

## POPULATION & DEMOGRAPHICS

The population growth and trends, as well as the composition of an area, can influence decisions made about economic development, housing, transit, community/social welfare, land use, natural resources, and much more. This section examines population data for Door County in order to inform planning efforts and decisions to address the changing needs of the growing population.

First discussed are the historical population levels of Door County from 1900 to 2020, as well as the 2021 population estimate from the United States Census Bureau (Census). The Census data for Door County from 2020 are further analyzed, providing insight into population characteristics such as race and ethnicity, sex, and age, and are then compared with state and national population trends. Finally, the population levels for year-round residents are projected into the future for each section.

*Note: Population “estimates” refer to present and previous population levels in years for which there were no official counts, while “projections” refer to anticipated future population levels.*

### HISTORICAL POPULATION DATA & GENERAL PROJECTIONS

The Wisconsin Department of Administration (DOA) estimates that Door County’s year-round population saw a net increase of only 2,523 people between 1900 and 1970. However, during the following decade, 1970 to 1980, the area’s population increased by nearly 5,000 people, over 24%. (See Table 2.1.) This sudden jump in the county’s population has been attributed to an increase in local shipyard employment and activity in the 1970s, as well as a *National Geographic* article, published in March of 1969, that praised the county’s culture and natural beauty. The article gave Door County unprecedented exposure to a large audience; neither the state nor nation saw any comparable population growth during that decade (6.5% and 9.8%, respectively).

While the county’s population growth rate has slowed since the 1970s, the overall population continued to increase until the 2010 Census showed a population decrease for the first time since the 1970 Census. Door County experienced a population increase of over 39% between 1970 and 2000, far surpassing the state’s increase of around 21% for the same timeframe. From 2000 to 2010, however, there was a 0.6% decline in the county’s population; the state and surrounding counties experienced population gains. The following decade, the county experienced an 8.2% population increase with the 2020 population totaling 30,066 residents. Brown County experienced comparable growth during this time at 8.4%, while Kewaunee County saw a *decrease* of 0.05%. The State of Wisconsin as a whole experienced an increase of 3.6% in its year-round population during 2010-2020. Table 2.1 displays 1900 - 2020 population levels for Door County, as well as neighboring counties Kewaunee and Brown and the state.

**Table 2.1: Historical Population Levels, Door County and Selected Areas**

Year	Door County	Decade % Change	Brown County	Decade % Change	Kewaunee County	Decade % Change	Wisconsin	Decade % Change
1900	17,583	--	46,359	--	17,212	--	2,069,042	--
1910	18,711	6.4	54,098	16.7	16,784	-2.5	2,333,860	12.8
1920	19,073	1.9	61,889	14.4	16,091	-4.1	2,632,067	12.8
1930	18,182	-4.7	70,249	13.5	16,037	-0.3	2,939,006	11.7
1940	19,095	5	83,109	18.3	16,680	4	3,137,587	6.8
1950	20,870	9.3	98,314	18.3	17,366	4.1	3,434,575	9.5
1960	20,685	-0.9	125,082	27.2	18,282	5.3	3,951,777	15.1
1970	20,106	-2.8	158,244	26.5	18,961	3.7	4,417,731	11.8
1980	25,029	24.5	175,280	10.8	19,539	3	4,705,642	6.5
1990	25,690	2.6	194,594	11	18,878	-3.4	4,891,769	4
2000	27,961	8.8	226,778	16.5	20,187	6.9	5,363,715	9.6
2010	27,785	-0.6	248,007	9.4	20,574	1.9	5,686,986	6
2020	30,066	8.2	268,740	8.4	20,563	-0.05	5,893,718	3.6

Source: US Census Bureau, for the years cited

The 2020 population consisted of 1,834 (6.1%) migrants from outside Door County. (See Table 2.2.) 3.5% of the population, over half of the migrants, came from a different county within Wisconsin, 2.2% came from a different state, and 0.4% came from abroad.

**Table 2.2: In-Migration 2020, Door County (% of Population)**

Different County in Wisconsin	Different State	Abroad
3.50%	2.20%	0.40%

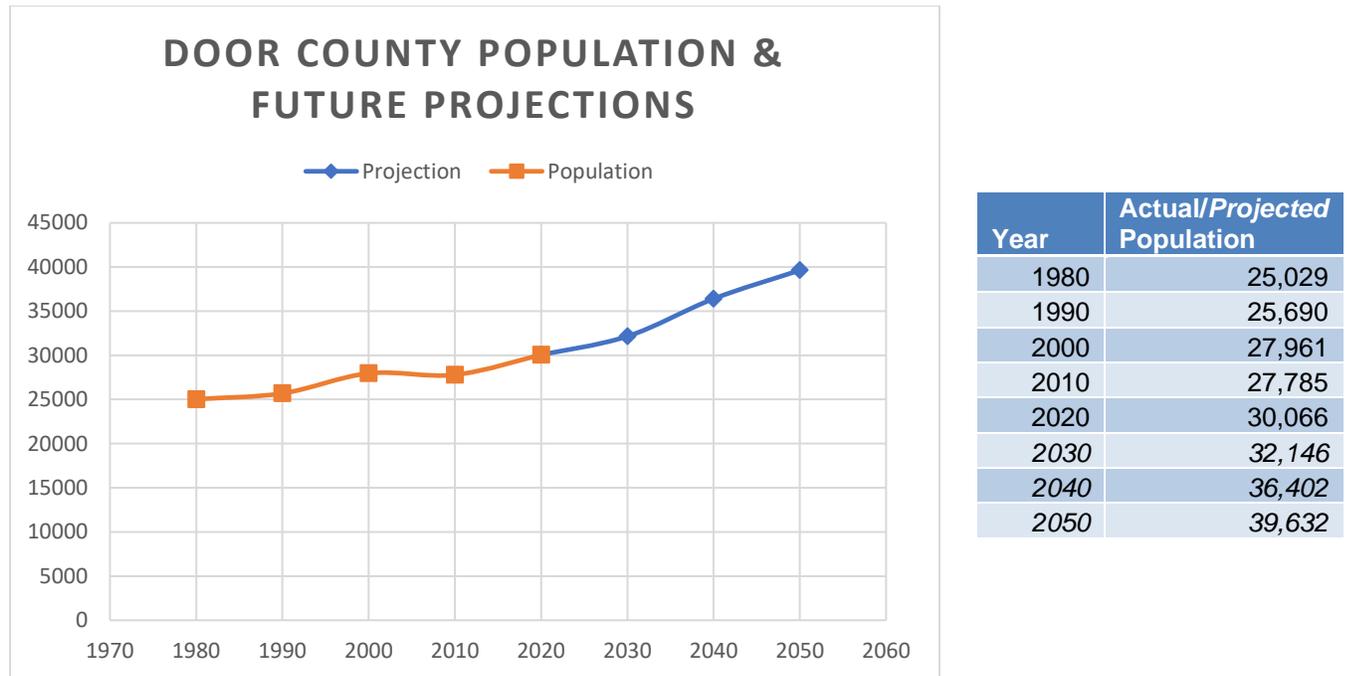
Source: US Census Bureau, Population Change & Components, for the years cited. See American Community Survey Table ID S0701.

The US Census Bureau estimated that the 2021 year-round population of Door County to be 30,369 residents, an increase of 303 residents (1%) in a single year. Door County Land Use Services Department (LUS) projects this trend of growth to continue. Year-round population projections are calculated by the LUS using the cohort-component method of projection. This method uses 5-year age cohorts for each sex and components of change (fertility rates, survival rates, migration rates) to project populations decades into the future. The LUS also performed projections using the trendline method, where historic data points are used to create “best fit” line which is then extended into future years. The cohort-component method ultimately was determined the most accurate because it considers more factors contributing to population change and matches the annual growth trends experienced in the county in recent years. The LUS also projected from 1980 forward, as the large jump in the 1970s due to the *National Geographic* article is an outlier in the data.

The LUS projects the population of Door County will grow to 39,632 by the year 2050. (See Figure 2.1 & Table 2.3.) This is an increase of approximately 319 people every year from 2020 onward. Typically, natural growth (births minus deaths) outpaces net migration to an area (the difference between residents moving into an area minus those leaving). Door County is atypical in that the county’s population growth between 1990 and 2020 came from net migration and not natural growth; during this

time, the number of deaths surpassed the number of births. The LUS expects this trend to continue, projecting deaths to outpace births and net migration to outpace natural growth. It is important to note that predicting net migration is difficult. In particular, migration that is not related to job growth is the most difficult to project, and, in recent decades, the in-migration of retirees has been a significant contributor to Door County’s population growth.

**Figure 2.1 and Table 2.3: Population Projections, Door County**



*Source: Projections by Door County LUS; US Census Bureau, historic data for years cited; survival rate data from the US SSA (Life Tables (ssa.gov)); fertility rate data from the Wisconsin DHS (WISH: Other Measures of Fertility | Wisconsin Department of Health Services).*

**POPULATIONS & PROJECTIONS BY AGE & SEX**

*Note: A municipality’s median age is that at which one-half of the population is below that age and one-half above.*

The median age of Door County is 53.3 years, compared to 39.6 years for the State of Wisconsin. The county’s median age has continually increased over the past forty years with the share of older residents growing larger. (See Table 2.4.) Table 2.5 looks at three age groups of the county’s 2020 and 2010 populations: under 24, 25-64, 65+. The number of retirement age residents (65+) in Door County has increased from a 23% share in 2010 to a 30% share in 2020, while the amount of working age residents (25-64) has decreased by approximately 6 percentage points. The number of school age residents (<24) fell only one percentage point from 2010 to 2020. These changes highlight that the population of the county is growing older and gaining a larger retiree base.

**Table 2.4: Median Age, Door County & Wisconsin**

Geographic Area	1970	1980	1990	2000	2010	2020
Door County	33.8	31.4	36.5	42.9	49.4	53.3
State of Wisconsin	27.2	29.4	32.9	36	38.5	39.6

Source: US Census Bureau, Profile of General Population Characteristics, for historical data. See American Community Survey Table S0101.

**Table 2.5: Population by Age Group (%)**

Age Group	2010	2020
<24	23%	22%
25-64	54%	48%
65+	23%	30%

Source: US Census Bureau, Profile of General Population Characteristics, for historical data. See American Community Survey Table S0101.

According to the US Census Bureau, the share of females versus males is roughly a 50-50 split. There is a slight leaning toward females with 15,195 residents, compared to males with 14,871. (See Table 2.6.) However, the retirement age group in Door County consists of approximately 53% female and 47% male. (See Figure 2.2.)

**Table 2.6: Total Population by Sex**

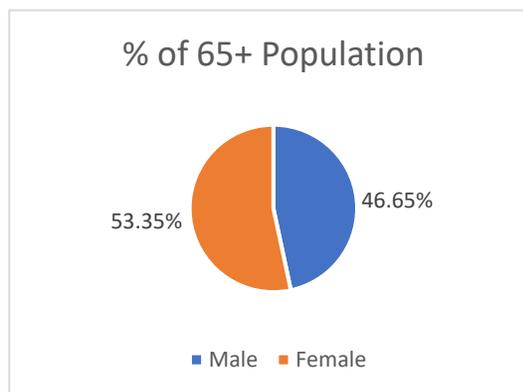
Sex	% of Population	# of Population
Male	49.46%	14,871
Female	50.54%	15,195

Source: US Census Bureau, Profile of General Population Characteristics, for historical data. See American Community Survey Table S0101.

While the LUS projects growth in each age cohort from 2020-2050, the aging trend is expected to continue, with the 65+ age group having a 38% share of the population by 2050. More specifically, the LUS predicts large increases in the last three age cohorts: 75-79, 80-84, 85+. (See Figure 2.3.) Significant growth is expected in the 40-44, 45-49, and 50-54 age cohorts as well.

The sex make-up of Door County is also expected to change. The LUS projects the male population will surpass the female population by 2050, at 20,197 and 19,435 respectively. (See Table 2.7.) This switch is expected to take place some time during the decade of 2030-2040. The retirement age group (65+) is also projected to be majority male by 2050, comprising 53% of that population, whereas females are projected to make up only 47% of the 65+ population. (See Figure 2.4.) Specifically, the male population is expected to be significantly larger than the female population in the 65-69 and 70-74 age cohorts. (See Figure 2.5.) The 65-69 cohort is projected to consist of 1,876 males compared to 1,379 females, and the 70-74 cohort is projected to have 1,458 males and only 978 females; both are almost a

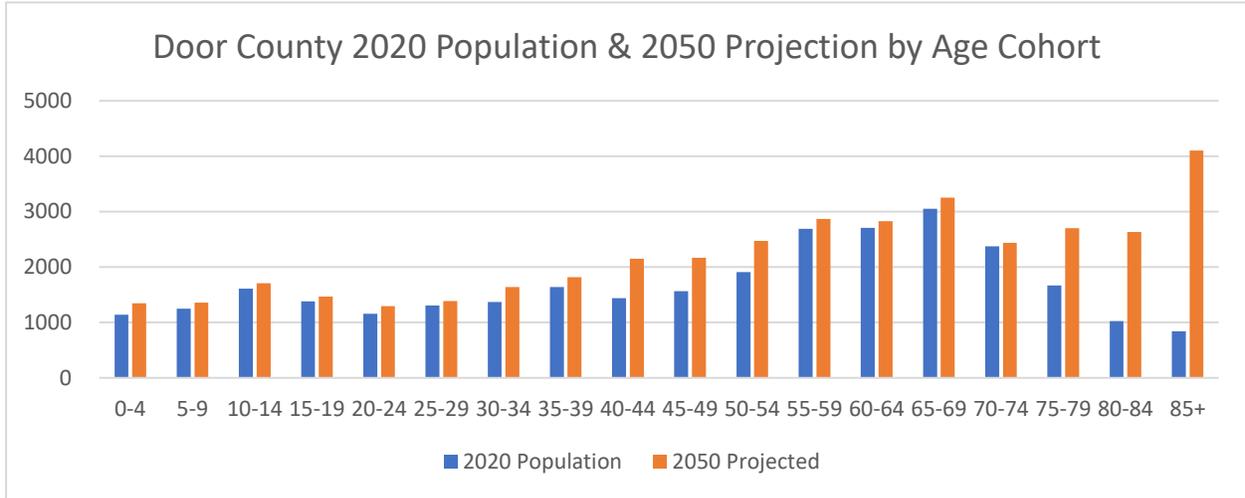
**Figure 2.2: 65+ Population by Sex**



Source: US Census Bureau, Profile of General Population Characteristics, for historical data. See American Community Survey Table S0101.

500-person difference. The younger age cohorts are expected to lean slightly female, specifically in the 30-34 and the 35-39 cohorts.

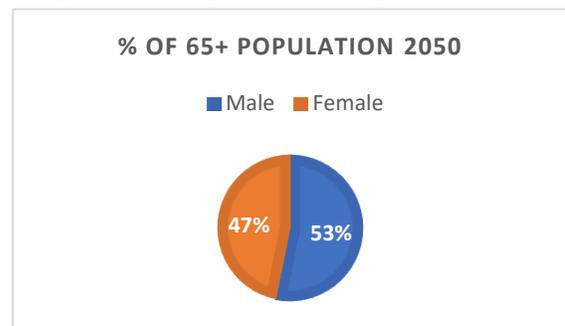
**Figure 2.3: Population & Projection by Age Cohort**



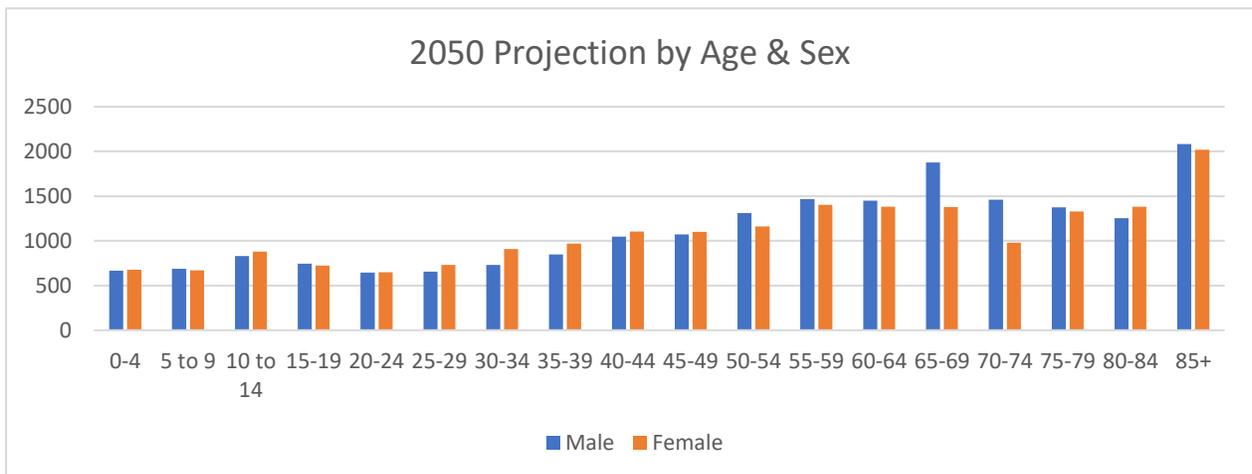
**Table 2.7: Population Projection by Sex**

Year	Males	Females
2010	13,679	14,106
2020	14,871	15,195
2030	16,008	16,138
2040	18,233	18,169
2050	20,197	19,435

**Figure 2.4: Projected 65+ Population 2050**



**Figure 2.5: Population Projection by Age & Sex 2050**



Measures of Fertility | Wisconsin Department of Health Services).

**POPULATION BY RACE & ETHNICITY**

Table 2.8 shows that Door County remains predominantly white, but there continues to be significant increases in the number of people of color since 1990, both single race (“alone”) and bi-racial or more, as well as persons of Hispanic/Latinx ethnicity. The white population experienced the smallest increase of only 10.1% while the Black population saw an increase of 727.6% in the last 30 years.

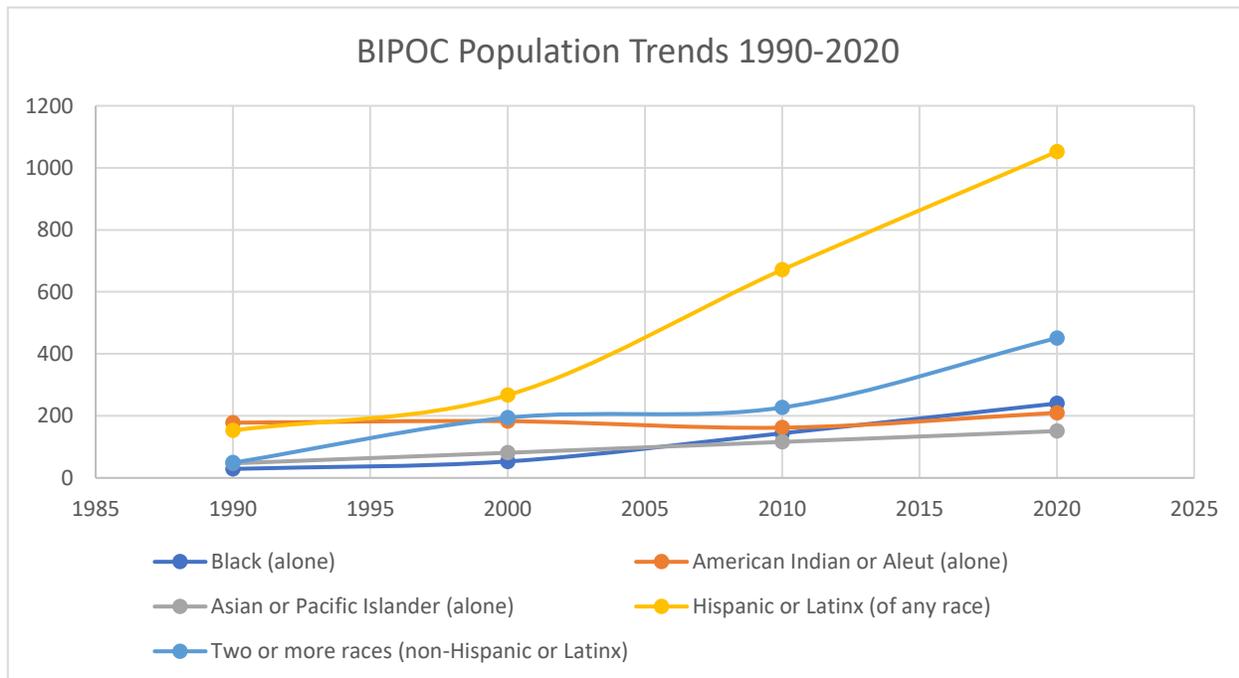
**Table 2.8: Population by Race & Ethnicity 1990-2020**

Race	1990	2000	2010	2020	Change 1990 to 2020 (%)
White (alone)	25,387	27,356	26,839	27,962	10.10%
Black (alone)	29	53	144	240	727.60%
American Indian or Aleut (alone)	178	183	162	210	17.90%
Asian or Pacific Islander (alone)	47	81	116	151	212.30%
Hispanic or Latinx (of any race)	153	267	671	1,052	587.60%
Two or More Races (non-Hispanic or Latinx)	49	194	227	451	820.40%

Source: US Census Bureau, Profile of General Population Characteristics, for historical data. See Decennial Census Table P1.

Figure 2.6 illustrates the increase of the Black, Indigenous, & Persons of Color (BIPOC) populations in the county over the past 30 years. The Hispanic/Latinx population is the second largest in the county behind white (alone) with a 2020 population of 1,052 residents. The population of two or more races follows with 451 residents.

**Figure 2.6: BIPOC Population Trends 1990-2020**



Source: US Census Bureau, Profile of General Population Characteristics, for historical data. See Decennial Census Table P1.

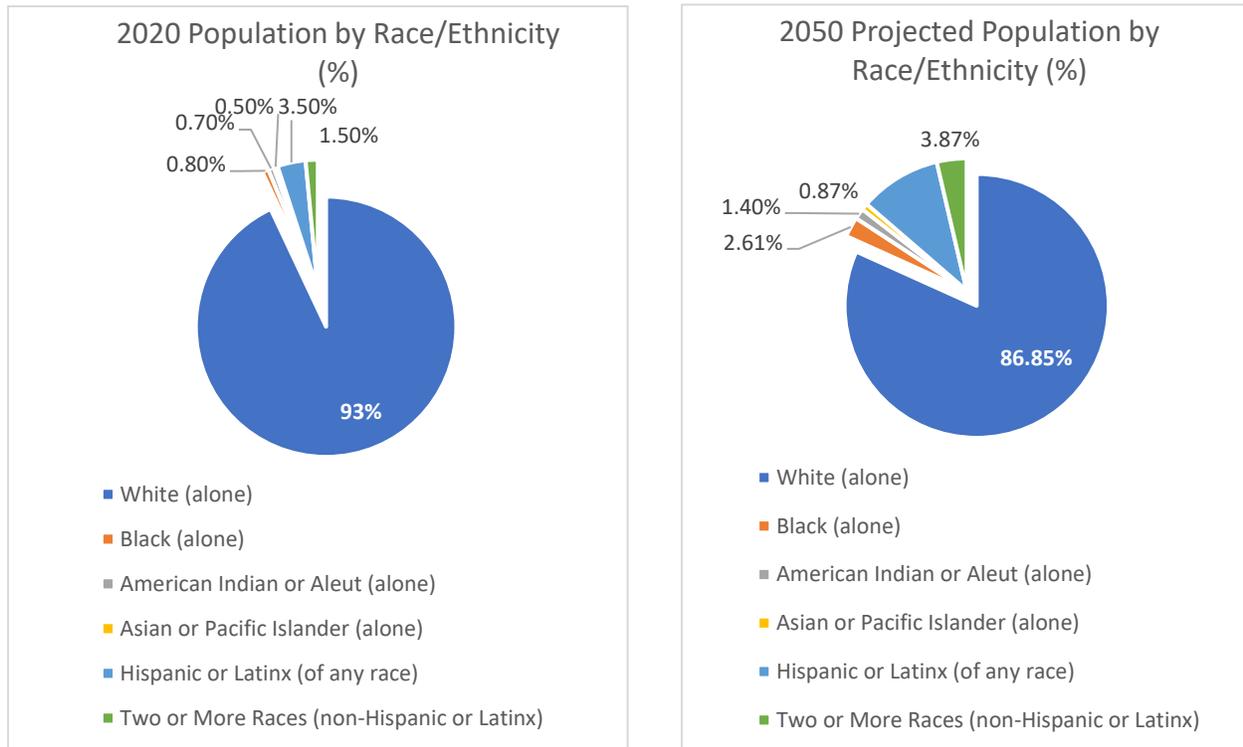
The LUS projected populations by race and ethnicity using the trendline method. The cohort-component method does not include race/ethnicity as a characteristic and therefore it is more accurate to use the trendline method. It is projected that every racial and ethnic population besides white (alone) will gain an increased share in the population by 2050. (See Table 2.9.) Specifically, the Hispanic/Latinx population of the county is expected to have its share grow from 3.50% in 2020 to 10.64% in 2050. The Black (alone) population and the population of those of two or more races are both projected to increase their share more than 1% in the next 30 years as well. Figure 2.7 shows the projected change in percent share of different racial/ethnic groups in Door County from 2020 to 2050.

**Table 2.9: Population Projection by Race 2050 (%)**

Race	2020	2050
White (alone)	93%	86.85%
Black (alone)	0.80%	2.61%
American Indian or Aleut (alone)	0.70%	1.40%
Asian or Pacific Islander (alone)	0.50%	0.87%
Hispanic or Latinx (of any race)	3.50%	10.64%
Two or More Races (non-Hispanic or Latinx)	1.50%	3.87%

Source: US Census Bureau, Profile of General Population Characteristics, for historical data. See Decennial Census Table P1.

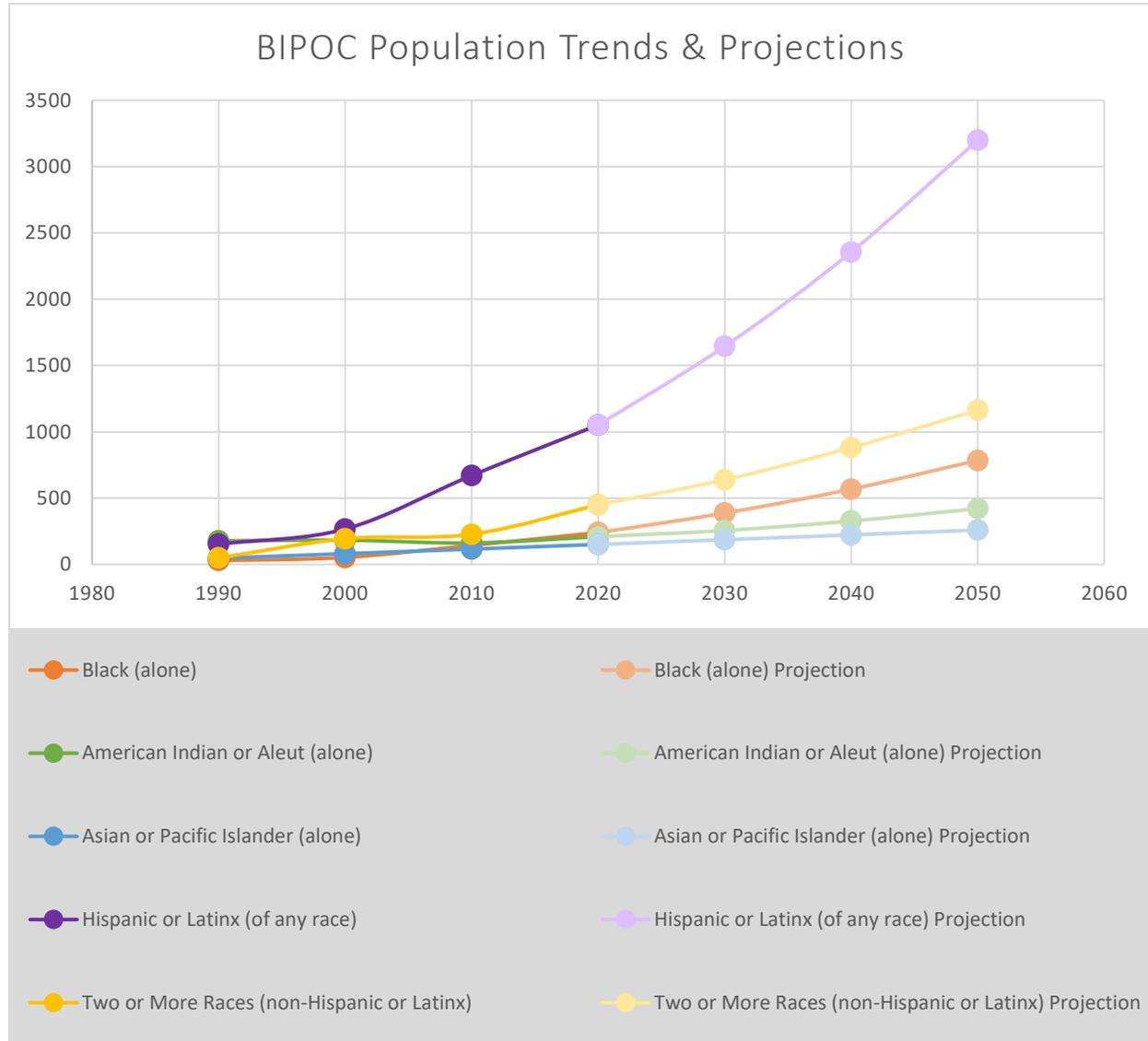
**Figure 2.7: Population Share 2020 & 2050 (Projected) by Race (%)**



Source: Projections by Door County LUS; US Census Bureau, Profile of General Population Characteristics, for historical data. See Decennial Census Table P1.

Figure 2.8 graphically illustrates BIPOC population projections out to 2050. It is projected the Hispanic/Latinx population will reach 3,199 residents by 2050; the population of two or more races will reach 1,163 residents; the Black population will reach 784 residents; the American Indian or Aleut population will reach 421 residents; and the Asian or Pacific Islander population will reach 260 residents.

**Figure 2.8: BIPOC Population Trends & Projection 2050**



Source: Projections by Door County LUS; US Census Bureau, Profile of General Population Characteristics, for historical data. See Decennial Census Table ID P1.

**ESTIMATING SEASONAL POPULATION**

Census data, DOA, and other agency population counts, estimates, and projections only deal with year-round residents. Door County has many seasonal or part-time residents – persons with homes in the county but whose primary residence is outside the county – and hundreds of thousands of tourists throughout the year who visit the county for just the day or stay overnight in hotel units, campsites, condominium unit rentals, house/cottage rentals, etc. The presence of these part-time residents and

visitors obviously affects local economic development and housing markets; the use, maintenance, and potential expansion of transportation systems, recreational and other community facilities, and utilities; and land use.

Because of the difficulties in counting, estimating, or projecting seasonal populations, the DOA does not even attempt to do so. Others have used simplistic methods of estimating Door County’s seasonal resident population, such as multiplying the number of housing units counted by the Census as being for “seasonal, recreational, or occasional use” by the average number of persons per household found in the county. Note that there are problems with this method of estimation, including: the assumption that the number of persons per household for a seasonal residence would be equal to that found in a year-round residence; the fact that it excludes all tourists, whether overnight or day-trippers; and the inability to determine when and for how long seasonal units are occupied.

Perhaps the best effort to estimate Door County’s “true” population, year-round residents plus seasonal residents and all visitors, was undertaken in 1999 by University of Wisconsin-Extension, Door County. In making calculations, the study author developed three estimates: 1) economic activity attributable to the seasonal population of the county; 2) geographic distribution of the seasonal population, based on municipal share of seasonal homes, hotel and motel rooms, and campground sites; and 3) time of year the seasonal population is in the county, based on traffic counts. Estimates and methods were meant to include and consider seasonal residents, overnight tourists, and day-trippers. Note that in developing these figures the author assumed January to be a “baseline” month: traffic levels and economic activity during that month were presumed to be those of year-round residents. The study found that the county’s “true” total population, counted in “whole” persons or full-time equivalency residents, was between 20% and 161% higher, depending on the month, than the number of year-round residents counted in Census data for that same year.

The monthly percentages from this 1999 study are shown in Table 2.10. Also shown in Table 2.10 are the 2020 estimated seasonal population and total “true” population by month for Door County, using the 2020 Census year-round population of 30,066 residents as the base population in January. While keeping in mind that these numbers are rough estimates and that the population counts (both the Census and the “true” estimates) are now outdated, the “percent over Census” calculations can provide at least some guidance in thinking about the county’s “true” population levels when looking at current and projected populations.

**Table 2.10: Estimated Monthly Seasonal & “True” Population, Door County**

Estimates	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
% of Census	0%	20%	24%	43%	82%	111%	161%	147%	116%	95%	37%	25%
People in addition to 2020 census (30,066)	0	6,013	7,216	12,928	24,654	33,373	48,406	44,197	34,877	28,563	11,124	7,517
<b>“True” Population</b>	<b>30,066</b>	<b>36,079</b>	<b>37,282</b>	<b>42,994</b>	<b>54,720</b>	<b>63,439</b>	<b>78,472</b>	<b>74,263</b>	<b>64,943</b>	<b>58,629</b>	<b>41,190</b>	<b>37,583</b>

Source: University of Wisconsin Extension Door County Study: “Estimating the Seasonal Population of Door County,” 1999.

## RESOURCES AND FURTHER INFORMATION

### Door County Land Use Services Department ([Land Use Services | Door County, WI](#))

The Land Use Services (LUS) Department consists of three areas:

1. Planning – develops and implements the comprehensive and farmland preservation plan, as well as creating and updating department ordinances.
2. Sanitarian – administers the county’s Private Onsite Wastewater Treatment System (POWTS) regulations which are intended to protect ground and surface waters.
3. Zoning – process zoning and conditional use permit applications, as well as petitions for variance from zoning ordinances, appeals of Resource Planning Committee (RPC) or zoning administrator decisions, and petitions for zoning ordinance text or map amendments.

The Resource Planning Committee (RPC), consisting of five county board members, oversees the Land Use Services Department. The Board of Adjustment (BOA) helps administer the zoning ordinance and conducts hearings for variances and appeals.

### U.S. Social Security Administration ([The United States Social Security Administration | SSA](#))

The U.S. Social Security Administration provides life tables which estimate and project survival/death rates for the United States population. A life table is a concise way of showing the probabilities of a member of a particular population living to or dying at a particular age.

### University of WI-Extension, Door County ([Extension Door County – University of Wisconsin-Madison](#))

The Door County UW-Extension Office works to bring the knowledge of the University to Door County citizens and to help people apply this information. Contact the Door County LUS Department (listed above) for a copy of the study, “*Estimating the Seasonal Population of Door County*” by Greg Lamb, University of Wisconsin Extension-Door County, 1999.

### U.S. Census Bureau ([Census.gov](#))

The Census Bureau serves as the leading source of quality data about the nation’s people and economy with the goal to provide the best mix of timeliness, relevancy, quality, and cost for the data collection and services provided. The Census Bureau conducts the following censuses and surveys:

- Population and Housing Census – every 10 years
- Economic Census – every 5 years
- Census of Governments – every 5 years
- American Community Survey – annually
- Demographic and Economic surveys
- Economic Indicators

### Wisconsin Department of Administration – Demographic Services Center ([DOA Home \(wi.gov\)](#))

The Demographic Services Center’s primary responsibility is to develop annual total population estimates for all Wisconsin towns, villages, and cities. Additionally, the Center develops population and household estimates and projections for all municipalities and population projections by age and sex for counties.