



**2017-2018 Academic Year  
Office of Science and Technology  
Placement ID: GSCM**

**Topic Area:** Geospatial and Crime Mapping

**Program Overview:** NIJ's geospatial program supports research that helps agencies use GIS to enhance public safety. To learn more about the geospatial and crime mapping programs visit

<http://www.nij.gov/topics/technology/maps/pages/welcome.aspx>. The program examines:

- How to use maps to analyze crime
- How to analyze spatial data
- How maps can help researchers evaluate programs and policies
- How to develop mapping, data sharing, and spatial analysis tools

**Research assistant project task responsibilities will include but are not limited to:**

- Exploring index measures for effectiveness and efficiency of place-based algorithms
- Conduct analyses on effects of space and time aggregation on crime patterns
- Assist in research related to extending the understanding of place-based theory as it relates to the criminal justice field
- Assist in developing research questions and designs for intramural studies (e.g., additional place-based research topics pertaining to areas of interest of the RA)
- Drafting and presenting presentations at conferences (where funding permits and the University approves).
- Recording, compiling, and reporting information related to the research program and activities with a focus on relevance for the policy or practitioner fields; preparing policy briefs; and assisting with responses to Congressional inquiries.
- Assisting with coordination of research activities and participating in intra- and inter-agency working groups
- Assisting with outreach activities and research dissemination activities (e.g., meeting presentations, articles, webinars).

**Candidate Eligibility Criteria**

- Demonstrated knowledge of the U.S. criminal justice system ***required***.
- Demonstrated knowledge of intermediate to advanced research and evaluation methods and analysis ***required***.
- Demonstrated experience in social and behavioral science or other related field (e.g., geography) related to mapping and spatial analysis ***required***.
- Demonstrated knowledge of mapping and spatial analysis techniques ***required***.

**General Required Qualifications**

- **Education and/or Experience:** Doctoral students working toward a terminal degree (e.g., Ph.D., D.P.A., Dr.PH., D.H.Sc., D.Sc., D.S.W., Psy.D., Ed.D.).
- **Mathematical Skills:** Very good to advanced understanding of statistical principles and research methods (quantitative and qualitative).
- **Computer Skills:** Working knowledge of computers and standard software such as Adobe Professional,



Excel, Internet Explorer, Outlook, Windows operating systems, Word, and PowerPoint required. Proficiency using statistical software (e.g., R, SPSS, SAS, Stata), geospatial software (e.g., ArcGIS), and Microsoft Access.

- **Reasoning Ability**: Ability to work independently, accurately, and in a timely manner.
- **Communication Skills**: Ability to communicate orally and in writing to prepare comprehensive research reports, proposals, and presentations and make recommendations to accomplish and enhance project objectives.
- **Certifications, Licenses, Registrations**: Human Subjects (HS) Protection training is required. NIJ research assistants must take annual HS training onsite at the Office of Justice Programs. RAs also must successfully complete CITI training.
- **Background Check**: Candidates must complete all required U.S. Department of Justice profile and pre-screening paperwork with all security reviews and background investigations (such as credit and criminal investigations) resulting in a favorable adjudication.
- **Citizenship**: Candidates must be U.S. citizens.

**Work Location:** Primary work location will be at [NIJ's offices in Washington, D.C.](#) Minimal local travel in the [National Capital Region](#) may be needed to attend meetings and visit offsite research facilities. For this assistantship, extensive travel is anticipated to conduct research site visits.