Texas Southern University 290 Corridor Workshop: Increasing Travel in Vulnerable Communities.
Bridging Barriers Campus Engagement Workshop: Good Systems.
Leading Principal Investigator: Dr. Junfeng Jiao

Leveraging Detailed Air Quality Data
Bill Tierney, Junfeng Jiao, Bruce Porter
Semester-long collaborative projects that leverage
Google-car sampled air quality data
CM² with WTS Southwest Region webinar
“Evolving Challenges in Regional and Megaregional Planning”

Fall Webinar  |  November 2, 2018  
11:30 am to 1:30 pm

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Presentations by:

Lisa Loftus-Owney, M.P.Aff, J.J.L.M., Research Engineer Scientist Associate and Attorney-at-Law, University of Texas at Austin - Center for Transportation Research
Introduction to Megaregions Research

Amy St. Peter, Assistant Director - Maricopa Association of Governments in Phoenix, AZ
Partnersing for Impact in Arizona’s Sun Corridor

Carol Lewis, Ph.D., Professor and Emeritus Director of Center for Transportation Training and Research (CTTR) - Texas Southern University in Houston, TX
Determining Purpose and Need for Vulnerable Communities in the Megaregion

Brian Wolston, Ph.D., PE (LA, MI, FL), PTOE Edward A. Schmitt Professor - Department of Civil and Environmental Engineering, Louisiana State University
Evaluation and Analysis of Post-Disaster Re-Entry in Megaregions Project
CM² Director Dr. Ming Zhang’s
Georgetown Bicycle Master Plan Practicum
CM² Director Dr. Ming Zhang’s presentation at Columbia University:
Territorial Urbanism: China’s Spatial Approach to Propel Socio-Economic Development
CM² GRA Chris Bischak presents at TRB Mid-Year Conference in Bellevue, Washington

Modeling Multi-Modal Transportation Access in Three Major Texas Cities

Introduction

Multi-modal transportation access has received increasing attention in recent years. However, the distribution of these services and their correlation with other factors is somewhat unclear, particularly at the neighborhood scale. We used LEH-based methods to model the availability of transportation at the block group level in three major Texas cities: Houston, Dallas, and Austin.

Methods

Taz-based methods were used to divide the city into smaller units, allowing for a more detailed analysis at the block group level. This approach was chosen due to the complexity of transportation systems and the varying needs of different areas within the city.

Findings

Overall, we found that few block groups have consistently poor transportation supply. However, some groups have lower congestion and infrastructure costs. The findings indicate that block groups with high demand for transportation services generally have slightly higher accessibility scores than other areas of the city. In terms of the regression model we generated, the following equation was used:

\[ TA = 2000 \times (P - 1) \times \frac{1}{V} \times \frac{1}{N} \]

where TA is taz access, P is the distance from the central business district, V is the population density per square mile, and N is the number of people in the block group. This model helps to identify areas with high transportation demand and can be used to allocate resources effectively.

Acknowledgments

This work was co-authored by Chris Bischak and Mike Pfeifer students of The University of Texas at Austin. It was partially supported by funds from the Center for Metropolitan Mobility Research at UT DOD, TIE, and Research Center.
CM² PI Dr. Jake Wegmann wins 2017-2018 Co-op Best Paper Award
CM² Upenn researchers hold workshop
Northeast Megaregion Travel Demand and Investment Model

A NORTHEAST MEGAREGION TRAVEL DEMAND & INVESTMENT MODEL: PROJECT OVERVIEW

University Transportation Center for
Cooperative Mobility for Competitive Megaregions (CM²)
CM² PI Dr. Junfeng Jiao presents CASA seminar in UK:
"Transit Desert USA—lessons from 52 cities"
CM² GRA Chris Bischak wins 2018 UTC Outstanding Student of the Year
CM² GRA Paulina Urbanowicz presented at the 6th Annual UTC Conference for the Southeastern Region
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CM² Presents:

Dr. Gian-Claudia Sciara
"Transit Operators in Metropolitan Transportation Decision Making"

Dr. Jake Wegmann
"Equitable Access to Transit Within and Across Mega-Regions"

West Mall Building
October 16, 2018

Hosted by Cooperative Mobility for Congested Megaregions (CM²) at the University of Texas at Austin, a USDOT Tier 1 University Transportation Center.
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The Philadelphia Story: urban renaissance and shifting travel behavior in a Northeast region
Erick Guerra (PI)
Nicholas Klein (Co-PI)
Michael Smart (Co-PI)
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Megaregion Truck Flow Estimation Model
Qisheng Pan & Bumseok Chun
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October 2018

Megaregion (MR) Freight Mobility: Impact of Truck Technologies
Robert Harrison, Ronald Matthews, Colton Voorhis, and Sean Mason
October 2018

Location Affordability and Fair Housing on a Collision Course?
Jake Wegmann (PI), UT Austin
Erick Guerra (co-PI), University of Pennsylvania
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