

Profiling the Community Context for the

NORTHSIDE

ACHIEVEMENT

ZONE



MACALESTER COLLEGE

GEOG 365: Urban GIS Seminar

April 20, 2017



PROJECT GOALS

- Produce analysis and visualizations that will help to illuminate the need for and inform the work of NAZ
 - Visualize spatial and temporal differences
 - Examine structural issues
 - Identify opportunities
- To build upon the work completed by students in the 2016 course partnership
- To produce alternative products that will reach a variety of audiences

THEMES

HOUSING

- Finance
- Stability

POPULATION

- Employment & Accessibility
- Community Characteristics & Resources
- Historical Demographics

DATA SOURCES

City of Minneapolis

HousingLink

Metropolitan Council

HOME Line

American Community Survey (ACS)

US Census & Tiger

Mergent Intellect

OnTheMap

National Archives and Records Administration

Family Search

University of Richmond Digital
Scholarship Lab

Minneapolis Council of Social Agencies

NHGIS

NACCRAware (National Association of
Child Care Resources and Referral
Agencies)



HOUSING

Finance and Stability



FINANCE

James Hargens and Karlyn Russell

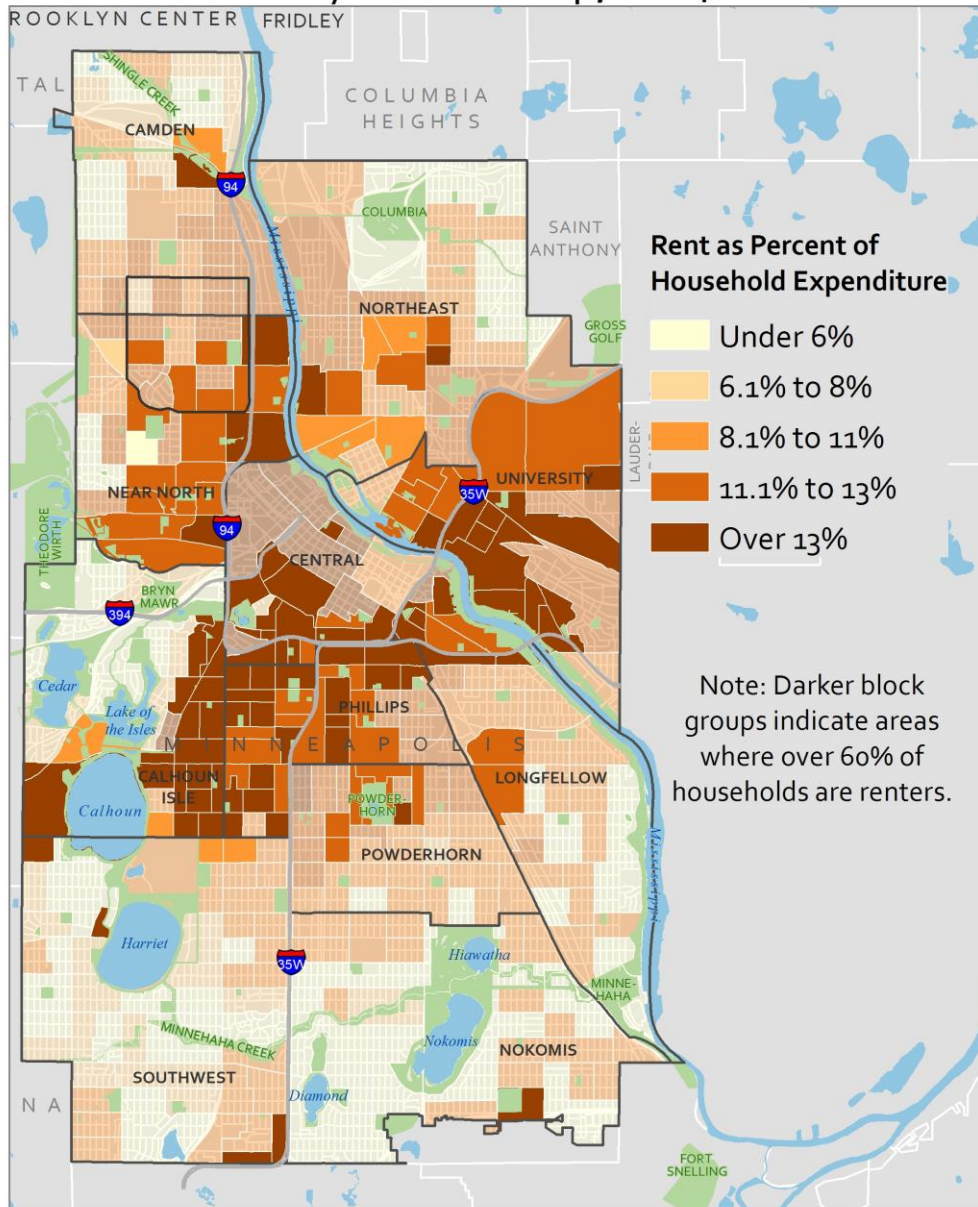
Research Questions

- How does affordable housing access impact families on the Northside?
- How affordable is housing on the Northside compared to the rest of Minneapolis?
- What are ways to make rental more affordable and accessible for low-income households?
- Is access to credit more restricted on the Northside?

Variables

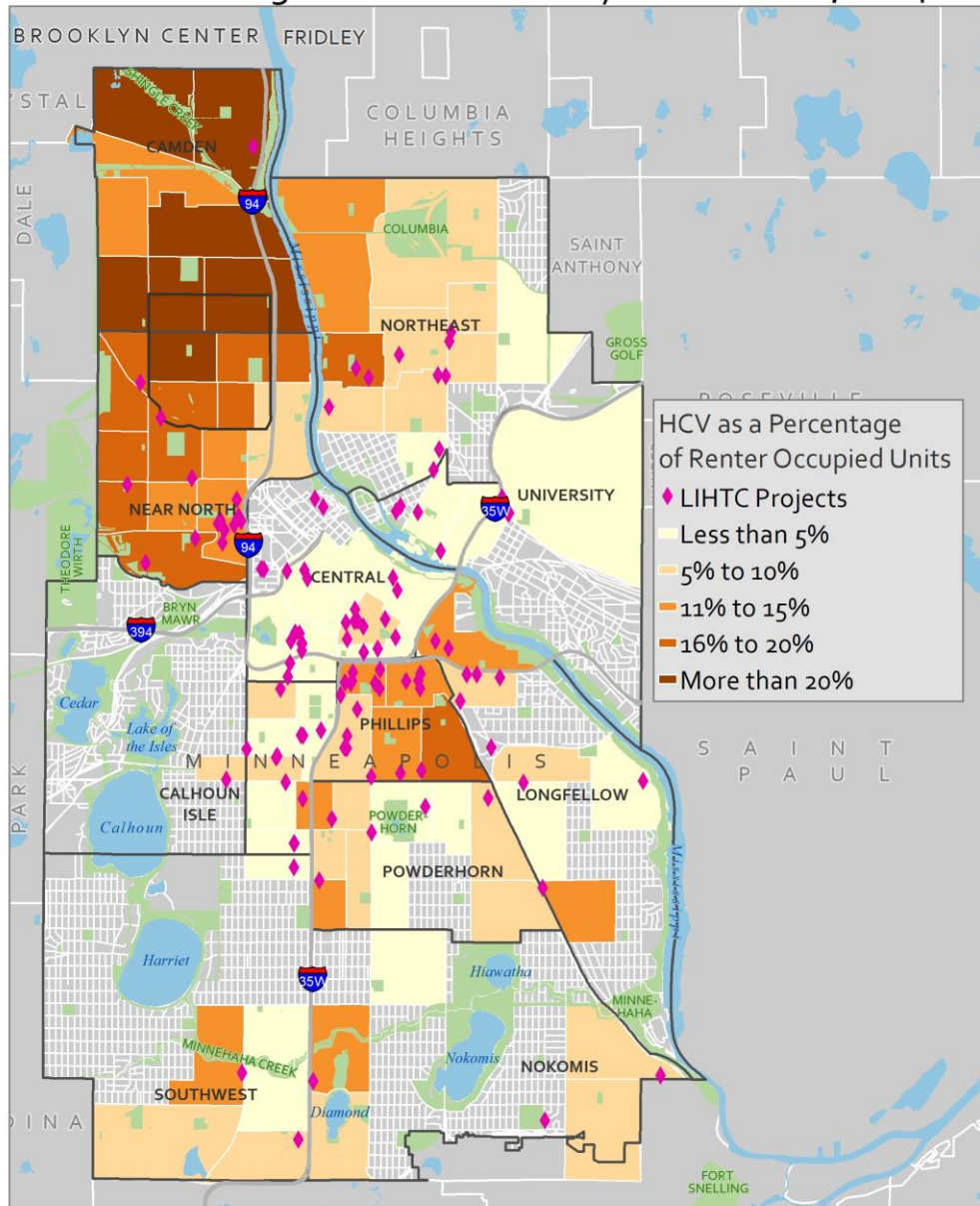
- Government Housing
 - Number of LIHTC Projects
 - Number of Housing Choice Vouchers
- Homeownership
 - Percent of homes owner- and renter-occupied
- Housing Expenditure
 - Percent of total expenditure spent on rent
 - Percent of total expenditure spent on mortgage
 - Interest spending as a percentage of mortgage amount

Rent as Percent of Household Expenditure by Block Group, 2014



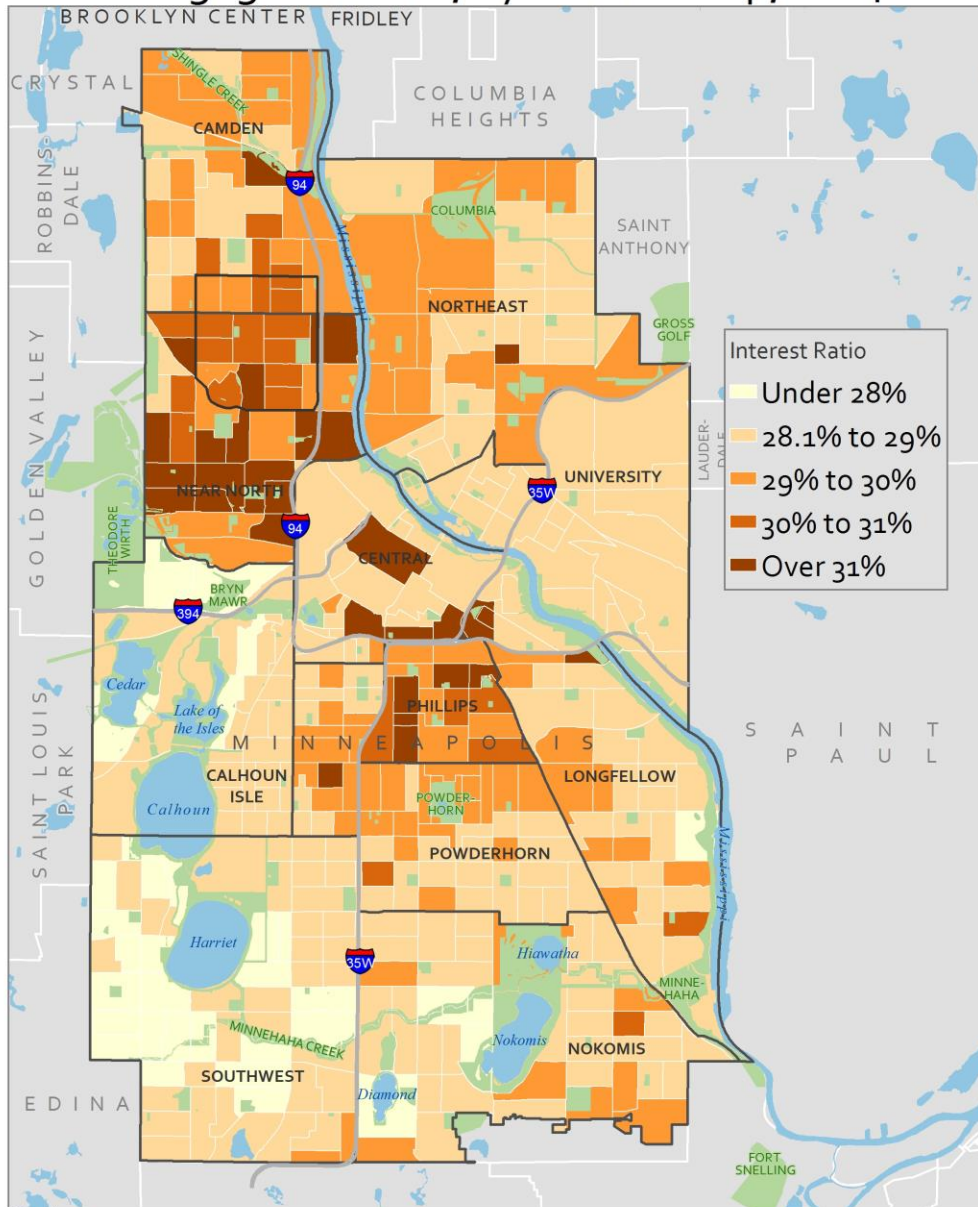
- 44.5% of Northside homes are renter-occupied vs. 37% in Minneapolis as a whole
- Some block groups 98% renters
- Renters in Near North and Downtown pay the most in relative terms

Low Income Housing Tax Credit Projects and Housing Choice Vouchers by Census Tract, 2014



- High concentration of housing choice voucher usage on the Northside compared to other areas of Minneapolis
- Fewer low income housing tax credit projects on the Northside

Interest Expense as a Percent of Original Mortgage Amount, by Block Group, 2014



Higher expenditure on interest as a percent of original mortgage amount in Northside and Phillips.

This could mean:

1. Younger mortgages
2. Predatory lending

Conclusions

- Affordable housing is essential for a safe, stable community.
- There are more renters on the Northside than the rest of Minneapolis, and renters there pay more in relative terms.
- The Northside is underserved by LIHTC.
- The Northside is more reliant on housing choice vouchers.
- Homeownership:
 - The financial crisis has produced a lasting impact on homeownership on the Northside.
 - Stability in families, better neighborhood environment, wealth building, better educational outcomes



STABILITY

Alex Abramson, Lee Guekguezian, G.G. Gunther, Eleanor Noble, Abby Raisz

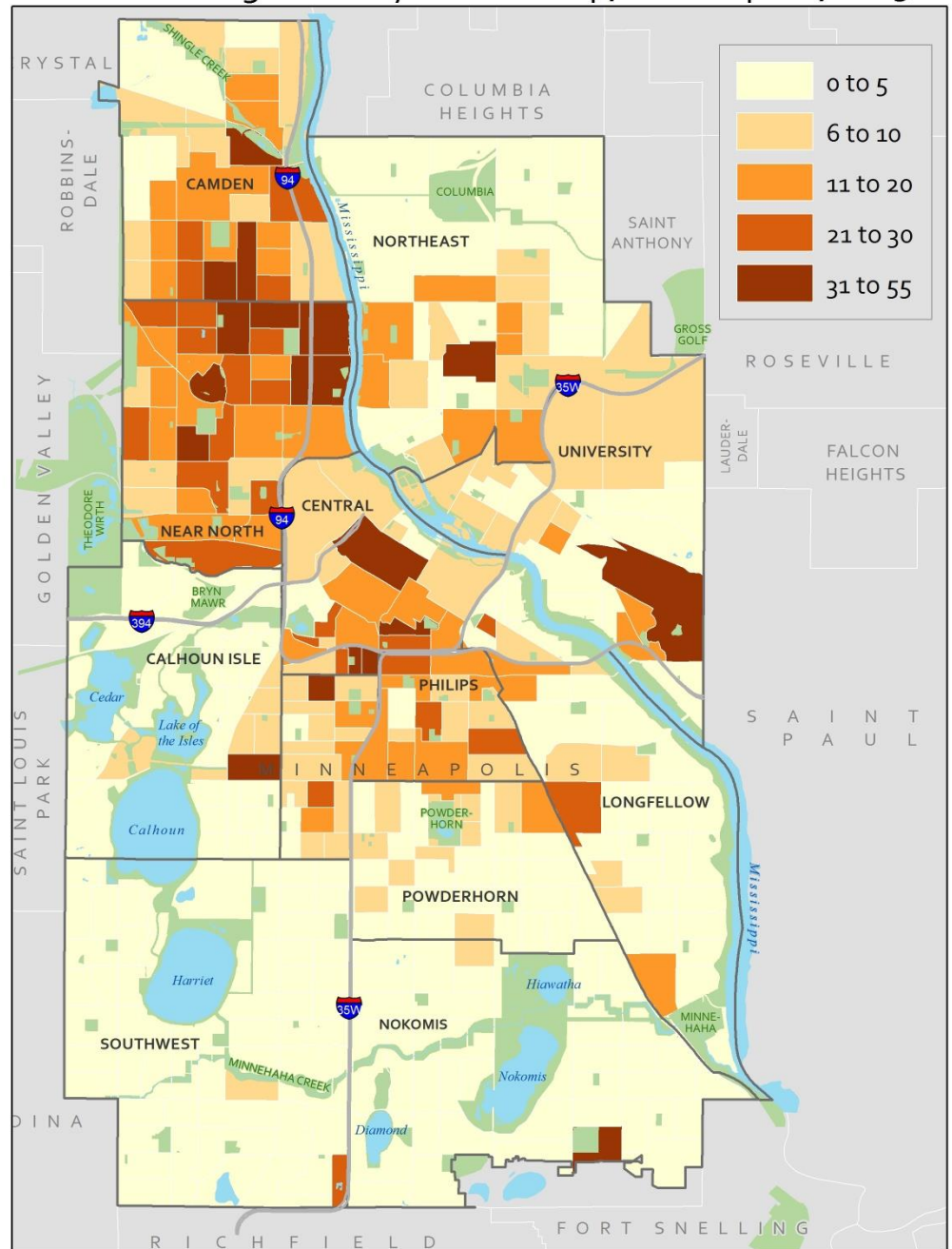
Research Questions

- What is the current status of housing stability in North Minneapolis?
 - How does this compare to past years?
 - How do we envision this changing in the future?
 - What does it mean for NAZ?

Variables

- Evictions
 - Overall eviction rates
 - Landlords with the highest eviction rates
- Mobility
 - Residential mobility
 - Residential vacancies
- Market Values
 - Residential parcels
 - Commercial properties
 - Corporate-owned properties
- Susceptibility to gentrification

Eviction Filing Count by Block Group, Minneapolis, 2015



- 67% of block groups in North Minneapolis had 21-55 eviction filings in 2015

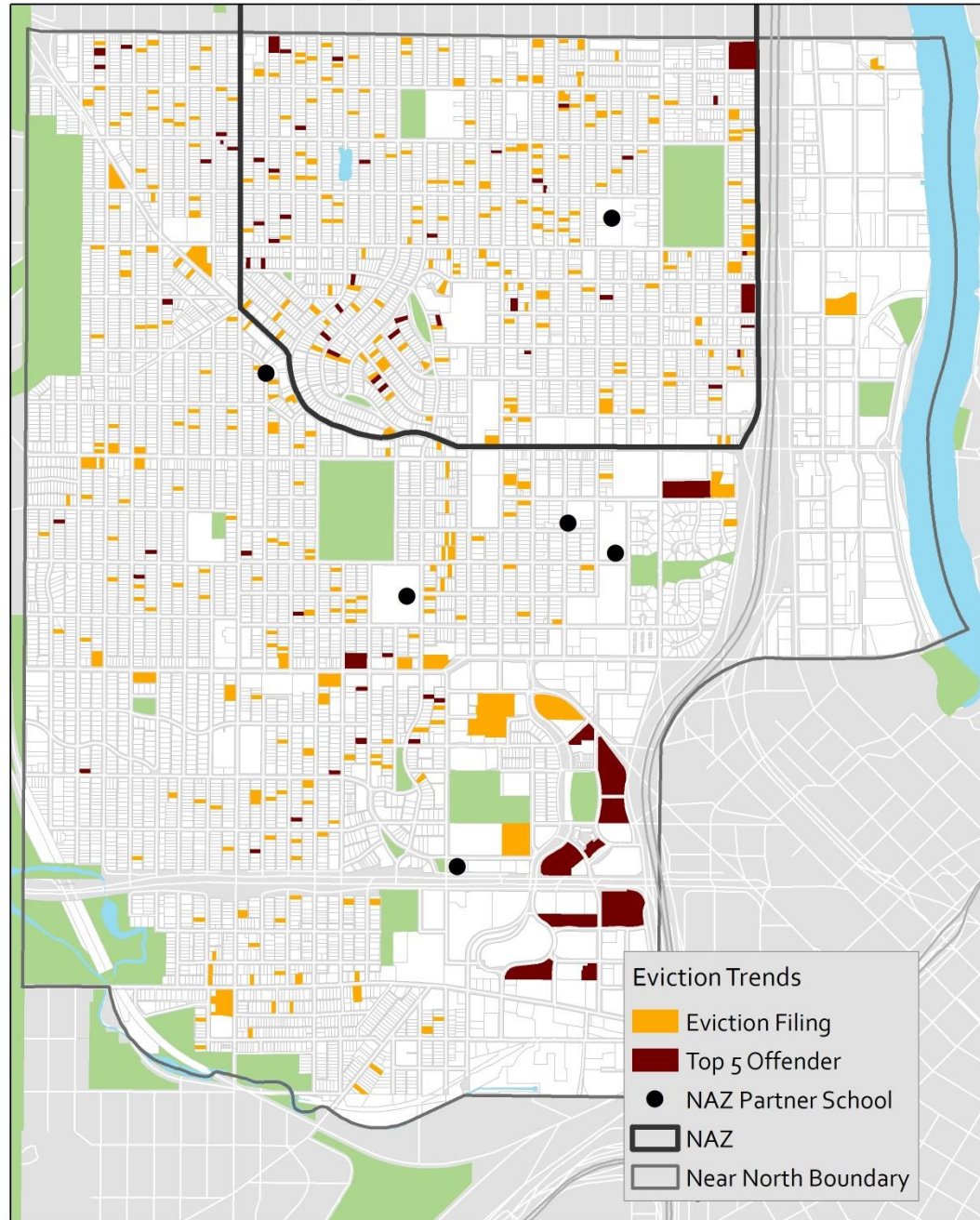
- Why does this matter?

- Neighborhoods with a high percentage of children experience increased evictions.
- Among tenants who appear in eviction court, those with children are significantly more likely to receive an eviction judgment.
- Single mothers who had been evicted experienced much higher levels of stress, anxiety, and depression than women who had not been displaced.

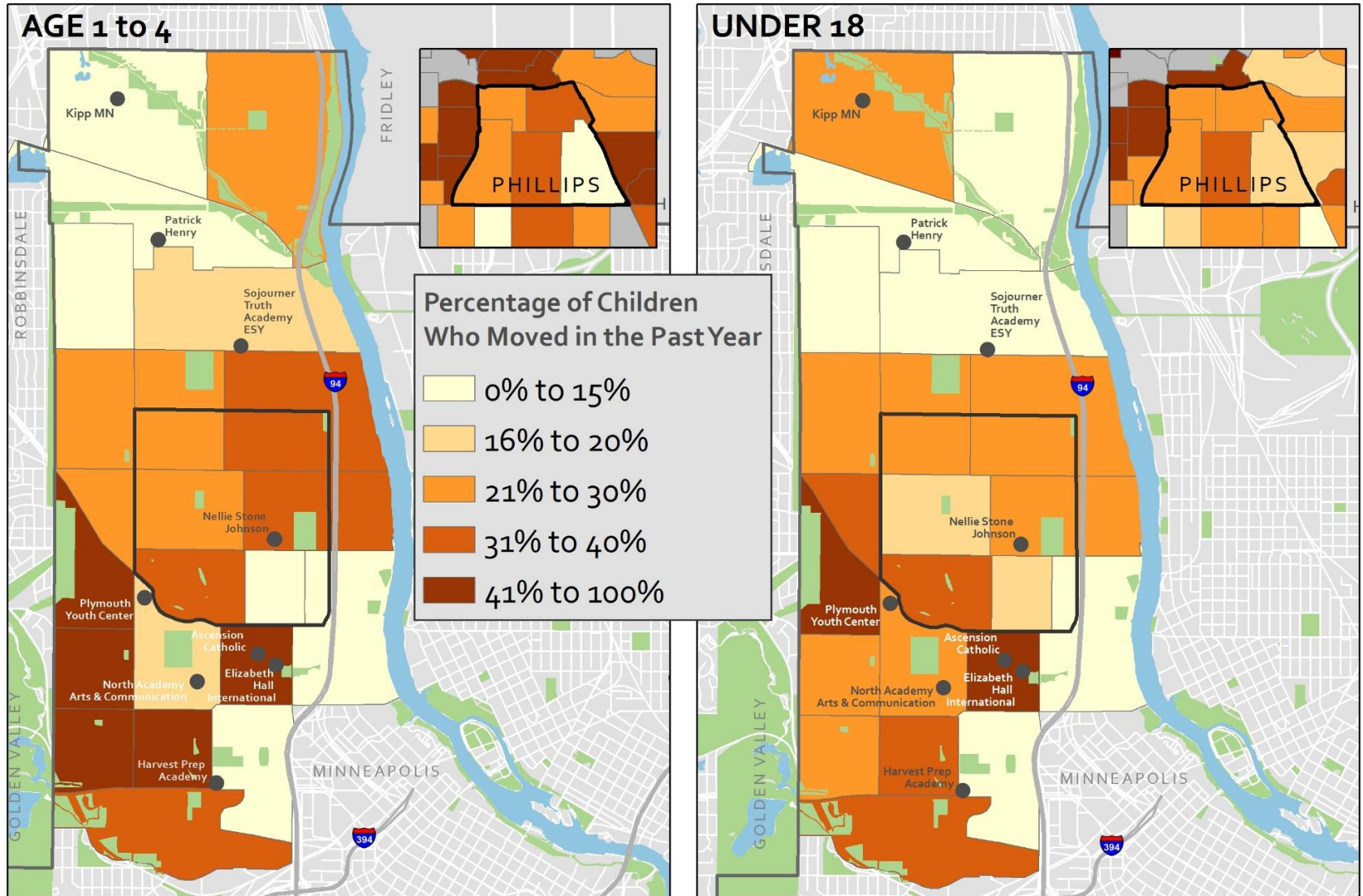
Landlord	% of total filings in Near North	% of properties owned in Near North that had a filing
Mahmood Khan	3.7%	51%
Steven Meldahl	5.8%	58%
MPHA	5.4%	11%

- Top 5 offenders do not file as many evictions in Camden as in Near North.
- There is a pattern of “slumlords” working and owning properties in distinct neighborhoods and communities, rather than operating at a city-wide level.

Eviction Filings by Parcel, Near North, 2015

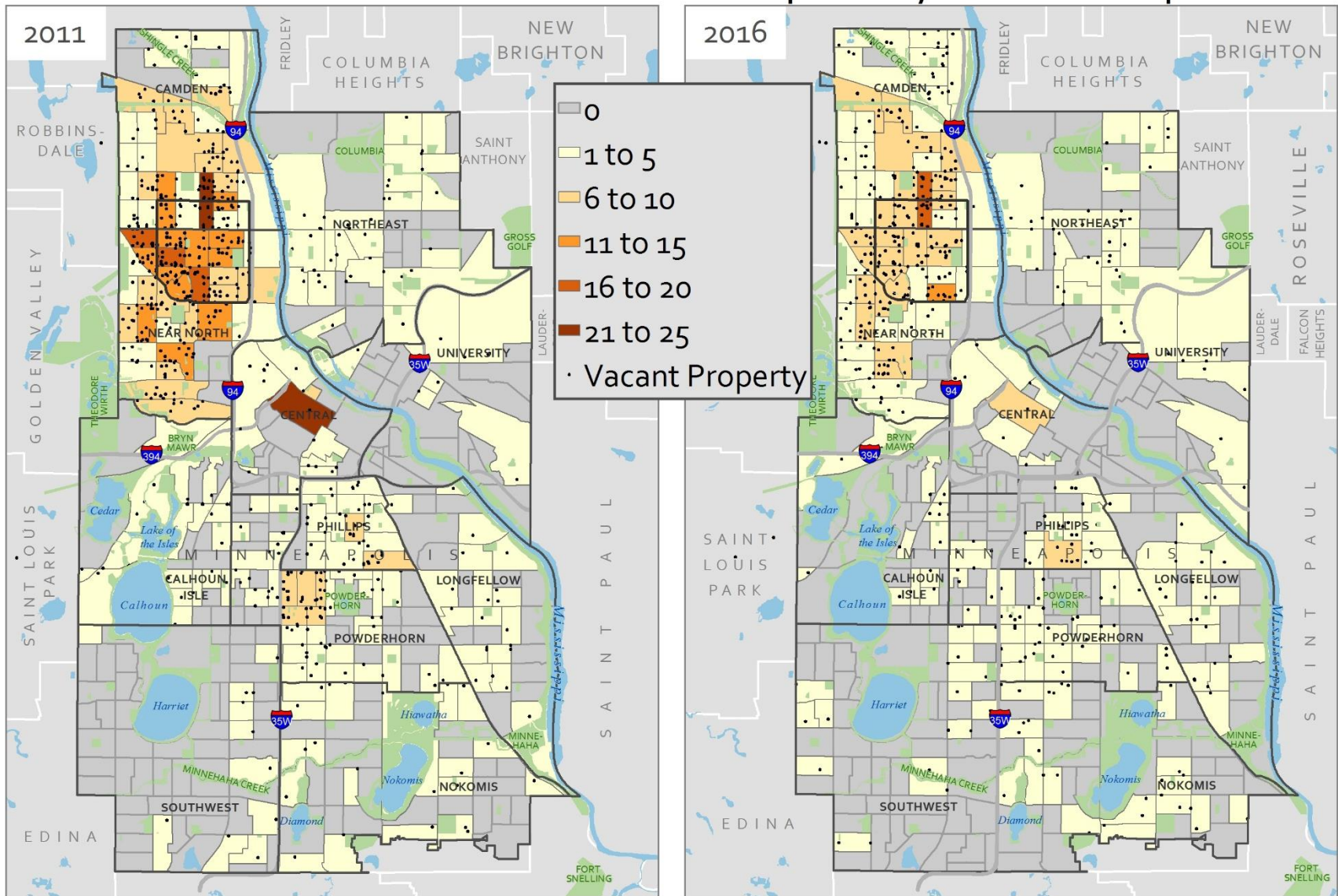


Geographic Mobility for Children by Census Tract in North Minneapolis and Phillips, 2014-2015



Younger children (age 1-4) are more likely to move than all children under 18. Children are especially vulnerable to high turnover rates in southern sections of the Northside, particularly Near North and Willard-Hay.

Residential Vacancies in Minneapolis by Block Group



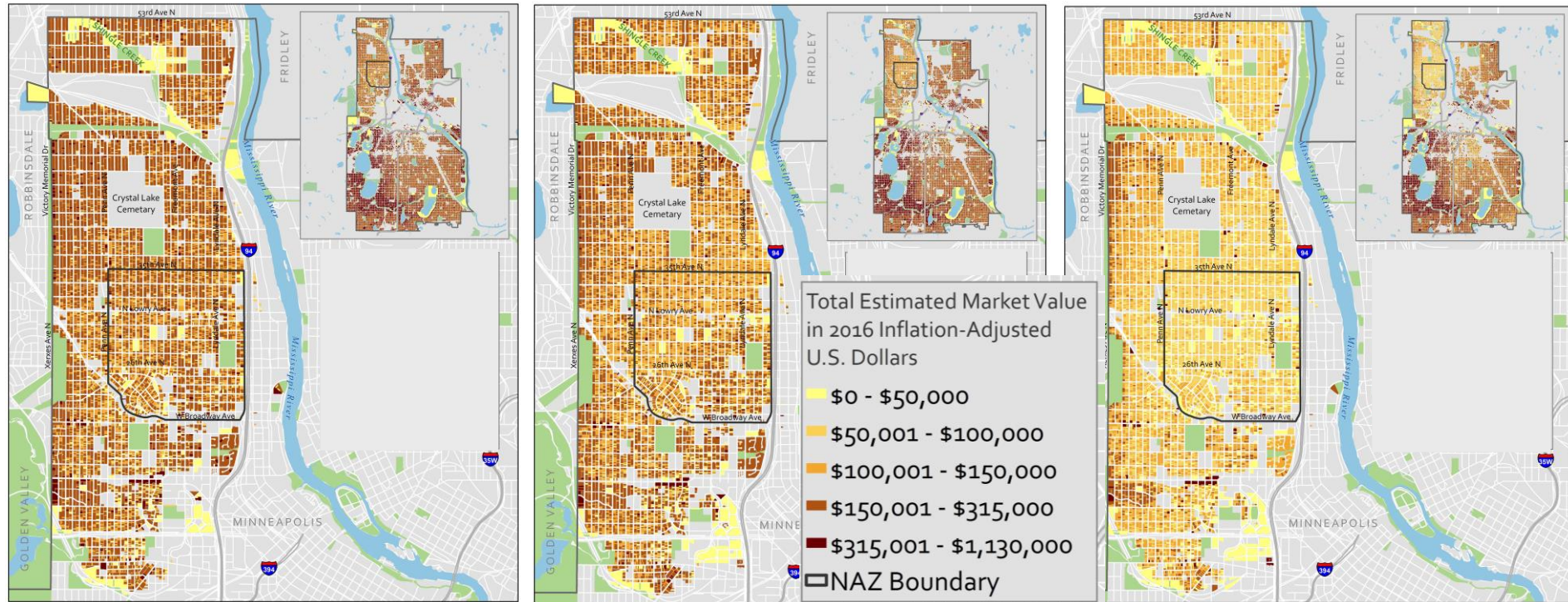
There has been a significant decrease in vacancies from 2011 (**770 vacancies**) to 2016 (**550 vacancies**). Both the largest cluster of vacancies and the block group with the highest number of vacancies are located within NAZ.

Residential Values in North Minneapolis by Parcel

2005

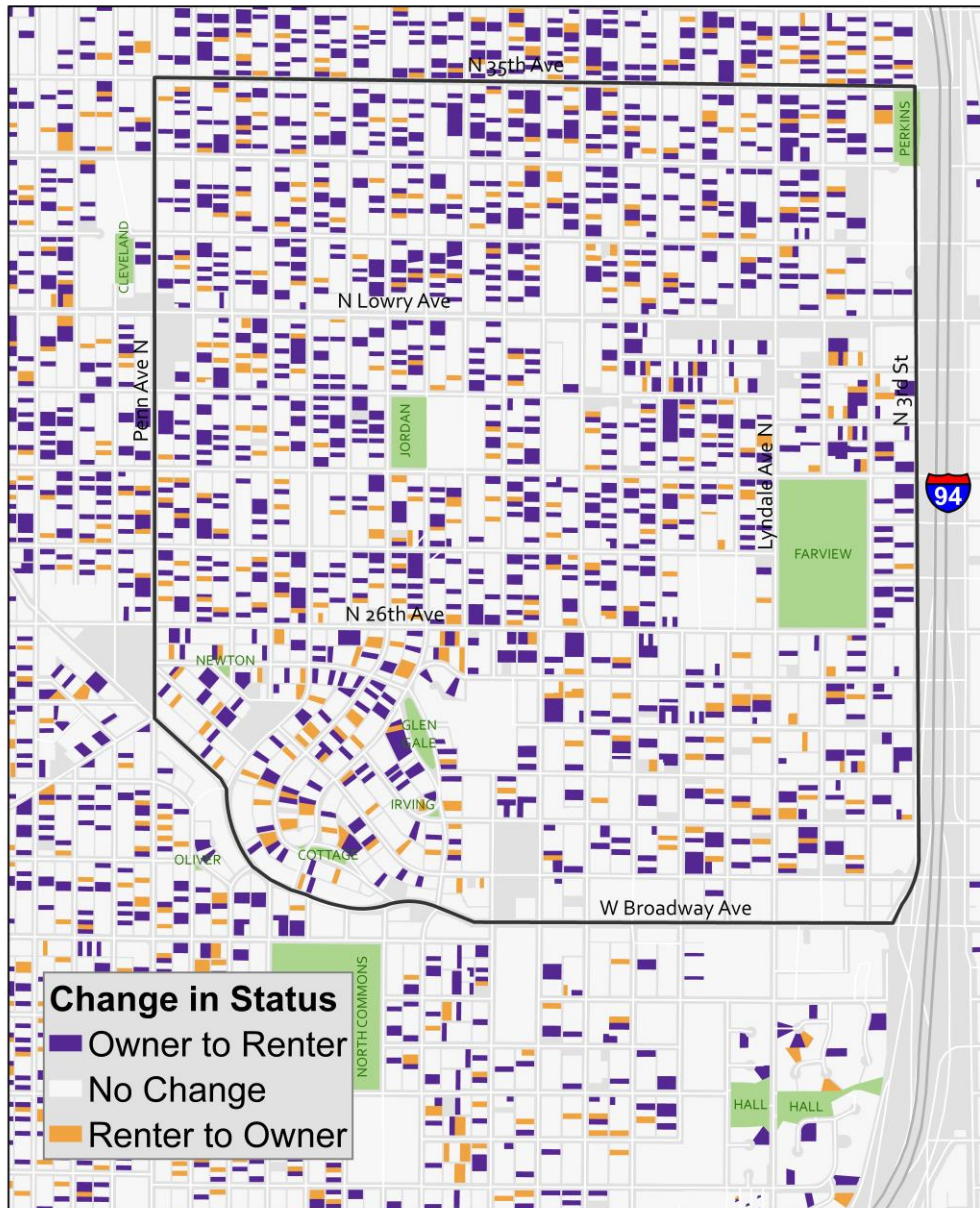
2010

2016



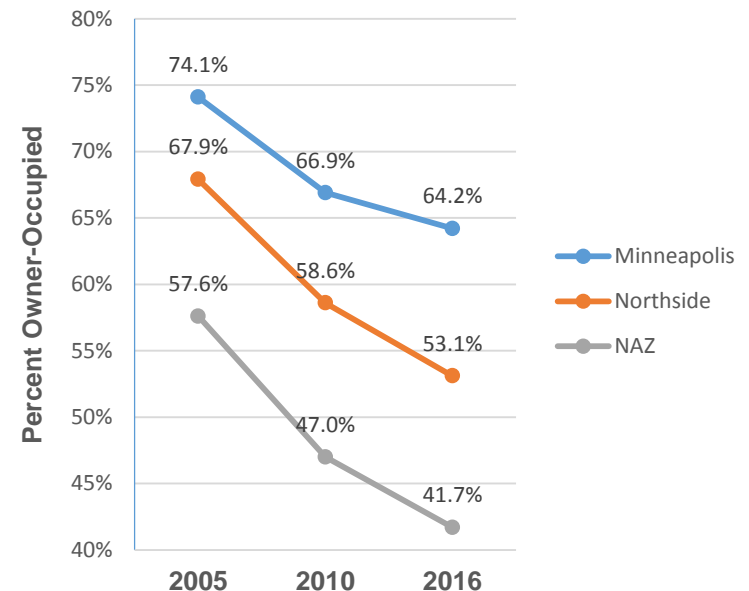
Overall, residential values on the Northside decrease from 2005 to 2016, with the greatest change occurring from 2010 to 2016. The western boundary of the Northside retains the highest values during this period.

Change in Owner/Renter Occupancy, by Parcel, 2005-2016

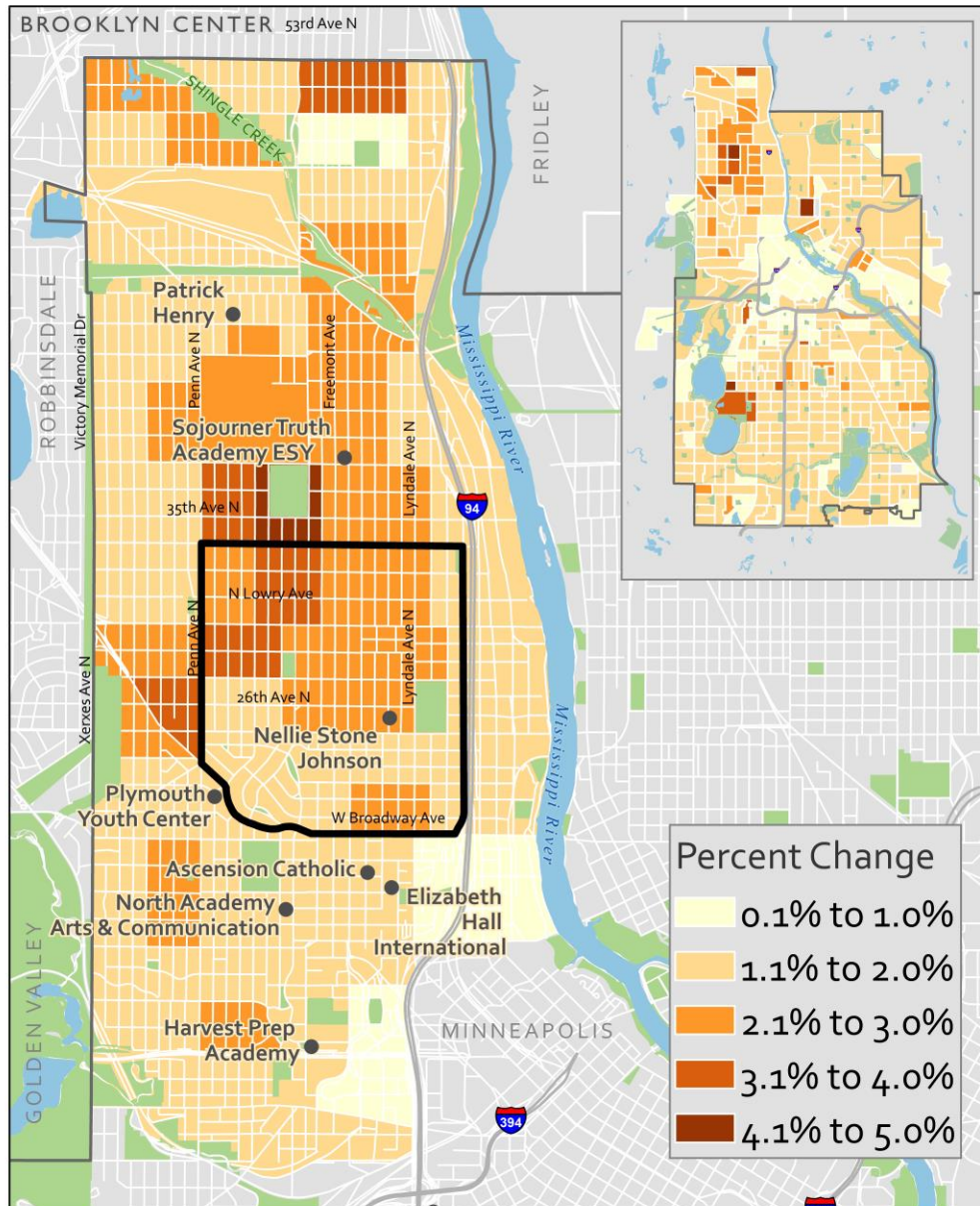


Houses are transitioning from owner-occupied to renter-occupied in increasing numbers. This trend disproportionately affects the Northside and NAZ.

The graph below presents the percentages of owner-occupied properties.



Change in Average Number of Properties Owned by Corporations, by Block Group, 2005 to 2016



The percentage of properties owned by corporations has increased throughout Minneapolis. This increase has been more pronounced in the Northside communities, and even more so in the NAZ.

The chart below presents the percentages of properties owned by corporations.

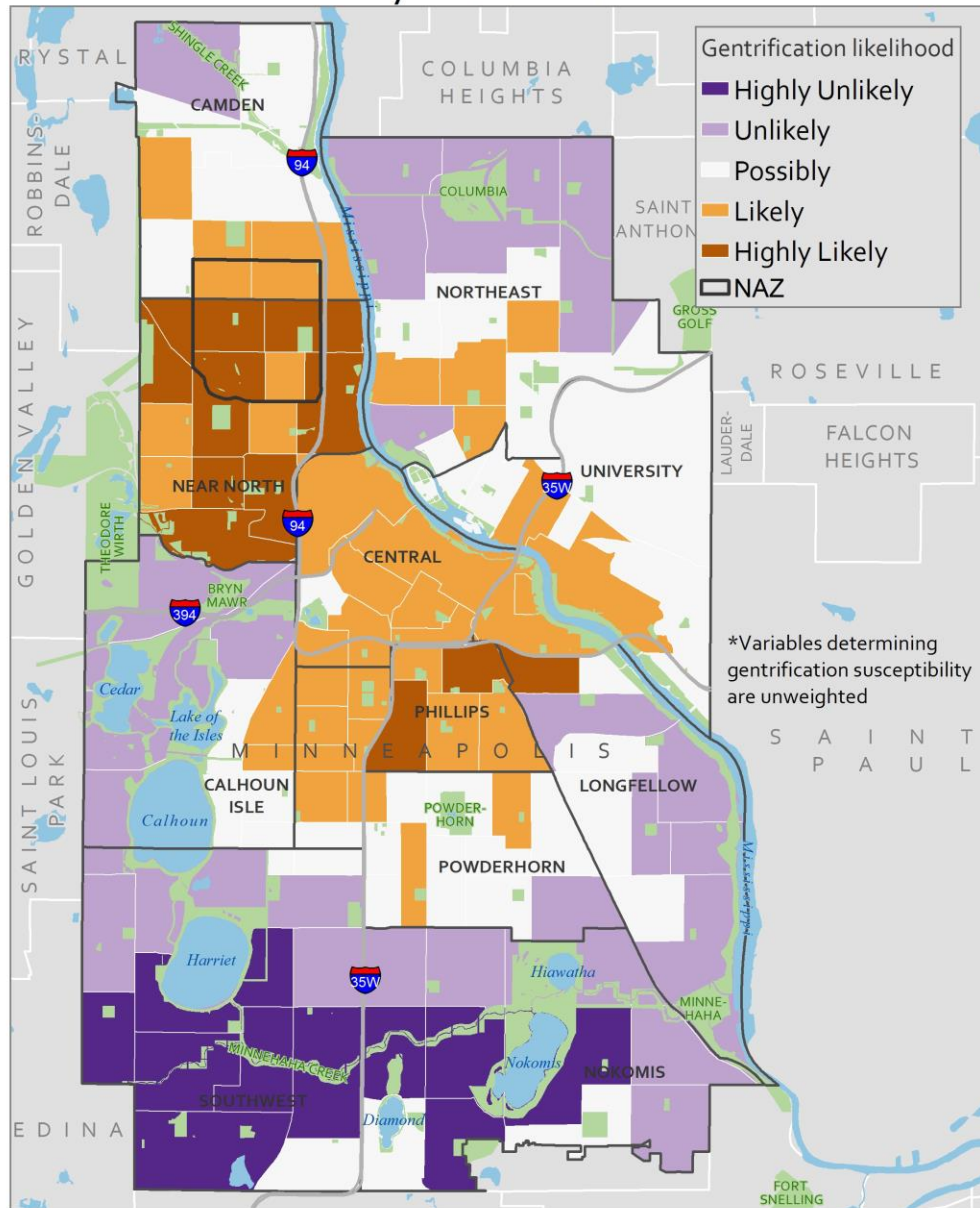
	2005	2010	2016
Mpls	11.4%	15.9%	16.0%
Northside	11.6%	17.1%	20.5%
NAZ	11.4%	21.3%	25.9%

Gentrification Susceptibility

Susceptibility Index Variables

Category	Variable Explanation	Correlation
Demographics	% Non-family households of total households	+
	Median income	-
	% White	-
Development	New building permits per square mile	+
	Minority-owned businesses earning less than a million dollars per square mile	+
Housing	% Renter-occupied residences of total residences	+
	% Residential buildings with 3-19 units of total residences	+
	Evictions per square mile	+
	Vacancies per square mile	+
Transit	Distance from future blue line extension (1/4 mile, 1/2 mile, 1 mile, > 1 mile)	-
	% Public transit commuters of total commuters	+

Gentrification Susceptibility in Minneapolis by Census Tract



Scoring Explanation:

- Census tracts were given a susceptibility score on a scale of 0-33
- Each variable within the index could add 0 to 3 points

While tracts on the Northside and in our comparison neighborhood of Phillips score high on the index and could possibly gentrify in the future, there are many limitations to this method of predicting rapid neighborhood change.

Conclusions

- Housing on the Northside is currently unstable, and has been over the past few years, particularly due to increasing eviction, ownership to renter conversion, and mobility rates.
- While the future of housing stability on the Northside is hard to predict, it is likely that neighborhood change will impact NAZ in the form of gentrification.
- Housing stock, usage, ownership, and tenure on the Northside is changing rapidly and will likely remain a challenge for NAZ.

Recommendations

- If these downward trends continue, housing stability may become an even greater issue for NAZ in the future.
- A stable home environment is crucial for many other factors of achievement and therefore must remain a top priority.



POPULATION

Employment & Accessibility, Community Characteristics & Resources, Historical Demographics



EMPLOYMENT & ACCESSIBILITY

Martine Cartier and Alex Edelmann

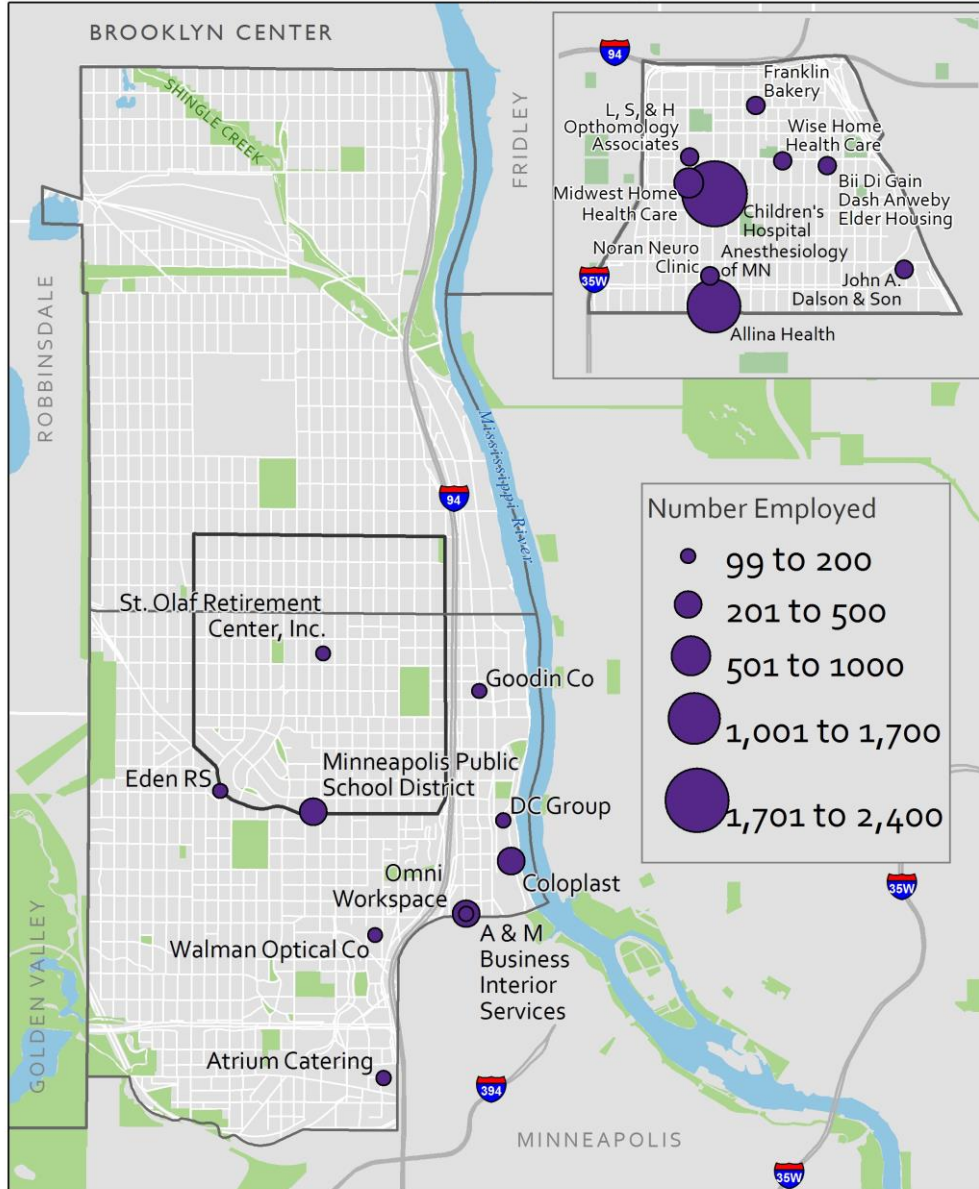
Research Questions

- Is there a spatial mismatch between jobs located on the Northside and Northside residents' places of employment?
- How accessible is employment for those living in North Minneapolis and how are jobs reached by Northside residents? How do levels of access compare to other neighborhoods?

Variables

- Employment sectors
 - Jobs
 - Working residents
- Wages
 - Jobs
 - Working residents
- Travel times
 - Access to transit stops
 - Commute times

Top Employers in North Minneapolis and Phillips, 2013



North Minneapolis Top Employers:

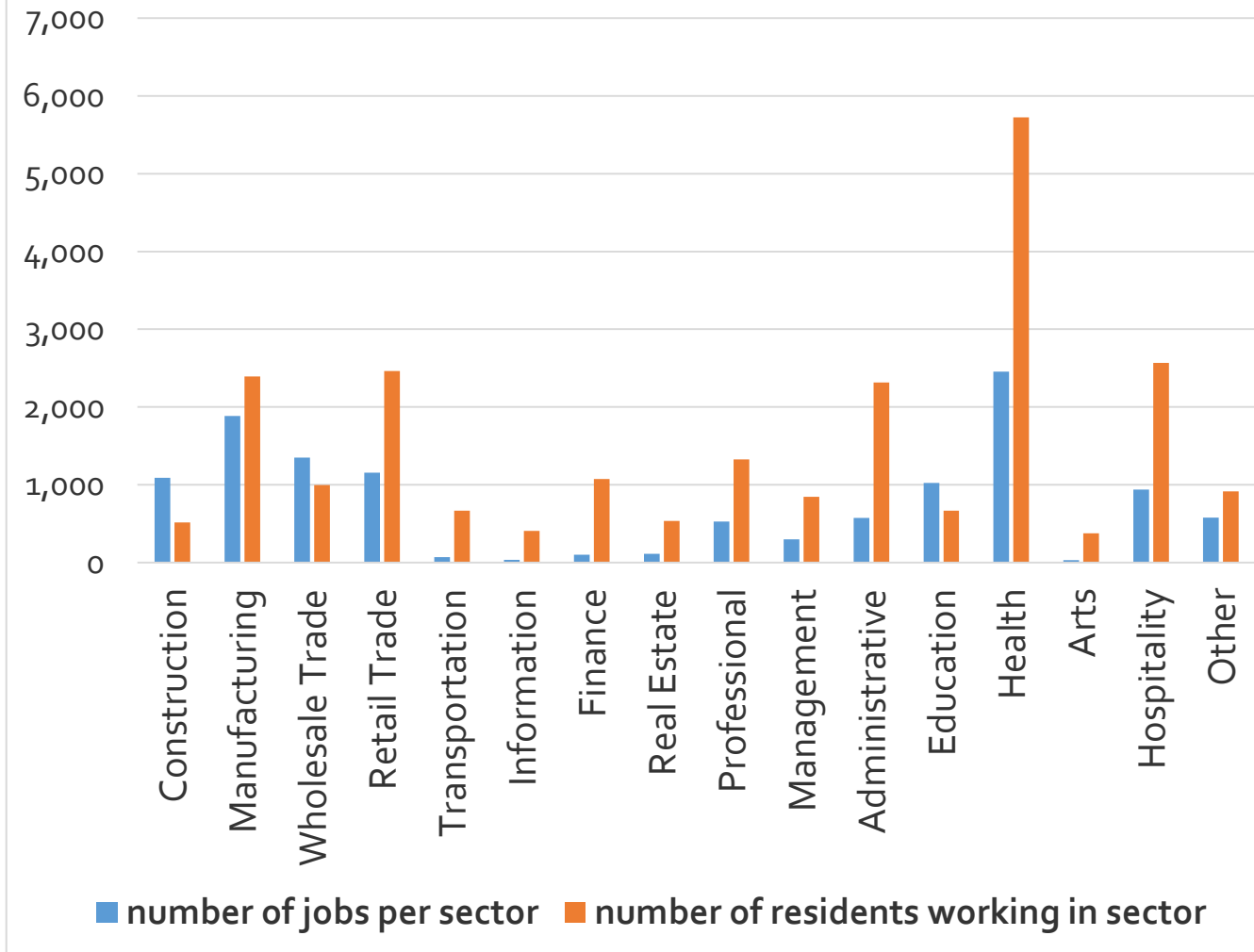
EMPLOYER	NUMBER OF EMPLOYEES
AMERICLEAN JANITORIAL SERVICES	610
MINNEAPOLIS PUBLIC SCHOOL DIST	490
COLOPLAST CORP.	277

Phillips Top Employers:

EMPLOYER	NUMBER OF EMPLOYEES
CHILDREN'S HOSPITALS AND CLINICS OF MINNESOTA	2,340
ALLINA HEALTH SYSTEM	1,200
AUGUSTANA CARE	600

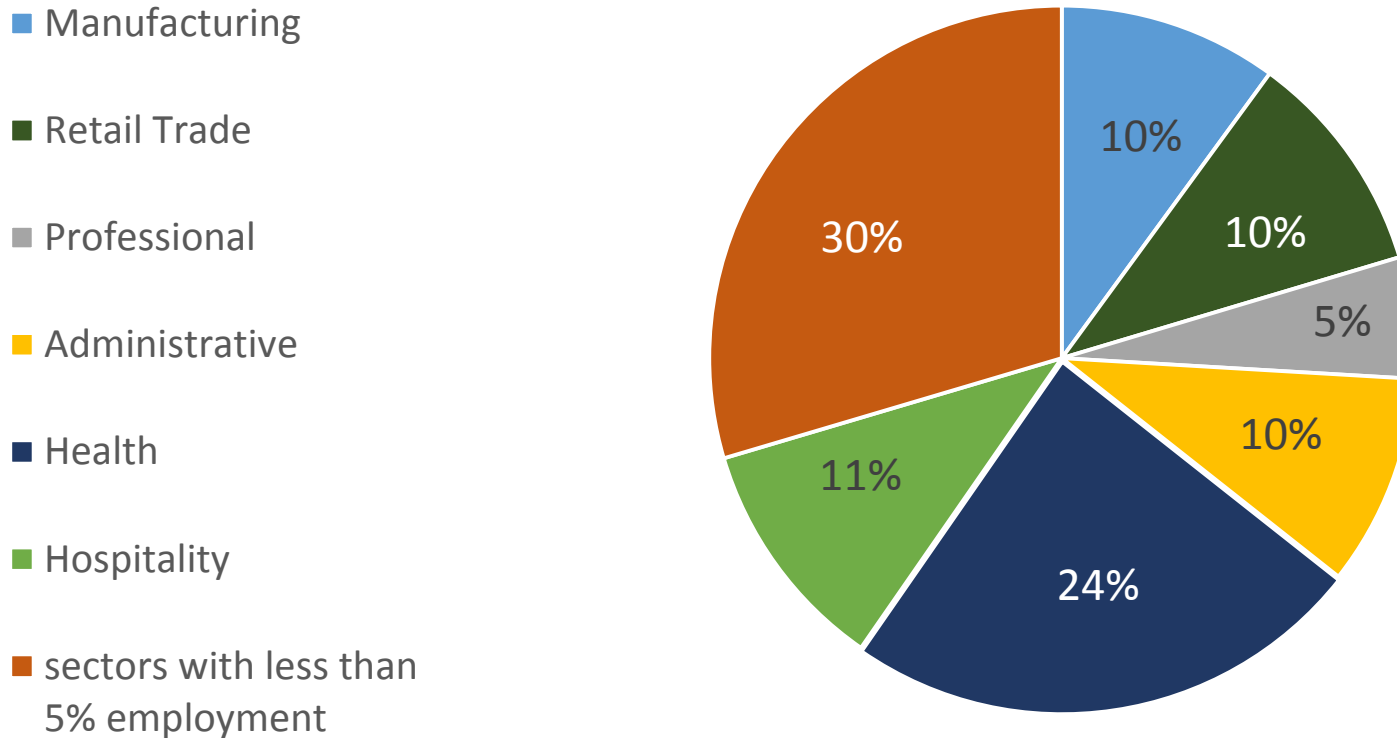
Companies located in the Phillips neighborhood employ many more workers than those in North Minneapolis. These “anchor businesses” provide nearby employment for residents and opportunities for the growth of support businesses.

Sectoral Data for North Minneapolis



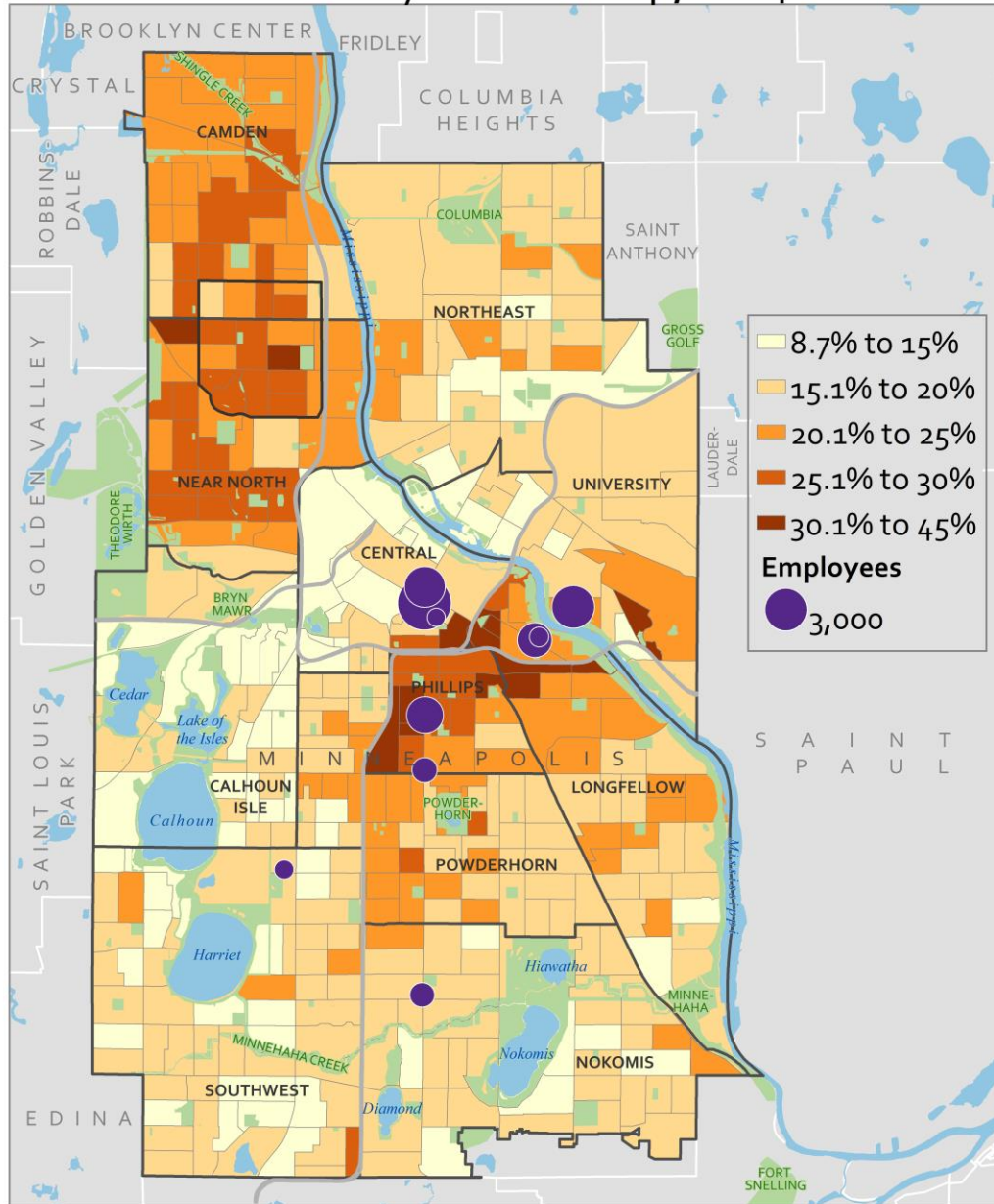
There are many more residents working than there are jobs on the Northside.

Northside Residents Sectoral Employment Rates



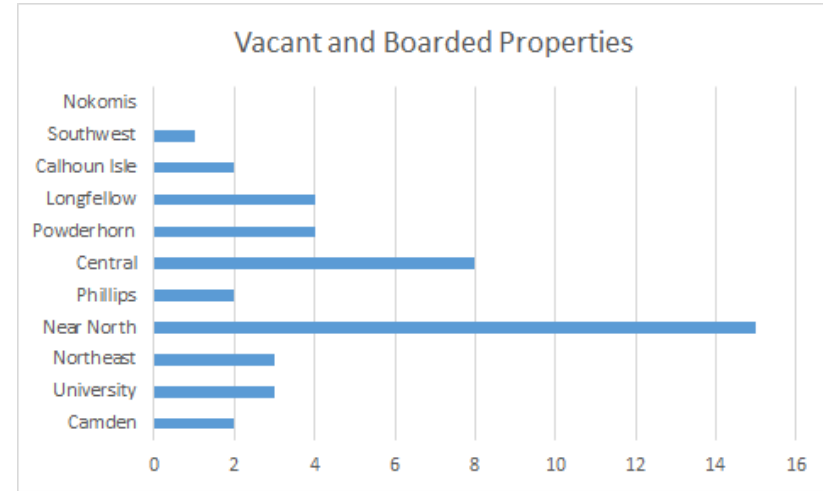
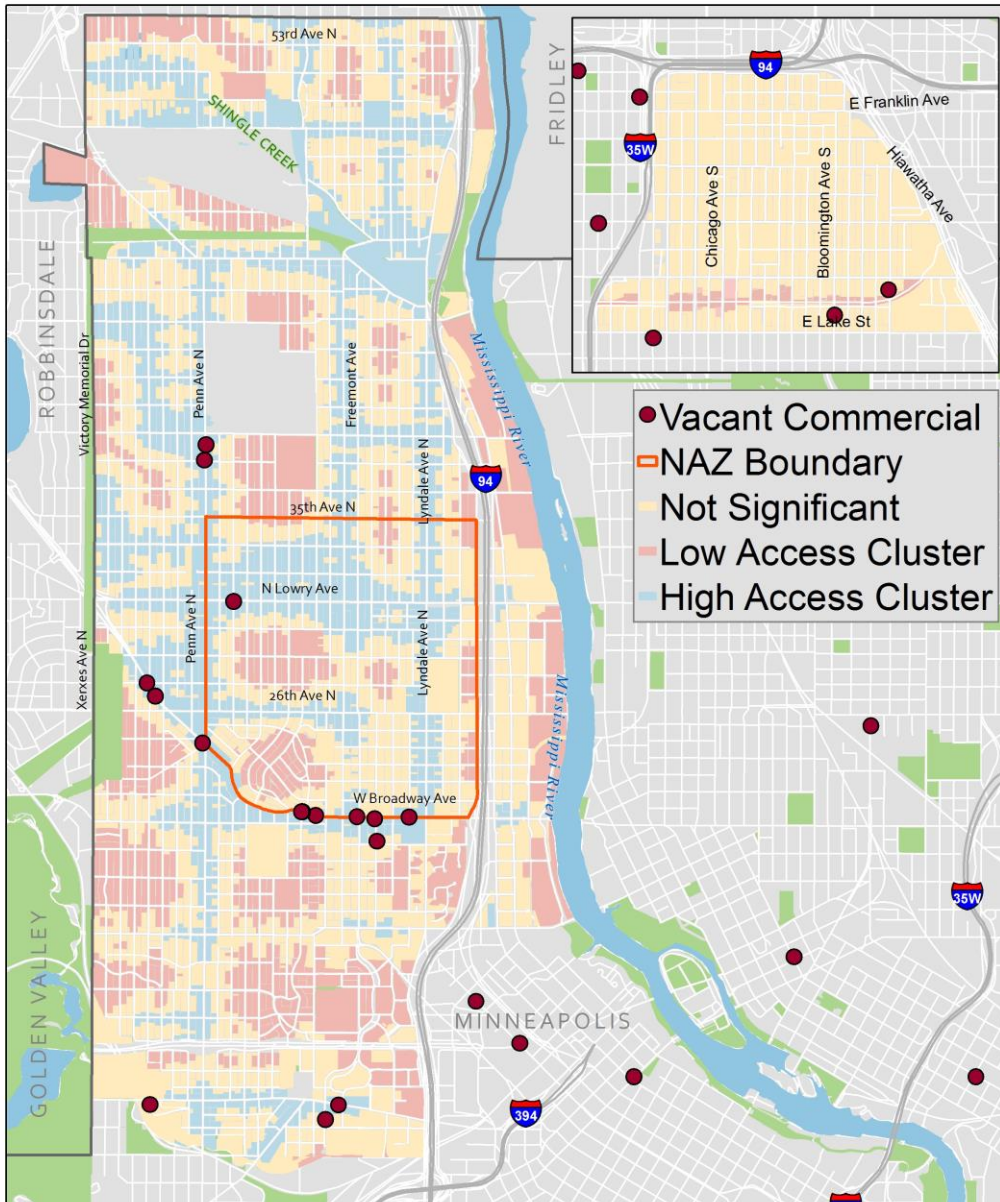
Residents of North Minneapolis primarily work in the health, hospitality, administrative, trade, and manufacturing sectors.

Percent of Residents Employed in Health Services Sector by Block Group, 2014

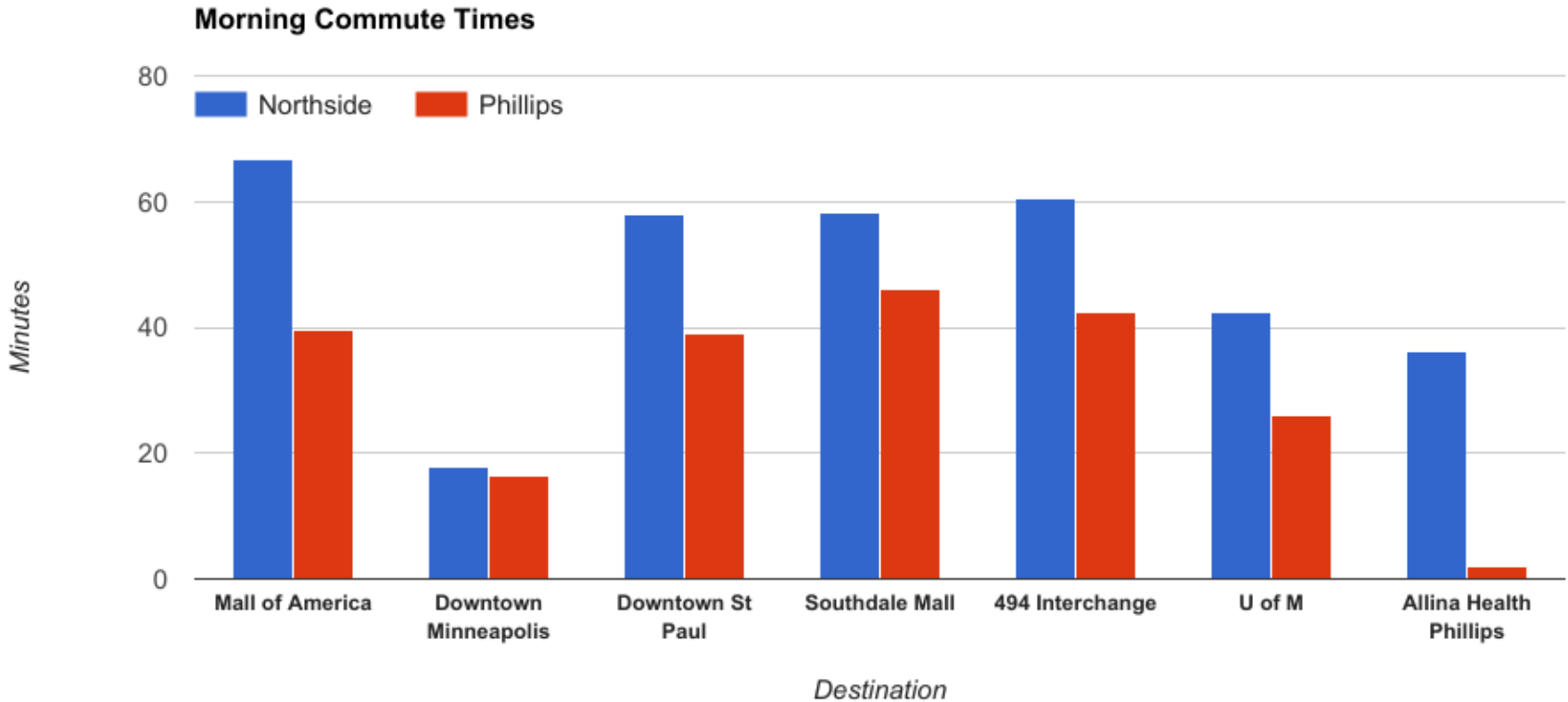


High concentrations of residents from both North Minneapolis and Phillips work in health services; however, the largest employers in the health sector are found in and around Phillips.

Spatial Grouping of Transit Access and Commercial Vacancy in Northside and Phillips, Minneapolis



There are more vacant commercial buildings in North Minneapolis than any other community. 9 of 15 vacancies are located on Broadway Ave, a high-access commercial corridor.



Travel times from North Minneapolis neighborhoods are almost universally longer than those from Phillips neighborhoods. Phillips is much more accessible via Metro Transit than the Northside, deepening the spatial mismatch between employers and employees.

Conclusions

- Transit and job access is not uniform across the city of Minneapolis.
- There is a significant spatial mismatch between jobs available on the Northside and the jobs in which residents work.
- Northside residents devote significant amounts of time traveling to workplaces that are proximal to residents of other neighborhoods, impacting Northside residents' ability to find gainful employment.

Recommendations

- Acknowledging the spatial mismatch may help NAZ refine their Career Training and Financial Education Program.
- Maintain partnership with Metro Transit through the expansion of the LRT, BRT, and future transportation projects to reduce commute times for Northside residents.



COMMUNITY CHARACTERISTICS & RESOURCES

Rachel Auerbach, Regan Fruh, Aramis Mendez, Gordon Moore, Olivia Thorp

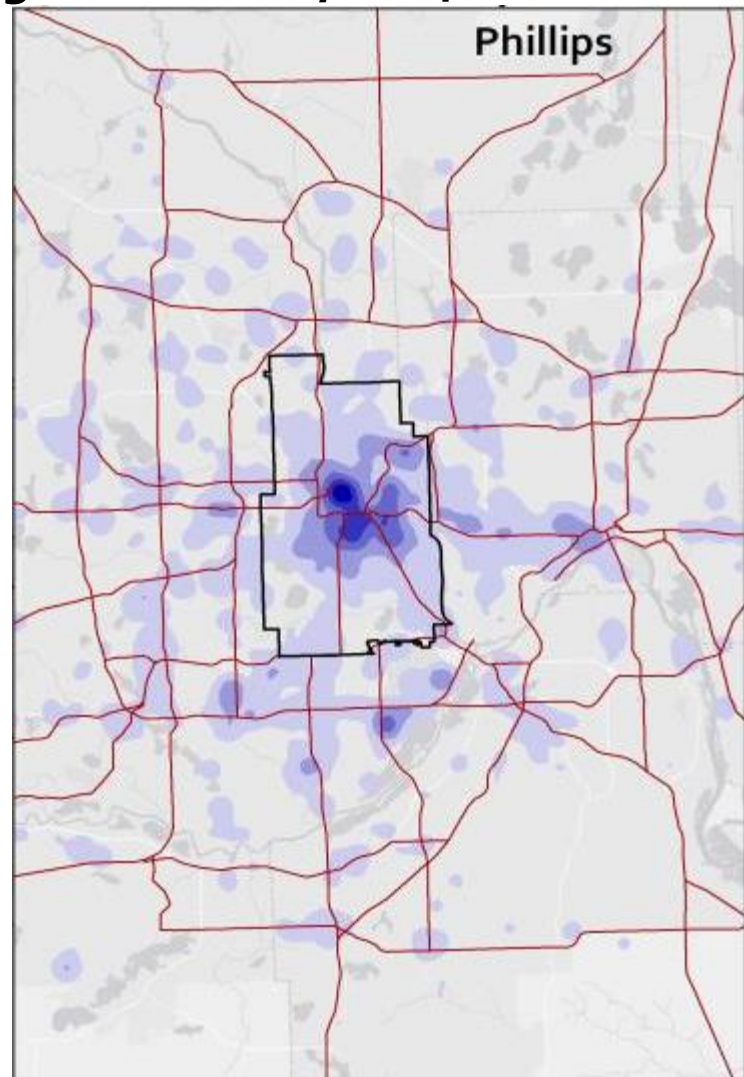
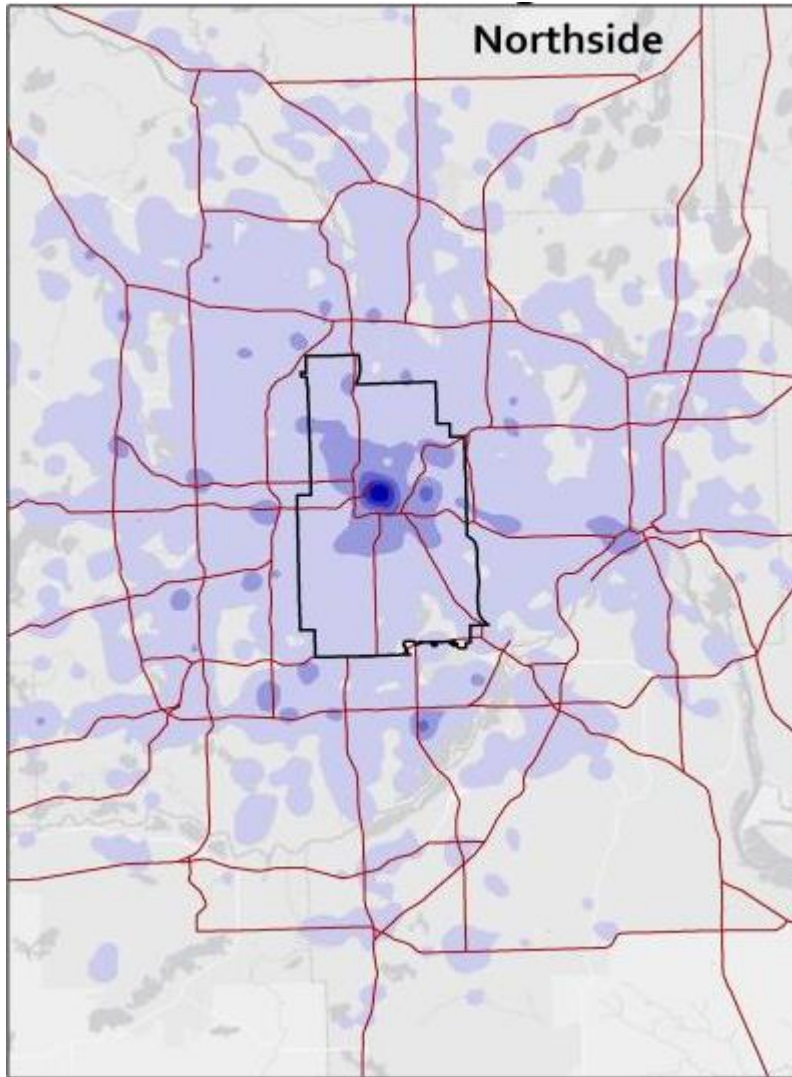
Research Questions

- What are some of the social, economic, and community characteristics that impact the lives of Northside families, especially the lives of mothers and children?
- We identified five main themes: Employment, early childhood education and childcare resources, female livelihoods, life expectancy, and outdoor recreation.

Variables

- Employment
 - Spatial distribution of employed Northside residents
 - Demographics of employed residents
 - Unemployment rates
 - Early childhood education and childcare centers in Minneapolis
 - Women leaving for work between 4pm and 12am
- Female Livelihoods
 - Single mother households with children
 - Incidents of domestic violence
- Life expectancy for greater Minneapolis
- Park Amenity Index

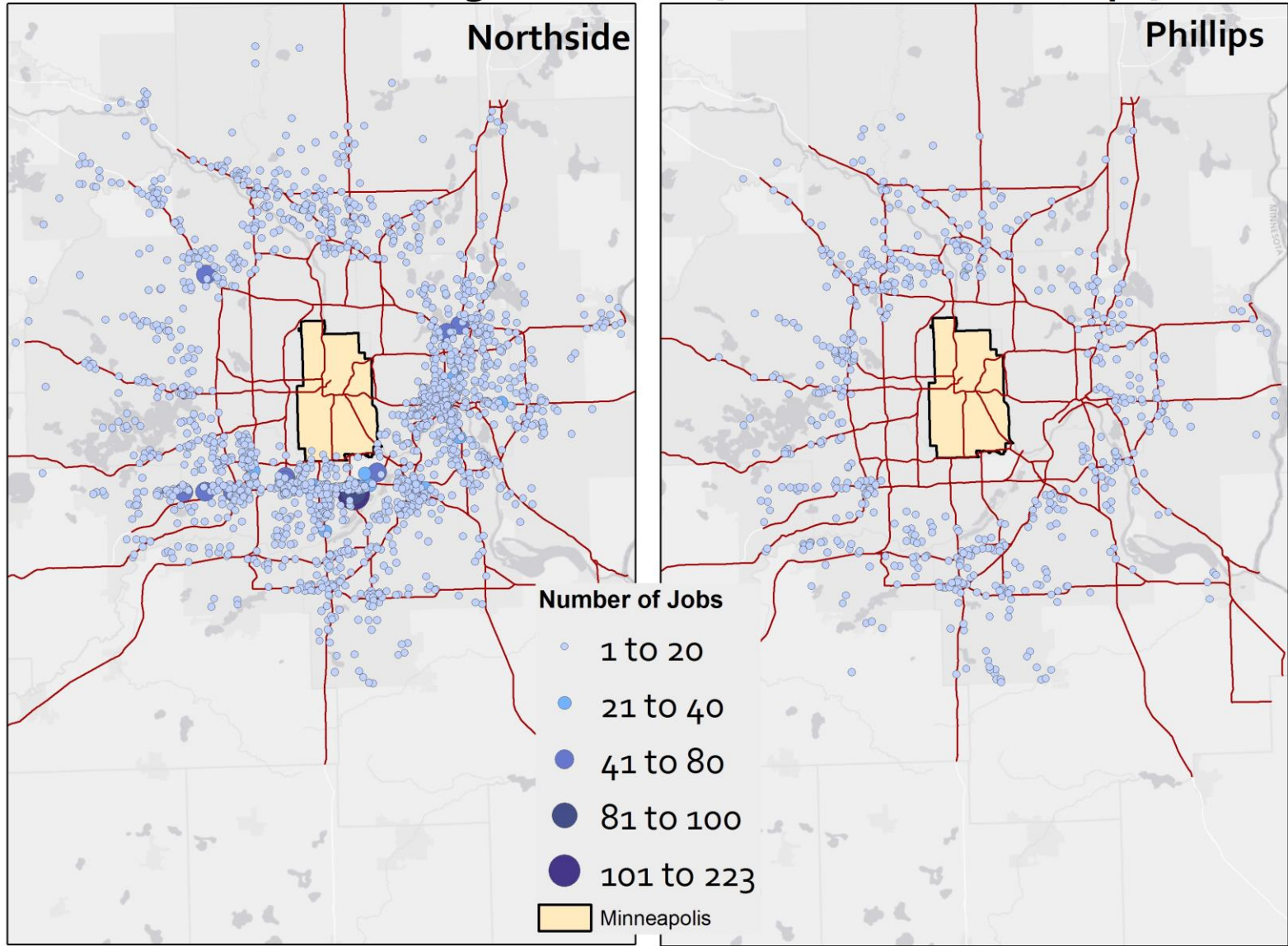
General Commuting Distribution, 2014



Number of Jobs:
Darker Purple = Higher Job Density
Lighter = Lower Density
No Purple = No Commuters

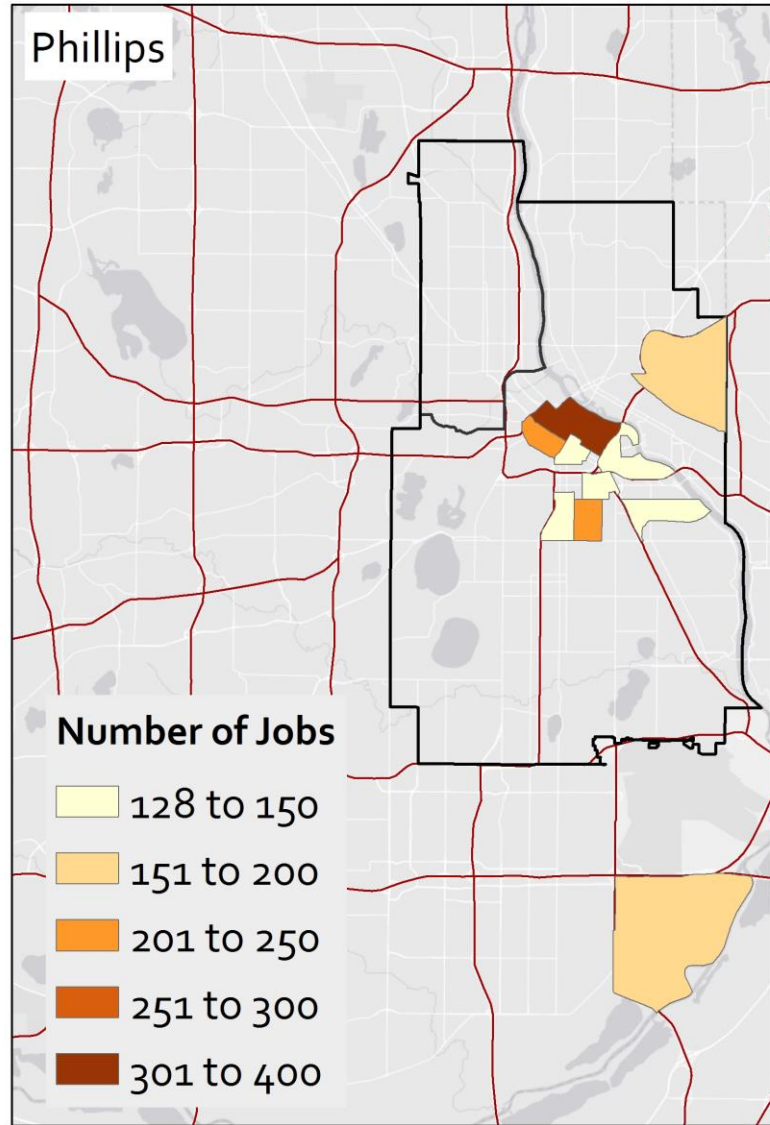
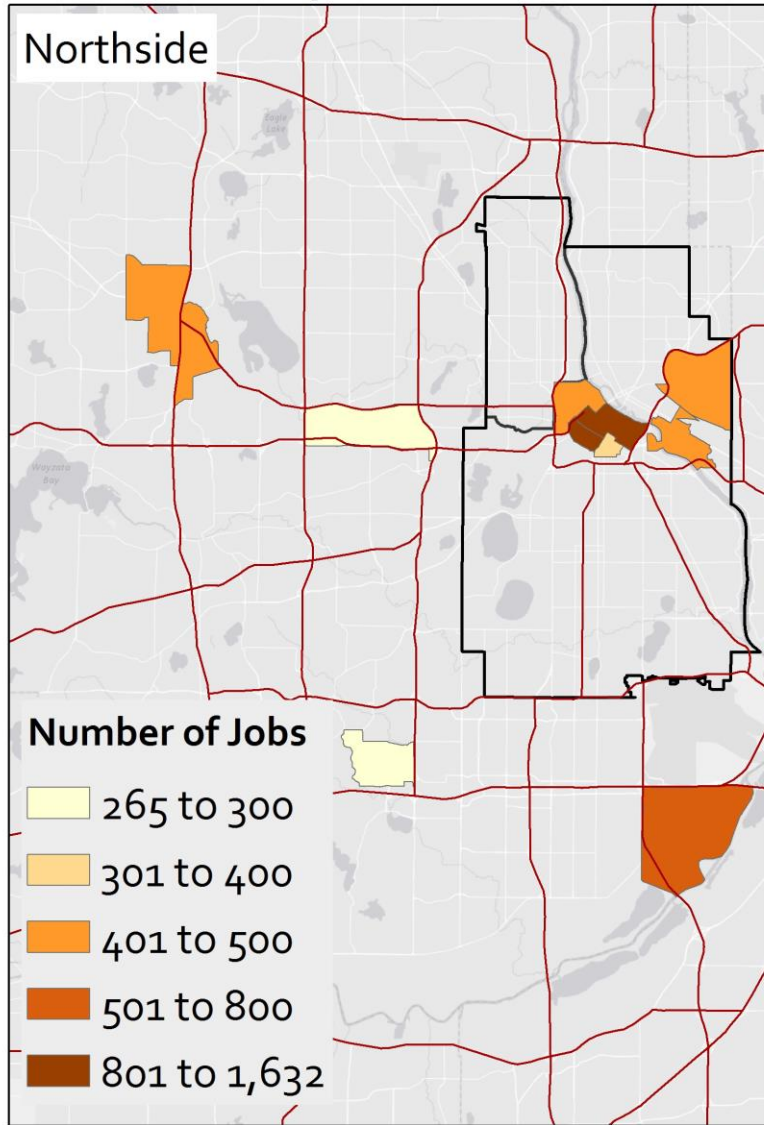
The Northside's commuting distribution is much more spread out than Phillips; Northside residents have a higher commuting burden.

All Workers Commuting 10-24 Miles, Northside vs. Phillips, 2014



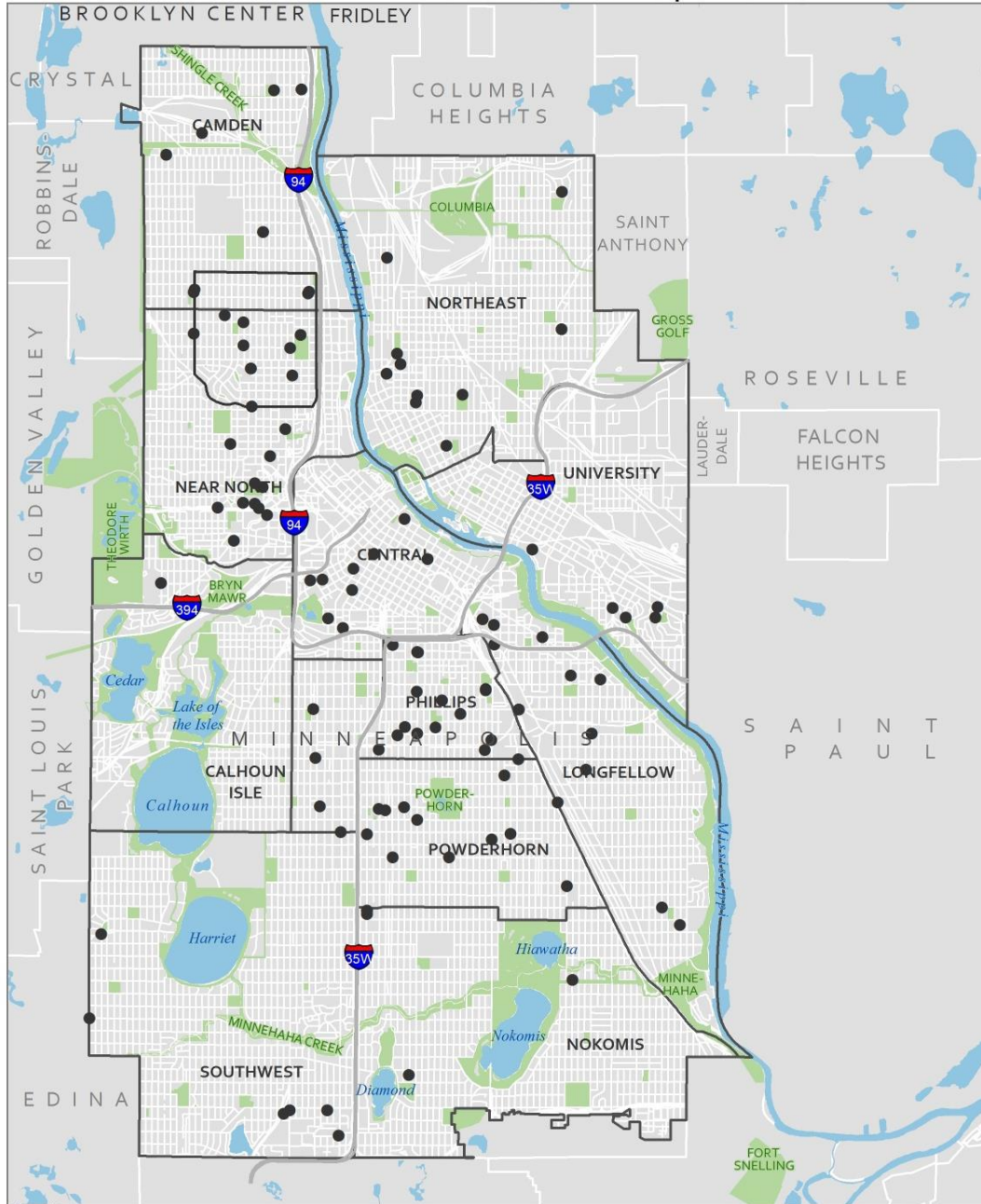
The Northside has many more workers who commute to large or middle-distance destinations than Phillips does; the percentage per neighborhood of 10-24 mile-commuters is 8 percent higher for the Northside.

Top 10 Worker Destination Census Tracts, 2014



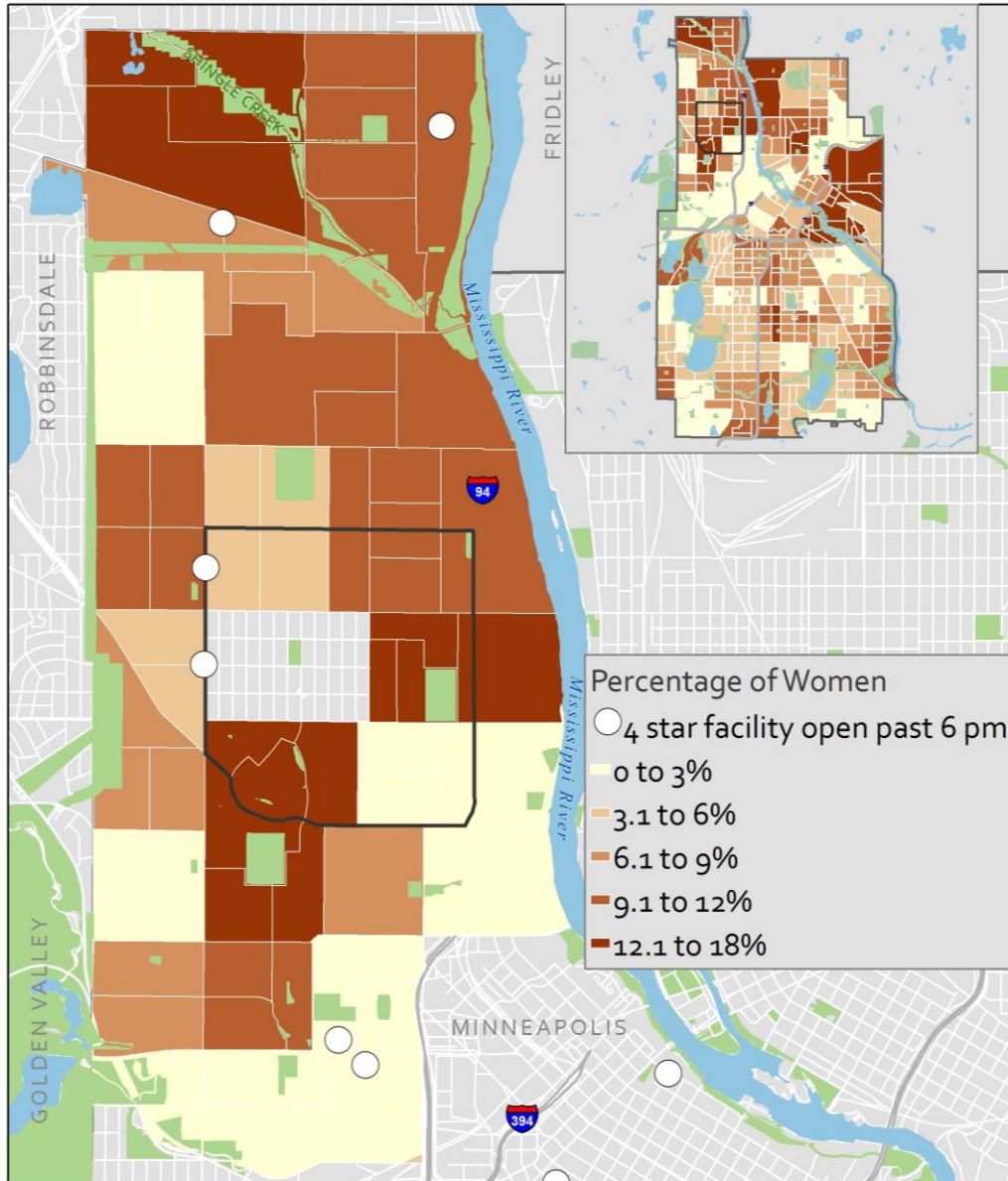
The top 10 destination tracts for Northside commuters are generally clustered, but with several suburban exceptions. The top 10 Phillips destination tracts are more clustered, with only one suburban tract.

Four star rated early childhood education and childcare centers, Minneapolis



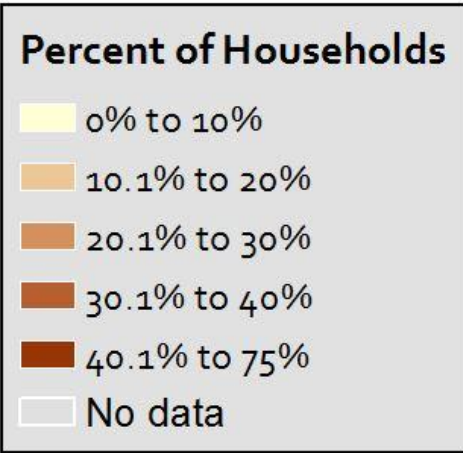
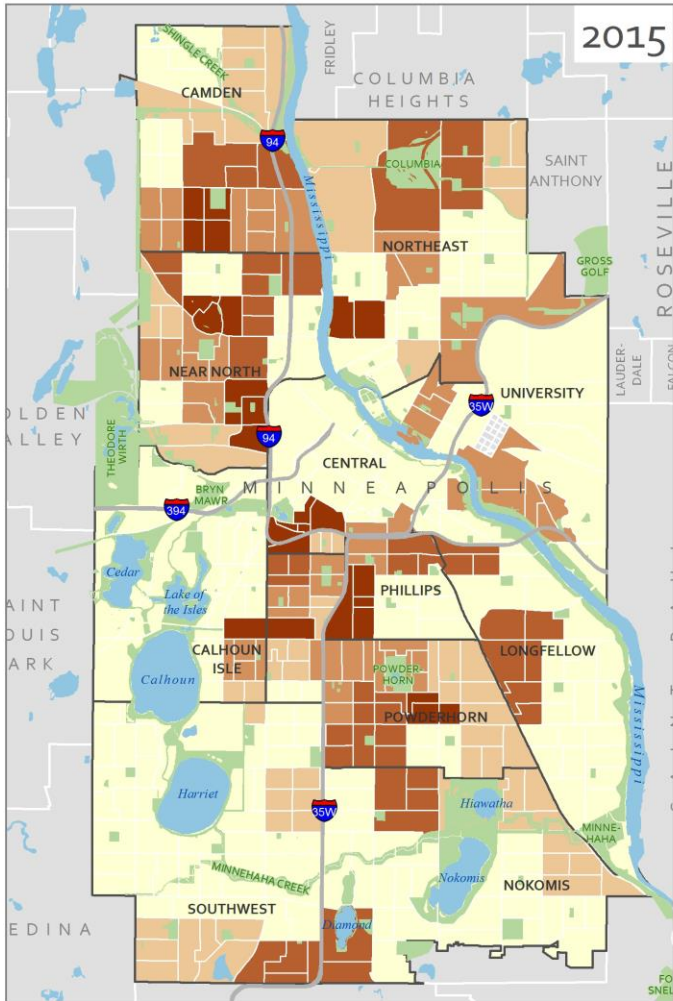
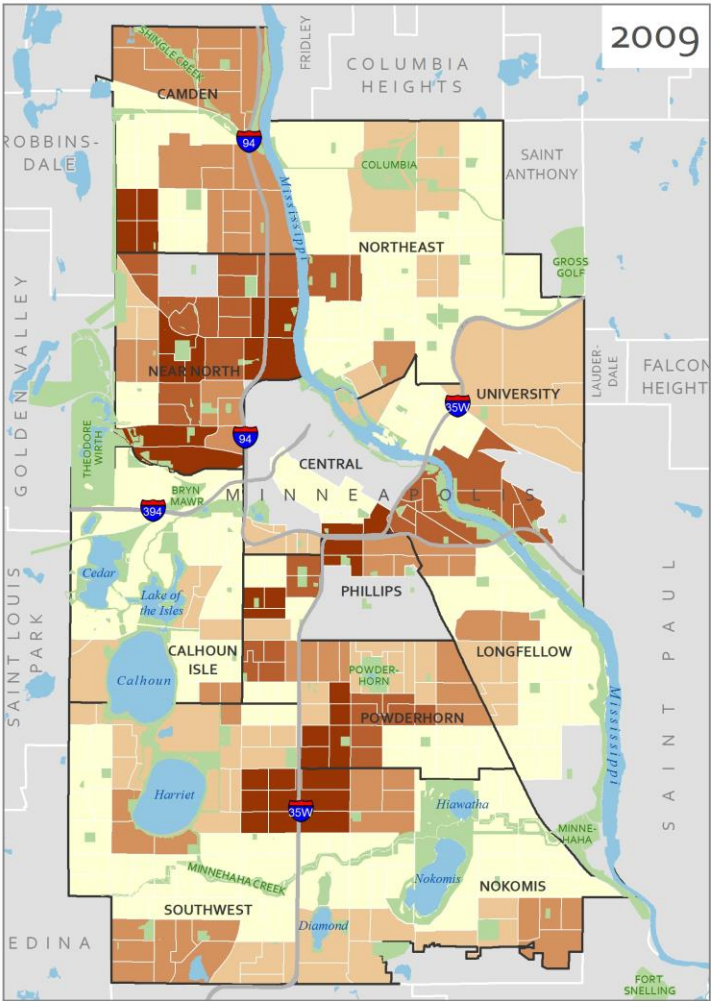
Parent Aware ranks early childhood education and childcare on a scale from 1 to 4 stars. 4-star facilities are considered the highest quality, and this map shows all such facilities in Minneapolis.

Women leaving for work between 4pm and 12am in North Minneapolis by block group, 2015, and 4 star childcare open late



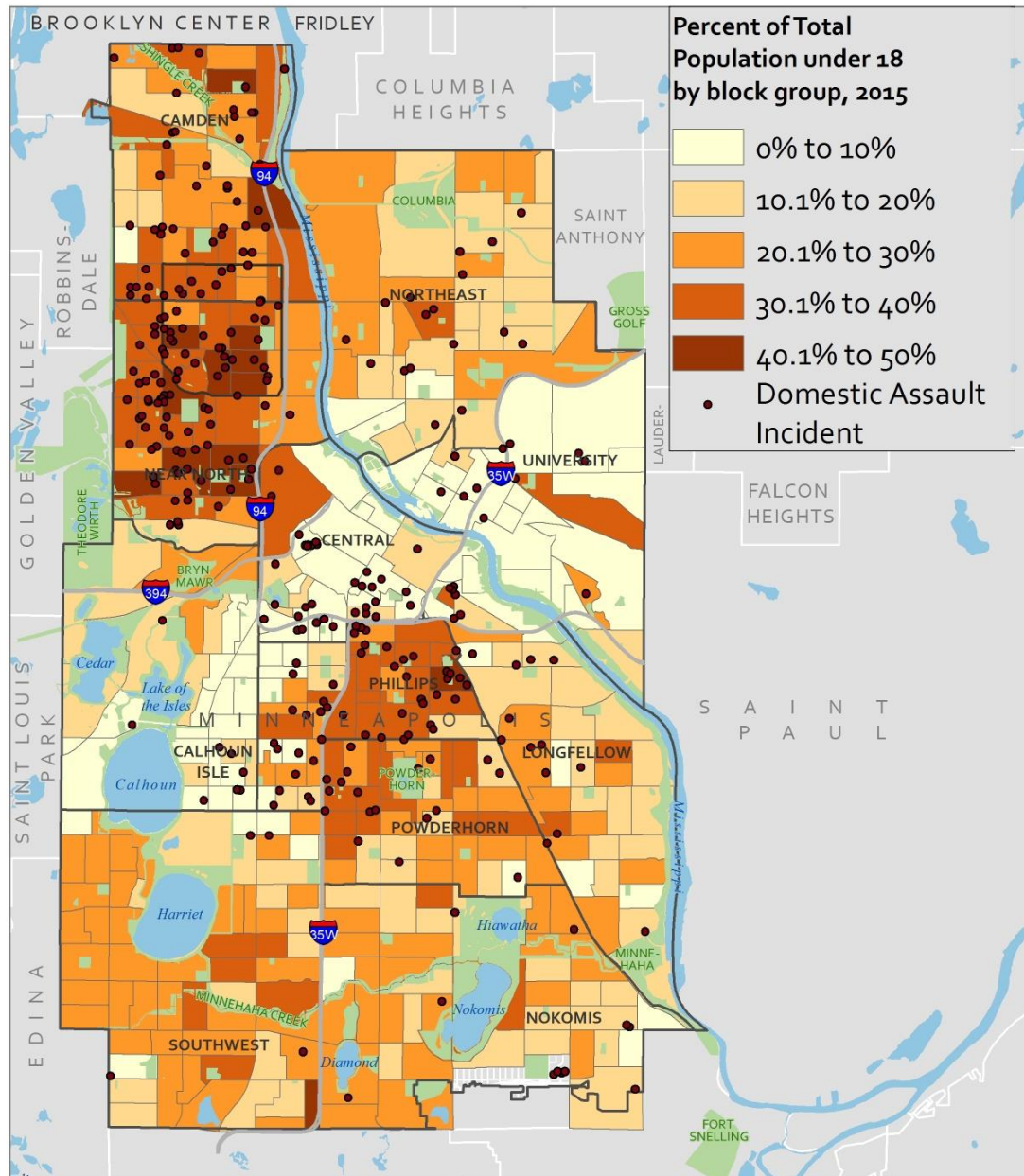
On the Northside, there is a lack of 4-star childcare facilities that are open outside of traditional hours and a sizable population of women working non-traditional hours.

Single-mother Households with Children in Minneapolis by Block Group



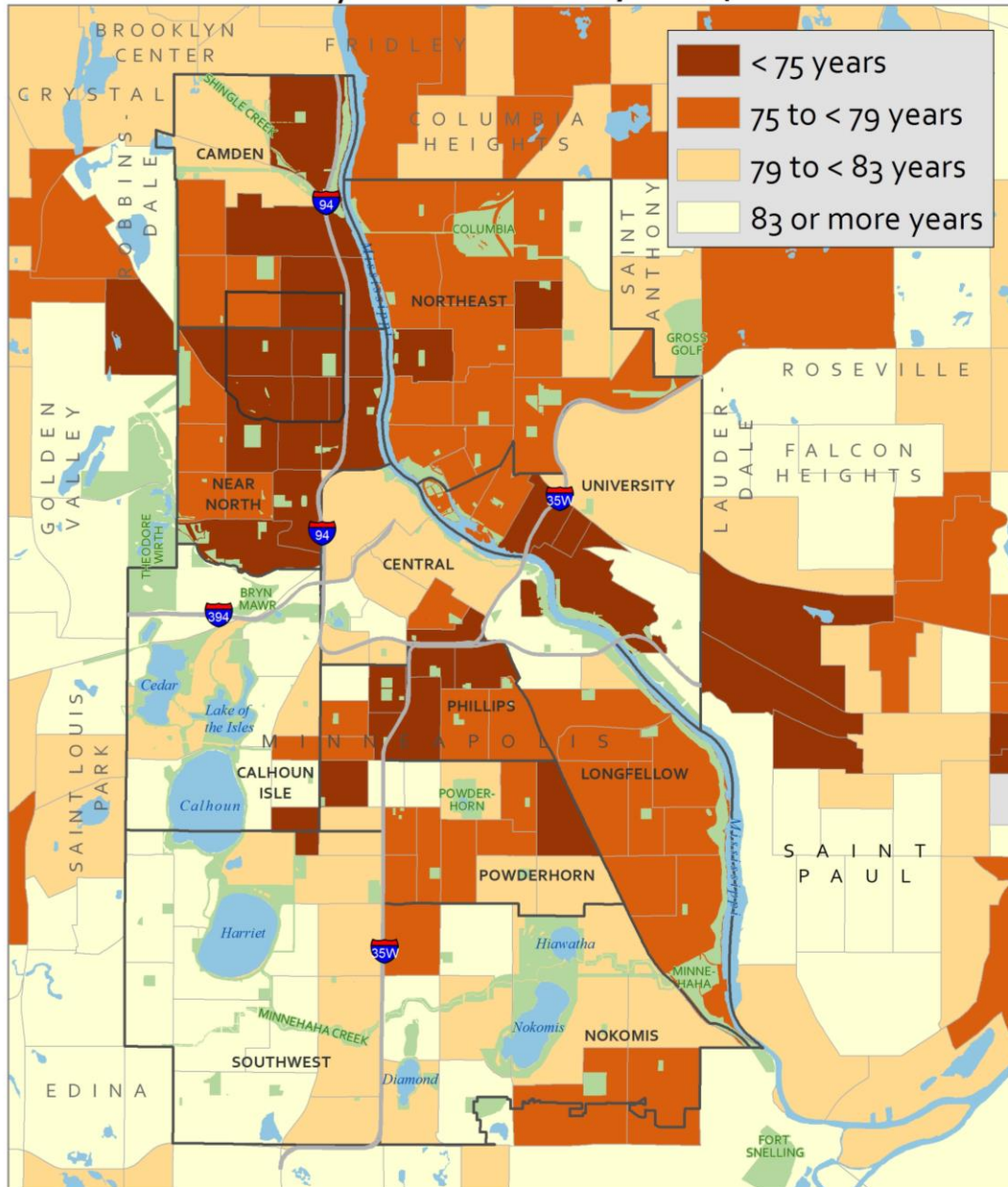
Compared to other Minneapolis neighborhoods over the last 10 years, the Northside continues to have higher percentages of single-mother households with children.

Domestic Violence Incidents and Youth Populations in Minneapolis, 2016



Since incidents of domestic violence that are witnessed by children can have detrimental effects on their emotional and physical health, it is important to investigate how to prevent these adverse childhood experiences.

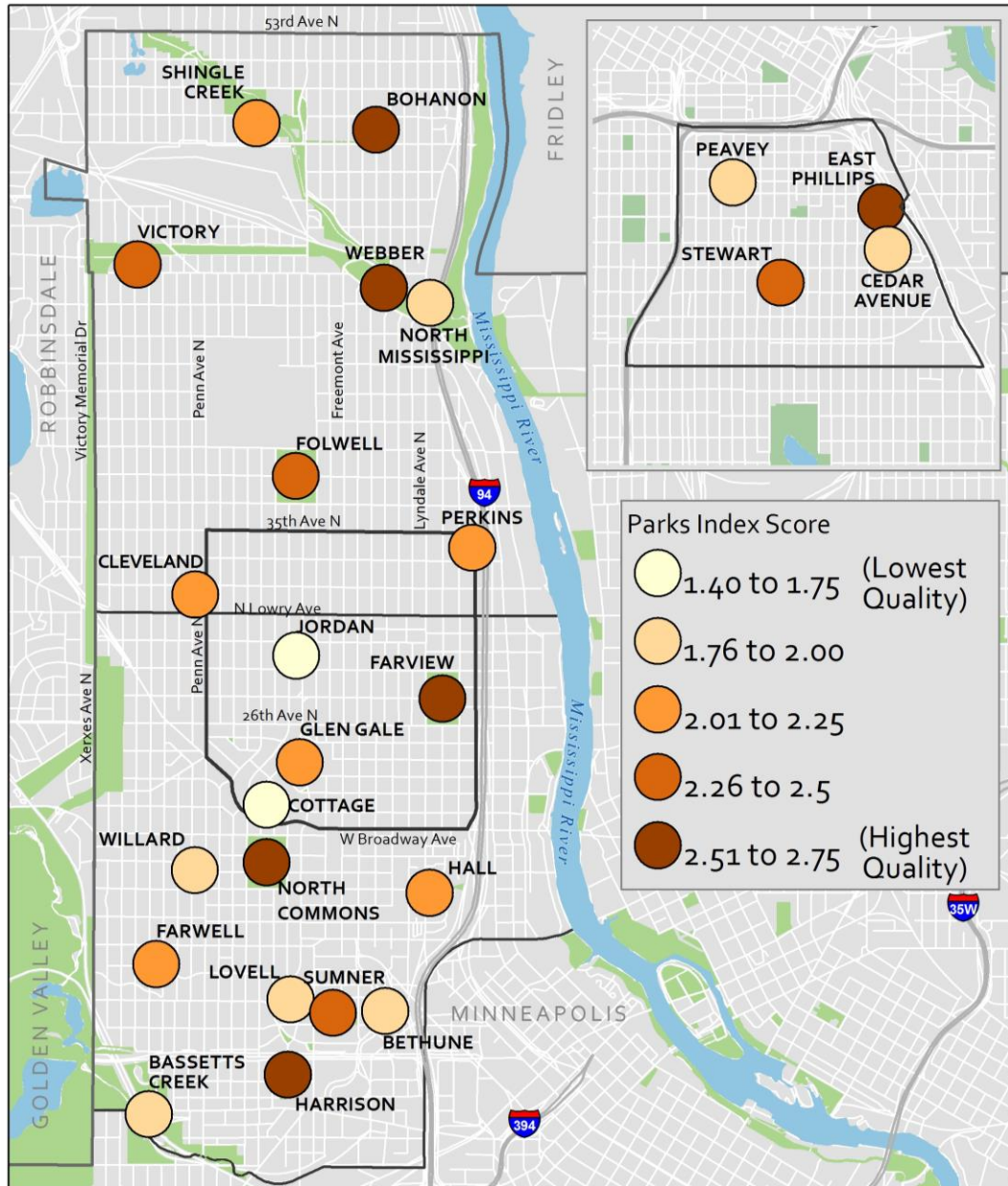
Life Expectancy in Greater Minneapolis, by Census Tract, 2014



Life expectancy here is based on which census tract a person is born in.

Where you live, and the associated conditions and resource availability, directly affect health outcomes.

Quality of Parks in North Minneapolis and Phillips, 2017



Phillips parks average: 2.28

Northside parks average: 2.21

NAZ parks average: 1.96

Despite a similar overall parks score in Phillips and the Northside, there is a cluster of low-scoring parks in Near North and in the NAZ that were poorly maintained and had an abundance of litter.

Conclusions

- Though our study of the Northside and our selection of variables is not exhaustive, it does highlight important considerations about some of the social, economic, and community characteristics that impact the lives of Northside families, especially the lives of mothers and children.
- This analysis provides an insight into the lives of Northside residents, and these variables provide an overview of the experiences of a local resident.

Recommendations

- Employment and economic empowerment are important aspects of the work of NAZ.
- NAZ could promote or invest further in programs designed to increase the number of Northside residents employed on the Northside, to help address the high commuting burden the community faces.
- There is a need to decrease the burden on working families and single-parent households who mostly travel outside the community for employment.

Recommendations

- Serving families, especially single-parent households, remains crucial.
- It is important to investigate incidents of domestic violence because of the potential detrimental effects on children who witness the abuse, and to provide resources to potentially affected children.
- There is a need for improved quality and availability of childcare open after hours on the Northside.
- The multi-faceted approach that NAZ takes to increasing resources and opportunities for children is particularly important on the Northside.



HISTORICAL DEMOGRAPHICS

Ruth Buck, Nina Escrivá Fernandez, Henry McCarthy, and Eleanor McGrath

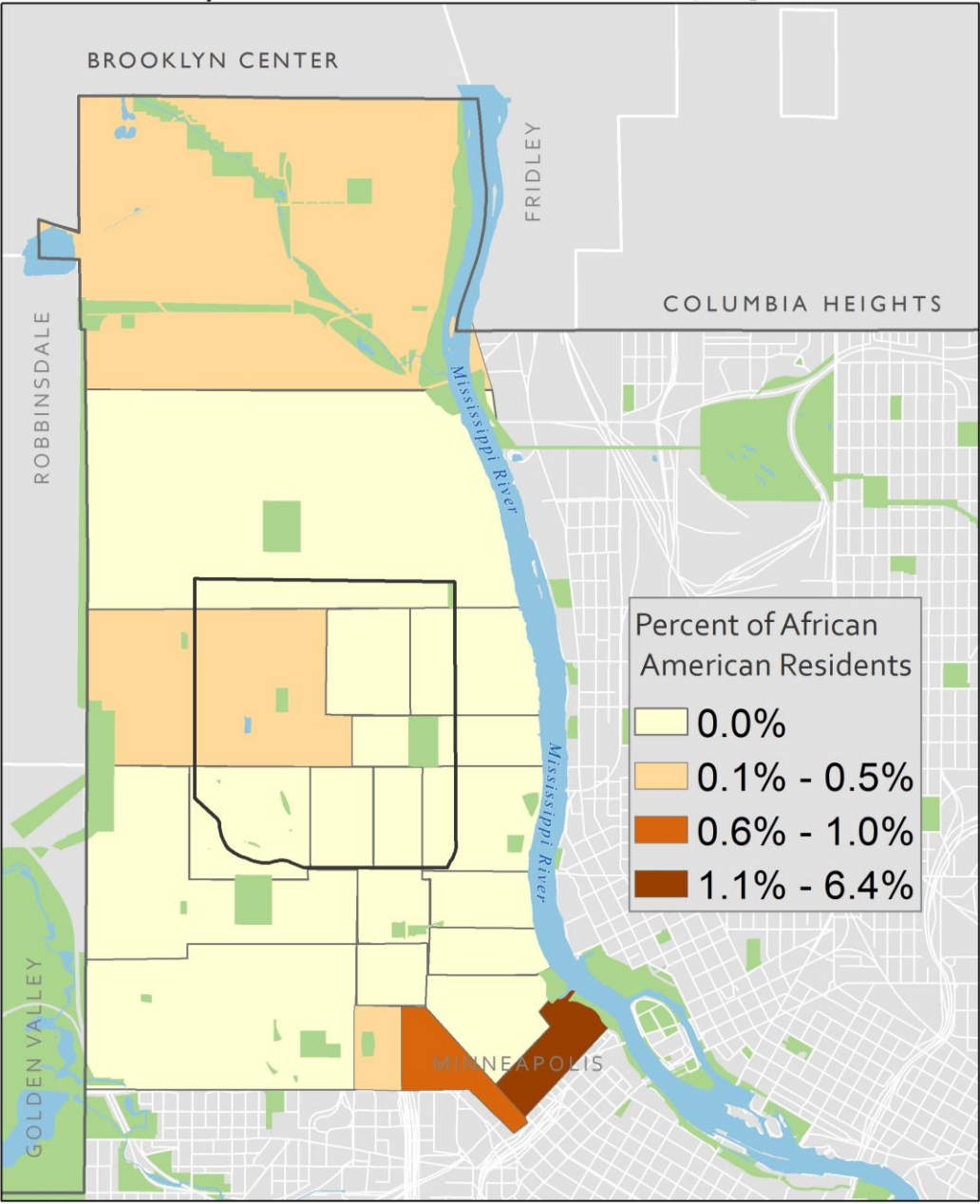
Research Questions

- How has the demographic composition of Minneapolis changed over the course of the 20th and 21st centuries?
- How do past public policy decisions and historic demographic trends continue to influence the Northside today?

Variables

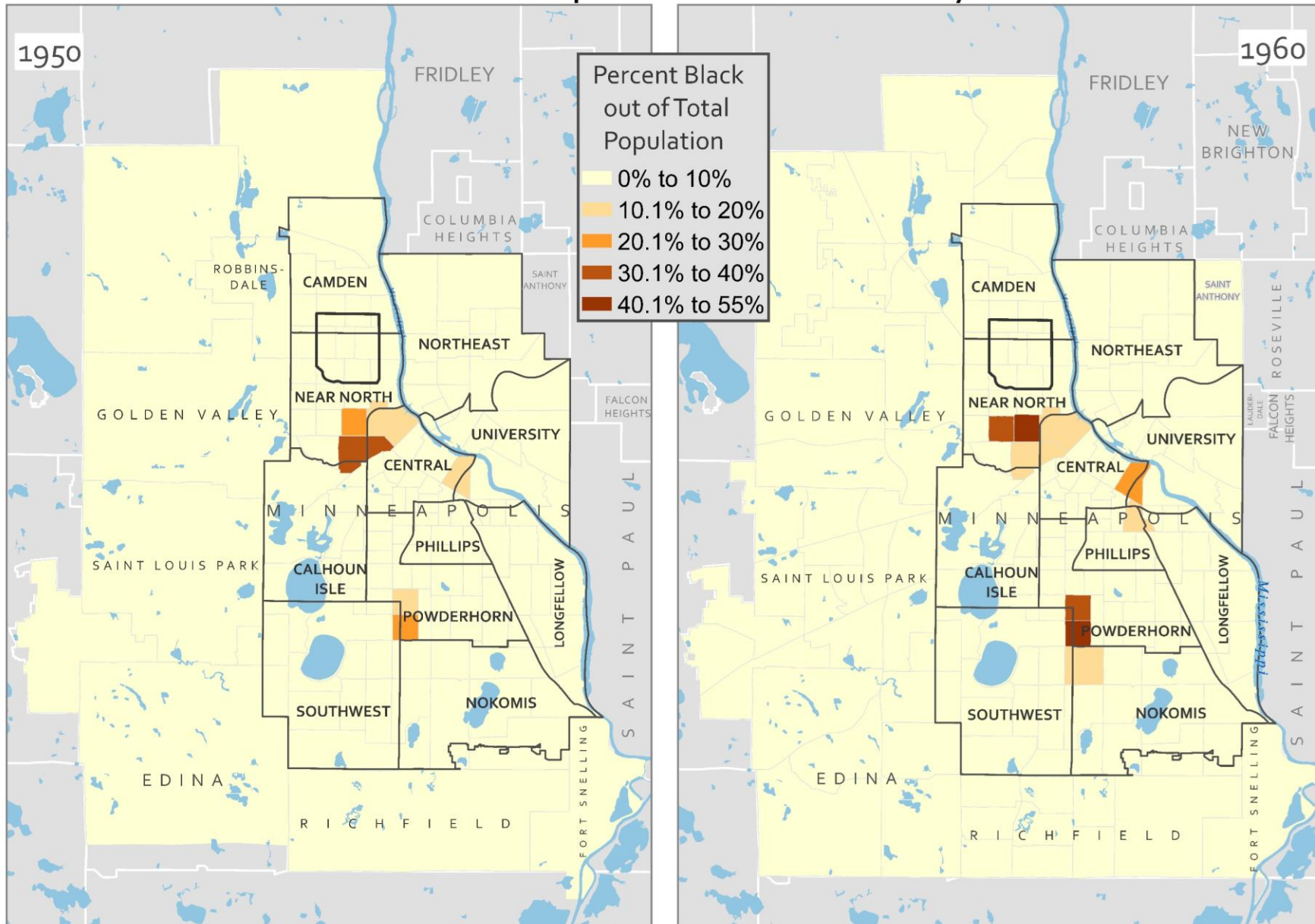
- Race/Ethnicity
- Age
- Areas of Concentrated Poverty
- Historical Discriminatory Public Policy
 - Redlining
 - 1935 Natural Areas

African American Population in North Minneapolis by Enumeration District, 1900



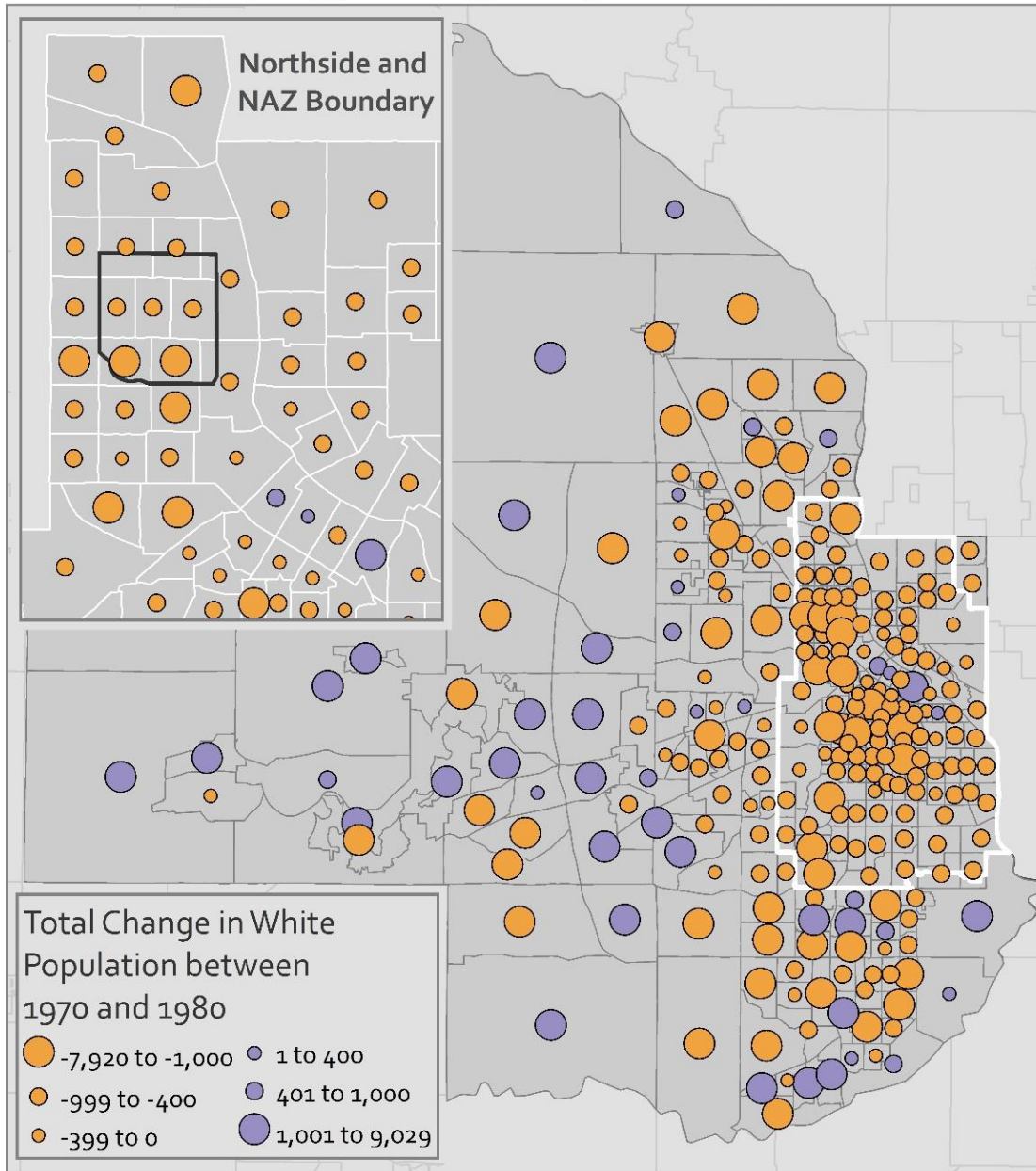
In 1900, the African American population was living in three distinct clusters on the Northside, with no other African American residents outside of those clusters.

Percent Black in Minneapolis and Suburbs by Census Tract



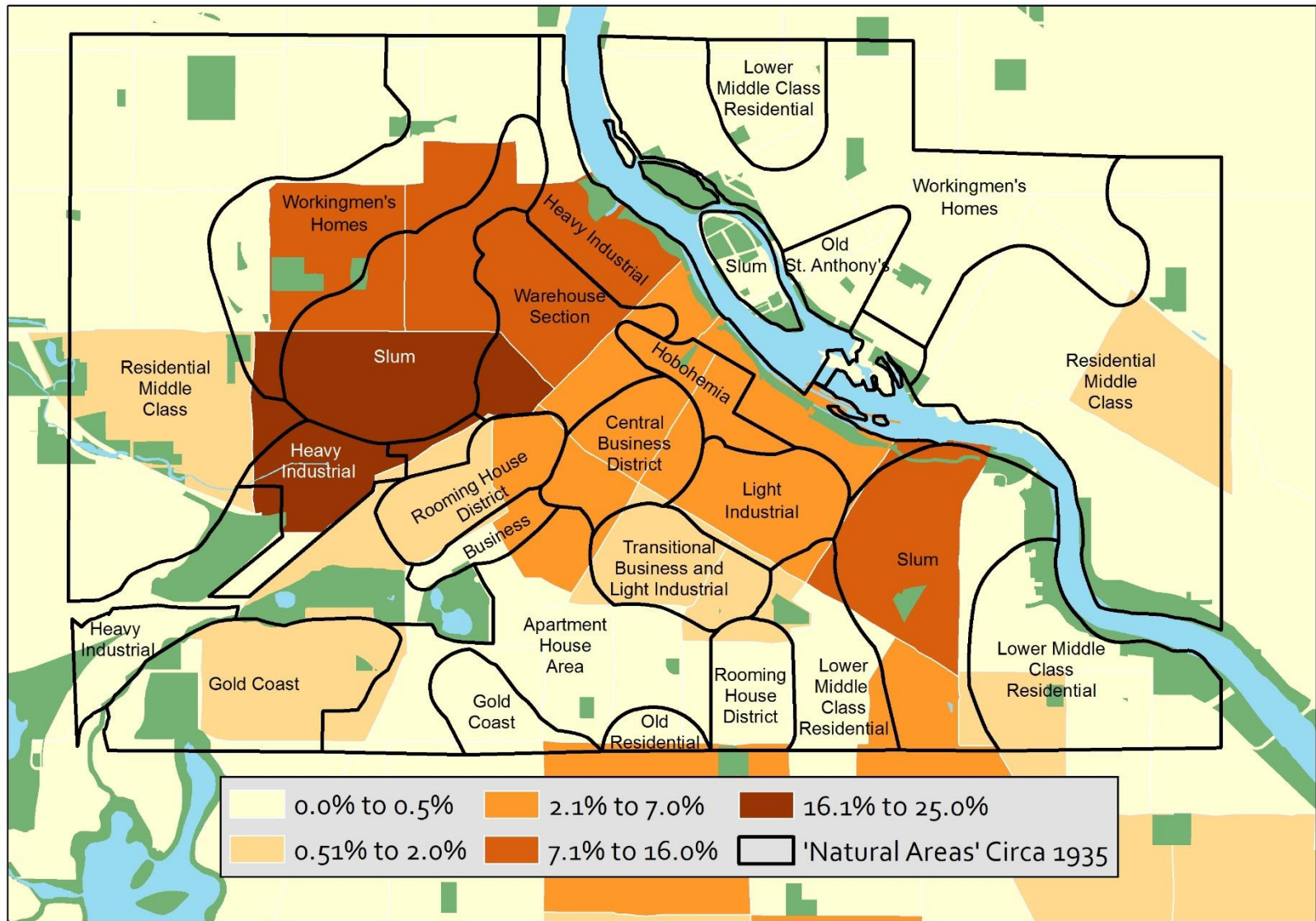
Both the North Minneapolis and Powderhorn neighborhoods saw a large increase in the Black population between 1950 and 1960.

White Flight to Hennepin County Suburbs from 1970 to 1980 by Census Tract



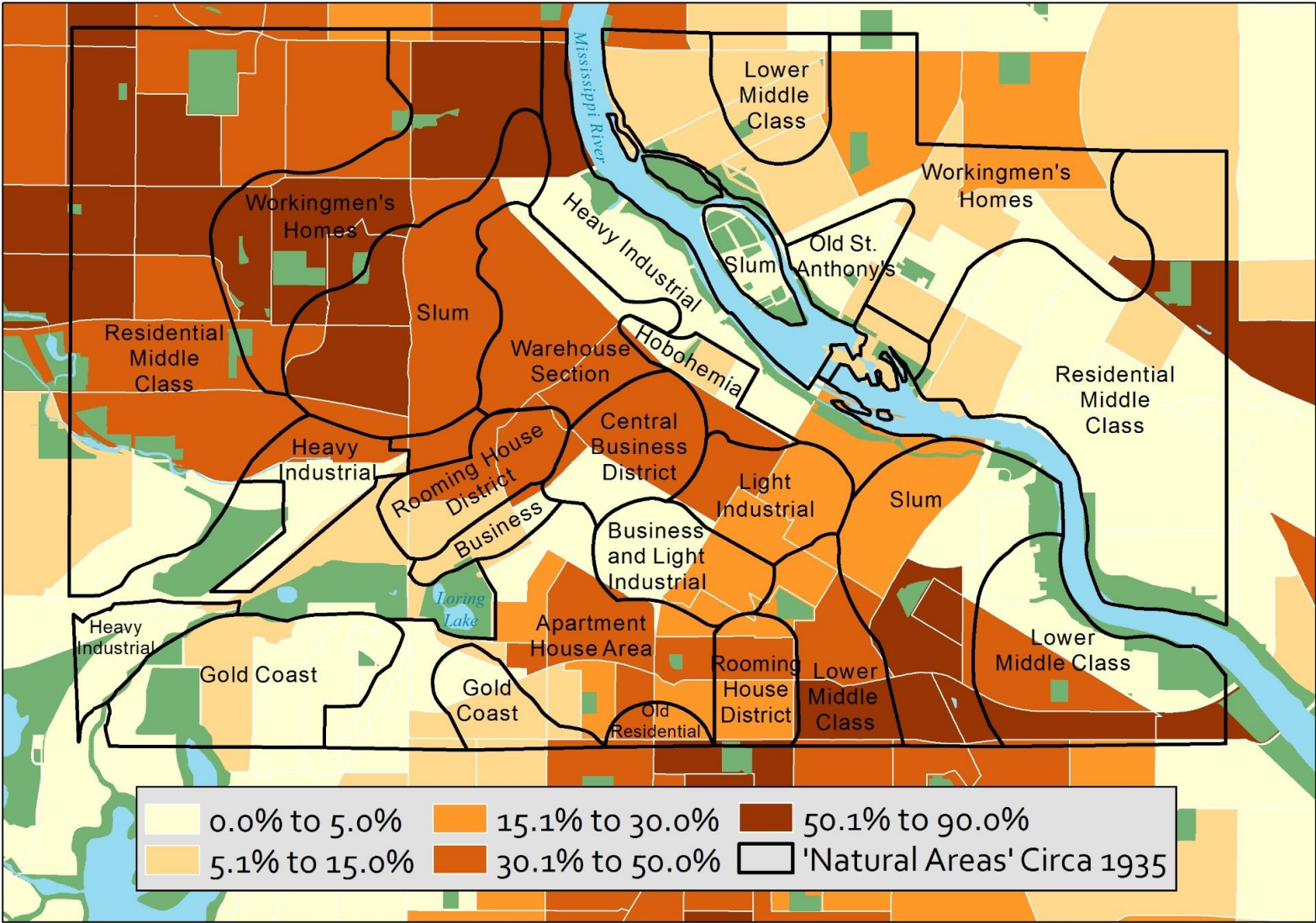
Between 1970 and 1980 white populations decreased in Minneapolis but increased in the suburbs.

Percent of Population Nonwhite by Census Tract in Minneapolis, 1940



At the time that the “Natural Areas” map was made, areas of Minneapolis with high non-white populations were classified as less desirable for development than predominantly white areas.

Percent of Population African American by Block Group in Minneapolis, 2015



Today, those areas characterized as less desirable in 1935 (e.g. “Negro Slum”) continue to have higher concentrations of African Americans than areas that were marked as more desirable for development (e.g. “the Gold Coast”).

Conclusions

- While the population of Minneapolis has changed considerably over the past century, examining historical trends helps to deepen our understanding of the current demographics of the Northside.
- Our study of the Northside's historical demographics creates a base of knowledge that enhances the findings of our classmates' research on current issues the Northside faces.

PROJECT SUMMARY

- Most of the variables we examined are strongly correlated with each other, reinforcing the idea that the Northside community faces pervasive structural issues.
- While other areas of Minneapolis face similar challenges, the persistence and intensity of these challenges are unique to the Northside.
- The fact that so many of these challenges directly affect youth and family welfare provides strong support for the holistic, wraparound approach of the Northside Achievement Zone program.
- The magnitude of the youth population on the Northside presents the opportunity for NAZ to make a significant and lasting impact on the community.

LOOKING FORWARD

- Impactful geographic visualizations support and enhance a compelling narrative about the need for a place-based initiative in the Northside and the necessity of the wraparound framework.
- Multi-variable research helps to identify additional issues, connections, and potential NAZ program partners.
- Continued assessment of select variables can contribute to evidence-based measurement of progress toward eradicating disparities.

ACKNOWLEDGEMENTS

Sondra Samuels (President and CEO) and the Northside Achievement Zone

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Zoe Thiel, City of Minneapolis

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