



## *Call for Abstracts*

# **2012 AASHTO/TRB MAINTENANCE MANAGEMENT CONFERENCE**

**Seattle, Washington - July 2012**

The American Association of State Highway and Transportation Officials (AASHTO) Highway Subcommittee on Maintenance (HSM) and the Transportation Research Board (TRB) Maintenance and Preservation Committees organize and conduct conferences every three years to provide information on the state-of-the-art and state-of-the-practice in maintenance operations and management to professionals responsible for maintaining and preserving highways.

The HSM's Strategic Goals are to improve the health/condition of the highway system, improve highway safety by reducing risk to travelers and workers, ensure the reliability of traffic flow, promote accountability and transparency through performance management, ensure a well qualified and competent workforce, and promote environmental stewardship and ensure compliance. To address its Strategic Goals, the HSM is organized into five Technical Working Groups (TWGs): Bridges, Equipment, Highway Safety and Reliability, Pavements, and Roadway/Roadside.

Topics of interest to the TWGs for this Conference include:

**Bridges** • Techniques/strategies to maintain steel coating systems • Repair techniques/strategies for the repair of prestressed adjacent box beam girders • Innovative/alternative methods for contracting bridge maintenance/preservation • Best practices in bridge preventive maintenance • Assessing innovative technologies to improve bridge inspection effectiveness and efficiency • Testing and monitoring critical members • State-of-the-practice for preserving and improving the health/condition of bridges and structures • Quantifying the benefits of bridge preventive maintenance activities • Application of innovative maintenance practices, timely inspections and repair, and worker safety to promote reliability and safety of bridges • Performance management of bridges and structures using accurate and efficient inventory systems, performance measures and goals, and innovative reporting techniques with common terminology • Inspection, preservation and activity specific training for bridge and structure workforce.

**Equipment** • Performance measures for fleet administration • Keeping equipment in service in the face of declining equipment replacement budgets • Changing demographics in the workforce and shortage of trained and skilled equipment technicians in the industry • Aging infrastructure and what new strategies will be implemented to maintain the aging infrastructure and how will equipment fleet need to adapt • Equipment mechanic training and certification • Evolving role of transportation agencies in emergency preparation, evacuation, response and recovery, and their impact on the equipment fleet • Decreasing work windows and/or moving to off-peak times (night work) - impact on equipment fleet • Decreasing the environmental impact of equipment operations and reducing the use of

traditional fuels • Green fleet regulations and initiatives • Telematics – hardware, software, sensors, vehicle requirements, installation, applications, data retrieval from CANbus, data storage and use.

**Highway Safety and Reliability** • Emergency and Incident Response (i.e., federal funding opportunities for states to perform incident response, training tools available for maintenance personnel to perform post-earthquake infrastructure assessments, and leading trends in hurricane response and cleanup) • Proper timing and frequency for the application of anti-icing and de-icing materials • Taking a sustainable approach to winter maintenance operations – i.e., considering the environment, economy and society in decision-making • Incorporating climate change into winter maintenance operations (especially long-range planning) • ITS connectivity (especially standards) for winter vehicle-mounted sensors and controls • Integration of AVL/GPS into Maintenance Decision Support Systems (MDSS), maintenance management systems, and efficient plowing operations • Winter levels of service and measures of performance • Winter maintenance training (competency, certification, cost-effectiveness) • Risks and benefits of outsourced winter operations • Communicating the economic and societal benefits of winter maintenance operations.

**Pavements** • Best practices for pavement preservation treatments • Network perspective on the allocation and justification of resources to meet preventive maintenance needs • Quantifying the short-term and long-term benefits of effective pavement preservation treatments and programs • Pavement preservation and maintenance guidelines, specifications, terminology and best management practices • Using new technologies and materials to cost-effectively extend pavement life • Incorporating sustainability into pavement maintenance • Workforce training for pavement preservation.

**Roadway/Roadside** • Wet night visibility of pavement markings • Maintenance of cable guardrail • Balancing roadside maintenance needs and performance with limited budgets • Development of self-sustaining, low-maintenance roadsides • Integrating environmental considerations into maintenance activities and assessing their impact on maintenance costs • Implementing infrastructure (e.g., roadsides, drainage, traffic control systems) preservation programs • Measuring the benefits and effectiveness of preservation actions • Network perspective on the allocation and justification of resources to meet preventive maintenance needs • Consistent/standard preservation terminology.

Presentations and papers describing current practices, technological innovations or the results of recent research involving maintenance and preservation of transportation facilities in the TWGs areas of interest are being solicited for the Maintenance Management Conference to be hosted by a Washington State Department of Transportation in Seattle, Washington in July 2012 and co-sponsored by the Federal Highway Administration.

### **Due Dates**

Interested practitioners, administrators and researchers should submit: (a) an abstract of not more than 500 words and (b) a 100-word biographical sketch with contact information for each author to the Transportation Research Board at [MMC@nas.edu](mailto:MMC@nas.edu) by **June 1, 2011**. Each submittal must indicate if the abstract is for: Presentation & Publication - prepare a paper for presentation at the Conference and publication in the Conference Proceedings, or Presentation Only - make a presentation at the Conference on the abstract topic without preparing a paper. Authors of accepted abstracts will be advised in early **August 2011** and invited to prepare a paper and/or make a presentation at the conference. Full manuscripts will be required by **December 1, 2011** to accommodate distribution of the published proceedings at the conference.

### **Questions**

Send questions regarding this 'Call for Abstracts' to: [MMC@nas.edu](mailto:MMC@nas.edu)