

UTRC-REGION II NEWSWIRE

UTRC Press Release

Friday, January 31, 2014

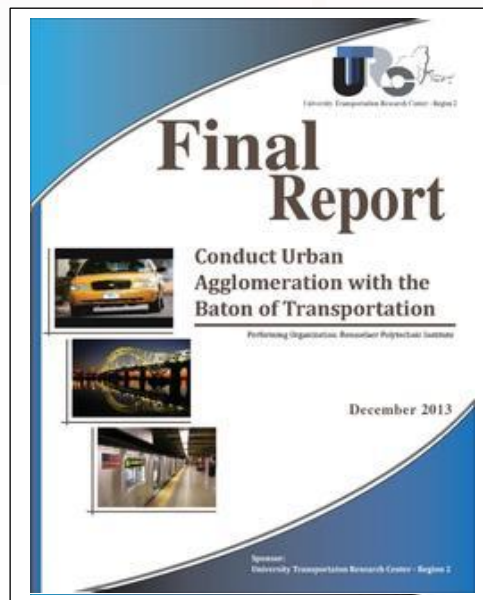
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The University Transportation Research Center Publishes the Final Report for the Research Project Titled: "Conduct Urban Agglomeration with the Baton of Transportation"

UTRC has released a final report for the research titled: "**Conduct Urban Agglomeration with the Baton of Transportation**", 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.

A key indicator of traffic activity patterns is commuting distance. Shorter commuting distances yield less traffic, fewer emissions, and lower energy consumption. This study develops a spatial error seemingly unrelated regression model to investigate commuting distance, and how various influential factors affect commuting distances in ten counties across the U.S. By integrating datasets from the Census Transportation Planning Product (CTPP) and Smart Location Database (SLD), this study acquires rich employment and residence information at the census block group (CBG) level. Patterns of commuting distance, characterized by mean and standard deviation, of three industry sectors are calculated. A set of jobs-residence metrics is created to represent the degree of matching between residence and employment. Variables characterizing the trip origins, such as income level and road network connectivity, are also controlled in the model. Results confirm that a high jobs-residence ratio is beneficial for commuting patterns. Short commuting distances are also associated with clustered industry sector distribution, and dense road networks with few intersections.

The full report is available for a free download at the UTRC website:
<http://www.utrc2.org/publications/final-urban-agglomeration>



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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 www.utrc2.org.