DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

HEALTHY HOMES AND LEAD-TECHNICAL STUDIES

Billing Code 4210-32-C

FUNDING AVAILABILITY FOR HEALTHY HOMES AND LEAD TECHNICAL STUDIES

PROGRAM OVERVIEW

Purpose of the Program. To fund technical studies to improve methods for detecting and controlling lead-based paint and other residential health and safety hazards. The purpose of the Healthy Homes Initiative is to develop, demonstrate and promote cost effective, preventive measures to correct multiple safety and health hazards in the home environment that are associated with serious diseases and injuries in children. The purpose of the lead technical studies program is to improve methods for detecting and controlling residential lead-based paint hazards.

Available Funds. Approximately $2.5 million for healthy homes technical studies, and $1 million for lead technical studies.

Eligible Applicants. Academic and not-for-profit institutions located in the U.S., State and local governments, and federally recognized Indian tribes are eligible to apply. For-profit firms also are eligible; however, they are not allowed to earn a fee.

Application Deadline. June 14, 2002.

Match. None required.

ADDITIONAL INFORMATION

If you are interested in applying for funding under this program, please review carefully the General Section of this SuperNOFA and the following additional information.

I. Application Due Date, Application Kits, Further Information, and Technical Assistance

Application Due Date. Your completed application is due on or before June 14, 2002.

See the General Section of this SuperNOFA for specific procedures that you must follow for the form of application submission (*e.g.,* mailed applications, express mail, overnight delivery, or hand carried).

Address for Submitting Applications. For U.S. Postal Service and Overnight/ Express Mailed Applications. The address for mailed applications is: Department of Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control, 451 Seventh Street, SW, Room P3206, Washington, DC 20410.

Application Submission Requirements. New Security Procedures. HUD has implemented new security procedures that impact on application submission procedures. Please read the following instructions carefully and completely. HUD will not accept hand-delivered applications. Applications may be mailed using the United States Postal Service (USPS) or may be shipped via the following delivery services: United Parcel Service (UPS), FedEx, DHL, or Falcon Carrier. *No other delivery services are permitted into HUD Headquarters without escort. You must, therefore, use one of the four carriers listed above.*

Mailed Applications. Your application will be considered timely filed if your application is postmarked on or before 12:00 midnight on the application due date and received by the designated HUD Office on or within fifteen (15) days of the application due date. *All applicants must obtain and save* a Certificate of Mailing showing the date when you submitted your application to the United States Postal Service (USPS). The Certificate of Mailing will be your documentary evidence that your application was timely filed.

Applications Sent by Overnight/ Express Mail Delivery. If your application is sent by overnight delivery or express mail, your application will be timely filed if it is received before or on the application due date, or when you submit documentary evidence that your application was placed in transit with the overnight delivery/express mail service by no later than the application due date. Due to new security measures, you must use one of four carrier services that do business with HUD Headquarters regularly. These services are UPS, DHL, FedEx and Falcon Carrier. Delivery by these services must be made during HUD's Headquarters business hours, between 8:30 AM and 5:30 PM Eastern time, Monday to Friday. If these companies do not service your area, you should submit your application via the United States Postal Service.

For Application Kits. You may obtain an application kit from the SuperNOFA Information Center at 1–800-HUD–8929. Persons with speech or hearing impairments may call the Center's TTY number at 1–800-HUD–2209. When requesting an application kit, please refer to the Healthy Homes and Lead Technical Studies grant program. Please be sure to provide your name, address (including zip code), and telephone number (including area code). Alternatively, you may obtain an application kit by downloading it from the Internet at www.hud.gov.

For Further Information and Technical Assistance. You may contact: Dr. Peter Ashley, Office of Healthy Homes and Lead Hazard Control, at the address above; telephone (202) 755–1785, extension 115, or Ms. Curtissa Coleman, Grants Officer, extension 119 (these are not toll-free numbers). Hearing- and speech-impaired persons may access the above telephone number via TTY by calling the toll-free Federal Information Relay Service at 1–800–877–8339.

II. Amount Allocated

Approximately $2.5 million from HUD's FY 2002 Healthy Homes Initiative appropriation will be available to fund technical studies proposals and approximately $1 million from the FY 2002 lead technical assistance appropriation will be available to fund lead technical studies proposals in FY 2002. Grants or cooperative agreements will be awarded on a competitive basis according to the Rating Factors described in Section V(B). For technical studies under the Healthy Homes Initiative, HUD anticipates awarding 3 to 6 grants ranging from approximately $200,000 to approximately $1 million. For lead technical studies, HUD anticipates awarding 1 to 4 grants ranging from approximately $250,000 to approximately $1 million.

III. Program Description; Eligible Applicants; Eligible Activities

(A) Program Description. Background

(1) *General Goals and Objectives.* (i) The overall goal of the Healthy Homes and Lead Technical Studies program is to gain knowledge to improve the efficacy and cost-effectiveness of methods for evaluation and control of health and safety hazards in the home. Through the Healthy Homes Initiative, HUD is assessing and promoting new risk reduction techniques and technical studies on the control of key hazards described in Appendix A. Objectives to be addressed by these projects are:

(a) Investigation of the epidemiology of housing-related hazards and illness and injury.

(b) Development and assessment of low-cost test methods and protocols for identification and assessment of housing-related hazards.

(c) Development and assessment of cost-effective methods for reducing or eliminating housing-related hazards.

(d) Evaluation of the effectiveness of housing interventions and public education campaigns, and barriers and incentives affecting future use of the most cost-effective strategies.

(e) Investigation of the health effects on children living in deteriorated housing and the impact on their development and productivity.

(ii) The overall goal of the lead technical studies program is to gain knowledge to improve the efficacy and

cost-effectiveness of methods for lead-based paint hazard evaluation and control. HUD is especially interested in the following technical studies topics:

(a) Evaluation of interior and exterior lead hazard control methodologies, especially novel approaches;

(b) The effectiveness of ongoing maintenance activities in controlling lead-based paint hazards;

(c) Other areas of focus that are consistent with the overall goals of HUD's lead technical studies program.

A table of examples of current Healthy Homes and Lead Technical Studies projects being funded by HUD can be found in Appendix C. HUD has also developed resource papers on a number of topic areas of importance under the Healthy Homes Initiative, including mold, environmental aspects of asthma, carbon monoxide, unintentional injuries, and hazard assessment. These papers can be downloaded from HHI web site at www.hud.gov.

(2) *Healthy Homes Initiative.* The Healthy Homes Initiative (HHI) departs from the more traditional approach of attempting to correct one hazard at a time (e.g., asbestos, radon). In April 1999, HUD submitted to Congress a preliminary plan containing a full description of the Initiative. This description (Summary and Full Report) is available on the HUD website at www.hud.gov. A description of the HHI is available at the HHI website, www/hud.gov.

In addition to deficiencies in basic housing facilities that may impact health, changes in the U.S. housing stock and more sophisticated epidemiological methods and biomedical research have led to the identification of new and often more subtle health hazards in the residential environment (e.g., asthma and mold-induced illness). While such hazards will tend to be found disproportionately in housing that is substandard (e.g., structural problems, lack of adequate heat, etc.), such housing-related environmental hazards may also exist in housing that is otherwise of good quality. Appendix A to this Healthy Homes and Lead Technical Studies program section of the SuperNOFA briefly describes the housing-associated health and injury hazards HUD considers key targets for intervention. Appendix B to this Healthy Homes and Lead Technical Studies program section of the SuperNOFA lists the references that serve as the basis for the information provided in this Healthy Homes and Lead Technical Studies section of this SuperNOFA.

HUD is interested in promoting approaches that are cost-effective and efficient and that result in the reduction of health threats for the maximum number of residents for the long run, and in particular low-income children. The overall goals and objectives of the HHI are to:

(i) Mobilize public and private resources, involving cooperation among all levels of government, the private sector, and faith-based and other community-based organizations to develop the most promising, cost-effective methods for identifying and controlling housing-based hazards.

(ii) Build local capacity to operate sustainable programs that will continue to prevent and, where they occur, minimize and control housing-based hazards in low and very low-income residences when HUD funding is exhausted.

HUD recognizes that there are many key scientific and implementation questions related to this Initiative, some of which were articulated in the HHI Preliminary Plan. With this NOFA, HUD hopes to advance the recognition and control of residential health and safety hazards and more closely examine the link between housing and health.

(3) *Lead Technical Studies.* HUD has been actively engaged in a number of activities relating to lead-based paint as a result of the Lead-Based Paint Poisoning Prevention Act of 1971, as amended, 42 U.S.C. 4801–4846. Sections 1051 and 1052 of the Lead Based Paint Hazard Reduction Act of 1992 (''Title X'') (42 U.S.C. 4854 and 4854a) state that the Secretary of HUD, in cooperation with other Federal agencies, shall conduct technical studies on specific topics related to the evaluation and subsequent mitigation of residential lead hazards. The HUD-sponsored technical studies program also responds to recommendations that were made by the Task Force on Lead-Based Paint Hazard Reduction and Financing, which was established pursuant to section 1015 of Title X. The Task Force presented its final report to HUD and the Environmental Protection Agency (EPA) in July 1995. The Task Force Report, entitled ''Putting the Pieces Together: Controlling Lead Hazards in the Nation's Housing'' (see Appendix A of this technical studies program section of the SuperNOFA), recommended research be conducted on a number of key topics to address significant gaps in our knowledge of lead exposure and hazard control.

The findings of technical studies will be used in part to update HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* (''*Guidelines*''), which were published in June, 1995 and amended in September, 1997. The *Guidelines* are a report on state-of-the-art procedures for all aspects of lead-based paint hazard evaluation and control. The *Guidelines* reflect the Title X framework for lead hazard control, which distinguishes three types of control measures: interim controls, abatement of lead-based paint hazards, and complete abatement of all lead-based paint. Interim controls are designed to address hazards quickly, inexpensively, and temporarily, while abatement is intended to produce a permanent solution. While the *Guidelines* recommend procedures that are effective in identifying and controlling lead hazards while protecting the health of abatement workers and occupants, HUD recognizes that targeted technical studies and field experience will result in future changes to the *Guidelines*. For availability of the *Guidelines*, see Appendix A of this technical studies program section of the SuperNOFA.

(B) Eligible Applicants

Academic and not-for-profit institutions located in the U.S., State and local governments, and federally recognized Indian tribes are eligible under all existing authorizations. For-profit firms also are eligible; however, they are not allowed to earn a fee (i.e., no profit can be made from the project). Federal agencies and Federal employees are not eligible to submit applications. The General Section of the SuperNOFA provides additional eligibility requirements.

(C) Eligible Activities

(1) *Healthy Homes Initiative, Eligible Activities*

(a) Evaluation of residential health and safety hazard assessment and control methodologies (including both existing methods and the evaluation of improved or novel approaches). Areas of particular interest to HUD include:

—Improving indoor air quality, such as through cost-effective approaches to upgrading residential ventilation or improving control/management of combustion appliances. Applicants should discuss how proposed approaches might affect energy residential energy costs (e.g., increasing air exchange rates resulting in an increase in heating costs).

—Improving or assessing the efficacy of current methods for residential Integrated Pest Management (IPM). IPM approaches focus on the use of economical means for managing pests, which incorporate information on the life cycles of pests and their

interaction with the environment, while minimizing hazards to people, property, and the environment (see link at www.hud.gov). HUD is particularly interested in IPM methods for reducing cockroach and/or rodent populations in multifamily housing.

—Controlling excess moisture and dust control measures (e.g., preventing track-in of exterior dust and soil, improved methods for interior dust cleaning) have been identified as key areas in the HHI Preliminary Plan.

— Additional ideas will be considered with an open mind toward novel techniques and applications.

(b) Low-cost analytical techniques for the rapid, on and off-site determination of environmental contaminants of concern (e.g., bioaerosols, pesticides, allergens).

—Establish and validate any necessary procedures, such as extraction and/or digestion that would work well with the field device/procedure.

—Improve old technology (e.g., colorimetric tests, titrimetric procedures) as well as examine and improve newer techniques.

—Consider the safety, environmental impacts, and cost of the procedure, particularly as used in the field.

In proposing technical studies within the broad topic areas discussed in III.C.2(a) and III.C.2(b), applicants should consider the following:

—The ''fit'' of the proposed hazard assessment and/or control methods within the overall goal of addressing multiple health and safety hazards in a cost-effective manner.

—The efficacy of the proposed methods for hazard control and risk reduction (e.g., how long is effective hazard reduction maintained?).

—Evaluate critical elements and potential weaknesses of the methods or techniques, and address how to minimize the effect of each critical element and/or eliminate or mitigate each weakness.

— Demonstrate where and how these methods have been applied and tested, and/or perform demonstration activities.

Although HUD is soliciting proposals for technical studies on these broad topics, HUD will also consider funding applications for technical studies on topics that are relevant under the overall goals and objectives of this program, as described above. In such instances, the applicant should describe how the proposed project activity addresses these overall goals and objectives.

Applicants should consider the efficiencies that might be gained by working cooperatively with some of the recipients of HUD's Healthy Homes and Lead Hazard Control grants, which are widely distributed throughout the U.S. Information on current grantees is available at www.hud.gov.

You may address one or more of the technical studies topic areas within your proposal, or submit separate applications for different topic areas. Projects need not address all of the objectives within a given topic area.

(2) *Lead Technical Studies, Eligible Activities.*

(a) *Evaluation of Interior and Exterior Lead Hazard Control Methodologies, Especially Novel Approaches.* Identify and evaluate new methods and/or techniques for lead-based paint hazard control. Identify materials and/or procedures that may be used for abatement or for interim controls. Show the potential utility of these methods for lead hazard control and risk reduction. Evaluate critical elements and potential weaknesses of the methods or techniques, and address how to minimize the effect of each critical element and/or eliminate or mitigate each weakness. Demonstrate where and how these methods have been applied and tested, and/or perform demonstration activities. Illustrate the results obtained, and the costs involved. Recommend cost-effective changes to the Program for inclusion in future HUD lead hazard control grants, and for possible inclusion in future revisions to the Guidelines.

(b) *The Effectiveness of Ongoing Maintenance Program Activities in Controlling Lead-Based Paint Hazards.* While a variety of lead abatement and interim control techniques have been evaluated for their effectiveness in controlling lead-based paint hazards at and after their implementation, there is limited study directly assessing the effectiveness of ongoing lead-based paint maintenance programs. Evaluate the effectiveness and feasibility of developing and implementing ongoing lead-based paint maintenance programs, identify program components for which particular implementation difficulties exist, and evaluate proposed measures for overcoming those difficulties. Such quantitative evaluation of program components could address whether and how technically-acceptable and cost-effective work practices are selected and implemented, how effective supervisors are in monitoring work activities to ensure that lead-based paint hazards are controlled and that dust and debris are contained and cleaned up during work, and how well clearance procedures (including necessary re-cleaning) are integrated into the maintenance program, among other factors.

(c) *Other Focus Areas that are Consistent with the Overall Goals of HUD's Lead Technical Studies Program.* Additional ideas will be considered with an open mind toward novel techniques and applications. Although HUD is soliciting proposals for technical studies on some specific topics, HUD will also consider funding applications for technical studies on topics which are relevant under the overall goals and objectives of the lead hazard control technical studies program, as described above. In such instances, the applicant should describe how the proposed activity addresses these overall goals and objectives.

(D) Ineligible Activities

(1) Purchase or lease of equipment having a per unit cost in excess of $5,000, unless prior written approval is obtained from HUD.

(2) Medical treatment costs.

IV. Program Requirements.

(A) *Applicable Requirements.* Please refer to Section II of the General Section of the SuperNOFA, Requirements and Procedures Applicable to All Programs. The threshold requirements are listed in Section II B of the General Section of this SuperNOFA. Applicants must comply with these threshold requirements.

(B) *Conducting Business in Accordance with HUD Core Values and Ethical Standards.* All applicants shall develop and maintain a written code of conduct that reflects HUD's Core Values. Refer to the General Section of the SuperNOFA for additional information.

(C) *Ensuring the Participation of Small Businesses, Small Disadvantaged Businesses, and Women-Owned Businesses.* The Department of Housing and Urban Development (HUD) is committed to ensuring that small businesses, small disadvantaged businesses and women-owned businesses participate fully in HUD's direct contracting and in contracting opportunities generated by HUD grant funds. Refer to the General Section of the SuperNOFA for applicable requirements.

(D) *Certifications and Assurances.* In addition to the certifications mentioned in the Section II(G) of the General Section of the SuperNOFA, you must comply with the following:

(1) All relevant State and Federal regulations regarding exposure to and proper disposal of hazardous materials.

(2) Any blood lead testing, blood lead level test results, and medical referral

and follow-up for children under six years of age will be conducted according to the recommendations of the Centers for Disease Control and Prevention (CDC) *Preventing Lead Poisoning in Young Children,* (See Appendix B of this technical studies program section of the SuperNOFA).

(3) HUD technical studies grant funds will not replace existing resources dedicated to any ongoing project.

(4) Laboratory analysis covered by the National Lead Laboratory Accreditation Program (NLLAP) will be conducted by a laboratory recognized under the program.

(5) Human research subjects will be protected from research risks in conformance with Federal Policy for the Protection of Human Subjects, codified by HUD at 24 CFR part 60.

(6) The requirements of OSHA (e.g., 29 CFR part 1910 and/or 1926, as applicable), or the State or local occupational safety and health regulations, whichever are most stringent, will be met.

(E) *Period of Performance.* The period of performance cannot exceed 36 months from the time of award.

(F) *Conducting Business in Accordance with HUD core Values and Ethical Standards.* If awarded assistance under this Super NOFA, you will be required, prior to entering into a grant agreement with HUD, to submit a copy of your code of conduct and describe the methods you will use to ensure that all officers, employees, and agents of your organization are aware of your code of conduct. See Section II(A)(2) of the General Section of the SuperNOFA for information about conducting business in accordance with HUD's core values and ethical standards.

V. Application Selection Process

(A) *Submitting Applications for Grants.* Applications that meet all of the threshold requirements will be eligible to be scored and ranked, based on the total number of points allocated for each of the rating factors described below in Section V (B) of this program section of the SuperNOFA. Your application must receive a total score of at least 70 points to remain in consideration for funding.

Awards will be made separately in rank order for Healthy Homes Technical Studies applications and Lead Technical Studies applications, within the limits of funding availability for each program.

Within each of the two technical studies programs, you may address more than one of the technical study topic areas within your proposal (e.g., a HH technical studies applicant can address multiple topics consistent with the HHI program objectives), or submit separate applications for different topic areas. Projects need not address all of the objectives within a given topic area. While you will not be penalized for not addressing all of the specific objectives for a given topic area, if two applications for technical study in a given topic have equal scores, HUD will select the applicant whose project addresses the most objectives.

You are encouraged to plan projects that can be completed over a short time period (e.g., 12 to 24 months from the date of award) so useful information generated from the technical studies can be available for policy or program decisions and disseminated to the public as quickly as possible.

Regarding the amount to be awarded to the selected applicants, please refer to the Negotiations section in the General Section of this SuperNOFA.

(1) *Use of Residual Funds.* In the selection process, HUD reserves the right to offer partial funding to any or all applicants. If you are offered a reduced grant amount, you will have a maximum of fourteen (14) calendar days to accept such a reduced award. If you fail to respond within the 14-day limit, you shall be considered to have declined the award.

(B) *Rating Factors.* The factors for rating and ranking applicants, and maximum points for each factor, are provided below. The factors or their assigned points differ somewhat from those used for most program areas included in this SuperNOFA because they have been amended for rating the unique aspects of technical study applications. The maximum number of points to be awarded is 100. The EZ/EC bonus points described in the General Section of the SuperNOFA do not apply to this Technical Studies NOFA.

Rating Factor 1: Capacity of the Applicant and Relevant Organizational Experience (30 Points)

This factor addresses the extent to which you have the ability and organizational resources necessary to successfully implement your proposed activities in a timely manner. The rating of you, the ''applicant,'' will include any sub-grantees, consultants, sub-recipients, and members of consortia that are firmly committed to the project (generally, ''subordinate organizations''). In rating this factor HUD will consider the extent to which your application demonstrates:

(1) *The capability and qualifications of the principal investigator and key personnel* (20 points). Qualifications to carry out the proposed study as evidenced by academic background, relevant publications, and recent (within the past 10 years) relevant research experience. Publications and research experience are considered relevant if they required the acquisition and use of knowledge and skills that can be applied in the planning and execution of the technical study that is proposed under this program section of this SuperNOFA.

(2) *Past performance of the study team in managing similar projects* (10 points). Demonstrated ability to successfully manage various aspects of a complex technical study in such areas as logistics, study personnel management, data management, quality control, community study involvement (if applicable), and report writing, as well as overall success in project completion (i.e., projects completed on time and within budget). You should also demonstrate that your project would have adequate administrative support, including clerical and specialized support in areas such as accounting and equipment maintenance.

Rating Factor 2: Need/Extent of the Problem (10 Points)

This factor addresses the extent to which there is a need for your proposed study activities to address documented problems, target areas or target groups. In responding to this factor, you should document in detail how your project would make a significant contribution towards achieving some or all of HUD's stated goals and objectives for one or more of the topic areas described in Sections III (A) and (C)(1)–(2) of this program section of the SuperNOFA.

(1) Your rating will be based on the scope and completeness of your documentation that should include available data linking housing-based hazards to disease or injuries to children. Examples of data that might be used to demonstrate need include:

(a) Rates of childhood illnesses or injuries (e.g., asthma, burns) that could be caused or exacerbated by exposure to conditions in the home environment and/or rates of environmentally-related disease or adverse health effects (e.g., hypertension, elevated blood lead levels) that would be addressed by your technical study;

(b) Unavailability of other federal, state or local funding or private sector resources that could be, or are being used, to address the problem. This includes current research projects for which funding will be terminated or significantly reduced in the next 12 months.

(c) Data documenting affected groups or areas that are traditionally underserved or have special needs.

(2) If your application addresses needs that are in the Consolidated Plan, court orders or consent decrees, settlements, conciliation agreements, and voluntary compliance agreements, you will receive more points than applicants that do not relate their program to identified need.

(3) In addition, if you are seeking funding for ''other'' technical study focus areas, as is described in Section III(C)(1)(b) and III(C)(2)(c), you must document the importance and need for the project with respect to addressing the overall goal of this technical studies program.

Rating Factor 3: Soundness of Approach (50 Points)

This factor addresses the quality of your proposed technical study plan. Specific components include the following:

(1) *Soundness of the study design* (30 points). The project description/study design must be thorough and feasible, and reflect your knowledge of the relevant scientific literature. You should clearly describe how your study builds upon the current state of knowledge for your focus area. If possible, your study should be designed to address testable hypotheses, which are clearly stated. Your study design should be statistically based, with adequate power to test your stated hypotheses. The study design should be presented as a logical sequence of steps or phases, with individual tasks described for each phase. You should identify any important ''decision points'' in your study plan and you should discuss plans for data management, analysis and archiving.

Indicate if you will address any of the Department's FY 2002 policy priorities that are applicable to this program (see Section VI of the General Section of the SuperNOFA for a description of these policy priorities). You will receive one point for each of the applicable policy priorities that are addressed in your application. Policy priorities that are potentially applicable to the Healthy Homes and Lead Technical Studies NOFA are: (1) Improving the Quality of Public Housing and Providing More Choices for its Residents; and (2) Colonias.

(2) *Quality assurance mechanisms* (10 points). You must describe the quality assurance mechanisms that will be integrated into your project design to ensure the validity and quality of the results. Areas to be addressed include acceptance criteria for data quality, procedures for selection of samples/sample sites, sample handling, measurement and analysis, and any standard/nonstandard quality assurance/control procedures to be followed. Documents (e.g., government reports, peer-reviewed academic literature) that provide the basis for your quality assurance mechanisms should be cited.

(3) *Project management plan* (8 points). The proposal should include a management plan that provides a schedule for the completion of major activities, tasks and deliverables, with an indication that there will be adequate resources (*e.g.,* personnel, financial) to successfully meet the proposed schedule. You are encouraged to plan a project with a duration of 24 months or less.

(5) *Budget Proposal* (2 Points). Your budget proposal should thoroughly estimate all applicable direct and indirect costs, and be presented in a clear and coherent format in accordance with the requirements listed in the General Section of this SuperNOFA. HUD is not required to approve or fund all proposed activities. Your budget should be submitted in the format provided in Appendix D; an electronic spreadsheet is available on HUD's website, *www.hud.gov.* You must thoroughly document and justify all budget categories and costs (Part B of Standard Form 424A) and all major tasks, for yourself, sub-recipients, partners, major subcontractors, joint venture participants, or others contributing resources to the project. Your budget proposal should be activity and task related.

Rating Factor 4: Leveraging Resources (5 Points)

Your proposal should demonstrate that the effectiveness of HUD's Healthy Homes and Lead Technical Studies grant funds are being increased by securing other public and/or private resources or by structuring the project in a cost-effective manner, such as integrating the project into an existing study. Resources may include funding or in-kind contributions (such as services, facilities or equipment) allocated to the purpose(s) of your project. Staff and in-kind contributions should be given a monetary value.

You should provide evidence of leveraging/partnerships by attaching to your application the following: Letters of firm commitment, memoranda of understanding, or agreements to participate from those entities identified as partners in the project efforts. Each letter of commitment, memorandum of understanding, or agreement to participate must include the organization's name, proposed level of commitment (with monetary value) and responsibilities as they relate to specific activities or tasks of your proposed program. The commitment must also be signed by an official of the organization legally able to make commitments on behalf of the organization.

Rating Factor 5: Coordination, Self-Sufficiency and Sustainability (5 Points)

(1) The extent to which you have coordinated your activities with other organizations that have or are in the process of conducting similar work. Your proposed study should build upon the existing body of related work and it should not significantly duplicate work that is currently being conducted, or has been conducted, by other organizations (to the extent that this can be ascertained);

(2) The extent to which your project will help generate practical solutions that can be funded and implemented locally for the identification and mitigation of health and safety hazards in residential environments;

(3) The extent to which your project findings can be used by various local and State governmental and non-governmental organizations to develop programs to implement improved evaluation and remediation strategies for addressing health and safety hazards in the residential environment in the absence of additional Federal funding.

VI. Application Submission Requirements

(A) *Applicant Data.* Your application must contain the items listed in this Section (VI(A)). These items include the standard forms, certifications, and assurances listed in the General Section of the SuperNOFA that are applicable to this funding (collectively, referred to as the ''standard forms''). The standard forms can be found in Appendix B to the General Section of the SuperNOFA. The remaining application items that are forms (i.e., excluding such items as narratives), referred to as the non-standard forms can be found as Appendix D to this program section of the SuperNOFA: The items are as follows:

(1) Transmittal Letter that identifies what the technical study program funds are requested for (you should clearly specify that you are applying for funds under either the Healthy Homes Initiative technical studies program or the Lead Hazard Control technical studies program), the dollar amount requested, and the applicant or applicants submitting the application. If

two or more organizations are working together on the project, a primary applicant must be designated.

(2) Checklist and Submission Table of Contents (see Appendix D).

(3) The name, mailing address, telephone number, and principal contact person of the prime applicant. If you have consortium associates, sub-grantees, partners, major subcontractors, joint venture participants, or others contributing resources to your project, similar information must be provided for each of these entities.

(4) Completed Forms HUD–2880, Applicant/Recipient Disclosure/Update Report; Certification Regarding Lobbying; and/or SF–LLL, Disclosure of Lobbying Activities, where applicable. A Certification of Consistency with the Consolidated Plan is not required for this application.

(5) Completed Standard Forms SF–424, 424M, 424A, 424B, and other certifications and assurances listed in the General Section of the SuperNOFA.

(6) A detailed total budget with supporting cost justification for all budget categories of the Federal grant request. Use the budget format discussed in Section V(B) Rating Factor 3:5, above. (See Appendix D.)

(7) A two-page (maximum) abstract containing the following information: The project title, the names and affiliations of all investigators, and a summary of the objectives, expected results, and study design described in the proposal.

(8) A project description/narrative statement addressing the rating factors for award of funding under this program section of the SuperNOFA. The narrative statement must be numbered in accordance with each factor for award (Rating Factors 1 through 5). The response to the rating factors should not exceed a total of 25 pages for each technical study topic area. Any pages in excess of this limit will not be read.

(9) Any important attachments, appendices, references, or other relevant information may accompany the project description, but must not exceed twenty (20) pages for the entire application. Any pages in excess of this limit will not be read.

(10) The resumes of the principal investigator and other key personnel. Resumes shall not exceed three pages each, and are limited to information that is relevant in assessing the qualifications of key personnel to conduct and/or manage the proposed technical studies.

(B) *Applicant Debriefing.* See Section VII(E)(2) of the General Section of the SuperNOFA for information about applicant debriefing.

VII. Corrections to Deficient Applications

The General Section of the SuperNOFA provides the procedures for corrections to deficient applications.

VIII. Environmental Requirements

In accordance with 24 CFR 50.19(b)(1) and (b)(5) of the HUD regulations, activities assisted under this program are categorically excluded from the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. 4321) and are not subject to environmental review under the related laws and authorities.

IX. Authority

These grants are authorized under sections 1051 and 1052 of the Residential Lead Based Paint Hazard Reduction Act of 1992, which is Title X of the Housing and Community Development Act of 1992, sections 501 and 502 of the Housing and Urban Development Act of 1970, and the Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 2002, Pub. L. 107–73, approved November 26, 2001.

Appendix A

The following briefly describes the housing-associated health and injury hazards HUD considers key targets for intervention:

Allergens and asthma: Experts estimate that 14 million Americans have asthma, with an associated annual cost of $14 billion. Asthma is now recognized as the leading cause of school and work absence, emergency room visits and hospitalization. For sensitized children, exposure to antigens from dust mites, certain pets, and cockroaches has been associated with more severe asthma. There is a preponderance of evidence showing a dose-response relationship between exposure and prevalence of asthma and allergies; some evidence also indicates that exposure to antigens early in life may predispose or hasten the onset of allergies and asthma. Dust mites have been identified as the largest trigger for asthma and allergies. Cockroach allergens appear to be excessive in 30–50% of inner-city housing and affect 5–15% of the population, whereas dust mite appears to be the dominant allergen in other environments.

Interventions known to have beneficial effects include installation of impervious mattress and pillow covers, which can reduce allergen exposure by 90%. Other dust mite control measures include dehumidification, laundering bedding, and removal of carpets and other dust sinks. Cleaning carpets with tannic acid solution has also been demonstrated to greatly reduce dust mites. Asthma prevention program costs have been estimated at about $500 per unit, which includes about $150 for educational interventions.

Asbestos: Asbestos is a mineral fiber that has been used commonly in a variety of building construction materials and household products for insulation and as a fire-retardant. The Environmental Protection Agency (EPA) and the Consumer Product Safety Commission (CPSC) have banned most asbestos products. Manufacturers have also voluntarily limited uses of asbestos. Today, asbestos is most commonly found in older homes: In pipe and furnace insulation materials, asbestos shingles, millboard, textured paints and other coating materials, and floor tiles. Elevated concentrations of airborne asbestos can occur when asbestos-containing materials (ACM) are disturbed by cutting, sanding or other remodeling activities. Improper attempts to remove these materials can release asbestos fibers into the air in homes, increasing asbestos levels and endangering people living in those homes. The most dangerous asbestos fibers are too small to be visible. After they are inhaled, they can remain and accumulate in the lungs. Asbestos can cause lung cancer, mesothelioma (a cancer of the chest and abdominal linings), and asbestosis (irreversible lung scarring that can be fatal). Most people with asbestos-related diseases were exposed to elevated concentrations on the job; some developed disease from exposure to clothing and equipment brought home from job sites. As with radon, dose-response extrapolations suggest that lower level exposures, as may occur when asbestos-containing building materials deteriorate or are disturbed, may also cause cancer.

Intact asbestos-containing materials are not a hazard; they should be monitored for damage or deterioration and isolated if possible. Repair of damaged or deteriorating ACM usually involves either sealing (encapsulation) or covering (enclosure) it. Repair is usually cheaper than removal, but it may make later removal of asbestos more difficult and costly. Repairs should be done only by a professional trained and certified to handle asbestos safely and can cost from a few hundred to a few thousand dollars; removal can be more expensive.

Combustion products of heating and cooking appliances: Burning of oil, natural gas, kerosene, and wood for heating or cooking purposes can release a variety of combustion products of health concern. Depending upon the fuel, these may include carbon monoxide (a chemical asphyxiant), oxides of nitrogen (respiratory irritants), polycyclic aromatic hydrocarbons (e.g., the carcinogen benzo[a]pyrene), and airborne particulate matter (respiratory irritants). Carbon monoxide, an odorless gas, can be fatal. Nitrogen dioxide can damage the respiratory tract, and sulfur dioxide can irritate the eyes, nose and respiratory tract. Smoke and other particulates irritate the eyes, nose and throat, and can cause lung cancer.

Improper venting and poor maintenance of heating systems and cooking appliances can dramatically increase exposure to combustion products. Experts recommend having combustion heating systems inspected by a trained professional every year to identify blocked openings to flues and chimneys; cracked or disconnected flue pipe;

dirty filters; rust or cracks in the heat exchanger; soot or creosote build-up; and exhaust or gas odors. Installing a carbon monoxide detector is also recommended; however, such a detector will not detect other combustion by-products.

Insect and Rodent pests: The observed association between exposure to cockroach antigen and asthma severity has already been noted above. In addition, cockroaches may act as vehicles to contaminate and environmental surfaces with certain pathogenic organisms. Rodents can transmit a number of communicable diseases to humans, either through bites, arthropod vectors, or exposure to aerosolized excreta. In addition, humans can become sensitized to proteins in rodent, urine, dander and saliva. Such sensitization may contribute to asthma severity among children. Insect and rodent infestation is frequently associated with substandard housing that makes it difficult to eliminate. Treatment of rodent and insect infestations often includes the use of toxic pesticides that may present hazards to occupants (*see below*). Integrated pest management (IPM) for rodents and cockroaches, which reduces the use of pesticides, is estimated to cost approximately $150 per unit. IPM control measures include sealing holes and cracks, removing food sources and use of traps.

Lead: Exposure to lead, especially from deteriorating lead-based paint, remains one of the most important and best studied of the household environmental hazards to children. Although blood lead levels have fallen nationally, a large reservoir of lead remains in housing. The most recent national survey, conducted from 1991–94, showed that nearly one million U.S. preschoolers still have elevated blood lead levels. Overall, the prevalence rate among all children under six years of age is 4.4%. Among low-income children living in older housing where lead-based paint is most prevalent, the rate climbs to 16%; and for African-American children living in such housing, it reaches 21%.

HUD estimates that 38 million dwellings have some lead-based paint, and that 26 million have significant lead-based paint hazards. Of those, about 5.7 million have young children and of those, about 1.6 million have household incomes under $30,000 per year. Costs for lead hazard control can range anywhere from $500 to $15,000 per unit. Corrective measures include paint stabilization, enclosure and removal of certain building components coated with lead paint, and cleanup and ''clearance testing,'' which ensures the unit is safe for young children.

Mold and moisture: An analysis of several pulmonary disease studies estimates that 25% of airways disease, and 60% of interstitial lung disease may be associated with moisture in the home or work environment. Moisture is a precursor to the growth of mold and other biological agents, which is also associated with respiratory symptoms. An investigation of a cluster of pulmonary hemosiderosis (PH) cases in infants showed PH was associated with a history of recent water damage to homes and with levels of the mold Stachybotrys atra (SA) in air and in cultured surface samples. Associations between exposure to SA and ''sick building'' symptoms in adults have also been observed. Other related toxigenic fungi have been found in association with SA-associated illness and could play a role. For sensitive individuals, exposure to a wide variety of common molds may also aggravate asthma. Addressing mold problems in housing requires coordination among the medical, public health, microbiological, housing, and building science communities.

The cost of mold/moisture-related intervention work (e.g., integrated pest management, clean & tune furnace, remove debris, vent clothes dryer, cover dirt floor with impermeable vapor barrier) is a few hundred dollars, unless major modification of the ventilation system is needed. In Cleveland, mold interventions, including repairs to ventilation systems and basement flooring, in the most heavily contaminated homes range from $500–$5,000, with some costs also being dedicated to lead hazard control simultaneously through its lead+asthma program.

Pesticide residues: According to the EPA, 75 percent of U.S. households used at least one pesticide product indoors during the past year. Products used most often are insecticides and disinfectants. Another study suggests 80 percent of most people's exposure to pesticides occurs indoors and that measurable levels of up to a dozen pesticides have been found in the air inside homes. The amount of pesticides found in homes appears to be greater than can be explained by recent pesticide use in those households; other possible sources include contaminated soil or dust that migrates in from outside, stored pesticide containers, and household surfaces that collect and then release the pesticides. Pesticides used in and around the home include products to control insects (insecticides), termites (termiticides), rodents (rodenticides), molds and fungi (fungicides), and microbes (disinfectants). In 1990, the American Association of Poison Control Centers reported that some 79,000 children were involved in common household pesticide poisonings or exposures. In households with children under five years old, almost one-half stored at least one pesticide product within reach of children. Exposure to chlorpyriphos (CP), a commonly used organophosphate insecticide, in the prenatal and early postnatal period may impair neurodevelopment. While CP is a biodegradable pesticide, substantial persistence of CP in house dust has been demonstrated. Exposure to high levels of cyclodiene pesticides, commonly associated with misapplication, has produced various symptoms, including headaches, dizziness, muscle twitching, weakness, tingling sensations, and nausea. In addition, EPA is concerned that cyclodienes might cause long-term damage to the liver and the central nervous system, as well as an increased risk of cancer.

There are available data on hazard evaluation methods and remediation effectiveness regarding pesticide residues in the home environment.

Radon progeny: The National Academy of Sciences estimates that approximately 15,000 cases of lung cancer per year are related to radon exposure. Epidemiologic studies of miners exposed to high levels of radon in inhaled air have defined the dose response relation for radon-induced lung cancer at high exposure levels. Extrapolation of these data has been used to estimate the excess risk of lung cancer attributable to exposure to radon gas at the lower levels found in homes. These estimates indicate that radon gas is an important cause of lung cancer deaths in the U.S. Excessive exposures are typically related to home ventilation, structural integrity and location.

Radon measurement and remediation methods are well developed, and the Environmental Protection Agency (EPA) recommends that every home be measured for radon. EPA estimates that materials and labor costs for radon reduction in an existing home are $800–$2500. Including radon resistant techniques in new home construction costs $350–$500, and can save up to $65 annually in energy costs, according to the EPA.

Take home hazards from work/hobbies and work at home: When the clothing, hair, skin, or shoes of workers become contaminated with hazardous materials in the workplace, such contaminants may inadvertently be carried to the home environment and/or an automobile. Such ''take-home'' exposures have been demonstrated, for example, in homes of lead-exposed workers. In addition, certain hobbies or workplaces located in the home may provide an especially great risk of household contamination.

Control methods include storing and laundering work clothes separately, and showering and changing before leaving work, or immediately after arriving home. Once a home becomes contaminated, cleaning floors and contact surfaces and replacing furnishings may be necessary to reduce exposures.

Unintentional injuries/fire: Unintentional injury is now the leading cause of death and disability among children younger than 15 years of age. In 1997, nearly 7 million persons in the United States were disabled for at least 1 full day by unintentional injuries received at home. During the same year, 28,400 deaths were attributable to unintentional home injuries, of which 1800 occurred among children 0–4 years of age. Among young children, three types of events accounted for more than 3/4 of deaths: fires/burns, drownings, and mechanical suffocation. Falls and poisoning are the next most common.

Home visitation protocols have been shown to be effective in reducing exposure to such hazards. The ''add-on'' cost of injury prevention measures, when combined with other housing interventions are estimated at about $100 per unit. This includes the cost of some injury prevention devices, such as smoke alarms, electrical socket covers, etc.

Appendix B—Relevant Publications and Guidelines

To secure any of the documents listed, call the listed telephone number (generally, the telephone numbers are not toll-free). A number of these references are provided on HUD's CD, ''Residential Lead Desktop Reference, 3rd Edition.'' This CD is available

at no charge from the National Lead Information Clearinghouse, 1–800–424–LEAD.

Regulations

1. Worker Protection: OSHA publication—Telephone: 202–693–1888 (OSHA Regulations) (available for a charge)—Government Printing Office—Telephone: 202–512–1800 (not a toll-free number):

—General Industry Lead Standard, 29 CFR 1910.1025 (Document Number 869022001124). Can be downloaded from the Internet without charge from www.osha-slc.gov/OshStd_data/1910_1025.html.

—Lead Exposure in Construction, 29 CFR 1926.62, and appendices A, B, C, and D (Document Number 869022001141). Can be downloaded from the Internet without charge from *www.osha-slc.gov/OshStd_data/1926_0062.html.*

2. Waste Disposal: 40 CFR parts 260–268 (EPA regulations) (available for a charge)—Telephone 1–800–424–9346, or, from the Washington, DC, metropolitan area, 1–703–412–9810 (not a toll-free number). Can be downloaded from the Internet without charge from www.epa.gov/docs/epacfr40/chapt-I.info/subch-I/htm.

3. Lead; Requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities; Final Rule: 40 CFR part 745 (EPA) (Lead Hazard Standards, Work Practice Standards, EPA and State Certification and Accreditation Programs for those engaged in lead-based paint activities)—Telephone: 1–202–554–1404 (Toxic Substances Control Act Hotline) (not a toll-free number). Can be downloaded from the Internet without charge from *www.epa.gov/lead/.*

4. Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance; Final Rule: 24 CFR part 35, subparts A through R, published September 15, 1999, at **Federal Register** pages 50201 through 50231(HUD)—Telephone: 1–800–424–LEAD (National Lead Information Center). Can be downloaded from the Internet without charge from www.hud.gov/offices/lead.

5. U.S. Environmental Protection Agency. Lead; Identification of Dangerous Levels of Lead; Final Rule at 66 FR 1205–1240, January 5, 2001. TSCA Hotline: 202–554–1404 (not a toll-free number). Can be downloaded from the Internet without charge from www.epa.gov/lead/leadhaz.htm.

Guidelines

1. Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing; HUD, June 1995, and amended September 1997. (available for a charge)—Telephone: 800–245–2691. Can be downloaded from the Internet without charge from www.hud.gov/offices/lead.

2. Preventing Lead Poisoning in Young Children; Centers for Disease Control, October 1991: Telephone: 888–232–6789. Can be downloaded from the Internet without charge from www.hud.gov/offices/lead.

3. Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officials, November 1997; Centers for Disease Control and Prevention (CDC): Telephone: 888–232–6789. Can be downloaded from the Internet without charge from www.hud.gov/offices/lead.

Reports and Articles

1. Putting the Pieces Together: Controlling Lead Hazards in the Nation's Housing, (Summary and Full Report); HUD, July 1995 (available for a charge)—Telephone 800–245–2691. Can be downloaded from the Internet without charge from www.hud.gov/offices/lead.

2. The Healthy Homes Initiative: A Preliminary Plan (Summary and Full Report); HUD, July 1995. Can be downloaded from the Internet without charge from www.hud.gov/offices/lead.

3. Institute of Medicine. Indoor Allergens. Assessing and Controlling Adverse Health Effects. National Academy Press. Washington, D.C. 1993.

4. Mott L., Our Children at Risk. Natural Resources Defense Council. Washington, D.C. 1997. Can be ordered from the Internet from www.nrdc.org.

5. Rom W.N., Ed. Environmental and Occupational Medicine. Little, Brown and Co., Boston. 1992.

6. President's Task Force on Environmental Health Risks and Safety Risks to Children. Asthma and The Environment: An Action Plan to Protect Children. Washington, D.C. 1999. Eliminating Childhood Lead Poisoning: A Federal Strategy Targeting Lead Paint Hazards. Washington, D.C. 2000. Can be downloaded from the Internet without charge from *www.epa.gov/children.*

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APPENDIX C ♦ Healthy Homes and Lead Technical Studies

Examples of Healthy Homes Technical Studies

No.	Title	Description
1	Urban Mold and Moisture Control Program	Assess the efficacy of low cost interventions to address mold and moisture problems as measured by subsequent reductions in fungal levels in environmental samples and reduction in asthma morbidity. Also includes development and validation of a visual assessment tool.
2	Improving the Lead Dust Final Clean Protocol to Reduce Cockroach Allergen Exposure	Determine effectiveness of modified cleaning protocols in reducing household contamination by cockroach allergen; evaluate polyclonal immunoassay for measuring cockroach allergens.
3	Healthy Public Housing	Document EHS hazards affecting public housing residents; evaluate remedial measures and quantify economic benefits of interventions
4	Head Start Healthy Homes Initiative	Evaluate home visitation with low cost interventions to Head Start families as a means of reducing health risks for asthma, lead poisoning and injury.
5	Baseline Study of Fungi in Urban Homes With No Known Moisture Problems	Identify fungal species and concentrations in samples of air and settled dust in homes with no known mold and moisture problems.
6	Use of GIS Predictive Modeling to Identify Homes at High Risk for Environmental Health Hazards	A GIS-based predictive modeling approach, built on an ongoing GIS modeling project for lead hazards, will be used to identify homes that are likely to have multiple environmental health hazards.
7	A Portable Instrument to Detect, Identify and Quantify Mold in Homes	The objective is to develop a relatively low cost, portable instrument to perform on-site evaluation of airborne concentrations of specific fungal species as well as estimates of total fungal concentration.
8	Evaluation of a Low Cost Method for Identification and Assessment of Mold Problems in Housing	The objective is to conduct laboratory and field testing of a new instrument for measuring the release of mold spores from surfaces.
9	Novel Markers of Fungal Exposure in Homes and Their Relationship to Respiratory Symptoms in Children in New York City	This research is evaluating the utility of fungal exposure assessment through immunoassay measurement of fungal extracellular polysaccharides (EPS) in house dust and fungal EPS specific immunoglobulin G (IgG) in the serum of participants to identify relationships between mold exposure and respiratory symptoms.

Examples of NOFA-Funded Lead Technical Studies

No.	Title	Description
1	Cleaning Lead Contaminated Dust from Hard Surfaces	The purpose of this research is to determine the effectiveness of various detergents in cleaning lead-contaminated dust from hard surfaces under varying conditions of wear and dust loading.
2	Monitoring HEPA Vacuum Dust Pick-up with an Aerosol Photometer	The objective of this research is develop a dynamic reading instrument that will indicate when a surface is sufficiently "clean".
3	Developing a Method for Collecting and Analyzing Vacuum Dust Samples for Lead Using Field Portable XRF	This research involves the development and assessment of a field method for collecting residential dust samples and analyzing them for lead using a field portable XRF analyzer.
4	The Use of Biosolids to Reduce Soil-lead Hazards	The study involves the application of treated biosolids to lead-contaminated urban yards with subsequent assessment of the effectiveness of the treatment in reducing lead concentration and bioavailability.
5	Assessing the Effectiveness of a State Law Requiring Lead Hazard Control Treatments in pre-1950 Rental Housing	The project is assessing the effectiveness of low cost treatments in reducing residential dust-lead hazards in rental housing.

APPENDIX D

The non-standard forms, which follow, are required for your Healthy Homes and Lead Technical Studies application. They are the "Checklist and Submission Table of Contents" and the "Budget Summary," including instructions.

CHECKLIST AND SUBMISSION TABLE OF CONTENTS
HEALTHY HOMES AND LEAD TECHNICAL STUDIES GRANT PROGRAM

The following checklist is provided to ensure you have submitted all required items to receive consideration for funding. You must assemble the application in the order shown below and note the corresponding page number where the response is located. **You must include this checklist and submission table of contents with the proposal.**

☐	**Transmittal Letter (limited to one page)**	Cover page
☐	**Applicant Abstract** (limited to a 2-pages; does not count towards 25-page limit)	_____
	Application Forms (to be included in Appendix 3)	
☐	Standard Form 424 and Standard Form 424A (Section B)	_____
☐	Standard Form 424B (Assurances/Non-Construction Programs)	_____
☐	HUD 424-M	
☐	Budget Summary (Federal Share and Matching)	_____
☐	HUD 2880 Disclosure and Update Report	_____
☐	HUD 2990 Certification of Consistency with the EZ/EC Strategic Plan	_____
☐	HUD 2992 Certification regarding Debarment and Suspension	_____
☐	HUD 50070 Certification for a Drug-Free Workplace	_____
☐	HUD 50071 Certifications of Payments to Influence Federal Transactions	_____
☐	Form SF-LLL Disclosure of Lobbying Activities Required ☐ Form SF-LLL Not Required (See SuperNOFA)	_____
	Rating Factor Response (The narrative response to the Rating Factors cannot exceed a total of 25 pages.)	
☐	1. Capacity of the Applicant and Relevant Organizational Experience	_____
☐	2. Need/Extent of the Problem	_____
☐	3. Soundness of Approach	_____
☐	4. Leveraging Resources	_____
☐	5. Coordination, Self-Sufficiency and Sustainability	_____
	Appendices	
☐	Appendix 1 – Required material in support of the Rating Factors (e.g, resumes of key personnel, organizational chart, letters of commitment) arranged in order of Rating Factor. Does not count towards the 20-page limit; resumes limited to 3 pages each.	_____
☐	Appendix 2 – Optional material in support of the Rating Factors, arranged in order of Rating Factors, e.g., maps, letters of support. The 20-page limit applies to this Appendix.	_____
☐	Appendix 3 – Material relating to the forms, or budget material. (See Application Forms, above.)	_____
☐	HUD 2993 Acknowledgment of Application Receipt	_____
☐	HUD 2994 Client Comments and Suggestions (Optional)	_____

Spreadsheet version available from www.hud.gov/lea/leaforms.html

Budget Summary

Total Budget (Federal Share and Matching)

Name and Address of Applicant

Detailed Description of Budget (for full grant period)

Category					
1. Personnel (Direct Labor)	Estimated Hours	Rate per Hour	Estimated Cost	Federal Share	Match
Position or Individual					
Total Direct Labor Cost					
2. Fringe Benefits	Rate	Base	Estimated Cost	Federal Share	Match
Total Fringe Benefits Cost					
3. Travel					
3a. Transportation - Local Private Vehicle	Mileage	Rate per Mile	Estimated Cost	Federal Share	Match
Subtotal - Trans - Local Private Vehicle					
3b. Transportation - Airfare (show destination)	Trips	Fare	Estimated Cost	Federal Share	Match
Subtotal - Transportation - Airfare					

Spreadsheet version available from www.hud.gov/lea/leaforms.html

Budget Summary

Total Budget (Federal Share and Matching)

Detailed Description of Budget

3c. Transportation - Other	Quantity	Unit Cost	Estimated Cost	Federal Share	Match
Subtotal - Transportation - Other					
3d. Per Diem or Subsistence (indicate location)	Days	Rate per Day	Estimated Cost	Federal Share	Match
Subtotal - Per Diem or Subsistence					
Total Travel Cost					
4. Equipment (Only items over $5,000 each)	Quantity	Unit Cost	Estimated Cost	Federal Share	Match
Total Equipment Cost					
5. Supplies and Materials (Items under $5,000)					
5a. Consumable Supplies	Quantity	Unit Cost	Estimated Cost	Federal Share	Match
Subtotal - Consumable Supplies					
5b. Non-Consumable Materials	Quantity	Unit Cost	Estimated Cost	Federal Share	Match
Subtotal - Non-Consumable Materials					
Total Supplies and Materials Cost					

Spreadsheet version available from www.hud.gov/lea/leaforms.html

Budget Summary

Total Budget (Federal Share and Matching)

Detailed Description of Budget

6. Consultants (Type)	Days	Rate per Day	Estimated Cost	Federal Share	Match
Total Consultants Cost					

7. Contracts and Sub-Grantees (List individually)	Quantity	Unit Cost	Estimated Cost	Federal Share	Match
Total Subcontracts Cost					

8. Other Direct Costs	Quantity	Unit Cost	Estimated Cost	Federal Share	Match
Item					
Total Other Direct Costs					

9. Indirect	Rate	Base	Estimated Cost	Federal Share	Match
Type					
Total Indirect Costs					
Total Estimated Costs					

Total of Federal Share and Match

Spreadsheet version available from www.hud.gov/lea/leaforms.html

Analysis of Total Estimated Costs	Estimated Cost	Percent of Total	Percent of Labor
1 Personnel (Direct Labor)			
2 Fringe Benefits			
3 Travel			
4 Equipment			
5 Supplies and Materials			
6 Consultants			
7 Contracts and Sub-Grantees			
8 Other Direct Costs			
9 Indirect Costs			
Total			

Federal Share
Match **Expressed as a percentage of the Federal Share**

Some cells in this spreadsheet are protected. There is no password for this spreadsheet.

Instructions for Completing the Budget Summary Spreadsheet

Note: an electronic version of this spreadsheet may be obtained from the HUD Office of Healthy Homes and Lead Hazard Control website at www.hud.gov/offices/lead

Item	Discussion
1 - Personnel (Direct Labor)	This section should show the labor costs for all individuals supporting the grant effort (regardless of the source of their salaries). The hours and costs are for the full life of the grant. If an individual is employed by a contractor or sub-grantee, their labor costs should not be shown here. Please include all labor costs which are associated with the proposed grant program, including those costs which will be paid for with in-kind or matching funds. Do not show fringe or other indirect costs in this section. Please use the hourly labor cost for salaried employees (use 2080 hours per year or the value your organization uses to perform this calculation). An employee working less than full time on the grant should show the numbers of hours they will work on the grant.
2 - Fringe Benefits	Use the standard fringe rates used by your organization. You may use a single fringe rate (a percentage of the total direct labor) or list each of the individual fringe charges. The spreadsheet is set up to use the Total Direct Labor Cost as the base for the fringe calculation. If your organization calculates fringe benefits differently, please use a different base and discuss how you calculate fringe as a comment.
3 - Travel	
3a - Transportation - Local Private Vehicle	If you plan on reimbursing staff for the use of privately owned vehicles or if you are required to reimburse your organization for mileage charges, show your mileage and cost estimates in this section.
3b - Transportation - Airfare	Show the estimated cost of airfare required to support the grant program effort. Show the destination and the purpose of the travel as well as the estimated cost of the tickets. Each program NOFA discusses the travel requirements which should be listed here.
3c - Transportation - Other	If you or are charged monthly by your organization for a vehicle for use by the grant program, indicate those costs in this section. Provide estimates for other transportation costs which may be incurred (metro, etc.).

3d - Per Diem or Subsistence	For travel which will require the payment of subsistence or per diem in accordance with your organization's policies. Indicate the location of the travel. Each program NOFA discusses the travel requirements that should be listed here.
4 - Equipment	Equipment is defined by HUD regulations as tangible, nonexpendable, personal property having a useful life of more than one year and an acquisition cost of $5,000 or more per unit. Each program NOFA describes what equipment may be purchased using grant funding.
5 - Supplies and Materials	Supplies and materials are consumable and non-consumable items that have a unit value of less than $5,000. Please list the proposed supplies and materials as either Consumable Supplies or as Non-Consumable Materials.
5a - Consumable Supplies	List the consumable supplies you propose to purchase. General office or other common supplies may be estimated using an anticipated consumption rate.
5b - Non-consumable materials	List furniture, computers, printers, and other items that will not be consumed in use. Please list the quantity and unit cost.
6 - Consultants	Please indicate the consultants you will use. Indicate the type of consultant (skills), the number of days you expect to use them, and their daily rate.
7 - Contracts and Sub-Grantees *Note: If any contractor, sub-contractor, or sub-grantee is expected to receive over 10% of the total Federal amount requested, a separate Total Budget Summary spreadsheet should be developed for that contractor or sub-grantee and the total amount of their proposed effort should be shown as a single entry in this section.*	List the sub-grantees, sub-recipients, or sub-contractors that will help accomplish the grant effort. Besides, sub-grantees or sub-recipients, other contracts for services including those for conducting inspections, risk assessments, and clearance inspections; contracts with faith-based and community-based organizations; liability insurance; contracts with laboratories; and training and certification for contractors and workers should be listed under this item. Unless your proposed program will perform the primary grant effort with in-house employees (costs listed in Items 1 and 2), the costs for contractors, sub-grantees or sub-recipients performing the primary grant activities should be identified and listed in this section. Types of activities which should be shown in this section: • Contracts for all services • Training • Contracts with Faith-Based and Community Based Organizations or Other Governmental Organizations (note the 10% requirement discussed in this section) • Insurance if your program will procure it separately Please provide a short description of the activity the contractor or sub-grantee will perform, if not evident.

8 - Other Direct Costs	Other Direct Costs include a number of items that are not appropriate for other sections. Other Direct Costs may include: • Staff training • Telecommunications • Printing and postage • Relocation, if costs are paid directly by your organization (if relocation costs are paid by a sub-grantee, it should be reflected in Section 7)
9 - Indirect Costs	OMB Circular A87 defines indirect costs are those that have been incurred for common or joint purposes. These costs benefit more than one cost objective and cannot be readily identified with a particular final cost objective without effort disproportionate to the results achieved. Indirect costs include (a) the indirect costs originating in each department or agency of the governmental unit carrying out Federal awards and (b) the costs of central governmental services distributed through the central service cost allocation plan and not otherwise treated as direct costs. The spreadsheet is set up to use the Total Direct Labor plus the Fringe Benefits costs as the base for the indirect cost calculation. If your organization calculates indirect costs differently, please use a different base and discuss how you calculate fringe as a comment.

The three rightmost columns allow you to identify how the costs will be spread between the Federal Share and the Match. This information will help the reviewers better understand your program and priorities. The far right column is an "error checking" function to confirm that the estimated cost is equal to the sum of the Federal Share and the Match. If there is a discrepancy, the word "Error" will appear.

Note: The formats and many of the cells for the spreadsheet (which can be downloaded from the HUD Office of Healthy Homes and Lead Hazard Control's website at: www.hud.gov/offices/lead) are protected. There is no password for the protection.