REQUEST FOR STATEMENTS OF INTEREST AND QUALIFICATIONS
PROJECT TO BE INITIATED IN 2007

Project Title: Modeling of NPS Visitation Trends

The purpose of this Request for Statements of Interest and Qualifications is to identify potential investigators for a project to be funded by the National Park Service which seeks to identify the significant variables associated with national park visitation trends over time, both at the System level and at selected parks or groups of parks. Approximately $50,000 is expected to be available to support this project. This Request for Statements of Interest and Qualifications has been distributed to partners of each Cooperative Ecosystem Studies Unit (CESU).

Background: National Park Service statistics show a steep increase in recreational visits to the National Park System from 1970 through 1987, followed by a gradual decline that has continued through 2005. According to the NPS Public Use Statistics Office, the total drop in annual visits between 1987 and 2005 was 13.7 million, or a 4.8% decrease from a peak of 287.2 million. Understanding the forces affecting visitation is fundamental to protecting resources in the National Park System, maintaining mission relevance to an increasingly diverse America, and suggesting actions that can be used to increase the relevance of the National Park System to a changing American public.

The analysis will be conducted by a CESU partner institution in two phases. The first phase will be a review of relevant scientific literature on the determinants of leisure travel and trends in use and allocation of leisure and non-leisure time. It is expected that this review will suggest variables to be included as determinants in the second phase: the modeling of National Park visitation over time. All data employed in the second phase are expected to come from secondary sources for which comparable time series are available, e.g., NPS visitation statistics, Census Bureau data, Department of Commerce data, annual national public opinion data, etc. The selected partner CESU institution will work closely with the NPS Public Use Statistics Office, which is responsible for visitation counting and is part of the NPS Social Science Program. NPS substantial involvement also will be provided by the Visiting Chief Social Scientist and other Social Science Program and park personnel as appropriate to the adopted statement of work.

The partner will construct and evaluate quantitative time-series models in which the dependent variable is changes in visitation (e.g., annual, quarterly, or some other appropriate
measure) and the predictor variables are quantifiable sociological, economic, and
demographic trends, as well as natural events, that are hypothesized to cause changes in visits
over time. Examples of effects to be evaluated include changes in population size around
parks; changes in the racial, ethnic, and age structure of the U.S.; trends in household
income, disposable and discretionary income, and vacation time; international arrivals at U.S.
airports; transportation costs in terms of time, money, and ease of travel and changes in
transportation networks; and natural events such as wildfires, hurricanes, floods, landslides,
and earthquakes that result in significant reductions in park access. The project will utilize
state-of-the-art statistical modeling to identify those factors having negative and positive
correlations with visitation trends over time.

**Brief Description of Anticipated Work:**

1. Collaborate with NPS personnel to identify theoretical questions and data needs for
   inclusion into project design.

2. Review previous scientific literature and research on factors affecting leisure travel and
trends in use of leisure and non-leisure time.

3. Utilize state-of-the-art statistical modeling to identify theoretical factors having negative
   and positive correlations with visitation trends, including interaction effects.

4. If warranted, carry out a pre-study using one or more parks to: 1) determine the
   availability and compatibility of data of different types, 2) test the validity and reliability
   of NPS visitation statistics (i.e., pre- and post-1987, when significant auditing controls
   took effect), and 3) identify those factors from the inventory of candidate variables that
   show little relationship to visitation or that strongly correlate with other determinants and
   thus do not add unique information to the models.

5. Prepare a written report of findings that:
   - Reviews scientific literature on the determinants of leisure travel and trends in use of
     leisure and non-leisure time.
   - Presents and describes the results of quantitative modeling that: 1) identifies
     statistically significant effects on changes in annual or quarterly recreational visits
     between 1980 and 2005 (or another agreed-upon time period; 2) measures the
     direction of the effects as positive or negative (i.e., contributing to increased or
decreased visitation); and 3) assesses the relative importance of each influence in the
     models.
   - Describes the explanatory power of the models.
   - Constructs and describes models for the National Park System as a whole and for
     selected individual parks, classes of parks (e.g., urban parks, rural parks), or
     geographic regions of parks.
   - Proposes recommendations for future studies that address additional informational
     needed to define and understand the relationship over time of the American people to
     the National Park Service and National Park System as units and as a whole.
Materials Requested for Statement of Interest/Qualifications:

Please provide the following via e-mail attachment to: jgramann@tamu.edu (Maximum length: 2 pages, single-spaced 12 pt. font).

1. Name, Organization, and Contact Information

2. Brief Statement of Qualifications (including):
   a. Biographical sketch of principal investigator and any co-investigators;
   b. Relevant past projects and clients/partners with brief descriptions of these projects;
   c. Staff, faculty or students available to work on this project and their areas of expertise;
   d. Amount of time the principal investigator will commit to the project;
   e. Any brief description of capabilities to successfully complete the project (e.g. computers, modeling expertise, theoretical knowledge, equipment, access to information sources, previous relevant research, etc.).

Note: A proposed budget is NOT requested at this time.

Review of Statements Received: Following review of the Statements of Interest and Qualifications received, one or more investigators will be invited to be interviewed by a review panel composed of NPS scientists and managers. Statements will be evaluated based on the investigator’s specific experience, capabilities, and demonstrated skills in econometrics, structural modeling using quantitative time-series statistics, theoretical knowledge, time commitment, and research project administration.

Please send responses or direct questions to:
NPS Lead: Dr. Jim Gramann
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Social Science Program
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Timeline for Review of Statements of Interest: Review of Statements of Interest and Qualifications will begin January 15, 2007. This Request for Statements of Interest will remain open until an investigator team is selected. The National Park Service will look forward to initiating this project by May 15, 2007.