths and opportunities. Systematic regional asset mapping has been completed in nine categories including tangible and intangible assets, natural, human/skills, knowledge, cultural/historic, geographic, excellence, infrastructure, government and innovation. The exploration and analysis of the region’s assets has included prioritizing assets that are “truly unique and indigenous” and that can be leveraged to reach the measureable economic vision. Outputs from this analysis are regional priority assets, targeted industry clusters, strategies and specific industry sectors for value chain mapping. AWEDD’s priority industry clusters are:

- *Alternative Energy*
- *Manufacturing*
- *Diversified Agriculture*
- *Forest Resources*
- *Tourism*
- *Marine Resources*

AWEDD economic development professionals and engaged business leaders will be paying particular attention to how educational institutions and workforce training address the changing structural job requirements to better support these clusters.

REGIONAL ENERGY USE AND PRODUCTION

Energy use and production issues are intimately related to the economic health of the region. The Findings and Recommendations of the Down East Maine Renewable Energy Working Group¹⁴ (January, 2014) summarized a 6-month exploration of renewable energy issues.

The following is excerpted from the Executive Summary (hereafter referred to as the 2014 Renewable Energy Working Group Report):

The Renewable Energy Working Group assumed that expanded investment and deployment of renewable energy, if found to be cleaner and more affordable than existing fuels and systems, would benefit Maine residents, who currently rely on fossil fuels for heat and electricity to a much greater extent than the average American or the average New Englander. The report examined investments, challenges, and opportunities – real and anticipated – in relation to renewable power, its sources, networks, mechanical systems, costs, and workforce requirements.

The topics arising most consistently, urgently, and persuasively throughout all these investigations concerned the linked challenges of **front-end transition costs, market distortion,**

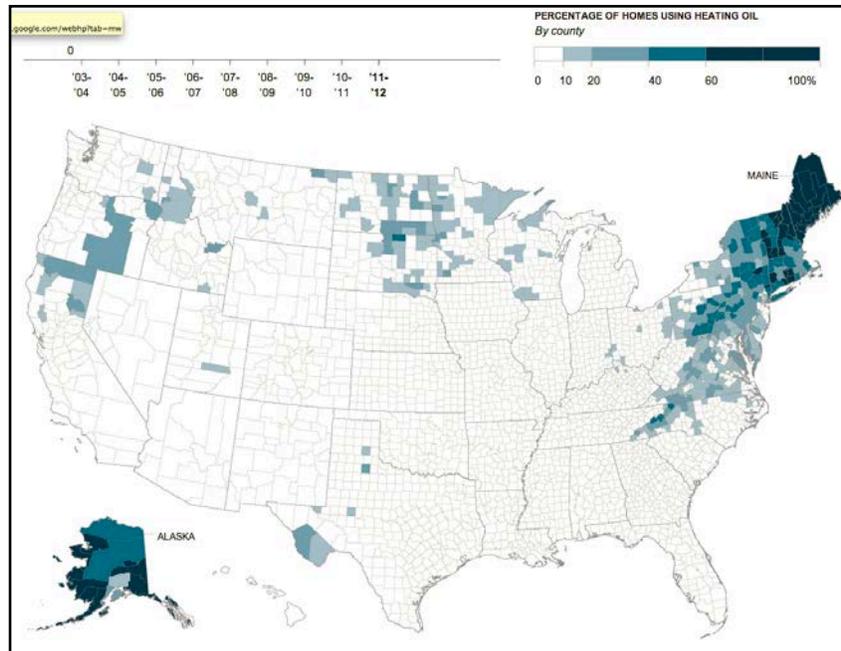
¹⁴ Calame, Jon and Woodworth, Asher. January, 2014. Down East Maine Renewable Energy Working Group: Findings and Recommendations Report. Available at: <http://www.gro-wa.org/down-east-maine-renewable-energy-report>

and fair policy frameworks. In particular, these issues were recurrent in relation to expanded deployment of renewable energy in Down East Maine:

1. status quo is full of liabilities, full of opportunities: existing conditions in Down East Maine’s energy sector are problematic due to high reliance on non-renewable fuels (which creates a statewide path dependency), prevalence of fuel poverty, home energy affordability gaps, excess winter morbidity, investment efficiency gaps, and market failures; at the same time, renewable assets are unusually high on a per capita basis, with new employment potential dovetailing with ailing traditional industries.
2. lack of equitable, consistent, and predictable regulation: when there is a perception of imbalance or caprice, investors can lose confidence and startups cannot attract the affordable capital they need.
3. new incentives for new energy markets: feed-in tariffs are viewed as an important tool with which to approach price-parity between incumbents and newcomers in the renewable energy marketplace, providing the funding and stability that support comprehensive development strategies.
4. reliable and affordable access to capital for installation, transition & retrofit: front-end industry investments in alternative energy technologies bring unit prices “multiples above market” in relation to incumbent energy sources, sending a discouraging message about investment in renewables.
5. uniform metrics for impacts & pricing: without apples-to-apples yardsticks for the full cost, success, impact of alternative energy, foggy decision-making precludes long-term policies and investments.
6. prohibitive transaction costs: insufficient information about options coupled with a lack of time and energy to investigate them; absence of trustworthy (neutral) technical guidance
7. low workforce capacity: even if investment were high, Down East Maine currently lacks the technical workforce (and capacity-building potential) to support large-scale energy transition to renewables.

Associated with production of renewable energy is the issue of affordable heat for low-income households. The 2014 Renewable Energy Working Group Report describes the energy consumption profile in Maine and Washington County. As of 2011, Maine’s overall energy consumption was 26th in the country (at approximately 311m BTU per capita annually), but the cost of that energy ranked much higher – at 10th in country (approximately \$5,508 per capita annually, amounting to 14% of Mainer’s personal income on average and a statewide expenditure of \$7.32b for the year).¹⁵

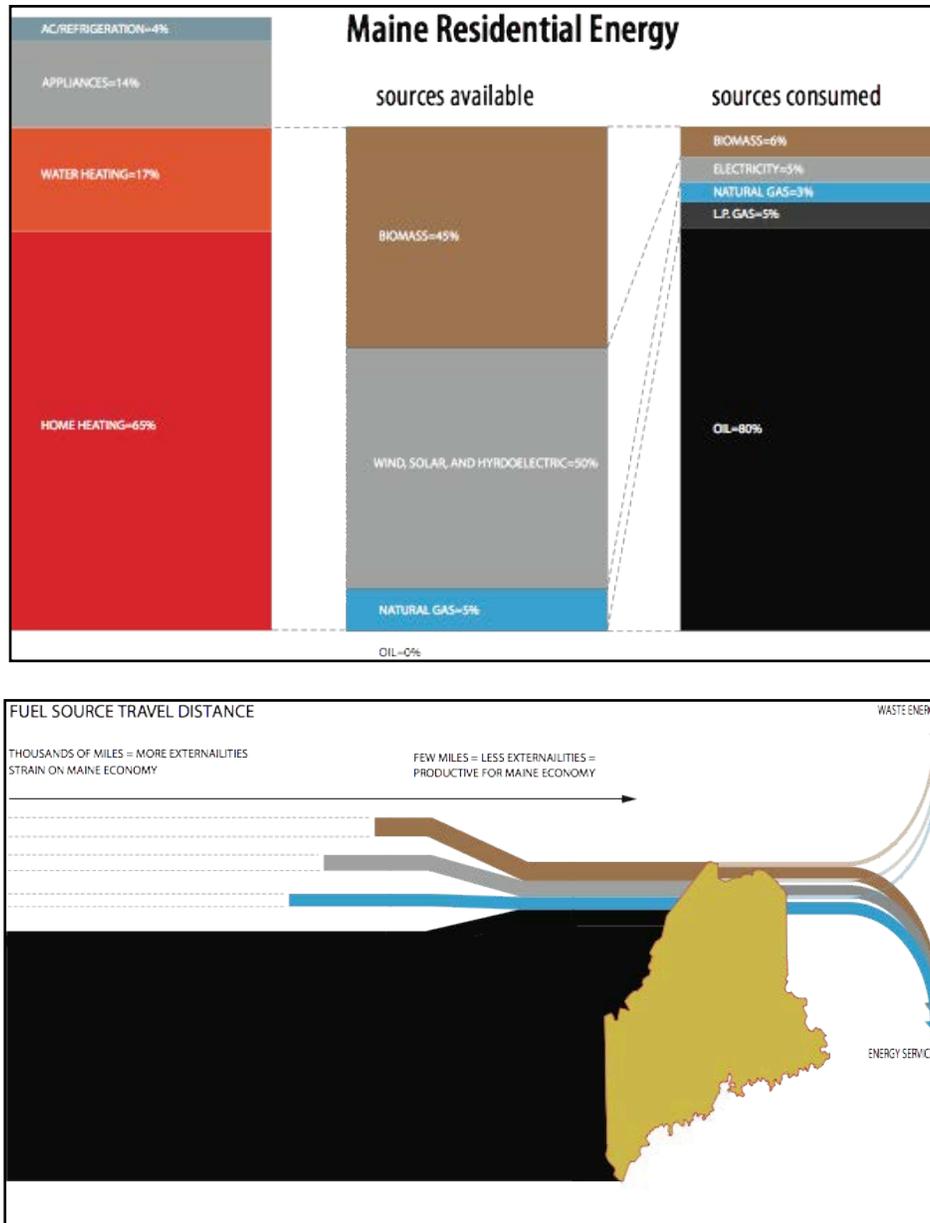
¹⁵ US EIA Maine state profile based on 2011 data.



Since Maine residents have household incomes generally well below the national average, these figures spell out a painful picture: those with less to spend more per unit of energy. **The map above, published in 2013 by the New York Times**, shows the special dependency on fossil fuel for structural heating in Maine, reflecting recent data from the US census showing that 75.6% of Maine’s homes use #2 heating oil,¹⁶ is by far the highest proportion of heating oil dependency of any state in the continental U.S.

Another way to look at Maine’s energy consumption profile is to compare regionally available energy sources with the fuels actually burned. The following two illustrations (from the 2014 Renewable Energy Working Group Report) depict the discrepancy between regionally available energy sources (mostly renewables in the form of biomass, wind, solar, and tidal sources) and current dependencies is evident.

¹⁶ From the Energy Information Agency [website](#).



Environmental concerns aside, Maine's reliance on heating oil is problematic because it contributes to energy insecurity, exposes consumers to price volatility, wastes resources on long-distance fuel transport, and constitutes a large annual net export of wealth out of the state and, in large part, out of the country.

REGIONAL HOUSING

The housing challenges in Washington County are related primarily to the age of the housing stock as well as the age and income of the population. It is more cost effective and preferred by elders to stay in their homes. However, older housing (71% is pre-1979) is often in disrepair; many houses are very large and most have inefficient thermal heating and insulation. Rental housing is also inadequate; it is not affordable for low-income persons especially young families who pay a

disproportionate percentage of their income for rent; and there are quality issues for all income levels that are also related to the age of the housing stock.

There is a “Catch-22” in relation to subsidized housing. There are an insufficient number of vouchers in relation to need and those that are available can expire due to a common inability to find adequate housing that meets the standard for a voucher given the short (30 day) timeframe allowed to find the rental. In addition, landlords are deciding not to accept vouchers because of the requirements to upgrade the housing (also related to age of housing stock). If housing is found, there is often a mismatch between its location and that of the tenants’ place of employment. Low-income persons do not often have a reliable vehicle for a long commute.

Homelessness is known on an anecdotal basis but existing measures do not adequately document those who “couch-surf”, double up with families in homes built for single-family occupancy, or live in sub-standard structures (camps, trailers, school busses). Finally, and also related to the age of the housing stock, many homes are unhealthy due to lead paint and mold.

Housing is primarily an issue measured and planned for on a town-by-town basis. However, the needs of certain populations, like seniors and those who may need an institutional setting, are often served at the regional scale. The needs of and programs for elderly housing are discussed at length in the Housing Chapter. Funding for housing assistance, whether for new construction or rehabilitation, is also provided at a regional scale. For a detailed list of options that could be applied to Whiting, visit the sustainable housing page of the GroWashington Aroostook website at: <http://gro-wa.org/sustainable-housing.htm>.

As an example, the Community Development Block Grant (CDBG) Housing Assistance programs are primarily channeled through regional Community Action Program agencies like the Washington Hancock Community Agency (WHCA). The CDBG program requires applicants for housing assistance funds to demonstrate that they have the capacity to administer the program either through municipal staff that are certified/qualified as general/rehab administrator or through a completed procurement process. To reach this threshold, small towns must often work together as a region or seek assistance from agencies like WHCA.

REGIONAL NATURAL RESOURCES

Whiting encompasses much of the lower watershed of the Orange River and a portion of the lower watershed of the East Machias River. While the East Machias is a free-flowing river, it is fed by the impoundment of Gardner Lake, partially located within Whiting. The Orange River is impounded in several locations, from the mill pond in the village and along the entirety of the Orange River, creating Little Lake, Roaring Lake, and Orange lake, and then up into Rocky Lake that continues north in the Unorganized Territories of Marion and Edmunds Townships. There are many brooks, streams and wetlands associated with these lakes, as well as a wide diversity of aquatic and terrestrial species mostly described in the Natural Resources Chapter.

Also, as more fully described in the Natural Resources Chapter, Whiting is part of three (Cobscook Bay, Cutler Grasslands, Machias Bay) and fully contains one Focus Area of Statewide Ecological Significance (Orange River Complex). There are also two sites of essential wildlife habitat that support the bald eagle (*Haliaeetus leucocephalus*), a Species of Special Concern, both located on Whiting’s northern and eastern border.

Natural resources in Whiting are protected through a variety of federal, state and municipal regulations and through public and private land conservation efforts. Existing regulatory and non-regulatory protection are largely sufficient to protect critical natural resources in Whiting.

The richest wildlife diversity in Whiting is avian. As noted, there is Bald eagle (*Haliaeetus leucocephalus*) as well as shorebird areas, tidal waterfowl/wading bird habitat in Holmes Bay and Leighton Cove near the village; and inland waterfowl/wading bird habitat is found in all of the lakes, streams and rivers in Whiting except the main basin of Orange Lake, Gardner Lake and Indian Lake. Whiting supports habitat for one endangered species in Maine, the Least Bittern (*Ixobrychus exilis*) located along Reynolds Brook and a portion of the Orange River where Reynolds Brook merges with its impoundment.

The Maine Geological Survey has identified two sand and gravel aquifers within Whiting, as described in the Natural Resources Chapter.

Multiple layers of regulatory and non-regulatory protection are in place for most of the significant habitat in Whiting and neighboring communities. In addition to state and federal permitting, activities occurring near identified inland wading bird and waterfowl habitat are governed under the jurisdiction of Whiting Shoreland Zoning Ordinance. Whiting should, in partnership with neighboring communities, consult periodically with biologists from the Maine Inland Fisheries and Wildlife to review the status of the regional populations of bald eagles.

REGIONAL PUBLIC FACILITIES

The town of Whiting contracts with the Washington County Emergency Medical Services Authority (WCEMSA), AKA “Downeast EMS” for ambulance services in the north and eastern portion of Whiting. Downeast EMS provides 24-hour service and operates out of three base stations in Baileyville, Eastport, and Lubec. The ambulance and rescue squads provide care at the EMT Basic, Advanced EMT and Paramedic levels. The town of Whiting also contracts with the town of Machias for their ambulance service. The Whiting Fire Department coordinates with other volunteer fire departments in neighboring communities and has mutual aid agreements with all of Washington County. The fire departments are undergoing extensive training in Whiting and with neighboring communities. The State Police and the Sheriff’s Department provide police protection to Whiting.

Outdoor recreation opportunities in Whiting available to the public include camping, water sports on several large lakes; snowmobiling and ATV riding; hunting and fishing; and nature viewing/photography. Regional recreation facilities accessible to community members throughout the region include the Moosehorn Wildlife Refuges, state and municipal parks; and access to surface waters, and hiking, bicycling, and ATV and snowmobile trails.

A range of outpatient health-care services is available to Whiting and nearby communities through Eastport Health Care, Inc. with locations in Eastport, Machias and Calais. Services include medical, dental and behavioral healthcare. Whiting residents and those in surrounding communities also travel to Calais, Machias, Ellsworth and Bangor to access other health care and medical services.

Solid waste is shipped to the Marion Transfer Facility in Marion Township.

Whiting does not have an animal control facility however, they contract with an animal control officer on an on-call, stipend basis. Whiting also contracts with the closest animal shelter in the region, located in Machias. Captured animals are held until the owner can be located. Other shelters in the region are located in Houlton, Bangor, Calais, and Cherryfield.

The Whiting Village School operates within AOS 96, which includes eight other schools from the towns of Cutler, East Machias, Jonesboro, Machias, Machiasport, Marshfield, Northfield, Roque Bluffs, Wesley, Whiting, and Whitneyville in Washington County. There are currently 18 students enrolled in the Whiting Village School, and another 40 Whiting residents who attend High Schools in regional High Schools in Washington County.

REGIONAL EMERGENCY PLANNING

Washington County Emergency Management operates under the Maine & Federal Emergency Management Agencies—MEMA & FEMA—and is also under the authority of the county commissioners. Emergency Management offers Washington County communities a central source for emergency preparedness information and training. Emergency Management works with each community's local emergency management director to help deliver vital services in case of a large-scale emergency. Although Whiting has some basic emergency information available to the public, they rely on the County EMA to assist citizens with immediate or long-range emergency management tactics.

REGIONAL LAND USE

Comprehensive planning recognizes the importance of regional cooperation. The land uses in one community can impact another community, particularly when that land use is located near the municipal boundaries. As indicated in the natural resources section of the plan, the Town should attempt to develop compatible resource protection standards with nearby communities.

Whiting has physical boundaries with the towns of East Machias, Machiasport, Cutler and the Unorganized Territories of Marion, Edmunds and Trescott Townships. Development in these communities has impacted, and will continue to impact, Whiting and our residents. None of our neighboring communities has adopted town wide zoning. The townships have land use functions administered by the Maine Land Use Regulatory Commission. Commercial retail activity in Calais, Lubec, East Machias and Machias attracts Whiting residents as consumers and for work. Proposed land use districts are consistent with the existing pattern of development in neighboring communities as well as the communities' Future Land Use Plans.

Whiting should continue to regularly coordinate with neighboring communities on a variety of issues, including land use, through participation in the Washington County Council of Governments, Washington Hancock Community Agency, and other regional groups.

REGIONAL PUBLIC HEALTH

A coordinated effort between Washington, Aroostook, and Hancock Counties is underway to develop and implement solutions to reduce the incidence of preventable chronic disease throughout the region. These efforts are spearheaded by the 2 Healthy Maine Partnerships serving the 3

counties: Healthy Acadia and Healthy Aroostook. A primary focus is to increase access to and availability of both local food and opportunities for exercise.

Desired outcomes are summarized as follows:

- Reduction in the incidence of preventable chronic disease throughout the region
- Increased access/availability to local food;
- Improved access to recreational assets providing opportunities for healthy exercise;

Additional public health goals for the Healthy Maine Partnership serving the region, include:

- Reduce, prevent and manage substance abuse; increase awareness of its impacts and provide healthy alternatives.
- Improving access to the full continuum of affordable health care services.

Initiatives to achieve these solutions currently underway in Washington County include several focus areas: access to physical activity, access to transportation, access to healthy foods and a wide range of outreach programs provided by Healthy Acadia.

Active Communities

Regular physical activity is an essential part of improving health and wellbeing. People who are moderately or vigorously active lower their risk of high blood pressure, heart disease and stroke, Type 2 diabetes, colon and breast cancer, and osteoporosis. Regular physical activity can also significantly improve mental health. Exercise can sharpen thinking, learning and judgment skills, reduce symptoms of anxiety and depression, and help us sleep better.

Fewer than half of all Americans get the physical activity they need to provide health benefits and 25% of adults are not active at all in their leisure time. In Maine only 23.7% of youth get the recommended level of exercise (60 minutes per day) and only 56% of Maine adults get the recommended levels of physical activity (30 minutes, 5 times per week).

Physical activity does not have to be strenuous and highly time-consuming to be beneficial. As an example, for adults, walking 30 minutes 5 times a week can benefit health and wellbeing. For youth, participating in school sports, engaging in after school activities, or walking to school can provide the recommended exercise to promote health and wellbeing.

Transportation for Health

Access to Transportation is a significant challenge in rural communities. Lack of transportation can be an obstacle to reaching needed health and social service appointments as well as employment and other services. Significantly more detail on this issue is provided above in the section on **Regional Transportation Issues - Public Transportation**.

Local Food Systems

Washington County is described by USDA as a “[food desert](#)”, a term that comes from the Food Access Research Atlas of the USDA (<http://www.ers.usda.gov/data-products/food-access-research-atlas>). In a food desert “those with low incomes have limited access to supermarkets, supercenters, grocery stores, **or other sources of healthy and affordable food**” (Emphasis added). However, the two Census Tracts (9551, 9559) in Washington County where these criteria are met include only our large depopulated areas and account for only 18% of our population.

Countywide there are indeed many low-income households, also many with inadequate transportation that limits access to fresh food. However, 82% of the population resides in the census tracts NOT deemed a “food desert” and 56% of low-income households reside in the service centers where the existing supermarkets, supercenters and grocery stores are located.

Furthermore, the USDA Food Access Research Atlas does not fully reflect data on “other sources of healthy and affordable food” in Washington County. And Washington County has a great deal of great food. The **Washington County Local Foods Map** posted at <http://www.gro-wa.org/wcfood> depicts over 80 farms, several active farmers markets and buying clubs, producers and retailers of local specialty food, and abundant seafood. There is an active local food movement in Washington County that is growing within the county and reaching out to the rest of the state to support a regional (Maine and New England) food system.

In the face of this potential plenty we do indeed have significant **food security** issues mostly as a result of the high rates of poverty. Food pantries report that demand outstrips supply, yet also report difficulty in distributing fresh vegetables. Many do not have the experience or knowledge of preparing whole, fresh foods for consumption. In response pantry organizers provide classes on whole food cooking. The 11” by 17” poster of Food Pantry and Community Meal Sites shown at right can be downloaded from the GROWashington Aroostook web site here: <http://www.gro-wa.org/washington-county-food-pantries>.

In addition to increased health, building the local foods infrastructure has powerful economic implications. Not only do local dollars stay in the economy, new dollars arrive and bring jobs and business opportunities, providing the resources needed for equal access for all.

Healthy Maine Partnership Programming

The programs of Healthy Acadia that reach out to youth and adults span the public health spectrum. They are provided at a regional scale as well as to individual municipalities and schools; they include:

- **Tobacco Cessation and Substance Abuse Prevention** - tobacco-free and tobacco cessation programs work to reduce exposure of children to second hand smoke, raise awareness of prevention assistance programs, provide tobacco-free policy for public events, and increase the number of retailers adhering to Maine NoButs! Program that limits tobacco sales to minors. Likewise, businesses and law enforcement collaborate on strategies to reduce underage drinking; schools, parents and businesses support open discussion of risks associated with under-age or binge drinking.
- **Farm and Food programs** – Farm to School including curriculum outreach, vermiculture, recipe and menu planning for school cafeterias; FoodCorps service leadership; support to the Food Pantry network; greenhouse materials & construction at



discounted prices; support in the formation of a regional food council and healthy eating initiatives.

- **Nutrition programs** – We Can! (Ways to Enhance Children’s Activity & Nutrition) public education; SNAP-Ed (Supplemental Nutrition Assistance Program) providing nutrition and cooking classes for residents receiving SNAP benefits; 5-2-1-0 Let’s Go to encourage kids and families to eat 5 servings of fruit and vegetables, 2 hours or less of recreational screen time, 1 hour or more of physical activity and 0 sugary drinks.
- **Living Well programs** – worksite wellness; Keep Me Well health assessment tool; Screen Washington County to increase awareness and actual screening for colon cancer; free Breathe Easy signs to reduce exposure to second hand smoke; Tobacco Free Pledge resources; Healthy Homes information on lead exposure, testing and education on symptoms of high lead blood levels; information on trails in the region.
- **Youth programs** – Washington County: One Voice youth coalition; Jobs for Maine Graduates profiles; Downeast Teen Leadership Camp for students entering grades 7,8, and 9
- **School and Community programs** – Coordinated School Health Program, an 8 part program to improve kids health and capacity to learn; Transportation Infrastructure and access to Quality Health Care including collaborating with regional partners to improve transit options and publication of a Transportation Services Guide; Annual October Turkey-A-Thon to raise funds for the Food Pantries.

REGIONAL CLIMATE CHANGE

Climate change - change in the long-term broad patterns of weather - is happening in Maine. It is well documented¹⁷ by more frequent and stronger storm events, higher tides, hotter summers, greater precipitation, shifting ranges of plant and animal species, expanded ranges of southern pests and disease, rising sea levels and acidification of the waters of the Gulf of Maine.

The short and long-term impacts associated with climate change are significant and far-reaching.

- Storm severity and frequency has and will continue to cause flooding, erosion and property damage.
- Sea levels will rise at an accelerated rate and threaten coastal infrastructure including roads, rail, working waterfronts, water and sewage treatment plants and many downtown centers.
- The temperature and salinity of the Gulf of Maine is reducing the productivity of the entire aquatic food chain with significant declines in zooplankton and stresses on shellfish.
- Pest species like Lyme disease-bearing ticks are reaching further north as winters become milder.
- Agricultural production is threatened with both drought and extreme precipitation as well as new pests and pathogens with expanded ranges and survival.
- The forest products industry might benefit from higher growth rates for some species. However a longer mud season and shorter periods of hard freeze will reduce harvest opportunity and large shifts in species composition (from insect, disease, or dieback) could ripple across the forest products industry.

¹⁷ *Maine’s Climate Future An Initial Assessment*; February, 2009. University of Maine; [People and Nature Adapting to a Changing Climate - Charting Maine’s Course, February, 2010](#) – a Summary of the Report Presented by the Maine Department of Environmental Protection to the Joint Standing Committee on Natural Resources of the 124th Legislature

- The public health impacts are also a concern, particularly for the elderly or infirm, as extreme temperatures increase risk of heat stroke and, during coastal flooding, isolation from services or emergency response.
- Natural systems also face loss of wetlands and wildlife are exposed to exotic species and temperature-related stress.

Some changes may bring more tourism to Maine; increase forest productivity (and carbon sequestration), and increased variety and security in food production.

Climate Vulnerability Assessment

Climate vulnerability assessment (CVA) is a collection of tools and analyses used to understand how we are vulnerable or resilient in terms of impacts on people, infrastructure, public health, natural systems, and the economy. It asks what systems, species, populations, entities, facilities and infrastructure are most vulnerable to expected climatic changes, often depending on factors such as exposure, sensitivity, and adaptive capacity. Geographic information systems (GIS) mapping tools are a powerful means of:

- a. visualizing our vulnerability,
- b. recognizing the gaps in our understanding of our vulnerability, and
- c. focusing our efforts on gathering necessary information and preparing for risk and change.

In the fall of 2013, the Washington County Council of Governments, working in cooperation with the University of Maine at Machias GIS Service Center presented a series of town- and bay-specific climate vulnerability assessments (CVAs) that anticipate a variety of storm impact scenarios. The GIS Service Center adapted the Sea, Lake and Overland Surges from Hurricanes (SLOSH) model, a computerized numerical model developed by the National Weather Service (NWS)¹⁸ to estimate storm surge heights resulting from historical, hypothetical, or predicted hurricanes by taking into account atmospheric pressure, size, forward speed, and track data. The SLOSH model is applied to a specific locale's shoreline, incorporating the unique bay and river configurations, water depths, bridges, roads, levees and other physical features.

The bay-specific CVAs were based on SLOSH model output of a hypothetical but entirely plausible hurricane that makes landfall in Penobscot Bay.

These CVAs included Whiting and can be downloaded here: <http://gro-wa.org/washington-county-climate-change-response>. The coastal CVAs are made possible by the recent (2012) acquisition of LiDAR (light detection and ranging) elevation data. The flights and analysis that provide this very high-resolution elevation data are very expensive. As a result, they are only available along the immediate coast of Washington County.

Adaptation to Climate Change Impacts

There is a range of adaptation responses that landowners, businesses, and municipalities can take to limit exposure to our vulnerabilities. These include:

For storm adaptation:

- Evacuation and shelter planning including in real time

¹⁸ According to the NWS, the surge height predictions from the SLOSH model are accurate to within +/-20% for storms that follow the track and force patterns within the model. National Weather Service Sea, Lake, and Overland Surges from Hurricanes (SLOSH) Model. 2013. <http://www.nhc.noaa.gov/surge/slosh.php>

- Establish communications protocol between UMM-GIS Service Center Director and County EMA Director to Ensure real time scenario development in event of actual predicted hurricane in the Gulf of Maine
- Pre-position equipment to areas that may be cut off during a storm
- Map house bound and elderly residents; add to Climate Vulnerability Assessment

For roads, bridges and transportation:

- Inventory transportation infrastructure
- Participate and update culvert mapping inventory of Washington County Council of Governments
- Keep sand & salt piles above flood levels
- Improve stormwater capacity
- Improve culverts, flow under causeways
- Evaluate substructure of roadways most vulnerable to inundation and upgrade where necessary

For municipal officials:

- Limit building in flood prone areas using on-line mapping tools provided by Washington County Council of Governments (<http://www.gro-wa.org/planners-maps>)
- Adopt construction codes for coastal properties
- Maintain wetlands and floodplains to absorb flood waters

For Public Health:

- Plan for heat emergencies
- Distribute education about pest borne illnesses especially Lyme disease;
- Translate health advisories into Spanish and Passamaquoddy
- Assist elders and low income households with air conditioning/cooling

For any and all concerned:

- Train all personnel on use of on-line scenario mapping tool
- Always document impacts from severe storms ([Damage and Injury Assessment AKA "Form 7"](#) & photos) to ensure County EMA officials can assemble documentation of regional storm impacts to reach Federal Disaster Declaration thresholds

M - PLAN IMPLEMENTATION – POLICIES AND STRATEGIES

As required by Chapter 208, Comprehensive Plan Review Criteria Rule, this chapter provides a separate section that prioritizes how implementation strategies will be carried out and identifies the responsible parties and anticipated timeline for each strategy in the plan.

HISTORIC AND ARCHAEOLOGICAL RESOURCES			
Goal: Whiting will preserve the community’s historic and archeological resources from development that could threaten those resources.			
Policy	Implementation Strategy	Responsibility	Timeframe
Protect and preserve known archaeological and historic sites and promote awareness of the history of Whiting.	Awareness of historic structures and artifacts will be promoted, including the consideration of listing on the National Register of Historic Places for Whiting.	Planning Board, Select Board, Historical Society	On-going
	Union Meeting House placed on National Register in 2012; stone dam eligible for nomination to register.	Historical Society	On-going
	Form a committee of volunteers to map and inventory Whiting cemeteries.	Selectmen; Whiting Historical Society and volunteers	Short Term, within two years
	The planning board will require any developer to provide evidence that the proposed development will not negatively impact known or probable archeological sites.	Planning Board	On-going
	The planning board will require that the development plans include a plan showing the preservation of known or probable historically significant areas.	Planning Board	On-going
	The Planning Board will work in cooperation with the State of Maine concerning any of the identified historical and archaeological resources within Whiting.	Planning Board	On-going
Whiting supports the identification and documentation of areas, artifacts, buildings, and structures of historical or archeological significance.	When identified they will be professionally surveyed and documented. Those found to be historically or archeologically significant would be monitored to ensure their protection and preservation.	Select Board, Historical Society	On-going
	The planning board will require any developer to provide evidence that the proposed development will not negatively impact known or probable archeological sites.	Historical Society (when formed), Select Board, Interested Citizens	Long term, as funding allows

POPULATION			
Goal: Whiting will actively monitor the size, characteristics and distribution of its population and use that information when making administrative and policy decisions for the town.			
Policy	Implementation Strategy	Responsibility	Timeframe
Actively monitor the size, characteristics and distribution of its population.	Seek assistance in the collection and maintenance of census data from the Washington County Council of Governments, the designated census information center for Washington County.	Town Clerk, Select Board, WCCOG	On-going

NATURAL RESOURCES			
Goal: Whiting will protect and preserve the natural resources and maintain consistency with the minimum State of Maine regulations.			
Policy	Implementation Strategy	Responsibility	Timeframe
Develop and maintain ordinances to protect Whiting's natural resources.	Develop a land Use Ordinance to require that landowners, project planners, municipalities or state agencies proposing a development in or near the site of an Essential Habitat or Significant Habitat, coordinate with a Maine Department of Inland Fisheries and Wildlife Biologist.	Planning Board	Short term (To be accomplished within two years)
	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, developers, and property owners. Make information available at the Town Office for developers during inquiry phases of development.	Planning Board, Select Board, Road Commissioner, Soil and Water Conservation District	On-going
	Incorporate use of current Best Management Practices for Stormwater Management and for Erosion and Sedimentation Control in any future Subdivision/Zoning regulations.	Planning Board, Select Board, Road Commissioner	
	Ensure that development is located on land that is capable of supporting on-site water treatment and septic systems.	CEO, Plumbing Inspector, Planning Board	On-going
	Update Shoreland Zoning Regulations to maintain compliance with minimum State and Federal regulations and reflect the local needs of the community.	Planning Board, Select Board, CEO	Short-term
Form partnerships to educate residents on value of natural resources.	Make available to the public 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, Select Board, Citizen Watershed Protection group (when formed),	On-going
	Collaborate with regional conservation organizations and state agencies in the	Select Board, Planning Board,	On-going

NATURAL RESOURCES			
Goal: Whiting will protect and preserve the natural resources and maintain consistency with the minimum State of Maine regulations.			
Policy	Implementation Strategy	Responsibility	Timeframe
	protection of the freshwater resources within Whiting.	Road Commissioner, Maine DOT	
	Support volunteer efforts to conduct water monitoring on all lakes and streams in Whiting.	Selectmen; Volunteer Lakes Monitoring Program	Immediate (within 2 years, as funding allows)
	Encourage the state and private conservation organizations to maintain the invasive aquatic plant warning signs at public boat landings.	Citizen Watershed Protection group (when formed), Select Board	On-going
Seek funds to protect water quality.	Participate in the Small Community Grant Program (if/when it has funds in it) to upgrade failing septic systems on eligible properties.	Selectmen	As program funding is available
Support long-term economically viable and environmentally sustainable forest management within Whiting.	Support owners of productive farm and forestland in their efforts to enroll in Current Use programs, such as Tree Growth and Farmland.	Assessor	On-going
	Encourage local or regional economic development activities that support productive agriculture and forestry operations.	Select Board, Planning Board, Sunrise County Economic Council	On-going
	Promote use of best management practices for timber harvesting and agricultural production; provide information to the public.	Select Board, Planning Board	On-going
Encourage the use of prime farmland for commercial agriculture or forestry.	Support timber management and agricultural activities on prime farmland and in rural areas of Whiting.	Select Board, Planning Board	On-going
	Include in any future land use ordinance a requirement that commercial or subdivision developments maintain areas with prime agricultural soils as undeveloped to the greatest extent practicable.	Planning Board, Select Board	As needed

ECONOMICS AND EMPLOYMENT			
Goals: Whiting will <ul style="list-style-type: none"> • promote an economic climate that increases job opportunities and overall economic well-being. ▪ Enhance and support existing businesses in Whiting and promote new business that is compatible with existing rural community values and patterns of development¹⁹. 			
Policy	Implementation Strategy	Responsible Parties	Timeframe
Develop land use ordinances to attract, enhance and support existing and future development, while minimizing impact of non-compatible uses.	Include performance standards in the land use ordinance to ensure compatibility among uses.	Planning Board	On-going
	Develop and keep current an ordinance to regulate various scales of wind energy facilities.	Planning Board	On-going
	Streamline the current ordinance to regulate various scales of telecommunication facilities.	Planning Board	On-going
Provide support for roads, parks, public transportation or other infrastructure and activities that materially aid the town's economy.	Obtain aid from higher levels of government, County, State and Federal, including such things as Community Development Block Grants, USDA Rural Development and others identified in the Capital Improvement Plan.	Select Board, Interested citizens	As needed
	Work with regional economic development groups to continue expansion of high-speed internet access throughout Whiting.	Select Board	Immediate
Support those who are eligible for state, regional, or local public assistance programs.	Ensure that information about programs that provide public assistance, unemployment assistance, job training, aid to the elderly and/or handicapped is available in the town office, at informational kiosks, and on the town web site as it develops over time.	Town Clerk	On-going
Ensure that the educational opportunities, both academic and vocational, address the needs of Whiting residents.	The School Committee will work with the Regional School Superintendent and staff to ensure that the educational opportunities available to its children, both academic and vocational, address the needs of those children.	Select Board; School Committee	Long-term

¹⁹ This goal and the implementation measures that follow from it under the heading of sustainable development recognize the multiple business interests that sustain rural families over the course of a year – from their homes, and from other locations. This recognition assumes that there is and will be a mixture of uses in all districts of our community; an independent spirit among local residents and entrepreneurs; and a general resistance to excessive regulation. It also recognizes that there are some basic “good neighbor” standards that can be developed to address the desired mixture of uses.

PUBLIC FACILITIES AND SERVICES			
Goal: Whiting will plan for, finance and develop an efficient system of public facilities and services to accommodate current and anticipated growth and economic development.			
Policy	Implementation Strategy	Responsibility	Timeframe
Local services will be efficiently maintained and will address community needs.	Address future funding needs for new and replacement items through the Capital Improvement Plan, to be reviewed/updated biennially	Select Board	Biennially
	Support improvement of the services and activities for seniors, including better transportation for shopping, medical services, and social purposes.	Select Board	Immediate and On-going
	Continue to educate citizens on the importance of recycling through the use of fliers, informational meetings and school programs. Literature on the local recycling program will be made readily available to residents at the town office.	Select Board; Town Clerk	On-going
	Explore the needs for improvement, maintenance, expansion and/or renovation of the town office, community center, and fire house complex; the Whiting Elementary School; and the Union Meeting House.	Select Board, or designated committee	Long Term

RECREATION			
Goal: Whiting will encourage preservation of open space and improve the provision of recreational opportunities.			
Policy	Implementation Strategy	Responsibility	Timeframe
Maintain/upgrade existing recreational facilities as necessary to meet current and future needs.	Develop a prioritized list of recreation needs. Explore ways of addressing the recreation needs as outlined in this plan.	Select Board	Short term Within 2 years
Encourage recreational opportunities and increase public access to surface water.	Fund improvements on town owned land, including landing facilities, as appropriate.	Select Board; Airport Committee	On-going and as funding allows

FISCAL CAPACITY			
Goal: Plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.			
Policy	Implementation Strategy	Responsibility	Timeframe
Finance existing and future facilities and services in a cost-effective manner.	Work with nearby communities to plan and finance shared capital investments as opportunities arise.	Select Board	On-going
	Explore grants to assist in the funding of capital investments within the community.	Select Board	On-going
	Direct a minimum of 75% of new municipal growth-related capital investments into designated growth areas in the Future Land Use Plan.	Select Board, Planning Board	On-going

HOUSING			
Goal: Whiting will encourage and promote affordable, decent housing opportunities for Whiting residents.			
Policy	Implementation Strategy	Responsibility	Timeframe
Encourage and promote affordable and workforce housing to support the community's economic development.	Continue to encourage affordable housing opportunities through a mixture of housing types within the residential areas, including accessory apartments, mobile and manufactured homes, multi-family dwellings, and senior citizen housing.	Select Board, Planning Board	On-going
	Pursue programs and grants that can assist in ensuring that at least 10% of new residential development over the next decade meets the definition of affordable housing.	Select Board; WCCOG; WHCA	On-going
Pursue programs and regional agencies with access to grant funds that can assist in rehabilitation of existing, sub-standard housing stock.	Refer housing assistance inquiries from residents to regional agencies with expertise and information on housing opportunities, housing assistance and rehabilitation programs.	Select Board; WCCOG; WHCA	On-going
Ensure that any existing or future codes and ordinances encourage quality affordable housing and promote public health and safety.	Ensure that the code enforcement officer (CEO) enforces 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, comparable nuisances, replacement of driveway culverts, and inadequate subsurface sewage disposal systems.	Planning Board, CEO, Select Board	As needed
	CEO will work with the planning board to address any need for modification to the existing land use regulations that may be appropriate.	Planning Board; Code Enforcement Officer	On-going

TRANSPORTATION			
Goal: Whiting will encourage, promote and develop efficient and safe transportation facilities to accommodate anticipated growth and economic development.			
Policy	Implementation Strategy	Responsibility	Timeframe
Construction and Maintenance			
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 Town arterials and collectors. Refer applicants to MDOT for necessary state Entranceway Permits	Select Board, Road Commissioner	Ongoing

TRANSPORTATION			
Goal: Whiting will encourage, promote and develop efficient and safe transportation facilities to accommodate anticipated growth and economic development.			
Policy	Implementation Strategy	Responsibility	Timeframe
	Make specific recommendations for intersection improvements at the most hazardous intersections; coordinate closely with the Department of Transportation.	Select Board, Road Commissioner	Ongoing
Promote public health, protect natural and cultural resources, and enhance livability by managing land use in ways that maximize the efficiency of the transportation system and minimize increases in vehicle miles traveled.	Include access management provisions within any future Zoning and Subdivision Ordinances aimed at maintaining the traffic carrying capacity on Route 1 at current speed limits, including: <ul style="list-style-type: none"> ▪ sight distance provisions ▪ common entrances ▪ enabling service road development ▪ spaces between access points ▪ number of access points/curb points ▪ deceleration lanes ▪ back lot access provisions 	Select Board, Planning Board	If applicable
	Require that private subdivision roads be brought up to acceptable standards, including width and culvert design, before the town will consider accepting these private roads as town roads.	Select Board, Planning Board	
	For subdivisions of greater than 25 lots the Planning Board will require that the developer provide information on the projected traffic impact under the local Subdivision regulation.	Planning Board	On-going
Plan for optimum use, construction, maintenance and repair of roads to create a safe and efficient transportation system.	Continue practice of a multi-year road maintenance plan, based in part on a recurring evaluation of roadways and culverts, which provides the basis for future allocation of road maintenance funds.	Select Board	On-going
	Road construction and maintenance will be conducted according to the most recently adopted Best Management Practices for erosion and sedimentation control.	Select Board	On-going
	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 town roadways.	Select Board	On-going
Multi-modal Transportation			

TRANSPORTATION			
Goal: Whiting will encourage, promote and develop efficient and safe transportation facilities to accommodate anticipated growth and economic development.			
Policy	Implementation Strategy	Responsibility	Timeframe
Meet the diverse transportation needs of residents (including children, the elderly and disabled) and through travelers by providing a safe, efficient, and adequate transportation network for all types of users.	Create an attractive pedestrian friendly atmosphere in the village by maintaining pedestrian amenities (e.g., shoulders) in good condition, giving pedestrians the right-of-way at crosswalks, and by improving access and signage to parking areas. Encourage businesses to embrace bicycle friendly practises. Improve linkages from Town to trails (bike racks, signage etc.)	Select Board, Maine Department of Transportation	On-going
	Explore grant opportunities to improve trails and bike facilities. Promote connection to the East Coast Greenway and regional ATV/snowmobile trails.	Select Board; regional trail clubs	Short-term
	Work with the Washington Hancock County Community Action Agency to assure Whiting residents are getting full benefit of the public transportation services offered.	Town Staff	On-going

REGIONAL COORDINATION			
Goal: Contribute to the regional connectivity and health of Washington County by cooperating on the delivery of regional services and endeavoring to achieve economies of scale where feasible.			
Public Facilities and Services			
Cooperate on the delivery of regional services and endeavor to achieve economies of scale where feasible.	Cooperate with neighboring communities to seek funding for upgrading or replacing inadequate well and septic systems.	Select Board	On-going
	Seek out cooperative means of reducing regional administrative costs for the school district and delivery of public services.	Select Board, School Board	On-going
	Stay current with local and regional emergency disaster response and pandemic disease training and planning through both existing regional mutual aid agreements and the Washington County Emergency Management Planning Agency.	Select Board, Fire Department	On-going
Regional Development			
Participate in regional organizations that provide technical assistance and information about business support and regional economic development opportunities.	Maintain active membership in the Washington County Council of Governments and participation in activities of the Sunrise County Economic Council.	Select Board, directly, or through appointment of others	On-going

REGIONAL COORDINATION			
Goal: Contribute to the regional connectivity and health of Washington County by cooperating on the delivery of regional services and endeavoring to achieve economies of scale where feasible.			
Coordinate the town's land use strategies with other local and regional land use planning efforts.	Meet with neighboring communities to coordinate land use designations and regulatory and non-regulatory strategies	Select Board, Planning Board	Ongoing
Advocate for infrastructure improvements to enhance the economic competitiveness of Whiting and Washington County.	Advocate for improvements to State highways, airports, seaports, rail corridors and telecommunication facilities to enhance the regional economy.	Select Board	Ongoing
Encourage and support regional development efforts that promote affordable, workforce, and senior housing.	Participate in programs, grants and projects for the construction of subsidized housing within the town and the region to insure sufficient, affordable housing options for its elderly or low-income citizens, including subsidized housing and energy-efficient housing.	Select Board; WCCOG; WHCA	On-going
	Encourage participation in programs, grants and projects within the town or the region to insure sufficient, affordable housing options for its elderly citizens.	Selectmen	On-going
Regional Transportation			
Cooperate in the development of regional transportation policy.	Participate actively in regional transportation meetings and policy development	Select Board,	On-going
	Advocate in regional and state meetings for any reconstruction of Route 1 in or nearby to Whiting.	Select Board	On-going
	Advocate to MDOT for installation of paved shoulders whenever Route 1 in the village is upgraded.	Select Board, Town Staff	On-going
	Participate in any discussions of a regional airport in the Machias area.	Selectmen	As needed
Natural Resources			
Protect shared critical habitats.	Cooperate with neighboring towns in the designation of critical resource areas where they cross municipal boundaries.	Select Board, Planning Board, Downeast Salmon Federation	On-going
Ensure that water quality is sufficient to provide for the protection and propagation of fish, and wildlife and provide for recreation in and on the water.	Expand water quality-testing programs for the town's lakes, rivers and streams. Give the highest priority to those water bodies most important for recreation and for fisheries and wildlife.	DEP Volunteer Programs, Dennys and East Machias River Watershed organizations	On-going
	Continue dialogue and exchange of information on watershed planning issues with neighboring communities.	Planning Board, WCCOG, Dennys and East Machias River Watershed organizations	On-going
Land Use			

REGIONAL COORDINATION			
Goal: Contribute to the regional connectivity and health of Washington County by cooperating on the delivery of regional services and endeavoring to achieve economies of scale where feasible.			
Coordinate Whiting's land use strategies with other local and regional planning efforts to protect critical rural and natural resource areas.	Work with nearby communities to coordinate land use designations and strategies related to neighboring or shared assets, such as water resources, wildlife habitat, transportation, housing, and recreation.	Planning Board, Select Board, WCCOG	On-going

LAND USE			
Goal: Whiting will preserve the rural character of the town through development of balanced regulation that encourages development where supported by services and infrastructure and conservation where dictated by natural resources constraints.			
Policy	Implementation Strategy	Responsibility	Timeframe
Ordinances and Regulation			
Support the locations, types, scales, and intensities of land uses that retain the rural and small-town character of Whiting while encouraging economic growth, as stated in the vision of this Plan.	Using the descriptions provided in the Future Land Use Plan narrative, explore the development of local ordinances which retain individual rights while also providing direction for future growth and change that retains the rural, intact nature of Whiting's environment.	Select Board, Planning Board, WCCOG	Long-term, Within 5 years
	Any Land Use Plan will: a. Clearly define the desired scale, intensity, and location of future development; and b. Clearly define protective measures for critical natural resources and, where applicable, important natural resources; and c. Clearly define procedures for obtaining development permits.		Short Term
	Day care facilities will be allowed throughout the town to assist in the creation of affordable childcare.	Planning Board	Short term
	Prepare a Land Use Ordinance consistent with the goals and guidelines of this Comprehensive Plan and their consistency with state and federal laws and the local needs.	Planning Board, WCCOG	Long-term, Within 5 years
	Update the town's Shoreland Zoning Ordinance to be consistent with the Guidelines issued in January of 2015.	Planning Board	Complete
	Review and update the telecommunications ordinance to develop streamlined procedures for minor additions to existing towers.	Planning Board	On-going
	Review Subdivision Regulations to define major and minor subdivisions and create		

LAND USE			
Goal: Whiting will preserve the rural character of the town through development of balanced regulation that encourages development where supported by services and infrastructure and conservation where dictated by natural resources constraints.			
Policy	Implementation Strategy	Responsibility	Timeframe
	streamlined procedures and submission requirements for minor subdivisions.		
Establish and maintain fair and efficient permitting procedures.	Provide the code enforcement officer with the tools, training, and support necessary to enforce existing codes and any future land use regulations and ensure that the Code Enforcement Officer is certified in accordance with 30-A M.R.S.A. §4451.	Select Board; CEO	Long term, As necessary
	Any permitting procedures that may be developed in the future shall set forth a clear and efficient process for obtaining land use permits. Permit procedures should include municipal staff or Planning Board review, as appropriate, to insure fair and open permitting procedures.	Planning Board, CEO/Planning Officer, Select Board	As necessary
Provide the necessary infrastructure to support growth in the existing town center of Whiting.	Direct a minimum of 75% of new municipal growth-related capital investments into designated growth areas in the Future Land Use Plan.	Select Board, Planning Board	On-going
	Include in the Capital Investment Plan anticipated municipal infrastructure investments necessary to support any anticipated or desired growth.	Select Board	On-going
	Periodically (at least every 5 years) evaluate implementation of the plan.	Select Board, Planning Board	2024
	Provide information to WCCOG and UMM-GIS ²⁰ lab to keep the online Planners and Public Parcel map databases up to date.	Planning Board; WCCOG, UMM-GIS Lab	Immediate
Allow and encourage existing resource based industries to thrive in their current locations.	Provide large rural areas for agricultural and forestry uses.	Select Board, Planning Board	On-going
	Consult with local land trusts in the acquisition of properties or easements of ecological significance, especially within the town's Resource Protection and Aquifer Protection Overlay Districts; and public access to surface waters.	Select Board	Immediate (To be accomplished within two years)
Educate residents about the requirements of local and state regulations.	Provide a list of all local and applicable state ordinances at the municipal office; include this information in land use outreach and education programs, as mentioned above.	Town Clerk; WCCOG	Immediate

²⁰ University of Maine at Machias GIS Service Center and Laboratory

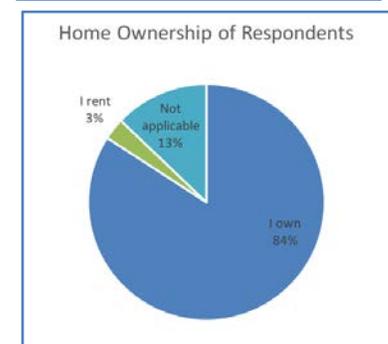
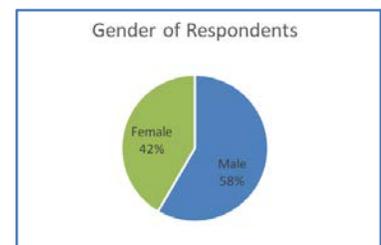
LAND USE			
Goal: Whiting will preserve the rural character of the town through development of balanced regulation that encourages development where supported by services and infrastructure and conservation where dictated by natural resources constraints.			
Policy	Implementation Strategy	Responsibility	Timeframe
	Prior to the development of any land use ordinances or building permit procedures, provide outreach and education to the community regarding land use ordinances, permitting, different types of zoning, the role of Planning Boards, building codes, etc.	WCCOG Select Board; Planning Board	Short term, Within 2 Years; and ongoing as necessary

N - PUBLIC SURVEY RESULTS

A survey in both paper and online format was circulated in the Fall of 2017. Paper copies of the survey were mailed to all property owners. Appendix A – Public Opinion Survey and Written Comments provides all of the written comments it generated as well as a copy of the blank survey. This chapter provides charts and diagrams of the responses where respondents chose from among a variety of answer choices. Planning Committee members worked to encourage participation through word of mouth.

Summary of Key Findings

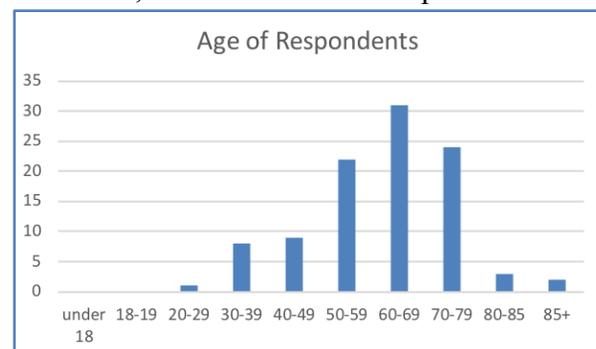
- Typical for municipal surveys of this kind, respondents were disproportionately older, primarily year round residents, and whether seasonal or year-round, long time residents.
- Residents travel to many locations for work; most to Machias or Lubec, and many are retired.
- Respondents tended to support efforts to actively encourage growth in general and to encourage a) new commercial and retail development and b) affordable residential development in particular. They generally opposed the encouragement of new industrial development.
- Respondents expressed strong support for additional conservation of land in Whiting, clear support for the creation of more public parks, trails or boat launches, and very strong disagreement on the need for sidewalks in the village.
- There was broad based agreement on the use of regulations to protect the economic value of property and promotion of quality of life.
- Opinions are very mixed on whether Whiting should request full assessed taxation on conservation land but strongly in agreement with preserving scenic and historic/cultural sites.
- Many written comments expressed concern about properties with “junk all over the place”.
- Respondents are generally satisfied with road maintenance and street lighting; exceptionally satisfied with waste disposal services; satisfied with the protection and equipment of local and regional first responders; and very satisfied with town office staffing, facilities and services. Satisfaction with the elementary school and with recreation and community services was generally positive.
- Support was expressed for growth and development to be encouraged in the town center and near existing development.

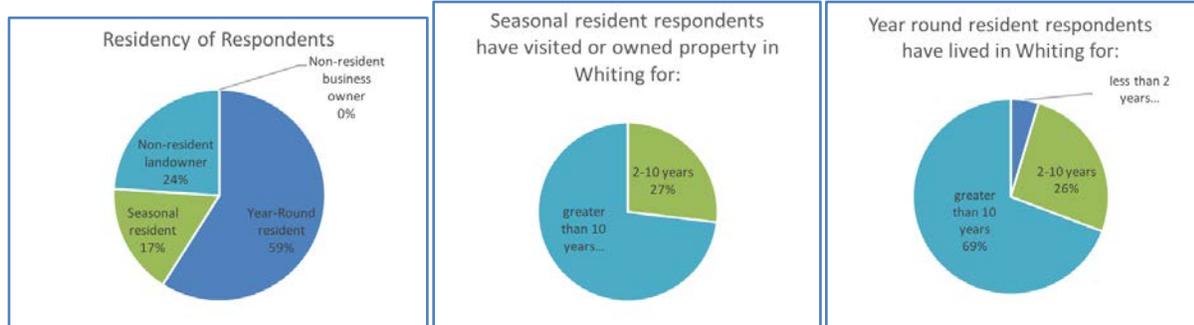


CHARTED SURVEY RESULTS

More respondents were male than female and the vast majority own the homes in which they live. Respondents were disproportionately older than the general population with 60% greater than 60 years of age.

While there are no responses from non-resident business owners, there is substantial input from non-resident landowners (24%) and seasonal residents (17%). Most of the respondents, both year-round and seasonal residents, have lived or visited Whiting for a very long time.

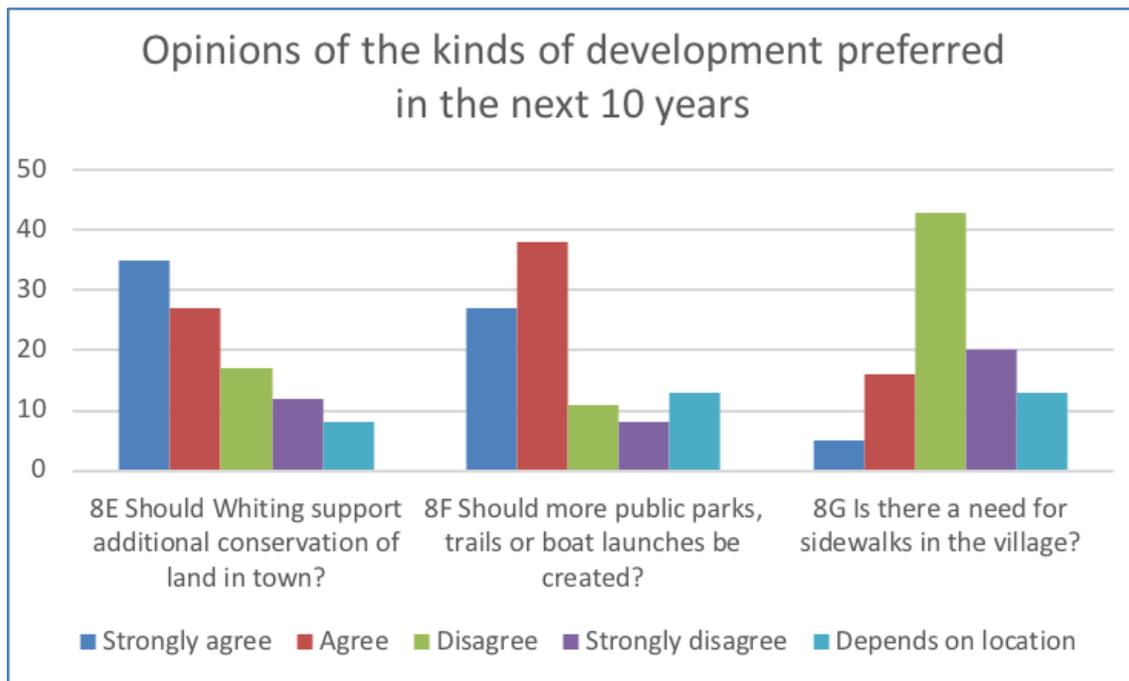
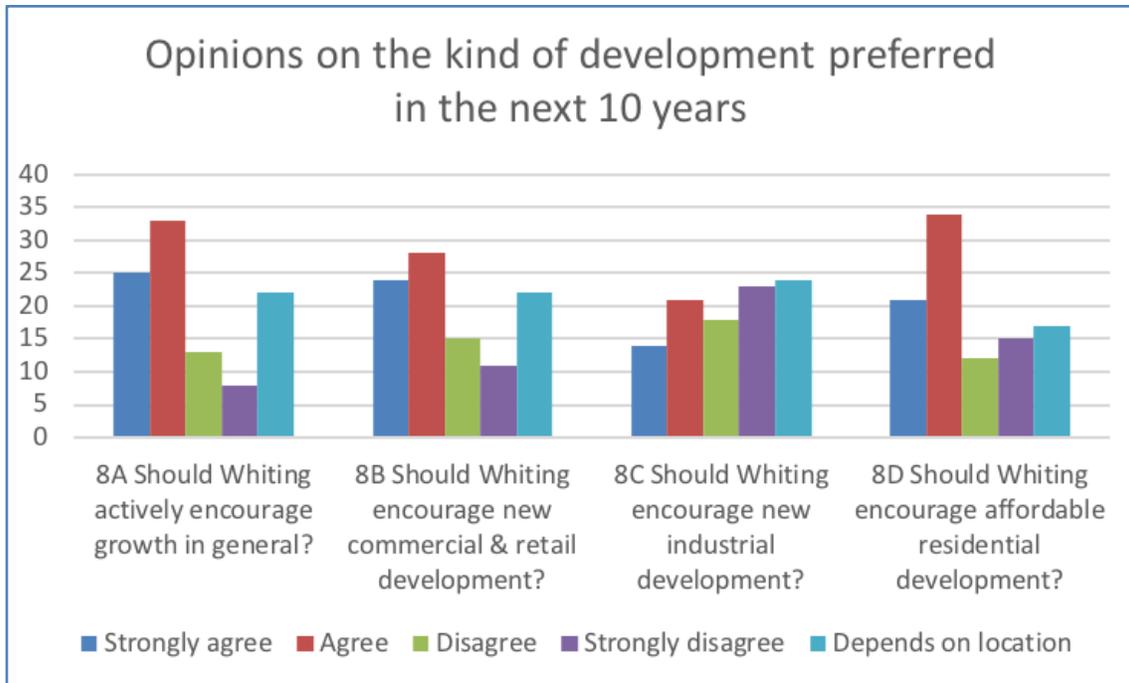




As Whiting does not have a great deal of economic activity the survey asks in what town(s) the respondent traveled for work within the past 5 years. All of the verbatim responses are provided in Appendix A – Survey and Written Responses. A word cloud, depicting the most commonly written words in the largest and most emphasized text, is provided below.



Seven questions asked for opinions on the preferred kind of development in Whiting over the next 10 years. Responses are provided in 2 charts below. Respondents tended to support efforts to actively encourage growth in general and to encourage new commercial and retail development and affordable residential development in particular. They generally opposed the encouragement of new industrial development. Respondents also provided written comments when they chose “depends on location” for particular types of development. These comments are reorganized and reproduced on the following page in the question order to which the comments refer; they are reproduced verbatim in Appendix A.



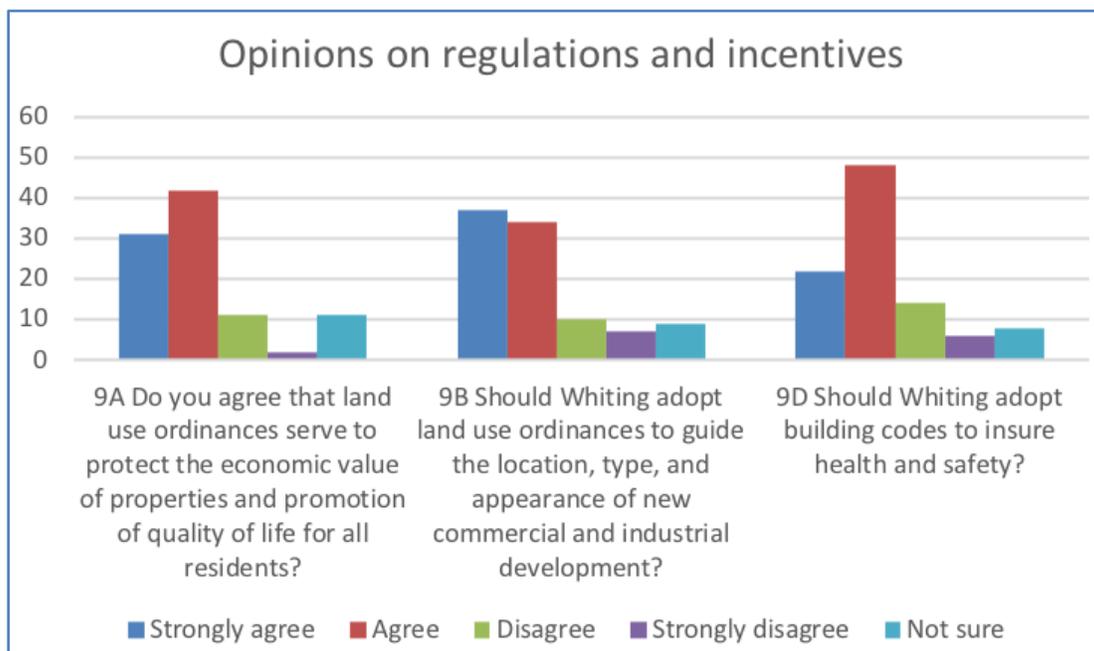
Respondents expressed strong support for additional conservation of land in Whiting, clear support for the creation of more public parks, trails or boat launches, and very strong disagreement on the need for sidewalks in the village.

Respondents could offer comments on the questions about growth and development and were specifically asked to do so if their answer was “depends on location”. These are reproduced in the following table.

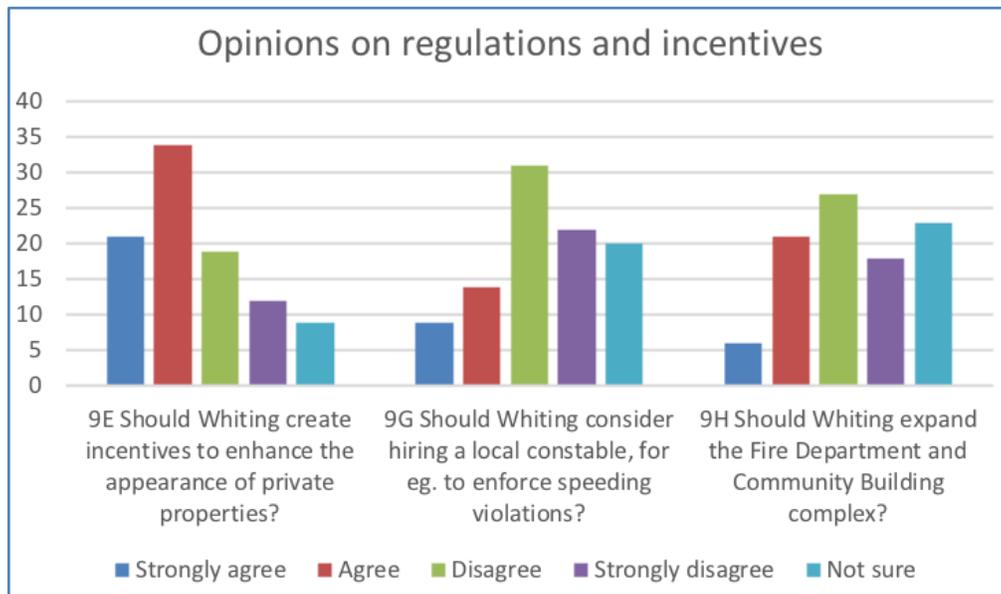
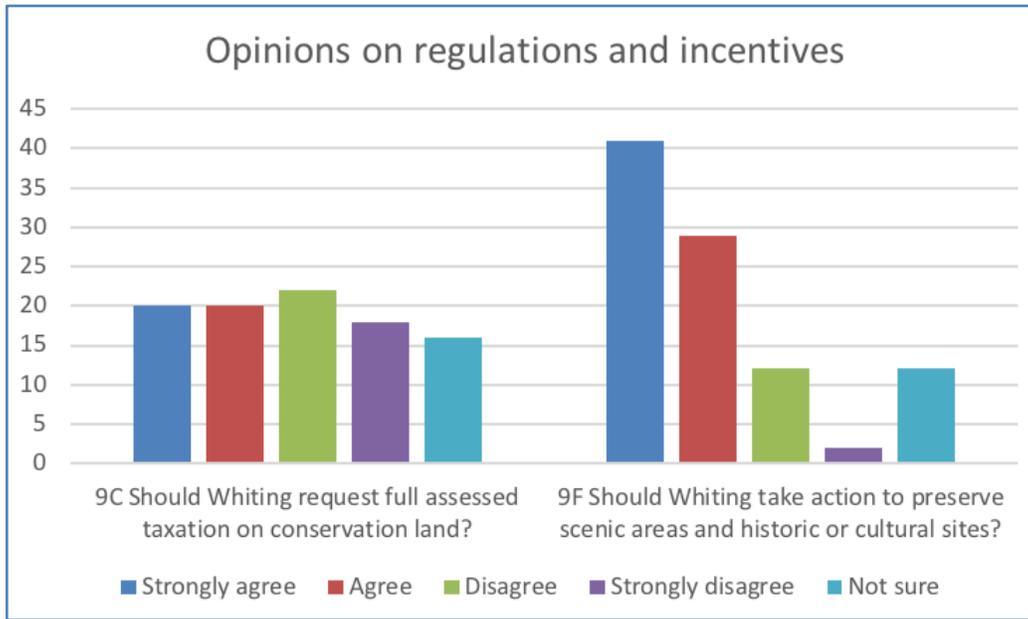
If you answered "depends on location above, please comment and indicate which question (by #) you are commenting on:
8A, B, and C. (no comments provided)
#8A,B,D. Development that is encouraged should be in keeping the town's character and history.
8a, 8b, 8c: only if this "growth" employs local people or otherwise directly benefits Whiting and its people; so no wind power
8A. Not all growth is advantageous, and should be within predetermined guidelines. 8C. Industrial wind turbines could generate revenue and clean power.
8A,8B,8C,8F (no comments provided)
#8A Define growth #8C and #8D close to town center & services but not on outskirts
8 a b, c, d,f,g) We bought land in Whiting because it is rural and a little remote. We currently live almost in the center of the city. Our residence was on the edge of town 7 years ago. We now have drivers who cut through our neighborhood to avoid traffic on the way to work. The speed limit is 25, they do 45 sometimes 50. But it won't be their child they run over. The point is, you have a lovely town. I am sure there is pressure to add to the economy and have city/town amenities. These things will come at a cost. So proceed with caution. The cost may be higher than you think. In the town I live in now, we have trash pick up, police and fire departments, sidewalks, 2 elementary schools, 1 high school and cable tv. In the 12 months there have been several shootings, 1 arson and multiple burglaries of homes and cars. Our downtown has all but died. But we have 3 Walmart's, a Lowes and a Home Depot. The lumber yard and hardware store went out of business. And we just got a 5th mega-hipster grocery store, because everyone needs to look cool sipping a beer while shopping for toilet paper. We hope that Whiting never becomes the town we live in now, we hope the town council can find a way to balance the town's needs.
8A prefer to see growth away from water & scenic areas. 8D same point, don't put houses in water or scenic areas
8B - in the village. Though it is not clear if the shopper base is sufficient to support much retail development. 8C - near other industrial development.
8B: character of business
8B It would be nice to have places to shop and eat, but not in the Village.
residential areas off the main roads
8BCD are very general questions. These items should be encouraged, but obviously their location should benefit and not harm our resources or current residents.
8C - industry creates jobs and pays taxes
8C - should be in an industrial zone
8C: in a appropriate industrial zone
8b: in a narrow corridor near the 189 intersection north of the village 8c: sections of the town. Away from Route 1 could be zone for non-smokestack industrial development 8e: certainly areas around lakes and oceans could be considered 8f: no more lake boat launches; parks, trails very appropriate that have minimal impact on existing homeowners 8e depends on size, location, and if the land could be better used for commercial/residential growth
8f: agree if town already owns land
8F not sure of the areas
8G: within 1/2 mile of corner Route 1
8G From the school to the town hall.
8G-Can't comment, don't live in town
8G (no comments provided)
no active growth on wooded land
Please dont develop undeveloped areas. Just work with what has already been developed. less of an eyesore and infringement on nature/community. cheaper
growth depends on what it is, only small scale. sawmill, auto repair, shop etc.; support more conservation land it if is taxed
high speed road very dangerous; when road is improved will be worse
All plans should be reviewed for location, impact on community etc.

If you answered "depends on location above, please comment and indicate which question (by #) you are commenting on:
only in areas where there are many residents houses
Maintaining the aspects of rural village should remain as is, industry endeavor should consider historical and aesthetic Values
Depends on location - consolidate development, be it residential, retail, industrial, in "city center" to avoid the usual wasteful, resource intensive and downright UGLY sprawl we see everywhere in more developed parts of the USA, including now that strip along Rt 1 of stores/malls in Machias.
Land conservation is acceptable but trusts or other entities should pay fair market value property taxes just like private landowners have to pay.
I would love to have a pub or a local/organic food restaurant/store near the town center. Industrial development that provides jobs to local year round residents would be an asset, but if I had to choose between that and preserved wild spaces I would choose preserved wild spaces.
Being embedded in mixed use residential is a key. Isolated projects for affordable house can create sectarian and non-inclusive status.
The judgement of local officials.
I don't know enough about the Village of Whiting to know where new sidewalks should be, but I do know that sidewalks encourage walking and that they improve safety.
All questions depend on many many factors including but not limited to location. Each individual proposal should undergo thorough cost/benefit analysis.
If you do create more boat launches or water access place a dry hydrant in that area when the work is done.

Eight questions asked respondents their opinion on the use of regulations and incentives that Whiting should consider. Responses are summarized in 3 charts below. There was broad based agreement on both the value and the use of regulations to protect the economic value of property and promotion of quality of life.

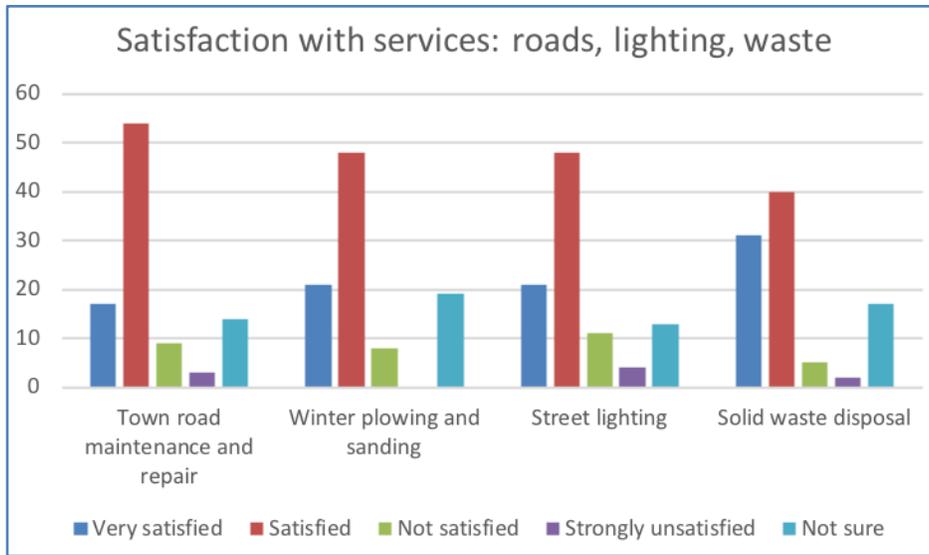


Opinions are very mixed on whether Whiting should request full assessed taxation on conservation land but strongly in agreement with preserving scenic and historic/cultural sites.

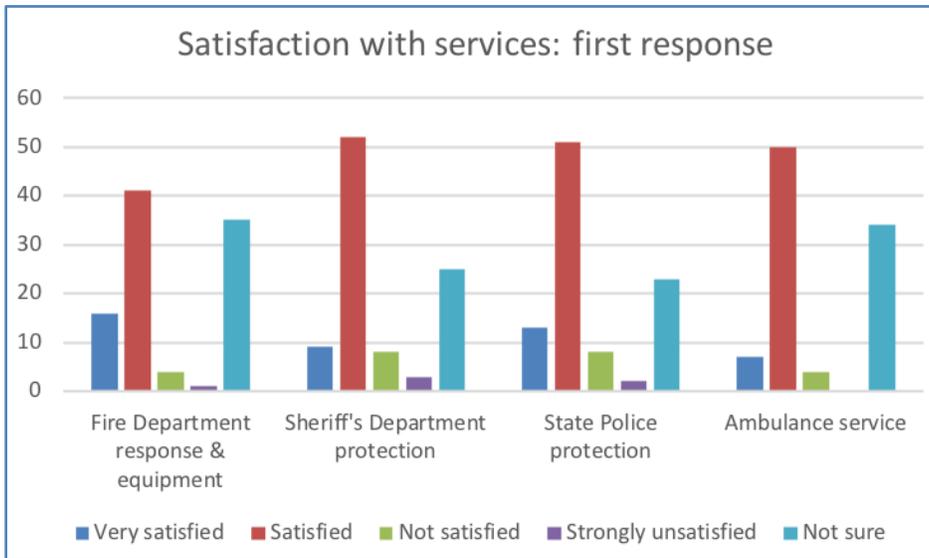


The strong agreement with incentives to enhance the appearance of private properties is reinforced by many written comments expressing concern about properties with “junk all over the place”.

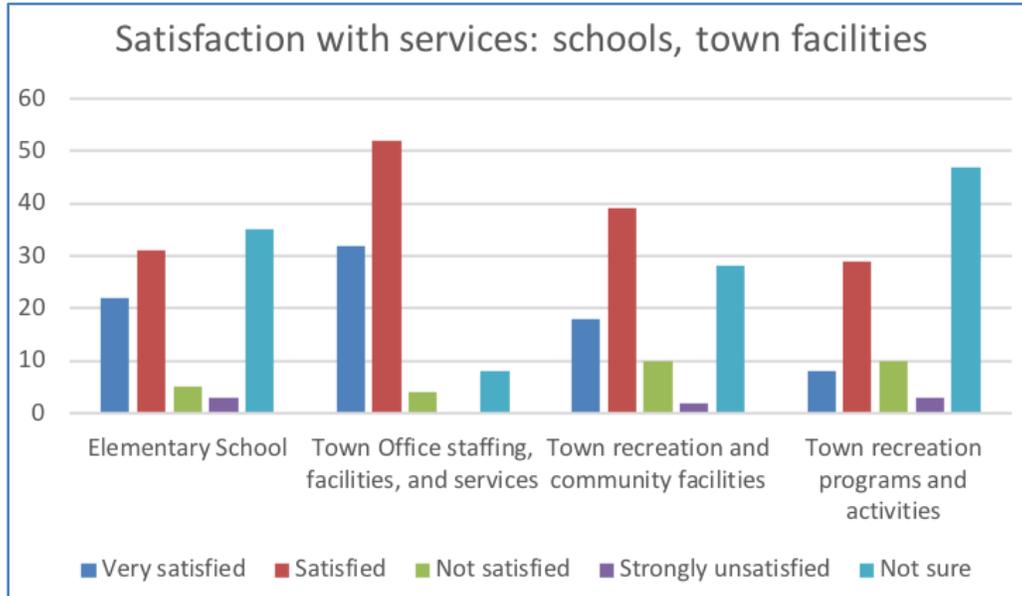
Twelve questions asked respondents about their level of satisfaction with a variety of services provided in Whiting. They are summarized in three charts grouped according to infrastructure and maintenance, emergency response, and civic services.



Respondents are generally satisfied with road maintenance and street lighting and exceptionally satisfied with waste disposal services.

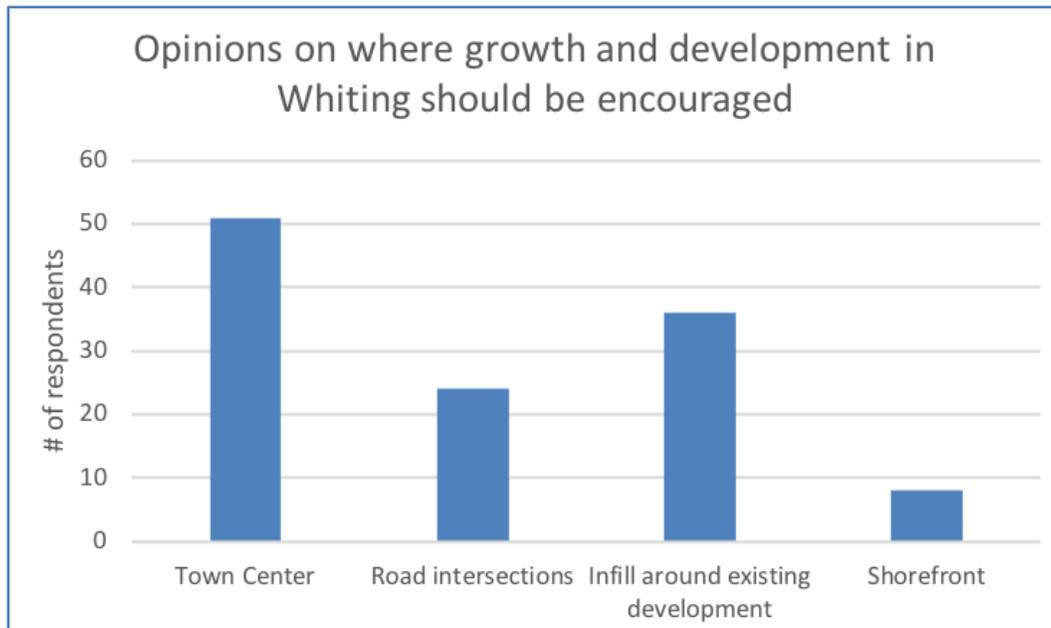


The vast majority of respondents are satisfied with the protection and equipment of local and regional first responders; those who are unsure are primarily seasonal residents.



As above those who are unsure about their level of satisfaction with services are primarily seasonal residents. Year round residents expressed significant satisfaction with town office staffing, facilities and services. Satisfaction with the elementary school and with recreation and community services was less enthusiastic but still generally positive.

Respondents offered an answer, charted below, on where growth and development should be located in Whiting. Support was expressed most clearly for growth and development to be encouraged in the town center and near existing development.



The question provided an opportunity to identify and “other” location for growth and development or for comment from respondents. These are reproduced in the following table.

Where specifically should growth and development in Whiting be encouraged? Other location – please specify:
all
New York
Route 1 north of Route 189
question is much too broad to respond
Tuck away industrial completely out of sight; regulate the size and look of businesses and industrial facilities to preserve Whiting's scenic, rural character. Don't turn it into Waterville.
It shouldn't be
none
fish passage around the dam
fish passage at the dam
shrorefront-1, infill - 2 town center -3 intersections - 4
not sure
Road intersections should always be safe. Growth around the Town Center will keep the Town Center alive.
Growth and development should not be encouraged
Outside of the Village
And outlying areas
Small business development
None. Whiting unique natural environment is unique and should be preserved.
It depends on what the growth is and how it affects the neighboring inhabitants. people want to live in peace and that means undo noise/light/smell/and water contamination needs to have minimal impact.
Judgement of Town officials.
New development should be encouraged where there is existing development in an effort to conserve land, reduce drive times for the local population, and minimize infrastructure and maintenance costs.
none
Depends on type of growth and development

The survey concluded with 3 open-ended questions. The responses to these last three questions are reproduced verbatim in Appendix A – Survey and Written Responses. Three word clouds, depicting the most commonly written words in the largest and most emphasized text, is provided for each of the last three open-ended questions below.

What are the things about the town of Whiting that you would not want to change?



What are the things about the town of Whiting that you would like to see changed?

Enforcement Thinking East Machias Students Grocery Sign Living
Expansion Business Completely Taxes Streetlights Town
Dinner Property Facilities Dam Speed Love Safe Growth
Salmon Federation

Describe how you would like to the town of Whiting to be in 10 years.

Nice Dam Development Lots Roads Junk Community Preserve
Businesses Mill Pond School Enjoy Town Basically
Whiting Providing Village Land Similar Improvements Big Kids
Local Thriving Natural

APPENDIX 1 – SURVEY AND WRITTEN RESPONSES

A public input survey was mailed to all Whiting property owners in November of 2017. That blank survey is reproduced at the end of this Appendix. Several questions provided opportunity for comments and there were 3 open-ended questions at the end of the survey. Those responses are reproduced verbatim here.

In what towns(s) have you traveled to work within the past 5 years?

work from home	N/A	East Machias
Machias area	Perry	Augusta and Portland, ME
retired	None	Machias
Retired	I am retired.	Machias, Milbridge, Cherryfield
Coastal towns from Lubec to Boston, Washington D.C.	Machias, Lubec	Machias, Lewiston, Baileyville, Orrington, Goffstown (NH), Calais.
San Diego, Miami, New York City, Chicago, Orlando, Las Vegas, Atlanta, New Orleans	Machias, Lewiston, Brunswick, Rumford, Calais.	Whiting, Trescott, East Machias, Cutler, Jonesboro, Roque Bluffs, Machiasport
Steuben, Harrington, Lubec, Machiasport, Machias, Jonesboro, Jonesport, Beals, Pembroke	East Machias, Machiasport, Machias, Lubec, Trescott, Dennysville, Roque Bluffs, Cutler, Edmunds	Cutler, East Machias, Pembroke, Perry, Eastport, Edmunds, Whiting, Calais, Machias, Ellsworth, Augusta, Portland
Perry	Machias	machias
retired	Machias	none other than Whiting
none	East Machias	Machias
Lubec	Retired	Lubec, Orono, Windham
not applicable	Machias	Lubec
Machias	retired	Machias
Machias, East Machias, Brewer, Bangor	Perry, Eastport, Dennysville, Edmunds, Lubec	I am a non-resident landowner, so this does not apply.
Machias	Bangor	N/A
East Machias	none	Cutler
several	East Machias	Lubec
none	Machias	Machias
retired	East Machias, Machias	
Whiting	none	Machias
Lewiston, Calais, Ellsworth	Machias, Harrington	none
many towns	Machias, Lubec	None
Machias	Bangor	retired
Machias	Too many towns to list	I work from home.

Here is a word cloud of the responses above. The word cloud depicts the most commonly written words with the largest and most emphasized font and typeface.



If you answered "depends on location above, please comment and indicate which question (by #) you are commenting on:
8G: within 1/2 mile of corner Route 1
8f: agree if town already owns land
no active growth on wooded land
8b: in a narrow corridor near the 189 intersection north of the village 8c: sections of the town. Away from Route 1 could be zone for non-smokestack industrial development 8e: certainly areas around lakes and oceans could be considered 8f: no more lake boat launches; parks, trails very appropriate that have minimal impact on existing homeowners
8a, 8b, 8c: only if this "growth" employs local people or otherwise directly benefits Whiting and its people; so no wind power
Please dont develop undeveloped areas. Just work with what has already been developed. less of an eyesore and infringement on nature/community. cheaper
growth depends on what it is, only small scale. sawmill, auto repair, shop etc.; support more conservation land if it is taxed
high speed road very dangerous; when road is improved will be worse
8F not sure of the areas
8e depends on size, location, and if the land could be better used for commercial/residential growth
8C - industry creates jobs and pays taxes
8C - should be in an industrial zone
8C: in a appropriate industrial zone
8B: character of business
All plans should be reviewed for location, impact on community etc.
only in areas where there are many residents houses
Maintaining the aspects of rural village should remain as is, industry endeavor should consider historical and aesthetic a Values
8A, B, and C.
#8A,B,D. Development that is encouraged should be in keeping the town's character and history.
Depends on location - consolidate development, be it residential, retail, industrial, in "city center" to avoid the usual wasteful, resource intensive and downright UGLY sprawl we see everywhere in more developed parts of the USA, including now that strip along Rt 1 of stores/malls in Machias.
8 a b, c, d,f,g) We bought land in Whiting because it is rural and a little remote. We currently live almost in the center of the city. Our residence was on the edge of town 7 years ago. We now have drivers who cut through our neighborhood to avoid traffic on the way to work. The speed limit is 25, they do 45 sometimes 50. But it won't be their child they run over. The point is, you have a lovely town. I am sure there is pressure to add to the economy and have city/town amenities. These things will come at a cost. So proceed with caution. The cost may be higher than you think. In the town I live in now, we have trash pick up, police and fire departments, sidewalks, 2 elementary schools, 1 high school and cable tv. In the 12 months there have been several shootings, 1 arson and multiple burglaries of homes and cars. Our downtown has all but died. But we have 3 Walmart's, a Lowes and a Home Depot. The lumber yard and hardware store went out of business. And we just got a 5th mega-hipster grocery store, because everyone needs to look cool sipping a beer while shopping for toilet paper. We hope that Whiting never becomes the town we live in now, we hope the town council can find a way to balance the town's needs.
8A,8B,8C,8F
Land conservation is acceptable but trusts or other entities should pay fair market value property taxes just like private landowners have to pay.
I would love to have a pub or a local/organic food restaurant/store near the town center. Industrial development that provides jobs to local year round residents would be an asset, but if I had to choose between that and preserved wild spaces I would choose preserved wild spaces.
8G-Can't comment, don't live in town
8B - in the village. Though it is not clear if the shopper base is sufficient to support much retail development. 8C - near other industrial development.
8B It would be nice to have places to shop and eat, but not in the Village.

If you answered "depends on location above, please comment and indicate which question (by #) you are commenting on:
residential areas off the main roads
8BCD are very general questions. These items should be encouraged, but obviously their location should benefit and not harm our resources or current residents.
8G
Being embedded in mixed use residential is a key. Isolated projects for affordable house can create sectarian and non-inclusive status.
8A. Not all growth is advantageous, and should be within predetermined guidelines. 8C. Industrial wind turbines could generate revenue and clean power.
8A prefer to see growth away from water & scenic areas. 8D same point, don't put houses in water or scenic areas
8G From the school to the town hall.
The judgement of local officials.
#8A Define growth #8C and #8D close to town center & services but not on outskirts
I don't know enough about the Village of Whiting to know where new sidewalks should be, but I do know that sidewalks encourage walking and that they improve safety.
All questions depend on many many factors including but not limited to location. Each individual proposal should undergo thorough cost/benefit analysis.
If you do create more boat launches or water access place a dry hydrant in that area when the work is done.

Where specifically should growth and development in Whiting be encouraged? Other location – please specify:
all
New York
Route 1 north of Route 189
question is much too broad to respond
Tuck away industrial completely out of sight; regulate the size and look of businesses and industrial facilities to preserve Whiting's scenic, rural character. Don't turn it into Waterville.
It shouldn't be
none
fish passage around the dam
fish passage at the dam
shrorefront-1, infill - 2 town center -3 intersections - 4
not sure
Road intersections should always be safe. Growth around the Town Center will keep the Town Center alive.
Growth and development should not be encouraged
Outside of the Village
And outlying areas
Small business development
None. Whiting unique natural environment is unique and should be preserved.
It depends on what the growth is and how it affects the neighboring inhabitants. people want to live in peace and that means undo noise/light/smell/and water contamination needs to have minimal impact.
Judgement of Town officials.
New development should be encouraged where there is existing development in an effort to conserve land, reduce drive times for the local population, and minimize infrastructure and maintenance costs.
none
Depends on type of growth and development

What are the things about the town of Whiting that you would not want to change?



What are the things about the town of Whiting that you would not want to change?
Some of the homes need to be cared and cleaned. And get cleaned up all the junk and garbage - waste to improve Whiting.
Dont take the dam out
School, Town offices, Shore access
The valley and town look
The beauty of our natural surroundings, the quietude and privacy.
School
Small community feeling, rural appearance
Small town atmosphere. Town meeting style of governments.
Administration
Almost everything.
School, rubbish pickup, community feeling
Forest, fields, lakes and rivers
The Village Pond. The small rural village imagine
I like our quiet, peaceful, and scenic life style. I enjoy walking in the woods and seeing all the wildlife.
Would like to see the town stay the same.
I don't want to see the dam removed.
Rural, small town character. Save the dam. No wind turbines - 0 employment, harm to flora and fauna, including people. Bad for tourism and property values.
Keep the windmills out. Save the dam!
the small town feel, the freedom to be able to get out and walk
small place keep it that way
the quiet
very satisfied with sanding and plowing
small friendly community
small rural community
small family oriented community
small family oriented community
Do NOT want any drug sales like marijuana stores or social clubs "ever"
Since I don't reside in Whiting I can't comment on these questions.
Anything!
simple organization
Whiting is one of the most natural places in our country. Please keep it that way.
I would not like the dam taken down and the mill pond drained
Love the ruralness, Love zoning freedoms
The small school as it creates one on one and creates a family feel for the child and allows the teacher to understand the background of the student.
Keep the dam and the community center the same
Keep the Mill Pond Dam
residential/neighborhood quality
Rural and quiet character, good roads, largely undisturbed natural beauty.
The rural character of the town.
Peaceful country feeling and restful environment.
I would not want to change the character of Whiting, a small historical village with vast woodlands and lakes, and a range of community activities for residents and visitors.
I love how outdoor recreation is available just by stepping out my front door.

What are the things about the town of Whiting that you would not want to change?
Do not allow the town to become a city. You have a community, for better or worse, everyone knows everyone. You know who your neighbor really is.
I like it the way it is.
I don't want to change the quality of life we enjoy living in Whiting. Whiting folks are respectful towards each other in general. The people who serve the town in elected offices, in volunteer work, in the town office, in the school and at town meeting are exceptional. The dam must remain for practical, historical, and aesthetic reasons.
Nothing is stagnant. Change is inevitable.
encourage development
Basic rural character, access to natural areas.
The Millpond
The character
Governing structure; NO Dollar Store or such
The quaint town as it exists. The community.
Natural beauty. The development at Pigeon Point is horrible.
Natural habitat
Areas off Rt 1 should remain rural. Keep business along the business district.
Quiet, rural nature.
The simple, quiet existence it offers residents.
People
I don't want to see the town change its rural character. The question about an ordinance to insure how properties look is intrusive to the freedom many have. How exactly would such an ordinance be worded? What standards would you go by? I would want the mill pond to stay intact. How this is done, either by keeping and rebuilding our dam, or making a step dam or one with a fish ladder is important to the fire protection of the community. I think outsider interference in town matters need to be checked at the door.
Keep the Pond. Make sure there is a service station. A boat landing on the Orange River should remain. Keep and support Look's Gourmet Food Company. Keep the Town Office, Fire Station, and Community Building (though I would support expansion if needed).
Not qualified.
The Dam and free use of our land without restrictions
The small town feel.
Small town rural feel. open lands with mixed income houses.
I just don't know enough about the town. We are non-resident landowners and when we go to "town" from our camp, it is usually Machias.
Relatively low property taxes, limited government. Demographic impact of the aging population have not been as severe as in nearby towns with regard to taxation and town budget stresses.
Open areas.
1. Road Maintenance and sanding and plowing 2. Curb side trash pickup
Rural unspoiled environment with scenic beauty.
The way the fire department has been run and managed by the volunteers from Whiting and surrounding towns as a private fire cooperation. The clean air and water that we are used to in this area. The friendliness of neighbors helping each other in times of trouble.

What are the things about the town of Whiting that you would like to see changed?

Enforcement Thinking East Machias Students Grocery Sign Living
 Expansion Business Completely Taxes Streetlights Town
 Dinner Property Facilities Dam Speed Love Safe Growth
 Salmon Federation

What are the things about the town of Whiting that you would like to see changed?
Make the countryside beautiful and have homeowners clean up their properties
Lower property tax rate. Understand property tax needed for area improvement.
central recreation for youth
More affordable living housing
People taking care of property and land, more economic opportunity for residents such as supporting a tourism economy and small business.
Lower the dam to let the salmon run
more open to businesses
Fewer streetlights
Junk/door yards are becoming more prevalent, preventing new people from moving here and decreasing property values. Officials must enforce clean up and encourage removing clutter. But also protect property owners rights.
Not much
Something done about properties which store too much junk.
Route 1 needs work, hopefully it will get done in Spring; town should get into recycling; we could do more for retirees
More social activity; restore potluck dinner
Town needs a Comprehensive land development plan and zoning ordinance; reduce lake set back requirement to 50 feet for permanent structures from current 100 foot requirement
I would like to see people able to make a decent living without having to drive for an hour or more one-way to do it.
Love the town as it but recognize need for jobs and support of Mom an Pop retail and restaurants.
Get some taxpaying businesses per earlier recommendation.
The houses in bad shape repaired, especially the empty ones, repaired and occupied. The bushes cut back. The fields cleared up and so many hungry people, and it would look better
too many lights and too much plowing up dirt in CC
safe roads, bike trail
lower property taxes, possible close the school, stop putting money in to the church beside the school
in this day and age it is an embarrassment to block fish from getting upstream (ask Ellsworth)
increase the tax base by encouraging year round residents; work with conservation groups to allow fish passage
the dam has got to go, either that or build a fishway
you cant call yourself an environmentally friendly town when an obsolete dam is completely blocking fish passage
Condemn the "Whiting House" it is unsafe - where is code enforcement regarding this?
Nothing
property tax - decreased
Too many loud and aggressive dogs. Ive been bit and kept up at night too many times.
We moved away some years ago due to health issues so I really don't have a say. I would trust the judgement of the Halls, Bronsons, Bridges, Pressleys and Crosbys in these matters. They care deeply about this town.
Nothing at this time
Would like to see more business and actually have the town be knowledgeable about the process on business licensing thru the state. Not the answer I don't know because we don't have many businesses in town.
Expanding the Fire Department and community building complex depends on what the expansion could also be used for. Speeding thru town in location near PO is real bad.
Remove the salmon federation, less destruction of homes
No Salmon Federation, more farms, more ways to earn a living, allow retail sales of marijuana

What are the things about the town of Whiting that you would like to see changed?
love it as it is
I'd be happy to see more conserved lands with additional hiking trails. I would very much like fish passage to be enabled at the Millpond dam.
There are buildings/residences that I feel should be condemned.
A grocery store and restaurant.
Thinking that remains 'inside the box'.
If the town is going to grow then the town could benefit from very, carefully planned commercial zoning that would encourage some 'in-town' conveniences without creating sprawl. It should be done slowly and reviewed regularly. A grocery store, hardware store, library, dinner, pharmacy ..what kinds of things do you wish you didn't have to drive to Machias for? (I am thinking of the stores we used to have in the town center before it died.) These things should be around the town center. You should limit the commercial zoning area. You could put sidewalks there. Most small towns have bored teenagers, a bowling ally/arcade/theater/general safe place to hang out and have fun. Maybe bored teenagers are a problem.
Nothing
More resources/space for the school to expand to meet the needs of the student population. I know our taxes can't support this but grants may be available. Better internet service for all areas in the town is needed.
More town-wide events and widespread communication of events, please! Maybe a Facebook page? I would love more opportunities to connect with community members. Great job with the website, by the way. I wonder if you'll consider taking down "save our dam" from the town sign? As it does not reflect the feelings of the community as a whole it feels like a slogan better left displayed from people's personal property. Thank you for considering!
The school closed with students being sent to Edmunds and East Machias.
Close the elementary school and consolidate with Machias or Lubec. Too few students and too much expense.
Job opportunities for young people. And I would love to see some retail/commercial development in the village area. But Whitefield can not just make that happen - sufficient demand from shoppers and diners has to exist. And I am not sure that it does.
Something to slow the traffic down, maybe a digital sign that shows the speed a person is traveling.
Lower waterfront taxes
Elimination of NIMBY syndrome. More citizen participation in town government
Better advertising of what activities do exist. Faster, affordable computer communication system. Assisted living/nursing home complex. Library with active programming. Public swimming park/beach.
Develop something that looks like a real town center not just an intersection of two roads.
Fire department volunteers get compensated in some way. Return the river system as was before the dam OR replace dam with new so as to have fully adequate fish passage. Town support to encourage folks to improve buildings which are unsafe or unsightly. Encourage locally owned small businesses to set up shop. Solar panels at town hall
The tree huggers need to mind their business and let the citizens of Whiting fix the Mill Pond dam. The failure to fix this dam will have a detriment to the lakes which feed into the Mill Pond. We are paying taxes on our land not the tree huggers. Taxes are being charged for large homes being built on Lakes, as landowners from the town we should not be charged in excess which has happened due to the growth building of large homes on lakes by rich people from away. You will not keep the younger generation if they cannot afford homes and the taxes.
Not sure
Better communication about town business, meetings, etc.
Routes 191 and 1 need to be completely overhauled. Make State DOT do its job.
Tell the state DOT to pave and plow our state-owned roads the way they're supposed to. Where does all our tax money go, if not for roads? The staff at Marion Transfer Station could smile once in a while. They border on rude. Machias transfer station is much nicer, contract with them.
I would like my real estate taxes to go down. I feel like the taxes on the properties on Gardners Lake are outrageously high compared to other properties.
Better grocery facilities. Restaurants.
The increased speed of traffic past the school and through town.
Pave the interior road between the Town's center and its southwestern part. Explore the possibility of placing utility lines underground. More cell phone towers. The school could be expanded, and an athletic field added - if population growth warrants. An in-season restaurant would be nice.
Not qualified.

What are the things about the town of Whiting that you would like to see changed?
Nothing except open mindedness about Alternative medicine growth
Fire department facilities need expansion.
recycling program & better dump site support to reduce trash left on public lands. Marion dump site is terrible and dump supportive of whiting trash removal. I would like to see less lighting in rural areas and more lighting in town and near large services. Better cell phone/data coverage in coastal areas
I don't know about what should be changed, but I do know that future development needs to be considered as you update your comprehensive plan. Unguided development leads to poorly-structured towns, having a negative impact on the function & appearance of the town, and it leads to increased infrastructure installation and maintenance costs. Proper planning is the key. The old timers will always say "a man should be allowed to do whatever he wants with his land", but unguided development of any kind can and does reduce property values, and diminish the quality of life in the area.
Streetlights are a waste of money. The land use ordinance (e.g. on sheds, etc) is way too restrictive. I would build on my vacant lot in Whiting if the codes weren't so restrictive. Unorganized territories represent an appealing alternative.
<ol style="list-style-type: none"> 1. Widening of side roads. 2. Fair Real Estate Taxes 3. Greater Internet Service, side streets
Include unsorted recycling pick-up at current refuse collection locations, or at least in 2 or 3 locations around town where residents can sort and drop, coupled with incentives to discourage putting recyclable items in general refuse (pay corresponding amount annually for small, medium or large can rental and/or purchase specially marked bags, or stickers for bags). Income from can rental, stickers or bags could be used to reduce taxes and/or pay for any recycling costs. Property value is not an equitable way to charge for trash pick up and disposal. Cost should be a user fee based on amount of trash a household generates. It's irresponsible to maintain the current system that encourages throwing recycling into general refuse. We are many decades behind on this. For those who don't need an incentive to recycle, the environmental benefits recycling are offset by the detrimental impacts of individual vehicles making the long journey to Marion. I would also like to see a fire department dry well on the Gardner Lake Road.
Have the town have fewer buildings to maintain, such as donating the Meeting House to the Historical Society. See more business be welcomed into town to help lower the tax burden on individuals. Think about merging the town office with that of East Machias to save money, the East Machias Town office is centrally located, open five days a week, and would be able to handle. This could allow for better service to all the residents of Whiting, providing the town of East Machias would go along with this regionalizing of services. I would also like to see better law enforcement from the county, there are times now that you might have to wait for hours before they show up, because there are two of them on duty and other things take priority. It might also not be a bad idea to regionalize some of the current state-mandated positions such as animal control officer and shellfish warden under the county and pay them a stipend just like we do for other law enforcement. Other counties have a system like this and it saves the taxpayers money.

Describe how you would like the town of Whiting to be in 10 years.



Describe how you would like the town of Whiting to be in 10 years.
We could use a nice restaurant and gift store since many tourists drive to different destinations. I love Whiting and it has beautiful scenery and lakes; also good advertising and marketing, art culture.
Thriving
same as it is today
I would like to be able to sell my land, at a good price (Real Estate Broker call me)
Lots of well-kept properties, attractive town-maintained areas, a more vibrant economy and tourist destination, to bring needed dollars into Whiting.
A Renys and a lumber/hardware would be nice
Bustling Village Center
Pretty much like it is now
"Village like" community that is inviting to new home owners; low taxes, community support for and involvement in fire department, school, community facilities,. Whiting used to be all of these things!
About the same.
Pretty much as it is now with less junk in front yards.
I would like to see town get rid of "unsightly" and run down property. I know it won't be easy! Get rid of junky areas - enforce law on books - how many junk vehicles can you have in yard?
more retail providing goods and services
Not much different than today; we enjoy our property on Indian Lake
I like the way it is, but a few more options might be helpful.
Doesn't matter I'm not going to be here!!! Ha! Ha!
Rural small town character maintained even if there are more retail sops and businesses that employ locals. Big, ugly industrial facilities out of site by town ordinance. Encourage Mom and Pop, not chain retail and restaurants. Limit or ban chain businesses (eg Walmart, McDonalds)
Same as it is now please
see #2 above. The pond still here with a fishway.
the same - lots of empty houses need to be filled
I would like the town of Whiting to be as considerate of its residents as it is today, as this survey indicates the involvement of the people always make the whole better especially when the people voice is heard and adhered to - thank you
not too crowded
a place my kids could live and be safe and successful
similar to now but with some growth
very similar to what it is now, with moderate growth
similar to now
similar to now
Continue to preserve historic buildings (Union Mtg House) - keep the character of the "village" preserve mill pond as is with good water level
stay a small town
The same!
a working town that clears its roads, collects garbage, and gets kids to school. Nothing grand but safe, clean and reliable.
No big housing developments like Pigeon Point

Describe how you would like the town of Whiting to be in 10 years.
Natural. No jet skis at smaller lakes.
I loved living in Whiting when we did, made many good friends and participated in community activities. I personally would not look for change without great thought. I am happy to be included in the survey but realize I can have very little input. Thank you.
Pretty much the same. I am not a big "change" kind of gal
A small business center to help with unemployment and a start for high school children to be able to stay in Washington County. I want to stay.
with the dam
No Downeast Salmon Federation and have the Mill Pond Dam
more families with children to support the elementary school
Not much different from today, I basically like the way it is.
Still very rural and untouched by developments.
Essentially as it is now but with significant improvements or removal of dilapidated buildings, sidewalks for bicycles and walkers, and additional seasonal recreational opportunities.
Mostly as it is now, with a few improvements that enhance small business opportunities and promote ecotourism in Whiting.
Strong local school, public library services, active town center including retail, providing both specialized and basic consumables, open park space for general gathering and public parking on the periphery making the center accessible and safe for walkers and bicyclists. Work to make the town center a 'destination' for those living elsewhere ... -- Make the Whiting Village School an excellent provider of education in all grades prompting selection of the school by those from unorganized territories. Maintain 'multi-age' classrooms.
A nice town that has kept its identity. With no Walmart's or big box stores. I think you might consider a 'downtown' area with some locally owned shops. A town square.
Just as it is today
I like to see young families moving in, reviving old properties and building their lives here. I hope we will attract more of them because Whiting has relatively low taxes, a good school, and is a well run town. The Union Meeting House is a beautiful facility and it could be used more for weddings & concerts. Whiting is a central location for meetings. More groups could have meals or events in the community building if the kitchen were upgraded to make this happen. I would like to see more resource based industry in the Holmes bay area.
Thriving community in which families want to reside.
I hope there are plenty of woods and green spaces to roam, the school is a wellspring of knowledge and activities for young people, the community building has a full schedule of community-wide events that are well-attended, there are beautiful local farms that are embraced and supported by the community, and places to eat and buy healthy, fresh food.
As it is with no school.
Encourage some controlled development but keep small town atmosphere.
Much as it is now, but with a better economy and a couple of stores and/or restaurants in the village.
Pretty much the same.
Better Roads and better police, fire and ambulance response time
Basically, the same, but with a moderately larger population to increase the tax base without substantially increasing the cost of municipal government
Drug free. Rural yet with small business that will attract residents to broaden the tax base. No more conservation land takeover, which steals the land from business and residential growth. Enough is enough.
A real physically appearing town center not a large parking lot.
A nice restaurant in the village. A few nice businesses in village. Fish education center & park in village. School still open
A bit more busy with small businesses.
Natural. May some additional trails to enjoy nature.
The way it is now.
Modest growth in population; opportunities for local employment.
A great deal of preserved lands to keep it natural and providing availability for access to nature. More small businesses would be great
Welcoming to visitors, with well-maintained roads, clear directional signage, and no streetlights that obscure the nighttime stars.
Better paved roads, same quality of life.

Describe how you would like the town of Whiting to be in 10 years.
The town has slowly matured into its fine character. Careful planning will control what happens to keep what the majority of the townspeople want. The people need to be considered.
Less quiet. More businesses and people.
Just like it is now. Maybe add a police officer and preserve the historic sites.
Not qualified.
The same and free from federal restrictions
Pretty much the same.
Basically exactly the same but with a more vibrant job market to take over the derelict facilities without building new sites. i.e. less run down businesses but no more over all business locations.
Downeast Maine is increasingly drawing more out-of-staters as they escape the noise, pollution, traffic, crime and high property costs of more populous areas. Most are retired people, but increasingly they are folks who can make a living from their homes using the internet. If Whiting wants to benefit from this influx, then creating a "small town" atmosphere would be wise, NOT simply allowing random development along to grow along route 1. Resist McDonalds, Walgreens, Wal-Mart and other big box stores that people can find anywhere, keep the town unique and special, THAT is what people enjoy about Maine.
Unincorporated.
Shops and markets to support more local families and seasonal people.
<ol style="list-style-type: none"> 1. Wider side roads, instead of "Keep Right Signs" 2. The survey should consider the small size of the town, ability to pay for services, example, a police department would require a salary for each officer, time for training, vacation, benefits, vehicles and equipment ect.
Similar to today.
I would like to see the town be more prosperous then it currently is. I have lived here for about twenty years and the only thing that has really changed is the school was converted into a small house. The town needs to grow and change in order to keep up the current standards, given the aging population of the town. I would also like to see more activities for children to do, that is not tied to the schoolyard. Maybe work out an arrangement with Cobscook State Park to keep the playground area open year round so children from the surrounding communities can go there, that is homeschooled to be able to get some exercise and play. The ability to combine services could save the town money and offer better customer interactions.

WHITING COMPREHENSIVE PLAN – COMMUNITY PUBLIC SURVEY

The Town of Whiting is updating its Comprehensive Plan and we need your input!

Please fill out this survey (on-line or on paper!) by **THURSDAY December 21st**

- On-line (**OUR PREFERENCE!**) at <http://www.surveymonkey.com/s/WhitingCompPlanSurvey>
- Fill it out at home - **drop it in the collection box at the Town Office** or mail it to:
Town of Whiting, 169 US Route 1 PO Box 101, Whiting, ME 04691

Thank you for your time and input! You may attach additional sheets if necessary.

Please NOTE we will have a Community Visioning Meeting in the Spring of 2018 to allow for participation by year-round and seasonal residents alike.

I am:	Male	Female	I own the house where I live	I rent the house where I live	Not applicable

I am:	Under 18	18-19	20-29	30-39	40-49	50-59	60-69	70-79	80-85	85+

I am a:	Year-round resident	Seasonal resident	Non-resident landowner	Non-resident business owner

For year round residents ...I have lived in Whiting for:	<2yrs	2-10yrs	>10yrs	For seasonal residents ...I have visited or owned property in Whiting for:	<2yrs	2-10yrs	>10yrs

In what town(s) have you traveled to work within the past 5 years? _____

Town Growth and Development	Strongly Agree	Agree	Disagree	Strongly Disagree	Depends on Location
1. Should the Town actively encourage growth in general?					
2. Should the Town encourage new commercial and retail development?					
3. Should the Town encourage new industrial development?					

Town Growth and Development	Strongly Agree	Agree	Disagree	Strongly Disagree	Depends on Location
4. Should the Town encourage affordable residential development?					
5. Should the town support additional conservation of land in Whiting?					
6. Should more public parks, trails, or boat launches be created?					
7. Is there a need for sidewalks in the village?					

If you answered “depends on location” above, please comment and indicate which question (by #) you are commenting on:

Town Regulations and Incentives	Strongly Agree	Agree	Disagree	Strongly Disagree	Not sure
Do you agree that land use ordinances serve to protect the economic value of properties and promotion of quality of life for all residents?					
Should the Town adopt land use ordinances to guide the location, type, and appearance of new commercial and industrial development?					
Should the town request full assessed taxation on conservation land?					
Should the Town adopt building codes to insure health and safety?					
Should the Town create incentives to enhance the appearance of private properties?					
Should the Town take action to preserve scenic areas and historic or cultural sites?					
Should the Town consider hiring a local constable, for eg. to enforce speeding violations?					
Should the Town expand the Fire Department and Community Building complex?					

Town Services How satisfied/dissatisfied are you with the following services:	Very Satisfied	Satisfied	Not Satisfied	Strongly Unsatisfied	Not Sure
Town road maintenance and repair?					
Winter plowing and sanding?					
Street lighting?					
Solid waste disposal?					
Fire Department response and equipment?					
Sheriff's Department protection?					
State Police protection?					
Ambulance service?					
Elementary School?					
Town Office staffing, facilities, and services?					
Town recreation and community facilities?					
Town recreation programs and activities?					

Future Development Where specifically should growth and development in Whiting be encouraged?	Town center	Road intersections	Infill around existing development	Shore front	Other location (please specify)

ADDITIONAL COMMENTS

1. What are the things about Whiting that you **would not** want to change?

2. What are the things about Whiting that you **would** want to see changed?

3. Describe how you would like the town of Whiting to be in 10 years.

APPENDIX 2 –STATE POLICIES

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

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.

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.