

2014/2019 Esri Diversity Index

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An Esri® White Paper
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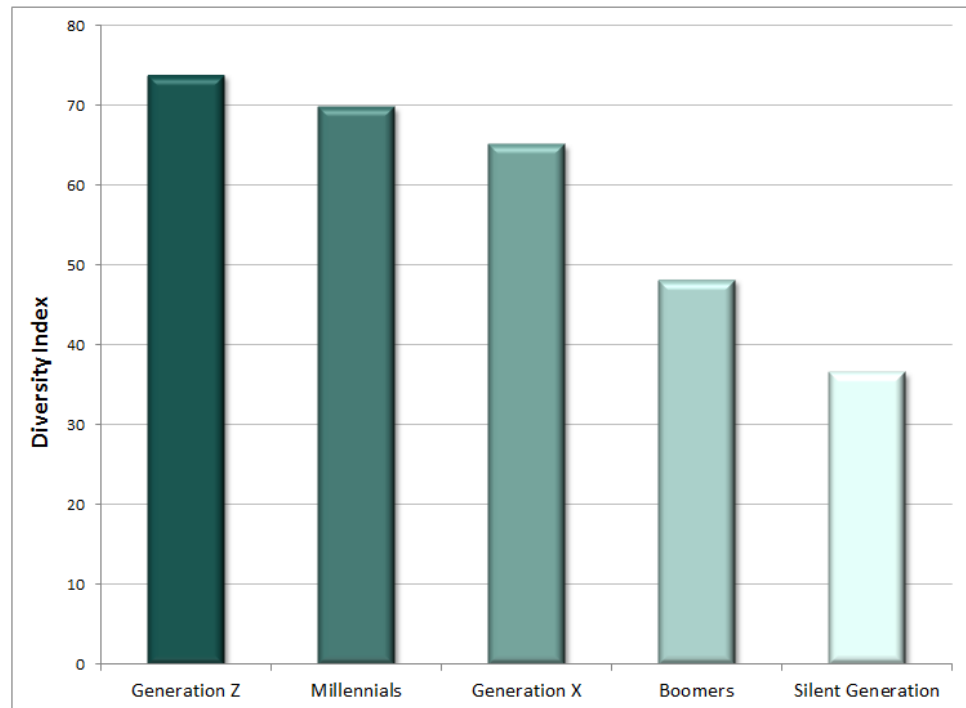
Introduction

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. In 1970, Hispanics accounted for 4.7 percent of the population. Today, Hispanics represent 17.5 percent of the population, which is expected to grow to 19 percent by 2019. Hispanic population growth accounted for half of all population growth in the last decade.

Although immigration has largely contributed to gains in diversity over the past four decades, there are new forces driving diversity in America. Native births have become the primary source of diversification. 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 40.4 percent of the population by 2019. That reduces the majority (non-Hispanic whites) share of the population from 69 percent to less than 60 percent. The transition to a "majority-minority" population is expected around 2040. When viewed through a generational lens, the differences in diversity by age are unmistakable.

Chart 1
2014 Diversity Index by Generation



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. 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.

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
2010–2014 Diversity Index Annual Change by Geography

Geography	Census 2010	Update 2014	Annual Change
US	60.6	62.6	0.8%
Northeast	41.4	43.4	1.1%
Midwest	55.5	57.8	1.0%
South	61.4	63.4	0.8%
West	73.2	74.6	0.4%
Metropolitan areas*	63.6	65.4	0.7%
Micropolitan areas*	40.5	42.7	1.3%
Rural areas*	36.1	38.0	1.2%

*Based on 2014 Core Based Statistical Area (CBSA) status

Table 2
2014–2019 Diversity Index Annual Change by Geography

Geography	Update 2014	Update 2019	Annual Change
US	62.6	65.0	0.8%
Northeast	43.4	46.0	1.2%
Midwest	57.8	60.7	1.0%
South	63.4	65.8	0.8%
West	74.6	76.1	0.4%
Metropolitan areas*	65.4	67.8	0.7%
Micropolitan areas*	42.7	45.3	1.2%
Rural areas*	38.0	39.9	1.0%

*Based on 2014 CBSA status

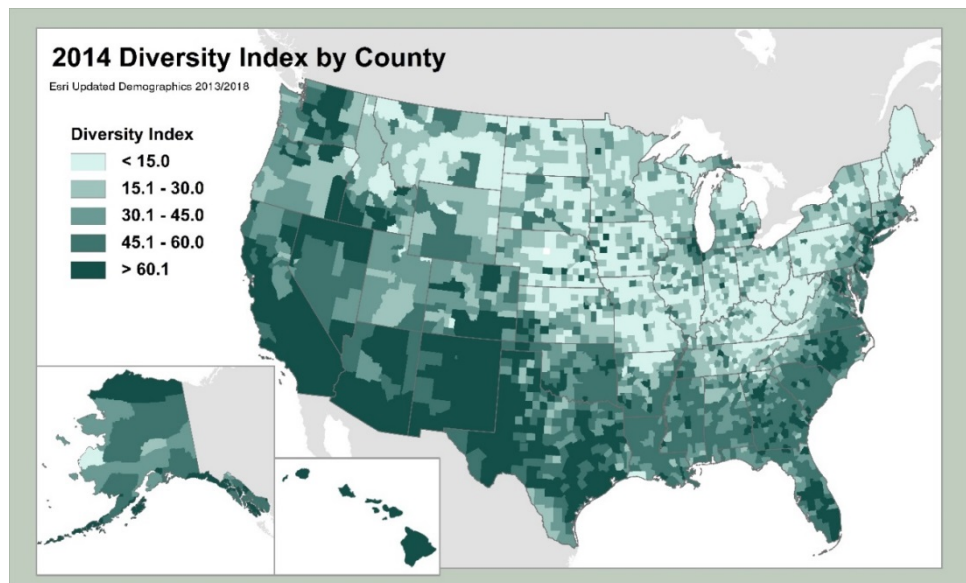
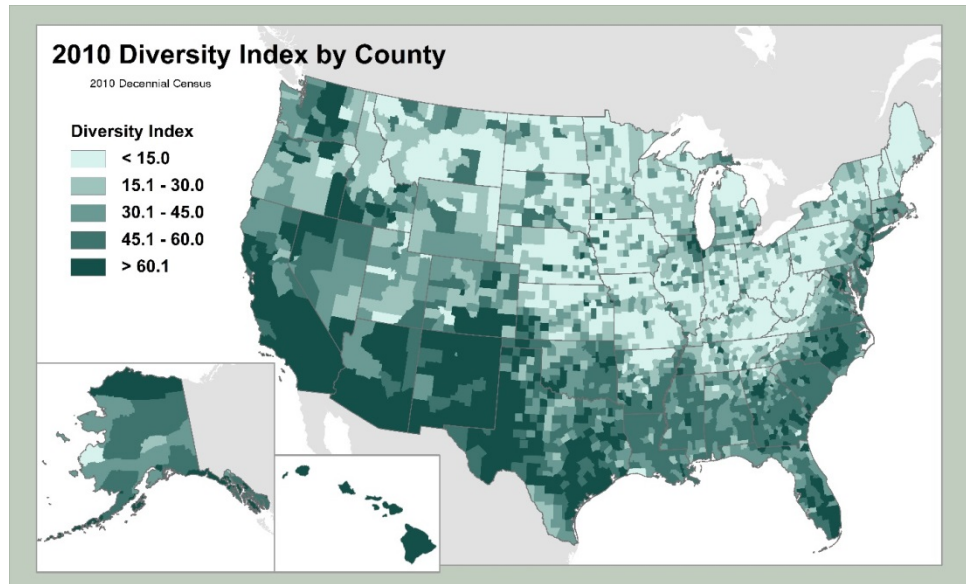
Definition of Diversity Index

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 racial diversity is compounded.

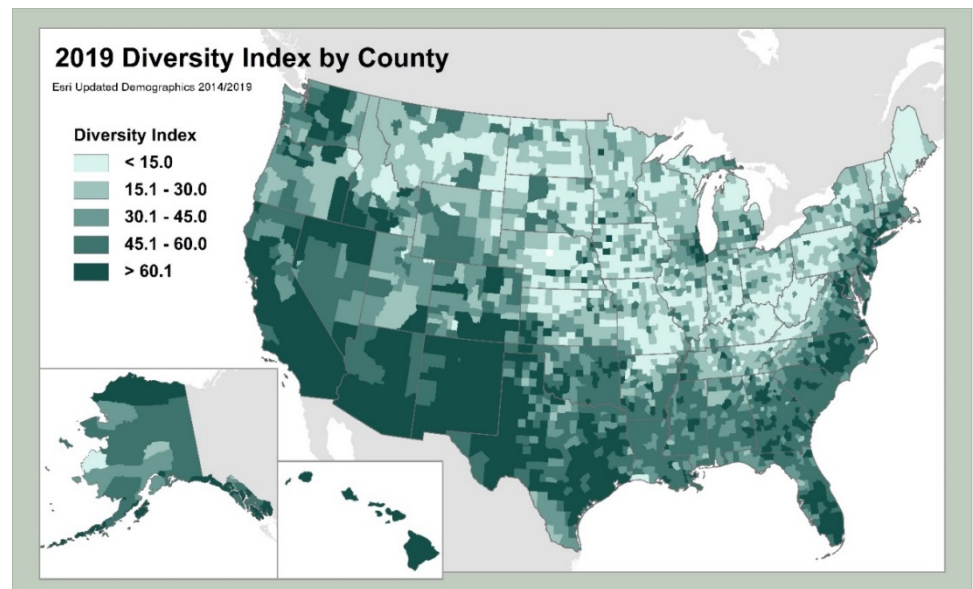
The Diversity Index is available down to the block group level geography and ranges from 0 (no diversity) to 100 (complete diversity). If an area's entire population belongs to one race group and one ethnic group, then an area has zero diversity. An area's diversity index increases to 100 when the population 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 2014 updates stands at 62.6, and it is expected to rise to 65 in

2019. A Diversity Index of 65 translates to a probability of 65 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. You can also explore Diversity Index maps and content in ArcGISSM Online (ArcGIS.com).



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

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