2014/2019 Esri Diversity Index

By Kyle Reese-Cassal
Demographer, Data Development Team

An Esri® White Paper
September 2014

380 New York Street
Redlands, California 92373-8100 USA

800 447 9778
info@esri.com

esri.com

Copyright © 2014 Esri
All rights reserved.
Printed in the United States of America.

The information contained in this document is the exclusive property of Esri. This work is protected under United States copyright law and other international copyright treaties and conventions. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system, except as expressly permitted in writing by Esri. All requests should be sent to Attention: Contracts and Legal Services Manager, Esri, 380 New York Street, Redlands, CA 92373-8100 USA.

The information contained in this document is subject to change without notice.

Esri, the Esri globe logo, ArcGIS, arcgis.com, esri.com, and @esri.com are trademarks, service marks, or registered marks of Esri in the United States, the European Community, or certain other jurisdictions. Other companies and products or services mentioned herein may be trademarks, service marks, or registered marks of their respective mark owners.

2014/2019 Esri Diversity Index

An Esri White Paper

Contents **Page**

Introduction 1

Definition of Diversity Index 3

2014/2019 Esri Diversity Index

Introduction

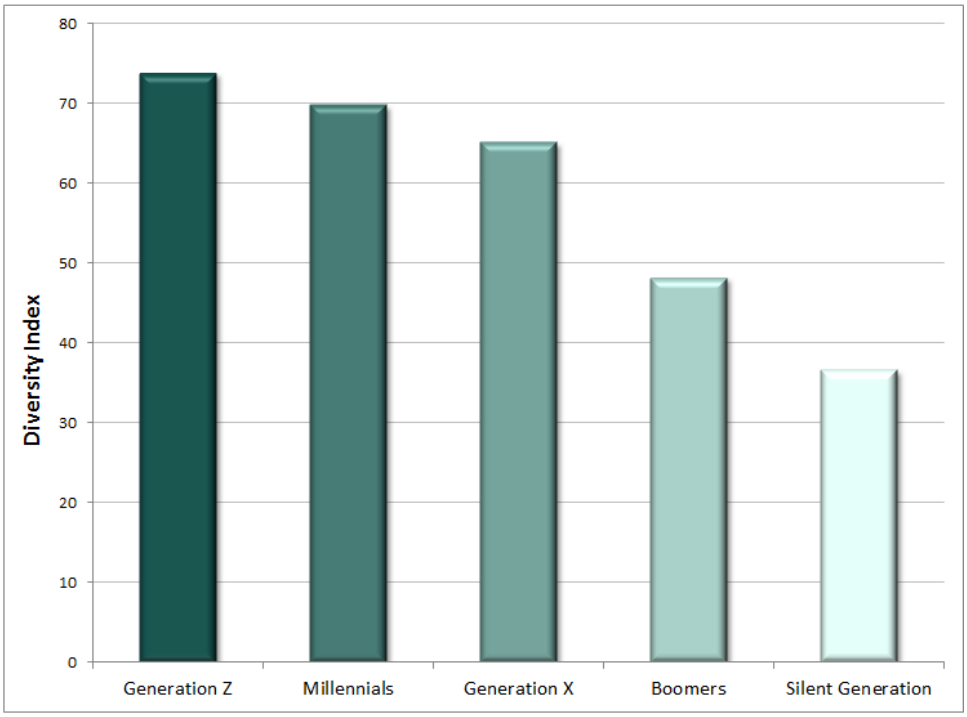
Tracking the diversity of our society is crucial to understanding the shifting demographics of race and ethnicity in the United States. Esri's Diversity Index captures the racial and ethnic diversity of a geographic area in a single number, 0 to 100. The Diversity Index allows for efficient analysis 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.

J10170

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:

J10170

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

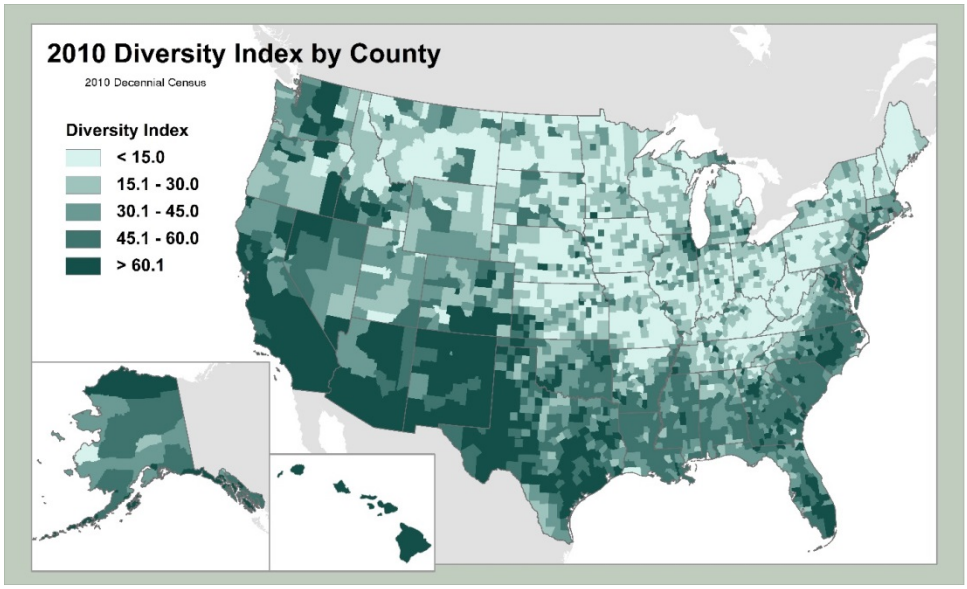
The Diversity Index from Esri represents the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. Ethnic diversity, as well as racial diversity, is included in our definition of the Diversity Index. Esri's diversity calculations accommodate up to 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.

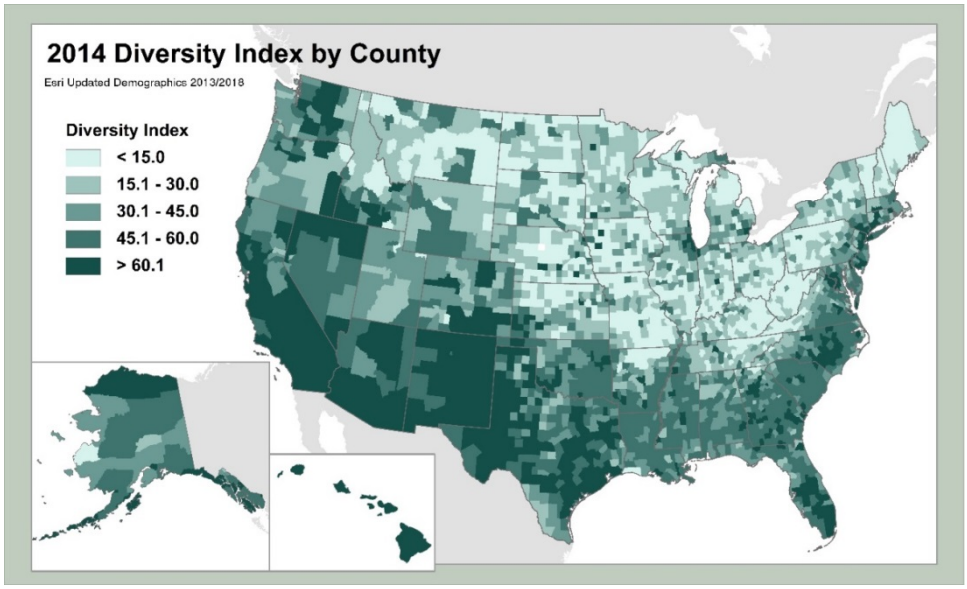
The Diversity Index is available down to the block group level geography and ranges from 0 (no diversity) to 100 (complete diversity). If an area's entire population belongs to one race group and one ethnic group, then an area has zero diversity. An area's diversity index increases to 100 when the population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

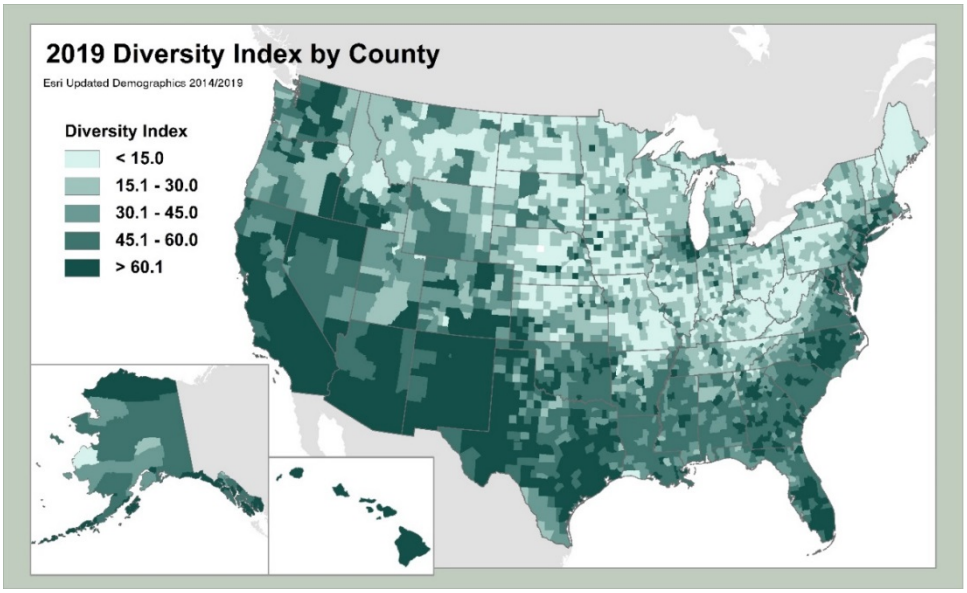
J10170

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 ArcGIS℠ Online (ArcGIS.com).





J10170



For more information about the Esri Diversity Index, please 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. Reese-Cassal has more than 10 years of experience in applied demographic work in both the public and private sectors with specialization in small-area estimates and projections.

Esri inspires and enables people to positively impact their future through a deeper, geographic understanding of the changing world around them.

Governments, industry leaders, academics, and nongovernmental organizations trust us to connect them with the analytic knowledge they need to make the critical decisions that shape the planet. For more than 40 years, Esri has cultivated collaborative relationships with partners who share our commitment to solving earth's most pressing challenges with geographic expertise and rational resolve. Today, we believe that geography is at the heart of a more resilient and sustainable future. Creating responsible products and solutions drives our passion for improving quality of life everywhere.

Contact Esri

380 New York Street
Redlands, California 92373-8100 USA

1 800 447 9778
T 909 793 2853
F 909 793 5953
info@esri.com
esri.com

Offices worldwide
esri.com/locations

Printed in USA