

Federal Aviation Administration
Center of Excellence
For
Commercial Space Transportation
Final Solicitation

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Issued by the:

Federal Aviation Administration

- Centers of Excellence Program Office -

- The Office of Commercial Space Transportation -

800 Independence Avenue, SW

Washington, DC

OVERVIEW

The Federal Aviation Administration (FAA) intends to establish a Center of Excellence for Commercial Space Transportation (COE-CST) in 2010. The Office of Primary Interest (OPI) for the COE-CST is the Office of Commercial Space Transportation (AST).

The goal of this endeavor is to create a cost sharing partnership of academia, industry, and government that will focus on research areas of primary interest to the FAA and the U.S. commercial space transportation industry as a whole.

Our purpose is to forge a union of public sector (FAA, space port authorities, state/local governments, etc.), private sector, and academic institutions to create a world-class consortium that will identify solutions for existing and anticipated commercial space transportation problems. The FAA expects the COE-CST to perform basic and applied research through a variety of analyses, development, and prototyping activities.

To this end, the FAA is soliciting proposals from accredited institutions of higher education and/or consortia of higher education with partners and affiliates addressing the establishment of the COE-CST.

The FAA intends to enter into cooperative agreements with core university members and award matching grants to establish, operate and conduct commercial space transportation research. As a result of this competitive process, the FAA also plans to award Indefinite Quantity Indefinite Delivery Contracts (IDIQ) to the successful COE team members and thereafter possibly fund delivery order tasks, on a cost reimbursement, cost sharing, and/or fixed price basis.

Although other government organizations, such as NASA, and private companies have indicated an interest in working with the FAA and the winning COE team, and may contribute funds and participate as co-sponsors, the FAA intends to invest \$1,000,000 per year for the next ten years to support the COE-CST.

1. FAA CENTERS OF EXCELLENCE PROGRAM

The FAA has long had a successful partnership with the nation's academic research community, working with U.S. colleges and universities to foster research by both faculty and students that contributes significantly to the advancement of aviation science and technology. This research has provided the agency and the industry a high return on its investment over the past decade. To enhance its research efforts, in August 2009, FAA proposed the establishment of a Center of Excellence for Commercial Space Transportation (COE-CST), designed to advance aerospace technology to meet the current and future needs of the U.S. commercial space transportation industry. This effort is in support of the FAA's mission to ensure protection of the public, property, and the national security and foreign policy interests of the United States during commercial launch or reentry activities, and to encourage, facilitate, and promote U.S. commercial space transportation. The Office of Primary Interest (OPI) for the COE-CST is the Office of Commercial Space Transportation (AST).

1.1 Background

Through the COE business strategy and structure, the FAA enhances internal research efforts by accessing the various talents of nationally recognized academic and industry research scientists. By establishing major research centers throughout the country, the agency proactively creates a pool of technical professionals trained in research areas related to the commercial space transportation industry, helps finance graduate education, fosters cooperative FAA-university-industry research and development (R&D) efforts, and, ultimately, improves the standing of the national commercial space transportation industry.

The FAA COEs are required by Congress to match grant funds, thus solidifying a significant partnership between the COE members and the FAA. Through this partnership, the government, academic institutions, and industry leverage the resources available for aviation research and maximize technological competence.

The FAA also may award contracts to successful applicants in a COE competition. This authority gives the COE the latitude to take basic research successes and continue to develop multiple forms of analysis, applications, and prototyping activities, thus providing products for the benefit of the agency as needed.

Researchers may be drawn from the academic institution's faculty and students, industry, the FAA, and other government agencies. They may work at an academic institution, an FAA location, or an industry location. For the COE-CST, each selected educational institution enters into a long-term cooperative agreement to conduct critical research in specific areas of interest to the commercial space transportation industry that are critical to the FAA's mission and long-term vision.

To foster the terms of this cooperative agreement, researchers provide technical expertise to relevant FAA projects and participate on major planning and investigative committees. They are also required to conduct annual research reviews, actively participate in Joint COE Conferences, and host seminars and reviews to disseminate research results.

In response to this solicitation, qualified institutions of higher education must submit proposals for consideration. Applicants are required to show the facilities; equipment; matching funds commitments from industry affiliates, state and local governments, etc; and financial and other resources that are available to meet statutory requirements.

Proposals are reviewed and evaluated on a competitive basis by a panel of subject matter experts and management officials. Each proposal is evaluated to determine the extent to which institutions and team members and affiliates are able to provide a quality environment for commercial space transportation research and to determine whether the team meets the selection criteria established by Congress.

As stated in Public Law 101-508, 49 U.S.C. 44513, institutions being considered for selection as a COE must demonstrate their ability to meet the following criteria:

- *The extent to which the needs of the State in which the applicant is located are representative of the needs of the region for improved air transportation services and facilities.*
- *The demonstrated research and extension resources available to the applicant to carry out this section.*
- *The ability of the applicant to provide leadership in making national and regional contributions to the solution of both long-range and immediate air transportation problems.*
- *The extent to which the applicant has an established air transportation program.*
- *The demonstrated ability of the applicant to disseminate results of air transportation research and educational programs through a statewide or region wide continuing education program.*
- *The projects the applicant proposes to carry out under the grant.*

Specific projects will be defined, evaluated, and supported on an ongoing basis throughout the life of the COE.

1.2 Questions

During the course of two public meetings held between the time of the release of the draft COE-CST solicitation and the final COE-CST solicitation, many questions were submitted and answered. A document containing these questions was distributed to all the attendees of both public meetings and was made publicly available on the FAA AST web site. For the latest version of this document, and additional information about the FAA COE Program and Public Meeting presentations, see www.faa.gov/go/coe or www.faa.gov/go/ast.

If the applicant has questions that were not addressed in the document referred to above, please send your questions via email to patricia.watts@faa.gov. Every attempt will be made to respond to your questions in a timely manner. No guarantee can be given that questions received after April 15 will receive a response.

2. STATEMENT OF WORK

Following the five year COE evaluation process (See 5.2 Duration and Reassessment), the hierarchy of research areas described below may be reorganized, expanded, and/or contracted as deemed necessary by the FAA and the OPI.

The proposals submitted in response to this Solicitation should reflect capabilities that would support the ensemble of technical areas listed below as a whole.

The successful applicant(s) shall be required to perform a variety of research, analysis, development, and prototyping tasks within the scope of the areas of interest to the FAA and the commercial space transportation industry. The initial technology areas to be addressed by the Center and grouped hierarchically and include:

2.1 Space Launch Operations and Traffic Management

This category of research encompasses all the engineering, operations, management, and safety areas of study related to the overall commercial space traffic management systems and its interactions with the civil aviation traffic management systems.

Specific discipline areas of research include, but are not limited to: On-Orbit Operations (with a subcategory in orbital debris mitigation), Emergency Response, Ground Safety, Spaceports, Space Traffic Control (with subcategories of Space Situational Awareness, Trajectory Analysis, Operational Constraints, Communication Black-Out During Re-Entry, and Micro-Meteorite and Orbital Debris Avoidance), Training (with subcategories of Regulatory Training, and Operations and Maintenance Training), and Space Environment (with subcategories of Space Weather, Terrestrial Weather, and Environmental Impact).

2.2 Launch Vehicle Systems, Payloads, Technologies, and Operations

This category of research encompasses all the engineering, operations, management, and safety areas of study related to launch vehicle, its systems, and its payloads.

Specific discipline areas of research include, but are not limited to: Safety Management & Engineering, Flight Safety Analyses & Computation, Avionics (with subcategories of GPS GNC, Inertial GNC, Orbital GNC, and Docking & Berthing), Flight Safety Systems, Materials, Propulsion Systems, Sensors, Software Safety, Testing (with subcategories of Ground Component Testing, Ground Systems Testing, and Flight Testing), Vehicle Design, and Payloads.

Where appropriate, both expendable launch vehicles (ELVs) and reusable launch vehicles (RLVs) can be addressed.

2.3 Commercial Human Space Flight

This category will provide opportunities for research in the areas of Aerospace Physiology and Medicine, ECLSS and Habitability, Human Factors, Human Rating of Commercial Spacecraft, and Personnel Training.

Research in these areas can provide critical information needed to allow the ordinary citizen, i.e., that person without the benefit of the physical, physiological, and psychological training and exposure to the space environment that the traditional astronaut has, to travel to space safely, to withstand the extremes of the space environment, and to readjust normally after returning to Earth.

2.4 Space Commerce

This category of research encompasses the subcategories of space business and economics, space law, space insurance, space policy, and space regulation.

Research in these areas will include, but not be limited to, a focus on developing innovative and practical commercial uses of space; innovative business and marketing strategies for companies involved in commercial launch operations and related components and services; support of the U.S. commercial space transportation industry's international perspective and competitiveness; and developing innovative financing for commercial launch activities.

2.5 Cross-Cutting Research Areas

There are three research topics that cross-cut most (if not all) of the four primary research areas mentioned above. These cross-cutting research topics are:

- Safety
- Testing
- Training

These three topics should be addressed in the four primary research areas where appropriate.

3. EVALUATION CRITERIA

Members of this Center of Excellence will be selected based on the formal evaluation criteria set forth in Public Law 101-508, 49 U.S.C. 44513. Each applicant is requested to address each of these individual evaluation factors, as these are the sole basis for the selection.

It should be noted that the italicized text used in this section is language quoted from Public Law 101-508, so it was left unchanged. Therefore, wherever the phrase "Air Transportation" is used, we assume the meaning to pertain to commercial space transportation as appropriate within the scope of FAA responsibilities.

3.1 CRITERION 1: THE EXTENT TO WHICH THE NEEDS OF THE STATE IN WHICH THE APPLICANT IS LOCATED ARE REPRESENTATIVE OF THE NEEDS OF THE REGION FOR IMPROVED AIR TRANSPORTATION SERVICES AND FACILITIES.

The applicant must demonstrate the following:

- Describe the state and region’s commercial space transportation capabilities, resources, and commitment to commercial space launch development, services and facilities, including relevance to next generation transportation planning, as well as environmental concerns.

3.2 CRITERION 2: THE DEMONSTRATED RESEARCH AND EXTENSION RESOURCES AVAILABLE TO THE APPLICANT TO CARRY OUT THIS SECTION. [RELATING TO Public Law 101-508]

The applicant must demonstrate the following:

- Relevant partnerships with members of the commercial space transportation industry.
- Recent grants and contracts awarded to the applicant focusing on commercial space transportation topics of research.
- The availability of laboratory, test, and evaluation facilities, located on-campus or off-campus.

3.3 CRITERION 3: THE ABILITY OF THE APPLICANT TO PROVIDE LEADERSHIP IN MAKING NATIONAL AND REGIONAL CONTRIBUTIONS TO THE SOLUTION OF LONG-RANGE AND IMMEDIATE AIR TRANSPORTATION PROBLEMS.

The applicant must demonstrate the following:

- Significant experience with industry and/or government agencies related to commercial space transportation. A proposed plan might include the establishment of an advisory board comprised of leaders in the field and written commitments from their organizations to be actively engaged in the COE.
- High standing within the national and international arena of commercial space transportation research as evidenced by presentations at national and international conferences, publications in popular and peer-reviewed periodicals, etc.
- Evidence of ability to obtain matching funds and potential sources, i.e. letters of commitment.
- If the applicant proposes as a member of a team of universities, it must provide a comprehensive strategic management plan. This plan should articulate proposed management and oversight of fiscal and technical activities, and detail how the universities will coordinate research efforts, how research teams will be selected and evaluated, and how the costs of administering the Center will be apportioned and funded.

3.4 CRITERION 4: THE EXTENT TO WHICH THE APPLICANT HAS AN ESTABLISHED AIR TRANSPORTATION PROGRAM.

The applicant must demonstrate the following:

- A history of training personnel in relevant and related academic fields (e.g., scientists, engineers, planners, economists, etc.) for commercial space transportation.
- Research experience related to commercial space transportation issues.
- Curricula in academic fields relevant and related to the hierarchy of technology areas listed in section 2. STATEMENT OF WORK above.
- Significant number of graduates and placement of students in industry, academia, and government in jobs related to commercial space transportation, and methods used to collect data on placement of graduates.
- Credible academic standards.

3.5 CRITERION 5: THE DEMONSTRATED ABILITY OF THE APPLICANT TO DISSEMINATE RESULTS OF THE AIR TRANSPORTATION RESEARCH AND EDUCATIONAL PROGRAMS THROUGH A STATEWIDE OR REGIONWIDE CONTINUING EDUCATION PROGRAM.

The applicant must demonstrate:

- Academic programs, such as continuing education, distance learning, etc., that address commercial space transportation needs.
- Experience conducting seminars, symposia, and workshops related to commercial space transportation topics.
- Experience using the Internet to disseminate results of research and enhance educational programs.
- Facilities and resources available to provide for information dissemination activities.

3.6 CRITERION 6: THE PROJECTS THE APPLICANT PROPOSES TO CARRY OUT UNDER THE GRANT.

The FAA is interested in the administrative plan for the COE-CST (e.g., how the applicant will organize and manage the core team members within the COE).

The FAA is also interested how the applicant will approach, conduct, evaluate and manage the research initiatives within the COE.

The applicant shall submit a concise program plan that reflects the needs for research in the commercial space transportation technology areas as defined in the scope of work. The plan shall not exceed 20% of the 50-page limit (See paragraph b. Volume I, Proposal in section 6.3. WHAT TO SUBMIT).

It is expected that the plan will contain between 10-20 projects that are evenly distributed across the entire spectrum of technology areas of interest listed in section 2. STATEMENT OF WORK. Descriptions of each project should be no more than typical abstracts of 300-400 words each. It is envisioned that the final number will be determined by the proposal page limit. If an applicant emphasizes one or more of the technology areas over the other four, a rationale for doing must be included.

These projects will not necessarily be funded if the applicant is selected.

In addition related to the selection criteria provided by Congress, COE proposals will be evaluated on the following evaluation factors:

- Ability to team with relevant state and local commercial space transportation-related organizations and industry affiliates.
- Overhead and other management/business cost minimization.
- A disciplined strategic COE management plan.
- A plan to implement special emphasis outreach efforts and collaborate with under represented groups.

4. CENTER OPERATIONS

The COE must maintain close working relationships with the FAA COE Program Office and the sponsoring research program offices. This relationship extends to participation in conferences, meetings, joint research efforts, and submission of significant activity reports to the FAA on a routine basis. The COE is required to prepare and submit semiannual reports and a fully inclusive annual report on research projects, other accomplishments, matching contributions and fiscal expenditures. During the first year, the COE is required to conduct on-site reviews and submit these reports quarterly.

The FAA will require the COE to hold an annual meeting with agency representatives on topics relating to the status and results of the designated research. The COE members will host a major symposium before the end of the initial five-year phase and thereafter as agreed upon. The Center is also required to actively participate in FAA Joint COE Meetings as scheduled.

In keeping with the Congressional requirement to disseminate information and the interest expressed by the agency to disseminate and utilize new knowledge, the COE will report on, and participate in, numerous informational activities. These activities may include, but are not limited to:

- Site visits for representatives of key professional, industrial, academic, state or local associations or organizations, members of the media, etc.
- Preparation of COE related publications, articles, pamphlets, manuals, books prepared or published, and papers delivered at conferences.
- Local, state, or regional meetings.
- Demonstrations of new or proposed technology.
- Development and presentation of courses, seminars, etc.

These activities may be accomplished in a variety of ways, such as through continuing education programs focused on the aviation community, university technology transfer organizations, etc.

The Grantee will not make any presentations, issue news releases, grant interviews, or engage in any other public interface or written publication that implies FAA involvement

or support or attribute conclusions to the FAA without prior written permission of the FAA COE-CST Technical Program Manager and the FAA COE Program Director.

5. ANNUAL RESEARCH REVIEW

The COE shall host an annual review of the research completed and in progress. The annual review includes on-site meetings and briefings conducted by appropriate technical and administrative support personnel. It must focus on the relevance, merit, direction, results, costs, and benefits of research and education efforts in the designated technology area, and include a discussion of potential future projects.

5.1 Annual Report

The COE shall prepare and deliver to the FAA Centers of Excellence Program Director an annual report by project area. The report shall include research results, benefits, and information dissemination efforts; the name and national origin of all research personnel; significant events that were sponsored or attended; journal articles and conference proceedings published throughout the past year; and a brief description of the research intended to be conducted during the following year. Use of graphics, photographs, in addition to the narrative descriptions is highly encouraged.

5.2 Duration and Reassessment

The FAA intends to fully support the COE for a period up to ten years, however this support is subject to the availability of funding. The needs of the agency are reviewed annually and the Center is reassessed within the first five years. As a result of changing needs, the agency reserves the right to expand scope, change direction, or terminate support for a COE for just cause. Under usual circumstances, COE members are provided adequate time to respond to changes or to assure orderly shut-down of the COE-CST at the time of its termination.

The reassessment process focuses on the progress and results of research efforts conducted within the COE during the initial five-year period in relation to the original proposal and the requirements of the agency. A reassessment team indicates FAA needs and expectations for continuing research and determines the appropriate funding necessary to continue, expand, or change direction of research projects or COE scope. Consideration is also given to the strategic management plan, activities supporting information dissemination requirements, technology transfer, outreach efforts, and legislative mandates.

The reassessment process includes an audit of the matching contributions.

The initial reassessment concludes with a recommendation for continuation, suspension, or termination. A recommendation for continuation means:

- The reassessment team has found that the COE is advancing the state-of-the-art technological areas specified in this solicitation.
- The FAA continues to have a need for ongoing research that can be satisfied by this COE.

- The FAA is reasonably sure funding will be available to support the next five-year phase.

The reassessment team then recommends that the partnership should continue to be funded for another five-year period. Each cooperative agreement is closed out at the end of the initial five-year period. When all members have satisfied matching requirements, a new cooperative agreement is negotiated with each core university member. Core members are then able to continue to receive direct grant funding from the FAA.

The FAA Administrator is immediately notified if the reassessment team recommends suspension or termination for cause. See FAA Order 9550.7A, Aviation Research Grants Program, for additional information on suspension and termination for cause.

(<http://www.its.tc.faa.gov/logistics/grants/order.htm>)

When a successfully evaluated COE is notified of pending termination as a result of completed research requirements, changing needs, or fiscal constraints, the FAA may continue to fund limited research at the member universities by awarding standard grants as requirements are generated. The COE members in good standing may maintain the COE designation following notification of the need to terminate the COE partnership. During the final transition, all measures are taken to provide for orderly close out of tasks. The FAA makes every attempt to continue to fund graduate students through the completion of theses and doctoral dissertations.

6. PROPOSAL PREPARATION AND SUBMISSION

The applicant begins the formal request for grant assistance to become a member of this COE by submitting a proposal.

The FAA expects adherence to the rules of proper scholarship and attribution. The responsibility for proper attribution rests with authors of a research proposal, all parts of which should be prepared with equal care for this concern. Failure to adhere to such standards can result in disqualification of the proposal. To avoid processing delays, the proposal should be reviewed carefully to include all essential data and required forms.

6.1 Who Is Eligible To Submit

- The final solicitation is posted on the grants.gov website.
- Accredited institutions of higher education are eligible to submit proposals to become a core member of the proposed Center of Excellence. When a team is proposing to serve as a COE, one member must serve as the lead. This role may be rotated, changed or redefined during the life of the Center.
- Individuals are not eligible for a COE designation and do not qualify for any awards under this program. Graduate students cannot submit proposals, but they are encouraged to serve as research assistants to faculty members.

Prior to final submission written questions may be submitted to the Centers of Excellence Program Director, Patricia Watts, FAX (609) 485-4101, email: patricia.watts@faa.gov.

Questions and answers will be distributed to all participants who request a solicitation package. Verbal questions will not be accepted after the Public Meeting.

6.2. When to Submit

Proposals may be submitted after the effective date of the final solicitation. The closing time and date for submission is 5:00 p.m. Eastern Daylight Time on Friday, April 30, 2010. Proposals postmarked on or before the closing date will be accepted for review. The FAA COE Program Office will review all submissions as received. Universities submitting a proposal in advance of the closing date will have an opportunity to provide further clarifications if needed prior to the final due date. Proposals must also be received by Grants.gov by 5:00pm Eastern Daylight Time on Friday, April 30, 2010.

6.3. What To Submit

The applicant must submit two volumes: Volume I is the Proposal, and Volume II contains the formal Certifications and Declarations.

Proposals may be fixed in the upper left hand corner; if unbound, submit materials in separate three-ring binders. Pages are to be numbered at the bottom.

Margins should be 1 inch (2.54 cm) at the top, bottom, and on each side, and text should be in type no smaller than 12 point. Print the original signed copy one sided, with the exception of original forms. Additional copies of the proposal may be printed on both sides.

Seven copies of each proposal must be submitted in addition to the original.

Attach any reprints, appendices, or other materials to be considered with the proposal to each individual copy of the proposal.

The FAA is not responsible for proposal preparation expenditures incurred by the proposing organization.

The Omnibus Trade and Competitiveness Act of 1988 requires federal agencies to use the metric system in procurement, grants, and other business-related activities. Proposals for grants submitted to the FAA are required to use the metric system of weights and measures. Likewise, reports, publications, and communiqués regarding proposals are required to use metric units.

Assemble proposals in the following sequence:

- a. **Cover Letter.** Affix a standard business format cover letter to the front of the proposal. Both the principal investigator/main point of contact and a senior level official at the lead institution must sign the letter in addition to a grants or contracts official.
- b. **Volume I, Proposal.** The Proposal will consist of a narrative statement (limited to 50 pages) that addresses the Evaluation Factors and the Selection Criteria established by Congress and set forth in this final Solicitation. Letters of commitment should be included in this volume.
- c. **Volume II, Certifications and Declarations.** This volume will consist of the following:

- (1) A copy of each core university team member's latest institutional audit report or letter.
- (2) Standard Form 424, Application for Federal Assistance. The original must be signed by the authorized Organizational Representative.
- (3) Research and Related Budget
- (4) Research and Related Personnel Data
- (5) Research and Related Senior/Key Person Profile (Expanded)
- (6) RR Fed/NonFed Budget
- (7) Project/Performance Site Locations
- (8) Indirect Cost Agreement. Provide a copy of the latest institutional indirect cost agreement negotiated with the institution's cognizant Federal audit agency (Department of Health and Human Services, Department of Defense, or other) in force. Applicants must ensure that the costs the FAA is being asked to support are allowable, necessary, and reasonable and that the treatment of direct or indirect costs in the budget is consistent with applicable federal cost principles and with the policies of the submitting organization.
- (9) Long-Term Management Plan. The strategic business and financial plan should detail how the institution proposes to direct and manage the Center of Excellence and generate matching funds and income from outside sources in order to achieve financial independence within a 10-year period. This plan should include: an organization chart, roles and responsibilities of key personnel including industry affiliates; projected activities to be undertaken during the life of the COE to satisfy Congressional mandates and achieve goals of the COE Program and technical requirements presented by public and private sponsors.

If the proposal being submitted includes related work that has been funded previously, or is currently being funded, by FAA or a source other than the FAA, the information should be declared. If the proposal is being submitted to other possible sponsors, include a listing of them. Concurrent submission of a proposal to other organizations for a similar purpose will not impact review by the FAA or other government entities.

6.4 Where to Submit

Send original proposal plus seven copies to:

Patricia Watts, Ph.D. AJP-9
Director, Centers of Excellence Program
Federal Aviation Administration
William J. Hughes Technical Center, K15
Atlantic City International Airport, NJ 08405

The outside of each package should be clearly marked "Center of Excellence Proposal." Every effort will be made to promptly reach a decision and to inform the applicants of a selection. Proposals must also be submitted through Grants.gov.

7. PROPOSAL PROCESSING AND EVALUATION

7.1 Acknowledgment/Review

Proposals to establish a COE are assigned a proposal number and the COE Program Office will acknowledge receipt in writing. Proposals are reviewed to assure that each one contains all elements required of standard and continuing grant proposals and all data are sufficient for the evaluation team to evaluate proposals in accordance with Public Law 101-508.

7.2 Evaluation/Selection

The COE Program Office performs an initial review of each proposal to assure it satisfies all congressionally defined criteria and requirements.

After initial review, a team of subject matter experts will evaluate each proposal to assure the FAA Technical Evaluation Factors are fully addressed.

During the evaluation process, the FAA will also conduct a management and fiscal review of each proposal.

The evaluation team will consist of at least three government employees with expertise in commercial space transportation subject matter. The team leader is responsible for developing an overall rating based on evaluations of the team members.

The FAA sponsoring organization and COE Program Office may conduct site visits to inspect available resources prior to finalizing the evaluation process.

The FAA COE Program Director may contact the proposing organization to discuss the submission or request further information to assist in assessing the proposal prior to selection and award.

7.3 Ineligible Proposals

Proposals determined to be ineligible for consideration under this solicitation will be returned to the applicant with a written explanation as to why the proposal was determined ineligible.

7.4 Withdrawal

A proposing institution, at any time before an award is made, may withdraw a proposal. The request for withdrawal must be made in writing, stating the reason for withdrawal, and be signed by the Principal Investigator, a grant or contract official, and a senior university official.

8. GRANT AWARD AND ADMINISTRATION

8.1 Types of Awards

Cooperative Agreement — This agreement specifies terms and conditions of the initial five-year period of award and allows award of grants at a specified level. In keeping with

current congressional requirements, the COE must match, on average, 100% of FAA-provided funding during each five-year phase on all funds awarded to establish, operate and conduct related research. A cooperative agreement will be prepared and signed by the FAA and fiscal officers at each core university. Grant funds will be awarded as amendments to this agreement over the life of the COE.

Standard Grant — A grant which the FAA agrees to support at a specific level of effort for a specified period of time with no statement of FAA intent to provide additional future support without submission of another proposal. Standard grants may be awarded to a COE following notification of intent to cease funding the long-term partnership. Grant awards are made for public purpose.

The OPI will establish the level of effort for this Center of Excellence and establish long-term fiscal plans to support the COE-CST research, education, training and related activities.

8.2 Grant Award

The award instruments will contain all documentation applicable to the award and administration of the grant(s).

8.3 Grant Administration

Program guidance is provided in the COE Cooperative Agreement and in the COE Policy Guide. The conditions and provisions of the initial Cooperative Agreement and the subsequent grant award instrument(s) govern the administration of grant funds awarded through the COE Program Office. The COE Program Director also serves as the Grants Officer for all grant awards.

The FAA COE Grants Officer may make direct awards to universities, partners, and affiliates for the convenience of the government. The Grants Officer also has the authority to make grant awards directly to participating universities for special emphasis outreach efforts, information dissemination activities and products, and to support other activities as required by the Federal Government.

The grantee has full responsibility for the conduct of the projects and activities supported under an FAA award, and for adherence to the award conditions. The grantee is in the best position to determine the means by which activities and projects can be performed most effectively.

The relationship between the FAA and the award recipient, through the Principal Investigator, the FAA COE Program Director, the FAA COE-CST Program Manager, and the FAA and COE-CST Directors, is a collaboration. Once a COE is established, grantees are encouraged to seek advice and opinions on technical issues, management and fiscal concerns, and problems that may arise with appropriate offices.

Only officially designated fiscal officers are authorized to commit funds and to permit projects to be initiated.

8.4 Direct Awards

In the event that a team submits a proposal to establish a COE and is selected, direct grants and contracts to university partners and affiliates may be awarded to each member without further competition. The COE will provide a final strategic Management Plan to include a process for allocation of projects and administrative expenses.

9. REQUIRED FORMS

The attached forms are required when submitting grant proposals.

- Standard Form 424, Application for Federal Assistance
- Research and Related Budget
- Research and Related Personnel Data
- Research and Related Senior/Key Person Profile (Expanded)
- RR Fed/NonFed Budget
- Project/Performance Site Locations
- Attachments

10. E-GRANTS AND ADDITIONAL INFORMATION

For information regarding FAA Air Transportation Centers of Excellence and the electronic grants application system, see the website at www.faa.gov/go/coe

APPENDIX A
CHECKLIST FOR CENTER OF EXCELLENCE
PROPOSAL SUBMISSION

Use this checklist to ensure that a complete proposal is submitted. Complete proposals expedite processing and facilitate the review process. Details of these required elements are found within this solicitation.

_____ Cover Letter

Volume I, Proposal

_____ Narrative Statement in response to the Evaluation Factors
(125 Page Limit)

Volume II, Certifications and Declarations

_____ Cover Sheet for Proposals to the FAA (FAA Form 9550-1)

_____ Research and Related Budget

_____ Research and Related Personnel Data

_____ Research and Related Senior/Key Person Profile (Expanded)

_____ RR Fed/NonFed Budget

_____ Project/Performance Site Locations

_____ Attachments (For Proposal Narrative, Indirect Cost Agreement,
and Long-Term Management Plan in Grants.gov)

APPENDIX B
REQUIRED FORMS

APPLICATION FOR FEDERAL ASSISTANCE

SF 424 (R&R)

2. DATE SUBMITTED []	Applicant Identifier []
3. DATE RECEIVED BY STATE []	State Application Identifier []
4. Federal Identifier []	

1. * TYPE OF SUBMISSION

- Pre-application Application
 Changed/Corrected Application

5. APPLICANT INFORMATION

* Organizational DUNS: []

* Legal Name: []

Department: [] Division: []

* Street1: [] Street2: []

* City: [] County: [] * State: [] * ZIP Code: []

* Country: []

Person to be contacted on matters involving this application

Prefix: [] * First Name: [] Middle Name: [] * Last Name: [] Suffix: []

* Phone Number: [] Fax Number: [] Email: []

6. * EMPLOYER IDENTIFICATION (EIN) or (TIN):

[]

7. * TYPE OF APPLICANT:

Please select one of the following

Other (Specify):

Small Business Organization Type

- Women Owned Socially and Economically Disadvantaged

8. * TYPE OF APPLICATION:

- New
 Resubmission Renewal Continuation Revision

If Revision, mark appropriate box(es).

- A. Increase Award B. Decrease Award C. Increase Duration
 D. Decrease Duration E. Other (specify):

9. * NAME OF FEDERAL AGENCY:

[]

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:

[]

TITLE: []

* Is this application being submitted to other agencies? Yes No

What other Agencies?

11. * DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:

[]

12. * AREAS AFFECTED BY PROJECT (cities, counties, states, etc.)

[]

13. PROPOSED PROJECT:

* Start Date [] * Ending Date []

14. CONGRESSIONAL DISTRICTS OF:

a. * Applicant [] b. * Project []

15. PROJECT DIRECTOR/PRINCIPAL INVESTIGATOR CONTACT INFORMATION

Prefix: [] * First Name: [] Middle Name: [] * Last Name: [] Suffix: []

Position/Title: [] * Organization Name: []

Department: [] Division: []

* Street1: [] Street2: []

* City: [] County: [] * State: [] * ZIP Code: []

* Country: []

* Phone Number: [] Fax Number: [] * Email: []

<p>16. ESTIMATED PROJECT FUNDING</p> <p>a. * Total Estimated Project Funding <input style="width:150px;" type="text"/></p> <p>b. * Total Federal & Non-Federal Funds <input style="width:150px;" type="text"/></p> <p>c. * Estimated Program Income <input style="width:150px;" type="text"/></p>	<p>17. * IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?</p> <p>a. YES <input type="checkbox"/> THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:</p> <p>DATE: _____</p> <p>b. NO <input type="checkbox"/> PROGRAM IS NOT COVERED BY E.O. 12372; OR <input type="checkbox"/> PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW</p>
--	---

18. By signing this application, I certify (1) to the statements contained in the list of certifications* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances * and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001)

* I agree

* The list of certifications and assurances, or an Internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

19. Authorized Representative

Prefix: * First Name: Middle Name: * Last Name: Suffix:

* Position/Title: * Organization:

Department: Division:

* Street1: Street2:

* City: County: * State: * ZIP Code:

* Country:

* Phone Number: Fax Number: * Email:

* Signature of Authorized Representative
 * Date Signed

20. Pre-application

21. Attach an additional list of Project Congressional Districts if needed.

RESEARCH & RELATED BUDGET - SECTION C, D, & E, BUDGET PERIOD 1

* ORGANIZATIONAL DUNS:

* Budget Type: Project Subaward/Consortium

Enter name of Organization:

* Start Date: * End Date: Budget Period: 1

(If the Reset Entries button is pressed, please navigate to previous year to enable the submission of the

C. Equipment Description

List items and dollar amount for each item exceeding \$5,000

	Equipment item	* Funds Requested (\$)
1.	<input type="text"/>	<input type="text"/>
2.	<input type="text"/>	<input type="text"/>
3.	<input type="text"/>	<input type="text"/>
4.	<input type="text"/>	<input type="text"/>
5.	<input type="text"/>	<input type="text"/>
6.	<input type="text"/>	<input type="text"/>
7.	<input type="text"/>	<input type="text"/>
8.	<input type="text"/>	<input type="text"/>
9.	<input type="text"/>	<input type="text"/>
10.	<input type="text"/>	<input type="text"/>
11.	Total funds requested for all equipment listed in the attached file	<input type="text"/>
	Total Equipment	<input type="text"/>

Additional Equipment:

D. Travel

	Funds Requested (\$)
1. Domestic Travel Costs (Incl. Canada, Mexico and U.S. Possessions)	<input type="text"/>
2. Foreign Travel Costs	<input type="text"/>
Total Travel Cost	<input type="text"/>

E. Participant/Trainee Support Costs

	Funds Requested (\$)
1. Tuition/Fees/Health Insurance	<input type="text"/>
2. Stipends	<input type="text"/>
3. Travel	<input type="text"/>
4. Subsistence	<input type="text"/>
5. Other <input type="text"/>	<input type="text"/>
<input type="text"/> Number of Participants/Trainees Total Participant/Trainee Support Costs	<input type="text"/>

RESEARCH & RELATED BUDGET - SECTION F-K, BUDGET PERIOD 1

Next Period

* ORGANIZATIONAL DUNS:

* Budget Type: Project Subaward/Consortium

Enter name of Organization:

* Start Date: * End Date: Budget Period: 1

(If the Reset Entries button is pressed, please navigate to previous year to enable the submission of the

F. Other Direct Costs	Funds Requested (\$)
1. Materials and Supplies	<input type="text"/>
2. Publication Costs	<input type="text"/>
3. Consultant Services	<input type="text"/>
4. ADP/Computer Services	<input type="text"/>
5. Subawards/Consortium/Contractual Costs	<input type="text"/>
6. Equipment or Facility Rental/User Fees	<input type="text"/>
7. Alterations and Renovations	<input type="text"/>
8. <input type="text"/>	<input type="text"/>
9. <input type="text"/>	<input type="text"/>
10. <input type="text"/>	<input type="text"/>
Total Other Direct Costs	<input type="text"/>

G. Direct Costs	Funds Requested (\$)
Total Direct Costs (A thru F)	<input type="text"/>

H. Indirect Costs	Indirect Cost Rate (%)	Indirect Cost Base (\$)	* Funds Requested (\$)
Indirect Cost Type			
1. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Indirect Costs			<input type="text" value="0.00"/>

Cognizant Federal Agency
 (Agency Name, POC Name, and POC Phone Number)

I. Total Direct and Indirect Costs	Funds Requested (\$)
Total Direct and Indirect Institutional Costs (G + H)	<input type="text" value="0.00"/>

J. Fee	Funds Requested (\$)
	<input type="text"/>

K. * Budget Justification
 (Only attach one file.)

RESEARCH & RELATED BUDGET - Cumulative Budget

		Totals (\$)
Section A, Senior/Key Person		<input type="text"/>
Section B, Other Personnel		<input type="text"/>
Total Number Other Personnel	<input type="text"/>	
Total Salary, Wages and Fringe Benefits (A+B)		<input type="text"/>
Section C, Equipment		<input type="text"/>
Section D, Travel		<input type="text"/>
1. Domestic	<input type="text"/>	
2. Foreign	<input type="text"/>	
Section E, Participant/Trainee Support Costs		<input type="text"/>
1. Tuition/Fees/Health Insurance	<input type="text"/>	
2. Stipends	<input type="text"/>	
3. Travel	<input type="text"/>	
4. Subsistence	<input type="text"/>	
5. Other	<input type="text"/>	
6. Number of Participants/Trainees	<input type="text"/>	
Section F, Other Direct Costs		<input type="text"/>
1. Materials and Supplies	<input type="text"/>	
2. Publication Costs	<input type="text"/>	
3. Consultant Services	<input type="text"/>	
4. ADP/Computer Services	<input type="text"/>	
5. Subawards/Consortium/Contractual Costs	<input type="text"/>	
6. Equipment or Facility Rental/User Fees	<input type="text"/>	
7. Alterations and Renovations	<input type="text"/>	
8. Other 1	<input type="text"/>	
9. Other 2	<input type="text"/>	
10. Other 3	<input type="text"/>	
Section G, Direct Costs (A thru F)		<input type="text"/>
Section H, Indirect Costs		<input type="text"/>
Section I, Total Direct and Indirect Costs (G + H)		<input type="text"/>
Section J, Fee		<input type="text"/>

RESEARCH & RELATED BUDGET - SECTION C, D, & E, BUDGET PERIOD 2

* ORGANIZATIONAL DUNS:

* Budget Type: Project Subaward/Consortium

Enter name of Organization:

* Start Date: * End Date: Budget Period: 2

(If the Reset Entries button is pressed, please navigate to previous year to enable the submission of the

C. Equipment Description

List items and dollar amount for each item exceeding \$5,000

	Equipment item	* Funds Requested (\$)
1.	<input type="text"/>	<input type="text"/>
2.	<input type="text"/>	<input type="text"/>
3.	<input type="text"/>	<input type="text"/>
4.	<input type="text"/>	<input type="text"/>
5.	<input type="text"/>	<input type="text"/>
6.	<input type="text"/>	<input type="text"/>
7.	<input type="text"/>	<input type="text"/>
8.	<input type="text"/>	<input type="text"/>
9.	<input type="text"/>	<input type="text"/>
10.	<input type="text"/>	<input type="text"/>
11.	Total funds requested for all equipment listed in the attached file	<input type="text"/>
	Total Equipment	<input type="text"/>

Additional Equipment:

D. Travel

	Funds Requested (\$)
1. Domestic Travel Costs (Incl. Canada, Mexico and U.S. Possessions)	<input type="text"/>
2. Foreign Travel Costs	<input type="text"/>
Total Travel Cost	<input type="text"/>

E. Participant/Trainee Support Costs

	Funds Requested (\$)
1. Tuition/Fees/Health Insurance	<input type="text"/>
2. Stipends	<input type="text"/>
3. Travel	<input type="text"/>
4. Subsistence	<input type="text"/>
5. Other <input type="text"/>	<input type="text"/>
<input type="text"/> Number of Participants/Trainees Total Participant/Trainee Support Costs	<input type="text"/>

RESEARCH & RELATED BUDGET - SECTION F-K, BUDGET PERIOD 2

Next Period

* ORGANIZATIONAL DUNS:

* Budget Type: Project Subaward/Consortium

Enter name of Organization:

* Start Date: * End Date:

Budget Period: 2

(If the Reset Entries button is pressed, please navigate to previous year to enable the submission of the

F. Other Direct Costs

Funds Requested (\$)

1. Materials and Supplies	<input type="text"/>
2. Publication Costs	<input type="text"/>
3. Consultant Services	<input type="text"/>
4. ADP/Computer Services	<input type="text"/>
5. Subawards/Consortium/Contractual Costs	<input type="text"/>
6. Equipment or Facility Rental/User Fees	<input type="text"/>
7. Alterations and Renovations	<input type="text"/>
8. <input type="text"/>	<input type="text"/>
9. <input type="text"/>	<input type="text"/>
10. <input type="text"/>	<input type="text"/>
Total Other Direct Costs	<input type="text"/>

G. Direct Costs

Funds Requested (\$)

Total Direct Costs (A thru F)

H. Indirect Costs

	Indirect Cost Type	Indirect Cost Rate (%)	Indirect Cost Base (\$)	* Funds Requested (\$)
1.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Indirect Costs				<input type="text" value="0.00"/>

Cognizant Federal Agency

(Agency Name, POC Name, and POC Phone Number)

I. Total Direct and Indirect Costs

Funds Requested (\$)

Total Direct and Indirect Institutional Costs (G + H)

J. Fee

Funds Requested (\$)

K. * Budget Justification

(Only attach one file.)

RESEARCH & RELATED BUDGET - Cumulative Budget

		Totals (\$)
Section A, Senior/Key Person		<input type="text"/>
Section B, Other Personnel		<input type="text"/>
Total Number Other Personnel	<input type="text"/>	
Total Salary, Wages and Fringe Benefits (A+B)		<input type="text"/>
Section C, Equipment		<input type="text"/>
Section D, Travel		<input type="text"/>
1. Domestic	<input type="text"/>	
2. Foreign	<input type="text"/>	
Section E, Participant/Trainee Support Costs		<input type="text"/>
1. Tuition/Fees/Health Insurance	<input type="text"/>	
2. Stipends	<input type="text"/>	
3. Travel	<input type="text"/>	
4. Subsistence	<input type="text"/>	
5. Other	<input type="text"/>	
6. Number of Participants/Trainees	<input type="text"/>	
Section F, Other Direct Costs		<input type="text"/>
1. Materials and Supplies	<input type="text"/>	
2. Publication Costs	<input type="text"/>	
3. Consultant Services	<input type="text"/>	
4. ADP/Computer Services	<input type="text"/>	
5. Subawards/Consortium/Contractual Costs	<input type="text"/>	
6. Equipment or Facility Rental/User Fees	<input type="text"/>	
7. Alterations and Renovations	<input type="text"/>	
8. Other 1	<input type="text"/>	
9. Other 2	<input type="text"/>	
10. Other 3	<input type="text"/>	
Section G, Direct Costs (A thru F)		<input type="text"/>
Section H, Indirect Costs		<input type="text"/>
Section I, Total Direct and Indirect Costs (G + H)		<input type="text"/>
Section J, Fee		<input type="text"/>

RESEARCH & RELATED BUDGET - SECTION C, D, & E, BUDGET PERIOD 3

* ORGANIZATIONAL DUNS:

* Budget Type: Project Subaward/Consortium

Enter name of Organization:

* Start Date: * End Date: Budget Period: 3

(If the Reset Entries button is pressed, please navigate to previous year to enable the submission of the

C. Equipment Description

List items and dollar amount for each item exceeding \$5,000

	Equipment item	* Funds Requested (\$)
1.	<input type="text"/>	<input type="text"/>
2.	<input type="text"/>	<input type="text"/>
3.	<input type="text"/>	<input type="text"/>
4.	<input type="text"/>	<input type="text"/>
5.	<input type="text"/>	<input type="text"/>
6.	<input type="text"/>	<input type="text"/>
7.	<input type="text"/>	<input type="text"/>
8.	<input type="text"/>	<input type="text"/>
9.	<input type="text"/>	<input type="text"/>
10.	<input type="text"/>	<input type="text"/>
11.	Total funds requested for all equipment listed in the attached file	<input type="text"/>
	Total Equipment	<input type="text"/>

Additional Equipment:

D. Travel

	Funds Requested (\$)
1.	Domestic Travel Costs (Incl. Canada, Mexico and U.S. Possessions) <input type="text"/>
2.	Foreign Travel Costs <input type="text"/>
	Total Travel Cost <input type="text"/>

E. Participant/Trainee Support Costs

	Funds Requested (\$)
1.	Tuition/Fees/Health Insurance <input type="text"/>
2.	Stipends <input type="text"/>
3.	Travel <input type="text"/>
4.	Subsistence <input type="text"/>
5.	Other <input type="text"/>
<input type="text"/>	Number of Participants/Trainees <input type="text"/>
	Total Participant/Trainee Support Costs <input type="text"/>

RESEARCH & RELATED BUDGET - SECTION F-K, BUDGET PERIOD 3

Next Period

* ORGANIZATIONAL DUNS:

* Budget Type: Project Subaward/Consortium

Enter name of Organization:

* Start Date: * End Date:

Budget Period: 3

(If the Reset Entries button is pressed, please navigate to previous year to enable the submission of the

F. Other Direct Costs

Funds Requested (\$)

1. Materials and Supplies	<input type="text"/>
2. Publication Costs	<input type="text"/>
3. Consultant Services	<input type="text"/>
4. ADP/Computer Services	<input type="text"/>
5. Subawards/Consortium/Contractual Costs	<input type="text"/>
6. Equipment or Facility Rental/User Fees	<input type="text"/>
7. Alterations and Renovations	<input type="text"/>
8. <input type="text"/>	<input type="text"/>
9. <input type="text"/>	<input type="text"/>
10. <input type="text"/>	<input type="text"/>
Total Other Direct Costs	<input type="text"/>

G. Direct Costs

Funds Requested (\$)

Total Direct Costs (A thru F)

H. Indirect Costs

	Indirect Cost Type	Indirect Cost Rate (%)	Indirect Cost Base (\$)	* Funds Requested (\$)
1.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Indirect Costs				<input type="text" value="0.00"/>

Cognizant Federal Agency
 (Agency Name, POC Name, and POC Phone Number)

I. Total Direct and Indirect Costs

Funds Requested (\$)

Total Direct and Indirect Institutional Costs (G + H)

J. Fee

Funds Requested (\$)

K. * Budget Justification

(Only attach one file.)

RESEARCH & RELATED BUDGET - Cumulative Budget

		Totals (\$)
Section A, Senior/Key Person		<input type="text"/>
Section B, Other Personnel		<input type="text"/>
Total Number Other Personnel	<input type="text"/>	
Total Salary, Wages and Fringe Benefits (A+B)		<input type="text"/>
Section C, Equipment		<input type="text"/>
Section D, Travel		<input type="text"/>
1. Domestic	<input type="text"/>	
2. Foreign	<input type="text"/>	
Section E, Participant/Trainee Support Costs		<input type="text"/>
1. Tuition/Fees/Health Insurance	<input type="text"/>	
2. Stipends	<input type="text"/>	
3. Travel	<input type="text"/>	
4. Subsistence	<input type="text"/>	
5. Other	<input type="text"/>	
6. Number of Participants/Trainees	<input type="text"/>	
Section F, Other Direct Costs		<input type="text"/>
1. Materials and Supplies	<input type="text"/>	
2. Publication Costs	<input type="text"/>	
3. Consultant Services	<input type="text"/>	
4. ADP/Computer Services	<input type="text"/>	
5. Subawards/Consortium/Contractual Costs	<input type="text"/>	
6. Equipment or Facility Rental/User Fees	<input type="text"/>	
7. Alterations and Renovations	<input type="text"/>	
8. Other 1	<input type="text"/>	
9. Other 2	<input type="text"/>	
10. Other 3	<input type="text"/>	
Section G, Direct Costs (A thru F)		<input type="text"/>
Section H, Indirect Costs		<input type="text"/>
Section I, Total Direct and Indirect Costs (G + H)		<input type="text"/>
Section J, Fee		<input type="text"/>

RESEARCH & RELATED BUDGET - SECTION C, D, & E, BUDGET PERIOD 4

* ORGANIZATIONAL DUNS:

* Budget Type: Project Subaward/Consortium

Enter name of Organization:

* Start Date: * End Date: Budget Period: 4

(If the Reset Entries button is pressed, please navigate to previous year to enable the submission of the

C. Equipment Description

List items and dollar amount for each item exceeding \$5,000

	Equipment item	* Funds Requested (\$)
1.	<input type="text"/>	<input type="text"/>
2.	<input type="text"/>	<input type="text"/>
3.	<input type="text"/>	<input type="text"/>
4.	<input type="text"/>	<input type="text"/>
5.	<input type="text"/>	<input type="text"/>
6.	<input type="text"/>	<input type="text"/>
7.	<input type="text"/>	<input type="text"/>
8.	<input type="text"/>	<input type="text"/>
9.	<input type="text"/>	<input type="text"/>
10.	<input type="text"/>	<input type="text"/>
11.	Total funds requested for all equipment listed in the attached file	<input type="text"/>
	Total Equipment	<input type="text"/>

Additional Equipment:

D. Travel

		Funds Requested (\$)
1.	Domestic Travel Costs (Incl. Canada, Mexico and U.S. Possessions)	<input type="text"/>
2.	Foreign Travel Costs	<input type="text"/>
	Total Travel Cost	<input type="text"/>

E. Participant/Trainee Support Costs

		Funds Requested (\$)
1.	Tuition/Fees/Health Insurance	<input type="text"/>
2.	Stipends	<input type="text"/>
3.	Travel	<input type="text"/>
4.	Subsistence	<input type="text"/>
5.	Other <input type="text"/>	<input type="text"/>
<input type="text"/>	Number of Participants/Trainees	<input type="text"/>
	Total Participant/Trainee Support Costs	<input type="text"/>

RESEARCH & RELATED BUDGET - SECTION F-K, BUDGET PERIOD 4

Next Period

* ORGANIZATIONAL DUNS:

* Budget Type: Project Subaward/Consortium

Enter name of Organization:

* Start Date: * End Date:

Budget Period: 4

(If the Reset Entries button is pressed, please navigate to previous year to enable the submission of the

F. Other Direct Costs

Funds Requested (\$)

1. Materials and Supplies	<input type="text"/>
2. Publication Costs	<input type="text"/>
3. Consultant Services	<input type="text"/>
4. ADP/Computer Services	<input type="text"/>
5. Subawards/Consortium/Contractual Costs	<input type="text"/>
6. Equipment or Facility Rental/User Fees	<input type="text"/>
7. Alterations and Renovations	<input type="text"/>
8. <input type="text"/>	<input type="text"/>
9. <input type="text"/>	<input type="text"/>
10. <input type="text"/>	<input type="text"/>
Total Other Direct Costs	<input type="text"/>

G. Direct Costs

Funds Requested (\$)

Total Direct Costs (A thru F)

H. Indirect Costs

	Indirect Cost Type	Indirect Cost Rate (%)	Indirect Cost Base (\$)	* Funds Requested (\$)
1.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Indirect Costs				<input type="text" value="0.00"/>

Cognizant Federal Agency

(Agency Name, POC Name, and POC Phone Number)

I. Total Direct and Indirect Costs

Funds Requested (\$)

Total Direct and Indirect Institutional Costs (G + H)

J. Fee

Funds Requested (\$)

K. * Budget Justification

(Only attach one file.)

RESEARCH & RELATED BUDGET - Cumulative Budget

		Totals (\$)
Section A, Senior/Key Person		<input type="text"/>
Section B, Other Personnel		<input type="text"/>
Total Number Other Personnel	<input type="text"/>	
Total Salary, Wages and Fringe Benefits (A+B)		<input type="text"/>
Section C, Equipment		<input type="text"/>
Section D, Travel		<input type="text"/>
1. Domestic	<input type="text"/>	
2. Foreign	<input type="text"/>	
Section E, Participant/Trainee Support Costs		<input type="text"/>
1. Tuition/Fees/Health Insurance	<input type="text"/>	
2. Stipends	<input type="text"/>	
3. Travel	<input type="text"/>	
4. Subsistence	<input type="text"/>	
5. Other	<input type="text"/>	
6. Number of Participants/Trainees	<input type="text"/>	
Section F, Other Direct Costs		<input type="text"/>
1. Materials and Supplies	<input type="text"/>	
2. Publication Costs	<input type="text"/>	
3. Consultant Services	<input type="text"/>	
4. ADP/Computer Services	<input type="text"/>	
5. Subawards/Consortium/Contractual Costs	<input type="text"/>	
6. Equipment or Facility Rental/User Fees	<input type="text"/>	
7. Alterations and Renovations	<input type="text"/>	
8. Other 1	<input type="text"/>	
9. Other 2	<input type="text"/>	
10. Other 3	<input type="text"/>	
Section G, Direct Costs (A thru F)		<input type="text"/>
Section H, Indirect Costs		<input type="text"/>
Section I, Total Direct and Indirect Costs (G + H)		<input type="text"/>
Section J, Fee		<input type="text"/>

RESEARCH & RELATED BUDGET - SECTION C, D, & E, BUDGET PERIOD 5

* ORGANIZATIONAL DUNS:

* Budget Type: Project Subaward/Consortium

Enter name of Organization:

* Start Date: * End Date: Budget Period: 5

(If the Reset Entries button is pressed, please navigate to previous year to enable the submission of the

C. Equipment Description

List items and dollar amount for each item exceeding \$5,000

	Equipment item	* Funds Requested (\$)
1.	<input type="text"/>	<input type="text"/>
2.	<input type="text"/>	<input type="text"/>
3.	<input type="text"/>	<input type="text"/>
4.	<input type="text"/>	<input type="text"/>
5.	<input type="text"/>	<input type="text"/>
6.	<input type="text"/>	<input type="text"/>
7.	<input type="text"/>	<input type="text"/>
8.	<input type="text"/>	<input type="text"/>
9.	<input type="text"/>	<input type="text"/>
10.	<input type="text"/>	<input type="text"/>
11.	Total funds requested for all equipment listed in the attached file	<input type="text"/>
	Total Equipment	<input type="text"/>

Additional Equipment:

D. Travel

	Funds Requested (\$)
1. Domestic Travel Costs (Incl. Canada, Mexico and U.S. Possessions)	<input type="text"/>
2. Foreign Travel Costs	<input type="text"/>
Total Travel Cost	<input type="text"/>

E. Participant/Trainee Support Costs

	Funds Requested (\$)
1. Tuition/Fees/Health Insurance	<input type="text"/>
2. Stipends	<input type="text"/>
3. Travel	<input type="text"/>
4. Subsistence	<input type="text"/>
5. Other <input type="text"/>	<input type="text"/>
<input type="text"/> Number of Participants/Trainees Total Participant/Trainee Support Costs	<input type="text"/>

RESEARCH & RELATED BUDGET - SECTION F-K, BUDGET PERIOD 5

* ORGANIZATIONAL DUNS:

* Budget Type: Project Subaward/Consortium

Enter name of Organization:

* Start Date: * End Date:

Budget Period: 5

(If the Reset Entries button is pressed, please navigate to previous year to enable the submission of the

F. Other Direct Costs

Funds Requested (\$)

1. Materials and Supplies	<input type="text"/>
2. Publication Costs	<input type="text"/>
3. Consultant Services	<input type="text"/>
4. ADP/Computer Services	<input type="text"/>
5. Subawards/Consortium/Contractual Costs	<input type="text"/>
6. Equipment or Facility Rental/User Fees	<input type="text"/>
7. Alterations and Renovations	<input type="text"/>
8. <input type="text"/>	<input type="text"/>
9. <input type="text"/>	<input type="text"/>
10. <input type="text"/>	<input type="text"/>
Total Other Direct Costs	<input type="text"/>

G. Direct Costs

Funds Requested (\$)

Total Direct Costs (A thru F)

H. Indirect Costs

	Indirect Cost Type	Indirect Cost Rate (%)	Indirect Cost Base (\$)	* Funds Requested (\$)
1.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Indirect Costs				<input type="text" value="0.00"/>

Cognizant Federal Agency

(Agency Name, POC Name, and POC Phone Number)

I. Total Direct and Indirect Costs

Funds Requested (\$)

Total Direct and Indirect Institutional Costs (G + H)

J. Fee

Funds Requested (\$)

K. * Budget Justification

(Only attach one file.)

RESEARCH & RELATED BUDGET - Cumulative Budget

		Totals (\$)
Section A, Senior/Key Person		<input type="text"/>
Section B, Other Personnel		<input type="text"/>
Total Number Other Personnel	<input type="text"/>	
Total Salary, Wages and Fringe Benefits (A+B)		<input type="text"/>
Section C, Equipment		<input type="text"/>
Section D, Travel		<input type="text"/>
1. Domestic	<input type="text"/>	
2. Foreign	<input type="text"/>	
Section E, Participant/Trainee Support Costs		<input type="text"/>
1. Tuition/Fees/Health Insurance	<input type="text"/>	
2. Stipends	<input type="text"/>	
3. Travel	<input type="text"/>	
4. Subsistence	<input type="text"/>	
5. Other	<input type="text"/>	
6. Number of Participants/Trainees	<input type="text"/>	
Section F, Other Direct Costs		<input type="text"/>
1. Materials and Supplies	<input type="text"/>	
2. Publication Costs	<input type="text"/>	
3. Consultant Services	<input type="text"/>	
4. ADP/Computer Services	<input type="text"/>	
5. Subawards/Consortium/Contractual Costs	<input type="text"/>	
6. Equipment or Facility Rental/User Fees	<input type="text"/>	
7. Alterations and Renovations	<input type="text"/>	
8. Other 1	<input type="text"/>	
9. Other 2	<input type="text"/>	
10. Other 3	<input type="text"/>	
Section G, Direct Costs (A thru F)		<input type="text"/>
Section H, Indirect Costs		<input type="text"/>
Section I, Total Direct and Indirect Costs (G + H)		<input type="text"/>
Section J, Fee		<input type="text"/>

RESEARCH & RELATED PERSONAL DATA

Project Director/Principal Investigator and Co-Project Director(s)/Co-Principal Investigator(s)

The Federal Government has a continuing commitment to monitor the operation of its review and award processes to identify and address any inequities based on gender, race, ethnicity, or disability of its proposed PDs/PIs and co-PDs/PIs. To gather information needed for this important task, the applicant should submit the requested information for each identified PD/PI and co-PDs/PIs with each proposal. Submission of the requested information is voluntary and is not a precondition of award. However, information not submitted will seriously undermine the statistical validity, and therefore the usefulness, of information received from others. Any individual not wishing to submit some or all the information should check the box provided for this purpose. Upon receipt of the application, this form will be separated from the application. This form will not be duplicated, and it will not be a part of the review process. Data will be confidential.

Project Director/Principal Investigator

Prefix:	* First Name:	Middle Name:	* Last Name:	Suffix:
<input type="text"/>				

Date of Birth:	<input type="text"/>	Social Security Number:	<input type="text"/>	Gender:	<input type="text"/>
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Race (check all that apply):

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Do Not Wish to Provide

Ethnicity:**Disability Status (check all that apply):**

- Hearing
- Visual
- Mobility/Orthopedic Impairment
- Other
- None
- Do Not Wish to Provide

Citizenship:

OMB Number: 4040-0001
Expiration Date: 04/30/2008

RESEARCH & RELATED PERSONAL DATA

Project Director/Principal Investigator and Co-Project Director(s)/Co-Principal Investigator(s)

The Federal Government has a continuing commitment to monitor the operation of its review and award processes to identify and address any inequities based on gender, race, ethnicity, or disability of its proposed PDs/PIs and co-PDs/PIs. To gather information needed for this important task, the applicant should submit the requested information for each identified PD/PI and co-PDs/PIs with each proposal. Submission of the requested information is voluntary and is not a precondition of award. However, information not submitted will seriously undermine the statistical validity, and therefore the usefulness, of information received from others. Any individual not wishing to submit some or all the information should check the box provided for this purpose. Upon receipt of the application, this form will be separated from the application. This form will not be duplicated, and it will not be a part of the review process. Data will be confidential.

Co-Project Director/co-Principal Investigator 1

Prefix:	* First Name:	Middle Name:	* Last Name:	Suffix:
<input type="text"/>				

Date of Birth:	<input type="text"/>	Social Security Number:	<input type="text"/>	Gender:	<input type="text"/>
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Race (check all that apply):

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Do Not Wish to Provide

Ethnicity:**Disability Status (check all that apply):**

- Hearing
- Visual
- Mobility/Orthopedic Impairment
- Other
- None
- Do Not Wish to Provide

Citizenship:

OMB Number: 4040-0001
Expiration Date: 04/30/2008

RESEARCH & RELATED PERSONAL DATA

Project Director/Principal Investigator and Co-Project Director(s)/Co-Principal Investigator(s)

The Federal Government has a continuing commitment to monitor the operation of its review and award processes to identify and address any inequities based on gender, race, ethnicity, or disability of its proposed PDs/PIs and co-PDs/PIs. To gather information needed for this important task, the applicant should submit the requested information for each identified PD/PI and co-PDs/PIs with each proposal. Submission of the requested information is voluntary and is not a precondition of award. However, information not submitted will seriously undermine the statistical validity, and therefore the usefulness, of information received from others. Any individual not wishing to submit some or all the information should check the box provided for this purpose. Upon receipt of the application, this form will be separated from the application. This form will not be duplicated, and it will not be a part of the review process. Data will be confidential.

Co-Project Director/co-Principal Investigator 2

Prefix:	* First Name:	Middle Name:	* Last Name:	Suffix:
<input type="text"/>				

Date of Birth:	<input type="text"/>	Social Security Number:	<input type="text"/>	Gender:	<input type="text"/>
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Race (check all that apply):

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Do Not Wish to Provide

Ethnicity:**Disability Status (check all that apply):**

- Hearing
- Visual
- Mobility/Orthopedic Impairment
- Other
- None
- Do Not Wish to Provide

Citizenship:

OMB Number: 4040-0001
Expiration Date: 04/30/2008

RESEARCH & RELATED PERSONAL DATA

Project Director/Principal Investigator and Co-Project Director(s)/Co-Principal Investigator(s)

The Federal Government has a continuing commitment to monitor the operation of its review and award processes to identify and address any inequities based on gender, race, ethnicity, or disability of its proposed PDs/PIs and co-PDs/PIs. To gather information needed for this important task, the applicant should submit the requested information for each identified PD/PI and co-PDs/PIs with each proposal. Submission of the requested information is voluntary and is not a precondition of award. However, information not submitted will seriously undermine the statistical validity, and therefore the usefulness, of information received from others. Any individual not wishing to submit some or all the information should check the box provided for this purpose. Upon receipt of the application, this form will be separated from the application. This form will not be duplicated, and it will not be a part of the review process. Data will be confidential.

Co-Project Director/co-Principal Investigator 3

Prefix:	* First Name:	Middle Name:	* Last Name:	Suffix:
<input type="text"/>				

Date of Birth:	<input type="text"/>	Social Security Number:	<input type="text"/>	Gender:	<input type="text"/>
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Race (check all that apply):

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Do Not Wish to Provide

Ethnicity:**Disability Status (check all that apply):**

- Hearing
- Visual
- Mobility/Orthopedic Impairment
- Other
- None
- Do Not Wish to Provide

Citizenship:

OMB Number: 4040-0001
Expiration Date: 04/30/2008

RESEARCH & RELATED PERSONAL DATA

Project Director/Principal Investigator and Co-Project Director(s)/Co-Principal Investigator(s)

The Federal Government has a continuing commitment to monitor the operation of its review and award processes to identify and address any inequities based on gender, race, ethnicity, or disability of its proposed PDs/PIs and co-PDs/PIs. To gather information needed for this important task, the applicant should submit the requested information for each identified PD/PI and co-PDs/PIs with each proposal. Submission of the requested information is voluntary and is not a precondition of award. However, information not submitted will seriously undermine the statistical validity, and therefore the usefulness, of information received from others. Any individual not wishing to submit some or all the information should check the box provided for this purpose. Upon receipt of the application, this form will be separated from the application. This form will not be duplicated, and it will not be a part of the review process. Data will be confidential.

Co-Project Director/co-Principal Investigator 4

Prefix:	* First Name:	Middle Name:	* Last Name:	Suffix:
<input type="text"/>				

Date of Birth:	<input type="text"/>	Social Security Number:	<input type="text"/>	Gender:	<input type="text"/>
-----------------------	----------------------	--------------------------------	----------------------	----------------	----------------------

Race (check all that apply):

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Do Not Wish to Provide

Ethnicity:**Disability Status (check all that apply):**

- Hearing
- Visual
- Mobility/Orthopedic Impairment
- Other
- None
- Do Not Wish to Provide

Citizenship:

OMB Number: 4040-0001
Expiration Date: 04/30/2008

RESEARCH & RELATED Senior/Key Person Profile (Expanded)

PROFILE - Project Director/Principal Investigator				
Prefix	* First Name	Middle Name	* Last Name	Suffix
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Position/Title: <input type="text"/>		Department: <input type="text"/>		
Organization Name: <input type="text"/>		Division: <input type="text"/>		
* Street1: <input type="text"/>		Street2: <input type="text"/>		
* City: <input type="text"/>	County: <input type="text"/>	* State: <input type="text"/>	Province: <input type="text"/>	
* Country: <input type="text"/>	* Zip / Postal Code: <input type="text"/>			
* Phone Number		Fax Number		* E-Mail
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Credential, e.g., agency login: <input type="text"/>				
* Project Role: <input type="text"/>		Other Project Role Category: <input type="text"/>		
*Attach Biographical Sketch		<input type="text"/>		
Attach Current & Pending Support		<input type="text"/>		

PROFILE - Senior/Key Person <u>1</u>				
Prefix	* First Name	Middle Name	* Last Name	Suffix
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Position/Title: <input type="text"/>		Department: <input type="text"/>		
Organization Name: <input type="text"/>		Division: <input type="text"/>		
* Street1: <input type="text"/>		Street2: <input type="text"/>		
* City: <input type="text"/>	County: <input type="text"/>	* State: <input type="text"/>	Province: <input type="text"/>	
* Country: <input type="text"/>	* Zip / Postal Code: <input type="text"/>			
* Phone Number		Fax Number		* E-Mail
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Credential, e.g., agency login: <input type="text"/>				
* Project Role: <input type="text"/>		Other Project Role Category: <input type="text"/>		
*Attach Biographical Sketch		<input type="text"/>		
Attach Current & Pending Support		<input type="text"/>		

RESEARCH & RELATED Senior/Key Person Profile (Expanded)

Additional Senior/Key Person Form Attachments

When submitting senior/key persons in excess of 8 individuals, please attach additional senior/key person forms here. Each additional form attached here, will provide you with the ability to identify another 8 individuals, up to a maximum of 4 attachments (32 people).

The means to obtain a supplementary form is provided here on this form, by the button below. In order to extract, fill, and attach each additional form, simply follow these steps:

- Select the "Select to Extract the R&R Additional Senior/Key Person Form" button, which appears below.
- Save the file using a descriptive name, that will help you remember the content of the supplemental form that you are creating. When assigning a name to the file, please remember to give it the extension ".xfd" (for example, "My_Senior_Key.xfd"). If you do not name your file with the ".xfd" extension you will be unable to open it later, using your PureEdge viewer software.
- Using the "Open Form" tool on your PureEdge viewer, open the new form that you have just saved.
- Enter your additional Senior/Key Person information in this supplemental form. It is essentially the same as the Senior/Key person form that you see in the main body of your application.
- When you have completed entering information in the supplemental form, save it and close it.
- Return to this "Additional Senior/Key Person Form Attachments" page.
- Attach the saved supplemental form, that you just filled in, to one of the blocks provided on this "attachments" form.

Important: Please attach additional Senior/Key Person forms, using the blocks below. Please remember that the files you attach must be Senior/Key Person Pure Edge forms, which were previously extracted using the process outlined above. Attaching any other type of file may result in the inability to submit your application to Grants.gov.

- 1) Please attach Attachment 1
- 2) Please attach Attachment 2
- 3) Please attach Attachment 3
- 4) Please attach Attachment 4

ADDITIONAL SENIOR/KEY PERSON PROFILE(S)

Additional Biographical Sketch(es) (Senior/Key Person)

Additional Current and Pending Support(s)

OMB Number: 4040-0001

Expiration Date: 04/30/2008

RESEARCH & RELATED BUDGET (TOTAL FED + NON-FED) - SECTION A & B, BUDGET PERIOD __

* ORGANIZATIONAL DUNS:

* Budget Type: Project Subaward/Consortium

Enter name of Organization:

* Start Date: * End Date: * Budget Period:

A. Senior/Key Person

	Prefix	* First Name	Middle Name	* Last Name	Suffix	* Project Role	Base Salary (\$)	Cal. Months	Acad. Months	Sum. Months	* Req. Salary (\$)	* Fringe Ben. (\$)	* Total (Sal & FB) (Fed + Non-Fed)(\$)	* Federal (\$)	* Non-Federal (\$)
1.															
2.															
3.															
4.															
5.															
6.															
7.															
8.															
9. Total Funds requested for all Senior Key Persons in the attached file													Total Senior/Key Person		

* Additional Senior Key Persons:

B. Other Personnel

* Number of Personnel	* Project Role	Cal. Months	Acad. Months	Sum. Months	* Req. Salary (\$)	* Fringe Ben. (\$)	* Total (Sal & FB) (Fed + Non-Fed)(\$)	* Federal (\$)	* Non-Federal (\$)
<input type="text"/>	Post Doctoral Associates								
<input type="text"/>	Graduate Students								
<input type="text"/>	Undergraduate Students								
<input type="text"/>	Secretarial/Clerical								
<input type="text"/>									
<input type="text"/>									
<input type="text"/>									
<input type="text"/>									
<input type="text"/>									
<input type="text"/>									
<input type="text"/>									
<input type="text"/>									
Total Number Other Personnel		Total Other Personnel							
Total Salary, Wages and Fringe Benefits (A + B)									

RESEARCH & RELATED BUDGET (TOTAL FED + NON-FED) - SECTION C, D, & E, BUDGET PERIOD ___

* ORGANIZATIONAL DUNS:

* Budget Type: Project Subaward/Consortium

Enter name of Organization:

* Start Date: * End Date: * Budget Period:

C. Equipment Description

List items and dollar amount for each item exceeding \$5,000

	* Equipment item	* Federal (\$)	* Non-Federal (\$)	* Total (Fed + Non-Fed) (\$)
1.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
6.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
8.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
9.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
10.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
11.	Total funds requested for all equipment listed in the attached file	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Total Equipment	<input type="text"/>	<input type="text"/>	<input type="text"/>

* Additional Equipment:

D. Travel

		* Federal (\$)	* Non-Federal (\$)	* Total (Fed + Non-Fed) (\$)
1.	Domestic Travel Costs (Incl. Canada, Mexico and U.S. Possessions)	<input type="text"/>	<input type="text"/>	<input type="text"/>
2.	Foreign Travel Costs	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Total Travel Costs	<input type="text"/>	<input type="text"/>	<input type="text"/>

E. Participant/Trainee Support Costs

		* Federal (\$)	* Non-Federal (\$)	* Total (Fed + Non-Fed) (\$)
1.	Tuition/Fees/Health Insurance	<input type="text"/>	<input type="text"/>	<input type="text"/>
2.	Stipends	<input type="text"/>	<input type="text"/>	<input type="text"/>
3.	Travel	<input type="text"/>	<input type="text"/>	<input type="text"/>
4.	Subsistence	<input type="text"/>	<input type="text"/>	<input type="text"/>
5.	Other <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	Number of Participants/Trainees	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Total Participant/Trainee Support Costs	<input type="text"/>	<input type="text"/>	<input type="text"/>

RESEARCH & RELATED BUDGET (TOTAL FED + NON-FED) - SECTION F-K, BUDGET PERIOD __

* ORGANIZATIONAL DUNS:

* Budget Type: Project Subaward/Consortium

Enter name of Organization:

* Start Date: * End Date: * Budget Period:

F. Other Direct Costs	* Federal (\$)	* Non-Federal (\$)	* Total (Fed + Non-Fed) (\$)
1. Materials and Supplies	<input type="text"/>	<input type="text"/>	<input type="text"/>
2. Publication Costs	<input type="text"/>	<input type="text"/>	<input type="text"/>
3. Consultant Services	<input type="text"/>	<input type="text"/>	<input type="text"/>
4. ADP/Computer Services	<input type="text"/>	<input type="text"/>	<input type="text"/>
5. Subawards/Consortium/Contractual Costs	<input type="text"/>	<input type="text"/>	<input type="text"/>
6. Equipment or Facility Rental/User Fees	<input type="text"/>	<input type="text"/>	<input type="text"/>
7. Alterations and Renovations	<input type="text"/>	<input type="text"/>	<input type="text"/>
8. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
9. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
10. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Other Direct Costs	<input type="text"/>	<input type="text"/>	<input type="text"/>

G. Direct Costs	* Federal (\$)	* Non-Federal (\$)	* Total (Fed + Non-Fed) (\$)
Total Direct Costs (A thru F)	<input type="text"/>	<input type="text"/>	<input type="text"/>

H. Indirect Costs	Indirect Cost Rate (%)	Indirect Cost Base (\$)	* Federal (\$)	* Non-Federal (\$)	* Total (Fed + Non-Fed) (\$)
* Indirect Cost Type					
1. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Indirect Costs			<input type="text"/>	<input type="text"/>	<input type="text"/>

Cognizant Agency (Agency Name, POC Name, and Phone Number)

I. Total Direct and Indirect Costs	* Federal (\$)	* Non-Federal (\$)	* Total (Fed + Non-Fed) (\$)
Total Direct and Indirect Costs (G + H)	<input type="text"/>	<input type="text"/>	<input type="text"/>

J. Fee
Federal (\$)

K. * Budget Justification (Only attach one file.)

RESEARCH & RELATED BUDGET (TOTAL FED + NON-FED) - Cumulative Budget

	Total Federal (\$)	Total Non-Federal (\$)	Totals (\$)
Section A, Senior/Key Person			
Section B, Other Personnel			
Total Number Other Personnel			
Total Salary, Wages and Fringe Benefits (A + B)			
Section C, Equipment			
Section D, Travel			
1. Domestic			
2. Foreign			
Section E, Participant/Trainee Support Costs			
1. Tuition/Fees/Health Insurance			
2. Stipends			
3. Travel			
4. Subsistence			
5. Other			
6. Number of Participants/Trainees			
Section F, Other Direct Costs			
1. Materials and Supplies			
2. Publication Costs			
3. Consultant Services			
4. ADP/Computer Services			
5. Subawards/Consortium/Contractual Costs			
6. Equipment or Facility Rental/User Fees			
7. Alterations and Renovations			
8. Other 1			
9. Other 2			
10. Other 3			
Section G, Direct Costs (A thru F)			
Section H, Indirect Costs			
Section I, Total Direct and Indirect Costs (G + H)			
Section J, Fee			

RESEARCH & RELATED Project/Performance Site Location(s)

Project/Performance Site Primary Location

Organization Name:											
* Street1:				Street2:							
* City:			County:			* State:		* ZIP Code:		* Country:	

Project/Performance Site Location 1

Organization Name:											
* Street1:				Street2:							
* City:			County:			* State:		* ZIP Code:		* Country:	

<input type="button" value="Reset Entry"/>	<input type="button" value="Next Site"/>
--	--

Additional Location(s)	<input type="text"/>	<input type="button" value="Add Attachment"/>	<input type="button" value="Delete Attachment"/>	<input type="button" value="View Attachment"/>
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OMB Number: 4040-0001
Expiration Date: 04/30/2008

RESEARCH & RELATED Project/Performance Site Location(s)

Project/Performance Site Primary Location

Organization Name:											
* Street1:				Street2:							
* City:			County:			* State:		* ZIP Code:		* Country:	ATA

Project/Performance Site Location 2

Organization Name:											
* Street1:				Street2:							
* City:			County:			* State:		* ZIP Code:		* Country:	

Reset Entry	Previous Site	Next Site
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Additional Location(s)		Add Attachment	Delete Attachment	View Attachment
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OMB Number: 4040-0001
Expiration Date: 04/30/2008

RESEARCH & RELATED Project/Performance Site Location(s)

Project/Performance Site Primary Location

Organization Name:											
* Street1:				Street2:							
* City:			County:			* State:		* ZIP Code:		* Country:	ATA

Project/Performance Site Location 3

Organization Name:											
* Street1:				Street2:							
* City:			County:			* State:		* ZIP Code:		* Country:	

Reset Entry	Previous Site	Next Site
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Additional Location(s)		Add Attachment	Delete Attachment	View Attachment
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OMB Number: 4040-0001
Expiration Date: 04/30/2008

RESEARCH & RELATED Project/Performance Site Location(s)

Project/Performance Site Primary Location

Organization Name:									
* Street1:		Street2:							
* City:		County:		* State:		* ZIP Code:		* Country:	ATA

Project/Performance Site Location 4

Organization Name:									
* Street1:		Street2:							
* City:		County:		* State:		* ZIP Code:		* Country:	

Reset Entry	Previous Site	Next Site
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Additional Location(s)		Add Attachment	Delete Attachment	View Attachment
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OMB Number: 4040-0001
Expiration Date: 04/30/2008

RESEARCH & RELATED Project/Performance Site Location(s)

Project/Performance Site Primary Location

Organization Name:											
* Street1:				Street2:							
* City:			County:			* State:		* ZIP Code:		* Country:	ATA

Project/Performance Site Location 5

Organization Name:											
* Street1:				Street2:							
* City:			County:			* State:		* ZIP Code:		* Country:	

Reset Entry	Previous Site	Next Site
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Additional Location(s)		Add Attachment	Delete Attachment	View Attachment
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OMB Number: 4040-0001
Expiration Date: 04/30/2008

RESEARCH & RELATED Project/Performance Site Location(s)

Project/Performance Site Primary Location

Organization Name:											
* Street1:				Street2:							
* City:			County:			* State:		* ZIP Code:		* Country:	ATA

Project/Performance Site Location 6

Organization Name:											
* Street1:				Street2:							
* City:			County:			* State:		* ZIP Code:		* Country:	

<input type="button" value="Reset Entry"/>	<input type="button" value="Previous Site"/>	<input type="button" value="Next Site"/>
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Additional Location(s)	<input type="text"/>	<input type="button" value="Add Attachment"/>	<input type="button" value="Delete Attachment"/>	<input type="button" value="View Attachment"/>
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OMB Number: 4040-0001
Expiration Date: 04/30/2008

RESEARCH & RELATED Project/Performance Site Location(s)

Project/Performance Site Primary Location

Organization Name:												
* Street1:					Street2:							
* City:				County:			* State:		* ZIP Code:		* Country:	ATA

Project/Performance Site Location 7

Organization Name:												
* Street1:					Street2:							
* City:				County:			* State:		* ZIP Code:		* Country:	



Additional Location(s)	<input type="text"/>	<input type="button" value="Add Attachment"/>	<input type="button" value="Delete Attachment"/>	<input type="button" value="View Attachment"/>
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OMB Number: 4040-0001
Expiration Date: 04/30/2008

ATTACHMENTS FORM

Instructions: On this form, you will attach the various files that make up your grant application. Please consult with the appropriate Agency Guidelines for more information about each needed file. Please remember that any files you attach must be in the document format and named as specified in the Guidelines.

Important: Please attach your files in the proper sequence. See the appropriate Agency Guidelines for details.

- 1) Please attach Attachment 1
- 2) Please attach Attachment 2
- 3) Please attach Attachment 3
- 4) Please attach Attachment 4
- 5) Please attach Attachment 5
- 6) Please attach Attachment 6
- 7) Please attach Attachment 7
- 8) Please attach Attachment 8
- 9) Please attach Attachment 9
- 10) Please attach Attachment 10
- 11) Please attach Attachment 11
- 12) Please attach Attachment 12
- 13) Please attach Attachment 13
- 14) Please attach Attachment 14
- 15) Please attach Attachment 15