AGENCY: ENVIRONMENTAL PROTECTION AGENCY (EPA)

TITLE: Modeling of Climate Change Mitigation, Impacts and Adaptation

ACTION: Request for Proposals (RFP)

RFP NUMBER: EPA-OAR-OAP-16-07

CATALOG OF FEDERAL DOMESTIC ASSISTANCE (CFDA) NO: 66.034

DATES: The closing date and time for receipt of proposal submissions is **September 12, 2016, 4:00 p.m., Eastern Time (ET)** to be considered for funding. Proposals must be submitted to EPA through Grants.gov (http://www.grants.gov) no later than **September 12, 2016, 4:00 p.m. ET.**

SUMMARY: This notice announces the availability of funds and solicits proposals to advance the field of climate economic modeling to assist decision makers and the public in effectively responding to the challenges and opportunities posed by climate change. The work involved in this effort includes two distinct modeling capabilities. The first is computable general equilibrium (CGE) modeling of climate mitigation and impacts at the level of disaggregation of U.S. states. The second is integrated assessment modeling (IAM) and assessment of multiple greenhouse gases (GHGs) and air pollutants to enhance understanding of climate change impacts.

EPA seeks proposals from eligible entities that will enhance "studies related to the causes, effects, (including health and welfare effects), extent, prevention and control of air pollution." Specifically, this effort is intended to contribute to the development and use of modeling tools to analyze the mitigation and impacts of greenhouse gas emissions.

FUNDING/AWARDS: The total estimated funding for this competitive opportunity is approximately \$1,250,000. EPA anticipates awarding approximately one to three assistance agreements from this announcement, subject to availability of funds, the quality of proposals received, and other applicable considerations.

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I. FUNDING OPPORTUNITY DESCRIPTION

A. Background

Climate variability and change play important roles in shaping the environment, natural resources, infrastructure, the economy, and other aspects of life in all countries of the world. Human-induced changes in climate and related environmental systems, and the options proposed to adapt to or mitigate these changes may have substantial environmental, economic, and societal consequences.

The Climate Science and Impacts Branch and the Climate Economics Branch are part of the Climate Change Division in EPA's Office of Atmospheric Programs. The Climate Change Division works to assess and address global climate change and the associated risks to human health and the environment.

The Climate Economics Branch (CEB), as part of the Climate Change Division in EPA's Office of Atmospheric Programs, is responsible for the economic analysis of domestic and international implications of anthropogenic climate change. This includes work to understand the economic impacts of climate change on the economy, and analysis of actions to mitigate climate change. These actions include reducing emissions of greenhouse gases, changes to land use, alternative energy sources, and adaptation to potential changes in climate. Strategies of mitigating and adapting to climate change include a wide range of approaches, including legislative, regulatory, financial, and voluntary programs.

Providing meaningful analysis of the economic implications of climate change, climate mitigation and climate adaptation requires specialized expertise and a suite of analytical tools both for the U.S. and at the global scale. It requires an understanding of the relationship of economic activity to climate change mitigation, including current and projected emissions of greenhouse gases and of the opportunities to reduce or sequester these emissions. The work also requires an understanding of strategies to adapt to a changing climate, and analysis of the potential specific impacts of climate change on specific economic sectors and regions. There is no single analytical tool that can provide the assessment and information EPA requires, so CEB develops and maintains a suite of specialized tools and capabilities. These include databases of emissions inventories and projections, economic models of activity in specific sectors of the economy, models of climate change impacts, and models that simulate the economy as a whole. CEB requires model improvement and updating, and the capability to conduct analysis using the results of different relevant models.

The Climate Science and Impacts Branch (CSIB) is responsible for informing policy analysis and risk communication by leveraging existing literature and applying it to better understand the risks/impacts of climate change on human health, ecological systems, and socio-economic sectors; assessing issues related to adaptation to the impacts of climate change in key sectors; conducting analytical work and participating in interagency and international processes for emerging issues such as the role of aerosols in climate change; and integrating information produced through scientific and impacts research into broader analytical and policy-relevant frameworks.

B. Scope of Work

EPA seeks proposals from eligible entities to advance the state of computable general equilibrium (CGE) modeling of the U.S. economy and integrated assessment modeling of global climate change. A focus of this work is to enhance understanding of climate change impacts and their economic implications to assist decision makers and the public in effectively responding to the economic challenges and opportunities posed by climate change. Another focus is on adaptation to climate change. This funding is intended improve the

economy-wide modeling of climate at a disaggregated regional level within the United States, and for many different household types. EPA seeks proposals from entities with the in-house capability to use both an established integrated assessment model (IAM) and an established, disaggregated CGE model of the U.S. The proposal should demonstrate how the capability to run both IAM and CGE models will aid in the goal of representing climate change impacts within the CGE model.

EPA is interested in proposals to improve the capabilities of existing CGE models. Applicant's proposals must demonstrate understanding and expertise in the field of computable general equilibrium modeling and in linking climate impact models, sector mitigation models, and electricity sector dispatch models with CGE models. The proposal must detail the applicant's plans for model development of and improvement to an existing CGE model.

The applicant must demonstrate the extent to which their existing CGE has the following capabilities and detail how their proposal will enhance the following features:

- 1. Comprehensive economy-wide modeling capability, with emissions and mitigation of the six major greenhouse gases (i.e., carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)) linked to specific production sectors, such as the electric power sector, transportation sector, service sectors, etc.
- 2. Highly disaggregated regionally, capable of representing the economics of climate mitigation and climate impacts in many sub-national regions of the United States.
- 3. Capability of representing the impacts of international climate policies on the economy of the United States through the modeling of international trade.
- 4. Highly disaggregated household sector, capable of representing the economics of climate mitigation and climate impacts on many types of households.
- 5. Capability of linking the economy-wide model to detailed sector models of the electric power sector to represent mitigation opportunities and climate impacts on that sector as well as feedbacks to the rest of the economy.

Additionally, applicants should describe their capability to use comprehensive, integrated modeling and assessment of multiple greenhouse gases (GHGs) and air pollutants, and to also enhance understanding of climate change impacts and their economic implications to assist decision makers and the public to effectively respond to the challenges and opportunities posed by climate change. Applicants' proposals must demonstrate enhanced understanding of Integrated Assessment Models (IAMs), climate change impacts, and economic valuation techniques. This RFP is intended to support the improvement of existing IAMs. Proposals must utilize an existing IAM that combines both the socio-economic and earth system (atmosphere, land, and ocean) components of climate change at the global and national levels. Specifically, applicants must describe the extent to which the proposed IAM includes the following features, and how their proposal intends to enhance these features:

1. Comprehensive, integrated modeling of emissions of multiple GHGs [i.e., carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)] and air pollutants, including short lived climate forcers (e.g., black carbon and organic carbon).

- 2. Detailed and rigorous representation of multiple domestic climate change impacts. These include, but are not limited to, human health (i.e., air quality and direct temperature effects), sea level rise, energy demand, natural ecosystems, managed land productivity (i.e., agriculture and forestry) and water resources. EPA is interested in supporting IAMs that comprehensively represent multiple impact sectors, both in the U.S. and globally, and incorporate relevant feedbacks (cause-and-effect chains between climate variables and resulting impacts) in each sector and interactions across sectors and regions.
- 3. Ability to generate both bio-physical and economic valuation metrics of the risks and impacts of climate change. EPA is interested in metrics that can operate on both large and small scales (from global to regional to local), and that provide useful information on the benefits of mitigation (i.e., avoided climate change and associated risks on a non-marginal scale).

C. EPA Strategic Plan Linkage and Anticipated Outcomes, Outputs and Performance Measures

Pursuant to Section 6a of EPA Order 5700.7, "Environmental Results under EPA Assistance Agreements," EPA must link proposed assistance agreements to the Agency's Strategic Plan. EPA also requires that grant applicants and recipients adequately describe environmental outputs and outcomes to be achieved under assistance agreements (see EPA Order 5700.7, Environmental Results under Assistance Agreements, http://www.epa.gov/sites/production/files/2015-03/documents/epa_order_5700_7a1.pdf).

1. Linkage to EPA Strategic Plan. All proposals must support progress toward EPA's 2014-2018 Strategic Plan Goal 1 "Addressing Climate Change and Improving Air Quality"; Objective 1.2: "Improve Air Quality", which states "achieve and maintain health- and welfare-based air pollution standards and reduce risk from toxic air pollutants and indoor air contaminants." EPA's Climate Change Division works to assess and address global climate change and the associated risks of human health and the environment. Specifically, the proposed activities will support analytical projects to advance understanding of climate change science, impacts, and mitigation options. Such analyses provide insights for developing strategies to reduce greenhouse gas emissions that will have substantial environmental and human health benefits.

Please read EPA's FY 2014-2018 Strategic Plan for more information.

2. Outputs. The term "output" means an environmental activity, effort, and/or associated work product related to an environmental goal and objective that will be produced or provided over a period of time or by a specified date. Outputs may be quantitative or qualitative but must be measurable during an assistance agreement funding period.

Expected outputs from the projects to be funded under this announcement include, but are not limited to:

- Publication of at least two to three academic papers each year in peer reviewed literature.
- Presentation of findings on an annual basis to relevant scientific conferences that would be available to the general public. These papers and presentations will document advances made in understanding of the areas described in the Scope of Work.

Quarterly progress reports and a detailed final technical report will also be a required output, as specified in Section VI(C) of this announcement, "Reporting Requirement."

3. Outcomes. The term "outcome" means the result, effect or consequence that will occur from carrying out an environmental program or activity that is related to an environmental or programmatic goal or objective. Outcomes may be environmental, behavioral, health-related, or programmatic in nature, but must also be quantitative. They may not necessarily be achievable within an assistance agreement funding period.

Projects to be funded under this announcement are expected to produce at least one, and preferably all, of the following environmental outcomes:

- Improved representation of climate impacts and their feedbacks to the economy and the climate in integrated assessment models.
- Improved understanding of the interactions between multiple GHGs and short term climate forcers, such as black carbon and organic carbon, and their effect on achievement of climate goals.
- Improved understanding of the effect of reductions in short lived forcers on climate change.
- Improved understanding of the reductions in probabilities of climate indicators associated with small changes in radiative forcing.
- Improved understanding of the drivers of uncertainty in sea level rise.
- Improved understanding of shifting water resources under climate change and the impacts of these changes on other systems/sectors.
- **4. Performance Measures.** The applicant should also develop performance measures they expect to achieve through the proposed activities and describe them in their proposal. These performance measures will help gather insights and will be the mechanism to track progress concerning successful process and output and outcome strategies and will provide the basis for developing lessons to inform future recipients. It is expected that the description of performance measures will include the following:
 - Academic papers describing advances in CGE modeling and the results of studies using the applicant's model.
 - Academic papers describing developments in incorporating climate change impacts into a CGE framework.
 - Academic papers detailing the results of studies using the applicant's IAM model.
 - Presentations of findings at conferences and workshops to inform the broader community and the public of insights gained from the work.

D. Statutory Authority

The statutory authority for this action is Clean Air Act, Section 103(b)(3) which authorizes the award of grants for research, investigations, experiments, demonstrations, surveys, and studies related to the causes, effects, (including health and welfare effects), extent, prevention, and control of air pollution. Such activities include rendering technical services and providing financial assistance, as well as promoting analyses with the goal of improved understanding of climate change science, impacts and mitigation options, in relation to air pollution. The National Environmental Policy Act (NEPA), Section 102(2)(F) may also be applicable.

II. AWARD INFORMATION

A. What is the amount of funding available?

The total estimated funding expected to be available for awards under this competitive opportunity is approximately \$1,250,000.

B. Partial Funding

In appropriate circumstances, EPA reserves the right to partially fund proposals by funding discrete portions or phases of proposed projects. If EPA decides to partially fund a project, it will do so in a manner that does not prejudice any applicants or affect the basis upon which the proposal or portion thereof, was evaluated and selected for award, and therefore maintains the integrity of the competition and selection process.

C. How many agreements will EPA award in this competition?

EPA anticipates award of approximately one to three cooperative agreements resulting from this announcement, ranging in value from approximately \$100,000 to \$250,000 per year, subject to the availability of funds, quality of evaluated proposals, and other applicable considerations. In addition, EPA reserves the right to make additional awards under this announcement, consistent with Agency policy, if additional funding becomes available after the original selections. Any additional selections for awards will be made no later than six months from the date of the original selections.

D. What is the project period for awards resulting from this solicitation?

The estimated project period for awards resulting from this solicitation will begin in the fall/winter of 2016. Proposed project periods may be up to five years.

E. Funding Type

The funding for selected projects will be in the form of a cooperative agreement. Cooperative agreements permit substantial involvement between the EPA Project Officer and the selected applicants in the performance of the work supported. Although EPA will negotiate precise terms and conditions relating to substantial involvement as part of the award process, the anticipated substantial Federal involvement for this project will be:

- close monitoring of the successful applicant's performance to verify the results proposed by the applicant;
- collaboration during performance of the scope of work;

- in accordance with 2 CFR 200.317 and 2 CFR 200.318, review of proposed procurement;
- approving qualifications of key personnel (EPA will not select employees or contractors employed by the award recipient);
- review and comment on reports prepared under the cooperative agreement (the final decision on the content of reports rests with the recipient);

III. ELIGIBILITY INFORMATION

A. Eligible Entities

In accordance with CFDA 66.034, proposals will be accepted from states, local governments, territories, Indian Tribes, and possessions of the U.S., including the District of Columbia, international organizations, public and private universities and colleges, hospitals, laboratories, other public or private non-profit institutions.

Non-profit organization, as defined by 2 CFR Part 200, means any corporation, trust, association, cooperative or other organization that: (1) is operated primarily for scientific, educational, service, charitable or similar purposes in the public interest; (2) is not organized primarily for profit; and (3) uses its net proceeds to maintain, improve and/or expand its operations. Note that 2 CFR Part 200 specifically excludes the following types of organizations from the definition of "non-profit organization" because they are separately defined in the Circular: (i) colleges and universities; (ii) hospitals; (iii) state, local and federally-recognized Indian tribal governments; and (iv) those non-profit organizations that are excluded from coverage of this Circular in accordance with paragraph 5 of the Circular. While not considered to be a "non-profit organization(s)" as defined by 2 CFR Part 200, colleges and universities, hospitals, state, local and federally-recognized Indian tribal governments are, nevertheless, eligible to submit proposals under 2 CFR Part 200 and this RFP.

For-profit organizations are <u>not</u> an eligible entity for this funding opportunity. Additionally, non-profit organizations described in Section 501(c)(4) of the Internal Revenue Code that engage in lobbying activities as defined in Section 3 of the Lobbying Disclosure Act of 1995 are not eligible to apply.

B. Cost Sharing or Matching

No matching funds are required under this competition.

C. Threshold Eligibility Criteria

These are requirements that if not met by the time of proposal submission will result in elimination of the proposal from consideration for funding. Only proposals from eligible entities (see above) that meet all of these criteria will be evaluated against the ranking factors in Section V of this announcement. Applicants deemed ineligible for funding consideration as a result of the threshold eligibility review will be notified within 15 calendar days of the ineligibility determination.

 a. Proposals must substantially comply with the proposal submission instructions and requirements set forth in Section IV of this announcement or else they will be rejected. However, where a page limit is expressed in Section IV with respect to the narrative proposal, pages in excess of the page limitation will not be reviewed. b. In addition, initial proposals must be submitted through www.grants.gov as stated in Section IV of this announcement (except in the limited circumstances where another mode of submission is specifically allowed for as explained in Section IV) on or before the proposal submission deadline published in Section IV of this announcement. Applicants are responsible for following the submission instructions in Section IV of this announcement to ensure that their proposal is timely submitted.

- c. Proposals submitted after the submission deadline will be considered late and deemed ineligible without further consideration unless the applicant can clearly demonstrate that it was late due to EPA mishandling or because of technical problems associated with Grants.gov or relevant SAM.gov system issues. An applicant's failure to timely submit their proposal through Grants.gov because they did not timely or properly register in SAM.gov or Grants.gov will not be considered an acceptable reason to consider a late submission. Applicants should confirm receipt of their proposal with Eric Smith as soon as possible after the submission deadline—failure to do so may result in your proposal not being reviewed.
- 2. Proposals must support EPA Strategic Plan Goal 1, "Addressing Climate Change and Improving Air Quality". (See Section I)
- 3. Proposals must address each of the activity components as described in Section I. Part B Scope of Work.
- 4. Ineligible activities: If a proposal is submitted that includes any ineligible tasks or activities, that portion of the proposal will be ineligible for funding and may, depending on the extent to which it affects the proposal, render the entire proposal ineligible for funding.

IV. PROPOSAL AND SUBMISSION INFORMATION

A. Requirement to Submit Through Grants.gov and Limited Exception Procedures

Applicants, except as noted below, must apply electronically through <u>Grants.gov</u> under this funding opportunity based on the grants.gov instructions in this announcement and Appendix A. If an applicant does not have the technical capability to apply electronically through grants.gov because of limited or no internet access which prevents them from being able to upload the required proposal materials to <u>Grants.gov</u>, the applicant must contact <u>OGDWaivers@epa.gov</u> or the address listed below in writing (e.g., by hard copy, email) *at least 15 calendar days prior to the submission deadline under this announcement* to request approval to submit their proposal materials through an alternate method.

Mailing Address:

OGD Waivers
c/o Barbara Perkins
USEPA Headquarters
William Jefferson Clinton Building
1200 Pennsylvania Ave., N. W.
Mail Code: 3903R
Washington, DC 20460

Courier Address:
OGD Waivers
c/o Barbara Perkins
Ronald Reagan Building
1300 Pennsylvania Ave., N.W.
Rm # 51267
Washington, DC 20004

In the request, the applicant must include the following information:

- Funding Opportunity Number (FON)
- Organization Name and DUNS
- Organization's Contact Information (email address and phone number)
- Explanation of how they lack the technical capability to apply electronically through Grants.gov because of 1) limited internet access or 2) no internet access which prevents them from being able to upload the required application materials through www.Grants.gov.

EPA will only consider alternate submission exception requests based on the two reasons stated above and will timely respond to the request -- all other requests will be denied. If an alternate submission method is approved, the applicant will receive documentation of this approval and further instructions on how to apply under this announcement. Applicants will be required to submit the documentation of approval with any initial application submitted under the alternative method. In addition, any submittal through an alternative method must comply with all applicable requirements and deadlines in the announcement including the submission deadline and requirements regarding proposal content and page limits (although the documentation of approval of an alternate submission method will not count against any page limits).

If an exception is granted, it is valid for submissions to EPA for the remainder of the entire calendar year in which the exception was approved and can be used to justify alternative submission methods for proposal submissions made through December 31 of the calendar year in which the exception was approved (e.g., if the exception was approved on March 1, 2016, it is valid for any competitive or non-competitive proposal submission to EPA through December 31, 2016). Applicants need only request an exception once in a calendar year and all exceptions will expire on December 31 of that calendar year. Applicants must request a new exception from required electronic submission through Grants.gov for submissions for any succeeding calendar year. For example, if there is a competitive opportunity issued on December 1, 2015 with a submission deadline of January 15, 2016, the applicant would need a new exception to submit through alternative methods beginning January 1, 2016.

Please note that the process described in this section is only for requesting alternate submission methods. All other inquiries about this announcement must be directed to the Agency Contact listed in Section VII of the announcement. Queries or requests submitted to the email address identified above for any reason other than to request an alternate submission method will not be acknowledged or answered.

B. Grants.gov Application Submission Instructions (see Appendix A.)

Your organization's authorized official representative (AOR) must submit your complete proposal electronically to EPA through Grants.gov (http://www.grants.gov) no later than **September 12, 2016, 4:00 p.m., Eastern Time (ET)**.

C. Content of Proposal Submission

The proposal package *must* include all of the following materials:

• Standard Form (SF) 424, Application for Federal Assistance

Complete the form (available at http://www.epa.gov/grants/epa-grantee-forms). There are no attachments. Please be sure to include organization fax number and email address in Block 5 of the Standard Form SF 424.

Please note that the organizational Dun and Bradstreet (D&B) Data Universal Number System (DUNS) number must be included on the SF-424. Organizations may obtain a DUNS number at no cost by calling the toll-free DUNS number request line at 1-866-705-5711.

• Standard Form (SF) 424A, Budget Information

Complete the form (available at http://www.epa.gov/grants/epa-grantee-forms). There are no attachments. The total amount of federal funding requested for the project period should be shown on line 5(e) and on line 6(k) of SF-424A, the amount of indirect costs should be entered on line 6(j). The indirect cost rate (i.e., a percentage), the base (e.g., personnel costs and fringe benefits), and the amount should also be indicated on line 22.

Narrative Proposal

The Narrative Proposal (including sections 1-3 below) **cannot** exceed a maximum of 20 single-spaced typewritten pages, including the Summary Page. Supporting materials, such as resumes and letters of support, can be submitted as attachments and are not included in the 20-page limit.

1. Summary Information Page (recommended not to exceed one page)

- a. Project Title
- b. Applicant Information. Include applicant (organization) name, address, contact person, phone number, fax and e-mail address.
- c. Funding Requested. Specify the amount you are requesting from EPA.
- d. Total Project Cost. Specify total cost of the project. Identify funding from other sources, including cost share or in-kind resources.
- e. Project period. Provide beginning and ending dates. (Projects are anticipated to begin date and end no later than date.)

2. Narrative Proposal Work Plan

The narrative proposal work plan must explicitly describe how the proposed project meets the guidelines established in Sections I-III (including the threshold eligibility criteria in Section III.C) of this announcement, and must address each of the evaluation criteria set forth in Section V.

a. Project Summary/Approach: The summary shall contain the following components:

- i. Detailed project summary, description of specific actions and methods to be undertaken and the responsible institutions, including estimated time line for each task.
- ii. Description of the associated work products to be developed.

- iii. Explanation of project benefits to the public, and specifically the potential audience(s) served.
- iv. Description of the roles of the applicant and partners, if any.
- v. Description of the applicant's organization and experience related to the proposed project.
- vi. Description of staff expertise/qualifications, staff knowledge, and resources or the ability to obtain them, to successfully achieve the goals of the proposed project.

b. Environmental Results—Outcomes, Outputs and Performance Measures

Identify the expected quantitative and qualitative outcomes and outputs of the project (**See Section I**), including what performance measurements, timeline of milestones, or other means will be used to track and measure your progress towards achieving the expected outcomes and outputs and how the results of the project will be evaluated.

c. Programmatic Capability and Past Performance

Submit a list of federally funded assistance agreements (Federal grants and cooperative agreements, but not Federal contracts) similar in size, scope and relevance to the proposed project that your organization performed within the last three years (no more than 5 agreements, and preferably EPA agreements.

Applicants must describe:

- i. whether, and how, you were able to successfully complete and manage those agreements, and
- ii. your history of meeting the reporting requirements under those agreements including whether you adequately and timely reported on your progress towards achieving the expected outputs and outcomes of those agreements (and if not, explain why not) and whether you submitted acceptable final technical reports under the agreements.

In evaluating applicants under these factors in Section V, EPA will consider the information provided by the applicant and may also consider relevant information from other sources, including information from EPA files and from current/prior grantors (e.g., to verify and/or supplement the information provided by the applicant). If you do not have any relevant or available past performance or reporting information, please indicate this in the proposal and you will receive a neutral score for these factors (a neutral score is half of the total points available in a subset of possible points). If you do not provide any response for these items, you may receive a score of 0 for these factors.

In addition, provide information on your organizational experience and plan for timely and successfully achieving the objectives of the proposed project, and your staff expertise/qualifications, staff knowledge, and resources or the ability to obtain them, to successfully achieve the goals of the proposed project.

3. Detailed Budget Narrative (See Appendix B, Budget Sample)

- a. Description of the budget and estimated funding amounts for each work component/task.
- b. Description of the applicant's approach, procedures, and controls for ensuring that awarded grant funds will be expended in a timely and efficient manner.
- c. Applicants must itemize costs related to personnel, fringe benefits, contractual costs, travel, equipment, supplies, other direct costs, indirect costs, and total costs. *Selected applicant(s) will need to submit a copy of their current indirect cost rate that has been negotiated with a federal cognizant agency prior to award.
- d. For applicants that provide a voluntary cost share/match, the budget narrative must clearly specify the amount of federal funding and the cost-share amount for each category of total project costs for each category. <u>Include an explanation of how the voluntary match will be met.</u> All matching funds are subject to the regulations governing matching fund requirements at 2 CFR Part 200.

D. Submission Dates and Times

The closing date and time for submission of proposals is **September 12, 2016, 4:00 p.m., Eastern Time** (**ET**). Proposals submitted after the closing date and time will not be considered for funding.

E. Additional Provisions for Applicants Incorporated into the Solicitation

Additional provisions that apply to this solicitation and/or awards made under this solicitation, including but not limited to those related to confidential business information, contracts and subawards under grants, and proposal assistance and communications, can be found at http://www2.epa.gov/grants/epa-solicitation-clauses. These, and the other provisions that can be found at the website link, are important, and applicants must review them when preparing proposals for this solicitation. If you are unable to access these provisions electronically at the website above, please communicate with the EPA contact listed in this solicitation to obtain the provisions.

V. APPLICATION REVIEW INFORMATION

Only eligible entities whose proposals meet the threshold criteria in Section III of this announcement will be reviewed according to the evaluation criterion set forth below. Applicants should explicitly address these criteria as part of their proposal package submittal. Each proposal will be rated under a points system, with a total of 100 points possible.

A. Evaluation Criteria

Criteria	Points
1. <u>Project Summary/Approach:</u> Under this criterion, the Agency will evaluate the	
following factors:	
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a. (15 pts) the extent and quality to which the narrative proposal includes a well-conceived strategy for addressing the requirements in Section I, Parts B (Scope of Work) and C (EPA Strategic Plan Linkage and Anticipated Outcomes/Outputs), **b.** (10 pts) the applicant's demonstration of capability to perform the model development and analysis required, through detailed description of the GCE and IAM models, planned model upgrades, and published record of model results, c. (15 pts) whether the narrative proposal sets forth a reasonable time schedule for the execution of the tasks associated with the project and for achieving the project goals and objectives by project end. 2. Environmental Results—Outcomes, Outputs and Performance Measures: Under this criterion, the Agency will evaluate the effectiveness of the applicant's plan for tracking and 15 measuring its progress toward achieving the expected project outputs and outcomes, including those identified in **Section I** of this announcement. In addition, the Agency will evaluate the performance measures proposed by the applicant and how they will be used to help track and measure the Applicants progress towards achieving the expected outputs and outcomes. 3. Programmatic Capability and Past Performance: Under this criterion, applicants will be evaluated based on their ability to successfully complete and manage the proposed project taking into account their: I. (8 pts) past performance in successfully completing and managing the assistance agreements identified in the narrative proposal as described in Section IV.C of the announcement, II. (8 pts) history of meeting the reporting requirements under the assistance agreements 30 identified in the narrative proposal as described in Section IV.C of the announcement including whether the applicant submitted acceptable final technical reports under those agreements and the extent to which the applicant adequately and timely reported on their progress towards achieving the expected outputs and outcomes under those agreements and if such progress was not being made whether the applicant adequately reported why not, III. (7 pts) organizational experience and plan for timely and successfully achieving the objectives of the proposed project, IV. (7 pts) staff expertise and qualifications, staff knowledge, and resources or the ability to obtain them, to successfully achieve the goals of the proposed project. Note: In evaluating applicants under items I and II of this criterion, the Agency will consider the information provided by the applicant and may also consider relevant information from other sources including agency files and prior/current grantors (e.g., to verify and/or supplement the information supplied by the applicant). If you do not have any relevant or available past performance or reporting information, please indicate this in the proposal and you will receive a neutral score for these sub-factors (items I and II above-a neutral score is

half of the total points available in a subset of possible points). If you do not provide any response for these items, you may receive a score of 0 for these factors.	
4. <u>Budget</u>: Under this criterion, the Agency will evaluate the proposed project budget to determine whether,	10
I. (5 pts) costs are reasonable to accomplish the proposed goals, objectives, and measurable environmental outcomes,	
II. (5 pts) the proposed budget provides a detailed breakout of the approximate funding used for each major activity.	
An applicant's budget and budget narrative must account for both federal funds and any non-federal funds (e.g., any required or voluntary cost share/match if applicable). Applicants must precisely describe in their budget narrative how they will account for any required or voluntary cost share/match, if applicable, and what role EPA funding will play in the overall project.	
5. Expenditure of Awarded Grant Funds: Under this criterion, applicants will be evaluated based on their approach, procedures, and controls for ensuring that awarded grant funds will be expended in a timely and efficient manner.	5

B. Review and Selection Process

Proposals will first be evaluated against the threshold factors listed in Section III. Only those proposals which meet all of the threshold factors will be evaluated using the evaluation criteria listed above by an EPA evaluation team. Each proposal will be given a numerical score and will be rank-ordered according to the numerical score. Preliminary funding recommendations will be provided to the Approving Official based on this ranking.

C. Other Factors

Final funding decisions will be made by the Approving Official based on the rankings and preliminary recommendations of the EPA evaluation team. In making the final funding decisions, the Approving Official may also consider programmatic priorities and geographic diversity of funds. Once final decisions have been made, a funding recommendation will be developed and forwarded to the EPA Award Official.

D. Additional Provisions For Applicants Incorporated Into the Solicitation

Additional provisions that apply to this solicitation and/or awards made under this solicitation including the clause on Reporting and Use of Information Concerning Recipient Integrity and Performance can be found at EPA Solicitation Clauses. These, and the other provisions that can be found at the website link, are important, and applicants must review them when preparing proposals for this solicitation. If you are unable to access these provisions electronically at the website above, please communicate with the EPA contact listed in this solicitation to obtain *the provisions*.

VI. AWARD ADMINISTRATION INFORMATION

A. Award Notices

Following evaluation of proposals, all applicants will be notified regarding their status.

Proposal Notifications

1. EPA anticipates notification to successful applicants will be made via e-mail or postal mail. The notification will be sent to the original signer of the proposal or the project contact listed in the proposal. This notification, which informs the applicant that its proposal has been selected and is being recommended for award, is not an authorization to begin work. The official notification of an award will be made by GIAMD.

Applicants are cautioned that only a grants officer is authorized to bind the Government to the expenditure of funds; selection does not guarantee an award will be made. For example, statutory authorization, funding or other issues discovered during the award process may affect the ability of EPA to make an award to an applicant. The award notice, signed by an EPA grants officer, is the authorizing document and will be provided through electronic or postal mail. The successful applicant may need to prepare and submit additional documents and forms (e.g., work plan), which must be approved by EPA, before the grant can officially be awarded. The time between notification of selection and award of a grant can take up to 90 days or longer.

2. EPA anticipates notification to unsuccessful applicant(s) will be made via email or postal mail. The notification will be made to the original signer of the Standard Form (SF) 424, Application for Federal Assistance.

B. Administrative and National Policy Requirement

A listing and description of general EPA Regulations applicable to the award of assistance agreements may be viewed at: http://www.epa.gov/grants/policy-regulations-and-guidance-epa-grants.

Executive Order 12372, Intergovernmental Review of Federal Programs, may be applicable to awards resulting from this announcement. Applicants selected for funding may be required to provide a copy of their application to their State Point of Contact (SPOC) for review, pursuant to Executive Order 12372, Intergovernmental Review of Federal Programs. This review is not required with the Initial Application and not all states require such a review. A listing of State Point of Contacts (SPOC) may be viewed at: https://www.whitehouse.gov/omb/grants_spoc

C. Reporting Requirement

Quarterly progress reports and a detailed final technical report will be required. Quarterly reports summarizing technical progress, planned activities for the next quarter and a summary of expenditures are required. The final technical report shall be completed within 90 calendar days of the completion of the period of performance. The final technical report should include: summary of the project or activity, advances achieved, and costs of the project or activity. In addition, the final technical report should discuss the problems, successes, and lessons learned from the project or activity that could help overcome structural, organizational or technical obstacles to implementing a similar project elsewhere. The schedule for submission of quarterly reports will be established by EPA, after award.

D. Disputes

Assistance agreement competition-related disputes will be resolved in accordance with the dispute resolution procedures published in 70 FR (Federal Register) 3629, 3630 (January 26, 2005) which can be found at http://www2.epa.gov/grants/dispute-resolution-procedures. Copies of these procedures may also be requested by contacting the person listed in Section VII of the announcement.

E. Additional Provisions For Applicants Incorporated Into The Solicitation

Additional provisions that apply to this solicitation and/or awards made under this solicitation, including but not limited to those related to DUNS, SAM, copyrights, disputes, and administrative capability, can be found at http://www2.epa.gov/grants/epa-solicitation-clauses. These, and the other provisions that can be found at the website link, are important, and applicants must review them when preparing proposals for this solicitation. If you are unable to access these provisions electronically at the website above, please communicate with the EPA contact listed in this solicitation to obtain the provisions.

VII. AGENCY CONTACTS

For further information, contact:

U.S. Environmental Protection Agency ATTN: Eric Smith WJC South 4232S 1200 Pennsylvania Ave NW Mailcode 6207A Washington, DC 20460 smith.eric@epa.gov

All questions or comments must be communicated in writing via postal mail or email to the contact person listed above. Questions and answers will be posted until the closing date of this announcement at the OAR Grants/Funding webpage: https://www.epa.gov/grants/air-grants-and-funding.

VIII. Other Information (Appendices)

Appendix A. Grants.gov Submission Instructions

Grants.gov Proposal/Application Instructions

The electronic submission of your application must be made by an official representative of your institution who is registered with Grants.gov and is authorized to sign applications for Federal assistance. For more information on the registration requirements that must be completed in order to submit an application through grants.gov, go to http://www.grants.gov and click on "Applicants" on the top of the page and then go to the "Get Registered" link on the page. If your organization is not currently registered with Grants.gov, please encourage your office to designate an Authorized Organization Representative (AOR) and ask that individual to begin the registration process as soon as possible. Please note that the registration process also requires that your organization have a DUNS number and a current registration with the System for Award Management (SAM) and the process of obtaining both could take a month or more. Applicants must ensure that all registration requirements are met in order to apply for this opportunity through grants.gov and should ensure that all such requirements have been met well in advance of the submission deadline. Registration on grants.gov, SAM.gov, and DUNS number assignment is FREE.

Applicants need to ensure that the AOR who submits the application through Grants.gov and whose DUNS number is listed on the application is an AOR for the applicant listed on the application. Additionally, the DUNS number listed on the application must be registered to the applicant organization's SAM account. If not, the application may be deemed ineligible.

To begin the application process under this grant announcement, go to http://www.grants.gov and click on "Applicants" on the top of the page and then "Apply for Grants" from the dropdown menu and then follow the instructions accordingly. Please note: To apply through grants.gov, you must use Adobe Reader software and download the compatible Adobe Reader version. For more information about Adobe Reader, to verify compatibility, or to download the free software, please visit:

http://www.grants.gov/web/grants/support/technical-support/software/adobe-reader-compatibility.html

You may also be able to access the application package for this announcement by searching for the opportunity on http://www.grants.gov and then click on "Search Grants" at the top of the page and enter the Funding Opportunity Number, EPA-OAR-OAP-16-07, or CFDA 66.034, in the appropriate field and click the Search button. Alternatively, you may be able to access the application package by clicking on the Application Package button at the top right of the synopsis page for the announcement on http://www.grants.gov. To find the synopsis page, go to http://www.grants.gov and click "Browse Agencies" in the middle of the page and then go to "Environmental Protection Agency" to find the EPA funding opportunities.

Application Submission Deadline: Your organization's AOR must submit your complete application package electronically to EPA through Grants.gov (http://www.grants.gov) no later than September 12, 2016, 4:00 p.m., ET. Please allow for enough time to successfully submit your application process and allow for unexpected errors that may require you to resubmit.

Please submit all of the application materials described below using the grants.gov application package that you downloaded using the instructions above. For additional instructions on completing and submitting the electronic application package, click on the "Show Instructions" tab that is accessible within the application package itself.

Proposal/Application Materials

The following forms and documents are required under this announcement:

Mandatory Documents:

- Application for Federal Assistance (SF-424)
- Budget Information for Non-Construction Programs (SF-424A)
- Narrative Proposal (Project Narrative Attachment Form) prepared as described in Section IV. Part C. 1-3 of this announcement

Applications submitted through grants.gov will be time and date stamped electronically.

If you have not received a confirmation of receipt from EPA (not from grants.gov) within 30 days of the application deadline, please contact Eric Smith, at 202-343-9200. Failure to do so may result in your application not being reviewed.

Technical Issues With Submission

- 1. Once the application package has been completed, the "Submit" button should be enabled. If the "Submit" button is not active, please call Grants.gov for assistance at 1-800-518-4726. Applicants who are outside the U.S. at the time of submittal and are not able to access the toll-free number may reach a Grants.gov representative by calling 606-545-5035. Applicants should save the completed application package with two different file names before providing it to the AOR to avoid having to re-create the package should submission problems be experienced or a revised application needs to be submitted.
- 2. Submitting the application. The application package must be transferred to Grants.gov by an AOR. The AOR should close all other software before attempting to submit the application package. Click the "submit" button of the application package. Your Internet browser will launch and a sign-in page will appear. Note: Minor problems are not uncommon with transfers to Grants.gov. It is essential to allow sufficient time to ensure that your application is submitted to Grants.gov BEFORE the due date identified in Section IV of the solicitation. The Grants.gov support desk operates 24 hours a day, seven days a week, except Federal Holidays. A successful transfer will end with an on-screen acknowledgement. For documentation purposes, print or screen capture this acknowledgement. If a submission problem occurs, reboot the computer turning the power off may be necessary and re-attempt the submission. Note: Grants.gov issues a "case number" upon a request for assistance.
- 3. Transmission Difficulties. If transmission difficulties that result in a late transmission, no transmission, or rejection of the transmitted application are experienced, and following the above instructions do not resolve the problem so that the application is submitted to www.Grants.Gov by the deadline date and time, follow the guidance below. The Agency will make a decision concerning acceptance of each late submission on a case-by-case basis. All emails, as described below, are to be sent to Eric Smith at smith.eric@epa.gov with the FON in the subject line. If you are unable to email, contact Eric Smith at 202-343-9200. Be aware that EPA will only consider accepting applications that were unable to transmit due to www.Grants.gov or relevant www.Sam.gov system issues or for unforeseen exigent circumstances, such as extreme weather interfering with internet access. Failure of an applicant to submit timely because they did not properly or timely register in SAM.gov or Grants.gov is not an acceptable reason to justify acceptance of a late submittal.
- a. If you are experiencing problems resulting in an inability to upload the application to Grants.gov, it is essential to call www.Grants.gov for assistance at 1-800-518-4726 before the application deadline. Applicants who are outside the U.S. at the time of submittal and are not able to access the toll-free number may reach a Grants.gov representative by calling 606-545-5035. Be sure to obtain a case number from Grants.gov. If the problems stem from unforeseen exigent circumstances unrelated to Grants.gov, such as extreme weather interfering with internet access, contact Eric Smith at 202-343-9200.
- b. Unsuccessful transfer of the application package: If a successful transfer of the application cannot be accomplished even with assistance from Grants.gov due to electronic submission system issues or unforeseen exigent circumstances, send an email message to Eric Smith at smith.eric@epa.gov prior to the application deadline. The email message must document the problem and include the Grants.gov case number as well as the entire application in PDF format as an attachment.
- c. Grants.gov rejection of the application package: If a notification is received from Grants.gov stating that

the application has been rejected for reasons other than late submittal promptly send an email to Eric Smith at smith.eric@epa.gov with the FON in the subject line within one business day of the closing date of this solicitation. The email should include any materials provided by Grants.gov and attach the entire application in PDF format.

Appendix B. Budget Sample

Budget Detail

This section of the work plan is a detailed description of the budget found in the SF-424A, and must include a detailed discussion of how EPA funds will be used. Applicants must <u>itemize</u> costs related to personnel, fringe benefits, travel, equipment, supplies, contractual costs, other direct costs, indirect costs, and total costs.

If the project budget includes any cost-share, the Budget Detail portion of the narrative proposal must include a detailed description of how the applicant will obtain the cost-share and how the cost-share funding will be used. If EPA accepts an offer for a voluntary cost-share, applicants must meet their sharing commitment as a legal condition of receiving EPA funding. If the proposed cost-share is to be provided by a third-party, a letter of commitment is required. Any form of cost-share included in the Budget Detail must also be include on the SF 424 and SF 424A. Please see Section III.B if this RFP for more detailed information on cost-share.

Applicants should use the following instructions, budget object class descriptions, and example table to complete the Budget Detail section of the work plan.

- Personnel List all staff positions by title. Give annual salary, percentage of time assigned to the project, and total cost for the budget period. This category includes only direct costs for the salaries of those individuals who will perform work directly for the project (generally, paid employees of the applicant organization). If the applicant organization is including staff time (in-kind services) as a cost share, this should be included as Personnel costs. Personnel costs do not include: (1) costs for services of consultants, contractors, consortia members, or other partner organizations, which are included in the "Contractual" category; (2) costs for employees of subrecipients under subawards, which are included in the "Other" category; or (3) effort that is nor directly in support of the proposed project, which may be covered by the organization's negotiated indirect cost rate. The budget detail must identify the personnel category type by Full Time Equivalent (FTE), including percentage of FTE for part-time employees, number of personnel proposed for each category, and the estimated funding amounts.
- Fringe Benefits Identify the percentage used, the basis for its computation, and the types of benefits included. Fringe benefits are allowances and services provided by employers to their employees as compensation in addition to regular salaries and wages. Fringe benefits include, but are not limited to the cost of leave, employee insurance, pensions and unemployment benefit plans.
- Travel Specify the mileage, per diem, estimated number of trips in-State and out-of-State, number of travelers, and other costs for each type of travel. Travel may be integral to the purpose of the proposed project (e.g. inspections) or related to proposed project activities (e.g. attendance at meetings). Travel costs do not include: (1) costs for travel of consultants, contractors, consortia members, or other partner organizations, which are included in the "Contractual" category; (2) travel costs for employees of subrecipients under subawards, which are included in the "Other" category.

- Equipment Identify each item to be purchased which has an estimated acquisition cost of \$5,000 or more per unit and a useful life of more than one year. Equipment also includes accessories necessary to make the equipment operational. Equipment does not include: (1) equipment planned to be leased/rented, including lease/purchase agreement; or (2) equipment service or maintenance contracts. These types of proposed costs should be included in the "Other" category. Items with a unit cost of less than \$5,000 should be categorized as supplies, pursuant to 2 CFR Part 200. The budget detail must include an itemized listing of all equipment proposed under the project.
- Supplies "Supplies" means all tangible personal property other than "equipment". The budget detail should identify categories of supplies to be procured (e.g., laboratory supplies or office supplies). Non-tangible goods and services associated with supplies, such as printing service, photocopy services, and rental costs should be included in the "Other" category.
- Contractual Identify each proposed contract and specify its purpose and estimated cost.

 Contractual/consultant services are those services to be carried out by an individual or organization, other than the applicant, in the form of a procurement relationship. Leased or rented goods (equipment or supplies) should be included in the "Other" category. The applicant should list the proposed contract activities along with a brief description of the scope of work or services to be provided, proposed duration, and proposed procurement method (competitive or non-competitive), if known.
- Other List each item in sufficient detail for EPA to determine the reasonableness and allowability of its cost. This category should include only those types of direct costs that do not fit in any of the other budget categories. Examples of costs that may be in this category are: insurance, rental/lease of equipment or supplies, equipment service or maintenance contracts, printing or photocopying, rebates, and subaward costs. Subawards (e.g., subgrants) are a distinct type of cost under this category. The term "subaward" means an award of financial assistance (money or property) by any legal agreement made by the recipient to an eligible subrecipient. This term does not include procurement purchases, technical assistance in the form of services instead of money, or other assistance in the form of revenue sharing, loans, loan guarantees, interest subsidies, insurance, or direct appropriations. Subcontracts are not subawards and belong in the contractual category. Applicants must provide the aggregate amount they propose to issue as subaward work and a description of the types of activities to be supported.
- Indirect Charges If indirect charges are budgeted, indicate the approved rate and base. Indirect costs are those incurred by the grantee for a common or joint purpose that benefit more than one cost objective or project, and are not readily assignable to specific cost objectives or projects as a direct cost. In order for indirect costs to be allowable, the applicant must have a federal or state negotiated indirect cost rate (e.g., fixed, predetermined, final or provisional), or must have submitted a proposal to the cognizant Federal or State agency. Examples of Indirect Cost Rate calculations are shown below:
 - Personnel (Indirect Rate x Personnel = Indirect Costs)
 - Personnel and Fringe (Indirect Rate x Personnel & Fringe = Indirect Costs)
 - Total Direct Costs (Indirect Rate x Total direct costs = Indirect Costs)
 - Direct Costs minus distorting or other factors such as contracts and equipment (Indirect Rate x (total direct cost – distorting factors) = Indirect Costs)

Example Budget Table

	EPA Funding	**Cost-Share
Personnel		

(1) Project Manager @ \$40/hr x 10 hrs/week x 52 wks		\$20,800
(3) Project Staff @ \$25/hr x 40 hrs/week x 40 wks	\$120,000	
TOTAL PERSONNEL	\$120,000	\$20,800
Fringe Benefits		
20% of Salary and Wages	20%(120,000)	20%(20,800)
- Retirement, Health Benefits, FICA, SUI	\$24,000	\$4,160
TOTAL FRINGE BENEFITS	\$24,000	\$4,160
Travel		
Travel for Project Manager and staff: 500 mi/mo @ \$0.55/mi x 12 mos.	\$3,300	
TOTAL TRAVEL	\$3,300	
Equipment		
TOTAL EQUIPMENT	0	
Supplies		
Office and related supplies to support training	\$10,000	
TOTAL SUPPLIES	\$10,000	
Contractual		
Support Services Contract	\$20,000	
TOTAL CONTRACTUAL	\$20,000	
Other		
TOTAL OTHER	\$0	
Indirect Charges		
Federal Negotiated Indirect Cost Rate = 10% (Indirect Rate x Personnel = Indirect Costs)	\$12,000	
TOTAL INDIRECT	\$12,000	
TOTAL FUNDING	(fed) \$189,300	(non-fed) \$24,960
TOTAL PROJECT COST (federal and non-federal)	\$214,260	

^{**} Cost-Share funds, while not required under this RFA, must also be included on the SF-424A as detailed in Section III.B of this RFP.

Note on Management Fees: When formulating budgets for proposals, applicants must not include management fees or similar charges in excess of the direct costs and indirect costs at the rate approved by the applicant's cognizant Federal audit agency, or at the rate provided for by the terms of the agreement negotiated with EPA. The term "management fees or similar charges" refers to expenses added to the direct costs in order to accumulate and reserve funds for ongoing business expenses, unforeseen liabilities, or for other similar costs that are not allowable under EPA assistance agreements. Management fees or similar charges cannot be used to improve or expand the project funded under this agreement, except to the extent authorized as a direct cost of carrying out the work plan.