## UTRC-REGION II CANEWSWIRE

### **UTRC Press Release**

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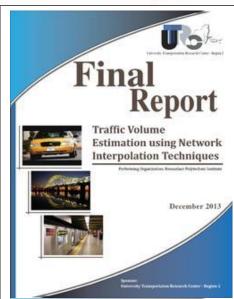
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The University Transportation Research Center Publishes the Final Report for the Research Project Titled: "Traffic Volume Estimation using Network Interpolation Techniques"

UTRC has released a final report for the research titled: **"Traffic Volume Estimation using Network Interpolation Techniques"**, funded by the Research and Innovative Technology Administration/USDOT (RITA). The principal investigator was *Dr. Xiaokun (Cara) Wang*, an assistant professor of Civil Engineering at Rensselaer Polytechnic Institute.

Kriging method is a frequently used interpolation methodology in geography, which enables estimations of unknown values at certain places with the considerations of distances among locations. When it is used in transportation field, network distance is a better measurement of distance as traffic follows the network. This report presents the development of the Network Kriging method and demonstrates its application on predicting transit ridership. Network distance, instead of Euclidean distance, is used to reflect the fact that subway stations are only connected by subway tunnels. Results show that the Network Kriging method outperforms other approaches. And the application on transit ridership estimation indicates that the new service would largely relieve the traffic burden on current crowded subway lines, although the total fare revenue would not increase right after the new service.

The full report is available for a free download at the UTRC website: http://www.utrc2.org/publications/final-traffic-volume-interpolation



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#### **About The University Transportation Research Center**

The University Transportation Research Center (UTRC) is a USDOT Regional Transportation Center addressing surface transportation operations, management, design economics and planning. The Region 2 University Transportation Research Center is one of ten original National Centers, established in 1987, in recognition that transportation plays a key role in the nation's economy and in the quality of people's lives. Located at the City University of New York, the Center is a Consortium of 17 major Academic Institutions in New York, New Jersey, and Puerto Rico. Through the Grant supporting the Center, the mission incorporates research, education and the transfer of technology in the field of transportation. Academically based, the work of Faculty and Students – graduate and undergraduate provide a critical link in resolving our national and regional transportation problems while training the future and current professionals who address our transportation system and their customers on a daily basis. For more information, visit <u>www.utrc2.org</u>.