Title: Harvesting Data from Advanced Technologies

SPR No: 723

Project Description: This research initiative presents a two-year research and education plan whose primary goal is to design and develop state-of-the-art data mining and fusion techniques and modeling tools that provide reliable and real-time transportation network management including traffic congestion prediction, incident identification and bridge structural health monitoring. This suite will be achieved by designing and using advanced data gathering, processing and mining tools to estimate the current and future transportation system performance. The resulting modeling tools will be enabled by emerging technologies suitable for implementation by transportation agencies in northern communities. A secondary goal is to quantify the effect of travel behavior changes and consequent planning and modeling challenges in the use of advanced technologies. Research findings will be disseminated to multidisciplinary academic outlets, transportation agencies, and emergency management and planning organizations.

Start date: 2011
End date: 2013
Status: Active
Total Dollars: $101,507

Index Terms:
- Administration
- Bridges
- Construction
- Environment
- Geotechnical
- Maintenance
- Materials
- Pavements
- Safety
- Traffic
- Transit

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Subjects:
- Real-Time Transportation Network Management, Data-Mining and Fusion Technologies