Belgrade Community Profile

This report holds a statistical profile of the town of Belgrade and its people. It has a great deal of numerical information about the community. Data like this will often confirm intuitions about what is happening within the community. More importantly, it can show early signs of new patterns and trends before their impacts become apparent.

Demographical statistical data of a particular place, like Belgrade, is incredibly valuable



and can greatly affect future decisions. Demographic data can affect and impact nearly every decision made on the municipal level. For example, the amount of money from taxes the town needs to generate is affected by things like services the town offers for its senior citizens, the size of the school system and expected future enrollment, waste management services, and the quantity of recreational amenities provided. The level of services the town needs for senior citizens can be assumed using demographic data, just as the school system size will be affected by total family households in the area. Belgrade is evolving and in the last decade, there are more residents than ever before. Innovative ideas and strategies will be needed to accommodate the increasing and changing population. The information supplied here will be used throughout the

plan and will help inform us about how the community has changed. Future changes are also discussed. Growth projections will help in planning for the increased housing and public service demands that are expected over the next couple of decades. Similar information can be found in the Housing Chapter of this plan.

****Note: You may notice that the population number varies between 3,250 and 3,148. This is because 3,250 is from the Decennial Census and the 3,148 is from the 2021 American Community Survey (ACS) and is an estimate. It has been used in certain charts because the data was calculated based on this number from the ACS. To change the population and recalculate the data would be inaccurate. It is important to understand this because it could be construed as a mistake, and it is not. These discrepancies have been annotated in several places.

Components of Household & Population Change

There are many factors that contribute to population changes besides birth rate, migration, and death rate. Some of these factors include economic development, education, quality of life, urbanism, changes in job availability, and many more. Some of these, although not relevant to Belgrade, may be factors for why people moved from their original locations to Belgrade.

These changes are never solely a case of emigration; there are various contributing factors for people to move to a new home. Population change in a community is a result of both natural change and migration. <u>Natural change</u> is the difference between deaths and births in the community over a period. Natural change can also be an indicator of population trends in a population. A trend of more births than deaths would indicate a higher number of families as well as residents normally in the 20-40 age range, while a trend of more deaths than births would indicate older populations. <u>Migration</u> accounts for people moving in and moving out. Net migration is population change not explained by births and deaths. Migration is calculated as the difference between overall population change and natural change. People choose to move in or out of a community based on many factors, such as availability of employment, housing costs, and quality of life.

Will the ratio of natural change and net migration continue? Considering the aging population, a trend toward smaller families and increasing housing values, it seems that deaths will continue to outpace births, resulting in an increased decline in natural change.

Population trends are important to identify because they form the basis for future land use and municipal planning. Likewise noting any changes in age distribution and other factors in the town is also important as they may affect municipal services and cost.

Historical Population Trends

"Population" is usually the principal criteria used in measuring the size and vitality of a town. The current population is often used like a yardstick for the town's identity in the regions, expected level and use of public and municipal services, and more.

Since its incorporation in 1796, Belgrade has seen an ebb and flow of population, similar to its neighboring communities and the State. Economic and cultural factors heavily influence the population changes that are displayed in Table 1 and Figure 1 as seen below.

Year	Population	Year	Population
1860	1,592	1950	1,099
1870	1,485	1960	1,102
1880	1,321	1970	1,302
1890	1,090	1980	2,043
1900	1,058	1990	2,375
1910	1,037	2000	2,978
1920	957	2010	3,189
1930	978	2020*	3,250
1940	1,046		

Table 1: Population Count by Census Year

*Population from U.S. Decennial Census

Following the Civil War, and lasting until the early 20th Century, virtually all of Maine lost population. This was the era of westward expansion when many people relocated to the

West. Like many other towns, the population hit its lowest documented point in the 1920's before rebounding over the next several decades.

Belgrade is unique in the fact that while many surrounding towns lost population through the 1920's to 1950's, due to several factors such as the Great Depressions, World War I and II, and westward expansion, Belgrade gained population steadily through the decades. This can most likely be attributed to the flourishing tourism industry. Several summer camps were developed along the shores of the lakes, catering to children and families alike. Along with the camps and hotels were the industries needed to serve them, housekeepers, maintenance and groundskeepers, culinary staff, and recreation staff. One of the largest growing trends in recreation was the fishing industry. The lakes of Belgrade have long been known for their clean waters and excellent fishing.



*Population from U.S. Decennial Census

The above graph shows the same data as Table 1 but better highlights the years of rapid growth that the town experienced.

The changes in population can be attributed to the availability or lack thereof of employment opportunities, available modes of transportation to reach undeveloped parcels of land and employment, and changes in the cultural perception of living in a rural community versus an urban community.

General Population Characteristics					
	2000 Census	2010 Census	2020 Census	20 Year Trend	
Total Population	2,978	3,189	3,250	272	
Median Age	39.4	43.8	49.6	10	
Persons less than 5 years	137 (4.6%)	173	112	-25	
Persons 5 to 19 years	677 (22.8%)	616	550	-127	
Persons 20 to 44 years	1,005 (33.7%)	864	789	-216	
Persons 45 to 59 years	677 (22.8%)	856	760	83	
Persons 60 to 64 years	144 (4.8%)	214	292	148	
Persons 65 to 84 years	319 (10.7%)	432	734	415	
Persons 85 years and over	19 (.6%)	34	45	26	

Table 2: Age Trends 1990-2021

Source: U.S. Decennial Census

Highlights of Population Trends

- The number of individuals in the 5-19 age range has steadily and significantly decreased. This is the age range that most affects the local education system and those intertwined systems.
- The "family-age" bracket is associated with the population group from 20-44. It has also decreased over the past two decades. This has a direct impact on both the younger and older age cohorts.
 - A lessening of the "family-age" means there will be fewer children being born or otherwise brought into the community. It also means those in that bracket are aging out of it and are not being replaced with new families.
- As expected with the decrease of preceding age brackets, the cohorts of those 45-59, 60-64, and older than 65 have steadily grown with each count.
 - As the baby boomers (those born between 1945 and 1965) ages, it may impact the housing sizing and style, workforce levels and need for services within the municipality.
 - This group put an enormous strain on available systems such as in schools, now they are aging out of the workforce and altering the various housing and health services.

Regional Perspective

Belgrade's development pattern is not at all unusual for Kennebec County. All the towns in this area prospered as farm towns during the 1800's, growth slowed during westward expansion and the urbanization period of the late-19th-early 20th centuries and began to

grow again as suburbs and green spaces. The region's largest growth period was in the 1970's and '80's and has slowed since.

Table 3 compares Belgrade to four neighboring communities in terms of population since 2000. Belgrade has grown by 272 residents since 2000, placing its growth directly in the middle of the five towns compared below.

Municipal Population				
Town	2000	2010	2020	
Sidney	3,514	4,208	4,465	
Belgrade	2,978	3,189	3,250	
Oakland	5,959	6,240	6,230	
Readfield	2,360	2,598	2,597	
Manchester	2,465	2,580	2,456	

Table 3: Population Comparison to Neighboring Towns

Source: U.S. Decennial Census

Table 4 compares the 2010 and 2021 population of Belgrade to Kennebec County, the State of Maine, and the United States. The town median age is several years higher than the rest of the county and Maine; it is also significantly higher than the rest of the country. The average family size is also significantly lower than the rest of the country along with a much lower population growth. The Town's population has not grown significantly in the past several years, contrasting with several nearby communities. This could very likely be due to the availability of appropriate housing stock and employment availability both directly in town as well as in nearby service centers.

Town/County/State/	Population Cl	nange	% Change	Average	Median
Nation				Family Size*	Age
	2020	2021		2021	2021
Belgrade	3,250	3,218	-1.0%	2.73	47.3
Kennebec County	122,143	124,486	1.88%	2.72	44.1
Maine	1,327,567	1,372,247	3.25%	2.79	44.7
United States	309,349,689	331,893,745	6.79%	3.15	38.8

Table 4: Town, County, State, National Comparison

Source: 2021 ACS *This differs from the Average Household Size, which is 2.45 for 2021. Household refers to those living together, related or not. Family refers to those who are living together and are related.

The region's towns are also somewhat similar in the other two high-impact population trends: median age increase and household size decrease, as mentioned above. Belgrade has the highest median age, 47.3, of the surrounding municipalities, while also having the smallest household size. This can be interpreted as the municipal population being comprised of older adults living singularly or in pairs. Traditionally, an older median age and reduced family size are indicative of a more rural community comprised predominantly of owner-occupied housing units.

Median Age and Household Size Comparison					
Town	Median Age	Household Size			
Belgrade	47.3	2.45			
Readfield	45.5	2.65			
Manchester	44.6	2.47			
Oakland	44.5	2.40			
Sidney	37.8	2.44			
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Table 5: Median Age and Household Size of Neighboring Communities

Source: 2021 ACS

Household Characteristics

By breaking down the household characteristics in Table 6, we can see how the population from 2000 to 2020 steadily rises, as does the median age and number of households. On the other hand, the average household size and number of couples with children under the age of 18 are decreasing. These trends show that the population of Belgrade is aging in place and there are fewer families and children in town. Additionally, the statistics of fewer people per household can show that there are more residences being built to sustain the population and more residents living alone. The needs that each population has on municipal services changes based on the ago cohort.

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General Population Characteristics	2000	2010	2020*				
Total Population	2,978	3,189	3,250				
Male Population	1,435	1,577	1,610				
Female Population	1,543	1,612	1,640				
Median Age	39.5	43.8	47.3				
Total Households	1,178	2,198	2,267				
Married Couple with Children Under 18	320	286	206				
Married Couple Households	739	769	790				
Non-Married Couple Households	301	330	131				
Nonfamily Households Living Alone	301	248	321				
Single Parent with Children Under 18	97	96	91				
Single-Person Household 65 years +	77	114	87				
Average Household Size	2.52	2.51	2.45				

Table 6: Population and Household Characteristics 2000-2020

*Population from 2020 Decennial Census

The ACS defines household size as the number of people living in one place, who may or may not be related. This contrasts with average family size, which was 2.86 in 2021; average family size is defined as people living in one location who are related to one another.

An emerging, recent trend is multigenerational housing. This living situation was born out of necessity during the COVID-19 pandemic and became the new normal, as it seems to be mutually beneficial to all involved. Multigenerational homes are those that include

parents living with their adult children and grandchildren, for example. This is beneficial for the parents of the young children, as the grandparents can supply childcare, and it is beneficial for the grandparents as they also have access to care. This situation has proven financially beneficial for all parties. As of the 2021 American Community Survey, there were 694 residents over the age of 65 and 39% of households had one or more persons aged 65 or over. The 2021 ACS also documents 38 grandparents living with their grandchildren.

Population & Housing Density

The rate of housing development is a good way to estimate population growth, but it is also a good way to manage it. Local policies can affect the rate of housing growth through their influence on the cost of development or land use restrictions.

Trends can be managed, to a certain extent, to produce desired results. For example, if the local economy or housing market changes, that in turn affects how the community grows and changes, as well. Municipal regulation and policy can have an influence on the size and types of new houses constructed, which in turn will drive population demographics. Neighborhoods with large lots tend to add to building costs and require expensive homes to be built. Many times, these homes are 3-, 4-, or 5-bedroom houses suitable for large families with young children. At the other extreme, housing units can be designed exclusively for senior populations with 1- and 2-person households. This type of development would more closely match the demand for housing but would not add as much to the growth potential of the town.

Land Area and Housing Density						
	Square Miles	2000 Housing Count	2010 Housing Count	2020 Housing Count	Unit per Sq. Mile	
State	30,864	651,901	721,830	739,072	23.9	
Kennebec County	867	56,364	60,972	62,607	72.2	
Belgrade	57.93	1,178	2,198	2,267	39.13	
Readfield	30.95	1,148	1,293	1,320	42.65	
Manchester	22.62	1,181	1,255	1,259	55.66	
Oakland	28.17	2,847	3,024	3,136	111.32	
Sidney	45.51	1,518	1,850	2,063	45.33	

Table 7: Municipal Housing Density

Source: U.S. Decennial Census

Population density is a gauge of residents per square mileage of land. While the square mileage of Belgrade is documented at 57.83, only 43.24 is made up land which increases the density to 75.16 residents per square mile. Much of the population is focused in the village area and along the lake shores.

Land Area and Population Density								
	Square Miles	2000 Population	2000 Density	2010 Population	2010 Density	2020 Population	2020 Density	
State	30,864	1,274,923	41.3	1,328,361	43.0	1,362,359	44.1	
Kennebec County	867	117,114	135	122,151	140.9	123,642	142.6	
Belgrade	57.83	2,978	51.5	3,189	55.1	3,250	56.2	
Readfield	30.95	2,360	76.2	2,598	83.9	2,597	83.9	
Manchester	22.62	2,465	108.9	2,580	114.1	2,456	108.6	
Oakland	28.17	5,959	219.3	6,240	221.5	6,230	221.2	
Sidney	45.51	3,514	77.2	4,208	92.4	4,465	98.1	

Table 8: Municipal Land Area and Population Density

Source: U.S. Decennial Census

Growth in population and households increases the demand for public services and commercial development. Unless specifically designed for senior citizens, each new household must have one or more jobs to support it. Younger, larger households will generate schoolchildren. Nearly all households require added waste management and road maintenance costs. All these factors must be considered when projecting population growth.

School Enrollment

The changes and trends in municipal population have a direct impact on the education system. As populations age out of the schools and are not replaced, it creates a lesser need for school programs and transportation. School enrollment can also be impacted by existing housing stock. As prices increase it will naturally not be as available for first-time home buyers. Additionally housing stock made up of smaller homes are not as appealing for larger families with multiple children.

Belgrade is a part of Regional School Unit 18, which also serves the towns of China, Oakland, Rome, and Sidney. Belgrade students in K-5 attend the Belgrade Central School.

School Enrollment											
County/ Town	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	10 yr. Average
Kennebec County	17,221	16,965	16,957	16,798	16,981	16,790	16,621	15,842	16,140	16,150	16,646.5
Belgrade	522	522	485	484	463	454	448	425	451	448	470.20
Readfield	442	426	403	403	417	420	412	371	367	392	405.30
Manchester	383	374	400	388	368	362	332	334	354	372	366.70
Sidney	703	685	651	636	655	663	655	629	635	635	654.70
Oakland	1,007	972	936	963	949	941	932	884	903	915	940.20
Rome	140	132	130	124	130	140	139	136	147	135	135.5
China	719	683	698	688	685	663	671	647	658	677	678.9

Table	9: 3	School	Enrollment b	oy Mun	icipality



Source: Maine Department of Education; Public Funded Residential County by Town & County

Source: Maine Department of Education

There is a small portion of the school age population that is home schooled. According to the Maine Department of Education there are four or less home-schooled students in each municipality. The specific data is redacted for the student's privacy.

Population Projections

The Maine State Economist has released population projections covering the state, counties, cities, and towns for 5-year intervals to 2040. Historic population and demographic trends are interesting, but their true value is in preparing for the future. Population projections provide the short and easy answer. These are mathematical extrapolations of past population growth and factors such as age distribution and household size.

Table 10: Projected Population Change by Municipality through 2040

Population Change				
Municipality	Percentage			
Belgrade	9.1%			
Readfield	7.6%			
Manchester	-3.4%			
Sidney	24.9%			
Oakland	7 5%			

Source: Department of Administrative and Financial Service, State Economist

While there is no way to predict if the 9.1% growth will be due to natural change or migration, this will have an impact on the housing density, development, and vacancy of existing units. It is unlikely that the 9.1% growth, which equates to 289 new residents, will all be natural population gain. It can be assumed that due to the increasing population and housing density, a portion of this population will require newly built units.

While some towns can use municipal policies to impact population change, it requires a need and consensus to take strong action. It is important, however, that the community pays attention to annual changes in housing development and other local and regional indicators. The town should continue to monitor the rate of new construction and the type of homes that are being built and should continue to discuss the implications and address them through policy changes.

An important topic of discussion that is being held across planning organizations and municipalities is the effect that the COVID-19 pandemic has and will continue to have on populations. While the popularity of remote working exponentially increased during the pandemic, it also allowed for changes in where employees traditionally live. Companies developed remote working policies and adopted flexible scheduling, giving their employees a wider option of towns to live in, thereby expanding the company's traditional geographic footprint as well as where they can recruit qualified employees from.



Source: Department of Administrative and Financial Service, State Economist

Seasonal Population

All of the above analysis and data cited above refers to year-round residents. While the classification of a resident vs. non-resident is multi-faceted, generally a person is considered a resident of the State of Maine when they spend more than 183 days in the State and maintain a permanent place of abode in Maine.

According to the American Community Survey, there are 885 housing units that are classified as for seasonal, recreational, or occasional use. There are also a number of hotels, camps and rentals available in Belgrade that contribute to the changes in the seasonal population. The vacation or tourist season in Maine is associated with the months of May, when the weather begins to warm, through October, which is the height of foliage change or "leaf peeping" If the 885 housing units are occupied by the average family size for the United State of 3.15, this would account for an additional 2,787.75 people present in the community.

As discussed in the Population and Housing Density portion of this chapter, the population density of Belgrade is 56.2 people per square miles and rises to 75.2 people per square mile when the amount of surface area covered in water is removed. The seasonal population of Belgrade causes the density to rise to 104.4 people per square mile and further grows to 139.6 when calculated using just land area.

This seasonal fluctuation has significant effects on the town such as increased traffic, demand on commercial/retail establishments, use of public safety services and more. Belgrade relies on the seasonal boost to the economy through the businesses downtown, rentals and amenities. The Belgrade Lakes Golf Course has been ranked as one of the top public golf courses nationwide and in Maine.

Discussion

There are several solutions to combat or encourage these population trends. Belgrade is a short drive from the capital city of Augusta, making it an ideal community for those who work in the city or those who wish to be nearby for convenience. Other neighboring and nearby towns are working on extensive downtown revitalization projects and Belgrade's proximity to many waterbodies all make the town attractive for those looking to live in Central Maine. While the rate of natural change cannot be impacted with town policy, the rate of migration can be affected by managing land use controls, promoting economic sectors that fit the character of the town, and offering public services that town residents want and need.

It is believed that the Covid-19 pandemic has caused a unique surge in populations to rural communities, such as Belgrade. While at the time of this plan development there is no known study conducted determining why many communities surged in population, the pandemic is a likely factor. With the majority of organizations choosing to have employees work remotely, it has allowed those employees a wider range of locations to choose from. Occurring simultaneously as the pandemic Maine also experienced a housing boom with many new homes being built, likely to accommodate the surge in relocations.

A demographic shift to highlight would be the ongoing growth and increase in average age of community members. At this point, Belgrade has the largest population in its existence as well as the oldest population in its existence.

Analysis

- With its convenient location to the populations of Waterville and Augusta, Belgrade is well located for the workforce.
- The seasonal population and associated tourist dollars provide a significant benefit to the town and commercial enterprises.
- As seen in many other towns, the conversion of seasonal residences to year-round residences is a likely byproduct of COVID-19. The extent is something still being studied.
- Most of the population growth through the past two decades has been in the older generations. In order to maintain a diverse population and workforce, there needs to be consideration given on how to attract younger residents and families.