Mobility, Economic Opportunity and New York City Neighborhoods

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Introduction

• 56% of New York City residents commute by public transit
• Larger percentage than any other metropolitan area in the US
• Economic opportunity in various neighborhoods is governed by the quality of public transit options available to residents
Purpose

• To explore the relationship between public transit access and economic opportunity in New York City
• To recommend meaningful transportation policy measures to improve economic opportunity across New York City
Data Sources

• 2008-2012 5-Year American Community Survey
• 2011 LEHD Origin-Destination Employment Statistics (LODES)
• Google Maps Routing Application Programmer Interface
Methodology

• We calculated the travel time between NYC Metro ZIP Code Tabulation Areas (ZCTAs) via public transit using Google Maps API

• We then calculated the number of jobs available in each destination ZCTA using LODES data

• Finally we calculated a Job Access Rank for the 177 NYC ZCTAs with population greater than 2,500
RESULTS
Household Income and Job Access by NYC Neighborhood

Median Household Income (bubble size indicates neighborhood population size)

Jobs accessible within one hour on transit

Commute Mode by Job Access Rank

- Private Car
- Cycling
- Public Transportation
- Walking
- Other (includes taxis)
- Work at Home

Job Access Rank (1 = most jobs accessible in 60 minutes)
Top third average: $79,148.83
Middle third average: $46,773.32
Lowest third average: $61,381.64
INTERACTIVE VISUALIZATION
NYC Neighborhoods: Mobility & Economic Opportunity

Chelsea (North)

**JOB ACCESS RANK**
1 of 177

**JOBS ACCESSIBLE IN 60 MINS:**
4,839,253

**TOP 5 JOB TYPES BY INDUSTRY**
- Health Care: 743,740
- Educational Services: 485,651
- Finance: 425,691
- Professional Services: 424,515
- Retail: 393,042

**ZIPCODE** 10001

**POPULATION** 20,579
**UNEMPLOYMENT** 9%

**MEDIAN HOUSEHOLD INCOME**
- $76,138
- 1,391

**RESIDENTS 25YRS+ HAVE ONLY A HIGH SCHOOL DIPLOMA & ACCESS TO**
720,527 jobs

CREDITS
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SOURCES
Key Findings

• Low transit access typically leads to a car commute
  – The percentage of people who commute by private car increased to 81% in the city’s lowest-access areas in Staten Island

• In nearly 40 neighborhoods, walking is a more common commute mode than driving
  – Public transportation remained the primary commute mode in the vast majority of NYC neighborhoods
Key Findings

• Limited transit access is linked to higher unemployment
  – Neighborhoods with some, but not sufficient transit access – those in the middle third – faced higher rates of unemployment than those in the top or bottom third
Proposed Solutions

• Develop intelligent, informal transit
• Bus Rapid Transit is essential
• Make incremental improvements to transit
• Foster smart, efficient workplaces
Lessons Learned

• Google Maps API includes taxi trips in its public transit directions
Lessons Learned

• Google doesn’t use ZCTAs
THE FULL REPORT IS AVAILABLE AT:


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