



University Transportation Research Center
RFP Cover Sheet

Title: **NY/NJ Port Risk Analysis**
Proposal Number: 2009-08
Sponsor: NJDOT
Date Issued: December 15, 2008
Pre-Proposal Meeting: Contact NJDOT by December 22, 2008
RFP Due at UTRC: Send to Camille Kamga by January 21, 2009
RFP Closing Date: January 23, 2009

If you plan to apply:

1. Please contact Camille Crichton-Summers (camille.crichton-summers@dot.state.nj.us) or Stephanie Nock (609-530-5637) to request a pre-proposal meeting, and so that you will receive information about this meeting if it is held. *This meeting will be your only opportunity to ask questions about this proposal.*
2. If you plan to submit a proposal through UTRC, please notify us by email at nadia@utrc2.org and ckamga@utrc2.org. Please indicate whether you are open to teaming up with faculty at other universities on this project.

Proposal submission guidelines:

Please contact Camille Kamga (ckamga@utrc2.org, 212-650-8087) to discuss submission logistics. After UTRC confirms that the proposals' budgets meet UTRC and NJDOT guidelines, we can either provide you with a UTRC cover sheet, or you can send us the printed proposals for hand-delivery to NJDOT.

Proposals must be prepared in accordance with NJDOT's Information and Instructions for Preparing Proposals. Please visit:

<http://www.state.nj.us/transportation/refdata/research/pdf/techpropresproj.pdf>

For questions about budget preparation, contact: Camille Kamga, ckamga@utrc2.org
NJDOT has not specified a budget or timeline for this project. Please note that matching funds up to \$50k are available from UTRC for projects that are relevant to UTRC's theme of "Planning and Managing Regional Transportation Systems in a Changing World." Decisions about the availability of these funds will be made pursuant to the relevance of the topic and the volume of requests.

New Jersey Department of Transportation
Bureau of Research
RESEARCH PROJECT
Scope and Request for Proposals
2009 Program

Date of RFP
12-15-08

Closing Date
01-23-09

NY/NJ Port Risk Analysis
Project 2009-08

(Proposals must be prepared in accordance with NJDOT's *Information and Instructions for Preparing Proposals*. Please visit:

<http://www.state.nj.us/transportation/refdata/research/pdf/techpropresproj.pdf>

Revised Proposal Evaluation Forms are available for your information on the website.)

Proposals will be based on the merit of the information contained in the proposal. Budgets will be evaluated separately. Please place three (3) copies of the budget for this project in a separate sealed envelope.

1. RESEARCH PROBLEM STATEMENT, BACKGROUND AND OBJECTIVES

The port of NY/NJ is the largest port complex in the East Coast. It is also home for a number of petrochemical and oil terminals along with large container terminals and ferry operation routes. This creates major choke points especially on the New Jersey side from Perth Amboy to Newark Bay including strategically critical areas of Arthur Kill and Kill van Kull, Hudson River as well as ports of Newark and Elizabeth. Also, Lower New York Bay and the Narrows entrance are strategic areas bearing high security risks.

It is necessary to identify locations and situations where vessel, commercial ferry and pleasure craft movements intersect and potentially create high risks, high consequences and vulnerabilities. Research will also include assessment of environmental impacts to waterside transportation movements (such as visibility, tidal angulations, among others). Research will provide recommended strategies for mitigation of risk, consequence and vulnerability including operational policies, navigational policies and federal/state/local law enforcement tactical deployments. The research will provide opportunities for long term planning of allocation and deployment of first responder assets.

2. Tasks

The following items are identified as potential project deliverables:

The development of a software tool in the form of a computer simulation model of the NY/NJ harbor complex.

The proposed simulation model will focus on traffic patterns of all cargo and passenger vessels in the area from the Lower New York Bay, KVK and AK waterways, Ports Newark and Elizabeth, Staten Island Ferry terminals, Verrazano Narrows, Brooklyn terminals and the Hudson River up until GW Bridge.

The model will provide opportunities that identify strategies for long term planning of allocation and deployment of first responder assets.

Access the Impact of PANYNJ's voluntary speed reduction initiative for air quality on the port performance.

Access the Impact of the 10-knot speed-restriction initiative by the National Marine Fisheries Service (NMFS) on the port performance (This initiative by the NMFS, a division of NOAA, restricts vessel speed to 10 knots in the area 20 miles into the ocean from the Colregs Demarcation Line. The restriction will be in effect annually, through 2013, from November 1st until April 30th).

Identify locations and situations where vessel, commercial ferry and pleasure craft movements intersect and potentially create high safety risks, high consequences and vulnerabilities.

The model will help assess the recommended strategies for mitigation of risk, consequence and vulnerability including operational policies and navigational policies and federal/state/local law enforcement tactical deployments.

The NJDOT is also seeking the insight of proposal responders on how best to achieve the research objectives. Proposers are expected to describe a research effort that can realistically be accomplished as expeditiously as possible. Proposals must present the proposers' current thinking in sufficient detail to demonstrate their understanding of the problem and the soundness of their approach for conducting the required research.

PHASE I – Literature Search

Conduct a literature search of the current state of the practice.

After the award of the project, a more comprehensive literature search should be conducted. At the completion of this literature search, the PI will make a presentation to the Research Project Selection and Implementation Panel to discuss their findings and to discuss the appropriate research approach.

PHASE II – Research Approach and Anticipated Results

Clear description of how you will solve the problem and implement anticipated findings. Work may be divided into phases (e.g., Laboratory, Field or Year 1, Year 2) as necessary to clarify tasks. *Exit Criteria* must be developed during this phase.

3. Implementation and Training Plan

The PI must meet with the Research Project Selection and Implementation Panel (RPSIP) and other NJDOT units to present the findings and as appropriate train these personnel in the use the project products/results.

The PI will develop an implementation plan as per the guidance provided by NJDOT Research Bureau.

4. Deliverables:

Presentation of Summary of Literature Search Results
Discussion to Support and Refine the Project Tasks
Project work plan.
Technical Memorandum on the survey results
Technical memorandum on the measures that are working or not working
Technical memorandum on actions taken
Interim Status reports suitable for Senior Leadership if required
Quarterly Reports, and
Final report with appropriate tables graphs and charts in hard copy version, PDF file format, Word, and on CD ROM. Two copies plus one per RSIP member of each presentation, technical memorandum, draft final report and Final Report (plus 10 copies). The Final Report and Tech Brief are due three (3) months before the end date of the project to allow time for review by the Research Project Selection and Implementation Panel. Final Acceptance will be granted upon receipt of ten copies of the approved final report.

5. Contract Time:

The PI must provide the anticipated research study duration based on the proposed tasks. Consideration should be given to potential impediments so that adjustments are incorporated into the schedule.

6. Contacts:

A meeting may be scheduled with interested parties after the RFP's are distributed to refine the objectives and deliverables and to promote a better understanding of the research needs. Questions on this topic shall not be directed to any Research Project Manager, Research Customer, or any other NJDOT person. All questions and answers would be addressed during this meeting. Contact Stephanie Nock (Stephanie.Nock@dot.state.nj.us , 609-530-5637) on or before December 22nd , 2008 to confirm your interest in participating in such a meeting.

7. DEADLINE

<p>Proposals (10 single-bound copies are due to the NJDOT Bureau of Research no later than 4:00 p.m. January 23, 2009</p>
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At the request of the Federal Highway Administration, please provide an electronic copy as well to be sent to Camille.CrichtonSummers@dot.state.nj.us.

Authorization to Begin Work: To be negotiated

8. Delivery Instructions:

For private, paid messenger services such as Federal Express, DHL, UPS, etc., or for hand-carried deliveries:

2009 PROPOSAL-NJDOT
New Jersey Department of Transportation
Bureau of Research
1035 Parkway Avenue

Trenton, New Jersey 08625-0600

For U.S. Postal Service mail:

New Jersey Department of Transportation
ATTN: Camille Crichton-Summers
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