2015/2020 Esri Diversity Index

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An Esri® White Paper
March 2015

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Introduction

Tracking the diversity of our society is crucial to understanding the shifting demographics of race and ethnicity in the United States. Esri's Diversity Index captures the racial and ethnic diversity of a geographic area in a single number, 0 to 100. The Diversity Index allows for efficient analysis and mapping of seven race groups that can be either of Hispanic or non-Hispanic origin—a total of 14 separate race/ethnic groupings.

Over the last 40 years, the racial and ethnic compositions of the United States have changed dramatically. Much of the increased diversity has been fueled by the Hispanic population. Hispanic population growth accounted for half of all population growth from 2000 to 2010. In 1970, Hispanics accounted for 4.7 percent of the population. Today, Hispanics represent 17.6 percent of the 2015 population, which is expected to grow to 19.1 percent by 2020. Although immigration has largely contributed to gains in diversity over the past four decades, there are new forces driving diversity across America. Native births have become a primary source of diversification. It is estimated that births currently account for 74 percent of Hispanic population growth.[1]

More than half of all children born in the United States are *minorities*, defined as any race/ethnicity other than non-Hispanic white. Minorities accounted for 30.9 percent of the population in 2000 and are expected to make up 40.7 percent of the population by 2020. That reduces the majority (non-Hispanic whites) share of the population from 69.1 percent to 59.3 percent. The transition to a "majority-minority" population is expected around 2040.

The non-Hispanic white population is aging. Younger non-Hispanic whites are marrying later in life and having fewer children. There are now more deaths than births for the non-Hispanic white population, a process called *natural decrease*. This shift can been seen in chart 1 below and juxtaposed with chart 2 showing the natural increase in the Hispanic population. Never in US history has the majority race/ethnic group experienced this type of decline. Meanwhile, a steady increase in marriages across racial and ethnic lines pushes the rate of diversification for the next generation. All these factors combine to accelerate the rate of diversification.

[1] US Census Bureau Population Projections Program, Projected Components of Change by Race and Hispanic Origin for the United States: 2015 to 2060.

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Chart 1

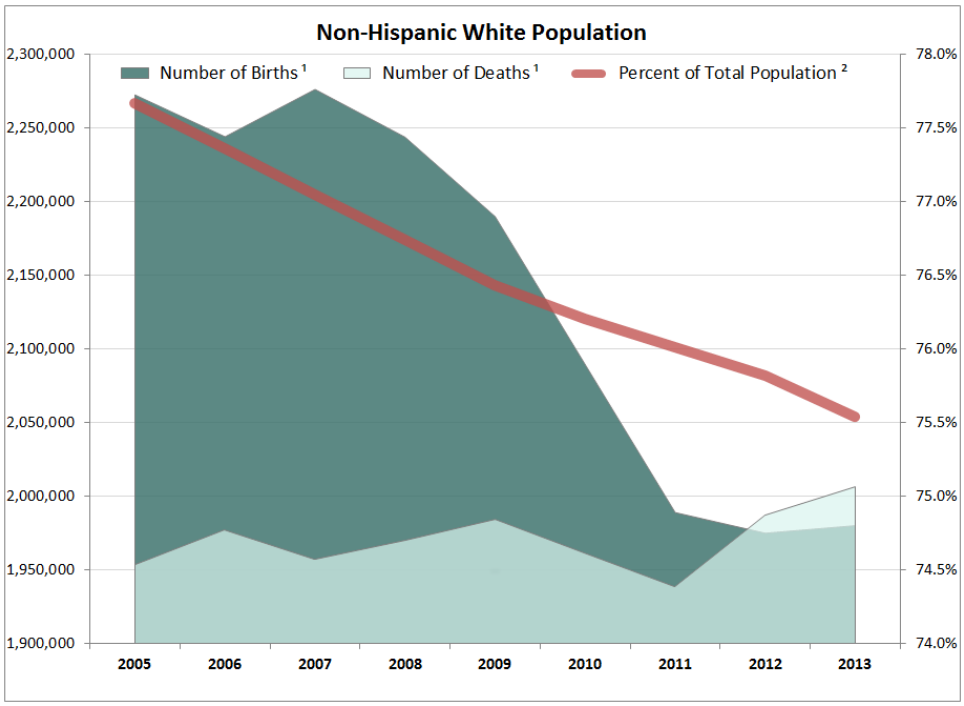
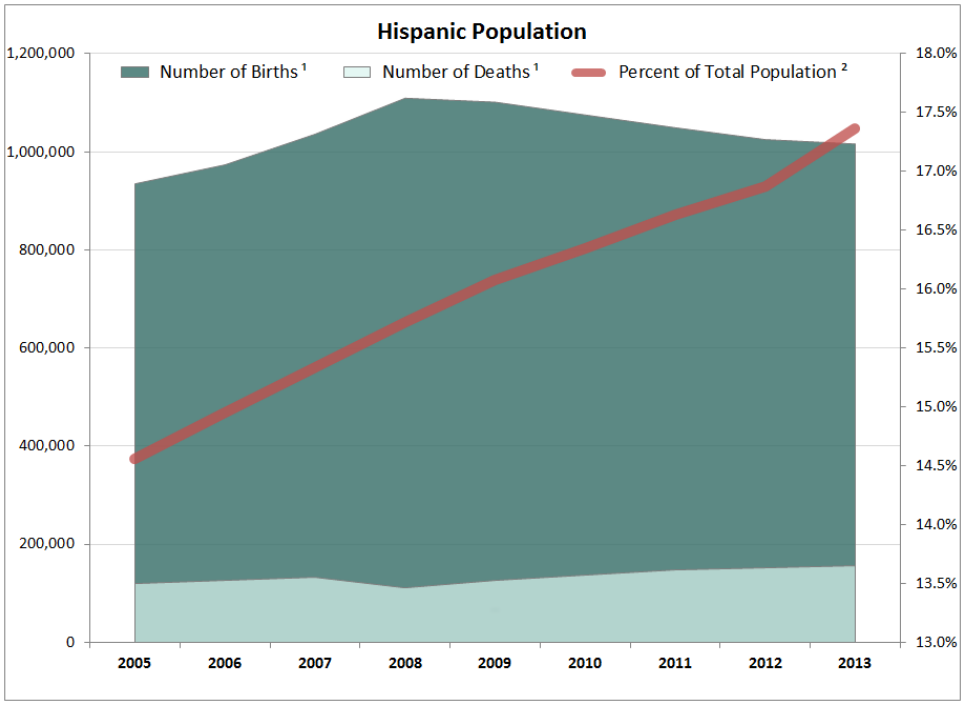


Chart 2



[1] US Census Bureau Population Estimates Program, Estimates of Components of Residential Population Change by Race and Hispanic Origin. *Component data may lag the current estimate year by as much as two years.*

[2] Esri Demographics 2015/2020.

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Geographically, the largest gains in diversity are occurring in areas that previously had the least diversity. Micropolitan and rural areas are experiencing higher rates of diversification than metropolitan areas. Regionally, diversification in the Northeast and Midwest is outpacing the West and the South. These trends are likely to continue as the population of minority groups expands into areas that are currently dominated by the non-Hispanic white population. Variations in the Diversity Index for different geographic areas and the annual rate of change are shown in tables 1 and 2:

Table 1
2010–2015 Diversity Index Annual Change by Geography

Geography	Census 2010	Update 2015	Annual Change
US	60.6	63.0	0.7%
Midwest	41.4	43.8	1.1%
Northeast	55.5	58.7	1.1%
South	61.4	63.6	0.7%
West	73.2	74.8	0.4%
Metropolitan areas*	63.6	65.8	0.7%
Micropolitan areas*	40.5	43.2	1.2%
Rural areas*	36.1	38.5	1.3%

*Based on 2013 Core Based Statistical Area (CBSA) status

Table 2
2015–2020 Diversity Index Annual Change by Geography

Geography	Update 2015	Update 2020	Annual Change
US	63.0	65.3	0.7%
Midwest	43.8	46.4	1.2%
Northeast	57.7	61.7	1.0%
South	63.6	65.9	0.7%
West	74.8	76.2	0.4%
Metropolitan areas*	65.8	68.0	0.7%
Micropolitan areas*	43.2	45.7	1.2%
Rural areas*	38.5	40.6	1.1%

*Based on 2013 CBSA status

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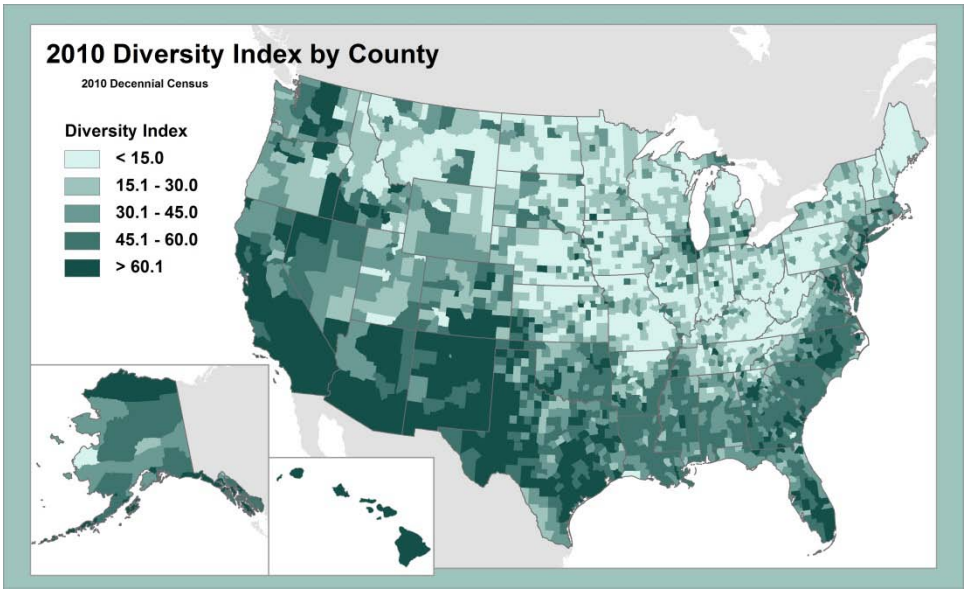
Definition of Diversity Index

The Diversity Index from Esri represents the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. Ethnic diversity, as well as racial diversity, is included in our definition of the Diversity Index. Esri's diversity calculations accommodate up to seven race groups: six single-race groups (White, Black, American Indian, Asian, Pacific Islander, Some Other Race) and one multiple-race group (two or more races). Each race group is divided into two ethnic origins, Hispanic and non-Hispanic. If an area is ethnically diverse, then diversity is compounded.

The Diversity Index is available down to the block group level geography and ranges from 0 (no diversity) to 100 (complete diversity). If an area's entire population belongs to one race group and one ethnic group, then an area has zero diversity. An area's diversity index increases to 100 when the population is evenly divided into two or more race/ethnic groups.

The United States had a 2010 Diversity Index of 60.6, based on census counts. The Diversity Index based on 2015 updates stands at 63, and it is expected to rise to 65.3 in 2020. A Diversity Index of 63 translates to a probability of 63 percent that two people randomly chosen from the US population would belong to different race or ethnic groups. Maps 1, 2, and 3 show the distribution of the Diversity Index by county over time. You can also explore Diversity Index maps and content in ArcGIS℠ Online (ArcGIS.com).



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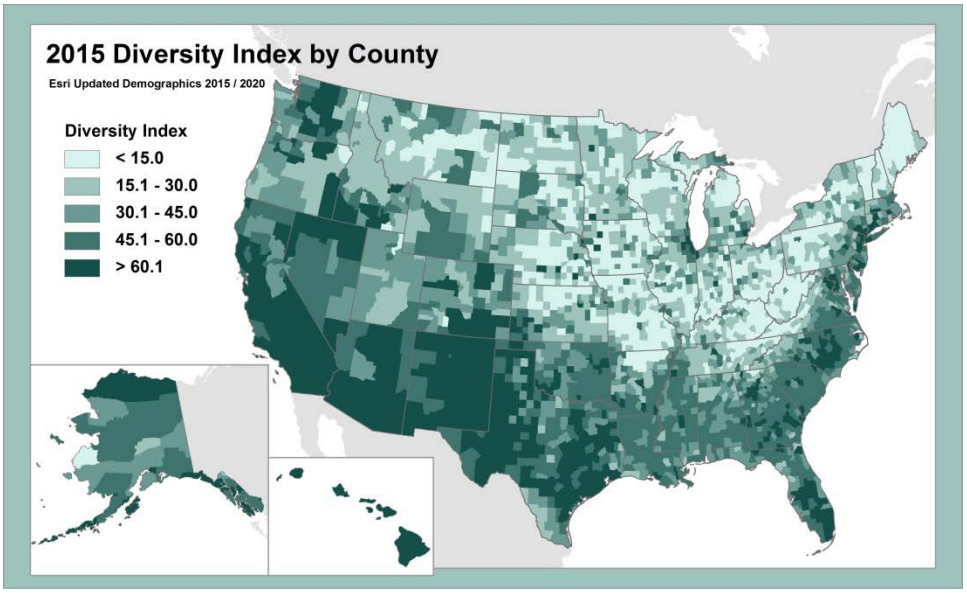

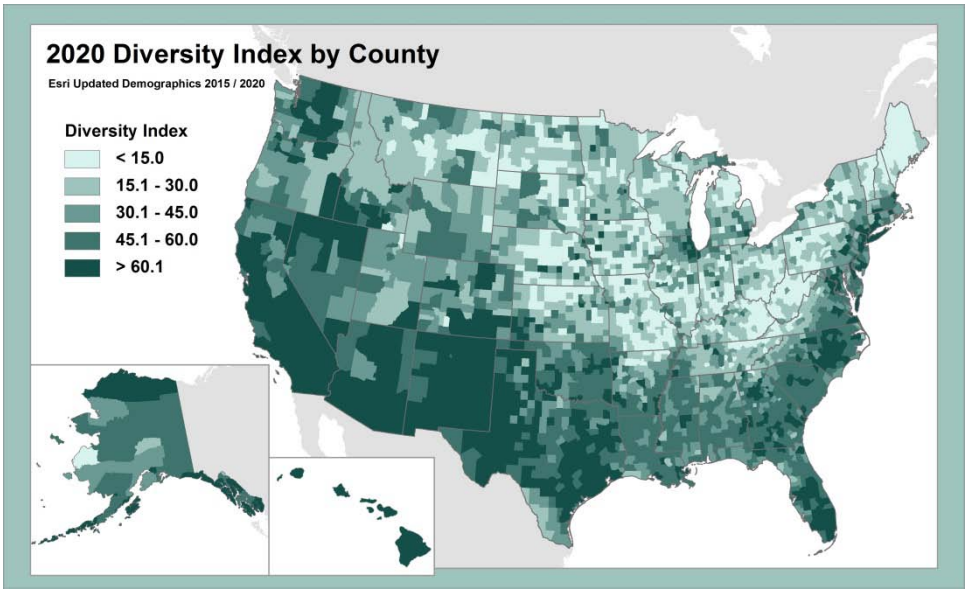

For more information about the Esri Diversity Index, call 1-800-447-9778.

Kyle Reese-Cassal is a demographer at the Esri Olympia, Washington, regional office. He holds an MS from Florida State University and a BS from the University of Wisconsin, Madison. He has more than 10 years of experience in applied demographic work in both the public and sectors with specialization in small-area estimates, projections, and mapping.

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