

DIVERSITY FELLOWSHIP *MINNESOTA POPULATION CENTER*

Summer 2016 – Projects

Terra Populus (terrapop.org):

TerraPop is creating an integrated database of global population and environmental data.

Outreach and Development: We are rolling out a new user interface that allows researchers to construct customized datasets integrating population and environmental data. Fellows worked on developing outreach materials to promote the new tools and educate users, including video tutorials, written instructions, webinars, classroom activities, and other promotional materials.

Information Technology (<u>tech.popdata.org</u>):

The MPC IT core builds all of the systems required to produce and disseminate more than a dozen data infrastructure projects.

Convert NHGIS and IPUMS from MySQL to PostgreSQL: TerraPop has adopted PostgreSQL as its database platform. In an effort to reduce duplication across the core and allow for easier inter-project operability, we are converting IPUMS and NHGIS to MySQL. This required students to audit each project's current codebase to understand use of the database in general and MySQL-specific features in particular, and develop and execute a plan to convert to PostgreSQL.

Race in America (<u>Liebler Profile</u>):

Professor Carolyn Liebler studies race and racial identity in the United States. She is particularly interested in the translation of individuals' racial identities into their answers to standardized questions about race, as well as the ways in which these answers are grouped to form the statistics used by social scientists.

Analyzing race in the 2010 Census: Fellows worked with Professor Liebler to analyze the racial composition of household in the 2010 U.S. Census. Fellows gained valuable research experience working with large datasets provided by IPUMS in STATA. Fellows developed a research question and are determining if the data supports the hypothesis.

IPUMS-International (international.ipums.org):

IPUMS-International is collecting and disseminating census microdata from around the world; users can access data from 277 censuses representing 82 countries.

Spatial analysis: We recently released primary- and secondary-level geography information that is consistent over time for several countries. Fellows worked with statistical software (SPSS, Stata, or SAS) and GIS to assist in multiscale analysis of migration variables using IPUMS International data.

Constructed socio-economic index variables: We are developing new variables constructed from information in the census samples. Examples include a household asset index based on household characteristics and holdings and a socio-economic status index based on individual-level occupation and educational information. Fellows participated in the development, analysis and evaluation of these new variables.

