



Gentrification along the BLUE LINE Light Rail



A spatiotemporal analysis



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Introduction

- Do megaprojects trigger gentrification in surrounding neighborhoods?
- Do public transit megaprojects cause similar changes?



Defining Gentrification

- A neighborhood is considered susceptible to gentrification if the population is predominantly lower income or working class.
- Also a neighborhood is going through gentrification when income levels rise at a rate faster than the rest of the city.
- Other factors include housing values and education levels.
- Race composition of a neighborhood is not always used as a factor globally for defining gentrification, so we included Race within our definition of gentrification.



Data

- Decennial Census, 2000-2010
 - Demographic data
- Five year American Community Survey, 2013
 - Median incomes
- Metropolitan Council, 2002-2010
 - Land use data
- Minnesota Department of Revenue, 2004-2008
 - Average income tax filing data

United States™
Census
Bureau



Methods - Comparing before and after

- **Temporal bracket** - 2-4 years before and 6 years after opening
- **Variables analyzed** - Race, Income, Land Use , Land Value
- **Study Area** - Residential area, 38th and 46th Street Stations
 - Mile and half mile buffer
- **Scale** - Block group level

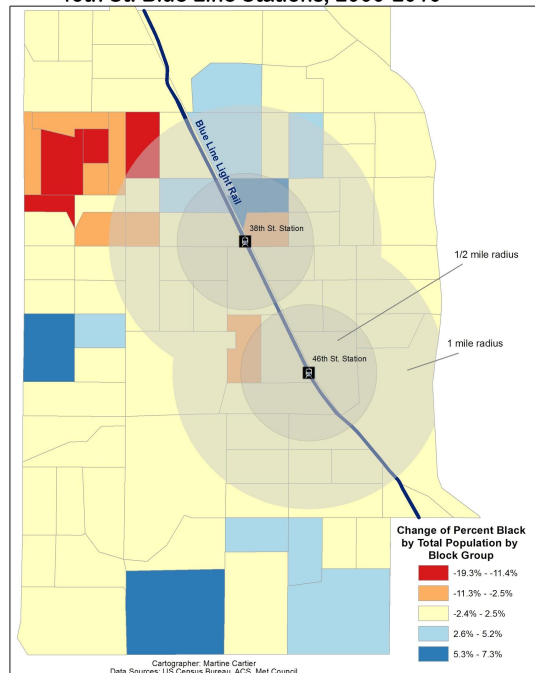
GIS Processing

- Buffer
- Clip
- Spatial and Table joins
- Dissolve
- Field calculator
- Select by attribute and locations
- Choropleth maps with diverging color scheme
- Dot-density map

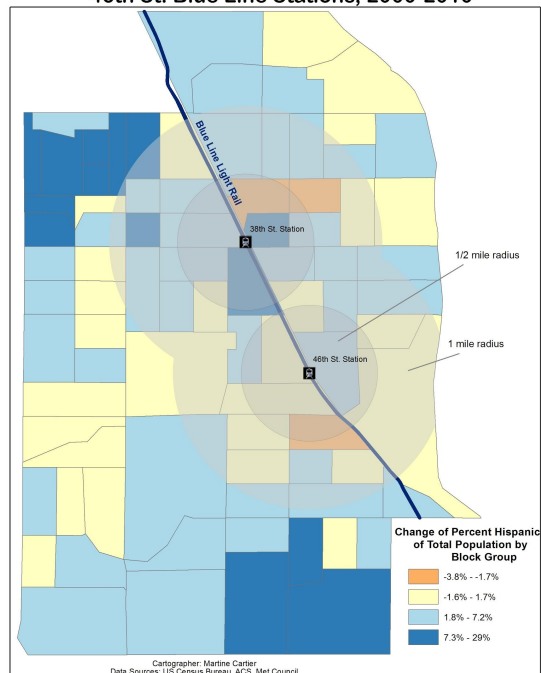
Results

Race Composition

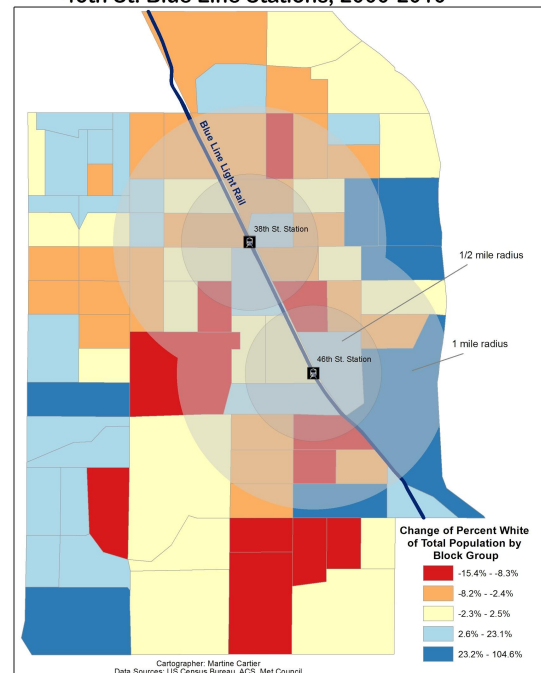
Black Population Change Near 38th and 46th St. Blue Line Stations, 2000-2010



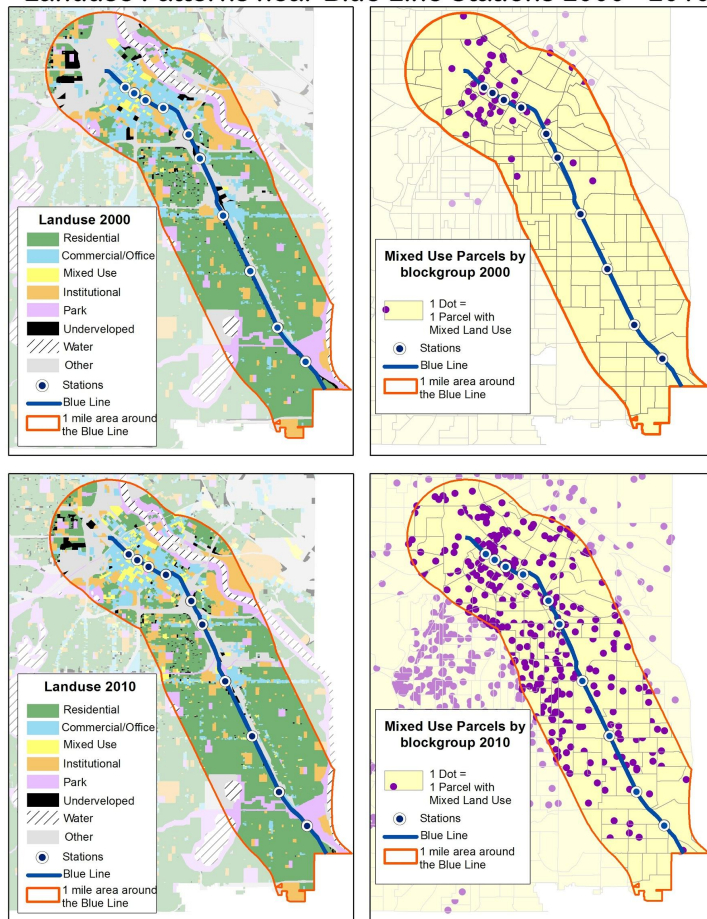
Hispanic Population Change Near 38th and 46th St. Blue Line Stations, 2000-2010



White Population Change Near 38th and 46th St. Blue Line Stations, 2000-2010

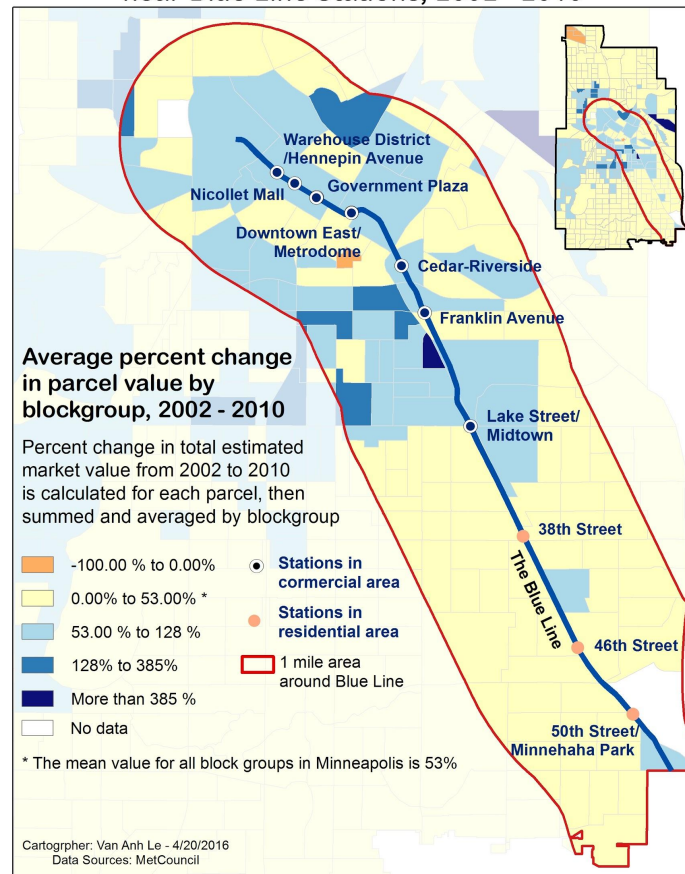


Landuse Patterns near Blue Line Stations 2000 - 2010

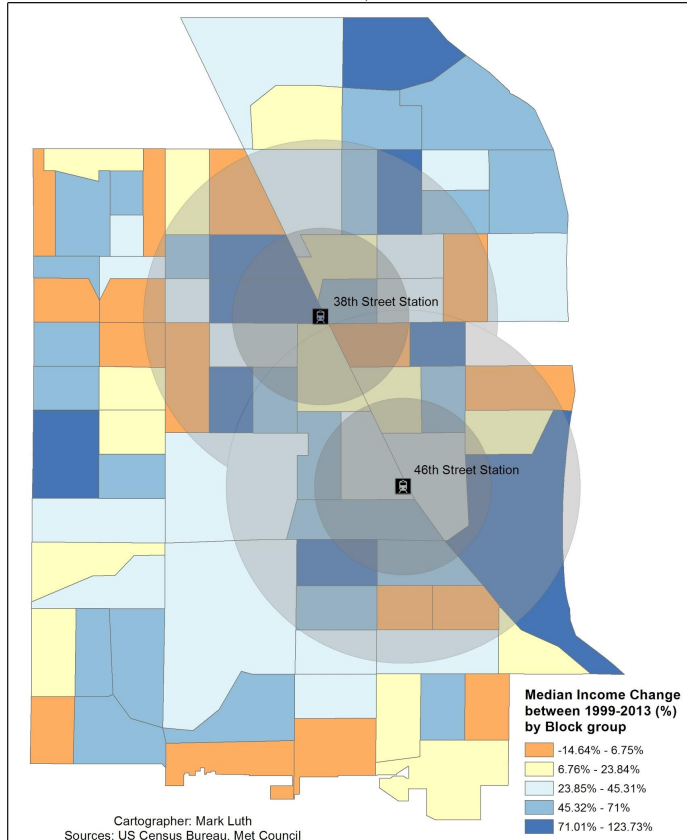


Cartographer: Van Anh Le - 4/20/2016
Data Source: Met Council

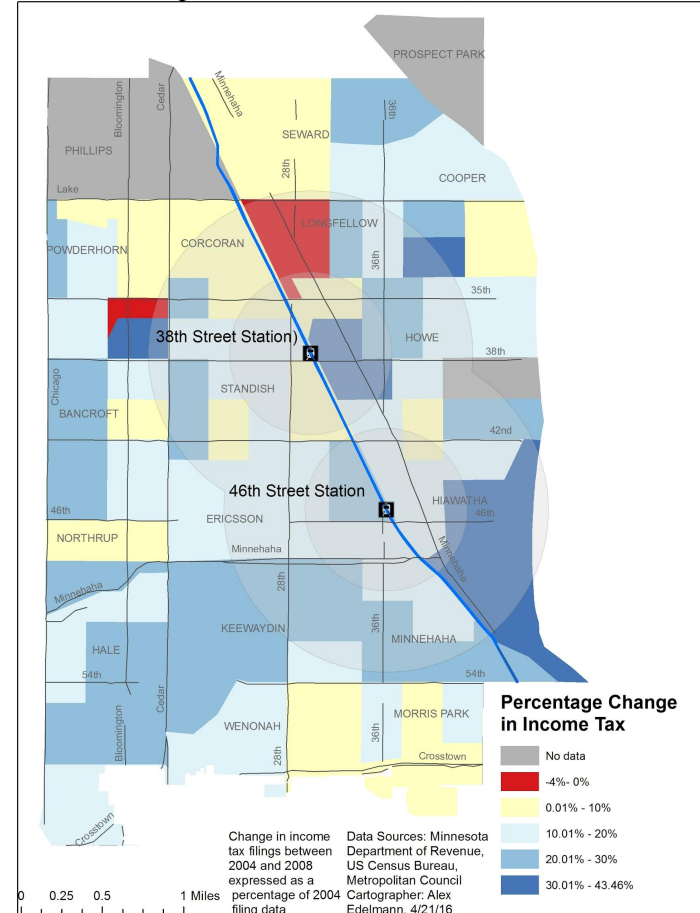
Change in Estimated Market Value near Blue Line Stations, 2002 - 2010



Income Change Around the 38th and 46th Street Stations, 1999-2013



Change in Income Tax Return, 2004-2008



Conclusion

*Does the BLUE LINE contribute to
gentrification ?*

- The effects of the BLUE LINE is difficult to isolate.
 - Overall, no overwhelming trends were found
 - It is **unlikely** that the BLUE LINE has lead to gentrification.
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Questions?
