# Mathew E Hauer

# Curriculum Vitae

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of Georgia

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Google Scholar: Profile

## **EDUCATION**

May 2, 2018

| 2016 | Ph.D. | Geography           | University of Georgia  |
|------|-------|---------------------|--|
|      |       | "Ripple Effect: How | $Sea\ Level\ Rise\ Induced\ Migration\ Will\ Reshape\ the\ U.S.\ Population\ Landscape"$ |
| 2008 | M.S.  | Demography          | Florida State University   |
|      |       | "The Decomposition  | of Period and Cohort Life Tables"  |
| 2007 | B.S.  | Sociology           | Florida State University   |
| 2007 | B.S.  | Social Sciences     | Florida State University   |
|      |       |                     |  |

### **Positions**

| 2018 -      | Assistant Professor, Department of Sociology       | Florida State University        |
|-------------|--|---------------------------------|
| 2013 - 2018 | Public Service Associate                           | CVIOG, University of Georgia    |
| 2011 - 2018 | Director, Data Science & Demographic Analysis Unit | CVIOG, University of Georgia    |
| 2009 - 2013 | Public Service Assistant                           | CVIOG, University of Georgia    |
| 2009 - 2009 | Survey Statistician                                | US Census Bureau, Atlanta       |
| 2008 - 2008 | Statistician                                       | US Census Bureau, Washington DC |

#### Honors and Awards

- 2017 Excellence in Research Award, University of Georgia Graduate School.
- 2016 Excalibur Award, Technology Association of Georgia.

Top Honors, Georgia Technology Authority.

Policy Communications Fellow, Population Reference Bureau.

2015 Top 30 Under 30 Young Alumni, Florida State University. Best Poster Award, South East Climate Consortium.

2014 E. Walter Terrie Award, Southern Demographic Association.

2013 Delta Epsilon Iota Honor Society.

#### **Publications**

- 9. Hardy, R. D., and **Hauer**, **M.** (2018). "Social vulnerability projections improve sea-level rise risk assessments." *Applied Geographer* 91: 10-20.
- 8. Schmertmann, C., and **Hauer**, **M.** (2018). "Bayesian estimation of total fertility from a population's age-sex structure." *Statistical Modelling* (Forthcoming). [Preprint]
- 7. **Hauer**, **M.** (2017). "Sea level rise induced migration could reshape the United States population landscape." *Nature Climate Change* 7(5): 321-325.
  - \* Featured in over 85 national and international news outlets.
  - \* The 287th most discussed article out of 250,000+ articles published in 2017 according to Altmetric.
- 6. Shannon, S. and **Hauer**, **M.** (2017). "A life table approach to estimating disproportionate minority contact in the juvenile justice system." *Justice Quarterly*.
- Shannon, J., Hauer, M., Shannon, S., and Weaver, A. (2017). "The Suburbanization of Food Insecurity: An Analysis of Projected Trends in the Atlanta Metropolitan Area." Professional Geographer.

- 4. **Hauer**, M., Evans, J., and Mishra, D. (2016). "Millions projected to be at risk from sea-level rise in the continental United States." *Nature Climate Change* 6(7): 691-695.
  - \* Winner of the 2014 E. Walter Terrie Award from the Southern Demographic Association.
  - \* Featured in over 270 national and international news outlets.
  - \* The 4th most discussed article published in Nature Climate Change in 2016 according to Altmetric.
  - $^{*}$  The 21st most discussed article published on Climate Science in 2016 according to Altmetric.
  - \* The 148th most discussed article out of 277,000+ articles published in 2016 according to Altmetric.
- 3. **Hauer**, M., Evans, J., and Alexander, C. (2015). "Sea-level rise and sub-county population projections in coastal Georgia." *Population and Environment* 37(1): 44-62.
- 2. **Hauer**, M., Baker, J., and Brown, W., (2013). "Indirect estimates of the total fertility rate using the child woman/ratio: A comparison with the Bogue-Palmore method." *PloS one* 8(6).
- 1. **Hauer, M.**, (2013). "A 3D spatio-temporal geovisualization of subcounty estimates of historic housing density in metro Atlanta, 1940-2009." *Spatial Demography* 1(2), 146-161.

## In Prep

- **Hauer, M.** & Santos, A. Climate change could reduce European life expectancy. Under review *Lancet Planetary Health* [Preprint]
- **Hauer, M.**, Mishra, D., Pippin, J.S., Hardy, D. No landward retreat: Confronting 80 years of sea level rise in Louisiana. Under review *Scientific Reports*.
- **Hauer, M.**, Holloway, S., Oda, T. Evacuees and migrants exhibit different migration systems after the Great East Japan Earthquake and Tsunami.
- **Hauer, M.** & Schmertmann, C. A scale and temporally independent, parameter-free method for estimating total fertility rates.

### Commissioned Reports

- 2016 **Hauer, M.**, and Hensley, E. A New Face of Georgia: An analysis of the state's population projections through 2050. *Governor's Office of Planning and Budget*.
- 2015 **Hauer**, M., Byars, J., Wilson, G., & Pizarek, M. Transfer Student Report: Demonstrating innovative ways to analyze student transfer data to answer policy questions. *Board of Regents of the University System of Georgia*.
  - **Hauer, M.**, Lynde, H., Byars, J., Wilson, G., Coyne, J., & Tanner D. First Time Freshman Report: USG market share and the Georgia high school to USG pipeline. *Board of Regents of the University System of Georgia*.
  - **Hauer, M.**, Lynde, H., Byars, J., Wilson, G., Coyne, J., & Tanner, D. Student progression report: Enrollment patterns that lead to graduation. *Board of Regents of the University System of Georgia*.
  - **Hauer, M.**, Lynde, H., Byars, J. Wilson, G., Coyne, J., & Tanner, D. University System of Georgia Student Group Profiles. *Board of Regents of the University System of Georgia*.
  - Shannon, J. and **Hauer**, M. Projections of food insecurity in the metro Atlanta area. *Atlanta Community Food Bank*.
- 2014 Evans, J., **Hauer**, M., Hardy, D., & Pippin, S. Assessing social vulnerability using SoVI-Lite: A demonstration study at Glynn County, GA. *Carl Vinson Institute of Government*.
  - Evans, J., Pippin, S., Hardy, D., & **Hauer**, **M.** Social vulnerability and local hazard mitigation planning: Application and evaluation of SoVI-Lite approach for Glynn County, Georgia. *Carl Vinson Institute of Government*.
  - **Hauer, M.**, A tale of two Georgias: Rural and urban demographic changes in Georgia. *Georgia Healthcare Foundation*.

- 2012 **Hauer, M.** and Vaida, G. Disproportionate minority contact assessment. *Governor's Office of Children and Families*.
- 2011 Tinsley, K. and **Hauer**, M. Atlama Community Transformation (ACT) district housing assessment. Glynn County, GA.
- 2010 Clarke, W., Brown, W., & **Hauer**, **M.** The motor use fuel tax in Georgia: Collection efficiency, trends, and projections. *MARTA*.
  - Clarke, W., Brown, W., **Hauer**, M., & Meyer, M. Metropolitan Atlanta Rapid Transit Authority revenue and expense forecast evaluation 2011-2016. *MARTA*.
- Hauer, M. Utilizing Census data for non-profits: A training manual for Girls, Inc. Girls, Inc.
- 2008 Simmons, M. and **Hauer**, M. An analysis and critique of Tallahassee and Leon County transportation funding by residential project size. *CNL Real Estate and Development Inc.*
- 2007 Simmons, M. and Hauer, M. Health and the built environment. Florida Legislature.

## Other

Hauer, M. Deviation of PAA President's Age, 1931-2018. PAA Affairs, 2017

### Grants

|            | Competitive Grants Awarded  | \$427473 |
|------------|---|----------|
| 2017 Co-I  | Forecast of the Timing, Locations, Sequence and Likeliest Destinations of     | \$0      |
|            | Populations Displaced by Sea Level Rise and Coastal Extremes. SESYNC          |          |
| 2016 Co-I  | Sustainability in Chesapeake Bay shorescapes: climate change, management      | \$175295 |
|            | decisions, and ecological functions. – NSF Coastal SEES. Total \$1,640,152    |          |
| 2012 Co-PI | Assessment and Application of the Social Vulnerability Index for Coastal      | \$67320  |
|            | Hazards Planning in Glynn County, GA.—#NA12NOS4190171, Georgia                |          |
|            | Department of Natural Resources from the Office of Ocean and Coastal          |          |
|            | Resource Management, National Oceanic and Atmospheric Administration          |          |
| Co-PI      | Understanding social attitudes and prioritizing geo-spatial risks for climate | \$126858 |
|            | adaptation outreach in coastal Georgia.— Georgia SEAGrant                     |          |
| 2011 PI    | Projecting Hispanic Economic Outcomes in Georgia, 2000-2030.— Poverty         | \$29 000 |
|            | and Economy Grants, University of Georgia                                     |          |
| PI         | The Production and Evaluation of Estimates of the Total Population Using      | \$29 000 |
|            | the Housing Unit Based Method.— US Census Bureau                              |          |

|   |      |    | Contracts Awarded  | \$1437722 |
|---|------|----|--|-----------|
| - | 2018 | PΙ | Georgia Governor's Office of Planning and Budget, Population Projections.    | \$120 519 |
| - | 2016 | PI | Georgia Gwinnett College Data Analysis Project, Georgia Gwinnett College.    | \$242349  |
|   |      | PI | Data Research, Analysis, and Modeling Project. Board of Regents of the Uni-  | \$394 304 |
|   |      |    | versity System of Georgia.   |           |
|   |      | PI | Population Projections for Coweta County and cities of Newnan and Seqoia.    | \$14550   |
|   |      |    | Coweta Water and Sewer Authority   |           |
| 4 | 2015 | PI | Extended Population Projections for Carroll County, GA. Georgia DNR.         | \$8550    |
|   |      | PI | Small Area Population Projections for the Bear Creek Reservoir in South Ful- | \$8550    |
|   |      |    | ton County. Law Offices of Andrea P. Gray                                    |           |
|   |      | PI | Community Needs Assessment. Tallatoona Community Action Partnership          | \$12400   |
|   |      | PI | Food Insecurity in 2020 for the Atlanta Food Bank Service Area. Atlanta      | \$2000    |
|   |      |    | Community Food Bank  |           |
|   |      |    |  |           |

|      | PΙ   | Population Projections for the State of Georgia, 2015-2050. Georgia Governor's  | \$100 000                |
|------|------|---|--------------------------|
| 2014 | ΡI   | Office of Planning and Budget<br>Enrollment Projections for the University System of Georgia 2014-2024. Board<br>of Regents of the University System of Georgia                                       | \$30 000                 |
|      | ΡI   | A Tale of Two Georgias: Rural and Urban Demographic Changes in Georgia.  Georgia Healthcare Foundation  | \$3 500                  |
|      | PΙ   | Demography and Higher Education MOOC. Board of Regents of the University System of Georgia  | \$3 500                  |
|      | ΡI   | University System of Georgia Data Analysis Demonstration Project. Board of Regents of the University System of Georgia  | \$296 000                |
|      |      | * Awarded Top Honors by the Georgia Technology Authority * Awarded the Excalibur Award by the Technology Association of Georgia   |                          |
|      | ΡI   | Population Estimates for the Atlanta Regional Commission. Atlanta Regional Commission   | \$10 000                 |
| 2013 | PΙ   | Small Area Population Projections for the Bear Creek Reservoir in South Fulton County. Law Offices of Tommy Craig   | \$8 500                  |
|      | PΙ   | · · · · · · · · · · · · · · · · · · ·   | \$2 500                  |
|      | PΙ   | Technical Assistance for Producing Population Projections. Etowah Water & Sewer Authority   | \$2 500                  |
|      | PΙ   | Enrollment Projections for the University System of Georgia 2013-2023. Board of Regents of the University System of Georgia   | \$25 000                 |
| 2012 | PΙ   | Enrollment Projections for the University System of Georgia 2012-2022. Board of Regents of the University System of Georgia   | \$25 000                 |
| 2011 | PΙ   | Enrollment Projections for Fayette County School System 2011-2021. Fayette County School System   | \$6 000                  |
|      | PΙ   | Population Projections for the State of Georgia, 2010-2030. Georgia Governor's Office of Planning and Budget  | \$50 000                 |
|      | PΙ   | Disproportionate Minority Contact in the Juvenile Justice System of Georgia.<br>Georgia Governor's Office of Children and Families  | \$62 000                 |
|      |      | Previous Grants Total   | \$10 000                 |
|      |      |   |                          |
|      | T. T | Under Review and In Prep  | \$6756825                |
| 2017 |      | Redefining the Spatio-Temporal Geographies of Sea Level Rise. NSF – GSS  I Developing top-down data driven models to predict population flows during crises. DOD Multi-University Research Initiative | \$506 825<br>\$6 250 000 |

# Teaching Experience

# University of Georgia

| Course Name                         | Course Number  | Semesters |  |  |
|-------------------------------------|----------------|-----------|--|--|
| Family Demography and Public Policy | HACE 4400/6400 | 1         |  |  |
| Training Sessions                   |                |           |  |  |
|                                     |                |           |  |  |

| Course Name                  | Organization                  | Times |
|------------------------------|-------------------------------|-------|
| Population for Public Policy | Georgia Municipal Association | 12    |

Population for Public Policy ACCG 9
Demography and Higher Education MOOC Georgia Board of Regents 1

### Selected Press Coverage

- 1. Chattanooga Times Free Press, "Georgia called the New California by demographics expert" (2011).
- 2. University of Georgia, "People Person: Demographer breaks down trends in state's population" (2012).
- 3. Bloomberg News, "Nonwhite US Births Become the Majority for First Time" (2012).
- 4. GeorgiaTrend, "Neely young: Shame on Us" (2013).
- 5. Georgia Municipal Association, "The Next Generation: GMA 2013 Annual Convention" (video, 2013).
- 6. Red & Black, "Paint the state purple: Race, age changing color of politics" (2014).
- 7. New York Times, "In Georgia, Politics Moves Past Just Black and White" (2014).
- 8. Columbus Ledger-Enquirer, "U.S. Census Bureau report: Poverty rate, median income rise slightly in Columbus metro area" (2014).
- 9. Columbus Ledger-Enquirer, "Tri-Cities' Hispanic population growing rapidly" (2014).
- 10. Huffington Post, "Economic Hard Times Slow US Diversity" (2014).
- 11. Huffington Post, "The Nuevo South: A Changing Landscape" (2014).
- 12. Macon Telegraph, "Hispanic population surging across Middle Georgia" (2014).
- 13. Pew Charitable Trusts, "Economy slows, but doesn't stop, diversity trend" (2014).
- 14. Atlanta Business Chronicle, "Housing rebound has people moving to Atlanta again" (2015).
- 15. Atlanta Business Chronicle, "INTERACTIVE MAP: ZIP code 30327 'epicenter' of Atlanta Affluence" (2015).
- 16. Charleston Post & Courier, "Researcher: Millions could be displaced by rising oceans by 2100" (2015).
- 17. Georgia Political Review, "Explaining Inequality in the Classic City" (2015).
- 18. Athens Banner Herald, "Students inflate Clarke poverty stats but it's still way high" (2016).
- 19. Atlanta Journal Constitution, "Metro Atlanta's population grows as residents seek jobs, amenities" (2016).
- 20. Atlanta Journal Constitution, "Metro Atlanta governments grapple with exiting executives" (2016).
- 21. Interview with WABE 90.1, On Closer Look (2016).
- 22. Millions projected to be at risk from sea-level rise in the continental United States Time Magazine, National Geographic, National Geographic (again), National Geographic (again still), The Guardian, The Guardian (again), New York Times, Forbes Magazine, Bloomberg News, USA Today, Popular Science, Daily Mail, Wired Magazine, Los Angeles Times, Huffington Post, Huffington Post (again), Newsweek, Newsweek (again), Brookings Institute, BBC, Christian Science Monitor, San Francisco Gate, Baltimore Sun, MSN, Gawker, Climate Central, Ars Technica, Vice Magazine, ZME Science, Triple Pundit, Climate News Network, Informs, Daily Telegraph (Australia), Business Insider, Science Daily, Phys.org, Phys.org (again), Boston Globe, Tampa Bay Times Live Science, World News SBS, Adelaide Now, Eureka! Alert, Chicago Tribune, New Orleans Times-Picayune, Daily Press, The Spec, Shanghai Daily, Yahoo News UK, Yahoo News India, Yahoo News, Yahoo News (again), Philly.com, Courier Mail, Herald Sun, Technology.org, Star Tribune, Manilla Bulletin, Economic Times, Times of India, Environmental Research Web, Straight Times, Morning Call, NT News, The Australian, Reason.com, Mic.com, The Week, Star Tribune, Homeland Security News Wire, Tech Times, AZO Clean Tech, HNGN, Sentinel Source, Irish Examiner, Spokesman-Review, Pittsburgh Post-Gazette, E Science News, AOL News,

News.com.au, Geelong Advertiser, Charlotte Observer, Sacramento Bee, Inside Climate News, Der Standard, Latest Nigerian News, CBS News, Seattle PI, Seattle PI, Seattle PI, Eco-Business, International Business Times, Fusion Net, NY Post, Yahoo Finance,

Radio NPR's Science Friday, KQED NPR Northern California, WNYC PRI NPR New York, Public Ratio International, BYU Radio

TV/Video NJ.com, Business Insider, CityLab

- 23. Sea level rise induced migration could reshape the United States population landscape Scientific American, USA Today, U.S. News and World Report, Bloomberg, Salon, Forbes, United Press International, MSN, Business Insider, Mashable, IFL Science, Anthropocene Magazine, Daily Mail, Upworthy, New Scientist, New Scientist, Vice Magazine, Science Blog, Yahoo News, Climate Central, Common Dreams, Houston Chronicle, Technology.org, ArsTechnica, Think Progress, Climate News Network, Clean Technica, Clean Technica, Atlanta Business Chronicle, Phys.org, News Wise, Breitbart, Nature World News, Voice of America, Homeland Security News, Daily News and Analysis, Strait Times, Indian Express, Reuters, Post Online, Digital Journal, Bullfax.com, Eureka! Alert, Popular Science, New Orleans Times-Picayune, Seattle PI, Star Tribune, Star Tribune, Raw Story, Huffington Post, Latest Nigerian News, Alternet, Environmental Research Web, Radio PRI Science Friday, WWNO NPR New Orleans, KUT NPR Austin, KUOW NPR Seattle, WUNC Chapel Hill, Yale Climate Connections
  - TV/Video WCTV Tallahassee, WPTV West Palm Beach
- 24. Atlanta Business Chronicle, "Lawmakers start search for solutions for ailing rural Georgia" (2017).
- 25. Atlanta Journal Constitution, "Georgia colleges exploring new ways to recruit students" (2017).
- 26. NPR Atlanta WABE 90.1, "Will Atlanta Draw Thousands Of Evacuees From Harvey?" (2017).
- 27. America Adapts Podcast, "The Great Climate Migration: A Podcast with Dr. Matt Hauer" (2017).
- 28. UGA Research Magazine, "The Rising Tide" (2017).
- 29. Accuweather, "Scientists project millions around the world will need to flee rising seas by 2100" (2017).
- 30. Gatehouse Media, "Patterns in the sand: Sea level rise forced earlier migrations" (2017).

### **Invited Presentations**

Brown University (Dec 2017), Florida State University (Dec 2017), University of Texas at San Antonio (Dec 2017), Florida State University (Oct 2017), NOAA (Jul 2017), Texas A&M University (Nov 2016), University of Georgia (Mar 2016), Board of Regents of the University System of Georgia (Jan 2016), University of Georgia (Feb 2016), College of William & Mary (Apr 2015), Florida State University (Sep 2013), Testimony at the Georgia Legislature (Jun 2012), Federal Reserve Bank of Atlanta (Feb 2012)

### Technical Committees and Professional Service

### Departmental/University Service

- 2016 Chair, University Search Committee, Carl Vinson Institute of Government.
- 2014 Member, University Search Committee, Department of Family and Consumer Sciences.
- 2013 *Member*, University Search Committee, Carl Vinson Institute of Government's Training Department.

# Ad Hoc Reviewer

## Journals

Demographic Research (2), Climatic Change (2), Population Research & Policy Review (2), Nature Climate Change (1), Mitigation and Adaptation Strategies for Global Change (1)

## Grants

Florida SeaGrant (1), National Science Foundation (1)