



Great Lakes Maritime Research Institute

*A University of Wisconsin-Superior and
University of Minnesota Duluth Consortium*

To: GLMRI Affiliate Universities, Advisory Board Members and other GLMRI associates

From: Carol Wolosz, Assistant Director

Date: March 12, 2008

Subject: **GLMRI Request for Proposals, due by 4:00 PM, Thursday June 5, 2008**

In the FY08 Transportation Appropriation, GLMRI received funding for another year of research project awards. A list of the recommended focus areas is included below, but we are open to other topical subjects that would impact Great Lakes shipping and commerce. Also included in the RFP is a list of the currently funded projects supported by GLMRI. We look forward to your participation in GLMRI research. We anticipate having the award notifications back to proposers by mid-August.

Research Focus Areas:

Evaluate short sea shipping market opportunities on the Great Lakes

Evaluate export and import markets for foreign trade between ports on the Great Lakes and foreign ports such as those located in Europe and Africa

Evaluate the environmental benefits of waterborne transportation in the Great Lakes region and assist in developing sustainable solutions to the environmental effects of maritime transportation and port operations

Analyze the methods and effects of taxes and fees imposed on Great Lakes shipping

Evaluate the state of shipbuilding and repair bases on the Great Lakes and the impact to the industry and national security

Analyze the origin-to-destination flow of freight in the Great Lakes

Analyze the economic viability of establishing transshipment facilities and intermodal for ocean-going and intra-lake cargoes on the Great Lakes, which may include the evaluation of 12-month operations of the locks and shipping lanes

Evaluate new vessel designs for domestic and international shipping on the Great Lakes

Develop new products and technologies to enhance port security and port operations

Provide education and outreach activities to the public on Great Lakes maritime shipping, port security and intermodal operations

Identify ways to improve the integration of the Great Lakes Marine Transportation System (MTS)/Marine Highway into the national transportation system

Examine the potential of expanded seasonal operations on the Great Lakes MTS/Marine Highway

Identify ways to include intelligent transportation applications into the Great Lakes MTS

Analyze the effects and impacts of aging infrastructure and port corrosion on the Great Lakes MTS

Establish and maintain a model Great Lakes MTS database

Identify market opportunities for, and impediments to, the use of United States-flag vessels in trade with Canada on the Great Lakes

FY 08 On-going Projects: The following projects are currently funded/supported thru GLMRI.

- Great Lakes Maritime Education Program for K-12 Teachers, Students and Communities
- Application of an Environmental Management System “Model” to Examine Port and Tennant Operations and Provide a Tool to Small Public Port Authorities for Enhancing Environmental Initiatives
- Intermodal Freight Transport in the Great Lakes: Development and Application of a Great Lakes Geographic Intermodal Freight Transport Model
- Further Development and Optimization of the Ballast-Free Ship Design Concept
- Erie Pier Process Re-Use Cost and Market Analysis
- Year 2: Building Sustainable Solutions to the Issues of Ballast Water Treatment: Testing Relationships Between Propagule Pressure and Colonization Success of Invasive Species
- Development and Succession of Microbial Communities Associated with Corroding Steel Pilings in the Duluth-Superior Harbor
- Shipboard Testing of B-20
- The Great Lakes Maritime Information Delivery System: A Resource for the Regional Analysis of Intermodal Freight Flows in the Great Lakes Region (Phase III)

Proposal Format and Submission Instructions:

GREAT LAKES MARITIME RESEARCH INSTITUTE FINAL RESEARCH PROPOSAL AND WORK PLAN

1. Research Project Title:

2. Principal/Co-Investigator Information:

Co-Investigators (if applicable)

Name:

Department:

Position Title:

Address:

Phone:

FAX:

E-Mail:

Name:

Department:

Position Title:

Address:

Phone:

FAX:

E-Mail:

3. Abstract: *A brief (maximum 200 words) description of the research project*

4. Budget Details: *Include salaries, fringe, travel, supplies and any capital equipment, and applicable university indirect costs. GLMRI will also pay the costs associated with submission to one formal /professional publication/journal. Also, please reference any matching, or other support that will provided for this proposed project. (An Excel spreadsheet (sample) is available for your use on the GLMRI web site.)*

5. Research Objectives: *Concisely describe the objectives or goals of the project. Include expected outcomes or deliverables. What impact will be made as a result of this research?*

6. Background: *Provide an introduction for your proposed research .Include, if appropriate, related research completed by members of the research team.*

7. Research Methodology and Scope: *Provide an overview of your research methodology. Explain why your methodology is unique in the proposed field.*

8. Tasks: *In chronological order, by month, list each major task to complete the project. For each task, list any deliverables (reports, test results, maps, software, etc.) that result from work on that task.*

Use the following format for each identified task:

Task #: *Task Title*

Narrative Detailed Description of the Task

Duration (in months):

Deliverables:

9. Project Schedule (Sample Format)

Include project schedule as shown here.

TASK	MONTH
	Jul...Aug...Sep...Oct...Nov...Dec...Jan...Feb...Mar...Apr...May...Jun...
Title of task 1	xxxxxxx
Title of task 2	xxxxxxxxxxxxxxxxxxxxxxxx
Title of task 3	xxxxxxxxxxx
Title of task n	xxxxxxxxxxxxxxxxxxxxxxxx

Please also include a short vita for each of the principal investigators for your project in addition to the proposal. Provide your proposals (4 paper copies plus an electronic file/e-mail) by Thursday, June 5, 2008, 4:00PM CDT.

Contact and Mailing Info:

Carol Wolosz
Assistant Director, GLMRI
291 Marshall W. Alworth Hall
1023 University Drive
University of Minnesota Duluth
Duluth, MN 55812

cwolosz@d.umn.edu
Voice (218)726-7446
Fax (218)726-7366