Section 1



Image Source: VisitMaine.com

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Introduction to the 2018 Comprehensive Plan Update

In 1989, the State of Maine instituted the Growth Management Program (GMP) legislation requiring towns and cities to adopt a local growth management program, including a comprehensive plan and an implementation program. The goal of the GMP is for communities to develop a "blueprint" for managing growth and change – which amounts to a master plan for how and where development should happen.

Specifically, the comprehensive plan of that blueprint must include an inventory and analysis section, and include economic and demographic data, and information on land use, transportation, housing and more. Further, the plan must identify growth areas and provide for development standards, permitting procedures, and ensure that public services are available. The plan must also identify rural areas and adopt policies and ordinances that discourage incompatible development.

Following similar updates to the Comprehensive Plan in 1999 and 2011, the City initiated an update of the 2011 Comprehensive Plan in November 2016 with an emphasis on the downtown and surrounding neighborhoods. An eleven-member Comprehensive Plan Committee (CPC) was appointed by the City Council. The City Planner, Economic Development Director, and the Southern Maine Planning and Development Commission (SMPDC) facilitated the meetings, performed data gathering, and drafted the updated Comprehensive Plan sections.

The CPC has thoroughly reviewed each of the topics related to the downtown – Population and Demographics, Local Economy, Transportation, Housing, Arts and Culture, and Land Use – as well as a new section to the Plan, Sea Level Rise. Meetings included other town staff, community leaders, organizations and various stakeholders from the development community, Dyer Library, City of Portland staff, Heart of Biddeford and Saco Main Street, the Maine Geologic Survey and more.

The information gathered and recommendations found in the 2018 Comprehensive Plan Update will provide the basis for guiding and managing Saco's growth over the next 10 to 15 years. The objective: improving Saco in a thoughtful and measured way that recognizes the many changes impacting the way we live, work and play, and that benefits residents, businesses, and visitors.

Section 1A: Population and Demographics Goals and Policies

Population and Demographics Goals and Policies

State Goal: To encourage orderly growth and development in appropriate areas

of each community, while protecting the State's rural character, making efficient use of public services and preventing development

sprawl. (Growth Management Act, 1988)

Local Goals: To accommodate and encourage growth in a manner that maintains the

character and respects the cultural attributes of the City of Saco while recognizing the need to evolve and provide state of the art amenities for

both residential and business citizens of the City.

To ensure that Saco remains a welcoming community for all individuals

regardless of background or socioeconomic status.

Pursuant to these goals, the City's policies with respect to population and demographics are:

- 1. The City should assure that residential growth is accommodated in appropriate locations that are properly zoned and able to be provided with public services.
- 2. In accordance with the goals set forth by Mayor Lovell in early 2018, the City should seek to grow its population to 25,000 residents by 2025.
- 3. Recognizing the demographic reality of Maine's aging population and retiring workforce, the City should recognize the value of and make efforts to attract new residents of all ages and backgrounds to Saco to ensure that the City can meet its workforce needs for years to come.

POPULATION AND DEMOGRAPHICS - IMPLEMENTATION STRATEGIES

Policy Reference	Activity	Primary Responsibility
1	The City will work to update its zoning to ensure that adequate areas are provided for residential growth in areas with access to public services as well as areas outside the urban core, where larger lots with private utilities are appropriately located.	Council, Planning Board, Planner, and Development Director
2, 3	Survey existing residents of Saco to determine specific wants and needs in the areas of housing, support services, entertainment, etc., with a view toward determining what amenities attract people to the City, but more specifically with a view toward what the City is lacking and should strive to develop.	Council, Planning Board, Planner, and Development Director
2, 3	Perform a study of other communities similar in size, population and character to determine if and how other cities are either more or less successful in providing the housing, amenities, etc., that attract and maintain a diverse population.	Council, Planning Board, Planner, and Development Director
2, 3	Develop a City "report card" that periodically tracks progress in specific measurable attributes that attract and maintain a diverse population.	Council, Planning Board, Planner, and Development Director

SECTION 1B: POPULATION AND DEMOGRAPHICS

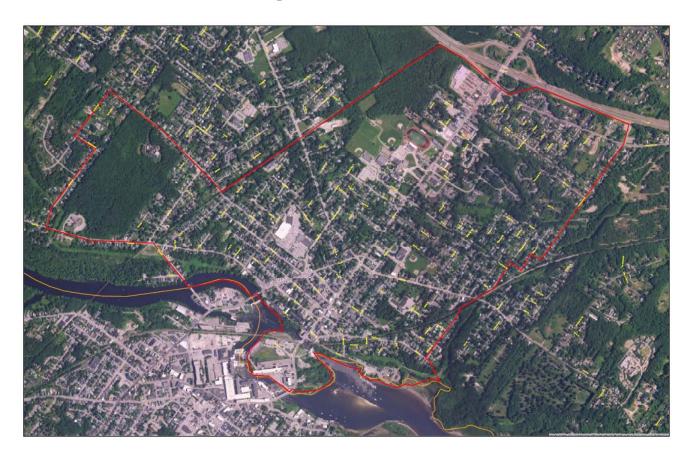
Population changes play a significant role in a community's development. Over the last three decades, while most Maine cities were losing population, Saco's population has grown steadily. At the same time, the City's demographics have changed. This section looks at how Saco's population has grown over the past century, and how it is likely to change in the coming decade.

A. YEAR-ROUND POPULATION

Saco lies along the southern Maine coast in one of the fastest growing and most economically robust regions in the state. Saco and its sister city Biddeford have historically served and continue to act as the economic and population center of this part of York County. This role was based largely on the mills located in the two communities. Biddeford and Saco have been and remain to be the employment center of York County and are surrounded by more rural and seasonal resort communities.

Saco and the larger region have changed over the past several decades as manufacturing has migrated to other areas of the United States or offshore. Rural and seasonal towns have become suburban bedroom communities for Saco, Biddeford, and Greater Portland. From an economic standpoint, Saco has become more closely aligned with Greater Portland. This has reduced the City's role as an independent economic center, and as a result, in 2000 Saco, Biddeford and several surrounding towns were added to the Portland metropolitan area by the U.S. Office of Management and Budget.

Map 1: Downtown Focus Area



The Downtown Focus Area extends from I-95 to the north, along Cumberland Avenue, Wood Avenue, along the railroad tracks down to Wakefield Avenue, then along the Saco River's shoreline, including Saco Island. From Saco Island, it continues along the shore, then up along Market Street to Lincoln Street, along Skyline Drive, Applewood Drive and Hubbard Street, then along Bradley Street to the Eastern Trail and back up to I-95.

1. Long-Term Population Change 1900-2014

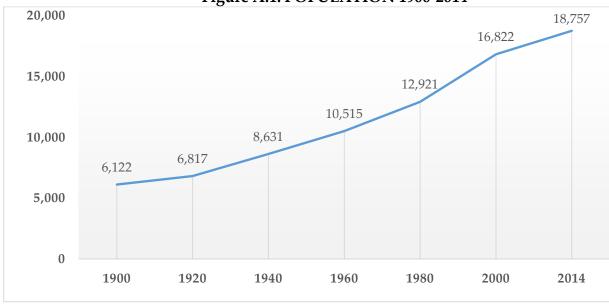


Figure A.1: POPULATION 1900-2014

Source: U.S. Census Bureau, 2014

1900-2000

Saco's population has grown steadily since the 1930s (see Figure A.1). Between 1930 and 1950, it increased by 20% each decade, from 7,233 in 1930 to 10,324 in 1950. Growth slowed in the 1950's, then resumed during the 1960's and 1970's. By 1980, Saco's population had grown to 12,921, nearly double what it was in the early 1900s.

Population growth in Saco shows few signs of slowing down. Between 1980 and 2000, the City's population grew by 30%, to 16,822. The 2010 Census showed Saco's population increasing to 18,482 residents, adding about 1,660 residents since the 2000 Census. The 2014 Census estimates indicate a steady increase to approximately 18,757 residents, but American Community Survey estimates Saco's population as of 2016 as 19,213.

Despite being geographical neighbors and sister cities, Saco's and Biddeford's historical population changes have followed different patterns. Prior to World War II, both communities experienced relatively steady growth. Since 1950, however, the pattern in the two communities has diverged (see Figure A.2). While Saco's population has grown rapidly since 1970, growth in Biddeford's population has remained slow.

200,000 180,000 160,000 140,000 120,000 100,000 80,000 60,000 40,000 20,000 1920 1940 1960 1980 2000 1900 2020 --- Biddeford --- York County

Figure A.2: SACO, BIDDEFORD AND YORK COUNTY POPULATION CHANGE 1900-2014

Source: U.S. Census Bureau, 2014

Population growth in Saco generally mirrored that in York County until 1960 (see Figure A.2). Between 1950 and 1980, the City's rate of growth was slightly slower than the county's, reflecting a general trend toward suburban development. As households moved out of urban centers to more rural communities, Saco's population as a percentage of York County's total population declined, from 10.6% in 1960 to 9.3% in 1980 and to 9.0% in 2000.

From 1980 to 1990, both York County and Saco populations grew by more than 17%. The City and the County continued to grow in the 1990s, but at a slower rate. Saco's population increased 10.8% during this time, while the County's population increased 13.5% (see Table A.1, following page). As Saco grew from 15,181 to 16,822, a gain of 1,641 people, Biddeford's population remained flat, increasing by just 282 residents.

2000-2014

Based on 2014 Census estimates, Saco has seen some rebounding, and Saco's population now stands at 9.43% of York County's population (see figure A.4). This rebound may reflect recent changes in housing choices and preferences, gas prices, and other cost of living factors.

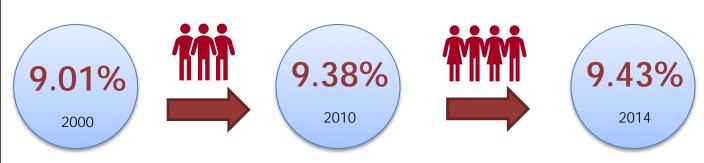
York County's growth rate slowed to a bit over 5% while Biddeford's growth rate stood at 1.6% from 2000-2010. Estimates for the period 2010-2014 show Saco continuing to grow modestly.

Another important aspect for the 2018 Comprehensive Plan Update to examine is the population and growth rate of the Downtown Focus Area (DFA). In 2000, the DFA's estimated population was about 32% of Saco's total population. That percentage dipped to about 29% in 2010. However, between 2000 and 2014, the DFA's population grew by 9.9% compared to 1.5% for the community as a whole.

Table A.1: Population Changes, 2000 - 2014										
	2000	2010	%	2014	% Change					
	Population	Population	Change	Population	2010 - 2014					
Saco	16,822	18,482	9.9%	18,757	1.5%					
Saco, Downtown Focus	5,393	5,429	0.7%	5,967	9.9%					
Area	3,393	3,429	U.7 /0	3,907	9.9 /0					
Biddeford	20,942	21,277	1.6%	21,303	0.1%					
Portland-South Portland	487,568	514,098	5.4%	518,387	0.8%					
Metropolitan Area LMA	407,300	314,096	J.4 /0	310,307	0.0 /0					
York County	186,742	197,131	5.6%	198,934	0.9%					

Source: U.S. Census Bureau, 2014 & ESRI Community Analyst, 2014

Saco's Population as a Percentage of York County's Population



Since 2000, Saco has seen more population growth than surrounding York County communities such as Biddeford. As such, Saco has since become a greater proportion of York County's total population.

In 2000, Saco and Biddeford were incorporated into the Portland-South-Portland-Biddeford Metropolitan New England City and Town Area (NECTA)¹ (see Figure A.3). The new census area replaces both the Biddeford LMA and the Portland MSA. The change reflects increased economic and demographic ties in the region. In 2007, Saco was 5% of the total Portland-South- Portland-Biddeford NECTA population.

In 2015, the U.S. Office of Management and Budget adjusted the Metropolitan Statistical Areas (MSA) across the U.S. and recalibrated the census data back to 1990 to use the newly redefined MSAs.

The State of Maine uses the Portland-South Portland Metropolitan Area as a labor market area for data collection purposes. The Portland – South Portland Metropolitan Area is roughly similar to the Portland-South Portland – Biddeford NECTA. The differences are that the NECTA includes westernmost York County towns and Sagadahoc County (11 towns) that the Metropolitan Area does not. According to 2014 estimates, Saco is about 4% of the Portland-South Portland Metropolitan Area Labor Market Area.

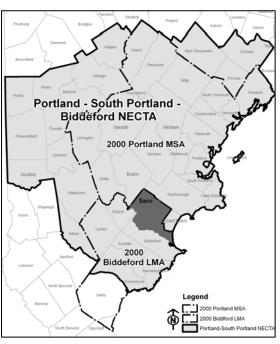


Figure A.3: CHANGES TO THE CENSUS

2. Where Did Saco Grow?

Saco is divided into four census tracts (see Figure A.4). Tract 51 is the predominantly rural area west of the Turnpike. Tract 52 is the Route 1 corridor, running east of the Turnpike and north of North Street. Tract 53 includes Saco's downtown core, running north of the river, south of North Street, east of the Turnpike and west of the railroad right-of-way. Tract 54 includes the residential areas leading out to and including the coastal neighborhoods and Camp Ellis.

¹ A Metropolitan New England City and Town Area or NECTA is a geographic and statistical entity defined by the U.S. Office of Management and Budget, for use in describing aspects of the New England of the United States. A Metropolitan NECTA is a region that includes an urban core with a population of at least 50,000 and surrounding communities that have a high degree of social and economic integration as measured by commuting and employment patterns.

During the 1980's, most of Saco's population growth occurred in the rural area west of the Turnpike (41.5%) and in the intown area (38.6%). There was only modest growth in the Route One area (16.3%) and limited growth in the coastal tract (3.5%). This growth pattern resulted in a shift in the demand for public services, as a growing share of the population moved west of the Maine Turnpike where services were limited.

In the 1990's, Saco's rural areas continued to see substantial growth, with more than 56% of the City's population increase occurring there (see Table A.2). The intown and coastal areas saw the most significant changes in population growth during this time. While growth slowed substantially in the in-town area (only 9.5% of the total increase), the coastal population had 19.4% of the total increase, making it the second largest growth area. Growth along Route One was modest, at 14% of the total.

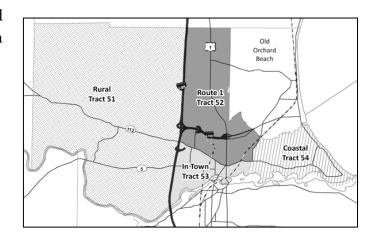


Figure A.4: MAP OF SACO CENSUS TRACTS

Between 2000-2014, Saco continued to see population growth in the rural (52%) and coastal areas (21%). However, another trend is visible – in-town neighborhood populations have become the second fastest growth area in Saco, showing a growth rate of 49% (See Table A.2.1, next page). The DFA's growth rate, as would be expected, is also increasing.

Tal	Table A.2: POPULATION INCREASE BY CENSUS TRACT 1990-2000										
		CT 51 (Rural)									
	Total Saco	Рор.	% of total	Рор.	% of total	Рор.	% of total	Pop.	% of total		
1990	15,181	3,106	20.5%	4,198	27.7	5,910	38.9%	1,967	13.0%		
2000	16,822	4,033	24.0%	4,427	26.3	6,067	36.1%	2,286	13.6%		
90-00	1,641	927	56.5%	229	14.0	157	9.6%	319	19.4%		

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Table	Table A.2.1: POPULATION INCREASE BY DOWNTOWN FOCUS AREA & CENSUS TRACTS 2000-2014										
		Saco Downtown Focus Area		CT 51 (Rural)		CT 52 (Rt 1)		CT 53 (In- town)		CT 54 (Coastal)	
Year	Total Saco Population	Pop.	% of Total	Pop.	% of Total	Pop.	% of Total	Pop.	% of Total	Pop.	% of Total
2000	16,822	5,393	32.1%	4,033	24.0%	4,427	26.3%	6,067	36.1%	2,286	13.6%
2010	18,482	5,429	29.4%	5,058	27.4%	4,557	24.7%	6,338	34.3%	2,529	13.7%
2014	18,757	5,967	31.8%	5,035	26.8%	4,007	21.4%	7,017	37.4%	2,698	14.4%
2000 -											
2014	1,935	574	29.7%	1,002	51.8%	-420	<i>-</i> 21.7%	950	49.1%	412	21.3%
Change											

Source: U.S. Census Bureau, 2014 & ESRI Community Analyst, 2014

Table A.3 below shows the change in year-round housing units from 1980-2000. The rural area west of the turnpike accommodated the largest growth in population and accounted for the largest increase in housing units (65.4%), with a boom in single-family subdivision development. The Route One corridor lost housing units. This may be due in part to an increase in commercial and industrial development in the area and a decline in its desirability for residential development. The intown and coastal areas saw modest growth in the 1990s, adding 88 units and 126 units respectively.

Table	Table A.3: HOUSING UNIT INCREASE BY CENSUS TRACT 1980-2000									
	Housing Units	CT (Ru	_	_	T 52 oute 1)		Γ53 town)		`54 istal)	
		# of units	% of total	# of units	% of total	# of units	% of total	# of units	% of total	
1980	4,868	725	14.9	1,440	29.6%	1,905	39.1%	798	16.4%	
1990	6,826	1,059	15.5	1,954	28.6%	2,650	38.8%	1,163	17.0%	
2000	7,424	1,450	19.5	1,947	26.2%	2,738	36.9%	1,289	17.4%	
90-00	598	391	65.4	(7)	-1.2%	88	14.7%	126	21.1%	
Units wit	% Change in Units within Tract 90 -00		9%	-0	0.4%	3.	3%	10.	8%	

Source: U.S. Census

Between 2000 and 2014, growth in housing units in the in-town area surged and edged out the rural area for the largest increase in housing units, standing at nearly 40% (472 units) compared to the rural area's nearly 38% (459 units). The Route One corridor and the coastal area saw modest growth. There is no earlier data available to compare for the DFA, but it is interesting to note that 2014 estimates show that the DFA represents about 35% of the City's total housing units.

	Table A.3.1 HOUSING UNIT INCREASE BY DOWNTOWN FOCUS AREA & CENSUS TRACTS 2000-2014										
Year	Total Housing Units	Dow	nco ntown s Area	CT 51 (Rural)		CT 51 (Rural) CT 52 (Route 1)		CT 53 (In- town)		CT 54 (Coastal)	
		# of units	% of Total	# of units	% of Total	# of units	% of Total	# of units	% of Total	# of units	% of Total
2000	7,424	-	-	1,450	19.5%	1,947	26.2%	2,738	36.9%	1,289	17.4%
2010	8,508	2,811	33.0%	1,841	21.6%	2,141	25.2%	3,076	36.2%	1,450	17.0%
2014	8,640	2,998	34.7%	1,909	22.1%	2,030	23.5%	3,210	37.2%	1,491	17.3%
2000 - 2014 Change	1,216	-	-	459	37.7%	83	6.8%	472	38.8%	202	16.6%
% Change in Units within Census Tracts between 2000 - 2014			-	31.7%		4.3%		17.2%		15.7%	

Source: U.S. Census Bureau, 2014 & ESRI Community Analyst, 2014

Saco's residential growth pattern reflects larger regional and national development trends. The rural area saw the largest increase overall during the 1980-2014 time span, due to increased suburbanization and the City's burgeoning role as a regional bedroom community. New unit growth in the in-town area was low (3.3%) during the 1980-2000 time frame, reflecting the limited amount of land available for development and a general population shift away from the urban center. However, in the next fourteen years, another trend emerged and new unit growth grew as properties were redeveloped and demand for in-town living increased. Modest growth in the coastal area is due in part to year-round and seasonal single-family subdivision developments attracted by proximity to the ocean.

An examination of residential subdivision activity since 2000 offers insight into Saco's population growth by area. A study of the locations of new development activity in Saco showed that most housing growth in the city since 2000 occurred in its growth areas east of the Maine Turnpike. About 79% of housing added between 1999 and 2009 was located east of the turnpike, and the majority (57%) was in Tracts 53 and 54, the in-town and coastal sections of Saco.

Between 2010 and 2015, 40% of the housing was added in Tract 51, the rural area west of the turnpike, followed by an additional 29% in the Tract 54 (Coastal). The numbers reflect a slower growth rate in in-town Tract 53 as compared to the 1999-2009 period. However, these numbers do not reflect the approval of Mill Building #4, which while not completed by 2015 included 150 residential units in the downtown. Since 2015, there have been more than 400 housing units approved throughout the City, and as of this writing this trend is continuing.

Table A.4: HOUSING UNITS BUILT BY CENSUS TRACT, 1999-2015											
	Housing Units	CT 51 (Rural)		CT 52 (Route 1)		_	Γ53 town)	CT 54 (Coastal)			
		# of units	% of total	# of units	% of total	# of units	% of total	# of units	% of total		
Units Built, 1999-2009	995	212	21.3%	214	21.5%	310	31.2%	259	26.0%		
Units Built 2010-2015	335	133	39.7%	81	24.2%	25	7.5%	96	28.6%		

Source: City of Saco

A boom in economic development in Southern Maine from the mid-1990s through the mid-2000s resulted in increases in Saco's residential development. In the decade between 1996 and 2006, the City saw on average 125 new building permits a year, peaking in 2005 at 163 permits issued. The number of permits dropped to 74 in 2007, rebounded briefly to 124 in 2008 and fell off sharply for several years during the recession (Figure A.5). As the recession eased, permits edged upward a little over the next several years but did not reach the numbers seen prior to the 2008 spike until 2016. It is important to note that 150 of the units that were permitted in 2016 were the apartments created as a part of the Mill Building #4 redevelopment project on Saco Island, making this project alone responsible for a significant portion of the rapid rate of growth from the previous year.

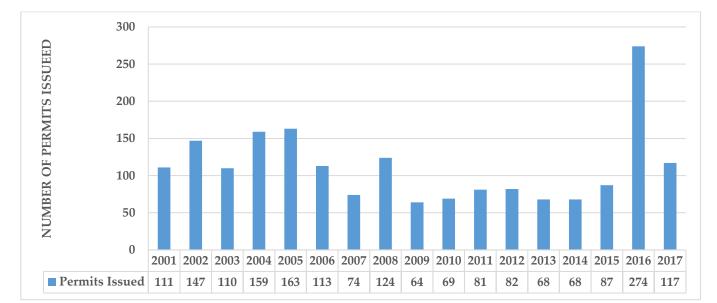


Figure A.5: NUMBER OF BUILDING PERMITS ISSUED IN SACO 2001-2017

3. Population Projections

The State of Maine Office of Policy and Management (OPM) projects that Saco's population will increase to 19,957 residents by 2024, 20,292 residents by 2029, and 20,497 residents by 2034. This would be a 7.8% increase in overall population over a 20-year period when compared to Saco's 2014 population. The OPM projects that only one in five Maine communities will experience any population growth over the time period in question.

These projections are significantly below the goal of reaching a population of 25,000 by 2025, which would require a 31.6% increase in residents in comparison to the 2014 population. However, it is important to note that the OPM calculates population projections by estimating a constant rate of growth for each municipality's share of its county's population between 2010 and 2014. This time period was a slower period of growth for the City and does not take into consideration the spike in building permits and development activity that Saco has experienced since 2014. Without looking at the more recent growth trends in the City that show the potential to attract even more residents to Saco, the estimates provided by the OPM are likely to be relatively conservative. As a comparison, data services provider ESRI estimates that Saco's population is expected to grow by about 6% a year during 2016-2021, for a total of 19,722 people in 2021. If this more rapid projection for the rate of growth in Saco is correct and continues after 2021, Saco would come much closer to reaching its population goals, with 24,897 residents by 2025.

B. SEASONAL POPULATION

Saco has a small seasonal population. According to the U.S. Census, in 2000 there were 366 housing units categorized as seasonal, recreational or for occasional use (based on April 1st occupancy). This is up only a fraction from a decade before (351 seasonal homes in 1990). The 2010 Census shows the number of seasonal housing units increased to 431 which is a large increase compared to the decade before. The majority (approximately two-thirds) of these units are located in the coastal area between Camp Ellis and Ferry Beach (Census Tract 54). It is likely that many of the 431 housing units are either occupied by retired people (who travel to warmer climates during the winter months and return to Maine during the more temperate seasons) or are used as summer beach homes. Assuming that the typical profile of this population is a retired couple, the average household size would be two or fewer, resulting in a seasonal population of about 862 people.

However, these numbers may not fully capture the actual seasonal population in Saco, as many homes in Saco are rented out on a short-term basis. In 1999, the City Council passed the Seasonal Property Rental ordinance, which requires all homeowners that rent out their houses to secure a seasonal rental license from the Code Enforcement Officer. Records of these licenses show that the City has 178 registered seasonal rental properties as of 2017. These kinds of rental properties often attract larger families that are outside the typical profile of the rest of Saco's seasonal population, and some of the licensed rentals are multi-family homes that can house several of these families at a time. Assuming that these 178 homes are rented out on a weekly basis from Memorial Day to Labor Day with an average of three people per home each week, this adds a rotating group of nearly 7,500 additional people who conduct their lives in Saco for some portion of the summer. Although some may classify these families as "visitors" due to the short portion of time they reside in the City, many of these families return to Saco year after year, and it is important to acknowledge the impact of this larger transient seasonal population.

C. HOUSING GROWTH

The rate of household growth in Saco continues to outpace population growth due to the fact that household size has decreased over the same time frame from 2.79 in 1980 to 2.37 in 2014 (see tables A.5 and A.6 on the following page for more detail).

Table A.5: Changes in the Number of Households & Household Size, 2000 - 2014									
	Average Household Size Household % Increase			Population % Increase					
	2000	2010	2014	2000 - 2010	2010 - 2014	2000 - 2010	2010 - 2014		
Saco	2.44	2.38	2.37	12.10%	2.20%	9.90%	1.50%		
Saco, Downtown Focus Area	2.16	2.08	_	5.25%	7.19	0.70%	9.90%		
Biddeford	2.32	2.30	2.31	-0.44%	1.37%	1.60%	0.10%		
Portland-South Portland	2.42	2.35	2.37	8.52%	0.31%	5.40%	0.80%		
Metropolitan Area LMA									
York County	2.47	2.40	2.40	8.64%	0.72%	5.60%	0.90%		

Source: U.S. Census Bureau, 2014 & ESRI Community Analyst, 2014

Table A.6:	Changes in	the Number of H	Iouseholds, 2	2000 - 2014	
	# of Households 2000	Average Annual % Change 2000 - 2010	# of Households 2010	Average Annual % Change 2010 - 2014	# of Households 2014
Saco	6,801	1.21%	7,623	0.22%	7,794
Saco, Downtown Focus Area	2,456	0.53%	2,585	0.07%	2,771
Biddeford	8,636	-0.04%	8,598	0.16%	8,716
Portland-South Portland Metropolitan Area LMA	196,669	0.85%	213,436	0.54%	214,107
York County	74,563	0.86%	81,009	0.56%	81,593

Source: U.S. Census Bureau, 2014 & ESRI Community Analyst, 2014

D. COMPONENTS OF POPULATION CHANGE

Saco's population changes are the result of births, deaths, and migration into and out of the community. Since 1970, Saco has seen net in-migration reflecting the community's desirability as a place to live, the availability of housing, the revitalization of the City's economic base, and its accessibility to Portland, Boston, ocean and mountains.

Between 1980 and 1990, the decade in which Saco experienced its highest rate of growth since the 1940's, the City's population grew by 2,260. Natural increase (births minus deaths) accounted for 33.5% of the increase and net migration for 66.5%. From 1990 to 2000, the pace of growth slowed. Saco's population grew by 1,641, and the source of growth shifted slightly. Net migration and natural growth reached almost a balance: net migration accounted for 45.8% of the growth, while

natural growth was 54.2%.

From 2000-2007, net migration boomed, making up 94% of Saco's population increase. The City's population grew by 1,660 in the ten years between 2000 and 2010, a 9% increase since 2000. This is due in part to the economic upturn experienced in the middle part of the decade, and an increase in new housing development throughout Southern Maine (see Table A.7).

Table A.7:1970 -2007 SACO COMPONENTS OF POPULATION CHANGE									
		% of population change							
1970 Population	11,678								
Births	1,710								
Deaths	-1,220								
Natural Increase	490	39.4%							
Net Migration 70 -79	753	60.6%							
1980 Population	12,921								
Births	1,996								
Deaths	-1,240								
Natural Increase	756	33.5%							
Net Migration 80 -89	1,504	66.5%							
1990 Population	15,181								
Births	2,185								
Deaths	-1,296								
Natural Increase	889	54.2%							
Net Migration 90 -99	752	45.8%							
2000 Population	16,822								
Births 2000 - 07	1,526								
Deaths 2000 - 07	-1,451								
Natural Increase	75	5.3%							
Net Migration 00 -07	1,337	94.7%							
2007 Population	18,234								

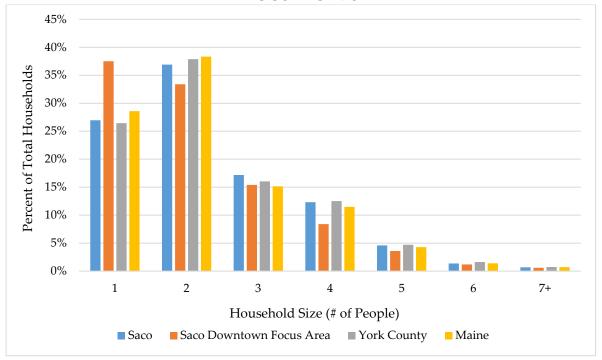
Sources: Maine Department of Health and Human Services, U.S. Census, Planning Decisions, Inc.

E. HOUSEHOLD COMPOSITION

The composition of Saco households is changing. Family size continues to decline, and more people are living alone. The 1990 Census found that 58% of households in Saco consisted of only one or two people; the percentage rose to 61% in 2000. This was also the pattern for York County and the State of Maine as a whole.

The 2010 Census shows this pattern continuing with nearly 64% of Saco households consisting of one or two people, and similar numbers for York County and the State of Maine (see Figure A.6 below). Looking at the DFA, the number of one or two-person households increases even more, to nearly 71%. This may be, in part, a reflection of the interest that both young adults and older adults have in living in more pedestrian-friendly neighborhoods that are closer to downtown businesses and services.

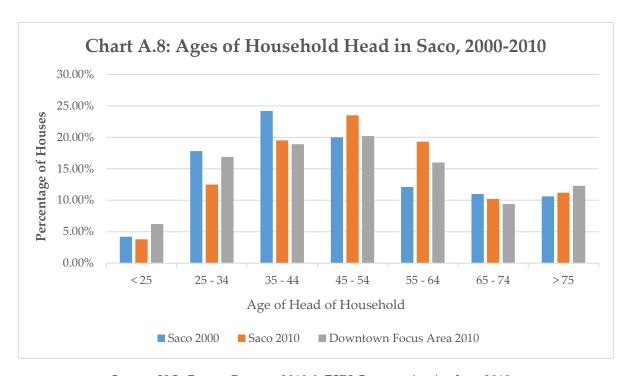
Figure A.6: 2010 HOUSEHOLD SIZE AS REPRESENTED BY PERCENTAGE OF TOTAL HOUSEHOLDS



Source: U.S. Census Bureau, 2010 & ESRI Community Analyst, 2010

Families remain the most common household unit in Saco. In 2000, 53.3% of Saco households were married couples. In 2014, the Census estimates that 48% of Saco households were married couples. Children under the age of 18 were present in 33.1% of Saco households in 2000 but that number has dropped to 25.5% in 2014 according to Census Bureau estimates. Non-family households accounted for 30.3% of households in 2000 but dipped to 26.5% in 2014. Single-parent households comprised 7% of households in 2000 and rose to 9.7% in 2014.

On average, Saco's households are becoming older. In 2007, just 37% of Saco's heads of household were younger than 45 years of age and the 2010 Census shows a small drop again, to just 35.8%. The shift is attributable to the aging of the Baby Boom Generation. The change is most evident among households age 55 to 64 The DFA's households tend to be younger, with 42% under 45 years of age. (see Chart A.8).



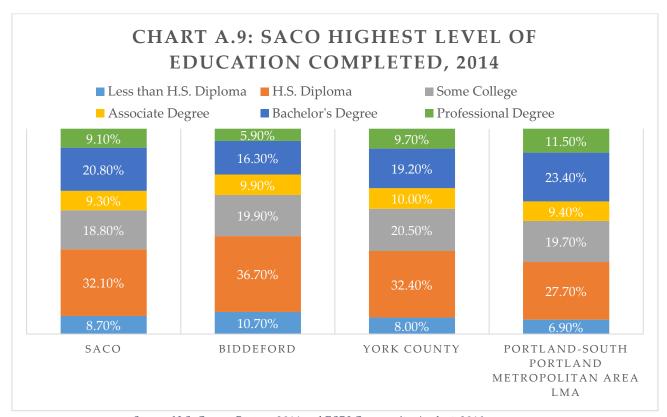
Source: U.S. Census Bureau, 2010 & ESRI Community Analyst, 2010

F. EDUCATIONAL ATTAINMENT

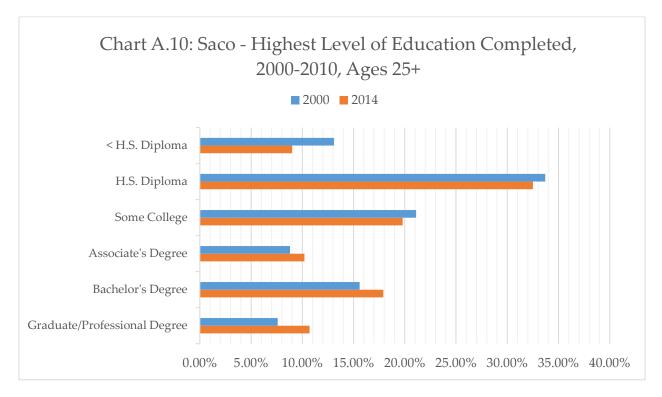
The level of education among Saco adults in 2000 was higher than in the City of Biddeford and in York County, but lower than in the Portland Metropolitan Statistical Area (see Table A.9). Data from 2014 finds that Saco's level of education for adults had dropped slightly below York County but was still above that of the City of Biddeford (see Table A.9.1). Data from 2000 shows that a substantial

percentage of people in Saco, Biddeford, and York County (13%-22%) did not complete high school. Data from 2014, shows that the number of people who did not complete high school has dropped, now ranging between 8%-10.7%. The percentage of people obtaining some level of education beyond high school is slightly higher in Saco than in the City of Biddeford and nearly the same as York County for both 2000 and 2014.

In 2000, 32.1% of Saco adults had associate degrees or higher, compared to 24.2% in Biddeford and 31.1% in York County. In 2014, that percentage increased to 39.2% of Saco adults with associate degrees or higher, compared to 32.1% in Biddeford and 37.9% for York County. The Portland Metropolitan Statistical Area (used for 2000) and the Portland-South Portland Labor Market Area (used for 2014) had significantly higher levels of education: 42.1% of adults have associate degrees or higher and 90% of adults graduated from high school in 2000 and in 2014, showing 44.3% of adults obtaining associate degrees or higher and 93% having completed high school. Using 2016 data, the DFA shows a higher number of people who have not completed high school and lower numbers of people having attained at least an associate's degree when compared to the City of Saco.



Source: U.S. Census Bureau, 2014 and ESRI Community Analyst, 2016



Source: U.S. Census Bureau, 2010

The level of education of Saco adults continues to increase (see Chart A.10). Census Bureau data shows that in 1980, 67% of Saco adults had completed high school. In 1990, this had risen to 80.6% and by 2000, 87%. Between 1990 and 2000, the percentage of adults with some college education increased from 46% to almost 53%. This trend continued in 2010, with over 58% of Saco's adults completing some college. A higher level of education attainment can influence citizen expectations for municipal services, especially education.

G. AGE DISTRIBUTION

The composition of Saco's population by age is changing. Saco's elderly population is growing, especially those in the 65+ category (see Table A.11). In 1990, there were 2,011 people 65 years old or older in Saco. By 2000, that population had 2,342 people, a 16.5% increase and in 2010, 2,587 people were 65 years old or older, which is a 9% increase. During those same time periods, Saco's population as a whole increased by 10.8% from 1990-2000 and by a bit over 9% from 2000-2010 (see Table A.11.1). Population estimates for 2016 show that 16.4% of Saco residents are 65 years of age or older. The DFA seems to have a smaller percentage of residents 65 years or older than the City, at about 13.8% of the population.

By contrast, 2010 data shows that the DFA seems to have a higher percentage of residents aged 15-44 years old than Saco as whole, with nearly 43% in this age range living there as compared to nearly 38% in Saco itself. Population estimates for 2016 show a slight dip to 42.5% for the DFA and a dip for Saco as a whole to 36.6% for 15-44-year-olds.

At the time of the 2011 Comprehensive Plan update, members of the Baby Boom Generation were in their mid-40's to early 60's, and many were beginning to reach retirement age. This group comprised 22.3% of Saco's population in 2000, 29.5% in 2010 and rose to an estimated 30.8% in 2016. The DFA shows about 26.6% of the population living there in 2010 were of the Baby Boom generation and estimates show that percentage remains much the same in 2016. As the Baby Boom generation ages, it will increase pressure on community health care and emergency response services, and influence land use and housing patterns. Baby boomers are nearing the end of their child rearing years, and as their children leave home, some may prefer to move to a smaller house, perhaps closer to town, with the associated amenities and services.

Table	Table A.11: SACO AGE OF POPULATION										
	19	90	2000								
Total Population	15,	181	16,822								
	#	%	#	%							
Under 5 years	1,050	6.9%	1,059	6.3%							
5 to 9 years	1,014	6.7%	1,184	7.0%							
10 to 14 years	995	6.6%	1,247	7.4%							
15 to 19 years	980	6.5%	990	5.9%							
20 to 24 years	1,098	7.2%	857	5.1%							
25 to 29 years	1,407	9.3%	2,413	14.3%							
30 to 44 years	3,869	25.5%	2,991	17.8%							
45 to 54 years	1,428	9.4%	2,352	14.0%							
55 to 59 years	680	4.5%	804	4.8%							
60 to 64 years	649	4.3%	583	3.5%							
65 to 74 years	1,151	7.6%	1,198	7.1%							
75 to 84 years	679	4.5%	830	4.9%							
85 years and over	181	1.2%	314	1.9%							

Source: U.S. Census, State of Maine

Table A.11.1: SACO AGE OF POPULATION, 2010 - 2016					
	Sa	co	Saco Downtown Focus Area		
	2010	2016 Est.	2010	2016 Est.	
Total Population	18,482	19,119	5,429	5,426	
< 5 Years	5.9	4.7%	5.6%	5.4%	
5 - 9 Years	5.8	5.3%	5.5%	5.2%	
10 - 14 Years	6.7	6.0%	5.7%	5.3%	
15 - 24 Years	12.0%	12.0%	13.2%	13.3%	
25 - 34 Years	11.0%	11.6%	15.1%	15.5%	
35 - 44 Years	14.7%	13.0%	14.5%	13.7%	
45 - 54 Years	17.1%	15.7%	15.1%	14.0%	
55 - 64 Years	12.4%	15.1%	11.5%	12.7%	
65 - 74 Years	6.8%	8.8%	6.2%	8.1%	
75 - 84 Years	5.1%	4.9%	4.6%	3.9%	
85+ Years	2.4%	2.7%	3.0%	3.0%	
18 + Years	78.1%	79.8%	79.7%	80.8%	

ESRI Community Analyst, 2016

SACO'S AGING POPULATION Median Age 65+ Residents 2016 (Est.) 2000 41.8 2010 2016 est. 2,011 (13.3% of pop.) 3,135 (16.4% of pop.)

Since 1990, the median age of Saco residents has risen by nearly **ten years** and the percentage of the population aged 65 or over has increased by **55.9%**. Saco's aging population will bring about unique challenges and opportunities which will need to be considered in planning decisions in the coming years. *Source: U.S. Census Data*

Saco's school age population (ages 5-19) also increased during the 1990's. In 2000, there were 3,421 school age residents, a 16.5% increase over the 1990 total of 2,989. According to 2014 Census data, the number of school-age children (ages 5-17) in Saco was 2,831 children, which is down from the numbers shown in the 2010 Census, 3,225 children, in this age group in Saco.

Historical enrollment information for schools in Saco shows that K-8 school enrollment has reached a peak and has begun to decline. In school year 1997-98 there were 1,974 K- 8 students enrolled in Saco schools. Though this number increased through the first part of the decade, it has begun to decline. By the 2009-2010 school year, there were just 1,965 K-8 students in Saco's schools. Enrollment projections by Planning Decisions done in 2011 indicate a continued decline in enrollment over the coming decade, with a total loss of 115 students between school year 2007-08 and 2017-18. This is similar to forecasts for communities throughout Maine, as household and family sizes continue to decline and the population ages.

H. OCCUPATIONAL CHARACTERISTICS

In 2000, Saco had a slightly higher percentage of white collar professional, managerial workers than York County as a whole, but in 2014, the percentage was the same as the County's. Saco ranked behind the Portland Metropolitan Statistical Area/Portland – South Portland Labor Market Area in its percentage of people employed in white collar occupations in both 2000 and 2014 (see Table A.12).

A community's education level is reflected in the employment of its population. Saco has a high percentage of skilled, well-paid workers. The high percentage of Saco people employed in service and sales likely reflects the trend toward a more service oriented workforce overall, as well as an increase in sales related jobs in the area (see the Local Economy Chapter of this inventory for more details).

Table A.12: SACO OCCUPATIONAL PROFILE OF EMPLOYED PERSONS 16 +, 2000								
		co vorkers	' ' ' '	ord LMA workers	Portland 130,313 v			County workers
	# of workers	% of total	# of workers	% of total	# of workers	% of total	# of workers	% of total
Managerial	2,830	31.4	3873	12.9	49,864	38.26	29,435	30.98
Service	1,364	15.1	9211	30.6	18,158	13.93	13,664	14.38
Sales	2,692	29.8	8809	29.3	37,503	28.78	24,906	26.21
Farming	77	0.9	236	0.8	620	0.48	639	0.67
Construction	842	9.3	1115	3.7	9,277	7.12	10,486	11.04
Production	1,221	13.5	6812	22.7	14,891	11.43	15,886	16.72

Source: U.S. Census; Maine Department of Labor

Table A.12.1: OCCUPATIONAL PROFILE OF EMPLOYED PERSONS, 16+, 2014						
	Saco: 10,010 workers		York County: 101,926 workers		Portland-South Portland MSA: 270,681 workers	
	# of Workers	% of Total	# of Workers	% of Total	# of Workers	% of Total
Managerial / Business	3,489	34.2%	34,847	34.2%	107,454	39.7%
Service	2,210	21.7%	18,683	18.3%	47,320	17.5%
Sales	2,597	25.5%	25,036	24.6%	65,243	24.1%
Natural Resources / Construction / Maintenance	855	8.4%	10,356	10.2%	23,600	8.7%
Production / Transportation	1,040	10.2%	13,004	12.8%	27,064	10.0%

U.S. Census Bureau, 2010

More detailed 2016 data obtained for the DFA tends to generally reflect what was seen for the entire City. Service workers are the majority, involving over half of all workers, followed by those employed in the retail trade (over 16%) and manufacturing (over 10%).

Table A.12.2: Occupational Profile of Employed Persons, 16+ Years	3
Old, Saco Downtown Focus Area, 2016 Est.	

Industry	# of Workers	% of Total
Agriculture / Mining	9	0.3%
Construction	158	5.3%
Manufacturing	313	10.5%
Wholesale Trade	15	0.5%
Retail Trade	480	16.1%
Transportation / Utilities	89	3.0%
Information	45	1.5%
Finance / Insurance / Real Estate	197	6.6%
Service	1,511	50.7%
Public Administration	158	5.3%
Total Workers, 16+	2,980	100%

ESRI Community Analyst, 2016

I. HOUSEHOLD INCOME

From an income perspective, Saco was a solidly middle-class community in 1999. Household income can be represented several ways. Median household income divides households into two equal parts, the first half earning more than the median household income and the second half earning less. Average household income is calculated as total aggregate income divided by the number of households. Average household income is typically higher than median household income because households with very high incomes pull the average up. Median household income is therefore often a better indication of the prosperity of a community's residents.

Among Saco, Biddeford, the Portland Metropolitan Statistical Area, and York County (Table A.13), Saco had the highest median household income in 1999. However, this has changed over time and in 2014, Saco's median household income was less than the Portland - South Portland Labor Market Area and the County. Saco's relatively low average income indicates that Saco household incomes cluster around the median.

In 1999 and in 2014, Saco's percentage of households with incomes less than \$10,000 a year was slightly higher than that of York County but nearly identical to the percentage in the Portland MSA and the Portland – South Portland Labor Market Area. The percentage of Saco households earning more than \$75,000 is smaller than both the Portland-South Portland Labor Market Area and York County in 2014.

Table A.13: 1999 SACO HOUSEHOLD INCOME					
	Saco	Biddeford	York County	Portland MSA	
Median Household Income	\$45,105	\$34,976	\$43,630	\$44,707	
Average Household Income	\$50,092	\$43,153	\$52,821	\$58,253	
# of households earning under \$10,00	532	1,150	5,817	7,403	
# of households earning \$10,000-19,999	931	1,284	8,657	11,420	
# of households earning \$20,000-24,999	443	663	5,029	6,331	
# of households earning \$25,000-29,000	440	681	5,039	5,973	
# of households earning \$30,000-34,999	329	532	4,608	6,504	
# of households earning \$35,000-49,999	1,105	1,442	13,508	17,680	
# of households earning \$50,000-74,999	1,782	1,633	17,398	21,929	
# of households earning \$75,000 or more	1,211	1,231	14,471	22,486	

Source: U.S. Census

Section 1

So. Portland LMA)

Table A.13.1: Household Income, 2014						
	Saco	Biddeford	York County	Portland - South Portland LMA		
Median Household Income	\$52,611	\$45,729	\$56,701	\$58,000		
Average Household Income	\$67,980	\$57,583	\$71,453	\$76,149		
under \$10,000	5.8%	5.4%	5.0%	5.6%		
\$10,000 - \$14,999	3.5%	9.1%	5.0%	5.2%		
\$15 ,000 - \$24 , 999	10.5%	13.8%	10.0%	9.3%		
\$25,000 - \$34,999	10.3%	14.6%	1.7%	9.9%		
\$35,000 - \$49,999	16.7%	12.6%	13.3%	13.2%		
\$50,000 - \$74,999	18.1%	17.3%	19.6%	18.9%		
\$75,000 - \$99,999	15.3%	12.5%	15.2%	14.2%		
\$100,000 - \$149,999	12.4%	9.7%	13.3%	14.2%		
\$150,000 - \$199,999	4.1%	2.8%	4.4%	5.0%		
\$200,000 +	3.3%	2.2%	3.5%	4.6%		

Source: U.S. Census Bureau, 2014

D -	T	0044
KEGIONAL	MEDIAN INCOMES	. 2014

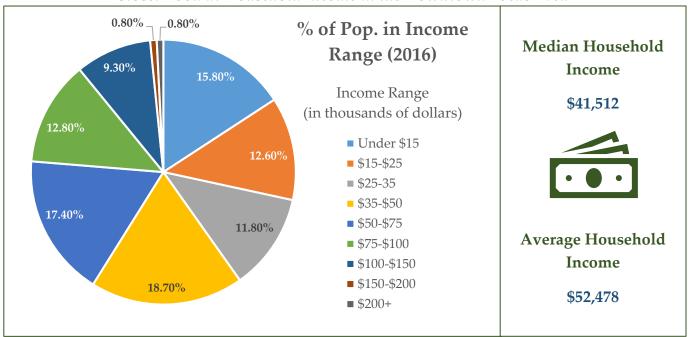
Biddeford	\$\$\$\$\$\$\$	\$45,729 (78.8% of Portland- So. Portland LMA)
Saco	199999999	\$52,611 (92.1% of Portland-

York County	\$\$\$\$\$\$\$\$\$\$	\$56,701 (97.8% of Portland-So. Portland LMA)
		001101101211111

Portland –	\$\$\$\$\$\$\$\$\$	
South Portland		\$58,000
LMA		

As can be seen from the graphic above, Saco's median income is slightly lower than the median income in greater York County and sits at about 92.1% of the Portland – South Portland Labor Market Area's median income. This places Saco 32nd in terms of median income in Maine.

Estimated income in the DFA tends to be lower than in the City of Saco as a whole. Nearly 16% of households earn less than \$15,000 as compared to 9.3% of the entire City. About 33% of households in the DFA earn \$75,000 or more compared to the City's 35.1%. This may stem from the DFA tending to have more people in the 25-44-year-old range than the City so some DFA residents have not yet reached peak earning years.



A Closer Look at Household Income in the Downtown Focus Area

Source: ESRI Community Analyst, 2016

Income estimates for Saco households show gains in prosperity between the original data set from 1999 and the most recent data available through 2014. Just over half of all households (53.2%) earn \$50,000 per year or more, and fewer than 20% of all households earn less than \$25,000 per year. The median household income stood at \$52,611 in 2014 (see Table A.14 and A.14.1). These numbers may reflect the City's higher education rates and white-collar employment levels, as well as stronger economic ties to the Greater Portland area and Saco's increased role as a regional "bedroom" community.

Section 1

Table A.14.1.: SACO INCOME CHANGE, 2000 - 2014					
	2000	2014			
Median Household Income	\$45,105	\$52,611			
Average Household Income	\$50,092	\$67,980			
Under \$10,000	7.9%	5.8%			
\$10,000 - \$14,999	7.4%	3.5%			
\$15,000 - \$24,999	12.9%	10.5%			
\$25,000 - \$34,999	11.4%	10.3%			
\$35,000 - \$49,999	16.3%	16.7%			
\$50,000 - \$74,999	26.3%	18.1%			
\$75,000 - \$99,999	10.1%	15.3%			
\$100,000 - \$149,999	5.8%	12.4%			
\$150,000 - \$199,999	1.2%	4.1%			
\$200,000 +	0.9%	3.3%			

Source: U.S. Census Bureau, 2014

J. ISSUES AND IMPLICATIONS

Changes in Saco's population, where residents choose to live and work, and what services they are likely to need or desire are important to the City's future. As Saco's population has increased, the City's role in the economic region has changed. Housing trends show a preference for locations that allow easy commuting, and Saco's proximity to Portland and the quality of life residents enjoy within the community has made it increasingly more attractive to individuals who work in the larger Portland employment market. The City has also retained a strong commercial economic base with more than 100 commercial and industrial businesses located in our industrial parks. These dual roles need to be kept in mind as Saco looks to the future, particularly as we look to grow our commercial and industrial tax base and shift more of the community's operating costs away from residential taxpayers.

This review of Saco's population trends suggests the following issues and implications:

- As the economy continues to grow, Saco may see a resurgence of growth at a rate closer to what was experienced prior to the 2008-2012 recession. Even taking a conservative approach based on permitting since 2008, Saco will add several hundred more housing units. Where and how that development occurs as well as what form it takes are key issues for the community.
- Saco has grown and become more attractive for both rural, in-town, and seashore living, leading to rapid growth in housing prices (with a pause during the recession) for much of the past decade. Developing a housing plan or strategy that addresses the needs of all socioeconomic sectors is an important challenge for the City to undertake.
- As Saco's attractiveness continues to grow for both quality of life and pricing reasons, the pressure for further development west of the turnpike will continue to increase. Maintaining the rural areas of the City will become more difficult. Decisions regarding the provision of City services and infrastructure for these new neighborhoods will need to be made and clearly articulated so the impacts on community services, including schools, public works, and other infrastructure, are clearly understood. It is unclear at this time if there is a consensus of view on the support for further infrastructure development or not.

- As more people are commuting to the Portland area than are working in Saco, Greater Portland has begun to replace Saco as the commuting population's center for commerce and entertainment. Developing programming to attract the residents of these households to Downtown Saco will become increasingly important to the vitality of the City.
- It has been stated that school enrollment projections predict a slow annual decline. The community is currently engaged in a debate over the replacement of its existing elementary schools and whether this effort will be undertaken without the support of state funding or if this decision will be deferred until such state aid is available. Further, while the enrollment project statement above may be accurate, it does not take into consideration the tremendous attraction of Thornton Academy, and as a result, Saco's school system as a feeder to that highly regarded institution.
- Smaller household sizes coupled with a growing population have created more demand for housing and for different types of housing. The number of younger households with children is decreasing. Maintaining a balanced population and providing the housing options that are desirable to every population group will be important to fostering a diverse population and a vital community.
- Saco continues to experience increases in the median age of its population. The addition of more retirees to Saco's population mix is both an opportunity and a challenge. The City must determine how it will address this by undertaking strategies (including support for additional elderly housing and eldercare facilities) to service this population and attracting other businesses and investments that will do so. The City must also recognize that, save for the cost of incremental ambulance utilization, this is an opportunity for augmentation of the tax base with very little community cost.

Section 2 A: Local Economy Goals, Policies, and Strategies

Local Economy Goals and Policies

State Goal: To promote an economic climate that increases job opportunities and overall economic well-being. (Growth Management Act, 1988)

Local Goals: To increase the number and quality of jobs available in Saco.

To diversify the mix of firms/jobs, and to avoid dependence on single sectors.

To increase the commercial tax base of the City.

To strengthen Saco's role as a service center for the region, focusing on the industrial, commercial, distribution, logistics, natural resource – value added, office, health and medical, tourism and hospitality, education and retail sectors.

To maintain and enhance the vitality of Downtown Saco and expand its role as a commercial, office, retail, educational and cultural, residential, and service center.

To ensure that new commercial and industrial development occurs in a way that is visually and environmentally sound and that protects established residential neighborhoods.

To enhance Saco's role in the Southern Maine tourist economy and expand the range of recreational, entertainment, and cultural activities available in Saco to meet the needs of travelers and visitors.

To work cooperatively with Biddeford, Old Orchard Beach, Scarborough, Dayton, Buxton, and other communities in the region, as well as with quasi-governmental and nongovernmental entities to improve the economy of the region.

To work cooperatively with our various utility partners to ensure that Saco businesses of all sizes and types have access to all the infrastructure and utility resources necessary to operate competitively at the speed of 21st Century business.

Pursuant to these goals for the economy of Saco, the City's policies are:

- 1. The City should assure that there is an adequate supply of land in appropriate locations that are zoned to accommodate future growth in manufacturing, distribution, research, and similar high quality economic activities. Through its land use regulations, the City should discourage the use of these areas for commercial activities and should restrict the construction of housing in these areas, except in areas designated for mixed-use development, to reduce the potential for future conflicts over industrial/economic development except in those areas that are specifically designated for mixed-use development in the Future Land Use Plan. The appropriate locations for these uses are identified in the land use policies.
- 2. Since there is a limited supply of well-located sites in Southern Maine for economic development that are or can be served with public water and sewerage, the City of Saco should continue its business park program to provide a continuous supply of suitable development sites that are serviced by public water and sewerage.
- 3. Attracting new businesses to Saco and accommodating the growth of existing businesses will require that the City continue to fund a robust economic development program. The City's efforts should continue to include the judicious use of the State's Development District Legislation Statutes including tax increment financing (TIF) and other financial incentives, including but not limited to economic development grants to fund locally imposed impact and permit fees for significant development projects when these are needed to make a project viable, attract a project to Saco, and/or will result in the creation or retention of good quality jobs.
- 4. Maintaining Downtown Saco as a prosperous core of the community will require that the City play an active role in revitalizing this area. To accomplish this, the City should work in conjunction with Downtown business and property owners and Saco Main Street, Inc. Among the activities which should be included in this effort are:
 - a. The Chamber of Commerce is now working with the state's regional tourism program and local tourism-related businesses, including hotels and theme parks, to promote tourism in the region. Collaboration with the Chamber, area hospitality, restaurant, tourism-based and retail businesses, and the Northern New England Passenger Rail Authority (NNEPRA)/Amtrak Downeaster to develop events and weekend packages are among the possible areas for improvement.

The City and Saco Main Street, Inc. should support these collaborative efforts. Heritage tourism and a "quaint downtown image" should guide these efforts.

- b. Support for additional pedestrian ways, and bridges over the Saco River to Biddeford, from mill district to mill district, and throughout Saco's downtown should be considered by the two cities and the mill district stakeholders, and constructed as support and funding allow as a way to augment and expand the Saco and Biddeford urban RiverWalk Trail system and contribute to the vitality of the downtown community.
- c. Saco Island continues to play a key role in the history of the City. Redevelopment and reuse of this area as a multi-use extension of the urban core is a very important objective of the City. As such, the City should support private efforts by the owners of Saco Island toward the revitalization of this area.
- d. The City should recognize that zoning can hamper or aid efforts to maintain or enhance a vital and active downtown. Consideration should be given to the uses that are most desirable for the downtown, the existing pattern of 19th century buildings, setbacks and buildings heights, parking, design review, and a pedestrian friendly environment.
- 5. The Route One Corridor from Thornton Academy north to the I-195 Spur functions as a community commercial center. The City should work to improve the visual appearance of this area. In addition, efforts should be made to upgrade traffic flow and to improve access to and from adjacent properties and neighborhoods. This effort should be guided by the access management principles endorsed by the City in the Main Street Access Study, February 2005 and subsequent reports.
- 6. The Route One Corridor north of the I-195 Spur to the Cascades area currently plays a variety of economic roles and is the location of a number of car dealerships and commercial recreational facilities. This area offers significant potential for the future commercial growth of the City. As such, the City's policy should be to reserve much of the land in this corridor as a commercial growth center to accommodate a wide range of retail, service, office, and light manufacturing uses. The availability of public water and recent and proposed extensions of sewerage infrastructure makes this area the most desirable location in Saco for commercial uses that require a large amount of area and are therefore inappropriate in Downtown Saco or other intown locations.

- 7. The northern end of the Route One Corridor from the Cascades area to the City line offers the potential to accommodate commercial, office, and light industrial development in a high-quality mixed-use environment. The City's development standards should continue to reserve this area for this type of development/redevelopment.
- 8. While the goal of the City is to accommodate good quality commercial development in appropriate locations, the City is also interested in discouraging commercial use in inappropriate locations. Therefore, it is a policy of the City to avoid the location of commercial activities within residential neighborhoods except for strictly regulated home occupations, day care, or others with minimum impact. In addition, the City discourages the establishment of commercial enterprises along major streets except in those areas specifically designated for commercial use in the land use policies.
- 9. Poorly designed and/or maintained nonresidential development can have an undesirable impact on the community. To assure that new or expanded commercial usage has a positive benefit for the community, the City now requires through its design review standards that proposals for nonresidential construction meet high standards of site design. In areas where there is existing development, the City should continue to work with property owners to reduce the amount of signage and to improve the visual appearance of the development.
- 10. Within the built-up area of the City, residential neighborhoods often abut commercial areas. The City should be thoughtful in allowing the expansion of commercial activity into established residentially zoned neighborhoods, and should limit the use of residential streets for access to commercial activities. Appropriate buffering along the transition from commercial to residential use should be required. Notwithstanding the foregoing the City should actively promote greater in-fill and mixed-use development in the City's downtown urban core in furtherance of the City's ongoing efforts to enhance the pedestrian friendliness and walkability of our Downtown.
- 11. The health of the Saco economy is closely tied to the economic health of the entire Biddeford-Saco region. Therefore, the City should continue to work cooperatively with our neighboring communities and regional economic development organizations such as the BSAEDC, SMPDC, and the Chamber of Commerce to foster the economic prosperity of the region.

LOCAL ECONOMY - Implementation Strategies

Policy Reference	Activity	Primary Responsibility
1	The City should consider acquiring and land banking suitable future development parcels as these sites become available.	Council, Economic Development Director
4	The City should continue a comprehensive and coordinated program to revitalize Downtown Saco as a viable specialty retail and service center as set out in the City of Saco's Downtown Plan	Council, Saco Main Street
4	The City should continue the public/private partnership with Saco Main Street, Inc. to manage and improve the downtown.	Council, Saco Main Street
4	Saco Main Street, Inc., should continue to operate under the National Main Street model as set forth by the Maine Downtown Center and the National Main Street Center with appropriate flexibility to meet Saco's needs.	Saco Main Street
4	The City should continue to improve its signage for downtown Saco to include orientation and way-finding, welcome, information, and parking lot signs. Some of this is under way and more remains to be done.	Administrator, Public Works, Parks and Rec
4	The City's involvement on Saco Island should be focused on providing the infrastructure needed to support private re-use and a mix of housing and commercial uses.	Council, Economic Development Director, Public Works
4	The City should consider creating and improving access to the Saco River at various appropriate locations.	Council, Parks and Rec
6	The City should reserve much of the land along Rte. One from I-195 to Cascade Road as a commercial growth center to accommodate a wide range of retail, service, office, and light manufacturing uses.	Council, Planning Board, Planner

7	The City should continue to reserve the Rte. One corridor north of Cascade Road for commercial, office, and light industrial development in a high quality, mixed-use environment.	Planning Board, Planner
8	Avoid locating commercial activities within residential neighborhoods except for strictly regulated home occupations, day care, or other uses with minimal impact.	Council, Planner, Economic Development Director, Planning Board
10	Promote in-fill and mixed-use development in the downtown urban core, with the goal of enhancing a pedestrian-friendly, walkable downtown.	Council, Planner, Economic Development Director, Planning Board

SECTION 2B: THE LOCAL ECONOMY

In the 1630's, Europeans settled in what is now known as the City of Saco and established a trading outpost. Over the next century-and-a-half, the outpost grew initially to a village, then a township, and ultimately to the Town of Pepperellborough, named for Sir William Pepperell in 1765. But by the early 1800's, the townspeople had tired of the long name, and in 1805 chose to rename the community to Saco in recognition of their main economic engine: The Saco River. And on February 18th, 1867, the town was incorporated as a City.

During the 18th Century, Saco's economy was tied to lumbering, shipbuilding and farming, like much of coastal Maine. The 19th Century brought industrial development to Saco, as the Saco River supplied ample power for machinery and the ocean provided access to markets. In 1800, there were 17 sawmills operating in the area. By the 1830's, Saco was producing 21 million board feet of lumber per year. In 1840, Saco mills employed 1,000 people.

In 1842, the railroad made its way to Saco, resulting in the expansion of inland market opportunities. By 1850, there were blacksmith and machine shops, iron foundries, a nail factory, cigar factories, and cotton milling. Leather tanning, as well as the manufacturing of shoes, leather belting, harnesses, and carriages also prospered. Blessed with the energy producing power of the falls, as well as rail and ocean access to markets, Saco and Biddeford quickly became the region's manufacturing and employment center, remaining that way for close to a century.

Yet around the 1950's, Biddeford and Saco's role as a manufacturing center began to decline. First came the closing of the textile mills, then the loss of the shoe industry, and more recently, defense downsizing. The only remaining, operating remnants of the mill economy are precision machine shops.

Understanding its historical and present value, the City of Saco has undertaken the development of multi-phase industrial and business parks in an effort to rebuild its economic base. Utilizing this approach, the local economy has undergone a fundamental transition from a manufacturing-focused model to an economic model that mirrors the greater diversity of the southern Maine economy. The following sections provide a more detailed view of the various aspects of Saco's economy today.

A. THE SACO LABOR FORCE

Saco's labor force continued to grow in the first years of the 21st century, albeit at a slower pace than was experienced in the 1990's, until 2008 when "The Great Recession" caused extreme contractions in the workforce. According to the Maine Department of Labor, Saco had a civilian labor force of 10,709 people in 2008 (see Table B.1 below), a 10.9% increase from 2000. From 2008 to 2015, Saco's civilian labor force grew a very modest 2.0% to 10,923 people. The modest pace of growth over that specific period is due to the fact that the years from 2008 thru 2012/2013 were the years of "The Great Recession" when employment levels shrank over the vast majority of the country.

As part of the Portland-South Portland-Biddeford-Saco Labor Market Area (LMA), Saco accounted for just over 5% of the LMA's civilian labor force in 2008 and 2015. As a percentage of the York County labor force, excluding southern Cumberland County/Greater Portland, Saco's work force grew slightly, accounting for 10.1% of the York County labor force at the end of 2015.

In 2008, the City's unemployment rate was 4.4%. In 2015, the unemployment rate was 3.4% (398 unemployed persons). Despite the rebounds of the last few years, employment numbers have only recently returned to pre-recession levels.

Table B.1: Saco Civilian Labor Force, 2000 - 2015

	Labor Force	Employed (#)	Unemployed (%)
1990 (Annual)	8,540	8,078	5.4%
% Change '90-'00	14.2%		
2000 (Annual)	9,751	9,517	2.4%
% Change 2000 – 2008	10.9%	-	-
2008 (Annual)	10,709	10,233	4.4%
% Change 2008 - 2015	2.0%	-	-
2015 (Annual)	10,923	10,551	3.4%
Saco as % of Portland - South Portland LMA (2008)	5.3%	-	-
Saco as % of Portland - South Portland LMA			
(2015)	5.5%	-	-
Saco as % of York County ('00)	9.5%		
Saco as % of York County (2008)	9.5%	-	-
Saco as % of York County (2015)	10.1%	-	-

Source: Maine Department of Labor, 2015

Saco's unemployment rate is lower than the state's as a whole and is consistent with 'nominal' levels of unemployment. The realities the City now faces include:

- An available labor force that is not adequately trained with the full array of technical skills needed for the 21st century workplace;
- The demand for additional qualified workers is greater than the supply of trained workers, and;
- A steady and growing flow of Baby-Boomers are retiring and taking their experience from the workforce.

The above facts present the following challenges that will need to be addressed:

- Finding qualified workers with the necessary full-array of technical skills;
- Delivering adequate and appropriate training to available workers who lack the skills necessary to be competitive in today's labor force, and;
- Finding ways to allow the retiring Boomers to do so "to a retire degree"- while at the same time retaining them on a part-time basis so that their legacy experience and skills don't completely disappear.

B. EMPLOYMENT BY INDUSTRY

Over the past decade and a half, Saco residents have experienced a fundamental shift in employment. Between 2000 and 2010, employment in Saco's manufacturing sector decreased significantly (see Table B.2 on the next page), reflecting the loss of manufacturing jobs, primarily the result of automation coupled with in–country relocation & manufacturing consolidation, and to a lesser extent, off-shoring.

While the number of residents and the percentage of local workers working in manufacturing declined over the period, the losses were partially offset by strong growth in the construction sector. At the same time, employment in the services sector grew sharply from 3,708 employees to 4,859, and now accounts for 48.7% of the area workforce.

By the 2010 Census, nearly 64% of the local workforce was employed in retail, finance/insurance/real estate, services, or public administration. The diversification of employment has strengthened the local economy so that Saco is now less susceptible to the fluctuating fortunes of one or two major employers.

Table B.2: Employment of Saco Residents by Industry, 2000 - 2010

Industry	20	2000		10
	# of Workers	% of Total	# of Workers	% of Total
Total Workers, 16+	9,026	-	9,986	-
Agriculture / Forestry / Fishing & Hunting / Mining	81	0.9%	191	1.9%
Construction	630	7.0%	653	6.5%
Manufacturing	1,232	13.6%	950	9.5%
Wholesale Trade	389	4.3%	180	1.8%
Retail Trade	1,290	14.3%	1,181	11.8%
Transportation & Warehousing / Utilities	431	4.8%	329	3.3%
Information	185	2.0%	144	1.4%
Finance / Insurance / Real Estate	817	9.1%	1,043	10.4%
Professional / Scientific / Management / Admin. / Waste Management Services	682	7.6%	917	9.2%
Educational / Health / Social Services	1,958	21.7%	2,687	26.9%
Arts / Entertainment / Recreation / Accommodation & Food Services	721	8.0%	766	7.7%
Other Services (Not Public Admin.)	347	3.8%	489	4.9%
Public Administration	263	2.9%	456	4.6%

Source: U.S. Census Bureau, 2010

Employment patterns of the Downtown Focus Area closely follow that of Saco as a whole with a few exceptions (see Table B.3 below). Employment is higher in manufacturing, service, and retail trade, and lower in construction, finance, insurance, and real estate.

Table B.3: Occupational Profile of Employed Persons, 16+ Saco Downtown Focus Area 2016 Est.

	# of	% of
	Workers	Total
Agriculture / Mining	9	0.3%
Construction	158	5.3%
Manufacturing	313	10.5%
Wholesale Trade	15	0.5%
Retail Trade	480	16.1%
Transportation / Utilities	89	3.0%
Information	45	1.5%
Finance / Insurance / Real	197	6.6%
Estate	197	0.0 /0
Service	1,511	50.7%
Public Administration	158	5.3%
Total Workers, 16+	2,980	100%

Source: ESRI Community Analyst, 2016

In terms of Saco's employment base, the Downtown Focus Area (DFA) comprises 43.2% of total businesses and 34.5% of all employees in the community. Business sectors concentrated in the DFA vs. the community as a whole include: finance, insurance, and real estate (15.9% in the DFA vs. 12.0% in the City as a whole), service (46.7% vs. 41.1%), and government (6.1% vs. 3.75). Business sectors, where the percentage of businesses in the DFA is lower than that of Saco as a whole, are: construction (5.3% vs. 9.3%) and retail (16.7% vs. 18.7%).

The percentages of Saco residents employed in different sectors of the economy follows a similar pattern as the Portland–South Portland Metropolitan Statistical Area (MSA), with some deviation (see Table B.4 below).

Saco has higher proportions of manufacturing, construction, and transportation/ utility employment, which are a reflection of Saco's history as a regional manufacturing center as well as a reflection of the commitment of the last 30 years to provide land with convenient highway access and full infrastructure for industrial development.

Table B.4: Employment of Saco Residents by Industry Compared to Portland - South Portland MSA, 2014

Industry	Saco		Portland Portland	
	# of Workers	% of Total	# of Workers	% of Total
Total Workers, 16+	10,191		270,681	-
Agriculture / Forestry / Fishing & Hunting / Mining	60	0.6%	3,263	1.2%
Construction	672	6.6%	16,123	6.0%
Manufacturing	1,033	10.1%	25,846	9.5%
Wholesale Trade	131	1.3%	6,897	2.5%
Retail Trade	1,366	13.4%	35,168	13.0%
Transportation & Warehousing / Utilities	367	3.6%	9,409	3.5%
Information	197	1.9%	5,520	2.0%
Finance / Insurance / Real Estate	898	8.8%	21,643	8.0%
Professional / Scientific / Management / Admin. / Waste Management Services	974	9.6%	28,996	10.7%
Educational / Health / Social Services	2,778	27.3%	71,631	26.5%
Arts / Entertainment / Recreation / Accommodation & Food Services	833	8.2%	25,090	9.3%
Other Services (Not Public Admin.)	390	3.8%	11,347	4.2%
Public Administration	492	4.8%	9,748	3.6%

Table B.5: Business & Employment Snapshot as of 2016

	Downtown Focus Area (DFA)					City	of Saco	
Total Businesses	359				831			
Total Employees	2,789			8,077				
Total Residential Population			,513				,119	
Employee / Residential Ratio			51 : 1				12:0	
	Busi	inesses		ployees	Busi	inesses		loyees
	#	%	#	%	#	%	#	%
By SIC Codes*								
Agriculture & Mining	8	2.2%	63	2.3%	29	3.5%	126	1.6%
Construction	19	5.3%	71	2.5%	77	9.3%	389	4.8%
Manufacturing	5	1.4%	94	3.4%	25	3.0%	487	6.0%
Transportation	8	2.2%	43	1.5%	25	3.0%	262	3.2%
Communication	2	0.6%	18	0.6%	3	0.4%	32	0.4%
Utility	1	0.3%	4	0.1%	4	0.5%	78	1.0%
Wholesale Trade	2	0.6%	18	0.6%	17	2.0%	197	2.4%
Retail Trade Summary	60	16.7%	703	25.2%	155	18.7%	2,010	24.9%
Home Improvement	1	0.3%	5	0.2%	11	1.3%	89	1.1%
General Merchandise Stores	1	0.3%	35	1.3%	2	0.2%	37	0.5%
Food Stores	10	2.8%	223	8.0%	20	2.4%	398	4.9%
Auto Dealers, Gas Stations, Auto Aftermarket	5	1.4%	50	1.8%	29	3.5%	394	4.9%
Apparel & Accessory Stores	5	1.4%	12	0.4%	7	0.8%	18	0.2%
Furniture & Home Furnishings	3	0.8%	24	0.9%	7	0.8%	42	0.5%
Eating & Drinking Places	19	5.3%	232	8.3%	43	5.2%	610	7.6%
Miscellaneous Retail	16	4.5%	122	4.4%	36	4.3%	422	5.2%
Finance, Insurance, Real Estate Summary	57	15.9%	372	13.3%	100	12.0%	544	6.7%
Banks, Savings & Lending Institutions	32	8.9%	207	7.4%	58	7.0%	270	3.3%
Securities Brokers	4	1.1%	8	0.3%	6	0.7%	15	0.2%
Insurance Carriers & Agents	8	2.2%	39	1.4%	12	1.4%	73	0.9%
Real Estate, Holding, Other Investment Offices	14	3.9%	118	4.2%	24	2.9%	186	2.3%

Source: ESRI Community Analyst, 2016

^{*} SIC stands for Standard Industrial Classification and is used by the U.S. government to identify the primary business of an establishment.

Table B.5: Business & Employment Snapshot, continued

	Downtown Focus Area				City of Saco			
	Busi	nesses	Employees		Businesses		Employees	
	#	%	#	%	#	%	#	%
Services Summary	166	46.2%	1,195	42.8%	344	41.4%	3,614	44.7%
Hotels & Lodging	5	1.4%	22	0.8%	17	2.0%	122	1.5%
Automotive Services	11	3.1%	52	1.9%	29	3.5%	227	2.8%
Motion Pictures & Amusements	4	1.1%	23	0.8%	26	3.1%	320	4.0%
Health Services	22	6.1%	261	9.4%	43	5.2%	988	12.2%
Legal Services	14	3.9%	75	2.7%	16	1.9%	84	1.0%
Education Institutions & Libraries	13	3.6%	320	11.5%	20	2.4%	671	8.3%
Other Services	98	27.3%	442	15.8%	193	23.2%	1,202	14.9%
Government	22	6.1%	209	7.5%	31	3.7%	338	4.2%
Unclassified Establishments	9	2.5%	0	0.0%	21	2.5%	0	0.0%
Totals	359	100%	2,789	100%	831	100%	8,077	100%

Source: ESRI Community Analyst, 2016

C. COMMUTING PATTERNS

Changes in Saco's employment patterns have been driven by changes in the local economy and where City residents work. As of 2014, many Saco residents commute out of the Biddeford-Saco area with an average commuting time of 24 minutes. Consequently, only about 25% of Saco's workers actually work in Saco.

To view additional commuting information, please see Appendix F, Section C (Saco's Transportation Users).

D. SACO'S ECONOMIC BASE

From 1825 to the mid-twentieth century, textile and manufacturing, including machinery-making, was the foundation of the Saco-Biddeford economy. By 1958, most of the textile mills had closed, bringing an end to the industrial era that served the region for more than a century. The last downtown mill in Saco, a Nike shoe affiliate in what is now referred to as Saco Mill No. 4, closed in 1988. The last textile mill in the area to close, West Point-Pepperell in Biddeford, shut its doors in 2009.

During the late 1980's and into the 1990's, Saco suffered employment losses due to both mill closings and defense industry downsizing. Saco Defense (now General Dynamics) lost more than 1,000 jobs during this period. However, these losses were offset by growth in Saco's industrial parks. With more than 1,000 people employed in Saco's two industrial parks by 1997, seven of Saco's twelve largest employers were in the manufacturing sector.

Whereas service and retail businesses now comprise more than half of Saco's largest employers, most of Saco's businesses are small businesses. With the exception of General Dynamics, the manufacturers that remain in Saco employ fewer than 100 people in each establishment. In 2009, General Dynamics was operating at nearly full occupancy, with more than 400 employees producing armaments for Department of Defense contracts, up from just 179 employees four years earlier. In early 2017, General Dynamics had 233 full-time employees and was seeking to add additional skilled machinists and other skilled workers.

Over the last thirty years, Saco has reserved significant areas for industrial and commercial development near Route 1 and the Maine Turnpike through four business and industrial park developments, which has brought in new businesses and helped to dramatically increase assessed value of commercial and industrial properties.

Table B.6: TOP 15 MAJOR EMPLOYERS IN SACO FOR 2016

Company	Industry	# of Employees
Sweetser School	Children's Educational Services	362
General Dynamics	Manufacturing	212
Hannaford Bros.	Supermarket	221
Atlantic Heights	Nursing Facility	211
Thornton Academy/Middle School	High School/Middle School	184
City of Saco	Public Administration/Municipal Government	168
Shaw's Supermarket	Supermarket	160-180
Visiting Nurses Association	Health Care	151
Saco-Biddeford Savings Bank	Financial Institution	121
Prime Toyota	Car Dealership	94
Huttig Manufacturing	Window and Door Manufacturing	84
Aquaboggan	Amusement Park	77
Michaud Distributors	Distributor	
Casco Bay Steel	Manufacturing 6	
Yale Cordage	Manufacturing	57

Source: Research compiled by City of Saco Summer Associates 2016

Table B.7: TOP TAX PAYERS IN SACO 2017-2018

	Owner	TOTAL VALUE	PARCEL/PP COUNT
1	CENTRAL ME POWER CO (various locations)	\$47,905,459.00	25
2	GENERAL DYNAMICS ARMAMENT SYSTEMS	\$27,610,192.00	4
3	MAINE WATER BIDDEFORD & SACO	\$10,466,900.00	4
4	SACO REAL ESTATE HOLDINGS LLC	\$12,052,300	5
5	FPL ENERGY MAINE HYDRO LLC	\$21,748,200	10
6	SACO & BIDDEFORD SAVINGS	\$22,958,500.00	9
7	MAINE WATER CO.	\$11,357,000.00	8
8	SACO VALLEY LLC	\$8,352,200.00	1
9	FERRY ROAD ASSOCIATES IV LLC (Atlantic Heights/First Atlantic)	\$5,701,700.00	1
10	SACO VALLEY LLC	\$7,607,100.00	2
11	CORMIER LAND CO FUNTOWN/SPLASHTOWN	\$7,241,931.00	11

E. TOURISM/HERITAGE TOURISM

Due to its location on the Southern Maine coast, tourism is an important component of Saco's economy. Saco's beautiful beaches, the Saco River, historic downtown, and the shopping district provide visitors with many recreational and cultural opportunities. Visitor services include hotels/motels, campgrounds, water parks, a theme park, the trail system, and other outdoor activities, while several Saco businesses supply goods and services to tourists.

The City and affiliated organizations have taken an increased role in heritage tourism. In 2009, the City was able to obtain a \$47,500 from the Preserve America Program and other sources to support a major permanent regional history exhibition at the Saco Museum, with a small overview of the exhibit at the Saco Transportation Center.

Another joint City and Saco Museum program includes the colorful set of historic panels along Main Street, which will be updated in the near future. A revamped National Register district walking tour is also available.

The state of Maine encourages a regional approach to tourism, and organizes tourism promotion in several regions. Southern Maine's region is called "The Beaches." The Biddeford+Saco Area Chamber of Commerce and Industry have affiliated with this regional promotion program to help increase tourism and heritage tourism.

F. THE RETAIL SECTOR

Together with Biddeford, Saco has historically served as the commercial center for the region. Saco's retail community fulfills four economic roles:

- 1. Community Retail Center: A number of businesses (including the Saco Valley Shopping Center and Hannaford Plaza) provide for the day-to-day needs of residents in the Saco Trade Area.
- 2. Specialty Retail Center: A portion of retail focuses on meeting needs for specialty goods from regional markets.
- 3. Automobile Sales: A significant portion of Saco's retail economy is centered in the sale of new and used automobiles. Typically, car dealerships account for more than half of Saco's annual taxable retail sales. Saco's auto businesses are clustered along the Route One Corridor, commonly known as the Saco Auto

Mile.

4. Tourist Businesses: A group of Saco businesses are oriented to providing goods and services to meet visitor needs. A number are seasonal.

Within the Biddeford Economic Summary Area (Biddeford, Buxton, Dayton, Hollis, Limington, Old Orchard Beach, and Saco) referred to as the Biddeford ESA, Saco has gained some market share as a percentage of total consumer sales. From 2010 to 2015, Saco's share of total consumer sales of the Biddeford ESA has increased slightly from 37.5% to 39.3% (see Table B.8).

Table B.8-A: Taxable Total Consumer Sales, 2004-2009

	Saco	Biddeford ESA	Saco as % of Biddeford ESA
2004	\$236,975	\$600,058	39.5%
2005	\$247,810	\$637,688	38.9%
2006	\$245,078	\$677,705	36.2%
2007	\$244,448	\$719,838	34.0%
2008	\$262,919	\$720,402	36.5%
2009	\$252,291	\$680,577	37.1%

Source: Maine Retail Sales Reports, Maine State Planning Office

Table B.8-B: Taxable Total Consumer Sales, 2010 – 2015

	Saco	Biddeford ESA	Saco as % of Biddeford
			ESA
2010	\$263,562.00	\$701,970.30	37.5%
2011	\$271,629.70	\$721,749.00	37.6%
2012	\$295,289.50	\$749,928.30	39.4%
2013	\$296,111.10	\$761,814.40	38.9%
2014	\$311,290.80	\$794,237.60	39.2%
2015	\$323,922.70	\$824,803.50	39.3%

Source: Maine Department of Policy & Management, 2015

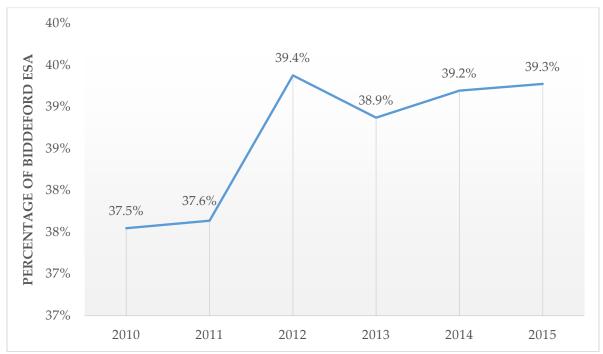


Figure B.1 Saco's Share of Regional Retail Sales, 2010-2015

Source: Maine Department of Policy & Management, 2015

In most years, automobile sales are the single largest component of Saco's total consumer sales. From 2010 to 2015, Saco's percentage of ESA sales of automobiles has remained stable from 84.3% to 84.2%. Automobile sales have continually risen from \$176,265,000 in 2010 to \$224,375,000 in 2015.

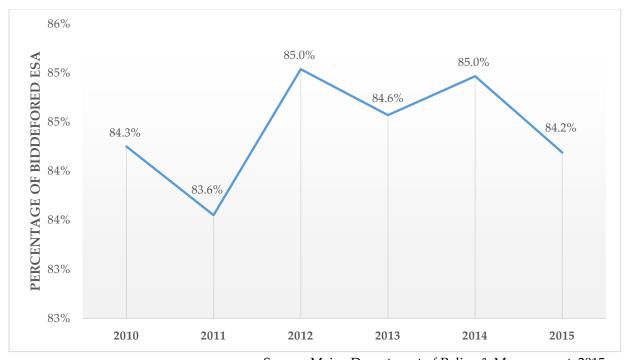
Table B.9-A: Automobile Sales 2004-2009 (in thousands of dollars)				
	Saco	Biddeford ESA	Saco as % of ESA	
2004	\$151,974	\$197,831	76.8%	
2005	\$157,216	\$198,113	79.4%	
2006	\$149,904	\$190,405	78.7%	
2007	\$149,259	\$185,520	80.5%	
2008	\$170,093	\$206,596	82.3%	
2009	\$165,591	\$197,897	83.7%	

Source: Maine Retail Sales Reports, Maine State Planning Office

Table B.9-B: Total Taxable Automobile / Transportation Sales, 2010 – 2015 (in thousands of dollars)			
	Saco	Biddeford ESA	Saco as % of ESA
2010	\$176,265	\$209,216	84.3%
2011	\$185,509	\$222,030	83.6%
2012	\$205,755	\$241,959	85.0%
2013	\$205,043	\$242,453	84.6%
2014	\$216,995	\$255,392	85.0%
2015	\$224,375	\$266,516	84.2%

Source: Maine Department of Policy & Management, 2015

Figure B.2: Saco's Share of Regional Automobile and Transportation Sales 2010-2015



Source: Maine Department of Policy & Management, 2015

Tables B.10A and B.10B show taxable sales for food stores, general merchandise, and other retail categories from 2010 to 2015. Saco's percentage of total retail sales for food, general merchandise, and other retail categories increased from 18.4% in 2010 to 19.7% in 2015. Figure B.3 shows the increase.

Table B.10-A: FOOD/GENERAL MERCHANDISE/OTHER RETAIL TAXABLE SALES 2004-2009 (in thousands of dollars)

	Saco	Biddeford ESA	Saco as % of ESA
2004	\$43,025	\$161,781	26.6%
2005	\$48,158	\$184,678	26.1%
2006	\$47,458	\$207,688	22.9%
2007	\$46,526	\$230,060	20.2%
2008	\$46,203	\$231,448	20.0%
2009	\$42,813	\$221,087	19.4%

TABLE B.10-B: FOOD/GENERAL MERCHANDISE/OTHER RETAIL TAXABLE SALES 2010-2015 (in thousands of dollars)

	Saco	Biddeford ESA	Saco as % of Biddeford ESA
2010	\$41,330	\$225,029.20	18.4%
2011	\$41,415	\$226,103.60	18.3%
2012	\$43,660	\$233,403.00	18.7%
2013	\$44,098	\$239,450.00	18.4%
2014	\$46,429	\$245,073.30	18.9%
2015	\$49,346	\$250,483.90	19.7%

Source: Maine Department of Policy & Management, 2015 Maine Retail Sales Reports, Maine State Planning Office

It is noted that while Saco's proportional share of the regional sales of staple goods sales has declined as a percentage of total sales, its share of absolute sales is up significantly from \$161.8 million in 2004 to \$250.5 million in 2015.

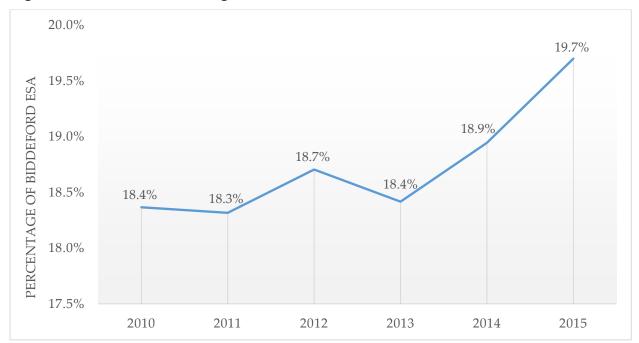


Figure B.3 Saco's Share of Regional Food/General Merchandise/Other Sales 2010-2015

As Figure B.4 on the following page shows, Saco merchants have increased their sales volumes slightly. The City's relatively steady share is also likely due to increases in its share of auto sales, especially in recent years. As general merchandise retailers develop their businesses in Biddeford, Saco is specializing in other areas.

\$50,000,000 \$49,346,200 \$49,000,000 \$48,000,000 \$47,000,000 \$46,429,400 FOTAL SALES \$46,000,000 \$45,000,000 \$43,660,200 \$44,000,000 \$44,097,600 \$43,000,000 \$42,000,000 \$41,330,400 \$41,000,000 \$41,414,700 \$40,000,000 2010 2012 2011 2013 2014 2015

Figure B.4: SACO'S FOOD/GENERAL MERCHANDISE/OTHER RETAIL SALES, 2010-2015

Source: Maine Department of Policy & Management, 2015

G. THE SERVICE SECTOR

Saco plays an economic role as a professional and financial services center for the region, which is an important aspect of the City's economy. With the expansion of Saco and Biddeford Savings Institution, the relocation of People's Choice Credit Union's main office to Saco, and branches established by Norway Savings Bank, Bangor Savings Bank, Town and Country Credit Union, Camden National Bank and others, growth in the service sector is alive and well.

Health care is another area with recent activity. Atlantic Heights, a senior care provider approved in 2003, is now among the city's largest employers. Establishment of the Southern Maine Health Care Walk-In Clinic in 2015 filled an additional important health care niche.

H. DOWNTOWN

Saco's downtown is supported by the City and by Saco Main Street, Inc., a National Main Street affiliated organization. The City and other private utilities (Unitil and Maine Water) have invested more than \$8 million in Downtown improvements over the last five years, including the reconstruction of several streets and sidewalks, the installation of new gas lines, upgraded water lines, some sewer infrastructure replacement and upgrades, and other changes in design, infrastructure, and physical condition.

Living in downtown Saco is currently favorably perceived, and this attitude has been reflected in noticeable growth to downtown housing options. Approximately 300 newer condominiums built on Saco Island and the surrounding ring around downtown house hundreds of people, and recently, the development known as Saco Mill No. 4 added another 150 apartment units, which were all pre-leased before the building was entirely completed.

The positive image for downtown Saco has been noted by many individuals and groups, including several developers. Saco's "brand equity" is building positively. Additionally, significant new development activity is planned on Saco Island and in the Biddeford mill district, which will further bolster the vitality of our downtown.

Saco completed a Downtown Plan in 1998 and it has been updated several times since then, most recently in 2017. Some of the major downtown initiatives from the original plan and its future iterations include:

- Continuing to encourage mixed use redevelopment of the Downtown, including using a Development District designation for the downtown and other incentives;
- Establishing a mechanism to mitigate impact fees (which have acted as a deterrent to Downtown Development);
- Working to create a business-friendly environment that is attractive to new and diverse businesses that look to establish or expand a brick and mortar presence;
- Continue to support Saco Maine Street, Inc. and its National Main Street approach for downtown development;
- Promote synergistic in-fill residential development in the core of our downtown.
- Improve and more clearly sign Public Parking areas.

Since the above initiatives first came to the forefront as development ideals for downtown Saco, substantial progress has been made on all of the stated goals.

Saco Island is being redeveloped; Saco Main Street coordinates much of the activity in the downtown; parking has been added and improved; Main Street and Pepperell Square have been rebuilt beautifully; the Main Street section from City Hall to Beach Street has been completed; and new signage and orientation signage has been designed and installed.

While many of the initiatives have been accomplished, nothing is ever perfect, and as such, new iterations of the Downtown Plan emphasize:

- Continued support of Saco Main Street, Inc.'s efforts to enhance the vibrancy of Saco's Downtown;
- Continue to reinvigorate downtown's "streetscape" and parking lots;
- Plan a pedestrian bridge to Biddeford to connect mill district to district;
- Plan for housing expansion in the downtown;
- Plan for Saco and Biddeford's role in the Creative Economy, which has led to the revitalization of many downtowns.
- Evaluate Saco's environmental leadership and heritage tourism to see how big of a role they could have in the downtown revitalization efforts.

Considerable progress has already been made concerning the above recommendations. Streetscape work has continued in the City Hall to Beach Street area; a pedestrian bridge with Biddeford has been completed and additional pedestrian ways and bridges have been contemplated; housing growth continues downtown; and heritage tourism has begun to be addressed with a regional history exhibition inside Saco's Transportation Center/Amtrak Train Station, the Saco Museum's permanent makeover, a Main Street history trail, a National Register District walking tour, and an enhancement of our Museum In the Streets historic panel program.

I. ECONOMIC DEVELOPMENT

1. Local and Regional Economic Development Plans

During the last decade, four economic development plans that include the City of Saco have been developed: the Southern Maine Economic Development District Community Economic Development Strategy (available from the Greater Portland Council of Governments); the City of Saco Downtown Plan; the City of Biddeford Mill District Study; and the Bridge 2025 Citizen Initiative.

2. <u>Economic Development Incentive Districts</u>

Development (Tax Increment Financing) Districts

Development (Tax Increment Financing or TIF) Districts are a tool that enables the City to reduce the tax burden on new developments while sheltering this incremental tax revenue from losses in state education funding, revenue sharing, and/or County tax formulas as a result of the development. Below are the many Development Districts of Saco.

The Downtown Development District

The City established Maine's first Tax Increment Financing District in 1986, the Saco Island / Downtown Tax Increment Financing (TIF) District. This matured on Dec. 30, 2016 and the City Council approved a new Omnibus Downtown Development District on February 21, 2017, but is awaiting final approval from the State of Maine.

This proposed Downtown Development TIF District was the collaborative outcome of work done by the Comprehensive Plan Committee, the Economic Development Commission, Planning Board, the Saco Main Street Board, and citizen input at workshops and public hearings, all of which resulted in the proposal being unanimously approved by City Council on February 21, 2017. The pending Development District will allow Saco to address several goals articulated in the Downtown Plan, as well as needs identified in the Bridge 2025 citizen initiative including:

- Establishment of a commercial façade improvement matching grant fund for downtown businesses;
- Provision of a funding source to offset local impact and permit fees as a way to incentivize the development of downtown properties;
- Funding of infrastructure improvements;
- Funding of economic development efforts through incremental tax revenues generated by this and other Development Districts rather than through the General Fund.

First Light Technology

In 1997, the City formed a TIF District to assist First Light Technology, Inc. in acquiring real estate and constructing a manufacturing and research building, as well as assist the City in financing necessary public improvements. The benefits to the company are complete and now available for public improvements.

Spring Hill

In March 2002, the City established the Spring Hill Municipal Development TIF District in the Spring Hill section of the Saco Industrial Park and adjacent areas. The adjacent areas included a portion of the railroad right-of-way for the Saco Industrial Park, a portion of the proposed Saco 67 Business Park across Route 1 from the Spring Hill section (approved in 2004 as the Mill Brook Business Park), and a portion of the Route 1 right of way where the installation of a traffic light and a sewer extension north to the Park North subdivision have been completed. The goals of the TIF district are to:

- Provide serviced business park lots;
- Permit the purchase of land;
- Provide for additional rail service to an existing industrial park;
- Provide for traffic improvements, such as a traffic light required by the industrial developments, and;
- Provide for the installation of a public sewer system in an area of industrial, business, and commercial zoning to enhance the facilities for business and industrial development.

During the first 10 years of the development program, the City will capture 100% of the increase in assessed value due to real property improvements, which allows the City to allocate all 100% to the development program.

The Spring Hill TIF was amended on October 7, 2008 to include boundary changes that removed a 12-foot strip to the Scarborough line and the addition of one lot to the district for the site of a new IMAX theater. Subsequently, the TIF revision creates a mitigation fund for a fifth lane on Route 1, which MDOT requires for the IMAX Theater (\$118,000), and extends the end date of the TIF 10 years beyond the original 2012 expiration to 2022.

Park North

The Park North TIF, approved September 12, 2008, is for 100% of the tax increment for 20 years, with 70% reimbursing the developer for a sewer extension. The developer has paid for the costs and financing of the sewer extension and for a pump station serving the project (this includes only large sewer mains, not local service mains within the development). The sewer cost is estimated at \$3.5 million, although financing could double the cost. It is estimated that reimbursement to the developer could take up to 11 years. The remainder of the TIF - 30% in the early years, 100% later - will be used by the City for improvements in the district and the area of the project, and for

qualifying economic development projects.

Industrial Park Road

The Industrial Park Road TIF was approved March 16, 2008, and is for 100% of the tax increment through 2027. The entire increment will be treated in a special fund by the City and used for construction of roads and sewers and sidewalks, including improvements to a portion of North Street and a portion of Industrial Park Road. An agreement has been reached with People's Choice Credit Union to reimburse the company \$100,000 for intersection improvements by reimbursing 50% of its taxes each year.

Franklin Fuels

The Franklin Fuels TIF (Incon-Intelligent Controls) was approved on March 24, 2009. The TIF captures 100% of captured assessed value. The agreement returns 45% of taxes to Franklin Fuels, which has erected a new industrial building for manufacturing fuel tank monitoring equipment and other electronic detection devices. The TIF retains 55% for City public improvements and economic development programs through fiscal year 2019.¹

This TIF was recently extended for 10 years and the Credit Enhancement is now capped at \$135,000 with a 30% developer / 70% to City split of the revenue stream. There are also job creation/quality requirements that will be measured annually.

General Dynamics

The General Dynamics TIF was approved in 2011. The TIF captures 100% of captured assessed value related to the development of General Dynamics's Aegis Radar Component production line. The agreement returns 100% of the incremental taxes to General Dynamics the program runs thru 06/30/2034.

Saco Mill No. 4 – Chinburg

The Saco Mill No. 4 TIF was approved in 2014. The TIF captures 100% of captured assessed value related to the redevelopment of Saco Mill #4, with 80% of all incremental tax revenue, up to a total of \$5,000,000, payable to the developer as a Credit Enhancement. This District runs until 2045.

*The Mill Brook Business Park – Maine Molecular Omnibus Development District*The Mill Brook Business Park – Maine Molecular Omnibus Development District

¹ City of Saco

was approved in 2014. The TIF captures 100% of incremental taxable revenue assessed value related to the development of the Mill Brook Business Park. The City may provide Credit Enhancement to businesses locating within the Park as set forth in the City's recently enhanced Development District and Tax Increment Financing Guidelines. At present, there is one business in the Park receiving a Credit Enhancement benefit, Maine Molecular Quality Controls, as 80% of all incremental tax revenue, up to a cap of \$800,000.

Pine Tree Zone

Before LD1473 became law in 2009, Saco had designated areas in the mill district and industrial sections of the City as Pine Tree Zones. The new law expanded the Pine Tree Development Zone program from a limited location to a statewide program. The entire City of Saco is now a Pine Tree Zone. Eligible businesses are offered the chance to greatly reduce or virtually eliminate state taxes for up to ten years when they create new, quality jobs in certain business sectors OR move existing jobs in those sectors to Maine. The Pine Tree Zone business sectors are:

- Biotechnology
- Aquaculture and Marine Technology
- Composite Materials Technology
- Environmental Technology
- Advanced Technologies for Forestry and Agriculture
- Manufacturing and Precision Manufacturing
- Information Technology
- Financial Services

Under the Pine Tree Zone program, a new quality job:

- Meets the income requirements for the current year, including employer payments toward employee benefits such as retirement, health insurance, education, and dependent care.
- Includes access to group health insurance with an employer contribution encouraged but not required
- Includes access to group retirement benefits subject to certain regulations with an employer contribution encouraged but not required

Benefits for eligible companies include corporate tax credits, sales and use tax exemptions for both personal and real property, withholding tax reimbursements of 80%, and reduced electricity rates.

J. ISSUES AND IMPLICATIONS

The review of Saco's economy suggests the following issues and implications that need to be addressed in its policies:

- Saco has had some success in diversifying its economy in recent decades after the earlier industrial decline in the region. Increasing the number and quality of jobs remains an ongoing focus for the community.
- Over the past twenty years, Saco's economy has become much more entwined with the Greater Portland and Boston Metro economy. This changes the economic role of Saco businesses and increases Saco's desirability as a bedroom community.
- Saco continues to function as both a community retail center and as a niche regional center for certain types of goods and services. These roles will continue to evolve, impacting the type and location of facilities needed to serve these markets. Downtown Saco and the Route 1 corridor can continue to serve these markets.
- Saco's downtown is a major economic asset for the region. The City should continue its efforts to strengthen it.
- The City should consider measures to maintain and enhance potential Interstate highway access.
- The City should continue to be selective in pursuing growth opportunities. It should emphasize the quality of the companies, the quality of the buildings, and especially the quality of jobs in encouraging growth.

Section 3A: Transportation

Transportation - Goals and Policies

State Goal: To plan for, finance and develop an efficient system of public facilities

and services to accommodate anticipated growth and economic

development. (Growth Management Act).

Local Goals: To maintain and enhance the ability of the road network to move traffic

safely and efficiently.

To minimize the impact of vehicular traffic on residential neighborhoods.

To discourage suburban sprawl and its impacts on the existing transportation network, and to instead promote sustainable, environmentally sound and energy efficient transportation choices.

To expand the range of non-automotive transportation alternatives available to the City's residents, workforce, and visitors.

To support economic vitality by ensuring the efficient movement of goods, services and people.

Pursuant to these goals, the City's policies with respect to transportation are:

1. Maine Turnpike

Work with the Maine Turnpike Authority to explore how traffic can be better managed and moved more efficiently through Saco.

2. Maine DOT

Work with the Maine Department of Transportation to explore how traffic can be better managed and moved more efficiently through Saco.

3. Route One

Work with the Maine DOT, the Portland Area Comprehensive Transportation System, the local business community, and local residents to improve Route One in terms of its ability to move traffic safely and efficiently, while working to improve its design and interaction with the community so that Route One functions more as a vital regional transportation link and less as a barrier between neighborhoods.

- 1. The City should continue its successful access management program to work with the owners of existing developed properties along Route One in the downtown focus area to reduce the number access points onto Route One and to better define the points of access in areas that currently lack defined curb cuts.
- 2. The City should discourage the creation of new lots fronting directly onto Route One. Where feasible, the City's development standards should require that an overall access plan be instituted when new lots are created so that access to Route One is limited to internal streets or to combined access ways to minimize the number of access points.
- 3. The City should continue to develop ideas to alleviate traffic build-up on Route 1 (Main Street) between downtown and I-195

4. Bridges

1. Explore the idea of constructing a new vehicle bridge across the Saco River located west of the downtown area to help alleviate traffic congestion.

5. Road Projects

Existing and potential new road infrastructure projects should emphasize connectivity, limiting access points along arterials and connectors, pedestrian access, and safe and efficient conditions for users.

6. Traffic Signals

Technology has significantly increased the capabilities of traffic signalization in recent years, albeit at an ever-increasing cost. Partnering with the Maine DOT and PACTS in terms of new installations and maintenance of signals while identifying opportunities for increasing the efficiency of traffic movements, particularly in the busy downtown, will enhance local and regional transportation for residents and visitors.

7. Parking

Parking in commercial areas, particularly the downtown, is increasingly challenging. Parking requirements should address demonstrated needs while not overwhelming such areas with more parking that is necessary.

8. Bicycle / Pedestrian Network

Alternative modes of transportation are receiving state and national attention. Saco has a walkable downtown and an off-road trail system connecting to neighboring communities, each of which position the City to offer viable alternatives to vehicular travel and opportunities to encourage all age groups to walk and bicycle.

9. Alternative Modes of Transportation

Saco is fortunate to have both bus and rail service available to residents and visitors. The City's partnership with both the Biddeford Saco Old Orchard Beach Transit system and the Northern New England Passenger Rail Authority should continue to be nurtured and expanded, and other alternatives explored as transportation options.

GoMaine: Work with employers to promote the GoMaine program – especially for employees in the downtown focus area (to help with parking, etc.)

10. Funding

The City will continue to pursue funding opportunities through Maine DOT and PACTS, and to adequately fund an ongoing capital plan for road maintenance.

11. Regional Cooperation

The City will continue its active participation in multi-community and regional transportation efforts.

TRANSPORTATION – IMPLEMENTATION STRATEGIES

Policy Reference	Activity	Primary Responsibility
1	Work with the Maine Turnpike Authority to address current and future Exit 36 capacity issues and possible projects to improve traffic flow and lessen congestion at peak commuting hours.	Council, Administrator
1	Participate in the upcoming engineering feasibility study to connect Exit 36 to Route 112 – "Route 112 Bypass" concept.	DPW, Administrator, Planner
2	Support expansion of the MDOT-owned Park & Ride facility on Industrial Park Road.	DPW, Planner
2	Work with MaineDOT to improve traffic flow on Industrial Park Road and Route 112.	DPW
2, 3	The City should continue to work with Maine Department of Transportation to improve traffic flow and safety in the portion of Route One south of I-195 Spur (Main Street) through the construction of turning lanes or a center turn lane.	Administrator, DPW, Planner
3	Limit the creation of new curb cuts to provide access to properties along the entire length of the Route One corridor. Standards should require the creation of consolidated entrances where feasible.	Planning Board, Planner, DPW
3, 4	Work to improve access to Main Street between Thornton Academy and the I-195 Spur through improvement of signalization at key intersections, and better articulation of consolidated entrances and access ways.	DPW, Planning Board
3	The City should explore developing parallel roadways on both the east and west sides of Main Street in order to reduce traffic pressure on Route One. This may include the purchase of private property or negotiating easements with current owners.	Council, Pⅅ
4	Explore the idea of constructing a new vehicle bridge across the Saco River west of the downtown area to help alleviate traffic congestion.	Council, P&ED, DPW
5	Explore the idea of constructing a roundabout at the intersection of Routes 112 / 5 / 9 / 1.	DPW, Planning
5	The City should explore routes for the establishment of a new connector road west of the Turnpike linking Routes 5 and 112, designed as an arterial with the potential for access control.	DPW, Planning

5	Encourage the consolidation of property access points along Main Street between Hutchins St and Ocean Park Rd as suggested by 2004 Main Street Access report.	Planning, DPW
5	Pursue additional pedestrian accommodations along Ferry Road from Bay View Road to Camp Ellis in conjunction with PACTS and MaineDOT.	DPW, Planning
6	Encourage the integration of smart technology in traffic signals that better reflects the needs of unique traffic patterns and results in more efficient traffic flow.	DPW
6	Encourage NNEPRA participation with installing warning signals on Main Street which would notify motorists of the presence of a train, allowing them to choose a different route.	Administrator
6	Explore solutions to the traffic issues at the Main Street/Pepperrell Square/Water Street intersection.	
7	Continue to review feasibility and cost/benefit of constructing a parking garage at the Saco Transportation Center (especially with the potential Shuttlebus Pulse system changes).	Administrator, BSOOB Transit
7	Schedule regular parking assessments, and review ordinance-based parking standards to measure efficiency and identify improvements.	ED, Planning, DPW
8	Work with the Eastern Trail Management District to assess conditions on the Eastern Trail in Saco and prioritize needed improvements, and encourage the use of the off-road Eastern Trail for transportation and recreation purposes.	Planning, SPR, DPW
8	Pursue the full build-out of the off-road Eastern Trail segment that traverses Saco, including the restoration of the railroad bridge over the Saco River into Biddeford.	Planning, SPR, DPW
8	Focus on improving bicycle and pedestrian infrastructure along Elm Street (Route 1), Main Street (Route 1), Beach Street (Route 9), and North Street from General Dynamics westward to Colonial Drive and Garfield Street.	DPW, Planning
8	The City should consider adopting a Complete Streets policy to include strategic investments in streets and street design in order to provide mobility, safety and accessibility for all users.	Planning, DPW, Administrator
8	Continue to provide regular maintenance of sidewalks, and maintain a capital improvement plan for major repairs and additional sidewalk sections.	DPW

8	Monitor the demand for adding bike racks at public places throughout the community. Utilize pricing advantages that PACTS or other regional or state agencies may offer.	SPR, DPW
8	Explore establishing a bike-share program in the downtown area, possibly in coordination with Biddeford.	Planning, Administrator
8	Maintain the goal of completing a Route 1 sidewalk from Biddeford to Scarborough, as DPW has worked toward for several years.	DPW, Council
8	Continue to work to improve pedestrian safety and convenience within the downtown area including the use of pedestrian crossing warning lights and physical protection such as bollards and refuge islands for people crossing the street.	DPW, Planning, Administrator
8	Continue to support the efforts of Saco Bay Trails to establish and maintain a trail system throughout the community.	DPW, SPR
8	Provide paved shoulders for use by cyclists when collector and arterial roads in the downtown focus area are upgraded, and upgrade bicycle infrastructure along Routes One, 112, 9, and 5 cooperatively with the Maine Department of Transportation.	DPW
8	Consider bicycle lane markings and signage to clarify for both motorists and cyclists where bicycle use is appropriate and can be expected.	DPW
9	Explore the feasibility and traffic impacts of the proposed Shuttlebus route changes and "Pulse" project, along with creating a "hub" for the system at the Saco Transportation Center.	BSOOB Board, Administrator, Council
9	Explore the possibility of other modes of transportation at the Transportation Center such as bikeshare, Zipcars, and Trailways or Greyhound service, etc.	BSOOB Board, Administrator
9	Continue annual funding commitment for Shuttlebus service with member communities Biddeford and Old Orchard Beach. Work toward involving Scarborough as a full member community.	Council, Administrator, BSOOB Board
9	Work with Shuttlebus to provide bus shelters at key points in the system.	BSOOB Board
9	Increase service to and from the Portland area and work toward seamless connections with the Portland and South Portland transit services.	BSOOB Board
9	Work with Downeaster staff to create more promotional material, ticket discount options and package deals focused on Saco area opportunities, activities and events.	Administrator

9	Work with Downeaster staff to explore options for future commuter service to and from Portland.	Administrator
9	Work with the Northern New England Passenger Rail Authority (NNEPRA) to construct a full-length, high-level platform at the Saco Transportation Center to allow bicycle access and to alleviate vehicle traffic/train delays on Main Street.	Administrator
9	Explore the idea of constructing a vehicle bridge that will link the current Transportation Center to 3 Lincoln Street in Biddeford (former MERC Site).	Planning, DPW, ED
10	Where appropriate, pursue MaineDOT Municipal Partnership Initiative (MPI) funding for road projects, including the new MPI program through the Portland Metropolitan Planning Organization (PACTS).	DPW
10	Continue participation in the PACTS process, including the recently approved grant for a study of Rte. One in Saco and Scarborough.	Planning, DPW
12	Communicate with the schools in order to ensure awareness and implementation of the Safe Route to School program in Saco Schools.	

SECTION 3B: TRANSPORTATION

A. INTRODUCTION

Roads, streets, and other means of transportation are often referred to as a city's circulation system. This system is necessary to move people, goods, and services from one part of the city to another, into the heart of the city, out of the city, and through the city. Roads can also be thought of as the framework upon which the city is built.

Concurrently, the roadway system also provides access to private property. In addition, the roadway system is also the setting from which we view much of the city. The views from the roads in the city, including views of fields, forests, the ocean, and the places where people live and work, all form the visual impressions of our community.

Thus, the efficiency of our city, the value of our land, and how we view and experience our surroundings are all affected by the roadway system and how well it carries out often conflicting roles. Many of the problems associated with roadways in any city are a result of one or both of these basic flaws: (1) their inability to carry out all of their roles equally well and (2) their inability to carry out these roles and provide a type of service for which they were never designed or built.

The following transportation inventory presents information necessary to develop a management plan for Saco's future transportation system. It begins with a summary of Saco's Transportation Network, including functional classification of roadways, traffic volumes, crash trends, road maintenance, access management, the Maine Turnpike, bridges, parking, alternative modes of transportation, pedestrian / trails / open space information, and complete streets. The following section also includes a detailed summary of Saco's Transportation Network Users, including commuting and place of work information. Also in the following section, a summary of Funding Transportation Infrastructure can be found, including MaineDOT Highway Corridor Priorities, MaineDOT Customer Service Levels, MaineDOT funding opportunities, local funding opportunities, and funding available through the Portland Area Comprehensive Transportation System (PACTS). The next section introduces past municipal, PACTS, and other recent Transportation Studies. Finally, this transportation inventory will wrap up with information about upcoming Transportation Projects in the City of Saco.

B. SACO'S TRANSPORTATION NETWORK

The city's roadway system ranges from rural country-type roads to the six-lane Maine Turnpike, which serves as Maine's gateway for the Boston metropolitan area and the eastern United States. The Maine Turnpike is a heavily traveled highway, especially during the ten-week summer tourist season from late June through Labor Day. Additionally, U.S. Route 1 travels through the city, and the I-195 spur highway connects the Maine Turnpike to U.S. Route 1 and Old Orchard Beach to the east. The local road system experiences similar seasonal demands while the year-round population and travel activity in southern Maine continues to rise (see the *Population and Demographics* section for more information).

Saco's transportation network consists of 127.15 miles of public roadways. There are 7.83 miles of interstate, 10.64 miles of State Highway, 21.83 miles of State-Aid roads, and 86.85 miles of city roads. Road systems are grouped and classified for several reasons. This network is depicted on the *Roadway Jurisdiction* map. Some important reasons to classify roads include:

- To design appropriate capacity, safety measures, and design speed;
- To guide investment priorities;
- To provide a framework for a road maintenance program; and
- To guide land use-related regulations and access management standards for properties with frontage on the roadway system.

1. Functional Classification of Roadways

As previously mentioned in the introduction to this chapter, many of the problems associated with roadways are the result of the fact that the roadways' roles often conflict with one another, and roadways do not perform all functions equally well. Also, roadways of today are often expected to perform functions and carry the type of and amount of traffic for which they were never designed or built.

Therefore, it is important to understand the function of the roadways in Saco to prevent their misuse and possible safety problems. From a standpoint of function, roads and streets can be classified into three (or more) functional classifications. For our purposes, we have classified the roads in Saco as local roads and streets, collectors, or arterials. Please refer to the *Functional Classification* map to see these in map form.

<u>Arterials</u> – MaineDOT defines arterials as roadways that provide long-distance connections between towns and regional centers. Volumes of traffic typically range from 5,000 to 30,000 vehicles per day. Arterials are classified as either *principal arterials* or *minor arterials*. MaineDOT further classifies principle arterials into *interstates, other freeways and expressways, rural,* and *urban*.

A *primary arterial – interstate* is a continuous route that has trip lengths and volumes indicative of substantial statewide or interstate travel.

A *principal arterial – other freeways and expressways* is a divided roadway with partial (freeway) or full (expressway) control-of-access.

A *rural principal arterial* serves as a corridor suitable for substantial statewide or interstate travel between larger population centers.

An *urban principal arterial* is a route that carries through traffic and most of the trips entering / leaving a federally-designated urban area.

Minor Arterials are classified as a series of continuous routes (1,315 miles in Maine) that should be expected to provide for relatively high overall travel speeds with minimum interference to through movement. Much like principal arterials, minor arterials are further classified into *rural* and *urban*.

Arterials in Saco include:

- *Principle Arterials (Interstate):* I-95 / Maine Turnpike, I-195 west of exit 2
- *Principle Arterial / Other Freeway:* I-195 east of exit 2
- Other Principle Arterials: None
- *Minor Arterials:* Route 1

It is here at the arterial level where the conflict between the traffic service function of the roadway and the land or property service function is most extreme. As traffic volumes increase and land use intensifies, this conflict also increases. There are three ways to eliminate or prevent this conflict from causing possible safety problems associated with misuse: (1) provide additional capacity in the roadway (additional lanes), (2) provide additional roadways, or (3) manage the access to the existing arterial roadways.

<u>Collectors</u> – Collectors act as connecting roads between local or residential neighborhoods and arterials. Collectors also provide an element of community aesthetics. These roadways are the locations from which many of us view our community. Traffic is *collected* from local roads and delivered to arterial roadways, which are designed for higher speed and improved mobility. Typically, traffic volumes on collector roads range from 1,000 to 5,000 vehicles per day. Like arterials, MaineDOT further divides classification of collectors into *major* and *minor* collectors; MaineDOT requires driveway and entrance permits for all collector roads.

Collector roads in Saco include:

- Major Collectors: Route 117 (very small portion near the intersection with Route 112), Route 112, Route 5, Route 9, Route 98, Industrial Park Road, Spring Hill Road, Garfield Street, Maple Street, Market Street, Spring Street, Lincoln Street (between Route 1 and Spring Street), Old Orchard Road, Ocean Park Road, Bay View Road
- Minor Collectors: Louden Road

<u>Local Roads</u> – All roads not classified by MaineDOT as arterial or collectors are considered local roads. Local roads may be town-owned or private, and it is important for towns to make that distinction. Local roads and streets provide access to individual parcels of land as well as provide sites for building; moving traffic (typically up to 1,000 vehicles per day) is only of secondary importance. Local roads and streets are also a part of the residential (and sometimes commercial and industrial) design features. The curves, straight sections, street trees, landscaping, street lighting, and so forth can provide a strong element of community aesthetics.

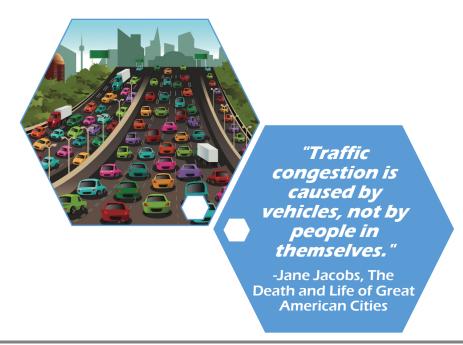
Local Roads in Saco include:

All of the roadways not classified above are considered to be local

2. Traffic Volumes

The Average Annual Daily Traffic (AADT) is the predominant type of traffic data that is collected for Maine roadways. In some ways, traffic volume trends are an excellent way to measure the functionality of the road system. MaineDOT is responsible for conducting traffic counts for the Southern Maine Planning & Development Commission region. Saco is part of Zone 1, and traffic counts are conducted every 3 years. Traffic volume trends are shown in the table below. These trends are also depicted in map form on the *Traffic Volume Trends*, 2010-2013 map.

Significant traffic volume increases have occurred along Route 9 (Ferry Road & Seaside Avenue) and Old Orchard Road between 2007 and 2013.



MaineDOT Traffic Counts (Outside of Downtown Focus Area), 2007 - 2013

Wallebol Halle Coults (Out		_ 5.7110		·	-2013	2010-	-2013
Traffic Counts: 2007, 2010, 2013	2007	2010	2013	Change	Percent	Change	
I-195 (Westbound) East of OFF RAMP TO US 1 (Northbound)	5,700	5,640	5,540	-160	-2.81%	-100	-1.77%
I-195 (Eastbound) East of OFF RAMP TO US 1 (Northbound)	4,140	4,170	4,140	0	0.00%	-30	-0.72%
US 1 (MAIN ST) Northeast of FLAG POND RD	18,810	19,330	17,430	-1,380	-7.34%	-1,900	-9.83%
US 1 (MAIN ST) Northeast of FUNTOWN ENTRANCE	16,850	17,230	15,150	-1,700	-10.09%	-2,080	- 12.07%
SR 5 (OCEAN PARK RD) East of US 1 (MAIN ST)	9,570	9,320	9,030	-540	-5.64%	-290	-3.11%
SR 5 (BRADLEY ST) Northwest of SHADAGEE RD	5,300	-	4,790	-510	-9.62%	-	-
SR 9 (FERRY RD) Southeast of OLD ORCHARD RD	5,510	-	7,310	1,800	32.67%	-	-
SR 9 (SEASIDE AVE) North of BAYVIEW RD	2,630	3,000	3,040	410	15.59%	40	1.33%
SR 98 (CASCADE RD) Southeast of US 1 (MAIN ST)	-	5,040	6,130	-	-	1,090	21.63%
SR 112 (BUXTON RD) Southeast of TALL PINES DR	8,750	-	7,730	-1,020	-11.66%	-	-
LOUDON RD Southwest of SR 112 (BUXTON RD)	2,700	-	2,830	130	4.81%	-	-
GARFIELD ST Southwest of SR 112 (NORTH ST)	4,230	-	4,450	220	5.20%	-	-
OLD ORCHARD RD Northeast of TIMBER OAKES LN	3,490	-	3,880	390	11.17%	-	-
BAYVIEW RD Northeast of VINES RD	-	1,580	1,700	+	+	120	7.59%
INDUSTRIAL PARK RD Northeast of SR 112 (NORTH ST)	17,010	-	17,260	250	1.47%	-	-
INDUSTRIAL PARK RD Southwest I- 195 Westbound RAMPS	-	11,470	11,820	-	-	350	3.05%
I-95 Northbound RAMP TO I-195 Eastbound	-	4,700	4,990	-	-	290	6.17%
I-95 Northbound RAMP FROM I-195 Westbound	-	8,100	8,070	-	-	-30	-0.37%
I-95 SB ON RAMP FROM I-195 WB	-	4,630	5,060	-	-	430	9.29%
I-95 SB OFF RAMP TO I-195 EB	-	8,200	8,200	-	-	0	0.00%

Source: MaineDOT, 2013

MaineDOT Traffic Counts (Downtown Focus Area), 2007 - 2013

				2007-2013			2010-2013
Traffic Counts: 2007, 2010, 2013	2007	2010	2013	Change	Percent	Change	Percent
US 1 (ELM ST) Northeast of LINCOLN ST	13,340	-	12,780	-560	-4.20%	-	-
US 1/SR 5 (MAIN ST) Northeast of US 1/SR 5 (ELM ST)	21,460	21,750	20,560	-900	-4.19%	-1,190	-5.47%
US 1/SR 5 (MAIN ST) Southwest of STOCKMAN AVE	25,200	26,130	24,640	-560	-2.22%	-1,490	-5.70%
US 1/SR 5 (MAIN ST) Northeast of KING ST	24,220	25,150	23,460	-760	-3.14%	-1,690	-6.72%
SR 5/112 (NORTH ST) Southeast of SCAMMON ST	9,580	-	9,960	380	3.97%	-	-
SR 5 (BRADLEY ST) Southeast of OAKLAND ST	5,330	-	5,170	-160	-3.00%	-	-
SR 9 (BEACH ST) Southeast of SR 9 (MAIN ST)	-	-	8,160	-	-	-	-
SR 9 (MAIN ST) Southwest of SR 9 (BEACH ST)	14,100	-	14,790	690	4.89%	-	-
SR 9 (MAIN ST) Southwest of WATER ST	19,170	-	19,160	-10	-0.05%	-	-

COMMON ST							
East of FRONT ST	5,380	-	4,880	-500	-9.29%	-	-
FAIRFIELD ST							
Southwest of US 1 (MAIN	2,390	1,840	2,550	160	6.69%	710	38.59%
ST)							
KING ST							
Southeast of	1,930	2,420	1,950	20	1.04%	-470	-19.42%
US 1/SR 5	,	,	,				
(MAIN ST) LINCOLN ST							
West of	2,170	_	1,940	-230	-10.60%	_	_
MAPLE ST	2,170		1,7 10	200	10.0070		
LINCOLN ST							
Northwest of	6,030	-	5,270	-760	- 12.60%	-	-
US 1 (ELM ST)							
MAPLE ST Northwest of	F 260		4.710	(50	10 100/		
LINCOLN ST	5,360	-	4,710	-650	-12.13%	-	-
SCAMMON							
ST North of							
US 1 (ELM ST)	5,590	-	4,820	-770	-13.77%	-	-
S/O MALL							
ENT WATER ST							
(Westbound)							
Southeast of	2,610	-	2,360	-250	-9.58%	-	-
US 1 (ELM ST)							

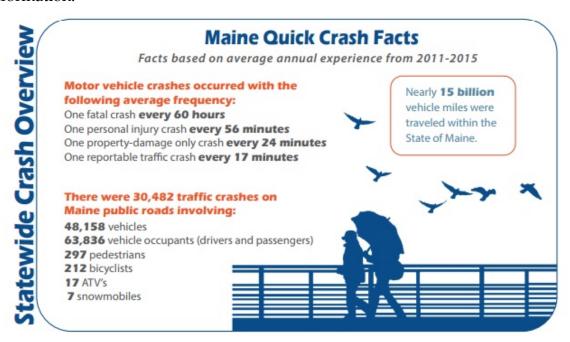
Source: MaineDOT, 2013

3. Crash History / Trends

The table below indicates that there were 3,196 crashes in Saco between 2010 and 2015. From 2010 to 2015, there has been an increase in crashes by 87 (17%). 2015 had the most crashes with 591. 2010 had the least amount of crashes with 504.

2010	2011	2012	2013	2014	2015	TOTAL
504	514	514	564	509	591	3,196

MaineDOT has a system that it uses to rate crash locations throughout the state called *High Crash Locations (HCLs)*. HCLs are given greater attention for funding projects by MaineDOT for their safety programs. In order to qualify, HCLs must be at locations that have had at least eight crashes for a three-year period and must also exceed the Critical Rate Factor of 1 or greater. A Critical Rate Factor is the average expected rate of crashes for a location (based on statewide data of similar crashes). In Saco, there were twenty-three high crash locations between 2013 and 2015. The tables on the following pages indicate the specific locations for Saco's HCLs and other important information.



one-third of traffic fatalities. Motor vehicle crashes in which roadway design was likely a contributing factor cost Maine motorists \$457 million per year in medical costs, lost productivity, travel delays, workplace costs, insurance costs and legal costs.

MaineDOT High Crash Locations, 2013 – 2015

High Crash Locations in Saco: 2013 – 2015	Total Accident	Critical Rate	Ranking County / State
Intersection of Route 9 (Main Street) & Pleasant Street*	10	1.72	46 / 173
Intersection of Route 9 (Beach Street / Ferry Road) & Old Orchard Road	8	1.73	45 / 172
Intersection of Route 112 (North Street) & Franklin Street	8	1.36	57 / 198
Intersection of Route 112 (North Street) & Garfield Street	19	2.80	26 / 105
Intersection of Route 112 (North Street) & Route 5 (Spring Street)*	14	2.43	34 / 124
Intersection of Route 5 (Bradley Street / Spring Street) & Spring Street*	15	4.08	13 / 48
Intersection of Route 1 (Elm Street) & North Street (Route 112 / 5)*	37	1.71	47 / 174
Intersection of Route 1 (Main Street), Ocean Park Road (Route 5) & Ramp E (I-195) off to Route 1 (Main Street)	50	1.41	55 / 193
Intersection of Route 1 (Main Street) & Ramp F (I-195)	12	2.84	25 / 102
Intersection of Route 1 (Portland Road), Mill Brook Road & Spring Hill Road	20	3.06	21 / 86
Intersection of Route 1 (Main Street) & Smith Lane*	13	1.55	52 / 185
Boom Road, from the intersection with Smutty Lane to the intersection with Berry Road	9	1.41	21 / 147
Route 9 (Beach Street), from the intersection with Weymouth Street to the intersection with Washington Avenue*	8	2.37	3 / 72
Route 1 (Main Street), from the intersection with Route 1 (Elm Street) to the intersection with Summer Street	12	1.07	37 / 181
Route 1 (Main Street), from the intersection with Academy Avenue to the intersection with Hutchins Street*	21	1.48	18 / 140
Route 9 (Beach Street), from the intersection with Washington Avenue to the intersection with Homestead Lane*	11	2.36	4 / 73
Old Orchard Road, from the intersection with Time Oakes Lane to the Old Orchard Beach – Saco Town Line	9	1.21	26 / 167
Route 9 (Main Street), from the intersection with Water Street to the bridge over the Saco River Canal (East Canal)*	9	1.93	7 / 103

Route 9 (Main Street), from the intersection with Cross Street to the intersection with North Street*	9	1.51	17 / 137
Route 9 (Main Street), from the intersection with Storer Street to the intersection with Pepperell Square*	8	1.71	12 / 117
Route 112 (Buxton Road), from the intersection with Route 117 (Old Buxton Road) to the intersection with Harvest Circle	21	1.67	13 / 121
Route 1 (Main Street), from the intersection with Smith Lane to the intersection with Stockman Avenue*	31	2.26	6 / 79
I-195 (Eastbound) from the Maine Turnpike Toll Booth to the Exit 1 Off-Ramp	8	1.46	19 / 142

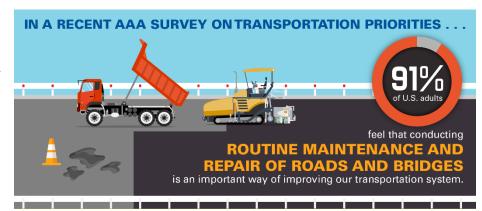
Source: MaineDOT, 2015

These high crash locations can be found in map form on the *High Crash Locations*, 2013-2015 maps.

4. Road Maintenance

There are four different jurisdictional categories used to classify how roads are maintained:

- State Highways
- State-Aid highways
- Local roads
- Private roads



The fourth category, private roads, indicates that they are roads that are neither maintained nor owned by the City or the State. Please refer to the *Roadway Jurisdiction* map to see these jurisdictional categories in map form.

State Highways are a system of connected main highways throughout Maine that primarily serve arterial or through traffic. State Highways are primarily maintained by MaineDOT. The exceptions are the State Highways located in Urban Compact Areas (see page 9 for more information on urban compact areas), which are maintained by the municipality.

^{*}Please Note: High Crash Locations in Italics indicate that they are located within the Downtown Focus Area

State Highways include:

- I-195 east of the Maine Turnpike toll booth
- Route 1
- Route 5 (west of the bridge over Deep Brook just west of the Maine Turnpike)

State-Aid highways are those highways not included in the system of the state highways that primarily serve as collector and feeder routes. These highways also generally connect local service roads to state highways. Commonly, State-Aid Highways in the rural areas are maintained by MaineDOT during the summer and by the municipality during the winter. Any State-Aid Highways in the urban compact area are maintained by the City. The State-Aid Highways in Saco are:

- Route 117 (very small portion near the intersection with Route 112)
- Route 112
- Route 5 (east of the bridge over Deep Brook just west of the Maine Turnpike)
- Route 9
- Route 98
- Louden Road
- Garfield Street
- Industrial Park Road
- Maple Street
- Market Street
- Spring Street
- Lincoln Street (between Route 1 and Spring Street)
- Old Orchard Road
- Ocean Park Road
- Bay View Road
- Spring Hill Road

Urban Compact Areas are those in which the population according to the last U.S. Census; 1.) Exceeds 7,500 people, or 2.) Has less than 7,500 people but more than 2,499 people, and in which the ratio of people whose place of employment is in a given municipality to employed people residing in that same municipality is 1.0 or greater, and when the municipality has not opted-out. The specific location of Saco's Urban Compact Area can be found on the *Urban Compact Area* map. For more information on Urban Compact Areas, be sure to visit the MaineDOT's website at www.maine.gov/mdot.

"Compact" or "Built-up sections" means a section of the highway where structures are closer than 200 feet apart for a distance of ¼ of a mile. Under the rules of the Urban Compact Areas, the City of Saco and MaineDOT are required to complete the following maintenance:

City of Saco	MaineDOT
Winter Snow and Ice Control	Route and Designation Signs
Pothole Repair	Bridge and Minor Span Maintenance
Pavement Markings per MUTCD (Centerline,	Speed Limit Signs on State or State Aid
Arrows, Words, Symbols, Crosswalks, and	Highways when first installed or when
Edge Lines)	changed due to MaineDOT Review
Traffic Signs per MUTCD (Regulatory,	
Warning, and Advisory)	
Ditching	
Driveway and Cross Culvert Cleaning,	
Repair, and Replacement	
Catch Basin Cleaning and Repair	
Surface Treatments i.e. Sand Seals, Chip Seals,	
Crack Sealing, Asphalt Shimming, Thin	
Overlays (typically less than 1 inch thick and	
do not improve strength)	
Traffic Signal Maintenance	
Guardrail Installation or Repair	
Railroad Signs and Pavement Markings	
Brush Cutting, Erosion Control, Mowing,	
Herbicide Application	
Tree Pruning or Removal	
Retaining Walls	
Sidewalk Maintenance	
Dust Control, Sweet Sweeping	

Local roads are not included in the State Highway and State-Aid Highway systems. They are primarily maintained by towns and serve as local service roads providing access to adjacent land. The City of Saco is responsible for maintenance of local roads and all State Highways and State-Aid Roads that are included in the Urban Compact Area.

5. Access Management

For improved safety and speed preservation along the state's highways, the MaineDOT has developed a set of access management rules in response to legislation concerned with arterial capacity, poor drainage, and the high number of driveway-related crashes. Access Management balances safe access to property with "mobility," or traffic flow. In order to achieve this balance, anyone installing a driveway or entrance along a state highway must get a permit from MaineDOT. State law mandates that even if the intention is to "change use" of an entrance (i.e. from strictly residential to residential and small business) a permit must be obtained from MaineDOT. Further, recent amendments to the law state that local building permits (including subdivisions) involving access to property on a state or state-aid highway may not be issued without first having a MaineDOT permit approved. Additionally, any new or changed driveways or entrances on state or state-aid highways located outside of urban compact areas must meet specifications described in MaineDOT's set of rules in order to obtain a permit. The rules regulate sight distance, corner clearance, spacing, width, setbacks, parking, drainage, and mitigation requirements.

The rules are organized into a four-tier system with regulation of driveways and entrances increasing for roads with higher mobility importance and poorer safety records.

The following are the designations for the highway networks in Saco:

The rules define mobility corridors as those corridors that connect service centers (towns / cities that provide consumer services for surrounding, typically smaller communities) and/or urban compact areas and carry at least 5,000 vehicles per day along at least 50% of the corridor's length.

In Saco, the mobility corridors include the non-urban compact portions of the following roads:

- Basic safety standards apply to all State Highways and State-Aid Highways. In Saco, this includes the non-urban compact area portions Route 5, Route 112, and Louden Road.
- Major collector and Arterial standards provide more detailed design standards for entrances into major collector and arterial roads. Entrances are access that serves 50 or more trips per day. In Saco, this includes the non-urban compact area portions of Route 5 and Route 112.
- Mobility corridors connect service centers and/or urban compact areas and carry at least 5,000 vehicles per day along at least 50 percent of the corridors

- length. There are no mobility corridors in Saco.
- Retrograde arterials are mobility corridors where the number of crashes related to a driveway or entrance exceeds the statewide average for arterials with the same posted speed. There are no retrograde arterials in Saco.

Please refer to the *Access Management Highway Classification* map to see these in map form.

6. The Maine Turnpike

The six-lane Maine Turnpike serves as Maine's gateway from the Boston metropolitan area and the eastern United States. The turnpike is a heavily traveled highway, especially during the ten-week summer tourist season from late June through Labor Day. In May 2016, the Maine Turnpike Authority (MTA) completed the *Maine Turnpike Needs Assessment, Safety and Capacity Study*. According to MTA, "the purpose of this assessment is to update the analysis of the safety and capacity needs on the Maine Turnpike over the next 20 years. For more information on this assessment, please visit MTA's website: www.maineturnpike.com

In December 2015, MTA approved the *Maine Turnpike 4-Year Capital Investment Plan* (2016-2019). The table on the following page includes projects that are located in the City of Saco.

Projects on the Maine Turnpike Located in Saco, 2016 – 2019

Year	Mile Marker	Project Name	Preliminary Construction Only Value for Construction	Preliminary Work Scope	Anticipated Project Duration (Months)	Estimated Year(s) of Construction
	36	Exit 36 Interchange Underpass	Included in mile 44 - 44.3 project funding total	Installation of snow fence on bridge rail	1	2016
	36	Exit 36 Toll Plaza	Funded/Bid in 2015	Update existing toll system, rehabilitate toll plaza	18	2015 - 2017
2016 / 2017	Kittery - Augusta	Installation of LED light fixtures	\$500,000	Remove existing light fixtures and replace with LED light fixtures	24	2016-2017
	Kittery - Augusta	Weather Info./Automatic Vehicle Locators (GPS)	Funded in 2015	Installation / implementation of technology in Winter Maintenance operations	36	2015-2017
2018	35.7	Old Saco Interchange Pavement Rehabilitation	\$922,500	Pavement Rehabilitation	2	2018
	Kittery - Augusta	ITS Upgrades	\$50,000	TBD	TBD	2018
2019	35.7	Saco NB On Ramp	\$2,100,000	Ramp Widen	3	2019

Source: Maine Turnpike Authority, 2016

7. Bridges

There are 32 bridges in the City of Saco, with 13 owned and maintained by MaineDOT, 3 owned and maintained by the Town, 10 owned and maintained by the Maine Turnpike Authority, and 6 owned and maintained privately by Pan Am Railways. Information on these bridges are provided in the table below. To see these bridges in map forms please refer to the *Bridge Jurisdiction* map.

Bridge condition is monitored every two years and given a Federal Sufficiency Rating (SFR). The FSR includes structural deficiencies as well as functional obsolescence and gives an overall value of the sufficiency of the bridge. Each FSR has a numeric indicator of the overall value of the sufficiency of the bridge. A rating will be from 0-100 (0 indicates the worse and 100 indicates the best). The FSR is computed with a federally supplied formula using an array of condition and inventory data, which when computed, is used to identify bridges eligible for federal funding. Since functional obsolescence (too narrow or low weight capacity) may account for a large portion of the rating, one should not assume that a low sufficiency rating means the bridge could fail.

Bridges Located in Saco

Bridge Name	Bridge Number	Owner / Maintainer	Sufficiency Rating
Saco River NB	1341	Maine Turnpike Authority	84.4
Saco River SB	1483	Maine Turnpike Authority	84.4
Cascade Brook	1346	Maine Turnpike Authority	80
Buxton Road	1345	Maine Turnpike Authority	85.3
New County Road	1343	Maine Turnpike Authority	89.3
Boom Road	1342	Maine Turnpike Authority	95.9
Flag Pond Road	1347	Maine Turnpike Authority	96.2
I-95 / BMRR Spur	0809	Maine Turnpike Authority	95.3
I-195 WB Over MTPK	0808	Maine Turnpike Authority	93.6
I-195 EB / ME TPKE	0807	Maine Turnpike Authority	92.4
Elm Street	2265	MaineDOT	63.5

Main Street	3423	MaineDOT	88.4
I-195 Spur EB / Route US 1	0812	MaineDOT	78.5
I-195 Spur WB / Route US 1	0813	MaineDOT	95.4
I-195 WB / Industrial Spur	0811	MaineDOT	92
I-195 EB / Industrial Spur	0810	MaineDOT	92
Ferry Beach	0226	MaineDOT	97.9
Cataract	2137	MaineDOT	81.1
Jordan	2419	MaineDOT	97
New County Road	2603	MaineDOT	78.5
Cascade	3015	MaineDOT	82.1
Somesville	3412	MaineDOT	Replaced in 2016
Goose Fare	3643	MaineDOT	46
Prescott	1294	Saco	99.7
Watson Mill	5606	Saco	100
Foxwell Brook	3185	Saco	70.7
Common Street	1354	Pan Am Railways	N/A
Wharf Street	1353	Pan Am Railways	N/A
James Street	1355	Pan Am Railways	N/A
Beach Street	1364	Pan Am Railways	N/A
Old Orchard Road	1365	Pan Am Railways	N/A
Front Street	1352	Pan Am Railways	N/A

Source: MaineDOT, 2016

^{*} *Please Note*: The Pan Am Railways bridges do not have Federal Sufficiency Ratings as the information needed to calculate the sufficiency rating is not collected. Sufficiency rating does not apply to these bridges.

8. MaineDOT Map Viewer

The MaineDOT maintains an interactive online mapping tool, the MaineDOT Map Viewer, which includes most of the city's transportation infrastructure. To view the MaineDOT map viewer, click the link below to visit MaineDOT's website: www.maine.gov/mdot/mapviewer

9. Parking

There are many different areas within downtown Saco that offer public parking. The following table summarizes these areas and the amount of parking they provide.

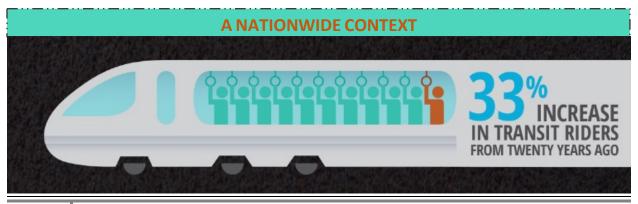
BLOCKS	Public Lots	Private Lots	Driveways	Total
West Side (North - Cross)	0	0	50	50
West Side (Cross - Cutts)	36	25	31	92
West Side (Cutts - Thornton)	0	79	38	117
West Side (Thornton - Pleasant	18	45	45	108
West Side (Pleasant - Storer)	0	184	57	241
West Side (Storer - Water)	95	211	34	340
West Side (Water - Saco River)	0	19	0	19
West Side (Saco Island)	155	459	0	614
East Side (Saco Island)	0	0	5	5
East Side (Saco River - Front / Common)	0	34	0	34
East Side (Front / Common - Free)	32	13	3	48
East Side (Free - School)	0	102	14	116
East Side (School - Beach)	0	54	63	117
Boundaries	0	201	93	294
TOTAL	336	1,426	433	2,195

ON-STREET	# Spaces			
Main Street	86			
Cutts Avenue	32			
Thornton Avenue	7			
Storer Street	12			
Gooch Street	8			
Pepperell Square / Common Street	38			
Middle Street	100			
Water Street	10			
Cross Street	13			
School Street	22			
Pleasant Street	6			
Front Street	4			
Common Street	21			
Free Street	14			
TOTAL	373			
TOTAL PARKING SPACES 2,568				

Source: City of Saco Downtown Plan, 2013

10. Alternative Modes of Transportation

While the private automobile continues to be the primary means of transportation in Saco, the City has been effective in encouraging and planning for other forms of transportation. With a station on Saco Island, the Amtrak Downeaster continues to provide plentiful northbound and southbound passenger rail service for business and recreation alike. Additionally, Shuttle Bus-Zoom provides public transportation service to Saco, Biddeford, and Old Orchard Beach.



Bus Service

Shuttle Bus-Zoom is a public transportation system that serves Saco, Biddeford, and Old Orchard Beach. The following options are available:

> Shuttle Bus Local

The Tri-City area of Saco, Biddeford and Old Orchard Beach is serviced by two buses. Local 1 begins at Southern Maine Health Care (SMHC) in Biddeford to start its daily run along the Route 1 (Elm Street) corridor to Saco and Old Orchard Beach. Local 2 also begins at SMHC in Biddeford and travels along Route 111 (Alfred Street) to Saco and Old Orchard Beach.

> Shuttle Bus Intercity to Portland

Starts at SMMC in Biddeford and makes stops in Biddeford, Saco, Old Orchard Beach, Scarborough, South Portland, and Portland.

Zoom Turnpike Express

Provides commuter service from the Commuter Service Park & Ride Lot in Biddeford, located on Route 111 near Maine Turnpike Exit 32 and the Commuter Service Park & Ride Lot in Saco, located on Industrial Park Road near Maine Turnpike Exit 36 to Downtown Portland.

> UNE Nor'Easter & UNE Express Bus

Provides bus service from the University of New England (UNE) to downtown Biddeford and Saco. Available to UNE students, faculty, staff, and the general public.

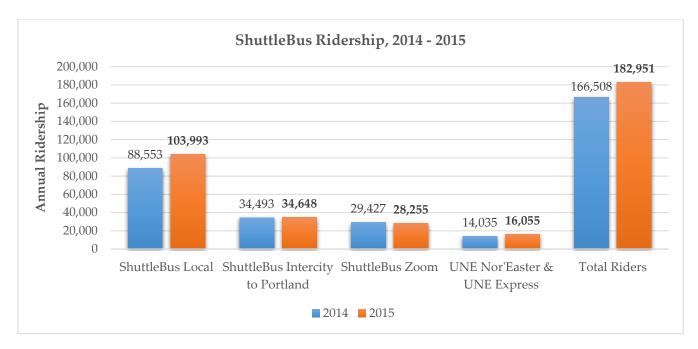
> Camp Ellis Trolley (Seasonal)

Provides bus service from the Saco Transportation Center (Amtrak Downeaster Station) to Old Orchard Beach via Route 9 (through Camp Ellis).

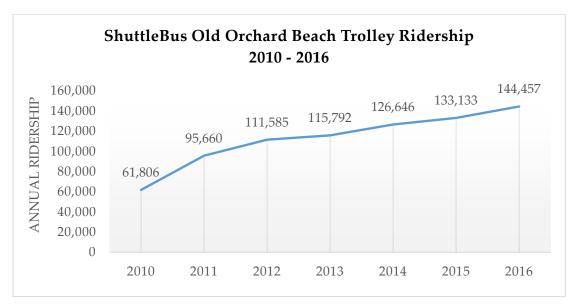
> Old Orchard Beach Trolley (Seasonal)

Provides bus service from Route 1 in Saco (Funtown-Splashtown area) to downtown Old Orchard Beach.

The chart below illustrates ridership of Shuttle Bus Local, Shuttle Bus Intercity to Portland, Shuttle Bus Zoom, and the UNE Nor'Easter / UNE Express routes in 2014 and 2015. Total ridership increased nearly 10%.



Source: Shuttle Bus, 2015



Source: Shuttle Bus, 2016

The chart above illustrates the ridership of the Shuttle Bus Old Orchard Beach Trolley for the years 2010 – 2016. The ridership has increased each year since 2010, with an increase of nearly 134% between 2010 and 2016.

For more information about Shuttle Bus-Zoom visit their website: <u>www.shuttlebus-zoom.com</u>

York County Community Action Corporation (YCCAC) provides scheduled and ondemand transportation services for eligible residents throughout York County. Programs include bus transportation to / from Biddeford along the *Wave* service. The *Wave* service links to the Shuttle Bus Local and Zoom routes. Additionally, YCACC provides service for shopping and medical appointments for York County residents on a weekly basis. For more information about YCCAC visit their website: www.yccac.org/index.php/programs/transportation

Rail

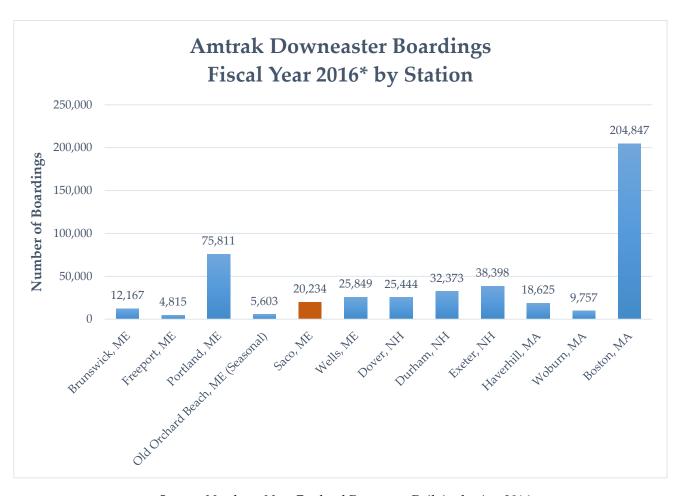
The Amtrak Downeaster runs from Boston, Massachusetts to Brunswick, Maine. The train stops right in the downtown area at the Saco Transportation Center located on Saco Island.



Amtrak Downeaster Station, Saco, Maine

SMPDC Photograph, 2016

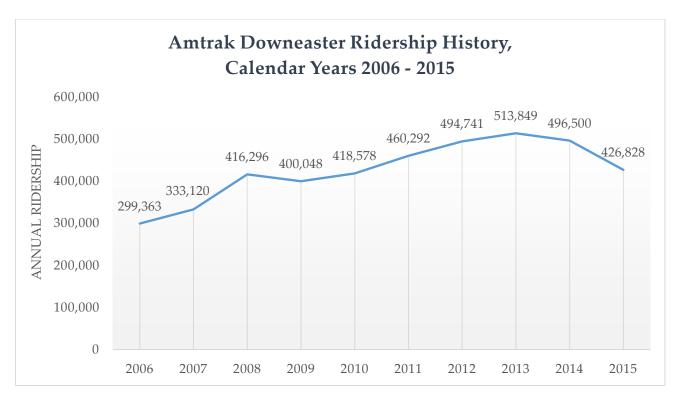
The Amtrak Downeaster provides five northbound and southbound passenger trains on a daily basis during the week and on the weekend. The chart on the next page illustrates the number of boardings at each of the Amtrak Downeaster stations during Fiscal Year 2016. Saco had a total of 20,234 boardings during this time period.



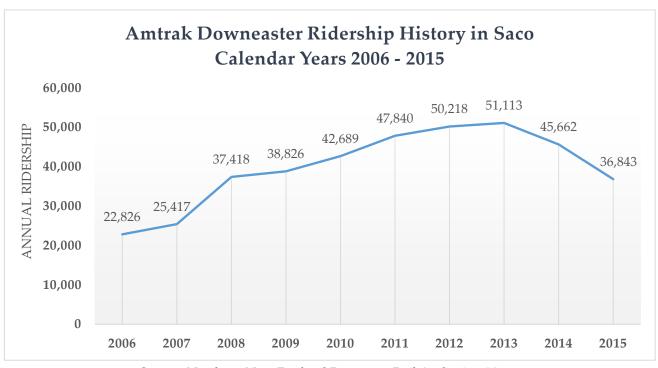
Source: Northern New England Passenger Rail Authority, 2016

The chart on top of the next page illustrates the Amtrak Downeaster's historical ridership between 2006 and 2015. Whereas 2013 had the highest ridership with 513,849 people boarding the train, 2006 had the least ridership with 299,363 people riding the train. In 2015, there were 127,465 more boardings than in 2006.

^{*} *Please Note*: Fiscal Year 2016 is July 1, 2015 – June 30, 2016.



Source: Northern New England Passenger Rail Authority, 2015



Source: Northern New England Passenger Rail Authority, 2015

The chart at the bottom of the previous page illustrates the Amtrak Downeaster's historical ridership at the Saco station between 2006 and 2015 and corresponds quite nicely with the overall historical data from the chart above it. Whereas 2013 had the highest ridership with 50,113 people boarding the train in Saco, 2006 had the least ridership with 22,123 boarding the train in Saco. In 2015, there were 14,720 more train boardings in Saco than in 2006. It should also be noted that in 2015 there was a fourmonth major maintenance project to replace ties that certainly impacted the ridership of that year as all mid-day trains did not run during that four-month project. For more information about the Amtrak Downeaster visit their website:

www.amtrakdowneaster.com

Air

Saco is approximately 20 minutes from the Portland International Jetport and 45 minutes from the Pease International Trade port in Portsmouth, New Hampshire. The Manchester-Boston Regional Airport is approximately 80 minutes from Saco, while Logan International Airport in Boston, Massachusetts is approximately 100 minutes from Saco. Shuttle Service is available to all airports from private carriers, such as Greyhound and Concord Coach Bus lines from Portland.

11. Pedestrian Network

Pedestrians are a part of every roadway environment and attention should be paid to their presence. Sidewalks are the primary facility provided to meet their needs, and care must be taken when designing a pedestrian network to account for the needs of children, the elderly, and people with strollers, and pedestrians with physical and mental disabilities, including impairments that require the use of wheelchairs and other assistive devices. Please refer to the *Sidewalk Inventory* map to see the town's network of sidewalks in map form.

12. Trails / Open Spaces

Detailed below are the five major organizations that have created on-road and off-road trails in Saco.

The Eastern Trail Alliance created the Eastern Trail network that connects Kittery to South Portland through a series of on-road and off-road trails. In Saco, the Eastern Trail is located on several local roads in the downtown district before joining the off-road section of the trail at Thornton Academy.

This off-road portion of the trail follows an old railroad grade northwest of Thornton Academy towards Old Orchard, where it crosses Route 1 on a pedestrian bridge before crossing into Old Orchard Beach. The Eastern Trail (not to be confused with the Appalachian Trail) is part of the larger East Coast Greenway network that will eventually connect Maine to Florida through its off-road trail system. Please refer to the Eastern Trail map to view the trail in map form.

The Saco Valley Land Trust was founded in 1990 to "preserve scenic, historic, recreational and environmental resources in the Biddeford, Saco, and Old Orchard Beach area by acquiring interests in land; protecting open space, scenic areas & water quality, wildlife, and plant habitat for the public good." The Trust has preserved 545 acres of forest, fields, and waterways. The Saco Valley Land Trust currently owns and maintains an impressive thirteen preserves across the City.

Saco Bay Trails began as a subcommittee of the City of Saco's Conservation Commission and was incorporated as a non-profit organization in 1998 to "create, maintain and promote the use of walking trails on public and private land in the Saco Bay area." In total, Saco Bay Trails maintains twelve trail networks in Saco, some of which overlap with Saco Valley Land Trust's properties.

The State of Maine owns and maintains Ferry Beach State Park, located just north of Camp Ellis off of Route 9 on Bay View Road between Old Orchard Beach and Camp Ellis. The state park comprises 100 acres, offering views of miles of white sand beaches between Saco River and Pine Point in Scarborough. Visitors can enjoy a picnic area, nature trails, a nature center providing guided nature programs, and a changing room in the park.

The Nature Conservancy owns and maintains the Saco Heath Preserve, located along Route 112 west of I-95 / The

BENEFITS OF TRAILS

Most people agree that trails can contribute to the health and wellness of a community, but studies have also provided evidence of the economic benefits of local trail systems.

- Trails create new opportunities for tourists to visit Saco
- Tourist visits generate revenue for local businesses
- "Trails consistently remain the number one community amenity sought by prospective homeowners", making real estate in Saco a more attractive investment (National Association of Homebuilders '08)
- Higher property values and taxes
- Health care savings. According to a recent study in the Miami area, a new trail system would save the community up to \$2 million annually in direct medical costs from the increase in physical activity, with up to 6,500 area residents expected to become new exercisers. The community was also expected to lose up to 100,000 pounds of weight annually by burning calories exercising on the

Source: American Trails Magazine, 2011

Main Turnpike. The Saco Heath is a 1,223-acre preserve that features a raised coalesced bog, where the surface of peat is perched above the level of groundwater. There is also a self-guided hike along a woodland trail to a boardwalk through the heath's varied peat land communities.

13. Bicycle Network

Bicyclists have the same mobility needs as any other road user, and increasingly, land use and transportation planners are recognizing the bicycle as a viable transportation mode.

While recreation is still the primary use of the bicycle, more people are beginning to cycle as a way to commute to work and run errands. Cyclists should be included in all phases of transportation planning including new road design, construction, and rehabilitation (for more on this, see the Complete Streets section below).

DID YOU KNOW?

When the city of Seattle removed car lanes and added bike lanes to its Stone Way North street, the volume of cyclists increased 25%, motor traffic on adjacent streets declined 12-34%, speeding decreased 80%, and collisions dropped 14%. (City of Seattle Department of Transportation)

Maine bicycling laws generally give bicyclists the rights and same responsibilities motor vehicle operators. Bicyclists may use public roads and must obey traffic laws such as stopping at red lights and stop signs, yielding to pedestrians at crosswalks, and yielding to traffic when entering a road from a driveway. Motorists are required to give at least three feet of clearance when passing bicyclists.

Any segment of roadway having a paved shoulder of at least four feet wide is generally considered appropriate for bicycle travel. As roadways are improved and upgraded, the city will encourage adequate shoulder widths and bicycle lanes when necessary in order to safely accommodate bicycle travel as we look to mitigate traffic congestion.

14. Complete Streets

Saco residents need streets that are safe and inviting for everyone. Our streets allow children to get to school and parents to get to work, bring together neighbors, and draw visitors to neighborhood stores. As such, our streets ought to be designed for everyone's needs, whether young or old, on foot or bicycle, in a car or in a bus. But too often, streets in general are designed primarily for motor vehicles. Communities across Maine and the

country are beginning to adopt Complete Street policies that result in safer and more accessible streets for all users, something Saco should certainly be cognizant of as it plans updates to its street network moving forward.

Complete Streets are designed and operated to enable safe access for all users: pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They also allow buses to run on time and make it safe for people to walk to and from train stations. Cities and towns in Maine, large or small, can begin building a safer and more welcoming street network by adopting a Complete Streets Policy and then ensuring its full implementation.

So far, eight communities in Maine have adopted a local Complete Streets Policy.

Yet a Complete Streets Policy does not dictate a one-size fits all approach. A Complete Street in a rural area will look quite different from one in an urban area as both are designed to balance safety and convenience for everyone using the road. A Complete Street may include sidewalks, bike lanes, paved shoulders, comfortable and accessible bus stops, safe crosswalks, median islands, curb extensions (bump-outs), narrower travel lanes and more



ACTIVE SIDEWALKS

Sidewalks should be smooth, wide, feel safe, and have appropriate transitions to the street, making them easy to walk or use a wheelchair on

DEDICATED BIKE LANES

Simple pavement markings creating a dedicated bike lane make both motorist and bicycle movement more predictable, and therefore safer for both. They may increase the likelihood of casual riders using bicycles for transportation

ACTIVE ROADWAY

One lane of car traffic going in each direction with a two-way-left-turn-lane (Timajor roads would reduce me amount or car crashes on Government Street by providing turning vehicles a refuge from through traffic, while keeping through traffic moving more efficiently

SAFE CROSSWALKS

Clearly marked crosswalks allow pedestrians and wheelchair users to cross streets safely, while making sure cars know where to expect them

PLANTING STRIP

Street trees and landscaping slow speeding traffic, improve the aesthetics of the roadway, provide shade, and create a buffer between cars and people, making a more inviting environment for pedestrians

GREEN Spaces

Parks and public green spaces create a destination, encouraging community interaction and providing a rest from the surrounding urban environment By adopting a Complete Streets Policy, communities direct planners, engineers, and other professionals to routinely design and operate the entire right of way to enable safe access for all users, regardless of age, ability, or mode of transportation. This means that every transportation project will make the street network better and safer for drivers, transit users, pedestrians, and bicyclists, making each community that institutes a Complete Streets Policy a better place to live and visit.

Here are the communities in Maine that have adopted a Complete Streets Policy:

- Portland
- Lewiston
- Auburn
- Windham

- Fort Kent
- Bath
- Scarborough
- Yarmouth

A comprehensive Complete Streets Policy should:

- Include a vision for how & why the community wants to complete its streets
- Specify all users to include pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses, and automobiles
- Apply to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way
- Make specific exceptions and set a clear procedure that requires high-level approval of exceptions
- Encourage street connectivity and aim to create a comprehensive, integrated, connected network for all modes of transportation
- Be understood by all agencies to cover all roads
- Direct the use of the latest and best design guidelines while recognizing the need for flexibility in balancing user needs
- Direct that Complete Streets solutions will complement the context of the community
- Establish performance standards with measurable outcomes
- Include specific next steps for implementation of the policy

Please refer to the *Complete Streets Ideas for the Downtown Focus Area* map for specific Complete Streets suggestions for the Downtown Focus Area in the City of Saco.

Some Examples of Complete Streets in Saco



Water Street (Before)



Water Street (After)



Scammon Street – Pedestrian Bumpout and Rectangular Rapid Flashing Beacon



Route 112 (North Street) – Sidewalk Buffers

Some Examples of Complete Streets in Southern Maine



Route 1, South Portland



Route 1, South Portland



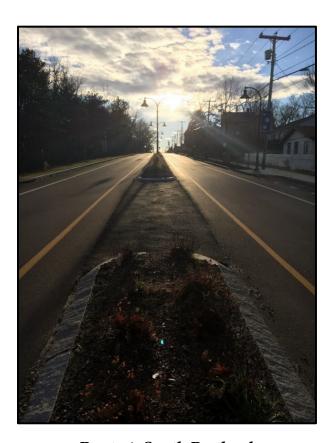
Route 1, South Portland



Route 1, South Portland



Route 1, South Portland



Route 1, South Portland



Main Street, Kennebunk





C. Saco's Transportation Users

Like most Maine communities, the automobile supersedes all other modes as the predominant mode of transportation for Saco workers (nearly 82% of all workers drive alone). About 11.5% of all workers carpool. While the automobile is dominant because of its convenience, it is notable that since there are alternatives in Saco, more people are choosing to use these additional transportation options (see alternative transportation section). It is also significant that around 4% of all workers work from home in Saco. As the world becomes more and more interconnected via the internet, this could also affect the City's transportation system as fewer residents need to leave their homes for work.

Commuting to Work in Saco, 2014				
	Total	Percent		
Car, Truck, or Van (Drove alone)	8,178	81.7%		
Car, Truck, or Van (Carpooled)	1,151	11.5%		
Public Transportation (excluding taxicab)	110	1.1%		
Walked	140	1.4%		
Bicycle	0	0.0%		
Taxicab, motorcycle, or other means	30	0.3%		
Worked at Home	390	3.9%		
Total Workers, 16+	10,010	100%		

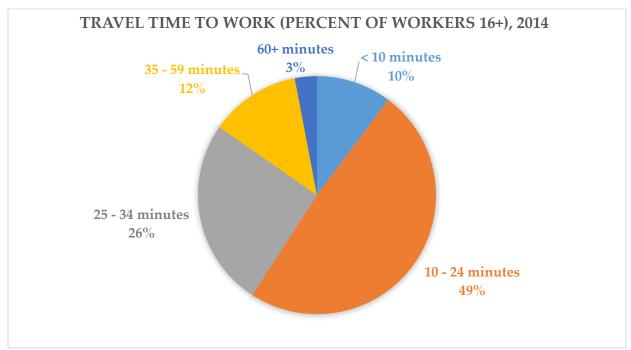
Source: U.S. Census Bureau, 2014

Data indicates that most adults living in Saco have access to a vehicle, with only approximately 1.6% of the population without access to a vehicle. Nearly 55% of all households have access to at least two vehicles and around 30% have access to at least three vehicles.

Vehicles Available in Saco (Per Household), 2014		
	Total	Percent
0 Vehicles Available	160	1.6%
1 Vehicle Available	1,369	13.7%
2 Vehicles Available	5,444	54.5%
3 or More Vehicles Available	3,017	30.2%
Total Vehicles Available	9,990	100%

Source: U.S. Census Bureau, 2014

A consistent issue throughout Maine and the rest of the country is that traffic tends to build up during the "commute hours," or the time(s) of day when people are driving to and from work. Approximately 59% of people with jobs in Saco have less than a 24-minute commute to work. Approximately 26% have commutes between 25 and 34 minutes while nearly 12% of all commuters have a commute between 35 and 59 minutes. Only 3% have commutes of an hour or more. The mean travel time to work in Saco is 23.8 minutes (2014).



Source: U.S. Census Bureau, 2014

Total Population and Commute Times for Workers 16+, 2000 - 2014

Town	2000 Population	2000 Mean Commute Time	2014 Population	2014 Mean Commute Time	Population Change 2000-2014	Commute Time Change 2000- 2014
Saco	16,822	22.4	18,757	23.8	1,935	1.4
Old Orchard Beach	8,856	22.9	8,679	24.7	-177	1.8
Biddeford	20,942	21.9	21,303	22.4	361	0.5
Dayton	1,805	30.3	1,989	30.8	184	0.5
Buxton	7,452	29.7	8,079	31.3	627	1.6
Scarborough	16,970	20.5	19,209	20.4	2,239	-0.1
York County	186,742	25.8	198,934	27.7	12,192	1.9

Source: U.S. Census Bureau, 2000 – 2014

Nearly 25% of all residents of Saco who work do so in Saco while only 19.5% work in Portland, and just 14% work in Biddeford.

Place of Work	Amount	Percent
Saco	2485	24.8%
Portland	1,950	19.5%
Biddeford	1,380	13.8%
South Portland	814	8.1%
Scarborough	525	5.2%
Westbrook	315	3.1%
Old Orchard Beach	230	2.3%
Kennebunk	210	2.1%
Gorham	145	1.4%
Kittery	135	1.3%

Source: U.S. Census Transportation Planning Products, 2015

Around 97.4% of all residents of Saco who work do so within the State of Maine. 52.4% of them work within York County while the other 45% work outside of York County. Of those that work outside of York County, approximately 2.6% work outside the State of Maine.

Place of Work	Percent
Worked in State of Residence	97.4%
Worked in County of Residence	(52.4%)
Worked Outside County of Residence	(45.0%)
Worked Outside State of Residence	2.6%
Total	100%

Source: U.S. Census Bureau, 2014

D. FUNDING OF TRANSPORTATION INFRASTRUCTURE

New construction and maintenance of existing transportation infrastructure is funded in a variety of ways including local funding (City of Saco), state funding (MaineDOT), and/or federal funding (Federal Highway Administration). The following section will discuss different funding opportunities for the city's transportation infrastructure.

1. MaineDOT Highway Corridor Priorities

The MaineDOT Highway Corridor Priorities are based on a ranking system. The following chart outlines the priority system for the current roadway system. The Corridor Priories are based on federal functional classification, regional economic significance, heavy haul truck use and relative regional traffic volumes. Further, the MaineDOT Highway Corridor Priorities are directly linked to the MaineDOT Customer Service Levels which can be found previously in this inventory. To see the Priority Corridors in map form, please refer to the *Highway Corridor Priorities* map.

Priority Corridor Roads in Saco include:

- *Priority 1*: I-95 / Maine Turnpike, Route 1, I-195 west of exit 2
- *Priority 2:* I-195 east of exit 2, Route 9 south of Route 1, Route 112
- *Priority 3:* Route 117 (very small portion near the intersection with Route 112), Route 5
- Priority 4: Route 98, Industrial Park Road, Spring Hill Road
- Priority 5: Louden Road, Garfield Street, Maple Street, Market Street, Spring Street (between Lincoln Street and Route 5), Lincoln Street (between Route 1 and Spring Street), Route 9 (east of Route 1), Ocean Park Road, Old Orchard Road, Bay View Road
- *Priority 6:* All other local roads not listed above.

MaineDOT definitions of Highway Priorities

Priority	Definition
Priority 1 Roads	These roads include the Maine Turnpike, the interstate system and key principal arterials like Route 1 in Aroostook County, the Airline (Route 9), and Route 2 west of Newport, and Route 302. The 1,400 miles of Priority 1 roads represent only 7 percent of the miles, but carry fully 40 percent of all vehicle miles traveled in Maine.
Priority 2 Roads	These roads total about 940 miles. They are non-interstate, high value arterials that represent about 4 percent of the total miles of road but carry 11 percent of overall traffic.
Priority 3 Roads	These roads generally are the remaining arterials and most significant major collector highways. These 2,050 miles represent only 9 percent of miles, but carry 19 percent of the traffic.
Priority 4 Roads	These roads generally are the remainder of the major collector highways, often also part of Maine's unique state aid system, in which road responsibilities are shared between the state and municipalities. These 1,900 miles represent about 8 percent of total miles, and carry 10 percent of the traffic
Priority 5 Roads	These roads are 2,500 miles of minor collector highways, almost all on the state aid system. They represent 11 percent of miles, but carry only 7 percent of traffic.
Priority 6 Roads	These roads are local roads and streets, and are the year-round responsibility of our municipal partners. Though they carry just 13 percent of the statewide traffic, these 14,300 miles make up 61 percent of the total miles.

2. MaineDOT Customer Service Levels

Similar to the Highway Corridor Priorities, the Customer Service Level is prioritized on three criteria: safety, condition, and service. Each criterion has several factors that are included in the overall rating of each category. Roads and road segments are given an A-F rating with A being the best and F being the worst. To get a better idea of the customer service levels for each road/node, visit the MaineDOT Customer Service Level page at http://maine.gov/mdot/about/assets/hwy/#undefined2.

<u>Customer Service Level – Safety</u>

Most roads in Saco are classified as an A or B. All of Louden Road and sections of Route 5, Route 1, and Old Orchard Road are in the C category, due to crash history, pavement width, and pavement rutting. Sections of Route 112 and Old Orchard Road are in the D category, primarily due to crash history and pavement width on these roads. There is one small section of Route 112, located around 1 mile southeast of the Saco – Buxton

Town Line, which is in the F category, primarily due to crash history and pavement width. To see these service levels in map form, please refer to the *Customer Service Level – Safety* map.

MaineDOT Customer Service Level - Safety Definitions

Customer Service Level	Category	Definition
Crash History	Safety	This measure includes the two types of motor vehicle crashes most likely related to the highway- head-on and run-off road crashes. The A-F scale compares these crash rates with the statewide average.
Paved Roadway Width	Safety	This measure compares total paved width (lane plus shoulder) with minimum acceptable widths by Highway Corridor Priority (not new design standards). If a highway segment fails this minimum, the Safety Customer Service Levels for that segment is decreased one letter grade.
Pavement Rutting	Safety	This measure looks at wheel path rutting, since excessive rutting holds water and contributes to hydroplaning and icing in winter. The A-F scale set points vary by Highway Corridor Priority, and are based on hydroplane tests.
Bridge Reliability	Safety	This measure is pass/fail. If a highway segment contains a bridge with a Condition Rating of 3 or less (excluding non-overpass decks), the Safety Customer Service Level is decreased one letter grade. These bridges are safe, but may require increased inspection or remedial work that could affect traffic flow.

Customer Service Level – Condition

Most roads in Saco are again classified in the A or B category. There are small sections of Route 1, Route 112, Route 5, and Lincoln Street in the C category. This is primarily due to ride quality, roadway strength, and pavement condition. There are small sections of Route 112 Route 1, and Market Street in the D category. This is primarily due to roadway strength and ride quality. Route 1 between Routes 112 / 9 and Lincoln Street, Route 9 between Route 1 and the Saco – Biddeford City Line (both sections are located in the downtown core), and a small section of Route 112 are in the F category. This is primarily due to roadway strength and ride quality. To see these in map form, please refer to the *Customer Service Level – Condition* map.

MaineDOT Customer Service Level - Condition Definitions

Customer Service Level	Category	Definition
Pavement Condition	Condition	This measure uses the Pavement Condition Rating (PCR), a 0-5 scale that is composed of International Roughness Index, rutting, and two basic types of cracking. The A-F scale varies by Highway Corridor Priority.
Roadway Strength	Condition	This measure uses the results of the falling weight deflectometer, a device that estimates roadway strength. The A-F scale is uniform across Highway Corridor Priority, since even low-priority roads must support heavy loads in Maine's natural resource-based economy.
Bridge Condition	Condition	This measure converts the 0-9 national bridge inventory (NBI) condition ratings to pass or fail; it is uniform across Highway Corridor Priority.
Ride Quality	Condition	This measure uses the International Roughness Index (IRI), which is expressed in inches per mile of deviation. IRI is the nationally accepted standard for passenger comfort, and the A-F scale varies by Highway Corridor Priority.

Customer Service Level – Service

Most roads in Saco are classified in the A or B category. However, most of I-95 / Maine Turnpike, Ocean Park Road, and Route 1 is in the C category, along with sections of Route 112 and Route 9 (east of Route 1), primarily due to traffic congestion. Small sections of Route 112, Route 9, and Route 1 are in the D category, also primarily due to traffic congestion. Finally, there are sections of Industrial Park Road (between Route 112 and I-195), Route 112 (near Industrial Park Road), and Route 9 (between the Route 1 / 112 intersection and the Saco – Biddeford City Line in the downtown core) that are in the F category due to traffic congestion. To see these in map form, please refer to the *Customer Service Level – Service* map.

MaineDOT Customer Service Level - Service Definitions

Customer Service Level	Category	Definition
Posted Road	Service	Each year, MaineDOT posts more than 2,000 miles of road during spring thaw to protect their longevity, but some posted roads directly affect Maine's economy. Road segments that are permanently posted get a D, those with seasonal postings get a C.
Posted Bridge	Service	This measure uses load weight restrictions to arrive at an A-F score that varies by Highway Corridor Priority.
Congestion	Service	This measure uses the ratio of peak traffic flows to highway capacity to arrive at an A-F score for travel delay. Peak summer months are specifically considered to capture impacts to Maine's tourism industry. This scale is uniform across Highway Corridor Priority, since tourist travel is system-wide and sitting in traffic affects customer service similarly on all roads.

3. Local Funding and Transportation Infrastructure

The City of Saco's Department of Public Works sorts its services into seven different categories: Street & Transportation, Sanitation, Utilities, Facilities, Engineering, Fleet Management, and Administration. The table below depicts the amount of funding for each category for Fiscal Year 2015.

Program Area	Budget Allocation	Percent of Total Budget
Street and Transportation	\$1,988,375	36%
Sanitation	\$1,516,167	27%
Utilities	\$350,125	6%
Facilities	\$360,800	7%
Engineering	\$175,318	3%
Fleet Management	\$996,470	18%
Administration	\$178,838	3%

Source: City of Saco Department of Public Works, 2015

The following table depicts the amount of funding the City of Saco spent on Road Pavement Funding (City / MaineDOT) and Winter Sand & Salt for the years 2011 – 2015.

Year	Road Pavement Funding (City / MaineDOT)	Winter Sand & Salt Cost	Total (Road Pavement & Winter Maintenance
2011	\$1,497,701	\$168,813	\$1,666,514
2012	\$1,005,825	\$124,988	\$1,130,813
2013	\$542,983	\$141,565	\$684,548
2014	\$485,684	\$165,840	\$651,524
2015	\$994,089	\$203,668	\$1,197,757

Source: City of Saco Department of Public Works, 2015

4. Municipal Partnership Initiative

The Municipal Partnership Initiative (MPI), a program MaineDOT began in 2011, is a special initiative geared towards funding projects for state and state-aid highways that often get overlooked. Municipalities that would like to participate in the initiative are required to contribute at least half of the project costs, with the remainder of the project being funded through state funds.

It is expected that the municipality (not MaineDOT) will manage the project, whereas MaineDOT will simply reimburse entities once the work is complete to the satisfaction of MaineDOT.

All MPI projects must first be certified by a professional engineer and have a useful life span of at least ten years in order to qualify under the initiative. Municipalities can, however, propose shifting long-term maintenance responsibilities as part of their share.

The City of Saco has participated in the MPI program for one project so far, in 2013 on U.S. Route 1, and saw it through completion. The project scope included slope stabilization and repair to a washout, with a total cost of \$67,280.

5. Maine Local Road Assistance Program

MaineDOT has a system to help municipalities maintain local and minor collector roads. The Maine Local Road Assistance Program (LRAP) is a program that provides equitable financial assistance to communities for their use in improving local roads and maintaining state roads in urban compact areas. The amount of annual funding for municipalities is based on a per lane mile rate. The table below indicates the LRAP funding the City of Saco has received and will receive during fiscal year 2017.

Fiscal	Total
Year	Funding
2017	\$220,632
2016	\$221,684
2015	\$219,344
2014	\$254,731
2013	\$255,465
2012	\$263,206
2011	\$245,567

Source: MaineDOT Local Roads Program, 2016

6. The Portland Area Comprehensive Transportation System

The Portland Area Comprehensive Transportation System (PACTS) was designated in 1975 as the federally-mandated metropolitan planning organization (MPO) for the Portland region. The federal government established these entities in all urbanized areas of the country in order to improve the coordination of transportation planning and investment decisions by state, municipalities, and public transportation organizations.

The PACTS region includes portions or all of 18 communities: Arundel, Biddeford, Cape Elizabeth, Cumberland, Falmouth, Freeport, Gorham, North Yarmouth, Old Orchard Beach, Portland, Raymond, Saco, Scarborough, South Portland, Standish, Westbrook, Windham, and Yarmouth.

PACTS members include the 18 communities, seven public transportation providers, the MaineDOT, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Maine Turnpike Authority, the Greater Portland Council of Governments, the Southern Maine Planning and Development Commission and other public and private transportation organizations, and interested citizens.

PACTS provides a continuing, coordinated and comprehensive planning process for the Greater Portland urbanized area, and a forum for collaborative decision-making amongst the members. PACTS sponsor and conduct studies, assist other planning agencies, and monitor compliance with federal air quality goals. They also approve the use of FHWA and FTA funds for transportation improvements in the PACTS area. The largest contribution to the funding of their work comes from the FHWA and the FTA. The MaineDOT and all of their member agencies and municipalities also contribute.

PACTS also administers several committees, including:

Transit Committee

Advises the Executive Committee on strategic public passenger transit issues in support of the principles outlined in the Long Range Plan, *Destination Tomorrow*; submits to the Executive Committee a recommendation regarding the allocation of FTA Section 5307 Urban Formula Funds; reviews and scores proposals for use of the PACTS Transit Set-Aside funds and then submits those recommendations to the Policy Committee; selects representatives to the Policy Committee, Technical Committee, Planning Committee, and Executive Committee.

Planning Committee

Advises the Executive Committee and staff on strategic transportation planning issues; focuses on long-range planning issues and relationships with other public planning issues, such as land use, economic development, environmental protection, resource conservation, and community enhancement.

Technical Committee

Advises the Executive Committee on any and all matters for which the Policy Committee seeks its advice; focuses on technical project and program review issues which relate to a broad scope of transportation issues and range from road and highway construction to traffic control, and from different modes of transportation to alternative transportation systems.

Policy Committee

The policy-making body of PACTS.

Executive Committee

Meets with PACTS staff to organize Policy Committee meetings and to coordinate the work of the PACTS committees; offers recommendations for action to the Policy Committee; makes certain Traffic Improvement Program (TIP) project changes, including revising the scope of work of funded MPO Allocation and FTA-funded projects; performs the annual evaluation of the Executive Director and reports to the Policy Committee; appoints "appointees" to the Planning, Transit, and Technical Committees; and takes on other responsibilities as requested by the Policy Committee.

PACTS also administers several local funding opportunities, including:

Municipal Partnership Initiative

This program builds upon the MaineDOT's successful Municipal Partnership Initiative (MPI) by using PACTS' annual allocations of state money to be matched with at least 50% local funds for road reconstruction or rehabilitation projects. The program is designed to fund collector or arterial roadway projects, and to focus on bringing the region's substandard roads up to PACTS' and MaineDOT's minimum standards thereby having the completed segment(s) included in future pavement preservation programs.

Collector Paving Program

"Simple" pavement preservation projects are those projects which primarily consist of paving the existing roadway without a high percentage of ancillary work. The scope would include shimming the existing travel way and shoulder surfaces and paving the entire width with one inch to one and one half inches of hot mix asphalt.

Milling ("mill and fill") the existing surface to restore cross slope, vertical grades and/or surface deflections is also considered pavement preservation.

Work in addition to the above which is part of the paving scope, such as butt jointing, hand placing pavement at driveways and intersecting streets as well as re-graveling the shoulders and/or minor loaming and seeding would also be included. American with Disabilities Act (ADA) work in accordance with current practice must always also be considered. However, replacing guard rails, substantial drainage, relocating poles and substantial sidewalk work are not considered under "simple" pavement preservation.

In general, the spending target definitions are:

- Preservation of our existing street/highway system, of our existing public transportation systems and of all other components of our transportation system.
- Modernization of the systems by addressing safety and other deficiencies for all modes, bringing systems up to current standards/technologies and being consistent with current transportation policies.
- Expansion of the systems the creation of new capacity such as new roads, new sidewalks, new bicycle infrastructure and separated shared use paths, more transit vehicles to provide new services.

MPO Allocation Funding Complex Projects (Federal Highway Administration)

A "complex project" is one that PACTS programs in two phases: funding for a Preliminary Design Report (PDR) in year one, and then funding for construction a year or more later after the PDR is completed. A complex project is one that requires (or might require) the purchase of right-of-way or involves significant design work. More information can be found in the PACTS 2017-2018 TIP Policies and Procedures document, including background information for how municipalities should go about preparing their applications, which can all be found on the PACTS website: www.pactsplan.org/

High Crash Locations Project

As part of its Fiscal Year 2016 – 2017 Unified Planning Work Program through MaineDOT, the PACTS staff will be performing preliminary safety assessments of high crash nodes (intersections) and high crash links (segments of highway between intersections) in the region. These assessments will be developed into a report that will be shared with the MaineDOT Region 1 Office, the Maine DOT Bureau of Planning, and the local towns in which the high locations are located. (There are over 300 high crash locations in the PACTS region alone.)

E. TRANSPORTATION STUDIES

There have been many transportation studies conducted in the City of Saco over the years. The studies below are the most recent and relevant to this transportation inventory.

1. Recent Municipal Transportation Studies:

- Pepperell Square Study (2015)
- Route 112 Corridor Update Study (2015)
- Mill District Transportation Study

2. Recent PACTS Transportation Studies:

- Saco / Biddeford Wayfinding Plan (2013)
- PACTS Congestion Management Process Plan (2013)
- Regional Bicycle and Pedestrian Facility Design Guide (2013)
- Regional Bicycle and Pedestrian Facility Design Guidance for the PACTS Metropolitan Planning Area (2014)
- Regional Arterial System Assessment (2014)
- Regional Transportation Plan Update (2014)

For more information about these transportation studies, please visit the PACTS website: www.pactsplan.org/plans-studies/

3. Other Recent Transportation Studies:

Sustain Southern Maine, Multimodal Transportation Plan (2013)

F. TRANSPORTATION PROJECTS

1. MaineDOT Work Plan

The MaineDOT's new Calendar Years (2017-2018-2019) Work Plan supports the department's mission, "To responsibly provide our customers with the safest, most reliable transportation system possible, given available resources." This Work Plan contains projections of transportation resources (federal, state, other) and MaineDOT's strategy to apply them to the planning, engineering, construction, operation, and maintenance of transportation infrastructure of all modes throughout Maine. The Work Plan emphasizes focusing scarce transportation resources on existing critical infrastructure needs—primarily roads and bridges—to the greatest extent possible. Projects that are included in the MaineDOT Work Plan focus on airports, bridges, and road infrastructure. For more information about the MaineDOT Work Plan, visit MaineDOT's website: www.maine.gov/mdot/projects/workplan/.

Year	Asset(s)	Project ID	Description	Highway Corridor Priority	Scope of Work	Estimated Funding
2017	Interstate 95	018531.00	Maine Turnpike Authority and MaineDOT scoping evaluation of existing traffic conditions and deficiencies at the Route 112 Interchange with particular attention to Route 1, Route 112, I-195, Broadturn Road, Flag Pond Road, and Haigis Parkway.	N/A	Other Work	\$70,000
	Saco Industrial Park	021960.00	City of Saco - IRAP: Reconstruction of a rail spur serving the Saco Industrial Park.	N/A	Rail	\$99,700
	Casco Bay Transportation	021954.00	Casco Bay Transportation - IRAP	N/A	Rail	\$87,700

Year	Asset(s)	Project ID	Description	Highway Corridor Priority	Scope of Work	Estimated Funding
	I-195 Bridges	021747.00	I-195 Bridge (# 0810) over Industrial Park Rd. eastbound. I-195 Bridge (#0811) over Industrial Park Rd. westbound. I- 195 Bridge (#0812) over Route 1 eastbound. I-195 Bridge (#0813) over Route 1 westbound.	1	Bridges Other	\$1,200,000
2018 / 2019	Louden Rd., Holmes Rd., Broadturn Rd., Route 99, Payne Rd., Log Cabin Rd., Mussey Rt., Route 7	22086.00	Biddeford Area 2018 Light Capital Paving	Varies	Highway Light Capital Paving	\$542,600
	Float System	20850.00	Expand float system, power pedestals, hoist, and seasonal water at Camp Ellis Pier	N/A	Marine	\$120,000
	Float System	20851.00	Ramp rehabilitation and new float system, located near Camp Ellis Pier	N/A	Marine	\$155,00

Local Road Assistance – Fiscal Year 2016: \$220,632. Projects located in Saco can be found in the tables on the following page.

Completed Capital Projects - 2016

018233.00 – Saco-Biddeford, Somesville Bridge (#3412) over the Saco River (East or North Channel). Located on the Biddeford – Saco city line.

020234.00 – Biddeford-Saco Elm Street Bridge (#2265) over the Saco River. Located on the Biddeford – Saco city line.

020871.00 – Old Orchard Beach, Route 98 Municipal Partnership Initiative. Beginning at Ross Road and extending east 0.88 of a mile.

Maintenance Accomplishments – 2016

1.00 Bridge Inspection Performed

1,500.00 Linear Feet of Brush Removed

4.32 Shoulder Miles of Mowing

48.00 Person Hours of Traffic Signal Maintenance

34.00 Drainage Structures Cleaned

1.00 Underwater Inspection Performed

71.62 Miles of Striping Applied

400.00 Linear Feet of Shoulder Rebuilt

1,089.57 Tons of Hot Mix Paving

2.00 Tons of Cold Patch Applied

7.00 Minor Signs Installed or Maintained

1,000.00 Linear Feet of Backhoe Ditching

3.00 Emergency Event responses

562.50 Linear Feet of Guardrail or Fence Maintained

1.00 Bridge Washed

3.05 Shoulder Miles of Sweeping

PACTS - S ₁	PACTS – Sponsored Projects in State Transportation Improvement Program (2017 – 2019)						
Year	Asset(s)	Project ID	Description	Highway Corridor Priority	Scope of Work	Estimated Funding	
	Industrial Park Road	020879.00	Beginning at Route 112 and extending northeast 1.79 miles	4	Highway Preservation Paving	\$1,521,900	
2018 / 2019	Route 9	020880.00	Beginning at the Biddeford-Saco city line and extending northerly 0.60 of a mile. Also includes 0.04 of a mile on Main Street	Varies 5	Highway Preservation Paving	\$8867600	
	Route 5	022464.00	Beginning at Route 1 and extending east 0.94 of a mile to the Saco-Old Orchard Beach town line.		Highway Preservation Paving	\$648,600	

G. ISSUES & IMPLICATIONS

- Like the majority of Maine communities, the automobile is the predominant mode of transportation for Saco workers, with nearly 82% of all workers ages 16+ driving to work alone. An additional 11.5% carpool to work.
- 54.5% of households in Saco have two vehicles, and around 30% of households have access to three or more vehicles, which means 84.5% of households in Saco have access to at least two vehicles.
- 49% of all workers ages 16+ travel between 10-24 minutes to work and 26% travel between 25 34 minutes to work. The mean travel time to work is 23.8 minutes.
- Average commute times have increased by 1.4 minutes between 2000 2014, which is less than the increase in York County (1.9 minutes between 2000 – 2014).
- Nearly 25% of all residents who work, ages 16+, work in Saco; 19.5% work in Portland; 13.8% work in Biddeford.
- Traffic count trends between 2007 2013 indicate that traffic has significantly increased on State Route 9 (32.67% increase just southeast of the intersection with Old Orchard Road and a 15.59% increase just north of the intersection with Bayview Road). Traffic has also significantly increased on Old Orchard Road (11.17% increase just northeast of the intersection with Timber Oakes Lane).
- Traffic count trends between 2007 2013 indicate that traffic has decreased on U.S. Route 1 (10.09% decrease just northeast of the Funtown/Splashtown Entrance; 7.34% decrease just northeast of the intersection with Flag Pond Road; 4.20% decrease just northeast of the intersection with Lincoln Street; 4.19% decrease just northeast of the intersection with Elm Street [U.S. Route 1 / Route 5], North Street [Route 112], Main Street [Route 9], and Beach Street).
- Traffic count trends in the Downtown Focus Area between 2007 2013 indicate that traffic has decreased on Scammon Street (13.77% decrease just north of Route 1); Lincoln Street (12.8% decrease just west of Route 1); Maple Street (12.13% decrease just north of Lincoln Street); and Water Street (9.58% decrease just east of Route 1). Increases in traffic count trends have occurred on Fairfield Street (6.88% increase just west of Route 1 and on Route 9 [Main Street] just south of the intersection with Route 1 / Route 112 / Route 5.)

- Between 2013 2015, MaineDOT designated 23 high crash locations in Saco. Of these, 13 of them are located within the Downtown Focus Area. On U.S. Route 1 alone there are eight, five of which are located in the Downtown Focus Area. The high crash location with the most crashes is the intersection of Main Street (U.S. Route 1 / 5), Ocean Park Road (Route 5), and Ramp E (I-195) off to Main Street (U.S. Route 1) with 50 crashes in the three-year period.
- The majority of roads in Saco are classified in the A or B category for MaineDOT Customer Service Levels for Safety, Condition, and Service, while there are small sections of roadways classified in the C, D, and F categories.
- There are sections of Industrial Park Road (between Route 112 and I-195), Route 112 (near the intersection with Industrial Park Road), and Main Street (Route 9 portion between U.S. Route 1 and the Saco-Biddeford City Line in the downtown core) that are classified in the F category for MaineDOT Customer Service Level Service. This is primarily due to traffic congestion along these section of roadways.
- Saco is fortunate to have several public transportation options (passenger rail and five different Shuttle bus routes), both of which have experienced increased ridership over the years:
 - o Total ridership for Shuttle bus-Zoom's four year-round routes has increased nearly 10% since 2014.
 - o Total ridership for the Amtrak Downeaster at the Saco Transportation Station has increased by 61.4% since the service began in 2006.
 - Total ridership for the Amtrak Downeaster (entire route between Boston, MA and Brunswick, ME) has increased by 42.5% since the service began in 2006.
- There are many opportunities, especially within the Downtown Focus Area, to implement Complete Streets in Saco. Pedestrian amenities, such as sidewalk bumpouts, visible crosswalks, rectangular rapid flashing beacons, additional sidewalk / street lighting, medians with pedestrian refuges, and sidewalk buffers should be considered in the City. Bicycle amenities, such as bike lanes, sharrows, additional bike racks, and off-road cycling facilities should also be considered by the City.

• The MaineDOT is currently accepting applications for bicycle and pedestrian projects with a target construction date of 2020. Although available funding varies from year to year, roughly \$2.3 million in federal funds is allocated annually for the Department's Bicycle and Pedestrian Program with a maximum grant award of \$400,000 and a required 20% local match. For general information about the program, a description of the application process or application materials, go to: http://maine.gov/mdot/pga/funding/#

TRANSPORTATION - IMPLEMENTATION STRATEGIES

Policy Reference	Activity	Primary Responsibility
1	Work with the Maine Turnpike Authority to address current and future Exit 36 capacity issues and possible projects to improve traffic flow and lessen congestion at peak commuting hours.	Council, Administrator
1	Participate in the upcoming engineering feasibility study to connect Exit 36 to Route 112 – "Route 112 Bypass" concept.	DPW, Administrator, Planner
2	Support expansion of the MDOT-owned Park & Ride facility on Industrial Park Road.	DPW, Planner
2	Work with MaineDOT to improve traffic flow on Industrial Park Road and Route 112.	DPW
	The City should continue to work with Maine Department of Transportation to improve traffic flow and safety in the portion of Route One south of I-195 Spur (Main Street) through the construction of turning lanes or a center turn lane.	Administrator, DPW, Planner
	Limit the creation of new curb cuts to provide access to properties along the entire length of the Route One corridor. Standards should require the creation of consolidated entrances where feasible.	Planning Board, Planner, DPW
4	Work to improve access to Main Street between Thornton Academy and the I-195 Spur through improvement of signalization at key intersections, and better articulation of consolidated entrances and access ways.	DPW, Planning Board
3, 4	The City should explore developing parallel roadways on both the east and west sides of Main Street in order to reduce traffic pressure on Route One. This may include the purchase of private property or negotiating easements with current owners.	Council, Pⅅ
7	Explore the idea of constructing a new vehicle bridge across the Saco River west of the downtown area to help alleviate traffic congestion.	Council, P&ED, DPW
	Explore the idea of constructing a roundabout at the intersection of Routes 112 / 5 / 9 / 1.	DPW, Planning
	The City should explore routes for the establishment of a new connector road west of the Turnpike linking Routes 5 and 112, designed as an arterial with the potential for access control.	DPW, Planning
	Encourage the consolidation of property access points along Main Street between Hutchins St and Ocean Park Rd as suggested by 2004 Main Street Access report.	Planning, DPW

Pursue additional pedestrian accommodations along Ferry Road from Bay View Road to Camp Ellis in conjunction with PACTS and MaineDOT.	DPW, Planning
Encourage the integration of smart technology in traffic signals that better reflects the needs of unique traffic patterns and results in more efficient traffic flow.	DPW
Encourage NNEPRA participation with installing warning signals on Main Street which would notify motorists of the presence of a train, allowing them to choose a different route.	
Explore solutions to the traffic issues at the Main Street/Pepperrell Square/Water Street intersection.	
Continue to review feasibility and cost/benefit of constructing a parking garage at the Saco Transportation Center (especially with the potential Shuttlebus Pulse system changes).	Administrator, BSOOB Transit
Schedule regular parking assessments, and review ordinance-based parking standards to measure efficiency and identify improvements.	ED, Planning, DPW
Work with the Eastern Trail Management District to assess conditions on the Eastern Trail in Saco and prioritize needed improvements, and encourage the use of the off-road Eastern Trail for transportation and recreation purposes.	Planning, SPR, DPW
Pursue the full build-out of the off-road Eastern Trail segment that traverses Saco, including the restoration of the railroad bridge over the Saco River into Biddeford.	Planning, SPR, DPW
Focus on improving bicycle and pedestrian infrastructure along Elm Street (Route 1), Main Street (Route 1), Beach Street (Route 9), and North Street from General Dynamics westward to Colonial Drive and Garfield Street.	
The City should consider adopting a Complete Streets policy to include strategic investments in streets and street design in order to provide mobility, safety and accessibility for all users.	Planning, DPW, Administrator
Continue to provide regular maintenance of sidewalks, and maintain a capital improvement plan for major repairs and additional sidewalk sections.	DPW
Monitor the demand for adding bike racks at public places throughout the community. Utilize pricing advantages that PACTS or other regional or state agencies may offer.	SPR, DPW
Explore establishing a bike-share program in the downtown area, possibly in coordination with Biddeford.	Planning, Administrator

Maintain the goal of completing a Route 1 sidewalk from Bid Scarborough, as DPW has worked toward for several years.	ldeford to DPW, Council
Continue to work to improve pedestrian safety and convenient the downtown area including the use of pedestrian crossing lights and physical protection such as bollards and refuge for people crossing the street.	g warning Planning,
Continue to support the efforts of Saco Bay Trails to esta maintain a trail system throughout the community.	ablish and DPW, SPR
Provide paved shoulders for use by cyclists when collearterial roads in the downtown focus area are upgrupgrade bicycle infrastructure along Routes One, 112, cooperatively with the Maine Department of Transportation.	raded, and 9, and 5
Consider bicycle lane markings and signage to clarify motorists and cyclists where bicycle use is appropriate an expected.	
Explore the feasibility and traffic impacts of the proposed S route changes and "Pulse" project, along with creating a "hu system at the Saco Transportation Center.	
Explore the possibility of other modes of transportation. Transportation Center such as bikeshare, Zipcars, and Transportation Greyhound service, etc.	
Continue annual funding commitment for Shuttlebus ser member communities Biddeford and Old Orchard Bead toward involving Scarborough as a full member community.	ch. Work Administrator,
Work with Shuttlebus to provide bus shelters at key point system.	nts in the BSOOB Board
Increase service to and from the Portland area and work seamless connections with the Portland and South Portland services.	
Work with Downeaster staff to create more promotional ticket discount options and package deals focused on supportunities, activities and events.	Saco area
Work with Downeaster staff to explore options for future of service to and from Portland.	commuter Administrator
Work with the Northern New England Passenger Rail (NNEPRA) to construct a full-length, high-level platform at Transportation Center to allow bicycle access and to allevia traffic/train delays on Main Street.	t the Saco

	Explore the idea of constructing a vehicle bridge that will link the current Transportation Center to 3 Lincoln Street in Biddeford (former MERC Site).	Planning, DPW, ED
	Where appropriate, pursue MaineDOT Municipal Partnership Initiative (MPI) funding for road projects, including the new MPI program through the Portland Metropolitan Planning Organization (PACTS).	DPW
	Continue participation in the PACTS process, including the recently approved grant for a study of Rte. One in Saco and Scarborough.	Planning, DPW
7, 8, 9	 Explore the following possibilities for public green space: City-owned spaces in or near downtown. Dyer Library's green space is nicely shaded but could use benches and a path. Areas along the Riverwalk closer to downtown or on Saco Island. Jubilee Park is an underutilized gem; a site for concerts in the summer? Brownfield property in or near downtown. Acquire property in or near downtown. Recreate/reimagine Pepperell Park 	Council, Pⅅ

Section 4A: Housing Goals, Policies and Strategies

Housing - Goals and Policies

State Goal: To encourage and promote affordable, decent housing

opportunities for all Maine citizens. (Growth Management Act)

Local Goals: To provide a diversity of housing to meet the needs of a wide range of residents.

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.

To maintain the existing housing stock in the City and assure that it provides safe and sanitary housing.

To discourage sprawl by encouraging residential development at greater densities in the downtown and adjacent neighborhoods.

Identify and maintain a Growth Area that is roughly equivalent to the area of the City serviced by public water and sewer.

Pursuant to these goals, the City's policies with respect to housing are:

- 1. The City should continue to provide for the construction of both single family and multifamily housing in a variety of locations at densities that are appropriate for the type of housing and the location. The Future Land Use Plan outlines these areas.
- 2. To further refine Policy 1, the City should consider an array of methods to attract and construct housing that is not limited to single-family detached. These methods include but are not limited to: public-private partnerships, allowing micro-apartments and tiny houses where appropriate, and adopting form-based code zoning in certain areas of the downtown.
- 3. The City should continue to allow housing for the elderly to be built at higher densities than other types of housing in recognition of the lower impact and established need that this type of housing has in the community.
- 4. The City should continue to work with nonprofit organizations and private developers to expand the supply of housing that is affordable to lower and moderate income

households. The City should consider offering economic and/or regulatory incentives for such affordable housing developments and, if appropriate, continue using contract zoning and similar techniques to allow case-by-case consideration of proposals for new affordable housing.

Another approach to consider is introducing form-based zoning for some downtown neighborhoods.

- 5. To assure that existing neighborhoods surrounding the downtown area remain desirable places to live, the City should continue to balance the construction of or conversion to multifamily housing with the predominantly single and two-family pattern of existing development in some older neighborhoods. In addition, the City should consider ways to ensure that certain existing, currently non-conforming, neighborhood markets can remain in their established residential neighborhoods while protecting the neighborhoods from other commercial uses that are incompatible.
- 6. The City should continue to work to maintain and upgrade the City's older housing stock and downtown neighborhoods. The City should continue to seek state funding to provide financial assistance to property owners to maintain and improve their property and to upgrade the infrastructure such as weatherization and similar programs. The current efforts of the Code Enforcement Office and Fire Department to regularly inspect multifamily buildings should continue. In addition, the City should actively enforce City codes in these neighborhoods to assure that the quality of the housing stock does not diminish and that any problem properties are addressed in a timely manner.
- 7. The City has recently approved an eighty unit multi-family dwelling that calls for less than one parking space per unit, a significant departure from established parking standards in Saco. The City should monitor the extent to which this proposal, which included both on- and off-site parking and an emphasis on alternatives to auto ownership on the part of tenants, is successful. If it is, the City should consider relaxing or re-writing the standards for parking and other regulations governing housing development in downtown neighborhoods to ensure that these requirements do not adversely affect development proposals.
- 8. The City should continue to provide for the construction of a wide range of housing at a variety of densities and types to assure that a diversity of people can continue to live in and be attracted to living in Saco. The City should influence development to include the facilities, support services and amenities that appeal to diverse age groups, and attract and maintain residents of all ages.

Housing - Implementation Strategies

Policy Reference	Activity	Primary Responsibility
5, 6	Continue to seek state funding to provide financial assistance to owners of older homes for maintenance and energy efficiency while allowing these owners the flexibility to convert a large older home into two or more units, especially when the building's outside appearance will remain largely unchanged.	City Council, Pⅅ
7	Consider relaxing parking standards and certain other dimensionally-related regulations, including density - either through form-based code or by amending existing performance standards - governing housing development in the downtown and certain downtown neighborhoods.	Planning Board, Pⅅ
4	Consider offering economic and/or regulatory incentives for affordable housing developments, including requiring a certain percentage of a housing development to be affordable. Explore inclusionary housing ordinance options.	City Council, Pⅅ
2	 Explore alternative ways to introduce additional housing in the downtown and downtown neighborhoods: Allow small or micro-apartments downtown which may appeal to both younger and older people. Permit the conversion of an accessory building such as a carriage house, barn or garage into a single apartment. Offer incentives to turn underutilized upper building stories into apartments. Adopt form-based code in certain downtown areas to allow flexibility and streamline permitting. 	Planning Board, Pⅅ

Policy Reference	Activity	Primary Responsibility
3	Continue to encourage housing for the elderly that is integrated into the fabric of the downtown and surrounding neighborhoods through form-based code, contract zoning or by relaxing performance standards in certain areas.	Planning Board, Pⅅ
5	Consider using form-based code to allow the existing neighborhood fabric to be a driver of what uses are allowed in certain downtown neighborhoods, e.g., existing small neighborhood stores could be made conforming under carefully constructed form-based code.	Planning Board, Pⅅ
	The City should consider actively encouraging housing that is not limited to single-family detached dwellings by seeking public-private partnerships with such entities as Avesta, the Volunteers of America, and Habitat for Humanity.	Planning Board, Administrator, Council.
	Consider allowing micro-apartments and tiny houses where appropriate.	Planning Board, City Council.

SECTION 4B: HOUSING

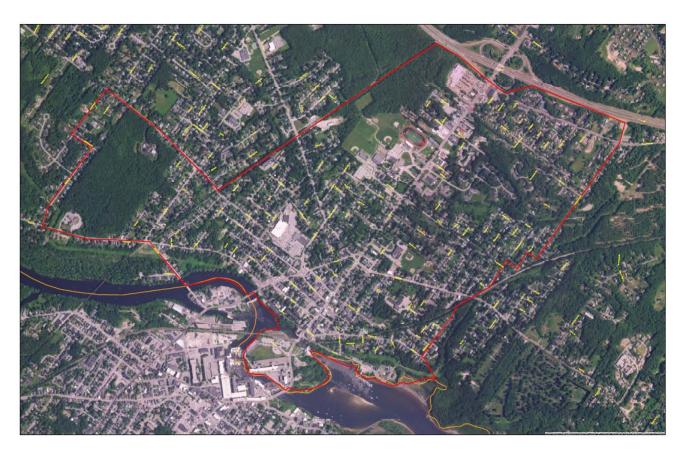
A house or apartment is more than just shelter: it is where a life is built. A home represents security, privacy, health, community, and all of the other things associated with "home." Many would even argue that safe, decent, affordable housing is a basic right that all Americans should enjoy. Unfortunately, that is not always the case. Construction costs, rising land values and sprawl (and the consequent demand for additional services that eventually increases taxes), contribute to housing affordability challenges. Higher taxes can make meeting expenses difficult for elderly residents on fixed incomes. Higher land prices, excessive lot sizes, lower zoning densities, and overzealous infrastructure requirements can drive up the cost of housing and exclude young people and families just starting out from the market. Low and middle-income people wanting to stay in or move to Saco may not be able to find an affordable place to call home.

Housing affordability contributes to the culture of a community as housing affordability influences the ability to attract business, determines whether families can remain from one generation to the next, and determines whether the people who serve the community, including a community's cashiers, food servers, plow truck drivers, police officers, teachers, and others can live in the community they work in. As such, the cost and varieties of housing available are extremely important to the diversity or homogeneity of a city like Saco.

This chapter examines the supply and condition of housing in Saco, its affordability in relation to local incomes, and its availability, especially for lower-income households.

This chapter is also part of a targeted update to the Comprehensive Plan that was completed in 2017. For this update, an area surrounding and including the downtown was identified as an area of special interest and is referred to as the Downtown Focus Area throughout. See Map 1. After the Comprehensive Plan update process had begun, the Downtown Focus Area was modified to include an area between Stockman Avenue and I-95. This means that the area bounded by Route 1/Main Street, Stockman Avenue and I-95 is not represented in the data shown for the Downtown Focus Area in this Appendix.

Map 1: Downtown Focus Area



The Downtown Focus Area extends from I-95 to the north, along Cumberland Avenue, Wood Avenue, along the railroad tracks down to Wakefield Avenue, then along the Saco River's shoreline, including Saco Island. From Saco Island, it continues along the shore, then up along Market Street to Lincoln Street, along Skyline Drive, Applewood Drive and Hubbard Street, then along Bradley Street to the Eastern Trail and back up to I-95.

A. HOUSING STOCK

Between 2000 and 2009, Saco added an estimated 1,741 year-round housing units, an increase of nearly 25.5% (see Table G.1). Single family homes accounted for 50% of the new year-round housing units built during the 2000-2009 period. According to the City, 304 housing unit permits were issued between 2010 and 2015, although some of these could be for seasonal-use residences (see Table G.1.1). Because the City cannot easily provide building permit details, housing type estimates must be used for the 2010-2014 period.

These estimates show that about 58% of the permits issued during the 2010-2014 period were for single-family homes.

During 2000-2009, the City lost 277 multi-family units (in buildings with 3 or more units) but gained 760 duplexes and attached single family units, primarily as part of a boom in condominium development. 85 mobile homes were lost, decreasing the percentage of mobile homes in Saco from 3.0% in 2000 to 1.9% in 2009. As of April 2009, Saco had a total year-round housing stock of approximately 8,542 units.

Table G.1: ESTIMATED YEAR-ROUND HOUSING STOCK 2000 - 2009					
	2000	2009	Housing units as % of 2009		
Total Housing Units	6,801	8,542	100.0%		
Single family, detached	3,875	5,225	61.2%		
Single family, attached	240	772	9.0%		
Duplex	834	1,062	12.4%		
Multi-Family (3 + unit)	1,448	1,171	13.7%		
Mobile home	397	312	3.7%		
Boat, RV, van, etc.	7	n/a	n/a		

Sources: 2009 Saco Housing Strategy Report

According to estimates from the U.S. Census Bureau and ESRI Community Analyst (maker of Geographic Information Systems and provider of demographic and marketing data similar to Claritas) during the 2010-2014 period, the City lost 103 single-family detached homes, 41 single-family attached homes and 41 mobile homes. As of 2014, Saco had about 8,640 year-round housing units.

The Downtown Focus Area (DFA) contains nearly 3,000 residential units. Nearly 68% are two-family or multi-family (three or more units) residences while the rest are single-family homes of various types. This contrasts with the City as a whole for which single-family homes represent the majority of housing stock.

Section 4

	Table G.1.1 Year-Round Housing Stock, 2010 - 2014					
	Saco			Saco	Downtown	Focus Area
	2010	2014	Housing Units as % of 2014 Total	2010	2014	Housing Units as % of 2014 Total
Total Housing Units	8,549	8,640	-	-	2,998	-
Single Family, Detached	5,114	5,011	58.0%	-	821	27.4%
Single Family, Attached	399	358	4.1%	-	80	2.7%
Duplex	814	973	11.3%	-	655	21.8%
3 - 4 Units	682	684	7.9%	-	442	14.7%
5 - 9 Units	693	702	8.1%	-	459	15.3%
10 - 19 Units	30	139	1.6%	-	120	4.0%
20 + Units	504	508	5.9%	-	388	12.9%
Mobile Home	313	265	3.1%	-	33	1.1%

Source: U.S. Census Bureau, 2014 & ESRI Community Analyst, 2014

1. Age and Condition of the Housing

According to the 2014 Census and ESRI Community Analyst, approximately 47% of Saco's housing was built prior to 1960, and only about 0.2% of the housing stock has been built since 2010. As might be expected, given historical growth patterns, the DFA's housing stock is older overall, with over half of its residences built prior to 1939 and nearly 70% built prior to 1960. (see Figure G.1).

While most of Saco's housing stock built in the last several decades is in relatively good condition, there are issues with some of the older housing stock built prior to 1960. Deterioration and sub-standard housing conditions are the biggest concern. According to a 2009 City housing report, "The city assessing department has rated 87 properties in Saco as "poor quality."

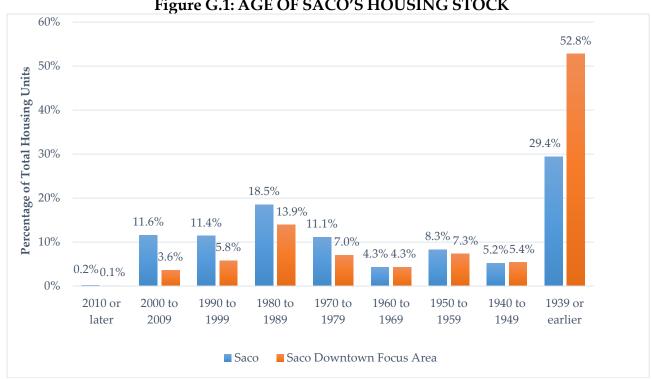


Figure G.1: AGE OF SACO'S HOUSING STOCK

Source: U.S. Census Bureau, 2014 & ESRI Community Analyst, 2014

The City uses Marshall & Swift's definition for property quality, in which poor condition (worn out) means:

Repair and overhaul needed on painted surfaces, roofing, plumbing, heating, numerous functional inadequacies, substandard utilities etc. (found only in extraordinary circumstances). Excessive deferred maintenance and abuse, limited value-in-use, approaching abandonment or major reconstruction, reuse or change in occupancy is imminent. Effective age is near the end of the scale regardless of the actual chronological age.

51 of these properties (59%) are single family homes, 23 are multi-family buildings (26%), and 9 are mobile homes (10%). The homes and apartments are scattered throughout the City and are not concentrated in any specific neighborhood.¹

¹2009 Saco Housing Strategy Draft Report

B. AFFORDABILITY

Many consider having a dry, warm place to sleep a basic right. However, for some Saco residents, housing can consume an inordinate amount of their income. Affordable housing for homeowners is defined in Maine's Growth Management Act as housing in which the mortgage payment, taxes, insurance, condominium fees, and utilities do not exceed 33% of the homeowner's gross income. For renters, the standard is 30% of gross income for rent and utilities

According to 2014 U.S. Census data, nearly 38% (compared to nearly 23% in 2000) of Saco households spent 35% or more of their income on rent and one out of four homeowners (in 2000, this was one out of every six homeowners) were paying mortgages and other associated costs with home ownership that were 35% or more of their income. There has been a documented increase from 2000 to 2014 in the number of households who are paying more for their housing (15% of renters and 8.33% of homeowners) than is deemed affordable by Maine's Growth Management Act.

Table G.2: Percentage of Household Income Spent on Monthly Rent* / Mortgage**

Renters	
< 20%	29.4%
20 - 24.9%	12.8%
25 - 29.9%	10.1%
30 - 34.9%	10.2%
35% +	37.6%
Owners	
< 20%	30.9%
20 - 24.9%	17.2%
25 - 29.9%	14.2%
30 - 34.9%	13.0%
35% +	24.8%

Source: U.S. Census Bureau, 2014

^{*}Renter costs are based on gross monthly rent **Owner costs are based on monthly expenses including mortgages, insurance, utilities, and ownership fees

Tables G.3 and G.3.1 compare changes in the median rent, the median home sales price, and the median household income in Saco between 2000 and 2014 along with the most recent housing costs and income estimates available. The changes reflect larger trends in the region over the last decade. From the initial housing boom to the peak in the housing market in 2006, there was a significant jump in the price of housing. Lower home rental and sales prices in 2009 reflect the decline of the housing market over the next two years. The 2014 rental and sales prices represent the slow but steady upward trend that began after the recession. Unfortunately, the available median rent data for 2014 does not allow for direct comparison since it includes apartments of all sizes while the 2000 and 2009 data targets only two-bedroom apartments.

Table G.3: SACO'S TREND IN INCOME AND HOUSING EXPENSE, 2000- 2009						
	2000	2006	2009			
Median rent (2 bedroom incl. utilities)	\$886	\$934	\$923			
Median home sales price	\$119,800 \$236,150		\$202,500			
Median household income	\$45,105	\$53,148	\$55,072*			

Sources: 2000 U.S. Census, Saco Housing Strategy Draft Report, State Planning Office

Table: G.3.1: TRENDS IN INCOME & HOUSING EXPENSE, 2014 or as noted Saco Downtown Focus Saco Area (2016 Est.) Median Monthly Rent (includes all \$865 \$771 apartments, not just two-bedroom) Median Home Value \$235,200 \$214,297 Median Home Price (2015) \$210,000 Median Household Income \$52,611 \$41,512

Source: U.S. Census Bureau, 2014; Maine Housing, 2015; ESRI Community Analyst, 2014

^{* 2008} estimate from Maine State Housing Authority

1. Definition of Very Low-, Low-, and Moderate-Income Households

A State of Maine objective is to ensure a supply of housing that is affordable to households in three income groups: very low-income (less than 50% of county median household income); low-income (51%-80% of county median household income); and moderate-income (81%-150% of county median household income).

Table G.4 below provides the incomes for each of these groups in York County. The median household income in York County was \$61,083 in 2014. The median income for the City of Saco is actually lower - \$52,611 for 2014.

Table G.4: Affordability Summary for Saco Based on 2014 York County Median							
Income of \$61,083							
	Very Low	Low	Moderate	Market			
	Income	Income	Income	Income			
% of County Median Income	< 50%	50% - 80%	80% - 120%	> 120%			
Household Income <\$30,542	< ¢20 E42	\$30,542 -	\$48,866 -	> \$72,200			
	\$48,866	\$73,300	>\$73,300				
# of Households (Estimate)	1,940	1,701	1,412	2,740			
Rental Market							
Affordable Gross Monthly Rent	ф Т С4	\$764 -	\$1,222 -	>\$1,832			
(at 30% of Median Income)	< \$764	\$1,222	\$1,832				
Home Purchase							
Affordable Mortgage	¢040	\$840 -	\$1,344 -	> \$2,016			
(Incuding PITI & Utilities at 33% of Income	< \$840	\$1,344	\$2,016				

Source: U.S. Census Bureau, 2014 & Maine Housing, 2014

Table G.4 also shows the rent and home purchase price ranges affordable to households in each of the income categories, as well as the estimated number of households in 2014. The estimated number of households is:

- 1,904 very low-income households (earning less than \$30,542)
- 1,701 low-income households (earning between \$30,542 \$48,866)
- 1,412 moderate-income households (earning between \$48,866 \$73,300)

Housing in York County



Median Home Price:

\$228,900

Home Price Affordable to Median Income:

\$213,754

The median income in York County is \$60,271, but to afford the median home, the median earner would need to make \$64,542 annually.

Because of this, **57.6%** of homes sold in 2016 were unattainable to the family that purchased them.



Average Monthly Rent for 2BR Apartment:

\$946

Monthly Rent Affordable with Median Renter Income:

\$879

To afford the average apartment, a renter would have to make \$18.19/hr.

Source: Maine State Housing Authority 2016

2. Housing Affordability

The maximum affordable rent for households in the very low-income group is below the median market rent in Saco (\$764 vs. \$865) as shown in Table G.3.1. Although Saco had 639 units with subsidized rents (according to Avesta Housing in 2011), there are few non-subsidized apartments available for rent in Saco in this price range. According to Maine Housing, as of March 2017, Saco has 583 subsidized units.

The elderly can be especially hard-hit by a lack of affordable housing. Census estimates for 2015 indicate that there are 852 Saco households headed by a person age 65 or older with incomes of less than \$30,000 per year (47% of the age range total). Many may be living in homes in which the mortgage has been paid off, or in which the payment is low, based on purchase prices and interest rates prevalent in the 1970s. For others, or those for whom their single-family home has become too much to care for, there are at least 114 subsidized senior rental housing units in Saco.

Opportunities for home ownership are limited for those in the very low-income bracket. Actual affordable home prices for households in this income bracket would depend on the prevailing interest rates but by way of example, homes at or below the median price of \$210,000 are not plentiful. In February 2017, the Multiple Listing Service (MLS) had just eleven properties listed at or below \$210,000 and nearly half of them were pending a sale.

3. Number of Households in Need of Affordable Housing

Not all households earning very low, low, and moderate incomes have an unmet housing need. Some are renters in an acceptable unit at a price that is affordable for them, perhaps a subsidized unit or an older private market unit.

Some are renters who, because of their age or employment status, would not choose to buy a home even if they had the opportunity. Some, including many senior households or people who inherit family property, may have a relatively low income but already own their home and are content where they are.

In 2015, based on Census updates, there were approximately 916 households in Saco with incomes of less than \$30,000. The Maine State Housing Authority estimated that for 2015 approximately 59.8% of renter households in York County were unable to afford the average two-bedroom apartment rent (including utilities) of \$1,064. In Saco, this would be equivalent to approximately 1,726 households.

As stated earlier, the median price for a home in Saco in 2014 was \$210,000 while Saco residents had a median income of about \$52,611. According to the Maine State Housing Authority, 54% (4,295) of Saco's households could not afford that median priced home.

4. Supply of Affordable Housing

The City of Saco has a wide range of affordable housing opportunities of different types but demand is high so these housing units tend to be snapped up quickly when they become available – many having waiting lists.

Over the past thirty years, a number of both market rate and subsidized rental housing units have been added to the City's housing stock. The availability of land served by public water and sewerage, combined with relatively liberal treatment of multi-family housing and reasonably high residential development densities, have helped keep housing relatively affordable.

The City's land use regulations (including the use of contract zoning and Tax Increment Financing known as TIF) allow new multi-family housing to be constructed in a number of areas of the City at relatively high densities. For example, Chinburg Developers Inc., acquired the historic Mill Building 4 on Saco Island in 2015 and commenced the complete rehabilitation of the building in Fall of that year. The rehabilitation includes 150 market-rate apartments, with the initial tenants welcomed to the building in April 2017. To help propel the forward movement of the project, a TIF was granted for the project by the City Council. For a different project, a contract zone was granted by the City Council in November 2016 for an 80 unit apartment building on the site of the former Notre Dame Church on Cutts Avenue. The church building will be rehabilitated, the rectory removed, and two new

buildings constructed by Hardypond Construction. Units will be one-bedroom and marketrate for the church building and the second building. The third building, sited on an existing parking lot, is intended for those ages 55 and older as higher densities are allowed for elderly housing.

In 2008, Saco amended its land use ordinance to allow accessory apartments in all residential and most business zones. Between 2010 through 2015, twelve accessory apartments were created.

C. Saco Housing Strategy Report

In December of 2008, the Saco City Council, as part of its annual strategic plan, established the goal of completing a plan for housing affordability in 2009. The Saco Housing Strategy Report assessed the current affordability of housing in Saco, Maine, and identified possible solutions.

It also includes information and policies needed to satisfy State of Maine Growth Management standards, and is incorporated into this update of the Saco Comprehensive Plan as an appendix document. Portions of the following sections are excerpted from the Saco Housing Strategy Report².

Homes for first time buyers

Local realtors describe Saco as a desirable location between Portland and Portsmouth with a nice downtown and nearby beaches. The housing market in Saco is more expensive than in surrounding communities, so that people looking for less expensive homes to purchase often look out of the city. For example, a home that would cost \$250,000 in Saco might be \$199,000 in Lyman, Arundel, or Dayton. Right now, with prices slightly lower and decent interest rates available, realtors report they are seeing people who already own a home elsewhere but who have family ties to Saco selling their homes and buying in the city.

Despite the lower prices, local observers say that first-time homebuyers still have a hard time buying in Saco, whether they are looking to buy a new or existing home. For new homes, the cost of land is too high for housing to be affordable -- a lot would need to be available for less than \$50,000 to make a house under \$200,000 feasible. Of 122 single family homes

² Saco Housing Strategy Report, Nov 6, 2009, pg 37-39

currently for sale in Saco, just 22 are priced under \$200,000. Few homes for sale in Saco are priced affordably. Of 65 lots currently available, the least expensive is \$64,000. The least expensive new home in a subdivision is \$225,000. High municipal impact fees – which can run around \$9,000 per single family house - also contribute to higher prices (though the ordinance has a provision that enables the Council to set aside open space and recreation impact fees on affordable houses – sewer impact fees do not have this provision). A York homebuilders study shows that for every thousand dollars that is added to the house price, hundreds of households are priced out of the market.

Local realtors describe that among existing homes, there are foreclosures available, but they are often in need of a lot of work, which first-time homebuyer loans from FHA don't allow. Timing is also an issue, as foreclosure sales can drag on for many months.

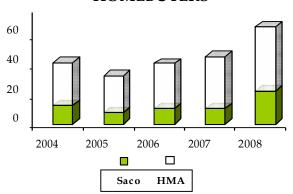
Condos are another option for first-time buyers, with prices ranging from \$125,000 in mills to \$300,000 in other developments. Realtors say condos are appealing, especially to single women, because they are low maintenance, safe, and affordable on one income. There are currently 44 condos on the market, 22 of which are under \$200,000, all 2- bedrooms.

Despite these issues, Saco is attractive to first-time buyers, as is evidenced by the fact that Saco consistently attracts about a third of 1st-time regional buyers (Figure G.2).

Assisted rental housing for low- to moderateincome renters

The Maine State Housing Authority (Maine Housing) estimated that there were 2,337 families and 393 senior households in need of housing assistance within the market area.

Figure G.2: SACO FIRST TIME HOMEBUYERS



In 2009, the Massachusetts Institute of Technology conducted a major study of housing affordability in Maine³. The study covered four different scenarios for low- and moderate-income households looking for apartments in Greater Portland. In Saco, only the two-parent, two-income family had the income necessary to afford an apartment, meaning that the households would pay only 30% of its income for gross rent (Table G.5).

³Housing Affordability in Maine: Taking Stock, MIT Center for Real Estate, for the Maine Affordable Housing Coalition, March 2009

Table G.5: SELECTED HOUSEHOLDS APARTMENT NEEDS, 2009			
	Need	Can	Median Gross
Single elderly person earning \$13,320	1 BR	\$331	\$596
Disabled parent with one child earning \$7,356	2 BR	\$184	\$835
Single working parent, 2 teen children, earning \$28,350	3 BR	\$709	\$860
Two parent, two-income household with one child, earning \$45,360	3 BR	\$1,134	\$860

Source: Housing Affordability in Maine

Assisted rental housing for very low-income renters

Saco had 14 housing projects with a total of 502 subsidized housing units designated for very low-income and special needs households in 2011. Of the total number of very low- income units, 302 are for non-elderly and special needs households, and 200 are for elderly. In addition, the City provides 137 Section 8 Vouchers to subsidize private rentals so that the tenant's share of rent is limited to 30% of their income.

After the Saco Housing Strategy Report was published, both Cascade Brook Senior Housing (for people 55 years old or older earning 50%-60% of the area's median income) and VOANNE at 7 Smith Lane were completed in Saco in 2012. More recently, Saco Island Apartments, featuring adaptive re-use of the former boiler house at 108 Gooch Street, opened in December 2014 with 36 units of workforce housing.

Table G.6: RENTAL SUBSIDIZED HOUSING IN SACO AND REGION							
	New		Special			Total	
	Family	Senior	Special Needs	Section 8		Renters	%
	Housing	Housing	Housing	Vouchers	Total	Getting	Subsidized
	Tiousnig		Tiousnig			Aid	
Market Area	653	863	139	555	2,210	11,97	18.5%
Saco	259	200	43	137	639	2,536	25.2%
Saco Percent	39.7%	23.2%	30.9%	24.7%	28.9	21.2	

Table G.7: SACO SUBSIDIZED HOUSING PROJECTS					
Housing Complex	Population	Year Built	# Units		
Cascade Brook	People over 55 years old	2012	30		
Golden Village	Elderly and People w/Disabilities	1977	12		
Kallock Terrace	Elderly and People w/ Disabilities	1982	20		
Ledgewood North	Families	1983	24		
Ledgewood Terrace	Families	1980	30		
Lincoln Apartments	Families	Pre-1960	21		
Lord Pepperell	Elderly and People w/ Disabilities	1980	66		
Maple Grove	Elderly and People w/ Disabilities	1977	8		
Park Village	Elderly and People w/ Disabilities	1976	12		
Pleasant St. Apartments	Elderly and People w/ Disabilities; Families	1982	45		
Nottingham Woods	Families	1984	52		
Pine Ledge	Families	1995	48		
River View Apartments	Families	1985	61		
Paul Hazelton House	Elderly and People w/ Disabilities	1999	36		
Wardwell Commons	Elderly and People w/ Disabilities	1992	14		
VOANNE, 7 Smith Lane	Elderly and People w/ Disabilities	2012	31		

Source: Maine State Housing Authority (Maine Housing)

D. AFFORDABLE HOUSING GOAL

The State of Maine requires that each municipality, "seek to achieve a level of 10% of new residential development, based on a 5-year historical average of residential development in the municipality, meeting the definition of affordable housing. Municipalities are encouraged to seek creative approaches to assist in the development of affordable housing, including, but not limited to, cluster zoning, reducing minimum lot and frontage sizes, increasing densities, and use of municipally owned land."4

The average number of new housing units built annually in Saco between 2004 and 2009 was 104 units. Between 2010 and 2015, the average dropped to less than 62 units annually. Six affordable units built each year would meet the 10% state requirement. To help reach this goal, the City has implemented contract zoning amendments to allow new elderly and affordable housing developments (Wardwell and Volunteers of America).

E. HOUSING ASSISTANCE

1. General Assistance

The City of Saco has a general assistance program to help residents having difficulty meeting basic needs. Basic needs assistance includes support for housing, utilities (electricity and heating fuel), and food. General Assistance provides "a specific amount and type of aid for defined needs during a limited period of time and is not intended to be a continuing 'grant-in-aid' or 'categorical' welfare program. The program is funded by local property taxes with a 50% reimbursement from the state."⁵

2. Avesta Housing Development Corporation

The Avesta Housing Development Corporation (formerly known as the York Cumberland Housing Development Corporation), is a non-profit housing organization which manages 52 subsidized elderly housing units and 30 rent restricted apartments for those 55+ in Saco in four projects: Cascade Brook, Golden Park Village, Maple Grove Apartments, and Kallock Terrace.

3. Wardwell Home for the Aging

The Wardwell Home is a non-profit organization that has been providing housing for the elderly in Saco since 1890. Currently they own and manage a total of 92 apartments, sixteen of which are full residential care facilities that are not federally subsidized. Wardwell Gardens, one of the subsidized congregate/assisted living facilities, includes thirty units with a tenant income limit of \$27,300 (where the out of pocket rent expense is between \$358 and \$877 per month). Wardwell Commons, another subsidized facility, has 14 independent living units with a tenant income limit of \$22,750 (where the tenant's out of pocket income expense is limited to 30% of their income). Finally, Wardwell Apartments and Terrace have 32 apartments without subsidies, though these are in the lower range of market rents in Saco: \$775 for a one bedroom (including utilities), and \$1,350 for a two-bedroom unit (also including utilities).

F. FUTURE HOUSING

Like nearly every other community in Maine, Saco is aging and appears to be losing younger adults (see Appendix A). However, Saco has advantages over many communities that the City could leverage if it wishes to attract those younger adults. These advantages are its proximity to Portland, its train station, and its downtown.

⁴ Saco Housing Strategy Report, Nov 6, 2009

 $^{5\ \}underline{www.sacomaine.org/departments/general_assistance/index.phpl}$

Current trends in housing show that both young adults and older adults want to live in downtown neighborhoods. While older adults are looking to downsize, many younger adults don't want the responsibility of owning a home as they pursue their career aspirations, instead preferring to rent. Continuing with the dichotomy of young and older adult trends in housing choices, young adults just starting out may not be able to afford a traditional one-bedroom apartment in a desirable in-town neighborhood but might find that a micro-apartment fits their budget, whereas older adults could find value in luxury condos. What brings adults of every age together for our specific area is that all are finding that renting or buying property in Portland is difficult and expensive, and this is where intelligent housing development in Saco comes into play.

As told by one local developer, it would serve the City well to encourage flexibility in its housing and to keep in mind that traditional four-bedroom single-family housing is not the overwhelmingly dominant market it once was.

Options instead include: redevelopment of underutilized second and third-story spaces in downtown buildings into apartments or condominiums, allowing larger accessory buildings such as barns and carriage houses to be converted into single apartments, and/or consider public-private partnerships. For example, a City-owned lot suitable for redevelopment could be made available to a developer through a bidding process by which the City would provide guidelines and restrictions, such as a certain amount of affordable housing, under which the developer would have to operate.

Finally, providing housing in and around the downtown would allow a commuter to walk or ride a bicycle to the train station and ride to Portland or to Boston. And while owning a car is still a necessity for many in Maine, Saco could encourage housing with flexible zoning and parking standards in its downtown and in-town neighborhoods to increase the use of car sharing opportunities such as Zip Cars or UhaulCarShare.

IMPACTS OF CARSHARING PROGRAMS

In a 2008 study of early carshare programs, households joining carsharing owned an average of **0.47** vehicles per household before joining carsharing, but that average dropped to **0.24** after membership. Carshare households exhibited a dramatic shift towards a carless lifestyle. The vehicles shed are often older, and the carsharing fleet is an average of **10 mpg more efficient** than the vehicles shed.

Source: Access Magazine 2011

G. ISSUES AND IMPLICATIONS

- Despite lower prices, first-time homebuyers still have a hard time buying in Saco, whether they are looking to buy a new or existing home. As such, affordable purchase options in Saco are limited.
- The housing needs of aging baby boomers are changing as many look to downsize, which may create continuing demand for condominiums, townhouses and similar smaller units, especially in the neighborhoods surrounding Saco's downtown.
- Some of the barriers to affordable housing are development costs. For example, the City's parking requirements can hinder the development of high-density housing. The City requires 2 spaces for each single-family unit, and an additional 1 space per unit for 6-unit buildings.
- Saco has a large number of older houses. The cost for heating and maintaining these houses is high. The City should consider expanded opportunities for weatherization and maintenance programs.
- A substantial share of the City's rental housing stock is in older multifamily buildings of varying condition. The City should consider efforts to work with the owners of these properties to assure that they are well maintained and offer safe and desirable housing.
- Little conventional rental housing was built in the City between 2010 and 2015. The City should continue to explore ways to enable the private market to develop additional market-rate rental housing, especially in in-town locations. Some examples include:
 - Downtown buildings may have underutilized second and third stories.
 The City could encourage building owners to convert these underutilized spaces into apartments.
 - Younger adults often prefer in-town living but may have difficulty affording a typically-sized market-priced one bedroom. The City should look beyond conventions and explore allowing smaller-sized microapartments to increase the availability of less expensive rental opportunities.

- Encourage the preservation of historic accessory buildings, like barns and carriage houses in older established neighborhoods (in and around the downtown), by allowing the accessory building to be converted fully or partially into an apartment.
- Consider public-private partnerships when a City-owned lot suitable for development or redevelopment becomes available – this could also provide a means by which the City could obtain below-market rate units as well.
- The City will continue to have the need for apartments and assisted living facilities for seniors, particularly affordable units.

Section 5A: Arts and Culture

Arts and Culture - Goals and Policies

State Goal: None.

Local Goals: To foster and encourage arts and culture in the City of Saco as a means

of building community, improving quality of life and boosting

economic development.

Pursuant to these goals, the City's policies with respect to arts and culture are:

- 1. The City should consider creating an Arts and Culture Committee with the goal of promoting the arts as a means of improving the local economy, enriching cultural and intellectual life, promoting lifelong learning, and protecting Saco's rich heritage and historic infrastructure.
- 2. The City should work with the Dyer Library and Saco Museum to increase funding so that hours of operation, event programming and services can be expanded.
- 3. The City should continue to collaborate with and fund Saco Main Street, Inc. to promote greater vitality downtown through the Main Street America four-point plan. The Main Street Approach is a focused, deliberate path to revitalize or strengthen a downtown or commercial district's economy that addresses Economic Vitality, Design, Promotion, and Organization.
- 4. The City should use the 2006 Twin Cities Cultural Plan and the Bridge 2025 report as guides for encouraging arts and culture in ways that suit Saco. As needed, the City should collaborate with Biddeford to update the 2006 Twin Cities Cultural Plan.
- 5. The City should broaden and expand its arts and cultural offerings in order to appeal to all ages.
- 6. The City has a somewhat untapped resource within its borders: the arts and cultural programming at Thornton Academy. The Arts and Culture Committee should formulate an outreach effort that highlights the value placed on T.A. arts and performances, and seeks to integrate them more fully into the community.
- 7. Another untapped resource in close proximity is City Theater. The Arts and Culture Committee might consider utilizing the venue for public performances in conjunction with the City of Biddeford, or the Theater Board of Directors.

8. The City should look for opportunities to create green spaces/pocket parks with seating within and near the downtown and enhance its streetscape with plantings and trees.

- 9. The City should look for opportunities to utilize or create green/open space for events at Ferry Beach, Camp Ellis, Pepperell Square and Saco Island as well as downtown.
- 10. The City should make necessary improvements to the Riverwalk Trail and all existing parks and green space in order to promote and expand community awareness and use.

Arts and Culture - Implementation Strategies

Policy Reference	Activity	Primary Responsibility
1, 3, 4, 5	Create a collective and comprehensive calendar of events related to arts and culture in Saco. Determine where that calendar should be hosted and how it will be maintained.	Council, Saco Main Street
1, 2, 3, 5	Plan a variety of events for all ages – ensure that younger adults, families with children and older adults all have arts and cultural events shaped to appeal to them. As new events are planned, include voices representing all ages at the table.	Council, Saco Main Street
2	Work with the Executive Director and Board of Trustees to augment the funding of the Dyer Library/Saco Museum for: Expanded programming Membership in MINERVA Maintenance and improvements to the buildings and the grounds to accommodate more visitors and increased programming	Council, Dyer Library/Saco Museum Executive Director and Board of Trustees
4	Explore additional ways that the City and Saco Main Street can work together to promote Saco's downtown using the Twin Cities Cultural Plan and Bridge 2025 as a starting point, perhaps hold a workshop once or twice a year.	Council, Saco Main Street
3, 4	Continue to explore opportunities to partner with Biddeford when doing so will promote and improve arts/culture for Saco.	Council, Pⅅ
7	Apply to Project Canopy for funding to bolster Saco's street tee program	Council, Pⅅ, PWD

Policy Reference	Activity	Primary Responsibility
7, 8, 9	 Explore the following possibilities for public green space: City-owned spaces in or near downtown. Dyer Library's green space is nicely shaded but could use benches and a path. Areas along the Riverwalk closer to downtown or on Saco Island. Jubilee Park is an underutilized gem; a site for concerts in the summer? Brownfield property in or near downtown. Acquire property in or near downtown. Re-create/re-imagine Pepperell Park. 	Council, Pⅅ
9	 Consider improving the Riverwalk in the following ways: Place way finding signs at intervals and points of decision, including the corner of Beach Street and Hall Avenue and on Front Street. Riverfront Park by the dam should also have a sign, or better yet a kiosk. Improve the portion of the trail along the riverbank. Widening and surface work could be done gradually over time. Add signs indicating public parking at the end of Hall Avenue is allowed in order to access the Riverwalk and consider installing a solar-powered streetlight on one of the utility poles there. Place benches and picnic tables at intervals or scenic spots. Add a kiosk or two along the Riverwalk with information on wildlife, fish and historical aspects. Extend the Riverwalk via a pedestrian bridge from Saco Island East to Riverfront Park, or from the west end of Saco Island to Biddeford near the West Cataract Dam. Invite artists to display artwork at certain points and at certain times along the Riverwalk — could become an event (see activity below). Consider the installation of public art at visible locations along the Riverwalk. 	Council, Pⅅ, Parks and Rec Dept.

Policy Reference	Activity	Primary Responsibility
9	 Create a map that can be downloaded from the City's website. Create an app – consider adding historic facts or information about the natural world that users can access interactively as they travel the Riverwalk. Partner with Saco Main Street and develop an event that includes the Riverwalk, possibly involving lighting and/or art. Examples of other towns that have riverwalks/waterfront parks and events in them abound (e.g. Ipswich Illumination, Providence's WaterFire, Hartford's Riverfront Recapture etc.). Install a live cam of the river along the Riverwalk – possibly at the Riverfront Park or other scenic location and allow access from the City's website. Feature the Riverwalk as part of the Biddeford-Saco Art Walks and other annually scheduled events. Hold a race that includes all or a portion of the Riverwalk within its course. Hold events in Pepperell Square and include the Riverwalk in the festivities. 	Council, Saco Main Street, Pⅅ, Parks and Rec Dept.

SECTION 5B - ARTS AND CULTURE

The City of Saco has long partnered with the City of Biddeford in promoting the arts and culture of both communities. The cities have walkable downtowns within minutes of each other, repurposed mill buildings that are becoming home for new residents and businesses, and a rich heritage with strong Franco-American influences.

A vital component to a thriving community's downtown is ensuring that local arts and culture have a living, tangible presence. This chapter will focus on the links between Saco's downtown and the community's creative culture and how even more connections might be made to the benefit of both.

A. RECENT ARTS AND CULTURE ADVANCEMENT EFFORTS

In 2004, a group led by the Dyer Library/Saco Museum obtained a Discovery Research grant from the Maine Arts Commission to "identify the cultural needs of the two cities and to plan how to provide for them." The City of Saco and the Dyer Library/Saco Museum consulted with the Maine Arts Commission which encouraged the Sacobased effort to include the City of Biddeford and its cultural organizations. The City of Biddeford, MacArthur Library and City Theatre Associates joined the effort. The Discovery Research effort yielded public forums held in both communities, an ethnic and cultural histories & profiles compiled by a folklorist, as well as an arts and culture inventory.

In 2005, through another joint effort between Biddeford and Saco, the Twin Cities Cultural Planning Committee was created. This Committee, whose membership included officials from both cities, a University of New England staff member, teachers, artists, cultural event organizers, downtown organization staff, theatre staff, business representatives, and library and museum staff, produced the Twin Cities Cultural Plan in 2006. The Plan lays out a vision and a strategy for advancing and promoting the creative community in both communities. Another key tenet of the Plan called for the formation of a Cultural Council that would implement the Plan's goals. That group, the Twin Cities Creative Council, was formed and held the "Milling About" art exhibition to celebrate the Plan's creation. A second "Milling About" was held in 2008. Unfortunately, the Council disbanded not long afterward.

In 2013, Engine, a Biddeford non-profit organization founded several years prior in part to meld support for the arts into a driver for economic development, formed the

Biddeford + Saco Arts + Cultural Alliance (BSACA), which serves to market the two cities as a tourist destination and to implement the goals of the Cultural Plan. Member organizations include the Heart of Biddeford, Saco Maine Street (formerly Saco Spirit), the Biddeford and Saco Chamber, City Theater, Arts@UNE, the Biddeford Mills Museum, Societe St. Jean de Bienfaisance, La Kermesse, McArthur Library, Saco Museum, and Dyer Library. To maintain an active profile in the community, BSACA keeps an active Facebook account to advertise and promote art, crafts, music and cultural events, as well as classes on various topics such as photography and painting.

B. THE CULTURAL PLAN

The 2006 Twin Cities Cultural Plan was based on the two public forums mentioned earlier, the results of two surveys (one of artists and performers and one of the general public living in both communities), three focus group forums, and an inventory of existing arts and cultural institutions, both local and in other communities.

The focal points identified by the Cultural Plan include the diversity and shared rich history of the two cities as well as the belief that arts and culture should be inclusive and viewed as economic engines to help drive economic development. The Plan's actions were based on those focal points and this shared vision statement: "Highlighting, enhancing and sustaining the region's creative economy by promoting collaboration among the diverse communities of Biddeford and Saco."

1. The Plan's Goals and Actions

The Cultural Plan contains five overarching goals which support the implementation Plan's Actions. The Plan's goals are:

- **Goal #1** –Artists and businesses interact and support each other.
- Goal #2 The larger community actively supports local arts and culture
- **Goal #3**–The community understands and appreciates the history and contributions of local ethnic and cultural groups
- **Goal** #4 Children learn to celebrate arts and culture from young ages.
- Goal #5 –Local leaders continually work to sustain the arts and culture communities.

The Plan's Actions are grouped according to a timeframe. There were immediate short term (within that year, 2006 and the next two years, 2007-2008), and long term (beyond 2009) actions. For example, some of the immediate actions included:

Action #1 – Establish local Creative Council

Action #2 – Create a brand identity

Action #3 – Establish regular networking events for the creative community

Action #4 - Hold biannual open studio/open mill events

As mentioned earlier, the non-profit arts organization, Engine, stepped in some years after the Creative Council disbanded in 2007. Engine has addressed some of the Cultural Plan's goals and actions, for instance, by creating maker space, doing some branding, running educational programs in the arts, holding events, and maintaining an active Facebook account that regularly posts events and activities going on. In addition, Engine has assistance in promoting arts and cultural events through the Heart of Biddeford, which is Biddeford's accredited Main Street organization similar to Saco Main Street.

2. Arts and Culture in Saco

The Saco Museum, the Dyer Library, Saco Main Street, the Stone Soup Artisans Cooperative, Thornton Academy, and Painting with a Twist all take part in bringing cultural events to Saco. For example, the Museum brought recognition to Saco through a curated needlework exhibition that was reported on by the New York Times! The Museum also holds events that feature docents costumed in historic apparel and exhibits that change with the seasons. Concurrently, each year the Museum holds the Festival of Trees during the holiday season. Not to be outdone, the Library holds art shows featuring art done by students, and recently held a Harry Potter-themed event for children. The Library also offers classes such as watercolor painting and other artscentered instruction regularly. The Dyer Library/Saco Museum would like to hold more events for both adults and children – with performers, speakers and authors – but doing more of this type of programming is beyond their current budget.

Saco Main Street also holds many events throughout the year, such as the Holiday Festival and Parade of Lights, the Pumpkin Harvest Festival, the Sidewalk Art Festival, and the Classic Car Show.

Also held during the summers of 2016 and 2017, the "Adirondacks on Main", which featured Adirondack chairs painted by artists on display along Main Street, were auctioned off at the end of the summer to benefit future Saco Maine Street events. Other successful events Saco Maine Street helps facilitate have been: Music in the Parking Lot concerts (which were held between the Dyer Library and Saco Museum buildings), and some seasonal projects such as planting flowering window boxes along Main Street. Saco Main Street has partnered with its sister organization, The Heart of Biddeford, to

sponsor River Jam, an event in September that features stand up paddle board and kayak races (and other kinds of family fun!) during the day and musical performers at night.

The Stone Soup Artisans Cooperative in Saco showcases local arts, crafts and Mainemade products. The store is a member of the Society of Southern Maine Craftsmen and participates in the Biddeford-Saco Art Walk which happens during the warmer months on the last Friday of the month.

Thornton Academy contributes to the arts and culture of Saco by offering Saco's middle and high school students an array of courses in the arts, ranging from visual arts to performing arts. Upper school students can choose from classes in photography, illustration, painting, sculpture, dance, music and theatre.

Saco is also home to the only Painting with a Twist franchise in Maine. Painting with a Twist features a friendly studio environment where customers are led through the process of creating their own painting by an artist while sipping their favorite beverage. Events for families or children can be found during the day.

C. THE INTERSECTION BETWEEN

The City of Saco has compiled an impressive array of plans and reports in the last ten years (including the Downtown Plan, adopted in 2007 and revised in 2013) on many aspects of the City. One of the most recent was the Saco Bridge 2025. This project brought a number of focus groups together to voice what people love about Saco now, what they would like to fix or change what they would like to see for Saco's schools, and to identify the key elements of the respondents' desired vision of Saco in 2025. There was also a survey which asked questions in a similar vein. Among the things that Saco residents said they loved about Saco now are the parades and community events, the natural assets like beaches and trails, and the downtown. The top two things these residents said they'd like to fix or change were revitalizing the downtown and improving the flow of traffic.

There are strong connections to be made between arts/culture, a community's downtown, and its pedestrians, bicyclists and even motorists. When vehicular traffic is calmed, pedestrians and bicyclists feel more comfortable and are more likely to use the sidewalks and roads. When people get out of their cars and walk, they are more likely to explore and duck into a shop or visit a restaurant they haven't been to before. When

a community's downtown features art and culture, both in the public and private realms, people tend to slow down, linger, and explore.

Besides a walkable downtown, Saco has many valuable, existing, natural assets such as beaches, parks, the Saco River, and open space that Saco residents feel fortunate to have so close by. Connecting that natural world to the downtown, perhaps through evocative art and wayfinding (for both bicyclists and pedestrians) along with providing some green space and benches along the way will foster an even greater sense of connection to place. These same spaces, especially those within the downtown or nearby, can also provide gathering places for music, performances, story-telling, reunions, and/or gettogethers. Such welcoming spaces to gather add to a downtown's sense of vitality simply by letting people know that those spaces exist purely for them, their friends, and their families to enjoy.

When planning for attractive, pedestrian-friendly streets and green spaces in a downtown, especially given the ever-warmer summer temperatures, it is important to provide ample shade for constituents and visitors alike. Urban trees, chosen for their adaptability to urban conditions, can provide a number of benefits, such as the cooling of streets, sidewalks and buildings, storm water management, cleaner air and water, beautification, and shade. Studies done in large communities, such as New York City, have also found that people are more attracted to buildings with trees near them in a downtown environment. Other studies have shown that building values are positively influenced by street trees. While Saco is currently a Tree City USA member, which indicates that the City has made a commitment to its trees, it is a challenge to keep trees growing and healthy in urban environments, and even harder to replace trees once they have been removed. In tighter spaces where trees may not work, options to enhance green spaces and streets include shrubs and perennials, which provide many of the same benefits as trees, except for shade and cooling.







Research suggests that trees may improve driving safety. One study found a 46% decrease in crash rates across urban arterial and highway sites after landscape improvements were installed, while another study found that placing trees and planters in urban arterial roadsides reduced mid-block crashes by 5% to 20%.

The Riverwalk that Saco shares with Biddeford is another gem that may not be fully appreciated. The City has mapped out the Riverwalk on the Saco side but only a few wayfinding signs exist to point the way.

The Riverwalk passes through both urbanized and more natural areas in Saco and could provide collaborative opportunities for local artists/artisans on both sides of the Saco River (perhaps even Thornton Academy art students) to provide public art. There may also be opportunity to tell some local history stories through the Museum in the Streets program, for instance, which can be found at this web address: www.themuseuminthestreets.com.

One of the other things that the focus groups in the Bridge 2025 report wanted more of were in-town restaurants. Food, especially food sourced from local Maine farms and prepared by local chefs, has become an important addition to the arts and culture scene in Maine as the national movement of Eat Local / Buy Local has taken off. Eating out is one of our national pastimes and can be considered entertainment of sorts – think about how some restaurants in Portland offer bar stools from which a diner can watch his/her meal be prepared. The City of Saco has the capacity and population to support several more restaurants, especially those that go beyond pizza and sandwiches, or can host restaurants that do such items with a twist.

As of this writing, two new restaurants, both located just steps from Main Street, have opened in the past several months. One of them, Cia Cafe, offers coffee, sandwiches, local ice cream and featuring local art —and may well become a gathering place for Saco residents.

Another challenge that has been identified by Saco residents is that it is difficult to find a place that serves food past 8:00 or 9:00 pm. Attending a performance or an art show and being able to grab a bite afterward is a common desire that is hard to accommodate in Saco because of this. Some communities have recognized that people also like to shop after going out to dinner and have shops that stay open late on weekend nights. As more people choose to live in the downtown area (for example, in the Notre Dame church redevelopment project that was approved in 2017), Saco will look more attractive to restaurateurs looking to open restaurants, to other businesspeople looking to start small performing arts venues, or even to existing business owners thinking about expanding their hours to meet the newfound and burgeoning need.

D. ISSUES AND IMPLICATIONS

 Despite multiple joint arts and culture planning efforts over the past 12 years, neither the City of Saco nor the City of Biddeford have committed to promoting arts and culture as a means to drive economic development, which goes against all studies done on livability and the economic impact of such arts & culture ventures.

- Saco has a pleasant walkable downtown something many communities envybut there are few gathering places or green spaces in or near downtown, which again goes against where the research is pointing us.
- The Riverwalk seems to be somewhat underutilized and may need improvements and more promotion via maps, apps, and wayfinding.
- The Dyer Library and the Saco Museum could offer more cultural programs and events if additional funding was made available. Their location on Main Street would help make new events even more visible to passersby.
- With more housing appearing in the downtown neighborhoods (such as the Notre Dame church redevelopment on Cutts Street and Mill Building #4 on Saco Island) Saco has an opportunity to engage those "feet on the street" and keep them attending local performances/shows, visiting downtown shops, and eating locally.
- According to the Bridge 2025 report, Saco residents cherish their city's events and are eager for more. With Saco Main Street being the main promoter of downtown events, the City should explore partnering more with Saco Main Street to bring additional events to the downtown area.

Section 6A: Land Use Goals, Policies and Strategies

Land Use - Goals and Policies

State Goal:

To encourage orderly growth and development in appropriate areas of each community, while protecting the State's rural character, making efficient use of public services and preventing development sprawl. (Growth Management Act).

To safeguard the State's agricultural and forest resources from development which threatens those resources. (Growth Management Act)

Local Goals: To foster a pattern of land use that respects and builds upon the established settlement pattern of an urban core surrounded by an outlying rural area.

> To guide development to identified growth areas that are compatible with the existing settlement pattern and that enhance the desired pattern of land use, and discourage suburban sprawl.

To accommodate the growth of commercial and industrial activities in designated growth areas where public services and facilities are or can be provided.

To encourage a pattern of land use that can be served efficiently and that does not impose an undue burden on the Town's financial resources.

To recognize that contract zones are appropriate in certain instances and an important tool, but that the repeated use that has occurred in recent years may be an indication that current zoning needs to be reconsidered.

To establish a greenbelt, incorporating properties via either fee or easement, as a way of encouraging open space, non-motorized transportation, wildlife habitat, and active recreation.

Pursuant to these goals, the City's policies with respect to land use are:

1. The City will evaluate and encourage higher densities in the downtown area through support of smaller unit sizes or by moving toward no density requirements at all.

- **2.** The City will work closely with Thornton Academy through its future planning efforts as the school continues its expansion efforts.
- 3. The existing impact fee program is intended to ensure that the costs of new development are borne in large part by developers. Quantitative date would allow the City to determine the actual financial gains realized, and measure the impacts of commercial activity from downtown projects.
- **4.** The City is supportive of investigating the potential for implementation of a Form-Based Code for the downtown portion of the City (see Focus Area Map in Inventory).
- 5. The City is willing to consider mixed uses that could be established without negatively impacting residential neighborhoods and that would be welcomed by those who could walk rather than drive to access goods and services.
- **6.** The City is willing to consider allowing small-scale commercial uses in residential zones that meet certain minimum standards with Planning Board review.
- 7. The City is willing to consider an approach to certain zones that lists what is NOT allowed rather than attempting to list all that ARE allowed.
- **8.** The City recognizes that development consists not only of roads, utilities and buildings but also of parks, trails and natural resource conservation. The City will work toward establishing a greenbelt intended to enhance the quality of life for residents and visitors by encouraging conservation of natural resources, active lifestyles, and alternatives to motor vehicles.

Land Use - Implementation Strategies

Policy Reference	Activity	Primary Responsibility
1, 4	Revise residential parking requirements in the downtown area with a view toward reducing individual residential unit parking space requirements, providing for shared parking agreements, and developing on-street parking arrangements that work for both business and residential mixed uses in the downtown area.	Council, Pⅅ
1	Change the building code to allow for smaller units in multi-family developments.	Council, Pⅅ
1, 4	Encourage more mixed-use development downtown with retail/commercial on the ground floor and residential units above.	Council, Pⅅ
2	Meet once or twice a year to discuss various issues with the appropriate board at Thornton Academy in order to have an open dialogue on future development.	Council, Pⅅ
2	Appoint an existing planning or development staff person to the appropriate Thornton Academy board as a liaison for continued dialogue.	Council
3	Consider eliminating or reducing the impact fee program in the downtown area in order to encourage more development.	Council, PD&D
3	Determine and implement a method of measuring the impacts of commercial activity on the downtown area.	ED
4	Continue discussions on form-based code with various groups within the community as a way to both educate residents and listen to their reactions/feedback.	PD&D

Policy Reference	Activity	Primary Responsibility
4	Begin reducing the number of zoning districts within the downtown area and change the names of the remaining zoning districts in order to start a transition from traditional Euclidean zoning to that of form- based code.	Council, PD&D
5	Create an overlay zone that will encourage the maintenance of existing and development of additional small independent neighborhood stores to support the local economy.	Council, PD&D
1	Evaluate and encourage higher densities in the downtown area through support of smaller unit sizes or by moving toward no density requirements at all.	Planning Board, Planner, Council
8	Review existing open space, City owned parcels, stream corridors and parcels enrolled in state taxation programs with the goal of establishing a greenbelt of linked, undeveloped spaces for recreation, environmental and wildlife preservation.	Conservation Commission, Planning Board, Council

SECTION 6B: LAND USE

A central goal of Maine's Growth Management program is to "encourage orderly growth and development in areas of each community while protecting the State's rural character, making efficient use of public services, and preventing development of sprawl." This chapter characterizes Saco's current land use pattern and analyzes development trends since 2010.

A. GENERAL PATTERN OF DEVELOPMENT

Saco's traditional downtown core reflects its heritage as a regional center of industry and commerce. Downtown Saco is a compact mix of commercial and residential land use. Main Street (Route 9) is Saco's historical downtown and serves as a local and specialty retail center whereas Elm Street, including the Saco Valley Shopping Center, serves as a community shopping area. Surrounding that commercial core are densely developed residential neighborhoods and mixed-use buildings, as well as multifamily housing. Further west are traditional residential neighborhoods with compact single family and two-family housing.

Two commercial districts have developed north of downtown along Route 1; the I-195 Spur divides them. South of the Spur, a commercial strip functions as a convenience goods and services center. Several of the properties in that area that have been converted to professional office space (or demolished to make room for small box fast-food type facilities) were large single-family homes dating back to the 19th century. Today, located behind the goods and services center, multifamily housing subdivisions and mixed residential neighborhoods dominate.

North of the I-195 Spur, land use along Route 1 is more varied. Prior to construction of the Maine Turnpike, Route 1 was the primary coastal travel route. While the heyday of interstate tourism on Route 1 has long passed, some of the motor courts, cabins, and cottages that served the tourist trade in that era still remain. Today, car dealerships, commercial recreation and entertainment facilities, as well as retail and service businesses have replaced many of those lodging facilities from the past. In addition, two industrial/business parks host manufacturing, light industrial, wholesale, and warehousing businesses in that area. And while residential development is sparse, besides two mobile home parks developed at higher densities than other residential uses on Route 1 (one just south of Cascade Road and the other adjacent to the municipal border with Scarborough), there are a few scattered low-density neighborhoods on roads connecting to Route 1.

Continuing down Route 1, plans for the Park North development, which was approved in 2009, call for a business park, retail/office development, and up to 290 moderate density housing units. As of early 2017, the project has been a reflection of the market: little commercial development while housing starts have increased through 2015 - 2017.

East of Old Orchard Road to the Atlantic Ocean, land use is primarily moderate density single family residential. There are a few commercial uses in the Camp Ellis area, primarily related to tourism and marine uses. Some redevelopment has occurred in the Bay View & Seaside Avenue area with demolition of the 19th century Bay View House to make way for a fourteen-lot subdivision approved in 2010.

The area west of the Turnpike in Saco has historically been agricultural and forest land. Almost 96% of the land in Saco enrolled in the state Farmland Tax Program, and 86% of the land enrolled in Tree Growth Tax Program, is located in this area. However, the historical land use pattern is changing. 20% of the housing units built in Saco between 1980 and 1990 are located in this area. Between 1990 and 2000, an additional 391 housing units were built, which account for 65.4% of the total new housing growth in the community during that time. Between 2000 and 2014, another 459 units were built, representing nearly 38% of the growth (see the Population Section for more information).

In total, the City of Saco encompasses approximately 38.5 square miles. The following detailed analysis of land use in Saco divides the City into four regions which coincide with the census tracts used in the Population and Demographics chapter (see Figure L.1 on the following page).

Rural Area West of the Turnpike (Census Tract 51)

25.4 square miles in size; this area includes all of Saco west of the Maine Turnpike.

Route 1 Corridor (Census Tract 52)

7.3 square miles in size; this area includes land north of North Street and east of the Turnpike to the Old Orchard Beach/Saco municipal border and Old Orchard Road.

Intown Saco (Census Tract 53)

2.2 square miles in size; this is Saco's urban core and includes the area east of the Turnpike to Old Orchard Road between North Street/Beach Street and the river.

Coastal Area: Ferry Road/Camp Ellis (Census Tract 54)

3.4 square miles in size; this area includes all land east of Old Orchard Road.

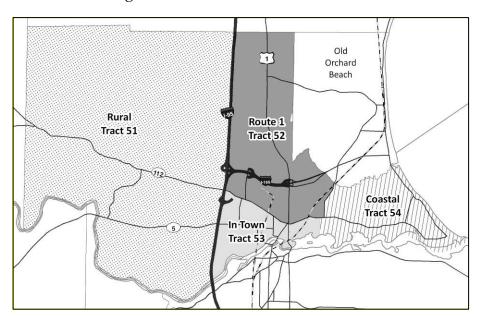


Figure L.1: SACO CENSUS TRACTS

B. OVERVIEW OF RECENT DEVELOPMENT

Since its founding, Saco, together with Biddeford, has been a regional center for commerce, industry, and employment. As the country has shifted from a manufacturing to a service-based economy, and retail has moved from downtown to malls, commercial strips, and big box superstores, Saco has evolved. The City has invested in new industries and created opportunities for job growth while embracing its role as a residential community for the Greater Portland area. As traditional downtowns have seen resurgences in popularity, Saco has invested in revitalizing Main Street and the Saco mills, attracting new retail businesses and residents to the City; overall striving to ensure that Saco continues to play an important role in the region.

Since the 2011 update, trends and practices have changed. There is a recognized need for more housing in the downtown area to accommodate both young adults and those of the Baby Boom generation seeking to age-in-place so each group can be close to services. This resurgence towards in-town living is putting pressure on communities to address how, where, and what type of development needs to occur in city center locations.

Residential development has been Saco's largest growth sector in recent years. The City's quaint, historic town center, small town sense of place, access to the river and ocean, location along the turnpike, and proximity to Portland and Boston, all work together to make Saco an attractive place to live.

At the same time, Saco has avoided becoming primarily a residential community. By investing in business/industrial park development and downtown revitalization, Saco has maintained a diversified economic base. Continued commercial development on Route 1 on both sides of the I-195 Spur has led to the expansion of auto related uses as well as new retail and office complexes. Efforts to revitalize Saco Island paid dividends in 2017 when the rehabilitation of Mill Building 4 was completed, which includes 150 apartment units and 37,000 square feet of mixed-use space.

The country's first green train station and continued reinvestment in the mills promise opportunity for continued downtown residential and non-residential development.

C. LAND USE REGULATIONS

To help manage growth and promote its historic pattern of development, the City has implemented a series of zoning and land use regulations between 1990 and 2011. The zoning code distinguishes between Saco's residential, commercial, and industrial areas and encourages compatible new growth that is complementary to existing uses. Higher density is promoted in the urban areas, consolidated growth that protects open space is promoted in the rural areas, and attractive commercial development is promoted in designated high traffic areas. In addition to defining where growth will take place, the City promotes appropriate design and land use with site plans, subdivisions reviews, and design standards. Historic standards help promote preservation and compatible design within the City's historic core (see Appendix 5), while shore land zoning, resource protection, and floodplain management regulations help protect natural resources throughout the City (see Appendix C in the 2011 Plan).

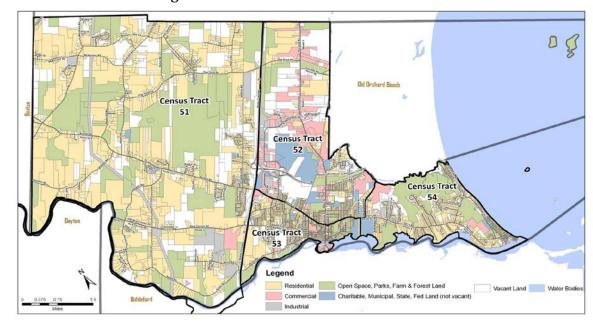


Figure L.2: MAP OF SACO LAND USE

D. RESIDENTIAL LAND USE

Residential development in urban Saco has thus far followed a historic pattern as the downtown and surrounding neighborhoods are indicative of historic factory towns. They include high-density development with single and multifamily homes on relatively small lots set close together.

The coastal area reflects an ocean cottage model with small homes on small lots oriented toward the ocean and the Saco River -- though the trend of recent years has been to purchase, demolish, and make way for larger new house construction.

In the rural area west of the turnpike, housing is more spread out, with historic large farms and recent suburban subdivisions made of primarily single-family homes on large lots. The different residential development types are reflected in the lot size and setback requirements in Saco's land use code (see current table of lot and dimensional standards at the end of this chapter). For the most part, the City's residential zones promote and preserve historic patterns.

The following sections examine Saco's current land use in more detail.

Rural Area West of the Turnpike (Census Tract 51)

This area of Saco has historically been mostly rural. A substantial portion of Saco's agricultural and forested lands are found here. Historic land uses include natural resource based activities, such as farming, logging, and sand/gravel excavation. However, as Saco has become more of a suburban bedroom community the land use pattern has come to include increased residential development.

Existing Pattern of Residential Development

While fields and trees still dominate the landscape, houses are becoming more dominant and visible. Proximity to the turnpike (and access to the Greater Portland area), the area's rural character, and a trend toward suburbanization have fostered residential development.

Much of the development has occurred along existing road networks. House lots have been cut out along the road frontages of larger parcels, creating long strips of land with single family houses up front and agricultural or unused land behind. Development generally follows two patterns: single lots intermittently spread along the road and small lot subdivisions along the existing road network. Examples of single lot development are prevalent along Boom and Buxton Roads. An example of a small lot subdivision along existing road frontage can be seen on Boom Road with Riverside Estates.

Boothby Park, on the other hand, is an older residential neighborhood with an internal road network and lot sizes ranging from 5,000-20,000 square feet on Flag Pond Road. On average, Boothby Park has developed at a medium density of 3 to 5 units per acre. Now, just west of the Turnpike, moderate density (1-2 units per acre) to low density (1 or fewer units per acre) subdivisions have been/are being built with lot sizes ranging from 15,000 square feet in the moderate density subdivisions to 40,000-80,000 square feet in the low-density subdivisions.

New subdivisions west of the turnpike include Precious Hidden Estates, Heath Overlook off Buxton Road (2016), and Morrill Estates off McKenney Road (2016). While a 2016 subdivision approval adjacent to the Turnpike and Route 5 calls for sewer to cross the Turnpike, public sewer is currently available only in the Buxton Road/Jenkins road area. In the northwest corner of Saco, a few cluster subdivisions have been established, including the Clearing and Horton Woods.

Lower road and infrastructure costs along with the smaller lot sizes (resulting from cluster development) continue to be attractive to developers. The City first began allowing cluster development in an effort to preserve agricultural land and open space but rightfully ended up restricting its use in some areas by requiring access to public sewer and water in 1999.

Rural Residential Development Trends Since 1990

Between 1990 and 2000, 56.5% of Saco's population growth occurred in the area west of the Turnpike. 391 housing units were built and 65.4% of Saco's total housing unit increased. From 2000-2015, Saco continued to see population growth, 52%, in the rural areas west of the Turnpike. Specifically, from 2010 through 2015, 133 housing units were built (see the Population and Demographics section of this inventory). In many cases, residential development occurred slowly as single homes built along existing roads and as part of incrementally developed projects.

Between 2000 and 2008, 133 housing lots in eleven subdivisions were approved in the area. The largest subdivisions approved during this time have been Sierra Woods (50 lots) and Brookside II (36 lots). The majority of other approved subdivisions have been between 13 and 18 lots (see the accompanying Saco Development Profile).

In the period between 2010-2016, 86 new house lots were created in eight new subdivisions ranging in size from three lots up to 31 lots.

Route 1 Corridor (Census Tract 52)

This area includes all land north of North and Beach Streets, east of the turnpike to Old Orchard Road in the south, and to the Scarborough/Saco municipal border in the north. Land use varies considerably, from industrial parks on the western edge to National Historic District neighborhoods in the southern section, and in the northern reaches mobile home parks, car dealerships, and agriculture.

Existing Pattern of Residential Development

Because public water and sewer service are available throughout the area, most of the area south of the I-195 Spur has residential use that is developed at medium to high densities. Recent times have seen a limited transformation on Route 1 toward properties of low impact commercial uses as zoning allows office and home occupation in existing buildings. With lot sizes ranging from 7,500 to 10,000 square feet, the southern section (just north of North/Beach Street) is a mixed-use neighborhood where single and multifamily residences stand side by side with schools, churches, the Dyer Library, Saco Museum, parks, professional offices, bed and breakfasts, and funeral homes. Because of the longevity of many of the buildings in this area, there are many sections (south of the I-195 Spur) that are included in Saco's National Historic District.

Moving westward on North Street toward Industrial Park Road, medium density subdivisions have sprouted up. And directly south of Thornton Academy are older, medium-density single-family residential neighborhoods.

Along Route 1 between Thornton Academy and the I-195 Spur, the development pattern changes from walkable scale to one dependent on the automobile as fast food restaurants and shopping centers dominate the streetscape. Single- and multi-family homes, built on average at a density of 8 to 10 units per acre, are located on side streets and behind the commercial strip. In particular, Stockman Avenue and its side streets create a pocket of medium-density residential development bordered on two sides by commercial development. Those residences are primarily single family, though a few duplexes and some multifamily developments exist there as well.

Meanwhile, north of the I-195 Spur, residential development is sporadic. Single family homes mix with car dealerships, gas stations, farms, movie theaters, and amusement parks, while a relatively high density mobile home park is located off Route 1 in the northern third of the corridor. A second mobile home park exists adjacent to the municipal line.

Between Route 1 and the turnpike, Flag Pond Road sits lined with single family homes on the south side of the road with lot sizes ranging from 10,000 square feet to larger than an acre. The northern side of Flag Pond Road is more sparsely developed with an unbroken line of trees comprising half the length of the road. Along Milliken Mills Road off Cascade Road, between the Eastern Trail and Cascade Brook, there is moderate-density, single-family residential development that is the epitome of quintessential Maine for those "from away."

Residential Development Trends Since 1990

Overall, there has been a decline in residential development along the Route 1 Corridor, most likely because much of it is also zoned for commercial use. Between 1990 and 2000, the area lost seven housing units (see the Population and Demographics Chapter of this inventory), though there have been a number of small compact neighborhoods alongside the corridor that have seen some residential growth.

Between 2000 and 2007, 10 subdivisions with a total of 489 housing units were approved in Census Tract 52. Particularly, the 290-unit Cascade-Park North development is benefitting from the 2016 housing boom. The Ross Ridge subdivision, also a part of the housing boom, will be completed in 2017 and will consist of 75 singlefamily dwellings. Between 2010 and 2016, three residential projects were approved with a total of fifteen lots.

Thornton Academy has actively promoted its services to international students for several years. In order to cater to students from overseas, a 38-bed/four apartment dormitory was built at Thornton Academy in 2009, a 42-bed/four apartment dormitory added in 2011, and a third dormitory in September 2017 that includes 52 beds and four apartments. A notable addition in 2016 was Thornton Academy's acquisition of the former Winterhaven senior care facility at 95 King Street, with the intention of converting it to an eighteen bed student dormitory, which was accomplished through an amendment to the Winterhaven contract zone.

In-town Saco (Census Tract 53)

As the southern boundary of the In-town area, which includes the City's historic core, the Saco River powered industry and provided access to markets, which is the reason Saco came into existence.

Existing Pattern of Residential Development

Land use in the In-town area is mixed and compact (which is typical of early New England settlement patterns) with an average of 10 housing units or more per acre. Apartments are located above retail shops and offices in the commercial district while older multifamily housing projects are located near the river and former mill sites. The fashionable homes of Saco's 19th century captains of commerce and industry are located throughout the In-town area, many of which are included in the Downtown Saco National Register Historic District.

Residential Development Trends Since 1990

The In-town area experienced the smallest increase in housing units for Saco between 1990 and 2000. According to the U.S. Census, 88 units were added, representing only a 3.3% increase in housing units within the In-town area, accounting for only 14.7% of the total housing unit increase in Saco.

From 2000 to 2009, 314 housing units were approved in 17 subdivisions. All but one is located west of Main Street in neighborhoods with easy access to both downtown and I-95. Of the approved units, 60% have been built (189 units). Three of the approved developments are single family subdivisions, and the remainder is condominium-style projects. Major completed projects include the 36-unit Stonegate townhouse project, the 34-unit Park Street Loft development, and the 16-unit Wild Oats subdivision. Approved but not yet built projects include the 77-unit Saco Island redevelopment project and an 11-bed Volunteers of America nursing home project.

From 2010 to 2016, multi-family housing played a prominent role in the in-town area, with 266 apartment units and nineteen residential housing lots approved. Major projects during this period included the 36-unit Boiler House Lofts (now Saco Island Apartments), a workforce housing project; the long awaited rehabilitation of Mill Building #4 on Saco Island that includes 150 apartment units; and the approved (but not yet built as of November 2017) conversion of the former Notre Dame church into an eighty unit apartment building, which will include the construction of new buildings on each side of the former church.

Coastal Area: Ferry Road/Camp Ellis (Census Tract 54)

Existing Pattern of Residential Development

Saco's immediately coastal neighborhoods are densely settled with single family homes on lots as small as 5,000 square feet, many of which are used seasonally. Current zoning requires a minimum lot size of 7,500 square feet for new development with public sewerage or 20,000 square feet for development without public sewerage.

Moving west, the settlement style changes toward moderate density single family subdivisions, most of which are serviced by public water and sewerage. These lots are typically between 20,000-30,000 square feet, though there are a few subdivisions that feature lots between 40,000-60,000 square feet.

The roads into these subdivisions tend to be single curb cuts branching from a collector

road. And even though many of the subdivisions are side by side, zero connections exist between them which means all traffic is funneled to the collector roads. Ferry Road, for example, while also being lined with homes, is the primary collector route for many subdivisions. A secondary collector road, Bay View Road, services several other subdivisions.

Residential Development Trends Since 1990

Census data indicates that between 1990 and 2000, the coastal area of the City gained 126 housing units. The growth has included single family and multifamily developments, as well as some conversion from seasonal to year-round residences. This modest growth that was seen during the last decade of the 20th century is similar to the previous decade's growth (1980-1990) which saw an increase of 129 housing units.

Between 2000 and 2009, residential development included six approved subdivision projects with the potential for 114 new units. Five of the six projects are single family developments, including the 28-unit Ferry Landing project and the 10-unit Ocean Greens II development. There is one new group quarter project in this area, the 105-bed Harborview nursing home. Connected to this development is the approved 43unit Harborview Cottage project. As of 2008, 25 cottages had been built (see Chapter Two of the Comprehensive Plan for more details).

Two hundred fifty-nine residential units were completed between 1999 and 2009. Seventy house lots in six subdivisions were created between 2010 and 2016 in the coastal area.

E. COMMERCIAL/INDUSTRIAL LAND USE

Commercial and industrial sections of the City were identified for this section using two methods: Geographic Information System (GIS) analysis and a review of the Saco Assessor's records of properties used for commercial or industrial purposes. Most commercial and industrial uses in Saco are located in the Route 1 Corridor and Intown areas.

Historically, downtown Saco has been the center of commerce and community life. In response to suburbanization, tourism, changing commuting patterns, and alterations to the road network, two additional commercial areas have developed north of downtown. In addition, several smaller business centers cater to neighborhood service and convenience goods needs.

In response to the loss of the region's textile industry, Saco launched an aggressive economic development campaign, developing industrial parks and promoting its regional ties and assets, such as proximity to the turnpike and rail lines. The majority of Saco's industrial land is in the Route 1 Corridor area north of the I-195 Spur, and as such, Saco's industrial parks are located between the Maine Turnpike and the rail line. The Mill Brook Business Park, approved and built in 2004, sits across Route One from Spring Hill Road. As of 2016, all parks have public water and sewer access. Natural gas service was extended throughout the Saco Industrial Park and the Spring Hill section of the Park during 2016-17. The Mill Brook Business Park is not yet serviced by natural gas.

Rural Area West of the Turnpike (Census Tract 51)

Existing Pattern of Commercial Uses

While there is little land classified as commercial west of the turnpike, there are a few scattered commercial uses in the area, including a golf course and some home businesses.

Existing Pattern of Industrial Uses

Land held for infrastructure use, such as Central Maine Power lines and telecommunications property, is classified as industrial. The only active industrial businesses west of the turnpike are three sand and gravel operations on New County and Berry Roads.

Non-Residential Development Trends

The area west of the turnpike includes the vast majority of Saco's farmland and commercial woodlands, which have many of the same needs as industrial properties. A mixture of agriculture, forestry, conservation land, sand and gravel extraction, and residential use, the majority of land west of the turnpike is zoned Resource Protection (RP) or Conservation (C-1), both of which restrict commercial and industrial development. As such, over the last 25 years, no significant commercial or industrial development has occurred west of the turnpike.

Route 1 Corridor (Census Tract 52)

As Saco's economy has diversified, and its working and commuting patterns have changed, commercial development in the northern portion of the City has increased.

Existing Pattern of Commercial Uses

Route 1 Corridor from the I-195 Spur south to Thornton Academy

The area is zoned Highway Business District (B-2) and is intended for businesses that require large areas or volumes of traffic. The zoning ordinance encourages high traffic generating businesses to locate on arterial roads away from the City's downtown core.

Route 1 between the I-195 Spur and Thornton Academy is a commercial center for residents of Saco and Old Orchard Beach. The commercial strip includes many national fast food restaurant chains as well as several full-service restaurants and lodging facilities. Just south of the Spur is a suburban style strip mall anchored by a grocery store. Across from the mall an auto parts/service superstore serves residents and travelers alike.

In more recent times, Thornton Academy has had a great deal of success promoting the school not only as a regional school but also internationally with its programs. As the school's popularity has increased so has its need for additional properties surrounding the school. Much of the expansion has been attributed to the need for living space, be it in Dorms or homes, within walking distance of the school's facilities. In 2017 the school acquired the former Winterhaven senior care facility at 95 King Street, and received approval to amend the contract zone that had made Winterhaven a permitted use in an otherwise residential (R-1b) zone. The amendment allowed conversion by the school to an eighteen bed student residential facility.

Route 1 Corridor from Thornton Academy to Beach Street

Located between Saco's two primary retail/service areas, the area is zoned Low Density Residential District (R-1b) in an attempt to preserve its historic character. Land use is intended to be primarily residential, though schools, parks, churches and playgrounds are also permitted. Appropriate conditional uses are few, limited to bed and breakfasts, offices in converted residential structures, home occupations, nursing homes, and elder and child care facilities. The lot size requirement for sewered lots in this area is 10,000 square feet.

Business use of property along Route 1 between Thornton Academy and Beach Street

is considerably less intense than in the commercial strip to the north or the downtown core south of Beach Street. Land use is a mix of residential and commercial uses (as stated above), including the Dyer Library, Saco Museum, several churches, two funeral homes, a bed and breakfast, a salon/day spa, and professional offices. There is also a large drug/convenience store across the street from Thornton Academy at the southern edge of the commercial area.

Ocean Park Road

Ocean Park Road is zoned as a Highway Business District (B-2c). It is intended for businesses that require large areas or volumes of automobile traffic.

Prior to construction of the I-195 Spur, Ocean Park Road was one of the primary routes from Saco to Old Orchard Beach. Many of the businesses along it reflect that heritage. Single family homes mix with restaurants, lodging facilities, and a miniature golf course.

While tourist traffic has declined modestly, Ocean Park Road (Route 5) remains a busy gateway to Old Orchard Beach from Main Street and from the Turnpike. The nature of the businesses on Ocean Park Road has begun to change, which can be seen with an increase in auto service-related businesses, the service club lodge built in 2003, and the business condominium built in 2016.

North Street

At the southern fringe of the industrial park at Industrial Park Road, the zoning changes to Industrial Business District (I-2), a transition zone between industrial and business uses. Several office buildings and a health club are located in a small area of the B-1 zone east of the Turnpike and north of North Street.

North Street west to the Turnpike is primarily residential. Limited commercial uses in this area include neighborhood sandwich shops, professional services, as well as medical and counseling offices. General Dynamics, a large-scale armament and technologies industry and major regional employer, is located just off of North Street near Industrial Park Road. Next door, at 271 North Street, the new Central Fire Station opened its doors in 2011. Residential uses along North Street include single and multifamily housing, as well as apartments over offices.

Beach Street

Beach Street from School Street north to Beach Street, then east to Winter Street is zoned B-7, Limited Business/Residential. Commercial uses on Beach Street consist primarily of a few mixed-use buildings with professional offices at the street level.

Route 1 north of the I-195 Spur

Most of the land north of the Spur is zoned Highway Business District (B-6), while north of Flag Pond Road and Cascade Road, zoning changed to MU-3 in 2013. The land north of the I-195 Spur to the Saco/Scarborough municipal line includes a broad mix of land uses, from agricultural production to car dealerships to commercial recreation enterprises. Commercial uses tend to be clustered together, interspersed with occasional single-family homes, open agricultural land, and vacant commercial land. The many different areas north of the Spur are listed in detail below:

- I-195 Spur to Goosefare Brook—This area functions somewhat as an extension of the Route 1 strip south of the Spur; it is zoned B-2b, Highway Business. With an increase in activity between 2005-2015 due to two new banks, a coffee drive-through, and a seafood restaurant/distributor, this area has quickly become a bustling part of the city.
- Goosefare Brook to Phillips Spring Road—This section of Route 1 accommodates a range of commercial uses including Funtown Amusement Park, Cinemagic Theater, car dealerships and repair shops, as well as several motels.
- Phillips Spring Road to Cascade Road—This is the most developed stretch of Route 1 between the Spur and the Saco/Scarborough line. It contains car dealerships and repair shops, a campground, several motels, and some mixed residential/retail and residential/office uses.
- Cascade Road to the Saco/Scarborough Municipal Line—This section of Route 1 doesn't quite have the commercial development as other areas north of the Spur. Much of the commercial use is tourist oriented, such as the Saco Drive-In movie theater and Aquaboggan Water Park. While the land north of Aquaboggan is primarily used for agriculture and limited residential development, there has been recent growth seen in retail/office with the development of a small strip mall and the redevelopment of the former Cascades Inn site, as well as a 246-acre parcel into a multi-phase commercial and residential complex called Park North just to the north.

The Park North project has been approved for a business park and includes a new credit union building. Concurrently, a 28-acre portion of the park was acquired by the University of New England, which in turn conveyed the acreage to the Maine National Guard, which has stated its intention to build a regional training center.

Existing Pattern of Industrial Uses

Although industrial land uses from earlier eras persist throughout the City, the majority of Saco's industrial land is located in the Route 1 Corridor to the north and south of the I-195 Spur, reaching as far south as North Street. These Industrial Park occupants include manufacturers, warehouse, storage, and distribution facilities, as well as office spaces.

Non-Residential Development Trends

With the expansion of Saco's industrial parks, this area of the City continues to experience substantial growth in manufacturing and office uses. Under current zoning, there is still room for more expansion north of the Spur.

While commercial development has stayed close to Route 1, many commercially used parcels have acres of vacant land behind their businesses, which could be capitalized on.

As a result of the Cascade-Park North subdivision, public sewer extends north to about a half mile short of the town boundary with Scarborough, with service extended from the previous terminus point at Springhill Road to a new pump station off Waterfall Drive in 2009.

In-town Saco (Census Tract 53)

Existing Pattern of Commercial Uses

Saco's vibrant downtown commercial district includes a mix of retail and service businesses, professional offices, restaurants, City Hall, and a post office. The downtown area can be separated into three sub-areas: Main Street/Pepperell Square, Elm Street/Saco Valley Shopping Center, and Saco Island.

Main Street/Pepperell Square

This area includes the businesses along Main Street, its side streets, and in Pepperell Square. It has a mix of specialty retail, restaurant, service, and professional office uses, and serves as both a local service/retail center and as a regional specialty retail center. It is zoned Downtown Business District (B-3) and MU-1, zones intended to facilitate high value businesses and services needed by the City's residents.

Elm Street/Saco Valley Shopping Center

Elm Street is the segment of Route 1 that runs through downtown Saco. Many of the businesses along it cater to the needs of the automobile and commuters. Elm Street is zoned B-3 on the east and B-1 on the west side of the street.

One block west of Main Street, at the intersection of Temple, Elm, and Scamman Streets, the Saco Valley Shopping Center, a suburban style strip mall located in a General Business District Zone (B-1) (a zone intended to allow desirable businesses in need of more space than typically available in the central business district to locate near the urban core) functions as a community shopping destination and primarily serves the residents of Saco and communities to the west along Routes 112 and 5. The shopping center plays host to a variety of businesses, including Shaw's grocery store, Reny's department store, a bank, a UPS store, the University College of the University of Maine at Augusta, and a family restaurant.

Having a chain grocery store and department store in a downtown location is both unique and valuable for maintaining the viability of the downtown district as intown residents can readily walk to the shopping center, although Elm Street can be challenging to cross.

Saco Island

Saco Island, once the site of Saco's prosperous mill industry, is located at the City's southern entrance. Over the last two decades, a number of aggressive mixed-use redevelopment plans have been envisioned for the island, including residential condominiums, office and professional uses, restaurants, retail, and a hotel. While redevelopment first moved forward at a slow pace, there have been a number of buildings refurbished and reenergized into spaces that are now occupied by office, retail, and residential uses. The 2009 opening of the Amtrak station and the 2015 approval of a plan to rehabilitate Mill Building 4 reflect the renewed investment and excitement in the mills on the Saco River.

Existing Pattern of Industrial Uses

There are only a few industrial sites active in the downtown area. They are located on Lincoln Street near the intersection with Spring Street.

Non-Residential Development Trends

Over the last two decades, Main Street has experienced significant revitalization. The City has invested heavily in streetscape renovation and provided support for building rehabilitation. As a result of these efforts, Main Street is a model of downtown revitalization. Saco has been accepted as a Main Street Maine Community by the Maine Downtown Center under the guidelines of the National Trust for Historic Preservation's Maine Street Maine program.

While Saco's downtown is faring better than many downtown districts, it still faces stiff competition from the Maine Mall, Saco's Route 1 Corridor, the new Biddeford Crossing Mall, and expanded retail development along Route 111.

The redevelopment of Saco Island continues to move forward and includes the rehabilitation of Mill Building 4 for commercial and residential use, with tenancy commencing in early 2017. A plan for new condominium development on the east side of the island was approved by the Planning Board in 2007, but failed to move forward. As of late 2017, the property had been acquired by a Limited Liability Corporation which is planning a mix of uses that include a hotel, condominium, restaurant, retail, open space and an extension of the City's River Walk Trail.

Coastal Area: Ferry Road/Camp Ellis (Census Tract 54)

Commercial Development Patterns

There are a number of commercial enterprises, many seasonal, that operate in the Camp Ellis area, including rental cottages, a restaurant, gift shops, bed and breakfasts, inns, convenience stores, bait shops, the municipal pier, a marina, and a boatyard.

While Ferry Road between Old Orchard Road and Camp Ellis has minimal commercial development, a seasonal ice cream stand is located on Ferry Road, and Moody's Nursery operates year-round near the intersection of Elmwood Drive.

Industrial Development Patterns

The only property classified by the Assessor as industrial in this area is a warehouse distribution center on Old Orchard Road.

Non-Residential Development Trends

Commercial and industrial development east of Old Orchard Road has been minimal and focused on marine uses. With limited available commercial land, there is little room for expansion. However, there has been some growth in recreational marine and tourist related activities.

Current Downtown Focus Area Zoning

The 2017 targeted update to the Comprehensive Plan specifically examined the zoning in the downtown and surrounding neighborhoods (see Map 1). Currently this small urban area has 11 zones: 5 Commercial, 5 Residential, and the Historic Overlay district. The existing Euclidean zoning in Saco is considered a "single-use" zone that clusters only "like" uses together to create homogeneity, which in turn does not allow for a compatible/complementary development pattern. The other zoning tool used on a regular basis in the City is contract zoning, whereby the developer negotiates a contract with the Planning Board and City Council to allow them to develop the property in a way not usually allowed under the Euclidean method of zoning. Currently there are fifteen (15) contracts within the study area.



Map 1: Downtown Focus Area

The Downtown Focus Area extends from I-95 to the north along Cumberland Avenue and Wood Avenue, along the railroad tracks down to Wakefield Avenue, along Saco River's shoreline (including Saco Island), then up along Market Street to Lincoln Street, along Skyline Drive, Applewood Drive and Hubbard Street, then along Bradley Street to the Eastern Trail before leading back up to I-95.

F. ISSUES AND IMPLICATIONS

- Saco's residential land use pattern is changing. Traditional small lots and walkable scale in the urban core now co-exists with larger lots, separated land uses, and a dependence on the automobile on the west side of the City. This pattern was reversed somewhat over the past decade, but land for higher density residential development is limited.
- Municipal services such as police and fire protection have seen changes in the pattern of service demands. As development spreads, these services become stretched.
- Agriculture and forestry play a diminishing role in both Saco's economy and its landscape—since 1992 the amount of land enrolled in the state's Farmland and Tree Growth taxation programs in Saco has dropped by 40 percent. The state Growth Management Act requires comprehensive plans to designate rural and growth areas. Previous Saco comprehensive plans have called for farmland preservation. Maintaining the rural landscape is important but is becoming increasingly difficult. One option to consider would be the Transfer of Development Rights program as a preservation technique to encourage higher densities in the Downtown area.

In earlier comprehensive plans and in Saco's zoning ordinance, cluster development has been put forth as a tool to preserve agricultural lands and open space. After Saco approved some cluster subdivisions in the 1990s, the effectiveness of cluster development was questioned in the 1999 plan and, as a result, cluster development was prohibited in unsewered areas. Clustering should again be re-evaluated to determine its appropriate use.

- There is continued pressure for both residential and commercial development in the Route 1 corridor north of I-195, as this area has good transportation access, public utilities, and is conveniently located to Portland. In planning for growth in this section of Saco, the city will need to consider many issues.
- The availability of land suitable for residential development that is served by public water and sewerage is very limited. Concurrently, it is difficult to finance the extension of water and sewerage utilities. By providing additional serviced land and higher densities in the downtown region, a reduction in the pressure for development in more rural areas of the City might be realized.

 Zoning districts abound in the region from Saco Island to the I-95 spur both east and west of the Route 1 corridor in the Downtown area. There are six Business zones and five Residential zones in the region, as well as an overlay zone for Historic Preservation. There are also 15 Contract zones located in this area.

Most of the development in the Downtown Focus Area is clustered in a homogenous way, allowing for similar redevelopment to occur. The best way to achieve that optimal development is through "Form Based Code" which can encourage a multitude of uses and allow development that is compatible in look and feel with the surrounding neighborhood. Form Based Code is defined by the Form Based Code Institute as:

"Land development regulation that fosters predictable built results and a high-quality public realm by using physical **form** (rather than separation of uses) as the organizing principle for the **code**. A **form-based code** is a regulation, not a mere guideline, adopted into city, town, or county law."

• Thornton Academy has recently had great success promoting the school not only as a regional entity but also internationally. As the school's popularity has increased, so has its need for adding properties surrounding the school. Much of the expansion has been attributed to the need for living space, be it in dormitories or houses within walking distance to the facilities. The city should work with Thornton Academy to encourage the development of a Master plan for the campus so that if a Form Based Code is introduced to this area, it will accommodate both the needs of the school as well as the compatibility with the surrounding neighborhood.

Section 7A: Sea Level Rise

Sea Level Rise – Goals and Policies

State Goal: None.

Local Goals: To regulate those properties located in flood-prone areas that may be subject to sea level rise and storm surge.

To encourage land owners in the coastal zone to find acceptable alternate methods of adaptive resiliency for properties that are at risk from sea level rise and/or climate change.

Create and implement a long-term solution to minimize erosion at Camp Ellis.

Pursuant to these goals, the City's policies with respect to sea level rise are:

- 1. Control new development occurring in the Coastal Sand Dune System and in all other flood-prone areas to reduce the potential for future property and infrastructure losses occurring as a result of storm events on top of predictable sea level rise.
- 2. Develop informational resources in order to inform developers and property owners of sea level and climate change concerns with development in the Camp Ellis neighborhood and other neighborhoods along the shore.
- 3. Seek alternative funding sources to support the ongoing beach re-nourishment programs.
- 4. Continue to cooperate with local and regional Emergency Management staffs on protocol for future evacuations during storm surge events.
- 5. The City's policy is that it is not obligated to expend City resources to reconstruct damaged infrastructure in high hazard areas unless there is a public health or safety or environmental issue.
- 6. Continue to manage new construction, remodeling, and reconstruction of property damaged by coastal storms in flood-prone areas in a manner that is consistent with state and federal Shoreland Zoning and Floodplain Management standards and as may be indicated by consideration of predictable seal level rise.

Sea Level Rise - Implementation Strategies

Policy Reference	Activity	Primary Responsibility
1	Review the zoning ordinance to consider a limited growth beach zone, e.g., R-1a Coastal, and encourage appropriate uses within the shoreland zone and sea level rise impact areas.	Council, P, PB ⅅ
3	Consider a Tax Increment Financing District to support infrastructure improvements impacted within the flood-prone zones of the beach area in order to improve the resiliency of the infrastructure from future storm surge impacts.	Council, Pⅅ
6	Integrate resilience criteria into the City's Capital Improvement Plan to ensure that municipal expenditures and investments are protected to the maximum practicable extent from flood hazards and sea level rise.	Council, Pⅅ
2, 5	Develop an outreach program and meet with residents and owners of flood-prone properties in the neighborhood to discuss erosion, flood risk, evacuation, and beach management matters on a yearly basis.	Council, PWD
6	Maintain the current policy practiced by the Department of Public Works: When a coastal storm event is predicted to produce any level of coastal flooding, all preparatory, response, and recovery costs for labor, materials, and equipment are documented in a format acceptable to FEMA to serve as backup should there be a State or Federal emergency declaration that involves reimbursement of these costs.	Council, PWD
4	Create a webpage on the City's website dedicated to flood information including local flood risk; storm preparedness; elevation certificates; instructions for acquiring flood insurance; and guidance on elevating structures. Advertise the webpage via appropriate media channels to residents located in flood hazard areas.	Council, Pⅅ

Policy Reference	Activity	Primary Responsibility
2	Investigate opportunities to create a public-private partnership with banking institutions to establish a low-interest loan program for qualifying property owners to elevate their homes and reduce the cost of flood insurance.	Council, P and DD
2	Consider creating a hazard disclosure policy, either formal or informal, for notifying potential buyers and real estate agents of flood hazards.	Council
2	Install high water mark signs in strategic locations around the community to indicate depths of historical flooding and future sea level rise to increase flood risk awareness and earn Community Rating System (CRS) credit.	Council, PWD
6	Continue participation in the Community Rating System (CRS) and investigate opportunities to earn more credit and improve the City's class rating.	Council, Pⅅ

SECTION 7B: SEA LEVEL RISE

According to one hundred years of records from the Portland, Maine tide gauge, the sea level is rising. Along with this change, storms are becoming more frequent and intense, and therefore the damages they cause are increasing. The important question for the City of Saco to answer is: How should the City respond and adapt?

This chapter inventories the best available data on historic and recent trends in sea level change to offer the best-available current predictions for the future. This chapter also establishes the rational basis on which the City's policy response to sea level rise is based. For text of the actual policies, see the Policy Section of the Plan.

The underlying causes of sea level rise are being debated nationally and internationally and are the subject of extensive scholarly investigation worldwide. Thus, this chapter simply acknowledges the sea level changes as documented over the past century at the Portland tide gauge and does not delve into the underlying causes of the observed changes in sea level. Whatever the cause may be, it is important for the City to react to changing physical conditions.

A. TRENDS IN SEA LEVEL RISE

As shown in this section, there is a clear historical pattern of sea level rise which began about 11,000 years ago and which is still occurring today. For the past few thousand years, there has been a pattern of only minor, gradual increases in sea level. However, the most recent data appears to be showing an increasing rate of sea level rise.

Scientists believe that there are two dominant components to observed increases in global sea level. The first is thermal expansion. As the ocean temperature warms, water molecules expand. The second is volumetric increase, which occurs when the volume of water in the ocean increases due to the melting of glaciers and ice sheets located on land.

When scientists look at data on a specific piece of coast, like at the shoreline of Saco, Maine, there are often additional local reasons for changes in sea level other than those observed at the global level. For example, some upwards or downwards movement of the land is a residual effect from the end of the last ice age. When the crust of the earth in this area was covered with thousands of feet of ice, it sank in response, just like when you lie down on a mattress. When the ice age ended, the land experienced "isostatic rebound' as the crust bounced back up. Some isostatic rebound is still happening

today after thousands of years, but the effect now is very slight. However, in the past, this phenomenon had a tremendous effect on Maine.

In other parts of the United States, there was no ice age, but the sinking of the land or "subsidence" is a problem. This is most pronounced in the Chesapeake Bay area and the Louisiana coast, where higher rates of sea level rise are happening compared to Saco, Maine right now. It should also be noted that seasonal wind patterns can change tide levels during different periods within each year. In our area, tides will run lower during periods of sustained northwest winds, such as during the winter when water is blown offshore.

Thirteen thousand years ago at the end of the last ice age, the land in Maine was so crushed by ice that sea level was 230 feet (70 meters) higher than it is today. At eleven thousand years ago after the ice had receded, the land rebounded so that sea level was about 200 feet (60 meters) below today's levels. Continued melting of ice filled the oceans, and in the last five thousand years, levels in Maine have been very stable, which can be observed with Figure 1 below. It is important to note that this is the period when our modern beaches and wetlands that we know today were formed.

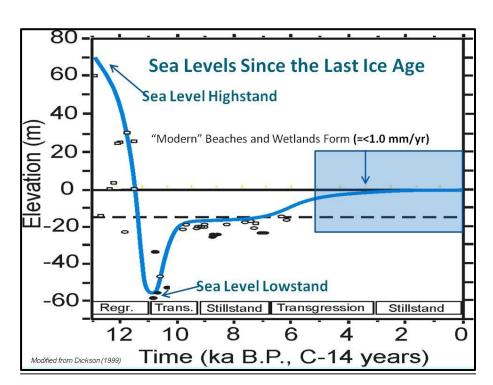


Figure 1: Elevation of Sea Level in Maine – 13,000 Years Ago to Present

Close to Saco, studies of marshes in Wells show that in the last five thousand years (the area shaded in blue in Figure 1) the rate of change in sea level has leveled off from over 3/64 inch (1mm) per year to only 1/64 inch (0.2 mm) per year about a thousand years ago. This data was derived by radiocarbon dating of marsh borings, which can be seen in Figure 2.

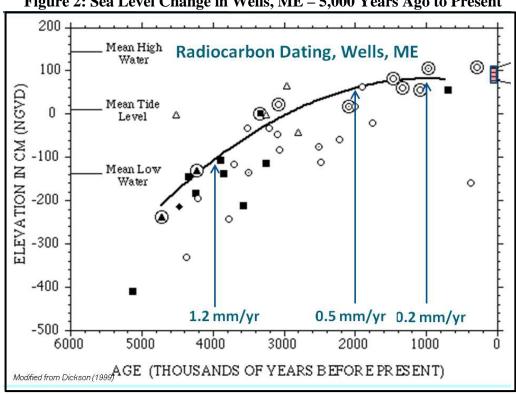


Figure 2: Sea Level Change in Wells, ME – 5,000 Years Ago to Present

However, the peaceful period of gradual sea level rise that has been experienced for the past several thousand years appears to be over. The Portland tide gauge shows that over the last hundred years, since 1912, sea level has been rising at a rate of 1.9 mm per year, reaching 7½ inches (190 mm) total during that whole period. Our sea level rise mirrors global ocean changes, as measured from orbiting satellites, of about 5/64 inch (1.8 mm) per year, which can be observed on the next page in Figure 3.

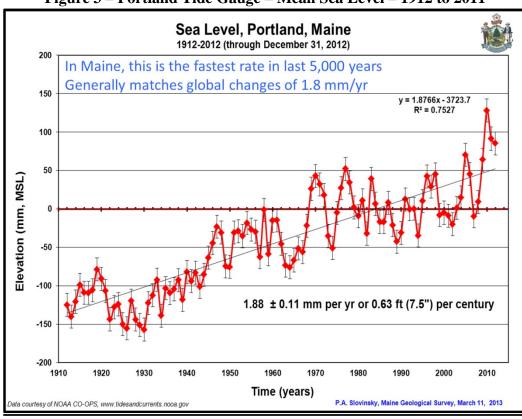


Figure 3 – Portland Tide Gauge – Mean Sea Level – 1912 to 2011

Similar results are found up and down the coast, as documented at nearby tide gauges which are monitored on a yearly basis, and can be seen on the next page in Figure 4.

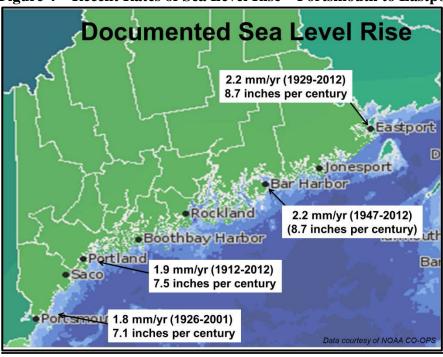


Figure 4 – Recent Rates of Sea Level Rise – Portsmouth to Eastport

Not only has the pace of sea level rise picked up over the last hundred years, the rate is increasing, and is up substantially since 1993. For the last 20 years or so, the rate of sea level rise has increased to 11/64 inch (4.3 mm) per year, or 17 inches (430 mm) per century, as can be seen in Figure 5 below.

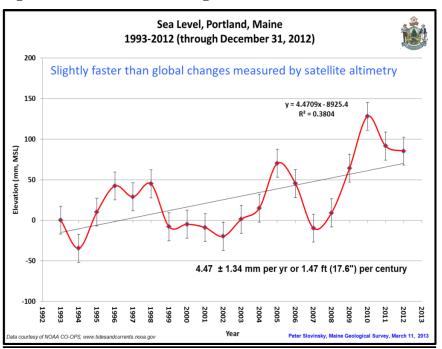
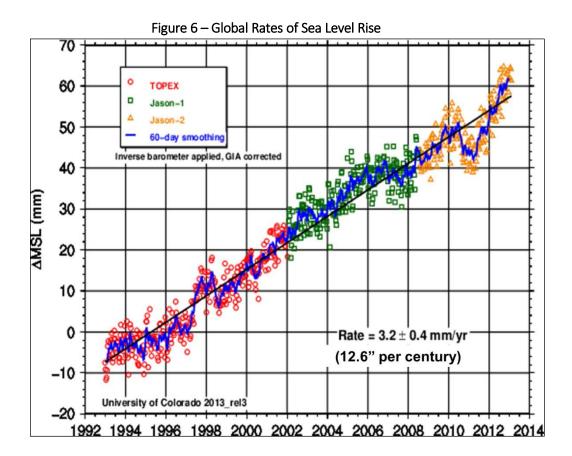


Figure 5 – Portland Tide Gauge – Mean Sea Level – 1993 to 2011

Not only has the pace of sea level rise picked up locally here in Maine, but the rate of rise has picked up on global sea level, as measured by orbiting satellites. Since 1993, global sea level has risen at a rate of 8/64 inch (3.2 mm) per year, or 12.5 inches (320 mm) per century, as seen below in Figure 6.



B. BEST PREDICTIONS OF FUTURE SEA LEVEL RISE

Having an overall understanding of past changes to sea level is essential to understanding the range of projections of future conditions. There seems to be widespread consensus in the science community that sea level will continue to rise in the coming century, meaning that planning for its implications on coastal communities like Saco will be required.

Some buildings, roads, and public facilities will be impacted on a daily basis or during storms where overall rising sea levels will worsen storm-related impacts. While the degree of certainty is unknown, it is nonetheless important to look to the future and consider the range of likely alternatives.

For planning purposes, as well as under the rules of the Sand Dune Act administered by the Maine Department of Environmental Protection, 2 feet (0.6 M) of sea level rise is expected by 2100. The current trends since 1993 shown on our local tide gauge and the satellite measurements of the global ocean levels are showing significantly faster increases than we have observed before. The amount of sea level rise in the last 100 years since 1912 has been about 7.5 inches (190 mm). According to the projections of the Intergovernmental Panel on Climate Change (IPCC), the rise over the next hundred years is likely to be triple that amount, reaching at least two feet. The IPCC projections, however, do not include contributions from the melting of glacial, land-based ice sheets, which could further increase the rate of sea level rise.

Figure 7 shows that if you superimpose the Portland tide gauge data from 1993 to the present, as well as the satellite measurements of the global ocean level, that sea level rise during the last 20 years is tracking the HIGHEST PROJECTION curve of the IPCC.

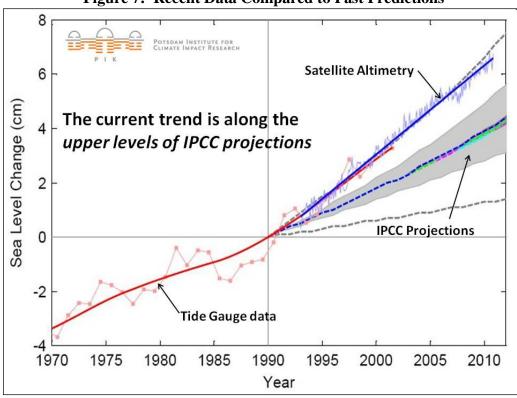


Figure 7: Recent Data Compared to Past Predictions

There is another factor at work which makes the prediction of one foot (0.3 M) of sea level rise by 2050 and 3.3 feet (1.0 M) of sea level rise by 2100 conservative numbers. Geologists are measuring that ice sheets on land in Greenland and the Antarctic are melting, which could add substantial amounts of water to the world's oceans. The recent SWIPA report (Snow, Water, Ice, and Permafrost in the Arctic) by Rignot and Others, from March 2011, predicts that "if the current Antarctic and Greenland ice sheet melting rates continue for

the next four decades, their cumulative loss could raise sea level by 5.9 inches (150 mm) by 2050. When this is added to the predicted sea level contribution of 3.1 inches (79 mm) from glacial ice caps and 3.5 inches (89 mm) from ocean thermal expansion, total sea level rise could reach 12.6 inches (320 mm) by the year 2050." Sea level increases from these sources have not been a factor in Maine's observed rise over the past hundred years, but the possible effects of these new observations should be considered by the City of Saco moving forward. (More information is available from the American Geophysical Union, via the Web: http://www.agu.org).

Figure 8 shows a review of nine recent peer reviewed studies that indicate between one and six feet of sea level rise by the year 2100 when the influence of ice sheets is included in sea level rise scenarios. The center of the red bar on the right side of the figure is the middle of all predictions, at around 4 feet (1.2 M). Most newer authors are factoring in a contribution from ice sheet melting processes, which drives their predictions higher.

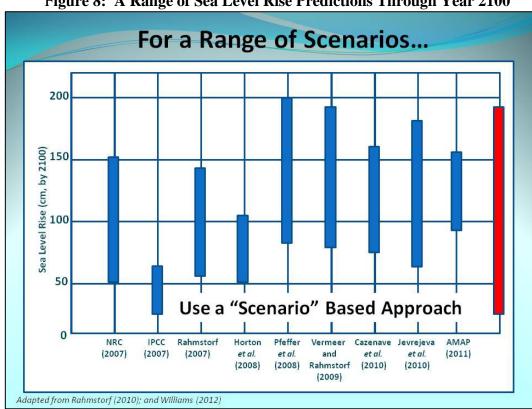


Figure 8: A Range of Sea Level Rise Predictions Through Year 2100

It seems clear from these expert projections that Saco can expect and should plan for some degree of sea level rise in the coming years. How much and in what timeframe are the key unknowns.

C. VULNERABILITY ASSESSMENT – SEA LEVEL RISE

Buildings, roads and public infrastructure are susceptible to impact as sea level rises. GIS analysis was conducted to estimate the changes to impacts associated with sea level rises of 1 foot (0.3M), 2 feet (0.6M), 3.3 feet (1M) and 6 feet (1.8M). These are general estimates based solely on the current building stock and current infrastructure, and are suitable for planners to understand the relative changes in impacts at varying states of sea level rise.

In addition to a simple increase in the water level at highest annual tide, the analysis was repeated to consider the impacts of storm conditions under those higher sea level scenarios. Storms such as this effectively increase the sea level for the duration of the storm. The 1978 storm is the storm of record with respect to ocean-related storm impacts as it produced a temporary increase in sea level of about $2\frac{1}{2}$ feet.

1. Impacts to Buildings

Under normal conditions, a one-foot sea level rise would impact just a few additional buildings, but if a large storm hits during a high tide, then storm-related building damage would approximately double. With two feet of sea level rise, buildings will routinely be flooded by astronomical high tides several times each year, even without any storm or wave activity. When accounting for additional storm-related impacts, buildings would experience significant damage. The number of buildings damaged increases at an alarming rate as the sea level increases. The areas of greatest vulnerability are Camp Ellis and Ferry Beach. The following pages provide Sea Lake and Overland Surges from Hurricanes SLOSH maps of the Saco coastline. The scenarios show a Category 1 storm, Category 2 storm and a worst-case scenario for the Saco beach head. This data may be found on the Maine.gov website

The vulnerability assessment did not estimate the dollar value of damage to buildings. In order to figure the economic impact of such damage, www.sealevel.climatecentral.org is an interactive website that can generally predict the value of property damaged based on the depth of flooding desired to be evaluated.

2. Impacts to Transportation Infrastructure

Under normal conditions, a one-foot sea level rise has a relatively limited impact, but if a large storm hits during a high tide then an additional 1.5 miles of road would be inundated. With two feet of sea level rise, the amount of inundated roads jumps to 1

http://www.maine.gov/dacf/mgs/hazards/slosh/index.shtml.

mile under astronomical high tides and up to 7.5 miles during storm events.

The amount of road inundation increases at an alarming rate as the sea level increases. The vulnerability assessment did not estimate whether these flooded roads in the scenario would be able to be reopened after flood waters receded, or whether they would be damaged and closed until repairs could be made. A depth-damage analysis would need to be conducted to predict damage levels, as discussed in the previous section. The Vulnerability Assessment for Saco Road Infrastructure in Appendix C depicts which roads will be impacted during certain Sea Level Rise events. This analysis was part of a larger study undertaken by The Sea Level Adaptation Working Group in 2013. Below are excerpts from that report that layout the various road impacts based on the grouped scenarios in Appendix C.

Highest Annual Tide Scenarios

Under the existing highest annual tide, Saco has no roads that appear to be impacted. This increases slightly to 7 roads and 0.2 miles under a scenario of 1 foot of sea level rise or storm surge. The major road potentially impacted includes Seaside Avenue (Route 9). With additional increased sea level rise (or storm surge scenarios of 2, 3.3, or 6 feet), those numbers increase to 20 roads and 1 miles, 29 roads and 2.5 miles, and 37 roads and 4.5 miles. The majority of impacts are in the northern end of Saco, nearest Goosefare Brook, and in the Camp Ellis neighborhood. Seaside Avenue remains the major road that is most vulnerable under these scenarios.

1% Storm Scenarios

The existing 1% storm potentially inundates 22 roads and 1.5 miles. With additional scenarios (1, 2, 3.3, and 6 feet), these numbers increase to 29 roads and 2.5 miles, 34 roads and 3.3 miles, 37 road and 4.2 miles, and 43 roads and 6.0 miles, respectively. Under the higher two scenarios, almost all of Seaside Avenue is inundated, as are most of the side streets in Camp Ellis and Seaside.

Category 1 and 2 hurricanes

Under a Category 1 scenario, about 4.3 miles of roads may be impacted, while under a Category 2 storm, up to 7.5 miles of road may be inundated. This includes almost all roads in the south, almost all of Seaside Ave., and all roads near Goosefare Brook.

<u>Highlights of Discussions with Public Works/Engineering</u>

Saco has already taken the steps to abandon a section of Surf Street after the 2007 Patriots' Day Storm. Saco has immediately identified a need to consider Ferry Road and Lower

Beach Road as near-term projects relating to SLR other than the most immediate need of addressing the Camp Ellis project.

3. Impacts to Camp Ellis

The existing roads and infrastructure at Camp Ellis are being regularly repaired and fortified by the Saco Public Works Department. High tides greater than ~9 feet that coincide with waves greater than 5-8 feet create measurable storm damage that requires shoreline repairs and road maintenance some 10-15 times annually. By comparison, other coastal Maine communities only experience similar levels of damage during events declared as disasters by FEMA. Saco Public Works requires over 700 hours of labor, 500 cubic yards of sand and 1800 cubic yards of sand annually to keep the Camp Ellis shoreline safe and accessible.

The City has tried numerous approaches to mitigate erosion at Camp Ellis with limited success. These have included armor stone, jersey barriers, dune grass, sacrificial sand, retreat, sandbags and geo-tubes. Armor stone, while no longer permitted under current environmental regulations, is providing critical protection to several roads, utilities, and homes. Sacrificial sand and dune grass planting have had very limited success within the highest erosion areas, and seem to withstand short duration storm events only. Geo-tubes, installed along a section of Surf Street in 2008, have proved useful in extending the protection during long events, as well as defraying the cost of sacrificial sand replenishment, but face permitting challenges in the frontal dune system. Retreating is often promoted as a solution during the permitting process. (Source: personal communication, Patrick Fox, Director, Saco Public Works, March 18, 2015) As of 2013, more than 35 properties and several blocks of city streets have been lost to erosion at Camp Ellis.

Impacts can also be seen on the SLOSH maps that have been developed by the Maine Geological Survey. Under the scenarios of either a Category 1 or 2 Hurricane and a High Tide situation, Camp Ellis will be underwater.

D. TIDAL SURGE AND FRESHWATER CONTRIBUTIONS

The Maine Coastal Program and Maine Geological Survey point out that when cities prepare for long term sea level rise, any actions taken will also protect against tidal surges which can happen at any time in the short term. Therefore, those State agencies counsel cities that taking actions to adapt to sea level rise can be made with no regrets.

Tidal surge is the term for any time the observed water level in a tidal water body is higher than the predicted level in the tide tables. Figure 9 below illustrates that during a rainstorm on June 4, 2012 that was not otherwise particularly notable, there was a surge of almost 2 feet recorded at the Wells tide gauge, which means that tides were running almost two feet higher than on the chart that day.

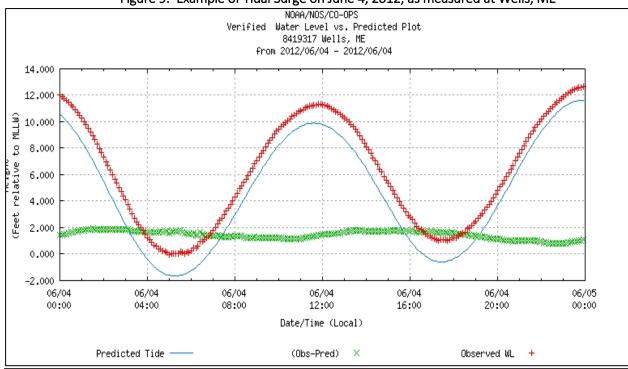


Figure 9. Example of Tidal Surge on June 4, 2012, as measured at Wells, ME

If surge happens at low tide, any associated problems are minimal or non-existent, but when surge happens at a high tide, flooding and damage can occur.

Figure 10 below shows the frequency of 3- and 4-feet surges at high tide in our area.

Figure 10. Frequency of various tidal surges.

Interval (yrs)	Surge at MHW (ft)	High Water Level (ft, MLLW)
1	1.1	11.7
5	2	12.6
10	2.4	12.9
25	2.9	13.4
50	3.3	13.7
100	3.7	14.1

Based on statistical analysis of hourly annual maximum tidal data at the Portland tide gauge from 1912-2012.

Surge levels and tide levels found on NOAA charts are "Still Water" elevations, like the waterline in a calm bath tub. Of course, it is unusual for the salt water in our area to be that still. It is relatively easy to predict static water levels over time – tide tables have done it for years, but wave action and erosion are harder to predict. As such, most of the scenarios of sea level rise found in the vulnerability assessment for this Plan did not take into account wave action or changes to the shoreline from erosion, as erosion events can be very dramatic and cause drastic changes, or can happen gradually over time; or both.

Predicted tide and surge levels also do not take into account concurrent intense rain events, which add freshwater runoff to the saltwater. During the Mother's Day and Patriot's Day storms in 2006 and 2007, as experienced in Saco Beach, the impacts from freshwater flooding greatly compounded the saltwater tidal surge levels. Therefore, the scenarios of possible damages from sea level rise to buildings and roads are very conservative. Any of the predictions can be considered to err on the low side, with any extreme rainfall, erosion or wave action that happens during storms making predicted conditions even worse.

E. BEACH MANAGEMENT

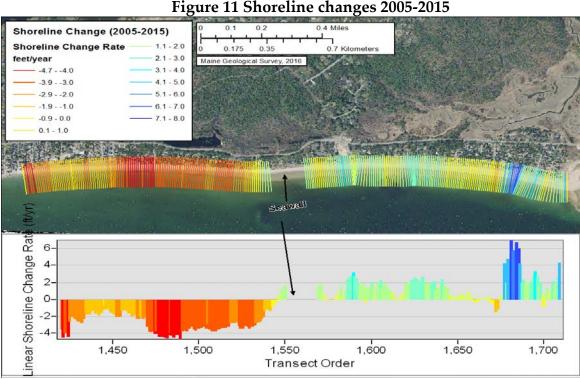
The Saco Beach Management Plan (the Plan) should be recognized as a starting point for the community to achieve several goals:

- The development of a management plan for the long-term care of the beaches stretching from Goosefare Brook to Camp Ellis and the Saco River;
- The recognition and protection of the endangered species that inhabit this region including the Piping Plover and the Rufa Red Knot;
- The development of a re-nourishment plan for the beach system;
- Provide guidance on flood and erosion mitigation measures;
- Support recreational use of Saco beaches.

Saco Bay represents the largest sand beach and salt marsh system in the State of Maine, and Saco's shoreline makes up approximately 1/3 of Saco Bay's coastline. While Saco's coast is less developed and populated than the beach sections to the north in Old Orchard and Scarborough, Saco's beaches, including Ferry Beach State Park, still serve as a recreation destination for tens of thousands of residents and visitors each year. While managing one of the most dynamic and changing sections of Maine's coast, the City continues to embrace the natural beauty of our less populated beaches.

For more than a century, the mile-long jetties, installed by the United States Army Corps of Engineers (USACE) for navigation purposes within the Saco River, have disrupted the natural sand dynamics in Saco Bay. These jetties prevent the natural sand nourishment of the southernmost areas of Saco's beaches, while also increasing the effects of wave energy on the shore. This dynamic has led to well documented severe beach erosion. Restoration of the eroded beach, currently proposed by USACE, will improve beach habitat, benefit recreational use, and lessen the risk of damage from coastal storms.

By enacting the Plan now, the City will assist in reducing the potential for conflicts between human activities and nesting plovers and terns; allow the City to fully realize the ecological, social, and economic benefit of the continued nourishment of Saco beaches; and allow the City to remain eligible for State/Federal funding through compliance with all Federal project requirements, including the protection of endangered species.



Source: Maine Geological Survey 2015

The chart above shows the Saco beach system and the regions that are losing sand and gaining sand. The region to the left of the photo in yellow and orange is the region on the beach that is losing the sand due to wave action moving water from the west to the east. The green and blue areas to the north of the sea wall represent the beneficiaries of sand deposit due to wave action. The most impacted area of erosion loses approximately 4.0-4.7 feet per year of beach, whereas a small area of beach (close to the outlet with Goosefare Brook) sees a growth in sand of upwards of 6 horizontal feet per year.

For a full review of the information found in this document please read the Beach Management Report. Below are the series of recommendations from that document that should be considered for the Comprehensive Plan:

- 1. The City should consider Sea Level Rise impacts on the Beach so that consideration can be given to the action plan beyond the horizon date of this study.
- 2. The City should revisit this document for updates every 10 years because if the Army Corp of Engineers follows through with the beach development, this study will be at the end of its 10-year cycle.

- 3. The City might have the experience of one cycle of beach re-nourishment, at which time they may choose to explore alternate methods.
- 4. The City should revisit the current Comprehensive Plan Goals, Policies and Strategies to make sure those are in line with the needs of the beach protection program.
- For those properties that have ownership rights beachside to the low water mark, the City should continue to obtain access easements for the purpose of ongoing maintenance and repairs.
- 6. The City should consider the development of a guide book for all properties, owned or rented, that can provide education to the public regarding issues surrounding the Piping Plovers, beach responsibilities, ongoing beach maintenance, etc.
- 7. The City should request that the Army Corp of Engineers provide them with a copy of the Operation Maintenance Manual (OMM) prior to the establishment of the new beachhead.
- 8. The City should appoint a Beach Management Coordinator for the purpose of such activities as Plover protection and ongoing beach management cleanup.
- 9. The City should address Article 64-5 as it relates to dogs on the beaches to require dogs be leashed on leashes which do not exceed 10 feet in length during the time period of April 1-October 15 in order to protect Plovers and other natural habitat.
- 10. The City should consider what level of beach protection the Section 111 Mitigation Project will cover and seek to enhance that protection above and beyond the federal standard based on past experience with beach erosion.
- 11. The City should track the costs associated with the construction of the Section 111 Project in order to adjust future costs accordingly.
- 12. The City should research and develop a cost/benefit analysis study in order to determine the most effective long-term re-nourishment options.

- 13. The City should research multiple options for re-nourishment, to include:
 - a. Hired dredge
 - b. Purchased dredge
 - c. Truck haul
 - d. Fixed or semi-fixed bypassing
- 14. The City needs to further develop a plan for post-storm pickup to include emergency re-nourishment plans.
- 15. Currently, and moving forward, the City should track expenses associated with maintaining City infrastructure at Camp Ellis, specifically expenses due to the failure of the existing structure (and any future structure) to function as designed.
- 16. The City should obtain aerial imagery on an annual basis so that the status of the shoreline, specifically the beach-upland edge, can be digitally mapped annually, as well as the mapping of additional property losses. This monitoring option can be conducted with minimal expense, and it might be the case that the State already obtains the needed aerial imagery for use by a number of State agencies.
- 17. The City should partner with Maine Geological Survey to maintain the existing beach profile monitoring program on an annual basis. At the completion of the mitigation project, As-Built plans should be required so that the final beach nourishment profiles are documented.
- 18. Beach management information and public safety information (swimming water quality, rip-tide safety, family safety) is not currently posted. It would be easy to add an informational kiosk (or 4 panel square kiosk) at several locations along the beach. Suitable locations would include the pier at Camp Ellis at Bay View Avenue either at the restrooms, or at the parking machines.
- 19. Consistent documentation of changes in the Saco Bay shoreline, specifically along Camp Ellis and Ferry Beach, will be important to track the outcome of the mitigation project. At the completion of the project and initial beach nourishment, As-Built plans of the project will provide valuable baseline data. Beach profile data and annual aerial imagery will both be useful tools for tracking changes over time and managing the beach in the future.

20. Volunteers are a valuable resource to any community. Not only do volunteers provide labor for projects, they take pride in the work they contribute and help communicate information about such projects within the community. At the same time, effective volunteer programs require a coordinator and a significant amount of time to communicate. If plovers extend their nesting along Saco's beaches, volunteers could be a valuable asset in monitoring the birds and facilitating successful early-season nesting. Volunteers could also help with beach profile monitoring, water quality sampling programs, and invasive species monitoring and removal.

F. FUNDING OPPORTUNITIES

Future funding for the maintenance and upkeep of this beach as it pertains to renourishment (which will be required on a 3- to 5-year increment or following major coastal storm events) could come from several different sources listed below:

- 1. Capital Improvement Planning- Over the years, the community has developed a Capital Improvement Plan (CIP). This is a long-range funding plan that allows the community to put capital reserves away that have been earmarked for specific projects. The City would budget a certain amount of funds to be set aside over a 5-year funding cycle to pay for the re-nourishment and upkeep of the beach system.
- 2. Special Statewide Allocation- If the community were able to do so, the legislature could create a special funding mechanism to pay for this project. The State has a State Park and Beach in this neighborhood and could set aside special allotments to assist the community in funding this work based on the historic damages that the community has seen in this area of the coast.
- 3. Tax Increment Financing- The State of Maine Department of Economic and Community Development (DECD) has recently determined that TIFs are allowed to be used in the funding of improvements that address flooding issues. If the community were to seek out opportunities to expand this project to address future flooding in this area through Sea Level Rise impacts and Flood Mapping, it could pursue a TIF that would pay for the future improvements in the neighborhood.

- **4. Special Taxing Districts-** Other states, such as New York, have enabling legislation that allows communities to develop special taxing districts. Saco could pursue legislation that would allow communities to create a tax district to help fund future improvements.
- **5. Leverage Federal Funds-** Federal funds could be leveraged through FEMA or USACE for the continued maintenance associated with our Federal jetties.

G. OTHER OPPORTUNITIES

Other opportunities that exist which can assist the community in offsetting some costs for the long-term re-nourishment issues include the contracting of dredge equipment on a region-wide basis. There are other southern Maine coastal communities that need to dredge harbors. These communities would be able to rotate the equipment on a yearly basis, making this venture much more cost effective for each community.

ADDENDUM A

Measuring Sea Level

"How Do They Measure Sea Level?"

An accurate measurement of sea level is very hard to pin down, yet it is an important measurement for two main reasons:

- By having an accurate sea level measurement, it is possible to measure the height of everything on land accurately. For example, calculating the height of Mt. Everest is complicated by sea-level measurement inaccuracies.
- By knowing sea level, we can determine if the oceans are rising or falling over time. The concern is that global warming and other weather changes caused by man might be leading to an overall rise in sea level. If so, coastal cities are in big, big trouble.

The problem with measuring the sea level is that there are so many things that perturb it. If you could take planet Earth and move it out into deep space so that the sun, moons and other planets did not affect it and there were no temperature variations worldwide, then everything would settle down like a still pond. Rain and wind would stop, and so would the rivers. Then you could measure sea level accurately. If you did this, the level of the ocean's water projected across the entire planet would be called the geode. On land, you can think of the geode as the level that ocean water would have if you were to dig a canal from the ocean's shore to any point on land.

But the Earth is not in deep space -- it is in the middle of a chaotic solar system. There are all sorts of things changing the water level at any given point, including:

- The tides, caused by the moon
- Large and small waves caused by wind and the tides
- High- and low-pressure areas in the atmosphere, which change the surface level of the ocean

- Temperature changes in the ocean, which change the density and volume of the water
- Rainfall and river water flowing into the ocean

If you were to stand on the ocean shore and try to measure sea level with a ruler, you would find it to be impossible -- the level changes by the second (waves), by the hour (tides) and by the week (planetary and solar orbit changes). To get around this, scientists try using tide gauges. A tide gauge is a large (1 foot [30 cm] or more in diameter), long pipe with a small hole below the water line. This pipe is often called a stilling well. Even though waves are changing the water level outside the gauge constantly, they have little effect inside the gauge. The sea level can be read relatively accurately inside this pipe. When read on a regular basis over a time span of years and then averaged, you can get a measurement of sea level.

You can see that getting an accurate reading (for example, down to the millimeter level) is extremely difficult. Satellites are now used as well, but they suffer from many of the same problems. And while scientists do the best they can, using extremely long time spans, to try to figure out what the sea level is and whether or not it is rising, it is still an imperfect science. The general consensus seems to be that the oceans rise about 2 millimeters per year (although the last link below has an interesting discussion on that consensus...).

Source: www.science.howstuffworks.com; downloaded verbatim on May 2, 2013.

ADDENDUM B

Other Sea Level Rise Adaptation Efforts in Maine

Peter Slovinsky, Senior Coastal Geologist with Maine Geological Survey has identified 4 regional efforts in Maine to address coastal resiliency. These include:

<u>Coastal Hazard Resiliency Tools</u> (CHRT). This is a NOAA- and Maine Coastal Program- funded project, with input from Maine Geological Survey, Southern Maine Regional Planning Commission, and the Greater Portland Council of Governments. It is an overall effort to analyze impacts of varying storm and sea level rise scenarios on the built and natural environment. The area of coverage included: Kittery, Saco, Ogunquit, Kennebunk, Biddeford*, Saco*, Old Orchard Beach*, Scarborough*, South Portland, Portland, and Freeport. The 4 communities designated by an asterisk are also members in the Saco Bay Sea Level Adaption Working Group (SLAWG).

<u>Marsh Migration Project</u>. This was an EPA-funded project from 2010 through 2012, with input from Maine Geological Survey and the Maine Natural Areas Program. This involved simulation of marsh migration with 2 feet and 1 meter of sea level rise. The area of coverage included: Kittery, Saco, Ogunquit, Wells, Kennebunk, Kennebunkport, Biddeford, Saco, Old Orchard Beach, Scarborough, Cape Elizabeth, South Portland, Portland, Falmouth, Cumberland, Yarmouth, Freeport, Brunswick, Harpswell, Phippsburg and GeorgeCity.

<u>Lincoln County Resiliency Project</u>. This was a Maine Coastal Program project from 2012 through 2013, with input from the Lincoln County Regional Planning Commission. This is a study to assess the vulnerability of infrastructure to varying storm and sea level rise scenarios. This included all the coastal communities in the County.

<u>Marsh Migration Project</u></u>. A NOAA Project of Special Merit from 2012 through 2014, with input from the Maine Geological Survey, Maine Coastal Program, and Maine Inland Fisheries and Wildlife. This is a similar though not identical study to that listed above, and covering a different mix communities – Topsham, Bath, Bowdoinham, George City,

ADDENDUM C

Road Infrastructure Assessment for the City of Saco Appendix C: Assessment of Potential Impacts to Roads, City of Saco

		Highest Annual Tide (+ SLR in feet)					1% Storm Event (+ SLR in feet)					Hurricane	
Road Name	Road Class	HAT	HAT+1	HAT+2	HAT+3.3	HAT+6	1%	1%+1	1%+2	1%+3.3	1%+6	Cat1	Cat2
ABBY LN	Local												238
ATLANTIC WY	Local												79
BAY AV	Local			95	378	430	323	380	405	430	430	430	430
BAY VIEW RD	Local					160			91	145	205	157	380
BAYVIEW RD	Major/urb collector					646			372	594	776	602	1277
BEACH AV	Local				86	364	7	87	216	347	364	351	364
BEACON AV	Local			32	66	102	39	66	77	96	419	97	504
CAMP ELLIS AV	Local			183	754	917	222	807	916	916	916	916	916
COTTAGE AV	Local				49	165		52	93	165	165	165	165
COURTLYNN CIR	Local												436
COVE AV	Local				273	594		271	422	559	709	549	709
CURTIS AV	Local				56	187		63	98	167	303	179	335
DUNE AV	Local		43	217	298	347	246	303	328	342	459	347	459
EAGLE AV	Local				26	53		26	38	51	148	54	465
EASTERN AV	Local			54	110	475	63	110	407	458	631	461	631
FAIRHAVEN AV	Local			12	47	177	21	42	65	104	515	87	628
FERRY LN	Local										16		425
FERRY PARK AV	Local					33				25	404	12	595
FERRY RD	Major/urb collector		53	311	313	496	313	311	327	472	823	453	1729
FRONT ST	Local				247	445		211	308	396	490	482	599
HARRIMAN FARM	Local												149
ISLAND VIEW AV	Local					90			69	84	276	84	331
ISLAND VIEW ST	Local					111				37	350	40	455
KING AV	Local										174		365
LANDING RD	Local												1103
LIGHTHOUSE LN	Local								No to	some Mode	ræle v	ajor	sevele
LOWER BEACH RD	Local			79	135	365	98	140	18 ^{6 im}	act도		p 科 -500 ft 5	lı çı pay t 00+ft

		Highest Annual Tide (+ SLR in feet)			1	% Storm	Hurricane						
Road Name	Road Class	HAT	HAT+1	HAT+2	HAT+3.3	HAT+6	1%	1%+1	1%+2	1%+3.3	1%+6	Cat1	Cat2
MAIN AV	Local				195	932		276	559	873	1077	856	1077
MARSHWOOD CIR	Local										53		196
MEADOW AV	Local		23	108	108	108	108	108	108	108	108	108	108
MORRIS AV	Local					103			47	93	139	102	301
NORTH AV	Local			39	755	755	540	755	755	755	755	755	755
OCEANSIDE DR	Local					1100				846	1676	934	1676
OLD ORCHARD RD	Major/urb collector										13		45
OUTLOOK AV	Local			105	141	205	118	143	167	200	504	201	590
PALMER AV	Local		211	597	635	774	620	635	662	774	774	774	774
PEARL AV	Local					144			56	103	144	100	144
PINE RIDGE RD	Local												518
PINE TREE AV	Local			178	493	892	232	496	627	892	892	892	892
PINEY WOODS RD	Local		204	442	503	650	472	503	573	650	650	650	650
POND AV	Local												82
RIVERSIDE AV	Local			92	301	563	213	312	42 9	521	694	518	694
SALTAIRE AV	Local			23	248	294	52	256	294	294	294	294	294
SEASIDE AV	Major/urb collector		276	1961	5562	8427	3132	5590	7072	8173	10225	8574	10804
SHORE AV	Local		332	387	447	549	409	450	495	549	549	549	549
SUNRISE AV	Local				65	120	33	59	90	115	325	112	448
SUNSET AV	Local			121	155	294	124	156	170	194	544	211	712
SURF ST	Local				10	450		9	62	361	1887	206	2027
SYLVAN AV	Local										67		212
WEST AV	Local			14	712	1027	333	718	868	1028	1028	1028	1028
WILDWOOD DR	Local												38
TOTALS (in feet)		0	1142	5050	13168	23544	7719	13339	17452	22272	31648	22677	39478
TOTALS (in miles)		0.0	0.2	1.0	2.5	4.5	1.5	2.5	3.3	4.2	6.0	4.3	7.5

NOTES: Highest Annual Tide based on the 2013 predicted value from NOAA for tidal stations in the community

All distances referenced are in linear feet of road, unless otherwise specified

The City of Saco requested that the classification scheme to include 0-50 feet as no to little impact instead of 0-10 ft Cat 1 &2 Storm events in this table do not include any Sea Level Rise

No to some impact	Moderate Impact	Major Impact	Severe Impact			
0-50 ft	50-100 ft	100-500 ft	500+ ft			
		* or entire road				