



NOTICE OF INTENT TO AWARD

This Funding Announcement is not a request for applications. This announcement is to provide public notice of the U.S. Geological Survey's intention to fund the following project activities without full and open competition.

ABSTRACT	
Funding Announcement	USGS-19-FA-0083
Project Title	Improving scenario-based simulations of future patterns of urbanization, climate adaptation, and landscape change
Recipient	NC State University
Anticipated Federal Amount	323,040.45
Cost Share	0
Total Anticipated Award Amount	323,040.45
New Award or Continuation?	New Award
Anticipated Period of Performance	36 months from point of award
Award Instrument	Cooperative agreement
CFDA # and Title	15.820 National and Regional Climate Adaptation Science Center/Climate Adaptation Science Centers
USGS Point of Contact	Ryan Boyles, rboyles@usgs.gov , 919-513-2816

OVERVIEW

This project will explore how urbanization and associated land use in the Southeastern US may change due to environmental, economic, and demographic forces. The researchers will produce spatially discrete scenarios of future habitat and urbanization that US Fish and Wildlife Service, National Park Service, and state fish and wildlife agencies will use to help inform regulatory and other management decisions.

RECIPIENT INVOLVEMENT

The Recipient will develop scenarios of future urbanization patterns, focusing on the synergy between global climatic change and both internal and external population-induced changes to the amount and pattern of developed areas. Using a coupled human and natural systems framework, the Recipient will improve the realism of urbanization modeling by undertaking the following three research objectives:

1. Using an existing high-resolution land change model, incorporate important macro-factors and forcings (e.g., environmental amenities, climate-related risks, economic opportunities) that affect the amount and spatial distribution of people in the Southeast.
2. Develop spatially explicit scenarios that explore social-environmental tradeoffs in areas of high climate risk.
3. Explore the potential for tipping points that could slow or even reverse the rate of in-migration to the region as the climate warms. This work will advance recent efforts to simulate the rate and extent of rapid urbanization in the Southeast.

USGS INVOLVEMENT

Substantial involvement on the part USGS is anticipated for the successful completion of the objectives to be funded by this award. In particular, USGS will be responsible for the following:

- ✧ The DOI SE CASC, through scientists from its partner North Carolina State University, will be substantially involved with the Principal Investigator during the term of the cooperative agreement for assuring that climate research projects are conducted in the locations in the southeast region. The DOI SE CASC will participate with and collaborate with its host institution, North Carolina State University, scientists, technicians, volunteers, and/or other personnel at the host institution to carry out the scope of work, train personnel, and or identify the need for additional Federal personnel to work on project efforts.
- ✧ The DOI SE CASC Director will review and approve proposed modifications, review and approve requests for supplemental project funding for new objectives, review award balances, and approve sub-grants to consortium members for funding in each Fiscal Year, prior to the award.
- ✧ The DOI SE CASC will direct and/or redirect the work because of interrelationships with other related SE region climate research projects.
- ✧ The DOI SE CASC has power to halt immediately an activity if detailed performance specifications are not met.

SINGLE-SOURCE JUSTIFICATION

DEPARTMENT OF THE INTERIOR SINGLE SOURCE POLICY REQUIREMENTS

Department of the Interior Policy (505 DM 2) requires a written justification which explains why competition is not practicable for each single-source award. The justification must address one or more of the following criteria as well as discussion of the program legislative history, unique capabilities of the proposed recipient, and cost-sharing contribution offered by the proposed recipient, as applicable.

In order for an assistance award to be made without competition, the award must satisfy one or more of the following criteria:

- (1) Unsolicited Proposal – The proposed award is the result of an unsolicited assistance application which represents a unique or innovative idea, method, or approach which is not the subject of a current or planned contract or assistance award, but which is deemed advantageous to the program objectives;
- (2) Continuation – The activity to be funded is necessary to the satisfactory completion of, or is a continuation of an activity presently being funded, and for which competition would have a significant adverse effect on the continuity or completion of the activity;
- (3) Legislative intent – The language in the applicable authorizing legislation or legislative history clearly indicates Congress' intent to restrict the award to a particular recipient of purpose;
- (4) Unique Qualifications – The applicant is uniquely qualified to perform the activity based upon a variety of demonstrable factors such as location, property ownership, voluntary support capacity, cost-sharing ability if applicable, technical expertise, or other such unique qualifications;
- (5) Emergencies – Program/award where there is insufficient time available (due to a compelling and unusual urgency, or substantial danger to health or safety) for adequate competitive procedures to be followed.
- (6) Cooperative Agreements - USGS Unique Authority cited at 43 U.S.C. 36d (Federal, State, and academic partners) or DOI Authority cited at 43 U.S.C. 1457b (not-for-profit organizations).

USGS did not solicit full and open competition for this award based the following criteria:

(4) UNIQUE QUALIFICATIONS

Single Source Justification Description:

(4) UNIQUE QUALIFICATIONS -. The recipient is uniquely qualified as he has extensive expertise with urbanization modeling and scenarios in the Southeastern US.

(6) STATUTORY AUTHORITY- 43 USC 36d and Consolidated Appropriations Act, 2008, Div., F, Title I, P.L. 110-161