



**Thomas Dudley**  
Research Associate  
North Carolina State University  
Centennial Campus, Box 8601  
Raleigh, NC 27695-8601  
919/515-7931 Fax 919/515-8898  
Email: tedudley@ncsu.edu

## EDUCATION

- **North Carolina State University, Raleigh, NC**  
MA in Economics: May 2012  
Graduate Minor in Geographic Information Systems (GIS)
- **North Carolina State University, Raleigh, NC**  
BS in Economics: May 2009

## WORK EXPERIENCE

- **OR/Ed. Laboratory- Institute for Transportation Research and Education**  
*Research Associate*, June 2013 -  
Assists the development of long-range planning solutions for public school districts by integrating and analyzing regional data, demographic forecasts, GIS data, land use surveys, and other data. Identifies and implements new analytical approaches, develops optimization scenarios, and presents findings to policy makers and the public.
- **Cardno-Entrix**  
*Staff Economist*, August 2012 - February 2013  
*Junior Economist*, June 2012 - August 2012  
Provided economic analysis for BP following the Deepwater Horizon oil spill in the Gulf of Mexico. Primary responsibilities included economic and geospatial modeling, statistical programming, and report creation.
- **North Carolina Department of Health and Human Services**  
*Evaluation Consultant*, March 2012 - August 2012  
Evaluated the cost effectiveness of a federally funded smoke alarm giveaway and installation program using ArcGIS. Co-authored a peer reviewed publication describing the evaluation approach and results. Other duties included conducting a GIS lecture series for DPH epidemiologists and fulfilling ad hoc mapping requests.
- **North Carolina Solar Center, North Carolina State University**  
*Renewable Energy Intern*, August 2011 - March 2012  
Conducted an economic feasibility study for biofuels in the North Carolina Piedmont. Developed business models to estimate how changes in production input prices and subsidies affect ethanol profitability. Potential feedstock location, estimated yields, soil suitability, transportation costs, and refining costs were also incorporated.

## PROGRAMMING AND SOFTWARE

- Statistical programming (Data management, data cleaning, regression analysis):
  - SAS (Base SAS programming certification)
  - STATA (2+ Years)
  - R (1 Year, including spatial analysis)
- Geospatial modeling (Workflow automation, geocoding, terrain modeling, spatial prediction)
  - ArcGIS 9.3 and 10 (3+ Years)
  - GRASS Open Source GIS (2+ Years)
  - Python scripting (2+ Years)