

# Applied Demography

Population Association of America – Committee on Applied Demography Newsletter

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## Looking Forward to Austin for PAA 2019!

Austin, Texas is the state capital! According to the U.S. Census Bureau, Austin had an estimated population of 950,715 an increase in comparison to the last census when the population was 790,491 people. Austin has been known with different names: Bat City, Waterloo, and City of the Violet Crown. Famous for the phrase "Keep Austin Weird" and many other attractions, 6th Street is home to the best music Austin offer. Austin is also famous for the Austin City Limits music program, recorded by PBS and KLRU it is broadcasted by many PBS affiliated around the United States. The show helped Austin become the "Live Music Capital of the World".



On April 10<sup>th</sup> – 13<sup>th</sup>, 2018, the Live Music Capital of the World will host the annual Population Association of America (PAA) meetings at the JW Marriot (110 East 2<sup>nd</sup> Street, Austin, Texas) .

**You still have time to submit your papers!** The deadline for submissions has been extended to Wednesday, September 19 (11:59 PM, PST) in anticipation of Hurricane Florence. Hoping our friends and colleagues are safe during this time. As always, the Committee on Applied Demography has planned an applied demography track. There are also several other sessions planned that are of potential interest to applied demographers.

Authors will be notified of papers accepted into regular sessions on November 13<sup>th</sup>, and will be notified of papers accepted to overflow and poster sessions December 3<sup>rd</sup> - 4<sup>th</sup>.

If you have questions, please contact [paa2019@popassoc.org](mailto:paa2019@popassoc.org).

## A Message from the Editor

The success of the Applied Demography Newsletter depends on the level of engagement of applied demographers who provide the material for it. We have expanded the scope of the newsletter to include visualization notes and policy impact notes. Given the emergence of the #DemographersLaughToo hashtag in social media, we will consider funny anecdotes or jokes, it is our hope to keep laughing.

We want to thank Diana C. Lavery (Applied Demographer at ESRI) for her diligent production of the newsletter for the last two years and to Tom Godfrey for acting as Interim Editor. Personally, I want to thank the Committee on Applied Demography for allowing me to serve as editor for this news letter for the 2018-2020 term.

The next edition of the Applied Demography Newsletter will be published close to PAA 2019.

Alexis R. Santos-Lozada, PhD, Editor, Applied Demography Newsletter ([ars39@psu.edu](mailto:ars39@psu.edu))

## Other Upcoming Meetings, Conferences, and Trainings

- [International Conference on Aging in the Americas](#) (September 18-20, 2018, Tucson, Arizona)
- [Improving the American Community Survey](#) (September 26-27, 2018, Washington D.C.)  
Workshop Registration: [Here](#)
- [Southern Demographic Association \(SDA\)](#) (October 10-12, 2018 in Durham, North Carolina).
- [26<sup>th</sup> Annual Symposium on Family Issues](#) (October 22-23, 2018 in State College, PA)
- [American Evaluation Association \(AEA\)](#) (October 28-November 3, 2018 in Cleveland, OH).
- [Association for Public Policy and Management \(APPAM\)](#) (November 8-10, 2018, Washington DC).
- [Gerontological Society of America \(GSA\)](#) (November 14-18, 2018 in Boston, MA)
- [Esri Federal GIS Conference](#) (January 29-30, 2019 in Washington, DC).
- [Population and Public Policy Conference](#) (February 8-9, 2019 in Albuquerque, N.M.).  
Deadline for submission of abstracts, workshops, and panel proposals: **October 31, 2018**  
Notification of acceptance: **November 30, 2018**

## Job announcements

- [Research Scientist , Demography and Survey Science – University Grad](#)
  - [Assistant or Associate Professor of Demography, University of Texas at San Antonio](#)
  - [Program Coordinator for Applied Demography, Pennsylvania State University](#)
  - [Applied Demographer, ArcGIS Product Engineering](#)
  - [Applied Demographer, ESRI – Small Area Estimates](#)
  - [Associate or Full Professor – Population Studies/Demography – University of Minnesota](#)
- For more information, contact MPC Director Rob Warren at [mpc-jobs@umn.edu](mailto:mpc-jobs@umn.edu).

## **Applied Demography Sessions in the PAA 2019 Program!**

Here is a list of sessions sponsored by the Committee on Applied Demography (CAD) or sessions where our applied work may fit.

### **Applied Demography**

#### **1101. Projecting Fertility in a Time of Demographic Change: Will it Rise or Fall?**

Organized by: Dr. Lloyd B. Potter, University of Texas at San Antonio ([Lloyd.potter@utsa.edu](mailto:Lloyd.potter@utsa.edu))

#### **1102. Domestic and International Migration in the United States: What does the Future Hold?**

Organized by: Dr. Michael E. Cline, North Carolina State Demographer  
([Michael.cline@osbm.nc.gov](mailto:Michael.cline@osbm.nc.gov))

#### **1103. Flash Session: Data Visualizations, Open Source and Other Tools of Applied Demography**

Organized by: Dr. Malia Jones, University of Wisconsin-Madison ([malia.jones@wisc.edu](mailto:malia.jones@wisc.edu))

### **Data and Methods**

#### **1005. Using Big Data in Population Research**

Organized by: Dr. Dennis Feehan, University of California, Berkeley ([feehan@berkeley.edu](mailto:feehan@berkeley.edu))

#### **1006. Computational Demography**

Organized by: Dr. Ridhi Kashyap, University of Oxford ([ridhi.kashyap@nuffield.ox.ac.uk](mailto:ridhi.kashyap@nuffield.ox.ac.uk))

#### **1008. Methods for Evaluating Population Programs**

Organized by: Dr. Jere Behrman, University of Pennsylvania ([jbehrman@econ.upenn.edu](mailto:jbehrman@econ.upenn.edu))

### **Health and Mortality**

#### **429. Small-Area Mortality Estimations**

Organized by: Dr. Samuel J. Clark, Ohio State University ([work@samclark.net](mailto:work@samclark.net))

### **Other sessions dealing with similar topics**

#### **205. Family Demography: Methods and Projections**

Organized by: Dr. Robert Schoen, Pennsylvania State University ([rschoen309@att.net](mailto:rschoen309@att.net))

#### **410. Spatial Distribution of Diseases and Deaths**

Organized by: Dr. Livia Montana, Harvard University ([lmontana@hsph.harvard.edu](mailto:lmontana@hsph.harvard.edu))

#### **616. The Changing Demography of Rural Areas**

Organized by: Dr. Leif Jensen, Pennsylvania State University ([lj1@psu.edu](mailto:lj1@psu.edu))

#### **706. Poverty and Social Policy**

Organized by: Dr. Jane Waldfogel, Columbia University ([jw205@columbia.edu](mailto:jw205@columbia.edu))

#### **802. Innovative Data and Methods for Population and Environment Research**

Organized by: Dr. Matt Hauer, Florida State University ([mehauer@fsu.edu](mailto:mehauer@fsu.edu))

#### **910. Pensions, Social Security, and Retirement**

Organized by: Dr. Angela M. O'Rand, Duke University ([aorand@soc.duke.edu](mailto:aorand@soc.duke.edu))

**Why primary care access is wildly overstated**

By: Ronald E. Cossman, PhD (Mississippi State University)

Physicians operate their practice like a business. That means the way the government calculates patient access is dead wrong. There are three reasons.

First, physicians must meet payroll, pay rent and utilities, secure insurance, and repay student loans. So a physician may “choose” to not accept a new patient. Actually, it’s a patient’s insurance that they are choosing to accept or decline.

Second, most practices have multiple physicians. In Mississippi, we found the average primary care practice was composed of three physicians. As such, they share office space, staff, and business practices. As a business decision, they may choose not to accept new Medicare patients in their practice. Having health insurances does not automatically equal access to healthcare. We called all the primary care practices in the state of Mississippi. Patients with some form of Blue Cross & Blue Shield insurance, some 95 percent of practices, were willing to set a new patient appointment. If you had Medicare, the acceptance rate statewide was closer to 75 percent. But only about half of the practices would consider accepting a patient with Medicaid (a needs-based insurance). Having health insurance did not guarantee access to primary care. It depended on the type of health insurance.

Third, the federal government treats each individual physician as a stand-alone point of access to the healthcare system. Three physicians equals three access points, despite the fact that all three have agreed on what kinds of health insurance to accept from new patients. This calculation, called the Health Professional Shortage Area (HPSA), is an important score. When your county’s HPSA score is high (which is bad) a number of programs designed to address the physician shortage problem kick in. There are multiple programs that offer incentives for physicians and other healthcare professionals to come and practice medicine in those underserved areas.

The problem is HPSA scores drastically overstate access. Take a typical rural county in Mississippi. There might be nine primary care physicians in the county. The HPSA score would be based on nine individual, independent, access points. The more physicians there are, the lower the HPSA score. But, those nine physicians are grouped in three practices. Nothing has changed except that we are now recognizing the reality of the marketplace. The HPSA scores need to take into account the reality of access, how it differs across payer types and how there are fewer access points than records would suggest.

The first step is to have every physician report on their annual license renewal form if they are in a practice and who they practice with. The second action is for physicians to report on their annual licensure form what percentage of their patients have different kinds of insurance. From that, we can calculate the acceptance rates for different insurance type by county and adjust HPSA scores accordingly. For example, a county with low acceptance of Medicaid would earn a high HPSA score and multiple programs would kick in to encourage physicians to move to and serve that area.

We can address the imbalance between the demand for healthcare and the supply of healthcare. We need to start by more accurately measuring that imbalance. And it is as easy as changing the physician license renewal form. The results will be better allocation of healthcare to underserved places. A version of this contribution was published in [Medical Economics](#) on May 30, 2018.

**Do antimalarial campaigns also reduce anemia?**

Bénédicte H. Apouey\*, Paris School of Economics  
Gabriel Picone, University of South Florida  
Joshua Wilde, University of South Florida  
Joseph Coleman, University of South Florida  
Robyn Kibler, University of Tampa

In sub-Saharan Africa, anemia is a common nutritional problem due to iron deficiency that causes harmful effects, particularly for children. The medical literature argues that malaria infections cause or worsen anemia, but research on this relationship is limited. We argue that if malaria is a significant determinant of anemia, then the protective impact of recent antimalarial campaigns on anemia should be stronger in regions that had higher malaria intensity prior to the campaigns.

To quantify the magnitude of the effect of malaria on anemia in children, we use data on anemia from the Demographic and Health Surveys program for 16 sub-Saharan countries between 2000 and 2014, combined with information on malaria intensity at baseline and antimalarial campaigns start dates. Among these interventions, we pay particular attention to mass distributions of bednets (the so-called scale-up), because bednet usage is considered a major tool for malaria prevention. In our full sample of countries, we find that scale-up had a small effect on (at least) moderate anemia and no effect on severe anemia.

When we evaluate the relationship between anemia and malaria country by country, we discover that scale-up significantly reduced anemia in two countries (Malawi and Senegal). The effect of other antimalarial campaigns was generally not significant. We conclude that while malaria may be a minor contributor to anemia in children, it is likely not the main driver.

Therefore, more research seeking to understand other channels through which malaria in childhood exerts such a negative influence on long-run individual outcomes is needed.

**Reference:**

Apouey BH, Picone G, Wilde J, Coleman J, Kibler R, 2017. [Malaria and anemia among children in sub-Saharan Africa: The effect of mosquito net distribution](#). *Revue Economique*, 68: 163-197.

**Abstract:** This article explores the impact of antimalarial campaigns, and in particular of the scale up in the distribution of mosquito nets, on anemia for children under 5 in sub-Saharan Africa. It uses individual-level data on more than 150,000 children and their families, combined with regional-level data on malaria intensity before the antimalarial campaigns, for sixteen countries between 2000 and 2014. Using a differences-in-differences estimation strategy, the paper tests whether the impact of the campaigns on anemia is larger in regions where the intensity of malaria was greater prior to the campaigns. The results indicate that the scale up has a negligible or small effect on moderate or severe anemia, whereas the other campaigns do not have any significant impact.

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### Gregg Robinson Given Award related to his work on Demographic Analysis

On June 12, 2018, the U.S. Census Bureau held a workshop to review the data and methods will that be used by the Demographic Analysis program to evaluate the 2020 Census. During the workshop, Gregg Robinson was given an award for all of his work at the Census Bureau developing and using the Demographic Analysis method to assess Census accuracy. In the award presentation, Eric Jensen noted that Greg was involved in applying Demographic Analysis in every Census since 1970.

The photo shows Greg receiving the award from Eric Jensen who leads the 2020 Demographic Analysis program



### Applied Demography on Social Media



/uscensusbureau  
/populationreferencebureau  
/KIDSCOUNT  
/PopAssoc



@PopAssocAmerica  
@SDA\_Demography  
@prbdata  
@uscensusbureau  
@urbandata  
@ipums  
@copafsk  
@APDUorg  
@aecfkidscount  
@pewresearch  
@allthingscensus



/uscensusbureau  
/prbnet  
/AECCaseyFound



/uscensusbureau  
/prbdata  
/pewresearch

## Accessing data from the American Community Survey in R using the Census API, producing a map

Alexis R. Santos-Lozada, Pennsylvania State University

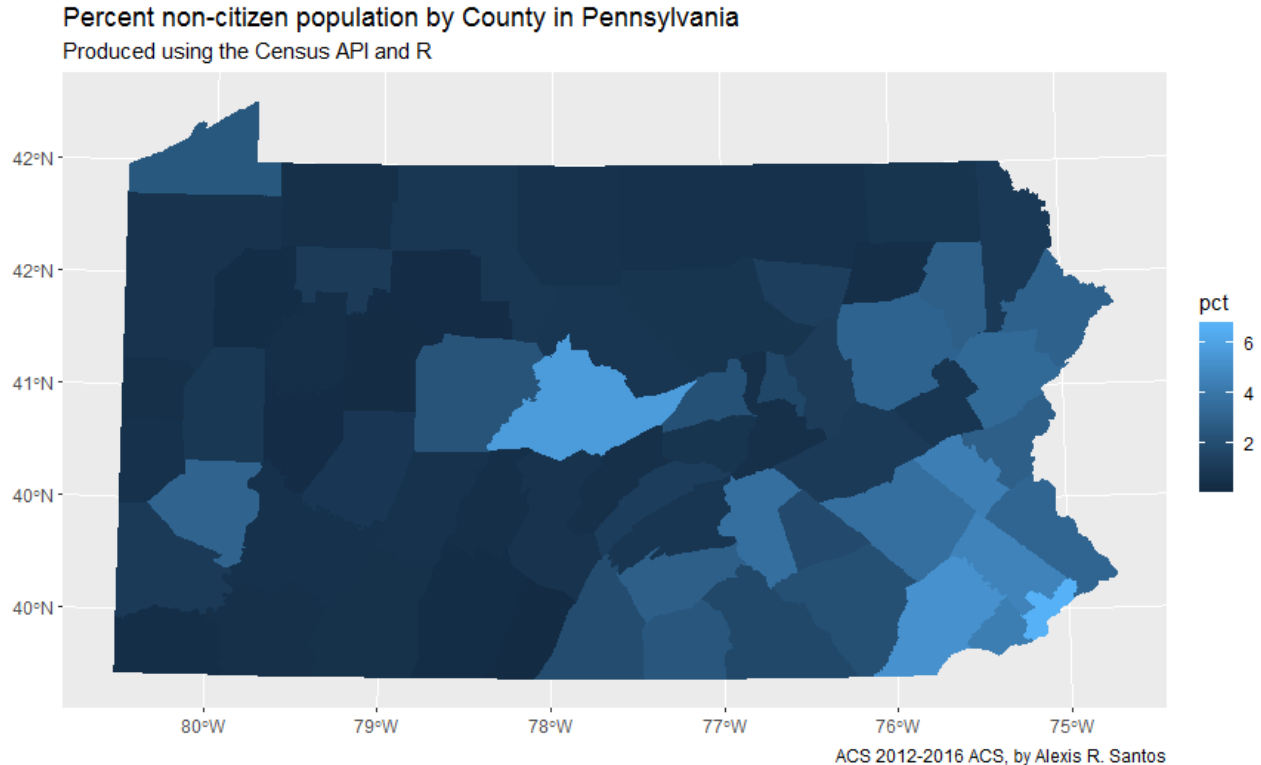
The following map was produced [RStudio](#) and the [Census API](#). The code used combines functions from the [tidycensus](#), [tidyverse](#) and [ggplot2](#) packages in RStudio.

First, I accessed counts for a population of interest (non-citizen population) and a total from the same ACS table (usually the \_001E variable). I store the name of the variables I want in an object called **vars**.

The data is requested using the `get_acs` function where I tell the Census API to provide data from Pennsylvania (state="PA"), at the county level (geography="county"), and ask for the variables contained in the object **vars**. I also specify wanting the shapefile (geometry=TRUE) and that the data should be formatted as wide (output="wide").

Using *tidyverse*, I calculate the percent of non-citizens by county (mutate) and then use *ggplot* to produce the map, specifying a CRS code for Pennsylvania (crs=2271), a title, subtitle, and a caption.

Sample code to produce this map and to produce your own map is available via my [GitHub Repository](#).



Link to repository: [https://github.com/alexisrsantos/censusapi\\_simplemap](https://github.com/alexisrsantos/censusapi_simplemap)

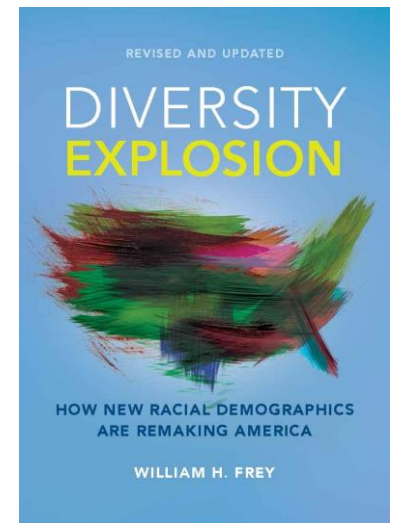
## Applied Demographers' Reading List

### ***Diversity Explosion: How New Racial Demographics Are Remaking America***

*Revised and updated, by William H. Frey*

In this updated and revised edition of his award-winning book, Brookings Institution and University of Michigan demographer, William H Frey draws lessons from the 2016 presidential election and fresh statistics to paint a clear picture of where America's racial demography is headed—and what it means for the nation's future.

His new analysis of election data and the changing electorate shows how Donald Trump's win highlights a major fissure in today's America: a cultural generation gap where many baby boomers and seniors are fearful about the nation's diversifying population, while at the same time younger adults—especially millennials—welcome it. Frey explains how, despite this gap, broad demographic forces will alter the nation's social and political landscape in the not-too-distant future, as older Americans and those living in red states come to absorb and embrace the contributions of multihued generations that are rapidly growing and dispersing. Clearly, the phrase “demography is destiny” is salient in ways that both political parties need to recognize.



Drawing from the U.S. Census, recent national surveys, and related sources, Frey tells how the rapidly growing “new minorities”—Hispanics, Asians, and multiracial Americans—along with African Americans and other groups, are transforming and reinvigorating communities from cities to suburbs and from the coasts to the heartland. He discusses their impact on generational change, neighborhood segregation, and interracial marriage, as well as presidential politics.

***Diversity Explosion*** is an accessible, richly illustrated overview of how unprecedented racial change is remaking the United States once again. It is an essential guide for political strategists, marketers, investors, educators, policymakers, and anyone who wants to understand the magnitude, potential, and promise of the new national melting pot in the 21st century.

### **Committee on Applied Demography Officers**

*The Committee recommends sessions and events for PAA's annual meeting, and serves as the primary conduit between PAA members who practice applied demography and the larger PAA organization.*

Tom Godfrey, Decision Demographics (CHAIR): *last year of term*  
 Susan Brower, Minnesota State Demographer: *year 1, second term*  
 Jason Devine, US Census Bureau: *year 1, second term*  
 Mathew Hauer, University of Georgia: *year 3, first term*  
 Sarah Burgoyne, Senior Demographer at Nielsen: *year3, first term*  
 Malia Jones, Applied Population Laboratory, University of Wisconsin–Madison: *year 2, first term*

*The CAD chair serves one four-year term while the other committee members serve a three-year appointment which can be renewed once for an additional three years.*





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## EDITORIAL INFORMATION

Readers are encouraged to suggest topics and to respond to articles in *Applied Demography* with letters to the editor. Please address all correspondence to the CAD Newsletter Editor:

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PAA members who wish to subscribe to *Applied Demography* will automatically become members of the Applied Demography subgroup until their current subscription expires. To continue membership in the Applied Demography subgroup (and continue receiving *Applied Demography*), please check the “AD Membership” option when renewing your PAA membership online.

**The newsletter will be available online to all subscribers; no printed version will be mailed.**

*Applied Demography* is published by the Committee on Applied Demography.