



Request for Proposal

Development of a Business Case for Scheduling Utility Vegetation Management on a Preventive vs. Corrective Maintenance Basis

Submit an electronic cover letter and proposal in PDF file format to:

Jessica Carroll
UAA Operations Manager
jcarroll@isa-arbor.com

Date Due:

12:00 midnight January 27, 2012

Section 1: Program Summary, Background and Purpose of the RFP

A. Program Summary

The Utility Arborist Association (UAA) has established five research priorities. The UAA's top research priority is to gain better understanding of how best to determine the optimum maintenance cycle and to obtain a better understanding of the relative costs of preventive vs. corrective maintenance.

This RFP initiates research that will provide a better understanding of these issues and will result in a business model that will help utilities and other managers of tree populations determine the most cost effective maintenance budgets and processes.

B. Background

Cities, utilities and agencies are responsible for managing millions of trees in order to prevent them from interfering with the systems they oversee. Expenditures to maintain these trees are usually a significant part of the organization's budget. There are also many non-financial costs (e.g., reliability of service and customer satisfaction) associated with maintaining or not maintaining the trees.

To optimize annual expenditure for managing a given population of trees, the manager must know the cost of tree pruning or removal and the frequency at which maintenance must be performed (i.e., cycle length) in order to achieve acceptable levels of performance. The manager must also understand the relationship between frequency of pruning and tree failure rate and, the ramifications and costs associated with tree failure. The optimum budget is then the one that best balances the costs of preventive maintenance with the costs of corrective maintenance while achieving overall safety and performance goals.

C. Objective

The intent of this study is to lay the groundwork for more comprehensive investigation into the relationship between costs (direct and indirect), performance (safety and reliability) and customer satisfaction from a utility vegetation manager's perspective.

The goal of this project is to accomplish the following:

1. Review the literature to determine what is known about the relationship between the frequency of tree pruning and removal along electric distribution facilities and the impact on operational and performance related costs of electric utilities, and;
2. Describe methodology for the development of a business case or model that will allow individual utilities to evaluate and understand the best strategy for timing maintenance to provide the best return on investment.

D. Scope of Services

The UAA is open to the researcher's innovative strategies for addressing the complex issues stated.

At a minimum, the proposed research shall:

1. Provide a basic review of the literature to determine what it known about the operational costs and performance relative to corrective vs. preventive distribution line maintenance including, but not limited to:
 - a. Per unit and annual maintenance costs (e.g., tree pruning and removal),
 - b. Reliability performance (e.g., SAIDI, SAIFI, costs of restoration, lost revenue, etc.,)
 - c. Customer satisfactions (e.g., relative to tree work, lost service, storm restoration, etc.,)
 - d. Other factor of critical importance to the electric utility management.

The literature review shall include a thorough analysis of the information on all issues.

2. Propose a detailed methodology, including estimated cost, for further investigation leading to the development of a business model(s) that will allow managers of distribution line vegetation maintenance programs to evaluate the cost and impact of various management strategies. The proposed methodology shall be staged in a manner that can be accomplished as separate project phases.

E. Deliverables

The successful proponent is expected to provide:

1. Quarterly or milestone-based reports of progress;
2. A ready-to-publish project report describing the work performed, analysis, findings, proposed future research and recommendations in an electronic file, Microsoft Word 2010 format;
3. A summary of findings suitable for publication in the Utility Arborist Newslines;
4. A 10-20 slide PowerPoint presentation reviewing the investigation and findings.

Section 2: Minimum Qualifications

All proposals received on or before the submittal deadline at the locations specified, as detailed in Section 3, shall be evaluated to determine whether they meet the minimum qualification requirements as set forth below:

E. Organizational Access

Since the intent of this study is to build on research that has already been completed, the successful bidder must have a means of accessing relevant research and technical publications from appropriate sources that include and emphasize, but are not necessarily restricted to refereed journals.

F. Researcher Qualifications

The successful bidder must provide a thorough description of the research team, the responsibility of each member, and the educational background, knowledge, and skills necessary to complete this research project. The successful bidder must demonstrate that the research team has the industry experience and the ability to perform comprehensive economic analyses.

G. Communication Skills

The successful bidder must be able to communicate the results of this study in a well-written manuscript with comprehensive bibliographic citations, suitable for publishing. The successful bidder may be asked to present a summary of the results at a conference to be determined by the UAA.

H. Budget

The successful bidder must submit a proposed budget in detail and a proposed schedule. The UAA prefers a schedule not to exceed 3 months. Indirect costs cannot exceed 10%.

Section 3: Proposal Submission

All proposals are to be submitted as follows:

1. Proposals are to be submitted electronically as a PDF file to jcarroll@isa-arbor.com
2. A separate cover letter transmitting the proposal package to the UAA is to be included. The cover letter shall be signed and dated by an authorized individual representing the bidder's organization.
3. Deadline: All proposals must be received by 12:00 midnight January 27, 2012
4. All proposals must contain the following four sections:
 - a. Program Plan/Narrative - A clear and concise description of the bidder's proposed research including overall content, methodology, design, scope of services, and ability to perform all required services. The proposal must demonstrate an understanding of the issues involved and demonstrate how the proposed research plan will meet the objectives. The proposal must contain a proposed timeline and a thorough description of the deliverable(s). A table of contents and page numbers are required.
 - b. Organizational Capacity - Evidence of adequate human, organizational and technical resources to meet the needs of this RFP. The resume/curriculum vitae should be submitted for each principle researcher.
 - c. Demonstrated Effectiveness - A description of the background of the organization and prior experience as it specifically relates to this research.
 - d. Budget - A detailed budget that stipulates how funds will be spent, including direct costs, salaries, wages and benefits, administration and overhead (if applicable), contractor costs, materials and supplies, and travel (if applicable).
 - e. Propose Schedule

