

Housing Needs Assessment and Strategy

Final Report May 16th 2022

Prepared for the
City of South Portland



Prepared by the team of



21 Ivy Lane, Suite 202
Burlington, VT 05408
michael@craneassociates.us
USA Office: 1-802-657-3720
www.craneassociates.us

It's a passion with a mission



Table of Contents

Chapter 1 Current Socio-Economic Landscape of South Portland and Regional Demographic-Economic Forecast	5
Introduction	5
Socio-Economic Profile of South Portland	8
Population Trends – 1990-2020	8
Components of Population Change	10
Households in South Portland	16
Labor Market and Employment Trends in South Portland	19
Labor Force Trends	19
Employment Trends	19
Regional Employment Structure	22
Unemployment	24
Commuting Patterns	24
Trends in Personal and Household Income in South Portland	29
Personal Income	29
Median Household Income	30
Poverty in South Portland	30
Chapter 2 Housing Supply in South Portland	32
Chapter 3 Regional Economic and Demographic Forecast	39
Economic and Demographic Forecast for the MSA and the City – 2021-2030	39
Overview	39
National and MSA Macroeconomic Forecast	44
Historical Economic and Demographic Data and 2021-2030 Forecast	49
Chapter 4 Housing Supply and Demand	53
Introduction	53
Housing Unit Supply and Demand Methodology	53
Housing Unit Baseline Supply	53
Summary of Additional Unit Adjustments	54
Housing Unit Demand:	55
Findings	55
Chapter 5 Analysis of Housing Affordability	56
Assessment of the Housing Wage for South Portland	56
Relating Earnings to Housing Affordability:	56
Defining the “Housing Wage”	56
South Portland Housing Wage Analysis	57
South Portland Median Renter Housing Wage	57
South Portland Average Owner Housing Wage	58
Owner and Renter Affordability Calculation Methods	60

Overview of Owner Unit Affordability Calculations _____	61
Property Tax Calculations: _____	62
Private Mortgage Insurance (PMI) Rate and Down Payment Percentage _____	63
Owner Utility Expenditures _____	63
Mortgage Rate Methodology _____	64
Mortgage Value Methodology _____	64
Median Transactions Price _____	65
Overview of Renter Affordability Calculations _____	65
Affordable Unit Gap Analysis _____	67
Affordability Forecast 2020-2030 _____	71
Median Residential Sales Price/Home Value _____	71
Utilities _____	71
Property Tax _____	72
Homeowner Insurance Calculation and Escalation Methodology _____	72
Affordability Analysis Forecast for 2025 and 2030 _____	73
Housing Unit Gap Analysis _____	75
Summary of Findings and Conclusions _____	77
The population of the city is aging. _____	77
South Portland is a local hub of employment/jobs for the surrounding communities which has historically driven demand within the city and in surrounding cities and towns. _____	77
COVID-19 is impacting demand. _____	77
Price pressures are expected to persist due to a combination of several factors _____	77
Despite all the efforts that the city had made to build affordable housing, the affordable price gap is getting worse. _____	78
Public forum not surprised by the findings. _____	79
CHAPTER 6 RECOMMENDATIONS _____	80
INTRODUCTION TO RECOMMENDATIONS _____	80
A NOTE REGARDING SERVING THE “MISSING MIDDLE” HOUSING CATEGORY _____	80
A NOTE ON TARGET HOUSING MARKETS _____	81
RECOMMENDATION 1: A REGIONAL SOLUTION _____	81
Developing a Regional Allocation Model and Production Targets _____	84
RECOMMENDATION 2: COMPLETE A COMPREHENSIVE REWRITE OF ZONING ORDINANCE _____	85
RECOMMENDATION 2A: EXPAND ALLOWANCES IN SINGLE FAMILY ZONES _____	88
RECOMMENDATION 2B: DENSITY BONUSES _____	95
RECOMMENDATION 2C: REMOVE OFF-STREET PARKING REQUIREMENTS _____	95
RECOMMENDATION 2D: ALLOW BY-RIGHT ACCESSORY DWELLING UNITS _____	97
Encourage ADU construction _____	Error! Bookmark not defined.
RECOMMENDATION 2F: CREATE COMPACT-NEIGHBORHOODS _____	98
RECOMMENDATION 2G: ALLOW ALTERNATIVE HOUSING TYPES _____	100
Manufactured Homes _____	100
Over Water Homes _____	101
3-D Printed Housing _____	101
Micro-Units _____	101

RECOMMENDATION 2H: OVERHAUL THE PERMIT APPROVAL PROCESS	102
Create more By-Right Development review processes	104
RECOMMENDATION 3: CAPITALIZE THE AFFORDABLE HOUSING TRUST FUND	105
RECOMMENDATION 4: INTERVENTIONS EXCLUSIVE TO RENTER HOUSEHOLDS	106
RECOMMENDATIONS 4A: STRATEGICALLY EMPLOY TAX INCREMENT FINANCING	106
RECOMMENDATION 4B: HELP IMPROVE CREDIT RATING OF RENTERS	107
RECOMMENDATION 4C: ALTERNATIVES TO SECURITY DEPOSIT	107
RECOMMENDATIONS MATRIX	108

Chapter 1 CURRENT SOCIO-ECONOMIC LANDSCAPE OF SOUTH PORTLAND AND REGIONAL DEMOGRAPHIC-ECONOMIC FORECAST

INTRODUCTION

The City of South Portland is a coastal community in southern Maine of 26,498 people encompassing an area of 12.07 square miles. The city is often referred to as two cities. The western half of the city is host to commercial, industrial, and advanced technology developments. The eastern half of the city includes a community college, a beach area, several parks, one of the State's largest marinas, a municipal boat ramp, a maritime museum, and the second busiest oil depot on the East Coast.

This housing study of both affordable and market rate housing needs is being undertaken at a very uncertain time for the city, the state, and the nation. This is because it is being undertaken during a time that includes the first ground war in eastern Europe since World War II, a period that now includes the highest rates of inflation in four decades, and because it is being undertaken as the global COVID-19 pandemic has entered its third year. The latter has forced a number of significant public health measures to be taken which have curtailed economic activity and distorted the activity of housing markets throughout the country and the northern New England region. The above developments have combined to produce a number of harshly negative impacts on the national, state and regional economies. The effects of the pandemic have been particularly hard on those parts of the economy that rely on person-to-person contact, including activity in sectors such as: (1) the regional tourism-visitor sector, (2) “bricks-and-mortar” retailing, eating and drinking places, (3) special events and other gathering venues, (4) certain personal services providers (e.g. who cannot easily distance themselves from their customers), and (5) other businesses that rely on the “personal experience” of customers for their revenues and/or earnings.

The impacts associated with the pandemic, in turn, has resulted in an extraordinary period of federal fiscal and monetary policy responses, as well as a number of complementary responses on the state and local government levels, which have helped mitigate the impacts associated with the pandemic. Those initial economic response policies had unintended economic impacts (including a rise in inflation) that are now being addressed with additional federal policies designed to address the rise in inflation and excesses in other over-heated markets—such as housing—in order to realign demand with supply. The recent strong economic recovery and the large increases in asset prices were driven at least in part by the extraordinary and coordinated fiscal and monetary policy response to the pandemic which appears to have overshot the overall decline in demand and has at least initially resulted in a sharp rise in the economy's price pressures (at both the producer level and at the retail level).

Those inflationary pressures and supply-chain disruptions were then made substantially worse by the Russian invasion of Ukraine in February 2022 —which have led to further disruptions in global supply chains and commodities markets and also led to dramatically increased prices for key items such as food and energy products.

It is expected that at some point in the future, the effects of this period high uncertainty and extraordinary policy measures will end and evolve. At that point, the performance of the national and regional economy and regional housing markets will return to responding to the underlying economic and financial fundamentals associated with a normally functioning economy and various commodity markets and the housing market. However, the timing of that future transition and the exact mechanisms by which that transition will occur are still evolving and some aspects of the expected transition remain largely unknown. To the extent possible during this unusual period of “high uncertainty,” this study has strived to differentiate between those factors and “tastes and preferences” that appear to be more temporary versus permanent in nature.

It is also important to note that the study used a series of long-term forecasts for the national and regional economy, national financial markets, and for regional demographics and housing markets in order to guide the study’s estimates of future housing needs. A long-term forecast was used in this study because it deemphasizes the more transitory, shorter-term and cyclical factors that can move up and down around the underlying economic and demographic trends. It is those underlying, longer-term trends that identify and quantify the housing needs of the region and the city. Those represent the identifiable and quantifiable long-term needs that lend themselves to actionable policy actions.

The use of long-term forecasts in housing needs assessment studies tend to reduce the impact shorter-term economic, demographic, and financial developments as well as other forms of economic and financial “noise” that tend to sling-shot up and down across the longer-term time horizon. As such, although there may be differences from the longer-term trend line in any given calendar year due to these shorter-term factors and cyclical events, many times these shorter-term factors are largely off-set in subsequent years by opposite and substantially equal shorter-term, cyclical events in the opposite direction over the course of the longer forecast time horizon. This is especially true for key factors in the housing market pertaining to variables such as mortgage interest rates, single family house prices, median rents, wage and household income levels, and costs of building materials for the construction of new housing unit supply,

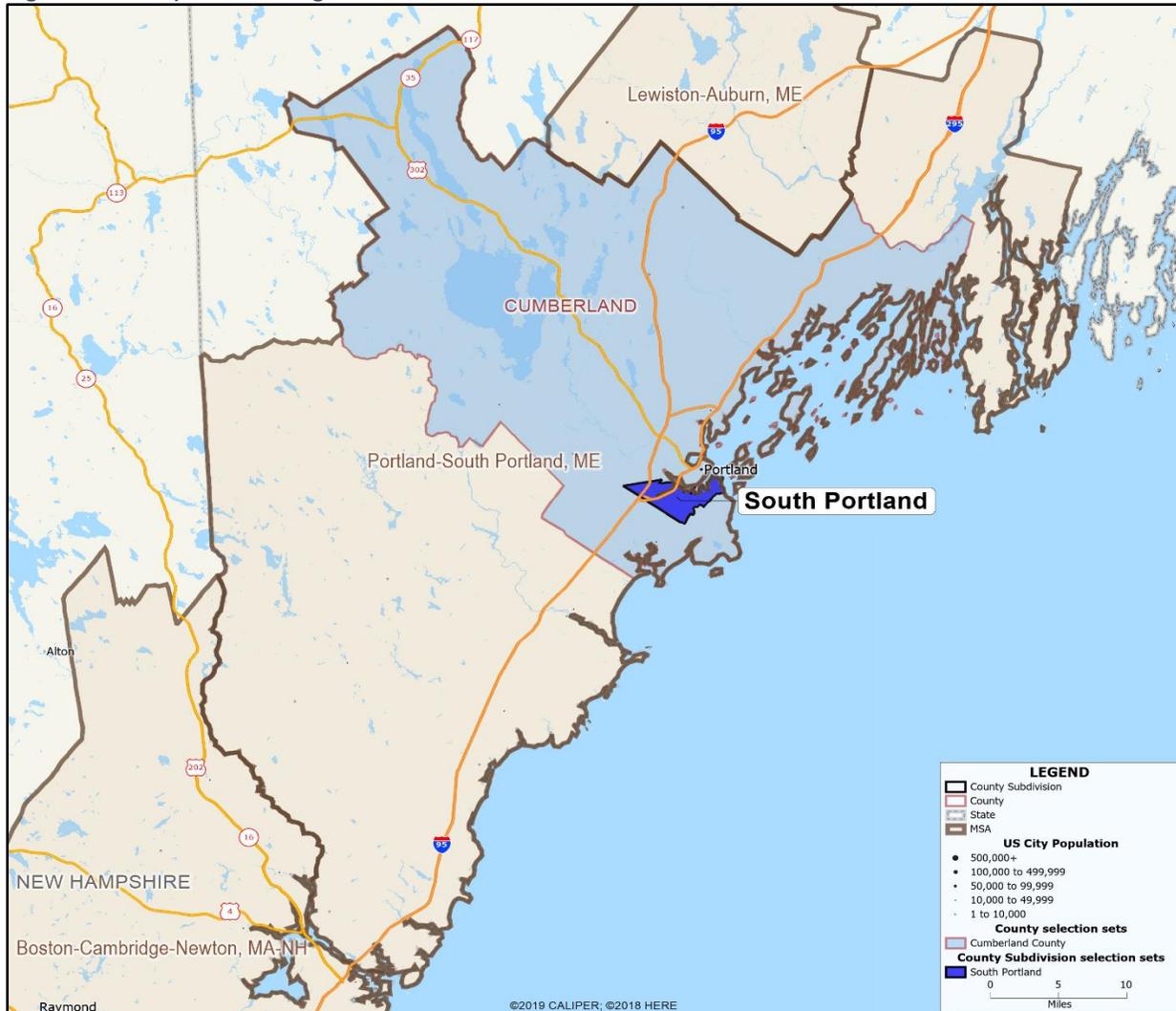
Periods of more rapid increases in key variables such as interest rates, house prices and rents can occur in any given year during the longer-term forecast period, typically result in a roughly equal and opposite period of softness—if not outright declines—in the level of interest rates, house prices and rents during subsequent years. As such, at the end of the longer-term forecast period (in this case of this study a 10-year period), the short-term differences from the underlying trend line largely even out around the long-term trend. The long-term forecast makes allowances within the longer-term trend for real growth and variations around the trend for such short-term factors-developments and a certain level of “noise.”

The long-term forecast used in this housing study has been developed using national and regional economic, financial, demographic, and housing market data and information for the ten-year forecast period from Moody’s Analytics—a nationally recognized economic forecasting firm, for the U.S. and the Portland-South Portland ME Metropolitan Statistical Area (MSA)¹—see the map below. A long-term economic, demographic, financial, and housing market forecast was developed for the MSA region and city using that national-regional data and information as a starting point. The forecast period used in this study was long-term in nature (ten years) so that actionable policies could be developed to focus on the housing needs of the city and region as

¹ The Portland-South Portland, ME Metropolitan Statistical Area is composed of Cumberland, Sagadahoc, and York Counties, with its principal cities of Portland and South Portland, both of which are located within Cumberland County.

indicated by the assessment of the underlying trends in the economy, demographics, and financial-housing markets in the city and region.

Figure 1-1 Map of the Region



This report focuses on the identification and quantification of the city's affordable and market rate housing needs within the factors and forces that define and affect the South Portland housing market. This report will present information about and identify gaps in supply and demand for housing, and propose context-appropriate strategies to address those identified housing gaps. The report is intended to focus policy and other efforts by the City to those measures that are most effective in closing housing gaps and addressing housing challenges that the community faces. The Report and Appendix provide an overview of recent economic and demographic trends in the city, and present a detailed long-term regional economic and demographic forecast upon which estimates of the city's future housing needs are based.

This study also includes recent information on population, households, employment, household income, commuting patterns, household size, and other important data relative to housing demand in the city and within the surrounding area. The surrounding area includes: (1) Cumberland County ("County"), in which the city is located, and (2) the Portland-South Portland

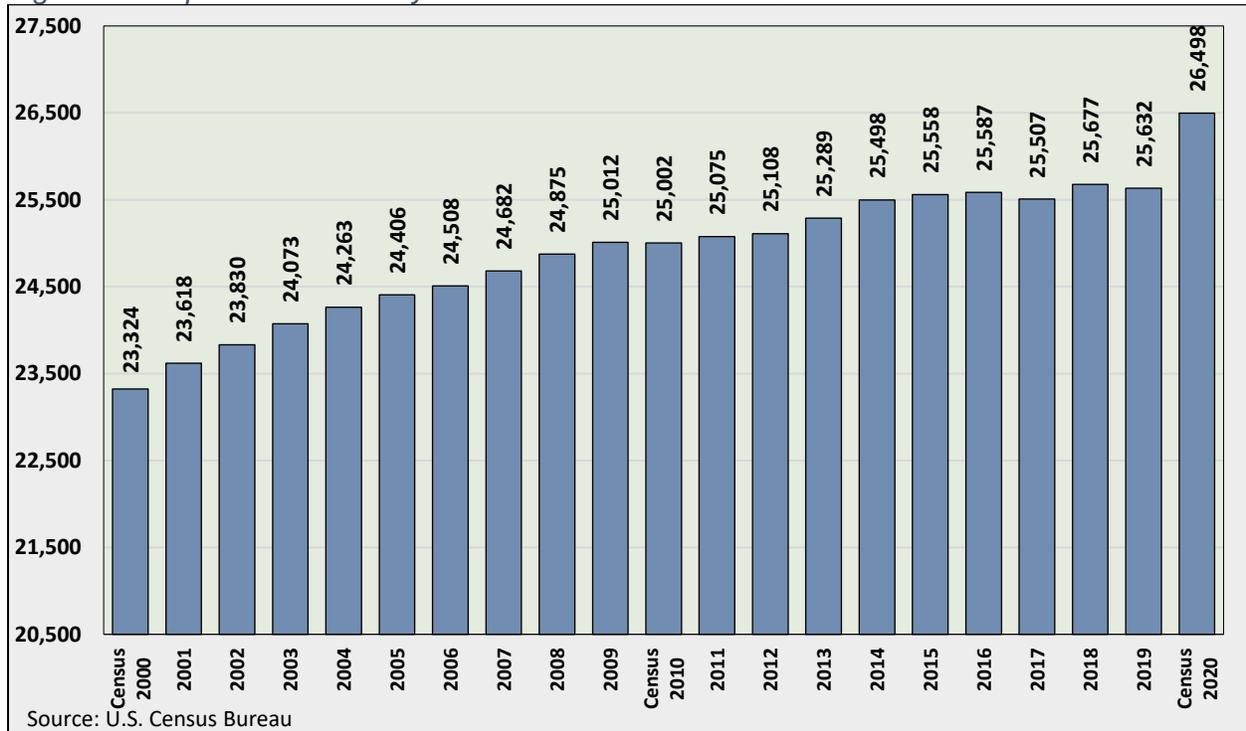
Metropolitan Statistical Area (“MSA”). This long-term forecast builds upon the background of this regional demographic-economic profile, and the ever-changing and evolving circumstances regarding the on-going housing market activity in the region and city.

SOCIO-ECONOMIC PROFILE OF SOUTH PORTLAND

Population Trends – 1990-2020²

Attracting and retaining people to live, work, raise a family, and retire underlies the economic vitality of any area. Changes in population are almost always associated with changing economic conditions within the local area. Over the last three decades, the City of South Portland has experienced moderate population growth. During the 1990s, the City’s population declined by 2.9 percent, in contrast with the rapid growth occurring within the overall MSA at 10.6 percent. From 2000 to 2010, the city resumed growth, with population gains at 6.7 percent versus 5.0 percent for the MSA. Since 2010, the data indicated that rate of population growth has slowed, punctuated by an alternating pattern of annual gains and losses, ending in 2020 with 25,950 people. The recently released 2020 Census data indicates the city had a population of 26,498 as of April 1, 2020, about 2.1 percent higher than the Census Bureau’s mid-year July estimate for 2020.

Figure 1-2 Population in the City of South Portland 2000-2020



It is currently unclear whether the results of the 2020 Census are an anomaly caused by the onset of the COVID pandemic or if there will be upward revisions of the population estimates between the 2010 and 2020 censuses. In either case, as discussed further in this report, the pace of growth from 2019 to 2020 is not expected to be maintained over the next 10 years as we move beyond

² Generally, for most social, demographic, and economic metrics used in this report, 2019 represents the last historical data release, particularly for the City and its peer communities. Thus, 2020 is the initial year of the forecast period (2020-2030). There are of course some 2020 exceptions—and are presented (as in population counts) as the last historical year.

the heightened health concerns surrounding the pandemic, the housing market continues to tighten, and interest rates rise.

From the 2010 to 2020 Census, many of the fastest growing communities within Cumberland County ringed Portland and South Portland; particularly Scarborough (+17 percent), Gorham (+11.9 percent), Westbrook City (+16.6 percent), Falmouth (+11.3 percent), Cumberland (+17.5 percent), and North Yarmouth (+14.2 percent). Only two Cumberland County communities lost population between the 2010 and 2020 Census, Casco (-2.6 percent) and Harrison (-10.4 percent).

Table 1:1 Population in the City of South Portland 1990 – 2020

Year	South Portland	Portland City	Cumberland County	Portland-So. Portland MSA
1990 Census	24,070	63,125	243,135	441,257
1991	23,923	63,414	244,084	443,863
1992	23,767	62,572	243,852	444,096
1993	23,674	62,274	244,620	445,567
1994	23,807	62,257	246,705	448,325
1995	23,766	62,005	247,792	450,840
1996	23,815	62,067	249,745	455,850
1997	23,843	61,938	251,740	460,748
1998	23,875	61,918	254,041	464,621
1999	23,903	61,967	256,098	469,696
2000 Census	23,324	64,249	265,612	487,568
2001	23,618	64,710	268,391	495,164
2002	23,830	65,033	270,533	500,412
2003	24,073	65,444	273,041	505,379
2004	24,263	65,702	274,920	508,446
2005	24,406	65,834	276,275	510,275
2006	24,508	65,818	277,084	510,656
2007	24,682	66,030	278,781	512,237
2008	24,875	66,289	280,681	514,405
2009	25,012	66,402	281,969	514,878
2010 Census	25,002	66,194	281,674	514,098
2011	25,075	66,193	282,753	516,159
2012	25,108	66,239	283,742	517,816
2013	25,289	66,425	285,681	520,251
2014	25,498	66,876	288,274	524,338
2015	25,558	66,873	289,704	526,248
2016	25,587	66,992	291,522	529,477
2017	25,507	66,739	292,549	532,557
2018	25,677	66,567	294,363	536,225
2019	25,632	66,455	296,052	540,087
2020 Census	26,498	68,408	303,069	551,740
1990-2000 Change	-746	1,124	22,477	46,311
2000-2010 Change	1,678	1,945	16,062	26,530
2010-2020 Change	1,496	2,214	21,395	37,642
1990-2020 Change	2,428	5,283	59,934	110,483
1990-2000 % Change	-3.1%	1.8%	9.2%	10.5%
2000-2010 % Change	7.2%	3.0%	6.0%	5.4%
2010-2020 % Change	6.0%	3.3%	7.6%	7.3%
1990-2020 % Change	10.1%	8.4%	24.7%	25.0%

Source: U.S. Census Bureau

Prepared by Economic & Policy Resources

South Portland’s racial demographics are similar to the County and the MSA, though somewhat more diverse. South Portland’s population is mostly White-alone (82.9 percent) with the next

largest group being Black or African American (5.8 percent). The city has a greater proportion of Black or African American, Asian, and Hispanic or Latino than the County and MSA. However, the City and MSA differ significantly from the national averages. While the U.S. population is majority White-alone, the South Portland and MSA populations are made up of 20 to 30 percentage points more White-alone residents than the U.S. as a whole. Every other racial group is a significantly larger proportion of the population in the U.S. than in the City or MSA.

Table 1:2 Population by Race

	South Portland	Portland	Cumberland County	Portland-So. Portland MSA	United States
Population of one race:	92.9%	92.1%	93.4%	93.9%	77.2%
White alone	82.9%	78.0%	86.5%	89.0%	57.8%
Black or African American alone	5.8%	10.1%	3.9%	2.5%	12.1%
American Indian and Alaska Native alone	0.2%	0.2%	0.2%	0.3%	0.7%
Asian alone	3.4%	3.2%	2.4%	1.8%	5.9%
Native Hawaiian and Other Pacific Islander alone	0.1%	0.0%	0.0%	0.0%	0.2%
Some other race alone	0.5%	0.5%	0.4%	0.4%	0.5%
Two or more races:	3.7%	4.1%	3.9%	3.9%	4.1%
Hispanic or Latino	3.4%	3.9%	2.6%	2.3%	18.7%
Total:	100.0%	100.0%	100.0%	100.0%	100.0%

Source: 2020 Census Redistricting Data Prepared by Economic & Policy Resources

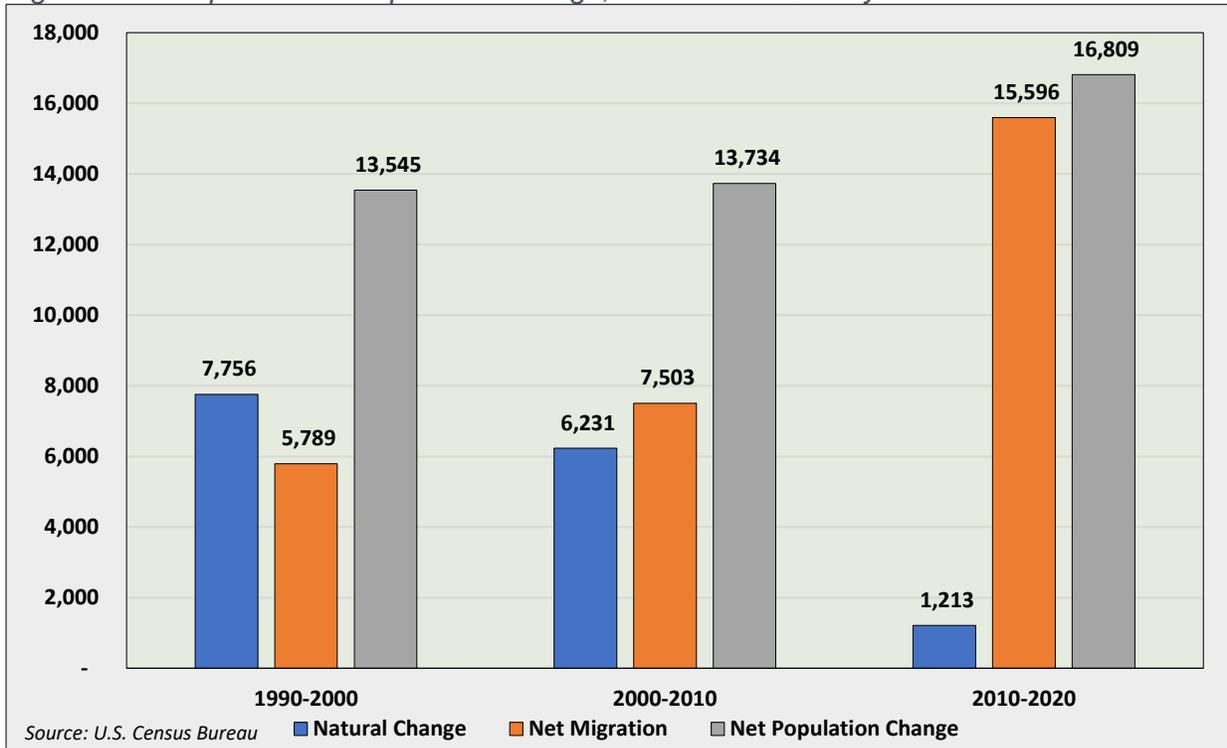
Components of Population Change

An area's population can change in two ways. There is net natural change—the balance of births minus deaths—and net migration, the balance of persons moving into and out of an area. During the 1990s, Cumberland County³ saw a larger share of its population growth from net natural change but that trend began to shift in the 2000s. Since 2010, 93% of the region's population growth was from net in-migration with net natural change turning negative (i.e., more deaths than births) in 2019 and 2020 (See Figure 1-3).

The recent declining trend in natural population change is largely attributable to the age profile of the county, affecting both birth and death rates. As an area's population grows older, most of its population ages out of childbearing years and eventually into higher mortality age groups. Thus, without new household formation and replacement population via net migration, the number of deaths will eventually outnumber new births in the region. The birth rate (i.e., number of births per 1,000 residents) in the Portland-South Portland MSA peaked back in 1990 at 15.04. Since then, the birth rate has steadily declined to its current low of 8.84.

³ The U.S. Census Bureau reports annual net migration population for counties as part of their annual population release.

Figure 1-3 Components of Population Change, Cumberland County



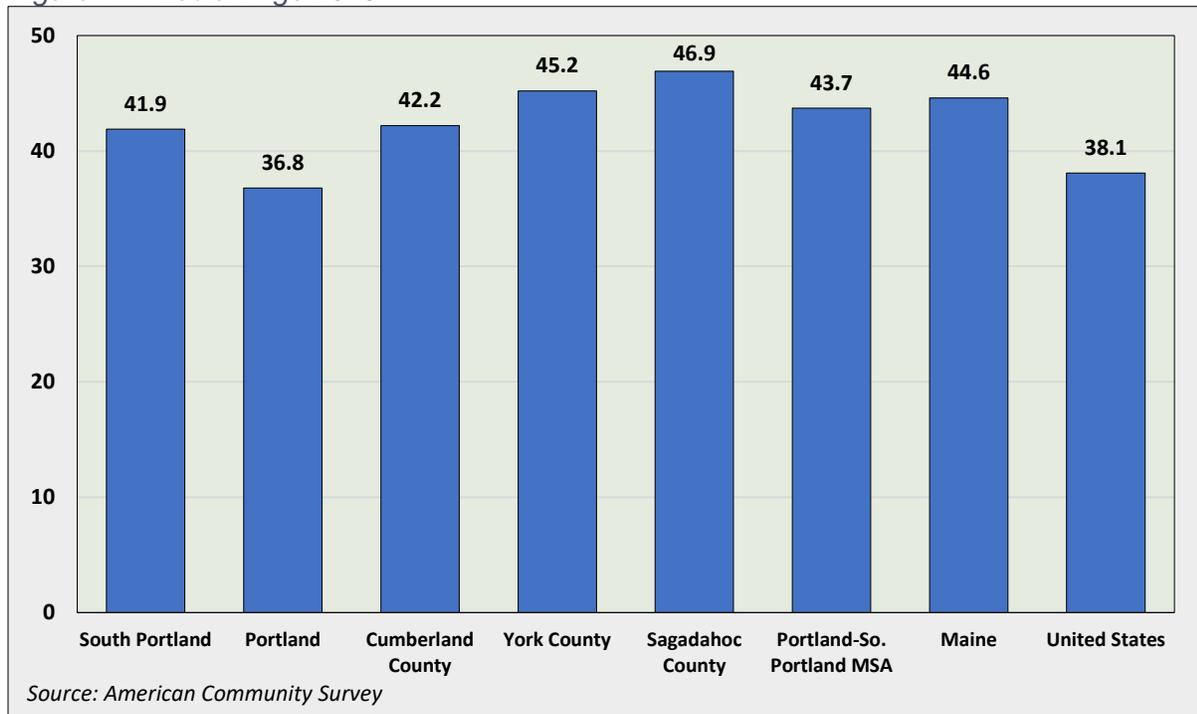
South Portland’s median age (41.9 years) is very similar to Cumberland County which represents one of the youngest counties in the state (42.2 years), with the City of Portland being notably younger (36.8 years). In the Portland-South Portland MSA, York (45.2 years) and Sagadahoc (46.9 years) Counties are the oldest compared to the State median of 44.6 years. Maine is the oldest state in the nation (See Figure 1-4).

The aging population in the region is a result of age cohorts shifting between 2000 and 2019. These broad age cohorts are:

- **0-19 years:** Infants to prospective new workforce entrants and college-age populations.
- **20-44 years:** New household formers, new entrants to the workforce, and workers in their prime employment years;
- **45-64 years:** Maturing persons, workers with accumulated skills and experience; and
- **65 years and older:** Principally retirees.

In 2000, over a quarter of the City’s population was in the youngest age cohort of 0-19 years. Since the early 2000s, this cohort has declined in both relative and absolute numbers. Similarly, school enrollments (Kindergarten through Grade 12) have declined throughout the region. Since 2012 public school enrollment in South Portland has declined by 6.4 percent (198 students), a slightly greater decline than the MSA at -5.5 percent (3,977 students) and greater than Cumberland County at -2.4 percent (943 students).

Figure 1-4 Median Age 2019



The population share of the 20-44 years cohort has also declined since the 1990s and appears to have aged into the 45-64 age group. Most households form and most entrants into the workforce are from this age cohort. Since 2000, the share to people ages 45-64 has shown the largest growth, increasing from 23.1 percent of the population to 29.5 percent.

The aging population of the region can readily be seen in the broad age cohorts of 45-64 years and 65 years and older, which combined currently make up just under 50% of the region's total population (up from 37% in 2000). Each city and town has its own unique population age structure with each of the four major age cohorts growing or shrinking at different rates.⁴ Portland and South Portland, in particular, have an age structure that resembles an expanding older population, with low birth rates, a growing elderly class, and younger age cohorts shrinking. The MSA is experiencing similar trends to the Portland/South Portland experience.

There is a smaller share of those aged 65+ (16.7 %) in South Portland, compared to 18.9% within the MSA. Many within the 65+ age cohort are "retirees;" this group has grown in both absolute and relative terms between 2000 and 2019. As the general population continues to age, the elderly will constitute an increasing share of the region's population base, making the "graying" of the MSA (as well as the City of South Portland) a significant socio-economic development phenomenon (Table 1:4).

⁴ Age structures are typically called population pyramids. Through a simple graph, this population pyramid conveys a complex social narrative of population through its shape. While each place has its own unique age structures, there are three prototypical shapes: expansive (generally, young and growing, characterized by a typical "pyramid" shape of a broader base with younger age cohorts and a narrow top of elder age cohorts); constrictive (generally, elderly and shrinking, with an inverted shape tapering at the bottom); and stationary (generally, little or no population growth, with a rectangular shape).

Table 1:3 School Enrollments

School Year	South Portland	Cumberland County	Sagadahoc County	York County	Portland- So. Portland MSA
2012	3,110	39,306	5,249	27,937	72,492
2013	3,122	39,231	5,204	27,641	72,076
2014	3,101	39,249	5,099	27,380	71,728
2015	3,095	39,435	5,010	26,947	71,392
2016	3,088	39,312	4,897	26,817	71,026
2017	3,035	39,180	4,887	26,566	70,633
2018	2,980	39,232	4,796	26,618	70,646
2019	2,979	39,318	4,831	26,517	70,666
2020	2,963	39,534	4,790	26,545	70,869
2021	2,912	38,363	4,648	25,504	68,515
2012-2021 Change	-198	-943	-601	-2,433	-3,977
2012-2021 % Change	-6.4%	-2.4%	-11.4%	-8.7%	-5.5%

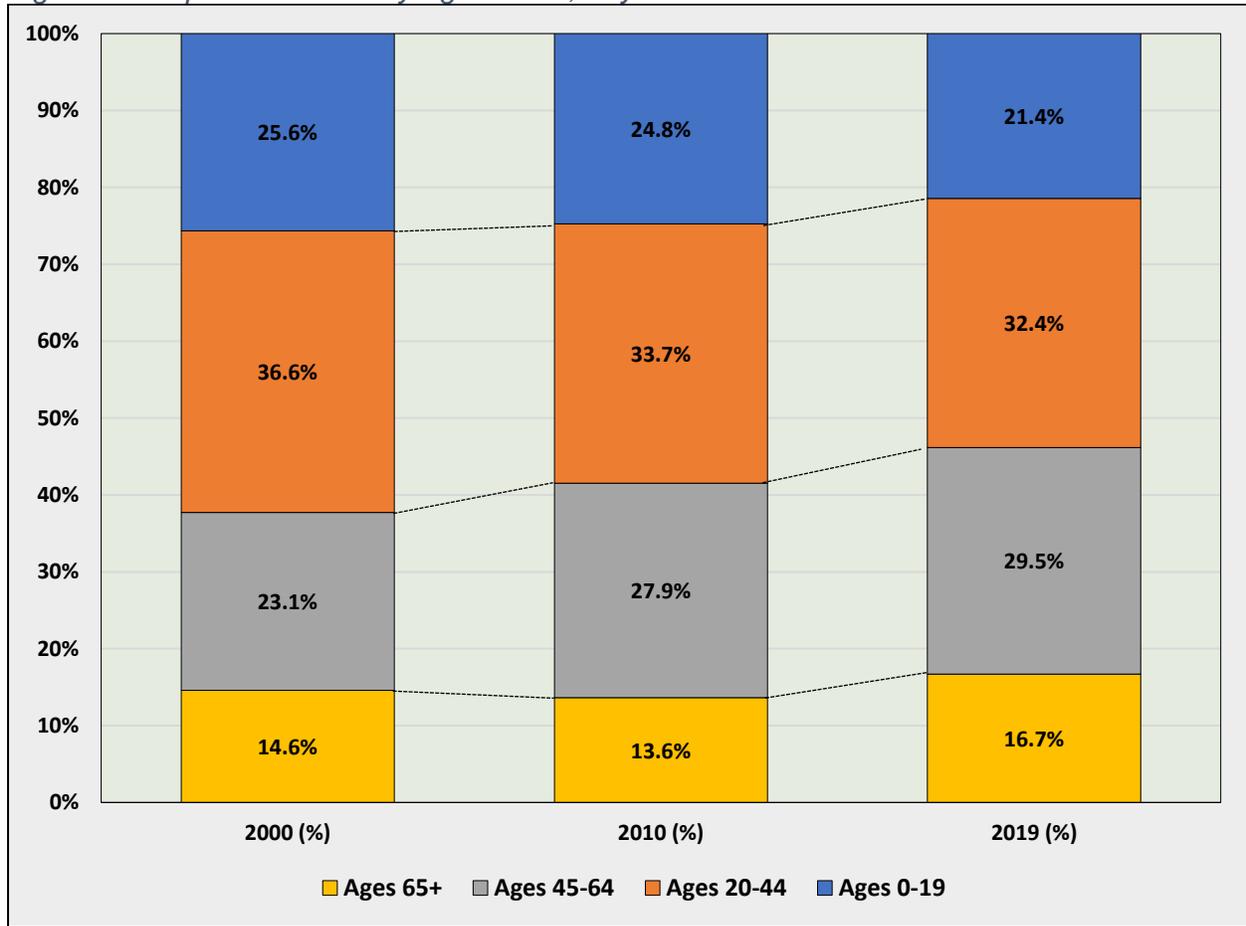
Source: Maine Department of Education Prepared by Economic & Policy Resources

Table 1:4 Population by Age Cohorts in South Portland, Portland, Cumberland County, and Portland-South Portland MSA 2000, 2010, 2019

Geography	Age Cohorts	2000	2010	2019	2000 (%)	2010 (%)	2019 (%)
South Portland	Ages 0-19	5,982	6,190	5,474	25.6%	24.8%	21.4%
	Ages 20-44	8,542	8,428	8,279	36.6%	33.7%	32.4%
	Ages 45-64	5,399	6,976	7,527	23.1%	27.9%	29.5%
	Working-Age (20-64)	13,941	15,404	15,806	59.8%	61.6%	61.9%
	Ages 65+	3,401	3,408	4,268	14.6%	13.6%	16.7%
Portland City	0-19	14,496	13,756	11,588	22.6%	20.8%	17.4%
	20-44	27,622	26,999	28,588	43.0%	40.8%	42.9%
	45-64	13,222	17,102	16,593	20.6%	25.8%	24.9%
	65+	8,909	8,337	9,826	13.9%	12.6%	14.8%
Cumberland County	0-19	72,406	70,326	62,598	27.3%	25.0%	21.4%
	20-44	95,133	87,089	93,254	35.8%	30.9%	31.9%
	45-64	62,749	84,102	84,322	23.6%	29.9%	28.8%
	65+	35,324	40,157	52,133	13.3%	14.3%	17.8%
Portland-South Portland MSA	0-19	134,596	127,669	113,140	27.6%	24.8%	21.3%
	20-44	170,148	152,139	161,258	34.9%	29.6%	30.3%
	45-64	117,737	157,992	157,191	24.1%	30.7%	29.5%
	65+	65,087	76,298	100,486	13.3%	14.8%	18.9%

Source: U.S. Census Bureau Prepared by Economic & Policy Resources

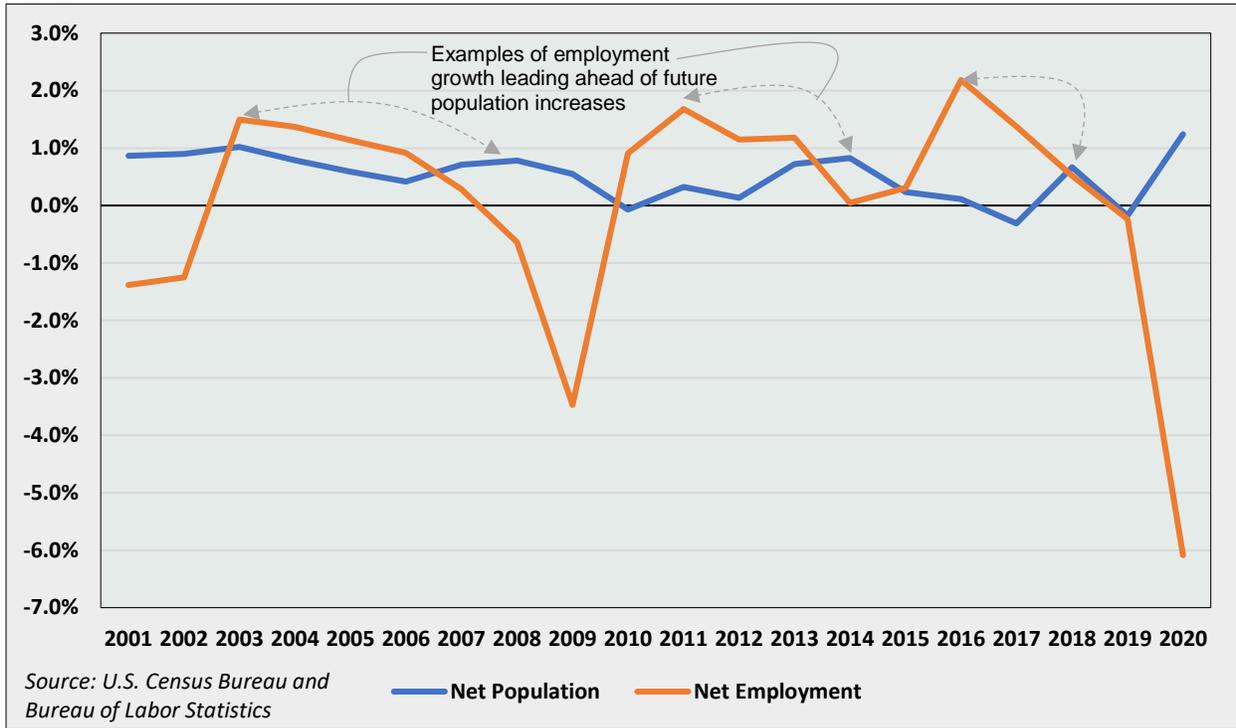
Figure 1-5 Population Share by Age Cohort, City of South Portland 2000-2019



As noted earlier, a region’s or city’s population can change due to net natural change (births minus deaths); and net migration (persons moving in versus out). For South Portland, natural increase played an important role in population change in earlier decades. Net in-migration has become a greater influence since the early 2000s.

Net in-migration is generally related to local economic performance. Though the phenomenon is somewhat muted compared to past regional economic cycles, people continue to follow jobs. In general, as job prospects increase within an area, people will migrate to that area from elsewhere, attracted by the likelihood of employment. Such migrants, however, tend to arrive well after economic expansion is under way; thus, a region’s population growth will tend to lag behind its employment growth (Figure 1-6).

Figure 1-6 Annual Percent Change in Population and Employment in South Portland, 2000-2020



HOUSEHOLDS IN SOUTH PORTLAND

Significant demographic determinants in housing demand are new formations of households and household size. Looking back at the past two decades, household changes have mainly reflected the maturing of the “baby boom” population. Baby boomers are generally defined as those persons who were born between 1946 and 1964—a period of time when the nation experienced strong population growth rates following the end of World War II. The oldest “baby boomers” are today in their late-sixties to mid-seventies, and the youngest nearing their mid-fifties. Therefore, the majority of this population group has already formed independent households—a factor that is very important to housing markets.

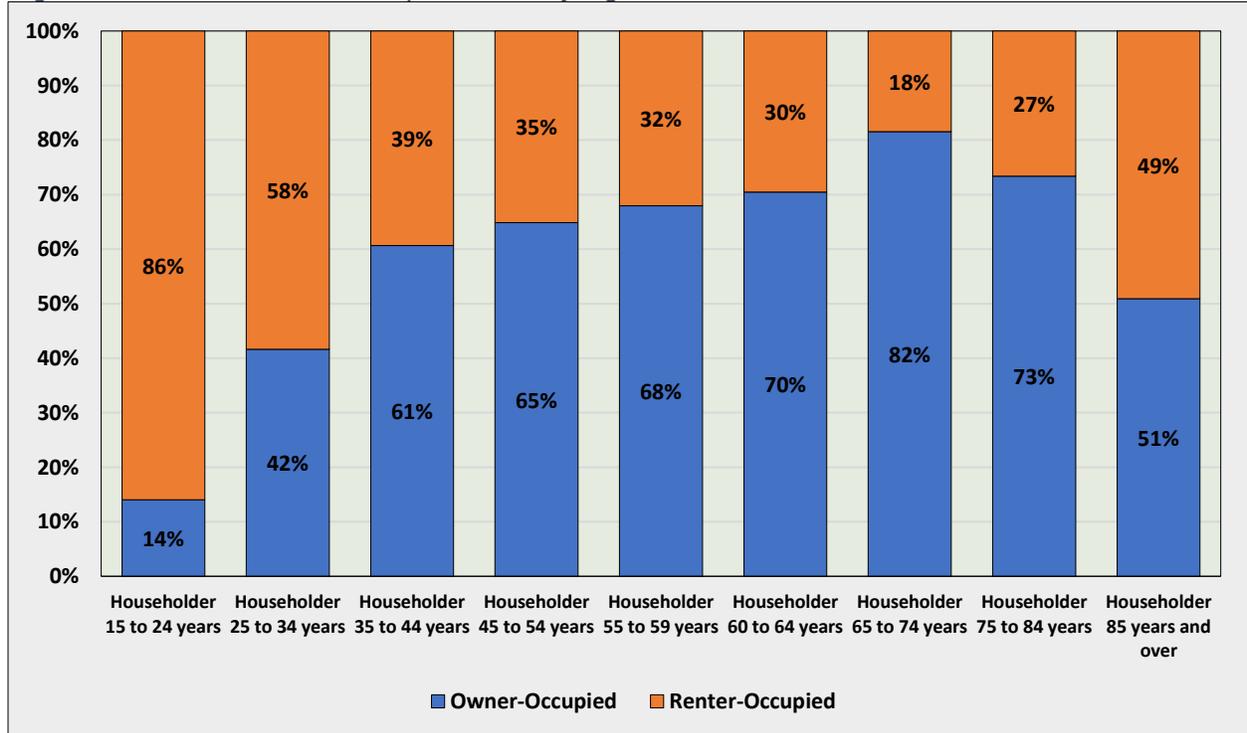
Table 1:5 Households in South Portland, 2000-2020 (Census Years)

Municipality / Region	2000 Census	2010 Census	2020 Census	2000-2010 Change (#)	2000-2010 Change (%)	2010-2020 Change (#)	2010-2020 Change (%)
South Portland	10,047	10,877	11,793	830	8.3%	916	8.4%
Cumberland County	107,989	117,339	128,100	9,350	8.7%	10,761	9.2%
Sagadahoc County	14,117	15,088	16,136	971	6.9%	1,048	6.9%
York County	74,563	81,009	88,924	6,446	8.6%	7,915	9.8%
Portland-So. Portland MSA	196,669	213,436	233,160	16,767	8.5%	19,724	9.2%

Source: U.S. Census Bureau
Prepared by Economic & Policy Resources

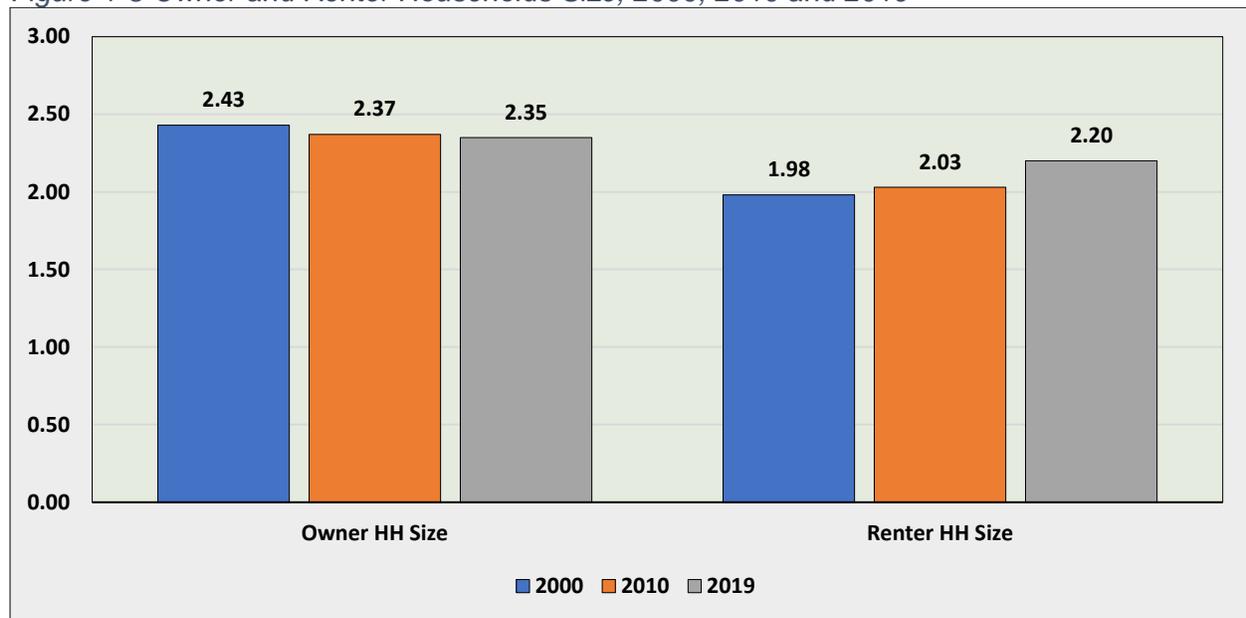
The post-“baby boom” population—which is smaller than the baby boom population—is now in the prime age categories for forming new households. An overall slowdown in the rate of new household formations because of the aging of the “baby boomer” segment of the population is a demographic trend that is expected to continue to dominate in the entire United States over the next decade. This well-known demographic dynamic will therefore affect the level and nature of housing demand in South Portland over the next decade as well.

Figure 1-7 Owner/Renter Occupied Units by Age of Householder in South Portland, 2019



Off-setting the decline in housing demand caused by the aging “baby boom” population is the trend towards decreasing household size. There are fewer persons per household today than in the past in owner occupied units. Renter occupied units are countering this trend by increasing in average household size by about 22% over the last decade. This shift could be explained by an increasing share of renters aged 35-64 years, the prime age for raising children. Similarly, there is a growing share of homeowners aged 65 to 84 years which typically have fewer people per household. However, since there are more owner-occupied units than rental unit in the city, the net effect is a decrease in average household size in the city. The most obvious implication for housing demand from this net effect over time is that more housing units will be required to house each increment of both the existing population and any population growth in the city over the next decade versus what was the case over the last twenty to thirty years.

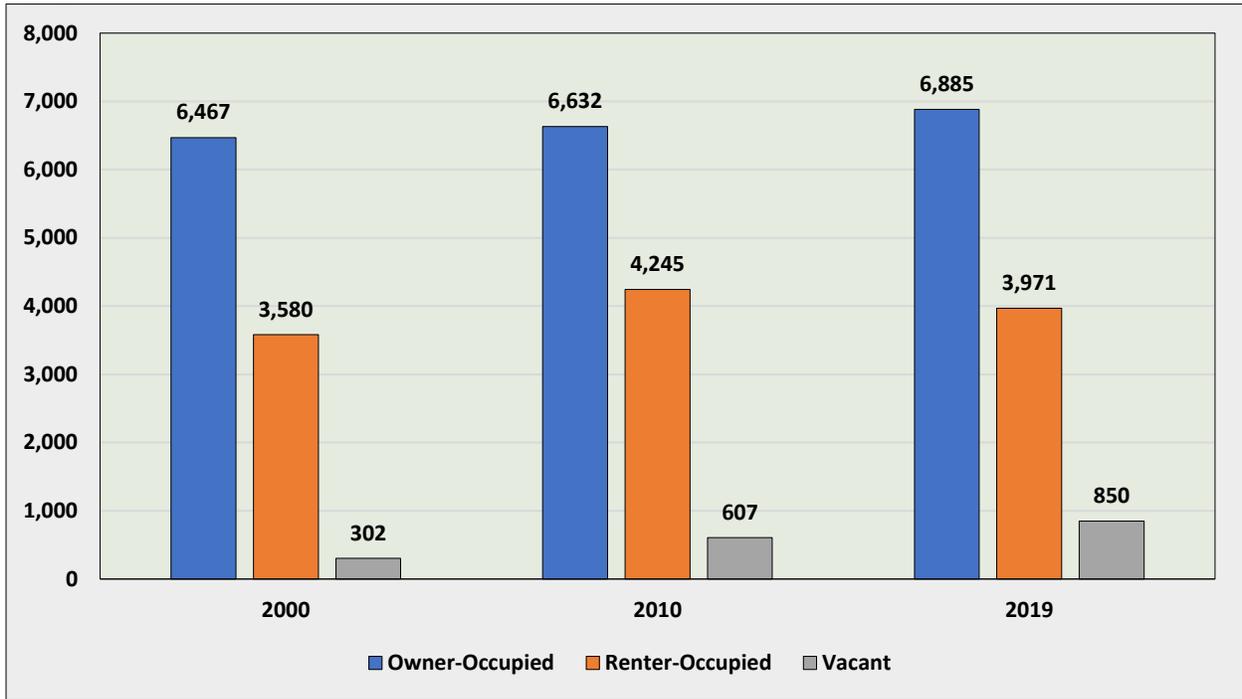
Figure 1-8 Owner and Renter Households Size, 2000, 2010 and 2019



Over the past two decades, the number of owner-occupied units has slowly increased within the city from 6,467 units in 2000 to 6,885 units in 2019. Renter occupied units have fluctuated from 3,580 units in 2000, increasing to 4,245 units in 2010 and then declining slightly to 3,971 renter-occupied units in 2019. Some of this fluctuation, particularly around the 2010 Census, may be explained by the shifting housing needs before, during, and after the Great Recession (2007-2009) when many owner-occupied houses were foreclosed upon increasing the number of rental units, as well as the increasing number of vacant units⁵ within the City, increasing from 302 units 2000 to 850 units in 2019.

⁵ A housing unit is vacant if no one is living in it at the time the survey is taken. Vacant units can include seasonal/second homes, new owner/rental units that are not yet occupied, or units being held off the market for repairs, settlement of an estate, and/or for other personal reasons.

Figure 1-9 Owner-Occupied, Renter- Occupied and Vacant Units in South Portland, 2000, 2010, 2019

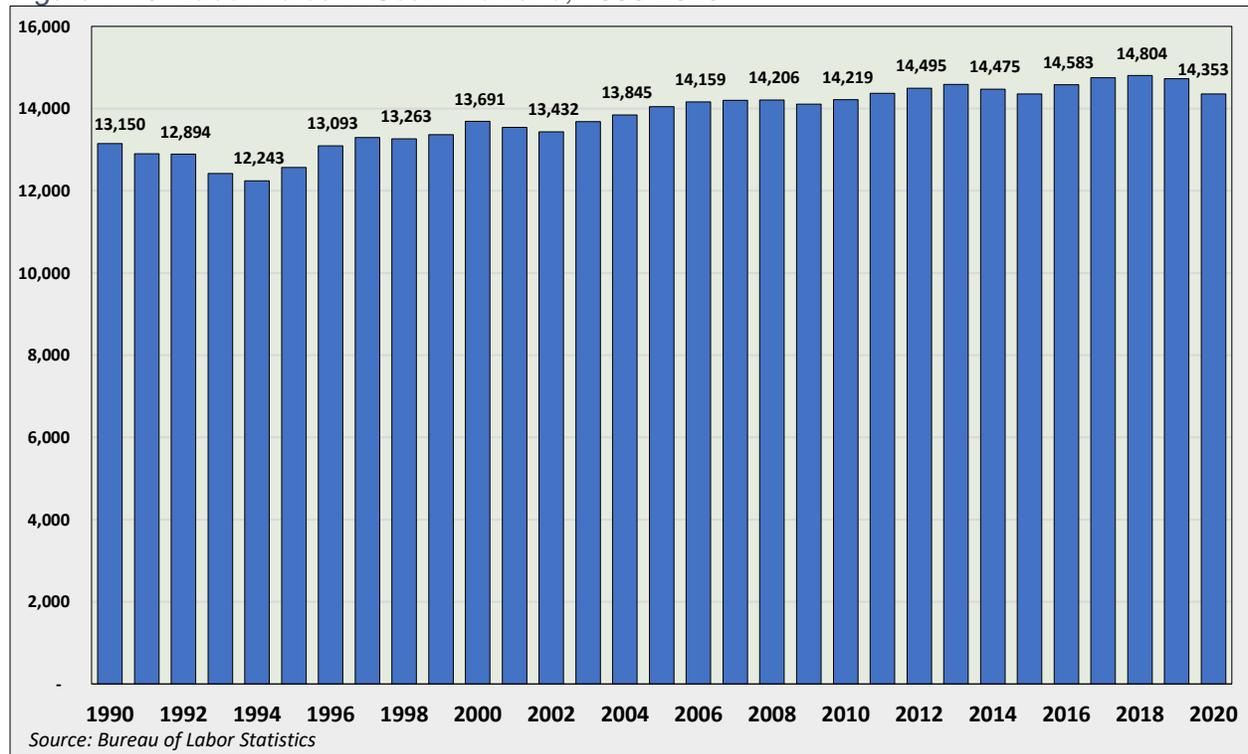


LABOR MARKET AND EMPLOYMENT TRENDS IN SOUTH PORTLAND

Labor Force Trends

The City’s labor force⁶ has generally tracked closely with the national business cycle expansion and contraction, though in a more muted fashion. After declining slightly in the early 1990s, the City’s labor force grew by roughly 12 percent to 13,691 people in 2000. From then on, the City’s labor force has grown slowly, moved up and down with the business cycles and reached a peak in 2018 with 14,804 people. After a very slight decline in 2019, the labor force contracted by 2.5% in 2020 as a result of the COVID-19 pandemic to 14,353 people (versus a contraction of 1.7% for the nation Figure 1-10).

Figure 1-10 Labor Force in South Portland, 1990-2020



Employment Trends

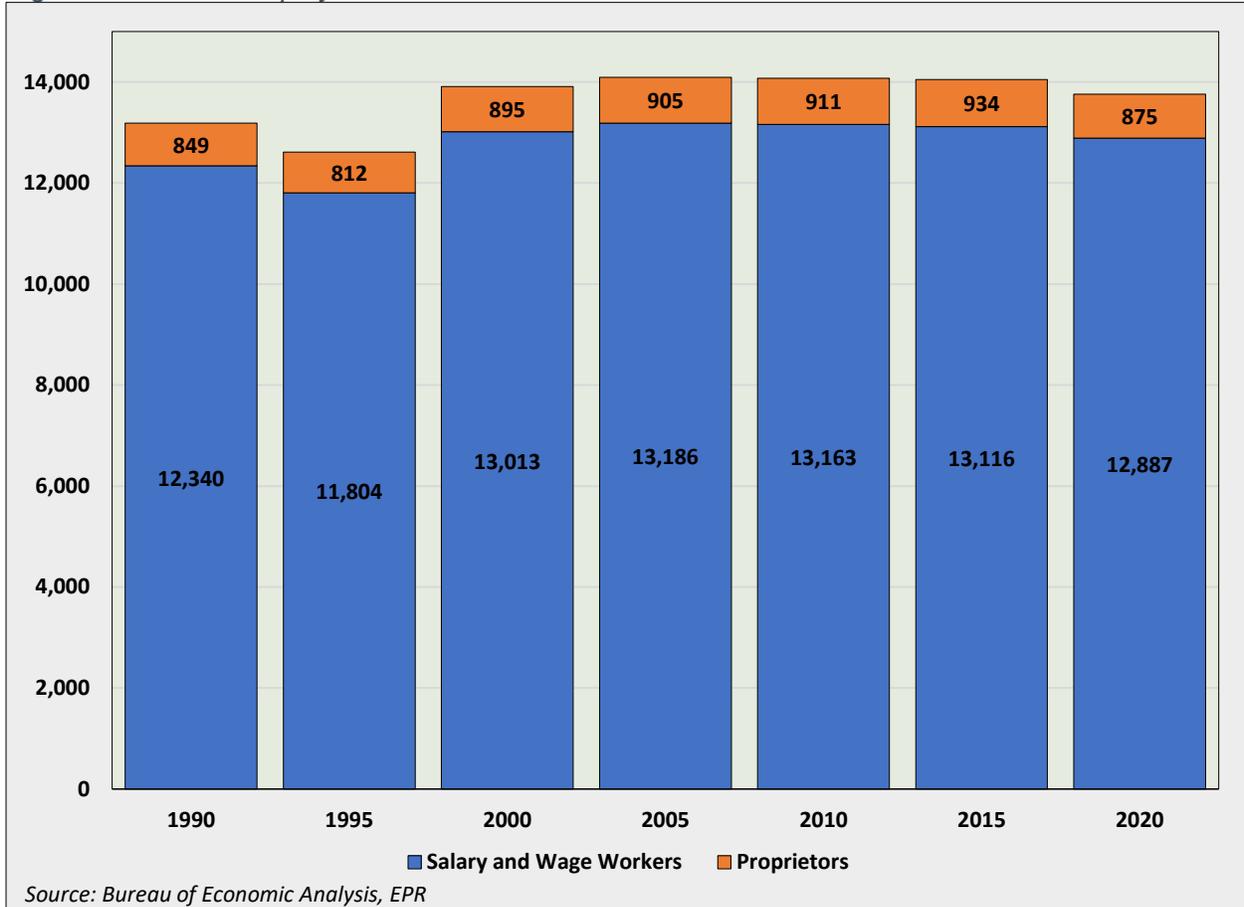
In the 1990s, total employment⁷ in the city has fluctuated significantly but ended the period stronger than it started. There was relatively little change in employment from 2000 through 2015, with employment peaking in 2018 with 14,897 workers. Employment in the City—as throughout the nation due to the COVID-19 pandemic—took a marked hit in 2020 with the number of wage and salary workers dropping to 13,762 (down 7.6 percent from 2018).

⁶ The labor force refers to those persons employed or seeking employment (unemployed) within a geographic area. Employment in this case is not a measure of the number of jobs within the city but a measure of the number of people within the city who have reported through a survey of households in the city that they hold at least one job.

⁷ Total employment used in this report is consistent with the Bureau of Economic Analysis (BEA) series of full- and part-time employment. In addition to wage and salary employment BEA includes employment of proprietors, as well as farm workers and military.

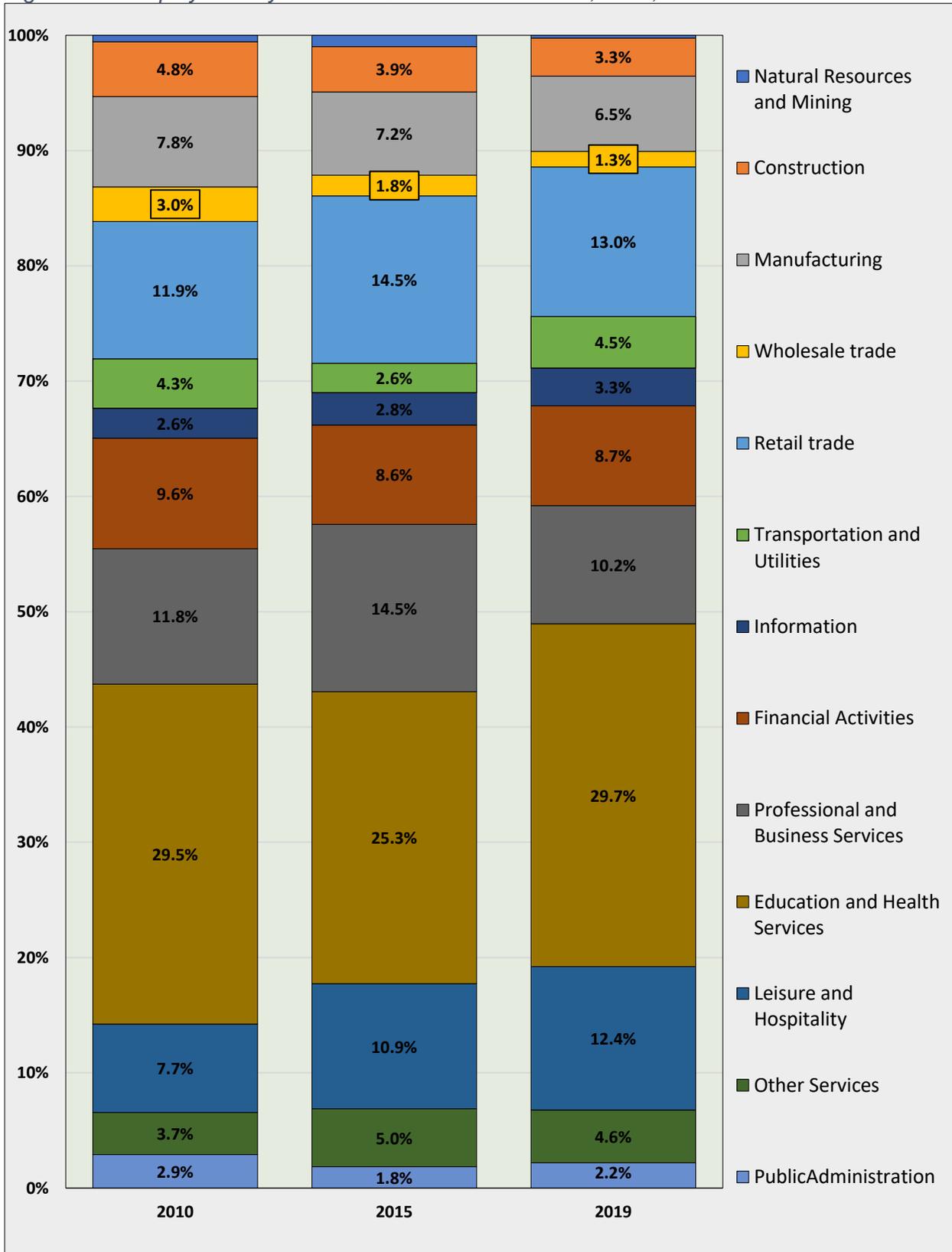
Historically, the majority of employment in the city have been salary- and wage-earning rather than proprietors. Since 1990 the share of proprietors in South Portland has remained relatively stable at roughly 6 percent, with most of the employment growth from the 1990s through 2000s generated by wage-earning jobs.

Figure 1-11 Total Employment in South Portland, 1990-2020



This pattern was mirrored within the sectors of the regional economy. Natural resources and mining, construction, and manufacturing (i.e., goods-producing) sectors all experienced noticeable contractions between 2010 and 2019 as a percentage of total employment, declining by 0.3 percentage points, 1.5 percentage points, and 1.3 percentage points, respectively. During the same period, the leisure and hospitality sector's share of total employment expanded by 4.8 percentage points, and retail trade expanded by 1.1 percentage points (Figure 1-11).

Figure 1-12 Employment by Sector in South Portland: 2010, 2015, and 2019



Regional Employment Structure

In economic terms, a region's employment base is defined as that employment among firms whose products or services are sold to markets outside of the region, thereby capturing new income for the area. Those customers may be in other parts of the state, in other states, or in foreign countries. Regional economic theory holds that selling to a non-local customer brings income into a region and qualifies that firm as part of the local economic base. Businesses that sell to local customers, such as other businesses or households, are called non-basic businesses. Services provided to markets outside the region and services provided to visitors coming in from outside the region also qualify as basic industries in capturing streams of new revenue.

Basic employment is that share of a regional industry's employment that corresponds to the industry's output sold outside the region. Estimates of basic employment among the regional industries was based on an indirect measure of specialization called location quotient analysis. Location quotients are simply measures of economic specialization; here comparing the share of total employment in a particular industrial grouping in the region with the share it represents in the nation. The quotient for any industry or sector is determined by dividing its share of the region employment by its share of national employment. The idea behind this measure is that a region that is highly specialized in a given sector is exporting a portion of that good or service. In contrast, a less developed industry sector implies that the region is importing goods and services to meet local demand in that sector.

A location quotient is computed in the following manner:

$$LQ_i = \frac{E_{ic} / E_c}{E_{is} / E_s}$$

where:

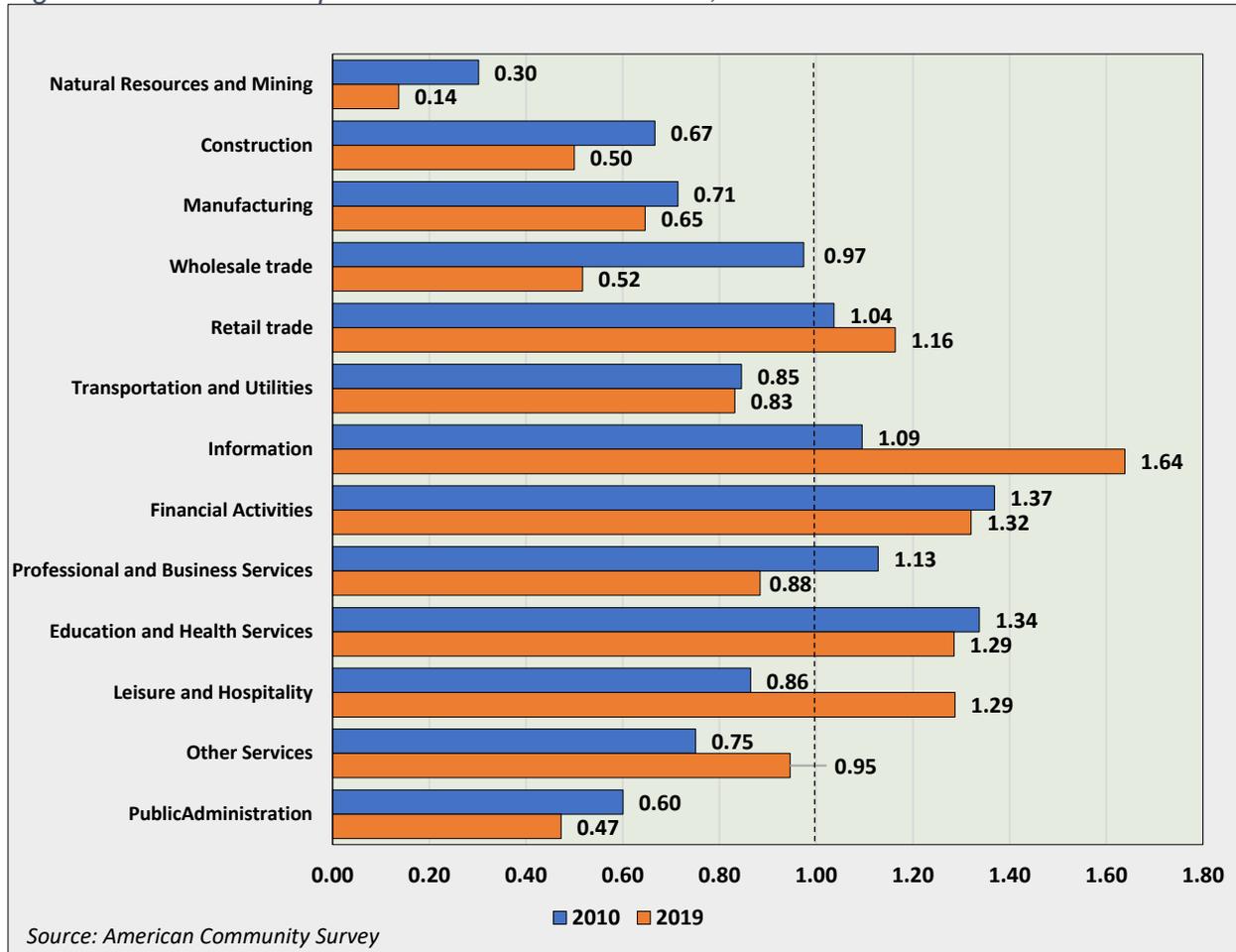
LQ_i is the location quotient for sector i ;

E_{ic} / E_c is the percent of regional employment in sector i ; and

E_{is} / E_s is the percent of national employment in sector i .

Essentially, location quotients indicate an industry sector's self-sufficiency and export orientation. A quotient of 1.0 means that the region has the same proportion of its employment in sector i as the nation. In other words, the region just meets local consumption requirements through local production of the specified good or service. If the location quotient is less than 1.0, the region is not producing enough to meet local needs, meaning that local residents and businesses need to import some goods or services to meet production or consumption requirements. This analysis can become a key indicator of sectors to focus on among local economic developers that are seeking to implement an import substitution strategy for growth. If the location quotient is greater than 1.0, the area has a larger proportion of its employment in sector i than does the nation, and is considered "specialized" in that sector. The excess proportion is assumed to be for export purposes and may represent an economic competitive "edge" for the region.

Figure 1-13 Economic Specialization of South Portland, 2010 and 2019



The location quotient helps identify a region's export sectors. Implicitly, this notion contends that a regional economy depends upon the vigor of its export industries. Other economic sectors in the region in turn support these export-oriented industries by providing needed supplies and services. As export industries grow, then linked local sectors will in turn expand.

More recently, this technique has been utilized to help identify local industry clusters (composed of leading companies and their respective supply chains). Any exporting industry, identified through location quotient analysis, might be a strong candidate for further development and can serve as the core of an industry cluster for the region. An industry cluster is a concentration of related industries and associated institutions with overlapping knowledge, skills, inputs, demand, and/or other economic linkages. An industry cluster tends to encourage the location of other supporting businesses, along with the persons-households with complementary skill sets (i.e. to staff the other companies that may be needed to supply-support the export-based facilities of the cluster) in order to facilitate the development of a sustainable competitive advantage that underpins sustainable future job growth for the region's industry cluster as a whole. This, in turn, can lead to increased demand for housing within the impacted region related to this growth.

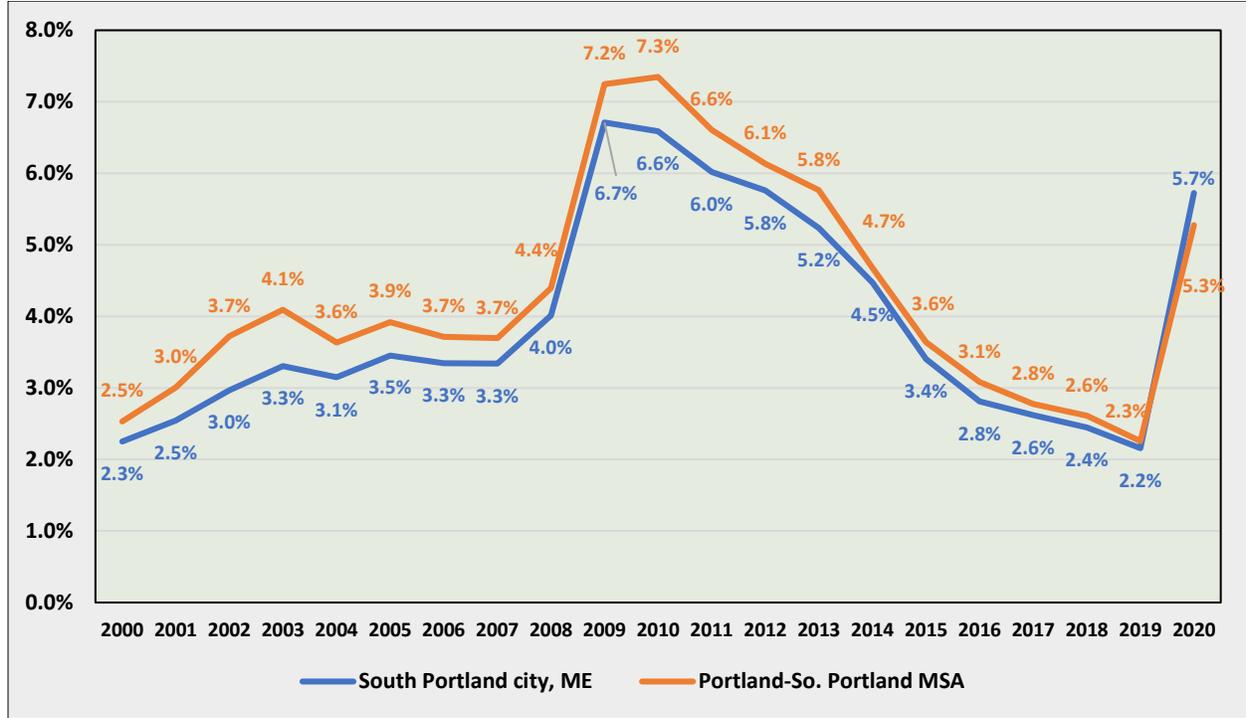
Economic snapshots of South Portland are provided for 2000 and 2019. Currently, the regional industries of importance include Information, Financial Activity, Education and Health Services,

and Leisure and Hospitality. Each of these industries have location quotients exceeding 1.2, underscoring economic specialization (Figure 1-13).

Unemployment

Unemployment is a significant indicator of the vitality of a region’s economy. As noted earlier, the labor force consists of two groups: those who are working; and those who are seeking work. Those who are not working but are actively looking for work constitute the unemployed.⁸

Figure 1-14 Annual Unemployment Rate in South Portland and Portland-So Portland MSA, 2000-2020



The unemployment rate in the Portland-South Portland MSA has been consistently higher—between 0.1 to 0.8 percentage points—than the city’s unemployment rate over the past 20 years. By 2019, the city and MSA had largely recovered from the “Great Recession,” with the unemployment rate reaching new record lows. In 2020, the COVID-19 pandemic-induced recession saw the unemployment rates jump to 5.3% in the MSA and 5.7% in the city, reversing the long trend of lower unemployment within the city. Preliminary data for the first few months of 2021 indicate that the city is also recovering more quickly than the MSA as a whole (Figure 1-14).

Commuting Patterns

Commuting/worker flows throughout the day include (1) internal movements—city residents traveling to in-city workplaces; and (2) external movements, composed of either city residents commuting to workplaces located outside of the city, or nonresidents commuting to workplaces in the city. The table below, which presents the most recent available commuting behavior data (2018) of residents and workers in the city, indicates that the city is a net importer of workers. In

⁸ Discouraged workers, defined as those no longer active in looking for work, are not included in the official labor force numbers.

2018,⁹ there were about 10,312 city residents holding jobs outside of the city—primarily in Portland, Scarborough, and Westbrook, while the city’s employers imported 21,314 non-resident workers from surrounding communities.

The commuter data shows that residents of the city travel a much shorter distance to work, with 76.6 percent travelling less than 10 miles and only 13.7 percent traveling farther than 25 miles. In contrast, only 46.0 percent of workers in South Portland travel less than 10 miles to get to work and 27.5 percent traveling farther than 25 miles. Interstate 95 and 295 play a vital role in connecting residents of other cities and towns with employment opportunities in the city. Interstate 95 runs south-to-north from Portsmouth, NH through Portland and South Portland and on through Augusta and Bangor before ending at the Houlton-Woodstock border crossing with Canada. Interstate 295 is an auxiliary interstate highway running from Scarborough along the Maine coast, bypassing Lewiston and Auburn, and reconnecting with Interstate 95 just south of Augusta.

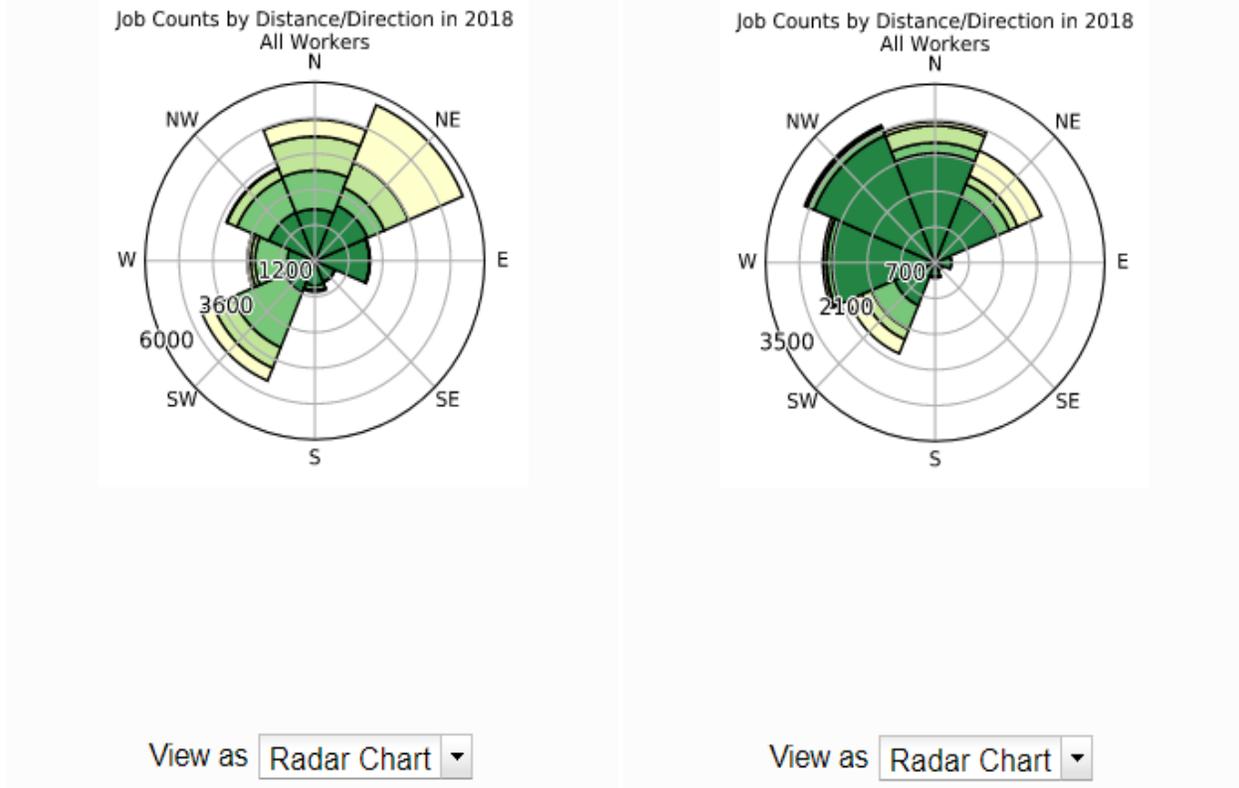
Table 1:6 Commuting Patterns in South Portland, Primary Jobs¹⁰ 2018

Where Workers in South Portland Live		2018		Where Residents of South Portland Work		2018	
Municipality	Count	Share		Municipality	Count	Share	
Portland city (Cumberland, ME)	3,293	13.54%		Portland city (Cumberland, ME)	4,878	37.25%	
South Portland city (Cumberland, ME)	2,782	11.44%		South Portland city (Cumberland, ME)	2,782	21.25%	
Scarborough town (Cumberland, ME)	1,269	5.22%		Scarborough town (Cumberland, ME)	951	7.26%	
Westbrook city (Cumberland, ME)	1,181	4.86%		Westbrook city (Cumberland, ME)	738	5.64%	
Gorham town (Cumberland, ME)	998	4.10%		Falmouth town (Cumberland, ME)	279	2.13%	
Saco city (York, ME)	909	3.74%		Biddeford city (York, ME)	268	2.05%	
Windham town (Cumberland, ME)	864	3.55%		Gorham town (Cumberland, ME)	189	1.44%	
Biddeford city (York, ME)	737	3.03%		Cape Elizabeth town (Cumberland, ME)	172	1.31%	
Buxton town (York, ME)	517	2.13%		Saco city (York, ME)	169	1.29%	
Cape Elizabeth town (Cumberland, ME)	499	2.05%		Lewiston city (Androscoggin, ME)	161	1.23%	
Falmouth town (Cumberland, ME)	481	1.98%		Augusta city (Kennebec, ME)	157	1.20%	
Old Orchard Beach town (York, ME)	462	1.90%		Brunswick town (Cumberland, ME)	148	1.13%	
Standish town (Cumberland, ME)	443	1.82%		Yarmouth town (Cumberland, ME)	142	1.08%	
Gray town (Cumberland, ME)	343	1.41%		Freeport town (Cumberland, ME)	134	1.02%	
Lewiston city (Androscoggin, ME)	339	1.39%		Windham town (Cumberland, ME)	124	0.95%	
Sanford city (York, ME)	309	1.27%		Auburn city (Androscoggin, ME)	116	0.89%	
Cumberland town (Cumberland, ME)	268	1.10%		Bangor city (Penobscot, ME)	110	0.84%	
Waterboro town (York, ME)	268	1.10%		Kennebunk town (York, ME)	69	0.53%	
Brunswick town (Cumberland, ME)	266	1.09%		Cumberland town (Cumberland, ME)	62	0.47%	
Yarmouth town (Cumberland, ME)	257	1.06%		Sanford city (York, ME)	51	0.39%	
All Other Cities/Towns	7,829	32.20%		All Other Cities/Towns	1,394	10.65%	
Total	24,314	100.00%		Total	13,094	100.00%	

⁹ Most current year of available data.

¹⁰ A primary job is the highest paying job for an individual worker for the year. The count of primary jobs is the same as the count of workers.

Figure 1-15 Distance and Direction of Workers in South Portland to their home (left) and of Residents in South Portland to their work



Jobs by Distance - Work Census Block to Home Census Block

	2018	
	Count	Share
Total Primary Jobs	24,314	100.0%
Less than 10 miles	11,174	46.0%
10 to 24 miles	6,460	26.6%
25 to 50 miles	3,354	13.8%
Greater than 50 miles	3,326	13.7%

Jobs by Distance - Home Census Block to Work Census Block

	2018	
	Count	Share
Total Primary Jobs	13,094	100.0%
Less than 10 miles	10,034	76.6%
10 to 24 miles	1,266	9.7%
25 to 50 miles	781	6.0%
Greater than 50 miles	1,013	7.7%

Figure 1-16 Where Residents of South Portland Work, 2018

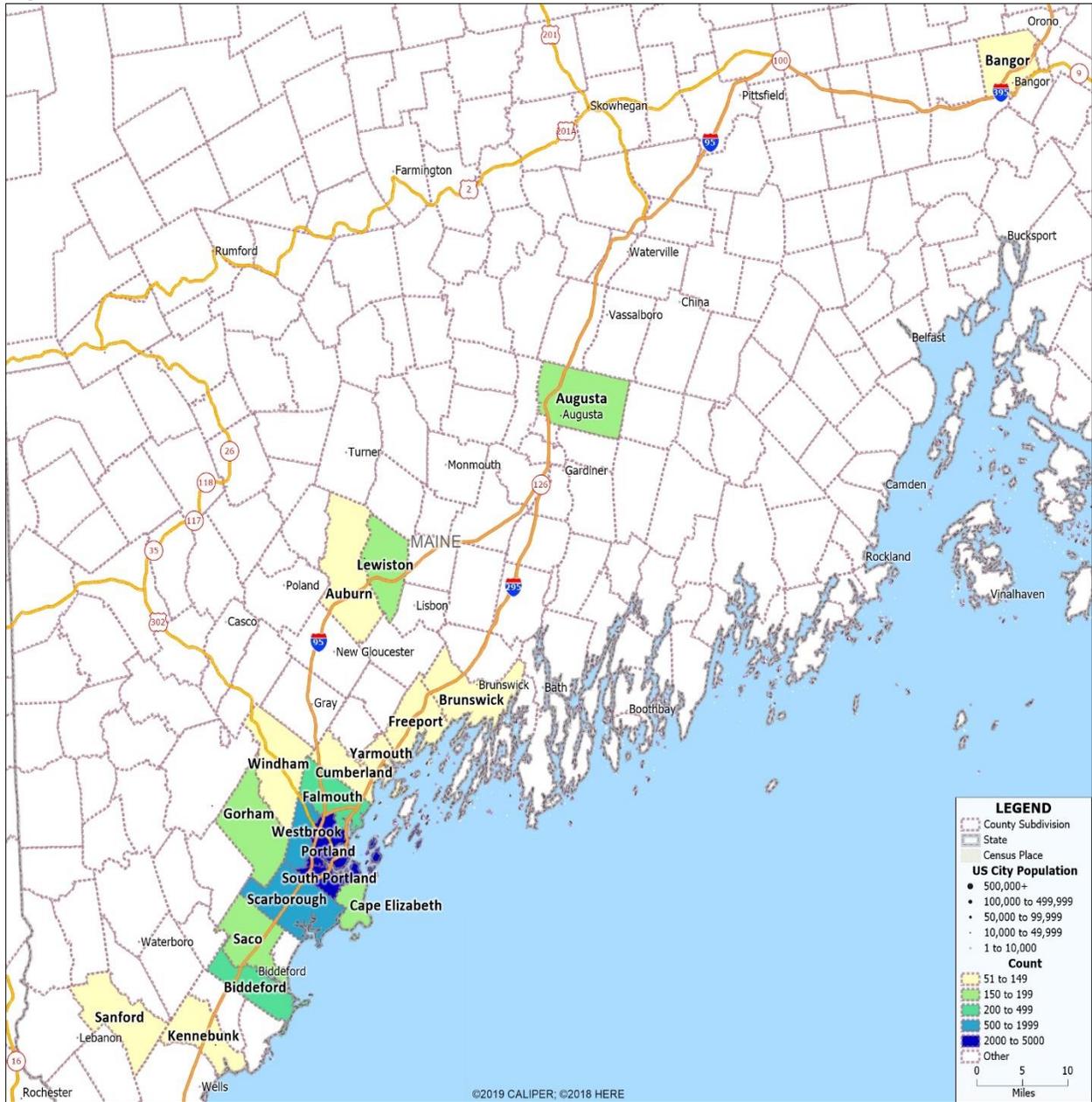
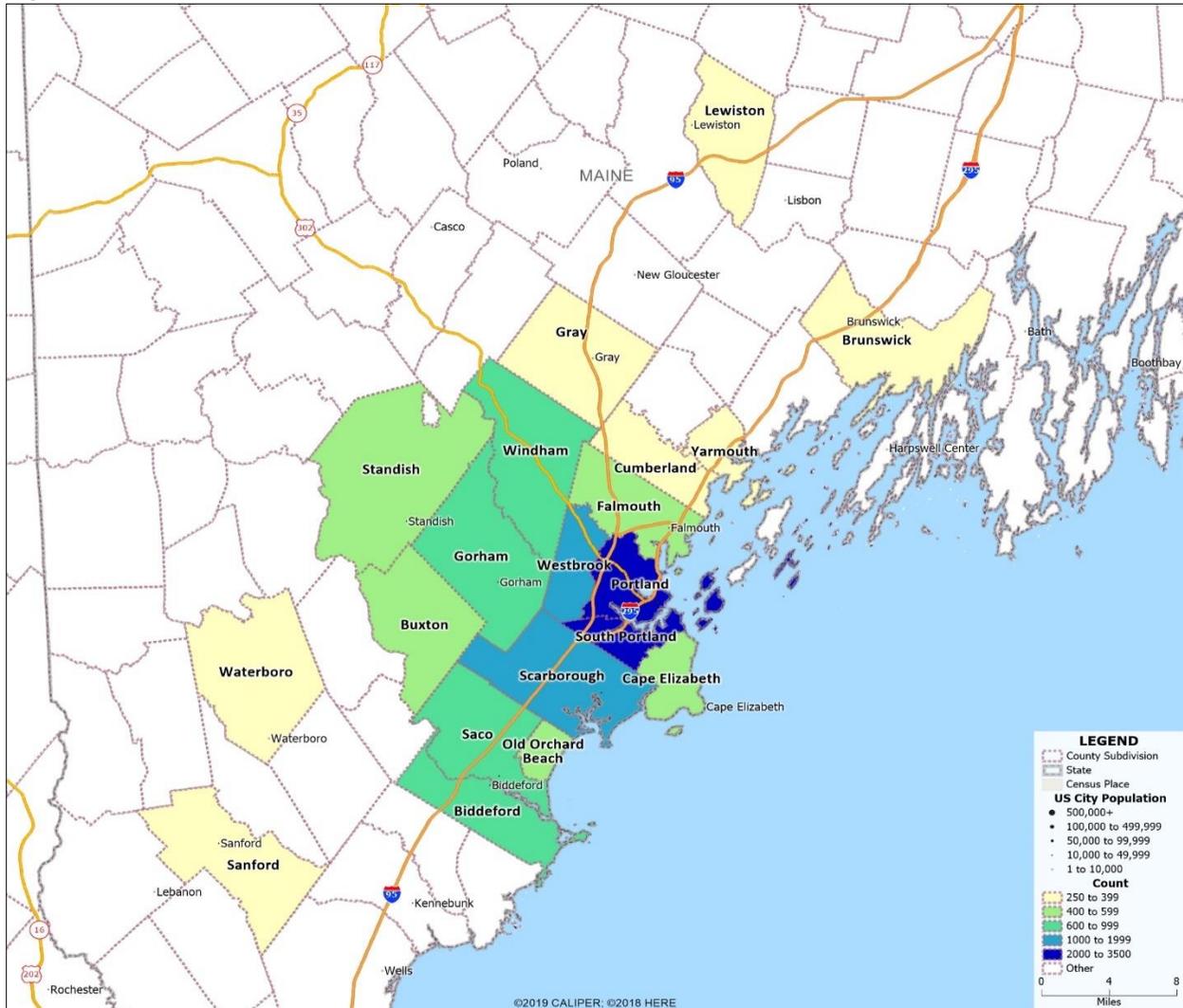


Figure 1-17 Where Workers in South Portland Live, 2018



This data shows that the city is a regional hub of employment, drawing many residents from the surrounding towns to the city for work. These commuters may seek to shorten their commuting time and expenses by living closer to their place of work and are traditionally the likeliest sources of demand for housing within the city. The prevalence of remote working has increased due to the COVID pandemic—but it does not yet appear to be a dominant feature of the labor market even though it has likely grown significantly in recent years.

Anecdotal evidence from the focus groups discussed below indicates that many of those purchasing newly-constructed, single-family homes were taking advantage of working remotely for employers that were actually physically located in larger cities in southern New England and are seeking the amenities and charms of a smaller city—like South Portland—to live in. It is unclear as of the time of this report how long remote working will remain an available option for workers currently residing in the city as the risks of the COVID pandemic have begun to recently diminish. It is a labor market factor of potential importance as a source of additional housing demand in the city that deserves to be watched—as acceptance of this type of remote work arrangement potentially increases over the next decade as the importance of physical proximity to one’s workplace potentially declines over the next decade.

TRENDS IN PERSONAL AND HOUSEHOLD INCOME IN SOUTH PORTLAND

Personal Income

Employment measures only tell part of the economic story of a region. Personal income in South Portland, the most broad-based measure of general purchasing power available at the local level, amounted to over \$1.57 billion in 2019. When measured in current dollars, Cumberland County's total personal income more than doubled between 2000 and 2019. However, when measured in constant 2012 dollars to adjust for inflation, the entire increase over the 19-year period amounted to only 52 percent.¹¹

Personal income consists of three major components: 1) net earnings for labor services; 2) property incomes; and 3) transfer receipts as detailed below. Net labor earnings (\$991 million), which accounted for 63.2 percent of the City's total personal income in 2019, can be considered payment for current labor services. Net earnings include wage and salary disbursements, proprietors' income, and other labor income which are mostly employer contributions to private pension and welfare funds. The contributions that individuals make to social insurance programs (e.g., Social Security taxes) are excluded from net earnings.

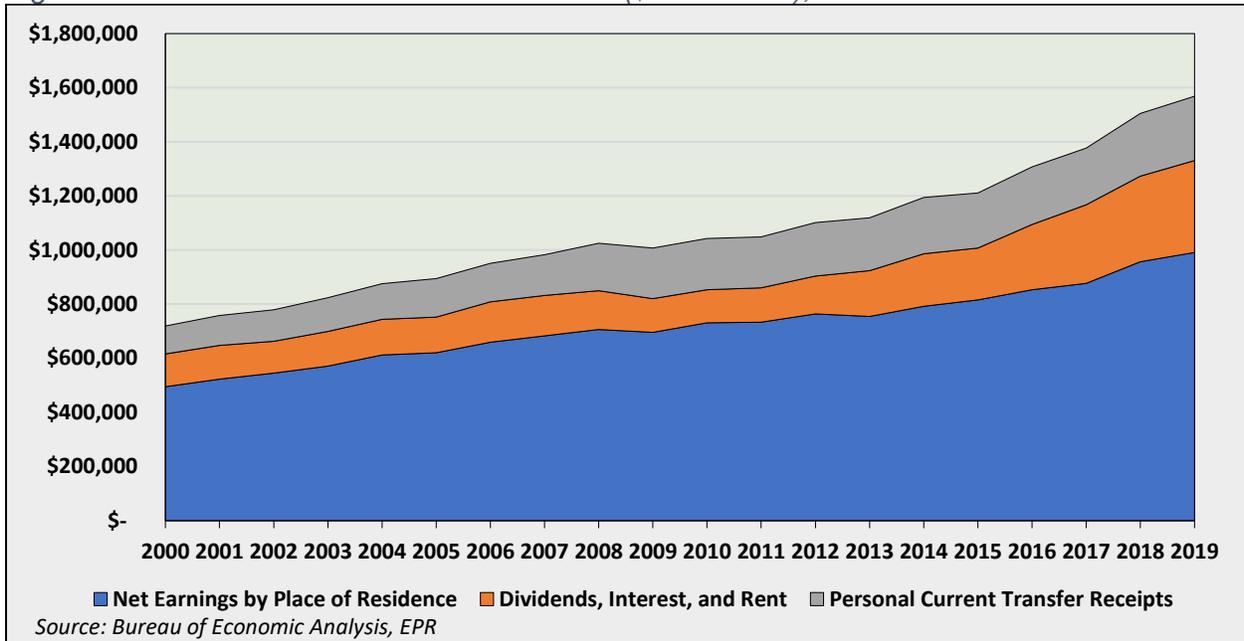
The remaining non-labor portion (\$577 million or 36.8 percent) of the City's personal income was split between dividends, interest, and rent (which is also called property income) and transfer receipts. Wages and proprietor income are the return to productive labor, while dividends, interest and rent are the return to fixed assets like stocks, bonds, and rental property. Property incomes (\$339 million) account for 21.6 percent of the City's income; above the MSA and national average.

Transfer receipts, the other portion of non-labor income, accounts for 15.2 percent of the City's personal income (\$238 million); compared to the national share of 16.8 percent. Transfer receipts are referred to as "unearned income," such as receipts from the government to people (and non-profit institutions) for reasons other than labor services. Some people might think "welfare payments" when hearing transfer receipts. However, "welfare" only accounts for about 5 percent of transfer receipts in Cumberland County in 2019, with unemployment insurance benefits adding just 0.6 percent. Transfers receipts are composed of the following leading categories: retirement benefits (38.0 percent), medical benefits (44.5 percent), veterans benefit payments (4.2 percent), federal assistance for education and training programs for individuals (5.3 percent), and government payments to nonprofit institutions business payments to individuals (2.2 percent).

Retirement benefits and medical payments amount to over four-fifths of all transfer payments for City residents. Together with the about 21 percent of personal income coming from dividends, rent and interest, transfer receipts represents 33 percent of the regional economy. Put another way, if one focused only on jobs and the money they bring in, one-third of the economy would be ignored.

¹¹ The U.S. Bureau of Economic Analysis reports personal income data in current dollars--the basis of the value or purchasing power of the dollar during the year in which the incomes are received. To remove the effects of inflation and allow for direct comparison of personal income in terms of an approximation of real purchasing power over time, constant dollar or real estimates of personal income are computed using the Implicit Price Deflator for personal consumption expenditures (2012 = 1.00).

Figure 1-18 Personal Income in South Portland (\$Thousands), 2000-2019



Median Household Income

Median household income in the city was \$69,290 in 2019, growing by \$18,224 (in current dollars) over the previous nine years. For resident homeowners, median household income in 2019 was \$87,435, while renters’ median household income was \$47,101. In the nine years since 2010, owners’ median household income has grown by \$25,782 while renters’ median household income has grown by a relatively modest \$12,999. This represents a significant difference in economic conditions and related opportunities experienced between owner and renter households.

Table 1:7 Median Household Income of South Portland and Peer Communities, 1999, 2010 and 2019

Region/Municipality	1999	2010	2019	Annual Growth Rate	
				1999-2010	2010-2019
South Portland City	\$42,770	\$51,066	\$69,290	1.6%	3.4%
Portland City	\$35,650	\$44,422	\$60,467	2.0%	3.5%
Cumberland County	\$44,048	\$55,658	\$73,072	2.1%	3.1%
Sagadahoc County	\$41,908	\$55,486	\$63,694	2.6%	1.5%
York County	\$43,630	\$55,008	\$67,830	2.1%	2.4%
Maine	\$37,240	\$46,933	\$57,918	2.1%	2.4%
United States	\$41,994	\$51,914	\$62,843	1.9%	2.1%

Source: U.S. Census Bureau and American Community Survey

Poverty in South Portland

Poverty levels in a community can be an indicator of the housing need for low-income households within a community. Statistics indicate that 2019 poverty levels for all individuals range from a low of 8.8 percent within the South Portland, compared to 14.6 percent in Portland and 11.8 percent

for the State of Maine. Compared to all individuals, a greater share of children (under 18 years old) is below the poverty line however, 14.7% within the city compared to 15.1% statewide.

Figure 1-19 People below the Poverty Level, 2010, 2013, 2016, and 2019

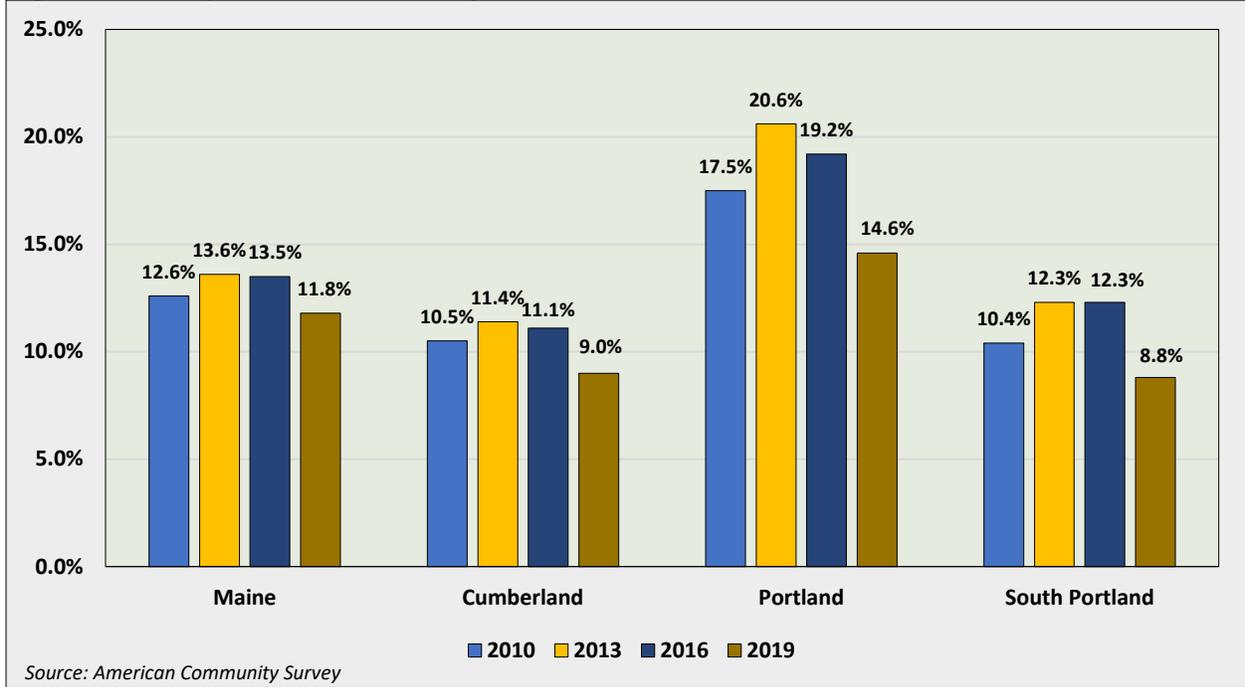
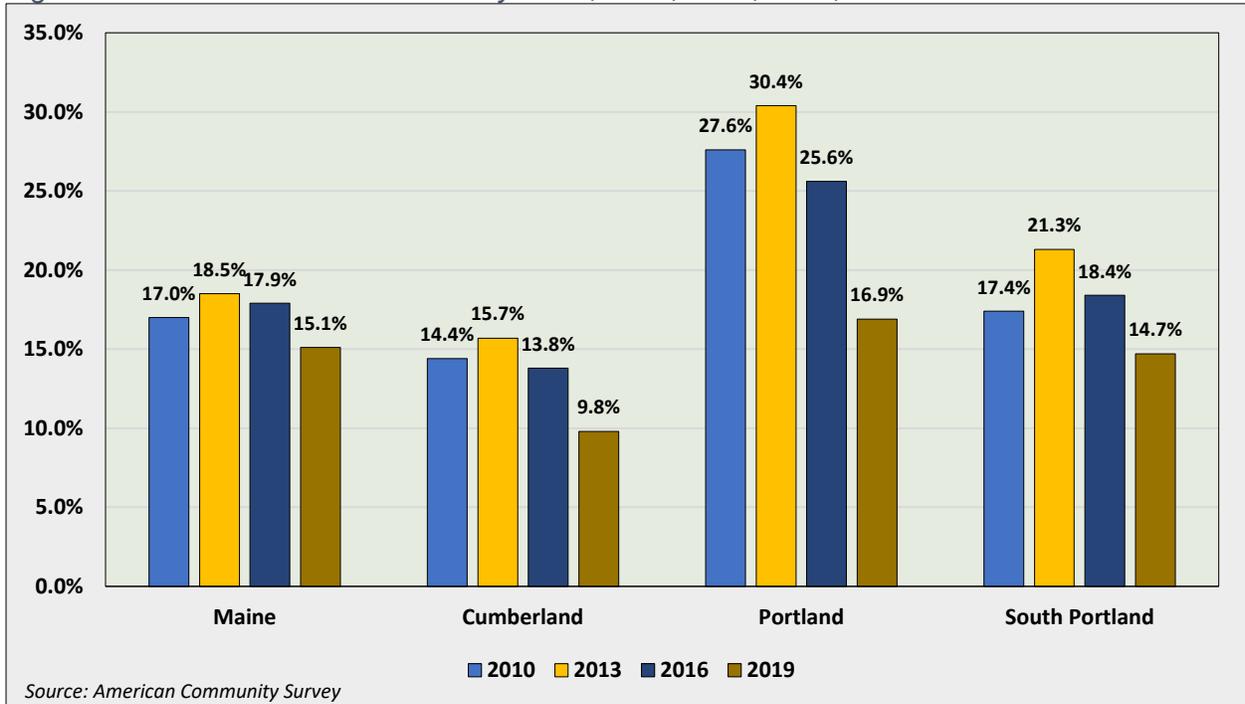


Figure 1-20 Children below the Poverty Level, 2010, 2013, 2016, and 2019

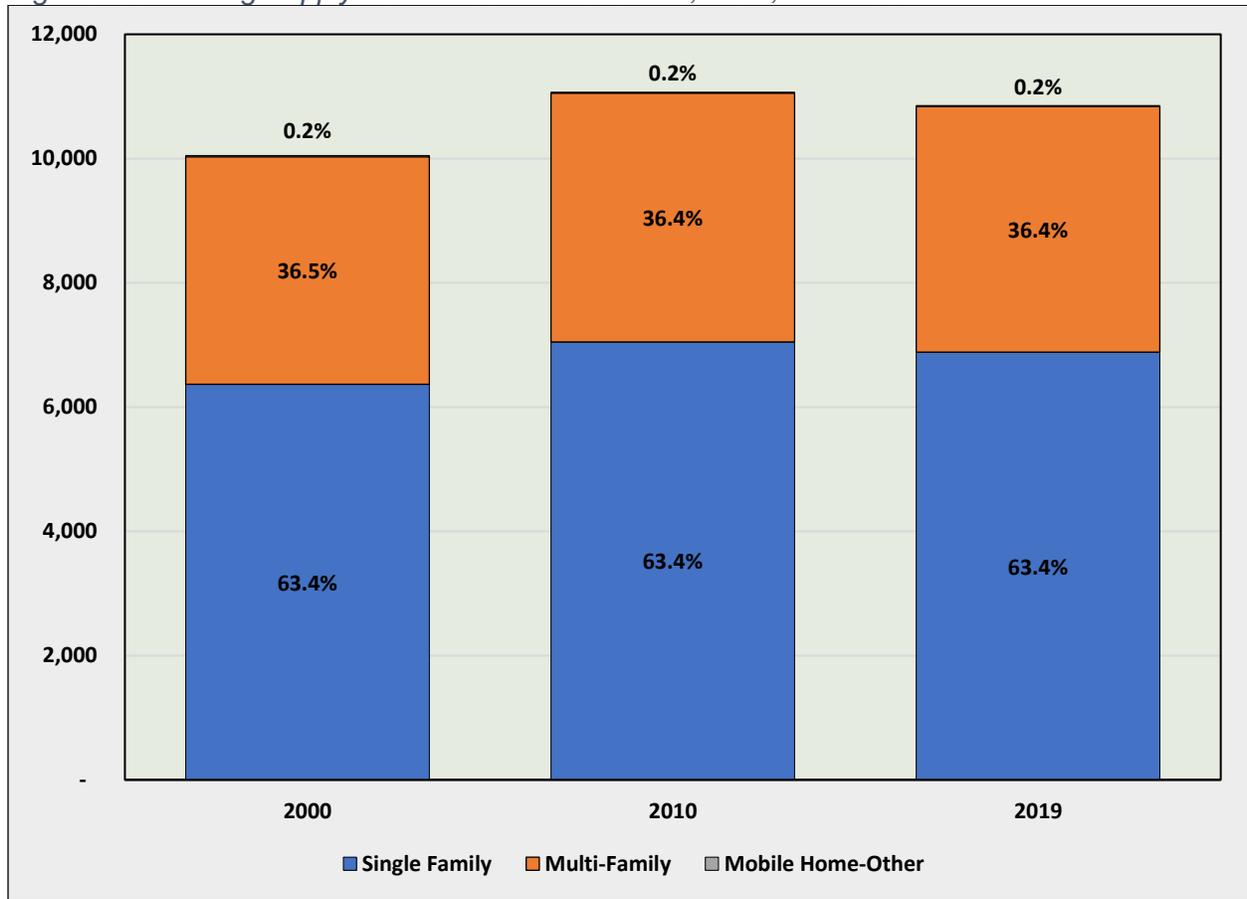


Chapter 2 HOUSING SUPPLY IN SOUTH PORTLAND

Turning to the housing supply for the city and the county, the majority (63 percent) of housing units within the city has historically been single-family units, however the share of single-family units in South Portland compared to neighboring communities other than Portland is smaller, indicating a more densified housing mix is available in the city. Only the City of Portland has a lower percentage of single-family units as a share of the housing stock than South Portland, with just 41 percent of its units in this category in 2019.

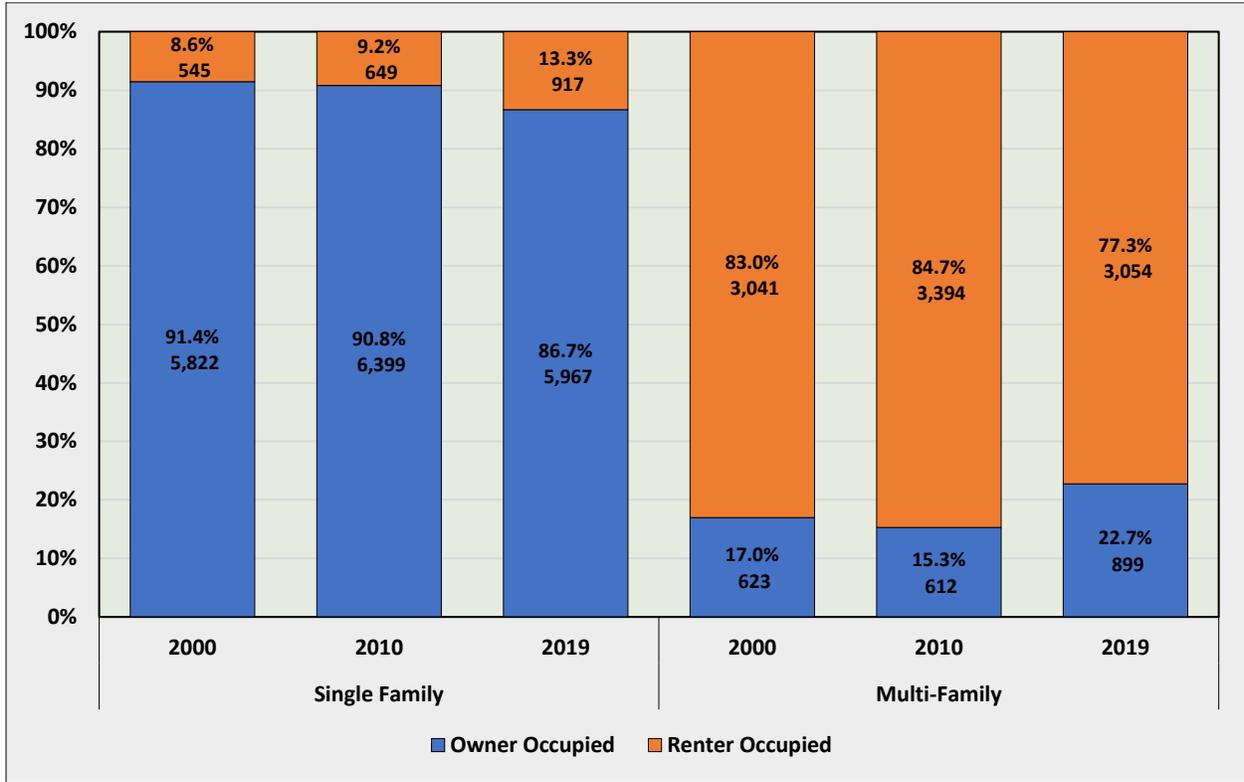
Over the past 19 years, the number of single- and multi-family units that have been added in the city has roughly maintained the share of each housing type. As of the 2019, there were approximately 6,884 single-family units along with 3,953 multi-family units and only 19 mobile home/other units (Figure 2-1).

Figure 2-1 Housing Supply in South Portland in 2000, 2010, and 2019



Since 2000, there has been a slow conversion of single-family units from owner-occupied units to renter-occupied units, and an increasing share of owner-occupied multi-family units (i.e., condos). In 2000, 91.4 percent of single-family units were owner-occupied, declining to 86.7 percent in 2019. Similarly, in 2000 only 17.0 percent of owner-occupied units were multi-family but that share increased to 22.7 percent in 2019. This trend has quickened in just the last five years which may indicate the relative affordability or availability of multi-family units as opposed to single family units.

Figure 2-2 Owner/Renter Single and Multi-Family Units in South Portland in 2000, 2010, and 2019



Building permit data can be a leading indicator of housing supply. Since the early 2000s, there has been a marked reduction in the number of single-family building permits issued within the city, peaking in 2003 with 127 units and declining to just 18 and 15 units in 2019 and 2020, respectively. Multi-family unit permits are more sporadic but have increased notably in recent years with permits for 204 units in 2019 and 260 units in 2020 (Figure 2-3) owing at least in part to efforts from the City to expand affordable and low income housing. It can take several years from the time permits are issued to when the housing units become available in the housing supply or housing unit inventory. As a result, the city is very likely still feeling the “squeeze” of too few new housing unit units added to the city’s housing unit inventory over the last decade, exhibited by sharply escalating home prices.

Figure 2-4 shows the monthly sales volume and 12-month moving average of residential properties (excluding condominium sales) in South Portland from January 2005 through September 2021 based on South Portland’s Vision Government Solutions sales database. This chart also shows significant seasonality in the housing market which is typical of most housing markets in the northeast. To reduce confusion related to seasonal changes, a 12-month moving average is included in Figure 2-3. Residential property sales peaked in 2006 at roughly 34 sales per month before falling to 15 sales per month following the great recession. From 2012 to 2015 the number of transactions slowly increased and leveled off at 25 sales per month until January of 2020. As a result of the COVID-19 pandemic, sales volume initial decreased slightly during the first half of 2020 but then rebounded in late 2020 and early 2021 to a level similar to that of 2006.

Figure 2-3 Building Permits in South Portland in 2000-2020

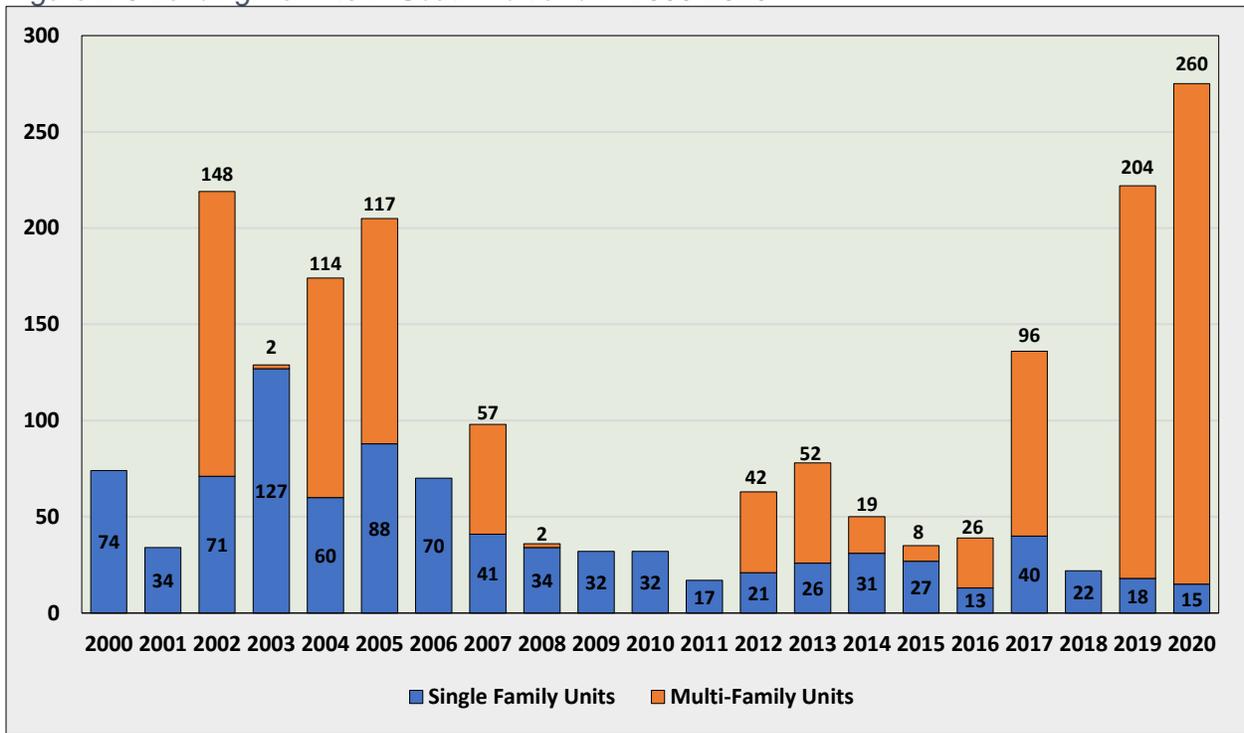
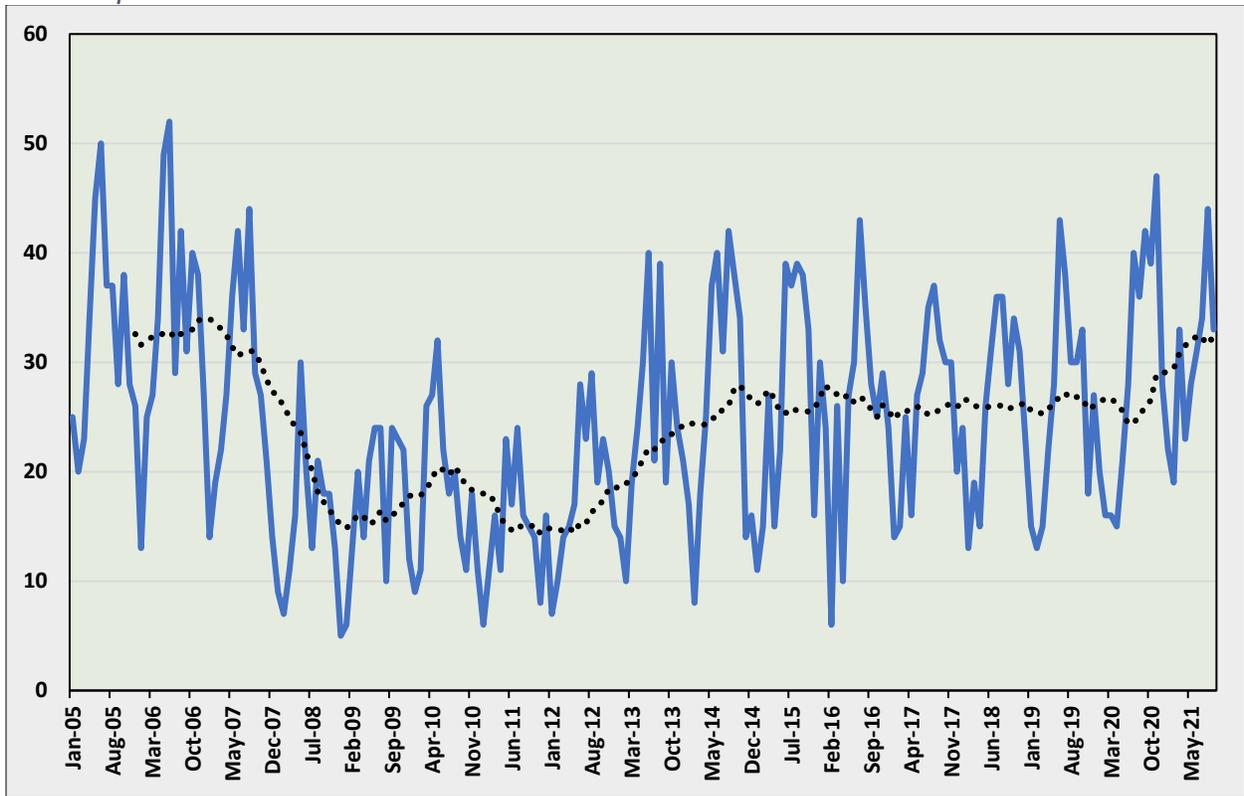
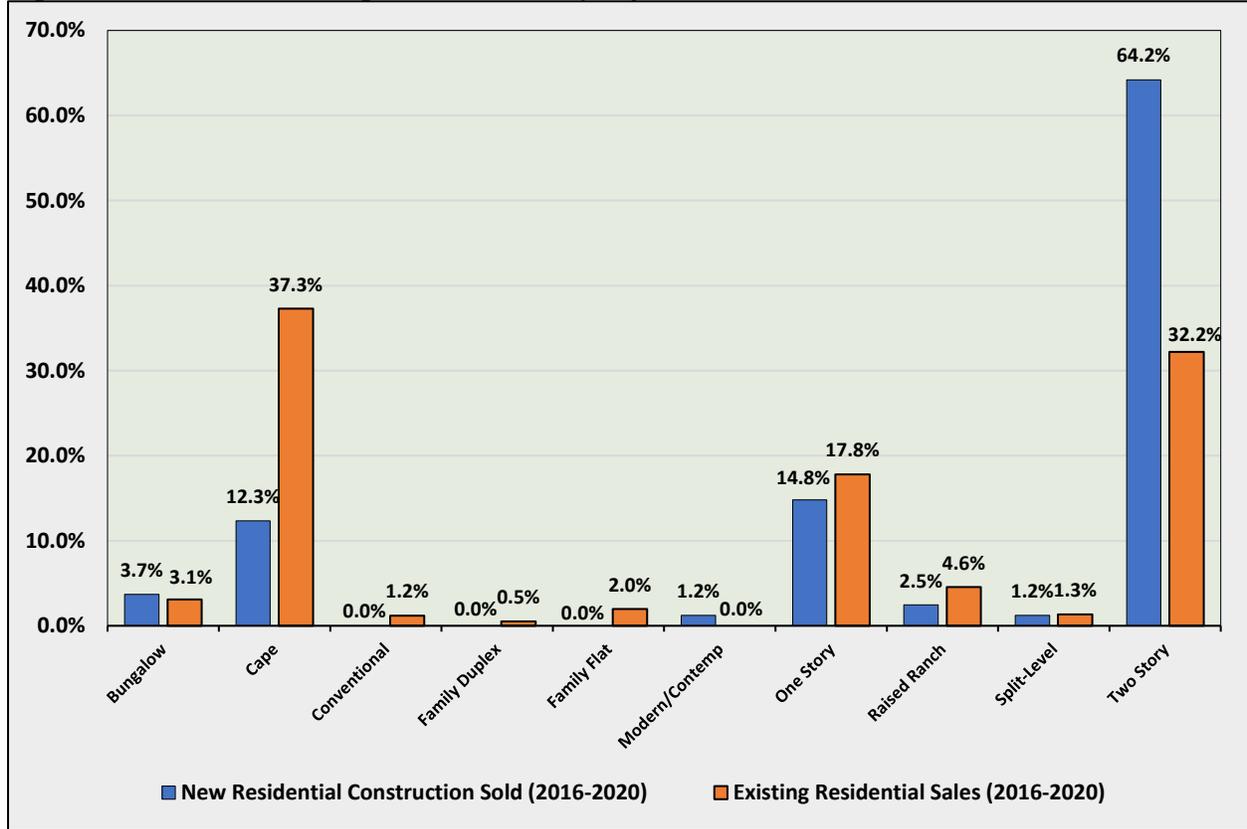


Figure 2-4 Monthly Sales Volume of Residential Properties (and 12-Month Moving Average), 2005-September 2021



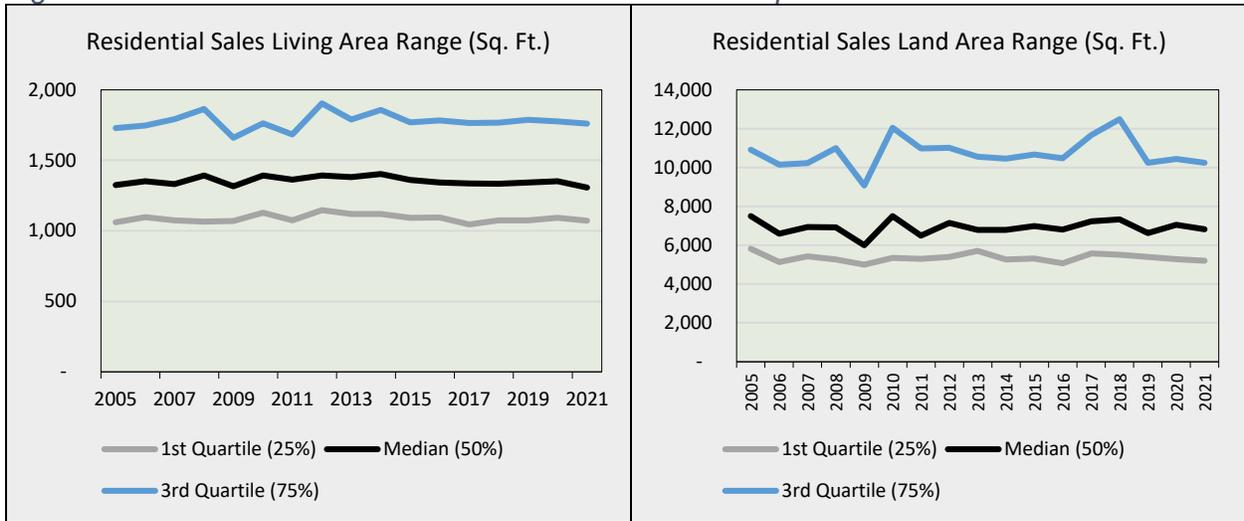
Among owner-occupied units, the housing types or styles associated with sales have not varied greatly since 2005. Over the last five years most residential property sales have been either Capes (36.0 percent), Two Story (33.8 percent), or One Story (17.6 percent) structures; Raised Ranches (4.5 percent), Bungalows (3.1 percent), and various Family Flats, Split-Levels, Conventional, Family Duplexes, and Modern/Contemporary structures account for the remainder. In contrast to the existing housing unit supply, new residential construction is overwhelmingly two-story single-family homes. However, new construction accounts for only 5.1 percent of single-family homes sold, totaling just 81 of the 1,593 sales from 2016 to 2020.

Figure 2-5 New and Existing Residential Property Sales, 2016-2020



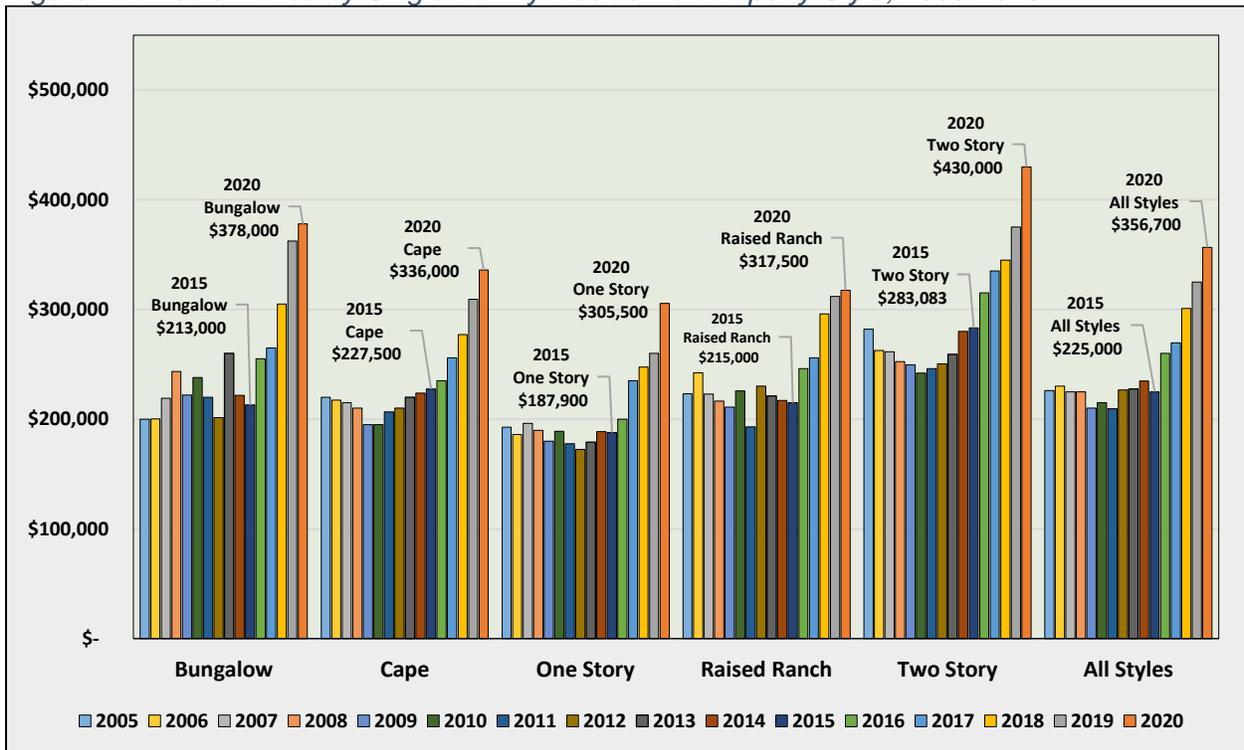
A review of the listed living space and land area of the sold properties indicate very little change or variation in the size of the homes or the size of the property. The Figure 2-6 includes the median values as well as the 25th percentile (1st Quartile) and the 75th percentile (3rd Quartile) which show the range of the middle 50% of sales. The median size of the living space has stayed level at just under 1,400 square feet and the 1st and 3rd quartile range from 1,100 square feet to 1,800 square feet. Land area has followed the same pattern, remaining mostly level at about 7,000 square feet (about 1/6th of an acre) with the quartiles ranging from 5,000 square feet to 11,000 square feet.

Figure 2-6 Live Area and Land Area of Sold Residential Properties



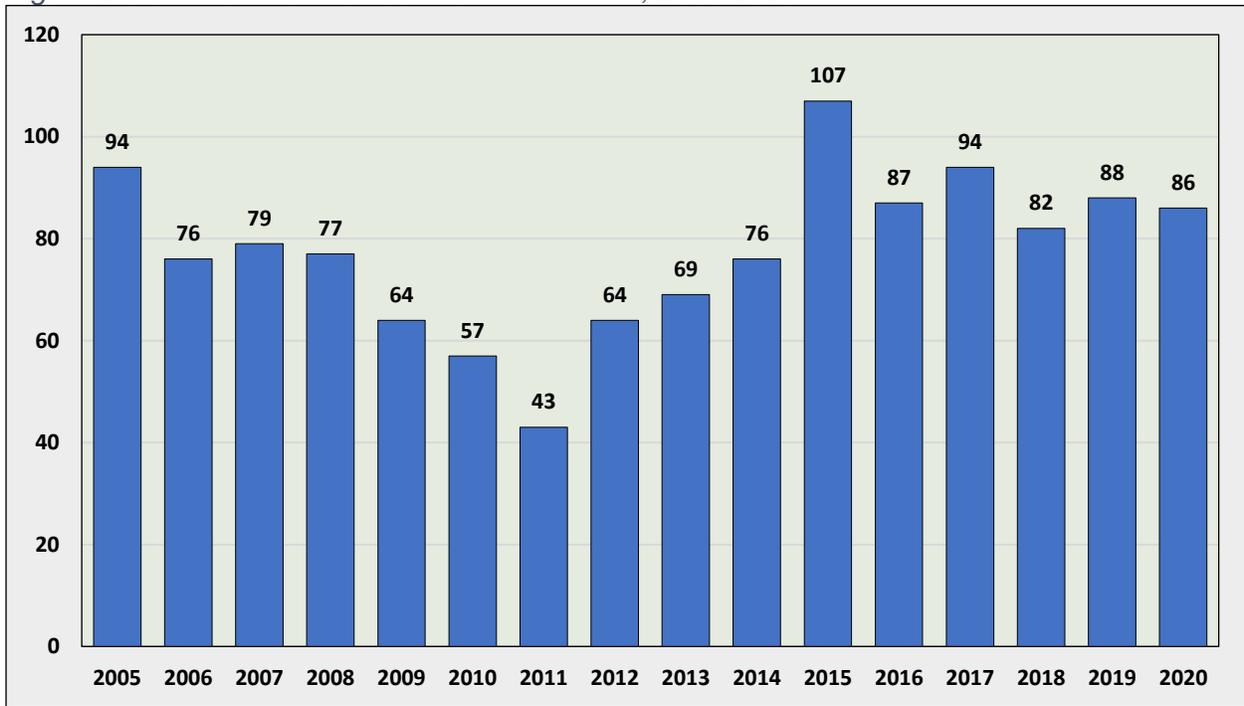
The median prices of these housing types were either flat or declining slightly from 2005 up to 2015, but have increased sharply in the just last five years, with each increasing by over \$100,000. Across all styles, the median sales price for a home increased from \$225,000 in 2015 to \$356,700 in 2020 (9.7% per year). The median price of a Bungalow increased from \$213,000 in 2015 to \$378,000 in 2020 (or by 12.2 percent growth per year). The median price of a Cape increased from \$227,500 to 336,000 (or by 8.1 percent per year), while the median price of a One Story increased from 187,900 to \$305,500 (or by 10.2 percent per year). The median price of a Raised Ranch increased from \$215,000 to 317,500 (or by 8.1 percent per year), and the average price of a Two-Story increased from \$283,083 to \$430,000 (or by 8.7 percent per year).

Figure 2-7 Median Price by Single-Family Residential Property Style, 2005-2020



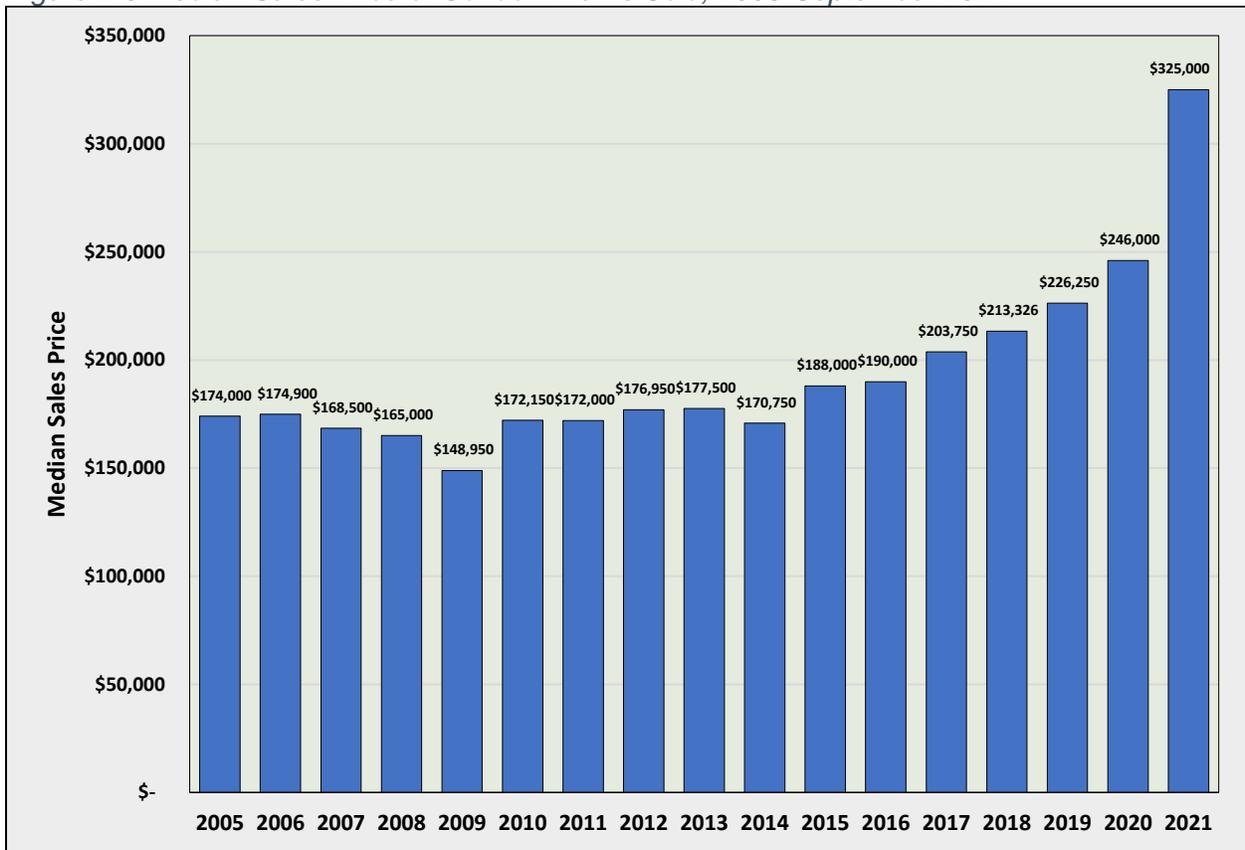
Condominium sales in South Portland are lower by overall volume than other residential properties. There were 94 condo sales in 2005 which declined to just 43 sales in 2011. Sales increased to a peak in 2015 (possibly on account of new condominiums added to the housing unit supply of the city) and has remained near 80 to 90 sales per year over the 2016-2020 time frame. Unlike the sales volume of other residential properties, there was no notable increase in condominium sales in 2020. The median sales price of condominiums was relatively flat over the 2005-2014 period. However, from 2015 to 2020, the sales price increased from \$188,000 to \$246,000. Over the first nine months of 2021, the median sales price of condominiums has jumped to \$325,000, likely related to the unusually constrained level of available listings for sale and to the widely reported COVID-induced migration away from the major metro centers across the northeast. As discussed elsewhere in the report, this increase in COVID-induced population migration is typical of that reported across the entire northern New England region and in upstate New York.¹²

Figure 2-8 Condominium Sales in South Portland, 2005-2020



¹² See <https://www.bostonfed.org/publications/new-england-public-policy-center-regional-briefs/2021/how-the-covid-19-pandemic-changed-household-migration-in-new-england.aspx>; [Welcome to Woodstock 2020: Peace, love . . . and urban exiles fighting over real estate - The Washington Post](#); and <https://www.nytimes.com/2020/09/26/us/coronavirus-vermont-transplants.html>

Figure 2-9 Median Sales Price of Condominiums Sold, 2005-September 2021



Chapter 3 REGIONAL ECONOMIC AND DEMOGRAPHIC FORECAST

ECONOMIC AND DEMOGRAPHIC FORECAST FOR THE MSA AND THE CITY – 2021-2030

Overview

With the previous discussion as context, this section turns to the long-term economic and demographic forecast for the MSA and the city. As of late-August 2021, economic activity has been dominated by—as previously noted—an unusual combination of: (1) the COVID-19 pandemic (including its variants); (2) unprecedented levels of federal fiscal and monetary policy support designed to off-set the economic trauma caused by the various public health measures taken to address the pandemic; and (3) an unusual number of natural disasters (e.g. wildfires in the Mountain West and Far West regions, August-September of calendar year 2021’s Hurricane Ida in the southern U.S along the Gulf Coast and up through the northeastern region). On top of those already-significant issues, this long-term economic and demographic forecast was completed as the results of the April 1, 2020 decennial census results were being released by the U.S. Census Bureau,¹³ and as the U.S. and global rates of inflation were increasing sharply. In February 2022, and just as this study was being finalized, Russia invaded Ukraine—thereby beginning the first ground war in eastern Europe since World War II. These recent developments have combined to add additional wrinkles to the already challenging economic, demographic, and housing market forecasting environment for this study.

Regarding the first factor, this long-term economic, demographic, and housing market forecast was developed as the State and the greater Portland-South Portland region were experiencing another significant wave of COVID cases and associated hospitalizations due to the Omicron variants. As such, COVID-related public health issues have continued to have a significant influence on economic, demographic, and housing market developments across the northern New England region, in the State, and the Portland-South Portland region, and they will likely continue to do so over at least the first half of the ten-year forecast period. While these on-going impacts are expected diminish across the forecast time frame, COVID impacts will continue to impact these developments until the public health authorities are able to declare that the pandemic has come under “control.” The long-term forecast expects that this will occur only when there is a level of vaccination in the overall population that sufficiently protects it from both rising infection case rates and from the incidence of more severe illness during the first half of the ten-year forecast period.

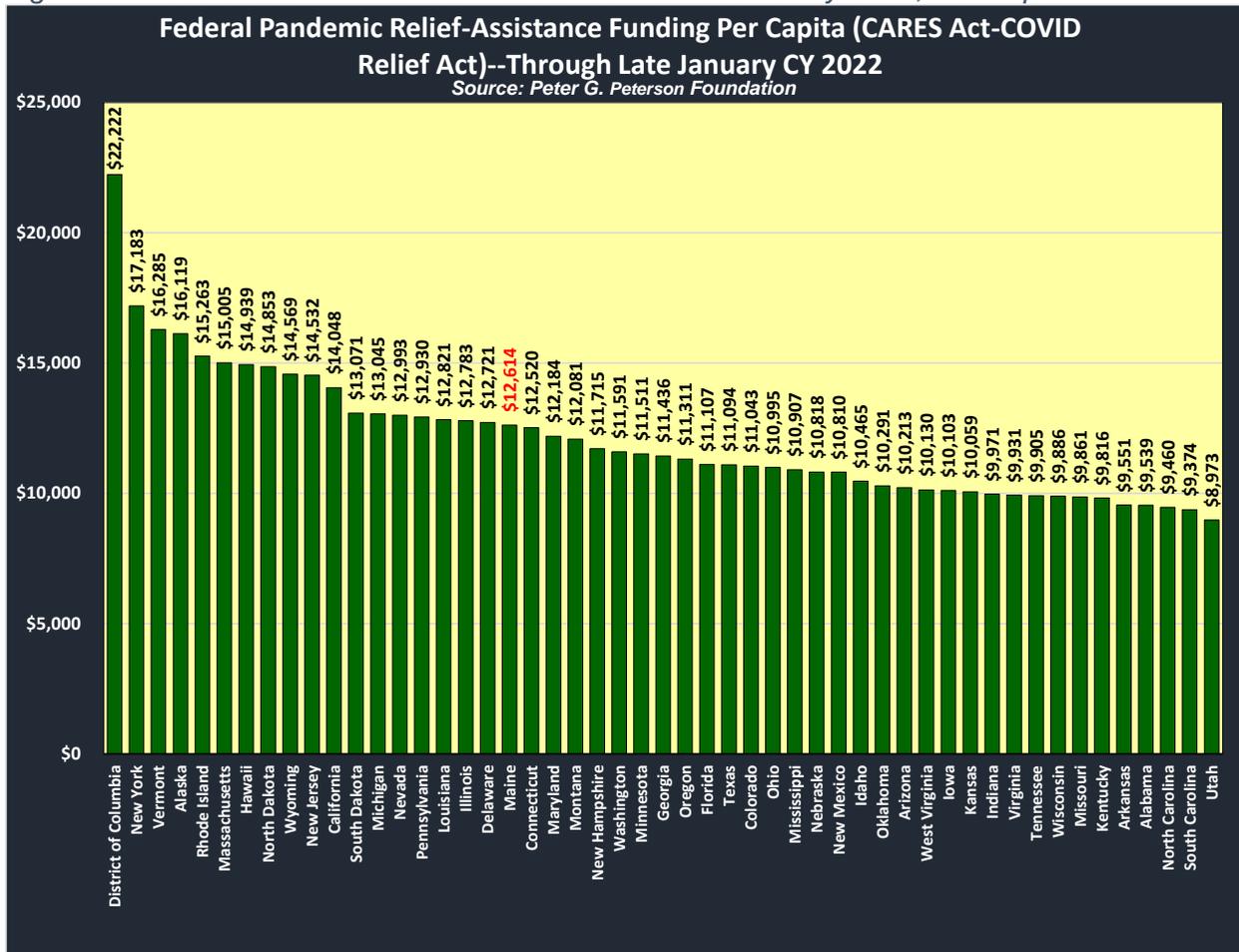
Regarding the second major factor impacting the regional and City economic and demographic outlook, the latest numbers on the flow of federal deficit spending dollars to the State from federal COVID relief legislation show that Maine has been a significant beneficiary of these federal pandemic funds. Total funds received in Maine from all of the various federal programs through early calendar year 2022 where state-by-state data exists totaled \$16.956 billion, ranking the state 19th highest among the 50 states and the District of Columbia in terms of per person federal pandemic fiscal relief-assistance funds received. This corresponds to \$12,614 per person in

¹³ It should be noted that the April 2020 Census was taken prior to a potentially significant migration into the MSA and city by “COVID refugees” escaping perceived health risks in areas with greater COVID infection rates.

federal pandemic financial aid, which is roughly equal to a quarter or 22.1%) of the per capita income of \$57,159 per Maine resident in 2021.¹⁴

Since this assistance has been nearly all federal deficit financed, this is going to continue to have a very highly stimulative effect on the State and regional economy—and on most states and regions throughout the U.S. economy—given the high “multiplier effect” this type of federal deficit spending typically has.¹⁵ This unprecedented level of federal fiscal pandemic assistance is likely going to continue to exert significant sway on State and northeastern U.S. regional economic activity well into fiscal year 2023—and likely beyond—until federal spending requirements for various sources of COVID financial assistance funds are required to be spent by law (likely within the next two to three calendar years)

Figure 3-1 Federal COVID Financial Assistance-Aid Received by State, Per Capita



¹⁴ Source: Bureau of Economic Analysis of the U.S. Department of Commerce; Federal Reserve Bank of Saint Louis. April 2022.

¹⁵ This analysis is typically associated with tax cuts and significant increases in federal spending that are not of-set by tax increases—see “What is Keynesian Economics,” Sarwat Jahan, Ahmed Saber Mahmud, and Chris Papageorgiou; International Monetary Fund; Volume 51, Number 3, September 2014; which describes the works of British economist John Maynard Keynes theory of government intervention through government spending in an economy.

Looking more closely at the chart of federal COVID funds received through late January of 2022, it is notable that five of the top twenty states and District of Columbia were New England states. Among the other New England states, Vermont ranked 3rd highest, Rhode Island ranked 5th, Massachusetts ranked 6th, and Connecticut ranked 20th. Further, three additional states in the northeastern U.S. region were also ranked high in terms of per capita pandemic assistance financial aid received and were also among the “top twenty” aid recipients. Looking at those other states, New York ranked 2nd, New Jersey ranked 10th, and Pennsylvania ranked 15th highest, rounding out the leading federal pandemic financial aid-assistance receiving states in the northeastern U.S. region. Only New Hampshire ranked outside of the “top twenty” states in terms of federal pandemic assistance received per capita—with a ranking of 23rd highest among the 50 states and the District of Columbia (and the other U.S. territories).

The federal aid has been present within the economy of Maine as either: (1) savings held by households, or (2) funds being spent and re-spent in circulation around the northeastern U.S. regional economy. Since the northeastern region of the U.S. is a primary source of tourism to the state of Maine, federal aid has underpinned elevated levels of visitor spending and associated economic activity over at least the near-term time-period (and probably longer). Moreover, it also has become apparent (when viewing the U.S. household savings rate data) that a significant portion of COVID aid has been saved and/or invested by households in financial and other hard assets. This, in turn, has helped to boost asset values significantly since the pandemic began. This situation promises to position households with additional consumption capacity that could sustain historically elevated levels of economic activity for a significant period of time going forward. Consumption activity rather than continued saving, is likely because of the significant level of “pent up demand” in the national and regional economies brought about by the combination of pandemic restrictions (which have now eased somewhat) and the recent on-going friction in national and global supply chains that has acted to curtail available inventory and created significant wait times and upward price pressures on impacted goods.

The unusual aspect to the federal government’s (and to a lesser degree state and local government actions) economic stimulus activity and the strong level of personal income growth of residents, strong personal consumption expenditures, and increasing residential unit housing sales activity and price appreciation the city (and MSA) have recently experienced, is that these events have coincided with significant levels of on-going, pandemic-induced labor market stress nationally, regionally and in the state. Table 3:1 Payroll Job Change in U.S. and New England States from February 2020 to March 2022, Seasonally Adjusted Table 3:1 highlights the comparative COVID-induced labor market downturn and subsequent on-going nonfarm payroll job recovery levels/rates for the U.S. economy as a whole, the New England region as a whole, and individually for New England states (including Maine) through March of calendar year 2022.

Table 3:1 Payroll Job Change in U.S. and New England States from February 2020 to March 2022, Seasonally Adjusted

Jobs Lost Feb-April 2020 and Jobs Recovered Since Apr. 2020	Lost Jobs (000s)	% of Total	Jobs Recovered	% of Total	% Recovered	% Left-to-Go	Jobs Left-to-Go
Connecticut	(289.4)	-17.0%	236.8	16.8%	81.8%	18.2%	(52.6)
Maine	(95.3)	-14.9%	93.9	17.2%	98.5%	1.5%	(1.4)
Massachusetts	(689.1)	-18.4%	600.1	19.7%	87.1%	12.9%	(89.0)
New Hampshire	(117.6)	-17.1%	108.1	18.9%	91.9%	8.1%	(9.5)
Rhode Island	(108.1)	-21.3%	92.0	23.0%	85.1%	14.9%	(16.1)
Vermont	(65.8)	-20.8%	49.7	19.9%	75.5%	24.5%	(16.1)
N.E. TOTAL	(1,365.3)	-18.0%	1,180.6	15.6%	86.5%	13.5%	(184.7)
United States TOTAL	(21,991)	-14.4%	20,412	15.6%	92.8%	7.2%	(1,579)

Prepared By: Economic and Policy Resources, Inc.

From the above table, the most recent data show that Maine's job recovery has been the fastest among the six New England states (at 98.5% of the COVID pandemic-induced job losses recovered as of March of 2022), with 1,400 nonfarm payroll jobs "*left-to-go*" of the nonfarm payroll jobs Maine lost during the COVID-induced downturn. That percentage is well below the 7.2% of the payroll jobs "*left-to-go*" for the U.S. through the month of March 2022 and compares favorably to the 13.5% "*left-to-go*" among the six New England States in total. Maine's recovery rate was ahead of all six New England states over the period and was a full 23 percentage points faster than Vermont's job recovery rate (as the slowest recovering New England state).

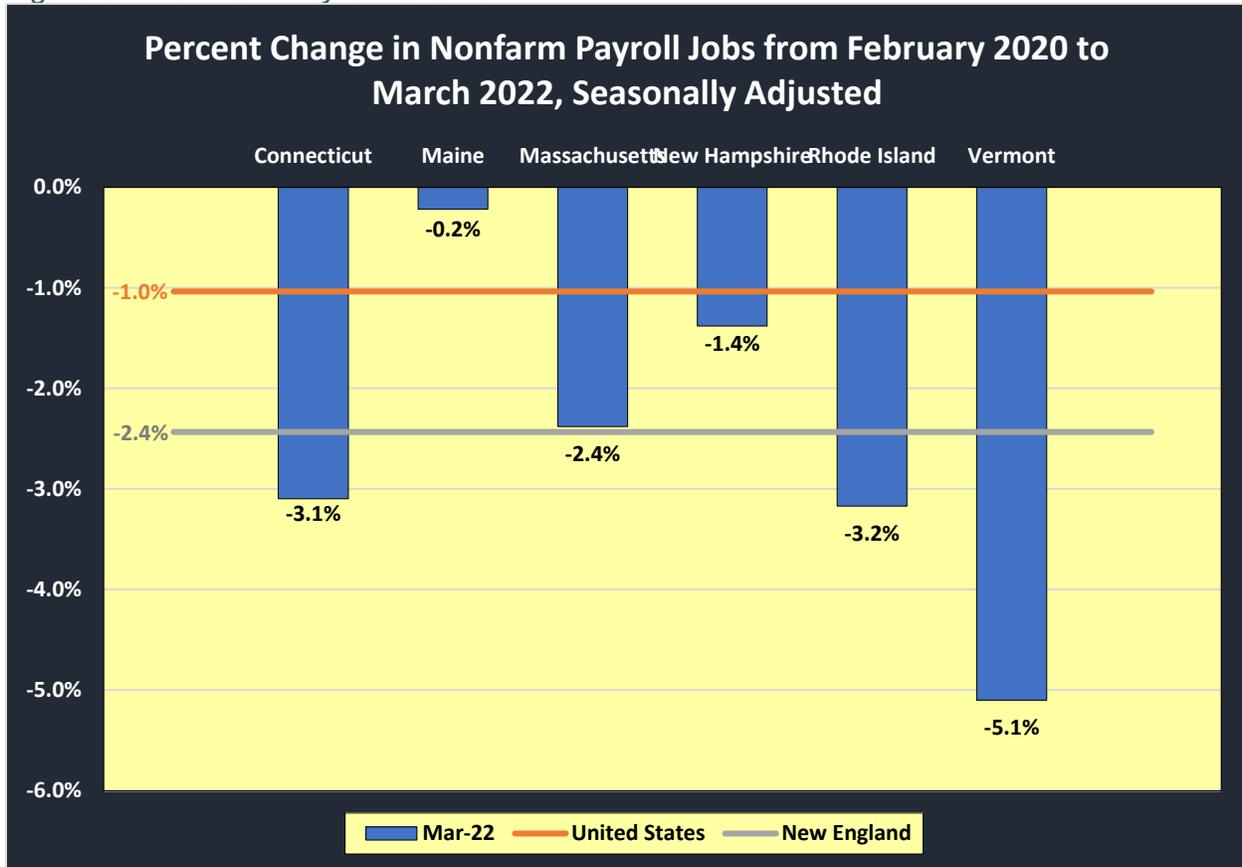
Combined with the total job loss experienced during the COVID-induced downturn, Figure 3-2 (below) indicates that Maine's relatively smaller job loss during the COVID downturn overall has positioned it as the strongest New England state in terms of labor market recovery through March of 2022, with total payroll job decline since the onset of the COVID pandemic of just -0.2% overall. That decline as of March of 2022 was 0.8 percentage points below the U.S. average job decline since the onset of the COVID pandemic and was 2.2 percentage points lower than the New England average overall and 1.2 percentage points below the closest New England state in this regard (which was the State of New Hampshire at a -1.4% cumulative payroll job loss since February 2020). Other cumulative job losses among the New England states included the 3.1% cumulative payroll job decline in the State of Connecticut since February 2020, the 3.2% cumulative payroll job decline in Rhode Island; the 2.4% cumulative payroll job decline in the Commonwealth of Massachusetts since February 2020, and the 5.1% cumulative payroll job decline since February 2020 in the State of Vermont. The much larger than average cumulative payroll job decline in Massachusetts is particularly important to the economic performance of the New England region and the regional economic outlook given its outsized contribution that state makes to the New England economy overall—mostly related to the many economic and business activities associated with the greater Boston metro area.

Under ordinary circumstances, a long-term economic and demographic forecast for an MSA or for a municipality like South Portland that came against the loss of more than 95,300 nonfarm payroll jobs in the State overall during an economic recession (back over the February 2020 to April 2022 time frame) would be cause for a high degree of pessimism—even alarm—about the near-term prospects for the regional economy of the MSA and city. However, this forecast expects that near-term prospects for the region, MSA, and city will be driven by the residual, and on-going effects of the recent extraordinary federal fiscal and monetary policy measures as the national and regional labor markets continue to recover from the trauma associated with the COVID pandemic and associated public health measures. The forecast also expects that over the forecast time period, the impact of these measures will fade somewhat gradually, and it will become clear that the overall economic impacts of the COVID pandemic will be largely transitory in nature—except for increased acceptance of remote work, which will allow for some workers to telecommute at a somewhat higher rate than was the case prior to the pandemic.

In addition, this forecast also expects that—likely within the next two to three years—there will be a shift away from the regional economic and demographic performance reflecting the effects of the extraordinary federal fiscal and monetary policy interventions due to the pandemic, and that economic performance will drift back to reflecting the long-established, underlying economic and demographic fundamentals of the region as they may have been altered by the more enduring effects of the pandemic. In the region, MSA, and city, that means a resumption of economic activity determined by the region's historical reliance on: (1) being a regional hub for health care (e.g. economic drivers being MaineHealth, Mercy Hospital, and Webber Hospital Association); (2) a center for retail (e.g. economic drivers being L.L. Bean, Hannaford Brothers Company, Wal-

Mart, and a robust visitor spending (or tourism) sector); (3) a northeastern New England regional center for financial services (e.g. economic drivers include Unum Group and TD Bank); and (4) as a working waterfront—especially in the Portland-South Portland area (e.g. regional economic drivers include General Dynamics, Bath Iron Works, and the Portsmouth Naval Shipyard).¹⁶ In addition, although the forecast anticipates there will be additional federal spending initiatives for various forms of infrastructure (both built-infrastructure and perhaps even some federal investment in programs that have been identified as “human infrastructure” as contained in the federal “Build Back Better Act”), the large pandemic relief programs from the last two years will ease over the near-term future.¹⁷

Figure 3-2 Non-Farm Payroll 2020-2022



This process of the national, regional, and local economy returning to a more normal operating regime represents a potential source of uncertainty in this demographic forecast, as it is unclear exactly how and when the macroeconomic effects of the fiscal and monetary policy action will begin to ease or be completely withdrawn. While there is no historical precedent that can be consulted to track this transition precisely, the long-term forecast presented in greater detail below takes these uncertainties and unknowns into consideration and includes appropriate adjustments

¹⁶ It should be noted that an economic driver for a region does not necessarily have to be physically located within that particular geographic area. This is because economic drivers typically have labor market and other economic influences that go well beyond the immediately surrounding area as evidenced by typical commuting patterns of workers tied to such major employers-economic drivers.

¹⁷ The new refundable child credit program and other actions (including any additional federal proposals enacted to address the recent expiration of the federal eviction moratoriums) notwithstanding.

for the transition back to the state and regional underlying economic and demographic fundamentals that is likely to occur over the study's 2021-2030 timeframe.

NATIONAL AND MSA MACROECONOMIC FORECAST

The study was conducted and completed over the course of roughly a year. As a result, the study began using the Moody's Analytics June 2021 U.S. macroeconomic forecast baseline (hereafter the "Moody's baseline") as the starting national economic backdrop. The Moody's baseline included the expectation that the economic recovery from the COVID-induced economic downturn will continue, with a scaled down version of President Biden's federal government spending agenda (including about \$3 trillion of additional federal spending on investments in infrastructure, education, housing, climate change and other social spending initiatives, will be passed into law by the end of calendar year 2022.¹⁸ The Moody's baseline also included the expectation that the Federal Reserve will continue to be supportive of a policy track that prevents an overall U.S. economic recession, by successfully engineering something analogous to an economic "soft landing" for the U.S. economy as it moves toward a more restrictive policy stance in response to high and persistent levels of U.S. and global price inflation. In addition to increasing short-term interest rates, a second part of the Federal Reserve's effort to slow the pace of the U.S. economy and reduce the economy's recently high inflation rate without causing an economic recession also includes a period where the Fed is expected to reduce the amount of long-term securities held on its "balance sheet." The Fed will attempt to reduce its balance sheet holdings of long-term securities while making sure the U.S. economy has enough liquidity to avoid the "credit-crunch," liquidity issues that curtailed the pace of recovery for the U.S. economy as it was rebounding from the "Great Recession." The Moody's baseline also expects that the effect of the COVID-19 pandemic on the economy will gradually fade as the health care system and the economy move on to treat the virus as largely being endemic and seasonal in nature.

The forecast noted that consumer sentiment (which is very important to personal consumption activity and represents between 65% and 70% of all economic activity on average) has dropped significantly and a number of consumption indicators (such as the number of people passing through TSA checkpoints, the number of seated diners from "OpenTable", movie box-office revenues, and data from Google mobility have all recently weakened). This has led to recent downward adjustments to overall U.S. GDP growth rates in recent months and has shifted the preponderance of the national economic forecast risk to the "downside," as the Delta, Omicron, and other COVID virus variants has recently sapped the U.S. economy's forward momentum. The study team also made some additional downward adjustments to Moody's baseline forecast of economic activity associated with the effects of Hurricane-Tropical Storm Ida (which happened during the month of August 2021).

Even so, the Moody's baseline still has inflation-adjusted business investment at higher than typical cyclical levels for the rest of calendar year 2022 and into 2023. The Moody's baseline expects that housing data are going to be volatile—although no bubble in housing prices is currently expected. However, a price bubble in housing at this point cannot be ruled out completely, and whether or not one emerges will depend on a significant change in that direction in housing market psychology. Even with the housing disruptions associated with Hurricane Ida and the recent tightening of monetary policy by the Federal Reserve, housing starts will increase at double-digit rates even with all of the uncertainties about higher construction costs, supply-

¹⁸ The first part of this social spending agenda was passed as part of the so-called Bi-Partisan Infrastructure Bill," and the rest is under-consideration after the larger "Build Back Better" expenditure plan did not gain enough votes for passage. At this juncture a smaller version of the larger spending initiative is again under consideration.

chain disruptions, and tight labor markets for construction workers as the housing sector seeks to make-up for a long period of under-supply since the end of the “Great Recession.”

However, there is likely to be an increasing gap between housing demand and supply as supply struggles to catch up with increasing demand. Over the course of the past year, Moody’s forecast of housing prices has steadily increased. The Moody’s baseline for the FHFA All-Transactions Home Price Index is an increase by over 10.0% in calendar year 2021, and nearly 6.0% next year. As a result, this study expects that housing prices nationally should increase at a compound annual rate of 5.1% over the calendar year 2019-2025 time period—a rate of change that is about equal to the annual rate of increase over the 2015-19 period. Housing price increases are expected to moderate somewhat over the 2025 to 2030 period, resulting in a compound annual rate of change in national housing prices of 2.6% overall during the 2020 to 2030 time period as the extraordinary federal fiscal policy and monetary measures ease, and the Federal Reserve progressively tightens its monetary policy posture—including prospective increases in short-term interest rates—through at least calendar year 2022.

The Moody’s baseline also expects that the current elevated rate of inflation will moderate over the course of 2022 and 2023. With the announcement of and recent execution of actual monetary policy tightening moves by the Federal Reserve, the monetary policy moves expected in the June 2021 Moody’s baseline have now actually started as if this writing in March of 2022.

The Moody’s baseline does not expect that this tapering effort will impact inflation as reductions in securities purchases generally is not disinflationary. However, it could help to keep market-based measures of inflation expectations anchored, since tapering is the preamble to the Federal Reserve taking steps to “tighten monetary policy” either by allowing its balance sheet to decline and/or by increasing the target range for the short-term benchmark “federal funds rate.” This will likely be a key to future inflation rates because Inflation expectations are also important in the future path of inflation.

Table 3:2 lays out the forecasted levels for key national economic and demographic benchmarks over multiple year increments. The second table (below) then lays out the measures of rates of change included in the national economic background that underpin the national economic background for the MSA and city economic and demographic forecasts that follow. For these tables, the 2020 calendar year is highlighted as the year that was so significantly impacted by the COVID-19 pandemic.

Table 3:2 Overview of Selected U.S. Historical and Forecasted Macroeconomic and Demographic Benchmarks (Levels)

U.S. Macro Forecast										
Variable	1980	1990	2000	2005	2010	2015	2019	2020 [1]	2025	2030
	History							COVID	Forecast	
Gross Domestic Product (Bil. Chained 2012 \$, SAAR)	\$6,759	\$9,366	\$13,130	\$14,913	\$15,599	\$17,432	\$19,092	\$18,426	\$22,309	\$24,558
Total Personal Income (Bil. Chained 2012 \$, SAAR)	\$5,631	\$7,756	\$11,060	\$12,208	\$13,115	\$15,260	\$16,888	\$17,751	\$18,915	\$21,338
Personal Income--Wage & Salary Disbursements (Bil. Nominal \$, SAAR)	\$1,373	\$2,741	\$4,826	\$5,692	\$6,372	\$7,860	\$9,309	\$9,371	\$12,022	\$15,254
Personal Income--Supplements to Wages and Salaries (Bil. Nominal \$, SAAR)	\$249	\$599	\$1,022	\$1,375	\$1,553	\$1,840	\$2,123	\$2,120	\$2,645	\$3,267
Median Household Income (Nominal \$)	\$18,167	\$31,102	\$42,349	\$46,242	\$50,046	\$55,775	\$65,712	\$68,151	\$75,692	\$89,147
Total Nonfarm Payroll Jobs (Mil.)	90.5	109.5	132.0	134.0	130.3	141.8	150.9	142.3	155.8	159.4
Employment: Total Employment (Mil.)	99.3	118.8	136.9	141.7	139.1	148.8	157.5	147.8	161.4	164.6
Employment: Unemployment Rate (%) [2]	7.2%	5.6%	4.0%	5.1%	9.6%	5.3%	3.7%	8.1%	4.0%	4.3%
Total Labor Force (Thous.)	107.0	125.9	142.6	149.3	153.9	157.1	163.5	160.7	168.1	171.9
Labor Force Participation Rate-Total Population (%) [2]	47.0%	50.3%	50.5%	50.5%	49.7%	48.9%	49.8%	48.7%	49.8%	49.9%
Population, Total (Mil.)- [Annual Average]	227.5	250.0	282.5	295.9	309.6	321.0	328.5	329.6	337.7	344.7
Population, Ages 0-19 Yrs. (Mil.)	88.9	90.1	101.0	101.5	103.5	102.6	101.8	101.5	99.6	98.1
Population, Ages 20-64 Yrs. (Mil.)	112.9	128.6	146.4	157.7	165.6	170.6	172.4	172.3	173.4	174.8
Population, Ages 65 Yrs.+ (Mil.)	25.8	31.3	5.1	36.7	40.6	47.9	54.3	55.9	64.7	71.8
Households (Mil.)	81.1	92.1	106.1	112.7	117.1	122.8	126.5	126.8	134.8	140.6
FHFA All Transactions Home Price Index (95' Q1=100) [3]	102.7	166.1	236.0	349.1	325.0	357.5	439.1	461.6	560.3	594.2
Other Key National Metrics:										
Consumer Price Index-CPI-U (1982-84 =100)	82.4	130.7	172.2	195.3	218.1	237.0	255.7	258.8	294.3	327.5
New Home Prices: Median (Thous. \$)	\$64.7	\$122.2	\$166.6	\$234.2	\$221.2	\$293.7	\$319.4	\$334.9	\$418.1	\$481.5
Existing Single Family Home Price: Median (Thous., \$; Nat. Assn. Realtors)	\$62.0	\$96.8	\$146.0	\$217.4	\$172.8	\$221.3	\$272.3	\$298.9	\$371.0	\$419.1
30 Year Fixed Rate Mortgages -- National Rate (%) [2]	13.8%	10.1%	8.1%	5.9%	4.7%	3.9%	3.9%	3.1%	5.2%	5.3%
Homeownership Rate (%) [2]	65.6%	64.0%	67.4%	68.9%	66.9%	63.7%	64.5%	66.6%	66.9%	66.8%
Rental Vacancy Rate (%) [2]	5.4%	7.2%	8.0%	9.8%	10.2%	7.1%	6.7%	6.3%	8.1%	8.1%
Notes:										
@NA means "Not Available"										
[1] 2020 is a COVID-impacted transitional year.										
[2] Change statistics for these variables is in percentage points.										
[3] FHFA means Federal Housing Finance Agency; The 1980-2000 Change in the FHFA Index covers the calendar year 1983-2000 time period.										
Source: U.S. Census Bureau, Moody's Analytics as adjusted by EPR							Prepared by: Economic and Policy Resources, Inc.			

In addition, Table 3:3 sets forth the annual rates of change that correspond to the above-referenced economic and demographic levels over multiple time periods that are thought to be significant to this housing study. The rates of change time periods include a single year rate of change for the COVID-impacted, anomalous 2019-2020 time period. Aside from that column, all rates of change are for multiple year time periods.

Table 3:3 Overview of Selected U.S. Historical and Forecasted Macroeconomic and Demographic Benchmarks (Rates of Change)

U.S. Macro Forecast												
Variable	Ann. % Chg. 80-00	Ann. % Chg. 00-05	Ann. % Chg. 05-10	Ann. % Chg. 10-15	Ann. % Chg. 15-19	Ann. % Chg. 19-25	Ann. % Chg. 25-30	Ann. % Chg. 19-30	Ann. % Chg. 19-20	Ann. % Chg. 20-25	Ann. % Chg. 25-30	Ann. % Chg. 20-30
GDP (Bil. Chained 2012 \$, SAAR)	3.4%	2.6%	0.9%	2.2%	2.3%	2.6%	1.9%	1.4%	-3.5%	3.9%	1.9%	2.9%
Total Pers. Income (Bil. Chained 2012 \$, SAAR)	3.4%	2.0%	1.4%	3.1%	2.6%	1.9%	2.4%	1.0%	5.1%	1.3%	2.4%	1.9%
Personal Income--Wage & Salary Disbursements (Bil. Nominal \$, SAAR)	6.5%	3.4%	2.3%	4.3%	4.3%	4.4%	4.9%	2.4%	0.7%	5.1%	4.9%	5.0%
Personal Income--Supplements to Wages and Salaries (Bil. Nominal \$, SAAR)	7.3%	6.1%	2.5%	3.5%	3.6%	3.7%	4.3%	2.0%	-0.1%	4.5%	4.3%	4.4%
Median Household Income (Nominal \$)	4.3%	1.8%	1.6%	2.2%	4.2%	2.4%	3.3%	1.3%	3.7%	2.1%	3.3%	2.7%
Total Nonfarm Payroll Jobs (Mil.)	1.9%	0.3%	-0.6%	1.7%	1.6%	0.5%	0.5%	0.3%	-5.7%	1.8%	0.5%	1.1%
Employment: Total Employment (Mil.)	1.6%	0.7%	-0.4%	1.4%	1.4%	0.4%	0.4%	0.2%	-6.2%	1.8%	0.4%	1.1%
Employment: Unemployment Rate (%) [2]	-3.2	1.1	4.5	-4.3	-1.6	0.3	0.3	0.6	4.4	-4.1	0.3	-3.8
Total Labor Force (Thous.)	1.4%	0.9%	0.6%	0.4%	1.0%	0.5%	0.4%	0.3%	-1.7%	0.9%	0.4%	0.7%
Labor Force Participation Rate-Total Population (%) [2]	3.5	0.0	-0.8	-0.8	0.8	0.0	0.1	0.1	-1.0	1.0	0.1	1.1
Population, Total (Mil.)- [Annual Average]	1.1%	0.9%	0.9%	0.7%	0.6%	0.5%	0.4%	0.3%	0.3%	0.5%	0.4%	0.4%
Population, Ages 0-19 Yrs. (Mil.)	0.6%	0.1%	0.4%	-0.2%	-0.2%	-0.4%	-0.3%	-0.2%	-0.4%	-0.4%	-0.3%	-0.3%
Population, Ages 20-64 Yrs. (Mil.)	1.3%	1.5%	1.0%	0.6%	0.3%	0.1%	0.2%	0.1%	-0.1%	0.1%	0.2%	0.1%
Population, Ages 65 Yrs.+ (Mil.)	1.6%	0.9%	2.0%	3.4%	3.2%	3.0%	2.1%	1.6%	3.0%	3.0%	2.1%	2.5%
Households (Mil.)	1.4%	1.2%	0.8%	0.9%	0.7%	1.1%	0.8%	0.6%	0.2%	1.2%	0.8%	1.0%
FHFA--All Transactions Home Price Index (1995 Q1 =100) [3]	4.3%	8.1%	-1.4%	1.9%	5.3%	4.1%	1.2%	2.2%	5.1%	4.0%	1.2%	2.6%
Other Key National Metrics:												
Consumer Price Index-CPI-U (1982-84 =100)	3.8%	2.5%	2.2%	1.7%	1.9%	2.8%	2.2%	1.5%	1.2%	3.1%	2.2%	2.6%
New Home Prices: Median (Thous. \$)	4.8%	7.0%	-1.1%	5.8%	2.1%	4.6%	2.9%	2.5%	4.9%	4.5%	2.9%	3.7%
Existing Single Family Home Price: Median (Thous. \$; Nat. Assn. Realtors)	4.4%	8.3%	-4.5%	5.1%	5.3%	5.3%	2.5%	2.9%	9.8%	4.4%	2.5%	3.4%
30yr Fixed Rate Mortgages Nat'l Rate (%) [2]	-5.7	-2.2	-1.2	-0.8	0.1	1.2	0.2	1.4	-0.8	2.1	0.2	2.2
Homeownership Rate (%) [2]	1.8	1.6	-2.1	-3.2	0.9	2.4	-0.1	2.3	2.1	0.3	-0.1	0.2
Rental Vacancy Rate (%) [2]	2.6	1.9	0.4	-3.2	-0.3	1.4	0.0	1.3	-0.5	1.8	0.0	1.8
Notes:												
@NA means "Not Available"												
[1] 2020 is a COVID-impacted transitional year.												
[2] Change statistics for these variables is in percentage points.												
[3] FHFA means Federal Housing Finance Agency; The 1980-2000 Change in the FHFA Index covers the calendar year 1983-2000 time period.												
Source: U.S. Census Bureau, Moody's Analytics as adjusted by EPR									Prepared by: Economic and Policy Resources, Inc.			

Rates of change for those multi-year time periods are annualized for comparative purposes because those multiple year periods may vary in length and annual rates of change would standardize those metrics and allow for comparison. The forecasted data show the pace of output and employment growth for U.S. economy easing back somewhat as the extraordinary federal fiscal and monetary policy measures are eased, and the U.S. economy overall experiences a bit of a sub-cycle through the mid-2020s.

Similarly, general price pressures as indicated by the Consumer Price Index are expected to also ease through the mid- to later 2020s reflecting the current inflation outlook consensus price increases. The moderation in the recent upward pressures on consumer prices will occur only after the recent supply-chain disruptions ease and the Federal Reserve’s monetary policy tightening moves sufficiently take hold—as the current friction in the supply-chain and labor markets eases back as the economy returns to “a more normal functioning” and demand pressures throttle down. While this process of the easing in global supply-chain disruptions and prices has been made more complicated by the recent Russian invasion of Ukraine, the price impacts of the war has resulted in additional and significant additional monetary policy tightening measures than was the case last Fall. As such, the long-term forecast includes the expectation that the Federal Reserve will ultimately be successful in taming higher rates of inflation through

its arsenal of inflation-fighting tools.¹⁹ In addition, the long-term forecast also indicates that housing prices, as measured by the FHFA Housing Price Index and by the Median New and Existing House Price indexes, will similarly go through a moderating period during the mid- to late-2020s and throttling down as the economic fundamentals return to more normal functioning and configuration and upward pressure on prices eventually ease back.

Similar to the national forecast scenario above, the MSA forecast expects a general moderating trend across most economic and demographic metrics as the region approaches the mid-2020s—reflecting the easing back of exceptional federal fiscal policy and monetary policy. Most regional economic and demographic metrics ease back over the last half of the 2020s relative to both the 2019-2025 or 2020-2025 time frames—including housing prices and the population growth dynamics for the MSA. In particular, regional population change trends have included the recent increase the negative natural population change (represented by the recent period’s higher number of deaths than births in the MSA) and positive recent in-migration numbers that appear to have been at least in part related to health safety concerns related to the COVID pandemic. The recent uptick in the housing price metrics appear to reflect the recent turmoil in markets related to that in-migration that has recently been reported in the regional and national press and that seems to be typical of recent activity across the northern New England and so-called upstate region of New York (that is, north of New York City).

¹⁹ Such as through increasing the level of short-term interest rates (through incremental increases in the Federal Funds interest rate) and through changes in the level of its purchases of long-term maturing debt securities which tend to influence longer terms interest rate levels such as mortgage rates. Mortgage rates are an important part of financing owner housing purchases of new and existing units.

Table 3:4 Overview of Selected MSA Historical and Forecasted Macroeconomic and Demographic Benchmarks (Rates of Change)

Variable	Ann. % Chg. 80-00	Ann. % Chg. 00-05	Ann. % Chg. 05-10	Ann. % Chg. 10-15	Ann. % Chg. 15-19	Ann. % Chg. 19-25	Ann. % Chg. 25-30	Ann. % Chg. 19-30	Ann. % Chg. 19-20	Ann. % Chg. 20-25	Ann. % Chg. 25-30	Ann. % Chg. 20-30
Gross Metro Product (Mil. Chained 2012 \$, SAAR)	3.6%	2.3%	0.8%	0.6%	2.8%	2.4%	1.7%	2.1%	-4.0%	3.7%	1.7%	2.7%
Total Personal Income (Mil. Chained 2012 \$, SAAR)	4.1%	2.4%	1.0%	2.1%	3.3%	2.0%	2.2%	2.1%	5.5%	1.3%	2.2%	1.7%
Personal Income--Wage & Salary Disbursements (Mil. Nominal \$, SAAR)	7.0%	4.5%	2.4%	3.3%	4.8%	5.0%	4.5%	4.7%	3.0%	5.4%	4.5%	4.9%
Personal Income --Nonwage (Mil. Nominal \$, SAAR)	8.2%	4.6%	3.5%	4.0%	5.1%	3.7%	4.2%	3.9%	10.5%	2.4%	4.2%	3.3%
Median Household Income (Nominal \$)	5.0%	2.4%	2.0%	2.2%	3.9%	2.3%	3.4%	2.8%	2.4%	2.3%	3.4%	2.8%
Total Nonfarm Payroll Jobs (Thous.)	2.4%	0.5%	-0.3%	1.0%	1.7%	0.2%	0.3%	0.3%	-7.1%	1.8%	0.3%	1.0%
Employment: Total Employment (Thous.)	NA	0.7%	-0.7%	1.0%	1.4%	0.3%	0.0%	0.2%	-5.9%	1.6%	0.0%	0.8%
Employment: Unemployment Rate (%) [2]	NA	1.4	3.4	-3.7	-1.4	0.8	0.2	0.9	3.0	-2.2	0.2	-2.1
Total Labor Force (Thous.)	NA	0.9%	0.0%	0.2%	1.1%	0.5%	0.0%	0.2%	-2.9%	1.1%	0.0%	0.6%
Labor Force Participation Rate-Total Population (%) [2]	NA	0.6	-0.5	-0.9	1.0	1.7	0.7	2.3	-1.5	3.2	0.7	3.9
Population, Total (Thous.) [ANNUAL AVERAGE]	1.2%	0.8%	0.2%	0.5%	0.6%	0.0%	-0.2%	-0.1%	0.2%	-0.1%	-0.2%	-0.1%
Population, Ages 0-19 Yrs. (Thous.) [ANNUAL AVERAGE]	0.4%	-0.1%	-1.2%	-1.0%	-0.6%	-0.8%	-1.1%	-0.9%	-0.4%	-0.9%	-1.1%	-1.0%
Population, Ages 20-44 Yrs. (Thous.) [ANNUAL AVERAGE]	1.0%	-0.7%	-1.5%	0.2%	0.8%	-0.5%	-1.7%	-1.0%	0.2%	-0.7%	-1.7%	-1.2%
Population, Ages 45-64 Yrs. (Thous.) [ANNUAL AVERAGE]	2.4%	3.7%	2.1%	0.0%	-0.8%	-1.2%	-0.1%	-0.7%	-1.4%	-1.1%	-0.1%	-0.6%
Population, Ages 65 Yrs.+ (Thous.) [ANNUAL AVERAGE]	1.5%	1.1%	2.2%	4.0%	3.8%	3.0%	1.9%	2.5%	3.3%	2.9%	1.9%	2.4%
Births (Thous.) [ANNUAL AVERAGE]	-0.1%	-0.3%	-2.0%	0.1%	-0.9%	0.3%	-0.2%	0.1%	-0.9%	0.5%	-0.2%	0.2%
Deaths (Thous.) [ANNUAL AVERAGE]	0.8%	0.7%	0.7%	2.3%	0.9%	2.3%	1.5%	1.9%	20.1%	-1.0%	1.5%	0.2%
Natural Population Change (Thous. of Persons) [ANNUAL AVERAGE] [3]	-0.19	-0.06	-0.17	-0.13	-8.89	-16.93	-12.23	-29.17	-0.28	0.11	-0.12	-0.02
Net Migration (Thous.) [ANNUAL AVERAGE]	0.76	-1.38	0.01	0.53	20.0	-22.6	-21.3	-43.9	-58.8	36.2	-21.3	14.9
Households (Thous.)	1.8%	1.0%	0.5%	0.7%	0.5%	0.6%	0.4%	0.5%	0.0%	0.7%	0.4%	0.5%
Existing Single Family Home Price: Median (Thous., \$; Nat. Assn. Realtors)	5.5%	12.6%	-2.4%	1.5%	6.9%	5.4%	1.9%	3.8%	14.0%	3.8%	1.9%	2.8%
FHFA--All Transactions Home Price Index (1995 Q1 =100) [4]	5.5%	11.0%	-1.2%	0.9%	5.3%	5.2%	1.2%	3.4%	6.4%	5.0%	1.2%	3.1%

Notes:
 NA means "Not Available"
 [1] 2020 is a COVID-impacted transitional year.
 [2] Change for the Unemployment Rate and Labor Force Participation Rate variables are in percentage points.
 [3] Change for Natural Population Change variable is in thousands of persons
 [4] FHFA means Federal Housing Finance Agency; The 1980-2000 Change in the FHFA Index covers the calendar year 1983-2000 time period.

Source: U.S. Census Bureau, Moody's Analytics as adjusted by EPR
 Prepared by: Economic and Policy Resources, Inc.

HISTORICAL ECONOMIC AND DEMOGRAPHIC DATA AND 2021-2030 FORECAST

The next two tables set forth the historical and forecasted levels and rates of change for the various economic and demographic metrics for the city. The city’s forecast is the result of the implications of the larger economic and demographic background as indicated by the U.S. and regional MSA macroeconomic and demographic forecast. The historical and forecasted metrics for the city are consistent with the historical and forecasted variables on the U.S. and regional MSA levels—including the adjustments made by the study team for fully account for the results of the 2020 Census and other data sources along with any further economic and other developments of significance to the city and this housing study—including potentially unknown future events over the long-term forecast period like that posed by Russia’s recent ground invasion of Ukraine.

The economic and demographic data show a similar moderating pattern to economic and demographic activity following the near-term period of more robust activity--likely attributable to the extraordinary federal fiscal and monetary policy related to COVID-19. Following this nearer-term upbeat trend, the forecasted economic and demographic data metrics are generally expected to ease back as the economy makes transitions away from the effects of those

extraordinary federal policy responses and back to a path determined by the region’s and the city’s underlying economic fundamentals. The near-term period likely will result in a relatively sharp intensification of housing affordability pressures given the recent sharp uptick in housing prices, mortgage interest rates, and rents-utilities that are expected to exceed household income growth over that period. The forecasted data also indicate that while housing affordability pressures may moderate somewhat during the latter half of the 2020s time period, housing prices and many of the costs associated renting (e.g. utilities costs) overall are still expected to exceed household income growth even as housing undergoes somewhat of a price sub-cycle²⁰—following the period of more robust housing price increases during the first half of the 2020s where housing price pressure increases are expected to be the most significant.

Table 3:5 City of South Portland: Historical Economic and Demographic Data 1990-2020 and Forecasted Economic and Demographic Data 2021-2030 (Levels)

Variable	2000	2005	2010	2015	2019	2020 [1]	2025	2030
	History					COVID	Forecast	
Median Household Income (Nominal \$)	\$42,770	\$47,278	\$51,066	\$54,598	\$69,290	\$71,541	\$79,521	\$93,660
Employment-Household Survey: Total Employment	13,383	13,561	13,283	13,870	14,408	13,531	14,503	14,324
Employment-Household Survey: Unemployment (%) [2]	2.3%	3.5%	6.6%	3.4%	2.2%	5.7%	3.9%	4.5%
Total Labor Force-Household Survey	13,691	14,046	14,219	14,358	14,726	14,353	15,088	14,993
Labor Force Participation Rate-Total Population (%) [2]	58.4%	57.5%	56.9%	55.7%	55.9%	54.1%	56.5%	56.0%
Population, Total (Thous.)-[Annual Average]	23.45	24.41	25.01	25.76	26.36	26.51	26.69	26.77
Population, Ages 0-19 Yrs. (Thous.) [ANNUAL AVERAGE]	5.76	6.51	7.12	6.40	5.55	5.56	5.41	5.25
Pop., Ages 20-44 Yrs. (Thous.) [Ann. Avg.]	8.80	8.51	8.14	8.39	8.60	8.52	8.02	7.17
Pop., Ages 45-64 Yrs. (Thous.) [Ann. Avg.]	5.47	6.06	6.54	7.03	7.50	7.58	7.70	8.28
Pop., Ages 65 Yrs.+ (Thous.) [Ann. Avg.]	3.41	3.33	3.21	3.94	4.71	4.85	5.56	6.07
Pop., Working Age (20-64) (Thous.) [Ann. Avg.]	14.27	14.58	14.68	15.42	16.10	16.10	15.72	15.45
Households (Thous.)	10.12	10.49	10.92	11.25	11.58	11.84	12.09	12.38
Persons per Household [4]	2.32	2.33	2.29	2.29	2.28	2.24	2.21	2.16
Value of Existing Owner Housing Units: Median	\$113,400	\$169,700	\$226,000	\$223,000	\$257,200	\$276,106	\$372,143	\$425,007
Median Residential Housing Unit Sales Price-South Portland	\$126,500	\$226,000	\$215,000	\$240,500	\$325,000	\$356,700	\$516,819	\$555,771

Notes:
 [1] 2020 is a COVID-impacted transitional year.
 [2] Change for the Unemployment Rate and Labor Force Participation Rate variables are in percentage points.
 [3] Change for Natural Population Change variable is in thousands of persons.
 [4] Change in Persons per Household are in the number of persons.

Source: U.S. Census Bureau, Moody's Analytics as adjusted by EPR Prepared by :Economic and Policy Resources, Inc.

In terms of population, the city is forecasted to experience a slight increase over the forecast time frame. From 2019 to 2020, the data suggest that the population of the City increased by an estimate 150 residents, and the population is forecasted to grow by 174 residents from 2020 to 2025, followed by a smaller increase of 81 residents between 2025 and 2030. By the end of the forecast period the City is forecasted to reach a total of 26,767. The forecast also expects that the City’s population will continue to grow older, with the population growth in the Over 65 Years age category—along with the 45-65 Years age category—providing the bulk of the population increases over the period in the City. These population projections assume that much of the Covid related in-migration has run its course and will not continue to add to the demand within the city.

²⁰ In this case, the sub-cycle is likely to include a period of moderating prices. This is referred to as a “sub-cycle” because the magnitude of the prospective price easing is not expected to be anywhere near equal to the overall run-up in prices.

Total households in the city are forecasted to increase relatively modestly from 2019²¹ to 2030 or by a total of 799 households, with the majority of growth occurring in the early years of this period. 259 new households are expected to be formed between 2019-2020 alone, followed by modest growth to 2025. By the end of 2030, the city is expected to have a total of 12,379 households. As a result of the aging population, it is forecasted that the average household size will shrink from 2.28 persons per household to 2.16 persons.

Looking at Median Residential Housing Unit Prices (which includes new and existing housing units) and the Estimated Value of Existing Housing Units, the forecast expects that housing prices will ease back during the forecast period, following the sharp 9.8% rise in Median Residential Housing Unit Prices and the estimated 7.4% increase in Existing Housing Unit Values for 2020. For Median Residential Housing Units, prices are expected to increase 7.7% per year over the 2020 to 2025 period, to be followed by a more restrained 1.5% annual rate of increase over the 2025 to 2030 time frame (corresponding to an overall annual rate of increase in price of 4.5% per year over the entire 2020-2030 time frame).²² The housing unit value for existing units is forecasted to increase by 6.2% per year during the initial 2020-25 period, then slow to a more restrained 2.7% annual average rate of increase over the 2025-2030 time frame (corresponding to an overall annual rate of increase in value of 4.4% per year over the entire 2020-2030 time frame).²³

These rates of housing price and unit value increases will coincide with rising household incomes by 2.1% per year over the 2020-2025 time frame and 3.3% per year over the 2025-2030 time frame (corresponding to an overall annual rate of increase in median household income during the entire 2020-2030 time frame of 2.7%—a rate of increase that is clearly significantly below the expected rate of increase in housing unit prices and values).

Considering the pace of housing price and unit value increase, compared to household income increases, the forecast indicates that housing affordability pressures are likely to increase, during the ten-year forecast period, with more acute stress on owner-occupied housing. The analysis in the housing affordability chapter below provides more detail to the affordability stresses that are anticipated for both owners and renters.

²¹ With calendar year 2019 being the last year of actual data for this variable as the long-term forecast was developed (during the second half of calendar year 2021).

²² It should be remembered that these are annual averages over a five-year and ten-year period. These will be different than the percent change that is the case in any individual year and with respect to any single observation that might be the case across the progression of years.

²³ Readers will note that housing values (which reflect the value of housing units already in the inventory) and housing prices (which reflect the price of the very small percentage of units that change hands every year as housing units are bought and sold) are different concepts of housing unit value. They do not necessarily move in tandem on a “one-to-one” basis. Housing price changes do become part of the housing unit value on a somewhat lagged basis as appraisals on the units bought and sold and other units (i.e., as they are re-financed with loans that require appraisals) are completed and these data become part of property valuations on a broader basis. As a result, while these two value-price concepts are in fact different, they do generally track in the same directions—even if on a somewhat different year-to-year path because they reflect different—even if related—concepts.

Table 3:6 City of South Portland: Historical Economic and Demographic Data 1990-2020 and Forecasted Economic and Demographic Data 2021-2030 (Rates of Change)

Annual Percent Change											
Variable	00-05	05-10	10-15	15-19	19-25	25-30	19-30	19-20	20-25	25-30	20-30
Median Household Income (Nom. \$)	2.0%	1.6%	1.3%	6.1%	2.3%	3.3%	2.8%	3.2%	2.1%	3.3%	2.7%
Employment-Household Survey: Total Employment	0.3%	-0.4%	0.9%	1.0%	0.1%	-0.2%	-0.1%	-6.1%	1.4%	-0.2%	0.6%
Employment-Household Survey: Unemployment Rate (%) [2]	1.2	3.1	-3.2	-1.2	1.7	0.6	2.3	3.6	-1.8	0.6	-1.3
Total Labor Force-Household Survey	0.5%	0.2%	0.2%	0.6%	0.4%	-0.1%	0.2%	-2.5%	1.0%	-0.1%	0.4%
Labor Force Participation Rate-Total Population (%) [2]	-0.9	-0.7	-1.1	0.1	0.7	-0.5	0.2	-1.7	2.4	-0.5	1.9
Population, Total	0.8%	0.5%	0.6%	0.6%	0.2%	0.1%	0.1%	0.6%	0.1%	0.1%	0.1%
Population, Ages 0-19 Yrs.	2.5%	1.8%	-2.1%	-3.5%	-0.4%	-0.6%	-0.5%	0.3%	-0.5%	-0.6%	-0.6%
Population, Ages 20-44 Yrs.	-0.7%	-0.9%	0.6%	0.6%	-1.2%	-2.2%	-1.6%	-0.9%	-1.2%	-2.2%	-1.7%
Population, Ages 45-64 Yrs.	2.1%	1.5%	1.5%	1.6%	0.4%	1.4%	0.9%	1.1%	0.3%	1.4%	0.9%
Population, Ages 65 Yrs.+	-0.5%	-0.7%	4.2%	4.6%	2.8%	1.8%	2.3%	2.9%	2.8%	1.8%	2.3%
Population, Working Age (20-64)	0.4%	0.1%	1.0%	1.1%	-0.4%	-0.3%	-0.4%	0.0%	-0.5%	-0.3%	-0.4%
Households	0.7%	0.8%	0.6%	0.7%	0.7%	0.5%	0.6%	2.2%	0.4%	0.5%	0.4%
Persons per Household [4]	0.01	(0.04)	(0.00)	(0.01)	(0.07)	(0.04)	(0.11)	(0.04)	-0.03	-0.04	(0.08)
Value, Existing Owner Units (Median)	8.4%	5.9%	-0.3%	3.6%	6.4%	2.7%	4.7%	7.4%	6.2%	2.7%	4.4%
Median Residential Housing Sales Price-South Portland	12.3%	-1.0%	2.3%	7.8%	8.0%	1.5%	5.0%	9.8%	7.7%	1.5%	4.5%
Notes:											
[1] 2020 is a COVID-impacted transitional year.											
[2] Change for the Unemployment Rate and Labor Force Participation Rate variables are in percentage points.											
[3] Change for Natural Population Change variable is in thousands of persons.											
[4] Change in Persons per Household are in the number of persons.											
Source: U.S. Census Bureau, Moody's Analytics as adjusted by EPR						Prepared by: Economic and Policy Resources, Inc.					

Chapter 4 HOUSING SUPPLY AND DEMAND

INTRODUCTION

A housing market is generally sub-divided into renter-occupied and owner-occupied housing markets. The key demographic metric utilized in assessing trends within these housing markets is households, specifically year-round resident households.²⁴ A household represents the basic demographic unit and is defined (according to U.S. Census) as including all the people who occupy a housing unit (such as a house or apartment) as their usual place of residence. A household includes related family members and all unrelated people, if any (such as lodgers, or sub-tenants) who share the housing unit. A person living alone in a housing unit, or a group of unrelated persons sharing a housing unit such as partners or roomers, also qualifies as a household. Household counts exclude group quarters such as college residence halls, military barracks, prisons, etc. as any “excess” or unused living space cannot typically be made available for prospective owners or renters on the open market.

HOUSING UNIT SUPPLY AND DEMAND METHODOLOGY

According to the U.S. Census Bureau, a housing unit is a house, an apartment, a mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters; or if vacant, intended for occupancy as separate living quarters. Separate living quarters are those in which occupants live separately from any other individuals in the building and which have direct access from outside the building or through a common hall. For vacant units, the criteria of separateness and direct access are applied to the intended occupants whenever possible. A housing unit is owner-occupied if the owner or co-owner lives in the unit, even if it is mortgaged and not fully paid for. A renter-occupied housing unit is one that is rented for cash rent or occupied without payment of cash rent.²⁵

A housing unit is considered vacant if no one is living in it at the time of census reporting, unless its occupants are temporarily absent. Units temporarily occupied at the time of enumeration by people who have a usual residence elsewhere are also classified as vacant. Unoccupied housing units are considered vacant; and vacancy status is determined by the terms which the unit may be occupied; whether for rent, or for sale, or for seasonal use only. A vacancy rate is that portion of the housing inventory (either rental or owner) which is vacant.

Housing Unit Baseline Supply

The housing unit supply forecast methodology follows the theory that the number of future housing units in the city would be correlated and predicted by the number of forecasted housing completions in the Portland-South Portland MSA, as set forth in the long-term May-June 2021 Moody’s Forecast for the MSA, and adjusted to the city—within the context of the broader long-term economic forecast for the U.S. economy as a whole. For each category of housing unit (total, owner-occupied, and renter-occupied), the calendar year 1990 through calendar year 2019 data in the city was compared with the calendar year 1990 through calendar year 2030 data for the

²⁴ Most familiar with the state’s and the city’s housing markets understand that that the regional housing unit inventory includes a relatively high percentage of units that are characterized as for “seasonal or occasional use.” This is also true of Maine’s sister states in the northern New England region (New Hampshire and Vermont). The State’s higher than the U.S. average of units in this category complicates housing affordability because these units are generally not available for “year-round, residential use.”

²⁵ Units rented for “No cash rent” may be owned by a friend or relative who lives elsewhere and who allows occupancy without charge. Rent-free housing may also be provided to compensate caretakers, ministers, tenant farmers, or others.

MSA. The results of this analysis were then used to forecast the calendar year 2020 through calendar year 2030 housing units in the city. The forecast was revised and put through a series of reconciliations in order to incorporate specific data for the city including:

- (1) the release of the population and housing unit totals from the 2020 Census;
- (2) housing units by type and year built from the city's Assessor's Office; and
- (3) planned housing unit development within the city based on active applications on file.

This reconciliation allows the development of forecasts specific to the city and the regional economic and demographic forecast in Chapter 3 are consistent with these adjustments.

Summary of Additional Unit Adjustments

First, a top-level adjustment was made to the aggregate unit supply forecast to incorporate the release of housing unit totals for the 2020 Census. The data showed that from the 2010 to 2020 Census the actual number of housing units in the MSA increased by 6.8%, compared to a previous Census estimate of 4.6%. South Portland's actual increase was 8.0% compared to the Census estimate of 2.1% increase. This marked somewhat of a reversal of the long-term trend of slower housing unit growth in previous censuses. This adjustment was made for the purposes of having a more precise launch point for the forecast period.

The second adjustment was made based on the types of housing units built over the last decade to ensure that the forecasted housing supply accurately reflected what has been occurring in the most recent time period prior to the forward-looking calendar year 2020 through calendar year 2030 forecast time frame. The analysis identified three new apartment buildings completed in 2020, totaling 232 housing units, along with 12 single family units and 13 condominium units which are included into the 2020 Affordability and Gap Analysis. The analysis also suggested that several hundred single-family and condominium housing units were converted from owner-occupied to renter-occupied units. While there certainly were several "statistically-based" advantages to using a series of forecasting models that covered a longer time series going back to the early 1980s, the initial results of those longer-term forecasting models did not produce a supply forecast that appeared to accurately reflect what had been occurring in the city during the most recent five-year and ten-year time periods. This was because the types of units that have been and now are demanded by the marketplace (for example, as the demographics of the city and region age such as baby-boomers who may be looking to downsize) and the types of units that have been requested by developers and have been permitted by the city need to reflect those evolving market preferences and changing public attitudes for housing (such as the quest for more affordable and more highly profitable developments with "higher unit density").²⁶ These are the types of factors and forces that many time are not adequately captured within statistical forecasting model's historical data sets.

A third adjustment was also made with the intent of more accurately aligning the forecasted future housing unit change numbers with the planned housing unit construction in the city, including planned affordable housing for renters. Of the planned construction, 8% are single-family units, 28% are condominium units, 60% apartment units, and 4% are additions to single-family units. These adjustments together produced the final housing unit supply forecast that was then utilized in the study's various gap analyses.

²⁶ As reflected in the city's zoning and development review requirements as they have evolved since the 1980s, and as reflected in the city's other public policies influencing housing have likewise evolved since the 1980s.

Housing Unit Demand:

Housing unit demand is closely associated with the number of households headed by a year-round resident residing in a particular locale (i.e. in the city). These households reside in housing units that are either owner-occupied or rental-occupied. Historical housing unit demand—households and owner-occupied/rental-occupied/vacant units—are reported by jurisdiction in decennial years by the U.S. Census Bureau and intercensal years by the American Community Survey estimates (or “ACS”). As stated in the definitions described above, housing unit demand is generally synonymous with the number of households. Housing unit demand is estimated using variables such as the forecasted number of households, the forecasted number owner-occupied units, the forecasted number of rental-occupied units as they statistically relate to the historical population-demographic data (as adjusted) and relative to what is expected in the long-term forecast for each variable of importance to housing unit demand and supply.

Estimates of housing unit demand were forecasted by using historical trends as set forth in the long-term population and demographic forecast. Long-term historical relationships between the past population and past demographic characteristics of the region’s (and city’s) resident population, and the actual or past housing unit inventory estimates were estimated. The forecast of future housing unit demand for both owner and renter housing units was then developed based on those quantified historical relationships and the population and demographic forecast.

Findings

The housing unit projections resulted in a lower rate of housing unit supply growth than was the case during 1990s through to the mid-2000s. The housing unit demand projections indicate there will be a slight increase in owner unit demand during the 2020 to 2025 time frame (but owner unit demand is expected to increase by less than one percent per year through to 2030). Unit demand for renter units is expected to experience a similar rate of growth during the 2020 to 2025 period, owing in part to the 232 units added in 2020 (nearly 5% increase in one year).

Overall, demand in the city is expected to increase by 540 year-round units by 2030 (or at an average annual rate of 54 year-round units per year), with a slightly heavier leaning toward renter units. Demand for owner units is expected to increase by 252 units by 2030 (or at an annual rate of 25 units per year). Renter unit demand is expected to increase by 288 units (corresponding to an annual increase of 29 units per year). These estimates correspond to an overall annual housing unit growth rate of 0.45% per year—including a total of 27 additional vacant units that are expected to be added over the period. There are always a number of vacant units in the housing inventory due to reasons previously stated above (see the housing definitions section above)

Table 4:1 Housing Demand in South Portland

				Change in Units/Households			Average Annual Change		
	2020	2025	2030	2020- 2025	2025- 2030	2020- 2030	2020- 2025	2025- 2030	2020- 2030
Total Housing Units	12,463	12,730	13,031	266	301	567	0.42%	0.47%	0.45%
Occupied Housing Units	11,839	12,092	12,379	253	287	540	0.42%	0.47%	0.45%
Owner	6,836	6,961	7,088	125	127	252	0.36%	0.36%	0.36%
Renter	5,003	5,131	5,291	128	160	288	0.51%	0.62%	0.56%

Prepared by Economic & Policy Resources.

Chapter 5 ANALYSIS OF HOUSING AFFORDABILITY

ASSESSMENT OF THE HOUSING WAGE FOR SOUTH PORTLAND

This analysis is provided to help connect the abstract concept of housing affordability to the labor market region of South Portland. This was established by comparing labor earnings for the city's labor market (as defined by the North American Industry Classification System or "NAICS") to the earnings necessary to affordably bear the cost of a median-priced owner or rental unit. This was accomplished using wage data from the Quarterly Census of Employment and Wages ("QCEW"), American Community Survey ("ACS"), and sales and pricing data from the City's Assessor's Office. This public data from the U.S. Census Bureau and U.S. Bureau of Labor Statistics allows comparison between average wages & salaries in the economic sectors in the regional labor market and the household income levels necessary to live in the City. The data used in assessment includes the average wage & salary paid in each major economic sector for the city for calendar year 2020.²⁷

Relating Earnings to Housing Affordability:

A household is determined to be "housing cost stressed" or "housing cost burdened" according to widely accepted guidelines from the U.S. Department of Housing and Urban Development (referred to as HUD) if more than 30% of a household's income goes to renter housing costs (including rent and utilities) or owner housing costs (including mortgage payments, utilities, taxes, and insurance). For home owners, affordability is assessed by comparing the household income needed to afford living in a median priced home, without the cost of living exceeding the 30% of income threshold. This study relates QCEW wage estimates to typical owner housing costs (including mortgage payments) in the city. For renters, this analysis presents average wages-salaries paid to workers by major employment sector, and is compared with the median renter housing-unit costs for the City.

The analysis below indicates whether a single-earner could afford housing in South Portland (the "housing wage concept"), as well as how many earners at a given income level would be needed within a household to be able to afford housing in South Portland (referred to as the "earnings-multiple concept"). It is recognized that many households have more than one wage earner, however it is important for housing affordability not to 'rely on' or necessitate two or more earnings in a household. The ACS indicates that nearly half of households (47%) in the city are either individuals living alone or in one-earner households. These are households across the age spectrum, who can only rely on their individual income to meet their housing needs including young adults who have yet to form a family, single parents who have the additional cost of childcare, and older adults whose partner may be unable to work due to health or disability reasons. Ignoring the realities of this demographic group could overstate the affordability of living within the city.

Defining the "Housing Wage"

The Housing Wage table shown within the analysis for owners and renters is the amount of annual household income required to bear the cost of a median-priced home or rental unit in the city. Workers earning above the Housing Wage are considered able to affordably live within the city.

²⁷ Wages and jobs are based on the location of the employer and so reflect average wages of jobs within the city.

SOUTH PORTLAND HOUSING WAGE ANALYSIS

South Portland Median Renter Housing Wage

Figure 5-1 and Figure 5-2 indicate that average hourly wages earned by workers in four of the ten largest employment sectors (by number of workers) in the city would leave a single-earner household potentially housing cost burdened. It should be emphasized that these are average tables, so it is reasonable to expect income distribution above and below this average. Figure 5-1 shows that an affordable wage for renter households is \$25.88 per hour and what the average wages are in each of the major employment sectors in South Portland. The figure shows that wages in the administration & waste services, retail trade, and accommodation and food services sectors are not adequate for single-earner households in these industries and therefore they are likely “house cost burdened”. Figure 5.2 shows the “earning multiple” necessary to afford an average rental unit in South Portland. A multiple of 1.0 means a single person household earning an average wage in this sector, working 40 hours per week, can afford an average rental unit in South Portland. These data show that average-earning, single worker in three employment sectors is not earning enough to afford their rental unit. Those sectors are administrative and waste services; retail trade; and accommodations and food services.

Figure 5-1 Affordable Renter Housing Wages

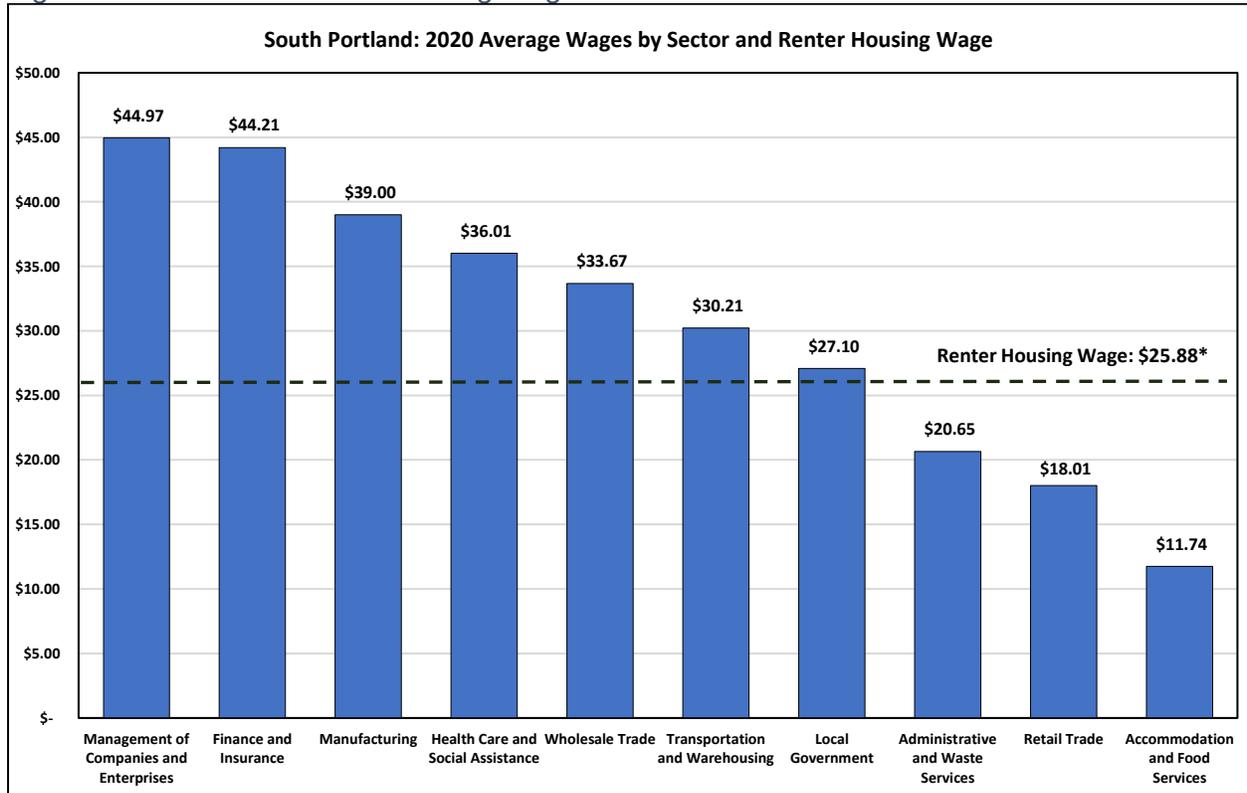
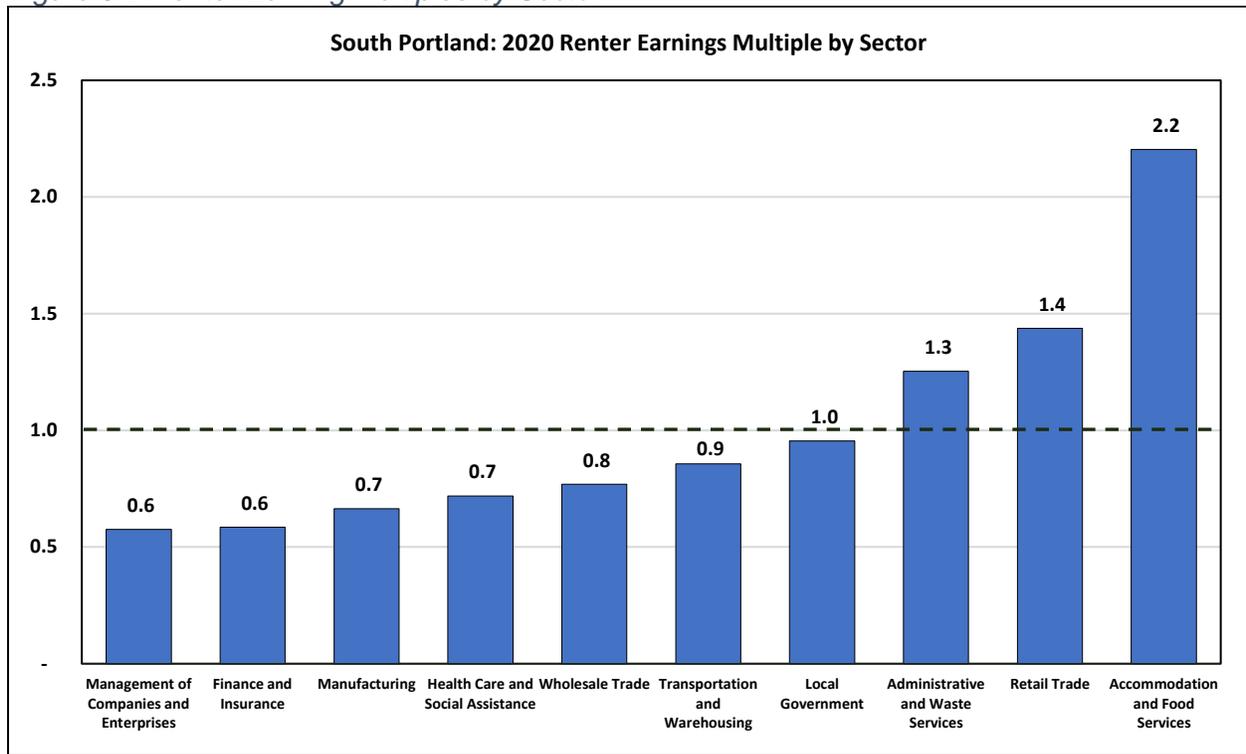


Figure 5-2 Renter Earning Multiples by Sector



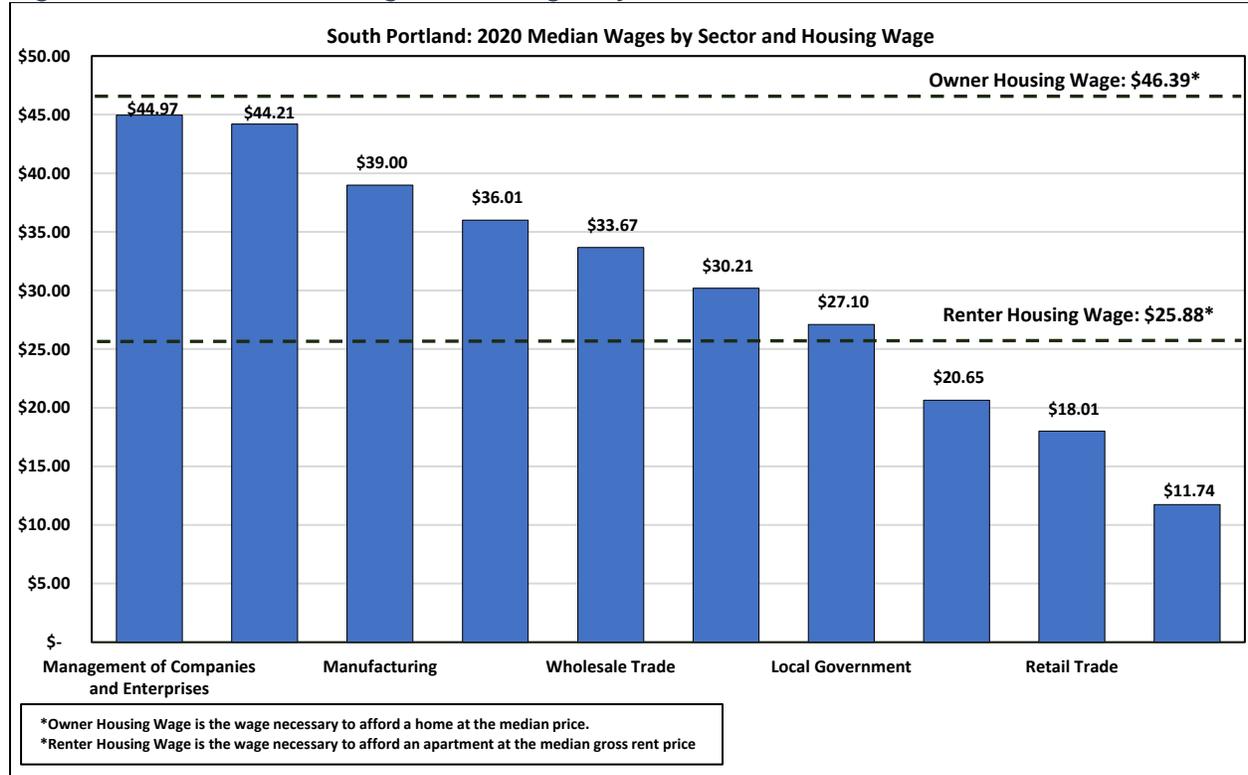
It is clear that in calendar year 2020 the average worker in the highest-paying major employment sectors in the city (such as Management of Companies and Enterprises, Finance and Insurance, Manufacturing, Health Care and Social Assistance, and Wholesale Trade) is likely able to affordably rent a housing unit without being housing cost stressed. Where the Earnings Multiple is less than 1.0, many employees in those industries likely earn less than the average wage needed to affordably rent. Employees in lower-paying employment sectors would require two or more household earners—or would need to hold multiple jobs—to exceed the minimum housing wage affordability threshold and have sufficient household income to avoid experiencing housing cost stress.

South Portland Average Owner Housing Wage

Figures 5-3 and 5-4 show the same data and calculations for owners as the section above does for renters. The average wage necessary to afford an ownership unit in South Portland is \$46.39 per hour. The gap between the owner housing wage and the average wage level for many employment sectors in the city is shown in figure 5-3. The figure shows that owning a home in calendar year 2020 was beyond the means of the average single earner in the city in all sectors. The data also indicates that this is the case for many households with two wage earners. Figure 5-4 shows the earnings multiple in each sector that is necessary for a single person household to afford a median priced housing unit in South Portland. These data show that only those workers in two sectors, management and financial/insurance, earning the sector average wage at 40 hours per week, can afford a median priced house in South Portland. On the other end of the spectrum, figure 5-4 shows that it would require four people earning the average wage in the

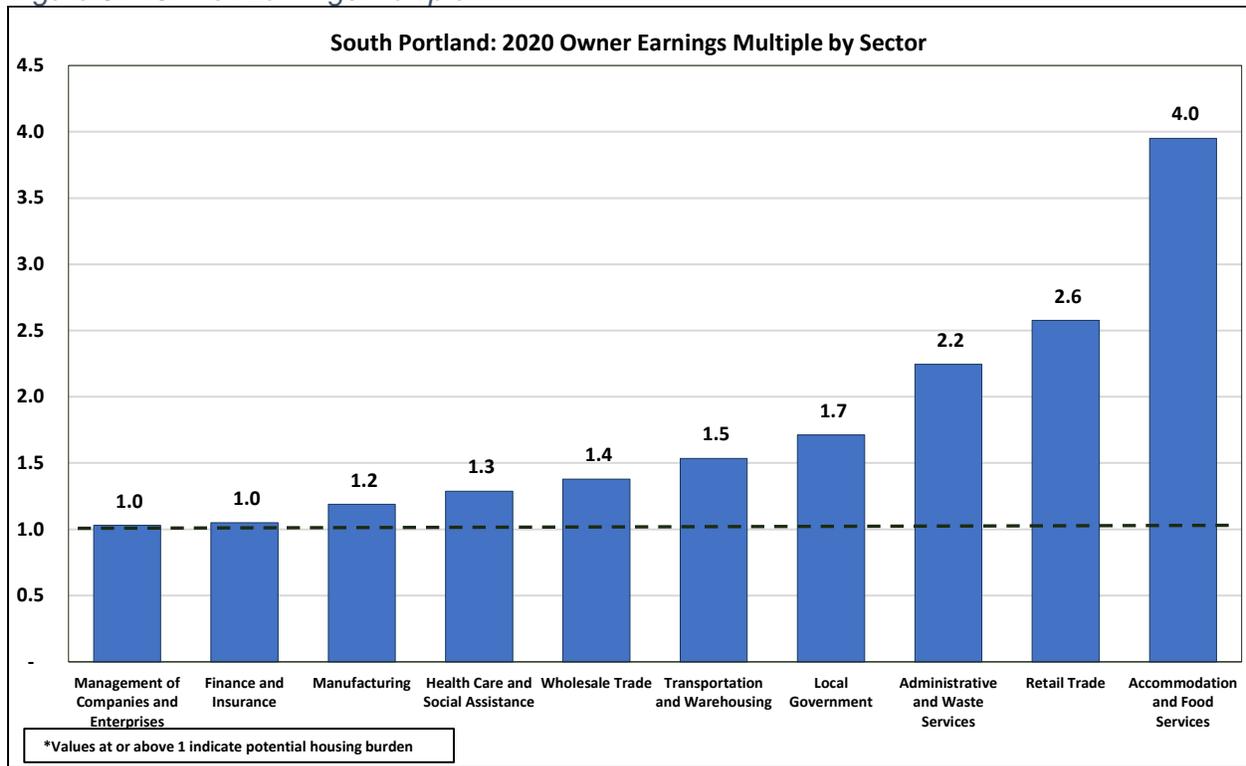
accommodations and food services sector to afford a median priced ownership unit in South Portland²⁸.

Figure 5-3 Affordable Housing Owner Wages by Sector



²⁸ Note, this multiple-earner analysis is simply an earnings-based analysis and does not assess issues of overcrowding or whether a median-priced home is also the appropriate “size” of home to accommodate the necessary number of earners to afford the home.

Figure 5-4 Owner Earnings Multiple



OWNER AND RENTER AFFORDABILITY CALCULATION METHODS

The following section presents the methods used to calculate the price at which home ownership and gross rent level within the city is affordable.

As described in more detail previously, the affordability calculations used in this study are consistent with the approach employed by HUD to identify housing cost stress in a housing market. According to HUD, a household is “housing cost stressed,” if it expends more than 30% of its gross household income on housing costs. This study builds on the HUD standard in order to derive a data-driven understanding of two primary issues: (1) what owner housing expenditure amount can a household affordably sustain from net household income, after paying the costs of utilities and home owner’s insurance, property taxes, and debt service costs on a conventional 30 year-5% down payment mortgage for an owner unit in the city, and (2) what rental housing expenditure amount can a household affordably sustain from net household income after paying the costs of utilities associated with a rental housing unit in the city.²⁹ A general description of the method is presented first, followed by additional details for each step in the affordability calculations process by tenure.

The analysis began with the estimated 2020 median household income for the county and municipality in the study region—referred to here as the Area Median Income (AMI). The estimates of 2020 household (HH) income were then segmented into four income groupings for the City as follows:

²⁹ Other expenses not included in housing costs include transportation and childcare expenses. While these may be fixed and necessary expenses, they are not factored into the 30% threshold.

- 60% of AMI or less
- >60% but <100% of AMI
- >100% but <120% of AMI
- >120% of AMI.

Affordability was calculated for each of the income groups based on the following:

- (1) per the HUD definition, up to 30% of household income is dedicated to the costs of housing for affordability to be maintained and for there to be no “housing cost stress;”
- (2) a mortgage interest rate of 3.11% for 2020 with 5% down payment—consistent with the prevailing 30-year rates that were available in the U.S. in calendar year 2020 according to Freddie Mac’s Primary Mortgage Market Survey;
- (3) households that own their house would insure their homes at market rates and would be required by their lender to purchase market rate private mortgage insurance of roughly 0.66% the loan amount annually; and
- (4) median sales price of houses in South Portland of \$356,700 in calendar year 2020.

Overview of Owner Unit Affordability Calculations

The housing affordability calculations for owners within the city employed a formula which results in the “affordable” owner housing unit price point at which a typical city resident household can afford the typical monthly expenses of homeownership. The affordability calculation represents a snapshot or a housing cost “stress test,” which compares the typical housing costs paid by a typical owner household to the price points that were present as of the year of the affordability analysis. The affordability analysis carries the affordability/housing costs calculation forward from calendar year 2020 to 2025, and to 2030 as part of the study’s dynamic gap analysis to clarify the direction and likely magnitude of affordability pressures in the city going forward.

For owners, the following table sets forth the step-by-step calculations used for each household income category for the city:

Table 5:1 Owner Affordability Calculation Guide

Step	Calculation
1. Annual income category as a percent of AMI	
2. Equated to a monthly income figure	÷ 12
3. Affordable monthly housing costs amount	× 30%
4. Isolate the mortgage payment by subtracting non-mortgage costs from the affordable monthly payment	– property tax – insurance – private mortgage insurance – utilities costs – HOA fees (if applicable)
5. Reverse calculate the affordable home price based on the mortgage payment in step 4	See formula detail below.

The table below shows the owner affordability analysis for the city for calendar year 2020. Each assumed cost of housing ownership included in the affordability calculation is presented. Included at the bottom of the table are estimates showing the number of housing units available at the calculated affordable price point for a given income category at or below the 30% of the estimated housing cost threshold.

The market supply price points use two concepts: (1) the affordability profile of single-family housing unit sales for calendar year 2020 from the city assessor sales data, and (2) an estimate of the single-family housing units by assessed value. The table below sets forth an overview of these calculations as an example for the city.

Table 5:2 South Portland Owner Affordability Findings, 2020

Owners					
2020 Affordable House Price: South Portland					
@ Percent of AMI		@60%	@100%	@120%	
Annual Household Income		\$54,166	\$90,276	\$108,331	
Monthly Household Income		\$4,513.80	\$7,523.00	\$9,027.60	
% of Income for Housing		30%	30%	30%	
Affordable Housing Expenses Per Month (@30% of Monthly HH Income)		\$1,354.14	\$2,256.90	\$2,708.28	
Property Tax & Insurance Payments Per Month		\$460.29	\$767.67	\$922.23	
Insurance	\$75.59	\$75.59	\$75.59	\$75.59	
Private Mortgage Insurance	0.66%	\$92.70	\$166.77	\$204.01	
Taxes (per \$1,000 in value in 2020)	\$19.75	\$292.00	\$525.32	\$642.63	
Utilities		\$173.22	\$192.78	\$200.08	
Affordable Mortgage Payment (@3.11%)		\$721	\$1,296	\$1,586	
Affordable Mortgage Amount (95% of Price, Assuming 5% Down)		\$168,546	\$303,220	\$370,935	
Affordable House Price		\$177,416	\$319,179	\$390,458	
Median House Price		\$356,700	\$356,700	\$356,700	
Monthly Mortgage for Median Home Price		\$1,449	\$1,449	\$1,449	
Affordable Price-Difference from Median Home		\$(179,284)	\$(37,521)	\$33,758	
Affordable Price-Difference from Monthly Mortgage		\$(728)	\$(152)	\$137	
South Portland-Estimated Affordable Gap for Owner Units, 2020					
% of AMI		<60%	60% to 100%	100% to 120%	>120%
Median Household Income		\$54,166	\$90,276	\$108,331	
Affordable Price [Excludes Transportation Costs]		\$177,416	\$319,179	\$390,458	
Estimated Unit Demand		1,818	1,628	710	2,680
Estimated Unit Supply		399	2,717	1,252	2,468
Affordability Gap in Units (Demand minus Supply)		1,419	-1,089	-542	
Cumulative Demand		1,818	3,446	4,156	6,836
Cumulative Supply		399	3,116	4,368	6,836
Cumulative Gap		1,419	330	-212	

Property Tax Calculations:

The 2019, 2020, 2021, and estimated/forecast Property Tax rates for the City of South Portland were calculated using a combination of General Municipal, School/Education, and County taxes levied in the city. The city’s annual reports provide a breakdown of the property tax rate (per \$1,000) for the municipality.

Table 5:3 Effective Tax Rate on South Portland Households, 2020

	General Municipal	School / Education	Cumberland County	Effective Property Tax Rate per \$1000 Value
	A	+ B	+ C	= D
2020	5.66	13.20	0.89	19.75

Private Mortgage Insurance (PMI) Rate and Down Payment Percentage

The affordability portion of this study for owners assumed that buyers initially made a 5% down payment, which typically requires that the mortgage agreement include private mortgage insurance (PMI). As a likely cost of house ownership for the typical housing transaction simulated by the affordability analysis, premiums for PMI were included as a housing cost in this analysis.

PMI is insurance that protects the lender against the potential default of the borrower. This is usually required when the total amount that is loaned in the mortgage agreement is 80% or more of the final selling price of the home. In other words, PMI is required when the borrower presents a down-payment for the home that is less than 20% of the selling price—although there are some exceptions. Borrowers typically continue to pay PMI premiums, along with their mortgage payment, until the outstanding loan value is less than 80% of the of the purchase price or value, again with the potential for exceptions according to the agreement between borrower and lender. Lenders typically use third-party insurance companies to manage their risk on loans which are greater than 80% of the home value, so premium rates and approval conditions can vary across companies and depend on multiple variables such as the value of the loan, the value of the house, type of loan, the borrower’s credit history, and type of property being purchased. While PMI makes it possible to buy a home with less than the traditional 20% amount of a down payment, it also represents an additional cost of ownership which borrowers must bear, even though it is insurance that protects the lender.

For the purpose of this study, the PMI rate for calendar year 2020 was published by the Urban Institute and utilizes the average credit score for Maine of 721 from United States Mortgage Insurers (USMI) with a 5% down payment. Using these parameters, the appropriate PMI amount per year was determined to be 0.66% of the loan amount, or 0.055% per month.

Following the “Great Recession” all mortgage insurance issuers revised their rates according to a reassessment of the level of risk presented by different classifications of homebuyers. Even after the factors and assumptions governing this rate underwent significant revision, the typical homebuyer’s monthly housing expenses were marginally impacted. Therefore, even with the minimal chance that an event like the housing crisis of the late-2000s financial crash were to occur again within the ten-year forecast time frame, the estimated 0.66% loan amount is expected to continue to be a reasonable assumption through the 2030 forecast horizon, and was therefore used for all years of the affordability forecast analysis.

Owner Utility Expenditures

Owner expenditures for utilities costs were calculated from the Consumer Expenditure Survey (“CES”) for the Northeast region. The utilities costs are organized by pre-tax income levels, and the data includes services costs for water/sewer, electricity, heat, and exclude telephone. The CES reflected consumer expenditure data collected from households during calendar year 2019-20 period. Because the base year of the housing affordability analysis was calendar year 2020, these data were then escalated to 2020 values using the Consumer Price Index (“CPI”) concept for urban utilities expenditure concept.³⁰

³⁰ The reader will note that this study and these estimates were developed during a highly uncertain period that included the recent invasion of Ukraine by Russia. This has and will likely continue to result in volatile year-to-year changes in utility costs over the ten-year study period. This study uses a long-term forecast approach, which means that near-term higher utility cost escalations will likely be followed by a period of off-setting corrections as national policymakers take actions to curtail future price increases. This is illustrated by the recent price track of crude oil which recently moved above to \$109 per barrel in March 2022 on an inflation-adjusted March 2022 dollars basis. This contrasts with the April 2020 average of only \$19 per barrel—including a short-term, multi-day period where

Utility costs for the city were calculated for each household income level (e.g., 60%, 100%, and 120%), based on the utilities expenditures for each income level provided in the CES consumer expenditure dataset.

Finally, the CPI utilities expenditure concept was used to convert CES dollar values to 2030 from the 2019-20 CES data. The 2030 utilities cost estimate was derived by applying the forecasted rate of change to those utilities expenditure amounts using the CPI Urban Wage Earner-Fuels and Utilities, (Index 1982-84=100, NSA) that was forecasted using the historical rate of change from 2000 to 2020. The specific rate of change and resulting utilities cost estimate for owners is set forth in the table below.

Table 5:4 Current and Forecasted Utility Costs, 2020-2030

	2020	2025	2030
CPI Household Energy (Index 1982-1984=100), NSA	199.5	231.8	256.6
Median Household Monthly Utility Costs			
Owners: South Portland	\$192.78	\$236.38	\$269.61
Renters: South Portland	\$169.81	\$200.58	\$227.36

Mortgage Rate Methodology

The table below shows the 2020 mortgage rate used in the study from the data supplied by the Moody’s June 2021 Macro Forecast for the Nationwide 30-Year Fixed Mortgage Rate from calendar year 2019 through calendar year 2030. The forecasted rate increase from 3.11% in 2020 to 5.16% in 2025 is expected to have a significant impact on the affordability of housing units.

Table 5:5 Current and Forecasted Mortgage Rates, 2019-2030

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
May-June 2021 Moody's Baseline Forecast: National 30-Year Fixed Rate	3.93	3.11	3.36	4.08	4.44	4.89	5.16	5.35	5.41	5.40	5.37	5.33

Mortgage Value Methodology

Once the maximum affordable monthly mortgage payment amount that could be borne by a household in each income category was determined, a calculation was made to translate that amount to a total mortgage value. That estimated total mortgage value corresponds to the affordable mortgage loan value for a home which a household can bear.

Translating the affordable monthly mortgage payment to an affordable mortgage loan amount was accomplished using a financial formula which yields the value of a loan assuming a fixed monthly payment, a fixed interest rate, and a 30-year loan term. The formula was employed as follows:

$$LoanValue = Payment \times \sum_{t=1}^n \frac{1}{(1+r)^t}$$

the price of oil fell below \$0 per barrel. Long-term forecasts seek to present the underlying long-term trends—up or down—in prices. In this case, the current near-term volatility masks an overall, underlying upward trend expected in utilities costs—of which energy prices (a key commodity in the global economy—have recently been disrupted by the on-going ground war in Ukraine— will be a contributing factor.

Where Loan Value is the size of the mortgage loan that can be serviced without causing housing cost stress; “n” is the number of payments (number of years for the mortgage term multiplied by 12 months); “r” is the fixed monthly interest rate; and “t” is each monthly period up to “n.”

Once the affordable mortgage value was determined, this amount was adjusted up by 5% (e.g., the number was divided by 0.95) with the assumption that the household would make a 5% down payment for the housing unit—the minimum for a conventional mortgage in the un-subsidized housing market. The result of that calculation yields the estimated affordable house price for that household income category.

Median Transactions Price

Sales data which includes the year, classification, and sale price for all residential real estate transactions within South Portland was gathered for the city via the Assessor’s Online Database. All residential real estate transactions which took place from before 2005 to July 2021 are contained within the data set. Calendar year 2020 served as the base year for this study, and transaction prices were escalated to 2030 using the Moody’s Portland, South Portland, Maine MSA forecast, as adjusted using the Moody’s May-June 2021 Macro Forecast for the FHFA All Transactions Home Price Index for the metro area as a starting point.

Table 5:6 Median Transactions Home Price by Style: South Portland, ME, 2019-2030

Median Transaction Price: (Indexed, 2019=100)	2019	2020	2025	2030
All Styles	-	109.8	159.0	171.0
Cape Style	-	112.0	162.3	174.5
One Story	-	117.5	170.2	183.1
Two-Story	-	114.7	166.1	178.7
Condominium	-	108.7	157.5	169.4
Median Transaction Price				
All Styles	\$325,000	\$356,700	\$516,819	\$555,771
Cape Style	\$299,950	\$336,000	\$486,827	\$523,519
One Story	\$260,000	\$305,500	\$442,636	\$475,997
Two-Story	\$375,000	\$430,000	\$623,023	\$669,979
Condominium	\$226,250	\$246,000	\$356,427	\$383,290

Overview of Renter Affordability Calculations: A set of affordability calculations was completed for renter housing units using the same general approach as previously described. The affordability analysis was undertaken for rental units in order to establish an understanding of rental affordability within the city. Consistent with the rest of the study, calendar year 2020 was the starting point for this analysis. Estimated household income was divided by 12 to yield monthly income, and then multiplied by 30% in order to establish the maximum affordable rent-utilities cost (i.e., Gross Rent) per HUD housing cost stress indicator guidelines described above.

The rental affordability calculations for the city were based on:

- (1) household income data which was taken from the 2014-2019 Five-Year American Community Survey (“ACS”) Financial Characteristics dataset;
- (2) Gross Rents Paid data from the Five-Year ACS dataset for households occupying renter units; and
- (3) utilities expenditures paid by household units derived from data from the Consumer Expenditure Survey (“CES”) published by the U.S. Department of Labor for households in the northeastern region of the United States. Estimated rents and utilities costs for renter households were then calculated specifically for the city.

The analysis was then performed in order to determine the number of households in each income category that were estimated to be experiencing housing cost stress—again, defined as households that were estimated to be dedicating more than 30% of their household income to housing costs in their renter unit.

The following table describes step by step the renter affordability calculations:

Table 5:7 Renter Affordability Calculation Guide

Step	Calculation
1. Annual household income as a percent of AMI	
2. Express income as monthly income	÷ 12
3. Define total affordable renter housing payment	× 30%
4. Calculate amount for affordable cash rent payment per month	Subtract utility costs

Median household income data for renter-occupied households for the City was sourced from the ACS Five-Year data and used as a starting point for this analysis. The median household income level was adjusted to 2020 levels then broken down into 60%, 100%, and 120% of the median household income level categories. Monthly household income was calculated by dividing the resulting percentages of median household income by twelve (corresponding to twelve months per year). From this number, “affordable gross rent ” was derived as 30% of monthly household income at each level, which established the affordable housing cost for each household income level.

Utility costs for renter units were based on the Consumer Expenditure Survey (“CES”) for the Northeast region by income before taxes for the years 2019-2020, including water/sewer, electricity, heat, and excluding telephone costs. The CES is conducted twice every year. Utility costs for the city are calculated for each household income level (60%, 100%, and 120%) for renters,³¹ based on the utilities expenditures for each income level provided in the CES data for the household income levels likely to occupy renter units.

Using the CES data for 2020, the table below sets forth monthly utility costs for each median renter-occupied household income level.

Table 5:8 City of South Portland Renter Utilities Payments, 2020 by Household Income Category

City of South Portland		Utilities Calculation		
100% of Median HH Income (AMI)		# Consumer Units	Per Year [1]	
\$48,633	<\$15k	2,320	\$1,522	\$3,531,040
	\$15k-\$29,999	3,361	\$1,978	\$6,648,058
	\$30k-\$39,999	1,958	\$2,445	\$4,787,310
	\$40k-\$49,999	1,466	\$2,404	\$3,524,759
	Sum	9,105		18,491,167
	Per Year			\$2,030.83
	Per Month			\$169.24
	Notes:			
	[1] Less Telephone			
	Consumer Expenditure Survey, U.S. Bureau of Labor Statistics			

³¹ As such expenses have historically proven to be a function of household income levels per the consumer expenditure survey of the U.S. Department of Labor (and others).

The affordability gap for renters for each household income level for the city was then calculated based on the difference between the affordable gross rent and the monthly gross rent. The Table below presents this data for the City of South Portland.

Table 5:9 South Portland Renter Affordability Study Findings and Gap Analysis, 2020

Renters			
2020 Affordable Rent: South Portland			
@ Percent of AMI	@60%	@100%	@120%
Annual Household Income	\$29,180	\$48,633	\$58,360
Monthly Household Income	\$2,432	\$4,053	\$4,863
% of Income for Housing	30%	30%	30%
Monthly Utilities	\$148	\$170	\$176
Affordable Asked Rent	\$581	\$1,046	\$1,283
Affordable Gross Rent	\$730	\$1,216	\$1,459
Monthly Gross Rent (Includes Utilities)	\$1,346	\$1,346	\$1,346
Affordability Gap	(\$616)	(\$130)	\$113

The number and type (zero, one, two, or three-plus bedroom) of rental unit for the city is also considered. These totals were calculated based on the Bedrooms by Gross Rent 2015-2019 ACS Five-Year Estimates data sets, adjusted to take into account the 2020 Census total housing units for the city.

The number and type of units in the rental market at each affordable gross rental rate was then obtained from the historical 2019 data. For example, at 100% of median renter-occupied household income for the city, there were an estimated 2,042 renter units at or below the affordable gross rental rate of \$1,216 based on the adjusted ACS estimates. Among those units, there were an estimated 90 no-bedroom units, 885 one-bedroom units, 829 two-bedroom units, and 238 three-plus-bedroom units in 2020.

Table 5:10 Renter Affordability by Bedroom (Adjusted ACS)

South Portland	60%	100%	120%	
Median HH Income	\$29,180	\$48,633	\$58,360	
Affordable Gross Rent	\$730	\$1,216	\$1,459	
Available Units at Affordable Gross Rent (%)				Total Number of Rental Units*
Not Bedroom (Studio):	20%	77%	89%	117
One Bedroom:	37%	75%	93%	1,181
Two Bedrooms:	8%	38%	65%	2,202
Three or More Bedrooms:	4%	19%	33%	1,225
Total Units at or Below	14.8%	43.2%	64%	4,725
*Excludes units with no cash rent				

Affordable Unit Gap Analysis

In order to understand the affordable unit gap analysis, a few terms, concepts, and assumptions need to be established. As noted previously, it was assumed that a household was able to spend up to 30% of its household income on housing before the household would become “housing cost-stressed.” Supply at a particular income level is the number of units (either owner or renter) that are valued at the affordable price point, **if all units within that geographic area were to be**

available for sale or rent. While it may be useful for the purpose of this analysis to represent all owner and renter units as available when comparing unit price, this turns out to be a severe assumption, as only about 1% of all owner and renter housing units are available for new occupants, or in other words are “on the market,” at any given time. Because the median price of actual sales in 2020 was used, the unit price presented, in reality, therefore only applies to owner units which are up for sale units which are available.

Demand at a particular income level is the number of households in the geographic area, or projected to be in the area, whose income is at or below the level at which rental or ownership can be affordable. The confluence of supply and demand shows the resulting unit gap at each income level, which is calculated as the difference between the number of units available, (supply) and the number of households that could afford them (demand). This theoretical gap initially assumes that households would not occupy units within other income levels (either above or below their capacity to affordably pay). This means that if a household was occupying a unit at either a higher or lower level than 30% of their income, then they do not appear in the demand for the income category that their housing unit falls into, only the income category the household is in. This assumption was necessary to do meaningful and orderly analysis.

The data has shown that the city is relatively affordable at levels above 60% of median owner income. The owner households that appear to be housing cost burdened are those that make 60% or less than median household income (AMI). Finding an affordable rental unit is somewhat easier for the renters of the city however, there are a number of renter households at or below 60% of AMI competing for units affordable for households above 60% to 100% income levels, because there are not enough units within their affordable range. This creates a cumulative gap for those income levels until the affordable supply finally meets demand in the 100% to 120% income bracket.

Estimated unit demand is the number of units demanded by households within each income category. For example, for owner units in South Portland, the 1,628 units demanded at 100% of AMI is the number of owner households that earned between 60% and 100%. Estimated unit supply is the number of units available at the affordable price for each income level. So for 100% of AMI, there is a supply of 2,717 units priced above \$177,416 and below the 100% affordable price of \$319,179 which would be affordable for those earnings 100% of AMI. The affordability gap is the number of units demanded minus the number of units available at each income category. All of the measures between the affordable price and cumulative figures of Table 5-13 are for the indicated income level only. They do not include any surplus or shortages from higher or lower income levels. For example, the 2,717 units supplied at 100% of median income does not include the 399 units supplied at 50% of median income.

Cumulative demand is the estimated unit demand at that income level plus the estimated unit demand for each lower income level. Therefore, Table 5-13 shows that the cumulative demand for households earning 100% of AMI was 3,446 in 2020, or 1,628 (the estimated demand from households earning 100% of AMI) plus 1,818 (the estimated demand from households earning 60% of AMI). **Cumulative Supply** is the estimated unit supply at each income level, plus all of the unit supply for each lower income level. At 100% of AMI, there was a cumulative supply of 3,116 units at affordable prices (2,717 from the estimated unit supply that was affordable to households earning 100% of AMI and 399 units affordable to households earning 60% of AMI). The **Cumulative Gap** is calculated by subtracting cumulative supply from cumulative demand. As a result, the cumulative gap at the 60% to 100% of AMI level is 330 (3,446 in cumulative demand minus 3,116 in cumulative supply). Alternatively, it can be calculated by summing the

affordability gaps at the income levels considered (a gap of –1,089 for the 100% of AMI level plus the gap of +1,419 for the 60% of AMI level).

Cumulative numbers are generally a better measure of the state of the market as someone who is making 100% of median income would be able to purchase a house that is affordable to someone below 60% of median income if the opportunity arose. Also, if there are not enough units available at an affordable price, those households will still need to live somewhere and so will likely purchase a unit at a price outside of their affordable range. This means that even though there was a theoretical oversupply of units for households earning above 100% of AMI, the full picture of the market was shown more clearly by the cumulative gap values which show that the “surplus” in housing among higher income households units is likely being purchased—at housing cost stress—by people in the lower income categories because lower-cost housing is undersupplied. The columns for the 120% of household income in Table 5-13 indicate the first income category that has a theoretical cumulative oversupply, indicated by the negative cumulative gap value.

Table 5:11 City of South Portland 2020 Owner’s Affordability Analysis

Owners				
2020 Affordable House Price: South Portland				
@ Percent of Median Owner Household Income	@60%	@100%	@120%	
Annual Household Income	\$54,166	\$90,276	\$108,331	
Monthly Household Income	\$4,514	\$7,523	\$9,028	
% of Income for Housing	30%	30%	30%	
Affordable Housing Expenses Per Month (@30% of Monthly Household Income)	\$1,354	\$2,257	\$2,708	
Property Tax & Insurance Payments Per Month	\$460.29	\$767.67	\$922.23	
Insurance	\$75.59	\$75.59	\$75.59	
Private Mortgage Insurance	0.66%	\$92.70	\$166.77	\$204.01
Taxes (per \$1,000 in value in 2020)	\$19.75	\$292.00	\$525.32	\$642.63
Utilities	\$173.22	\$192.78	\$200.08	
Affordable Mortgage Payment (@3.11%)	\$721	\$1,296	\$1,586	
Affordable Mortgage Amount (95% of Price, Assuming 5% Down)	\$168,546	\$303,220	\$370,935	
Affordable House Price	\$177,416	\$319,179	\$390,458	
Median House Price	\$356,700	\$356,700	\$356,700	
Affordable Price-Difference from Median	\$(179,284)	\$(37,521)	\$33,758	
Affordable Price-Difference from Monthly Mortgage	\$(728)	\$(152)	\$137	

Table 5:12 City of South Portland 2020 Renter’s Affordability Analysis

Renters				
2020 Affordable Rent: South Portland				
@ Percent of Median Renter Household Income	@60%	@100%	@120%	
Annual Household Income	\$29,180	\$48,633	\$58,360	
Monthly Household Income	\$2,432	\$4,053	\$4,863	
% of Income for Housing	30%	30%	30%	
Monthly Utilities	\$148	\$170	\$176	
Affordable Asked Rent	\$581	\$1,046	\$1,283	
Affordable Gross Rent	\$730	\$1,216	\$1,459	
Monthly Gross Rent (Includes Utilities)	\$1,346	\$1,346	\$1,346	
Affordability Gap	(\$616)	(\$130)	\$113	

Table 5:13 2020 City of South Portland Affordability Gap Analysis

City of South Portland - Estimated Affordable Gap for Owner Units, 2020				
% of Median Household Income	<60%	60% to 100%	100% to 120%	>120%
Median Household Income	\$54,166	\$90,276	\$108,331	
Affordable Price [Excludes Transportation Costs]	\$177,416	\$319,179	\$390,458	
Estimated Unit Demand	1,818	1,628	710	2,680
Estimated Unit Supply	399	2,717	1,252	2,468
Affordability Gap in Units (Demand minus Supply)	1,419	-1,089	-542	
Cumulative Demand	1,818	3,446	4,156	6,836
Cumulative Supply	399	3,116	4,368	6,836
Cumulative Gap	1,419	330	-212	

City of South Portland - Estimated Affordable Gap for Renter Units, 2020				
% of Median Household Income	<60%	60% to 100%	100% to 120%	>120%
Median Household Income	\$29,180	\$48,633	\$58,360	
Affordable Rent [Excludes Transportation Costs]	\$730	\$1,216	\$1,459	
Estimated Unit Demand	1,497	993	407	2,105
Estimated Unit Supply	712	1,251	1,043	1,997
Affordability Gap in Units (Demand minus Supply)	785	-258	-635	
Cumulative Demand	1,497	2,491	2,898	5,003
Cumulative Supply	712	1,963	3,006	5,003
Cumulative Gap	785	527	-108	

AFFORDABILITY FORECAST 2020-2030

Median Residential Sales Price/Home Value

All forecasts for prices of ‘owned’ single family residences are based on a univariate regression model, with the actual price data series set as the dependent variable and the Federal Housing Finance Agency (FHFA) House Price Index for the Portland-South Portland, Maine MSA geographic area set as the independent variable. This mathematical model measures the historical relationship between the FHFA price index data and the historical home price data, developing a line-of-best-fit regression equation based on this historical relationship. Since forecasted FHFA value for the Portland-South Portland MSA area is available from the Moody’s forecasted data, forecasted values for the independent variable were input into the model/equation, resulting in the forecasted value for the dependent variable, house price, for each year of the forecasted timeline between 2020 and 2030. Typically, the further back historical data goes into the past, the more accurate a regression model will be. However, the availability of data specific to some of the peer communities and geographies is limited. The American Communities Survey, for instance, provides a geographically precise public source of home price data that is self-reported by homeowners, but complete data is only available for the 2009 through 2019 time period, which does not allow for a reliably predictive forecast model.

The reader will note that the forecast of the median residential sales price calls for a significant—roughly 45%—increase over the 2020-to-2025-time frame. This reflects recent house price trends and generally increasing prices for many commodities and materials that impact construction costs for new units that may be added to the city’s inventory. While this housing unit price forecast seems large in comparison to price trends for the long-term period following the “Great Recession,” it is worth noting that as of March 2022, Realtor.com housing unit sales data indicated that the median price for South Portland was \$449,500 well more than halfway to the 2025 housing unit price forecast of \$516,819 relative to the \$356,700 median housing unit sales price actual for calendar year 2020—with calendar year 2020 being the last calendar year of actual data when the forecast was completed. See pages 77 through 78 (below) for a further detailed discussion of recent economic developments and factors that have been influencing housing prices.

Utilities

Utilities expenditure CPI was used to convert CES dollar values to 2030 from the 2018-2019 CES data. The 2030 estimated utilities cost was derived by applying the forecasted rate of change to those utilities expenditure amounts using the CPI Urban Wage Earner-Energy, (Index 1982-84=100, NSA) that was developed using the historical rate of change from 2000 to 2020. The specific rate of change and resulting utilities cost estimate for owners is set forth in the table below.

Table 5:14 Current and Forecasted Utility Costs by Tenure, 2020-2030

	2020	2025	2030	
CPI Household Energy (Index 1982-1984=100), NSA	199.5	231.8	256.6	
Median Household Monthly Utility Costs				
Owners: South Portland	\$192.78	\$236.38	\$269.61	\$258.75
Renters: South Portland	\$169.81	\$200.58	\$227.36	\$225.29

Property Tax

The property tax rates were escalated to 2030 values using the compound annual growth rate of historical effective property tax rates for the City of South Portland, as derived from the City’s annual report data, from FY 2010 through the estimated FY 2022 rate. Note that there is an apparent one-year lag between the tax rate for the City’s fiscal year and the actual property value for the calendar year to which those rates are applied – thus the FY 2021 property tax rate is applied to properties purchased in the 2020 calendar year.³² The tables detailing the tax rates “per \$1,000 of house value” are found in the table below.

Table 5:15 Current and Forecasted Effective Property Tax Rates by Calendar Year, 2020-2030

	Annual Growth Rate %	2020	2025	2030
South Portland	2.61%	\$19.75	\$21.64	\$24.62

Homeowner Insurance Calculation and Escalation Methodology

The 2020 and forecasted homeowner insurance rates for the city was calculated using the average premium of HO-3 policies in the State of Maine from the National Associations of Insurance Commissioners for calendar year 2018, the latest year available. The HO-3 policy is the most common type of homeowner insurance primarily for its broad range of coverage and affordability. Because this estimated cost was from calendar year 2018, the Tenants’ and Household Insurance component of the Consumer Price Index from the U.S. Department of Labor—Bureau of Labor Statistics was used to convert the 2018 dollar values to 2020, 2025, and 2030 values.

Table 5:16 Current and Forecasted Homeowners Insurance Costs, 2018-2030

	2018	2020	2025	2030
CPI - Tenants' and household insurance (Index to 2018)	-	1.002	1.079	1.183
Annual Growth Rate		-0.5%	1.9%	1.9%
Average Annual Homeowners' Insurance Premium	\$905	\$907	\$976	\$1,071

This historical rate was then escalated to 2030 values using the actual rate of increase from the Tenants’ and Household Insurance Consumer Price Index to September 2021 (latest available data) and then using the compound annual growth rate of the index from calendar year 2000 to 2020 as the basis for forecasting to 2030.

³² This is particularly relevant for 2020 because the lockdowns in the spring and early summer shifted properties sales to later in the year (after 2020 taxes were due).

AFFORDABILITY ANALYSIS FORECAST FOR 2025 AND 2030

Table 5:17 City of South Portland 2025 Owner's Affordability Analysis

Owners				
2025 Affordable House Price: South Portland				
@ Percent of Median Owner Household Income		@60%	@100%	@120%
Annual Household Income		\$60,207	\$100,345	\$120,414
Monthly Household Income		\$5,017	\$8,362	\$10,035
% of Income for Housing		30%	30%	30%
Affordable Housing Expenses Per Month (@30% of Monthly Household Income)		\$1,505.18	\$2,508.63	\$3,010.36
Property Tax & Insurance Payments Per Month		\$458.33	\$761.00	\$913.97
Insurance	\$81.32	\$81.32	\$81.32	\$81.32
Private Mortgage Insurance	0.66%	\$84.69	\$152.69	\$187.05
Taxes (per \$1,000 in value in 2025)	\$21.64	\$292.32	\$526.99	\$645.60
Utilities		\$204.67	\$229.33	\$236.38
Affordable Mortgage Payment (@5.16%)		\$842	\$1,518	\$1,860
Affordable Mortgage Amount (95% of Price, Assuming 5% Down)		\$153,987	\$277,612	\$340,092
Affordable House Price		\$162,092	\$292,223	\$357,991
Median House Price		\$516,819	\$516,819	\$516,819
Monthly Mortgage for Median Home Price		\$2,685	\$2,865	\$2,865
Affordable Price-Difference from Median		\$(354,727)	(224,597)	\$(158,828)
Affordable Price-Difference from Monthly Mortgage		\$(1,843)	\$(1,167)	\$(825)

Table 5:18 City of South Portland 2030 Owner's Affordability Analysis

Owners				
2030 Affordable House Price: South Portland				
@ Percent of Median Owner Household Income		@60%	@100%	@120%
Annual Household Income		\$70,912	\$118,186	\$141,824
Monthly Household Income		\$5,909	\$9,849	\$11,819
% of Income for Housing		30%	30%	30%
Affordable Housing Expenses Per Month (@30% of Monthly Household Income)		\$1,772.80	\$2,954.66	\$3,545.59
Property Tax & Insurance Payments Per Month		\$563.72	\$941.32	\$1,131.97
Insurance	\$89.22	\$89.22	\$89.22	\$89.22
Private Mortgage Insurance	0.66%	\$96.32	\$172.97	\$211.67
Taxes (per \$1,000 in value in 2030)	\$24.62	\$378.18	\$679.13	\$831.08
Utilities		\$233.45	\$261.34	\$269.61
Affordable Mortgage Payment (@5.33%)		\$976	\$1,752	\$2,144
Affordable Mortgage Amount (95% of Price, Assuming 5% Down)		\$175,126	\$314,485	\$384,851
Affordable House Price		\$184,343	\$331,037	\$405,106
Median House Price		\$555,771	\$555,771	\$555,771
Monthly Mortgage for Median Home Price		\$2,941	\$2,941	\$2,941
Affordable Price-Difference from Median		\$(371,428)	\$(224,734)	\$(150,665)
Affordable Price-Difference from Monthly Mortgage		\$(1,966)	\$(1,189)	\$(797)

Table 5:19 City of South Portland 2025 Renter's Affordability Analysis

Renters			
2025 Affordable Rent: South Portland			
@ Percent of Median Renter Household Income	@60%	@100%	@120%
Annual Household Income	\$32,435	\$54,058	\$64,870
Monthly Household Income	\$2,703	\$4,505	\$5,406
% of Income for Housing	30%	30%	30%
Monthly Utilities	\$181	\$201	\$208
Affordable Asked Rent	\$630	\$1,151	\$1,414
Affordable Gross Rent	\$811	\$1,351	\$1,622
Monthly Gross Rent (Includes Utilities)	\$1,550	\$1,550	\$1,550
Affordability Gap	(\$739)	(\$199)	\$72

Table 5:20 City of South Portland 2030 Renter's Affordability Analysis

Renters			
2030 Affordable Rent: South Portland			
@ Percent of Median Renter Household Income	@60%	@100%	@120%
Annual Household Income	\$38,202	\$63,669	\$76,403
Monthly Household Income	\$3,183	\$5,306	\$6,367
% of Income for Housing	30%	30%	30%
Monthly Utilities	\$214	\$227	\$238
Affordable Asked Rent	\$741	\$1,364	\$1,672
Affordable Gross Rent	\$955	\$1,592	\$1,910
Monthly Gross Rent (Includes Utilities)	\$1,804	\$1,804	\$1,804
Affordability Gap	(\$849)	(\$212)	\$106

HOUSING UNIT GAP ANALYSIS

Table 5:21 City of South Portland 2020 Affordable Housing Unit Gap Analysis:

City of South Portland-Estimated Affordable Gap for Owner Units, 2020				
% of Median Household Income	<60%	60% to 100%	100% to 120%	>120%
Median Household Income	\$54,166	\$90,276	\$108,331	
Affordable Price [Excludes Transportation Costs]	\$177,416	\$319,179	\$390,458	
Estimated Unit Demand	1,818	1,628	710	2,680
Estimated Unit Supply	399	2,717	1,252	2,468
Affordability Gap in Units (Demand minus Supply)	1,419	-1,089	-542	
Cumulative Demand	1,818	3,446	4,156	6,836
Cumulative Supply	399	3,116	4,368	6,836
Cumulative Gap	1,419	330	-212	

City of South Portland-Estimated Affordable Gap for Renter Units, 2020				
% of Median Household Income	<60%	60% to 100%	100% to 120%	>120%
Median Household Income	\$29,180	\$48,633	\$58,360	
Affordable Rent [Excludes Transportation Costs]	\$730	\$1,216	\$1,459	
Estimated Unit Demand	1,497	993	407	2,105
Estimated Unit Supply	712	1,251	1,043	1,997
Affordability Gap in Units (Demand minus Supply)	785	-258	-635	
Cumulative Demand	1,497	2,491	2,898	5,003
Cumulative Supply	712	1,963	3,006	5,003
Cumulative Gap	785	527	-108	

Table 5:22 City of South Portland 2025 Affordable Housing Unit Gap Analysis

City of South Portland - Estimated Affordable Gap for Owner Units, 2025				
% of Median Household Income	<60%	60% to 100%	100% to 120%	>120%
Median Household Income	\$60,207	\$100,345	\$120,414	
Affordable Price [Excludes Transportation Costs]	\$162,092	\$292,223	\$357,991	
Estimated Unit Demand	1,863	1,639	637	2,822
Estimated Unit Supply	126	333	684	5,818
Affordability Gap in Units (Demand minus Supply)	1,737	1,306	-47	
Cumulative Demand	1,863	3,502	4,139	6,961
Cumulative Supply	126	459	1,143	6,961
Cumulative Gap	1,737	3,043	2,996	

City of South Portland - Estimated Affordable Gap for Renter Units, 2025				
% of Median Household Income	<60%	60% to 100%	100% to 120%	>120%
Median Household Income	\$32,435	\$54,058	\$64,870	
Affordable Rent [Excludes Transportation Costs]	\$811	\$1,351	\$1,622	
Estimated Unit Demand	1,536	970	437	2,188
Estimated Unit Supply	694	1,137	921	2,380
Affordability Gap in Units (Demand minus Supply)	842	-167	-483	
Cumulative Demand	1,536	2,506	2,943	5,131
Cumulative Supply	694	1,831	2,751	5,131
Cumulative Gap	842	675	192	

Table 5:23 City of South Portland 2030 Affordable Housing Unit Gap Analysis

City of South Portland-Estimated Affordable Gap for Owner Units, 2030				
% of Median Household Income	<60%	60% to 100%	100% to 120%	>120%
Median Household Income	\$70,912	\$118,186	\$141,823	
Affordable Price [Excludes Transportation Costs]	\$184,343	\$331,037	\$405,106	
Estimated Unit Demand	1,892	1,605	784	2,807
Estimated Unit Supply	131	548	697	5,712
Affordability Gap in Units (Demand minus Supply)	1,760	1,057	87	
Cumulative Demand	1,892	3,497	4,281	7,088
Cumulative Supply	131	680	1,376	7,088
Cumulative Gap	1,760	2,817	2,905	

City of South Portland-Estimated Affordable Gap for Renter Units, 2030				
% of Median Household Income	<60%	60% to 100%	100% to 120%	>120%
Median Household Income	\$38,201	\$63,669	\$76,403	
Affordable Rent [Excludes Transportation Costs]	\$955	\$1,592	\$1,910	
Estimated Unit Demand	1,590	984	511	2,205
Estimated Unit Supply	727	1,239	1,062	2,263
Affordability Gap in Units (Demand minus Supply)	863	-255	-550	
Cumulative Demand	1,590	2,574	3,086	5,291
Cumulative Supply	727	1,966	3,028	5,291
Cumulative Gap	863	608	58	

SUMMARY OF FINDINGS AND CONCLUSIONS

The population of the city is aging.

The aging trend which began to accelerate during the latter half of the 2010s is expected to continue over the next ten years. The population age 65 years and over and the population age 45-64 are each expected to markedly increase, in both share and total. The portion of the population ages 19 years and younger is expected to decline slightly while the population age 20-44 will have the most noticeable reduction.

South Portland is a local hub of employment/jobs for the surrounding communities which has historically driven demand within the city and in surrounding cities and towns.

The city is a local hub of employment for the region which has historically driven housing unit demand within the city and in the surrounding communities. Up until the onset of the COVID-19 pandemic, many residents who live in the city were doing so to be close to their work. Those who lived in the city, particularly those who have moved to the city in the five years before 2020, were generally those with the financial means (i.e. those households with higher earnings and/or greater financial capacity thorough asset ownership or savings) to successfully compete for the limited housing supply that becomes available in any given year. This local demand remains and has been augmented by increased demand from a recent increase in households moving into the city/region from outside of the city and/or region.

COVID-19 is impacting demand.

The COVID-19 pandemic has caused an increase in remote working arrangements, which has reduced the importance of living in close proximity to where a worker is employed. At the onset of the pandemic, it was thought that this would be a short-term adjustment. However, as the pandemic has stretched into years, many companies still allow, and in some cases encourage, their employees to continue to work remotely as a health precaution. For many workers and their families, the ability of work remotely has significantly increased the number of housing options available. Anecdotal evidence from discussions with developers obtained during the initial phases of this study indicated that there recently has been an increase in the number of homes purchased by people who had previously lived outside the city and region, many times “cashing out” through the sale of a more expensive housing unit in one of the larger metropolitan areas of southern New England such as Boston and New York, and acquiring a more moderately priced/more affordable housing unit in the City and region. As this study is concluding, it remains unclear whether or not this phenomenon is a temporary development or one that is more permanent in nature.

Price pressures are expected to persist due to a combination of several factors

The data acquired, reviewed, and analyzed for this study showed that housing prices have recently been increasing across the country and are not unique to the city (or region). Year-over-year change in the Case Shiller Home Price Index for U.S. Cities shows that home prices have been rising across the nation. Following June 2020, the one-year growth rate increased from 4.2% in July 2020 to 20.0% in July 2021. Through November 2021, housing prices were up 18.3% from the year before.

The first key to understanding this rapid price increase is the record-low interest rates for a 30-year fixed rate mortgage. The rate for a 30-year mortgage has been falling for decades. The rate was highest in the early 1980s at 16.64%, which declined to 10.1% in 1990, 8.1% in 2000, and 4.7% in 2010. In 2019, just before the onset of the COVID-19 pandemic, the 30-year mortgage rate was 3.94% but that rate fell below 3.0% in calendar year 2021 for the first time—or to an annual average rate of 2.96%. As the mortgage rates fall, the financing power of potential

homeowners increases, and this often leads to increased demand across the price spectrum. For example, a \$100,000 30-year loan at 4% interest would require a monthly payment of \$477 per month, meanwhile the same loan at 3% interest would require just \$422 per month. Put another way, the same monthly payment of \$477 at 3% interest would be able to finance a \$113,235 loan rather than a loan of just \$100,000.

This represents an increase in homeowner purchasing power and can allow ‘more house’ to be purchased with the same loan. However, the inverse can also be the case where homebuyers with increased purchasing power are in competition and end up buying the ‘same house’ but for a higher price. This is more apparent in locations with limited new housing supply and in areas with limited housing diversity (e.g. price, size, style, etc.). Housing diversity is important because it allows homeowners to find housing that fits their needs as they progress through life (e.g. more or less space needed as children are born or move out of the house) and allows them to “age in place” in their community across their lifetime—without having to leave behind the community they have lived in and enjoyed for years.

A second factor in understanding the rise in home prices is the chronic under-supply of new housing construction since the Great Recession from 2007-2009. Since 2011, nationwide housing completions have recovered half of the ground lost during the “Great Recession.” Housing permits issued and housing starts both increased notably in 2021 but it may take a year or more for these units to be move-in ready. Within the city, single-family building permits are lower than before the COVID-19 pandemic, while multi-family building permits are higher. This indicates that more units will be added in the form of condominiums and apartments which will help these housing types remain relatively more affordable.

The third factor is a fear of missing out—or “FOMO.” As prices increase month after month, individuals who were undecided about buying or moving may become motivated by their concern that, if they look to buy their home in six months or a year, the price will be even higher or there will not be any housing stock available. This is in fact how housing prices can continue to increase, even after interest rates start to increase in response to tightening moves by the federal monetary policy-making authorities. This is because prospective buyers—when they are close to buying--continually and actively monitor new real estate listings, and then sometimes act quickly to ensure they buy before the opportunity at-hand passes. In the city before the pandemic, the median days on market fluctuated with the seasons with properties selling quickly in the spring and summer (about 25 days) and more slowly in the winter (60 days or more). Since the pandemic and particularly during calendar year 2021, the median days on market has fallen dramatically to an average of just 8 days from February 2021 to July 2021. Even in the off-season during winter months, the median days on market has fallen dramatically to 24 days, similar to the ‘hot’ summer months before the pandemic—indicating a lack of inventory within the city to meet the increasing demand for housing for both tenure categories (including both owner and renter).

Despite all the efforts that the city had made to build affordable housing, the affordable price gap is getting worse.

The city has established a record of working diligently on efforts to address the affordability issues, particularly for the city’s renters. In the last five years, the city permitted 586 multi-family units. In 2016, the city’s Affordable Housing Committee established a goal of creating 200 new units of rental housing in 2 years. They met this goal. The City amended its zoning ordinances several times to create “contract zones” that generally increased density to allow for the redevelopment of sites to create affordable housing. Contract zones: A-1 created 4 dwelling units/acre; S-1 created 29 units/acre; G-1 create 102 dwelling its in 2017; G-2 allow 14 dwelling units/acre; G-3

created 245 units of affordable housing in 2016; G-4 created 19 dwelling units in 2017; G-5 created 45 units in 2018. Despite all of this effect, the city is not gaining on the problem. The demand is growing faster and larger than the city can build.

The city has not been able to stimulate activity in the lower price points of unsubsidized housing units. While the city has worked with various housing partners to support the construction of deeded-restricted, and subsidized affordable units; housing for middle-income households who do not generally qualify for housing assistance, is not being built at all. For both renter-occupied and owner-occupied households, the affordability gap in 2020 was most acute for households earning up to 100% of AMI, with the majority of demand coming from low-income households who are housing-cost stressed (i.e., paying more than 30% of their monthly income on housing).

By 2030, the affordability gap for renters will be similar to the gap in 2020 for households earning between 60% and 100% of AMI, with the majority of demand coming from lower-income households. However, the affordability gap for owner-occupied units is expected to increase dramatically, even for households earning well above the AMI. This is in-part due to rising mortgage rates which are expected to surpass 5% by 2025 (vs. the 2.96% rate during most of 2021). These existing and increasing affordability pressures suggest that despite the City's efforts, there has been an overall lack of adequate investment in housing for the greater part of the last two decades. In fact, Crane Associates completed a housing study for South Portland in 2004 and calculated that the affordability gap for ownership units was 198 and would grow to 248 by 2013. Now, in 2020 the affordability gap for ownership units exceeds 1,400 units.

This suggests two important findings:

1. The City needs to go beyond traditional affordable housing tools and employ more creative and innovative ways to increase its supply of owner and renter unit.
2. The housing market demand is regional in nature and the city is building to meet a regional demand. One city will never be able to supply the region's needs. However, since there is no way to exclude non-residents from purchasing in the city, the city has no tools to slow the demand for South Portland homes except for engaging in a regional agreement with neighboring municipalities. In the consultant's best estimate based on experience, it appears that the City seems to be building its regional fair share, and if all cities did the same then the demand pressures for all regional municipality will likely go down. However, since this was not a regional study, there is no way to be sure of this supposition

Public forum not surprised by the findings.

The fact that this study presented data and concluded that housing affordability pressures were high and were forecasted to increase further surprised no one who participated in the study's mid-December of 2021 public forum. Rising home and rent prices have been noted by residents for years, and concern about this situation has resulted in a great deal of interest across the community to address these rising housing affordability problems. There is a lot of energy within the community to act thoughtfully and decisively on housing issues. There was frustration that other nearby communities in the southeast region of the State may not be 'pulling their weight' to alleviate these housing affordability pressures as they have mounted over time and have generally been met with under-investment in affordable housing over time. The public forum revealed many innovative ideas that residents would like to explore. The following section considers these ideas and the Recommendations section prioritizes those actions which are most appropriate and likely to have impact in South Portland.

Chapter 6 RECOMMENDATIONS

INTRODUCTION TO RECOMMENDATIONS

The following recommendations are the consultants' sole opinions. These opinions were developed from the collective body of data analysis, data interpretation, public interactions through focus groups and forums, economic and demographics forecasts, and our work experience from completing these studies across the northeastern United States for the past 20 years, including completing a similar study for the City South Portland in 2004. We fully understand that several of the following recommendations will not be palatable for some of the city leadership and residents. Consultants are often challenged over the course of a study to put forward the recommendations that they think are most likely to achieve an objective, (in this case produce housing obtainable to those earning less than 120% of AMI), versus putting forward recommendations that they think the clients will accept. Sometimes these two options are not in conflict. In the case of South Portland, the consulting team is forced to not recommend actions that may be more socially acceptable because the purpose of the study is to identify interventions that are likely to have the desired effect on housing production. The same recommendation may appear radical to some and welcomed by others. We don't select recommendations based on politics. We don't recommend actions that reflect the biases of selected individuals or groups versus others. We are independent consultants who are proposing recommendations based on the data and information we have studied, the history of housing markets in the City of South Portland, and our forecast of those markets. We don't recommend extreme actions casually, or simply for reasons of experimentation or entertainment, but because we see the City of South Portland in an extreme housing market situation. To those who disagree with a recommendation based on our economic findings, we respect differences in data interpretation and market forecasts but we have checked and rechecked our work and remain confident in our findings. To those who disagree with a recommendation based on it being politically infeasible, remember that this is not a political study but an economic one. We are imperfect consultants, but our recommendations to improve the city's housing crisis are made without prejudice toward any one sub-group of citizens and are with the best interests of the whole of South Portland in mind.

A NOTE REGARDING SERVING THE "MISSING MIDDLE" HOUSING CATEGORY

The "missing middle" refers to group of households that are earning too much to qualify for federal- or state-subsidized housing units, but not earning enough to afford a median-priced home in the open market in South Portland. The results from the affordability analysis in chapters 4 and 5 indicate "missing middle" households earn approximately 60% to 120% of the Area Median Income.³³ In 2020, the missing middle could afford ownership units at prices from roughly \$150,000 to \$350,000 per unit. The analysis shows that attached units such as duplex, multiplex, and condominium-style ownership units are affordable within that range, however supply is constrained and due to severe shortage of units for lower income households earning 60% of AMI or lower, the supply is also being consumed by those who are able to access housing and be cost stressed. The challenge for the city is to allow development of more units affordable in the 60-120% of AMI range. The policy interventions identified by the consultants will help create opportunities for producing missing middle housing.

³³ This translates to owner households with an income of \$54,166 to \$108,331 annually in 2020 and \$70,912 and \$118,186 annually in 2030; and renter households with an income of \$29,180 to \$48,633 in 2020 and \$38,202 to \$63,669 annually in 2030.

A NOTE ON TARGET HOUSING MARKETS

Certain communities have developed Strategic Housing Plans to identify target demographic groups to focus housing production to best serve the local population and demand. However, in South Portland's case this is neither necessary, nor advisable. South Portland's affordable housing gap is so severe, and getting larger, that any increases in supply that serve any household types with incomes below 120% of median income will improve the situation. The city should not identify specific housing markets to target other than the broad group of households at or below 120% of AMI (about \$109,000 for owner households and \$60,000 for renter households in 2022). The housing market should be allowed and incentivized to work as freely as possible for all households below 120% and several recommendations in this chapter are designed to do that. Identifying and building housing for any sub-group below 120% will likely place unnecessary influence on housing production, and not create much-needed opportunity and incentive for other housing serving households under 120% of AMI that are also severely needed. Housing providers should be allowed to build for any age group or household size, any tenure, any bedroom configuration, and any dwelling unit size that it can creatively serve. We recommend, in other sections, that the city allow a wider array of alternative housing types and development patterns. We recommend that the city aggressively alter the status quo of where and how much housing is viable with alternatives to its policies, procedures, and investment strategies. The remainder of the recommendations below suggest specific changes in this regard.

RECOMMENDATION 1: A REGIONAL SOLUTION

South Portland's efforts to supply affordable housing to city residents has been met with an even more rapid increase in housing demand. The city has clearly made an effort to build more affordable housing units. This is evidenced by the numerous zoning amendments, including the creation of conditional or contract zones to support proposed housing developments that provide housing diversity and affordability but do not meet existing zoning standards (e.g. CS (amended), G-1, S-1 (amended), G-2, G-3, G-4, G-5, G-6, G-7, and O'Neil Street, were all either created or amended in the last five years, and all created additional housing supply, including affordable housing). In total, between these conditional/contract zones and other development, approximately 586 multi-family units were built over the last five years. This exceeded the city's Affordable Housing Committee's 2016 goal of creating 200 new units of rental housing within two years. Most, if not all, of the built units were reserved for households earning below median income but it has not closed the supply gap of affordable housing. While we don't know what the rental housing gap was in 2016, it can be estimated. We do know that the rental housing gap in 2020 was 785 and in 2030 it is forecasted to reach 842 units. Using basic linear extrapolation, the rental housing gap in 2016 was approximately 760 units. In the five years from 2016 to 2020, about 586 units were built to meet this demand, yet today, the rental housing gap is even larger than in 2016. If the city's formidable effort to increase the supply of affordable housing was making progress, then the rental housing gap should be near 174 units (760-586), plus a growth factor equivalent to household growth of about 0.7%. In other words, if the city was gaining ground on meeting affordable housing demands, then the housing unit gap should have been reduced from 760 units in 2016 to about 228 units in 2020. However, when the consultants started this research study, the rental housing gap was calculated at 785 units. The result from all the effort the city made in trying to supply its housing demand was an additional 586 households to the city's population and an even higher demand for affordable rental units versus from where they started in 2016. It appears that the demand is growing faster and larger than the city's capacity to provide supply can build.

The city’s proactive efforts to supply housing were largely focused on only one demographic – rental housing at or below 60% of the Area Median Income.³⁴ The city has had much more limited success with facilitating development of unsubsidized housing at price levels affordable to households earning between 61% to 120% of the AMI.³⁵ This is referred to as the “missing middle” households who do not generally qualify for state or federal housing assistance but cannot afford market rate housing.

For both renter- and owner-occupied households, the affordability gap in 2020 was largely among households with between 60% and 100% of median household income, with the majority of demand coming from low-income households who are housing-cost stressed (i.e., paying more than 30% of their monthly income on housing). However, by the year 2030, the affordability gap for renters will be similar to the gap in 2020—with the majority of demand from lower-income households, yet, the affordability gap for owner-occupied units is expected to increase dramatically, and spread to include households earning up to 120% of AMI. This is in part due to rising mortgage rates which are expected to surpass 5% by 2025 (vs. the 2.96% rate during most of 2021)³⁶. The existing and increasing affordability pressures suggest that despite the city’s recent efforts, there has been an overall lack of adequate investment in housing supply for the greater part of the last two decades—or since the mid-2000s.

In fact, the City of South Portland commissioned a similar housing study in 2004 that calculated the affordability gap at 198 ownership units and 106 rental units for a total gap of 304 affordable units. The report projected that the ownership gap would grow from 198 to 248 by year 2013, and that the rental unit gap would *decrease* from 106 to 18 in the same ten years. The total affordability gap (rental and ownership units) was projected to decrease from 304 units to 266 units by the year 2013 if the rental units were actually built. Now, in 2020 the affordability gap is 1,537 ownership units and 1,204 for renters units or 2,741 total units. In 2004, the city would have had to increase its average annual supply rate by an average of 26 units per year for 10 years to keep up with demand. Now, 274 units per year will be needed just to keep pace with demand (without a regional agreement on production). Without substantial changes in land use and development policy in the city, production at this rate is unrealistic in South Portland considering that an average of 102 dwelling units (45 single family, and 55 multi-family units) were produced annually for the last 20 years (table 43). Addressing the backlog in production will be extremely challenging without dramatic adjustments in policy and housing market conditions.

“The result from all the effort the city made in trying to supply its housing demand was an additional 586 households to the city’s population and an even higher demand for affordable rental units from where they started in 2016.”

³⁴ With the exception of an 8-unit ownership project at Sunset Place

³⁵ The City has seen market-rate production serving households above 120% AMI, however the study does not focus on high-value units, and the gap analysis found that high-income households (above 120% of AMI) are able to find housing in the region.

³⁶ Recent Federal monetary policies have already created a 5%+ lending market, well in advance of 2025.

Table 5:24: Annual Housing Unit Production

Housing Units Produced in South Portland			
	Single Family	Multi-Family	Total Units
2000-2020	893	1,147	2,040
20 year average	45	57	102

There are only two ways for housing demand pressures to be reduced in South Portland: the first is from an exogenous and devastating negative impact on the national (more likely global) economy similar to the credit crisis of 2008, which is beyond the control of the city. The second way is that demand pressures are reduced through regional cooperation to provide additional supply. Since relying on a disaster is not viable public policy, the city’s only real hope for reducing demand pressures is if supply increases locally and in neighboring municipalities within the regional housing market. The regional housing market is likely similar to the boundaries of the Portland/South Portland/Biddeford Metropolitan Statistical Area, which comprises the counties of Cumberland, York, and Sagadahoc for a total population of 538,500 people. There are 68 cities and towns in the MSA. While the consultants did not complete a regional housing market analysis, the analysis of the commuter shed and regional economy indicates that the MSA is likely the housing market region. One regional housing market study completed by the US Housing and Urban Development (HUD) stated in 2015 “...in order to achieve balance in the housing supply, which would positively affect housing prices, approximately 4,000 [owner] units and 2,000 rental units will need to be created by the end of 2018 throughout the region.³⁷” The 2020 demand gap for ownership units in South Portland was calculated in this study as 1,537 units. If both of these studies are accurate, with 4,000 units needed in the whole region and 1,537 units needed in South Portland, then the remaining 67 cities and towns would need to accommodate 2,463 units. Under this scenario, South Portland would be absorbing 38% of the regional housing unit responsibility. Whether this is a reasonable “fair share” of regional demand for housing is uncertain³⁸. The reason that the city cannot keep up with housing demand is because the total gap reported in this study would reflect a scenario in which South Portland absorbed the demand created by other municipalities in the economic region. Even if the city miraculously found the capacity to accommodate 1,537 ownership units in 10 years, the demand would still not be satisfied because the region would continue

“The reason that the city cannot keep up with housing demand is because it is attempting to absorb the demand created by other municipalities in the economic region. Even if the city miraculously found the capacity to accommodate 1,537 ownership units in 10 years, the demand would still not be satisfied because the region would keep generating more.”

³⁷ Comprehensive Housing Market Analysis, U.S. HUD, 2015 Page 9

³⁸ The comparison of the 2015 HUD housing gap figure and the 2020 South Portland figure reported in this study is an imperfect comparison because the 2015 HUD figure may have changed between 2015 and 2020. The purpose of comparing the HUD and South Portland numbers is to illustrate potential relationships between South Portland’s role in the housing market within a regional context. The scope of this report does not include a full regional analysis, however at the time of writing Cumberland County is in the process of producing its mandated Analysis of Impediments to Fair Housing Choice study, which may provide a regional housing gap figure that is more appropriate for local policy consideration in South Portland and by other municipalities within the housing market region.

generating more demand. The consultants assume that other cities in the region are likely experiencing similar pressures.

The only effective way to address housing demands is through a regional solution with regional housing production agreements. These housing agreements could be tied to regional agreements on transportation, public infrastructure and open space conservation. Regional agreements could identify growth centers³⁹ that promote transit-oriented development, share financing, collaborate on TIF districts, create a regional housing bank, and have cooperative policies that transcend municipal boundaries. While this study was focused on one municipality, a regional solution is likely the best and most effective option for solving the housing gap problem for the City of South Portland. Therefore, the consultants strongly recommend that the city begin advocating for regional cooperation in housing production that includes the elements discussed here.

Developing a Regional Allocation Model and Production Targets

A Regional Housing Allocation (RHA) is one method to coordinate a regional response to housing needs. An RHA applied to the 68 municipalities in the MSA could be created through mutual agreement from all member municipalities, or at least a large majority of them. The RHA starts by taking the regional housing demand gap, (for example 4,000 ownership units and 2,000 rental units) and first distributes them across member municipalities to create a baseline distribution. Various factors should be included to ensure an equitable distribution of responsibility, which will need to be determined through an agreed-upon RHA methodology. Weighting the base distribution to maximize land efficiency, ensure sustainable development patterns, prevent unequal negative impacts, leverage infrastructure efficiency, and facilitate regional economic development is essential. Other factors may include the existing population, access to transportation and transit infrastructure, proximity to jobs, growth centers, municipal development goals, access to services, and others. The RHA methodology would adjust the equal distribution up or down depending on the municipality. The process would also involve extensive public involvement and negotiation between municipalities. The final results would show housing ownership and rental targets for each municipality.

Developing a regional fair share housing target for South Portland is not possible within this study because it requires the cooperation of all regional municipalities. It is nonetheless useful for South Portland to estimate what its fair share number of units might be and use it as a local production goal in the absence of a regionalized agreement. Using HUD's regional housing demand estimates as a base (4,000 ownership and 2000 rental), South Portland's per capita share of this demand is 191 ownership and 95 rentals. If an RHA methodology was applied to this base, these numbers would likely increase because of several of the weighting factors mentioned above including concentration of employment centers, transportation infrastructure and public transit services, location of social services, availability of land, comprehensive plans and the like. It is not possible to predict which factors the signatories of a regional agreement would use, or how in an RHA methodology. It is reasonable to assume that higher density urban areas with more infrastructure and services would accept a higher share of housing than an allocation based on a simple per capital share. South Portland has the second highest density of people per land area at 1,795 people per square mile or 9.9 times higher than the MSA

³⁹ The Greater Portland Council of Governments, as the region's Metropolitan Planning Organization has adopted plans, including the 2021 Transit Tomorrow plan and Destination 2040, which identify desirable growth centers and corridors. These were developed with member municipalities' input.

average⁴⁰. If the RHA used population density as the only factor to determine a fair share housing allocation then South Portland’s share of regional demand would be 2,311 ownership units and 1,155 rentals. However, the RHA would not use only one factor. The methodology would combine many factors and each would carry unique weights depending on how the region’s municipalities agreed on the importance of each factor. In the absence of a regional agreement, South Portland can use the median between these two extremes as targets for their local “fair share” contribution to the region’s shortage of housing. In other words, South Portland’s housing production targets for the next 10 years could be self-assigned as approximately 1,251 ownership units and 625 rental units. While it is not likely that a completed RHA would result in the same numbers as these estimates, it is also highly unlikely that an RHA would allocate housing units to South Portland that were outside of these upper and lower bounds and therefore using the median is a reasonable estimate in the absence of any more advanced calculations. South Portland can use these median numbers as a general target for production and model policies accordingly.

Table 5:25: Potential Ten Year Housing Production Targets for South Portland

Tenure	Total Units	Annual Production
Ownership	1251	125
Rental	625	62

Finally, what is clear from this analysis is that housing of all types for all income levels below 120% of AMI need support because the market is not constructing these units. Strategically focusing production on targeted household types will not address the problem and appears unjustified from a public policy perspective. Filling the demand gap for ownership units at 100% to 120% is just as important as meeting rental demand for households below 60% of median. While increases in housing supply in the city alone, without corresponding regional increases, will never fully address the housing gaps, the following recommendations provide advice on policy, tools, and techniques that South Portland can employ to increase housing supply within city limits, whether it is working independently or regionally coordinated within an RHA structure.

RECOMMENDATION 2: COMPLETE A COMPREHENSIVE ZONING REWRITE

The City’s zoning code (Chapter 27) has not received a thorough overhaul since 1975. Since then, the document has received many substantive and administrative changes. Zoning documents are meant to accommodate changes and amendments, which are often initiated by numerous causes such as directives from state legislature, major changes in comprehensive plans, changes caused by national economics or environmental disasters, or new planning techniques. It is normal practice that a zoning document be amended, however, amendments, accumulated over a long time can eventually result in a document that is difficult to follow, contain inconsistencies, have hold-outs of antiquated planning practices clashing with new approaches, and run contrary to new real estate market dynamics. The consultants believe that the City’s zoning document has reached this point (before any new recommendations stemming from this report are added). To simply amend the existing document on top of the numerous amendments already made over the past decades would likely lead to embedded

⁴⁰ Source: USA.com/south-portland. Two other sources also rank South Portland as second highest density behind Portland including Census Reporter estimating the density at 8.2 people/sq.mi. and StatisticalAtlas.com at 9.2 people/sq.mi. Changing the source of the data would negligibly change the results of a rough estimate for South Portland’s RHA.

inconsistencies and conflicts. Besides, the type and number zoning changes suggested by the consultants, if enacted, would amount to a nearly new code.

The consultants believe that the city should overhaul the zoning code (and related codes, such as the streets, subdivision, and building codes, as required for consistency) with a thorough public input process to address the recommendations listed below. Each recommendation is detailed further in the proceeding section:

- A. **Changes to Single Family Zoning Districts:** Zoning districts that are exclusive to single family uses cover the greatest amount of land in the city and, from a market perspective, are underutilized as housing sites due to their relative low density. Under current zoning, the city is missing one of its greatest opportunities to increase housing supply. Therefore, improving land efficiency is recommended within exclusively residential zones. The zoning code should be changed to expand land use allowances beyond single-family housing types, adjust frontage and setback standards, and pair appropriate density allowances that can enable 2-4 unit development on lots larger than 5,000 sq. ft. It may be most appropriate for the City to develop new residential zoning districts altogether that create gradients of opportunity that reach beyond the current allowances afforded in the AA and A districts. This will allow the preservation of single-family areas where appropriate and meaningful, while creating a transition in density that is comfortable and compatible with the built landscape.
- B. **Increases in Residential Density:** The City's zoning code does not provide sufficient density allowances to stimulate the level of housing production that will meet the community's demand for housing. Large areas of the community are designated for "neighborhood preservation", which effectively translates to maintaining a low-density, detached single-family land-use pattern. While this type of neighborhood and housing type is important and healthy, the City's code relegates too much of the land area to this form of development. In areas where higher densities are permitted, the code does not provide enough development potential to offset the costs of (re)development in an infill environment. This is evident, for example, in Mill Creek where density and bulk/spacing standards have not yielded any major projects since the Mill Creek Master Plan and rezoning occurred in 2015 (the plan did eliminate density restrictions in some zones, but the bulk/spacing, parking, and other development standards created an effective limit to density). The community has designated several "growth" and "transition" areas in its Comprehensive Plan that have failed to be revitalized and redeveloped because, in part, the density allowances were insufficient. The zoning code needs to be revised to allow increases in density where the community has expressed an interest in growth.
- C. **Revise Parking Standards:** The city currently imposes minimum parking standards based on dated national transportation engineering standards which, in some locations, have shown to be excessive. Parking standards result in an inefficient use of land or add significant cost if built in a structured format. The consultants recommend revising the zoning ordinance to remove parking standards altogether.
- D. **Incentivize Accessory Dwelling Units (ADUs):** While the existing zoning document allows for ADUs, they are subject to special exception permitting procedures, onerous requirements, size restrictions, and parking requirements that are more restrictive than for multi-family developments. The current zoning document should be amended to allow for easier development of ADUs.

- E. Allowances for Creating Compact Neighborhoods and Transit Oriented, Mixed-Use Developments:** The City’s Zoning Ordinance currently regulates compact development through cluster provisions that allow for a reduction in space/bulk standards in exchange for more efficient land use. The City’s cluster regulations, however, are relatively rural in scale and do not enable true compact design that would allow for higher-densities, or smaller units, that could lower construction costs through economies of scale. The City’s regulations also effectively only promote/induce a limited number of housing types (predominantly a detached, single-family model), and therefore the diversity of housing in the city has suffered. The current zoning should be revised to define and allow more compact neighborhoods as this development style can achieve “affordability by design”⁴¹. South Portland has a least one large scale redevelopment opportunity to create high-density, mixed-use, transit-oriented development (TOD). A recent finding from a concept plan of the Maine Mall TOD stated that the current zoning ordinance needed to be amended to allow for mixed use development in the Mall area⁴². This is one more supporting reason that the zoning document needs revision
- F. Allow for Alternative Housing Types:** Several types of housing units and/or novel housing construction methods—that may be eco-friendly, affordable, and gaining popularity across the country—appear to not be permitted or are insufficiently promoted in South Portland leading to limited market-based development in these housing types. The zoning ordinance should be changed to permit the specific types outlined further in this report.

In addition to the policy and land use changes recommended above, there are several administrative and organizational improvements that could be made to improve the user-friendliness of the City’s development regulations and process, including:

- 1) **Formatting.** The publicly available PDF version of the current zoning document is available on the City web site. This version is cumbersome to navigate and contains many remnants of its incremental development, including inconsistent pagination, misplaced references/citations, incomplete definitions, and contradictions. Consistent pagination would allow for easier referencing, cross-references and hyperlinks in an electronic format instead of PDF would aid with navigation.
- 2) **Inconsistencies.** Contradictions that create housing barriers are frequent in the ordinance: for example, Section 27-602 lists ADUs as a permitted use in the WR zone, but it really is a special exception use due to the catch-all requirement in Section 27-1577.
- 3) **Definitions.** The code’s section on definitions (27-201) needs attention to resolve undefined terms and clarify misused or ambiguous housing terms. The following are not clearly defined: non-conforming lot; single-family detached; multi-family unit is not defined; “substantial” is an ambiguous term used in special exception review procedures. Definitions should be consolidated into a single section where they are accessible in a predictable manner.

⁴¹ This refers to the notion that by allowing small, compact footprints, developers can produce units with cost-efficiency, and therefore sell units at lower cost without compromising their financial viability.

⁴² Maine Mall TOC Concept Plan. Greater Portland Council of Governments. Page 18 and 38.

- 4) **Tables of Uses/Standards:** A table of zoning districts that lists land use permissions and bulk/spacing requirements would drastically improve readability and clarity. Staff is preparing these tables currently and the consultant recommends their implementation.
- 5) **Construction Procedures.** The zoning ordinance details the process for securing approvals from the Planning Board (for site plan or special exception approvals) but there is limited guidance on processing building permits for development when no Planning Board approval is required.

The recommended changes above amount to a comprehensive rewrite of the code of ordinances. To simply amend the existing documents will likely lead to more confusion and inconsistencies. The proceeding recommendations will describe in more detail each recommendation.

The consultants recommend that city's new zoning code move away from Euclidian-type zoning and incorporate more advanced and innovative zoning techniques that allow flexibility in development forms, and housing types. The Comprehensive Plan is also requesting these types of changes. The affordability analysis completed in the previous chapters shows that a wide range of housing types and land development patterns will be required to meet the housing demand that is coming from all income levels below \$108,000 per year and in all tenure types. Each of the zoning recommendations will require detailed attention and refinement as there are multiple techniques and options available to achieve the stated effect. The City can, and should, develop a custom hybrid of techniques that meet their own circumstances based on thorough public and stakeholder input.

RECOMMENDATION 2A: EXPAND ALLOWANCES IN SINGLE FAMILY ZONES

This recommendation is made because of the large opportunity that exists in underutilized single-family zoned land in the City of South Portland. According to the City's Assessor's database, there 6,369 single-family parcels in current use totaling 1,486 acres. The City's largest untapped resource to accommodate households earning under 120% of AMI in affordable units is its existing supply of land that is reserved for single family zoning, specifically, the A, AA and G zoning districts. Table 6-3 shows that there is over 95% of the city's single-family homes are located in these three zones. Expanding the allowed uses of the A and AA zones to include duplexes and triplexes is a significant opportunity. In the case of the G zone, the land use allowances include multifamily but density and other development standards will need to be revisited (as detailed in other recommendations) to encourage conversion of single-family to multi-unit developments.

The City's Comprehensive Plan is clear that preserving neighborhoods is a critical priority. However, the city must question if allowing modest conversion of single-family detached homes to a more diverse array of housing types is inconsistent with neighborhood character. The consultant's opinion is that the existing character can be substantially or entirely maintained in the city's traditional neighborhoods while simultaneously accommodating increased density. This can be accomplished by allowing multi-unit residential development (duplexes and triplexes mainly) on existing single-family parcels (see separate and complementary recommendations on ADUs that reinforce this recommendation). The allowance can be limited to those lots larger than 5,000 sf. and can be subject to design standards to ensure relative compatibility with the prevailing structures and neighborhood fabric.

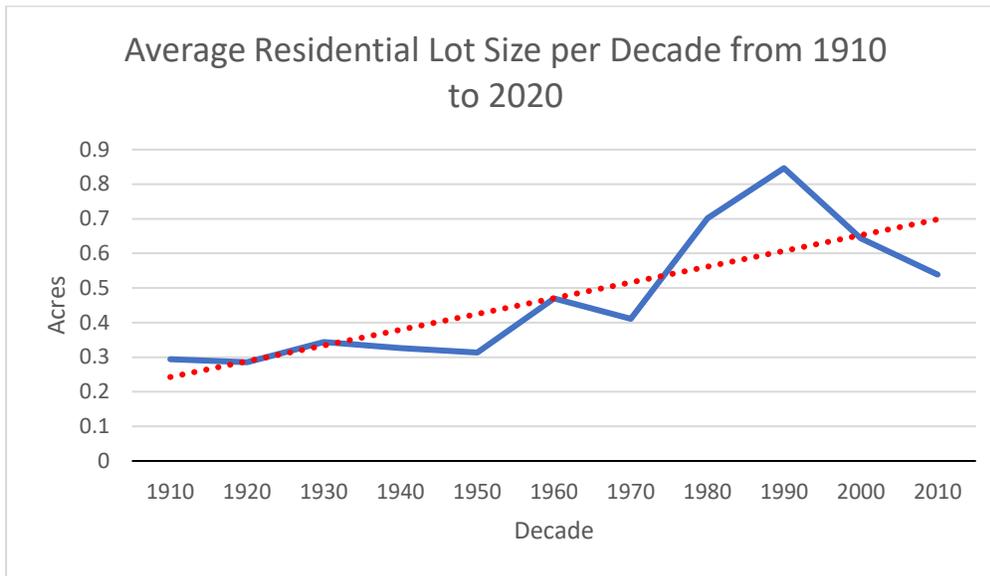
To implement this recommendation, two changes would be written into the A and AA zones: first, duplex and triplex dwellings are listed under permitted uses (Section 27-512 and 532). In

the definitions section of the zoning document (Section 27-201), duplexes and triplexes need to be defined. Second, the density allowances are increased to allow for a maximum of 4 units per lot (including the existing unit). In the G zone, multi-family units are already permitted. In addition to these changes, Accessory Dwelling Units in all residential and mixed-use zones are moved from special exceptions to permitted uses.

This strategy addresses two of the most difficult housing issues facing South Portland today: (1) local families being priced out of the market by wealthier in-migrating families and (2) producing housing for middle income families who are not served by subsidized units because they earn between 60-120% of the area median income. By increasing allowances on existing single-family parcels (and by being more permissive on ADUs), the city could enable the market to create units that are affordable by design. By creating units that are not in demand by this market segment, local families will not need to compete with them yet still be able to live and raise children in traditional neighborhoods. This recommendation finds a balance between maintaining traditional neighborhoods and providing housing obtainable to today's households.

In addition to allowing existing lot patterns to be utilized more efficiently, the city should explore returning to the historical, prevailing lot pattern of traditional neighborhood character in South Portland before 1975 by allowing 5,000 sq. ft. lots wherever feasible and functional for housing development. South Portland had a long tradition of developing neighborhoods on approximately on 5,000sf lots (or 8 dwelling units per acre). There are numerous well-established neighborhoods in South Portland that are built on approximately 5,000sf lots. For 75 years, the city was developed on these sized lots up to the mid-1970's, when the zoning ordinance was rewritten and increased the minimum lot size in traditional residential neighborhoods to densities of 2 dwelling units per acre in the AA zone and 4du/ac in the A zone. Figure 6-1 shows the 10-year average of lot sizes for residential construction in each of the decadal years between 1910 and 2020 as taken from the South Portland assessor database. These data show the dramatic increase of average lots sizes after 1975 when the city required more land per residential unit. This graph does not explain many questions. The average lot size will naturally be larger than the zoning minimum because many parcels sold and built upon were larger than the minimum. However, the trend line is clear: over the last century, more land per dwelling unit has been required to build housing in South Portland. This trend should be reversed in order for the city to utilize its land more efficiency and build housing more affordability. The city can improve affordability for its citizens and return to its traditional neighborhood character if it returned to its traditional housing density of 5,000 ac lot sizes.

Figure 5-5: Average Residential Density



This recommendation is consistent with South Portland’s Comprehensive Plan. The Plan’s objectives are:

1. “To accommodate growth in a manner that maintains the character of the City and its established residential neighborhoods.”
2. “To assure that a diversity of people is able to continue to live in South Portland.” (Comprehensive Plan page 5-1)

Specific Housing Objectives include:

1. “To provide a diversity of housing to meet the needs of a wide range of residents.” (Page 5-14)
2. “To assure that as new housing is built in the City, there continues to be a supply of affordable housing available to meet the needs of lower- and moderate-income households”. (Page 5-14)

To implement these objectives, the City adopted the following policies:

- 1) “The City’s land use regulations should allow the construction of infill housing in established residential neighborhoods at a density that is similar to the established pattern of the neighborhood as long as the new housing is compatible with the character of the neighborhood.” (page 5-1)
- 2) The City should continue to provide for the construction of both single-family and multi-family housing in a variety of locations at densities that are appropriate for the type of housing and the location. The Future Land Use Plan in Chapter 6 outlines these areas” (Page 5-2).

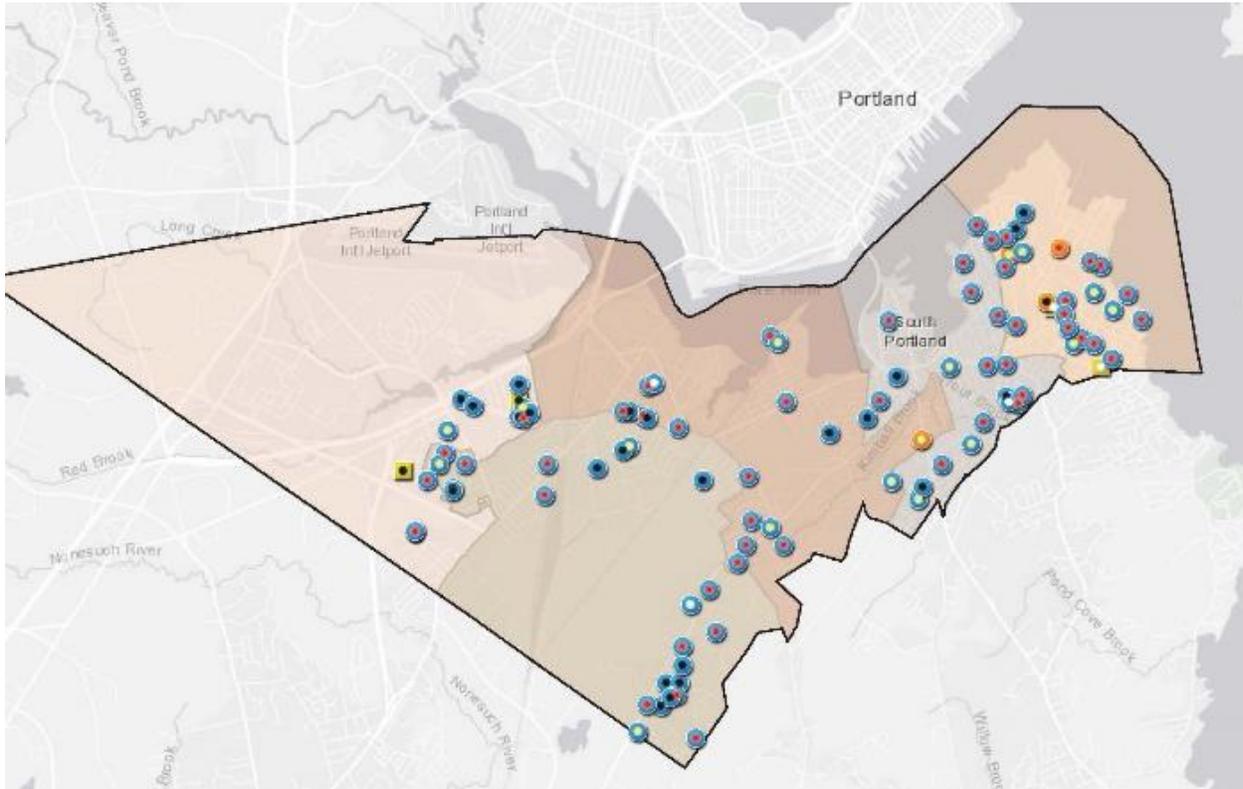
The city’s future land use designations provide for “Future Growth Areas” and “Limited Growth Areas” (page 6-50). The consultant’s recommendations on increasing land efficiency in single family zones respects the city’s policy for “Limited Growth Areas” by limiting the size of the unit and ensuring that the unit is compatible with the design of the neighborhood. This strategy will be implemented sporadically and minimally to ensure that no single location will receive a high concentration of development. This recommendation should be applied to lots over 5,000sf.

The objective of this recommendations is to avoid concentrating traditional family-oriented development along transportation corridors or in highly concentrated areas. Other recommendations support concentrations of high-density, multistory, multifamily unit buildings. This recommendation is intended to support a different market segment, young local families. When traditional neighborhoods were built in South Portland, especially post WWII, they were built to accommodate young lower and middle income working families. They were concentrated on safe quiet streets, walkable to schools and services, and allowed for community interaction. Today, these neighborhoods still provide these same benefits yet the units have become unaffordable. This recommendation merges the benefits of these neighborhoods with the economic realities of today by allowing some of these units to expand into duplexes, triplexes, or to build detached ADUs.

“at just a 10% conversion rate, this recommendation has the potential to produce all of the city’s rental shortage for working families who are ineligible for subsidies the next ten years and do it with negligible impact to the city’s traditional character.”

This recommendation may appear bold and far-reaching, but the likelihood of wholesale neighborhood transition is extremely limited. In practical reality, conversions will occur in a sporadic, and dispersed manner as all factors align on a property (most significantly, a willing investor/owner and available financing/resources). Unlike, subsidized, high-density affordable housing developments where an economy of scale is necessary to make the project financially viable, this recommendation is only viable in unique circumstances, which will result in limited application. First, a conversion can only be made on parcels larger than 5,000sf (0.1 acres). That restriction alone, according to the assessor database, eliminates 19% of the parcels in AA zone and 37% in the A zone in an irregular pattern. This assures that conversions will not be concentrated on only one street or neighborhood, with disproportionate impact. The distribution of additional units will be spread across the whole city and therefore so will the impacts to roads, schools and infrastructure be distributed. Secondly, this type of development will not occur on all parcels, nor will it occur rapidly as some might fear. The conversion will be dictated by the landowners’ personal objectives, costs of conversion and the overall real estate markets. There will not be a massive and rapid large-scale conversion of the city’s single-family properties. Only a small percentage will be converted, and they will occur irregularly scattered, and slowly. To estimate the dispersion rate, one can view the distribution of the ADUs being built in the city. ADUs are being built by private landowners based on their own personal preferences to develop their property, financing, and lot size. Essentially, this recommendation is an expanded and more liberal application of the ADU policy in place today. These data therefore provide a reasonable proxy on the distribution pattern of potential duplexes and triplexes in the city.

Figure 5-6: Distribution of Accessory Dwelling Units in South Portland. Source: South Portland Planning Division



An additional benefit to this recommendation is that it is highly effective with minimal visual impact. Because there are so many potential lots, only a small percentage needs to be converted for the city to effectively address its housing supply challenges. If only 10% of the parcels were allowed to create one additional unit, then an additional 637 units would be created and be dispersed across 6,369 parcels from one end of the city to another. The city's estimated regional fair share target is 625 rental units. The forecasted 2030 gap of rental units for those in the 60% to 120% AMI is 666 and the gap in ownership units is 2905. In other words, at just a 10% conversion rate, this recommendation has the potential to produce all of the city's rental shortage for working families who are ineligible for subsidies over the next ten years and do it with negligible impact to the city's traditional neighborhood character.

An alternative way to implement this intervention is to find targeted areas within the A and AA zones where densification can occur and change the zoning allowance from its current uses to that of the G zone. Expanding the G zone boundaries so that it replaces some of the A and AA zone boundaries will provide the benefit of expanding an existing zoning district. The city already has this policy in place, it is familiar with the effects and appearances of this district, and so there is less mystery to the future impacts. However, in that scenario, the city limits the pool of potential owners/investors that might be able to take advantage of the increased allowances for housing production. In so doing, the city may produce a policy environment that requires perfect implementation, where all property owners within the targeted areas implement the increased housing production. If the city were to strategically focus densification it should provide more acreage and over-shoot the policy allowances to account for the assumption that only a fraction of the landowners within areas targeted for densification would actually be willing and able to act on the opportunity that is created. Because the city cannot predict who, and how

many property owners would be willing and able to act on new housing production opportunities, a dispersed, wholesale up zoning to allow for duplex and triplex housing on 5,000 SF lots, throughout the A and AA zones, is recommended.

Table 5:26: Existing Developed Single-Family Parcels and Acres by Zoning District

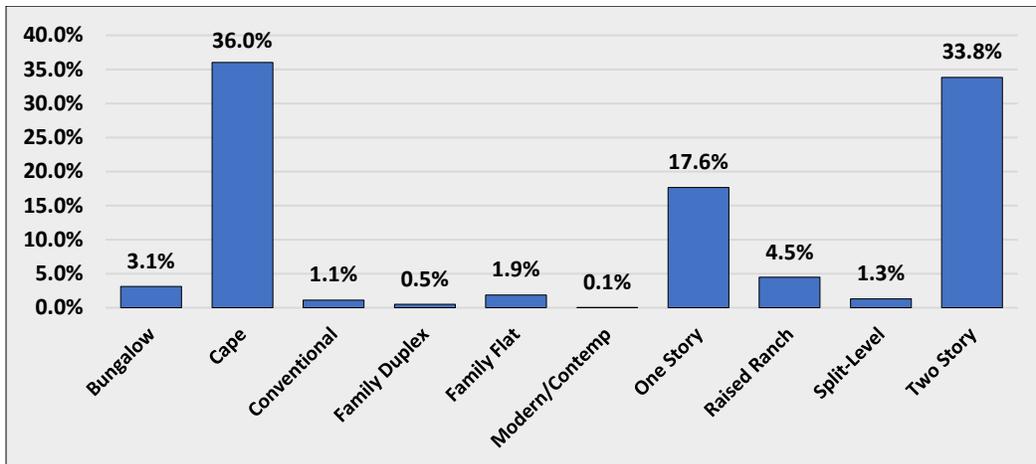
ZONE*	Current Use: SINGLE FAMILY MDL-01	Acres	Parcels	Acres%	Parcels%	New Duplexes Units @ 10% Conversion
A	Single Family Res	969.12	4,600	65.2%	72.2%	460
AA	Single Family Res	310.41	605	20.9%	9.5%	61
C	Single Family Res	7.74	44	0.5%	0.7%	4
DZ	Single Family Res	14.20	52	1.0%	0.8%	5
G	Single Family Res	175.03	1,003	11.8%	15.7%	100
LB	Single Family Res	3.12	17	0.2%	0.3%	2
MHCC	Single Family Res	0.60	2	0.0%	0.0%	0
MSCC	Single Family Res	0.68	6	0.0%	0.1%	1
RT	Single Family Res	0.58	2	0.0%	0.0%	0
VC	Single Family Res	0.10	1	0.0%	0.0%	0
VCW	Single Family Res	0.79	5	0.1%	0.1%	1
VE	Single Family Res	0.05	1	0.0%	0.0%	0
VR	Single Family Res	2.87	26	0.2%	0.4%	3
WNC	Single Family Res	0.17	1	0.0%	0.0%	0
[blank]	Single Family Res	0.66	4	0.0%	0.1%	
Total		1,486.12	6,369.00	100%	100%	637
Gap between Supply and Demand of Affordable Rental Units at 60-120% AMI in 2030						666

Figure 5-7 Examples of triplexes in traditional neighborhoods



The city’s assessor data base shows almost no duplexes or triplexes in the city. The city’s housing stock is over 85% single family homes in the vernacular of capes, one story and two-story architecture. Integrating more diversity in the city’s housing stock would increase land efficiency, place less pressure on open spaces, and allow more starter families to live in the city.

Figure 5-8 Current housing stock in South Portland



RECOMMENDATION 2B: DENSITY BONUSES

Density bonuses have been used for decades throughout the country as an economic incentive to entice developers to build below market rate (BMR) affordable units. The city has used density bonuses, or increases in base density, to build affordable housing in most of the contract/conditional zones that were codified during the last 5 years. In fact, these contract/conditional zones were likely the most effective tool the city has ever employed to increase the stock of affordable housing units. However, these are project-specific allowances created on a case-by-case basis, with no reliability. A city-wide policy of density bonuses for affordable housing would institute this practice more uniformly across the city and improve the efficacy of this effort. The policy can be used in conjunction with cluster (updated) development provisions and reinforce environmental protection. Density bonuses can be integrated as an affordable housing overlay zone, within the cluster development ordinance, or built into the zoning districts.

The density bonus policy can be instituted in several ways but should include four basic components:

1. The objectives (increases in affordable housing; environmental protection, cost savings, etc.)
2. The location where bonuses may be utilized.
3. The amount of the bonus.
4. Eligibility and other criteria. These include but are not limited to the percent of units that must be affordable, the affordability level, tenure of the unit (rental or ownership), and how long affordability covenants must be maintained.

RECOMMENDATION 2C: REMOVE OFF-STREET PARKING REQUIREMENTS

According to the city's zoning documents, the required amount of off-street parking spaces is determined by parking demand studies from the Institute of Traffic Engineers. The parking demand standards created by traffic engineers is a simple calculation of peak demand for parking in a specified land use type multiplied by a circulation factor. The result is the maximum number of spaces needed for each land use type is created in isolation from each other. This is the problem with using national parking standards: they are allied to each parcel of development separately and they each provide the maximum estimated needed spaces. These standards do not consider neighboring uses or cumulative effects. Moreover, the first number used, "peak demand for parking in a specified land use type," is an average of observed demand for the land use across a sample of field studies throughout the United States. Using these engineered standards creates excessive waste of land and resources. Most municipalities rarely question how parking demand standards are generated and apply them in zoning regulations to calculate required number of spaces per development project. These standards are generated based on estimated use only. Maximizing convenience for the automobile increases the incentive to use the automobile and further exacerbates auto-dependency as more parking spaces are created, which further separates land uses, increases walking distances, and increases demand for more parking. Furthermore, the national studies on parking are not derived in environments where land uses support alternative modes so that auto-dependency is less severe. Traffic engineered parking standards created by the Institute of Traffic Engineers has been analyzed and criticized as arbitrary and unscientific⁴³. Engineered parking standards are not created with any consideration of land values, economic efficiency, or real estate markets. This is most

⁴³ The High Cost of Free Parking. Shoup, Donald. 2005. American Planning Association, Routledge.

obviously evidenced by the fact that municipalities require *minimum* parking standards at *no cost* to the driver. This is an old and failed urban planning policy. Modern best practices are recognizing that free minimum parking standards, combined with separation of land use types, and maximum densities, are fueling traffic congestion and several environmental maladies.

The consultants recommend that the City of South Portland remove all off-street parking requirements from development ordinances in areas where doing so will not create a known and reasonably well-defined life and safety risk (e.g. on substandard roads that may exist in certain neighborhoods with insufficient travel width). Parking is one of many amenities that impacts the value of land, either positively or negatively. An off-street parking standard imposed on private property is affecting the value of private land, and with respect to residential housing, is affecting private individuals only.

The purpose of governmental policy is to protect the general welfare, health, and safety, of the public realm. There is little justification to use public policy to generate more parking on private land. Perhaps the proponents of these standards support them because they prevent overcrowded street parking. However, on-street parking is a public good paid for by all taxpayers. Maximizing the use of a public good is the most efficient use of the resource. Perhaps the proponents believe that no parking will be created by private developers if there are no requirements. This argument is not supported by the principals of real estate economics. Parking is an amenity that affects the value of private property. An apartment with no parking would generate less rent than one with off-street surface parking, which in-turn would collect less rent than a unit with covered parking. Housing projects with no parking would improve affordability by reducing development costs, but it also reduces the value of the real estate, and the owner must balance these opposing factors. The developer knows their target market, costs of development, and required return on investment. If the developer was allowed to determine the desired number of parking spaces, she would likely incorporate any public parking into the mix, if any were reasonably available, and then develop additional off-street parking according to the target market she is trying to capture. With no parking requirements the developer is free to match anticipated parking demand of the proposed project with any combination of parking options ranging from street parking, paid reserved parking, surface or covered parking, or no parking at all, and is free to adjust the rents accordingly. Allowing this freedom of choice will lead to a more efficient use of public and private parking and remove artificially imposed expenses on rents. Allowing rental units with no parking does not cost the public anything. The cost of no parking is imposed on the individual renter, which public policy should not intervene on. A renter household should be free to decide its own transportation options and whether a lower cost rental with no parking is preferable to a more expensive unit with parking. Removing the city's parking standards opens up more affordable housing options.

“Allowing rental units with no parking does not cost the public anything. The cost of no parking is imposed on the individual renter, which public policy should not intervene. A renter household should be free to decide its own transportation options and whether a lower cost rental with no parking is preferable to a more expensive unit with parking. Removing the city’s parking standards opens up more affordable housing options.”

In a winter environment, eliminating parking may create concern over the City's ability to provide effective and necessary street maintenance (snow removal, sweeping, etc.). Many communities

have addressed these needs through more careful and sophisticated coordination of municipal activities, implementation of on-street parking scheduling (and pricing), and parking permit programs (which also create a potential revenue source).

While removing parking requirements does not cost the city anything, the off street parking requirement usually does. A recent study in Hartford CT found that mandatory parking requirements result in large forgone tax revenues to the municipal government. The researchers calculated that the city forfeits \$1,200 per year per parking space, or nearly \$50 million per year altogether. Considering that the total value of all real estate in downtown Hartford amounts to \$75 million in tax revenue, the financial loss from parking is significant⁴⁴.

The consultant recognizes that this recommendation may appear to some as risky, extreme, or unconventional. However, the criticism of engineered parking standards has been in urban planning discourse for at least 20 years and many municipalities, large and small, are taking steps to remove some or all minimum off street parking standards. This recommendation is neither radical nor new. There are over 200 examples across the country where parking requirements were removed in some form⁴⁵. Examples in Maine include Belfast, Auburn, Bath and Portland. Some of the many other examples around the country include: City of Buffalo, NY, South Bend, IN and Fayetteville, AK; these communities have no off-street parking requirements for any land use. Hartford, CT eliminated its parking requirements in 2017 in an effort to increase economic revitalization, which appears to be having success. Seabrook, NH has no minimum parking requirements, has gone further and established parking maximums in commercial and industrial districts. Bridgeport, CT eliminated parking mandates except for when accessible parking is required by State law.

The City of South Portland should join the growing group of advanced cities that have recognized that parking requirements are detrimental to housing affordability, economic development, and their own financial sustainability. The removal of parking requirements in the city's zoning code would generate net revenue through increase property tax revenue, and reduce restrictions on the use of land to enable more housing construction.

RECOMMENDATION 2D: ALLOW BY-RIGHT ACCESSORY DWELLING UNITS

Accessory Dwelling Units have been part and parcel of American residential settlement patterns since the establishment of our country. Carriage housings, ally apartments, servants' quarters have all been incorporated into single family residential districts. ADUs fell out of favor in the mid-20th century, but many cities are bringing them back. ADU's in South Portland can help the city realize many benefits, including: contributing to housing affordability; helping retain South Portland's young families; building mixed generational neighborhoods; reducing demand on nursing homes; improving the environment by reducing the demand to develop raw land; and improving housing sustainability by supporting owner's financial burden.

The consultants recommend that Section 27-1577 and Section 27-1578 of the City's zoning code be revised with an Accessory Dwelling Unit (ADU) ordinance that provides much greater incentives to build more supply of smaller units throughout the city. The current ADU ordinance is more onerous than building a single-family home. By-right Accessory Dwelling Unit means that the ADU would undergo the same permitting process as any permitted use in that zoning

⁴⁴ "Urban Parking at Any Price." Tom Breen. UCONN Today. 2014.

⁴⁵ <https://parkingreform.org/resources/mandates-map/>

district. Currently, the applicant for an ADU must go through a “Special Exception” process and review by the Planning Board. This process should be eliminated.

To further strengthen the incentive to build ADUs, they should be allowed to stand alone, detached from the existing structure. We understand that the City Council is currently considering changes to ADU regulations. This recommendation is made to advise and guide the Council toward new ADU allowances. This recommendation also is designed to support, and work in conjunction with, the other recommendations on expanding allowances in single family zoning districts.

The following changes should be made to sections 27-1577 and 1578:

- 1) Revise Section 27-1576 so that ADUs no longer require Planning Board approval as a special exception land use. Instead, we recommend that they are listed as “Permitted Uses” in Sections 27-502, 512, 532, and 552 relating to zones RF, AA, A, and G.
- 2) Removal of ADUs under “Special Exception” sections throughout the entire document.
- 3) Revise Section 27-1577 to require building permit applications only.
- 4) Revise Section 27-1578 (a) to allow detached construction and new construction.
- 5) Revise Section 27-1578 (b) is removed and replaced with “an ADU is no larger than 90% of the living area of the principal dwelling unit.” This is moved (or copied) to the definitions section.
- 6) Amend Section 27-1578 to only allow ADU’s on lots larger than 4,000 square feet.
- 7) Amend Section 27-1578 (d) to allow two ADUs per lot but a maximum of two detached buildings.
- 8) Change Section 27-201 (definitions) in accordance with the changes above.
- 9) Amend Section 27-512 to allow more than one residential building on a lot.
- 10) Ensure that all other permit approval processes and building codes that apply to single family dwelling units in RF, A, AA and G zones apply to ADUs.

Not only should the city allow ADU by right, but they should also go a step further and encourage ADU construction by issuing 0% interest loans. The source of the loan fund should be the Housing Trust Fund (see discussion below for recommendations to capitalize the fund).

RECOMMENDATION 2E: CREATE COMPACT-NEIGHBORHOODS

The city has a cluster development ordinance that should be revised to allow small units on less land. The current zoning is written for larger scale houses on large land areas (up to 100,000sf). The objectives for the city’s existing Cluster Development Ordinance (Section 27-1501) is to: 1) allow for innovations in siting residential housing units; 2) protect environmental resources; 3) preserve open space; 4) provide connections to parks and open spaces; 5) reduce stormwater runoff; and 6) reduce municipal expenses. There is no mention of using cluster development to provide for affordable housing, however, it can be a valuable tool. The consultant recommends modifying this ordinance to allow for small scale housing and smaller scale neighborhoods. There are many terms used in planning parlance to describe compact-neighborhoods including cottage courts, courtyard developments, bungalow courts, co-housing, and pocket neighborhoods.

These small-scale neighborhoods are tight groupings of small sized houses clustered around a common space such as a community garden, quiet street, or pocket park. The houses are small, ranging from 400 to 1400 square feet and the neighborhood consists of 6 to as many as 20 homes. Compact neighborhoods can be any style — craftsman bungalows, cottages, artistic tiny homes, traditional mission style, or modern modular.



Figure 5-9 Example of a Compact Neighborhood

They can be detached single-family houses, attached townhouses, or clusters of urban apartments. They can be a mix of single family and multiplexes. The central theme is that a limited number of nearby neighbors gather around a shared common, save land, reduce impervious surfaces, improve environmental sustainability, are affordable to the missing middle families, reduce traffic, and create communities safe for children.

The city zoning code would need to be revised to accommodate this type of development. Changes in the ordinance would focus on design over density, would encourage in-fill on non-conforming lots, be allowed in all residential zones, and not be restricted to below market rate subsidized units only (although a reserved set aside may be optional). There should be no minimum square footage requirements of the housing, no minimum lot size, and no parking requirements. The new zoning ordinance recommended in this report should incorporate allowances for these compact neighborhoods.

Case Study: Ashville OR⁴⁶

Ashville Oregon was in a similar situation as South Portland. The city needed to make effective use of limited sites within the city while recognizing that most available sites are within single family neighborhoods. These are similar to the findings in South Portland. The additional units needed to be small but in physical balance with the neighborhoods. As the code continued to be developed, the possibility of larger sites within neighborhoods raised the need to be clearer about the total number of units to keep good physical balance with adjacent houses. This led to the requirement that the units be small and be organized around a large, shared open space: The time to prepare, consider and adopt the code took 18 months, with the ordinance adopted in 2017. The result were:

- **Units:** Minimum 3, maximum 12 (up to half the units may be attached).
- **Density:** 11.6 to 17.4 dwelling units per acre.
- **Floor Area Ratio:** Maximum 0.35.
- **Unit size:** Maximum 1,000 square ft. In projects of only three units, two must be less than 800 sq. ft.; in projects of four or more units, 75% must be less than 800 sq. ft.
- **Height:** Maximum 18 ft. to the eave, with the ridge of a pitched roof allowed up to 26 ft.
- **Lot coverage:** Max. of 50% (house, porch, driveways, sidewalks, 'not natural'); increases to 55% if there is porous concrete, grass etc., but still it is not enough.
- **Building separation:** Minimum 6 ft. (typically 12 ft.).
- **Fences:** Allowed between units but not taller than 4 ft.

⁴⁶ Resources: Additional readings and recommended resources for creating compact neighborhoods can be found at: <https://www.pocket-neighborhoods.net/> or Diversifying Housing Options with Smaller Lots and Smaller Homes. National Association of Home Builders. 2019.

- **Public street(s):** May be waived if project meets block length standards by providing public access for pedestrians and bicyclists through an alley, shared street, or multi-use path.
- **Parking:** One space per unit (two required in zone); parking spaces are required to be consolidated to minimize the number of parking areas. Guest parking is not required.
- **Open space:** Minimum 20% of total site area, with a minimum dimension of 20 ft., and required to consist of a central open space or series of interconnected open spaces. Parking areas, driveways, wetlands, and steep slopes do not count to this requirement.

RECOMMENDATION 2F: ALLOW ALTERNATIVE HOUSING TYPES

The City should ensure that the city’s housing, building, and development codes allow for a range of non-traditional housing types. This recommendation echoes the request of some participants who attended the public forum on December 8th, 2021. Alternative housing types come in many shapes and sizes. A few types are addressed here:

Manufactured Homes

Manufactured homes are far from an alternative housing type but they are mentioned here because the city’s zoning codes are highly unfriendly to manufactured or mobile homes. The city should remove the manufactured home restrictions in the current code. Zoning ordinance, Section 27-1520 severely restricts not only manufactured homes but many other alternative housing types such as tiny houses and buildings made of alternative materials. With the current housing supply constraints facing the city and region, and the whole housing market, caused by the combination of monetary and fiscal policies, global commodity supply chain obstructions, and labor shortages, the City should not exacerbate the problem by restricting housing structure types that have been available for decades. Manufactured housing is pre-built-in factories in controlled environments, with stockpiled materials, resulting in more affordable units that comply with national building codes. South Portland’s zoning code restricts these housing units by controlling the building materials, roof pitch, foundation, landscaping, building width, and even the sheen of the paint. The city’s zoning code should not reinforce the old stigma against these units but instead promote smaller and more affordable units of all types. Each of the following housing types pictured in figure 6-6 are illegal under current zoning in South Portland, each for a different reason. The zoning code should change to make these legal.

Figure 5-10: Examples of Illegal housing in South Portland



Over Water Homes

The City's zoning code is silent on over-water housing. Over water housing can either be in boats or on piers. There is likely a limited market for over-water housing, especially for year-round living in South Portland Maine considering the wave action on the Fore River and Casco Bay. However, increasing any housing supply, so long as it is adhering to environmental standards, is recommended. Opportunities for over-water housing in South Portland should be explored.



3-D Printed Housing

3-D printed housing is a new technology that may offer some promise for housing affordability however, the technology is still being field tested. The frame of a 3-D printed house can be built in 2 days and the finished product in 2-3 months. The material is a polymer concrete which can be shaped into almost any design. Habitat for Humanity is starting to use 3-D printed houses to lower costs for its clients. Early testing results show that the savings may only be in the 10-20% range, however, most experts seem to agree that as frequency of use increases, and the learning curve becomes smaller, costs will decrease. Nothing in the South Portland zoning code appears to prevent this type of structure on single lots but it may be prevented if the project was part of a cluster development, an ADU, subject to special exception review standards or in other ways subject to the review standards similar to section 1575(d) "New buildings my use materials that are visually compatible with adjacent and nearby buildings where a pattern exists...unacceptable predominate exterior materials include smooth stucco-like finishes...precast concrete..." The zoning standards may be used by individuals to prevent this type of construction. The zoning code should be reviewed to allow for 3-D printed housing.



Micro-Units

Micro-units are Single Room Occupancy (SRO) units and typically serve those households earning less than 60% of the AMI and will accommodate either one person or a couple. Micro units generally rent for about 20% to 30% less than a regularly sized unit. However, since they rent at a higher rate on a per-square-foot basis, they can be higher return investments for developers. This is an opportunity to facilitate the private sector in creating more units. The consultants recommend that the city encourage micro-housing units. The existing housing section of the city code allows for housing units to be as small as 100 sq. ft. The only restrictions against micro-units may come at the special exceptions review process and under density requirements. The number of micro-units at 100 sq. ft. that a site can accommodate is much more than, for example, a typical apartment building of 800 sq. ft. units. Occupants of these types of units also tend to have fewer automobiles than average apartment dwellers⁴⁷. These types of projects are more efficient in land usage, have the potential for more pervious surfaces, and provide for more affordable units. Therefore, it is reasonable to allow increases in density when building micro-units. The city should revise its zoning ordinance to allow higher densities for micro-units. Perhaps densities can be increased on a sliding scale that result in more units on less acreage, thereby creating a win-win for affordable housing and land preservation.

⁴⁷ Although the author is not aware of any study that supports this statement.

RECOMMENDATION 3: OVERHAUL THE PERMIT APPROVAL PROCESS

Several developers working in South Portland, and the general public, commented during the focus group sessions and stakeholder input processes on the lengthy, costly, and unpredictable permitting process as a potential cause of preventing affordable housing development. The consultant also inquired about the permitting process and noted several challenges including:

- **Disjointed codes and ordinance:** An investor or developer who might be new to South Portland will have a difficult time understanding which codes apply to housing development. A housing development may be impacted by numerous Chapters of the City ordinances including Chapter 27 (zoning); Chapter 24 (subdivisions), Chapter 23 (Streets), Chapter 8 (fire protection), Chapter 32 (soils), and Chapter 29 (sewer). There may be additional Chapters that may apply unknown as of this writing. However, an unsuspecting investor would not necessarily know where to start and which codes apply to his/her project. The number of potentially applicable codes is intimidating. The city should clarify the process with a one stop shop approach and develop a simple user-friendly guide to the permitting process.
- **An uncertain Planning Board approval process:** The Planning Division provides a flow chart to describe the permit application process (figure 6-7). The first step in the process requires a discussion with one of three individuals, the Admin/Counter, a Staff Planner, or a Code Officer. Based on this flow chart, a developer/investor has no clarity on the length of time the process might take. Pre-application meetings, planner reviews, application materials, and confirmation of complete applications all take an unknown amount of time before the application is submitted. This process has numerous uncertainties. There are no “by-right” development approvals.

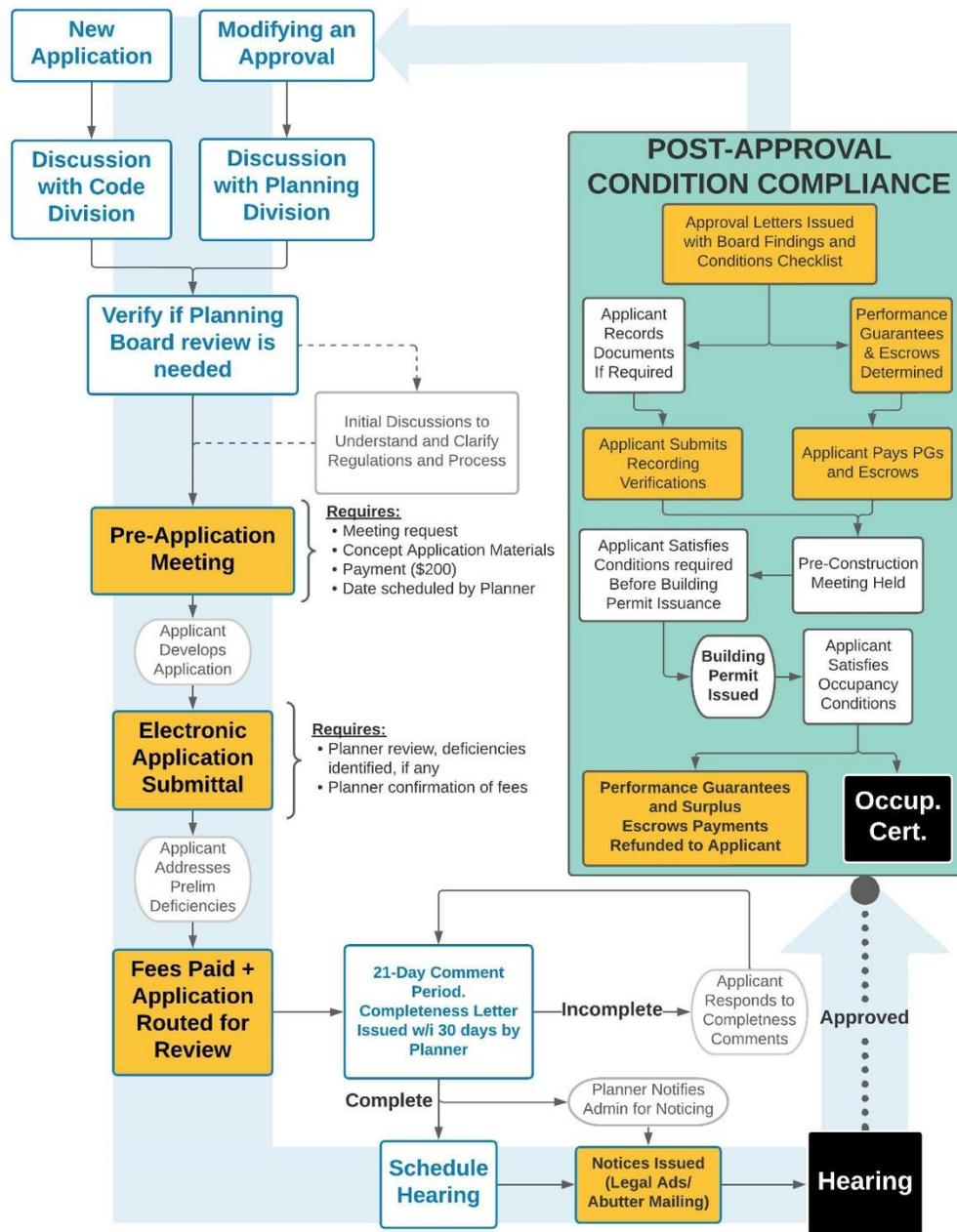
In response to stakeholder concerns and to facilitate more residential construction in the city, the consultants recommend that the city overhaul the permitting process to improve efficiency, save City resources, and reduce development risks. After reviewing the current state of permitting process, making minor adjustments will not likely lead to improvements but rather add additional layers of complications. Completing an overhaul of the permitting process would be part of the zoning rewrite process and should entail these features:

1. **Significant stakeholder participation.** Those most impacted by the permitting process should be given leadership roles in the overhaul process. This may include a local developer holding the chairperson position of a citizen overhaul committee, or perhaps a co-chairperson position with a city official as the other co-chair.
2. **City leadership.** The City Manager or an elected City Councilor lead the overhaul process
3. **Time.** Several months of time to identify bottlenecks, uncertainties, and redundancies.
4. **Objective 3rd party analysis.** A detailed analysis of the process, time, and costs involved of acquiring permits for different types of construction projects. This would include a thorough accounting of permitting costs paid to the city for each permit issued over the course of the last 3 years (minimum) to get an accurate average of permitting costs by project type.

5. **Case Studies.** A series of case studies and customer satisfaction surveys of those who have recently completed the process.

The results of the process should produce multiple deliverables to improve the process such as a “one-stop shop” permit, on-line application filing, electronic review system, and permit tracking system. A thorough review of the development permitting process that engages the users in a meaningful way will likely reveal bottlenecks, improve administrative efficiency, result in an improved process and demonstrate willingness on the part of the city to help facilitate new residential construction.

Figure 5-11 Development Application Approval Process



Create more By-Right Development Review Processes

An outcome of this recommendation, combined with the city's new zoning code, should include a clear development approval process including what uses are eligible for "by-right" approvals. "By-right" permit approval process is a streamlined process so that projects which comply with the zoning standards receive building permits at the counter without a discretionary review process, public review, or meetings before the Planning Board.

By-right approval processes decreases the cost of permitting by improving transparency and predictability. This contributes to an increase in supply, and increase in competition between suppliers, and indirectly places downward pressure on rents⁴⁸. By-right development approvals establish a rule-based development approval process that improves the amount of time and predictability of the permit approval process by removing discretionary reviews of citizen Planning Boards and replaces it with uniform, codified, and consistent zoning and development regulation. It does not remove public input processes; instead the public's goals and opinions are incorporated into the planning process, not the development review process. Public discourse, feedback and participation is therefore occupying the time of the City's municipal elected officials and staff and not of an individual investor or landowner.

The cost of risk is rarely understood by policy makers and city staff, but it can easily lead to increases in housing costs

By-Right approvals lowers the cost of development through a faster, more transparent, and predictable process, which results in an increase in supply and lower rents. A rule-based approach clearly outlines the permitted use, shape, and density at a parcel level. When development projects are submitted, review is administrative and does not exercise discretionary judgement on the project. The City of South Portland currently has more of a discretionary approval process that gives the planning board and city staff opportunities to insert bias and costly development risk into the review process. The cost of risk is rarely understood by policy makers and city staff but it can easily lead to increases in housing costs. Cost of risk on private capital is monetized every day in many typical business endeavors such as insurance, interest rates, exchange rates, and returns on retirement accounts. This same cost of risk is affecting housing prices in South Portland.

The consultant recommends that a thorough review of the permit approval process be conducted with experienced developers to identify the most discretionary elements in the approval process. An open and objective review of the permit process is not possible under the current scope of work because it would require extensive public input, mock development approval processes, hypothetical scenarios and cost analysis. The city's existing permit process is demonstrated in Fig 39. The objective of this recommendation is to modify the approval process so that discretionary interpretation of entitlement is reduced.

Accountability reporting

As part of the permitting reform process, the city should institute an accountability reporting process whereby certain Key Performance Indicators (KPIs) are used to measure progress of change in permit reforms. The reformed permit process and its accountability measures should be part of a public process to help demonstrate to the public that the City is sincere in its efforts

⁴⁸ "Solving the Housing Affordability Crisis." Bay Area Council Economic Institute, Oct 2016.

facilitate development of affordable housing. The City Council should pass a resolution that requires the Planning Division and Code Enforcement Division to release a report with statistics on the number of plans submitted and approved, average review times for various application types, and a comparison of the current year's data to the previous year.

The zoning rewrite should establish standard timeframes for reviewing applications. The maximum time allowed for intake review, sketch plan review, administrative public hearing, site plan approval, major and minor site plan approvals should be established during the permit overhaul process. Other important KPI's should be an increasing number of by-right permits issued and decreasing number of special exception reviews required.

RECOMMENDATION 4: CAPITALIZE THE AFFORDABLE HOUSING TRUST FUND

The city created an Affordable Housing Trust Fund in 2019. Section 12-241 of city ordinances established the fund for the purposes of issuing loans, awarding grants, or purchasing property. The city, through the Affordable Housing Committee, is developing a manual to guide the use of the fund and to explore options for capitalizing the fund. The following options to capitalize the Housing Trust Fund should be considered:

1. **2 Cents for Housing:** an increase in the tax rate for the General Fund could provide some capital to start the trust fund. The City could fund the Housing Trust Fund by taxing itself, for example two additional cents, on the taxable value of real estate. The 2020 property tax rate was \$19.10/\$1,000 of assessed value (up from \$18.50 in the previous year), or \$3,820 in property taxes for a \$200,000 assessment. Total assessed values in the City were \$3,686,331,560. At the 2020 tax rate, the City collected \$70,408,933 on this assessed value⁴⁹. If the new tax rate was \$19.12 then the City could generate \$73,726 on the same assessed value and the same homeowners with a \$200,000 home would pay \$3,840 in property taxes or \$20 more. This amount is not large enough to fund construction of any type of project, however, it can support a revolving loan fund for down payments, closing costs, or help relieve other barriers to entry for 1st time home buyers.
2. **Use City Discretionary Funds:** The City's Year End Comprehensive financial report states that "As of the close of the current fiscal year, the City of South Portland's governmental activities reported ending net position of \$110,375,522, an increase of \$4,956,209 in comparison with the prior year of \$105,419,313. Approximately 7.8% of this total amount, \$8,668,984, is available for spending at the City's discretion (unrestricted net position).⁵⁰ Perhaps a portion of these funds can be used to capitalize the Housing Trust Fund as a one-time transfer.
3. **Tax Increment Financing:** Maine Statute allows a portion of TIF funds to be used to create permanent housing development revolving loan or investment fund. The City has three housing TIF funds that can be used for this purpose. The city has already anticipated TIF as a source of funds as specified in Ordinance 12-242. Future housing TIF Districts should be used to help capitalize the Housing Trust Fund.

⁴⁹ Comprehensive Annual Financial Report 2020. South Portland Finance Department. Page 51.

⁵⁰ Ibid. Page 16

RECOMMENDATION 5: INTERVENTIONS EXCLUSIVE TO RENTER HOUSEHOLDS

Lower income households are defined in this report to be those with incomes at or below 60% of the median. The affordability tables in Chapter 5 shows how owning a single-family home in South Portland is far out of reach for most lower income households. Households with incomes at 60% of the median are earning about \$54,000 and therefore can afford to own a home if it cost \$177,416 or less. The median priced home in South Portland is about \$356,700, leaving a \$179,000 affordability gap. Therefore, a vast majority of South Portland residents at this income level are renters. The rental demand from these households far exceeds the supply and forces them to seek housing that exceeds their affordability level (30% of HH income), creating household financial hardship. When these households consume units that are beyond their affordability level two effects occur: first, they occupy housing that is affordable to higher incomes households, thereby restricting the supply of housing in that income strata, which in turn forces those higher-earning households to move beyond their levels of affordability and occupy unaffordable units that may otherwise be available to them. In effect, the shortage of lower income housing reduces affordable supply for all households, at all income levels below a certain high-income threshold at about 150% of median or above or \$145,000. Second, all households who are living beyond their affordability levels are “house cost stressed,” which means their remaining household income used to make other purchases of food, medicine, transportation, child-care, education, clothing, and leisure/amenities is reduced. This effect reduces the vitality and sustainability of the local economy.

Increasing the supply of rental units affordable to households earning 60% of median income will improve the supply of units for households at higher income levels as well and slow the increase in rents. It will also reduce the incentive to convert ownership units into rental units as rents begin to stabilize. This section of recommendations is designed to help increase the supply of affordable rental units for households below 60% of the median.

RECOMMENDATIONS 5A: STRATEGICALLY EMPLOY TAX INCREMENT FINANCING

Tax Increment Financing (TIF) allows municipalities to retain the incremental increase in property tax revenues that result from development improvements and redirect the new funds into public infrastructure within a TIF district. State of Maine enacted statute 30-A M.R.S.A. §§5245-5250-G that allows municipal governments to create TIF districts for the purposes of creating affordable housing. The Affordable Housing Tax Increment Financing (AHTIF) Program within the Maine Housing Authority assists municipalities in creating TIF districts. South Portland has experience in using TIF financing. The city currently has 10 TIF districts and has generated a balance of 7.4million in TIF funds. Three of these districts are used for affordable housing including Brick Hill, Thornton Heights, and Avesta Westbrook. While TIF financing can provide valuable capital to support housing (e.g. Brick Hill generated \$680,000 in TIF funds), it cannot be employed as a universal tool applicable for all situations. Creating TIF districts can be expensive so they should be reserved for large scale projects, and large-scale projects are not acceptable or desirable everywhere. In addition, the City Council must approve a Housing TIF districts and therefore they must approve the associated project, which introduces discretionary review through a legislative process. Large scale projects, while they may help build many affordable housing units, are also geographically concentrated, therefore there is a risk that this approach may create “low-income districts,” which may be inequitable.

The consultants recommend that TIF districts be used strategically in two approaches. First, the district is identified before the applicant comes forward with a project. The district is part of a city-wide comprehensive plan that has identified locations of affordable housing projects of the appropriate scale. With this approach, a maximum number of TIF districts are created ahead of

time and they become part of a long-range strategic plan to meet production goals. Second, the revenue from TIF funds are used to capitalize a Housing Trust Fund to support projects outside of the TIF district. TIF statutes allow TIF funds to be used outside of the district for the purposes of establishing a permanent housing development revolving loan or investment fund. By channeling TIF funds to projects outside of the TIF, the City can support affordable units throughout the city (potentially through smaller and less controversial projects), prevent high concentrations of affordable housing projects, support missing middle housing and earning families up to 120% of median income.

RECOMMENDATION 5B: HELP IMPROVE CREDIT RATING OF RENTERS

Renters with low or no credit rating are financially unstable and vulnerable to homelessness. The City could work to improve the credit rating of renters thereby helping them find an affordable rental lease and eventually build up into first time homeownership. The lack of a stable credit rating creates a large barrier to entry for many low-income renters and exacerbates affordability issues across the whole array of household expenses. Less than 1 percent of credit reports include rent, yet for many people it is their largest and most consistent payment. Nearly 10% of American adults have no credit history with one of the three credit reporting agencies (Equifax, Experian, or Transunion). A credit rating is one of the first steps in a security screening that landlords take to determine eligibility for a rental unit. The lack of a credit score is a legitimate reason to reject a person's rental application. In addition, households who do not receive points for their on-time rental payment history are prevented from qualifying for a mortgage, or a higher-priced home. The City could help improve its local economy, improve access to rental supply, and help prevent homelessness by ensuring that South Portland's renters are building credit scores through their timely rental payments.

To do this, the City of South Portland, may work in partnership with the South Portland Housing Authority and/or the Quality Housing Coalition, and with area landlords to improve the credit rating of renters through third-party credit reporting services. These third party reporting services report rental payments to credit rating agencies, thereby building up a positive credit score. An example of one such service is ESUSU, based in New York City. These services build credit reports for renters by partnering with property managers and public housing authorities or working directly with landlords. By using rent payment data to establish creditworthiness, these services improve the financial stability of renters, increase on-time payments, and improve property owners' net operating income. It also lowers their cost-of-capital for future home ownership.

RECOMMENDATION 5C: ALTERNATIVES TO SECURITY DEPOSIT

Security or damage deposits create a large barrier to entry for many low-income renters. Security deposits are payments to landlords that give them insurance against damage to their property. The payments are typically one-month's payment. In addition to a security deposit, renters are usually required to pay the first and last month's rent. If the monthly rent is \$1,500 then a family moving into a new unit would need \$4,500 to move in. The closing costs (exclusive of the mortgage down payment) on a new home cost about this much. Since security deposits are an insurance against damage, then they can be administered like an insurance policy. The consultants recommend that the city, through the housing authority and/or the Quality Housing Coalition, facilitate a damage insurance policy program for renters. The damage deposit can be paid in low-cost monthly premiums. Insurance companies such as Rhino (<https://www.sayrhino.com/>) and SureDeposit (<https://www.suredeposit.com/>) provide this product and operate nationwide. Some cities are passing legislation that would prohibit security deposits and require landlords to accept security-deposit insurance instead. However, the

consultants do not recommend this action. The city can facilitate the use of this insurance program in several ways including:

- 1) Making it required as part of any negotiated package of incentives for density increases. For example, when the city negotiates density under conditional or contract zoning requests, the use of damage insurance could have been required for those units.
- 2) The city can actively spread the word on the use of these insurance programs through the many ways it communicates with its renter community, for example, the city’s general assistance office can inform its clients.
- 3) The city can underwrite its own renter security-deposit insurance program.

The Affordable Housing Committee should discuss and recommend the best option for the city.

RECOMMENDATIONS MATRIX

The table below provides a qualitative assessment on how effective each of the recommended strategies are to addressing various targeted housing markets as well as how feasible it is. The ratings are as follows:

- Highly effective - ★★★
- Moderately effective - ★★
- Indirectly supportive - ★
- Not relevant - (no stars)

Table 5:27 Recommendations Matrix with Effectiveness Rating.

INTERVENTION	Rental		Ownership		Adoption Feasibility
	<60% AMI	60%-100% AMI	60%-80% AMI	80%-120% AMI	
Regional Allocation	★★★	★★★	★★★	★★★	Low
Diversify SF zoning	★★★	★★★	★★★	★★★	Low
Density Adjustment	★★★	★★★	★★	★	Mod.
No Off-Street Parking	★★★	★★★	★★★	★★★	Low
Revised ADU	★★★	★★★	★★★	★★★	Mod.
Compact/TOD Neighborhoods	★	★★	★★★	★★★	Mod.
Alternative Housing Types	★★★	★★★	★★★	★★★	High
Permitting Overhaul	★★★	★★★	★★★	★★★	High
By-Right Development		★	★★	★★★	Low
Housing Trust Fund	★★★	★★★	★★★	★★★	High
TIF districts	★★	★★			Mod.
Credit Rating Support	★★	★★			Mod.
Security Deposit Insurance	★★	★★			High
Density Bonus	★★	★★	★	★	Mod.