

## Katherine (Kate) Norris

Geospatial Data Manager & Assistant Scholar

GEOPLAN CENTER

University of Florida | Department of Urban and Regional Planning

131 Architecture Building | PO Box 115706 | Gainesville, FL 32611-5706

Office 352-392-0159 | Fax 352-392-3308 | katen@geoplan.ufl.edu

[GeoPlan](#) | [FGDL](#) | [MGRS-Data](#) | [LinkedIn](#)

## Education

**Bachelor of Science**, University of Florida, Gainesville, Florida, December 2000

Double Major in Botany and Zoology

**Master of Arts in Urban and Regional Planning**, University of Florida, Gainesville, Florida, April 2005

**IGIS Certification (Interdisciplinary Concentration in Geographic Information Systems)**, University of Florida, Gainesville, Florida, April 2005

## Summary of Qualifications:

I have been working in the field of Geographic Information System (GIS) for over 18 years. From this daily hands-on experience, I have gained a vast knowledge and expertise in the practical and theoretical capabilities of GIS, and of the intricacy and functionality of the software used. I have a strong background in GIS data availability, history and best practice use both at the State of Florida and National level.

## Specializations/ Software/ Etc:

ESRI Desktop Platform: ArcGIS (ArcMap, ArcCatalog, and Extensions)

ESRI ArcSDE, ArcIMS, and ArcGIS Online

ERDAS IMAGINE

Python, VBA, XML, XSLT Programming/Scripting Languages

X-tools Pro, Hawth's Tools, and Maplex

Website administration and maintenance

Oracle SQL Developer

Trimble GPS Certification

## Teaching Experience

**Lead Instructor (January 2017-present), University of Florida, College of Design, Construction and Planning, Department of Urban and Regional Planning.** Responsible for Graduate Level Class Development, Digital Media Content Creation and Online Class Instruction for new course: URP 6275, Intermediate Planning Information Systems [Intermediate Geographic Information System (GIS)].

**Lead Instructor (Summer B 2018), University of Florida, College of Design, Construction and Planning, Sustainability And The Built Environment (Major).** Responsible for Undergraduate Level Class Development, Digital Media Content Creation and Online Class Instruction for new course: DCP 4930, Intermediate Geographic Information Systems (GIS).

## Work Experience

**Assistant Scholar, Faculty (August 2016-present), University of Florida, College of Design, Construction and Planning, Department of Urban and Regional Planning.** Responsible for Geospatial Data Management and Funded Research Projects with the University of Florida GeoPlan Center.

**GIS Data Manager (August 2006-present), Efficient Transportation Decision Making (ETDM) Project, University of Florida GeoPlan Center/ Florida Department of Transportation.** Responsible for Research and Daily QAQC workflows of GIS data used in FDOT's ETDM process. The ETDM process provides governmental and nonprofit agencies and the public with access to FDOT project plans and information about potential impacts on natural and manmade resources.

**Project Manager (2011-present), MGRS-Data.org, University of Florida GeoPlan Center.** Create and Manage GIS database(s) of worldwide MGRS Grid Polygons at varying scales and extents. Provide technical assistance/support to scientific researchers using data from <http://MGRS-Data.org>

**GIS Data Manager (December 2013-present), US Department of Transportation, Federal Highways Administration (FHWA), Noise Barriers Inventory Submission, University of Florida GeoPlan Center, Contractor for Florida Department of Transportation (FDOT).** Coordinated with Mariano Berrios, 7 FDOT Districts, and the Florida Turnpike to collect, create, standardize, and manage Noise Barrier data for the Bi-Annual FHWA Noise Barrier Inventory Submission.

**Co-Principal Investigator (January 2019- April 2020), Updating the Florida Sea Level Scenario Sketch Planning Tool, University of Florida GeoPlan Center, Contractor for the Florida Department of Transportation, Office of Policy Planning.** Enhancement and maintenance of GIS tool for assessing transportation facilities at risk to the effects of sea level rise. Provide technical assistance and outreach to entities employing the Sketch Tool in their planning processes. (\$80,000)

**GIS Data Manager (September 2018) U.S. Department of Homeland Security (DHS), Fire Station Data Creation & Standardization, University of Florida GeoPlan Center, Data Provider for U.S. Department of Homeland Security's Homeland Infrastructure Foundation-Level Data (HIFLD) Open Data Platform.** Coordinated with Jeff Snow, Subject Matter Expert and Collection Manager for Programs and Technology under the International Association of Fire Chiefs to create, standardize, manage and submit Fire Station data for use by DHS and the general public. <https://hifld-geoplatform.opendata.arcgis.com/>

**Lead Researcher for Gainesville, FL (August 2018 - September 2018), United Nations Human Settlements Programme, Urban Legislation Unit of UN-Habitat, Planning Law Survey For The UN Global Sample Of Cities Project.** Responsible for Research and Data Collection, for a set if information on the City of Gainesville's development control regulation, population growth estimates, and development control regulatory bodies. The Urban Legislation Unit of UN-Habitat is conducting an objective, evidence-based planning law survey on the impact territorial planning systems have on sustainable urbanization. This study will be part of an update to the Atlas of Urban Expansion, which characterizes growth of cities and metropolitan regions around the world, utilizing a pre-selected global sample of 200 cities. The Legislation Unit has developed a questionnaire, consisting of 17 questions, to facilitate the data collection process in three thematic areas: a) Urban Areas; b) Urban Plans and Public Space; and c) Institutional Capacity. The data gathered from this research will assist us to catalogue the strengths and weaknesses of regional planning systems which will be critical, if UN-Habitat is to effectively implement the New Urban Agenda and the 17 Sustainable Development Goals (SDGs) in particular SDG 11. <http://www.atlasofurbanexpansion.org/cities>

**Co-Principal Investigator (2015-2017), Updating the Florida Sea Level Scenario Sketch Planning Tool, University of Florida GeoPlan Center, Contractor for the Florida Department of Transportation, Office of Policy Planning.** Enhancement and maintenance of GIS tool for assessing transportation facilities at risk to the effects of sea level rise. Provide technical assistance and outreach to entities employing the Sketch Tool in their planning processes.

**Lead Researcher for Gainesville, FL (May 2017 - Jul 2017), United Nations Human Settlements Programme, UN-Habitat Global Municipal Database (GMD) Project.** Responsible for Research and Data Collection, for a set of information on the City of Gainesville's budget, the city's responsibilities and an official population estimate. The GMD is a database of 200 cities containing internationally comparable data on local government budgets and responsibilities. This data provides participating cities the ability to benchmark basic financial information against global comparators. The GMD covers the same cities as the Atlas of Urban Expansion, providing an opportunity to integrate spatial data from the Atlas with financial data from the GMD. The work on the global municipal fiscal database will be led by Lourdes Germán, from the Lincoln Institute of Land Policy, Cambridge, MA. <https://unhabitat.org/un-habitat-and-lincoln-institute-pilot-a-global-municipal-database-for-sustainable-urbanization/>

**GIS Data Manager (January 2017), U.S. Department of Homeland Security, Office of Intelligence and Analysis, MGRS Data Creation & Standardization, University of Florida GeoPlan Center, Data Provider for U.S. Department of Homeland Security (DHS).** Coordinated with Jason Reyes, DHS Collection Manager (CM), DHS Departmental Requirements Office (DRO) to create, standardize, manage, and submit MGRS data for the use by FEMA and other DHS offices.

**Independent Researcher (October 2015 - March 2016), NYU Stern Urbanization Project, The Land and Housing Survey in the Global Sample of Cities.** Responsible for Research, Data Management, Coordination, and Completion of the Regulatory and Affordability surveys of the Land and Housing Survey in a Global Sample of Cities for Gainesville, FL (USA). These two surveys have been taken in 200 cities and metropolitan areas, the Regulatory Regime Governing Land and Housing Survey seeks to capture land ownership patterns, land-use planning, and development of new subdivisions in expansion areas of cities. The Affordability Survey seeks to record the costs as well as the key attributes of different types of residential plots, houses, and apartments available for sale or rent in those cities. Project Initiated and Conducted by The NYU Urban Expansion Program In Partnership with: The United Nations Human Settlements Programme (UN-Habitat), and The Lincoln Institute of Land Policy. <http://urbanizationproject.org/> & <http://globalmunicipaldatabase.unhabitat.org/about>

**GIS Data Manager (June 2011), National Geospatial-Intelligence Agency (NGA), MGRS Data Creation & Standardization, University of Florida GeoPlan Center, Data Provider for U.S. NGA.** Coordinated with Brian Akers N NGA-SNAC USA CIV, NGA Geospatial Analyst, to create, standardize, manage, and submit MGRS data for use by NGA offices.

**GIS Data Manager (September 2011- February 2012), Regional E911 Mapping Support for Enhanced 911 Act Grant, University of Florida GeoPlan Center, Contractor for Florida Department of Management Services.** Collected and managed pilot project GIS data for the Enhanced 911 Act Grant regional E911 GIS database.

**GIS Data Manager (August 2010-August 2012), GIS Data Support for State Broadband Initiative Program, University of Florida GeoPlan Center, Contractor for Florida Department of Management Services.** Collected and managed GIS database of Florida community anchor institution locations with associated broadband network data for use in the National Broadband Map. Work done as part of the National Telecommunications and Information Administration Recovery Act and Broadband Data & Development Act Grant.

**GIS Analyst (January 2008-January 2009), University of Florida GeoPlan Center/ Florida Department of Environmental Protection, Office of Greenways & Trails.** GIS Analyst for Update and Prioritization of the Recreational Trail Opportunity Maps.

**Florida Geographic Data Library Data Manager (January 2006-present), University of Florida GeoPlan Center.** Creation, collection, maintenance, standardization, and QA/QC of spatial databases and their metadata for online distribution.

**GeoPlan Center Graduate Student Research Manager (January 2006-present), University of Florida GeoPlan Center.** Organize, coordinate, track, review, and technically mentored graduate student work.

**GIS Consultant (June 2006 - July 2007) ArcGIS Server Geocoding Issue Diagnostic Support for a New York City Multi-modal Transportation Routing Site** <http://www.publicroutes.com>, GIS Associates, Inc., Subcontractor for Benton Yetman, Penobscot Bay Media, LLC. Using the Geocoding Developer's Kit Tools applied techniques to manipulate the default Geocoding files (.stn, .dct, .cls, .pat and .mat) so to allow the ArcGIS Server Geocoding Engine to preform nonstandard address location matching.

**Senior GIS Specialist (January 2005-present), University of Florida GeoPlan Center/ Lead GIS Analyst for data format/structure of Sociocultural Effects Evaluation data for ETDM.** Created standardized statewide SCE data layers for use in ETDM, through coordination with 67-counties, and other state and local agencies. Created standardized statewide Parcel data and derived layers for use in ETDM via coordination with 67 counties, and FDOR. Geocoding Specialist; Creation, standardization, and preparation of countrywide and statewide street layers for use in Geocoding environments and the development of different Geocoding locators to support GIS data creation.

**GIS Analyst (December 2003-December 2004), University of Florida GeoPlan Center/ Florida Department of Environmental Protection, Office of Greenways & Trails.** GIS Analyst for Update and Prioritization of the Recreational Trail Opportunity Maps.

**Imagery/ Photogrammetry Analyst (February 2001-December 2003), University of Florida GeoPlan Center/ Florida Department of Transportation.** Conversion of hardcopy aerial photographs to digital format and image rectification. QAQC of satellite imagery and performed color correction. UF Teaching Assistant for a graduate Imagery class (2 semesters).

## **Relevant Publications, Technical Reports, and Presented Papers:**

### **Conferences:**

ESRI User Conference Student Assistant, 2002

Kate Norris, Map Gallery Presenter, Flagler County Future Land Use Plan Maps, University of Florida, ESRI International User Conference Proceedings, July 2003.

### **Technical Papers/Reports, Author:**

Kate Norris, Federal Geographic Data Committee Compliant Metadata for 40+ Statewide Sociocultural Effects Evaluation datasets available on [www.FGDL.org](http://www.FGDL.org). These metadata documents provide technical assistance/support to researchers using the freely available data. Between the years 2012-2017 this data has been downloaded more than 8,000 times. The majority of the datasets are prefixed with, GC\_, PAR\_, D\*\_LU\_GEN and YB\_.

For Example, School Facilities (Public and Private) in Florida - 2017

[https://www.fgdl.org/metadata/fgdc\\_html/gc\\_schools\\_sep17.fgdc.htm](https://www.fgdl.org/metadata/fgdc_html/gc_schools_sep17.fgdc.htm)

Crystal Goodison, Kate Norris, Alexis Thomas  
2008 Update and Prioritization of the Recreational Trail Opportunity Maps for the State of Florida, University of Florida GeoPlan Center, December 2008

Katherine Norris

Mapping the Radon Potential of Alachua County Florida, an Application of Geostatistical Analysis and Geographic Information Systems Techniques, University of Florida, 2005

Lila Schaller, Kate Norris, Tom Hctor, Alexis Thomas, Margaret H. Carr  
A Report on Tasks Completed for the Florida Office of Greenways and Trails 2003-2004 Including Updates for and Prioritization of Recreational Trail Opportunities, Updates of Ecological Opportunities, & Critical Ecological Linkages Implementation Activities, University of Florida GeoPlan Center, June 2004

**Technical Papers/Reports, Acknowledged GIS Researcher/Technical Support Provider:**

Liz Paterson Gauntner, Marco Kamiya, Ananda Weliwita, Lennart Fleck, Hazel Kuria & John Muriithi  
Global Municipal Database Metadata, and Methods and Initial Results  
Urban Economy & Finance Branch, UN-Habitat, September 1st, 2018  
[http://globalmunicipaldatabase.unhabitat.org/sites/default/files/2018-09/Global%20Municipal%20Database%20Metadata%20and%20Methods%20revised%20130818\\_0.pdf](http://globalmunicipaldatabase.unhabitat.org/sites/default/files/2018-09/Global%20Municipal%20Database%20Metadata%20and%20Methods%20revised%20130818_0.pdf)

Crystal Goodison, Alexis Guillaume Thomas, & Sam Palmer  
The Florida Geographic Data Library: Lessons Learned and Workflows for Geospatial Data Management  
Journal of Map & Geography Libraries: Advances in Geospatial Information, Collections & Archives,  
Special Issue: Geospatial Data Management, Curation, and Preservation - Part 3, Vol 12, Issue 1, 2016

W. Cory Swales  
Identification of Critical Facilities along the Coast of Louisiana Using Geographic Information Systems for Emergency Management Planning, University of Florida, 2003

Stanley Latimer, Alexis Thomas, Peter McGilvray  
Mobile GIS Data Collection/Update Application to Support Efficient Transportation Decision Making,  
University of Florida GeoPlan Center, ESRI International User Conference Proceedings, July 2005

Lila M. Schaller  
Web-Based GIS to Enhance the Design of a Statewide Trails Network as Part of Florida's Greenways and Trails System, University of Florida, 2005  
Eloise Francesca Aka  
Identifying the Effects of Energy Efficient Houses on Energy Consumption, University of Florida, 2009

M. Convertino, G.A. Kiker, R. Munoz-Carpena, M.L. Chu-Agor, R.A. Fischer, I. Linkov  
Scale and Resolution-Invariance of Suitable Geographic Range for Shorebird Metapopulations,  
Article in Ecological Complexity, December 2011

Grady T. Carrick  
The Impacts of Police Traffic Stops on Freeway Operations and Capacity, University Of Florida, 2012

**Technical Papers/Reports, Acknowledged MGRS GIS Data Provider:**

Standard Sampling Grids for Avian Monitoring Programs - July 2013  
Recommendations to US-NABCI from the US-NABCI Monitoring Subcommittee  
[https://www.researchgate.net/publication/259220856\\_Standard\\_Sampling\\_Grids\\_for\\_Avian\\_Monitoring\\_Programs](https://www.researchgate.net/publication/259220856_Standard_Sampling_Grids_for_Avian_Monitoring_Programs)

Josée Rousseau, John Alexander  
An Approach for Bird Monitoring Sampling Design Using the MGRS Grid, March 20th 2014

Southeast Bird Monitoring Protocols and Programs  
Sampling Grids > Military Grid Reference System  
<http://semonitoringguide.sepif.org/sampling-grids/military-grid-reference-system>

U.S. National Grid Information Center  
Links to data sources: <http://usngcenter.org/portfolio-item/usng-gis-data/>

International Cartographic Association (ICA), eCARTO News June 2016  
Map Design & Use: A Library of MGRS Data and Information - mgrs-data.org  
<http://icaci.org/ecarto-news-june-2016/>

## Presentations and Lectures

Geocoding Tools and Techniques for Address Matching of Voter and Election Data, February 7th, 2019. Workshop held at the University of Florida's Informatics Center for UF Political Science faculty and students. Organized and presented material for a two-hour workshop.

Geocoding Tools and Techniques for Address Matching of Voter and Election Data, April 13th, 2017. Workshop held at the University of Florida's Informatics Center for UF Political Science faculty and students. Organized and presented material for a two-hour workshop.

## Professional Society Membership

- Florida Chapter of URISA Member (March 2018-present)
  - <http://www.flurisa.org/index.php>
  - URISA is a multi-disciplinary geospatial organization that provides professional education and training, a vibrant and connected community, advocacy for geospatial challenges and issues, and essential resources. URISA fosters excellence in GIS and engages geospatial professionals throughout their careers.
    - Source: <https://www.urisa.org/about-us/our-story/>
- Society for Conservation GIS (SCGIS) Member (August 2018-present)
  - The Society for Conservation GIS (SCGIS) is a non-profit organization that assists conservationists worldwide in using GIS through communication, networking, scholarships, and training.
    - Source: <https://www.scgis.org/content/about/about-scgis>

## Honors and Awards

- Florida Academic Scholarship Award (1996-00) (Now known as "Bright Futures")
- Graduate Research Assistantship (2001-04), GeoPlan Center UF
- WRS Infrastructure and Environment in Memoriam of Mario Ripol Graduate Scholarship Award (2002), Urban & Regional Planning
- AICP Outstanding Student Award (2003), Urban & Regional Planning
- ESRI Special Achievement in GIS (SAG) (2008) awarded to the GeoPlan Center
- Exemplary Human Environment Initiatives and Exemplary Ecosystem Initiatives - Federal Highway Administration, USDOT (2008) awarded to the GeoPlan Center
- UF Exemplary Online Awards 2019 Winner: URP6275 Intermediate Planning Information Systems
  - Selected to receive an Exemplary Online Award in recognition of the overall excellence of the course and quality course materials.
  - <http://teach.ufl.edu/awards/exemplary-awards/>

## Volunteer Work/ Community Service

- City of Gainesville Development Review Board, Secretary (2012-14) & Member (2009-14)
- Gainesville Regional Soccer League, Head of Women's League (2007-12) & Member (2005-12)
- Mapping Poverty in Alachua County, GIS Contributor (2009)
- Architecture College Council (ACC), Vice President (2002-03) & Member (2000-05)
- Student Planning Association (SPA), President (2002-03) & Member (2000-05)
- University of Florida's Women's Ice Hockey Club Team, Captain (1996-00) & Member (1996-00)