



RESEARCH REPORT

A publication providing statistical information on Howard County demographics, socioeconomic and employment trends and patterns. Available from the Department of Planning and Zoning by calling (410) 313-4370.

Howard County Population Growth – 2000 to 2008

Introduction

The Census Bureau recently released their intercensal population estimates for the period from April 1, 2000, the time of the last Decennial Census, to July 1, 2008. The population estimates are based on growth by three components of change: 1) natural population increase (births minus deaths), 2) international migration and 3) internal or domestic migration. *This report summarizes these estimates from the Census Bureau providing regional and state comparisons. In addition, the Bureau's estimates are compared to the Department of Planning and Zoning's (DPZ) population growth estimates based on new housing units. Historic population growth for Howard County is also discussed.* Later this year, sometime in the summer of 2009, the Census Bureau will provide growth estimates for the same time period by age, sex and race.

Howard County Population Growth

The table below summarizes population growth in Howard County since the 2000 Census was taken on April 1 of that year. Components of population growth are included in the table.

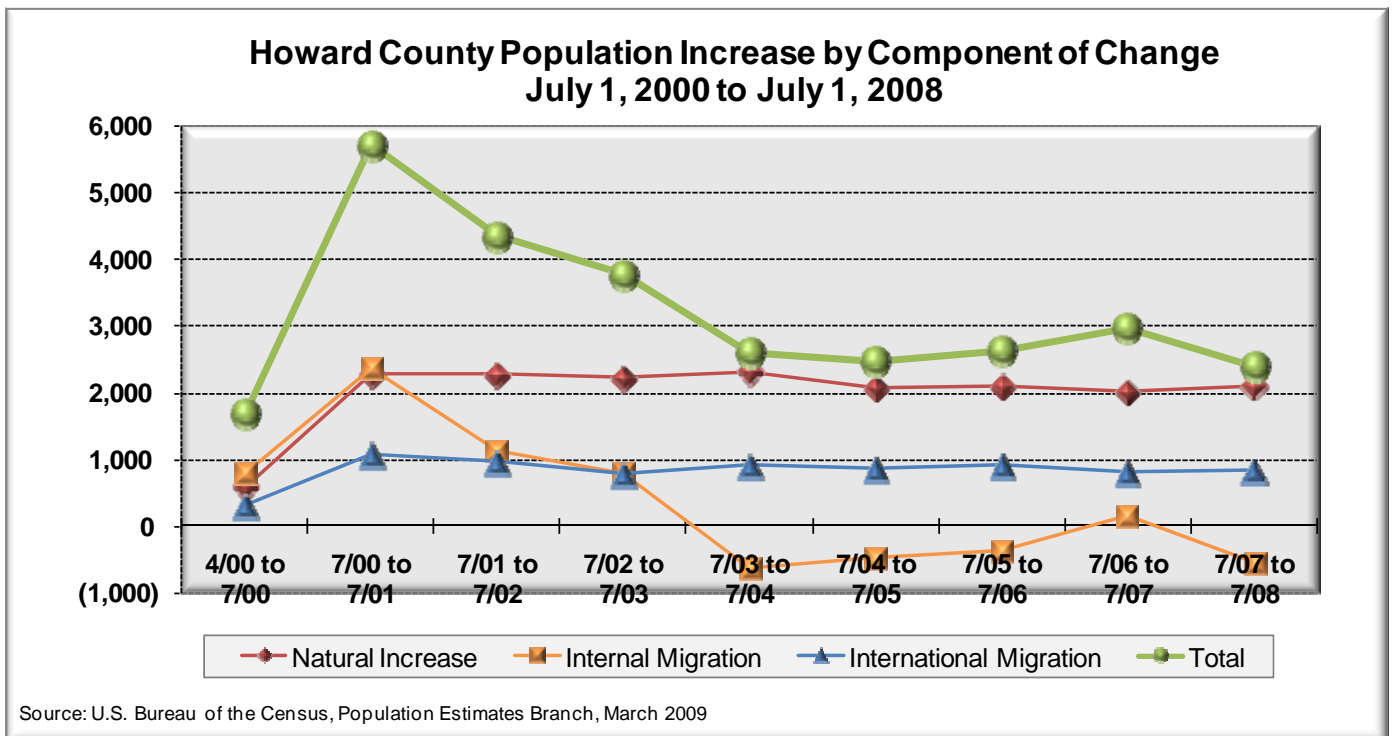
**Howard County Population Increase by Component of Change
April 1, 2000 to July 1, 2008**

Population Component	April 1 2000	July 1 2000	July 1 2001	July 1 2002	July 1 2003	July 1 2004	July 1 2005	July 1 2006	July 1 2007	July 1 2008	Total	Percent
+ Births		882	3,556	3,577	3,549	3,556	3,359	3,364	3,366	3,424	28,633	
- Deaths		296	1,274	1,310	1,336	1,241	1,289	1,273	1,361	1,332	10,712	
= Net Natural Increase		586	2,282	2,267	2,213	2,315	2,070	2,091	2,005	2,092	17,921	66.0%
+ Internal Migration		790	2,363	1,126	774	(630)	(475)	(380)	154	(544)	3,178	11.7%
+ International Migration		300	1,078	961	778	904	866	917	809	824	7,437	27.4%
+ Residual		2	(227)	(241)	(377)	(191)	(243)	(130)	12	12	(1,383)	-5.1%
= Population Increase		1,678	5,496	4,113	3,388	2,398	2,218	2,498	2,980	2,384	27,153	100.0%
% Population Increase		0.7%	2.2%	1.6%	1.3%	0.9%	0.8%	0.9%	1.1%	0.9%	11.0%	
Total Population	247,842	249,520	255,016	259,129	262,517	264,915	267,133	269,631	272,611	274,995		

Source: U.S. Bureau of the Census, Population Estimates Branch, March 2009

Over the eight and a quarter year period, the County's population increased by an estimated 27,153 residents, from 247,842 on April 1, 2000 to 274,995 on July 1, 2008, an 11% increase. Annually, over that time period, population has slowed from a high of 5,496 new residents from 2000 to 2001 to a low of 2,218 new residents from 2004 to 2005. Annual population growth has remained below 3,000 since 2003.

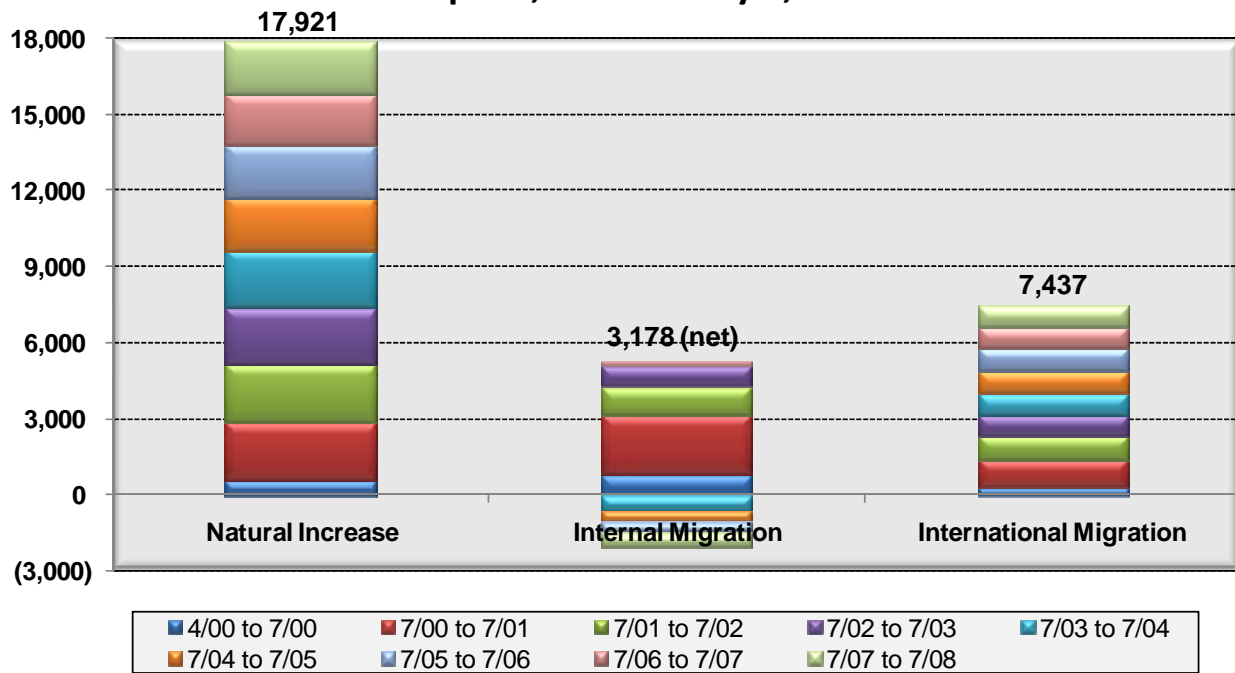
Observing the various component of population growth, 66% of the growth over the entire time period was due to natural population increase (births minus deaths), 11.7% due to internal or domestic migration and 27.4% was due to international migration.¹ The charts below summarize the components on an annual basis.



It is clear that while the increases due to natural population growth and international migration have remained relatively constant from 2000 to 2008, internal migration has slowed considerably, from 2,614 new residents from 2000 to 2001, when it was the greatest component, to negative territory starting in 2003.

¹ The Census Bureau estimates natural population increase from vital statistics (birth and death certificates). Internal migration estimates are based on an analysis of IRS tax records from one year to the next for those under 65 and Medicare enrollment records for those 65 and over. Data from the Armed Forces are also used. Foreign immigration estimates are based on national level data distributed down to the County level based on the previous five years immigration determined from the 2000 Census. The residual component is used to adjust the County totals slightly to match the national growth total. See the following Census web site for a detailed explanation of the methodology: www.census.gov/popest/topics/methodology/

Howard County Population Increase by Component of Change April 1, 2000 to July 1, 2008



Source: U.S. Bureau of the Census, Population Estimates Branch, March 2009

Looking at the detailed internal migration data some noticeable trends have occurred resulting in less and even negative internal migration numbers: 1) more Howard County residents are moving to than coming from other counties in the Baltimore region, 2) more Howard County residents are moving completely out of state compared to those moving in, particularly to the surrounding states of Virginia, Pennsylvania and Delaware. Net out-migration to Southern U.S. states has also increased over the last several years.

Comparisons to DPZ's Construction Report Estimates

The Department of Planning and Zoning's Research Division tracks residential building completions on a monthly basis. The results are summarized in DPZ's Construction Report.² Population growth is also estimated in this report based on the type of units built, estimated household size and vacancy rates. The table on the next page compares the population estimated in the Construction Report to the Census Bureau's estimates discussed above.

Based on building completions, it is estimated that the County grew by 34,832 residents from April 1, 2000 to July 1, 2008. This is 7,679 more residents than the 27,153 estimate provided by the Census Bureau, a difference of about 28%. However, the difference between the two estimates in total 2008 population is less than 3%.

² Construction Report link: www.howardcountymd.gov/DPZ/dpzpublicationsreports.htm#construction

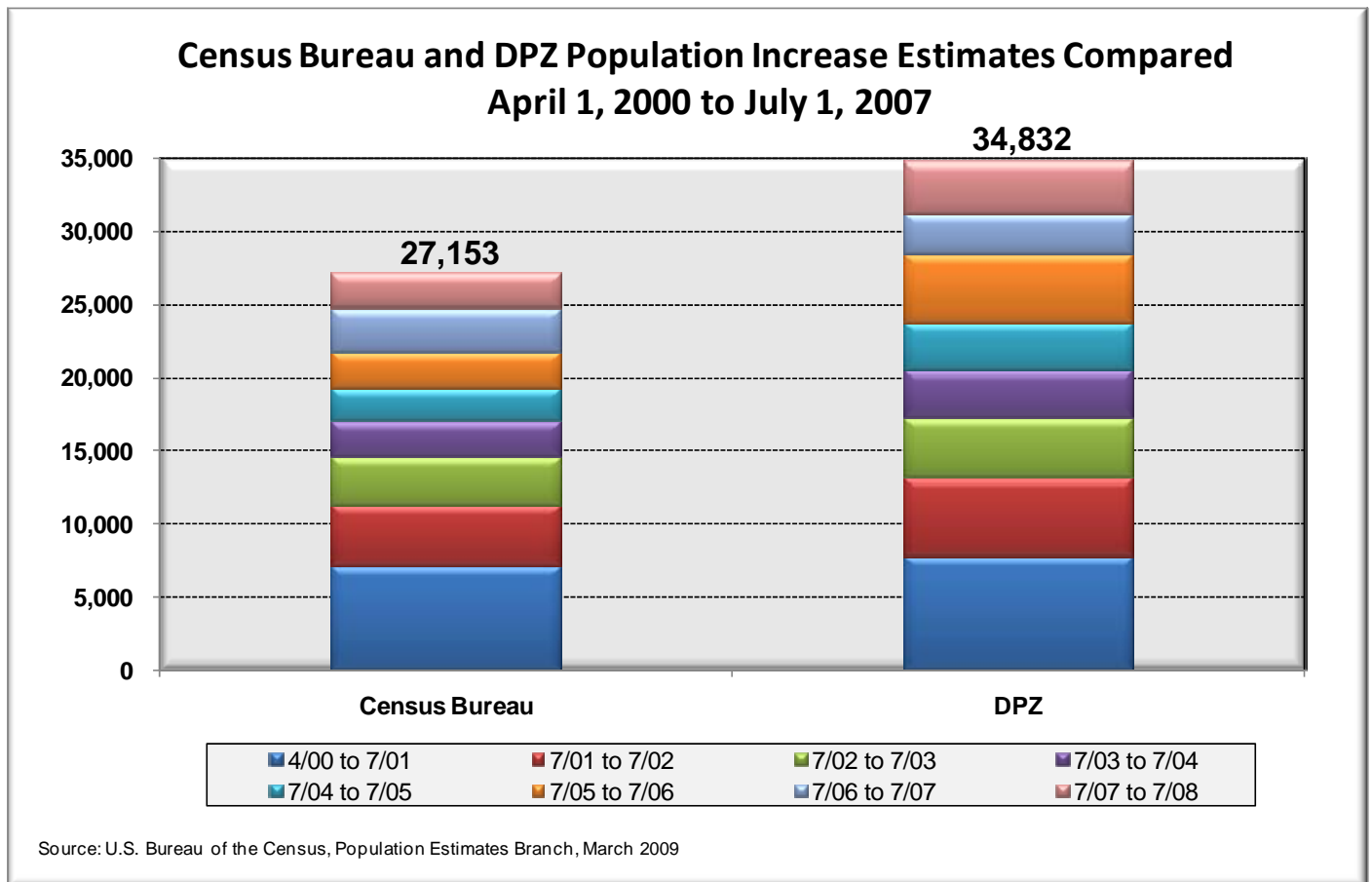
**Howard County Population Increase Based on New Unit Construction
Compared to Census Bureau Population Estimates
April 1, 2000 to July 1, 2008**

	April 1 2000	July 1 2001	July 1 2002	July 1 2003	July 1 2004	July 1 2005	July 1 2006	July 1 2007	July 1 2008	Total
DPZ Estimates										
New Units		2,780	2,104	1,439	1,332	1,590	2,081	1,251	1,610	14,187
New Population (1)		7,856	5,350	4,047	3,218	3,298	4,676	2,817	3,570	34,832
Total Population (2)	247,842	255,698	261,048	265,095	268,313	271,611	276,287	279,104	282,674	
Census Bureau										
New Population		7,174	4,113	3,388	2,398	2,218	2,498	2,980	2,384	27,153
Total Population	247,842	255,016	259,129	262,517	264,915	267,133	269,631	272,611	274,995	
Difference										
Population Growth (DPZ - CB)		682	1,237	659	820	1,080	2,178	(163)	1,186	7,679
Percent Diff in Growth Est.		9.5%	30.1%	19.5%	34.2%	48.7%	87.2%	-5.5%	49.7%	28.3%
Percent Diff in Total Pop.		0.27%	0.74%	0.98%	1.28%	1.68%	2.47%	2.38%	2.79%	

(1) Population Estimates based on new units times vacancy factors times household size by unit type. See DPZ's Construction Report for further details.

(2) DPZ future estimates begin with the 2000 Census population of 247,842 as a base.

Source: U.S. Bureau of the Census, Population Estimates Branch, March 2009, Howard County DPZ Construction Report

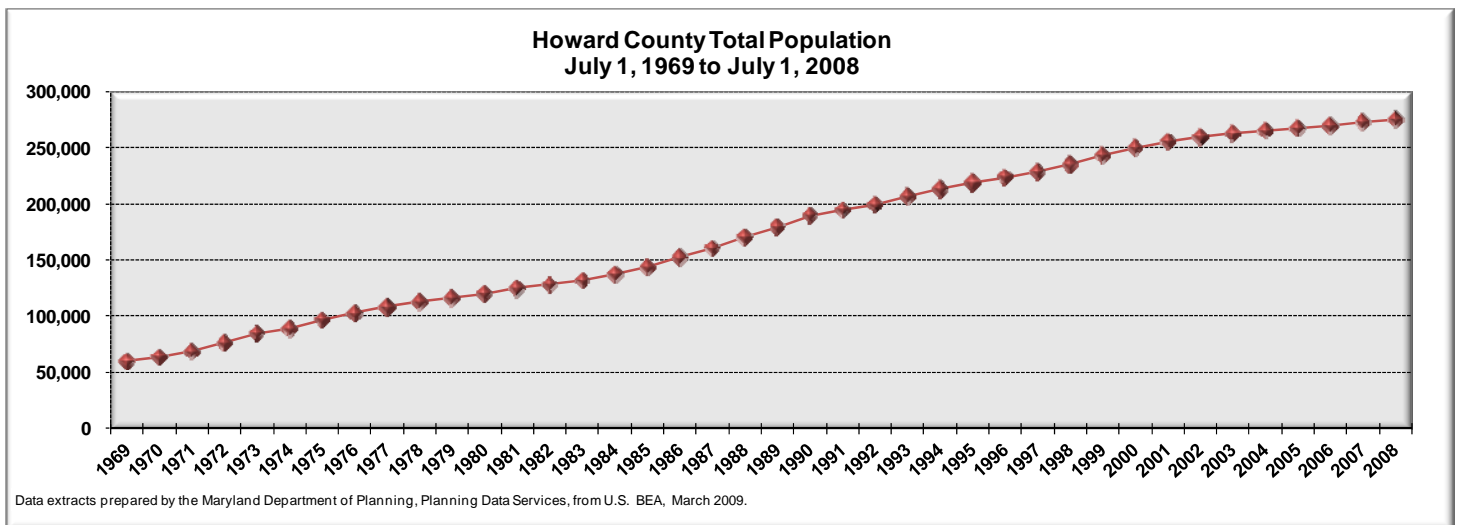


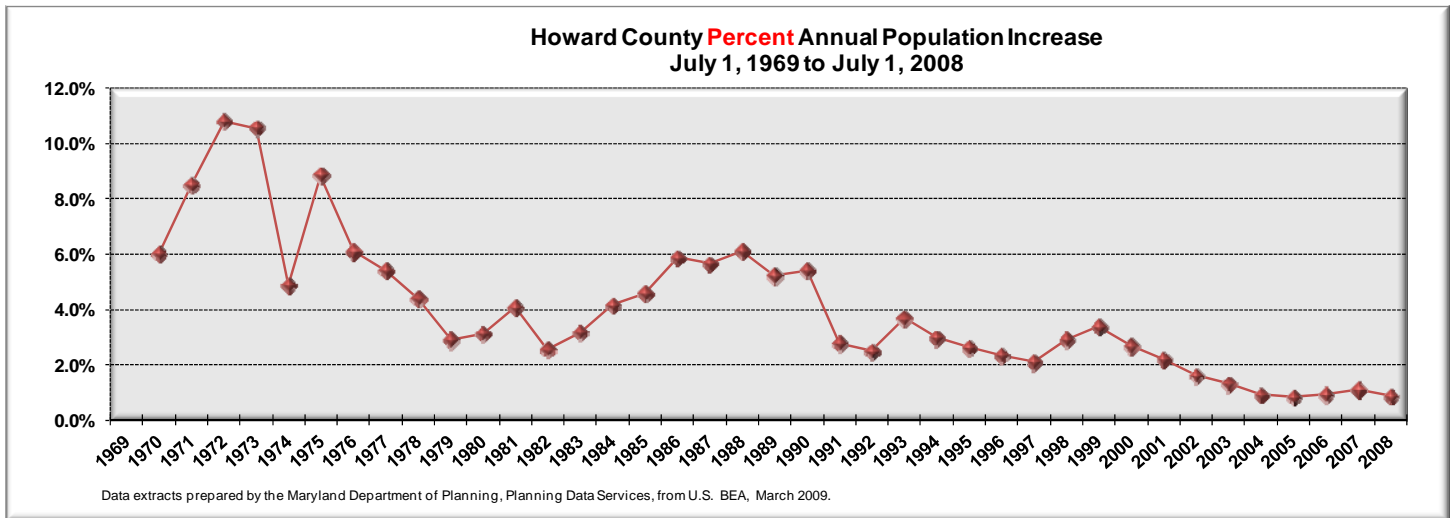
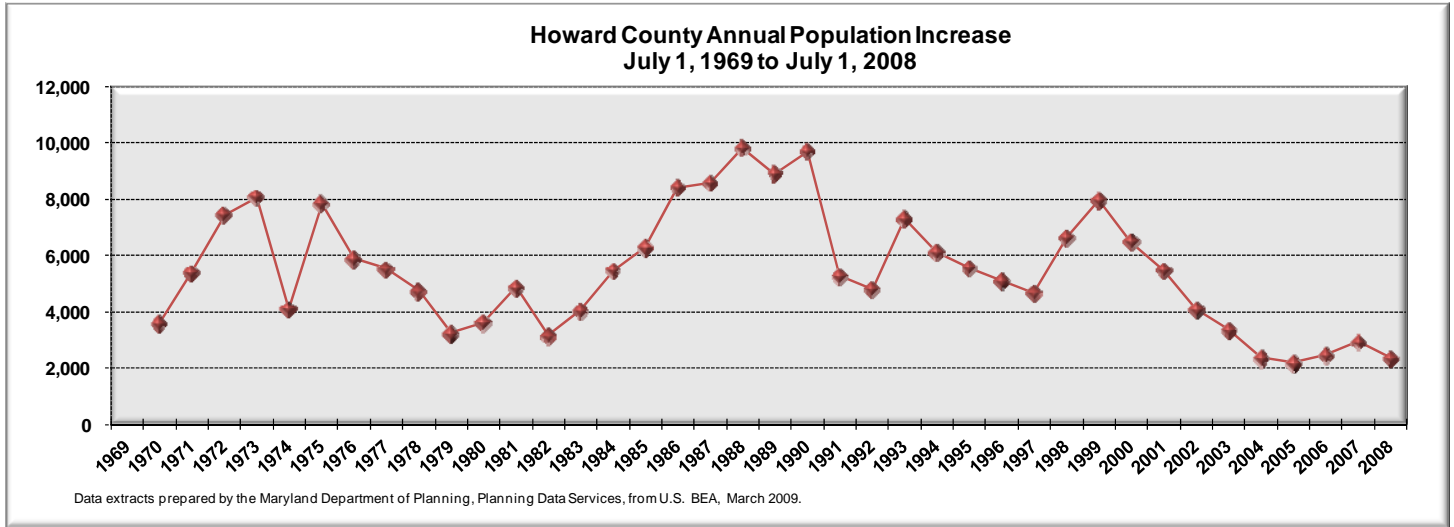
Given that both methodologies are estimates based on various factors, it is difficult to say which is closer to the truth. A number of factors could impact the Census Bureau's estimates such as a fallacy in their assumption that foreign immigration to Howard County maintains the same proportionate share of the national total as it did over the previous five years. On the other hand, the Construction Report assumes that household size countywide has not changed since 2000. If household size declines just slightly, then the total population estimates could be overestimated. It should also be noted that the Census Bureau underestimated population growth in Howard County during the 1990's. These underestimates were adjusted upwards after the complete count from the 2000 Census was reported. The 2010 Census, which is to take place on April 1, 2010, will no doubt shed some light on where the actual number lies.

An Historical Perspective

In 1969 the population of Howard County was only 60,092, about 22% of the 274,995 residents living in the County in 2008 according to the Census Bureau. This represents an average annual growth rate of 3.98% over the 39 year period. In general, growth has been consistent from one year to the next, although there have been peaks and valleys. Growth rates have steadily declined since 1999. From 1999 to 2008, the average annual growth rate was only 1.38%. For the last 5 years, the population has only grown by about 1% annually.

The first table below summarizes the cumulative population growth since 1969, whereas the subsequent two tables show the annual and percent annual growth, respectively. The population grew the most in 1990, when 9,719 new residents were added to the County. The year with the smallest population increase was 2005 when only 2,218 new residents were added. In terms of the rate of growth, or percentage growth from one year to the next, the smallest level over the 1969 to 2008 analysis period occurred from 2004 to 2005 at only 0.84%. The first time the rate fell below 2% occurred from 2001 to 2002 when it was 1.6%. This is to be expected given the growth limits imposed by General Plan 2000 in conjunction with a larger population base. Annual growth rates at these lower levels are anticipated into the future.





Howard County Compared to Other Maryland Jurisdictions

The table below summarizes the population growth from April, 2000 to July 2008 for each Maryland jurisdiction organized by region. Maryland as a whole grew by 337,081 residents, a 6.4% increase, resulting in a statewide ranking of 17th greatest in the U.S. in terms of numbers of residents and 24th greatest in percentage growth. Howard County's growth rate of 11% is higher than the Maryland average and the 10th greatest in the State (out of 24). In absolute numbers, Howard ranked 4th. Montgomery County had the greatest population increase with 77,339 new residents, about 2.8 times the increase in Howard. This is followed by Baltimore County (31,326), Frederick (30,445), and then Howard (27,152). Three jurisdictions actually *lost* population. Baltimore City lost the most with 14,235 residents, continuing a decades old trend. Allegany lost 2,692 residents and Dorchester lost 148.

COMPONENTS OF POPULATION CHANGE FOR MARYLAND'S JURISDICTIONS, 2000 - 2008

	Census Pop /1 4/1/2000	CUMULATIVE TOTALS - APRIL 1, 2000 TO JULY 1, 2008						Total Population 7/1/2008	TOTAL CHANGE 00-07	PCT. CNG. 00-07
		Births	Deaths	Net Increase	International Migration*	Domestic Migration	Residual			
MARYLAND	5,296,516	+ 618,156	- 361,871	= 256,285	+ 137,096	+ -86,033	+ 29,733	= 5,633,597	337,081	6.4%
BALTIMORE REGION	2,512,440	+ 280,918	- 190,609	= 90,309	+ 32,556	+ -40,510	+ 25,231	= 2,620,026	107,586	4.3%
Anne Arundel County	489,664	+ 56,283	- 29,999	= 26,284	+ 2,584	+ -3,428	+ -2,314	= 512,790	23,126	4.7%
Baltimore County	754,292	+ 78,061	- 63,268	= 14,793	+ 13,352	+ 6,833	+ -3,652	= 785,618	31,326	4.2%
Carroll County	150,897	+ 16,137	- 10,400	= 5,737	+ 482	+ 12,949	+ -712	= 169,353	18,456	12.2%
Harford County	218,590	+ 24,342	- 13,660	= 10,682	+ 963	+ 11,055	+ -939	= 240,351	21,761	10.0%
Howard County	247,843	+ 28,633	- 10,712	= 17,921	+ 7,437	+ 3,178	+ -1,384	= 274,995	27,152	11.0%
Baltimore City	651,154	+ 77,462	- 62,570	= 14,892	+ 7,738	+ -71,097	+ 34,232	= 636,919	-14,235	-2.2%
SUBURBAN WASHINGTON REGION	1,870,132	+ 237,353	- 99,600	= 137,753	+ 100,297	+ -119,456	+ 8,527	= 1,997,253	127,121	6.8%
Frederick County	195,276	+ 24,923	- 11,524	= 13,399	+ 1,927	+ 15,871	+ -752	= 225,721	30,445	15.6%
Montgomery County	873,341	+ 110,085	- 45,024	= 65,061	+ 66,678	+ -68,545	+ 14,145	= 950,680	77,339	8.9%
Prince George's County	801,515	+ 102,345	- 43,052	= 59,293	+ 31,692	+ -66,782	+ -4,866	= 820,852	19,337	2.4%
SOUTHERN MARYLAND REGION	281,341	+ 35,260	- 16,805	= 18,455	+ 513	+ 31,780	+ -1,049	= 331,040	49,699	17.7%
Calvert County	74,563	+ 8,414	- 4,707	= 3,707	+ 266	+ 10,431	+ -269	= 88,698	14,135	19.0%
Charles County	120,546	+ 15,210	- 6,862	= 8,348	+ 228	+ 12,126	+ -484	= 140,764	20,218	16.8%
St. Mary's County	86,232	+ 11,636	- 5,236	= 6,400	+ 19	+ 9,223	+ -296	= 101,578	15,346	17.8%
WESTERN MARYLAND REGION	236,699	+ 22,774	- 20,841	= 1,933	+ 631	+ 9,129	+ -1,072	= 247,320	10,621	4.5%
Allegany County	74,930	+ 5,771	- 7,452	= -1,681	+ 81	+ -734	+ -358	= 72,238	-2,692	-3.6%
Garrett County	29,846	+ 2,619	- 2,485	= 134	+ 33	+ -152	+ -163	= 29,698	-148	-0.5%
Washington County	131,923	+ 14,384	- 10,904	= 3,480	+ 517	+ 10,015	+ -551	= 145,384	13,461	10.2%
UPPER EASTERN SHORE REGION	209,295	+ 22,635	- 17,108	= 5,527	+ 1,367	+ 21,186	+ -854	= 236,521	27,226	13.0%
Caroline County	29,772	+ 3,609	- 2,578	= 1,031	+ 375	+ 2,071	+ -111	= 33,138	3,366	11.3%
Cecil County	85,951	+ 10,200	- 6,098	= 4,102	+ 370	+ 9,856	+ -353	= 99,926	13,975	16.3%
Kent County	19,200	+ 1,549	- 2,007	= -458	+ 101	+ 1,389	+ -81	= 20,151	951	5.0%
Queen Anne's County	40,560	+ 4,217	- 2,942	= 1,275	+ 285	+ 5,081	+ -110	= 47,091	6,531	16.1%
Talbot County	33,812	+ 3,060	- 3,483	= -423	+ 236	+ 2,789	+ -199	= 36,215	2,403	7.1%
LOWER EASTERN SHORE REGION	186,609	+ 19,216	- 16,908	= 2,308	+ 1,732	+ 11,838	+ -1,050	= 201,437	14,828	7.9%
Dorchester County	30,675	+ 2,922	- 3,233	= -311	+ 63	+ 1,723	+ -152	= 31,998	1,323	4.3%
Somerset County	24,747	+ 2,206	- 2,143	= 63	+ 204	+ 1,223	+ -118	= 26,119	1,372	5.5%
Wicomico County	84,644	+ 10,083	- 6,957	= 3,126	+ 1,050	+ 5,766	+ -540	= 94,046	9,402	11.1%
Worcester County	46,543	+ 4,005	- 4,575	= -570	+ 415	+ 3,126	+ -240	= 49,274	2,731	5.9%

1/ Census 2000 estimates base

* includes net foreign-born international migration, net movement to/from Puerto Rico, net Armed Forces movement and native emigration.

Source: Population Division, U.S. Census Bureau, release date March 19, 2009

Prepared by the Maryland Department of Planning, Planning Data Services, March 2009

Observing the individual components of growth, clear patterns of the shifting populations become apparent. The majority of the 337,081 additional residents in Maryland since 2000 was due to natural population increase (256,285 births minus deaths). International migration made up the next largest component with 137,096 people. There was actually a net loss of 86,033 residents due to domestic migration. Maryland ranked 42 out of all 50 states in domestic migration. That is, there were 8 states that had greater population losses from domestic migration. A total of 24 states had net losses from domestic migration, and 26 had population gains from domestic migration.

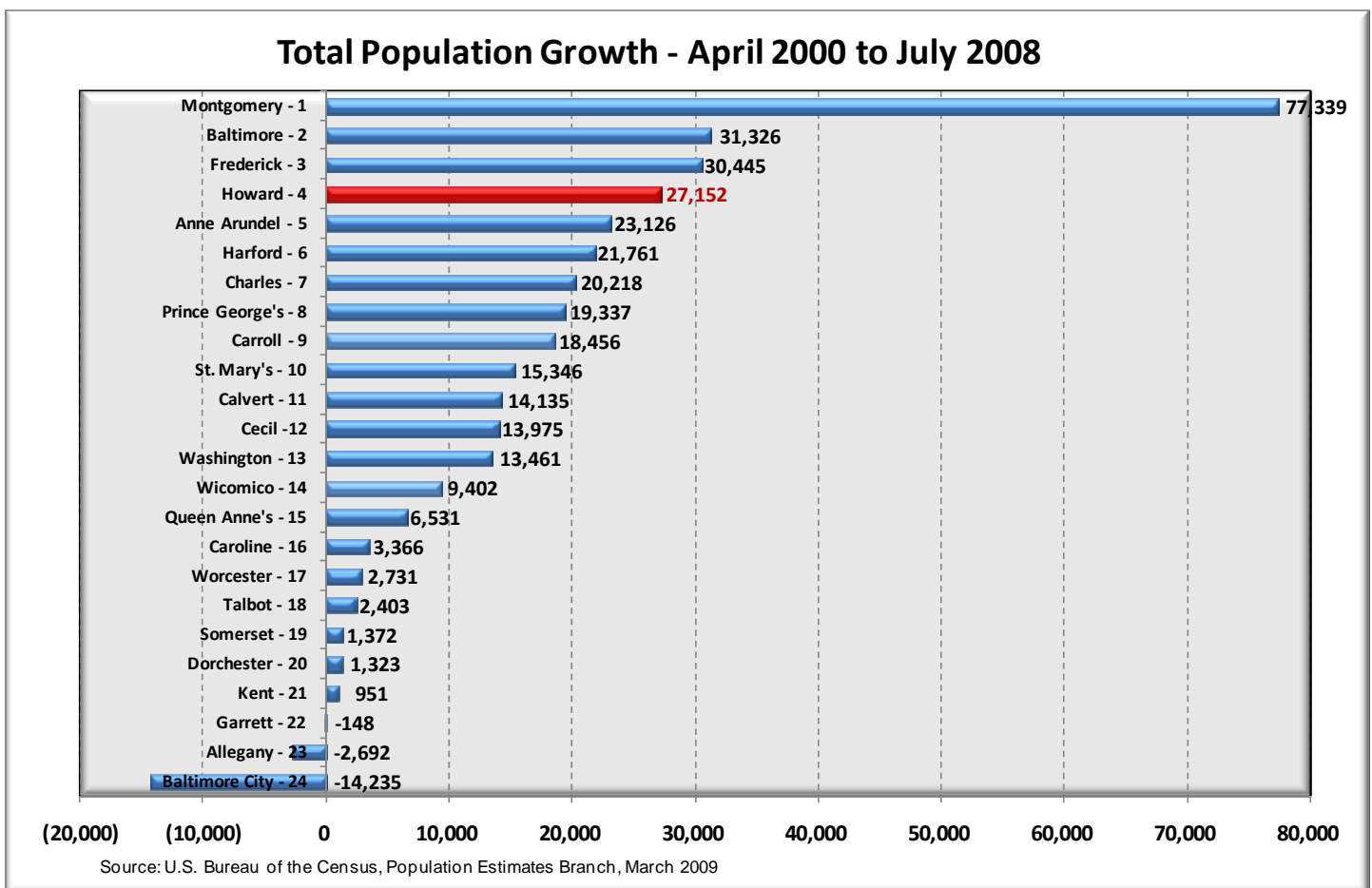
Montgomery County by far had the greatest population increase from 2000 to 2008, with 77,339 new residents. This is followed by Baltimore County with a population gain of 31,326. Frederick was 3rd with 30,445 new residents and Howard ranked 4th with 27,152. Garrett and Allegany counties and Baltimore City experienced population declines since 2000.

Observing the individual components of population change, Howard County also ranked 4th in total natural population increase, with 17,921 more births than deaths. Anne Arundel ranked 3rd (22,284), Prince George's 2nd (59,293), and Montgomery ranked 1st (65,061). Baltimore County,

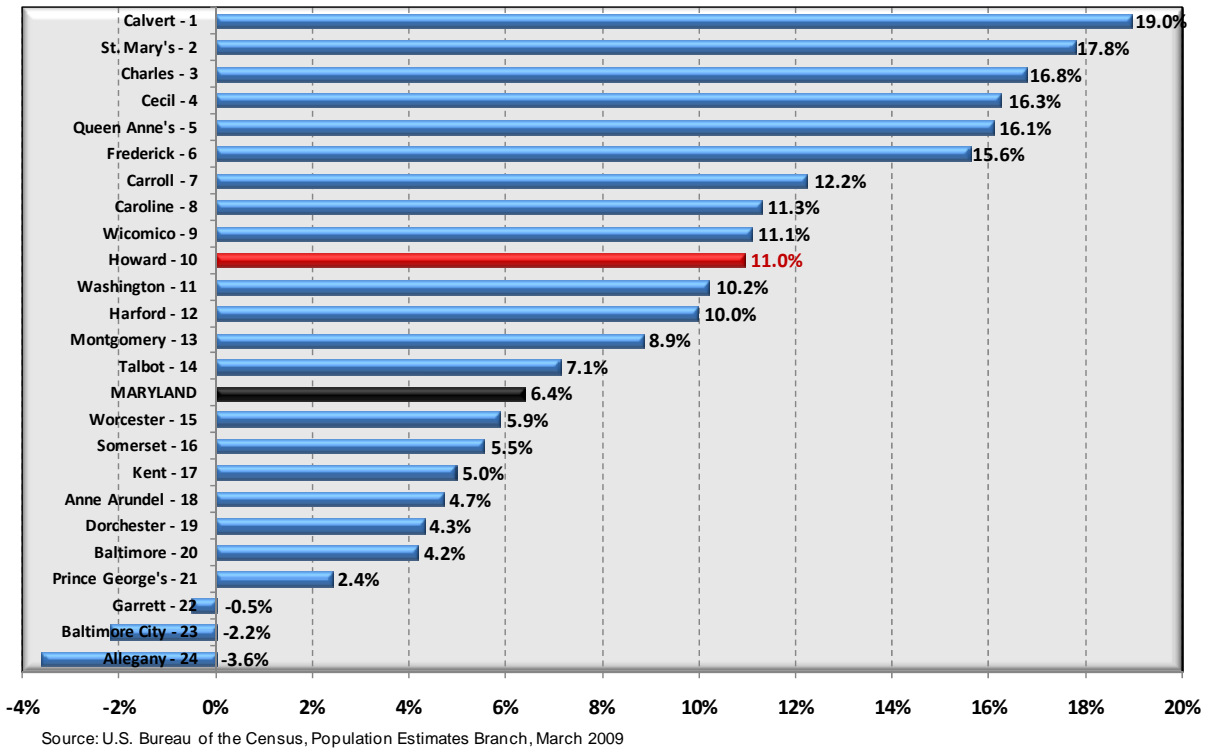
which has the 3rd greatest population in the State after Montgomery and Prince George's ranked 6th in natural population growth, with only 14,793 more births than deaths. This is due to its relatively older population. In general, and as expected, the natural population increase was greater for the larger counties in proportion to size. Counties on the eastern shore and the western part of the State experienced slight declines in population where deaths exceeded births. This is due to the relatively older populations living in these counties with proportionately less numbers of younger families.

Howard ranked 12th in the number of internal or domestic migrants with 3,178. Frederick had the most with 15,871 followed by Carroll with 12,949 and then Charles (12,126). Baltimore City lost more than 71,000 residents due to domestic migration more than offsetting the growth it received from international migration and natural increase. Montgomery, Prince George's, Anne Arundel, Allegany and Garrett counties also lost residents due to domestic migration.

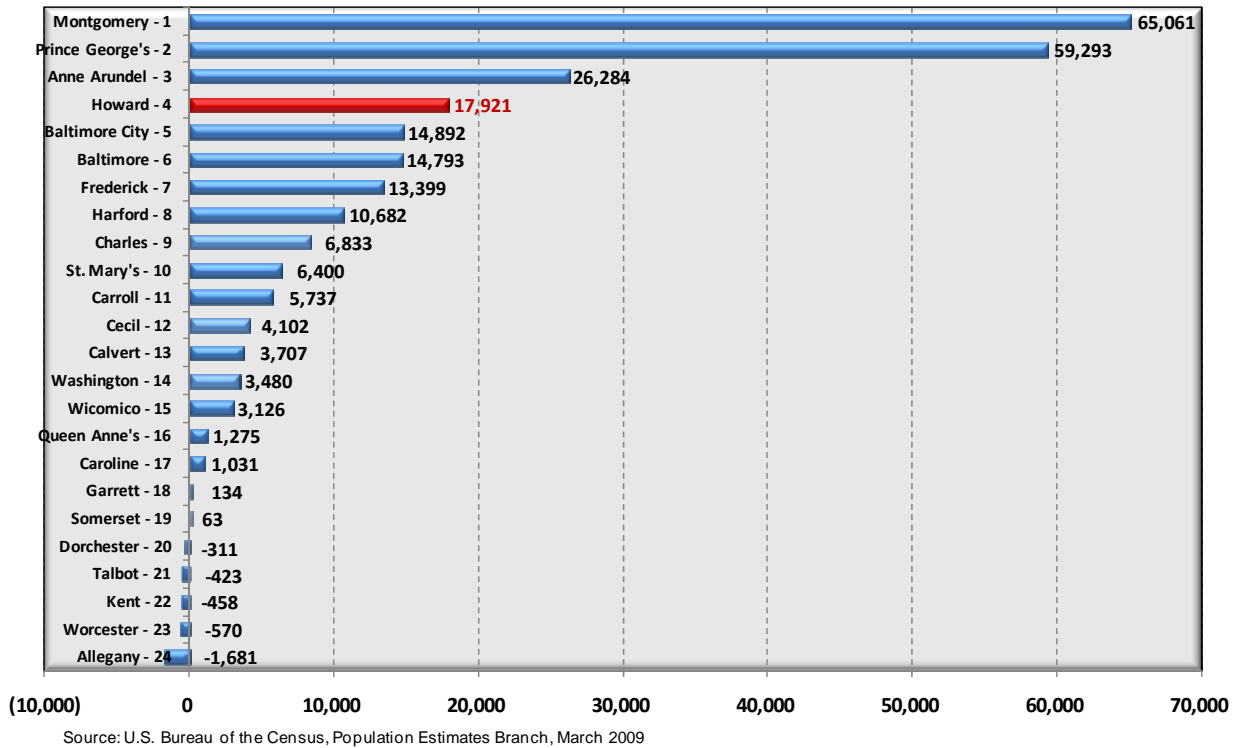
Montgomery County ranked 1st in new international migrants with 66,678 since 2000. This is followed by Prince George's with 31,692 international migrants, Baltimore County with 13,352 and Baltimore City with 7,738. Howard closely followed in 5th place with 7,437 international migrants. The charts below summarize the growth including the individual growth components.



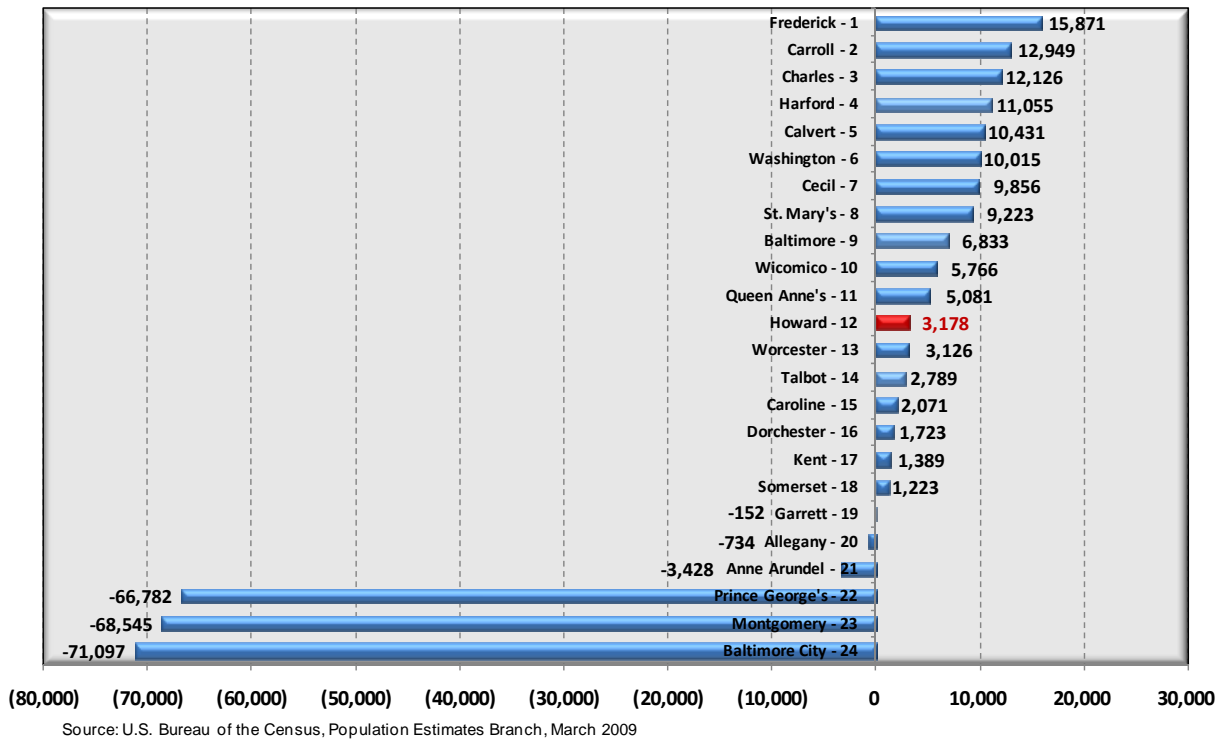
Percentage Population Growth - April 2000 to July 2008



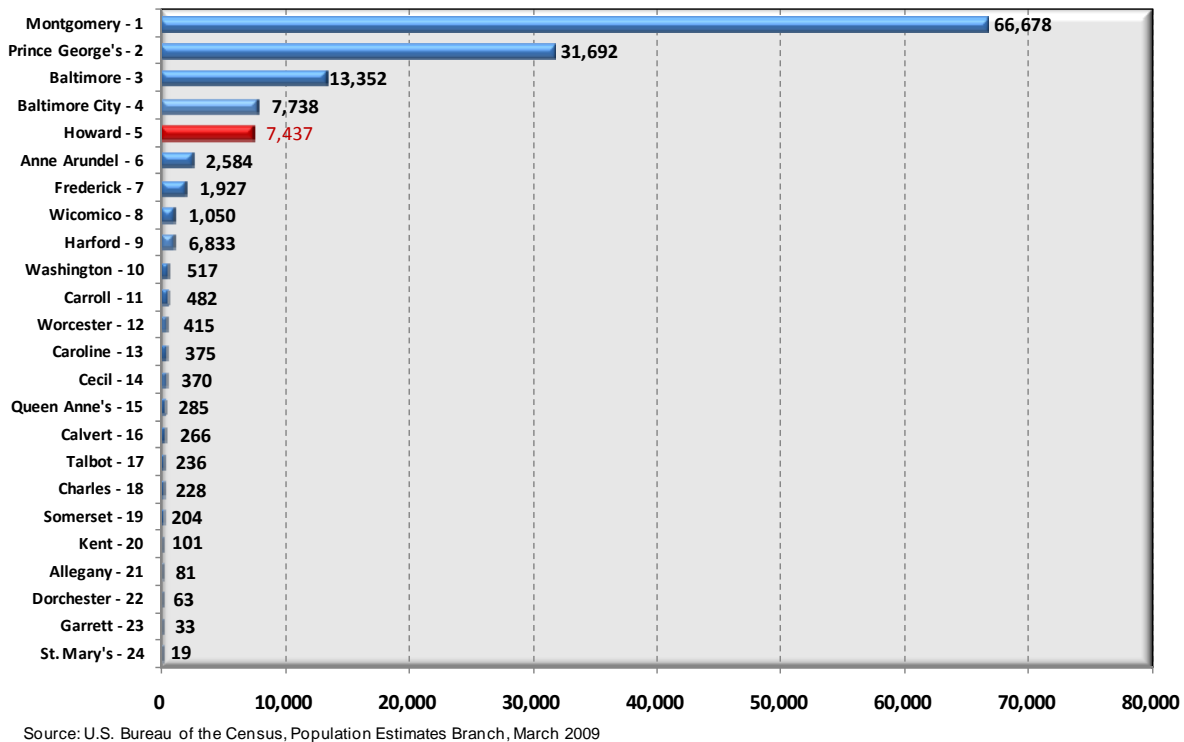
Natural Increase - April 2000 to July 2008



Domestic Migration - April 2000 to July 2008



International Migration - April 2000 to July 2008



Regional Comparisons Over Time

The table below shows the yearly population change estimates between 2000 and 2008 by growth component for central Maryland jurisdictions. The table is color-coded with graduated red showing negatives, where the darker red shows greater negatives, transitioning to yellow and then green for the positive numbers. There is also series of dynamic bubble charts following the table showing the changes over time for each component. Double click on each of the charts to activate. Click here for instructions: <http://www.jmp.com/support/swfhelp/en/bubbleplot.shtml>.

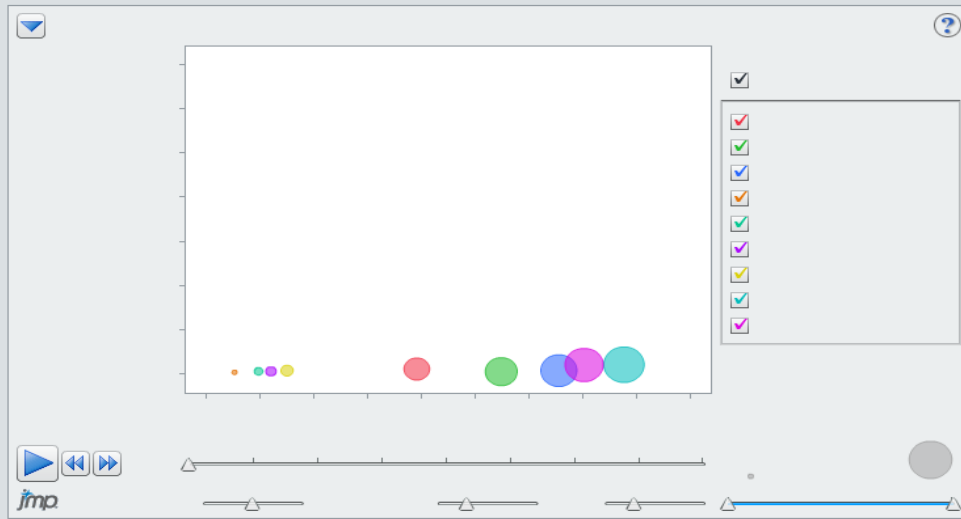
Population Growth by Component by Year for Central Maryland Counties

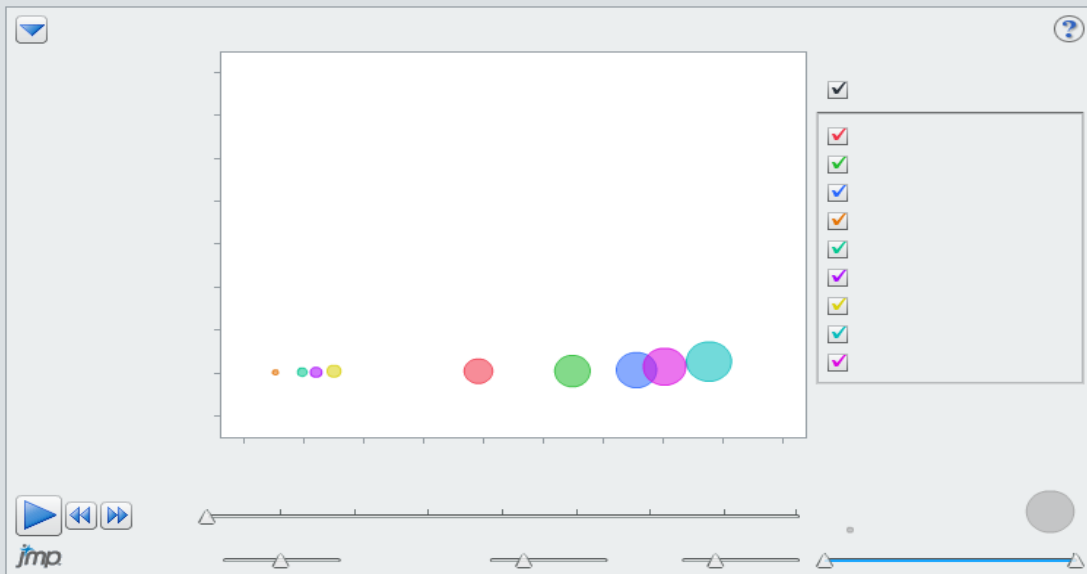
Maryland Jurisdiction	Natural Population Increase							
	4/1/2000-7/1/2001	7/1/2001-7/1/2002	7/1/2002-7/1/2003	7/1/2003-7/1/2004	7/1/2004-7/1/2005	7/1/2005-7/1/2006	7/1/2006-7/1/2007	7/1/2007-7/1/2008
Anne Arundel County	4,153	3,201	3,241	3,367	3,113	3,110	3,183	2,916
Baltimore County	2,147	1,231	1,597	1,779	1,757	2,244	2,029	2,009
Carroll County	926	700	682	655	743	595	665	771
Harford County	1,729	1,348	1,289	1,248	1,191	1,330	1,262	1,285
Howard County	2,868	2,267	2,213	2,315	2,070	2,091	2,005	2,092
Baltimore City	1,339	1,249	982	1,658	1,908	2,493	2,555	2,708
Frederick County	2,026	1,636	1,638	1,615	1,540	1,688	1,611	1,645
Montgomery County	9,786	7,481	8,092	7,952	8,057	8,341	7,778	7,574
Prince George's County	9,273	7,117	7,048	7,266	7,198	7,394	7,180	6,817
Maryland Jurisdiction	Domestic Migration +							
	4/1/2000-7/1/2001	7/1/2001-7/1/2002	7/1/2002-7/1/2003	7/1/2003-7/1/2004	7/1/2004-7/1/2005	7/1/2005-7/1/2006	7/1/2006-7/1/2007	7/1/2007-7/1/2008
Anne Arundel County	2,608	2,690	1,426	(1,085)	(1,661)	(4,091)	(2,103)	(1,212)
Baltimore County	3,951	3,436	3,638	2,157	79	301	(2,881)	(3,848)
Carroll County	2,674	3,457	2,947	2,216	1,155	787	(54)	(233)
Harford County	1,923	3,205	2,881	1,843	2,231	691	(1,203)	(516)
Howard County	3,153	1,126	774	(630)	(475)	(380)	154	(544)
Baltimore City	(15,547)	(10,895)	(9,127)	(11,537)	(7,552)	(4,522)	(5,565)	(6,352)
Frederick County	4,415	4,771	2,655	1,776	1,371	457	822	(396)
Montgomery County	(2,970)	(5,086)	(8,826)	(11,494)	(10,575)	(12,443)	(11,593)	(5,558)
Prince George's County	(1,416)	(1,947)	(3,208)	(6,609)	(7,438)	(15,008)	(16,833)	(14,323)
Maryland Jurisdiction	International Migration +							
	4/1/2000-7/1/2001	7/1/2001-7/1/2002	7/1/2002-7/1/2003	7/1/2003-7/1/2004	7/1/2004-7/1/2005	7/1/2005-7/1/2006	7/1/2006-7/1/2007	7/1/2007-7/1/2008
Anne Arundel County	859	(91)	(1,281)	1,206	306	820	294	471
Baltimore County	2,537	1,821	1,552	1,503	1,548	1,579	1,401	1,411
Carroll County	93	64	35	63	55	64	53	55
Harford County	219	65	(120)	241	110	192	115	141
Howard County	1,378	961	778	904	866	917	809	824
Baltimore City	1,468	1,047	885	872	897	919	822	828
Frederick County	373	223	90	295	227	278	213	228
Montgomery County	12,424	9,113	7,731	7,603	7,776	7,869	7,056	7,106
Prince George's County	6,094	4,139	2,946	4,019	3,692	3,979	3,360	3,463
Maryland Jurisdiction	TOTAL POPULATION INCREASE (1) =							
	4/1/2000-7/1/2001	7/1/2001-7/1/2002	7/1/2002-7/1/2003	7/1/2003-7/1/2004	7/1/2004-7/1/2005	7/1/2005-7/1/2006	7/1/2006-7/1/2007	7/1/2007-7/1/2008
Anne Arundel County	7,620	5,800	3,386	3,488	1,758	(161)	1,374	2,175
Baltimore County	8,635	6,488	6,787	5,439	3,384	4,124	549	(428)
Carroll County	3,693	4,221	3,664	2,934	1,953	1,446	664	593
Harford County	3,871	4,618	4,050	3,332	3,532	2,213	174	910
Howard County	7,399	4,354	3,765	2,589	2,461	2,628	2,968	2,372
Baltimore City	(12,740)	(8,599)	(7,260)	(9,007)	(4,747)	(1,110)	(2,188)	(2,816)
Frederick County	6,814	6,630	4,383	3,686	3,138	2,423	2,646	1,477
Montgomery County	19,240	11,508	6,997	4,061	5,258	3,767	3,241	9,122
Prince George's County	13,951	9,309	6,786	4,676	3,452	(3,635)	(6,293)	(4,043)

(1) Not including residual adjustments.

Source: Population Division, U.S. Census Bureau, release date March 19, 2009

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As to be expected, natural population growth is occurring in all central Maryland Counties, with the larger counties experiencing greater growth from this component. In general, all counties have also experienced growth each year from international migration from 2000 to 2008. There are a few exceptions in some years for Anne Arundel and Harford Counties. This has to do with net armed services movement from overseas. As indicated earlier, Montgomery, Prince George's and Baltimore Counties experienced the largest increases from international migrants.

Also, as indicated there has been some notable trend changes in growth from domestic migration. In particular for Howard County, net domestic out-migration has occurred beginning in 2003 through 2008 (with one exception in 2007). This shift from net in to net out domestic migration has also occurred in Anne Arundel, Baltimore, Harford and Frederick Counties, although the starting times vary. For example, Frederick County did not see net domestic out migration until the last year (2007 to 2008). This could be due to rapidly rising housing prices in the metro area beginning in the early part of this decade with more residents choosing to live elsewhere. This is an important trend that should continue to be tracked overtime. It could be that the trend reverses once again as housing prices continue to fall due to the current recession which began in December 2007.