

Pilot Penobscot Housing Fund Feasibility Study

DRAFT REPORT

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Maine Housing Coalition**

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EXECUTIVE SUMMARY

Project Description

The Maine Housing Coalition (MHC) has assembled a core group of public, private, and institutional partners in the Bangor region to explore the potential of establishing the Pilot Penobscot Housing Fund. The stated mission of the fund is to “accelerate the addition of new workforce housing units within the county across the income spectrum, by providing funding.” MHC retained ConsultEcon to conduct this feasibility study to provide market and economic analysis and direction to the housing fund initiative. The report is aimed at providing a broad view of the regional housing situation to help local and regional policymakers understand key issues and to guide the creation of the housing fund.

Housing Market Summary

The Bangor Labor Market Area (LMA) has experienced modest employment growth over the past decade, led by jobs in the professional services and healthcare sectors. Employment is expected to continue to increase over the next five years, with growth in these sectors as well as in the leisure & hospitality sector. While the region’s population has not been growing, its average household size has been declining due in part to the aging of its resident base. The COVID-19 pandemic resulted in a reduction of the region’s labor force and historically low unemployment rates, which is forcing employers to bring new workers into the region. The region has also seen growth in the number of seasonally occupied units. The combination of these factors is driving increased housing demand.

The characteristics of homeowners and renters in the region are very different. Homeowners tend to be older, more affluent, and less likely to move, while renters are generally young, lower income, and more mobile. The for-sale market has experienced rapid price growth over the past decade and available homes are difficult to find at lower price points. The rental market is very tight, with low vacancy and rising rental rates. The pace of housing development has not been keeping up with demand, and there is a limited pipeline of planned future housing developments in the region.

Barriers to Housing Production Summary

The Bangor region faces a similar acute housing shortage to other markets around the United States. The ability to produce enough housing to meet demand is challenged by a variety of factors, including:

- ◆ **Economic and financial factors:** high land costs, construction costs, interest rates, and home prices; limited availability of sites; vacant and substandard units, lack of federal and state funding for new housing.
- ◆ **Regulatory and policy factors:** local zoning and land use restrictions, building codes, underfunded tax credit and voucher programs, local resistance to new development.

- ◆ **Cultural and societal factors:** reluctance of homeowners to sell units, supply chain issues, desire for more space driven by the pandemic.

Housing Demand and Investment Gap Summary

Demand for new housing in the Bangor region is expected to originate from job creation and older residents moving to the region for lifestyle purposes. Over the next five years, demand for additional housing in the region is projected to average 306 units per year, and the region's current development pipeline of 344 units will only meet 14 months of demand. Future housing demand is expected to be 62 percent for ownership units and 38 percent for rental units. About 59 percent of projected housing demand will be for units affordable to households earning less than the expected average income of \$66,000. Under expected economic conditions, typical ownership units priced below \$300,000 and typical rental units priced below \$1,500 per month are not feasible without subsidies. The total housing investment gap in the region over the next five years is estimated to be a minimum of \$26.2 million, or \$5.2 million per year.

Summary of Recommendations for Housing Fund

The Pilot Penobscot Housing Fund should align its investments with both market needs and the broader planning and development goals of the state, region, and municipalities. Funding should focus on rental housing targeted at households earning between 60 and 100 percent of Area Median Income (AMI) and ownership housing should target up to 120 percent of AMI. Projects that align with the goals of LD2003, Maine's new statewide affordable housing law, should be prioritized. The fund should also prioritize rehabilitation/redevelopment projects and projects that provide housing for the active senior population. The fund will be able to maximize its impact by providing early stage, below-market debt for land acquisition, infrastructure, demolition, site preparation, and pre-development costs.

Section I

INTRODUCTION AND ASSUMPTIONS

The Maine Housing Coalition (MHC) has assembled a core group of public, private, and institutional partners in the Bangor region to explore the potential of establishing the Pilot Penobscot Housing Fund. The stated mission of the fund is to “accelerate the addition of new workforce housing units within the county across the income spectrum, by providing funding.” Before proceeding, MHC and its partners first are conducting this feasibility study to provide market and economic analysis and direction to the housing fund initiative. The report is aimed at providing a broad view of the regional housing situation to help local and regional policymakers understand key issues and to guide the creation of the housing fund. Additional tables showing background data and calculations are presented in **Appendix A**.

In preparing this report, the following assumptions were made. This study is qualified in its entirety by these assumptions.

1. Every reasonable effort has been made in order that the data contained in this study reflect the most accurate and timely information possible and it is believed to be reliable. This study is based on estimates, assumptions and other information developed by ConsultEcon, Inc. from its independent research efforts, general knowledge of the industry, and consultations with the client. No responsibility is assumed for inaccuracies in reporting by the client, its agents and representatives, or any other data source used in the preparation of this study. No warranty or representation is made that any of the projected values or results contained in this study will actually be achieved. There will usually be differences between forecasted or projected results and actual results because events and circumstances usually do not occur as expected. Other factors not considered in the study may influence actual results.
2. Possession of this report does not carry with it the right of publication. This report will be presented to third parties in its entirety and no abstracting of the report will be made without first obtaining permission of ConsultEcon, Inc., which consent will not be unreasonably withheld.
3. This report may not be used for any purpose other than that for which it was prepared. Neither all nor any part of the contents of this study shall be disseminated to the public through advertising media, news media or any other public means of communication without the prior consent of ConsultEcon, Inc.

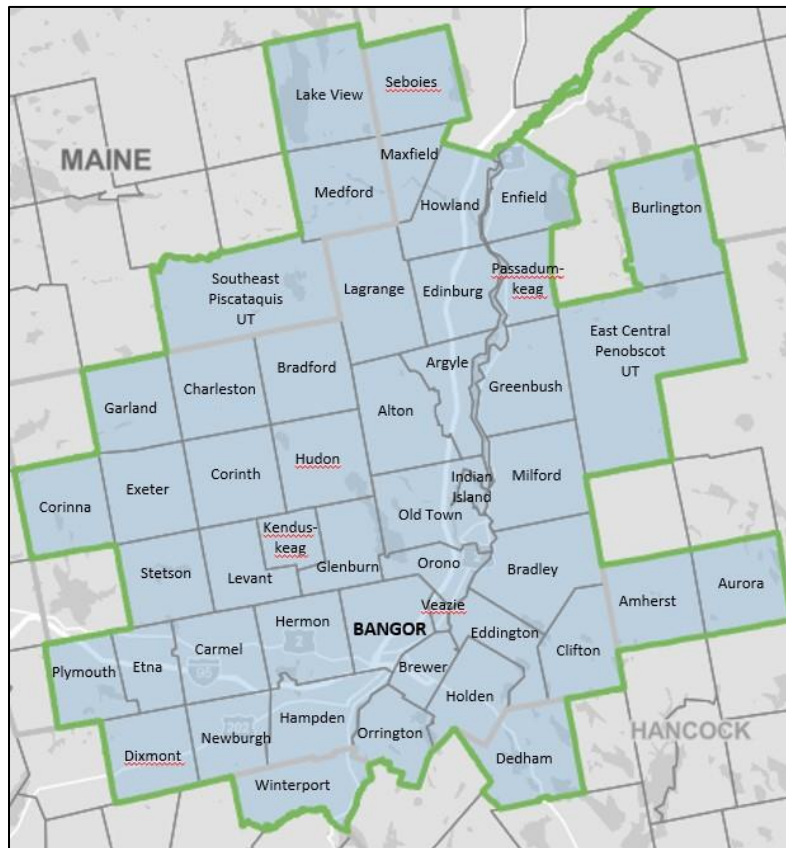
4. Qualitative information related to the Bangor area economy, housing market, and regulatory environment was obtained via confidential interviews with local professionals. The list of interviewees was provided by the steering committee of the Pilot Penobscot Housing Fund, and included developers, brokers, property managers, local government officials, and major employers. These interviews were conducted via videoconference or telephone in September and October 2022. All information and insight collected from these interviews is assumed to be accurate and reliable.
5. This report was prepared during August through November 2022. It represents data available at that time.

Section II

EVALUATION OF HOUSING MARKET CONDITIONS

This section presents an overview of the economy, demographics, and housing market of the Bangor region. For the purposes of this analysis, the region is defined as the Bangor Labor Market Area (LMA), which is defined by the Maine Department of Labor, using information from the U.S. Census Bureau. The boundaries of the Bangor LMA are shown in **Figure II-1**. The LMA includes most of southern Penobscot County, along with a few towns in the adjacent counties of Hancock, Piscataquis, and Waldo. The LMA excludes northern Penobscot County, which is mostly divided between the Millinocket and Lincoln LMAs.

Figure II-1
Bangor Labor Market Area Map



Source: US Bureau of the Census

Economic Overview

This analysis of the regional economy combines the 19 major industry groups as defined by the Bureau of Labor Statistics¹ into five employment categories that each generally reflect different types of demand for housing. The categories and their related major industry groups are as follows:

- ◆ **Manufacturing/Industrial:** Agriculture/Forestry/Fishing/Hunting, Construction, Manufacturing, Other Services
- ◆ **Trade/Transportation/Utilities:** Utilities, Wholesale Trade, Retail Trade, Transportation and Warehousing
- ◆ **Leisure & Hospitality:** Arts/Entertainment/Recreation, Accommodation and Food Services
- ◆ **Office-Using Sectors:** Information, Finance and Insurance, Real Estate and Rental and Leasing, Professional and Technical Services, Management of Companies and Enterprises, and Administrative and Waste Services
- ◆ **Health/Education/Government:** Health Care and Social Assistance, Educational Services, and Public Administration

Data on trends by employment category are presented in **Table II-1** covering the years from 2011 to 2021. Over this 10-year period, the region’s employment base increased by about 1,300 jobs, representing a 2.1 percent gain. Job growth was led by Office-Using Sectors, which saw a 13 percent increase and a net gain of 1,200 jobs. The Manufacturing/Industrial and Health/Education/Government categories also added jobs. However, these gains were dampened by job losses in the Trade/Transportation/Utilities and Leisure & Hospitality category.

¹ These are defined as the 2-digit industries under the North American Industrial Classification System (NAICS); information about this system can be found here: <https://www.bls.gov/bls/naics.htm>.

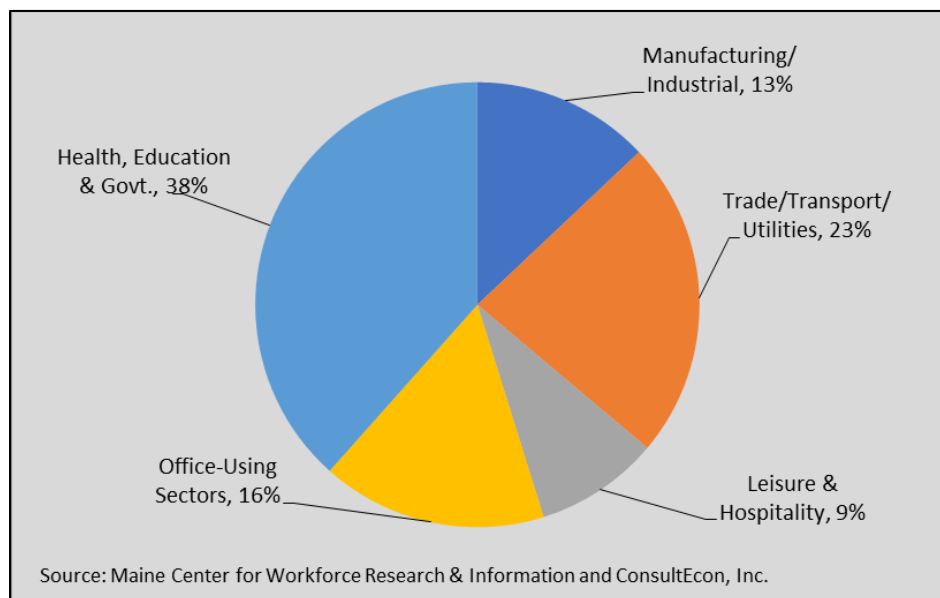
Table II-1
Employment Trends in Bangor Labor Market Area

	2011	2016	2021	Change	% Chg	Avg Wage 2021
Manufacturing/Industrial	7,624	7,879	8,148	524	6.9%	\$52,424
Trade/Transportation/Utilities	15,427	14,985	14,540	(887)	-5.7%	\$43,777
Leisure & Hospitality	5,829	6,687	5,683	(146)	-2.5%	\$23,226
Office-Using Sectors	9,114	9,892	10,301	1,187	13.0%	\$59,150
Health, Education & Government	23,511	24,275	24,128	617	2.6%	\$57,453
Total Employment	61,505	63,718	62,800	1,295	2.1%	\$50,815

Source: Maine Center for Workforce Research and Information; ConsultEcon, Inc.

Data in **Figure II-2** display the current distribution of jobs in the Bangor LMA among the major employment categories as of 2021. The region’s employment base is dominated by the Health Care/Education Government and Trade/Transportation Utilities categories – these two groups account for 61% of jobs in the Labor Market Area. Despite recent growth, Office-Using Sectors only represent 16 percent of regional employment and Manufacturing/Industrial only accounts for 13 percent of jobs.

Figure II-2
Bangor LMA Employment Profile, 2021



The roster of major employers in the Bangor region² matches up well with the distribution of employment, as shown in **Table II-2**. Five of the ten largest employers in the region are related to healthcare, led by Eastern Maine Medical Center, which is by far the largest employer in the region with more than 4,000 employees. This list also includes Northern Light Health, St. Joseph Hospital, Penobscot Community Health Care, and Acadia Hospital. Education is also a major employment sector: the University of Maine employs about 2,500 workers in the region and Husson University also employs more than 500. The only major office employer in the Bangor region is Bangor Savings Bank, and the other major employers are large retailers such as Hannaford and Walmart.

Table II-2
Major Employers in the Bangor Region

No.	Employer	Employees
1.	Northern Light Eastern Maine Medical Center	4,001 to 4,500
2.	Northern Light Health	1,001 to 1,500
3.	Hannaford Bros Co.	1,001 to 1,500
4.	St. Joseph Hospital	1,001 to 1,500
5.	Walmart/Sam's Club	501 to 1,000
6.	Penobscot Community Health Care	501 to 1,000
7.	Husson University	501 to 1,000
8.	Acadia Hospital	501 to 1,000
9.	Bangor Savings Bank	501 to 1,000
10.	Penquis C.A.P., Inc.	1 to 500
11.	General Electric Co.	1 to 500
12.	Wayfair Maine	1 to 500
13.	Hollywood Casino	1 to 500
14.	UPS Solutions	1 to 500
15.	Darlings	1 to 500
16.	Dysarts Service Inc.	1 to 500
17.	Sargent Corporation	1 to 500
18.	OHI	1 to 500
19.	Community Health and Counseling Services	1 to 500
20.	Global Spectrum LP	1 to 500
21.	Lowe's Home Centers LLC	1 to 500
22.	Versant Power	1 to 500
23.	Manpower	1 to 500
24.	Affiliated Laboratory Inc.	1 to 500

Source: Bangor Region Chamber of Commerce

² This information is provided by the Bangor Region Chamber of Commerce.

Employment Projections

Employment projections by category in the Bangor LMA are presented in **Table II-3**. These forecasts are derived from statewide employment by industry forecasts³ and assume that the Bangor LMA will maintain its 2022 share of each category through 2027. From 2022 to 2027, the region is projected to add a total of 900 additional jobs. Growth will be uneven, with net gains of 1,900 jobs in Office-Using Sectors, Health/Education/Government, and Leisure/Hospitality dampened by losses of 1,000 jobs in Manufacturing/Industrial and Trade/Transportation/Utilities.

Table II-3
Employment Forecasts by Category, 2022 to 2027
Bangor Labor Market Area

State of Maine Forecasts ^{1/}	Actual		Estimate	Forecast	Change		
	2020	2021	2022	2027	2020-2022	2020-2027	2022-2027
Industry Group							
Manufacturing/Industrial	103,100	107,500	109,500	107,800	6,400	4,700	(1,700)
Trade/Transportation/Utilities	111,700	117,700	117,200	109,700	5,500	(2,000)	(7,500)
Leisure & Hospitality	51,800	59,500	63,400	73,000	11,600	21,200	9,600
Office-Using Sectors	107,000	110,000	113,600	117,100	6,600	10,100	3,500
Health, Education & Government	222,600	223,400	225,600	231,900	3,000	9,300	6,300
Total	596,200	618,100	629,300	639,500	33,100	43,300	10,200
	Employment Comparison				Bangor Region Employment Forecast		
	State of Maine	Bangor Region	Bangor Region	Bangor Region	Estimate	Forecast	Change
Bangor Region Employment Profile	2021	2021 ^{2/}	Share	Avg Wage 2021 ^{3/}	2022 ^{4/}	2027 ^{4/}	2022-2027
Industry Group							
Manufacturing/Industrial	107,500	8,148	7.6%	\$52,400	8,300	8,200	(100)
Trade/Transportation/Utilities	117,700	14,540	12.4%	\$43,800	14,500	13,600	(900)
Leisure & Hospitality	59,500	5,683	9.6%	\$23,200	6,100	7,000	900
Office-Using Sectors	110,000	10,301	9.4%	\$59,100	10,600	11,000	400
Health, Education & Government	223,400	24,128	10.8%	\$57,500	24,400	25,000	600
Total	618,100	62,800	10.2%	\$50,800	63,900	64,800	900

1/ State forecasts are adapted from a February 2022 report by the Maine Consensus Economic Forecasting Commission:

2/ Bangor MSA employment by industry is from 2021 Quarterly Census of Employment and Wages from the Bureau of Labor Statistics

3/ Rounded to nearest \$1,000

4/ Assumes Bangor MSA share of State of Maine employment remains the same in 2022 and 2027 as in 2021.

Source: ConsultEcon, Inc.

³ Maine Consensus Economic Forecasting Commission, February 2022 report.

Demographic Overview

This section profiles trends in Bangor region’s population, households, and workforce.

Population and Household Trends

Data comparing population and household trends for the Bangor region, State of Maine, and United States are presented in **Table II-4**. The Bangor region’s population decreased slightly from 2010 to 2022 and is expected to remain flat through 2027. This compares unfavorably with the State of Maine, which experienced modest population growth from 2010 to 2022 and is projected to increase its population by 0.9 percent through 2027, which is close to the projected national growth rate of 1.2 percent.

Household growth is expected to outpace population growth for all of these areas – this is a function of declining household sizes. The Bangor region, despite having no projected population growth, is expected to add more than 300 households through 2027, a growth rate of 0.5 percent. While well below the expected statewide (1.4 percent) and national (1.6 percent) household growth rates, this still represents a positive outlook.

Table II-4
Population and Household Trends

Population	Bangor Region	State of Maine	United States
Population 2010	153,923	1,362,359	331,449,281
Population 2022	152,177	1,370,382	335,707,897
Population 2027	152,123	1,382,353	339,902,796
Numerical Change, 2022-2027	-54	11,971	4,194,899
Percent Change 2022-2027	0.0%	0.9%	1.2%
Households			
Households 2010	62,966	582,437	126,817,580
Households 2022	64,458	587,939	128,657,669
Households 2027	64,775	596,387	130,651,872
Numerical Change, 2022-2027	317	8,448	1,994,203
Percent Change 2022-2027	0.5%	1.4%	1.6%

Source: U.S. Census Bureau, Census 2010 Data; ESRI forecasts for 2022 and 2027; and ConsultEcon, Inc.

Age of Population

Data on the age profile of the Bangor region’s population are displayed in **Table II-5**. The region’s population has been aging, and this trend is expected to continue over the next five years. The median age in the region already increased from 39.9 in 2010 to 42.3 in 2022 and is projected to increase of 43.3 by 2027. This shift is being driven by a rapid increase in the region’s 65+ year old population. From 2010 to 2022, this age group added more than 8,000 people, while the rest of the region’s population decreased by nearly 10,000.

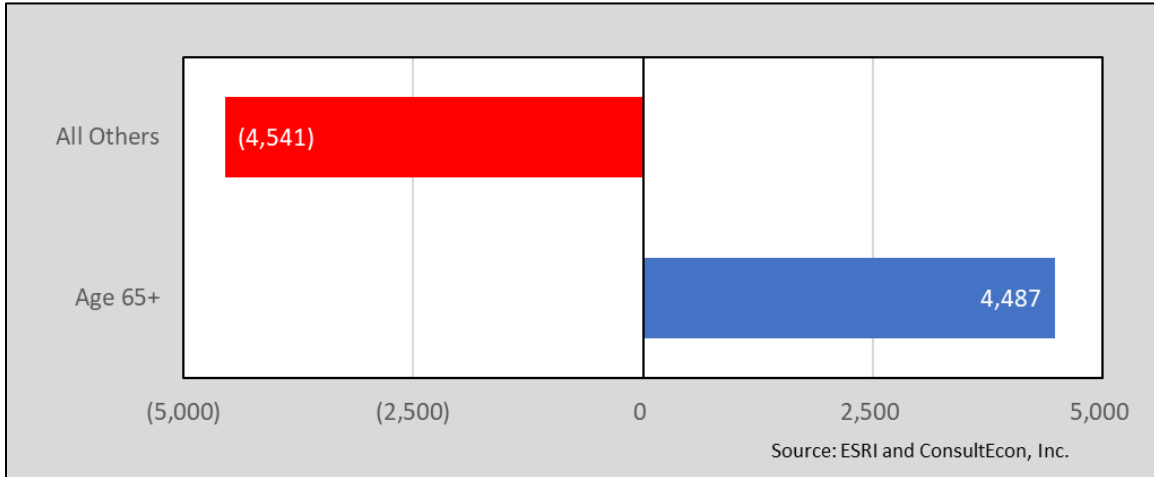
Although the region is not expected to add population from 2022 to 2027, the shift towards an older age profile is expected to continue. From 2022 to 2027, the region’s 65+ year old population is projected to increase by about 4,500 while the rest of its population declines by a nearly identical amount, as shown in **Figure II-3**. As a result of this shift, the 65+ year old share of the region population, which has already increased from 15 percent in 2010 to 20 percent in 2022, is expected to reach 23 percent by 2027. The continued aging of the region’s population will drive demand for housing that serves older residents and households.

Table II-5
Bangor Region Age Profile Trends and Projections

Market Area	Median Age	0 to 17	18 to 24	25 to 34	35 to 54	55 to 64	65+	Total
Bangor Region, 2010	39.9	31,886	18,791	17,631	43,066	20,296	22,253	153,923
Bangor Region, 2022	42.3	27,601	15,053	20,410	36,091	22,757	30,265	152,177
Bangor Region, 2027	43.3	27,272	14,820	17,837	36,827	20,615	34,752	152,123
Change								
2010-2022 Actual		(4,286)	(3,737)	2,779	(6,975)	2,461	8,012	(1,746)
2022-2027 Projected		(329)	(233)	(2,573)	736	(2,142)	4,487	(54)
Annual % Change								
2010-2022 Actual		-1.2%	-1.8%	1.2%	-1.5%	1.0%	2.6%	-0.1%
2022-2027 Projected		-0.2%	-0.3%	-2.7%	0.4%	-2.0%	2.8%	0.0%

Source: ESRI and ConsultEcon, Inc.

Figure II-3
Projected Population Change 2022 to 2027
Age 65+ and All Other Age Groups



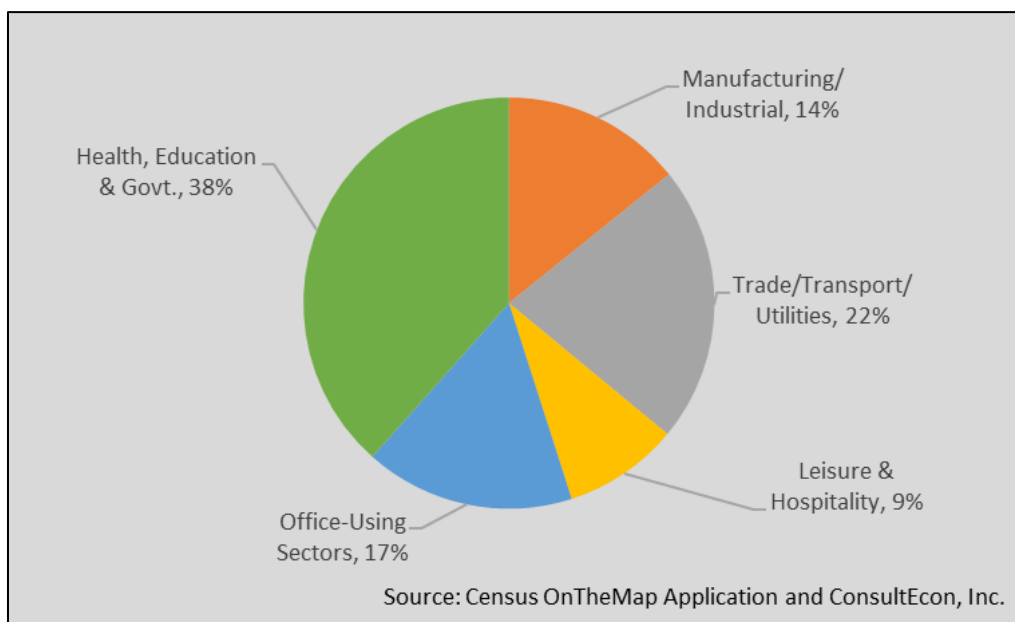
Local Labor Force and Unemployment

The availability of labor in the Bangor region has been deeply affected by the COVID-19 pandemic. As shown in **Figure II-4**, the regional unemployment rate has returned to its pre-pandemic level and was at 2.7 percent as of July 2022. However, as shown in **Figure II-5**, the region’s labor force has not rebounded because many workers left the labor force during the pandemic and have not returned. As of July 2022, there were 68,800 people in the regional labor force, down 3.1 percent from the July 2019 (pre-pandemic) level of 71,000. Assuming that many former members of the workforce still live in the region, new workers will be needed to fill new jobs, driving increased housing demand.

Job Sectors of Resident Labor Force

A profile of the employment sector of the Bangor LMA’s resident labor force is shown in **Figure II-6**. This profile matches the composition of at-place employment in the region (see **Figure II-2**), as would be expected given the large share of local workers who also live in the region (see Commuting patterns below).

Figure II-6
Employment Sector of Bangor LMA Resident Workforce, 2019

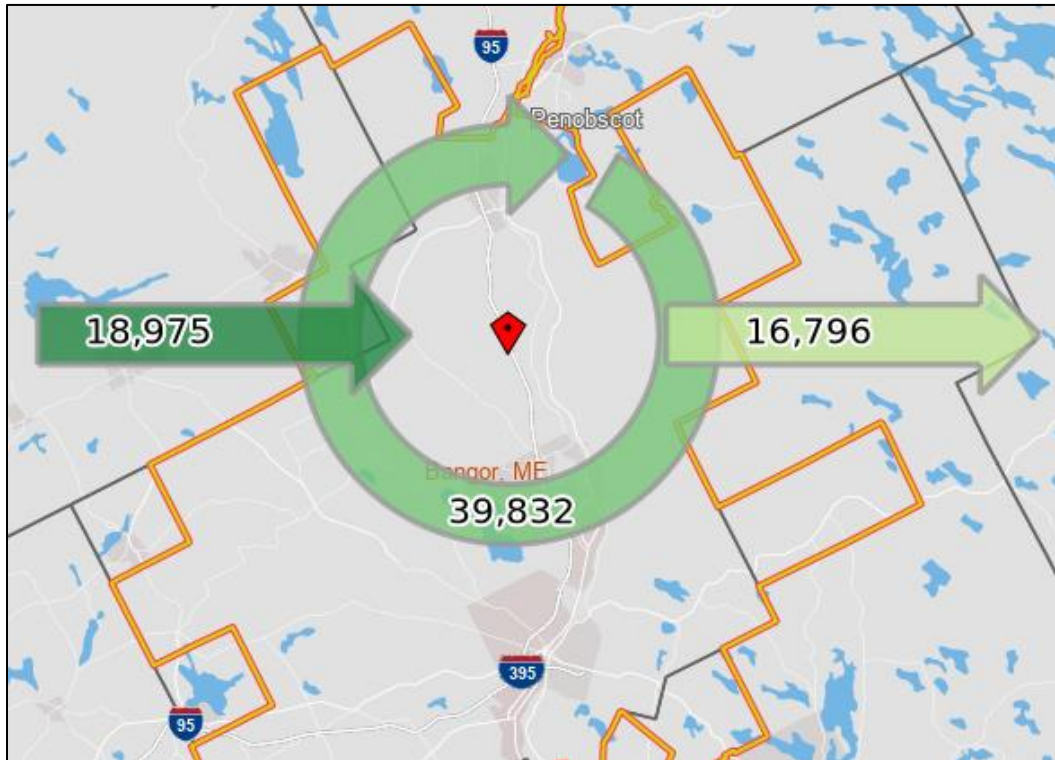


Commuting Patterns

An illustration of commuting patterns in the Bangor LMA is shown in **Figure II-7**. Among the 59,000 jobs in the region⁴, about 40,000 were filled by workers who also lived within the region, representing 67 percent of workers, with the remaining 33 percent commuting from outside the region. Among the Bangor LMA’s resident workforce, 70 percent also worked in the region and 30 percent commuted to jobs elsewhere. Most of these out-commuters work in either the Ellsworth or Waterville-Augusta regions, though about five percent commute are “supercommuters” who work in the Portland area.

⁴ Defined as Primary Jobs, as reported in the Census OnTheMap application, which uses data from the Longitudinal Employer-Household Dynamics (LEHD) database.

Figure II-7
Commuter Inflow/Outflow in Bangor LMA, 2019



Source: Census OnTheMap application

Profile of Households and Housing Units

This section describes trends and forecasts related to the households and housing stock in the Bangor region.

Household Size and Tenure

Data on household trends and projections are shown in **Table II-6**. The average household size in the Bangor region already declined from 2.33 people per household in 2010 to 2.25 in 2022 and is projected to decline further to 2.25 by 2027. This decline in household size explains why the region has continued to add households while losing population. This decline in household size has occurred despite an increase in the share of households that own their homes. The share of owner occupants in the region actually increased from 68.3 percent in 2010 to 70.5 percent in 2022 and is projected to increase to 71.7 percent by 2027.

Table II-6
Bangor Region Household Trends and Projections, 2010 to 2027

Population & Households	2010	2022	2027	2022-2027 Change	2022-2027 % Change
Population	153,923	152,177	152,123	(54)	-0.04%
Households	62,966	64,458	64,775	317	0.49%
Average Household Size	2.33	2.26	2.25	(0)	-0.44%
Owner Occupied Housing Units	42,981	45,418	46,476	1,058	2.33%
<i>Percent Owner Occupied</i>	<i>68.3%</i>	<i>70.5%</i>	<i>71.7%</i>		
Renter Occupied Housing Units	19,985	19,040	18,299	(741)	-3.89%
<i>Percent Renter Occupied</i>	<i>31.7%</i>	<i>29.5%</i>	<i>28.3%</i>		

Source: ESRI and ConsultEcon, Inc.

Household income by tenure

Income data by housing tenure (owners vs. renters) are presented in **Table II-7**. The overall median household income in the Bangor region as of 2021 was \$56,250. The income profiles of owners and renters are very different, though. The median household income for homeowner households in the region was \$74,200, which was 32 percent above the overall median, and more than 2.5 times above the median renter household income of \$30,090. More than half of households in the region earning below \$50,000 per year were renters. Conversely, 92 percent of households earning above \$75,000 per year were homeowners.

Table II-7
Household Income by Tenure in Bangor Region, 2021

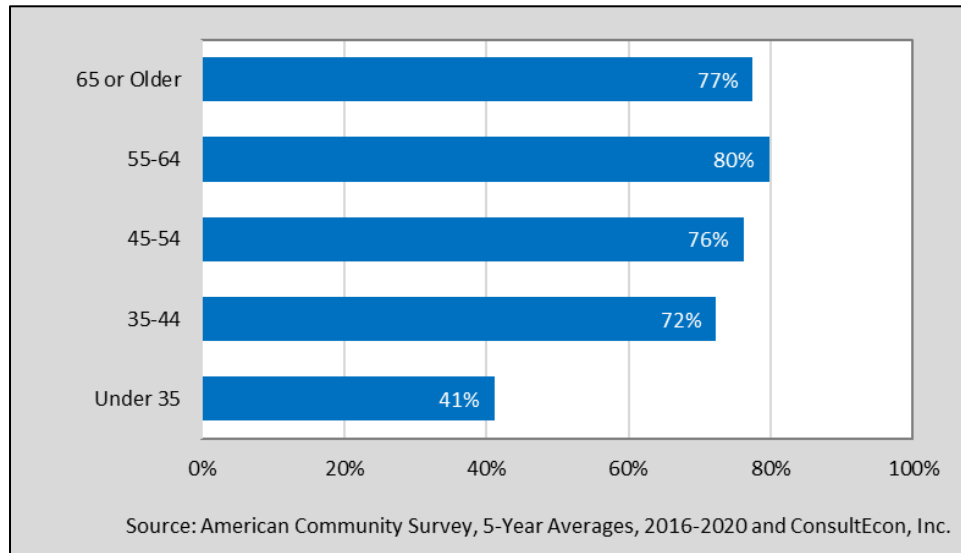
	All Households		Owner Occupied ^{1/}			Renter Occupied ^{1/}		
	Units	Percent to Total	Count	Percent to Total	Share	Count	Percent to Total	Share
Total Occupied Housing Units	65,441	100.0%	45,777	100.0%	70.0%	19,664	100.0%	30.0%
Household Income, 2021								
Less than \$25,000	15,080	23.0%	6,952	15.2%	46.1%	8,128	41.3%	53.9%
\$25,000 to \$34,999	6,425	9.8%	3,223	7.0%	50.2%	3,202	16.3%	49.8%
\$35,000 to \$49,999	7,582	11.6%	4,921	10.7%	64.9%	2,661	13.5%	35.1%
\$50,000 to \$74,999	11,685	17.9%	8,032	17.5%	68.7%	3,653	18.6%	31.3%
\$75,000 to \$99,999	7,741	11.8%	6,460	14.1%	83.5%	1,281	6.5%	16.5%
\$100,000 or more	16,928	25.9%	16,189	35.4%	95.6%	739	3.8%	4.4%
Median Household Income (Dollars)	\$56,250		\$74,200			\$30,090		

^{1/} Top line shows shares of owner and renter occupied housing as shares of all occupied units. Other lines show shares by income category of owner and renter occupied housing.
Source: American Community Survey (2021 1-Year Estimates) and ConsultEcon, Inc.

Tenure by Age of Householder

As shown in **Figure II-8**, tenure patterns in the Bangor region also vary greatly depending on the age of householders. Homeownership rates are highest among older working-age residents, as 80 percent of householders aged 55 to 64 own their homes. Rates are lowest among younger householders: just 41 percent of those under 35 are homeowners. The homeownership rate declines among older householders, though, as 77 percent of those aged 65 or older own their homes.

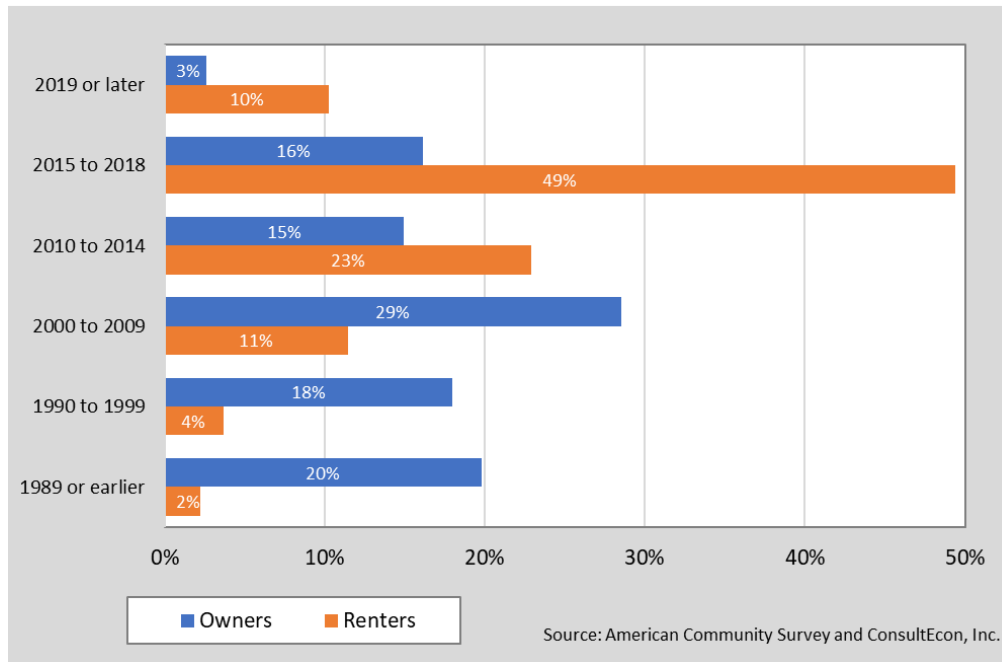
Figure II-8
Homeownership Rate by Age of Householder, 2016-2020 Five-Year Averages



Household Turnover by Tenure

Data in **Figure II-9** show the year that current householders as of 2020 moved into their homes by tenure type. Housing turnover is far higher among renter households: 59 percent had been in their units for less than 5 years, while just 6 percent had lived in their homes for 20 or more years. Among homeowners, just 19 percent had moved in the past five years, while 38 percent had been in same house for at least 20 years and 20 percent had not moved in at least 30 years.

Figure II-9
Year Householder Moved In, Bangor Region, 2020



Housing Inventory and Vacancy

Trends in the housing inventory and vacancy status⁵ in the Bangor region are shown in **Table II-8**. From 2010, the total housing inventory in the Bangor region increased by 2,228 units, an average of 222 per year. During the same period, the number of units reported as occupied only increased by 107, while the number reported as vacancy increased by 2,121, representing a 20 percent increase in reported vacancy. However, most units reported as vacant are not truly vacant – instead they are listed for sale or rent, under renovation, between residents, or occupied for seasonal or occasional use. The number of units reported as “Other Vacant” represents the actual count of vacant units; this figure did increase significantly from 2010 to 2020, nearly doubling from 1,986 to 3,618 units. Despite this increase, the share of units in the region that are considered to be actually vacant is still relatively low, at 4.8 percent as of 2020.

⁵ Occupancy and vacancy data are from the 2020 American Community Survey, using 5-year estimates for the period covering 2016-2020.

The presence of seasonal units has a strong effect on the housing market in Maine. Although Bangor’s housing market is not as seasonal as the state’s coastal, lake, or mountain areas, there are still many units that are only used for part of the year. The number of units only occupied for seasonal or occasional use in the region increased from 6,200 in 2010 to close to 6,700 in 2020. This gain in demand for seasonal use limits the availability of housing by removing units from the stock that is able to be purchased or rented by households seeking to live in the area.

Table II-8
Housing Inventory and Vacancy Status in Bangor Region, 2010 to 2020

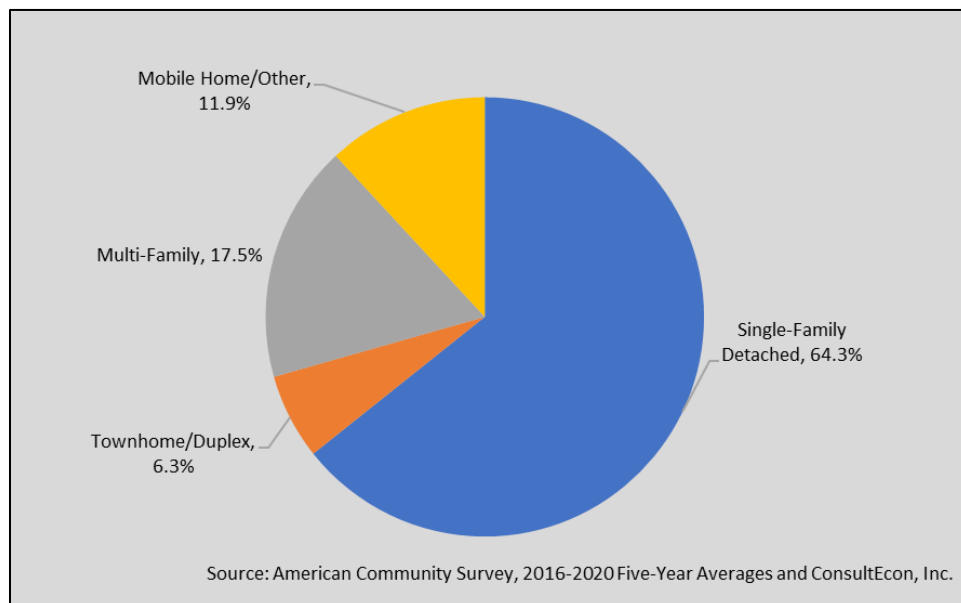
	2010	2020	Number Change	Percent Change
Total Housing Units	73,860	76,088	2,228	2.9%
Occupied Housing Units	62,966	63,073	107	0.2%
Total Vacant Housing Units	10,894	13,015	2,121	19.5%
Vacancy Status				
For Sale or Rent	2,431	2,102	(329)	-13.5%
Sold or Rented, not occupied	277	621	344	124.2%
Seasonal/occasional	6,200	6,674	474	7.6%
Other Vacant (Real Vacancy)	1,986	3,618	1,632	82.2%
Vacancy Rates				
Total Vacant	14.7%	17.1%		
Seasonal/occasional	8.4%	8.8%		
Real Vacancy	2.7%	4.8%		

Source: American Community Survey and ConsultEcon, Inc.

Units in Structure

A profile of the housing inventory by the number of units in structure for the Bangor region is shown in **Figure II-10**. As of 2020, an estimated 83 percent of housing units in the region are in structures with 1 or 2 units and only 17 percent are in multi-family structures with 3 or more units. Since more than 30 percent of the region’s households are renters, a significant percentage of renters live in houses, mobile homes, or duplexes rather than apartments. Single-family detached units account for most of the region’s housing stock (64 percent), though mobile homes also comprise a significant share (12 percent).

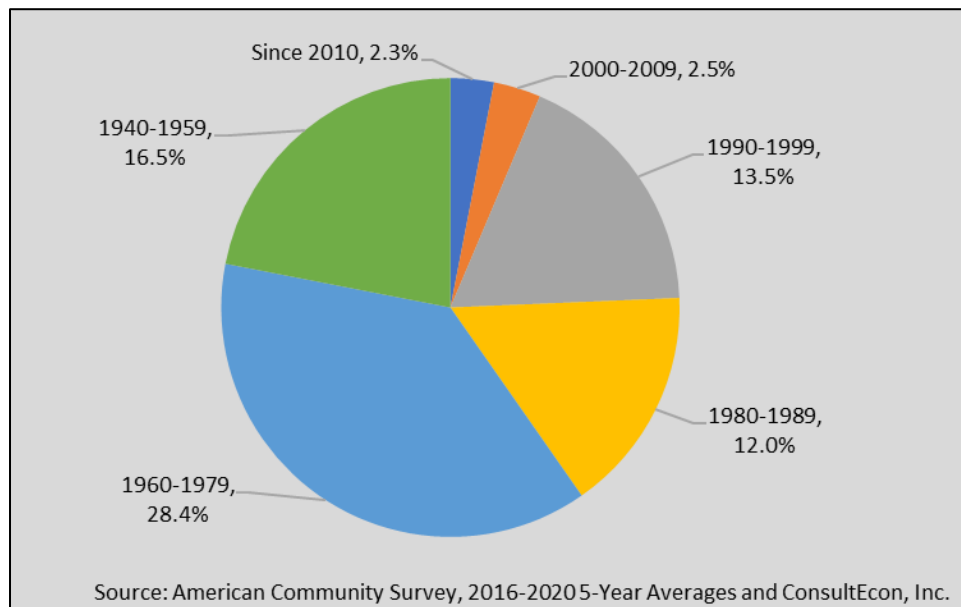
Figure II-10
Units in Structure, Bangor Region, 2016 to 2020 Five-Year Averages



Year Structure Built

Data on the year that residential structures in the region were built are presented in **Figure II-11**. This information shows that the rate of housing construction in the region has slowed considerably since 2010. Less than 5 percent of units in existence as of 2020 had been built since 2010. By comparison, more than 12 percent of the existing stock was built in each of the three preceding decades (80s, 90s, and 00s). More than half of the region’s existing stock was built before 1980 and is now more than 40 years old, and 33 percent of the stock was built prior to 1960. Many of these older units are now functionally obsolete and/or may need significant upgrades to remain habitable in the future.

Figure II-11
Year Structure Built, Bangor Region, 2016 to 2020 Five-Year Averages



Geographic Mobility

Information on the place of residence one year prior for current Bangor region residents as of 2020 is shown in **Figure II-12**. About 16 percent of residents had moved into their homes within the preceding year. Among movers, more than half moved from within the same county, and only 23 percent moved from outside of Maine. Detailed information on mobility rates is shown in **Table II-9**. Mobility differs greatly by tenure, as 31 percent of renters moved within the prior year, compared with just 8 percent of homeowners. Mobility also differs by age, with 45 percent of 18 to 24 year old residents having moved within the prior year, compared with 27 percent of 25 to 34 year old residents and less than 10 percent of residents 45 year or older.

Figure II-12
Place of Residence One Year Prior, Bangor Region, 2016 to 2020 Five-Year Averages

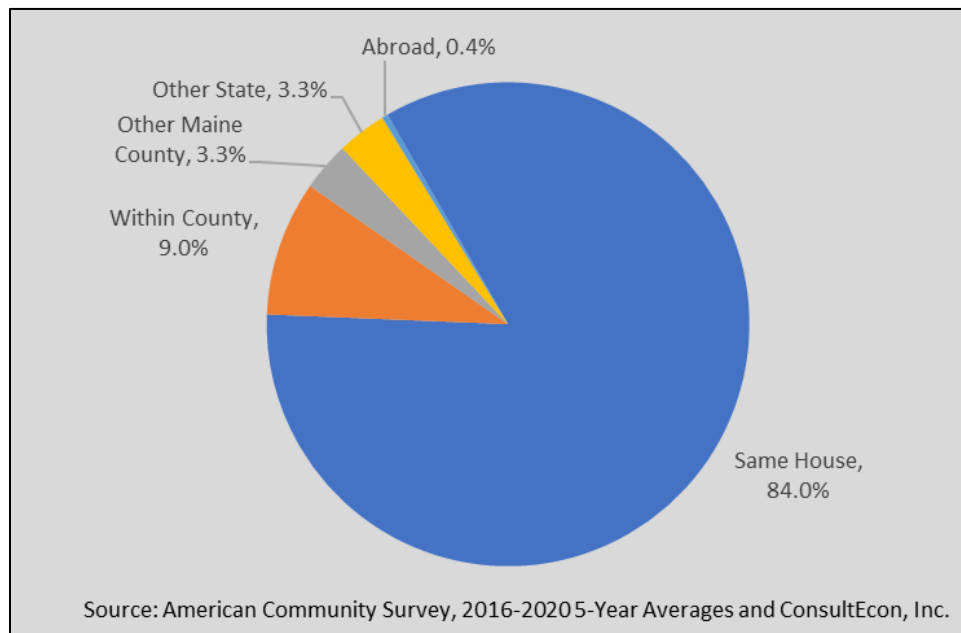


Table II-9
Place of Residence One Year Prior, Bangor Region, 2016 to 2020 5-Year Averages

	Count	Percent to Total	Share of Movers
Total Pop 1+	131,973	100.0%	
Same House	110,830	84.0%	
Within County	11,931	9.0%	56.4%
Other Maine County	4,329	3.3%	20.5%
Other State	4,377	3.3%	20.7%
Abroad	506	0.4%	2.4%

Source: American Community Survey, 5-Year Estimates, 2016-2020

Housing Market Conditions

This section presents data on recent trends in the Bangor region housing market. It includes information on both the for-sale and rental markets, using a combination of quantitative data and information gathered from a review of media reports, studies, and interviews with professionals active in the regional housing market.

For-Sale Market

Data on the past 10 years of the for-sale housing market in the Bangor region are presented in **Table II-10** including measurements of affordability. Over this period, the median home sale price in the region increased from \$130,000 to \$221,000, an average annual growth rate of 5.4 percent. This compares with a statewide price growth rate of 6.1 percent.⁶ The region’s median sale price increased by \$55,000 from 2019 to 2021, a 15.4 percent annual increase over this two-year period, and 2022 data through August showed a 14.8 percent annual increase from 2021. As a result, the overall regional housing affordability index in the region dipped below 1.00 in 2021⁷ for the first time since before 2010, meaning that a household earning the regional median income could not afford a home at the regional median sale price.

⁶ Figures are reported by MaineHousing, using data from the Maine Association of REALTORS.

⁷ Affordability Index information is reported by MaineHousing

This recent rapid increase is in line with statewide and national trends and has helped fuel a shortage in the availability of affordable housing. The number of closed home sales increased slightly from 2016 to 2021 but local real estate professionals expect fewer closings in 2022 due to a low inventory and rising interest rates.

According to local real estate professionals, a contributor to the price increases in the Bangor area has been increased interest from buyers coming from outside the area. One professional reports that 30 percent of home sales in 2021 and 2022 have been to buyers from outside the area, compared with the typical share of 25 percent. This is attributed both to purchases by investors and by a rising number of newcomers to the region. Major employers in the health care, education, and financial sectors are actively hiring, which is driving demand for housing at multiple price points. However, many employers are struggling to recruit and retain employees due to a lack of available housing at prices commensurate with their salaries.

Table II-10
Home Sales and Price Trends in Bangor Region, 2011 to 2021

	Affordability Index	Median Home Price	Median Income	Annual Income Needed to Afford	Hourly Income Needed to Afford	Home Price to Median Income	Households Unable to Afford	Households Unable to Afford	Total Households	Percentage of		
				Median Home	Median Home	to Median Income	Median Home	Median Home		Unattainable Homes Sold	Affordable Homes Sold	Unattainable Homes Sold
2011	1.12	\$130,000	\$42,633	\$38,095	\$18.31	\$145,486	45.20%	24,636	54,564	40.3%	594	401
2012	1.14	\$129,500	\$42,539	\$37,245	\$17.91	\$147,907	44.30%	24,745	55,863	40.8%	677	467
2013	1.20	\$135,000	\$47,021	\$39,180	\$18.84	\$162,619	43.00%	23,604	54,946	35.4%	814	447
2014	1.15	\$134,000	\$43,927	\$38,078	\$18.31	\$154,584	44.70%	24,580	54,994	38.5%	757	473
2015	1.20	\$132,000	\$45,182	\$37,678	\$18.11	\$158,290	42.80%	23,605	55,149	37.2%	880	522
2016	1.20	\$137,500	\$47,919	\$39,848	\$19.16	\$165,352	42.90%	23,740	55,395	35.1%	1,088	588
2017	1.07	\$150,000	\$47,412	\$44,126	\$21.21	\$161,168	47.60%	26,141	54,944	41.8%	962	692
2018	1.05	\$158,000	\$50,821	\$48,273	\$23.21	\$166,341	48.50%	26,530	54,732	45.1%	817	671
2019	1.13	\$166,000	\$55,341	\$48,889	\$23.50	\$187,905	45.70%	25,075	54,919	39.0%	1,010	647
2020	1.11	\$189,500	\$57,683	\$52,027	\$25.01	\$210,100	45.50%	24,993	54,879	40.4%	994	675
2021	0.92	\$221,000	\$55,338	\$59,975	\$28.83	\$203,913	53.10%	29,357	55,242	56.3%	776	1,000

Source: Maine Housing

Rental Market

Data on the Bangor region rental housing market from 2011 through 2020 are presented in **Table II-11**, including measurements of affordability. The median rental rate in the region for a two-bedroom unit increased from \$863 in 2011 to \$1,060 by 2020, an average annual rate of increase of 2.3 percent. The median rent has increased more rapidly in recent years, rising by 4.8 percent from 2017 to 2020.⁸ Although exact figures have not been reported for 2021 or 2022, local professionals report that rental rates have continued to increase and that there is virtually no availability of rental units at any price point.

Rental demand in the region is driven by a combination of local workers and students. Local real estate professionals report that there has been increased demand for luxury rental units among both young professionals and empty nesters who are looking for an urban lifestyle in downtown Bangor. The market has responded to this need, as multiple renovations of older commercial buildings in downtown Bangor have been delivered, with rents typically more than \$2,000 per month. With a limited stock of available buildings for renovation, though, future market-rate rental developments will likely need to be new construction. Demand remains high for entry-level rental units, though few are available, and there are multiple active and planned affordable and workforce developments in the pipeline to serve these markets. Major employers are very concerned about the impact of the tight rental market on their ability to attract workers, and some are considering purchasing or developing apartment projects to ensure an available supply of units.

⁸ All figures are from MaineHousing.

Table II-11
Rental Market Trends in Bangor Region, 2011 to 2020

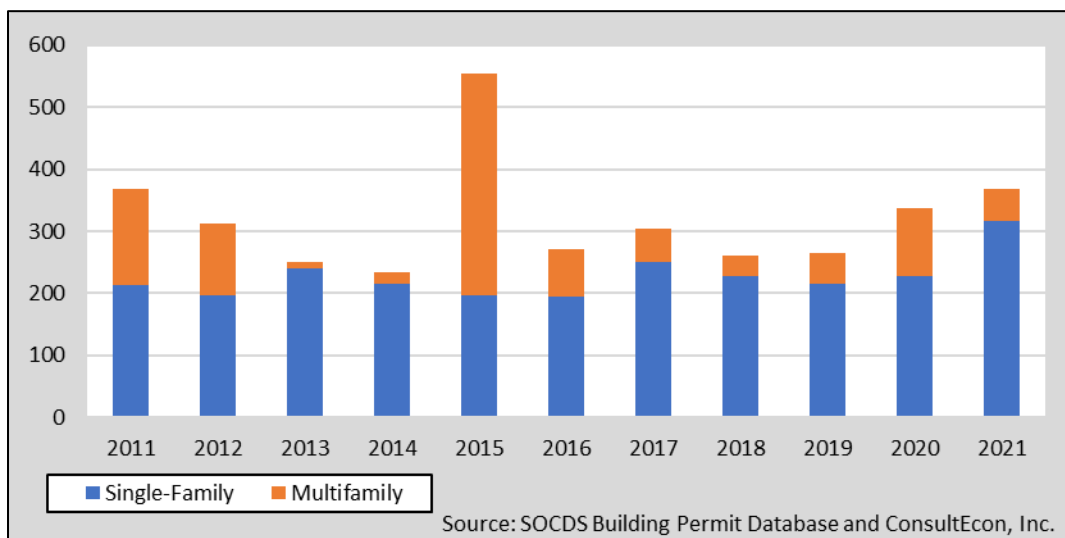
	Affordability Index	Median 2BR Rent (with utilities)	Renter Household Median Income	Annual Income Needed to Afford Median 2BR	Hourly Income Needed to Afford Median 2BR	2BR Rent Affordable to Median Income	Households Unable to Afford Median 2BR	Households Unable to Afford Median 2BR	Renter Total Households
2011	0.78	\$863	\$26,796	\$34,535	\$16.60	\$670	61.90%	10,603	17,127
2012	0.79	\$874	\$27,741	\$34,977	\$16.82	\$694	61.30%	10,729	17,494
2013	0.84	\$884	\$29,677	\$35,362	\$17.00	\$742	58.40%	10,508	17,999
2014	0.70	\$954	\$26,716	\$38,154	\$18.34	\$668	65.70%	11,813	17,990
2015	0.76	\$897	\$27,347	\$35,888	\$17.25	\$684	62.10%	11,189	18,032
2016	0.79	\$909	\$28,898	\$36,372	\$17.49	\$722	61.00%	11,029	18,083
2017	0.73	\$922	\$26,979	\$36,880	\$17.73	\$674	62.90%	11,265	17,908
2020	0.82	\$1,060	\$34,598	\$42,397	\$20.38	\$865	57.40%	10,225	17,821

Source: Maine Housing

Development Trends and Pipeline

Data on housing permit activity in the region are presented in **Figure II-13**. A total of 3,528 units were permitted during this period, an average of 321 per year. About 71 percent of permits issues were for single-family units (227 per year) and 29 percent were for multifamily units (94 per year). However, the pace of permit activity has slowed in the past six years, with the average number of permits from 2016 to 2022 decreasing to 301 per year, and the average number of multifamily units declining to just 63 per year.

Figure II-13
Residential Units Permitted by Year in Bangor Region, 2011 to 2021



An estimate of the current development pipeline was determined through discussions with local planning officials and real estate professionals. A total of **344 units** were identified as being under active development or in the planning stages in the Bangor region. This only includes major projects and does not include single-lot or small multifamily projects. The pipeline falls into three categories:

- ◆ New market-rate developments: 157 units
 - 60-unit condo project on Lancaster Street in Bangor; price range around \$250K
 - 61-unit multifamily rental on Broadway near Husson University in Bangor
 - 36-unit condo project on Parkway South in Brewer; approved, not yet underway
- ◆ Affordable developments: 152 units
 - 3-phase development 116 total units: 76 senior, 40 family, all 60% AMI
 - 36-unit conversion of hotel to permanent supportive housing
- ◆ Historic renovations in downtown Bangor: 35 units
 - High Tide Capital is renovating three buildings, 35 more units; will be high-end market rate projects with rents around \$2,000

Housing Market Summary

The Bangor Labor Market Area (LMA) has experienced modest employment growth over the past decade, led by jobs in the professional services and healthcare sectors. Employment is expected to continue to increase over the next five years, with growth in these sectors as well as in the leisure & hospitality sector. While the region’s population has not been growing, its average household size has been declining due in part to the aging of its resident base. The COVID-19 pandemic resulted in a reduction of the region’s labor force and historically low unemployment rates, which is forcing employers to bring new workers into the region. The region has also seen growth in the number of seasonally occupied units. The combination of these factors is driving increased housing demand.

The characteristics of homeowners and renters in the region are very different. Homeowners tend to be older, more affluent, and less likely to move, while renters are generally young, lower income, and more mobile. The for-sale market has experienced rapid price growth over

the past decade and available homes are difficult to find at lower price points. The rental market is very tight, with low vacancy and rising rental rates. The pace of housing development has not been keeping up with demand, and there is a limited pipeline of planned future housing developments in the region.

Section III

BARRIERS TO HOUSING PRODUCTION

This section discusses the many barriers to the production of new housing faced by households in the Bangor region. These barriers include national, statewide, and local/regional issues and relate to economics, regulations, politics, and other factors. Information in this section was gathered from research reports, media articles, and direct discussions with individuals directly involved in the housing development and finance arena both locally and statewide.

National / Statewide Issues

The underproduction of housing, particularly affordable housing, has become a national issue. A recent report by the advocacy group Up for Growth⁹ estimated that housing demand in the United States exceeds available supply by 3.8 million housing units. This ongoing housing shortage was exacerbated by disruption to the national housing market caused by the COVID-19 pandemic. This report documented several reasons for the underproduction of housing, including:

- ◆ Prime development sites are built out
- ◆ Cost per unit of new infrastructure in outlying areas has outpaced price increases
- ◆ Rising costs of materials and labor
- ◆ Local zoning policies limiting yield per acre
- ◆ Rising interest rates

Over the two-year period from Q2 2020 to Q2 2022, the national median home sale price in the United States rose from \$322,600 to \$449,300, an increase of \$127,000 or 39 percent¹⁰. A recent article in Bloomberg CityLab¹¹ cited the following factors as contributors to the increased demand for housing that drove up sales prices:

⁹ “Housing Underproduction in the US, 2022,” Up for Growth, August 2022

¹⁰ Figures from the Federal Reserve Bank of St. Louis: <https://fred.stlouisfed.org/series/MSPUS>

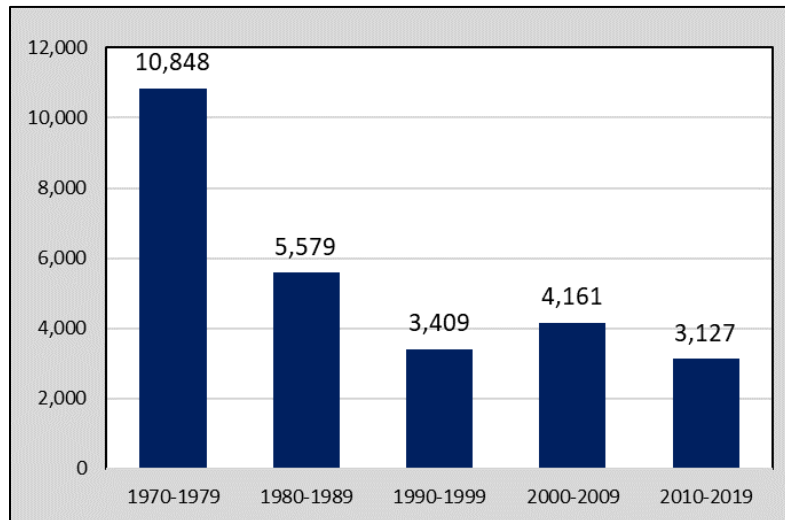
¹¹ “How the ‘Rise of the Rest’ Became the ‘Rise of the Rents’”, Bloomberg CityLab, September 8, 2022

- ◆ Desire for space and separation during pandemic
- ◆ Accelerated family formation during pandemic
- ◆ Existing housing shortage before pandemic was exacerbated
- ◆ Resistance to new development, particularly in suburbs
- ◆ Increased market share in single-family market by institutional investors

This combination of supply restrictions and surging demand has fueled a growing housing crisis around the country. The impacts of these issues are widespread and are affecting major metro areas, smaller cities, and rural regions alike.

In Maine, while the housing shortage has recently become a priority, the current situation is the result of decades of underproduction. The State of Maine has a goal of producing 1,000 affordable units per year, or 10,000 units over the course of a decade. As shown in **Figure III-1**, this goal was last met in the 1970s, when federal funding for affordable housing development was at a far higher level. Over the past four decades, the state added a total of 16,000 affordable units, meaning that it has fallen 24,000 units short of its goals over time. Over the last full decade from 2010 to 2019, just 3,127 affordable units were added in the state, meaning that production was nearly 7,000 units short of the goal for the decade.

Figure III-1
Affordable Housing Production in Maine, 1970 to 2019



Source: MaineHousing and ConsultEcon, Inc.

The state identified a mix of national and local issues as contributors to this underproduction of housing. At the national level, funding for affordable housing development, voucher, and tax credit programs have been significantly reduced since the 1980s¹². While these factors are beyond the state’s control, several internal factors were identified as barriers to housing productions, namely restrictive local land use regulations and the impending expiration of a state-level historic rehabilitation tax credit program.

In response, the State of Maine enacted two new laws in 2022 aimed at increasing the supply of housing statewide. The first, LD201, “An Act To Reduce Greenhouse Gas Emissions and Promote Weatherization in the Buildings Sector by Extending the Sunset Date for the Historic Property Rehabilitation Tax Credit” extended the State of Maine’s historic rehabilitation tax credit program through 2030, opening the door for additional housing developments in historic buildings. The second, LD2003, “An Act To Implement the Recommendations of the Commission To Increase Housing Opportunities in Maine by Studying Zoning and Land Use Restrictions”, enacted a variety of requirements aimed at easing municipal-level restrictions on density and the production of housing.

¹² “Federal tax changes would ease Maine’s affordable housing shortage, says one developer,” Maine Public Radio, August 16, 2022.

LD2003 contains three key provisions, all of which will take effect on or before July 1, 2023:

- ◆ Section 4 allows additional density for “affordable housing developments” in certain areas. This will permit densities of 2.5 times the underlying zoning for affordable units in areas zoned for multifamily. The definition of affordable housing is 80% of area median income (AMI) for rental units, and 120% of AMI for ownership units. All affordable units must be restricted to affordable for 30 years to qualify for the bonus.
- ◆ Section 5 requires municipalities to allow at least 2 units on all lots where single-family housing is permitted. In designated growth areas or in areas with water & sewer, this provision requires 4 units to be permitted on single-family lots.
- ◆ Section 6 requires municipalities to allow accessory dwelling units (ADUs) on most single-family lots. The minimum size of an ADU is 190 square feet and ADUs do not count towards unit restrictions under municipal rate of growth ordinances (growth caps).

Local / Regional Constraints

The City of Bangor assembled a Housing Working Group that completed a report on the city’s housing situation in 2018¹³, prior to the COVID-19 pandemic. This study identified a shortage of rental housing in the city, stating that “professionals such as nurses, lawyers and teachers, along with older adults and vulnerable populations, are all struggling to find housing in Bangor.” The limited supply of available housing was attributed to two major factors: 1) the poor condition of much of the city’s housing stock, including many vacant and substandard units, and 2) the lack of suitable sites zoned for new multifamily development.

As discussed in **Section II**, the increase in demand and housing prices since 2020 has exacerbated the shortage of housing that was identified in the 2019 report. According to active developers in the Bangor-area market, the concerns about vacant units and limited available sites remain as challenges. Other challenges have emerged since the onset of the pandemic, including:

- ◆ **Rising costs of construction materials:** these costs are estimated to have increased 35 to 40 percent from 2019 to 2022, making it difficult to deliver housing that would be attainable for buyers or renters at all but the highest price points.

¹³ “Recommendations to Improve the Status of Housing in Bangor,” Bangor Housing Working Group, March 2019

- ◆ **Difficulty in completing infrastructure and site work:** even if available sites with zoning entitlements are identified, there are few qualified site contractors in the region, which limits availability of labor and drives up site development costs.
- ◆ **Supply chain issues:** The global supply chain crisis has made it very difficult for small-scale homebuilders and developers to acquire necessary items for new units such as appliances, cabinets, and fixtures.
- ◆ **Chilling effects of the pandemic:** Many local homeowners, particularly older residents, have indefinitely delayed plans to sell their homes since 2020. This was driven partially by economic uncertainty and partially by a reluctance to live in multifamily or communal settings during the pandemic. The lack of turnover in these units limits opportunities for the renovation or redevelopment of older units that would otherwise be available to the market.

Barriers to Housing Production Summary

The Bangor region faces a similar acute housing shortage to other markets around the United States. The ability to produce enough housing to meet demand is challenged by a variety of factors, including:

- ◆ **Economic and financial factors:** high land costs, construction costs, interest rates, and home prices; limited availability of sites; vacant and substandard units, lack of federal and state funding for new housing.
- ◆ **Regulatory and policy factors:** local zoning and land use restrictions, building codes, underfunded tax credit and voucher programs, local resistance to new development.
- ◆ **Cultural and societal factors:** reluctance of homeowners to sell units, supply chain issues, desire for more space driven by the pandemic.

Section IV

HOUSING DEMAND PROJECTIONS AND INVESTMENT GAP ANALYSIS

This section determines the future need for housing by tenure (owner vs. renter) and price point for the Bangor region for the five-year period covering 2022 to 2027. This section additionally evaluates the economics of housing development based on current market conditions and determines the investment gap for different types of housing.

Sources of Demand

Demand for new housing in the Bangor region is expected to originate from two main sources: 1) households attracted to the region due to one or more workers taking a job, and 2) seniors aged 65 or older moving to the region for lifestyle purposes. There will be turnover in the housing market due to the typical inflow and outflow of households, but this turnover is assumed to have no significant net effect on overall housing demand within the region.

Demand From Employment Growth

Data on projected employment growth by major employment category in the Bangor region over the five-year period from 2022 to 2027 are presented in **Table IV-1**. These projections are adapted from statewide forecasts of employment growth completed in February 2022 by the Maine Consensus Economic Forecasting Commission. These forecasts anticipate an increase from the 2022 baseline of 629,300 jobs to 639,500 jobs in 2027, a net gain of 10,200 jobs or 1.6 percent. These forecasts predict employment growth in the Leisure/Hospitality, Office-Using Sectors, and Health/Education/Government categories, but job losses in the Manufacturing/Industrial and Trade/Transportation/Utilities Categories.

For the purposes of this analysis, it is assumed that the Bangor region will maintain its current shares of employment for each major employment category. As of 2021, the region accounted for 10.2 percent of all jobs in the state, with its share of each category ranging from 7.6 percent of Manufacturing/Industrial jobs to 12.4 of Trade/Transportation/Utilities jobs. Based on these assumptions, the Bangor region is projected to add about 900 jobs from 2022

to 2027, representing a 1.4 percent increase. The region is expected to add 1,900 jobs in the Healthcare/Education/Government, Office-Using Sectors, and Leisure/Hospitality categories, while losing about 1,000 jobs in Manufacturing/Industrial and Trade/Transportation/Utilities categories. However, it is assumed that job losses in these categories are unlikely to reduce population in the region, as those working in these jobs will either find other employment via turnover or will leave the workforce. As such, these job losses will not directly lead to losses in population, households, or housing demand.

Table IV-1
Employment Forecasts by Category
State of Maine and Bangor Region, 2022 to 2027

State of Maine Forecasts ^{1/}	Actual		Estimate	Forecast	Change		
	2020	2021	2022	2027	2020-2022	2020-2027	2022-2027
Industry Group							
Manufacturing/Industrial	103,100	107,500	109,500	107,800	6,400	4,700	(1,700)
Trade/Transportation/Utilities	111,700	117,700	117,200	109,700	5,500	(2,000)	(7,500)
Leisure & Hospitality	51,800	59,500	63,400	73,000	11,600	21,200	9,600
Office-Using Sectors	107,000	110,000	113,600	117,100	6,600	10,100	3,500
Health, Education & Government	222,600	223,400	225,600	231,900	3,000	9,300	6,300
Total	596,200	618,100	629,300	639,500	33,100	43,300	10,200
	Employment Comparison				Bangor Region Employment Forecast		
	State of Maine		Bangor Region	Bangor Region	Estimate	Forecast	Change
Bangor Region Employment Profile	2021	2021 ^{2/}	Share	Avg Wage 2021 ^{3/}	2022 ^{4/}	2027 ^{4/}	2022-2027
Industry Group							
Manufacturing/Industrial	107,500	8,148	7.6%	\$52,400	8,300	8,200	(100)
Trade/Transportation/Utilities	117,700	14,540	12.4%	\$43,800	14,500	13,600	(900)
Leisure & Hospitality	59,500	5,683	9.6%	\$23,200	6,100	7,000	900
Office-Using Sectors	110,000	10,301	9.4%	\$59,100	10,600	11,000	400
Health, Education & Government	223,400	24,128	10.8%	\$57,500	24,400	25,000	600
Total	618,100	62,800	10.2%	\$50,800	63,900	64,800	900

1/ State forecasts are adapted from a February 2022 report by the Maine Consensus Economic Forecasting Commission:

2/ Bangor MSA employment by industry is from 2021 Quarterly Census of Employment and Wages from the Bureau of Labor Statistics

3/ Rounded to nearest \$1,000

4/ Assumes Bangor MSA share of State of Maine employment remains the same in 2022 and 2027 as in 2021.

Source: ConsultEcon, Inc.

Projections of new housing demand resulting from employment growth in the Bangor region are presented in **Table IV-2**. These projections are based on the assumption that each net new job will drive demand for 0.63 new households in the region, meaning that there would be an average of 1.59 workers per new household. This assumption is based on the current ratio of households with at least one employed worker in the Bangor Labor Market Area

(37,071 as of 2019)¹⁴ to the total number of primary jobs in the region (58,808 as of 2019).¹⁵ For each employment category, an estimate of expected household tenure (owner vs. renter) is determined based on the current average wage for the category and the tenure profile for the appropriate household income cohort as shown in **Section II** of the report.

The total new regional housing demand resulting from net increases in employment over the five-year period from 2022 to 2027 is projected to be 1,198 units. Of this amount, 695 units (58 percent) would be from homeowners and 503 units (42 percent) would be from renters. Wages by category are anticipated to be in line with current average wages for each category in the Bangor region. Using this assumption, the average annual wage of the projected new jobs would be \$41,500. With an average of 1.59 workers per new household, the average annual household income would be about \$66,000.

Table IV-2
New Housing Demand from Employment Growth
Bangor Region, 2022 to 2027

	Est. New Households per Job ^{1/}		0.63				
	Projected Job Growth, 2022-2027			Est. Owner Tenure		Est. Renter Tenure	
	Growth	Avg Wage	New HHs	Share	Count	Share	Count
Total	1,900	\$41,500	1,198	58%	695	42%	503
Manufacturing/Industrial	0	\$52,400	0	69%	0	31%	0
Trade/Transportation/Utilities	0	\$43,800	0	65%	0	35%	0
Leisure & Hospitality	900	\$23,200	567	46%	262	54%	306
Office-Using Sectors	300	\$59,100	189	69%	130	31%	59
Health, Education & Government	700	\$57,500	441	69%	303	31%	138

^{1/} Estimated from current ratio of households with an employed worker and the number of at-place jobs in the region.

Source: ConsultEcon, Inc.

¹⁴ Source: American Community Survey, 2015-2019 5-year estimate for Bangor Labor Market Area

¹⁵ Source: Census OnTheMap Application, 2019. Primary jobs are defined as the highest-earning job held by an individual and excludes additional jobs.

Information on the anticipated new housing demand by tenure and price point based on these employment projections is presented in **Table IV-3**. The price points are tied to the assumed household income levels for new households moving to the region. The projected average household income of \$66,000 is very close to the current (2022) Area Median Income (AMI) for a family of two in the Bangor region, which is reported by HUD to be \$65,063.¹⁶ For the purposes of this analysis, \$66,000 is defined as Area Median Income (AMI).

The following assumptions are made regarding tenure, price point, and affordability:

- ◆ Ownership housing: a household can afford to purchase a home for which its annual income is up to 28 percent of the home’s sale price. The following price ranges are assumed for each AMI category:
 - Below 60%: Up to \$150,000
 - 60-100%: \$150,000 to \$225,000
 - 100-120%: \$225,000 to \$300,000
 - Above 120%: \$300,000 and up
- ◆ Rental housing: a household can afford to rent a home that is priced at up to 30 percent of its gross monthly income. The following monthly rental ranges are assumed for each AMI category:
 - Below 60%: Up to \$1,000
 - 60-100%: \$1,000 to \$1,499
 - 100-120%: \$1,500 to \$1,999
 - Above 120%: \$2,000 and up

¹⁶ Information from the HUD FY2022 Income Limits Documentation System for the Bangor HUD Metro Fair Market Rent Area: <https://www.huduser.gov/portal/datasets/il.html>

**Table IV-3
 Summary of New Housing Demand from Employment by Tenure and Affordability
 Bangor Region, 2022 to 2027**

<i>Category</i> <i>Percent of AMI</i>	Below Market Below 60%	Affordable 60-100%	Moderate 100-120%	Upper Over 120%	Total	Percent to Total
Ownership Units	34	46	40	22	142	58%
Rental Units	53	25	14	11	103	42%
Total Annual Demand	87	71	54	33	245	
Shares by Tenure and Income						
Ownership Units	24%	32%	28%	15%	100%	
Rental Units	51%	24%	14%	11%	100%	
Total Annual Demand	36%	29%	22%	13%	100%	

Source: ConsultEcon, Inc.

Demand From Seniors (Age 65+ Market)

Projected housing demand figures from seniors aged 65 or older are presented in **Table IV-4**. As discussed in **Section II**, the region’s population of residents aged 65 or older is projected to increase by 4,487 from 2022 to 2027. Using the region’s current average size of households headed by a person aged 65 or older (1.50 persons), this translates to 2,991 households. This analysis assumes that about 10 percent of new senior-headed households will move into the region over the next five years, while the remaining 90 percent will be the result of aging in place. This would translate to demand for 299 new households headed by a person aged 65 or older.

The breakdown of tenure is assumed to remain in line with the current profile for seniors in the region: 77.5 percent homeowners and 22.5 percent renters. For seniors, most of whom are not employed full-time, the affordability of housing is not necessarily tied to income. The assumptions of demand by price category are instead based on expectations of future demand from new residents who will be moving to the region. These residents are expected to be more affluent than the region’s current population and therefore generally more able to afford higher priced housing units.

Table IV-4
Projected Housing Demand from Households with Householder Age 65+
Bangor Region, 2022 to 2027

Total Increase						
Projected Increase in Age 65+ Population, 2022 to 2027	4,487					
Average Size of Households with Age 65+ Householder	1.50					
Increase in Households with Age 65+ Householder	2,991					
Estimated Share New to the Region ^{1/}	10%					
Estimated New Households with Age 65+ Householder	299					
Average New Age 65+ Households per Year	59					
Owner Occupied	Total	Under \$150K	\$150-225K	\$225-300K	Over \$300K	
Share of Age 65+ Headed Households	77.5%	10%	25%	25%	40%	
Total Owner Demand over Five Years	232	23	58	58	93	
Annual Owner Demand	46	5	12	12	19	
Renter Occupied	Total	Under \$1,000	\$1,000 to \$1,499	\$1,500 to 1,999	\$2,000 or More	
Share of Age 65+ Headed Households	22.5%	15%	20%	25%	40%	
Total Renter Demand over Five Years	67	10	13	17	27	
Annual Renter Demand	13	2	3	3	5	

1/ Share of households new to the region estimated from discussions with local housing market professionals.

Source: ConsultEcon, Inc.

Summary of Overall Housing Demand

Projections of overall regional housing demand by tenure and price point are presented in **Figure IV-1** and **Table IV-5**. Overall new housing demand in the Bangor region from 2022 through 2027 is projected to be 1,524 units, an average of 305 per year¹⁷. Compared with the current development pipeline of 344 units, there is only enough expected supply coming to the market to meet 14 months of demand.

Anticipated demand is 190 ownership units per year (62 percent of total demand) and 116 rental units per year (38 percent of total demand). More demand is anticipated for lower-cost units than higher-cost units, with projected demand by AMI level expected to be:

- **Below 60%:** 31 percent of overall demand (21 percent of ownership units, 47 percent of rental units)
- **60-100%:** 28 percent of overall demand (31 percent of ownership units, 24 percent of rental units)

¹⁷ The annual average differs slightly from the five-year total due to rounding.

- **100-120%:** 23 percent of overall demand (27 percent of ownership units, 15 percent of rental units)
- **Above 120%:** 19 percent of overall demand (22 percent of ownership units, 14 percent of rental units)

Figure IV-1
Summary of Projected Annual Housing Demand
Bangor Region, 2022 to 2027

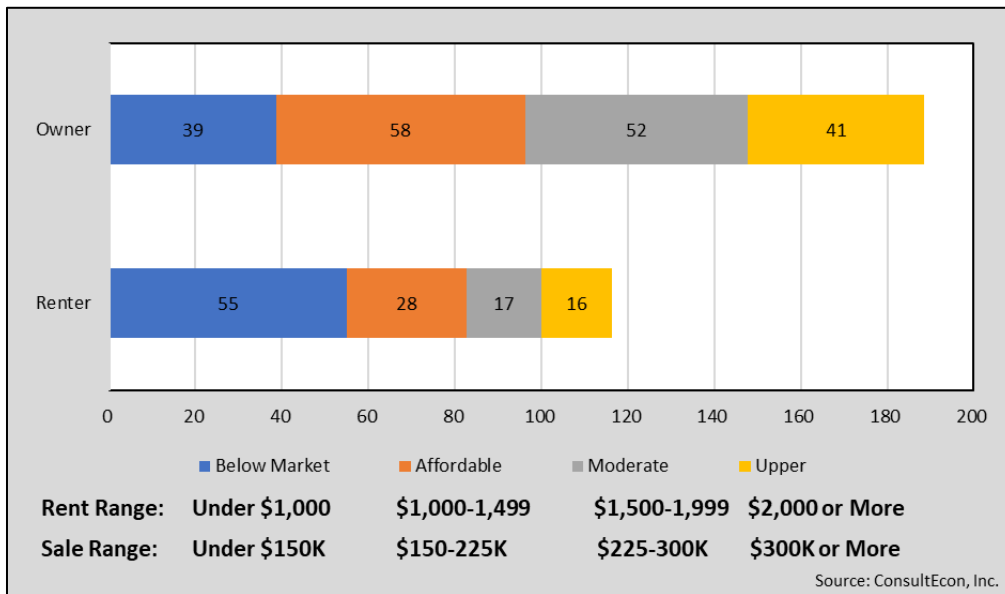


Table IV-5
Summary of Projected Housing Demand
Bangor Region, 2022 to 2027

<i>Area Median Income Level</i> ^{1/}	<i>Below Market Below 60%</i>	<i>Affordable 60-100%</i>	<i>Moderate 100-120%</i>	<i>Upper Above 120%</i>	<i>Total</i>	
Owner Demand	<i>Price Range</i>	<i>Under \$150K</i>	<i>\$150-225K</i>	<i>\$225-300K</i>	<i>Over \$300K</i>	<i>Total</i>
Demand from Employment Growth		34	46	40	22	142
Demand from New Age 65+ Residents		5	12	12	19	48
Total Annual Owner Demand		39	58	52	41	190
<i>Percent to Total</i>		<i>21%</i>	<i>31%</i>	<i>27%</i>	<i>22%</i>	<i>100%</i>
Renter Demand	<i>Price Range</i>	<i>Under \$1,000</i>	<i>\$1,000 to \$1,499</i>	<i>\$1,500 to 1,999</i>	<i>\$2,000 or More</i>	<i>Total</i>
Demand from Employment Growth		53	25	14	11	103
Demand from New Age 65+ Residents		2	3	3	5	13
Total Annual Renter Demand		55	28	17	16	116
<i>Percent to Total</i>		<i>47%</i>	<i>24%</i>	<i>15%</i>	<i>14%</i>	<i>100%</i>
Total Annual Housing Demand		94	86	69	57	306
<i>Percent to Total</i>		<i>31%</i>	<i>28%</i>	<i>23%</i>	<i>19%</i>	<i>100%</i>

1/ Based on assumed median income of new households moving the region of \$66,000 (in current year dollars).

Source: ConsultEcon, Inc.

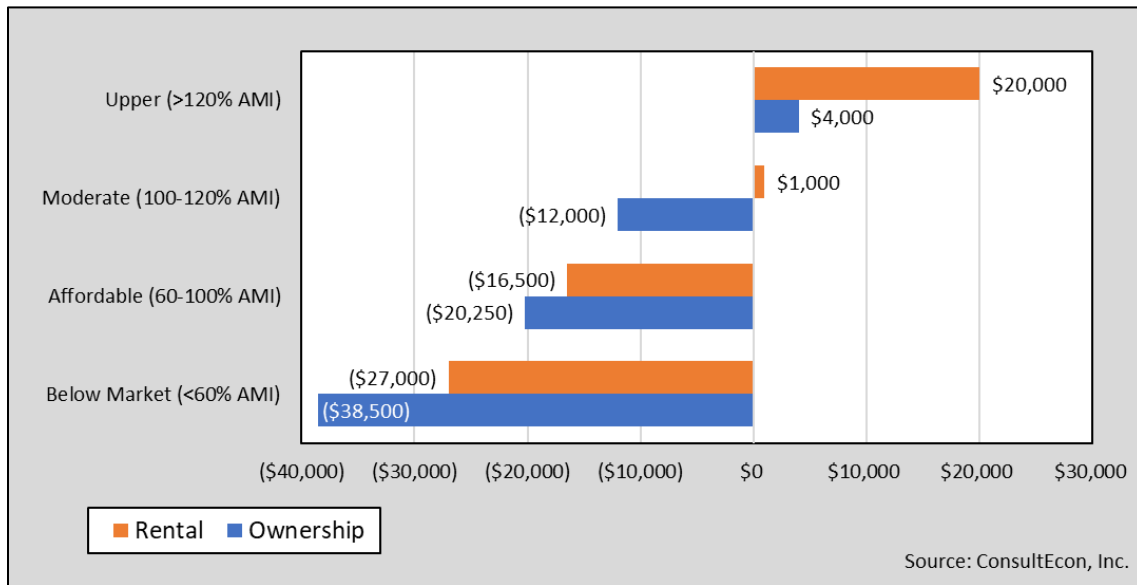
Projected Investment Gap

An evaluation of the projected investment gap by tenure and price point is presented in **Figure IV-2** and **Table IV-6**. This analysis illustrates the expected performance of each housing type on a breakeven basis, though real estate investors typically seek profit margins of 10 percent or higher. The analysis relies on the following assumptions:

- ◆ **Development costs:** \$175 to \$200 per square foot, depending on the unit type and price point. This amount is below current development costs in the region, but presumes that costs will moderate from their current levels over the next five years.
- ◆ **Cost of sales of ownership units:** the sale of housing units requires costs for broker commissions, closing costs, transfer taxes, and other fees; these are estimated to average 9 percent.
- ◆ **Operating costs of rental units:** the total management cost, owner-paid expenses, administrative costs and other expenses are estimated to be 30 percent of gross rental revenue.

- ◆ **Capitalization rate for rental units:** the market value of rental units is based on a capitalization rate that tied to its net operating income (NOI); this analysis assumes a capitalization rate of 7.0 percent, which is typical for smaller rental properties in Northern New England.¹⁸

Figure IV-2
Estimated Development Gap by Unit Type



¹⁸ A property that generates \$100,000 per year in net operating income and sells for \$1.42 million has a capitalization rate of 7.0 percent.

Table IV-6
Calculation of Estimated Development Gap by Unit Type

<i>Area Median Income Level</i> ^{1/}	Below Market <i>Below 60%</i>	Affordable <i>60-100%</i>	Moderate <i>100-120%</i>	Upper <i>Above 120%</i>
Ownership Units				
Price Range	Under \$150K	\$150-225K	\$225-300K	Over \$300K
Assumed Beds/Baths	2BR/1BA	3BR/1.5BA	3BR/2BA	4BR/2.5BA
Assumed Unit Size (SF)	1,000	1,250	1,500	1,800
Development Cost (SF) ^{2/}	\$175	\$180	\$190	\$200
Total Development Cost per Unit	\$175,000	\$225,000	\$285,000	\$360,000
Assumed Sale Price	\$150,000	\$225,000	\$300,000	\$400,000
Sale Price per SF	\$150	\$180	\$200	\$222
Less Cost of Sales ^{3/}	9%	9%	9%	9%
Net Sales Revenue	\$136,500	\$204,750	\$273,000	\$364,000
Net Income/Loss per Unit	(\$38,500)	(\$20,250)	(\$12,000)	\$4,000
Rental Units				
Price Range	Under \$1,000	\$1,000 to \$1,499	\$1,500 to 1,999	\$2,000 or More
Assumed Beds/Baths	2BR/1BA	2BR/1.5BA	2BR/2BA	3BR/2BA
Assumed Unit Size (SF)	750	900	1,100	1,250
Development Cost (SF) ^{2/}	\$180	\$185	\$190	\$200
Total Development Cost per Unit	\$135,000	\$166,500	\$209,000	\$250,000
Assumed Rental Rate	\$900	\$1,250	\$1,750	\$2,250
Rental Rate per SF	\$1.20	\$1.39	\$1.59	\$1.80
Less Operating Expenses ^{4/}	30%	30%	30%	30%
Monthly Net Operating Income per Unit	\$630	\$875	\$1,225	\$1,575
Capitalization Rate	7.0%	7.0%	7.0%	7.0%
Total Stabilized Unit Value ^{5/}	\$108,000	\$150,000	\$210,000	\$270,000
Net Income/Loss per Unit	(\$27,000)	(\$16,500)	\$1,000	\$20,000

1/ Based on assumed median income of new households moving the region of \$66,000 (in current year dollars).

2/ Includes all site acquisition, land development, construction, and soft costs; based on assumed future development costs to 2027.

3/ Includes all commissions, closing costs, transfer taxes related to the sale of a unit.

4/ Includes management costs, owner-paid expenses, and administrative costs incurred by owners of rental units.

5/ Stabilized value is calculated by multiplying monthly net operating income by 12 months and dividing by the capitalization rate.

Source: ConsultEcon, Inc.

Key findings from this breakeven analysis include:

- ◆ For-sale units below \$300K (<120% AMI) are not feasible in the current market without subsidies.
- ◆ Rental units below \$1,500 per month (<100% AMI) are not feasible in the current market without subsidies.
- ◆ Even higher priced units (>120% AMI) have narrow profit margins and can be difficult to develop without subsidies.

An evaluation of the total funding gap in the region based on projected demand and expected per-units investment gaps is presented in **Table IV-7**. The total housing investment gap in the Bangor region is projected to be \$26.2 million over the next five years, or an average of \$5.2 million per year. Since this gap is measured on a breakeven basis and does not consider potential profit margins for investors and developers it should be considered as the floor for the actual housing investment gap in the region.

Table IV-7
Total Residential Development Funding Gap in Bangor Region, 2022 to 2027

	Below Market <i>Below 60%</i>	Affordable <i>60-100%</i>	Moderate <i>100-120%</i>	Upper <i>Above 120%</i>	Total
<u>Ownership Units</u>					
Annual Demand	39	58	52	41	190
Estimated Gap per Unit	(\$38,500)	(\$20,250)	(\$12,000)	\$0	(\$17,368)
Total Gap	(\$1,501,500)	(\$1,174,500)	(\$624,000)	\$0	(\$3,300,000)
<u>Rental Units</u>					
Annual Demand	55	28	17	16	116
Estimated Gap per Unit	(\$27,000)	(\$16,500)	\$0	\$0	(\$16,784)
Total Gap	(\$1,485,000)	(\$462,000)	\$0	\$0	(\$1,947,000)
Total Annual Gap: All Units	(\$2,986,500)	(\$1,636,500)	(\$624,000)	\$0	(\$5,247,000)
Five-Year Gap: All Units	(\$14,932,500)	(\$8,182,500)	(\$3,120,000)	\$0	(\$26,235,000)

Source: ConsultEcon, Inc.

Housing Demand and Investment Gap Summary

Demand for new housing in the Bangor region is expected to originate from job creation and older residents moving to the region for lifestyle purposes. Over the next five years, demand for additional housing in the region is projected to average 306 units per year, and the region’s current development pipeline of 344 units will only meet 14 months of demand. Future housing demand is expected to be 62 percent for ownership units and 38 percent for rental units. About 59 percent of projected housing demand will be for units affordable to households earning less than the expected average income of \$66,000. Under expected economic conditions, typical ownership units priced below \$300,000 and typical rental units priced below \$1,500 per month are not feasible without subsidies. The total housing

investment gap in the region over the next five years is estimated to be a minimum of \$26.2 million, or \$5.2 million per year.

Section V

RECOMMENDATIONS FOR HOUSING FUND

This section identifies priorities for the Pilot Penobscot Housing Fund based on conclusions from the preceding tasks, as well as recommended selection criteria for future funding applications.

Priority Income / Price Targets

The review of market demand and housing economics in Section IV determined that an investment gap currently exists for ownership housing priced below \$300,000 and rental housing with monthly rents below \$1,500. As would be expected, the gaps increase in size at lower price points. However, there are a variety of federal and state tax credit and funding programs that are aimed at filling the investment gaps for units targeted at households that earn less than 60% AMI. With this in mind, it is recommended that the Pilot Penobscot Housing Fund should prioritize projects that are priced just above the 60% AMI level, with a particular focus on rental developments targeting the 60-100% AMI range (rents between \$1,000 and \$1,499 per month). For ownership units, the targeted range should be more flexible, as a funding gap exists for price points targeting up to 120% AMI (sale price of \$300,000).

Recommended Selection Criteria

The Pilot Penobscot Housing Fund should align its investments with both market needs and the broader planning and development goals of the state, region, and municipalities. There are three core recommendations for the criteria to use in selecting projects, as follows.

Recommendation 1: Align with standards of LD 2003

The newly enacted state law related to increasing the production of affordable housing will be setting the course for municipal governments to plan for residential growth and development into the future. The fund will therefore maximize its benefits to the region by aligning its

funding priorities with the standards set forth in the new law. With this in mind, the fund should:

- ◆ Prioritize projects that qualify for the Affordable Housing Density Bonus
- ◆ Prioritize infill and Accessory Dwelling Unit (ADU) projects in residential areas
- ◆ Restrict eligibility to projects in designated growth areas in local comprehensive plans
- ◆ Ensure that all units have provisions to protect affordability over a 30-year period, as stipulated in LD2003

Recommendation 2: Invest in Rehabilitation

The existing supply of vacant and substandard units in the Bangor region provides an opportunity to overcome the investment gap for developing new housing. The cost of rehabilitating existing units is typically far lower than new construction costs. Even building new units on sites that were previously developed is less expensive, due to the savings from not having to build infrastructure. By focusing on rehabilitation and redevelopment, the fund can potentially leverage the addition of more units than by only focusing on new development.

Recommendation 3: Incentivize Active Senior Housing

The region has a substantial population of aging homeowners who have lived in their units for many decades and will not be able to effectively maintain their units for the long-term future. A contributing factor to the aging-in-place of these residents is the lack of suitable housing in the region that serves younger seniors who may not yet want or need to live in continuing care communities such as assisted living or nursing homes. There is a strong need in the region for “active senior” developments that provide low maintenance living for younger seniors. Building more of this product would have the added benefit of adding older single-family units to the available inventory and opening up ownership and investment opportunities for younger buyers.

Recommendations for Fund Uses

The ideal situation for the Pilot Penobscot Housing Fund would be to provide direct subsidies for qualifying projects. However, this may not be feasible due to the requirements of potential investors in the fund. Instead, it is recommended that the fund be used to provide debt at below-market interest rates, with a focus on covering non-vertical construction costs such as land acquisition, infrastructure, demolition, site preparation, and pre-development soft costs. These costs incurred early in the development process, and low-cost capital at the early stages of development is more likely to have a positive impact on feasibility than at the later stages.

Summary of Recommendations for the Housing Fund

The Pilot Penobscot Housing Fund should align its investments with both market needs and the broader planning and development goals of the state, region, and municipalities. Funding should focus on rental housing targeted at households earning between 60 and 100 percent of Area Median Income (AMI) and ownership housing should target up to 120 percent of AMI. Projects that align with the goals of LD2003, Maine’s new statewide affordable housing law, should be prioritized. The fund should also prioritize rehabilitation/redevelopment projects and projects that provide housing for the active senior population. The fund will be able to maximize its impact by providing early stage, below-market debt for land acquisition, infrastructure, demolition, site preparation, and pre-development costs.

APPENDIX A
ADDITIONAL BACKGROUND DATA AND CALCULATIONS

Table A-1
Bangor Region Labor Force and Unemployment

Year	Period	Labor Force	Employment	Unemployment	Unemployment Rate
2018	Jan	69,967	67,470	2,497	3.6%
2018	Feb	71,392	68,829	2,563	3.6%
2018	Mar	71,119	68,684	2,435	3.4%
2018	Apr	71,993	69,727	2,266	3.1%
2018	May	70,802	68,706	2,096	3.0%
2018	Jun	71,533	69,275	2,258	3.2%
2018	Jul	71,539	68,971	2,568	3.6%
2018	Aug	70,231	68,250	1,981	2.8%
2018	Sep	71,214	69,194	2,020	2.8%
2018	Oct	72,759	70,669	2,090	2.9%
2018	Nov	72,061	69,966	2,095	2.9%
2018	Dec	71,717	69,545	2,172	3.0%
2019	Jan	70,307	67,721	2,586	3.7%
2019	Feb	71,127	68,676	2,451	3.4%
2019	Mar	71,526	69,166	2,360	3.3%
2019	Apr	72,242	70,204	2,038	2.8%
2019	May	71,092	69,272	1,820	2.6%
2019	Jun	71,099	69,317	1,782	2.5%
2019	Jul	70,997	69,151	1,846	2.6%
2019	Aug	71,074	69,481	1,593	2.2%
2019	Sep	72,188	70,499	1,689	2.3%
2019	Oct	73,100	71,328	1,772	2.4%
2019	Nov	72,376	70,467	1,909	2.6%
2019	Dec	71,679	69,864	1,815	2.5%
2020	Jan	71,063	68,644	2,419	3.4%
2020	Feb	72,036	69,591	2,445	3.4%
2020	Mar	71,492	68,874	2,618	3.7%
2020	Apr	66,996	61,307	5,689	8.5%
2020	May	66,215	60,151	6,064	9.2%
2020	Jun	67,084	63,031	4,053	6.0%
2020	Jul	67,160	62,992	4,168	6.2%
2020	Aug	67,178	64,693	2,485	3.7%
2020	Sep	67,441	65,355	2,086	3.1%
2020	Oct	68,964	66,861	2,103	3.0%
2020	Nov	68,526	66,318	2,208	3.2%
2020	Dec	68,004	65,435	2,569	3.8%
2021	Jan	67,773	64,284	3,489	5.1%
2021	Feb	68,670	65,304	3,366	4.9%
2021	Mar	69,094	65,703	3,391	4.9%
2021	Apr	69,248	65,836	3,412	4.9%
2021	May	67,859	64,696	3,163	4.7%
2021	Jun	68,232	64,849	3,383	5.0%
2021	Jul	68,707	65,542	3,165	4.6%
2021	Aug	68,420	65,533	2,887	4.2%
2021	Sep	69,688	67,143	2,545	3.7%
2021	Oct	70,539	67,984	2,555	3.6%
2021	Nov	70,304	67,775	2,529	3.6%
2021	Dec	69,619	67,299	2,320	3.3%
2022	Jan	69,432	66,624	2,808	4.0%
2022	Feb	70,628	68,018	2,610	3.7%
2022	Mar	70,516	67,890	2,626	3.7%
2022	Apr	69,192	67,264	1,928	2.8%
2022	May	68,561	66,654	1,907	2.8%
2022	Jun	69,174	67,191	1,983	2.9%
2022	Jul ^{1/}	68,809	66,984	1,825	2.7%

^{1/} July 2022 figures are preliminary
Source: Bureau of Labor Statistics

Table A-2
Employment Sectors of Resident Labor Force, 2019

Total Primary Jobs	Count	Share
All sectors	56,628	100.0%
Jobs by NAICS Industry Sector		
Agriculture, Forestry, Fishing and Hunting	486	0.9%
Mining, Quarrying, and Oil and Gas Extraction	23	0.0%
Utilities	349	0.6%
Construction	3,034	5.4%
Manufacturing	2,783	4.9%
Wholesale Trade	1,935	3.4%
Retail Trade	7,931	14.0%
Transportation and Warehousing	2,106	3.7%
Information	731	1.3%
Finance and Insurance	1,460	2.6%
Real Estate and Rental and Leasing	700	1.2%
Professional, Scientific, and Technical Services	2,087	3.7%
Management of Companies and Enterprises	972	1.7%
Administration & Support, Waste Management and Remediation	3,399	6.0%
Educational Services	6,824	12.1%
Health Care and Social Assistance	12,651	22.3%
Arts, Entertainment, and Recreation	655	1.2%
Accommodation and Food Services	4,484	7.9%
Other Services (excluding Public Administration)	1,730	3.1%
Public Administration	2,288	4.0%

Source: US Census Bureau, OnTheMap Application

**Table A-3
Age of Householder by Tenure, 2022**

	All Households		Owner Occupied ^{1/}			Renter Occupied ^{1/}		
	Units	Percent to Total	Count	Percent to Total	Share	Count	Percent to Total	Share
Total Occupied Housing Units	54,279	100.0%	37,734	100.0%	69.5%	16,545	100.0%	30.5%
Age of Householder, 2022								
15-24 years	2,365	4.4%	370	1.0%	15.6%	1,995	12.1%	84.4%
25-34 years	8,771	16.2%	4,212	11.2%	48.0%	4,559	27.6%	52.0%
35-44 years	7,864	14.5%	5,689	15.1%	72.3%	2,175	13.1%	27.7%
45-54 years	10,317	19.0%	7,863	20.8%	76.2%	2,454	14.8%	23.8%
55-64 years	10,814	19.9%	8,636	22.9%	79.9%	2,178	13.2%	20.1%
65-74 years	8,313	15.3%	6,867	18.2%	82.6%	1,446	8.7%	17.4%
75-84 years	4,033	7.4%	2,918	7.7%	72.4%	1,115	6.7%	27.6%
85 years and over	1,802	3.3%	1,179	3.1%	65.4%	623	3.8%	34.6%
Total 65+	14,148	26.1%	10,964	29.1%	77.5%	3,184	19.2%	22.5%

^{1/} Top line shows shares of owner and renter occupied housing as shares of all occupied units. Other lines show shares by income category of owner and renter occupied housing.

Source: American Community Survey (2021 1-Year Estimates) and ConsultEcon, Inc.

**Table A-4
Year Householder Moved in by Tenure, 2021**

	Count	Percent to Total
Owner Occupied		
Moved in 2019 or later	1,156	2.6%
Moved in 2015 to 2018	7,146	16.2%
Moved in 2010 to 2014	6,604	14.9%
Moved in 2000 to 2009	12,604	28.5%
Moved in 1990 to 1999	7,945	18.0%
Moved in 1989 or earlier	8,743	19.8%
Renter Occupied		
Moved in 2019 or later	1,939	10.3%
Moved in 2015 to 2018	9,327	49.4%
Moved in 2010 to 2014	4,327	22.9%
Moved in 2000 to 2009	2,169	11.5%
Moved in 1990 to 1999	692	3.7%
Moved in 1989 or earlier	421	2.2%
Total Units (Owner and Renter)	63,073	100.0%
Median Year Householder Moved into Unit	2009	

Source: American Community Survey (2021 1-Year Estimates) and ConsultEcon, Inc.

Table A-5
Units in Structure, 2016-2020 ACS Estimate

	2010	2020 Est.	Percent Change
Total	73,909	76,088	2.9%
1, detached	46,420	48,890	5.3%
1, attached	1,656	1,449	-12.5%
2	3,946	3,378	-14.4%
3 or 4	5,784	6,405	10.7%
5 to 9	2,486	2,881	15.9%
10 to 19	1,841	1,638	-11.0%
20 or more	1,851	2,351	27.0%
Mobile home	9,910	9,069	-8.5%
Boat, RV, van, etc.	15	27	80.0%

Source: American Community Survey and ConsultEcon, Inc.

Table A-6
Year Structure Built, Existing Units as of 2020

Bangor MSA		
Built 2014 or Later	1,714	2.3%
Built 2010 to 2013	1,930	2.5%
Built 2000 to 2009	10,268	13.5%
Built 1990 to 1999	9,115	12.0%
Built 1980 to 1989	10,833	14.2%
Built 1970 to 1979	10,803	14.2%
Built 1960 to 1969	6,443	8.5%
Built 1950 to 1959	6,104	8.0%
Built 1940 to 1949	2,331	3.1%
Built 1939 or earlier	16,547	21.7%
Total	76,088	100.0%
Median Year Structure Built	1976	

Source: ESRI

Table A-7
Residential Building Permit Trends in Bangor Labor Market Area

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Units	369	313	251	233	555	271	304	261	266	337	368
Units in Single-Family Structures	213	197	240	215	197	194	250	228	216	227	316
Units in All Multi-Family Structures	156	116	11	18	358	77	54	33	50	110	52
Mix of Multi-Family											
Units in 2-unit Multi-Family Structures	18	16	4	6	8	6	8	6	38	44	32
Units in 3- and 4-unit Multi-Family Structures	6	18	7	12	16	32	16	15	12	28	20
Units in 5+ Unit Multi-Family Structures	132	82	0	0	334	39	30	12	0	38	0

Source: SOCDs Building Permit Database

Table A-8
Projected Housing Demand from Employment by Tenure

PROJECTED OWNER DEMAND FROM EMPLOYMENT BY SECTOR BY PRICE RANGE					
Shares	Under \$150K	\$150-225K	\$225-300K	Over \$300K	Total
<i>Total Shares</i>	24%	32%	28%	15%	100%
Manufacturing/Industrial	0%	100%	0%	0%	
Trade/Transportation/Utilities	10%	40%	40%	10%	
Leisure & Hospitality	50%	25%	20%	5%	
Office-Using Sectors	5%	20%	50%	25%	
Health, Education & Government	10%	45%	25%	20%	
Five-Year Owner Demand	169	228	198	108	703
Manufacturing/Industrial	0	0	0	0	0
Trade/Transportation/Utilities	0	0	0	0	0
Leisure & Hospitality	133	67	53	13	266
Office-Using Sectors	7	28	71	36	142
Health, Education & Government	29	133	74	59	295
Annual Owner Demand	34	46	40	22	142
PROJECTED RENTER DEMAND FROM EMPLOYMENT BY SECTOR BY PRICE RANGE					
Shares	Under \$1,000	\$1,000 to \$1,499	\$1,500 to 1,999	\$2,000 or More	Total
<i>Total Shares</i>	52%	24%	13%	10%	100%
Manufacturing/Industrial	0%	100%	0%	0%	
Trade/Transportation/Utilities	15%	50%	30%	5%	
Leisure & Hospitality	70%	25%	5%	0%	
Office-Using Sectors	20%	20%	40%	20%	
Health, Education & Government	25%	25%	20%	30%	
Five-Year Renter Demand	265	125	69	53	512
Manufacturing/Industrial	0	0	0	0	0
Trade/Transportation/Utilities	0	0	0	0	0
Leisure & Hospitality	218	78	16	0	312
Office-Using Sectors	13	13	26	13	65
Health, Education & Government	34	34	27	40	135
Annual Renter Demand	53	25	14	11	103

Source: ConsultEcon, Inc.