## Mathew E Hauer

## Curriculum Vitae

Address: Department of Sociology, Florida State University

Phone: (706) 542-9369 Email: mehauer@fsu.edu Homepage: mathewhauer.com

June 2020 Google Scholar: Profile

#### **EDUCATION**

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
2018 -	Research Affiliate, Center for Demography and Pop. Health	Florida State University
2013 - 2018	Public Service Associate	CVIOG, University of Georgia
2011 - 2018	Director, Applied Demography Program	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

- 2018 E. Walter Terrie Award, Southern Demographic Association.
- 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**

- 20. Landon, CM, Lyles RH, Scrovronick, NC, Abadi, AM, Bilotta R, Hauer, M., Bell, JE, Gribble, MO. (2020). "Mixed-effects negative binomial regression with interval censoring: a simulation study and application to aridity and all-cause mortality among black South Africans over 1997-2013." Forthcoming in Springer Statistics and Biostatistics.
- 19. **Hauer M.** & Santos A. (2020). "Inaction on climate change projected to reduce European life expectancy." Forthcoming in Population Research and Policy Review [Preprint]
- 18. Keenan, J. M. & **Hauer**, **M.**. (2020). "Resilience for whom? Demographic change and the redevelopment of the built environment in Puerto Rico." *Environmental Research Letters*.
- 17. **Hauer**, M., Holloway, S., & Oda, T. (2020). "Evacuees and Migrants Exhibit Different Migration Systems after the Great East Japan Earthquake and Tsunami." *Demography*.

<sup>\*</sup>Student or Post-Doc.

- 16. **Hauer, M.** & Schmertmann, C. (2020). "Population pyramids yield accurate estimates of total fertility rates." *Demography* 57: 221-241.
- 15. **Hauer M.**, Fussell B., Burkett M., Call M.\*, Abel K.\*, Mueller V., McLeman R., Wrathall D. (2019). "Sea Level Rise and Human Migration." *Nature Reviews Earth & Environment* 1-12.
- 14. Wrathall D., Mueller V., Clark P., Oppenheimer M., **Hauer M.**, et al. (2019). "Meeting the looming challenge of future migration from global sea level change." *Nature Climate Change* 9(12): 898-901.
- 13. **Hauer, M.**, Byars J\*. (2019). "IRS County-to-County Migration Data, 1990-2010." Demographic Research 40: 1153-1166.
- 12. **Hauer**, M. (2019). "Population projections for US counties by age, sex, and race controlled to shared socioeconomic pathway." *Scientific Data* 6.
  - \* Winner of the 2018 E. Walter Terrie Award from the Southern Demographic Association.
- 11. **Hauer**, M. (2019). "Sociology, Demography, and Economics Presidential Ages and Sex over Time." *Socius* 5.
- 10. **Hauer, M.**, Hardy, R.D.\*, Mishra, D., and Pippin, J.S. (2019). "No landward movement: examining 80 years of population migration and shoreline change in Louisiana." *Population and Environment* 40(4): 369-387.
- 9. Schmertmann, C., and **Hauer**, **M.** (2018). "Bayesian estimation of total fertility from a population's age-sex structure." *Statistical Modelling* 19(3): 225-247.
- 8. Hardy, R. D.\*, and **Hauer**, **M.** (2018). "Social vulnerability projections improve sea-level rise risk assessments." *Applied Geographer* 91: 10-20.
- 7. Shannon, S. and **Hauer**, **M.** (2018). "A life table approach to estimating disproportionate minority contact in the juvenile justice system." *Justice Quarterly* 35(2): 330-355.
- Shannon, J., Hauer, M., Shannon, S., and Weaver, A. (2018). "The Suburbanization of Food Insecurity: An Analysis of Projected Trends in the Atlanta Metropolitan Area." *Professional Geographer* 70(1): 84-93.
- 5. **Hauer**, M. (2017). "Migration induced by sea-level rise could reshape the United States population landscape." *Nature Climate Change* 7(5): 321-325.
  - \* Featured in over 85 national and international news outlets.
  - \* The 238th most discussed article out of 250,000+ articles published in 2017 according to Altmetric.
- 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 126th 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.

### **Under Review**

- **Hauer M.**, Saunders, R.K., & Shtob, D. "The Path of Least Resistance Projections of Social Inequalities as a Result of Climate Change in the United States." [Preprint].
- **Hauer M.**, Hardy, R.D., Kulp, S., Mueller, V., Wrathall, D., Clark, P.U., Oppenheimer, M.O. "A framework for classifying and assessing sea level rise risk." [Preprint]
- Bell, A., Wrathall, D., Mueller, V., Chen, J., Oppenheimer, M., Hauer, M., Adams, H., Kulp, S., Clark, P., Fussell, E., Magliocca, N., Xiao, T., Gilmore, E., Abel, K., Call, M., Slangen, A. "Simulated migrants move toward vulnerable coastlines in Bangladesh under all sea-level change scenarios through 2100."

### In Prep

Hauer M. & Bohon, S. "Effects without a Cause: The Search for Demographic Anomalies."

## 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	\$767473
I Impassable During High Water: Sea Level Rise, Commuting, and Climate	\$300 000
Gentrification. NSF	
Projecting the Sociodemographic Characteristics of those Impacted by Sea	\$20 000
Level Rise in the United States. FSU FYAP	
Demographic Modelling of Puerto Rico. Harvard/RAND	\$20 000
Forecast of the Timing, Locations, Sequence and Likeliest Destinations of	\$0
Populations Displaced by Sea Level Rise and Coastal Extremes. SESYNC	
Sustainability in Chesapeake Bay shorescapes: climate change, management	\$175295
decisions, and ecological functions. – NSF Coastal SEES. Total \$1,640,152	
I 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	
I Understanding social attitudes and prioritizing geo-spatial risks for climate	\$126858
adaptation outreach in coastal Georgia.— Georgia SEAGrant	
Projecting Hispanic Economic Outcomes in Georgia, 2000-2030.— Poverty	\$29 000
and Economy Grants, University of Georgia	
The Production and Evaluation of Estimates of the Total Population Using	\$29 000
the Housing Unit Based Method.— US Census Bureau	
<b>O</b>	PI Impassable During High Water: Sea Level Rise, Commuting, and Climate Gentrification. NSF Projecting the Sociodemographic Characteristics of those Impacted by Sea Level Rise in the United States. FSU FYAP Demographic Modelling of Puerto Rico. Harvard/RAND Forecast of the Timing, Locations, Sequence and Likeliest Destinations of Populations Displaced by Sea Level Rise and Coastal Extremes. SESYNC Sustainability in Chesapeake Bay shorescapes: climate change, management decisions, and ecological functions. – NSF Coastal SEES. Total \$1,640,152 PI Assessment and Application of the Social Vulnerability Index for Coastal 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 Understanding social attitudes and prioritizing geo-spatial risks for climate adaptation outreach in coastal Georgia.– Georgia SEAGrant Projecting Hispanic Economic Outcomes in Georgia, 2000-2030.– Poverty and Economy Grants, University of Georgia The Production and Evaluation of Estimates of the Total Population Using

		Contracts Awarded	\$1474722
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	\$394 304
		University System of Georgia.	
	PI	Population Projections for Coweta County and cities of Newnan and Seqoia.	\$14550
		Coweta Water and Sewer Authority	
2015	PI	Extended Population Projections for Carroll County, GA. Georgia DNR.	\$8550
	PI	Small Area Population Projections for the Bear Creek Reservoir in South	\$8550
		Fulton 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	\$2 000
		Community Food Bank	
	PI	Population Projections for the State of Georgia, 2015-2050. Georgia Governor's	\$100 000
		Office of Planning and Budget	

- 2014 PI Enrollment Projections for the University System of Georgia 2014-2024. Board \$30 000 of Regents of the University System of Georgia
  - PI University System of Georgia Data Analysis Demonstration Project. Board of \$296 000 Regents of the University System of Georgia
    - \* Awarded Top Honors by the Georgia Technology Authority
    - \* Awarded the Excalibur Award by the Technology Association of Georgia

Previous Grants Total \$245 500

## TEACHING EXPERIENCE

Spring 2020	Climate and Society	SYA 4930
Spring 2020	Climate and Society	SYA 4930
Fall 2019	Population and Society	SYD 3020
Fall 2018	Population Data	SYD 5133
Spring 2014	Family Demography and Public Policy	HACE 4400/6400

#### INVITED PRESENTATIONS

University of South Florida (Mar 2020), University of Pennsylvania (Feb 2020), University of Wisconsin-Madison (Oct 2019), Florida State University (Oct 2019), Drexel University (Sept 2019), Penn State University (May 2019), Environmental Grantmakers Alliance (Sept 2018), Rutgers University (Sept 2018, declined), University of Florida (Feb 2018, declined), 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)

### Membership in Associations

Member, Population Association of America

Member, Committee on Applied Demography

Member, American Association of Geographers

Member, Southern Demographic Association

Member, Southeastern Division of the American Association of Geographers

## TECHNICAL COMMITTEES AND PROFESSIONAL SERVICE

Member, Government and Political Affairs Committee, Population Association of America.

## 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.

#### SELECTED PRESS COVERAGE

- 2019 New York Times, Public Source, Denton Record-Chronicle, National Mortgage News, Fast Company, My San Antonio, Finance and Commerce, New Haven Register, Accuweather, WUFT. Coastal Review
- 2018 Rolling Stone Magazine, <u>The Guardian</u>, <u>National Geographic</u>, <u>The Sun Sentinel</u>, <u>Climate Central</u>, <u>Tucson Online</u>, <u>Orlando Sentinel</u>, <u>Green Matters</u>
- Atlanta Business Chronicle, Atlanta Journal Constitution, UGA Research Magazine,
  Accuweather, Gatehouse Media, 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, <u>WWNO NPR New Orleans</u>, <u>KUT NPR Austin</u>, <u>KUOW NPR Seattle</u>, <u>WUNC Chapel Hill</u>, <u>Yale Climate Connections</u>, <u>America Adapts Podcast</u>, <u>NPR Atlanta WABE 90.1</u>

TV/Video WCTV Tallahassee, WPTV West Palm Beach

2016 Athens Banner Herald, Atlanta Journal Constitution, Atlanta Journal Constitution (again), Interview with WABE 90.1, On Closer Look, 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

- 2015 <u>Atlanta Business Chronicle</u>, <u>Atlanta Business Chronicle</u>, <u>Charleston Post & Courier</u>, Georgia Political Review.
- 2014 Red & Black, New York Times, Columbus Ledger-Enquirer, Columbus Ledger-Enquirer (again), Huffington Post, Huffington Post (again), Macon Telegraph, Pew Charitable Trust.

- ${\bf 2013~Georgia\,Trend,\,Georgia~Municipal~Association}.$
- 2012 University of Georgia, Bloomberg News.
- 2011 Chattanooga Times Free Press.