

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

Road Assessment Program – Pilot Study

The AAA Foundation for Traffic Safety is funding a research project to pilot test a road assessment program in the United States (USRAP) that, if implemented, would make information available to the public on the risks associated with specific highway and road segments.

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

1. Email Scott Osberg at sosberg@aaaafoundation 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 1, 2004 23:59 (PST).

Background

Road design and operations account for at least one-third of all traffic crashes in this country. At the same time, many traffic safety professionals believe that the public agencies that design, operate and maintain the highway system in this country are not investing enough in road safety.

In Europe, starting with the British AA, various officials were looking for a way to apply additional public pressure on the public agencies to increase their investment in traffic safety. Inspired by the successful New Car Assessment Program (NCAP), where new cars are crash tested, the Europeans have initiated a complimentary program to assess the safety of roads -- called the European Road Assessment Program or EuroRap. Subsequently, the Australian Road Association initiated a pilot test for a similar program in Australia. British and Australian officials have encouraged us to pilot test such a program in the United States.

Under the EuroRap program roads are assessed using two methods. The first is a synthesis of available crash statistics used to produce color-coded risk maps depicting historical risk by road segment. The second is an actual road safety audit (safety review) using a multi-disciplinary team to rate the road based on design features. These reviews are used to produce an adjectival rating from one star to five stars, with five stars representing the "safest road." The public can obtain this information on public Internet sites (www.eurorap.org), and it is beginning to be incorporated into maps and Triptiks provided by the European motor clubs. By all accounts, the EuroRap program has been widely received

and thus, officials believe it will continue to expand – covering more roads in more countries.

In the United States, many states collect data on road design features that contribute to traffic crashes but few do it in a very comprehensive manner. Some attribute this reticence to the fact that the public agencies are ultimately responsible from a liability standpoint for any crashes caused by road design features. In addition, many states have programs to identify high crash locations, since the Federal government has a program whereby states can apply for additional monies. However, most states do not typically release their analyses relative to which sites or highway segments are the most dangerous. FHWA and AASHTO, with support from TRB are currently developing an array of new “tools,” including “Safety Analyst,” to assist the states in identifying high crash locations, evaluating cost-effective remedial solutions and implementing improvements.

Iowa DOT and Iowa State University have done extensive work to map a variety of traffic safety problems in Iowa. NHTSA has funded a small project in Washington State to explore the feasibility of integrating state crash data and insurance data that would then be displayed on digitized maps. The newly formed Sandy Johnson Foundation (see www.sandyjohnsonfoundation.org) is attempting to get states to release information on high-risk intersections. Language relevant to this issue is being considered by one or more of the proposed bills to reauthorize the highway program. Nonetheless, to the best of our knowledge, there is no program similar to EuroRap in place or being planned in North America.

Scope of Work (general)

The overarching objective of this project is to plan and implement a “pilot program” to test the technological and political feasibility of implementing such a program in the United States.

One of the major elements of the pilot program would be to ascertain the feasibility of at least two different institutional arrangements for such an assessment program. One possibility would be for the Foundation or a new independent organization, possibly spun off from the Foundation, to conduct the assessments and publicize the results. For example, in Europe a separate EuroRap organization, that was affiliated with but independent of the Auto Clubs was established and now administers the program. Funding is obtained from the FIA Foundation, individual Clubs and other including auto manufacturers.

The other possibility would be for the Foundation to develop a “tool kit” for the AAA Clubs (or some other organization) to actually conduct the assessments and publicize the results.

However, more importantly, the pilot test would examine the fundamental feasibility of overcoming the various technological barriers – namely, can one easily collect and analyze this type of data, and exactly how could the data be aggregated (for example, would you analyze just road segments or would you also look at intersections). In addition, the pilot test would examine the feasibility of overcoming the political barriers – namely, will the states actually cooperate with such a program. The pilot study would investigate many technical details, including whether the EuroRap protocol would need to be adapted for use in the United States. To that end, it should be noted that officials from the British AA, who have led the EuroRAP efforts and Britain’s Transportation Research Laboratory, that has supported the technological analyses of the program, have offered to cooperate fully, including visiting the U.S. to explain their program and answer questions.

In order to examine these issues, the scope of this pilot test would include at least two states selected to be as representative as possible. Within each jurisdiction, the pilot test would also examine the major road types, including interstates, other major arterials and rural roads.

The pilot test would produce a final report resolving as many of the key questions as possible and would ascertain the feasibility of launching a formal “road assessment program” in the United States (that could be expanded into Canada). Given the initial budget, it is not expected that a comprehensive road assessment would actually be completed in even one of the “test jurisdictions;” however, a sufficient amount of the assessment would be completed to demonstrate not only the feasibility, but also the utility of such a program.

Scope of Work (detailed)

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

1. Assemble an advisory panel of 6-8 officials representing key stakeholders in such a program, including officials from AASHTO, FHWA, state DOTs, county or local road authorities, and AAA Clubs.
2. Organize and facilitate one or more meetings of the advisory panel and communicate regularly with the panel so as to allow their input to “guide” the project. Note: Reasonable and customary travel expenses for advisory panelists should be included in the total estimated project budget.
3. Prepare a synthesis of ongoing or planned activities in the U.S. directly relevant to this project beyond those mentioned in the background section, and identify opportunities for collaboration. Note, it is expected that the selected consultant will be well versed in these activities so there should be no need, to conduct an NCHRP-like synthesis study per se.
4. Analyze the technical feasibility of preparing risk maps based on available crash data and a star-ratings based on safety reviews. This should

- include specific comments on the EuroRAP protocols and recommendations for adapting them to the U.S. This should include fundamental questions dealing with the best measures of defining road safety performance (what to collect and how to analyze it) and whether the requisite data could be obtained.
5. Analyze the technical feasibility of expanding the EuroRAP protocols for the safety reviews (star-rating system) to go beyond its current focus on “crashworthiness” to include other elements of “risk” related to crash-prevention.
 6. Identify two or more candidate states (jurisdictions) that could be appropriate to examine in the pilot program.
 7. Plan, organize and conduct a pilot program in one or more states.
 8. To demonstrate the feasibility of such a program, prepare risk maps and star ratings on a sufficient number of selected road segments in one or more states.
 9. Analyze the technical feasibility of the two “institutional arrangements” described in the scope of work (general). Note, the AAA Foundation staff and any AAA Club representatives on the advisory panel will undoubtedly play a major role in this task.
 10. Prepare an interim stand-alone report that could be used to explain the pilot and the possibilities for implementation, including obstacles to implementation and benefits of such a program.
 11. Prepare a final report for public dissemination that includes literature review and methods sections, documents the results of the pilot program (including each of the above tasks), and includes a general discussion with recommendations.
 12. Prepare recommendations for continuing the pilot program to resolve any residual issues, to expand the pilot or to implement efforts beyond a pilot, as appropriate and as justified. Estimated budgets for needed technical support should be included.

It is recognized that the above tasks could be interpreted so as to exceed the scope of the proposed budget. Therefore, wherever appropriate, the respondents should clearly describe how they have interpreted the scope of work and the respondents should feel free to indicate how they would rank the above tasks relative to accomplishing the objectives of this research. Also, the respondents should feel free to suggest additional or substitute tasks that they believe could more cost-effectively meet those objectives.

Timeframe and Budget

It is expected that this project would be completed within 12 months from the execution of a contract with the Consultant. To that end, the Foundation is interested in initiating this project as soon as practical.

The minimum budget for this project is \$105,000. Respondents should indicate clearly which tasks above (or portions thereof) could be completed for \$105,000, as well as budgets of \$130,000, \$155,000, and \$180,000.

Finally, if the pilot test justifies additional work or implementation of a risk mapping or star-rating program, the Consultant selected for the pilot project may be engaged for additional work without additional competition.

The Selection Process:

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

- In depth knowledge and understanding of traffic safety issues relevant to this request for proposals,
- The soundness and feasibility of the technical and strategic details in the proposed research plan
- Relevant technical experience,
- Experience working with advisory panels,
- Experience writing and publishing traffic safety research findings, including those aimed at lay audiences

Proposal Requirements

Proposals should clearly and succinctly describe how you would accomplish the “scope of work” described below 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 proposed management plan that summarizes tasks, milestones and deliverables,
- A cost proposal that summarizes all 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.

Contact Information:

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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.

Additional information on the Foundation can be obtained at www.aaafoundation.org.