Research Motivation and Objectives

The emergence of shared autonomous vehicles (SAVs) is expected to alter transportation costs and patterns, thus affecting accessibility and mobility.

Assess the socio-economic implications related to SAVs, such as access to opportunities and flexible and affordable mobility.

Empirical Setting

• 400 Completed responses (November 2017 (Chicago, IL), and May 2018 (Indianapolis, IN))
• Hard quotas on gender and age groups
• Respondents over 18 years old
• IRB Protocol # 1701018708 (IL) and 1801020160 (IN)

ONGOING WORK

• Spatial Market Segmentation Analysis
• Comparison among study areas
• Final Report and Recommendations

SUPPORT

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CENTER FOR CONNECTED AND AUTOMATED TRANSPORTATION

Public Acceptance and Socio-Economic Analysis of Shared Autonomous Vehicles: Implications for Policy and Planning

DR. KONSTANTINA GKRITZA - PURDUE UNIVERSITY

Accessibility and Mobility for All Summit, USDOT - October 29th, 2019
Multi-spatial Perspective Approach

Accessibility: What opportunities are close to the area?
Mobility: What are the demographics of the area?
Outcome: How much does a person in a certain area drive daily?

CHICAGO TRANSPORTATION DISADVANTAGED AREAS

INDIANAPOLIS TRANSPORTATION DISADVANTAGED AREAS

Key Takeaways

Chicago seems to be more innovative than Indianapolis about the adoption of AVs.

Innovators are young people who commute via transit and walking.

Late adopters are mainly female, older than 45 who often commute by car.

Non-transportation disadvantaged areas have higher access to transit stops and interstates, among other factors.

Disadvantaged areas in Indianapolis are located in the south and east part of Marion County.

Disadvantaged areas in Chicago are scattered throughout Cook county.