UNIVERSITY OF MINNESOTA

Duluth Campus	***Northland Advanced Transportation*** ***Systems Research Laboratory***	*252 SCIV, 1405 University Dr.* *Duluth, Minnesota 55812-2496*
NATSRL	*Swenson College of Science and Engineering*	*218-726-6452* *Fax: 218-726-6445* *E-mail: natsrl@d.umn.edu*

November 11, 2010

To: UMD Faculty and Researchers

From: Eil Kwon, Director, NATSRL

Subject: **FY 2012 NATSRL REQUEST FOR PROPOSALS: Due Monday, February 7, 2011**

This Request for Proposal is to solicit the research proposals for the FY 2012 Northland Advanced Transportation Systems Research Laboratory (NATSRL) program at the University of Minnesota Duluth (UMD). The NATSRL program was established in March 2001 as the advanced research program in the areas of Intelligent Transportation Systems to address the surface transportation issues in northern regions. Since its inception, the NATSRL program has been supported by the ITS Institute, University of Minnesota, with the funding from U.S. DOT under the SAFETEA-LU. Further, the matching funds for NATSRL have been provided by both University of Minnesota Twin Cities and University of Minnesota Duluth, while local partnership agencies have supported NATSRL with in-kind contributions.

Partners of NATSRL

The partnership agencies of NATSRL include:
- Center for Transportation Studies (CTS), University of Minnesota, Twin Cities
- Intelligent Transportation Systems (ITS) Institute, University of Minnesota, Twin Cites
- Graduate School, University of Minnesota, Twin Cities
- Minnesota Department of Transportation
- St. Louis County
- City of Duluth

Focal Research Areas in NATSRL

The current research areas of the NATSRL program focus on:

- Advanced sensing technologies for traffic/driver/pedestrian/pavement condition detection and measurements,
- Vehicle and driver safety technologies,
- Wireless communication technologies that can support vehicle-infrastructure integration,
- Alternative power sources for operating ITS devices,
- Winter road maintenance strategies including optimum snow/ice treatment methods,
- New strategies for improving safety and operational efficiency of traffic and freight flows under various road/weather conditions,
- Innovative applications with the DSRC-based IntelliDrive system for improving traffic safety and congestion.

  * Some specific example research topics are listed in the attached document.

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Eligibility

To be eligible for funding by NATSRL the person submitting the proposal must be a UMD employee and eligible for Principal Investigator status as defined by the University of Minnesota Board of Regents Policy "Principal Investigator Eligibility on Sponsored Projects".

Budget Guidelines

Specific project funding requests for FY 2012 (July 1, 2011 - June 30, 2012) should include the salary of the principle investigator and students. This should be proposed by the number of two-week pay periods for both the academic year and summer. Equipment, travel, supplies and other specific expenses should be defined in the proposal with justification. Matching funds for the proposed project are encouraged. The duration of the project funding should not exceed 12 months (FY 2012). Faculty and researchers are welcome to submit multiple proposals.

Proposal Format

The detailed format of a NATSRL research proposal is included in the attached file.

NATSRL PROPOSAL SELECTION PROCESS

The major funding for the NATSRL program is provided by the ITS Institute, University of Minnesota, which is a federally funded program with the specific requirements for project selection including relevance to ITS and a peer-review process. The selection process to be used by the NATSRL program includes the following steps:

1) Proposal Screening
The UMD NATSRL convenes the proposal screening meeting, where the representatives from the partnership agencies and potential stakeholders review and rank the proposals on a high/medium/low scale.

2) External Peer Review
The external peer reviewers are selected depending on the types of the proposals to be reviewed. The external reviewers, consisting of the representatives from academic and public sectors including US DOT, evaluate and rate each proposal based on the selection criteria. The NATSRL staff facilitates the peer review process.

3) Proposal Selection
The peer-reviewed proposals and review results are presented to the NATSRL Advisory Board, where the priorities of the proposals are discussed and approved. Finally, the NATSRL leadership selects the proposals for funding with the consideration of the discussion results from the Advisory Board, the ratings and comments from the external peer reviewers, the amount of funding available and the distribution of research funding over the NATSRL research topic areas.

4) Notification to PIs
After the final selection is made, the NATSRL staff sends notification letters to the PIs. It is the goal of the NATSRL to notify the PIs by the end of March 2011.

Proposal Selection Criteria

The major selection criteria for NATSRL funding are as follows:

A. Importance and Timeliness of the Proposed Research Topic
　　Is the proposed research topic directly related to the focus areas of NATSRL?
　　Does the proposal address an important and timely issue in surface transportation?
　　Is there an adequate literature review that cites related previous and current state-of-the-art/practices for the proposed work including the evidence for contacts with field professionals?

Does the proposal adequately describe rationale for the proposed work?

B. Value and Applicability of the Expected Research Results

Would the expected results from the proposed research be applicable in the field in the near future (3-10 years) ?
Would the results from this research make significant impacts on the current practice in transportation fields?

C. Validity of Proposed Research Methodologies and Tasks

Can the proposed research provide the anticipated results using the methodology presented?
Does the methodology take advantage of the most current approaches and methodologies?
Is the proposed study different from what have been done elsewhere?
Is the budget adequate for the identified scope of work?

D. Record of Principle Investigator

Does the proposal adequately describe the PI's previous work relevant to the proposed research?
Do the PI's previous research records indicate a strong background and performance in related areas?
Are the number of the people to be involved and their qualifications/responsibilities for the proposed research justifiable?

E. Partnership

Does this research have a partnership with potential stakeholder(s)?
Have matching funds from other sources been identified?

F. Involvement of Students

Does the project involve students?
If so, does it promote education and development of the future work force in the areas of Intelligent Transportation Systems?

Contacts and Questions on Proposal Development

Questions regarding this Request for Proposal should be directed to Dr. Eil Kwon, NATSRL Director (218-726-6452, eilkwon@d.umn.edu).

Proposal Submission by email

All proposals must follow the format of the attached template file. The maximum proposal length should be 10 pages, not including vita or resumes. **An electronic submission of the proposal in MS Word by email is required.** Proposals must be received by February 7, 2011.

Proposals should be submitted to:

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 NATSRL, 252 SCIV
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