Innovative Pavement Research Foundation

INSTRUCTIONS FOR PREPARING AND SUBMITTING PROPOSALS

IPRF Project 01-G-002-03-10

Field Studies in Mitigating ASR in Existing Pavement
Topical Application of Lithium

General

The Innovative Pavement Research Foundation (IPRF) is a non-profit applied research and technology corporation. The IPRF does not operate on a grant basis and there are no funds to support unsolicited proposals. The projects for which proposals are requested are considered by the airport community to be pressing problems that exist nationwide; hence, proposals are desired only from agencies or individuals already having experience and a demonstrated capability in the subject project area. It is expected that only organizations or individuals with a high level of capability can satisfy the commitments of the proposal -- capability will not be developed at IPRF expense.

Colleges, universities, industry, research institutes and foundations, engineering and other consultants, or others who possess a demonstrated capability and have experience in the subject area may conduct research under the IPRF.

Proposals become the property of the IPRF, are treated as privileged documents, and are disposed of in accordance with IPRF policies. The IPRF retains the right to reject any and all proposals.

Deadlines

The deadline shown on each Request for Proposal (RFP) is rigid. Extensions will not be granted. One (1) original signed copy of a proposal is required by the IPRF; copies do not require an original signature. Proposals may be withdrawn at any time. In order to be considered, proposals must be received in the offices of the IPRF not later than the deadline given in the RFP. Any proposal that is received at the designated office after the deadline will be rejected.

Transmittal

A letter of transmittal is not required. If a transmittal letter is used it cannot include information vital to the proposal. All information that is to be considered as part of the proposal must be bound in a single volume that will constitute the proposal in its entirety. Standard brochures, pamphlets, and other descriptive materials pertaining to the agency may be included as an attachment in one copy as a part of the original document.
Acknowledgment

The IPRF will not acknowledge to the sender receipt of the proposal package unless a self-addressed, stamped postcard is included. The IPRF will, as quickly as possible, inform organizations, individuals or agencies of proposals rejected from consideration along with a statement as to the reason(s) for rejection.

Presentation

Proposals must be concise and straightforward. Information that is extraneous and not germane to the research project will not be included. The proposal is limited to 25 pages, not including the front and rear cover sheet, Times New Roman 12 point. Pages shall have information printed on only one side of the paper. Proposals will be evaluated beginning with the Summary Page (page 1) and will terminate with the 25th page.

Proposal Organization

The proposal will be submitted as one (1) bound original and eight (8) copies. The original (and any attachment) will be retained by the IPRF. The copies will be distributed to a technical panel for use during the evaluation process.

Proposals that do not comply with the instructions contained herein will not be accepted. It is mandatory that each proposal contains the following divisions and that each proposal is organized in the sequence shown below. Each of the prescribed divisions will be assigned points by the technical panel. There will be 100 total possible points distributed to the first eleven divisions of the proposal. Divisions will not be weighted equally. Some divisions will have higher point values than other divisions. If a division is missing from a proposal, or out of the prescribed order, that division will be given zero points. The entity that has the proposal with the highest total number of evaluation points will be given the highest consideration for award of a contract to do the research.

1) Cover (See IPRF Example on page 8 of 8)
2) Summary Page
3) Table of Contents
4) Organization Structure of the Research Team (Presented in a graphic format)
5) Qualifications Unique to Individuals on the Research Team
6) Work Distribution and Recent Experience of Individuals on the Research Team
7) Research Plan, Approach to the Problem and End Product(s)
8) Current Workload and Commitments of the Research Team
9) Proposed Time Line (with milestones) to Complete the Work
10) Proposed Budget, Itemized
11) Team Definition for Quality Control versus Quantity of Work
12) Biographies of Research Team Members (Appendix – not included in 25 page limitation)

For the convenience of the Technical Panel, divisions should be separated with either full sheet color separators or tab-type dividers so that information may be located quickly. Full sheets used for division separation will not include printed information and will not be in the page count.
Details of Proposal Content

1) Cover -- The outermost covering of the proposal shall be either paper or cardboard and must be non-glossy, light-colored material capable of accepting rubber stamp ink without smearing. The cover shall contain the task title, the name of the submitting group, and a "Limited Use Document" clause. The original will not be numbered. Copies shall be numbered in the upper right-hand corner beginning with the number 1. The original proposal will not be numbered.

2) Summary Page -- The summary page shall immediately follow the cover and shall include the information summarized below.
   a) IPRF project number and title (from the RFP);
   b) Name, address, telephone and fax number of the submitting group (normally the agency or individual that will appear on the contract);
   c) Name and address of any group or individual with which a joint venture is proposed, if such is the case (if none so state);
   d) Name and title of the person formally submitting the proposal (normally the principal investigator);
   e) Name(s) and title(s) of the person(s) who actually wrote the proposal;
   f) Proposal date;
   g) Name, address, and telephone number of the responsible administrative officer having cognizance of the project (this should be the individual authorized to bind the agency contractually and to approve the expenditure of project funds);
   h) Amount of time required to complete the research as specified in the proposal;
   i) Total amount of the budget proposed to complete the research.

3) Table of Contents -- Self-explanatory.

4) Organization Structure of the Research Team – In graphic format or an organizational chart that shows the relationship of the research team members beginning with the principal investigator.

5) Qualifications of the Research Team -- Name, address, telephone number, and pertinent background information must be provided for the Principal Investigator bearing responsibility for the project. The same information is required for other participating research team members.

This item must include a section labeled "Disclosure." The IPRF must have information that will assure that the objectivity of the research is maintained. The IPRF must be aware of possible sources of significant financial or organizational conflict of interest in conducting the research. For example, under certain conditions, ownership of the proposing agency, other organizational relationships, or proprietary rights and interests could be perceived as jeopardizing an objective approach to the research effort. The proposal must contain information that would disclose any such circumstances and explain how they will be accounted for in this study. If there are no issues related to objectivity, this should be stated.

State or local government employees submitting or participating in proposals to conduct IPRF research must also include in this section a letter signed by appropriate authority stating that the
employee's agency is aware of the proposal and approves of the employee conducting research in the event the proposal is successful.

6) **Team Member Work Distribution and Individual Recent Experience** -- Describe experience of the participants unique to the planning for construction, rehabilitation, and maintenance or repair of airfield pavement projects and how the academic, industrial, and/or research experiences relate to the project to be undertaken. Experience should include work done for Commercial Service Airports, General Aviation airports, and military installations.

Proposals shall contain a summary of the past accomplishments of the research team in the same, or closely related, problem area of the work to be undertaken. This summary is to include full particulars concerning instances of application to practice of the agency’s research results. If no such knowledge exists, it should be so stated.

The distribution of the work among the team membership should be representative of the team experience. An individual with an extensive amount of experience should not be aligned with a team of supporting individuals with little or no experience. A balance of the work among several team members should be used to accomplish the research. This latter scenario will assure that the discussion within the research group will stimulate an understanding of the practices rather than a dictation of thoughts of an individual.

7) **Research Plan, Approach to the Problem, and End Product** -- The research plan shall detail completely the performance of the research, including the submission of an acceptable final report. The plan will ultimately become a part of the contract agreement to do the work; therefore, it should describe in a specific and straightforward manner the proposed approach to the solution of the problem described in the project statement. It should be concise, yet include sufficient detail to describe the approach to the solution of the problem. **Research methodology shall be described in sufficient detail to permit an evaluation of the probability of success of the research team in achieving the objectives.** The research plan shall be subdivided into the following sections:

a) **Introduction.** The introduction to the research plan should provide a concise overview of the approach to conducting the research. It should describe the manner in which the expertise of the team or individual will be used to do the research. The application of special data, facilities, contacts, or equipment should be presented. The introduction should highlight the linkages of the team or individual capabilities to do the project tasks and satisfy the research objectives.

b) **Research Approach.** This section will be used to describe how the objectives will be achieved through a logical, innovative, and rational scientific plan. The plan shall describe each phase or task of the research to be undertaken. Data collection techniques will be described in detail. The researcher should describe how they intend to get information, describe the variables that are known, and what geographic anomalies are expected.
c) **Anticipated Research Results.** The research plan shall contain specific statements describing the end product of the research. How does the research team visualize the intent of the project. The results will be presented in terms of the language and working tools of the practitioner so as to be immediately applicable to practice. Consequently, there must be specific statements of the manner in which the desired results would be reported, e.g., mathematical models, design techniques, field or laboratory test procedures, or recommendations for changes in specifications. IPRF projects are intended to produce results that will be applied in practice.

8) **Current Workload and Commitments of the Research Team --** Proposals shall contain a listing of current organization and/or individual commitments to do other work. Sufficient detail will be provided to allow an evaluation of the organization and all of the individuals assigned to the proposed project and that same will be able to meet the commitments of the proposal. Staff-hour commitments and percentage of time committed to other work for each member of the proposed research team shall be specified.

9) **Proposed Time Line to Complete the Work --** The time required to complete the research project shall be specified. Proposals will not be rejected if the proposed time does not match the time specified in the project statement. However, the agency must justify any difference. In addition, a schedule shall be included that shows each phase of the work, when that phase will begin, how long it will continue, and when it should end. The timetable should clearly delineate the points in time where project deliverables and reports are planned. There will be a mandatory submittal and review at the 20%, 60% and 90% project completion points. The 20% review will be considered to be when the research plan is fully developed and accepted by the technical panel. The 90% review will be when the document is complete to the point that all items in the research plan are addressed. Some graphics or pictures may be missing from the 60% review. The 20%, 60% and the 90% review will be in the presence of the IPRF Technical Panel unless waived.

10) **Itemized Budget --** The cost for the project should be based on the proposed performance period. Proposals will not be accepted where budgets are in excess of the amount shown on the project statement unless the additional funding is clearly covered by other fund sources or the excess amounts are clearly documented and justified based upon the expected improvement in quality of the end product. Lump sum estimates are not acceptable. Budgets shall be itemized in accordance with the following cost categories where appropriate:

   a) **Salaries and Wages.** Each employee to participate in the performance of the project shall be identified by name, with role, level of effort, and cost.

   b) **Consultants.** Costs for services of independent consultants deemed necessary for accomplishment of the research.

   c) **Subcontracts.** Costs for services of subcontractors deemed necessary for performance of a portion of the research.
d) **Materials and Services.** Materials, supplies, and other articles, including the costs of processing: testing; rental of apparatus and equipment from others; preparing, editing and reproducing reports, including the final report for submission to the IPRF. After the final report has been received and accepted, publication of that report is a responsibility of the IPRF.

e) **Communications and Shipping.** Long-distance telephone calls, telegrams, cablegrams, radiograms, postage, freight, express, drayage, etc.

f) **Travel.** Transportation costs plus reasonable actual subsistence expenses (or an allowance in lieu of actual subsistence costs) of persons working directly on the subject research, payment for which is in accordance with current Federal travel regulations (See www.gsa.gov). Travel should include provision for three visits by the Principal Investigator for consultation with the IPRF staff and, if the requirement cannot be satisfied through these visits, an additional visit to complete the understanding of what is required in the preparation, editing, and revision of final reports.

g) **Overhead.** An allowance for overhead costs determined in accordance with the research agency's usual method of accounting and generally accepted accounting principles. The current overhead rate should be extrapolated on the basis of previous years' trends to provide the best estimate possible for the anticipated contract period. Specify the rate (a fixed rate may be proposed, if the agency so chooses) and the base on which the overhead is applicable and include a statement supporting this rate. A negotiation agreement or statement from a Federal Government agency is acceptable for this purpose.

In its consideration of these items, the IPRF is guided by the applicable U.S. Government regulations. In any case, all fiscal, budget, and other pertinent information must be bound with each proposal, in the single volume required.

A cost analysis will be conducted by the technical panel in coordination with the IPRF to determine if the proposed budget is reasonable and provides the best utilization of resources. A determination of the need for a pre-award audit for financial accountability purposes will be made on a case-by-case basis.

Institutions of higher education and other nonprofit recipients are required to meet the audit requirements of OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations." OMB Circular A-133 is also applicable to all higher education and nonprofit institution sub-recipients receiving $25,000.00 or more in federally funded awards during a fiscal year.

11) **Team Definition for Quality Control vs. Quantity of Work** – The research team shall define how the research will be completed and the report written such that the information is in the most communicable format. It is possible to generate pages of written information that does nothing more than fill space. This is not the purpose of the research. The research team will, therefore describe how they will ascertain which data will be used to communicate the most reasonable and effective information. In this division the research team will describe how information will be crisp and concise without unnecessary supporting information.
12) Appendix -- The appendix will not be counted in the 25-page limitation of the proposal. The appendix will include the biography of each participant of the research team if the biography is an element that could reinforce the position of the research team. The absence of the biography from the proposal will not be detrimental in the evaluation of the proposals.

General Information

The IPRF does not include providing briefings or attending meetings with those that propose to do research. During the course of proposal preparation, questions will be accepted by telephone, in writing, or by e-mail. When answers to questions warrant a change to the RFP or are considered of interest to all a notice will be posted to the IPRF web page. Before a contract is awarded the agency, organization, or individual considered for a contract will certify that all changes or information provided as a result of inquiry has been considered in the preparation of the proposal.

It is expected that those that submit a proposal will have studied the foregoing instructions and will comply in full. Failure to do so, if not warranting outright rejection, will certainly raise serious questions as to how well the group or individual can handle a complex research project. Failure to comply with the instructions would, therefore, seriously jeopardize the chances of being selected to conduct the work. In matters of doubt questions should be directed to the IPRF. The name and telephone number of the task leader assigned to each task is noted on the task statement.

Please remember that noncompliance with the following will result in automatic rejection:

1) Proposals must arrive at the address given in the RFP before the deadline.
2) Proposals must contain, in the order indicated, the 11 items under Proposal Organization.

END INSTRUCTIONS FOR PREPARING AND SUBMITTING PROPOSALS
LIMITED USE DOCUMENT
This proposal is for the sole use of the IPRF in selection of a research agency to conduct work. Proposals are fully privileged and the Executive Director, IPRF, must approve dissemination of the information outside of the administrative structure of the IPRF.
## Innovative Pavement Research Foundation (IPRF)

### Figure 2

**Sample Effort by Tasks (Hours and Costs)**

<table>
<thead>
<tr>
<th>Names of Principal Staff Members (Include Subcontractors and Consultants)</th>
<th>Role in Study</th>
<th>Time* (% Over Contract Period)</th>
<th>Hours</th>
<th>Hourly Rate ($)</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phase 1</td>
<td>Phase 2</td>
<td>Phase 3</td>
</tr>
<tr>
<td>-------</td>
<td>Principal Investigator Overall Project Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>Co-principal Investigator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

*Time* indicates the percentage of time devoted to the study over the contract period.