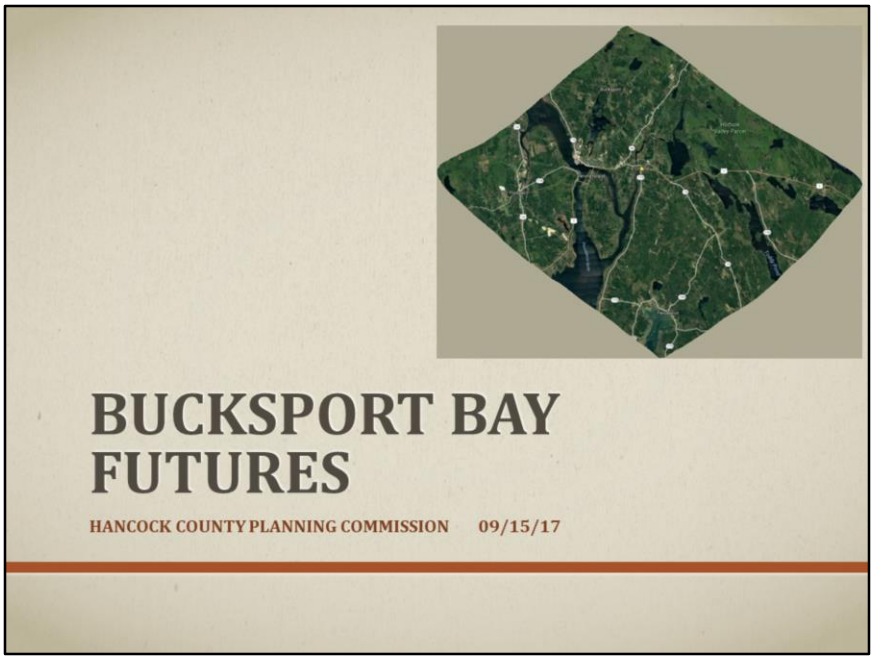
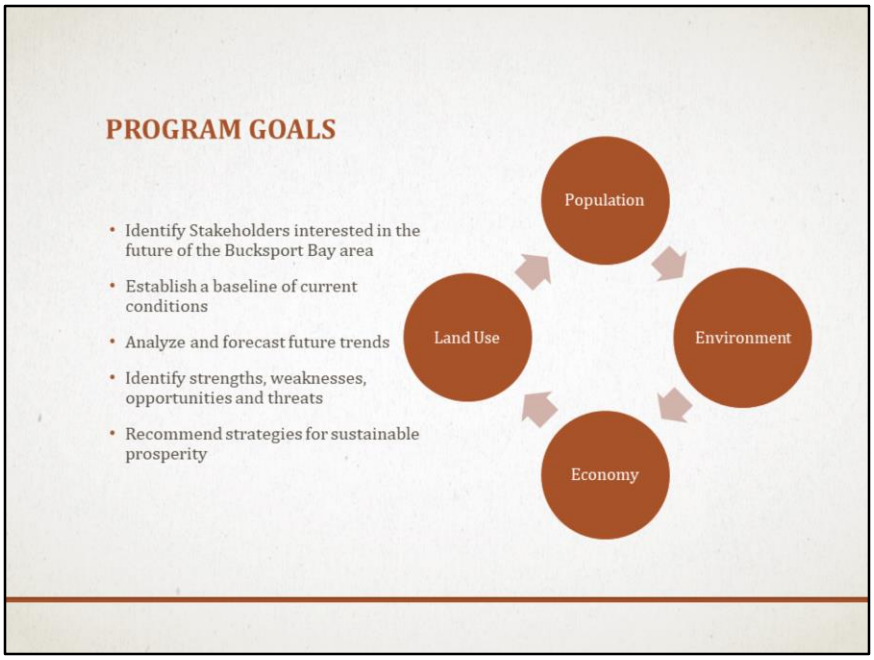


The Bucksport Bay Region surrounds the Penobscot River immediately above and below the Penobscot Narrows. The five towns included in this region are linked by this geography, economy and history. Recent changes in the economic landscape, particularly events like the closure of the Verso Paper Mill and closure of the Penobscot Nursing Home, and gradual trends of population aging and decline are leading the communities to reevaluate their future.

Towns do not typically work together economic development, environmental policy and land use. The benefits of collaboration are notable, but the time required and tradition of autonomy are important considerations.

This project seeks collaboration among these five towns in order to identify common interests and opportunities to accomplish more by working together.

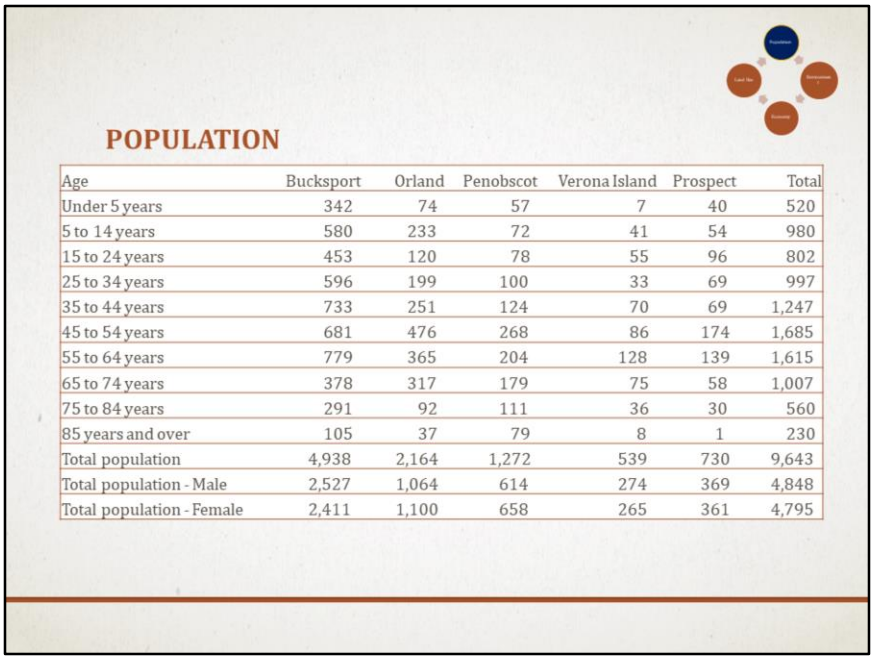


The five towns of the Bucksport Bay Region are each unique, but share a common labor market, retail facilities, health, education and other services. The pages that follow help to describe this region through analysis of population, the environment, the economy and land use. The purpose of looking at where the region stands and where it may be headed is to provide local leaders with information that will help them to enact smart policies.

There are many stakeholders in the Bucksport Bay Region, particularly within the downtown district in Bucksport. These stakeholders represent the five town governments, but also commercial and non-profit entities such as the schools, voluntary groups, service providers and businesses. The goal is to assure that everyone has an opportunity to participate or be represented in the process.
Towns – Bucksport, Orland, Penobscot, Prospect and Verona Island

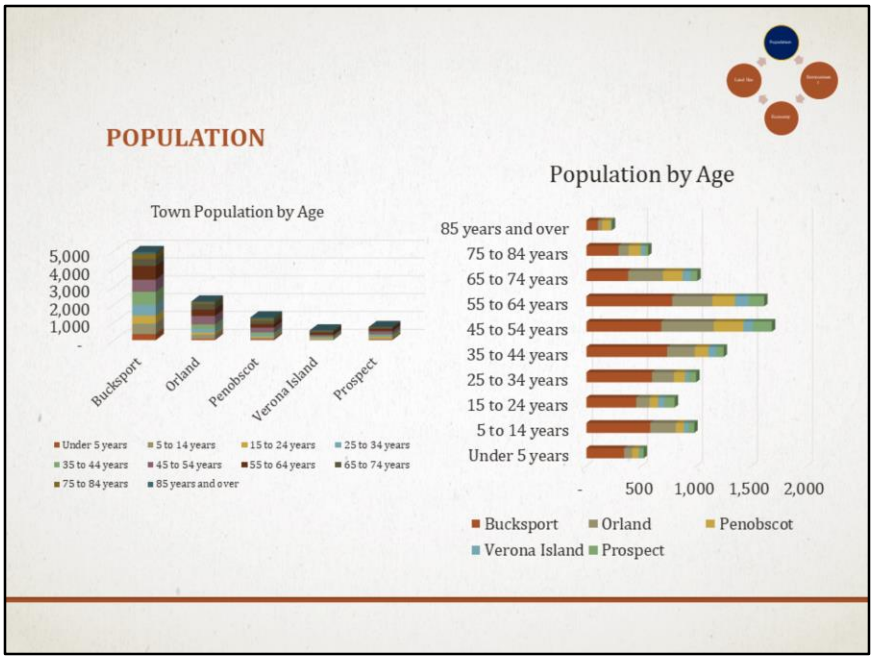
Organizational Stakeholders

Bucksport Area Chamber of Commerce
Bucksport Area Cultural Arts Society
Bucksport Bay Healthy Communities
Bucksport Heart and Soul
Bucksport Next
Bucksport Regional Health Center
Downeast Acadia Regional Tourism
Great Pond Mountain Conservation Trust
H.O.M.E.
Main Street Bucksport
People's Forum of Penobscot
Regional School Unit 25
Penobscot Community School



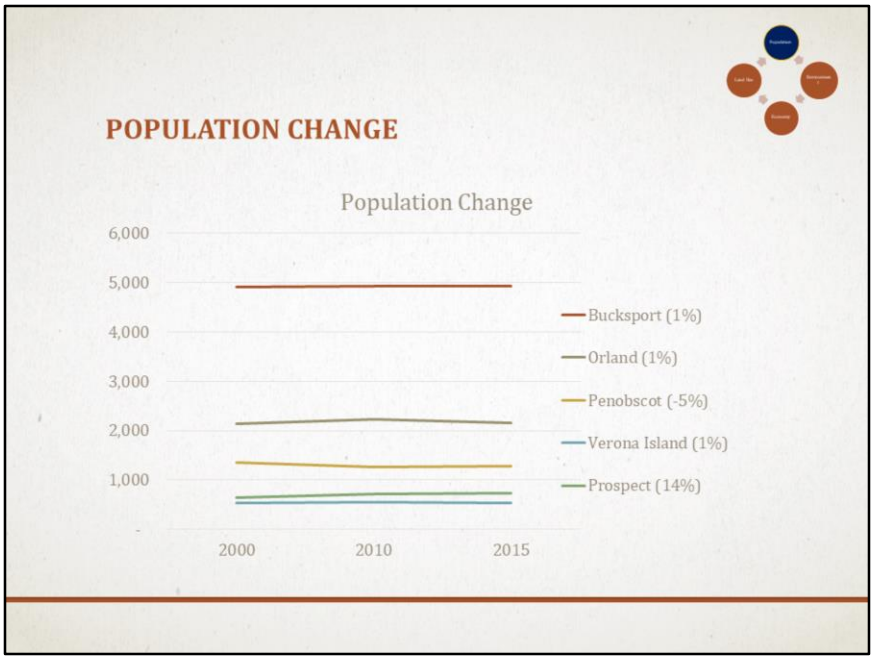
Age	Bucksport	Orland	Penobscot	Verona Island	Prospect	Total
Under 5 years	342	74	57	7	40	520
5 to 14 years	580	233	72	41	54	980
15 to 24 years	453	120	78	55	96	802
25 to 34 years	596	199	100	33	69	997
35 to 44 years	733	251	124	70	69	1,247
45 to 54 years	681	476	268	86	174	1,685
55 to 64 years	779	365	204	128	139	1,615
65 to 74 years	378	317	179	75	58	1,007
75 to 84 years	291	92	111	36	30	560
85 years and over	105	37	79	8	1	230
Total population	4,938	2,164	1,272	539	730	9,643
Total population - Male	2,527	1,064	614	274	369	4,848
Total population - Female	2,411	1,100	658	265	361	4,795

The estimated population in 2015 is approximately 10,000 persons. The five towns are different sizes, ranging from 539 persons on Verona Island to 4,938 in Bucksport. There are not big cities, but rather small towns and rural communities. The near balance between men and women is somewhat unusual as women on average live longer and outnumber men, particularly among seniors.

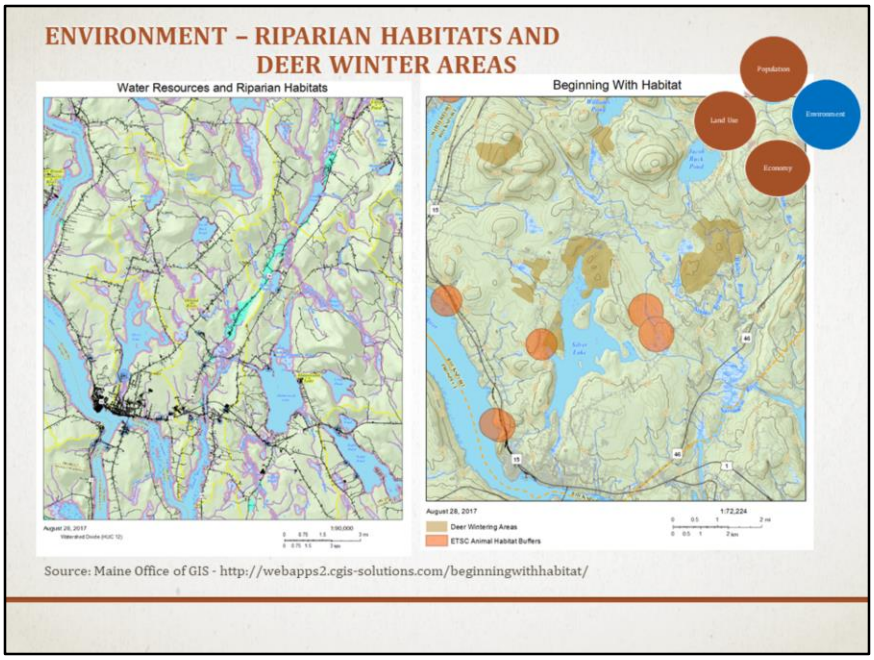


The age structure of the five towns is similar, with a very large baby-boom cohort, now entering their 60s and 70s, a particularly small cohort in their teen and early adult years and a somewhat larger cohort of children and adolescents. Note that the small bar for ages 0 – 4 represents a five year cohort while the others represent 10 year cohorts.

The rapidly aging population profile presents several issues for the future population and economy of the region. Over the next twenty years a majority of baby boomers will exit the Bucksport Bay region either by migration or by mortality. The small rise in child and adolescent populations will also see attrition in pursuit of higher education and employment. In-migration of young adults will depend primarily on job opportunities and quality of life.

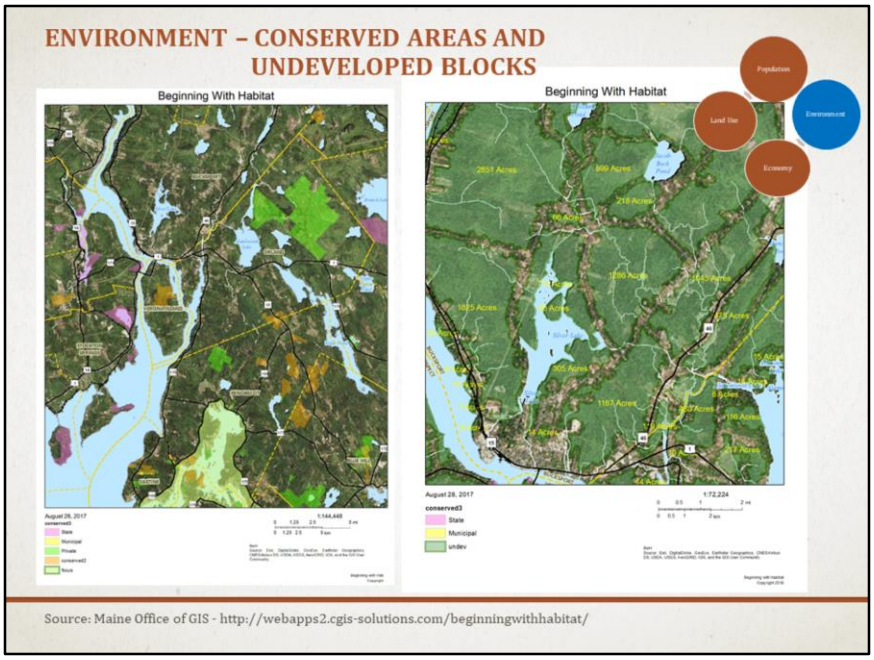


The prospects for a growing youth population will depend on in-migration of younger families. Without significant in-migration the population will decline significantly. Of the five towns, Prospect is the only town that is growing significantly. Penobscot has declined somewhat while Bucksport, Orland and Verona Island are essentially static, but are poised for significant deline.

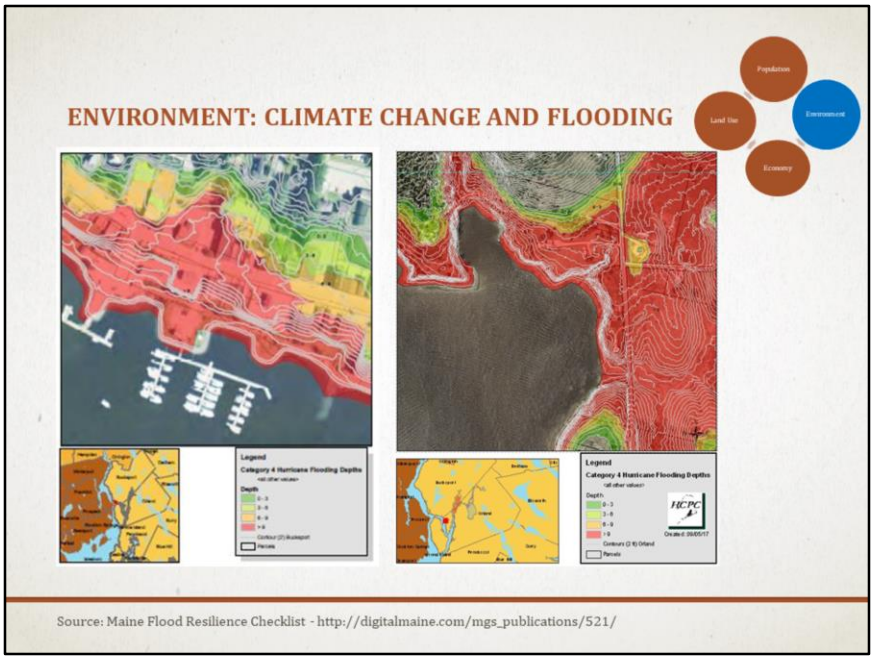


The environment of the Bucksport Bay Area temperate and robust in natural resources including salt water, fresh water, forests, pastures, granite and small farms. There are no pristine, untouched natural areas, but a very large portion of the landscape is in forests of differing ages and qualities.

The abundance of forests, pastures, ponds, lakes and rivers support a variety of wildlife species in all classes. These habitats also support a variety of migratory birds. Animals and humans come into frequent conflict along the region's narrow, unlit rural roads.



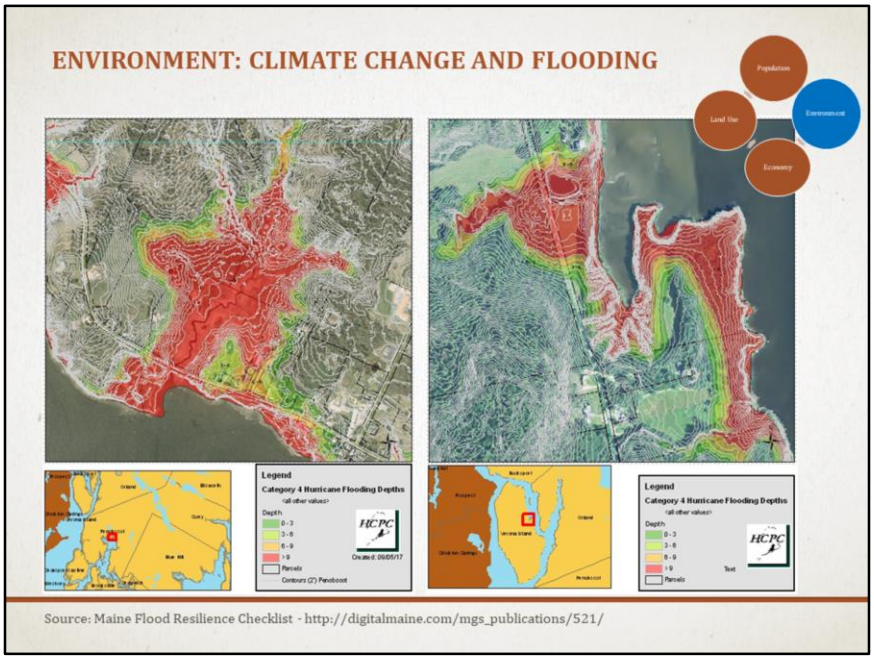
The Beginning with Habitat program has produced a variety of analyses indicating areas where contiguous habitat exists that is beneficial for wildlife. These areas are relatively free of high-speed roads and development that competes with wildlife. One goal of the region may be to encourage clustered development using the existing corridors. Clusters, such as business parks, enable efficient use of existing infrastructure. Clusters can also reinforce traditional New England village-oriented development.



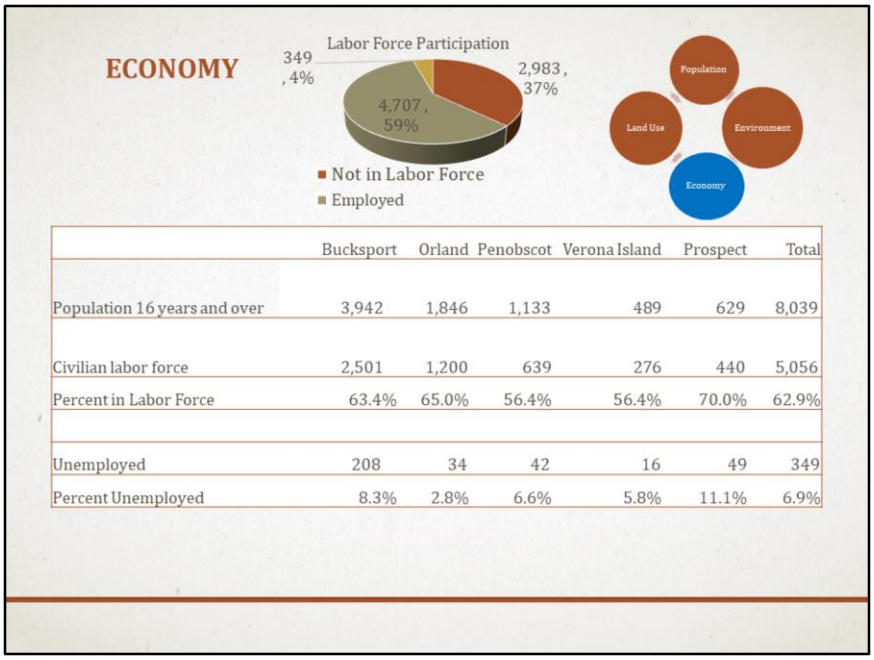
Environmental analysis also indicates areas where development may be threatened by future weather events that appear to be growing in intensity and elevated by slowly rising sea-levels. Areas within ½ mile of the ocean-shore have been mapped using LIDAR topographic analysis. These new, much more detailed maps provide better insight into areas subject to flooding under various weather scenarios.

In some instances, such as Bucksport's waterfront and village center, inundation-prone locations have already been developed. Adaptation measures, such as building up berms or sea-walls can help to protect critical infrastructure.

Other flood prone locations in the region have not been developed. Future development in those area should be cognizant of risks and possible requirements for flood insurance.



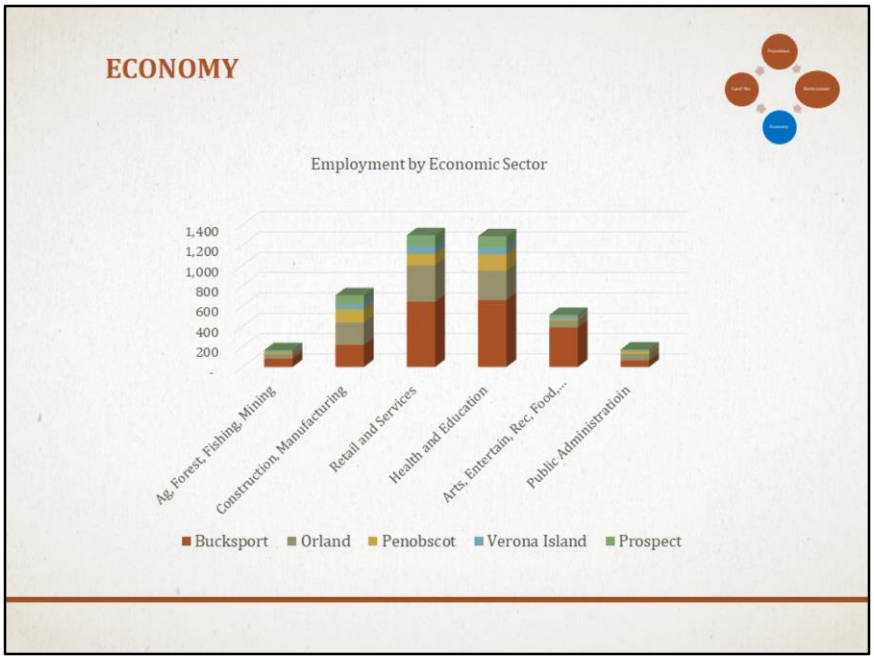
In addition to considerations about property development flood mapping suggests that important transportation corridors may be interrupted by flood events. Identification of these corridors is important for emergency response planning and serving vulnerable populations. The state is encouraging towns to embark on flood resilience planning using a Flood Resilience Checklist to identify policies and programs that would help a town to prevent, manage and recover from flood events.



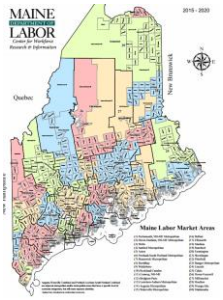
	Bucksport	Orland	Penobscot	Verona Island	Prospect	Total
Population 16 years and over	3,942	1,846	1,133	489	629	8,039
Civilian labor force	2,501	1,200	639	276	440	5,056
Percent in Labor Force	63.4%	65.0%	56.4%	56.4%	70.0%	62.9%
Unemployed	208	34	42	16	49	349
Percent Unemployed	8.3%	2.8%	6.6%	5.8%	11.1%	6.9%

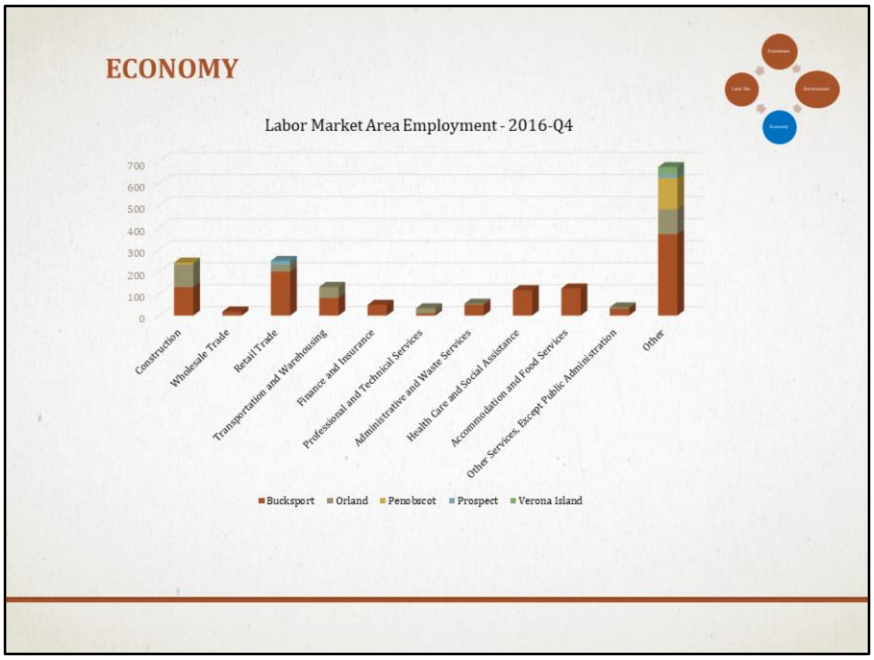
The data presented in this table are taken from the American Community Survey and are and average of five years of survey information. Unemployment rates have fallen in recent quarters and currently are certain to be less than reported over the longer period of time. Hancock County as a whole stood at 3.1% in July, 2017. For this analysis, a longer average may be a more useful measure of the economy.

Closure of the Penobscot Nursing Home and the Verso Paper Mill displaced many workers, contributing to unemployment and perhaps more significantly, some workers leaving the workforce though retirement, disability or being discouraged, or people moving away. Over this period of time unemployment rates varied from 2.8% in Orland to 11.1% in Prospect. Two towns, Penobscot and Verona Island, had significantly lower labor force participation rates, likely to be a combination of retirees and people that have withdrawn from the labor force.

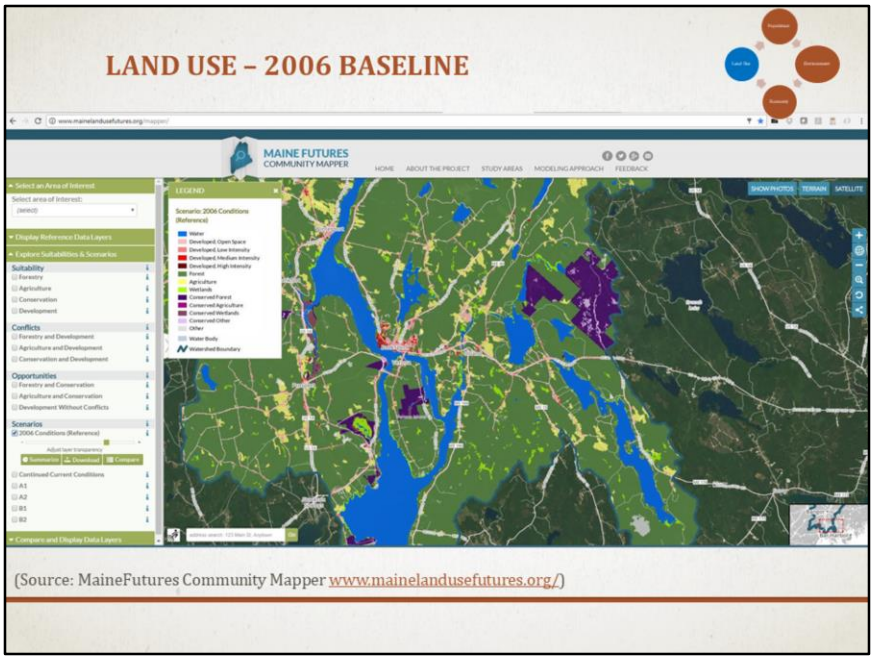


This graph shows employment by place of residence. Many workers in the smaller towns are commuting to Bucksport, Ellsworth, Belfast and Bangor. The data indicate that residents are overwhelmingly employed in Retail, Services, Health and Education. Bucksport has a notably high percentage of persons engaged in Arts, Entertainment, Recreation, Food and Lodging.



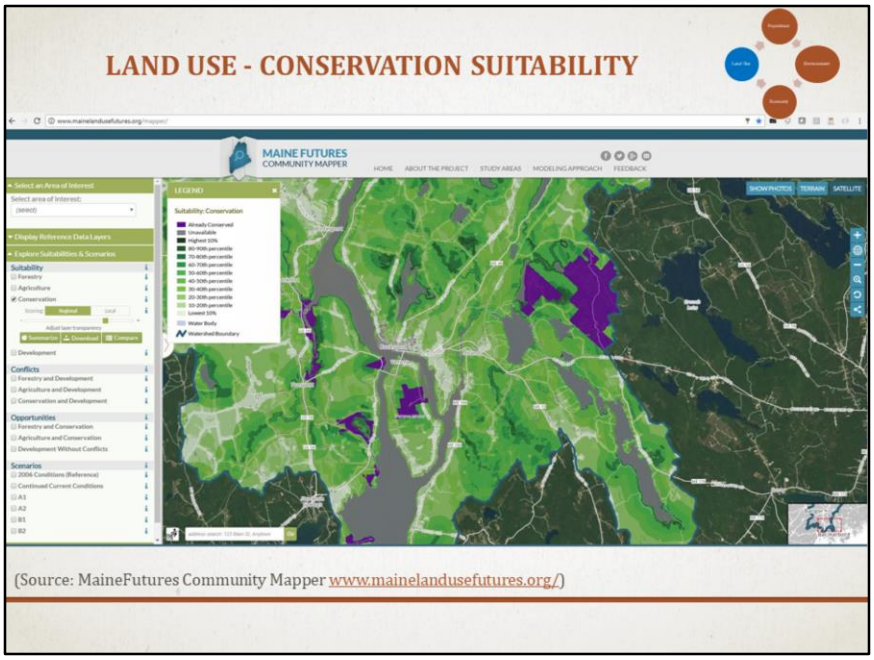


This graph shows employment by place of employment. The level of detail for smaller towns is limited to avoid disclosure of private information, thus the very large percentage of employees assigned to "other". With that, retail trade and construction appear larger than other categories, with transportation and warehousing, health care, accommodations and food service also emerging.

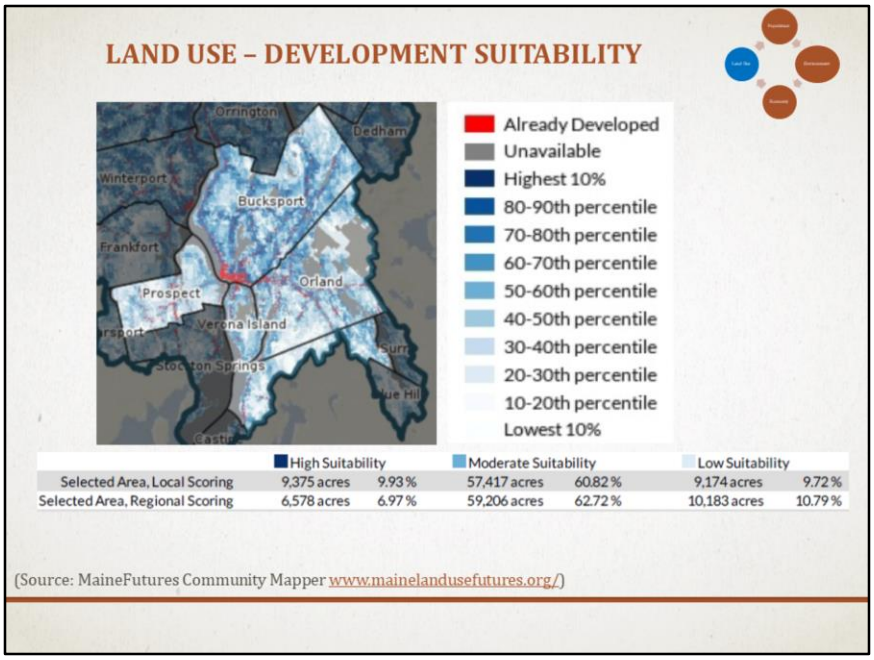


The Maine Futures Community Mapper was created through a collaboration of the University of Maine with multiple partners and funding organizations. The mapper automates an otherwise complex geographic information analysis to identify land that is most suitable for conservation, forestry, agriculture and development. The region of interest in this case consists of the five Bucksport Bay towns. The program creates an 18 page report (www.hcpcme.org/comdev/bbf.)

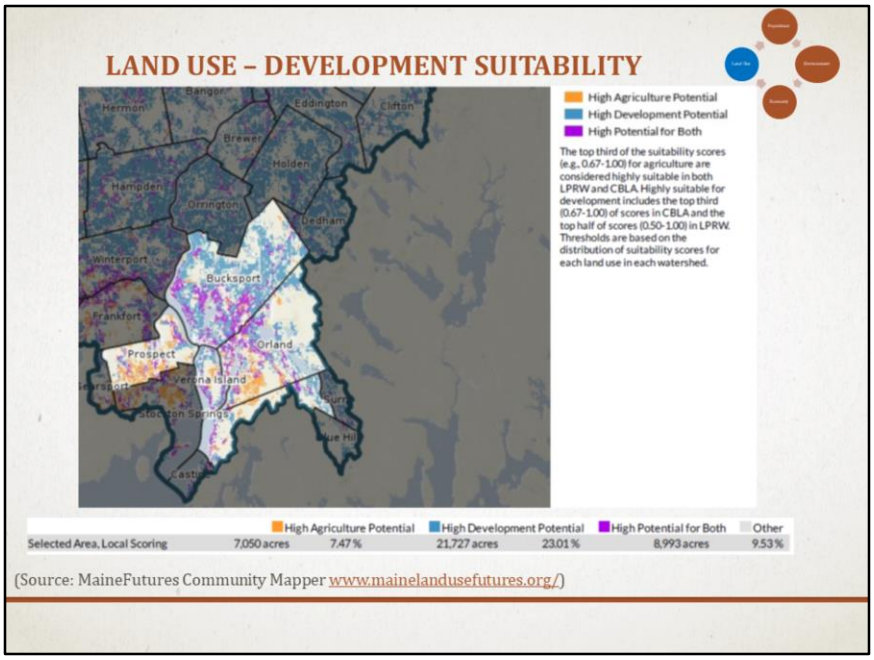
This map indicates baseline land use in 2006, with more than 90% of the land classified as forest or "other". Much of the land classified as other is undeveloped and in some stage of or forest regeneration. Development covers approximately 1% of the area. Identified agriculture occupies approximately 1% as well. Land Cover analysis assigns uses to large areas, thus a rural home is not classified a developed, but rather falls within a larger area classified as agriculture, forest or similar undeveloped categories.



The Maine Futures Community Mapper creates a number of additional maps indicating suitability of land for particular uses. The analysis indicates that approximately 73% of the land is suitable for conservation with the balance being divided between land that is already developed (14%) and land with low suitability (13%).



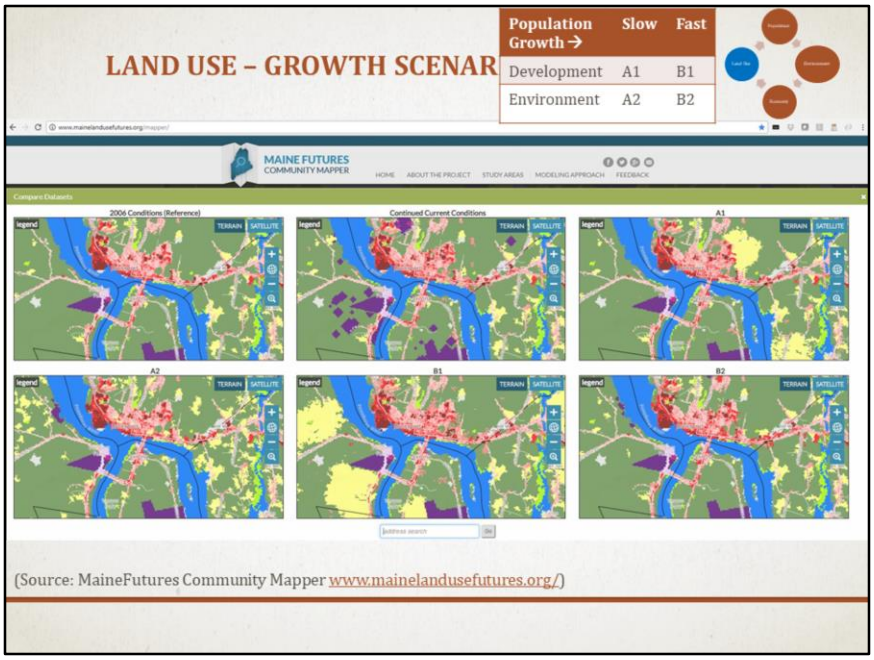
On the other end of the spectrum is land that is suitable for development. This analysis indicates that approximately 10% of the land area in this region is highly suitable for development, but that an additional 61%+ is moderately suitable. There are numerous caveats, to which the analysis turns.



One caveat is that land suitable for development may be equally suitable for other uses. In eastern Maine most land that is suitable for agriculture is also suitable for development. Loss of agricultural land often results as cultivated land moves to a "higher" use. There are approximately 9,000 acres or 9.5% of the land area in this region that are highly suitable for both. The map indicates that much of this land is located in the southern half of Bucksport and the north-western corner of Orland. Proximity to Route 1 or Route 15 is an important factor.

Possible Development Opportunities 2,780 acres (3%)
(Source: MaineFutures Community Mapper www.mainelandusefutures.org/)

After eliminating these potential conflicts between land uses, the amount of conflict-free land that is suitable for development declines to 2,780 acres or 3% of the land area. This would be approximately three times the amount of land currently classified as developed, which other things being equal would accommodate growth for many years. However, the de facto land development process intervenes in numerous ways that do not conform to suitability. One of the clear challenges with this model is that land development is prescribed for areas in Bucksport that are already relatively developed. Other towns have development needs, such as providing services for their populations, that are not addressed in the modelling exercise. Perhaps more importantly, development is an entrepreneurial activity in which individuals find opportunities in unlikely places.



The final product of the Maine Futures Community Mapper is a series of projections of land use under differing conditions. Thumbnail maps presented here are focused on the more developed core of the Bucksport Bay area. The scenarios presented are:

- A1 low population growth and high development priority
- A2 low population growth and high environmental priority
- B1 high population growth and high development priority
- B2 high population growth and high environment priority

The results are not immediately intuitive. Most notably, the high development priority appears to result in more land being devoted to agriculture. The dramatic increase in agricultural land under scenario B1 adds more than 17,000 acres over the current estimate of 1,000 acres.

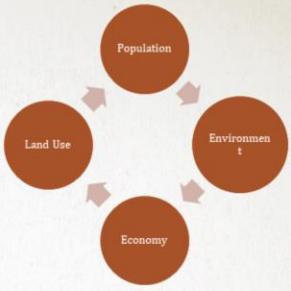
LAND USE

2006 Baseline	2006		2036			
Land Cover	Acres	Percent	Acres	Percent	Change	Percent
Water	10,574	11.2%	10,574	11.2%	0	0.0%
Developed, Open Space	449	0.5%	2,654	2.8%	2,205	2.3%
Developed, Low Intensity	315	0.3%	2,061	2.2%	1,746	1.8%
Developed, Medium Intensity	43	0.0%	463	0.5%	420	0.4%
Developed, High Intensity	3	0.0%	157	0.2%	154	0.2%
Forest	77,465	82.1%	59,809	63.4%	-17,656	-18.7%
Agriculture	845	0.9%	3,732	4.0%	2,887	3.1%
Wetlands	540	0.6%	1,410	1.5%	870	0.9%
Conserved Forest	2,780	2.9%	11,205	11.9%	8,425	8.9%
Conserved Agriculture	6	0.0%	231	0.2%	225	0.2%
Conserved Wetlands	39	0.0%	578	0.6%	539	0.6%
Conserved Other	224	0.2%	411	0.4%	187	0.2%
Other	1,122	1.2%	1,122	1.2%	0	0.0%
Total	94,405	100.0%	94,407	100.0%	2	0.0%

(Source: MaineFutures Community Mapper www.mainelandusefutures.org/)

The default scenario for growth by 2036 using current population projections and current development and conservation policies suggests that the forested area may decline significantly, by $17,656 acres. Forested land is projected to transition to a variety of other uses including developed land, agriculture and conserved forests. At the time the model was created the Verso Mill was still in full operation. The Verso mill created many indirect jobs in retail, service businesses. Some businesses were very hard hit, but most have weathered the shut-down and some have expanded. There have been several other smaller economic shocks to the system, some positive and some negative. New retail establishments have been created, the Penobscot Nursing Home closed, a business incubator has emerged in Orland, sewer capacity increased in Vero Island. Future changes will likely follow a dual track of big investments, such as the AIM redevelopment effort and many smaller, scattered changes.

CONCLUSIONS

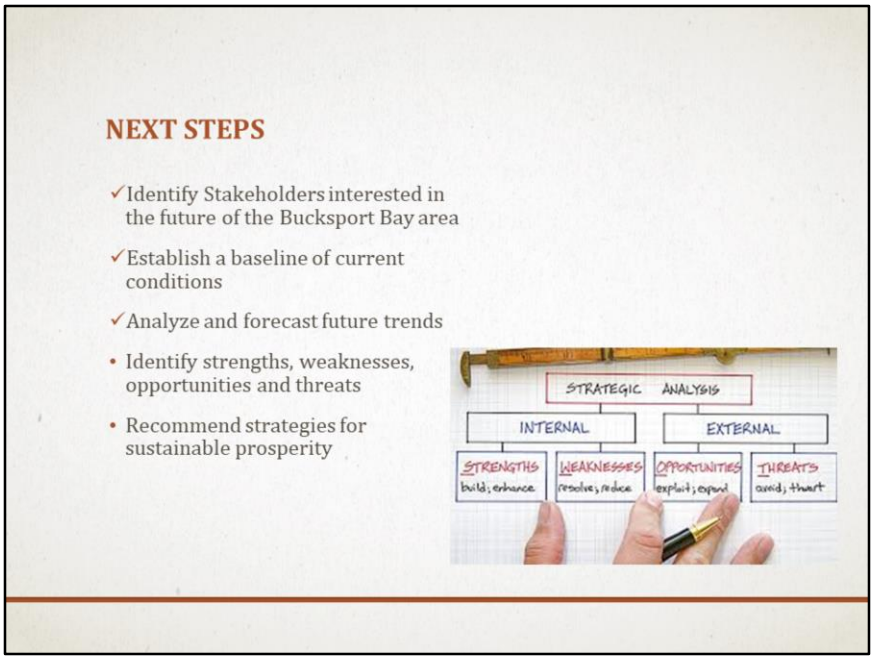


↯ **Population** – Area population is likely to decline over the coming decade due to low birth rates and the rising mortality and out-migration rates.

√ **Environment** – The natural environment of the Bucksport area is improving. Fallow land has returned to forest cover and air quality has improved.

? **Economy –** The region has had several setbacks. Employment losses, lower wages and induced economic losses have been significant, but the region is resilient and has grown in other sectors.

√ **Land Use** – The Bucksport Bay area has a large reserve of good land, abundant fresh water, access to river and rail transportation, additional potential for agriculture, fisheries and forestry. The area is well situated along freight transportation corridors and tourism routes.



This report only scratches the surface of available information about the Bucksport Bay area. Fortunately other organizations are working on local analyses and programs to encourage economic and cultural opportunities.

This process will gain importance when representatives of the five communities contribute to analysis of trends and identify common goals for the future. A meeting to assess regional strengths and weaknesses as well as external opportunities and threats, is a good first step to setting priorities. This process engages participants in a facilitated discussion with everyone contributing their ideas and the group as a whole identifying issues that are most pressing in the short run and most important in the long run. A unified voice from the five towns would carry more weight with private, state and national organizations.