

2010 West Virginia Population Projection by Age-Group and Sex

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Sex & Age	Estimate (July 1)		Projection (July 1)					
	2000	2005	2010	2015	2020	2025	2030	2035
MALE								
0-4	51,864	53,733	54,303	52,986	51,892	51,229	51,045	51,010
5-9	57,201	52,363	54,455	55,079	54,142	53,149	52,651	52,599
10-14	59,875	57,150	54,305	55,205	56,051	55,143	54,265	53,842
15-19	64,535	61,126	60,991	55,741	56,945	57,751	57,022	56,248
20-24	60,701	63,185	61,606	60,127	55,779	56,889	57,759	57,370
25-29	56,941	56,341	58,085	59,441	58,426	54,615	55,672	56,560
30-34	57,541	56,579	55,797	57,727	59,325	58,394	54,939	55,957
35-39	63,411	57,712	57,862	56,142	58,460	59,953	59,173	55,929
40-44	70,047	63,292	59,225	57,957	56,686	58,954	60,425	59,737
45-49	70,112	68,822	64,515	59,134	58,019	56,889	59,189	60,620
50-54	64,615	68,034	68,018	64,307	59,234	57,973	57,053	59,342
55-59	48,644	62,169	65,526	66,832	63,583	58,571	57,308	56,554
60-64	41,145	45,835	55,708	62,755	64,514	61,445	56,743	55,490
65-69	34,552	36,688	40,558	51,859	58,556	60,199	57,440	53,124
70-74	31,856	29,015	31,270	35,768	45,831	51,598	53,111	50,720
75-79	23,930	24,596	22,864	25,627	29,439	37,568	42,256	43,540
80-84	13,325	15,929	16,861	16,749	18,820	21,591	27,473	30,859
85+	8,875	9,697	11,797	13,596	14,267	15,709	17,891	22,081
Total	879,170	882,266	893,744	907,034	919,969	927,622	931,414	931,583
FEMALE								
0-4	49,941	50,949	51,866	50,424	49,358	48,743	48,591	48,544
5-9	53,949	50,626	52,299	52,380	51,312	50,338	49,871	49,834
10-14	56,307	53,936	51,777	52,793	53,122	52,092	51,224	50,825
15-19	61,043	57,142	57,192	53,232	54,568	54,904	54,066	53,301
20-24	59,408	60,660	58,435	56,605	53,331	54,595	55,073	54,588
25-29	56,636	54,950	56,951	56,130	54,807	51,882	53,098	53,654
30-34	57,976	56,460	54,756	56,463	56,113	54,906	52,243	53,444
35-39	66,405	58,073	58,362	55,136	57,259	56,964	55,921	53,406
40-44	72,386	65,439	59,406	58,370	55,670	57,782	57,585	56,642
45-49	71,117	71,181	66,865	59,674	58,730	56,236	58,435	58,298
50-54	64,622	69,746	71,100	66,972	60,117	58,964	56,740	58,983
55-59	50,272	63,183	67,563	70,692	66,987	60,167	58,942	56,930
60-64	44,755	48,119	58,043	66,008	69,463	65,867	59,324	58,033
65-69	41,311	41,166	44,278	55,339	63,042	66,259	62,948	56,813
70-74	40,744	36,235	36,959	40,651	50,940	57,842	60,813	57,818
75-79	34,872	33,788	30,964	32,079	35,479	44,310	50,254	52,832
80-84	24,526	26,079	26,052	25,013	26,040	28,786	35,847	40,568
85+	22,904	23,922	26,477	27,276	27,078	27,711	29,952	35,773
Total	929,174	921,654	929,346	935,237	943,417	948,350	950,928	950,288
MALE & FEMALE								
0-4	101,805	104,682	106,169	103,411	101,251	99,972	99,637	99,555
5-9	111,150	102,989	106,754	107,459	105,454	103,487	102,521	102,433
10-14	116,182	111,086	106,082	107,998	109,174	107,236	105,489	104,667
15-19	125,578	118,268	118,183	108,972	111,513	112,655	111,088	109,549
20-24	120,109	123,845	120,041	116,732	109,110	111,483	112,832	111,958
25-29	113,577	111,291	115,035	115,572	113,233	106,498	108,770	110,214
30-34	115,517	113,039	110,553	114,190	115,438	113,300	107,182	109,401
35-39	129,816	115,785	116,224	111,278	115,718	116,917	115,094	109,335
40-44	142,433	128,731	118,631	116,327	112,356	116,736	118,010	116,379
45-49	141,229	140,003	131,380	118,808	116,748	113,126	117,624	118,918
50-54	129,237	137,780	139,118	131,280	119,351	116,938	113,793	118,325
55-59	98,916	125,352	133,089	137,525	130,571	118,738	116,250	113,485
60-64	85,900	93,954	113,752	128,763	133,977	127,312	116,067	113,523
65-69	75,863	77,854	84,836	107,198	121,598	126,458	120,388	109,938
70-74	72,600	65,250	68,229	76,420	96,771	109,441	113,923	108,538
75-79	58,802	58,384	53,828	57,706	64,918	81,879	92,509	96,372
80-84	37,851	42,008	42,913	41,761	44,860	50,377	63,320	71,426
85+	31,779	33,619	38,275	40,872	41,345	43,421	47,843	57,855
TOTAL	1,808,344	1,803,920	1,823,091	1,842,270	1,863,386	1,875,972	1,882,342	1,881,872

Sources: Bureau of Business and Economic Research, West Virginia University and Population Estimates, U.S. Census Bureau

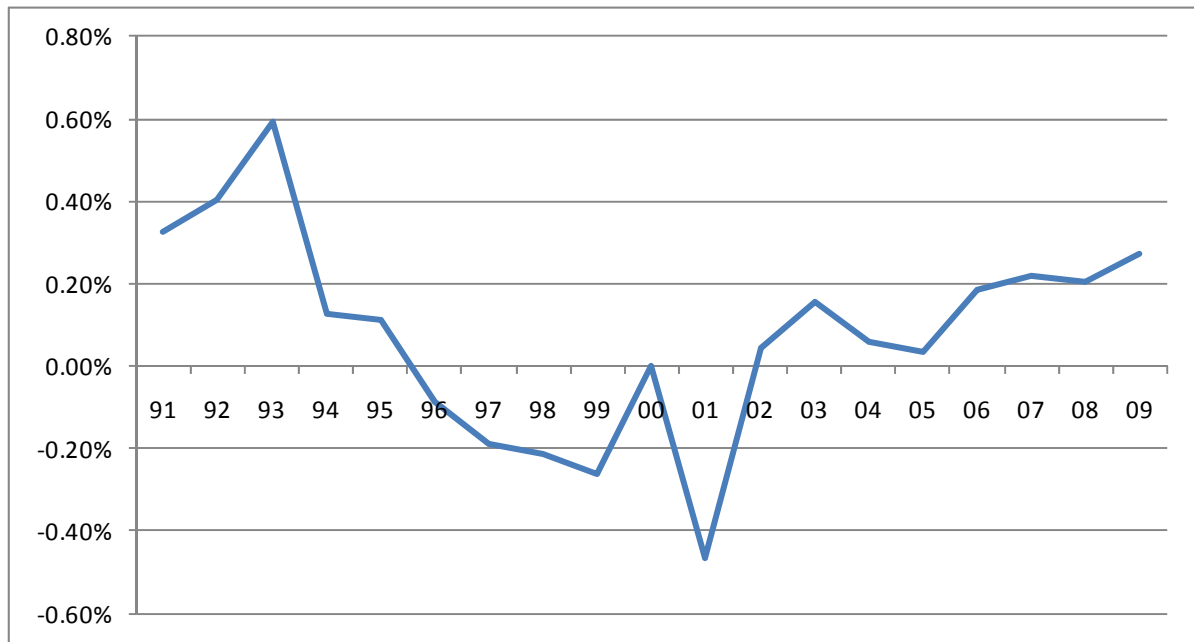
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2010 West Virginia Population Projection

Current Trends

After experiencing population losses between 1996 and 2001, West Virginia started gaining population in 2002. Growth remained slow hovering around 0.1 percent per year through 2005. In the last three years through 2009, however, growth has been pretty steady at above 0.2% per year. While this is hardly a significant growth, it is the state's fastest population growth since 1994.

Figure 1
West Virginia Population Growth, 1991-2009

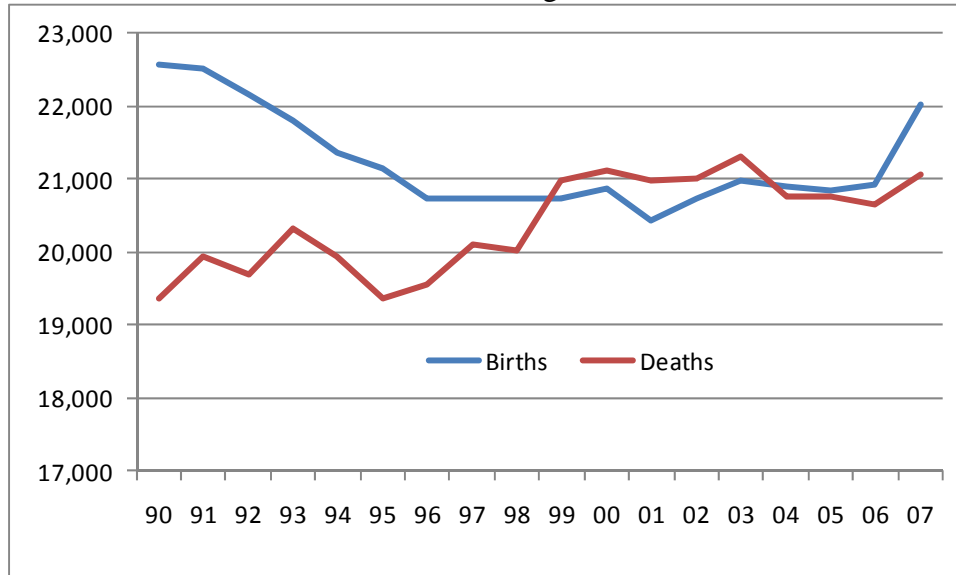


Source: Population Estimates, U.S. Census Bureau

Sources of population growth come from natural growth and net migration. As shown in Figure 2, natural growth, while small, is still positive and thus contributing to the state's population growth. Natural growth turned negative between 1999 and 2003 as deaths exceeded births, but births soared back in 2006 and remained above deaths afterward. In 2007 the gap between births and deaths rose to about 1000. This last trend contributes toward the state's steady population growth of above 0.2 percent per year through 2009.

However, as the state population continues to age, the number of deaths is expected to rise in the near future and eventually exceed the number of births. Moreover, the gap between them will only increase over time.

Figure 2
Births and Deaths, West Virginia, 1990 to 2007



Source: West Virginia Vital Statistics, West Virginia Department of Health and Human Services

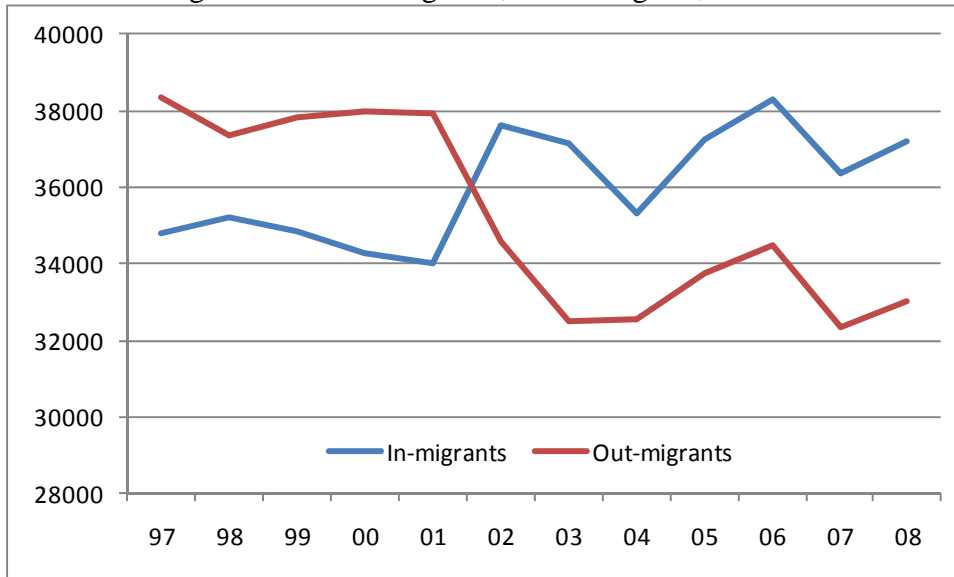
West Virginia out-migration used to out-perform in-migration most of the time until 2002. As shown in Figure 3, however, in-migration began to exceed out-migration in 2002 and remains that way until today. Between 2003 and 2007, the gap between in-migration and out-migration hovered around 4000. This was significantly higher than the gain from the natural growth. This migration trend is expected to continue through the next few years. As a result, net migration gain, has been since 2002, will be the primary source of the state's population growth through a few years after 2010.

The drop in out-migration in 2002 was due in part to the U.S. economic recession that came at the end of 2001. Recession shrank economic opportunities, reducing the incentives to move outside of West Virginia. Out-migration tried to rise back up in 2004. However, another recession that came in 2007 dropped out-migration back and remained below in-migration.

In-migration, on the other hand, jumped in 2002, which in part was due to the increased return migration and the fact that recession did not hit the state as much as the nation. In the following years, in-migration fluctuates following fluctuations in the U.S. economy, but managed to stay above out-migration.

In the future, however, outmigration is expected to gradually rise back up following the U.S. recoveries from this current recession. In-migration may rise as well, but will not be as high as the rise in out-migration. As a result, the state's gain from net migration is expected to gradually decline.

Figure 3
In-migrants and Out-migrants, West Virginia, 1997-2008

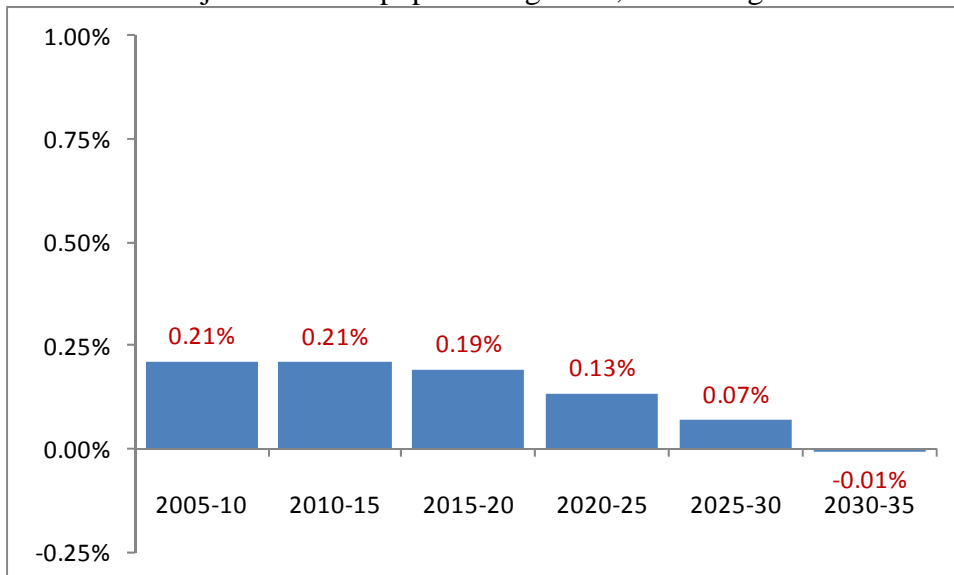


Source: IRS tax-return file

Projected West Virginia Population Growth

Following the steady growth of above 0.2 percent since 2006, the state population is expected to grow at about the same rate in 2010. Between 2005 and 2010 the state population grows 0.21 percent per year on average.

Figure 4
Projected annual population growth, West Virginia



Source: West Virginia Population Projection, Bureau of Business and Economic Research, August 2010

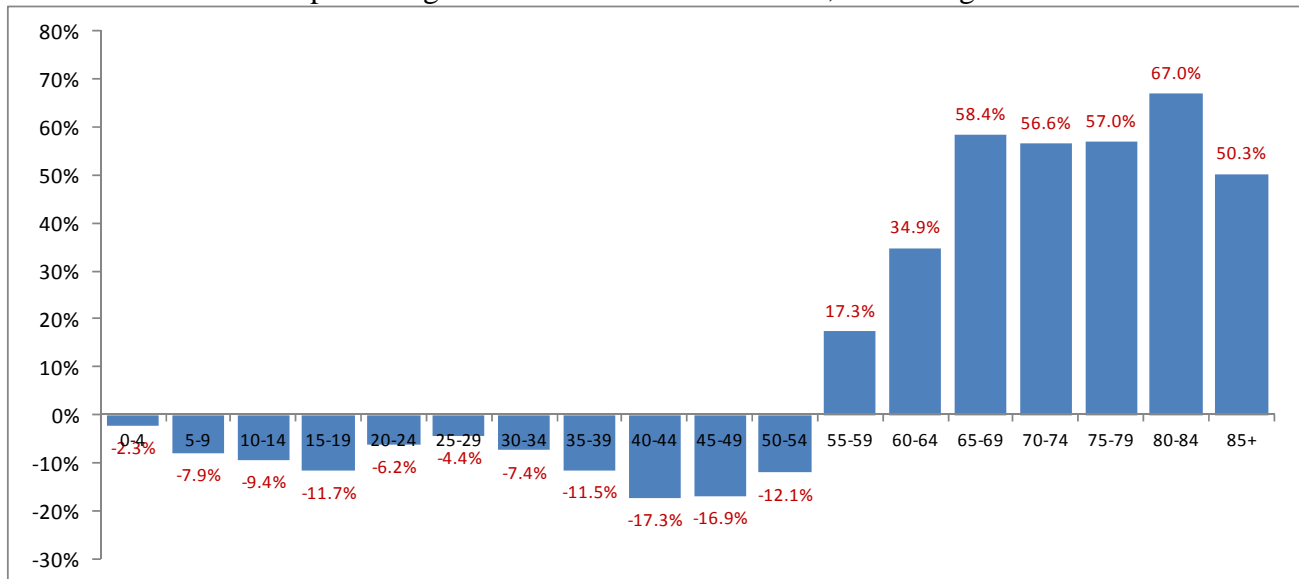
Growth is expected to gradually decline in the following five years between 2010 and 2015. Out-migration will slowly rise back up and deaths start catching up with births. The same trend continues in the following years. In fact, as aging accelerates due to more and more baby boomers retiring, deaths will rise quickly and far exceed births. At the same time, aging in both the state and the U.S. will slow both the out-migration and in-migration, gradually reducing the state's gain from net migration. Eventually, negative natural growth will outweigh any gain from net migration, causing the state to start losing population.

Young and Old Population

West Virginia population has been already among the oldest states in the nation. With most baby boomers retiring during the 2010 and 2030 period, aging accelerates, quickly increasing the share of old population. At the same time, having a small share of young population, low general birth rates, and high out-migration rates, the state gradually loses its young population.

Figure 5 shows, between 2000 and 2030, the number of young people will drop while that of old people increases significantly. More specifically, people under 25 years old will lose 7.7 percent, and those between 25 and 44 years old lose 10.6 percent. At the same time the number of people 65 years of age or older will jump by 57.9 percent.

Figure 5
Population growth between 2000 and 2030, West Virginia



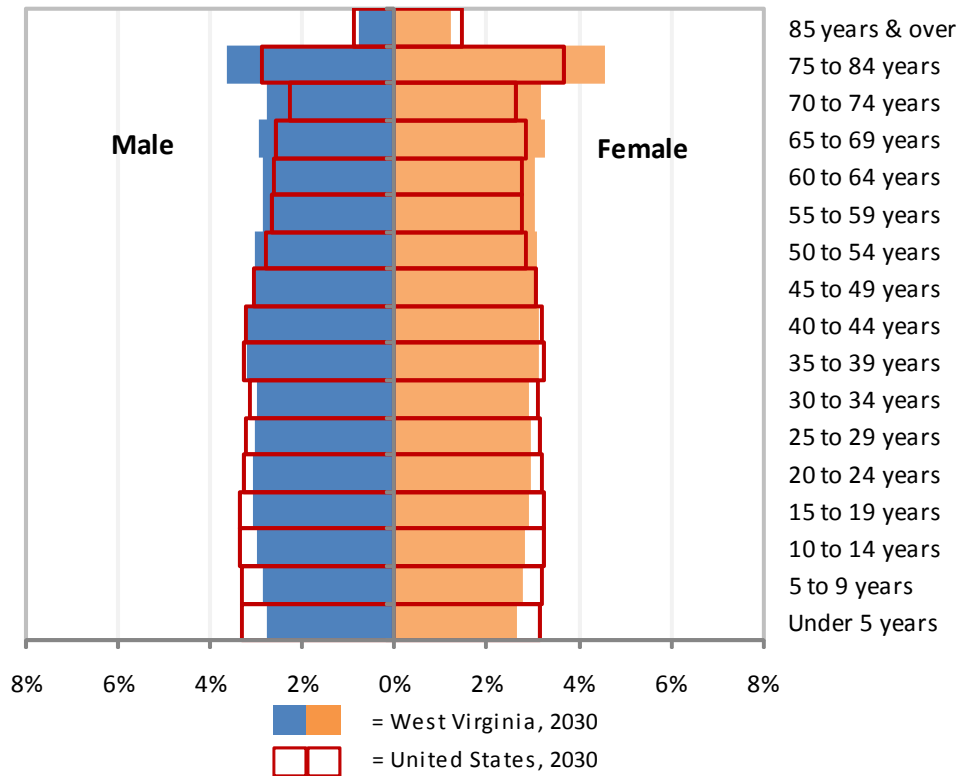
Source: West Virginia Population Projection, Bureau of Business and Economic Research, August 2010

The above changes shift the age distribution of the state population. The share of people 65 years of age or older will jump from 15.3 percent in 2000 to 23.3 percent in 2030. During the same period, the share of young population below 25 years old will shrink from 31.8 percent to 28.2 percent and that between 25 to 44 years old will shrink from 27.7 percent to 23.9 percent.

As shown in Figure 6, the state continues to have relatively more people 50 years of age or older than the nation in 2030. For older population, the older the age, the larger is the gap between U.S.

and the state. On the flip side, the state remains with fewer people 35 years of age or younger. For this young population, the younger the age the larger is the gap between the state and the nation. In 2030, West Virginia will remain one of the oldest states in the nation.

Figure 6
Population pyramids, West Virginia and United States, 2030



Sources: 2010 West Virginia Population Projection, Bureau of Business and Economic Research, August 2010 and 2008 National Population Projections, U.S. Census Bureau

Methodology

This projection uses the inter-regional cohort component model (Isserman, A., “The Right People the Right Rates,” *Journal of the American Planning*, Vol. 59, No. 1, Winter 1993). The model is applied to the state population not living in the group quarters (prison, school dorms, juvenile facilities, etc.). Each population cohort (by age and sex) is projected forward according to their specific survival and migration rates. The cohort of a newly born population is computed by applying the age-specific birth rates to the survived female population and female in-migrants. People living in group quarters (dorms, prisons, etc.) are assumed to remain relatively constant, maintaining their age and sex distribution.

Unlike the regular cohort-component model that uses net migration rates, the inter-regional cohort component model uses in and out migration rates instead. These migration rates are originally generated based on the 1995-2000 migration. The rates are then adjusted to the more recent migration trends from the Internal Revenue Service tax-return files. The base population (by age

and sex) is benchmarked to the Census 2000 population and the most recent U.S. Census Bureau's Annual Population Estimates (Population Estimates Vintage 2009).