

**AAA Foundation for Traffic Safety
Request for Proposals (RFP)
RFP- 04-2 dated March 1, 2004**

Safety Impacts of Pavement Edge Drop-offs

The AAA Foundation for Traffic Safety is seeking proposals from qualified consultants to study the safety impact of pavement edge drop-offs (PEDOs). The goal of this research is to take stock of the situation regarding PEDOs by studying existing guidelines and standards and their application, gaining a better understanding of the extent of the problem, examining current PEDO-related signage, and investigating opportunities to educate the public about edge drop-offs.

Individuals or organizations (hereafter referred to as either Consultant or Respondent) interested in competing for this project should:

1. Email Scott Osberg at sosberg@aaafoundation that you are interested in this project and intend to submit a full proposal. This expression of interest should be received by March 15, 2004.
2. Email a proposal to Scott Osberg no later than April 8, 2004 23:59 (PST).

Background

In February of 1994, the AAA Foundation for Traffic Safety published "The Elimination or Mitigation of Hazards Associated with Pavement Edge Drop-offs during Roadway Resurfacing," available in PDF at: <http://www.aaafoundation.org/resources/index.cfm?button=research>. The report examined the safety problems of inadequate road shoulders and excessive pavement edge drop-off. If the edge drop-off is too large, drivers of any vehicles that depart the road surface for any reason (e.g. inattention, fatigue, crash or pothole avoidance) are likely to lose control of the vehicle and crash. After a thorough review of practices in the state departments of transportation (DOTs), the report recommended enhancements in both highway design features and contractual practices. Ten years has passed since this research was conducted, so a re-examination seems timely especially given the unprecedented volume of highway construction underway and the persistent PEDO-related litigation.

The AAA Foundation is seeking a technical consultant to conduct the research and oversee the project, which, among other things, will involve working with an advisory panel of 10 to 12 key stakeholders and experts.

Other Ongoing work

FHWA officials have reviewed and endorsed this effort believing that it will complement their own work. In August 2002, a national workshop on Highway Infrastructure and Operations Safety, sponsored by AASHTO, FHWA and TRB encouraged “further analysis of the pavement edge drop-off problem” as one of the high priority research issues. To that end, FHWA has worked with states, including Georgia and New York, to initiate several “demonstration programs” designed to examine the safety consequences of a wide range of different PEDO geo-metrics (depth and slope), along with low cost treatments to eliminate or minimize the problem. More recently, in February 2004, FHWA hosted a national workshop on PEDOs, and has funded a new project to attempt to quantify the scope of the PEDO problem using available crash data.

Also, AASHTO and TRB have recently published NCHRP Report 500: A Guide for Addressing Run-Off the Road Collisions” that contains specific guidance on PEDOs.

Proposed Scope of Work

The Consultant selected for this project would be expected to perform the following tasks, while working very closely with Foundation staff:

1. Form a 10 to 12 member advisory panel of nationwide experts and key stakeholders, including representatives from FHWA, state DOTs, county or local road authorities, law enforcement, and AAA Clubs.
2. Organize at least two meetings of the advisory panel and communicate regularly with them to allow the panel to “guide” the project and where possible, develop consensus findings. Note: Reasonable and customary travel expenses for the advisory panels should be included in the total estimated project budget.
3. Review and evaluate the existing design guidance material currently recommended by FHWA and AASHTO and examine the current state of practice. The review should include relevant contractual language for re-paving and new construction projects designed to eliminate PEDOs.
4. Review and evaluate operational guidance provided to state and local officials and contractors relative to construction zone safety plans, precautions, and state of practice.
5. Review and evaluate operational guidance relative to the maintenance of existing roads to prevent PEDO and state of practice.
6. Review and evaluate traffic warning signs and practices contained in the Manual for Uniform Traffic Control Devices and state of practice for this problem.
7. Survey the state DOTs relative to their current construction and maintenance standards/practices to minimize PEDO and operational

- practices to identify PEDOs, maintain an inventory of road conditions (including using video logs of same), set priorities and take actions to minimize PEDO. This “survey” is expected to be similar to an NCHRP synthesis study.
8. Conduct site visits in one to three states to evaluate compliance with current guidance materials and document state of practice relative to the benchmarks established under task 3 -6. These site visits are not expected to include the full inventory of roads but rather a sufficient sample to infer meaningful conclusions. Note, Missouri DOT has already tentatively agreed to participate in such an effort. In addition, Texas Tech has recently completed an evaluation of the state of practice to address PEDO for Texas DOT.
 9. In conjunction with number 8, conduct an “inventory” of the pavement edge drop-off situation in one or more states. Note that it is not clear that any state currently collects and maintains this kind of information. In addition, as in task 8, this inventory is not necessarily meant to cover all roads within the state(s) but rather a representative sample.
 10. Gather and evaluate a sample of existing educational materials that teach motorists PEDO recovery techniques. The Foundation will provide all such materials developed by AAA.
 11. Prepare a final report that includes a literature review, study methods, results, and a comprehensive set of recommendations to reduce pavement edge drop-offs and increase public awareness of the problem.

To reach consensus on task’s 3-6, it is anticipated that the Consultant would prepare “summaries” relative to the specific subject and facilitate panel discussions (in meetings or email exchanges). As appropriate, the “summaries” should document past research or evaluation findings and the consensus findings should include recommendations for additional evaluation work necessary. In addition, if deemed appropriate, questions related to tasks 3 – 6 could be incorporated into task 7.

Although the Foundation wishes to accomplish as much as possible, our primary focus is on PEDO problems on two-lane rural highways. It is important to remember that this is a pilot project; we do not expect a comprehensive real-world evaluation of the problem. The AAA Foundation recognizes that the scope of the above tasks could be interpreted so widely as to make it impossible to accomplish all of them within the proposed budget for this project. Thus, respondents should clearly describe how they have interpreted the scope of work and what specifically they intend to do for each task. Respondents should feel free to indicate how they would rank the above tasks, especially tasks 3 – 11.

The AAA Foundation is interested in supplementing not duplicating the state of knowledge, so where appropriate, respondents should also highlight other relevant completed or planned research.

Timeframe & Budget

It is expected that this project would be completed within 15 months from execution of a contract with the Consultant.

The minimum budget for this project is \$125,000. In preparing a proposal, the proposers should clearly indicate which of the above tasks (or portions thereof) could be completed for this amount, as well as for a budget of \$150,000.

As noted earlier, proposed budgets should include an estimate for reasonable and customary travel expenses for the advisory panelists. The panel should meet at least once face-to-face during the early stage of the project, probably for 2 days and once near the end for 1-2 days.

Criteria for Selection of Consultant

All proposals received by the specified deadline will be analyzed by Foundation staff and possibly others. The following factors will be used to determine the “most qualified” Consultant for this project:

- In depth knowledge of traffic safety and familiarity with highway design issues, with emphasis on PEDO issues,
- Project management experience
- Experience working with advisory groups
- Knowledge of survey research methods
- Experience conducting and publishing traffic safety research
- Ability to communicate research findings for lay audiences

Proposal Requirements

Proposals must clearly and succinctly describe how you would accomplish the scope of work and why you should be selected. At a minimum, the proposal must include:

- A summary of the proposed research plan that is fully responsive to the scope of work,
- The qualifications of the research team;
- A management plan that summarizes tasks, milestones and deliverables,
- A cost proposal that summarizes costs by major task, and
- A statement declaring your understanding and acceptance of AAA Foundation’s Research Policies available at:
<http://www.aaafoundation.org/pdf/AAAFTSResearchPolicies.pdf>.

The body of proposal should not exceed **15 single-spaced pages, one-inch margins in 12pt Arial**. Resumes or additional informational materials on the organization can be included as an appendix to the proposal. Appendices should not exceed 20 pages. All submitted proposals become the property of the AAA Foundation. MS Office is our preferred product for word processing and spreadsheets. PDF files will also be accepted.

For questions regarding this RFP, or to submit an electronic proposal, please contact Scott Osberg:

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The Sponsor

Founded in 1947 by the American Automobile Association (AAA), the AAA Foundation for Traffic Safety (AAAFTS) is an independent not-for-profit, publicly supported, charitable research and education organization dedicated to saving lives and reducing injuries by preventing traffic-related injuries and deaths. The Foundation is committed to sponsoring research and education projects leading to real-world improvements in traffic safety.

The Foundation's research and education projects are funded by voluntary contributions from motor clubs associated with the American Automobile Association and the Canadian Automobile Association, individual AAA club members, and AAA-affiliated insurance companies.