Examining Spatial Mismatch in the Twin Cities Metro

Urban GIS Seminar

Macalester College, St. Paul

in association with the
Federal Reserve Bank of Minneapolis

May 1, 2008

Spatial Mismatch Hypothesis

- Kain, 1968
 - African American men
- Expanded focus to include all minorities and gender

Approaches to Studying SMH

Commuting distance/time

 Journey-to-work data used to measure distance or time between work and home

Job availability

Link between type of worker, employment, and wage rate

Job accessibility

e.g. Density of jobs per worker within commuting zones

Labor market "tightness"

 Incidence of lower vacancy rates and lower wages in areas affected by spatial mismatch

Research Questions

- What is the extent of spatial mismatch in the Twin Cities?
- What is the level of spatial mismatch for different areas and for different groups?
- How does transportation in the Twin Cities shape the spatial mismatch?

Data Sources

- MN Dept of Employment and Economic Development (DEED)
 - Residential Area Characteristics (RAC)
 - Worker Area Characteristics (WAC)
 - Origin-Destination (OD)
- HousingLink
 - Affordable housing (rent or mortgage payment is 30% or less of gross household income)
 - Public housing
 - Section 8 housing choice voucher
 - Project-based Section 8 housing
- U.S. Census 2000
- Metropolitan Council

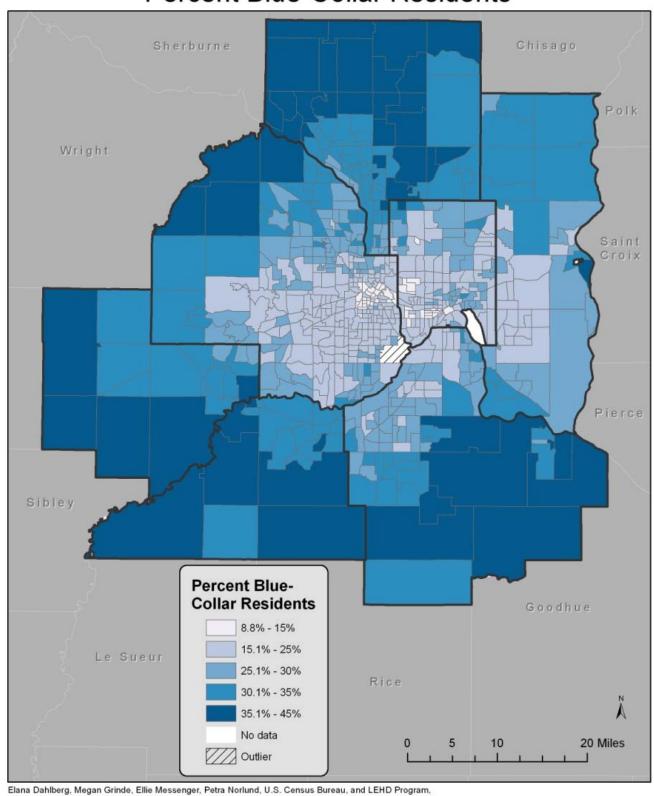
What is the extent of spatial mismatch in the Twin Cities?

- Workers overview
- Jobs overview
- Comparison of jobs to affordable housing
- Comparison of jobs and other housing characteristics
- Comparison of jobs to workers

Workers Overview

Residential Area Characteristics (RAC)

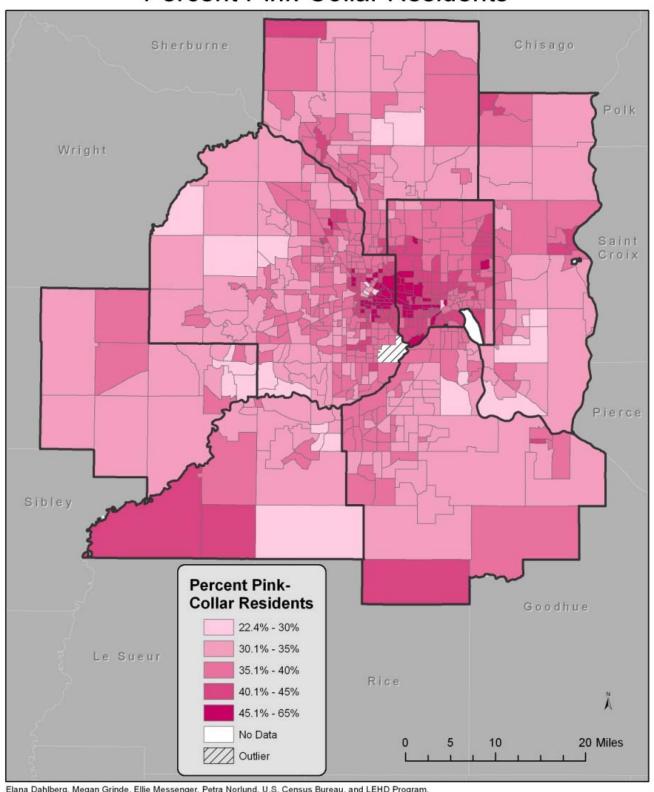
Percent Blue-Collar Residents



Elana Dahlberg, Megan Grinde, Ellie Messenger, Petra Norlund, U.S. Census Bureau, and LEHD Program, MN Dept of Employment and Economic Development, April 10, 2008

High concentrations of blue-collar residents in outer suburbs

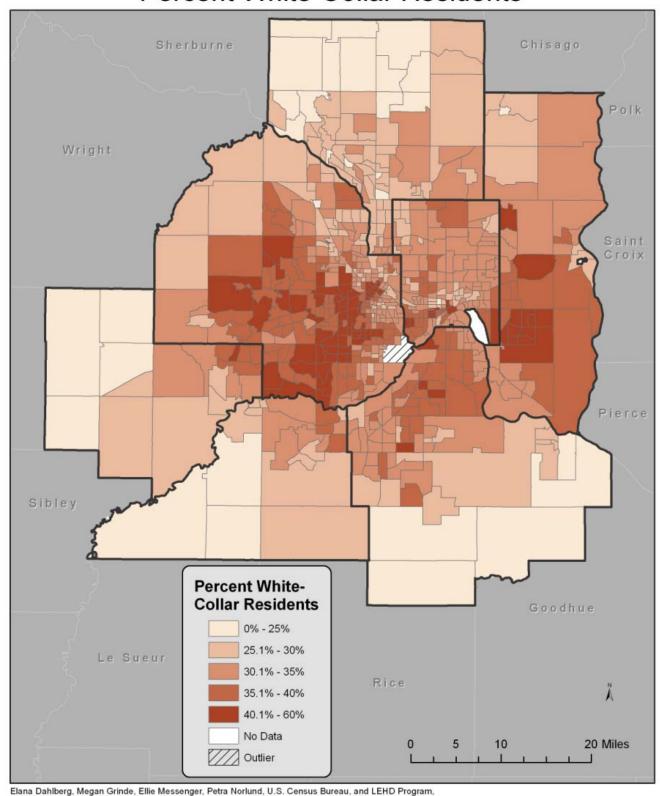
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High concentrations of pink-collar residents in the inner cities

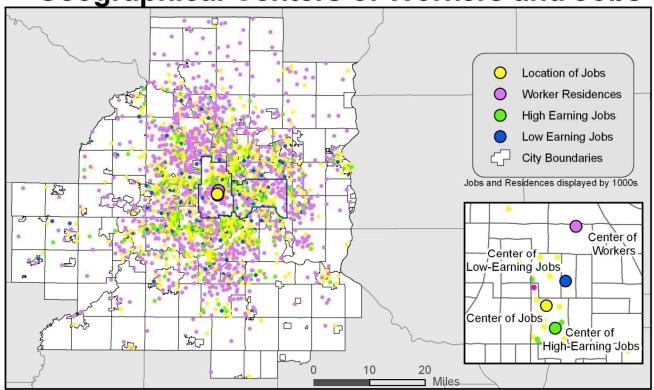
Percent White-Collar Residents



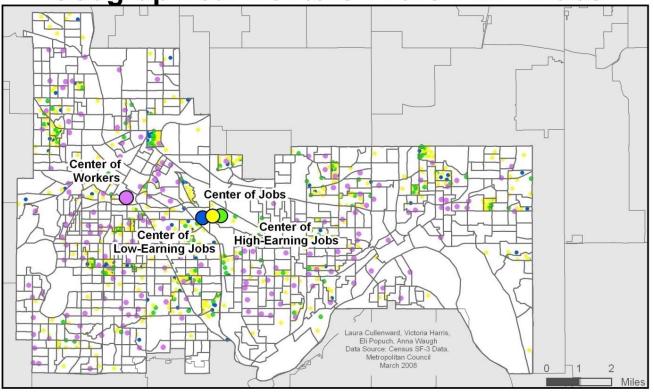
MN Dept of Employment and Economic Development, April 10, 2008

High concentrations of white-collar residents in the wealthier suburbs

Geographical Centers of Workers and Jobs



Geographical Centers in the Twin Cities



In Minneapolis-St. Paul, the mean center of workers is weighted more heavily to the west than the mean center of jobs