

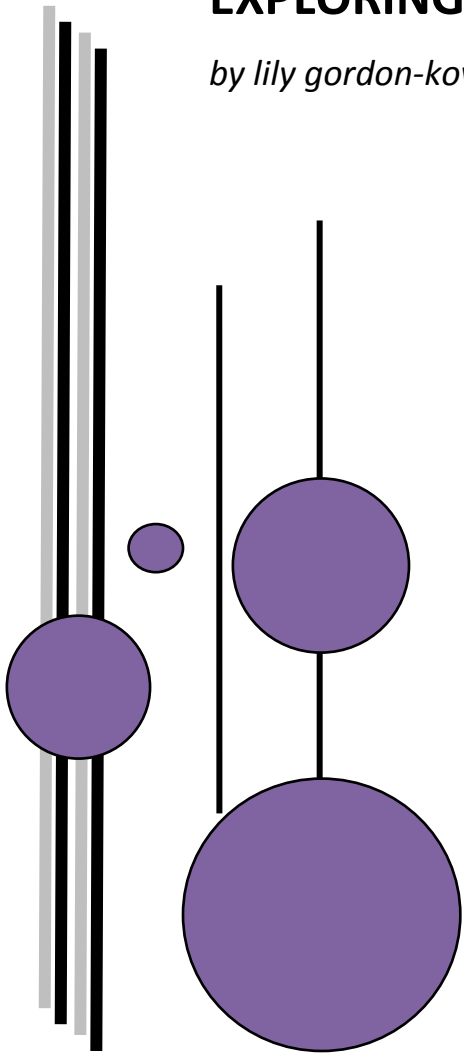
III. SOCIAL IMPACTS OF THE BUILT ENVIRONMENT



vi. CENTRAL CORRIDOR SUBSIDIZED HOUSING:

EXPLORING EXISTING PATTERNS

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This Chapter's Questions:

1. How do existing affordable housing patterns relate to social, economic, and demographic patterns in a one-mile buffer zone along the Corridor?
2. Is the Corridor in danger of gentrification?
3. Where should future affordable and subsidized housing efforts focus on the Corridor?

Chapter Outline:

- I. Introduction
- II. Data Sources and Methodology
- III. Urban Investment and Gentrification
- IV. Affordable Housing Definitions and Context
- V. Analysis
- VI. Conclusions and Questions

I. INTRODUCTION

Light rail development along the Central Corridor brings the potential for significant change to Twin Cities neighborhoods. Positive changes include expansion and improvement to the existing transit system as well as potential for environmental sustainability and economic growth¹. The successful implementation of the project has the potential, in short, to dramatically change the fabric of the region as a whole as well as the areas adjacent to the line.

In addition to chaotic construction and loss of some existing amenities, such as on-street parking, the implementation of the light rail has many implications for the future of existing communities along the Corridor². Investment in transit can be used as a tool for economic growth and urban revitalization in places like the Central Corridor. However, while beneficial to the region, economic success is not always translated to local communities.

Rising costs of living and doing business as a result of urban revitalization have acted as forces of displacement in urban areas across the country³. As property values rise, low-income populations can be priced out of existing neighborhoods. This process, known as gentrification, is essentially a class

conversion of low-income and often minority neighborhoods⁴.

As construction begins on the Central Corridor light rail project, evaluating the current characteristics and climate of the area is crucial to evaluating future change. Understanding what these patterns look like today will help evaluate change and hopefully support those working to ensure the future stability of existing communities along the Corridor.

Many concerns about the project revolve around the effects of light rail on business and parking on University Avenue⁵; however, this study focuses on the existing relationship between subsidized housing and 2010-era demographics.

Just as gentrification has the potential to affect local demographics, it also has the ability to affect the future of affordable housing along the Corridor. Given that it cannot compete with market-based real estate, affordable housing is traditionally built on less desirable land where costs are lower. Many community groups and residents fear that the likelihood of affordable housing construction may decline as property values rise⁶.

While there are many housing opportunities available to residents, publicly-funded and supported housing is often essential in low-income

neighborhoods. The presence of affordable housing in such areas is a key factor in sustaining neighborhood stability. Both rising land values and potential loss of subsidized housing would impact low-income communities currently in existence.

It is possible that economic growth could have a positive effect on local communities and foster internal wealth and economic development. However, studies of comparable projects and urban areas indicate that land values and housing costs will increase⁷. It is likely, therefore, that neighborhoods adjacent to the Central Corridor will experience gentrification. What gentrification will mean specifically for the Central Corridor is dependent on the reaction of social and cultural groups, economic forces, and political structures, including zoning codes⁸.

How do existing affordable housing patterns relate to social, economic, and demographic patterns in a one-mile buffer along the Corridor?

This study seeks to answer this question through a variety of means. First, I will examine the process of gentrification; provide a brief background to affordable housing; and discuss local affordable housing patterns. Second, I will present and analyze a series of maps aimed at illustrating existing patterns and relationships. Through map analysis, I

argue that the existing demographics along the Central Corridor illustrate a strong connection between minority groups, low-income populations, and rates of affordable housing. As research on gentrification shows, these groups and neighborhoods are typically at risk for displacement through gentrification. Drawing attention to existing patterns in the early stages of construction is crucial for sustaining existing communities and improving housing infrastructure.

II. DATA SOURCES AND METHODOLOGY

In order to illustrate the existing relationship between affordable housing and local populations, I have created a series of maps that incorporate a variety of demographic and socioeconomic characteristics in conjunction with presence and concentration of affordable housing rental units.

The discussion and analysis then focus on the relationship between low-income and minority populations and existing affordable housing. Understanding this relationship will be key for evaluating gentrification and identifying the best locations for affordable housing development.

The maps for this project combine HousingLink data on affordable housing in Ramsey County with Nielsen-Claritas and Metropolitan Council data on 2010 demographics and economic characteristics along and adjacent to the Central Corridor. The majority of the maps illustrate patterns existing in the one-mile buffer north and south of the Central Corridor light rail within the city of Saint Paul. All maps feature the light rail line, station areas, and a ¼ mile buffer north and south of the line.

There are several limitations with the data to consider before evaluating the corresponding maps. First, due to the specific nature of housing data, information is displayed at the block group level. Second, the HousingLink data represent affordable rental units only; no ownership unit data is reflected in this analysis.

Third, the data represented are limited to the one-mile buffer along the Saint Paul section of the Central Corridor line. This study does not include any data on Minneapolis block groups. Fourth, the data represent a sample of housing units and therefore are not entirely representative of affordable housing costs and numbers in Saint Paul. It is important to consider these limitations when examining the following maps.

Before demonstrating existing patterns, I will provide a brief overview of

the process of gentrification and the context of affordable housing in the city of Saint Paul.

III. URBAN INVESTMENT AND GENTRIFICATION

Development in the urban core differs from suburban and rural development in that it carries the potential to affect both the city and its surrounding areas. Investment in transportation is a way to spur economic growth and attract new businesses, wealthier residents, and a regional interest in older areas⁹. Other chapters in this atlas provide more detail on gentrification, this section provides context on gentrification that will be useful in the discussion of demographics and housing.

In the decades following World War II, government and private agencies created and utilized policies that promoted suburbanization of the booming White middle-class. These policies privileged certain populations, leaving low-income groups isolated and minority populations segregated in the inner city. Cities faced issues of disinvestment and deterioration of services and infrastructure.

The period of disinvestment in the city shifted to one of reinvestment and

revitalization in the 1980s. Improvements and investment in urban infrastructure have often gone hand in hand with the process of gentrification. Gentrification often has negative implications and indicates a shift in population demographics in any given area. The process typically occurs when groups such as students, artists, and bohemians move into neighborhoods devoid of significant investment¹⁰. While some scholars argue that economic motivation drives this group of early gentrifiers¹¹, others argue that desire for unique or safe cultural space motivates individuals¹².

Regardless of their motivation, cycles and spectrums of gentrification have the power to change the fabric of urban neighborhoods. As a force of class turnover, the result is generally the displacement of lower-income people as investment from wealthier populations causes property values to rise. In the Twin Cities, for instance, transitions in Uptown and Northeast Minneapolis have been identified as a part of the cycle of gentrification¹³. The film, *Flag Wars*, depicts the gentrification of a Black neighborhood in Columbus, Ohio. The film illustrates the delicate tension between gentrifiers and existing residents, many of whom fear displacement as a result of an influx of wealthier and whiter individuals and families¹⁴.

Displacement is harmful to individuals and families for a number of reasons. It disrupts community stability and dismantles established ties between residents and institutions. Displacement through gentrification has also been found to increase the need for subsidized housing¹⁵, which, as we will see, is already high in the Central Corridor.

Postwar federal policies and economic practices and gentrification lead to displacement or isolation of specific groups. However, because of its market-driven nature, gentrification differs from previous forces of displacement and isolation of poor and minority populations. Due to its cultural and economic nature, gentrification can be harder to identify and evaluate than concrete policies. Though urban investment, such as light rail, may act as a harbinger for gentrification, this differs greatly from previous policies of explicit exclusion of low-income and minority groups.

Neighborhoods across American cities have experienced gentrification to varying degrees; there is no single way to define or quantify gentrification. We can however, look to changes in population, changes in commercial activity, and changes in real estate and land values to gauge how the Central Corridor changes with the implementation of the light rail.

IV. AFFORDABLE HOUSING: DEFINITIONS AND CONTEXT

Affordable housing carries many connotations and can include many types of housing that are funded or supported through different public, private, and non-profit bodies. The federal government began subsidizing housing following the 1949 Housing Act, which aimed to create and support safe and affordable housing for all American families¹⁶. In Saint Paul, this led to the eventual creation of the Saint Paul Public Housing Agency.

Subsidized housing development historically consisted of large-scale and low-quality properties designed to house the country's urban poor at the lowest possible cost. Projects including Saint Louis's Pruitt-Igoe¹⁷ and Chicago's Cabrini-Green gained reputations as extremely dangerous and unhealthy places to live. These harsh landscapes fostered high rates of violence and crime and did not encourage integration of individuals based on race or socioeconomic status¹⁸.

Since the 1980s, approaches to affordable housing design and policy have shifted to focus on creating livable and safe housing for low-income populations. This shift in policy reflected a larger trend of investment and interest in urban spaces,

which, as the previous section highlighted, was ignored for the first few decades following World War II. Funding through programs like HOPE VI encourages affordable housing development based on improving living conditions and aesthetics of low-income neighborhoods¹⁹ and the creation of mixed-income communities.

These types of projects are typically smaller in scale, comprising townhomes or duplexes, rather than apartment towers. Non-profit and private affordable development now attempts to mirror the scale and style of neighboring homes. Contemporary affordable housing efforts also aim to create scatter-site housing, avoiding concentrating poverty. By integrating affordable and market-rate units, scatter-site development aims to integrate households with different socioeconomic backgrounds. Focusing on creating quality design, current affordable housing developers see the built environment as a tool in improving neighborhood and individual health. As such, specifically dedicated affordable housing is deeply tied to the health and status of the surrounding neighborhood.

The housing data come from HousingLink, a Minnesota non-profit that helps residents find affordable housing throughout the region. It is important to note that there are a myriad of non-profit and government agencies working on the

issue of affordable housing. HousingLink's data provide a window into the complete picture of affordable housing opportunities and partners.

The data illustrated in the maps in this chapter represent rental units in Ramsey County that are publicly subsidized. Rent in these units is restricted so that it remains affordable for low- and moderate-income households. These properties are funded and supported through one of four programs: Section 8 vouchers, public housing, project-based Section 8, and Section 42 tax credit.

Section 8 vouchers provide individuals and households with vouchers from the local Housing Authority to use in private-market housing whereas project-based Section 8 connects the subsidy to the building. Public housing, as opposed to project-based Section 8 housing indicates government - rather than privately owned - buildings tied to subsidies. Lastly, Section 42 tax credits provide incentive for private market developers to include affordable units in their developments²⁰.

According to HousingLink, there are 213 properties in Saint Paul that include publicly-subsidized rentals. Nearly 75 percent of these properties are exclusively dedicated as affordable rental units. The other 25 percent of properties include a range of developments: some of which have less than 20 percent affordable

rental units and some of which have over 90 percent affordable rental units²¹.

Other agencies that play a role in affordable housing include the Saint Paul Public Housing Agency. Saint Paul Public Housing Agency owns and operates 4,249 units in the city, the majority of which are in sixteen high-rise apartment buildings²². Residents of these units pay no more than 30% of their monthly family income.

Non-profit agencies of various sizes from the regional Common Bond to the local Aurora-St. Anthony and Greater Frogtown Community Development Corporations own and operate affordable housing along the Corridor. The number of agencies and players in the industry complicates the process of creating a comprehensive image of affordable housing.

Again, it is important to remember that these numbers represent rental units only. There are affordable owner-occupied units as well as market-based affordable units available throughout parts of Saint Paul. Market-based affordable units are apartments and homes that do not have subsidies but have lower rents due to neighborhood land values. As in any city, some Saint Paul neighborhoods have much higher property values due to physical amenities, relative location, size of lots and homes, architectural style, and other characteristics. In Saint Paul, many of

these neighborhoods fall within the one-mile buffer of the Central Corridor light rail.

Within one mile of the Central Corridor line, there are 147 properties that include publicly subsidized units²³. Of these properties, 8,765 units are subsidized. This is roughly 65 percent of the total subsidized units in the city of Saint Paul. Higher concentrations of affordable units in large developments and apartment buildings raise several questions about concentrations of poverty in a relatively low-density metropolitan area.

While light rail brings a myriad of opportunities, transit improvements will not directly improve affordable housing along the Corridor. As such, the Metropolitan Council, the Twin Cities regional government body, has studied the current status of affordable housing in the region as well as evaluated future needs. According to a 2006 report conducted by the Metropolitan Council, Saint Paul will need to construct between 2,000 and 3,000 new units of affordable housing between 2011 and 2020. This figure represents new construction only and attempts to highlight anticipated needs of local populations.

The report discusses the importance of locating affordable housing near job opportunities; a connection to keep in mind while reading the economic-focused chapters in this atlas.

Interestingly, the report also notes the need for affordable housing construction to occur in close proximity to public transportation. This is particularly important given that oftentimes, the most expensive land is adjacent to transit stations. The connection between low-income groups and transit dependency implies that improvements in public transportation infrastructure will be beneficial to these groups. It also highlights that the Central Corridor represents an opportune place to focus affordable housing construction.

V. ANALYSIS

Many of the chapters in this atlas seek to understand the current characteristics – social, economic, physical, and political – of the Central Corridor. This study in particular, highlights the current socioeconomic and racial makeup of the Corridor through the lens of affordable housing. Understanding who lives along the Corridor prior to light rail development is important for identifying existing communities and urban spaces. Studies like this one can and should be used as comparison points for future studies.

Documenting the locations and concentrations of affordable housing shows

us existing patterns that may change as a result of light rail. By comparing affordable housing patterns with social and economic characteristics, I hope to draw conclusions about what populations are accessing affordable housing and theorize about how this population will be affected by light rail and subsequent changes.

LOCATION AND CONCENTRATION

Using data from HousingLink, Figure 1 illustrates the absolute number of affordable housing units in Ramsey County by block group. The map shows the location and clustering of rental units with public subsidies that restrict rent levels affordable to low- and moderate-income households. Of the 103 block groups in the study area (seen in pink), 56 block groups (54 percent) have at least one subsidized rental unit. The symbols on this map represent a total of 13,334 subsidized rental units, of which 8,765 (66 percent) lie within the Central Corridor.

Though affordable rental units are dispersed across Saint Paul, there are a few clear concentrations of affordable units, including one originating in downtown Saint Paul running west along University Avenue. This sector includes the Frogtown and Rondo neighborhoods, historically home to minority groups such as the Hmong and Black populations

respectively. The West 7th corridor, East Saint Paul, and the West Side also show concentrations of subsidized units.

As discussed earlier, subsidized housing has taken many different shapes over the past several decades. As such, this map represents not only subsidized units built in the last decade, but includes subsidized units in older developments and apartment towers. These include well known and easily identified developments including Mt. Airy, Skyline Towers, McDonough Homes, and St. Anthony Residence.

Figure 2 illustrates the ratio of subsidized rental units to number of families under the poverty line in each block group. The correlation between existing subsidized units and need for more units is quite clear. All of the block groups shown in bright orange represent areas where there is less than one unit of subsidized housing for each family in poverty. This illustrates a dramatic need for more subsidized housing in these block groups.

The block groups shown in beige, on the other hand, represent areas where there is more than one unit of subsidized housing for each family under the poverty line. These block groups also have far fewer units of subsidized housing, as seen in the smaller green dots. This map implies that the areas with large green dots and

orange backgrounds represent concentrations of poverty.

What this map shows us is that areas that have the highest demand for more subsidized units also currently *have* the highest number of subsidized units. These block groups also encompass some of the more traditional large-scale apartment towers and complexes – pointing to the fact that though current affordable housing patterns focus on scatter-site and mixed-income housing, towers such as Skyline Towers and complexes such as Mt. Airy still dominate the landscape.

One limitation with the available data is that the totals do not take into account market-based affordable units; units that have low rents based on the property values and relative income levels of the neighborhood. Likewise, the map illustrates families whose income is less than the poverty line, which excludes families making close to the poverty line or facing other economic hardships not represented in this category.

Household affordability is, as previously mentioned, typically defined when a household pays no more than 30 percent of its monthly income on housing. Thus, if a household earns \$4,000 a month, they should pay no more than \$1,200 on rent. According to January 2011 HousingLink data, average monthly rent

for vacant units varied from \$589 for a studio unit to \$1,463 for a five/six bedroom unit. Average rent for a two-bedroom unit, the most common unit type, was \$845. The complete averages can be seen in the chart below:

Unit Type	Average Rental Price (Jan. 2011)
Studio	\$589
1 Bedroom	\$682
2 Bedroom	\$845
3 Bedroom	\$1,017
4 Bedroom	\$1,280
5/6 Bedroom	\$1,463

Data limitations prevented a comparison to 30 percent of the median incomes along the Central Corridor by household size. Figure 3 illustrates 30 percent of the median household income per month (or the annual median income divided by twelve months) in relation to existing subsidized rental units. As expected, the areas with highest numbers of subsidized units are also those with the lowest rent thresholds, or least ability to pay rent.

Though the rent threshold shown represents total median household income, if we generously assume each household requires a two-bedroom unit, households in the lightest-pink block groups would not be able to afford rent.

Figure 1

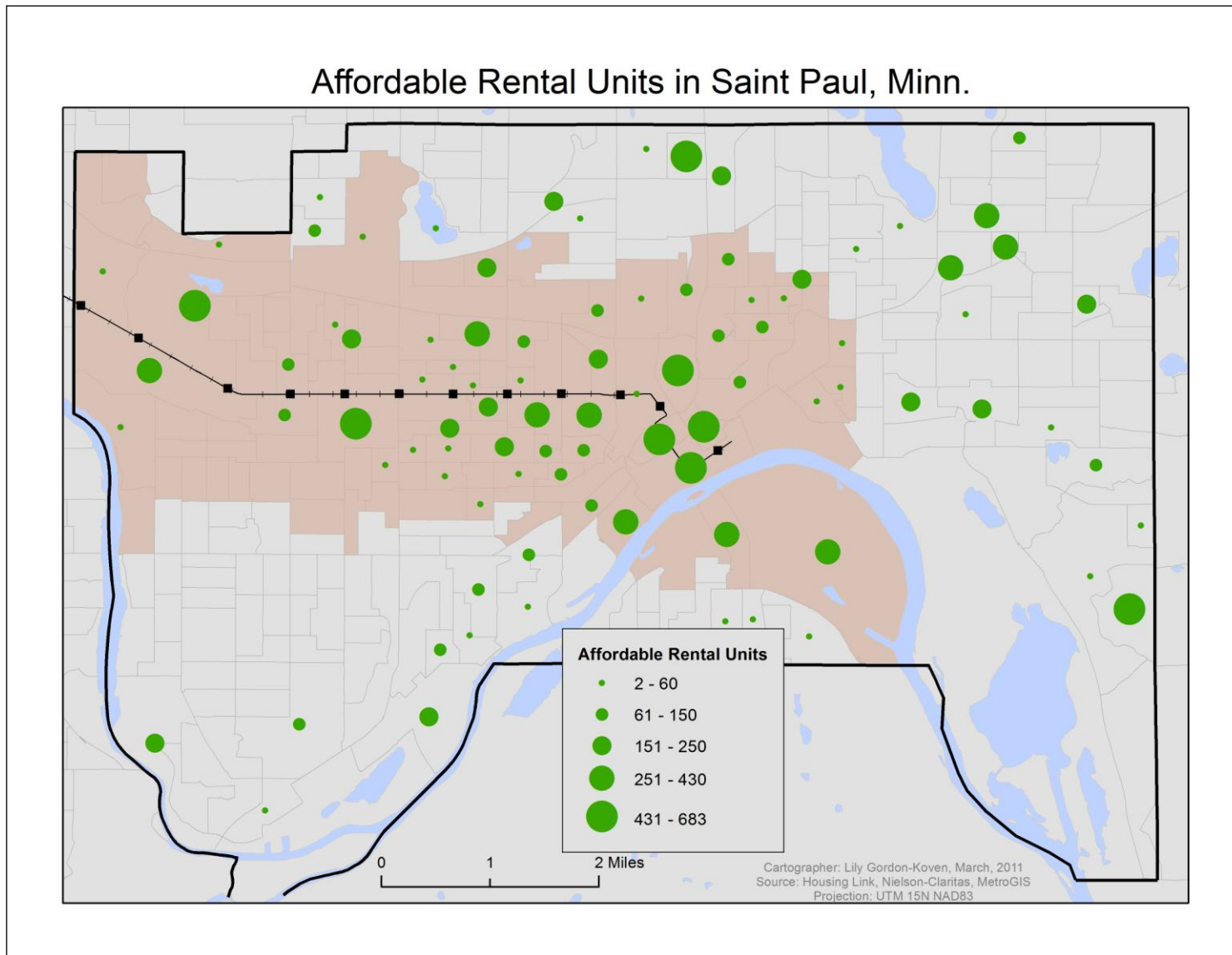


Figure 2

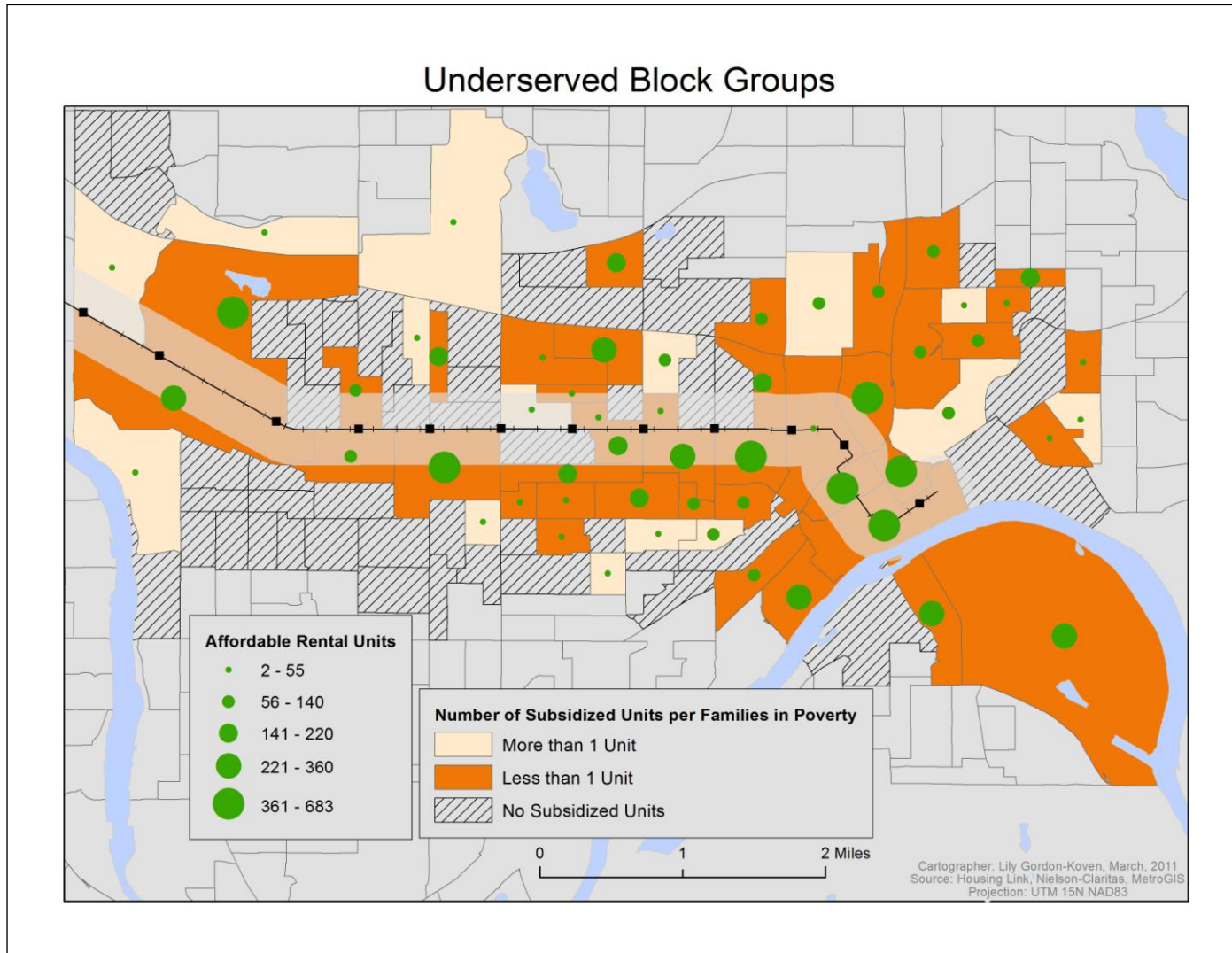


Figure 3

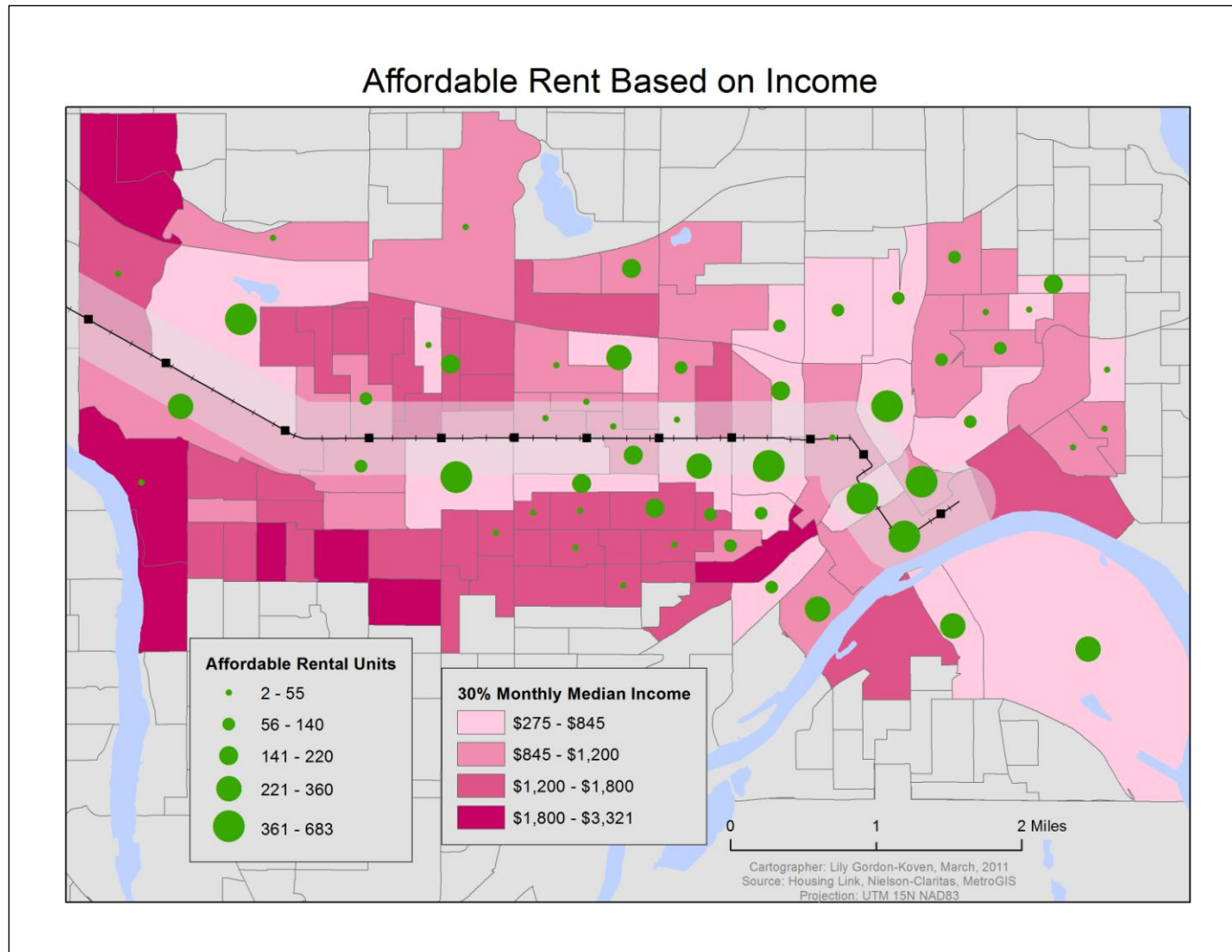


Figure 4

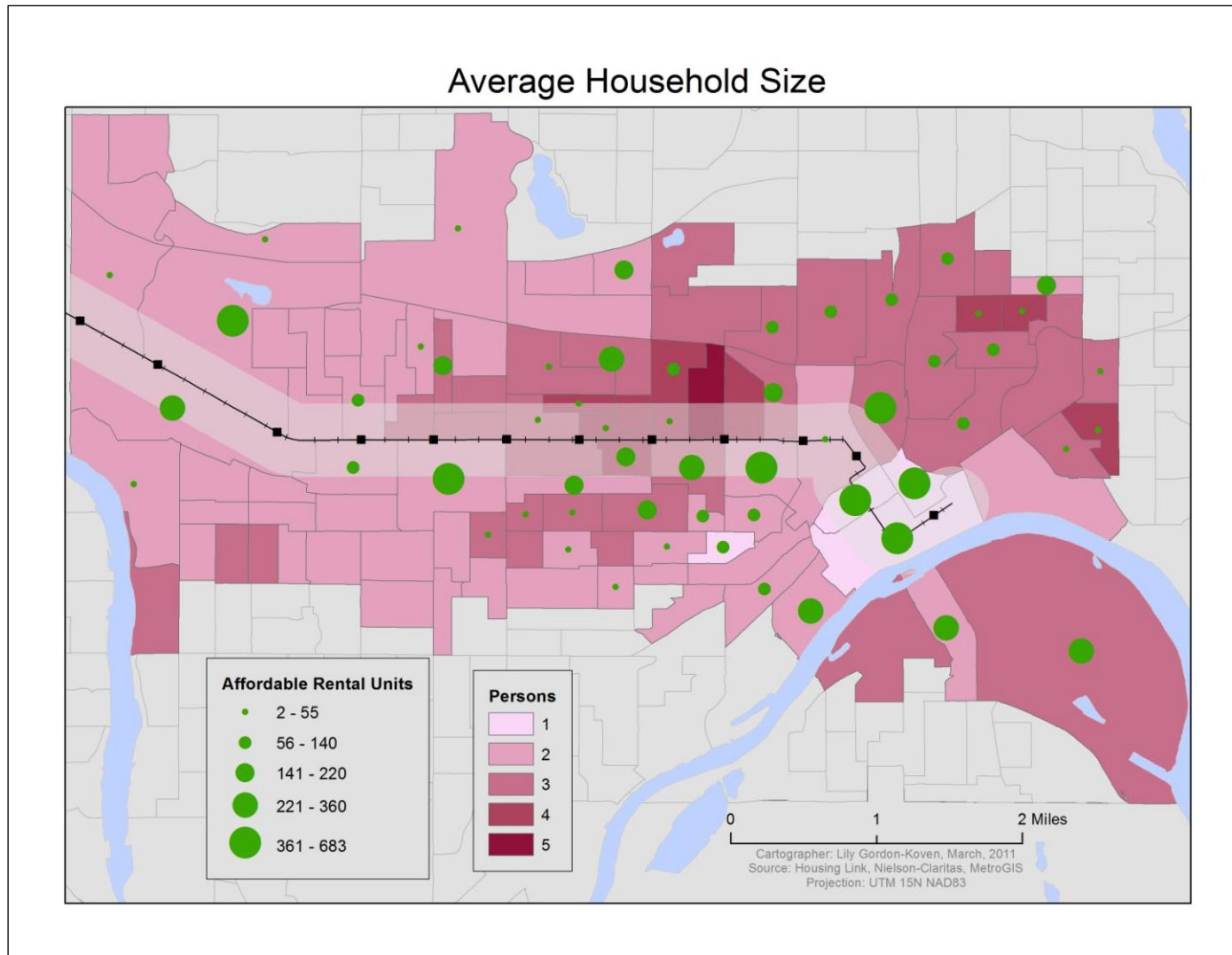


Figure 5

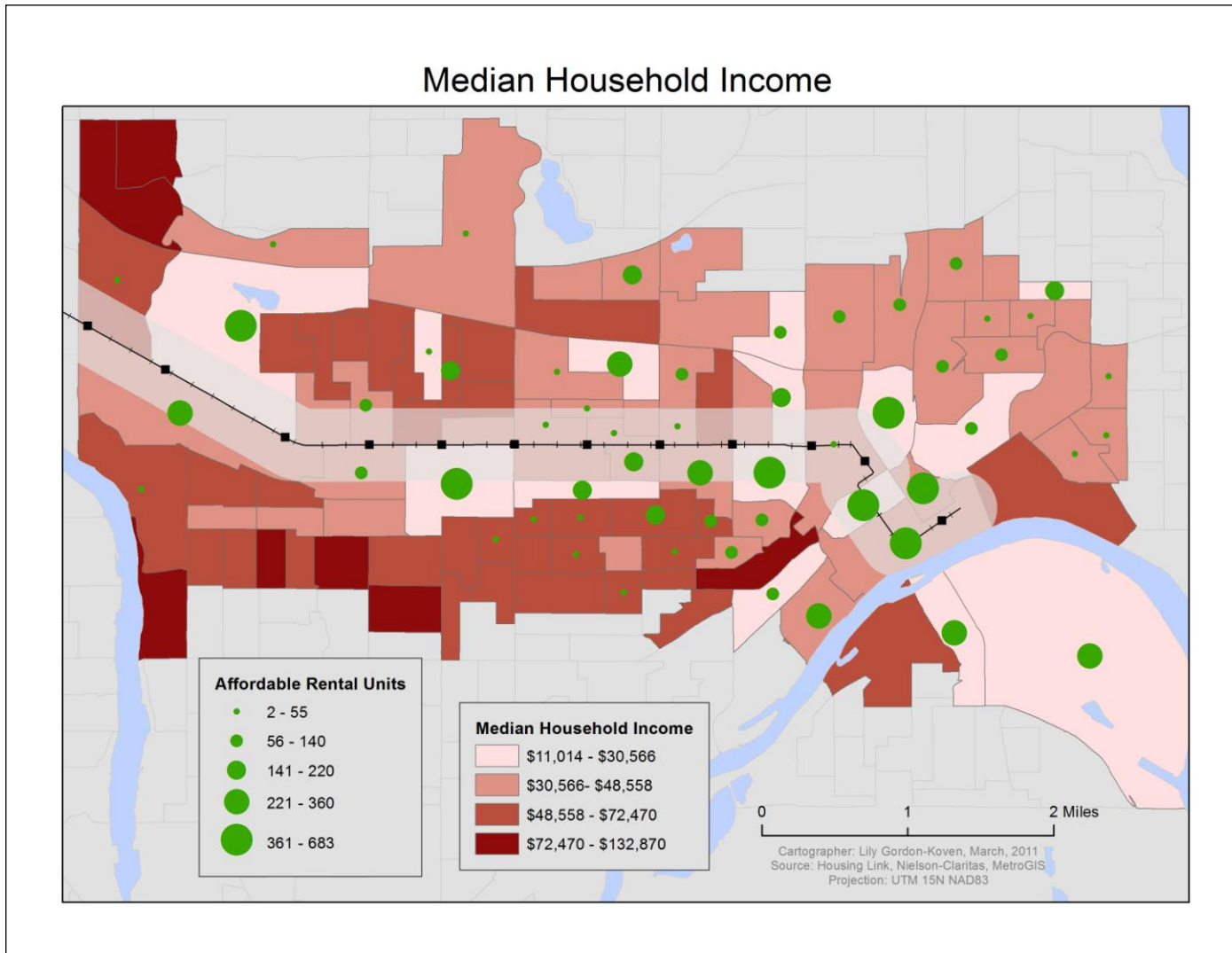


Figure 6

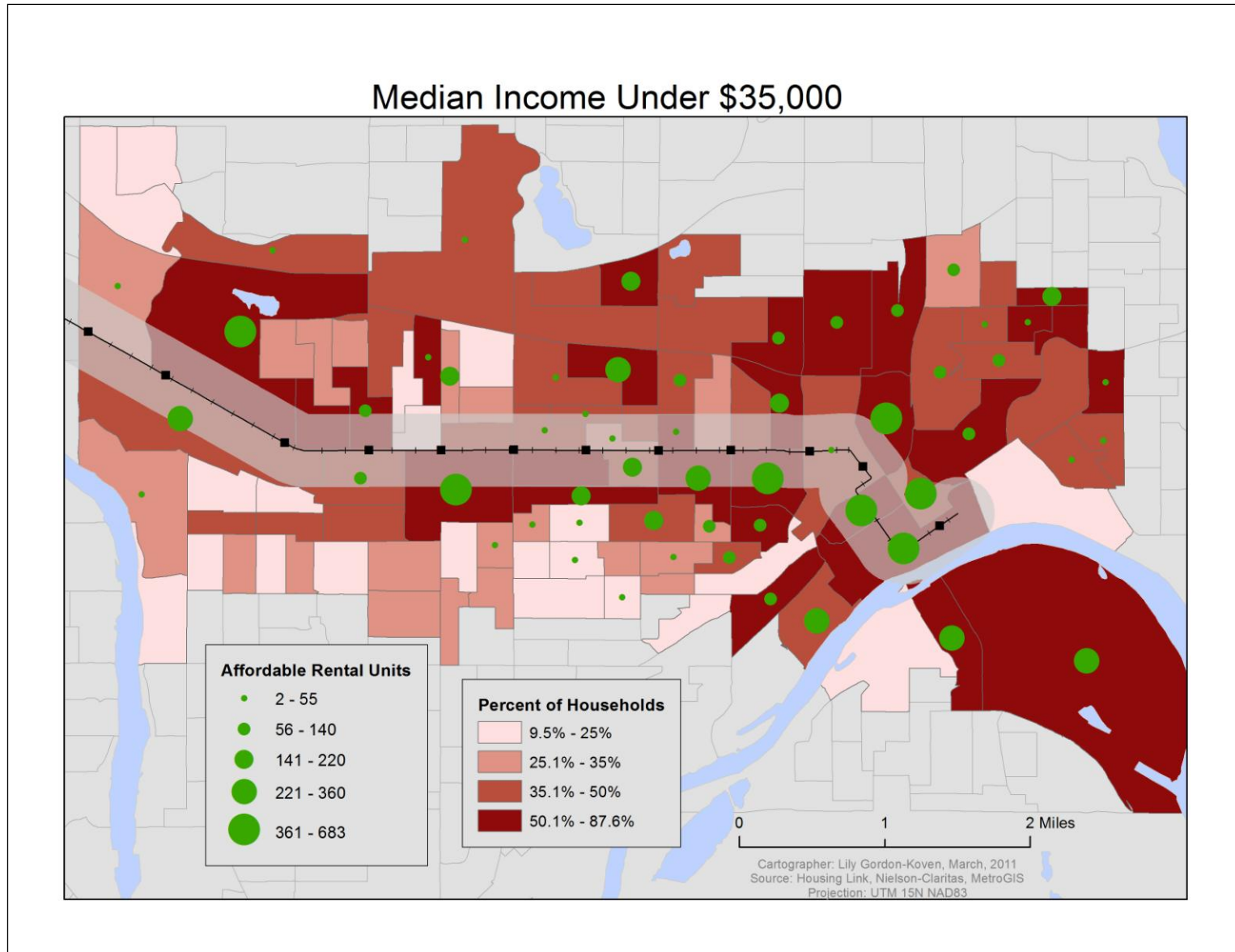


Figure 7

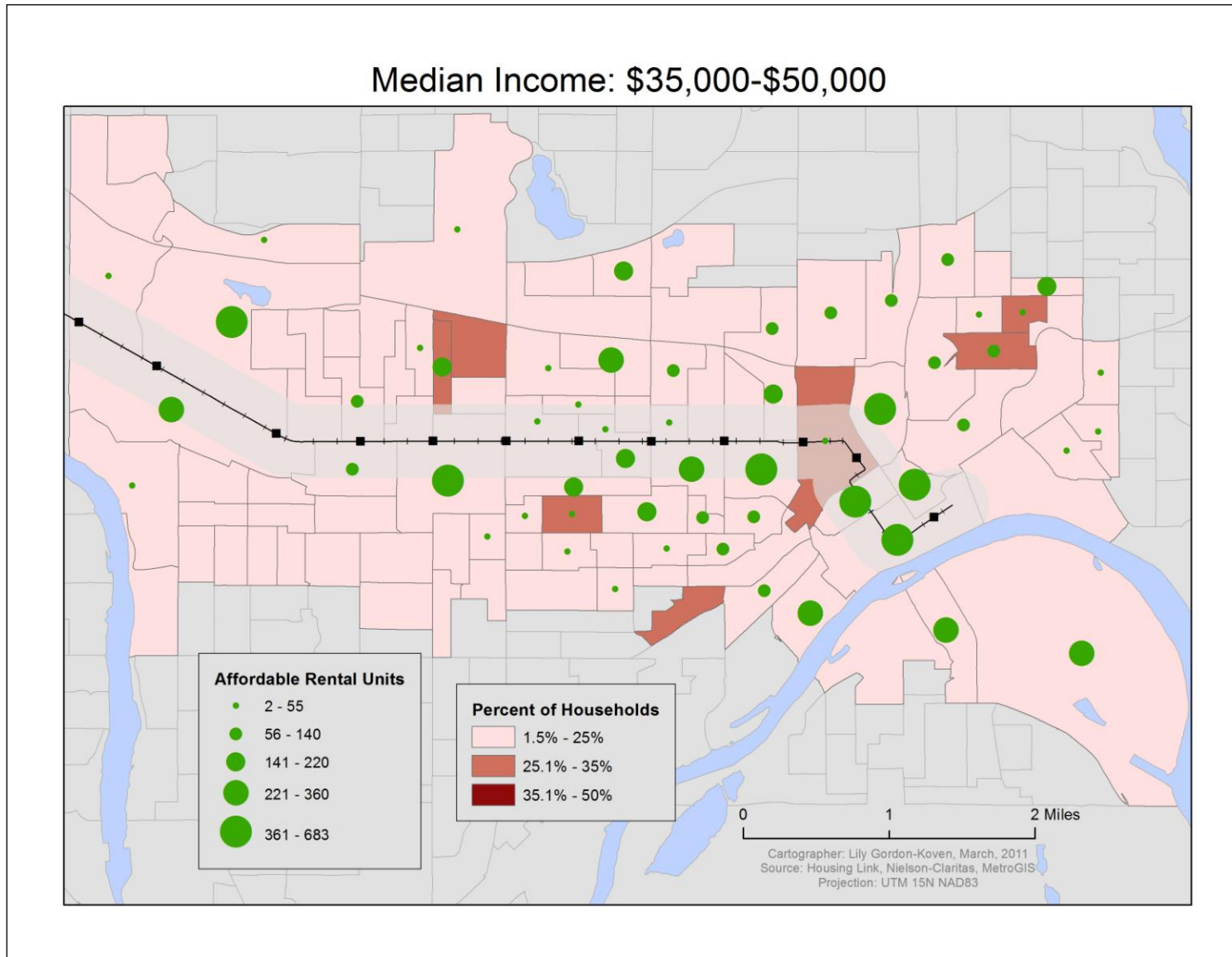


Figure 8

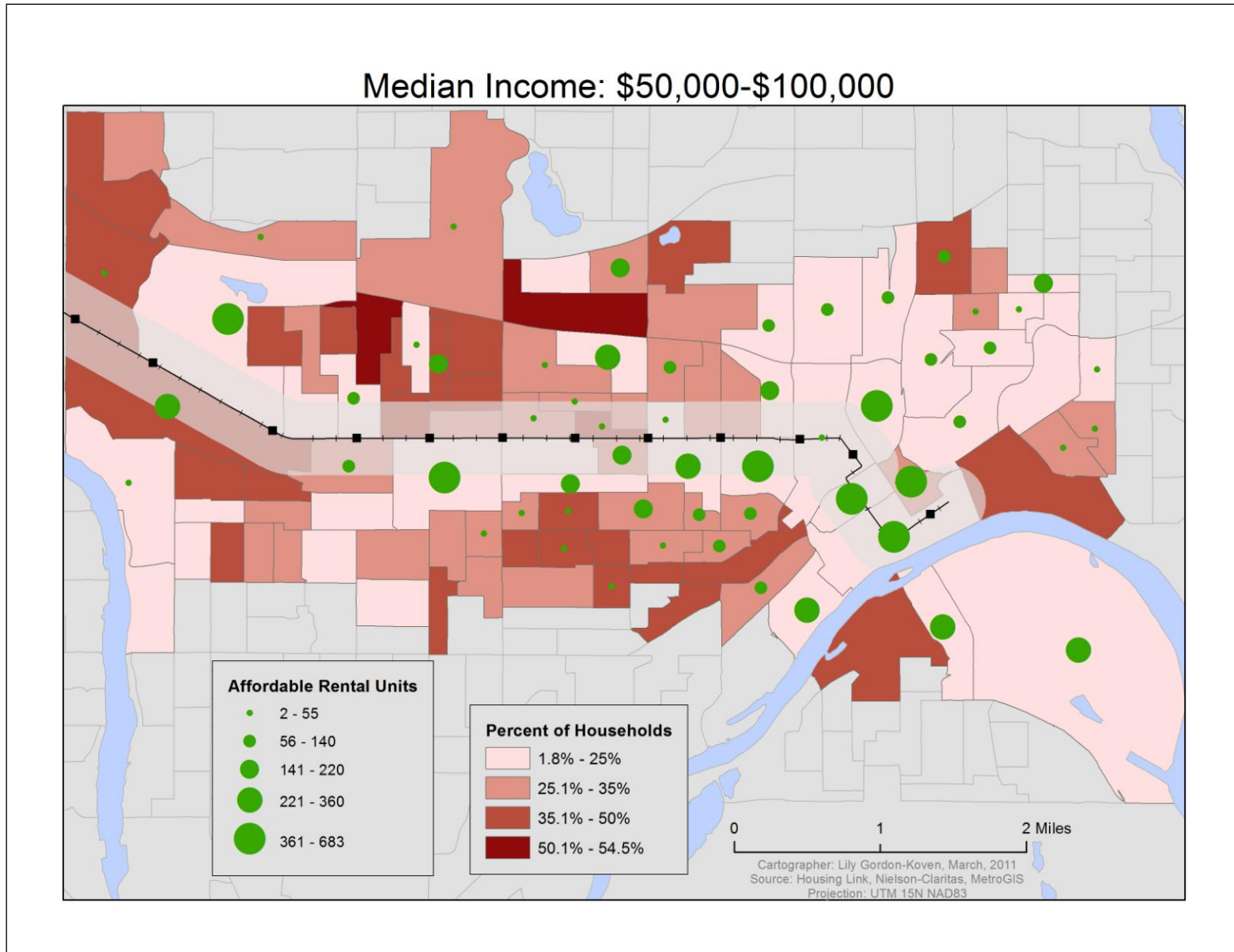
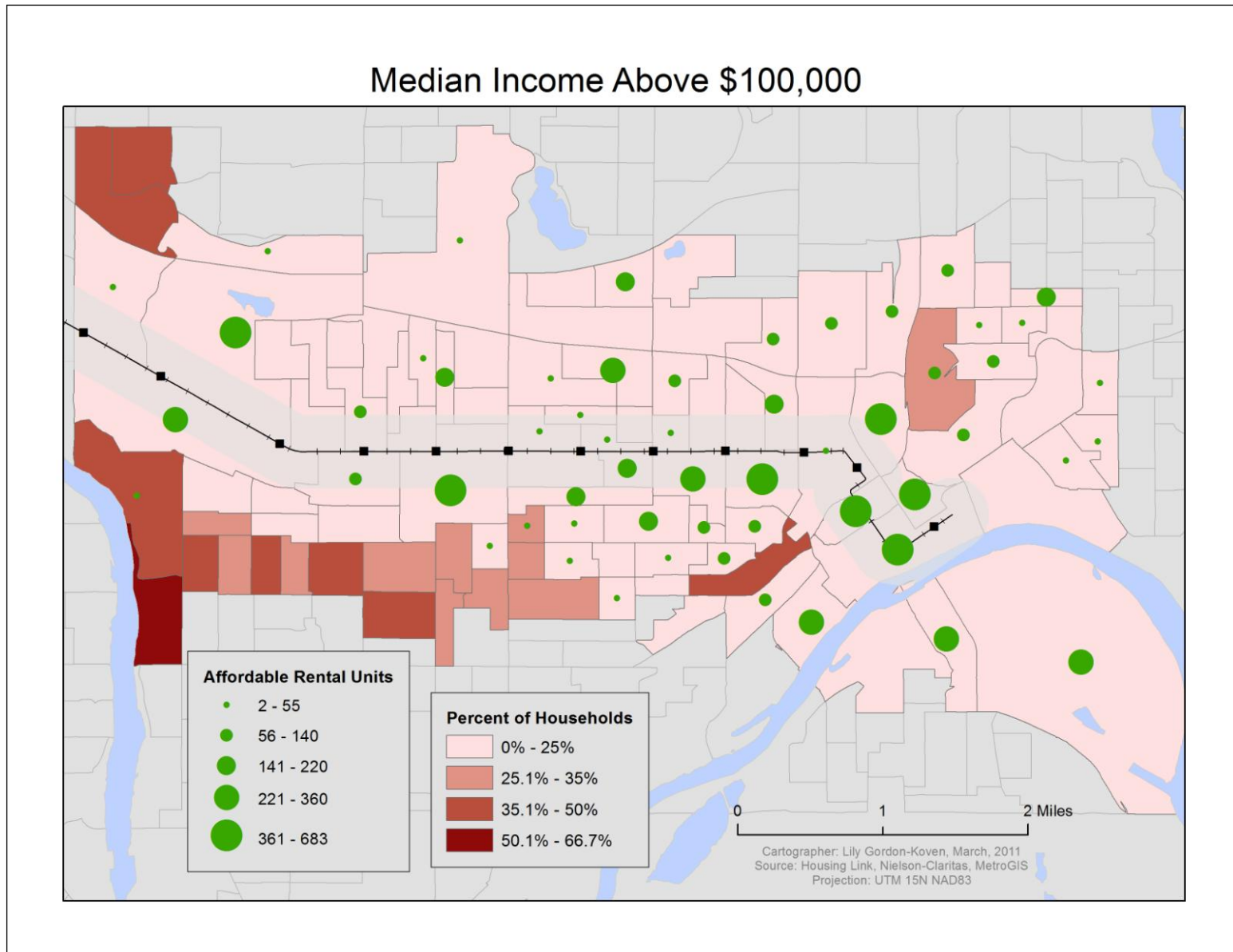


Figure 9



HOUSEHOLDS

Figure 4 illustrates average household size in comparison to existing affordable housing units. The darker maroon block groups represent non-white and immigrant populations in neighborhoods such as Frogtown, Rondo, the West Side, and Payne-Phalen. Particularly of note is the dark maroon block group in the Frogtown neighborhood, which- as Figure 13 shows- is home to a large Hmong immigrant population.

Comparing the pattern on this map to the city of Saint Paul average household size (2 people), this map is particularly striking. Here we also see a less noticeable relationship between household size and subsidized rental units. Some of the block groups with the highest numbers of subsidized units (including St. Anthony Residence and Skyline Tower) have an average household size higher than the Saint Paul average. Many block groups with average household sizes equivalent to the city's have no subsidized units. As such, this map provides more insight into the relationship between immigrant and minority groups and household size.

MEDIAN INCOME AND POVERTY

As light rail development inevitably changes the fabric of Central Corridor neighborhoods, measuring

changes in income levels will illustrate economic growth. Changes in income levels can also be indicators of gentrification. Figure 5 shows median household income along the Central Corridor. Consistent with average household size, rent threshold, and location of subsidized housing; the highest median incomes are located in the neighborhoods south of University Avenue. The Macalester-Groveland and Cathedral Hill neighborhoods show particularly high median household incomes.

There is a clear relationship between block groups with low median incomes and block groups with the most affordable housing units. The block groups in the lowest income bracket (\$11,104-\$27,206) are also the block groups with more than 4,472 units (roughly 50 percent) of subsidized housing within one mile of the light rail.

In reference, according to the American Community Survey conducted by the U.S. Census, the median household income in Twin Cities metro area was \$46,716 in 2009. In the block groups surveyed here, the 2010 median household income was \$44,421.

Figures 6 through 9 show concentrations of income groups by block group. Figure 6 highlights block groups with high percentages of households with median incomes under \$35,000 annually.

As we would expect, these areas are the same as those with the largest number of subsidized housing units. The average percentage of household income below \$35,000 per block group was 40 percent. However, 28 block groups - or 27 percent of block groups shown - have over 50 percent households with median incomes under \$35,000.

The highest category (block groups with over 50% households earning less than \$35,000 annually) encompasses block groups where 6,142 (70 percent) subsidized housing units along the Corridor are located.

Figures 7 and 8 show moderate- to higher-income groups with household incomes between \$35,000 and \$100,000. These maps illustrate that moderate incomes contribute a substantial but not dramatic percentage of households in each block group. For instance, in Figure 7, nearly 90 block groups include between 10 and 25 percent households with median incomes between \$35,000 and \$50,000.

Conversely, Figure 9 demonstrates the relative concentrations of wealthy families, showing percentages of households with annual median incomes exceeding \$100,000. This population is concentrated in the block groups farthest south and west of the Central Corridor. These block groups are included in the area

of Saint Paul with nearly no affordable housing.

One block group close to downtown Saint Paul and the Central Corridor line stands out. This unusual block group runs along Summit Avenue and includes some of the most expensive properties in the city. The proximity of this block group to the Cathedral contributes to its wealth, as does the presence of famous landmarks such as the James J. Hill house and other architecturally significant homes. It is therefore not surprising that it represents somewhat of an island devoid of affordable housing and low-income populations.

RACIAL CHARACTERISTICS AND IMMIGRANT COMMUNITIES

Figures 10 and 11 reflect the presence of White and Non-White populations respectively. In Figure 10, homogeneously White block groups buffer the southern end of the study area. From Figure 11, we see that the areas with the highest percentages of Non-White residents are those located along University Avenue between the Capitol and Snelling Avenue, two block groups east of the Capitol district, and on the West Side of Saint Paul.

The dark orange block groups in the highest two categories represent block

groups with over 40 percent Non-White population. As a point of comparison, the city of Saint Paul is roughly 60 percent White, meaning this map highlights areas that have higher Non-White populations than the city as a whole.

There is a visible connection between block groups with high Non-White populations and existing subsidized units. Within the highest category alone (65 to 94 percent Non-White), there are 3,240 units – or 37 percent of the total subsidized rental units shown.

Given the history of these neighborhoods and typical American socioeconomic patterns, the image this map gives us is not entirely unsurprising. It is, however, important to illustrate the connection between Non-White populations and subsidized housing, which as we have seen in the two previous sections, is also a marker of low median incomes and large household size.

Figures 12, 13, and 14 show the location of Black, Hmong, and Hispanic populations respectively. The historically Black neighborhood of Rondo, south of University Avenue between Rice Street and Lexington Avenue has the highest Black population in the area.

The areas with the highest Black populations also have some of the highest numbers of subsidized rental units. The 8 block groups with over 37 percent Black

population also have 1,541 units of subsidized housing. That corresponds to roughly 18 percent of the subsidized units within a little less than 8 percent of the total block groups.

For the residents of these block groups, the fear of gentrification is particularly high given the Rondo community's previous experiences with transportation development. The creation of Interstate-94 in the late 1960s²⁴ decimated much of the neighborhood infrastructure and housing stock. As such, community members have expressed fears about the light rail; comparing the current light rail infrastructure investment to the I-94 project²⁵.

In considering the current characteristics of the Central Corridor it is essential to highlight Saint Paul's Hmong population. The city's Hmong population is one of the largest urban Hmong populations in the nation²⁶. The total Hmong population in the city of Saint Paul is 24,618, with 11,060 (45 percent) residing in the Central Corridor study area.

Figure 10

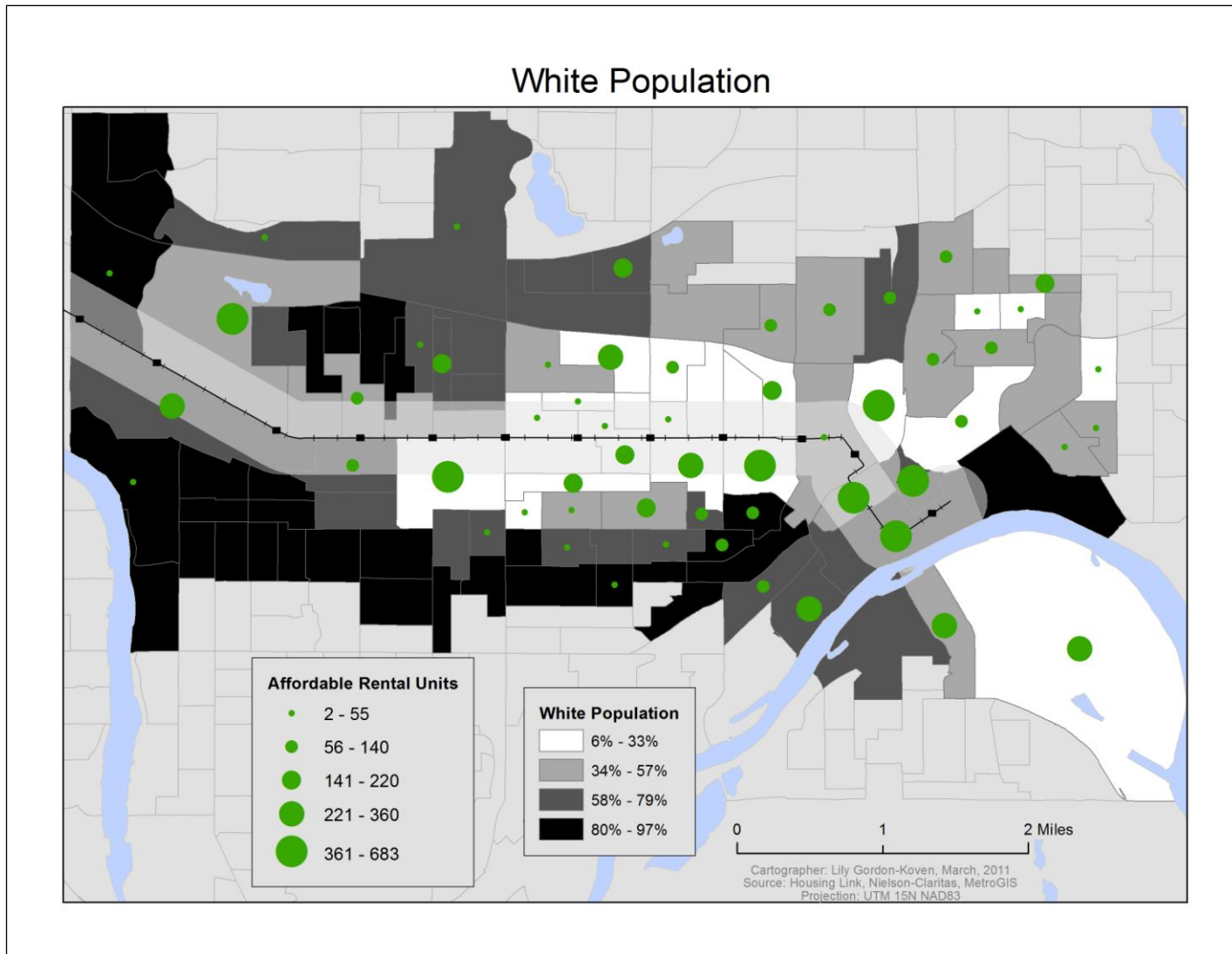


Figure 11

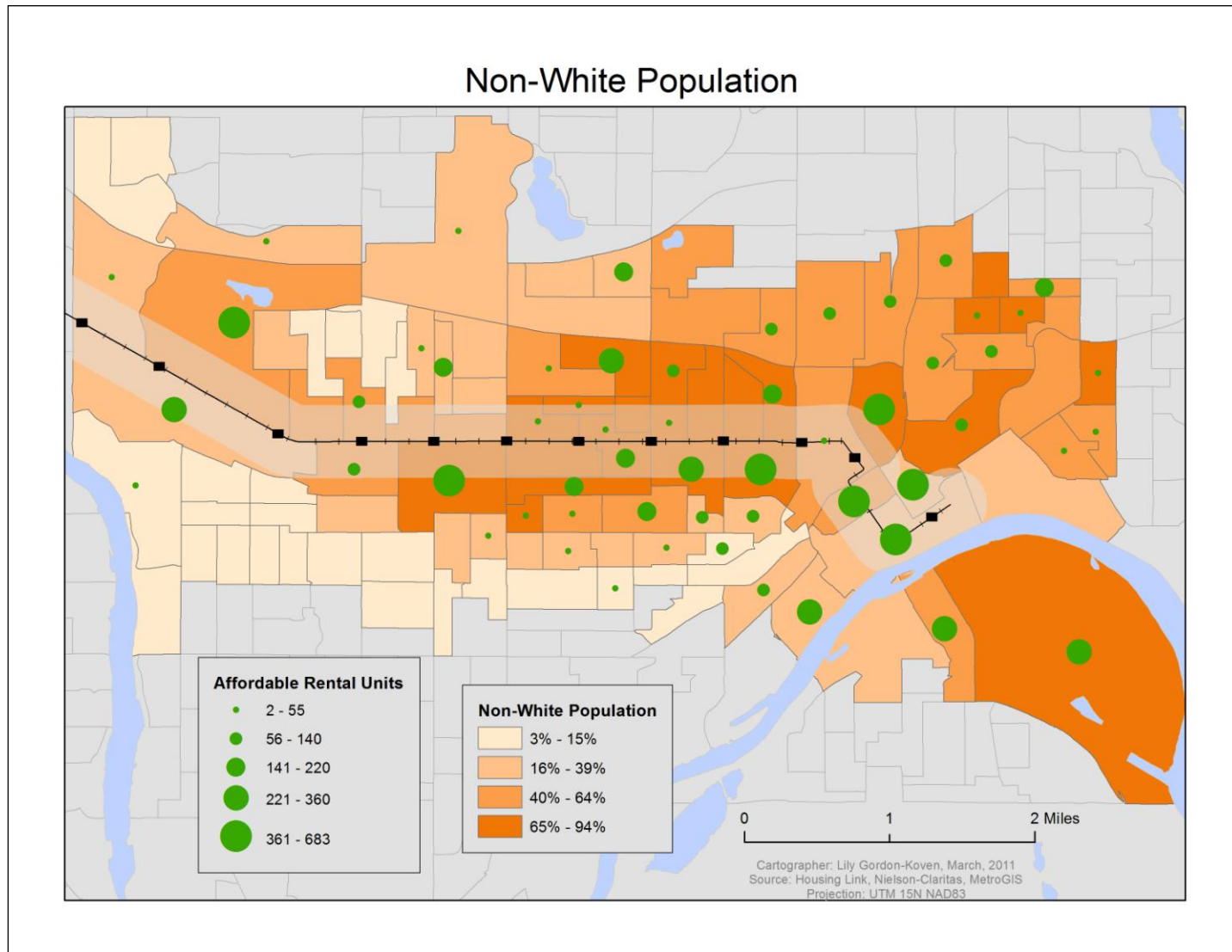


Figure 12

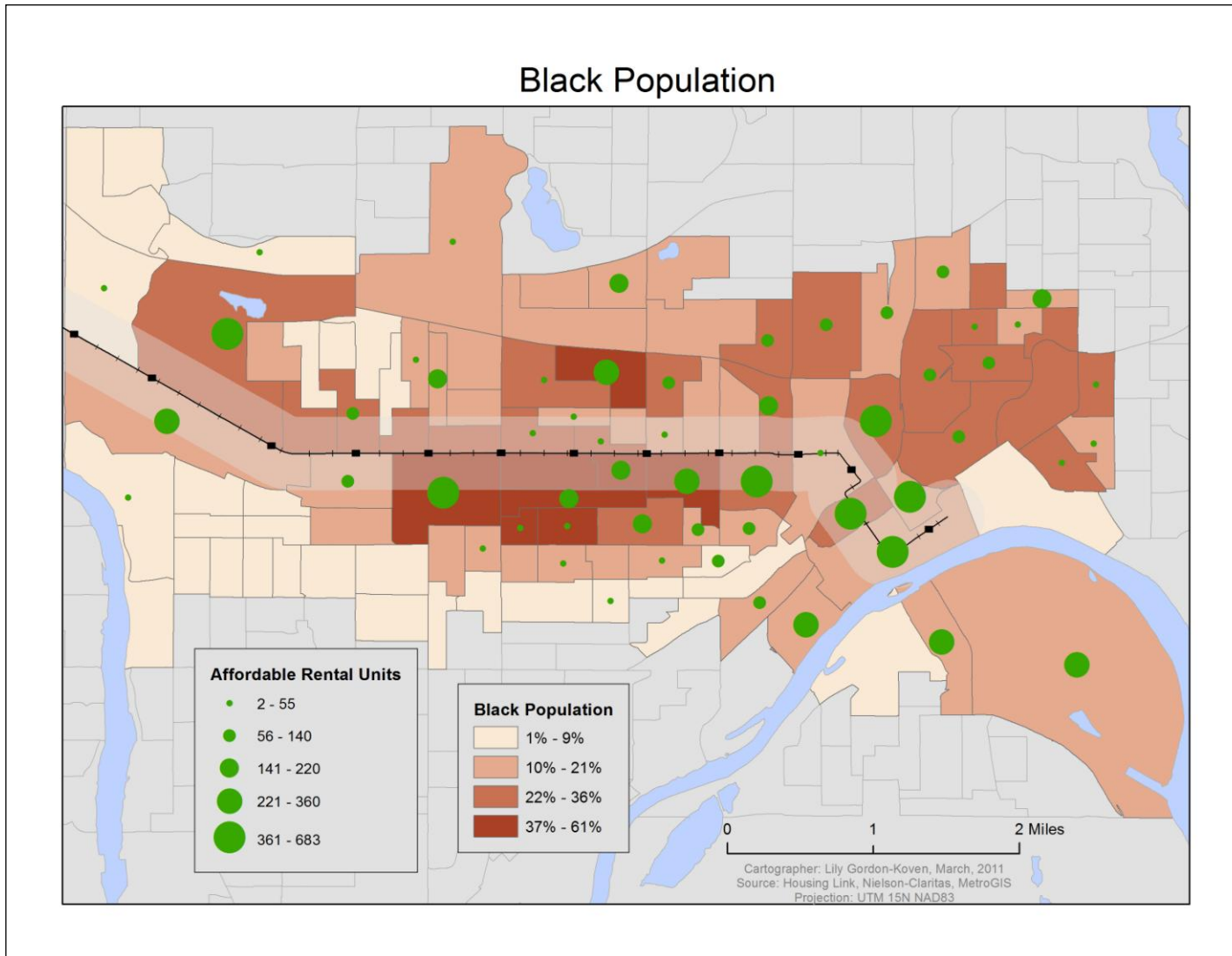
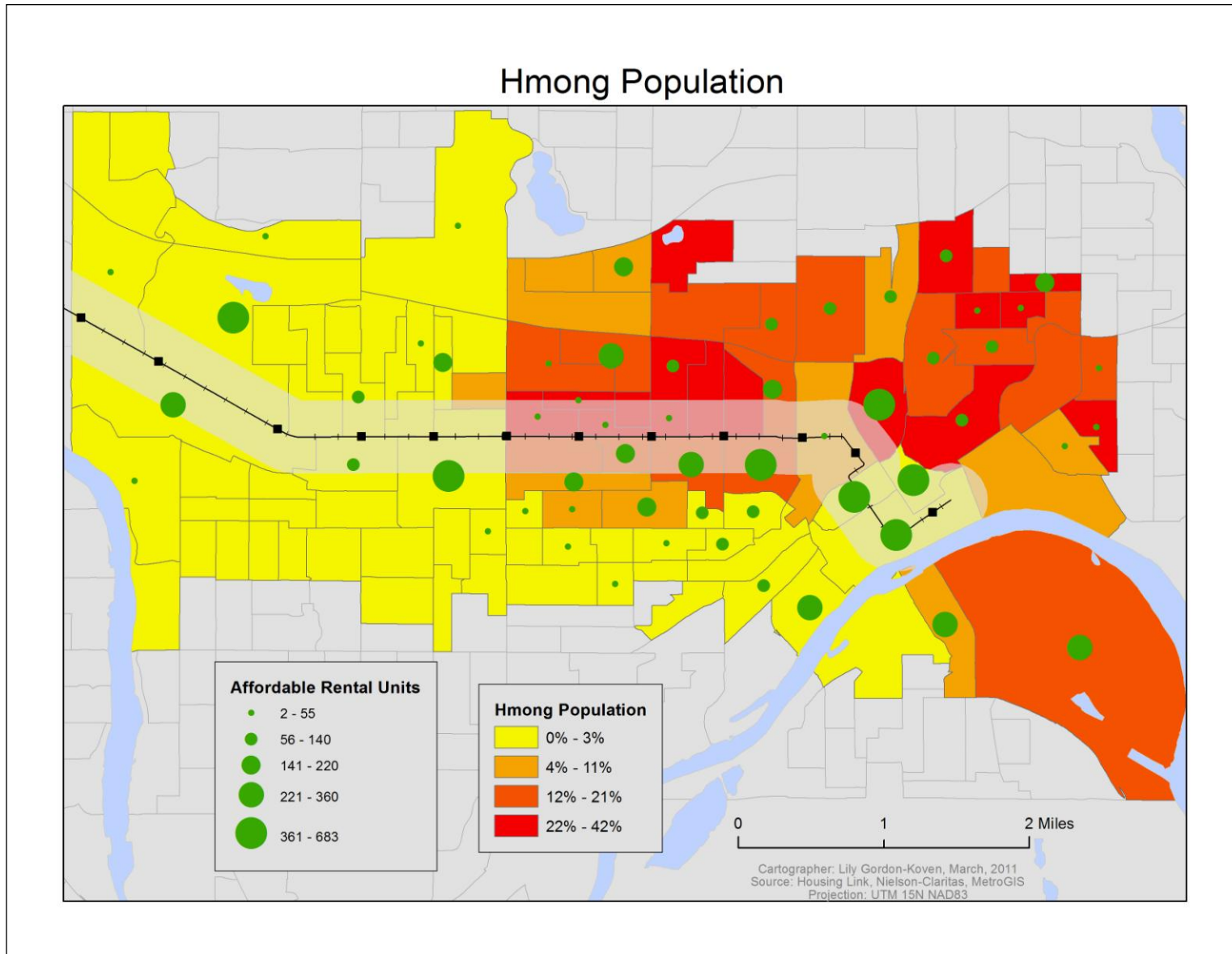


Figure 13



Frogtown, historically an immigrant neighborhood nicknamed for the French immigrants who occupied the area over a century ago, houses a large percentage of this population. There is also a significant Hmong population north and east of the Capitol. The clustering of the Hmong population in the northeast and east of the study area is striking. Nearly 80 percent of Hmong individuals reside in block groups with over 12 percent Hmong population. This clustering reflects the presence of an immigrant or ethnic enclave.

Like the Black population, the Hmong population resides in block groups with large numbers of subsidized rental units. The eastern half of the study area – drawn along the clear divide between yellow and orange block groups – contains 6,420 subsidized units, or nearly 75 percent of the subsidized housing available along the Corridor. This connection again illustrates a relationship between higher average household size, lower median income, and large immigrant and Non-White populations.

Though not illustrated in this chapter, the Hmong population represents only a portion of the large Asian population along the Central Corridor. The presence of immigrants from Laos, Cambodia, Vietnam, Thailand, and other Asian countries has contributed to the rise

of the Asian business district along University Avenue, which includes grocery stores, restaurants, cultural centers, and retail stores catering to different markets within the Asian population. Gentrification, should it occur, would threaten the ability of these business owners to remain concentrated in one geographic area. This would be detrimental to business owners who benefit from proximity to the Asian population and other Asian-focused businesses.

Figure 14 illustrates the Hispanic population within the Central Corridor sector. Unlike the Black and Hmong populations, the Hispanic population is concentrated on the West Side of Saint Paul and does not have as large of a presence as the other two groups along the Central corridor. Though significant in the diversity it brings, the Hispanic population does not have nearly the same presence as the Black or Hmong populations along the Corridor.

Figure 15 depicts households where only English is spoken at home. Saint Paul neighborhoods with large immigrant populations from East Africa, Latin America, and Southeast Asia fall into the two lower percentage categories – indicating the presence of more than one language spoken in the home.

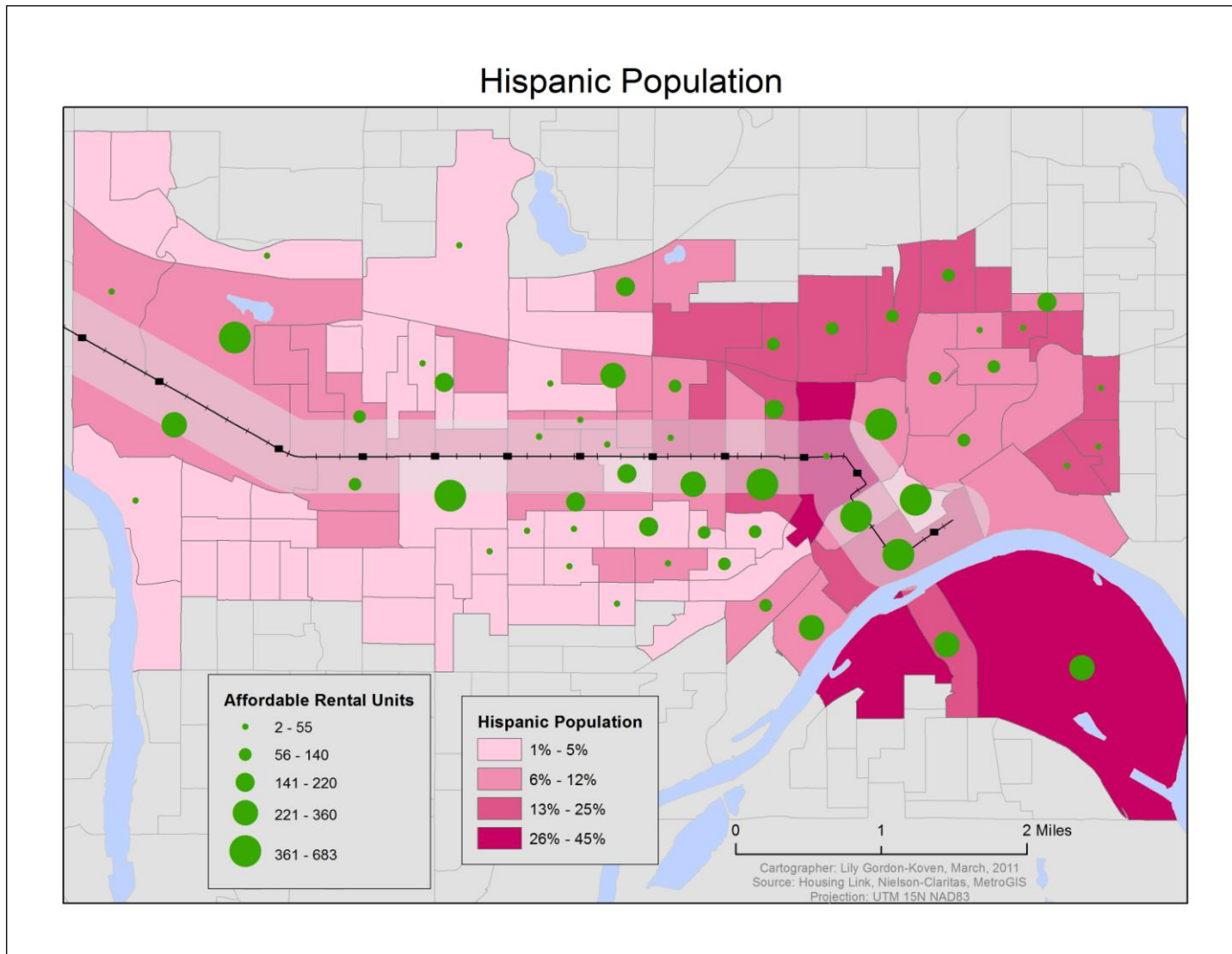
Likewise, comparing this map to Figures 9 and 10, we see a pattern

emerging along the southern strip of block groups between the Mississippi River to the west and downtown Saint Paul to the east. The maps illustrate a marked difference in these block groups from others in the study area. They highlight the transition from the Central Corridor to neighborhoods such as Macalester-Groveland, which are more strictly residential and traditionally higher-income neighborhoods.

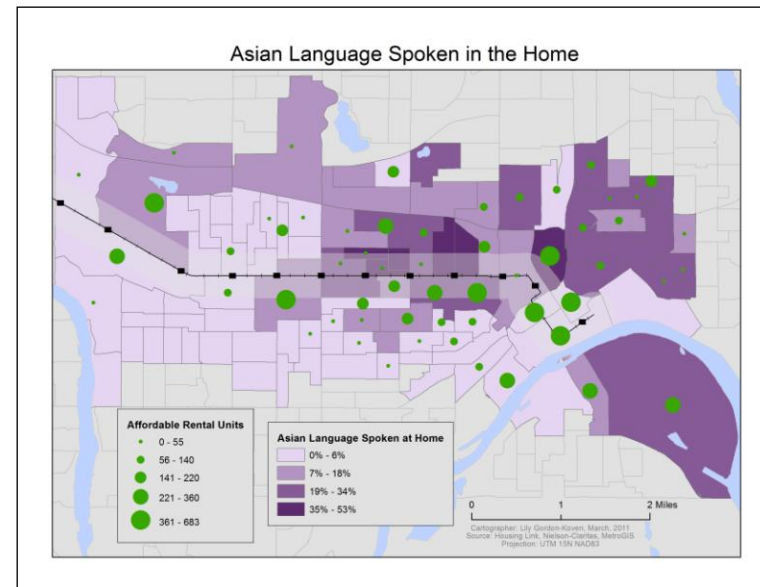
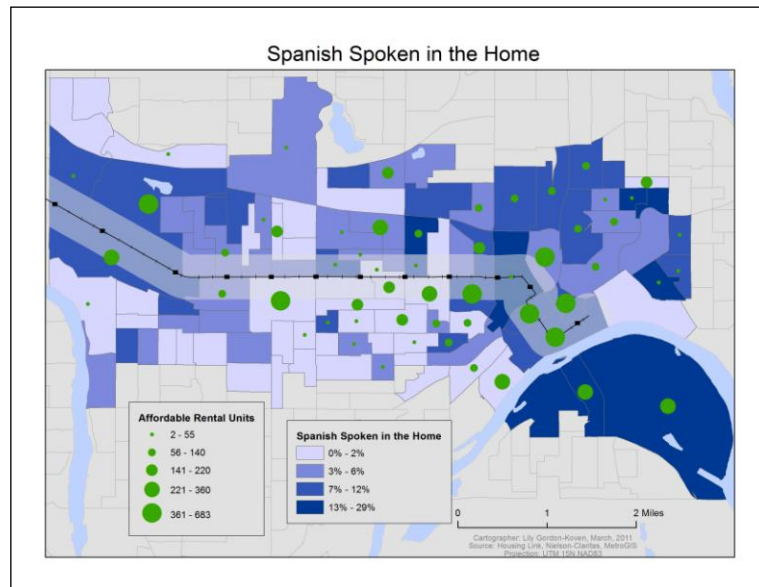
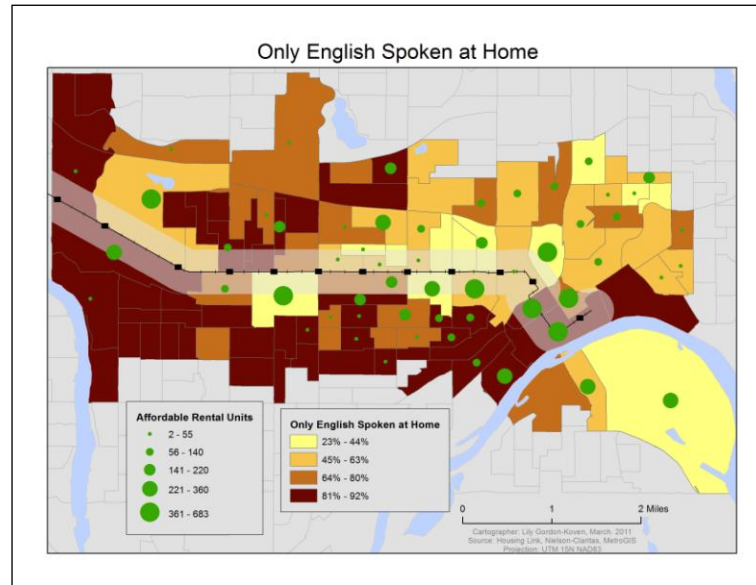
In contrast to Figure 15, Figures 16 and 17 highlight block groups where Spanish and Asian or Pacific Island languages are spoken in the home. These maps, like 11 through 14 attempt to show the presence of immigrant and ethnic groups who reside in these neighborhoods and access subsidized housing.

While Figure 14 highlighted the Hispanic presence, Figure 16 shows a slightly different image by illustrating areas where Spanish is spoken in the home. Interestingly, this map shows a much wider distribution than Figure 14. However, the concentration of Spanish speakers on the West Side is consistent with Figure 14.

Figure 14



Clockwise from top left: Figures 15, 16, and 17



Showing households where Asian languages are spoken at home, Figure 17 highlights the Frogtown neighborhood and areas in Payne-Phalen as concentrations of immigrant and non-native speakers. The high concentration of Asian-language speakers reflects the large Hmong community discussed earlier that established in Saint Paul in the decades since the Vietnam War.

As with Figures 14 and 16, this figure is essentially consistent with Figure 13. However, as with Figures 14 and 16, the distribution of households speaking Asian languages is wider than that of the Hmong population. Though the percentages of Asian language and Spanish speakers is lower than the respective population groups, these maps are important in that they continue to highlight the presence of immigrant and ethnic enclaves along the Corridor. These maps supplement other figures shown that illustrate a connection between minority groups and low-income populations and the presence of subsidized housing.

VI. CONCLUSIONS AND QUESTIONS

This chapter aimed to create a comprehensive picture of affordable housing along the Central Corridor as it

exists before light rail. The hope of this atlas is that this research will be used as a comparison point for studies done on the area after the implementation of light rail. By including a framework of gentrification and affordable housing, I attempted to illustrate the connection between affordable housing and the threat of gentrification.

The maps and analysis highlight that large, low-income, non-white families are most likely to access subsidized rental units. Given the context, these are the groups at risk to be displaced by gentrification. As such, government, private, and non-governmental sectors should pay close attention to economic and residential development that follows the light rail.

As construction crews lay train tracks across Saint Paul, how will potential economic investment affect the existing communities along the Corridor? What role will gentrification play in the future of affordable housing development? And what will become of the existing working-class, immigrant, and minority neighborhoods if gentrification cycles through the Corridor? These are key questions that future research should approach after the construction of light rail.

Understanding how local communities experience changes in the urban landscape is crucial in order to create

a more just and equitable urban system. Hopefully, the documentation of existing affordable housing and its relationship to local populations will continue to draw attention to the need for affordable housing.

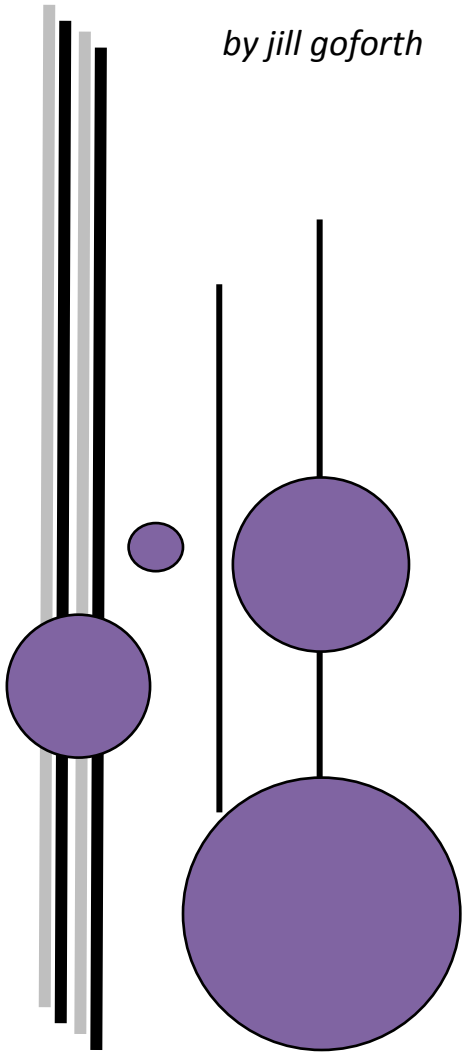
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vii. EXPLORING THE RELATIONSHIP AMONG TRANSPORTATION URBAN FORM, AND CRIME

by jill goforth



This Chapter's Questions:

1. What is the relationship between transportation, urban form, and crime?
2. Will University Avenue become safer as a result of light rail transit?

Chapter Outline:

- I. Introduction and Overview
- II. Theory Review
- III. Research Methods
- IV. Data Analysis and Results
- V. Interpretations
- VI. Conclusion

I. INTRODUCTION AND OVERVIEW

Upon studying University Avenue's history in depth, it becomes clear that its periods of prosperity and decline coincide with drastic changes in transportation characteristics, infrastructure, and societal preferences. As the city and its residents adapted to changes in transportation technologies and infrastructure, so too did University Avenue. In 1890, it became the site of the Minneapolis-Saint Paul interurban streetcar line, and it later came to represent quintessential American car culture. In March 2011, construction began on one of the newest trends in transportation infrastructure – light rail transit.

Advocates of the Central Corridor light rail project suggest the light rail line will reduce traffic congestion, provide better access to jobs and education, increase the visibility of already existing businesses, improve air quality, create sustained growth for the Midway business district, and improve the overall livability and safety of the surrounding

neighborhood.¹ This chapter explores the final claim – that the corridor will become safer as a result of this major transportation and development project. Specifically, I investigate the spatial and temporal patterns of crime along University Avenue to see if high crime levels occur during particular transportation eras that are hypothesized to be more unsafe.

The chapter begins with a theory review that provides the rationale for my study. Following this section, I discuss my methods and research design, and provide a study of the progression of crime along University Avenue. The research uses quantitative data to map crime along University, and finds that crime has increased over time, particularly in areas that are dominated by an automobile-oriented design scheme. The chapter ends with the conclusion that *University Avenue will experience an improvement in safety in the years that follow the completion of the Central Corridor light rail project.*

II. THEORY REVIEW

A key component of the newest trends in urban planning—transit-oriented development, smart growth, and New Urbanism—is the claim that by increasing densities, providing mixed-use development, and promoting walkability and alternate modes of transportation, the safety of our neighborhood streets will improve. These claims are based on the ideas of Jane Jacobs, the writer and activist famous for her critiques of the urban renewal policies of the 1950s.

Jacobs argues that a successful city neighborhood is one in which a person feels safe and secure on the sidewalks. According to her theory, public peace is not kept by the police, but by the people themselves. The more a street is used, the safer it becomes, for “eyes on the street” create a do-it-yourself surveillance that discourages the committing of crime.

Jacobs argues, however, that this method of people policing one another works best where the public is using and enjoying the city streets *voluntarily*. In order to create this

voluntary use, city streets need a substantial quantity of stores and other public places that are used at all times of the day, as well as a dense development pattern that allows for constant use of every portion of the street.²

Others have continued to explore the relationship between the built environment and safety. In his book, *Crime Prevention through Environmental Design* (1971), criminologist C. Ray Jeffery argues for the need to focus on the circumstances surrounding a crime incident, rather than on the criminal offender.³ He suggests that individuals learn from punishments and reinforcements in the environment and that the design of the built environment should be manipulated to control behavior.⁴

In 1972, Oscar Newman published *Defensible Space*, which became an essential addition to the literature on crime and environmental design. Concurrent with Jeffery's theoretical work, Newman's empirical study emphasizes specific design features that contribute to a secure environment: territoriality, or a sense of ownership in one's property; and

surveillance, or the ability to observe activities in parking lots, streets, and the like. Newman suggests that space can be constructed in a way that will improve territoriality and surveillance, thus deterring crime through the creation of defensible spaces.⁵ Specific design principles that Newman considers in his work include strategic placement of windows to allow residents to naturally survey exterior spaces, and the juxtaposition of building entries with city streets so as to create cohesion between the outside and inside worlds.

The "broken windows" theory, introduced by social scientists James Q. Wilson and George L. Kelling, expands upon Newman's theory of territoriality and suggests that maintaining the urban environment may prevent vandalism. Because individuals have been shown to pick up signals from their environment, a space that is well kept sends a signal that this is a place which is monitored, and which therefore deters individuals from committing a crime. On the other hand, an environment that is vandalized, littered, and disheveled sends the message that

undesirable behavior goes without punishment.

According to the theories presented above, the built environment plays a key role in the ability to bring about appropriate behaviors and limit exposure to crime. Numerous eyes on the street, dense development patterns, territoriality and maintenance of the urban environment all contribute to the safety of city streets.

The automobile-centered development pattern that dominates the current American landscape is not in accordance with the ideas of Jacobs, Jeffery, Newman, Kelling and Wilson. First, the car encourages low-density development that contributes to fewer eyes on the street—stores are set too far apart from one another to promote walking, and a lack of business activity deters individuals from visiting these areas at all. Second, the large surface parking lots that cars necessitate create spaces that are difficult to monitor—building entries that are juxtaposed with parking lots rather than sidewalks lose their connection to the public street. Finally, low densities and wide-open and unmonitored spaces signal to potential offenders that this is an area

where the chance of being caught is small. Once undesirable behavior becomes the norm, the area begins to attract more crime.

Drawing upon the arguments of Jacobs, Jeffery, Newman, Kelling and Wilson, I analyze and interpret the historical progression of crime along University Avenue in the following sections.

III. RESEARCH METHODS

I chose to limit my study of the relationship among transportation, urban form and crime to the city of St. Paul. First, the majority of the Central Corridor light rail line, which provides the motivation for this project, is located within the borders of St. Paul. Second, once the rail line crosses into Minneapolis, it stops following University Avenue and begins to follow Washington Avenue. Finally, because Minneapolis and St. Paul are part of different counties, both their data availability and their collection methods vary. Thus, in order to provide for a simple, clear and accurate study of

crime over time, I chose to study the crime history of University Avenue.

Next, I collected both historic and current crime data for the city of St. Paul. A study done by the St. Paul City Planning Surveys Work Progress Administration provided me with detailed crime statistics for each St. Paul census tract for the year of 1937. After this year, crime statistics were not compiled into comprehensive reports until 1971, when the police department began assembling the statistics annually. My final study includes statistics from the years of 1937, 1971, 1981, 1991 and 2001. The sample years of 1937 and 1971 were chosen because they were the earliest two years from which data were available; the remaining years were chosen because they represent a sample of crime occurrences from each decade after 1970 and because they are spaced at equal intervals of ten years apart.

Studying any variable over time can be difficult because collection methods tend to vary substantially. In 1937, crime statistics were reported at the census tract level; however, from 1971- present, crime statistics have been reported by police grid. To deal

with this issue, it was necessary to manipulate the crime data from each sample year into a consistent form.

With this in mind, I converted the grid data I collected from the years 1971, 1981, 1991 and 2001 into census tract data. To do this, I overlaid the police grids with the St. Paul census tracts, and assigned grids to census tracts accordingly. In certain instances, the grids did not line up well with the smaller census tracts, and in these cases, I had to designate the census tract as having no data. Though this method has issues of accuracy and precision, I am still able to portray the pattern of crime along University Avenue over time.

Finally, I created a series of choropleth maps that allow for visual representation of the data. Each map represents the occurrences of a specific crime during a specific year in time. The data have been normalized by population for each census tract. The final data shown on each map represent crime as a percentage of the population; this allows for relative comparisons of crime across space and across time.

Population data were found using the National Historical

Geographic Information System created by the Minnesota Population Center at the University of Minnesota.⁶ For each sample year, I used the population data that corresponded with the decade in which the data were collected.⁷ I have manually classed the data, and have converted the data into ordinal (ranked) data to allow for easier and quicker interpretation of the results. Within each map series, the data have been classed so that the ranks of low, medium-low, medium-high and high represent the same range of crime rates for each year.

IV. DATA ANALYSIS AND RESULTS

Each series of maps that follow show trends in the rate of a particular type of crime over time. Each map sequence will be accompanied by a brief explanation of the trends shown. Analysis of the effects of transportation on these trends will follow in the next section.

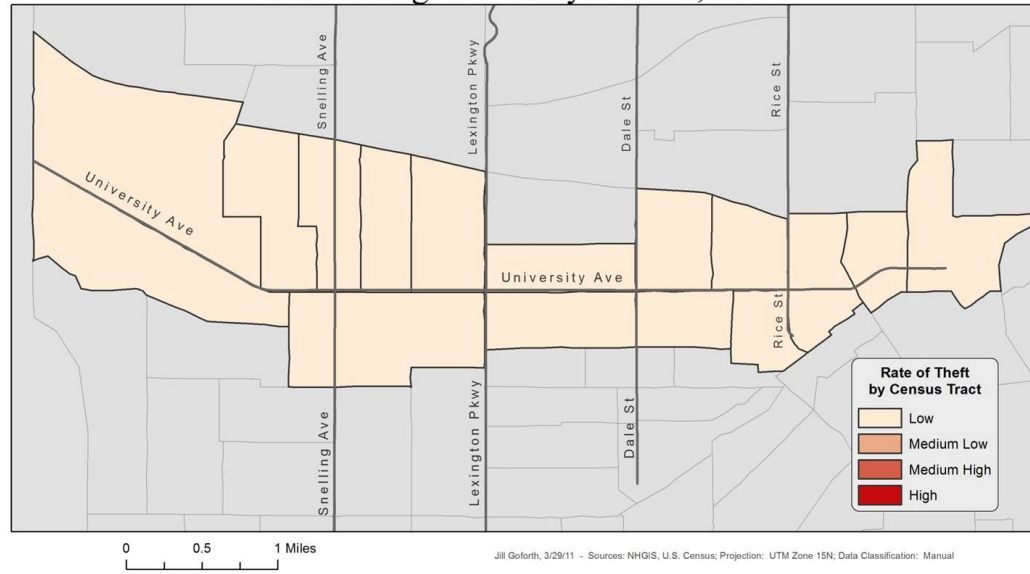
Map Series 1: Theft

The Saint Paul Police Department defines theft as “the unlawful taking, carrying, leading, or riding away of property from the possession or constructive possession of another.”⁸

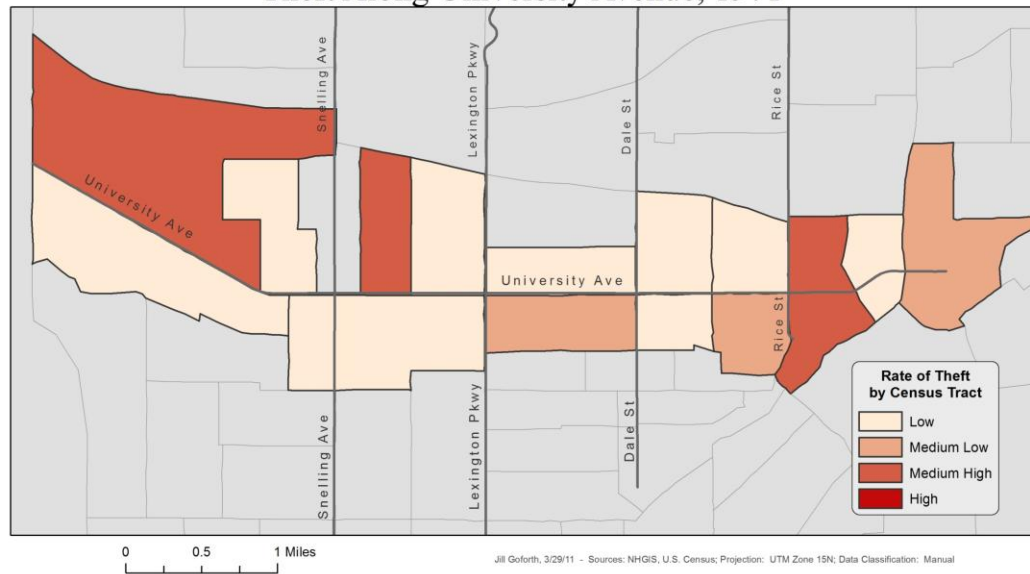
The rate of theft along University Avenue was lowest in 1937 and gradually increased over time. Theft was much more prevalent in 1971 than it was in 1937. The highest concentrations of occurrence were at the Avenue’s west end near the Minnesota Transfer Yards, as well at the Avenue’s far-east end near the State Capitol. From 1971 to 1981, the rate of theft increased in virtually every census tract along the Avenue. Most notable was the increase in the theft rate from “low” to “high” in the census tracts surrounding the Snelling-University intersection. From 1981 to 1991, the theft rate remained the same in most of the census tracts along University. By 2001, many census tracts had fewer occurrences of theft; however, the census tracts surrounding the Snelling-University intersection remained high.

Map Series 1: Theft

Theft Along University Avenue, 1937

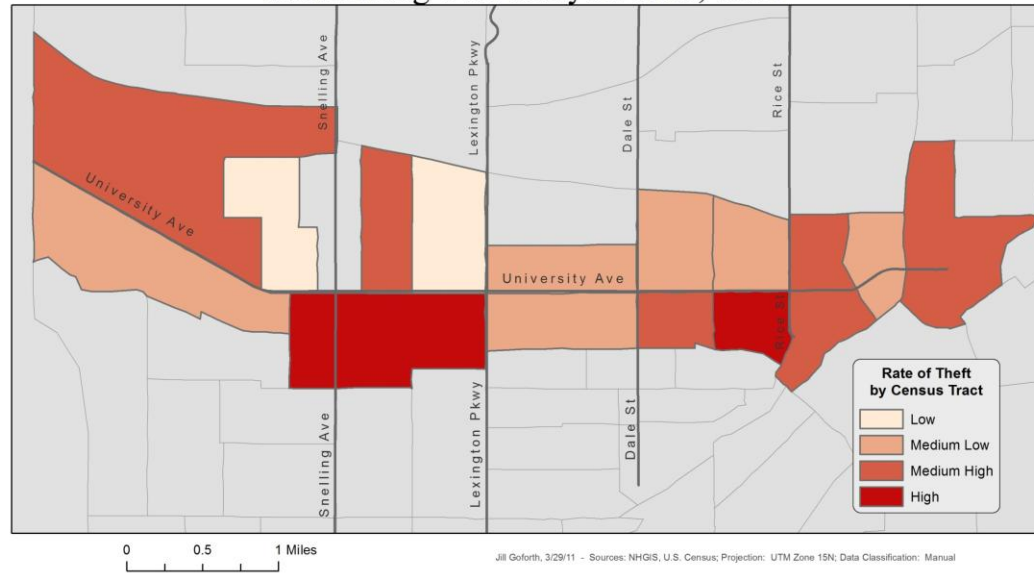


Theft Along University Avenue, 1971

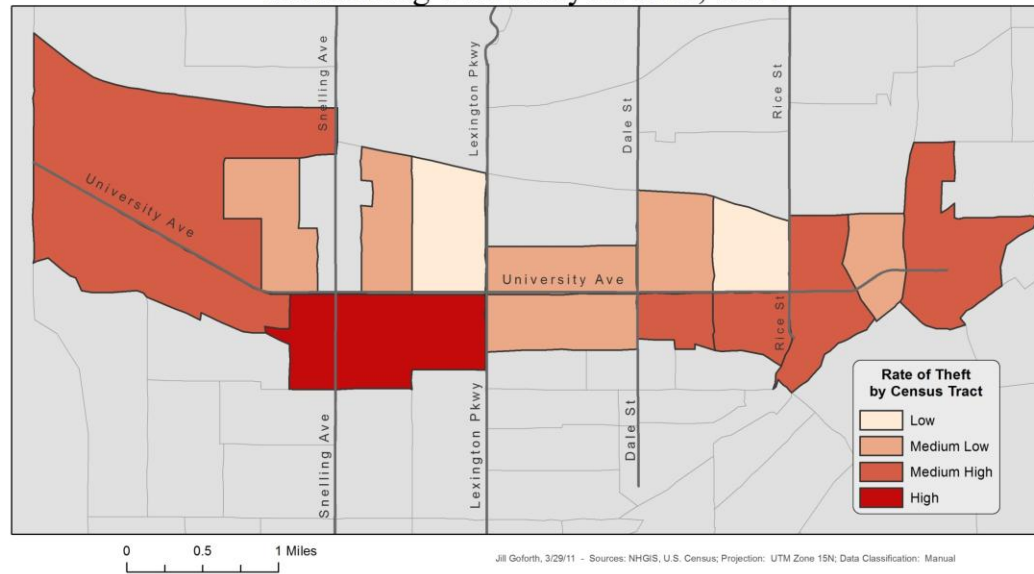


Map Series 1: Theft

Theft Along University Avenue, 1981

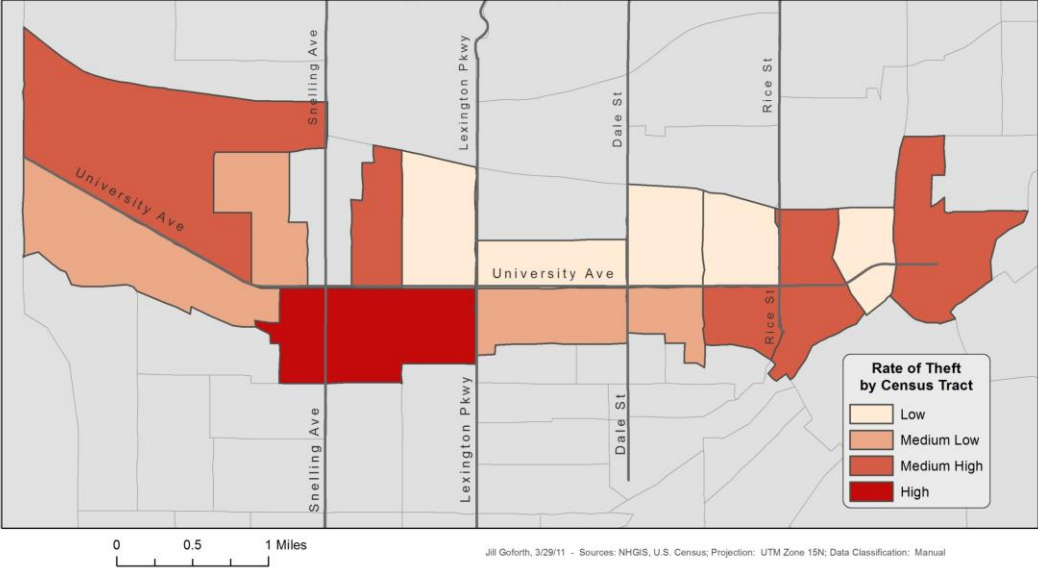


Theft Along University Avenue, 1991



Map Series 1: Theft

Theft Along University Avenue, 2001



Jill Goforth, 3/29/11 - Sources: NHGIS, U.S. Census; Projection: UTM Zone 15N; Data Classification: Manual

Map Series 2: Robbery

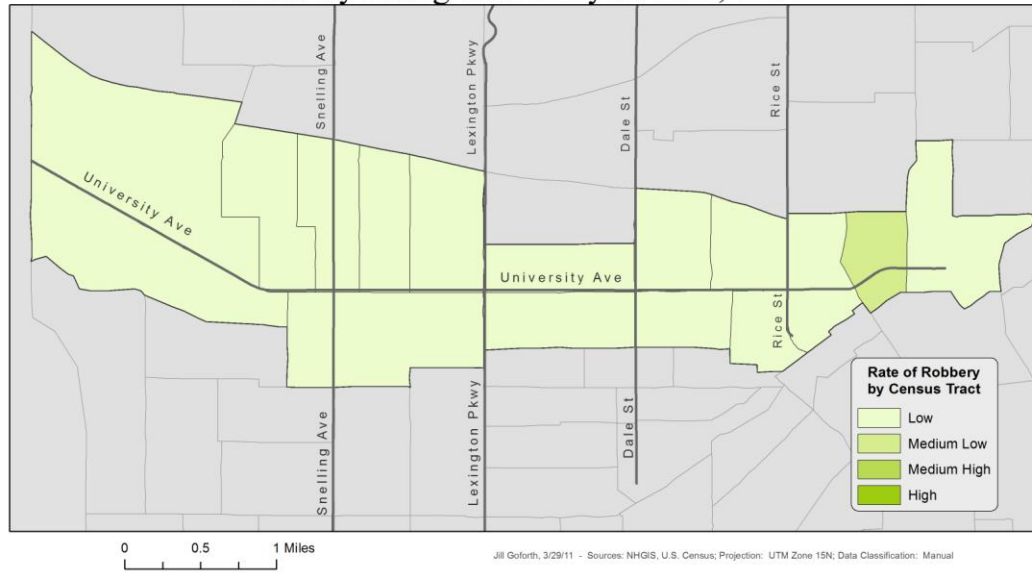
The Saint Paul Police Department defines robbery as “the taking or attempt to take anything of value from the care, custody, or control of a person or persons by force, threat of force or violence, or by putting the victim in fear.”⁹

Occurrence of robbery along University Avenue was low in every census tract in 1937, with the exception of the census tract at the Avenue’s far-east end near the state capitol. From 1937 to 1971, the rate of robbery increased in all but one census tract. Incidents are more prevalent along the Avenue’s east end, especially around the intersections of Dale-University and Lexington-University. From 1971 to 1981, occurrences of robbery increased in the census tract at the intersection of Snelling and University Avenues, as well as in the census tract to the east of the Dale-University intersection; however, overall, robbery rates remained the same. From 1981 to 1991, incidents of robbery decreased slightly along the Avenue, specifically at the intersection of Dale and University; however, overall, the rates

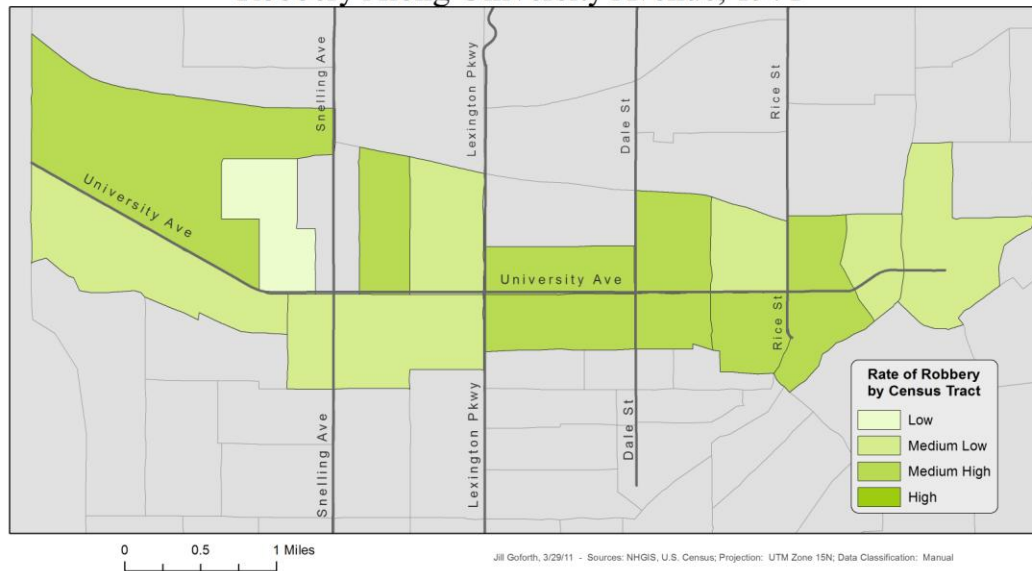
remained mostly unchanged. Occurrences of robbery continued to decrease through the decade; in 2001, several census tracts on the Avenue’s east end saw fewer reports of robbery. However, robbery rates increased at and around the Snelling-University intersection as well as in the census tract from Lexington to Dale Street.

Map Series 2: Robbery

Robbery Along University Avenue, 1937

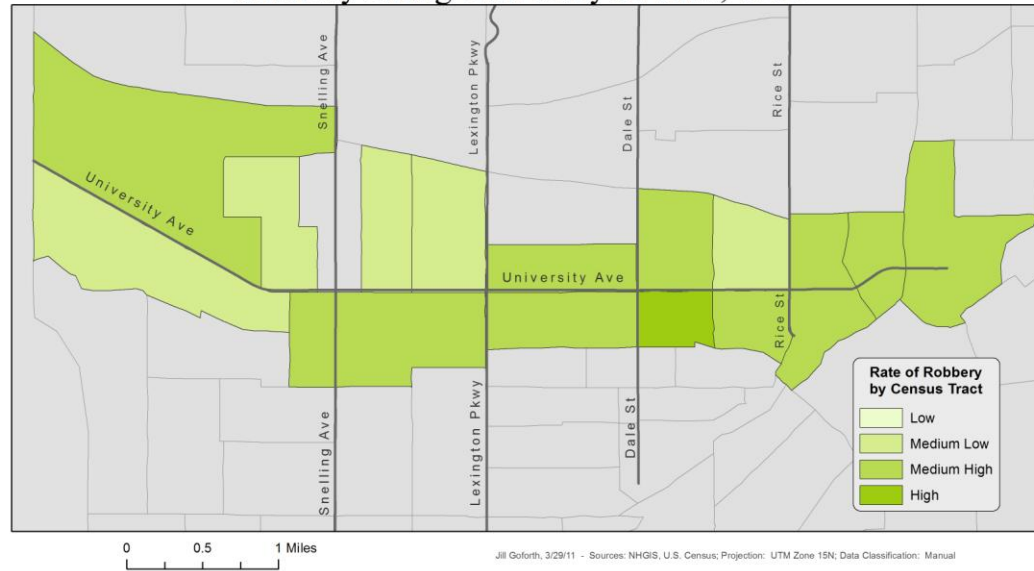


Robbery Along University Avenue, 1971

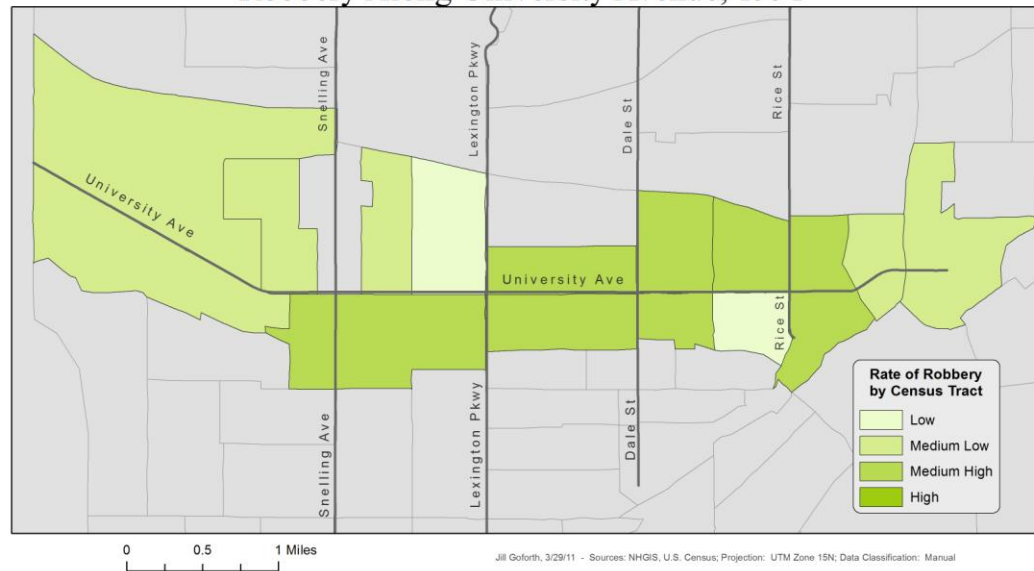


Map Series 2: Robbery

Robbery Along University Avenue, 1981

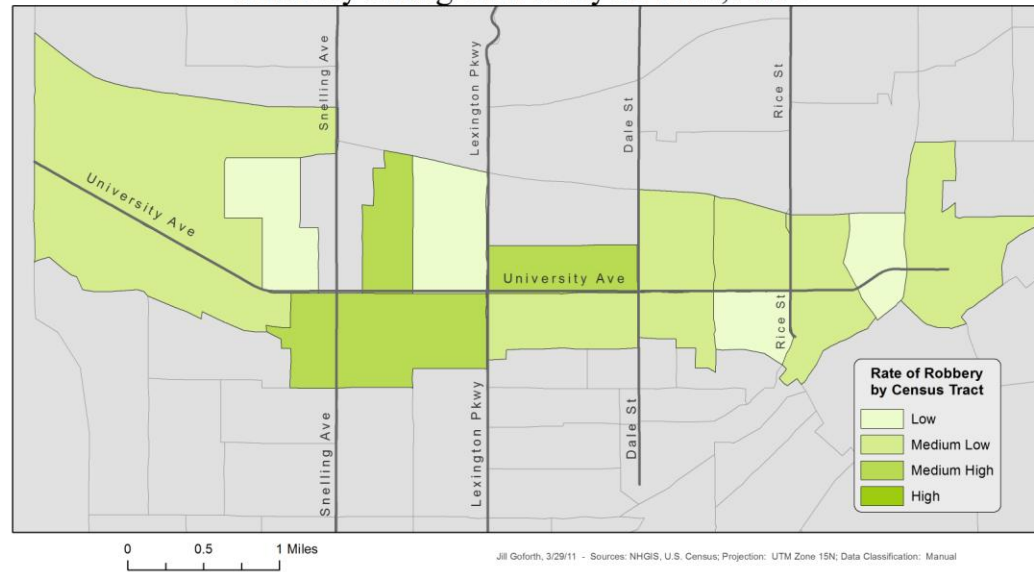


Robbery Along University Avenue, 1991



Map Series 2: Robbery

Robbery Along University Avenue, 2001



Map Series 3: Aggravated Assault

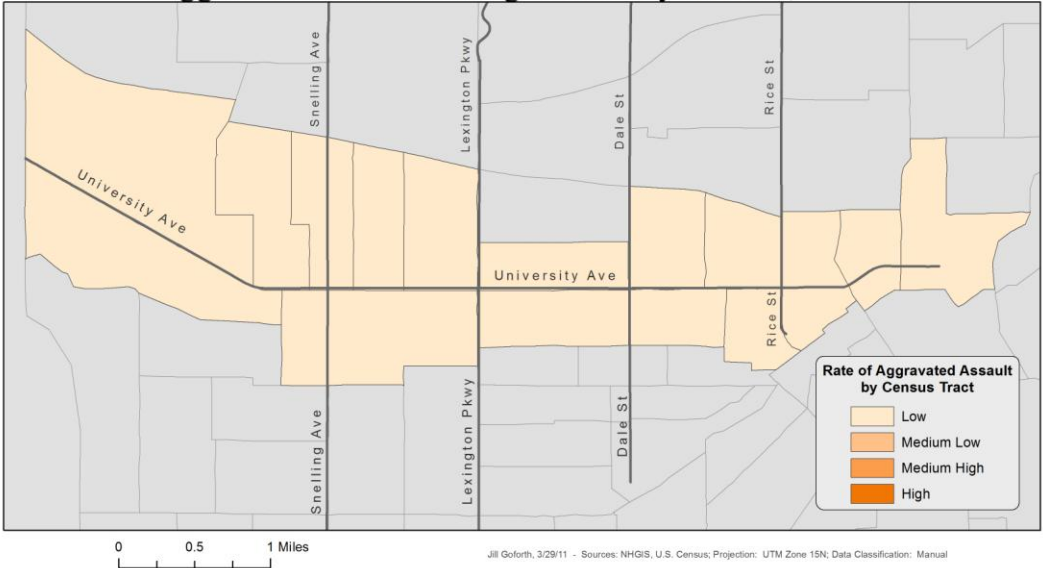
The Saint Paul Police Department defines aggravated assault as “an unlawful attack by one person, with use of a deadly weapon, upon another for the purpose of inflicting severe or aggravated bodily injury.”¹⁰

In 1937, occurrences of aggravated assault were low in every University Avenue census tract. By 1971, reports of aggravated assault were much more prevalent, especially along the Avenue’s east end. The highest concentration of crime was in the census tract directly to the east of the University-Dale intersection. Additionally, the rate of aggravated assault was relatively high at the west end of the Avenue, in the census tract that encompasses the Minnesota Transfer Yards. The year 1981 showed a similar pattern of aggravated assault occurrences; the highest concentrations of reports remained at the east end of University. However, there were fewer occurrences in the census tract at the Avenue’s west end and more occurrences in the census tract at the intersection of University and Snelling Avenues. In 1991, the rate of aggravated assault either remained the

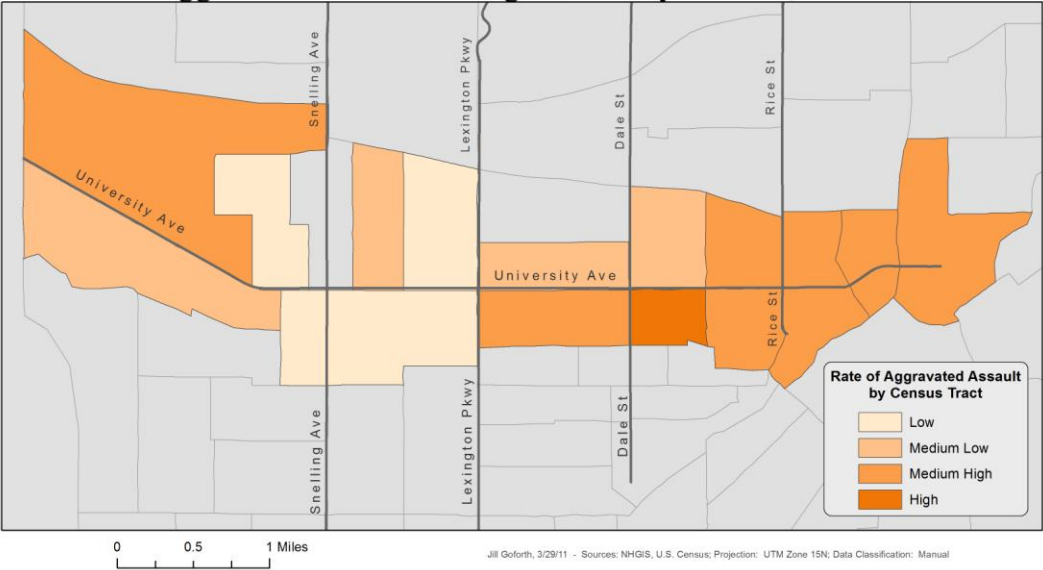
same or increased in all but one census tract. The highest concentrations of occurrences were at or around the University-Dale and University-Lexington intersections. Overall, the rate of aggravated assault declined from 1991 to 2001. However, occurrences did increase in the census tract at the Avenue’s far-east end, as well as in the census tract at the Avenue’s far-west end.

Map Series 3: Aggravated Assault

Aggravated Assault Along University Avenue, 1937

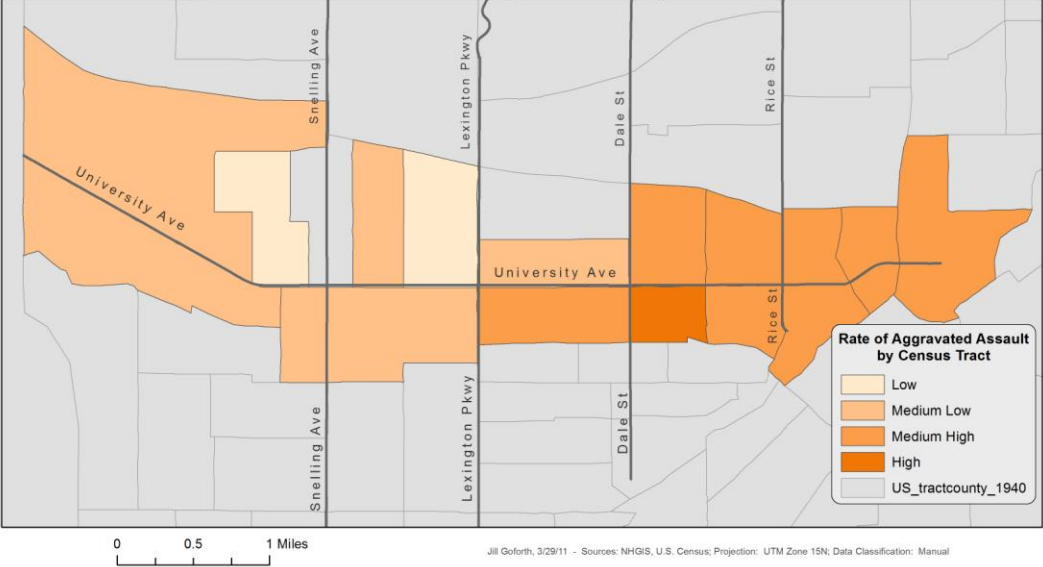


Aggravated Assault Along University Avenue, 1971

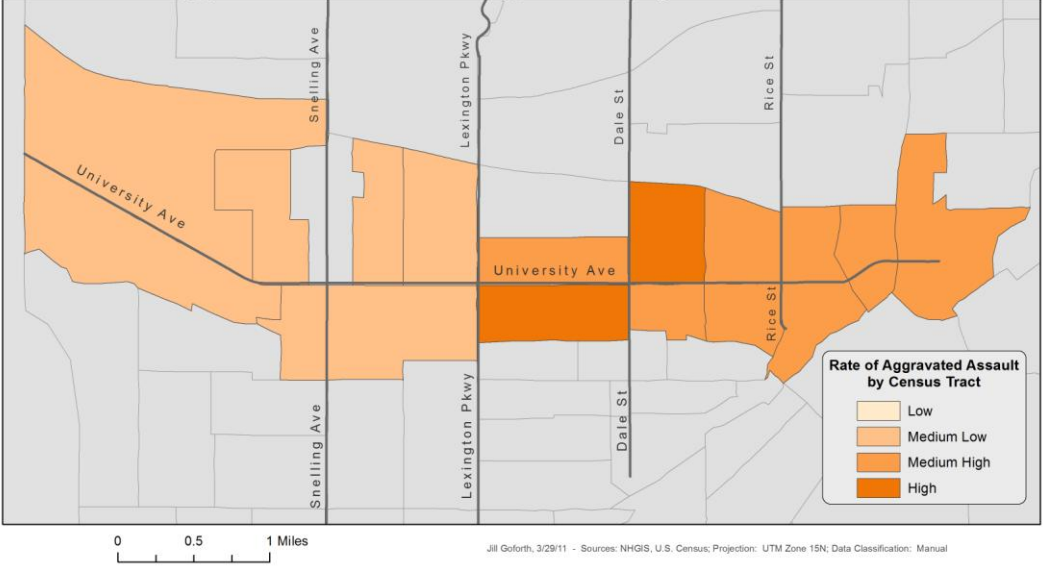


Map Series 3: Aggravated Assault

Aggravated Assault Along University Avenue, 1981

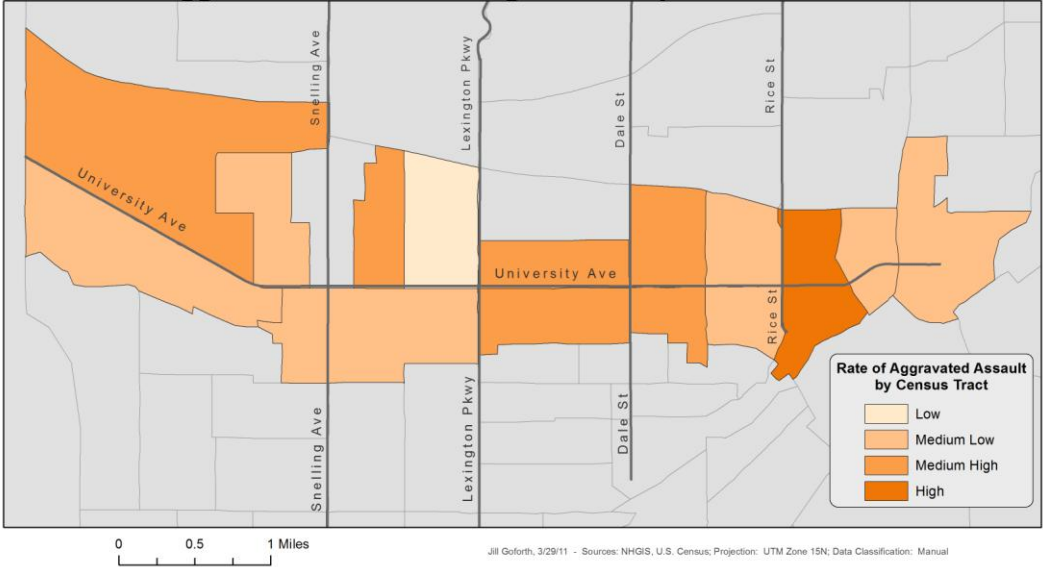


Aggravated Assault Along University Avenue, 1991



Map Series 3: Aggravated Assault

Aggravated Assault Along University Avenue, 2001



Map Series 4: Rape

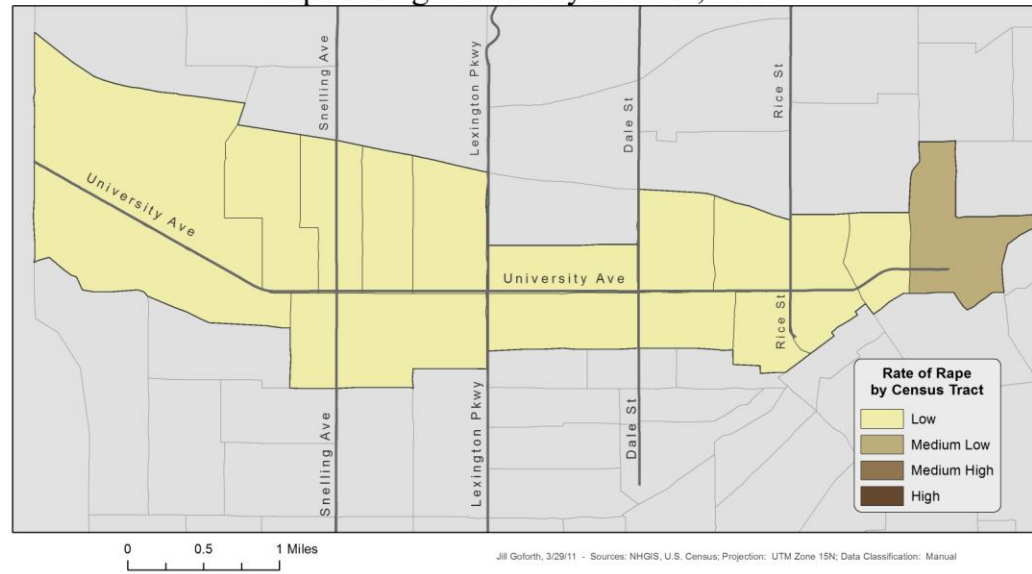
The Saint Paul Police Department defines rape as “the carnal knowledge, assault, or attempted rape of a person forcibly.”¹¹

Incidents of rape along University Avenue were lowest in 1937 and highest in 1991. From 1937 to 1971, the rate of rape increased in virtually every census tract. Occurrences were highest in the two census tracts directly to the east of the University-Dale intersection. By 1981, the rate of rape had decreased slightly in these two census tracts; however, the census tract at the northeastern edge of Dale and University saw an increase in the rate of rape. From 1981 to 1991, occurrences of rape increased, especially at the east end of the Avenue. Reports of rape were particularly high near the intersection of Dale and University as well as near the state capitol at the far-east end of University Avenue. By 2001, incidents of rape had declined along the Avenue as a whole; all of the census tracts at the east end of the Avenue went from having “high” rape rates to having “low” or “medium-low” rape rates. Reports of rape did increase from 1991

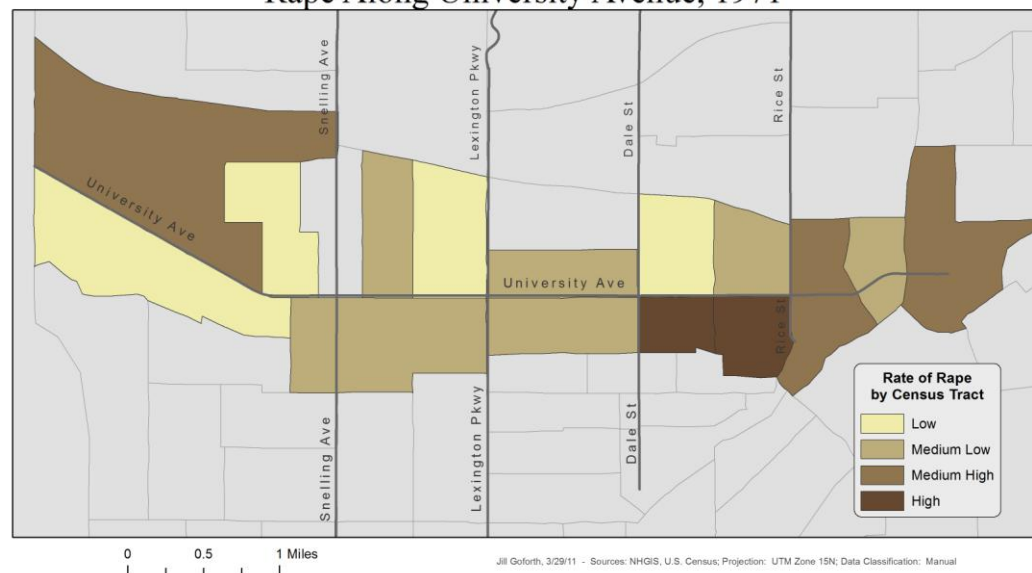
to 2001 in the census tracts surrounding the University-Snelling intersection.

Map Series 4: Rape

Rape Along University Avenue, 1937

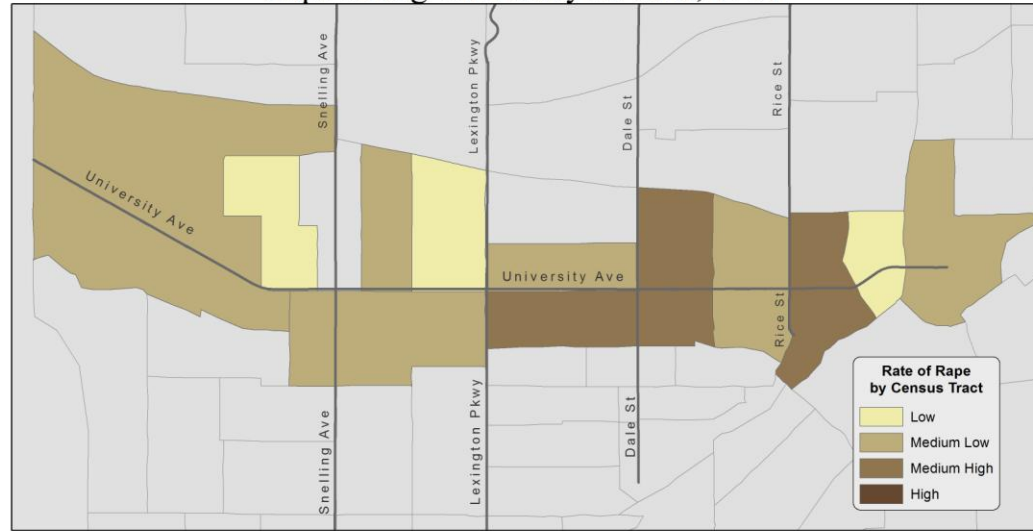


Rape Along University Avenue, 1971



Map Series 4: Rape

Rape Along University Avenue, 1981



0 0.5 1 Miles

Jill Goforth, 3/29/11 - Sources: NHGIS, U.S. Census; Projection: UTM Zone 15N; Data Classification: Manual

Rape Along University Avenue, 1991

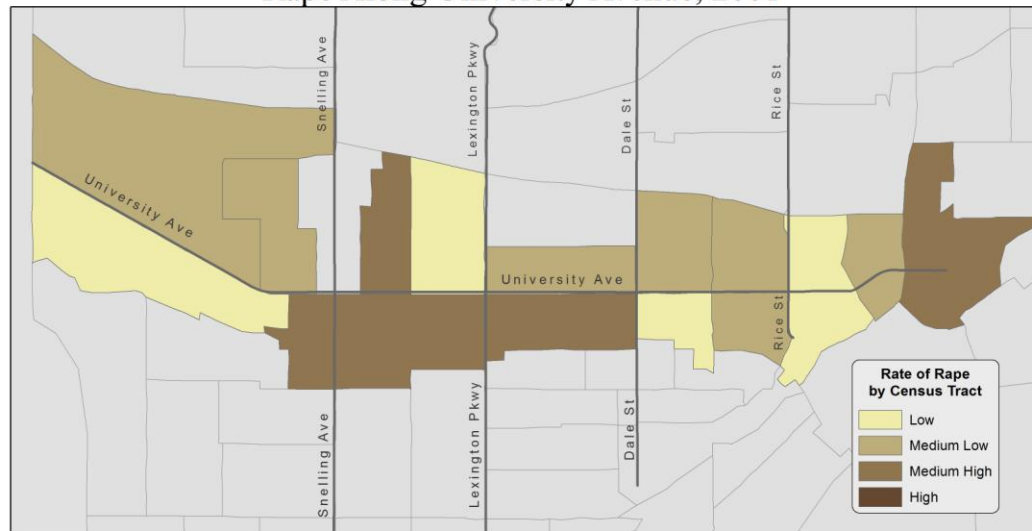


0 0.5 1 Miles

Jill Goforth, 3/29/11 - Sources: NHGIS, U.S. Census; Projection: UTM Zone 15N; Data Classification: Manual

Map Series 4: Rape

Rape Along University Avenue, 2001



Jill Goforth, 3/29/11 - Sources: NHGIS, U.S. Census; Projection: UTM Zone 15N; Data Classification: Manual

Map Series 5: Burglary

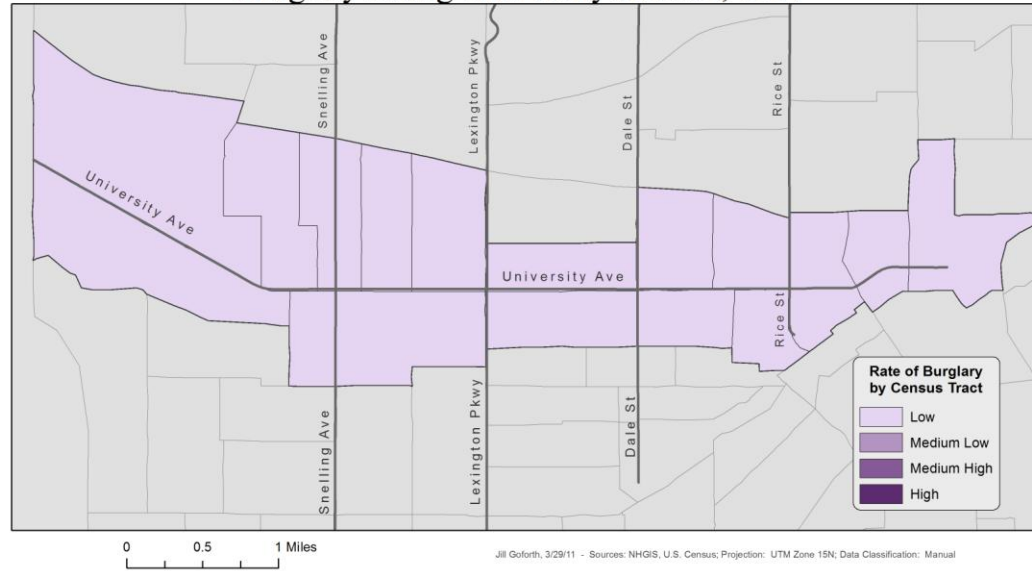
The Saint Paul Police Department defines burglary as “the unlawful entry of a structure to commit a felony or theft.”¹²

The occurrence of burglary along University Avenue was lowest in 1937 and hit its peak in 1981. The difference in rates of burglary between 1937 and 1981 is significant. In 1937 incidences of burglary were low in every census tract; by 1981, the rate of burglary increased in all but one census tract. For the most part, occurrences were spread out evenly across the Avenue; however, there was a higher concentration of burglary in the census tracts from Lexington Avenue to Dale Street, as well as in the census tract at the Avenue’s far-west end. By 1991, the rate of burglary had declined in many of the census tracts along University. Furthermore, incidents of burglary were low in all of the census tracts at the Avenue’s far-east end. The rate of burglary continued to decline throughout the decade. In 2001, every University Avenue census tract had low rates of burglary, with the exception of

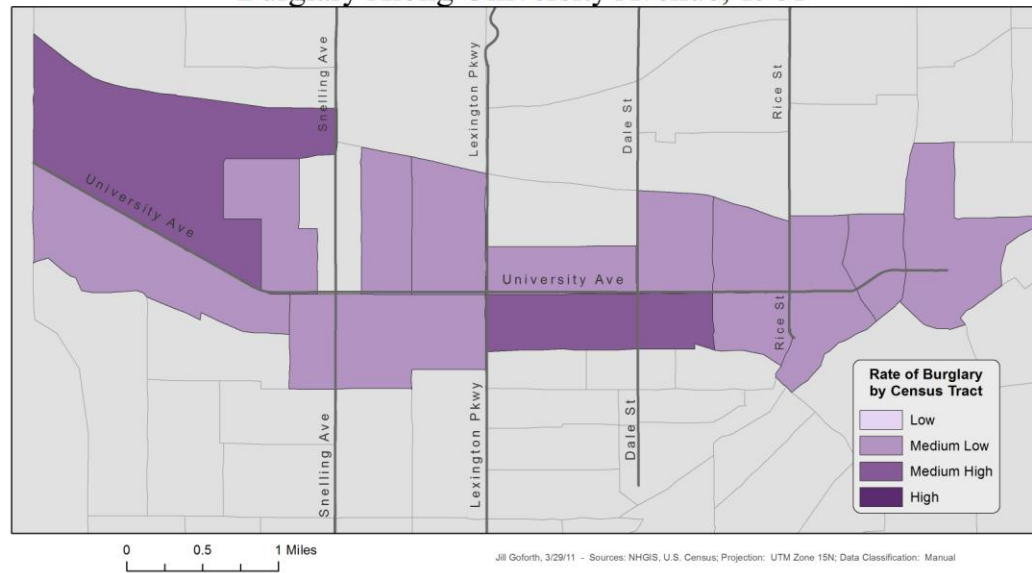
the census tract at the Avenue’s far-west end.

Map Series 5: Burglary

Burglary Along University Avenue, 1937

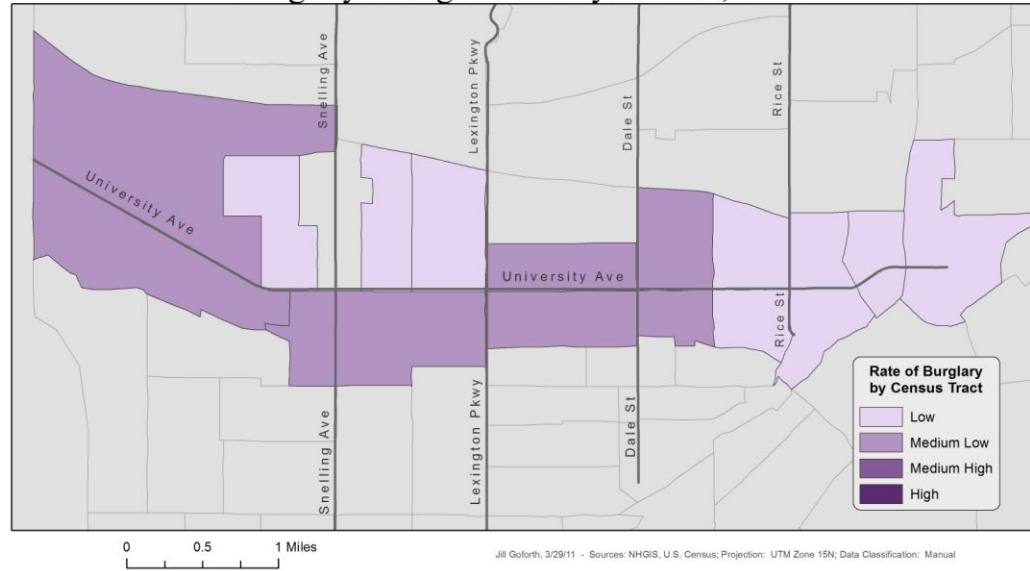


Burglary Along University Avenue, 1981

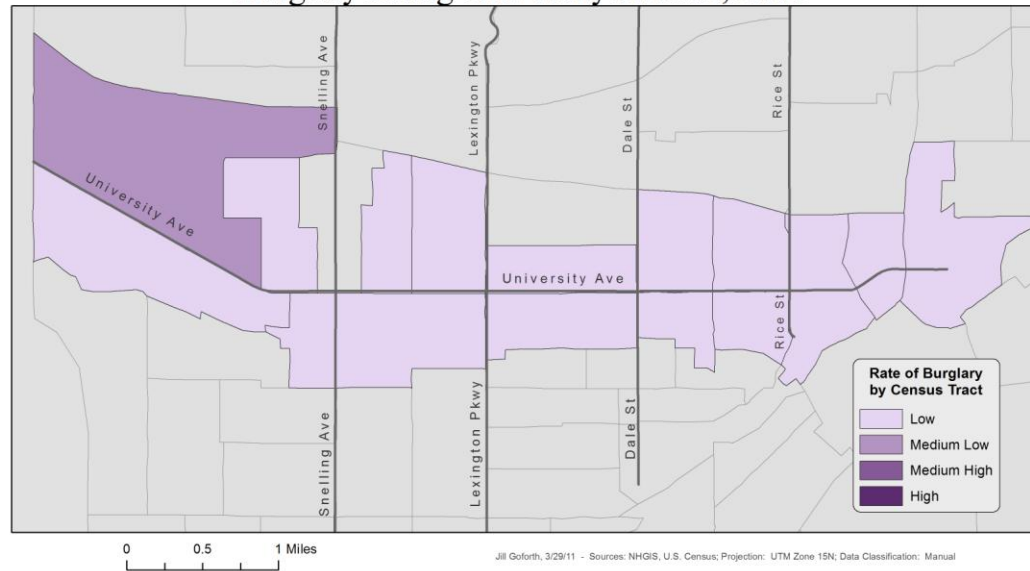


Map Series 5: Burglary

Burglary Along University Avenue, 1991



Burglary Along University Avenue, 2001



V. INTERPRETATIONS

According to the theories of crime prevention and environmental design, urban form has the ability to influence individual behavior. Crime is more likely to occur in spaces that are unmonitored and poorly maintained than in spaces that are constantly watched over and cared for.

The built environment of University Avenue has reflected two distinct design schemes throughout its history. Prior to 1940, the Avenue's physical form prioritized the pedestrian; however, after 1940, priority shifted to the private automobile.¹³

The proliferation of the automobile has necessitated a pattern of development that diminishes the ability for spaces to remain monitored and maintained. Thus, the rate of crime along University is expected to increase over time. The crime maps analyzed in the previous section reveal that rates of crime have, in fact, increased over time. This result will be interpreted in the following sub-sections.

STUDY YEAR 1: 1937

Along University Avenue, all types of crime were lowest in the year 1937. This low level of crime can be attributed to the University Avenue interurban streetcar line for two reasons. First, the popularity of the streetcar contributed to a development pattern that improved surveillance. It was in a business's best interest to have its entrance be easily accessible to streetcar stops. Therefore, buildings were developed in close proximity to the street. Second, because the streetcar stops were spaced at one-quarter mile intervals, people often had to walk a couple of blocks to arrive at their desired destination.

In both cases, surveillance of the Avenue was able to occur. Businesses that are directly adjacent to a sidewalk make it easy for owners to monitor the activities of the street, and pedestrians walking from streetcar stops to businesses are able to unconsciously police the Avenue.

STUDY YEAR 2: 1971

The rate of crime increased significantly from 1937 to 1971 for all

types of crime. The rate increased the most at the east end of University Avenue and near the Lexington Avenue shopping center. There are two transportation-related explanations for this significant increase in crime. First, Interstate-94 was completed in 1967 directly parallel to University.¹⁴ The freeway allowed for quick and efficient commutes from downtown Saint Paul to downtown Minneapolis and thus, people began to bypass University Avenue completely. In fact, in just one year after construction, the traffic along University was reduced by 10,000 vehicles per day.¹⁵ Second, the Avenue's built environment had come to reflect the now ubiquitous automobile. The Lexington baseball park was demolished in 1954, and a shopping center was built in its place.¹⁶ The development was constructed at a set-back from the street to make room for a large parking lot at its front.

The construction of the interstate and the Lexington Shopping Center decreased the ability for natural surveillance to occur. As traffic along the Avenue was reduced, business and social activity was reduced as well, thus decreasing the number of eyes on

the street. In addition, the large surface parking lots that came to dominate the landscape separated businesses from the street, and thus made it more difficult for storeowners, shoppers and residents to keep a watchful eye on activities occurring along the sidewalks. The prevalence of crime in the census tracts that encompass the Lexington Shopping Center supports this theory.

STUDY YEAR 3: 1981

Crime rates increased slightly from 1971 to 1981, with the exception of rape, which decreased. Changes in transportation preferences likely contributed indirectly to this increase. The construction of Interstate 94 allowed people to bypass University Avenue, which decreased the visibility of businesses. Furthermore, freeways like Interstate 94 enabled the nationwide trend of suburbanization, both of residential activity and commercial activity. Decreased visibility, as well as competition from suburban establishments put financial strain on University Avenue businesses. Specifically, the Faust Theater, located at the southwest corner of Dale and

University, began showing X-rated films in 1974 to differentiate itself from suburban showplaces.¹⁷ The theater became the anchor of a sex district that lasted through the 1980s.

It can be argued that the sex district brought more eyes to the street, thus contributing to improved surveillance and lower crime rates. However, I argue that the activities the sex district encouraged produced negative “signals” that contributed to unwanted behavior. The prevalence of crime in the census tracts surrounding the location of the Faust Theater and the sex district support this theory.

STUDY YEAR 4: 1991

From 1981 to 1991, occurrences of robbery, theft and burglary decreased; however, occurrences of rape and aggravated assault increased. Interestingly, incidents of rape and aggravated assault increased in the census tracts surrounding the sex district, but incidents of robbery, burglary and theft decreased in this area. Also notable is the fact that crime did not decrease near the automobile-oriented Midway Shopping Center at

the intersection of Snelling and University.

An analysis of overall crime along the Avenue for 1991 is difficult, because my results are varied. However, I posit that rates of robbery, theft and burglary decreased as a result of revitalization efforts along the Avenue. The City of Saint Paul negotiated a deal for the sale of the Faust Theater in 1989¹⁸, which sent a message that particular types of behavior were unacceptable. Additionally, in 1989, University UNITED, a not-for-profit, began funding streetscape and façade improvements for businesses along University Avenue.¹⁹ The funding enabled businesses to keep their property better maintained and created a visible sign of renewal along the Avenue.

These signs of revitalization may have deterred potential offenders from continuing to commit crime in these areas. This theory is supported by the crime maps for robbery, theft and burglary. Rates of crime decreased along the east end of the Avenue where revitalization efforts were most focused, but remained the same or

worsened in the areas of the Avenue that continued to be dominated by automobile-oriented development. The reasons behind the increase in rape and aggravated assault are unclear, and would have to be explored in more detail in order to make an informed hypothesis.

STUDY YEAR 5: 2001

From 1991 to 2001, overall crime rates decreased for every type of crime. However, crime rates increased around the intersection of Snelling and University Avenues for rape, and remained at its high level for theft and robbery in this area. A likely contributor to a decrease in crime rates is the continuation of revitalization efforts of University UNITED. In 1997, UNITED helped to establish the “Crime Prevention through Environmental Design” (CPTED) STAR Program. The program was awarded \$300,000 in City STAR monies to help University Avenue make exterior improvements consistent with CPTED principles.²⁰ CPTED principles emphasize aesthetics, which signals to potential offenders that this is a space that is cared for and monitored,

therefore deterring the individual from committing a crime. Areas that are not consistent with CPTED principles, such as the Midway Shopping Center, did not see an improvement in rates of crime.

VI. CONCLUSION

One of the claims of the Central Corridor light rail project is that it is just as much—if not more—about economic development and neighborhood revitalization as it is about moving people. Thus, the corridor will not only see the construction of light rail transit, but will also incorporate dense, mixed-use development that encourages walking, as well as public art, street trees, benches and streetlights to create a more visually stimulating and accessible environment. According to the theories of Jacobs, Newman, Jeffery, Wilson and Kelling, this type of development should contribute to improved safety along University Avenue.

The results of this study fall in line with this theory and reveal several

trends. First, crime rates have increased over time. After 1971, crime rates fluctuated; however, the low levels of crime that were observed in 1937 have yet to be experienced again. Furthermore, though crime rates have decreased overall from 1971 to 2001, they remain high in the areas of University that are particularly known for their automobile-oriented design features, and have decreased in areas that have utilized CPTED principles.

Given these results, I hypothesize that there is a connection between transportation, urban form and crime. Therefore, if the Central Corridor is developed as promised, University Avenue will experience improved safety in the years that follow the completion of the Central Corridor light rail line.

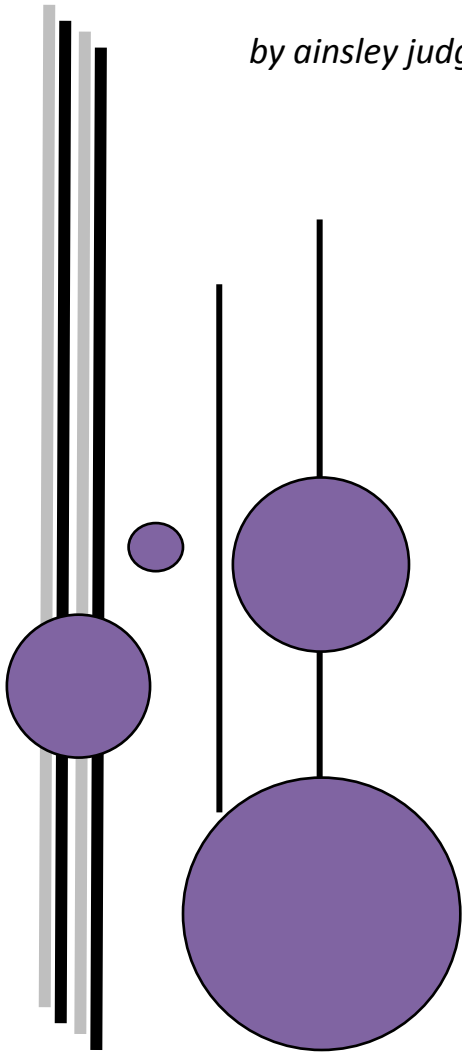
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viii. EVALUATING LIGHT RAIL TRANSIT AS A TOOL FOR PLACE-MAKING

by ainsley judge



This Chapter's Questions:

1. How does the connection among areas along a transportation corridor impact the connection of social interactions and communities?
2. How do we "make a place?" How are the LRT goals of place-making implemented and achieved?
3. What is the sense and place of community that already exists?

Chapter Outline:

- I. Introduction
- II. The Multi-faceted Goals of LRT
- III. Defining "Place-Making"
- IV. Defining "Community" and Mapping its Current Presence
- V. Stability and Length of Tenure
- VI. Conclusion: Planning for Community along the Central Corridor

I. INTRODUCTION

Advocates of light rail transit (LRT) generally argue that investment in LRT will spur future economic development as well as build identity along a corridor. As a large public infrastructure project, LRT has the capability of reshaping and re-orienting an area around the physical course and duration of the line. LRT directs the movement of people through a place and thus physically connects each community it passes through with each other and with the LRT riders. Yet these communities are not merely places to pass by on a commute, but should be treated as “places that should be *served* and *improved* by the transportation planning¹.” Among LRT’s potential positive benefits is the ability to establish an identity along the corridor, or act as a means of “place-making,” but what is less certain is how this process of place-making will unfold. How does this connection by infrastructure impact the connection between communities?

Applied to the Central Corridor and the neighborhoods along University Avenue, there is already a strong sense

of place in a multitude of communities, but different LRT stakeholders and current residents define “community” differently. Likewise, efforts to serve or improve these communities trigger a mixture of responses from stakeholders involved. How will the construction of the light rail and ensuing development impact the neighborhoods immediately adjacent to the corridor? Through the following analysis of current neighborhood characteristics and stated LRT goals, it appears that LRT development struggles to clearly define the “community” it is dually supporting and creating. Given the scale of large transit infrastructure projects, a lack of uniform or definitive community is understandable, if not inherent; however, in anticipation of future change along the corridor it is critical to document and bolster certain facets of the communities’ current status.

II. THE MULTI-FACETED GOALS OF LRT

From the outset of St. Paul’s Central Corridor Development Strategy, the document declares the double role that light rail plays in the city. It proclaims, “in addition to the resulting transportation improvement, it is a

tremendous occasion for city-building and place-making.²” Furthermore, one of six principles and objectives that the city of St. Paul hopes to achieve through the construction of the light rail is to “benefit and strengthen diverse communities along the Corridor.³” The city distinctly remarks on the importance and desire to protect the existing communities and the diversity within them. Thus the plans for light rail serve a multi-layered goal of “building community” through transit: one that welcomes change and new investment and also one that seeks to protect and strengthen existing residents’ networks.

Change and reinvestment are central components to the construction of transit lines historically, by opening opportunities for real-estate speculation and spurring development activity⁴. The Hiawatha Line in Minneapolis pays tribute to the economic development benefits of LRT building^{5,6} as did the streetcar lines throughout the Twin Cities in the early 20th century⁷. In order to strengthen the communities already present, appropriately designed transit can increase service and transportation options as well as ensure that

redevelopment projects act in accordance to residents' needs.

In regards to current transportation, residents' commutes are served by the MetroTransit bus system, notably the bus lines of the 16 and 50 limited stop, as well as use of personal automobiles along the Avenue and Interstate 94. The thoroughfare services 22,000 bus riders and 28,000 automobile trips per day⁸. Also, a plethora of civic and religious institutions, schools, and housing programs provide social services to the Corridor's population. Section 4 of this chapter illustrates the range of these community-oriented institutions that are present. Section 5 evaluates the potential for rapid change in development and population by mapping the current state of neighborhood stability. It compares the rate of turnover of parcels among neighborhoods, along the entire Corridor, and for Ramsey County to depict the length of tenure of community members.

Mapping the extent of not-for-profit social services and length of occupancy provides a backdrop for a community positioned for rapid change and redevelopment. Though the current state of the Corridor is also a product of dynamic and changing forces, the LRT

posits a direct desire to redevelop the area. The challenge for the plan will be to reconcile how these two shifting community populations, one new and dynamic and one already established, will be a part of a cohesive act of "place-making."

III. DEFINING "PLACE-MAKING"

The Project for Public Spaces purports that "place-making" is a multi-faceted approach to planning and design that works toward a common vision of a public space, based on the ideas and needs of people who actively use, live, and work in that space⁹. It is a process and opportunity to reconnect diverse publics toward a shared space and place-identity.

Light rail is one example of a public transit project that can be designed to bolster community identity. Two larger movements, Smart Growth and Transit-Oriented Development (TOD), contend that an emphasis on public transit and options for non-motorized transportation can promote higher levels of interaction and help build a stronger community.

Recent changes in federal policy and funding from the Federal Highway Administration (FHWA) in the last

decade promote investment in alternative modes of transit, such as light rail transit. Traffic congestion and air quality are main targets for new programming, but guidelines for community-sensitive design and community participation are also leading concerns in transportation planning¹⁰. An overall shift in federal and regional policy is a movement towards Smart Growth and away from sprawl. Integrated multi-modal transportation networks provide a solution to target environmental, economic, and community goals.

TOD and Smart Growth aim to combat sprawl and auto-oriented neighborhoods through a combination of transportation and land-use change. They urge land uses and development that is compact, mixed-use, and implements safer and intentional design (attention to sidewalks and street-crossings)¹¹. Land use that supports and is supported by improved transit can increase neighborhood accessibility, increasing the proximity and density of different uses and populations¹². However, the extent to which new transit development will alter and influence changes in land use is specific to the political and economic context of each place. Other elements

of land-use patterns that it influences include a change in urban densities and housing prices, yet again to varying degrees based upon supplemental policy and development guidelines. LRT development alone does not immediately address all facets of TOD, but it can be a tool to assist and direct change in a metro area.

IV. DEFINING “COMMUNITY” AND MAPPING ITS CURRENT PRESENCE

In order to evaluate how LRT or other public transit projects may create or build “community,” it is critical to understand the community services and institutions that exist prior to construction. Though there is no single way to define what a “strong community” entails, there are certain elements of change predicted to accompany the LRT that many fear will challenge the composition of the current community fabric¹³. Factors of redevelopment that would either negatively impact the current composition or drastically alter it include steep increases in property values that price out current residents, businesses, or services, and a significant change in zoning that

encourages different uses to occupy certain spaces.

To evaluate what the LRT’s impact will have on future development of community services, this study analyzes the range of community services available. Current community spaces are defined as places that serve a non-consumptive purpose or fill a need set by residents. This definition is divided into four broad categories: Charitable Institutions, Religious Institutions, Exempted Housing, and Schools. The categories encompass spaces such as community organizations and non-profits, social service providers, public housing, and centers for education and religion.

Data Classification

The data for community spaces originate from the County Assessor’s Office and provide descriptive information at the parcel level for Ramsey County. The data represent all parcels listed as “Tax Exempt” in the attached attribute file. Tax Exempt properties help to narrow the field for community organizations, as they represent a non-commercial or non-profit service or institution. Each tax-exempt parcel includes an “Exempt use

description” to explain its status as tax-exempt, and also lists its general land-use description and the property owner. Many parcels are federal, state, or municipal property and may not directly serve the immediate community. For instance, a property may be tax exempt if it is a municipally owned building or land area, such as the capitol building or government offices, as well as wetland or properties owned by the St. Paul Port Authority. Additionally, all vacant properties are tax-exempt, but are not examples of civic institutions or a community site. Thus, tax-exemption status alone is an insufficient measure for analyzing community organizations or community strength, and instead the following map and tables illustrate a more nuanced categorization of community institutions.

The category, “Charitable Institutions” represents a merger of properties listed as “Exempt Office Buildings” or exempt residential single-family or multi-family dwellings. Office properties include non-profits such as the Greater Frogtown Community Development Corporation and the Aurora-St. Anthony Neighborhood Development Corporation, each of which strives to

provide economic, residential, and social services to the communities within which they work. The residential properties listed under Charitable Institutions are those owned by a non-municipal organization, such as the St. Paul Urban League¹⁴ or the Model Cities of St. Paul, Inc¹⁵. These organizations demonstrate a community service or civic institution as they provide a myriad of supportive housing services for families and youth, as well as educational and employment programs, and civil rights information.

The Exempt Housing categorization encompasses government-owned public housing developments, mostly maintained by the St. Paul Public Housing Agency. Religious Institutions and Schools, as places of worship or education, serve as a gathering space and an environment that fosters community and interaction.

Evaluating the current extent of community-based organizations and tax-exempt properties as defined here offers a general overview of the services provided and demanded in the area. Map 1 and Table 1 illustrate the distribution of resources along the corridor and within individual neighborhoods.

Scale: Emphasizing Neighborhoods

To narrow in on the areas likely to be most affected by light rail transit, the data represent parcels and neighborhoods within a quarter-mile buffer north and south of the Central Corridor line. Further, the analysis operates on the different scales of parcel-level use distinction, the percentage of civic institutions by neighborhood, and draws comparisons to the entire Corridor and to Ramsey County.

“Neighborhood” boundaries delineate the areas between LRT stations from east to west, and within the north-south quarter-mile buffer. Neighborhood delineations do not follow the contours of the city’s district lines, but instead create areas oriented around the sites projected for future development. Using the station points as east and west boundaries also allows for a more uniform size of neighborhood to allow for comparisons along the Corridor.

The three neighborhoods between the Lexington Avenue LRT station to the west and the Western Avenue station to the east are in particular focus throughout this study. These three stations lie within St. Paul’s Summit-

University District to the south of University Avenue and the Thomas-Dale district to the north of University Avenue. Additionally, the southern portion of these neighborhood boundaries includes the Rondo Community, comprised of a large African American population, while the northern segment includes Frogtown, home to large Hmong and East Asian populations.

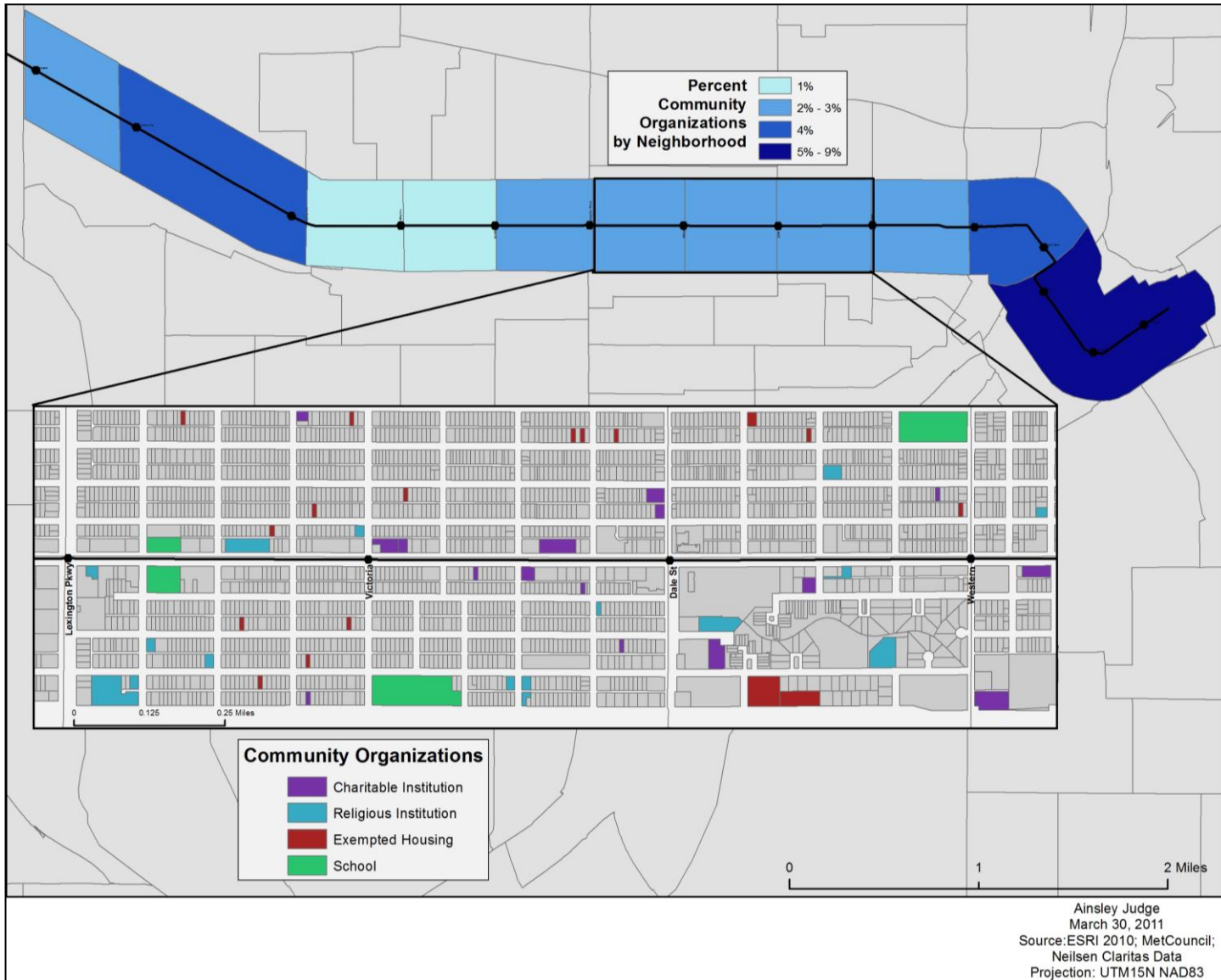
The Rondo and Frogtown communities occupy a visible economic, residential, and social presence along University Avenue and express fear of LRT redevelopment in the form of gentrification. Members of the communities participated in filing a lawsuit against the Central Corridor development through the St. Paul NAACP¹⁶. Activists behind the lawsuit pull from a coalition of Rondo residents, businesses, the Community Stabilization Project, Pilgrim Baptist Church, and the St. Paul NAACP¹⁷. Fear of displacement, lost business during construction, rising property values, and anger with the lack of meaningful participation granted to the public are representative of the communities’ critiques of LRT construction and planning.

The collection of activists represents the importance and collaboration among different civic institutions, such as non-profits and religious institutions, in promoting the needs of a surrounding community. Additionally, the lawsuit presented by current (2010) civic institutions and residents, and their confrontation with the proposal of future LRT development, challenges the dual roles of economic growth and place-making that light rail intends to achieve.

TABLE 1: TAX-EXEMPT CIVIC INSTITUTIONS

	Lexington-Victoria		Victoria-Dale		Dale-Western		Corridor		Ramsey County	
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total
Religious Inst.	7	0.91	2	0.25	4	0.68	49	0.71		
Charitable Inst.	2	0.26	9	1.12	3	0.51	91	1.32		
Exempt Housing	8	1.04	4	0.50	5	0.85	36	0.52		
School	2	0.26	1	0.12	1	0.17	11	0.16		
Total Comm. Inst.	19	2.47	16	2.00	13	2.21	187	2.72	1334	0.89
Total Parcels	770	100	802	100	587	100.00	6874	100.00	149055	

MAP 1: TAX-EXEMPT CIVIC INSTITUTIONS



Current Civic Institutions

The preceding map (Map 1) illustrates two scales of the influence and distribution of community institutions along the Corridor. The top portion of the map depicts the percentage of community institutions per total parcels in each neighborhood (as defined by the area between transit stations). In comparison to the total number of parcels per neighborhood, the percent of community institutions remains fairly low across the corridor, ranging from one to nine percent. The distribution by percent appears relatively uniform across the corridor, with the lowest neighborhood standing out in the Hamline-Midway District between Fairview and Hamline Avenues and the highest-ranking neighborhood in downtown St. Paul. The three neighborhoods drawn to focus, Lexington-Victoria, Victoria-Dale, and Dale-Western occupy the category between 2 and 3 percent, which is the dominant category on the Corridor.

A closer analysis of the data in Table 1 reveals slight differences between each of the three selected neighborhoods and draws comparisons to the entirety of Ramsey County.

Community Institutions represent 2.72 percent of all 6,874 parcels along the entire Central Corridor line. The three focus neighborhoods have a lower proportion of their parcels used for community institutions, all occupying between 2 and 2.5 percent of the total neighborhood property. Victoria-Dale experiences the lowest proportion of civic institutions, and has particularly low percentages of Religious Institutions and only one school, even though it is the largest of the three neighborhoods by number of parcels.

Lexington-Victoria predominately features exempt housing owned by the St. Paul Public Housing Agency, representing 1.04 percent of its parcels. It also has 2 schools and 7 churches. Victoria-Dale has a high percentage of charitable institutions, which consist of the previously mentioned Model Cities of St. Paul, Inc., Greater Frogtown Development Corporation, and the Aurora-St. Anthony Neighborhood Development Corporation. Additional parcels of note are Lifetrack Resources¹⁸, a non-profit that emphasizes healthy development in children and families as well as provides economic and employment assistance.

The neighborhood of Dale and Western has a more evenly distributed spectrum of different civic institutions. Dale and Western features a refugee and immigrant specific non-profit, Oromo Community, Inc., which operates programming and assistance for the Oromo people of Ethiopia and East Africa in attempts to foster an Oromo community in Minnesota¹⁹. Another community center is Peace Place, Inc., promoting solutions and assistance to combat homelessness.

The types of civic institutions across the three neighborhoods suggest a theme oriented around supportive housing and employment services – indicative of a basic community need for these social services as well as reflective of low-income or immigrant populations seeking to build community through service networks. The lower percentage of community centers in these three neighborhoods in comparison to the Corridor overall is likely due to the higher concentration of services in downtown St. Paul, as highlighted in Map 1, which may possibly skew the category breaks.

The spatial distribution of community centers within the three neighborhoods also reveals a pattern where exempt housing parcels and

religious institutions are more scattered throughout each neighborhood while charitable institutions are more concentrated directly on University Avenue or at intersections.

While the neighborhoods between Lexington and Western demonstrate a lower percentage of community centers in comparison to the rest of the Corridor, when compared to Ramsey County as a whole, the Corridor line boasts a significantly higher percentage of civic institutions than the rest of the county. Only 0.89 percent of Ramsey's 150,000 parcels are occupied by a civic function and tax-exempt use, whereas 2.72 percent of the parcels along the Corridor are designated for civic purposes.

Future Development

The map and table illustrate a few points worthy of attention in the process of light rail development. The higher proportion of civic institutions along the Corridor in comparison to Ramsey County as a whole indicates that there is a current demonstrated need for services and support for community spaces in the neighborhoods on University Avenue. LRT development that seeks to spur

economic development while strengthening communities on University, must weigh the influence that services currently provided by non-profit or other organizations and institutions holds in the area. Place-sensitive TOD should either support the institutions already in place, or direct more services, if demand exists, to the neighborhoods between Lexington and Western Avenues. The overall trend for housing services and related supportive programming among civic institutions in these three neighborhoods alludes to a potential pre-disposed resident vulnerability to rising property values and gentrification.

The locations of charitable organizations directly on University Avenue or near station intersections, especially in the Victoria-Dale and Frogtown neighborhood, could be in locations prime for redevelopment or rising property values²⁰. The variable mapped here, of community-based organizations and community sites for non-consumptive gathering, draws attention to parcels that directly service the community population, but may have to compete with speculative and for-profit development interests. Government-owned, educational, and religious sites are likely to be more

stable against threat of turnover or plans for redevelopment, but the guarantee of continued funding for housing and other social services is more tenuous.

V. STABILITY AND LENGTH OF TENURE

In addition to the places offering tangible services and spaces for gathering are the residents who comprise the life and identity of the neighborhoods. A measure employed to document a component of strength in a community is the length of tenure of populations. One of the fears of LRT economic revitalization and the subsequent change in the Corridor's structural appearance is a shift in resident populations along the corridor. A myriad of demographic variables could measure residential shifts between pre-LRT and post-LRT construction, such as race, ethnicity, and class. Similarly, another variable, length of residency, can explore the relative stability in a neighborhood. An indication of gentrification or displacement is the rapid turnover of properties and residents as more transient populations enter the neighborhood, attracted by reinvestment and new developments.

Neighborhood stability and diversity are also considered beneficial components of a strong community in St. Paul's Central Corridor Development Strategy, where it states the Corridor's direct ability to enhance these neighborhood characteristics²¹.

Data Considerations

The data available to document length of residency or neighborhood stability are drawn from the same parcel data as the Tax Exempt variable, from the Ramsey County Assessor's Office. Attached to each parcel is the last sale date for the property from 1976 to 2010. The data do not include the sale years for properties sold before 1976, so the years without data are merged into the low-year, or older, category as properties last sold before 1995. The middle category represented on Map 2 marks properties sold between 1996 and 2005, or properties sold between 5 and 15 years ago (from the year of the data set, 2010). The most recent category highlights properties sold within the last five years, from 2006 to 2010.

The last sale year provides a general marker for how recent or how well-established a resident or non-

residential venture is to the immediate community. University Avenue is in many ways simultaneously grounded in generations of family and community building, as well as a dynamic place, often serving as the first home to waves of immigrant populations in the Twin Cities.

Scale

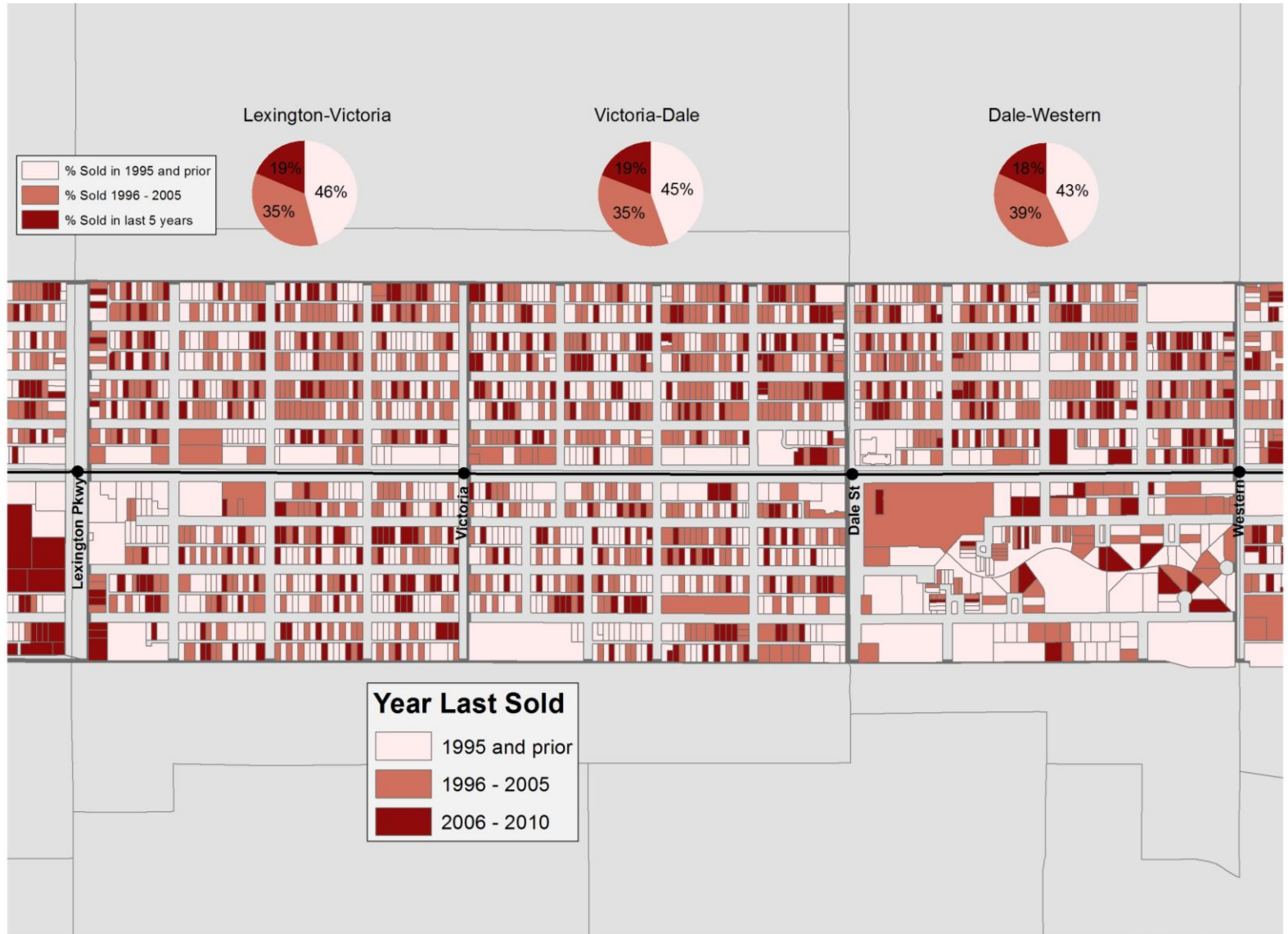
The scale of Map 2 aims to accomplish a similar range as Map 1, pinpointing information at the parcel, or individual plot level from the neighborhoods between Lexington and Western Avenues. The pie charts above portray the percent of each neighborhood that was sold in each sale-year range. Tables 2 and 3 provide sale-year information for the entire Corridor and Ramsey County using the same categories. Table 4 selects out only the properties sold in 2010 as a means to measure potential speculation along the LRT line or of businesses and residencies predicting lost business or rising housing prices. Patterns within and across the multiple scales reflect both dynamic and static components to a community's composition.

Current Status of Relative Stability

The individual sale years provided by the parcel data juxtapose the diversity of experiences between each household or commercial property. The prevalence of each category throughout the neighborhoods demonstrates a diversity of tenure – reflective of University's composition as a historically diverse Corridor with a persistent influx of immigrant populations. Within each neighborhood, spatial patterns of longer length of tenure are not readily apparent, but across neighborhoods and in comparison to the entire Corridor and to Ramsey County, patterns begin to emerge.

Though there is a mixture of tenure-lengths, the largest category of properties has not been sold since 1995. This represents at least fifteen years of occupancy for roughly 45 percent of the total number of parcels in the neighborhoods between Lexington and Western. The second highest category across the three neighborhoods is of properties last sold between five and ten years ago. This population of relative stability makes up 35 percent of the total parcels for

MAP 2: NEIGHBORHOOD TENURE BY PROPERTY SALE DATE



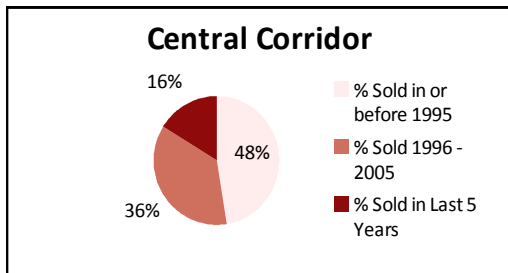
0 0.25 0.5 Miles

Ainsley Judge
 April 20, 2011
 Source: ESRI 2010;
 Nieleon Claritas Data; MetCouncil
 Projection:UTM15N NAD83

Lexington-Victoria and Victoria-Dale, and 39 percent of Dale-Western’s parcel count. Together these two categories, representing a slightly older or more consistent property stock, occupy many of the parcels immediately adjacent to University Avenue. The spatial arrangement of the older properties facing University Avenue and the future light rail can provide yet another marker for comparison as new development and re-zoning moves into the area.

The smallest category for the three neighborhoods catalogs the percent of property sales made in the last five years, from 2006 to 2010. Each neighborhood experienced the sale of 18 or 19 percent of its total parcels in the last five years. This trend is similar to findings for the entire Corridor as visualized in Table 2. However there are slight differences that are critical to note.

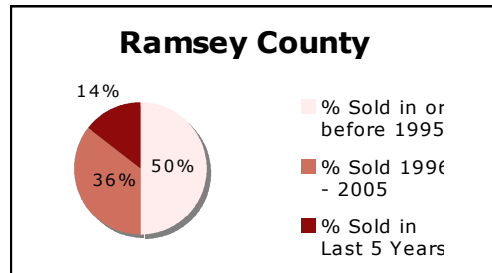
Table 2



The neighborhoods selected suggest a larger percentage of properties with significantly shorter length of residency than the Corridor as a whole. In comparison with 19 and 18 percent of total properties sold in the last five years in the three neighborhoods, 16 percent of a total of nearly 7,000 parcels on the entire Corridor line sold in the last five years. The discrepancy in overall length of tenure between the Corridor and the neighborhoods around Rondo and Frogtown could be attributed to anticipation of LRT development, either on the speculation side or a desire or need to leave for financial reasons. The last five years also covers realities of the economic recession and the peak of the foreclosure crisis in the Twin Cities, which had a significant impact on Frogtown.

When compared to Ramsey County as a whole the pattern continues.

Table 3



The parcels along the LRT line sold at a higher rate in the last five years than parcels through the entire county. In comparison to parcels within the neighborhoods of Lexington-Victoria, Victoria-Dale, and Dale-Western, the percent of parcels sold in the last five years decreases by four to five percent at the county level (comprised of a total of 149,000 parcels). The discrepancies indicate that there is a significant presence of more recent turnover of homes within a quarter-mile buffer of the light rail line. However, the direct impact that LRT development actually holds over the length of tenure is not certain.

To narrow the connection between LRT construction and rate of recent property sales, Table 4 illustrates the percent of parcels sold in 2010 alone for each neighborhood between Lexington and Western, the Corridor, and for Ramsey County. Again the three neighborhoods stand in stark contrast to the Corridor and County sale rates. The Corridor and Ramsey County are roughly even, with 2.1 percent of the Central Corridor’s parcels sold in 2010 and 2.3 percent of Ramsey’s parcels sold in 2010.

Table 4

	Lexington_ Victoria	Victoria_ Dale	Dale_ Western	Corridor	Ramsey County
Sold in 2010	26	29	17	144	3,477
Total parcels	770	802	585	6875	149,055
% Sold in 2010	3.4	3.6	2.9	2.1	2.3

The areas of Lexington through Western along the LRT line experienced much higher rates of sale in 2010. Victoria-Dale sold at the highest rate of 3.6 percent of parcels in 2010, and Dale-Western significantly lower at 2.9 percent of parcels. Contributing factors include the imminence of development with the official start of LRT construction – influencing the demand side – as well as impending lawsuits and tension within the Rondo community – influencing the supply side of businesses who are afraid of financial loss during construction or households fearing being priced out.

**VI. CONCLUSION:
PLANNING FOR “COMMUNITY” ALONG
THE CENTRAL CORRIDOR**

The variables measured, civic institutions and neighborhood stability, represent two components of a community identity. Spaces for social services, housing, religious practice, and education offer shared spaces for interaction or necessary basic information and programming for a healthier community population. Length of tenure illustrates the movement and level of permanency of people and businesses in and out of a corridor. A range of sale years within a neighborhood represents a neighborhood that balances a static and dynamic community population. The two components of a community

mapped and analyzed in this chapter offer a documentation of what currently exists, as well as draw attention to areas more prone to redevelopment with the LRT.

The presence of supportive-housing themed services in the neighborhoods between Lexington and Western suggest a demand from the immediate community for low-income and affordable housing. Given the same neighborhoods’ stated fears of gentrification and rising property values, the presence of the charitable institutions should indicate a demand for reinforced social programming in the area during LRT construction.

The higher concentration of properties that sold in the last five years and in 2010 along the Corridor – in comparison to the rest of Ramsey County – might reflect the changes and turnover to ensue with LRT development. It may also reflect the economic status of homeowners and businesses along the Corridor and the rate of foreclosures. The current pattern is a useful point of comparison as LRT construction continues to track property turnover through time and in each stage of development.

The Central Corridor Development Plan explicitly and

repeatedly states its desire to reach a balance between spurring economic redevelopment and strengthening existing communities. It also embraces many of the Transit Oriented Development, Smart Growth, and place-making principles, such as community participation, plans for higher densities, walkability, and increased public spaces. However, in order to effectively engage in place-making, the plans for development need to be contextualized and earn community buy-in. The analysis of civic institutions and neighborhood stability reveals potential discrepancies that already exist between development in the neighborhoods of Lexington to Western with the Corridor and the county. Civic institutions and tenure of residency are significant factors that should receive attention as LRT plans move forward in development plans and methods for strengthening existing communities.

Place-making is a process that can unite a community towards a shared space, but acknowledges that the space is constantly in flux and should be flexible in response to the changing demands and needs of the public²². The impetus for the Central Corridor pulls from multiple interests and motivations

and as it moves forward, development needs to incorporate the presence of established social and community organization networks in order to reconcile LRT's dual role of both creating and confirming a broad community identity.

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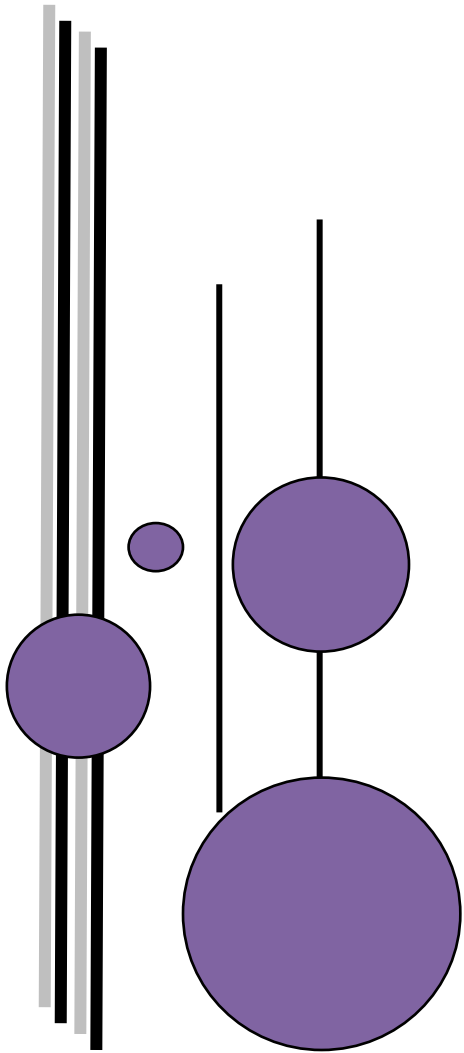
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ix. PUBLIC ART AT TRANSIT STATIONS

by maya fehrs



This Chapter's Questions:

1. How does public art at transit stations work as a place-maker?
2. How does the public art at the light rail stations along the Central Corridor represent communities?
3. What are viable ways of judging the success or effectiveness of public art at transit stations?

Chapter Outline:

- I. Introduction and Overview
- II. Public Art as Place-maker
- III. Public Art at Transit Stations
- IV. The Central Corridor: Analysis
- V. Conclusions

I. INTRODUCTION AND OVERVIEW

This chapter will address the role of public art at the transit stations along the Central Corridor. In general, the role of public art is to act as a placemaker and symbolize the community in which it is located. Public art at transit stations offers unique challenges for public artists due to the complexity of defining the transit community and reconciling this group with those in the immediately-surrounding transit corridors. Despite these challenges, public art in transit systems plays an important role in placemaking, wayfinding, and increasing public transit ridership.

The Metropolitan Council of Minneapolis-St. Paul commissioned seven artists to design the eighteen stations of the Central Corridor Light Rail Line. Each artist brings a different approach to public art and different aesthetic principles. However, each has the task of creating art that will relate to and be embraced by the public, however defined. This chapter will explore the following research

questions in order to understand the role of public art at transit stations within the context of the Central Corridor: How does public art at transit stations work as a placemaker? How does the public art at the light rail stations along the Central Corridor represent community? Finally, what are viable ways of judging the success or effectiveness of public art at transit stations?

This chapter will first address the context of public art, focusing on the ways in which public art works as a placemaker. It will then look specifically at public art at transit stations. Finally, the chapter will focus on the station designs for the Central Corridor in order to analyze the public arts process as enacted by the Metropolitan Council and the artists, as well as to analyze the images and themes of the station designs in the context of the neighborhoods they will serve. Research was conducted through the literature on public art, placemaking, and transit systems, as well through interviews with all seven artists and the CCLRT Project Manager of Station and Streetscape Design.

II. PUBLIC ART AS PLACE-MAKER

Placemaking is a primary function of public art in the modern context. Placemaking refers to the process of developing a distinct image and identity for a specific place, and creating ways for the people who inhabit and use the space to connect with it.¹ It operates on the theory that every place has a story to tell; public art is the means by which the embedded significance of a place can be found and represented.

The importance of public art is that it can help change the built environment into a lived environment. This process changes the way people use spaces and increases their sense of connection to and ownership over the various spaces they interact with. Rather than creating art that passively inhabits spaces, the point of placemaking is to make people interact consciously with the space. Some artists do this by purposefully creating works that are subject to varying and at times contentious interpretations, others by attempting to create works that will

resonate positively with the greatest number of community members.²

Placemaking in urban areas often serves the dual roles of remarketing urban areas and building identity for the community. This can be a contradictory process because the image created to remarket or “sell” urban areas may not coincide with the group identity of the community itself.³ Governmental policies may support public art in blighted neighborhoods to make them seem more amenable to middle class families; this process is often linked to broader gentrification patterns.⁴ Public arts policies become a strategy to enact a “cultural rebranding” of blighted urban neighborhoods.⁵ The process is such that “regardless of the scale and type of intervention, the installation of public art within the urban fabric is inevitably a political exercise.”⁶

While public art markets neighborhoods externally through “cultural rebranding,” it also markets a neighborhood to itself. Conflict arises when these two images do not coincide; often the struggle for the public artist is to portray both images simultaneously. It is possible for public art to find a

balance between place promotion and accurate local reflection. A successful public arts policy combines detailed guidelines reflecting the desires of the entity sponsoring the public art with strategies to involve the community.

Public art is a more democratic form of art because it is available for the public and ownership is community-wide. Through acting as a representation of a community, public art invites all members to take ownership over the art. The community can choose to interpret their public art in a way that seems appropriate for them, allowing the community greater agency in choosing their own means of representation. However, while public art can increase accessibility to art, it can also act as an exclusionary force. As public art is intended to represent communities, there is always the risk that the art will not be representative of the entire community, or that the community will feel that the art imposes a fixed identity upon them.

The goal of public art is to accurately represent the community in which it is situated; diverse neighborhoods and conceptions of the “accurate” identity of the community

complicate this process. It is impossible to create an art that will speak completely to the entirety of a city, or even of a neighborhood.⁷ The task of finding a “unified spirit” may be “destined to fail in a city characterized by a diverse population and complex social history”.⁸ The solution then must be to create public art that can generally represent a diverse population; the problem is that the art runs the risk of being so general so as to speak to no one. The problem of art by consensus is that it is likely uninspiring and unoriginal if it strives to please everyone.⁹ Public art must strike a balance between creating inclusive art that is specific enough so as to elicit identification from the community it serves.

Successful public art has been shown to require extensive community collaboration in order to ensure identification from the community. However, the designs will ultimately be the work of one artist or artist team and must represent their singular vision. There is thus a conflict between encouraging community input and maintaining the integrity of the artist. The issue of whether the artist can

appropriately represent the community becomes increasingly important if the artist is from outside of the community. Public art demands a responsibility to the public from the artist; the final project must be a type of participatory or group art. The level of community input will be determined by the entity commissioning the work, the artist, and the community itself.¹⁰

III. PUBLIC ART AT TRANSIT STATIONS

Transit systems are unique entities that transverse large portions of urban landscapes, often linking neighborhoods of vastly different demographics. Public art on transit systems offers the opportunity to both create distinct representations of individual communities and create a unified vision along the transit system. Public art plays many roles in the transit context: Public art can humanize the transit experience; it addresses the conflict between viewing transit stations as a space that exists only to pass through or as a deeply experienced environment; it often acts as an orienting device for passengers,

allowing them to situate themselves spatially but also within the context of neighborhoods with specific identities.¹¹

Although European transit systems had utilized public art since Edwardian times, the first use of decorative elements at transit stations in the United States was the inclusion of decorative tiles in New York Subway stations at the turn of the century. The art was primarily decorative architectural elements designed to signify the privilege and modernity then associated with public transportation. Public art for transit systems did not become widely prevalent until the 1980s. This use of public art “took place in context of a wider involvement of artists in the design of public spaces”.¹² The public viewed transit stations as an appropriate forum for public art because everyone could access public transport, democratizing access to art.

Art has since become a common feature of most transit systems. A critique of public art at transit stations is that it “tends to address the site as a physical rather than social space, and does not

approach the public issues of transport policy”.¹³ This critique addresses the limit as to how much art installed at transit stations can accomplish; the way that artists do address the social space of transit stations is through connection with the community. This connection between the transit system and the community is vital to the success of a transit system because the community will presumably make up at least a portion of the ridership. A greater connection to the transit system can increase the sense of ownership over the line and creates a space for the community to represent itself to those traveling through. If the community feels a sense of ownership over a transit station or line, it may lead to a “reduction in vandalism and an increase in stewardship for neighborhood stations”.¹⁴ Public art plays a very real role in creating identification between the community and the transit stations that serve it.

While art at transit stations plays a role in community identity and neighborhood revitalization, it also has the potential to be politicized. Public art improves the image of the transit system, ostensibly increasing

ridership.¹⁵ The incorporation of art connects public transportation with the cultural capital associated with the arts, positioning transit as a leisure activity. Public art can make public transportation “a choice rather than a necessity”.¹⁶ This changing image encourages the use of public transport across the metropolitan region, which may aid in discouraging auto use and reducing congestion.¹⁷ Public art also acts as a selling point for communities during the implementation stages of transit systems, a process that can be very disruptive. Within development or revitalization schemes, public art can be a “band-aid” to disguise or ameliorate reactions to inequalities and injustices.¹⁸ In this context, it is important that the public art does not replace open communication between the entity sponsoring the transit system and the public.¹⁹

While transit lines often seek some type of coherence of public art along the entire line, the uniqueness of individual stations is also important to highlight the individuality of the neighborhoods in which they are situated. Public art projects usually reference some combination of the site

itself, landmarks, and historical events or persons, depending on the perceived and indicated interests of the community. The ultimate goal of art at a transit station is to create an individual space, one that will decrease the uniformity of cities. A rider passing along a transit system will pass through many different neighborhoods; the station art will represent the complexity of the urban environment.²⁰

IMPLEMENTATION

It is general consensus that for public art to be successful, artists must be incorporated early in the design process so their vision can inform the entire system. This will increase the aesthetic quality of the entire system, but will also make the system more user friendly. Artists generally take a more humanistic approach to design and will be more attuned to the effect various design elements will have on users.²¹

There are many ways to approach incorporating public art at transit stations. Art pieces can be temporary or permanent, incorporated into the station design or free standing,

site specific or uniform along the line, among other factors. The way in which art will be incorporated depends on the larger context of the transit system and the goals of the city.²² Public art at transit stations can also take a broader approach: options for public art include stations, access structures, surrounding plazas, rail cars, walkways, street furniture, fountains, and lights, among others.²³ Public artists create works in a specific context and thus must consider the environment and achieving integrated design.²⁴

There are many considerations for public artists when working with transit stations; however, the most prominent concern is involving the community. The ideal process for creating art that reflects the community is for the selected artist to work with community members in order to create a design proposal that is subject to final review by a government entity and community members. This assures that the public art will reflect the design goals of the transit agency and the community it serves. While the artist must curtail his or her individual style to meet various objectives, he or she

can still maintain control over materials used and actual manifestation of the art.

IV. THE CENTRAL CORRIDOR: ANALYSIS

The neighborhoods along the Central Corridor represent a diverse population in terms of history and neighborhood demographics. The light rail will be the latest iteration of public transportation in the area; the corridor once hosted a streetcar line and currently several bus lines serve the neighborhoods. The Central Corridor Light Rail Transit (CCLRT) will serve the neighborhoods of the University of Minnesota, Prospect Park, St. Anthony Park, Hamline-Midway, Frogtown, and Downtown St. Paul.

Art along the CCLRT will be incorporated into the stations as columns and panels. The stations themselves will be uniform along the line; the artists will supply individuality by incorporating varying design elements to reflect the corresponding neighborhoods using differing techniques and materials. Five artists or artist teams were originally selected to design the station art, with each artist or

team designing three stations. With the inclusion of three additional stations the project selected two additional artists.

The process for selecting artists was strictly regulated because much of the funding for the CCLRT is through the Federal Transit Administration (FTA). The FTA required that the selection process be open to all artists and the Metropolitan Council could not select local artists based solely on that fact. This did lead to the Metropolitan Council receiving some criticism because not all of the artists are local; some community members felt non-local artists could not fully represent them. The council could also not specifically petition certain artists for designs and instead had to see who applied.

In 2008 the Metropolitan Council hired five artists to design for the original fifteen stations. The Council had planned to hire between three and five artists, meaning that the artists would design multiple stations. The process of selecting artists began with a request for qualifications, developed by the Metropolitan Council and the Selection Committee members.

The Selection Committee was made up of local funding partners, art experts, and public art coordinators from Minneapolis and Saint Paul. Artists had to meet several criteria in order to be eligible for review: involvement in at least three public art installations, involvement in several projects with large budgets, and the submission of samples of past work. Eighty-seven artists applied, which was considerably more than expected.

From the original applicant pool the Selection Committee shortlisted ten artists by evaluating artistic merit, budget, and materials from the design proposals. The ten artists were then given a budget of \$5000 and the task of creating a proposal that included drawings, a narrative, and a plan for working with the community. Before submitting their proposals the Metropolitan Council brought the artists to Saint Paul in order to meet with the Citizens Advisory Committee, a group of residents and business owners, as well as to tour the corridor and gain background information. Many of the artists did independent research along the corridor, in the archives, and through interviews with

various people within the community. Five artists were chosen from the group of ten based on the most feasible proposals and demonstrated knowledge of the community. Budget and materials were also considered. Due to regulations established by the FTA, the Metropolitan Council had to repeat the entirety of the process to select artists after three stations were added to the plans. Although several of the original artists did re-apply to design the new stations, the Metropolitan Council hired two additional artists.

The basic design of every station is the same; the art will be integrated into the existing structure. Design limitations include safety, durability, and harmony with the existing landscape. Any larger changes to the station design, for example replacing the railing, would involve the artist hiring their own engineer to certify the designs. This meant that the artists largely maintained the structure of the stations and simply added design elements. A further limitation is that the artists must work closely with the engineers and contractors. Engineers reviewed all of the designs and the installation of the art will be a

collaborative process between artist and engineer to make sure the installation process does not harm the integrity of the station.

Beginning with the initial request for applications from artists, the Metropolitan Council was clear on the need for the art to connect to the community. Most of the artists who applied had done some research on the area and had a plan to connect the art to the community. Of the five original artists only one used their original proposal, the others having shifted plans based on community feedback. The process for involving the community included a series of community meetings and the establishment of a committee of community members for each station. The Metropolitan Council employed several Outreach Coordinators to make connections with community members and business owners. They attended various district council meetings to present station plans. However, public art was less of a concern to community members than other hot-button issues like effects on businesses and parking loss, and it was at times difficult to engage people on the issue of public

art. Attendance of community art meetings largely depended on whether there was a specific group invested in the designs. Attendance varied between two to about twenty community members at any given meeting.

Although the public art process for each station followed a similar process, the Metropolitan Council and the artists had to maintain a degree of flexibility because some designs met with more resistance than others. The designs at the Dale station, for example, were contested because the neighborhood includes several different ethnic groups and not all of them felt represented by the original plans. The Metropolitan Council and the artist had several additional community meetings, including several meetings with specific groups. In this case it was very important that the artist had a strong connection to the neighborhood and was invested in representing the community accurately.

All of the artists selected had done extensive public art and were well aware of the process of working with a community. All were prepared to adapt their designs to fit the needs of the neighborhoods, although they were all

able to maintain their own design aesthetic. Public art at transit stations necessarily imposes some limitations on artists; however, the Metropolitan Council represented perhaps a larger bureaucracy than most of the artists were used to working with. The Council did receive some criticism for being too rigid, although they did not have a lot of leeway given the FTA guidelines.²⁵

THE DESIGN PROCESS

The seven different artists commissioned to design the transit stations for the Central Corridor all took very different approaches to the process of creating public art for transit stations and to the designs themselves. However, all expressed similar goals for the way their designs would interact with the community. As all of the artists are experienced in creating public art, they all have familiarity in how to incorporate community members into the design process. This process was largely mediated through the Metropolitan Council; as described above, each station held several planning meetings for the artists to

speaking with community members and present their plans. Community participation was of issue during the planning period as it can be “hard to get people to weigh in when they are invited to weigh in.”²⁶ Artist Nancy Blum explains that some community events did have sizeable turnouts, although others did not. She believes that a good turnout of community members depends on if the community feels involved in the process. It was at times difficult for the artists to foster this sense of involvement because the community meetings were on a specific schedule and community participation depended on who showed up.²⁷

Several of the artists pointed to the contentious nature of the CCLRT project as an explanatory factor for why community participation was low; public art is not the “make it or break it issue regarding the light rail.”²⁸ Public art can seem a more minor issue for some community members, leading to low levels of participation. This makes the process more difficult for the artists because they must form a representation of a community based on little input from the community itself. As artist Janet Lofquist explains,

the people that do turn up to the meetings are often quite opinionated and the artists must determine how much of the community involvement they see is actually representative of the community.²⁹

The artists took varying approaches towards forming a representative image of the neighborhoods serviced by their stations. The artists used a combination of outside research, important visual icons of the area, community input, and their own design sensibilities. Catherine Widgery developed a blog through which she could present ideas and receive public input, thus bypassing the formal process set up by the Metropolitan Council. This allowed more community members to access the process; however, although it is impossible to tell how many people viewed the blog, few left comments.³⁰

Janet Lofquist explains that this project ultimately involves a broader public than that defined by the boundaries of the neighborhood around the station. This comes from the fact that a transit system will serve not only the immediate surrounding neighborhoods, but also anyone who

passes through. The art then must be relevant to this public as well. However, not all of the artists sought specifically to represent a broader public. Seitu Jones focused his designs very specifically on the communities of the neighborhoods surrounding his stations; he works from the perspective that when an artist “zeroes in on the specifics, it becomes universal”.³¹ His designs focus narrowly on the neighborhoods but he feels this is what allows the stations to resonate with the larger community.

Community involvement is also a product of the perspective of the artist. For Stan Sears, the process involves determining who will be on the site, who will use it, and who will maintain it. All of these categories are important to consider when determining representation. Each artist identified a different community to represent, both in terms of the physical location of the community and its demographics, but also in the scale of the community. Some artists focused very specifically on the communities within the neighborhood boundaries served by the particular station, while

others focused on broader communities such as the region or state.

As defining the community of a transit station is a complicated process, it necessarily follows that representing this community will also be difficult. As Catherine Widgery puts it, “not everyone will be pleased all the times in this as in all things”. The role of the artist, according to Janet Lofquist, is to listen to advice, but keep the project moving forward: “you ultimately have to make decisions that make sense to you as an artist to avoid making a concept that is so washed out that it means nothing”. The majority of the artists identified finding this balance between serving the interests of the community and their own artistic integrity as the main challenge of a public artist. Catherine Widgery identifies this as a “feeling that was not about a single idea, but about a general sense of how the community felt about itself”. The role of the community is to give ideas and react to the initial plans but ultimately it is the artist who must pick and choose specific ideas, letting others “fall by the wayside”.³²

All of the artists incorporated the community into their designs; this

is largely to enhance the effectiveness of the placemaking capabilities of the stations. Many of the artists spoke of the specific role public art has for the Central Corridor. All of the stations will be exactly the same and it is only the station art that represents the neighborhoods uniquely. Stan Sears uses the fact that the Metropolitan Council commissioned seven artists as proof that they were aiming for unique stations: the role of the public art is to “make one place unique and identifiable from the next”. By allowing an individual and different image to represent each station, the CCLRT highlights the individuality to the neighborhoods.

Several of the artists had also worked on the Hiawatha Line and identified the differences between the public art process for that line and that for the Central Corridor. Each station on the Hiawatha Line is unique in its design, as well as in its public art; the Central Corridor did not follow this model largely for economic reasons.³³ Seitu Jones, who designed for the Hiawatha Line, describes the difference in approaches to station design as creating a different sense of place. In

the case of the Central Corridor, the art played a large role in the wayfinding process, as it was the only aspect of the stations that would indicate to a rider where they were. The way a rider will interact with a station is of importance because the stations are “a gateway” to the neighborhood.

While the station art often addresses a broad community that encompasses neighborhood residents, transit users, and the state in general, all of the artists sought to create a connection between the station art and the specific community in which it is located. This process is complicated, however, by the need to “make something that spoke to the specific feelings of the community without creating something that was so literal and narrow that it would not speak to future generations that we cannot now imagine”.³⁴ One approach, as described by Nancy Blum, is to create a strong central image. In her view, greater simplicity of representation allows multiple interpretations, thus creating chances for more people to connect with the art. Ultimately, placemaking art needs to come directly from the site and be grounded in the symbology and

iconography inscribed onto the landscape and the community.

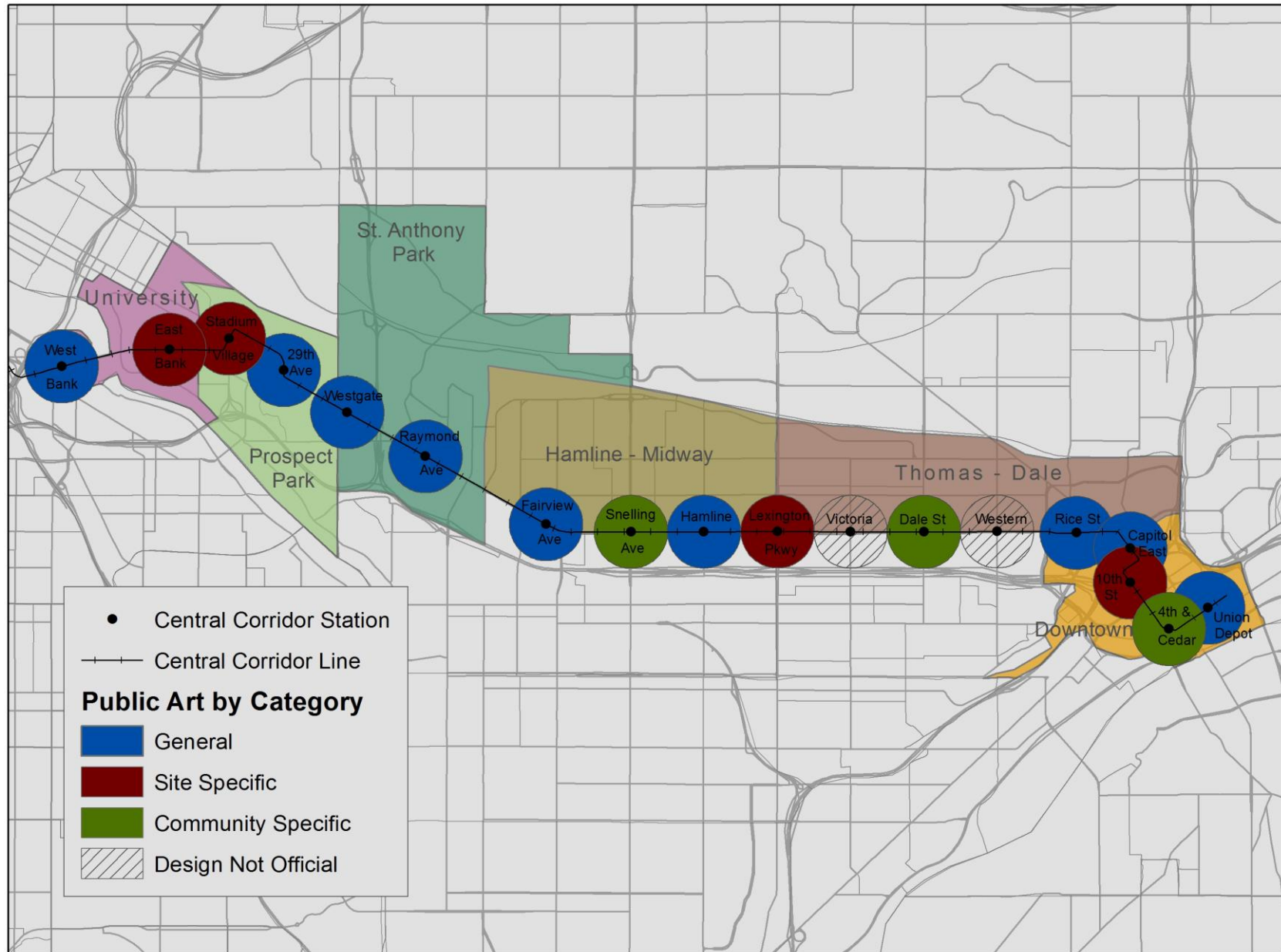
All of the artists employ methods for involving the community and enhancing the placemaking qualities of their designs; it is much more difficult to determine whether these methods are successful. Determining the success of public art is necessarily a highly subjective undertaking and it is difficult to arrive at any real conclusions. Each of the artists offered different criteria for determining success, often staying away from concrete guidelines to focus on the more abstract goals of public art. All of the artists identified success broadly as being “when the community takes ownership of a piece and claims it” and it becomes a symbol of the community.³⁵ However, this is a process that often takes a considerable amount of time and it is impossible to put a limit on how long this will take. Several of the artists did offer more concrete methods for determining the success of public art, related primarily to whether the art is vandalized.³⁶ Art that remains untouched can be indicative of the community feeling

ownership over the piece and wishing to protect and preserve it.

ANALYSIS BY NEIGHBORHOOD

The literature and interviews with the artists for the Central Corridor reveal several methods or approaches artists can use to create placemaking art. Often artists use a variety of methods in order to create art that is meaningful for a wide swath of the population and resonates for both broadly- and narrowly-defined communities. Varying approaches may include site-specific references, site history, general history, nature, and references to the specific communities that make up the site. The artists for the Central Corridor used different combinations of these elements; however, for the sake of analysis I have categorized all the stations as reflecting general, community-specific, or site-specific art. General art reflects art that represents a broad or generalized community such as the entire state or region. Site-specific art specifically reflects the site of the transit station without referencing the particular community neighborhood. Finally, community-

Types of Station Art along Central Corridor



Cartographer: Maya Fehrs 2011
 Data Sources: MetCouncil, U of MN Extension
 Projection: UTM Zone 15 N

specific art references the specific and narrowly-defined communities that make up the neighborhood surrounding the station. Several of the station designs did use multiple categories of art but I assigned one category to each station based on the most prominent. It should be noted that this categorization scheme is subjective and is based on my own analysis of the designs in tandem with the artists' expressed intentions for the station art. However, it is useful to think about what communities the designs are representing in conjunction with the various limitations placed on the artists throughout the process. Map 1 shows the stations along the line and the categorization of the public art at each station in order to provide a visual representation of the location and distribution of the different categories of public art. The map also shows neighborhood boundaries to allow analysis of the type of public art by neighborhood.

UNIVERSITY OF MINNESOTA

NEIGHBORHOOD:

Dominated by the University, students, professors and University staff make up

a large portion of the community of this neighborhood. The West Bank area, at the far edge of the neighborhood, was a historically Scandinavian community turned "beehive of hippies, intellectuals, actors, artists and musicians".³⁷ Currently the neighborhood serves a large immigrant community.

Stations in the University of Minnesota neighborhood: This neighborhood has two stations, the West Bank and East Bank stations. Artist Nancy Blum will design both stations.

West Bank- Nancy Blum

This station will feature a nature-based design with a representation of a bird sanctuary. Nancy Blum works often with nature imagery; this station is in some ways thematically linked to her work in general, although she has never incorporated bird imagery before. This station is in the University of Minnesota neighborhood, but while the other stop in the neighborhood will focus on the University, this stop focuses on the broader history and demographics of the area. While nature

imagery is a more general way to create site-specific art, Nancy sites the immigrant history and connection to the Mississippi River as inspiration for the art. Nancy's goal was to create easily identifiable art that can serve as a symbol for the neighborhood as well as a marker for transit users. In this way, the art's function as a placemaker works through looking to the future, rather than by using imagery from the past or from iconography from the neighborhood. However, the design does include panels etched to represent textiles from various cultures; in this way the art references the varied cultural identity of the neighborhood. The main emphasis of the design, however, is on the native birds, making this art a general representation of the community because it relates to Minnesota in general.

East Bank- Nancy Blum

The East Bank station focuses solely on the University of Minnesota; in this case representing the community is facilitated by restricting the community to a specific group. With this station Nancy does not try to represent the

entire neighborhood, as in the West Bank station, but only the University community. The design features spirograph imagery, as well as a repeating pattern of mathematical equations. The spirograph is reminiscent of a flower, which draws from Nancy's proclivity to use nature imagery. Although the designs superficially represent only the math and sciences, Nancy explains that through the use of the spirograph, which is often a children's toy, the design references the playfulness and joy of the learning process. This design is site specific because it draws reference directly from the University.

PROSPECT PARK NEIGHBORHOOD:

Bounded west-east by the University of Minnesota and the Minneapolis/St. Paul border, the Prospect Park neighborhood was the first suburb of Minneapolis. Proximity to retail, entertainment and cultural events gives the neighborhood an "urban-village community feel".³⁸

Stations in the Prospect Park neighborhood: Prospect Park includes the stations of Stadium Village and 29th

Avenue. Artist Roberto Delgado will design the Stadium Village station. Artist Janet Lofquist will design the 29th Avenue station.

Stadium Village- Roberto Delgado

The Stadium Village station will feature light columns and large panels featuring "an overlay of photos with a variety of colors and symbols representing the area".³⁹ The original plans for the subjects of the photos to be used in the murals included many from the entirety of the neighborhood. However, the stop will service the University of Minnesota and they requested that the images only portray the campus area. In this way, the station uses site-specific placemaking, although this was not the original intention of the artist.

29th Avenue - Janet Lofquist

The 29th Avenue station features imagery focused on the industrial and agricultural history of the area. The station platform will include colored concrete with images and patterns reflecting flax flowers, grain elevators,

railroad track, etc. The station columns will symbolize the industrial nature of the area, and will also include an abstracted representation of the Witch's Hat water tower, a distinctive neighborhood landmark. While the design does include a site-specific neighborhood icon, the majority of the focus of the design is on the industrial and agricultural history of the area. Thus, the design is in the general category of public art.

ST. ANTHONY PARK NEIGHBORHOOD:

The neighborhood exists within the eastern boundary of the MN State Fairgrounds and Southeast Minneapolis to the west. The neighborhood developed as an early suburb of the Twin Cities.

Stations in the St. Anthony Park neighborhood: The Westgate and Raymond stations will service this neighborhood. Both stations will feature designs by artist team Andrea Myklebust and Stanton Sears.

Westgate- Andrea Myklebust and Stanton Sears

The design for the Westgate station focuses on the varied transportation history of the Central Corridor and on transportation in general. The design features many variations on the image of a wheel, including a granite wheel sculpture and columns made of stacks of wheels. This station is at the border between Minneapolis and Saint Paul, and will thus include lettering and arrows in the platform paving designating the direction of the two cities. This element very directly serves a wayfinding function and is specific to the site. However, the majority of the design features are focused on a more general transportation history of the area; thus, I will categorize this design as general art.

Raymond- Andrea Myklebust and Stanton Sears

This station features very similar designs and themes to the Westgate station, designed by the same artist team. The design also focuses on a transportation theme and uses the wheel as the main image. One distinction is that the station will include panels of transportation artwork

on the station wall. The continuity of theme will provide continuity between the two stations, as they are next to each other and are the two stations within the St. Anthony Park neighborhood. This station is also general art within the categorization scheme as it represents the general transportation history of the area.

HAMLIN-MIDWAY NEIGHBORHOOD:

Occupying the area between Lexington Parkway and Transfer Road, this neighborhood is largely residential but also includes some light industry, retail, and businesses.

Stations in the Hamline-Midway neighborhood: This neighborhood includes the Fairview, Snelling, Hamline, and Lexington stations. A different artist will design each of the stations in this neighborhood, each representing the neighborhood in a different way. Artist Nancy Blum will design the Fairview Station. The Snelling station will feature designs by Roberto Delgado. Artist Foster Willey will design the Hamline station. The final station in the Hamline-Midway

neighborhood is the Lexington station, designed by Seitu Jones.

Fairview Avenue- Nancy Blum

This station, like the other stations designed by Nancy Blum, focuses on the natural elements of the neighborhood. The designs include mosaics on platforms “derived from the prevalence of indigenous oak trees in the area”.⁴⁰ Although the oak tree image does come directly from the neighborhood, because it is nature imagery I will designate it as general within the categorization scheme because it reflects broader Twin Cities and Minnesota communities as well as the neighborhood community.

Snelling Avenue- Roberto Delgado

The design for this station is similar to that of the Stadium Village station, designed by the same artist, and will feature photo overlays on columns and large panels. The photos used, however, will reflect the specific neighborhood community. Unlike the Stadium Village station, the artist was not limited to certain images, allowing

a more complete representation of the community. This station art is thus specific art because it directly references the neighborhood community.

Hamline Avenue- Foster Willey

Although the station designs have not been finalized for this station, the designs are far enough along to comment on. This station will feature designs and architecture modeled after the Prairie architecture style developed and popularized in the Midwest. There are several famous Prairie-style houses in the Twin Cities, and the artist selected two to serve as design models. The style utilizes long, horizontal shapes; the artist says he was drawn to the Prairie style for this project because the station design already reflects these elements. The station will also feature ceramic tiles created by the artist. As the Prairie style is not specific to the neighborhood, but rather reflects a more general Midwestern architecture, this station art is general in the categorization scheme.⁴¹

Lexington Parkway- Seitu Jones

This station design combines many placemaking elements, including references to nature, site history, and site-specific elements. The columns will include cutouts of hackberry and ash leaves from indigenous trees. The railing will feature a poem commissioned from a local artist on the themes of history and nature. The most prominent feature, however, will be references to the historic Lexington Ballpark that was at one time a prominent feature of this site. Representations of the ballpark include columns modeled after the structural supports of the ball park and an image of the hands of Roy Campanella, who played at the ballpark, holding a bat. Although this design features many different methods of representing the community, the most prominent is the site-specific reference to the former Lexington Ballpark.

FROGTOWN NEIGHBORHOOD:

University Avenue is the key commercial area of this neighborhood, although much of the area is residential. The neighborhood has a long tradition of immigrant

communities, a trend that continues today. The Frogtown neighborhood consists of nearly 40% Asian residents and 20% of the residents were born outside of the United States. This neighborhood is one of the most diverse in St. Paul.⁴²

Stations in the Frogtown neighborhood: Stations in the neighborhood include those at Victoria, Dale, Western, and Rice. The Victoria and Western stations are among the newly added stations, and thus do not have finalized designs at this point in time. Foster Willey will design the station at Victoria and Catherine Widgery will design the Western station. Both the Dale and Rice stations will feature designs by Seitu Jones.

Victoria Street- Foster Willey

Station designs are not finalized for this station.

Dale Street- Seitu Jones

The Dale Street station designs were among the most debated, largely because the Frogtown neighborhood it

will serve is very diverse. Many different communities wanted to be directly referenced in the station art; to accommodate the various interested parties, the artist will create painted steel panels to represent quilts with symbols and designs from different cultures from the neighborhood. The platform will include river imagery to symbolize “people who have crossed a major world river in their homeland to get to St. Paul”.⁴³ The railing will include a poem on the themes of home and place commissioned from a local artist. Although this design does feature different methods of representation, the most prominent are the community specific quilts, making this design specific.

Western Avenue- Catherine Widgery

Station designs are not finalized for this station.

Rice Street- Seitu Jones

This station is in close proximity to the capitol and thus draws its theme from the Minnesota Bill of Rights. The station will be white to mirror and

complement the capitol. The design will feature columns with “graphic interpretations of several unique articles of the Minnesota Bill of Rights”.⁴⁴ Platform and railing designs will include abstract representation of speed and movement, representing the transit experience. This station will also feature a poem commissioned from a local artist. Although there are now new stations separating the three stations designed by Seitu Jones, he envisioned his stations as providing a degree of continuity due to similar elements like the poems by local artists. Although the station art does reference the site-specific proximity to the capitol, the focus on the Minnesota Bill of Rights represents the general community of Minnesota.

DOWNTOWN:

Downtown Saint Paul is different from the other neighborhoods along the Central Corridor in that it is much more urban and residential patterns favor high-rise apartments over the single-family homes and duplexes prominent in the other neighborhoods. There is also a much higher mix of uses: downtown is home to offices,

museums, theaters, restaurants, and the state capitol, among others. These qualities mean that the community identity is much more fragmented and less defined than the other neighborhoods. This proved difficult for the artists, as they struggled to encourage community participation.

Stations in Downtown: The Downtown stations include Capitol East, 10th, 4th and Cedar, and Union Depot. Artist Janet Lofquist will design both the Capitol East and the 10th Street stations. The 4th and Cedar Street station will feature designs by Roberto Delgado. Artist team Andrea Myklebust and Stanton Sears will provide designs for the Union Depot station.

Capitol East- Janet Lofquist

The design for this station includes mosaics of water and frozen waterfalls inspired by the Glacial River Warren Falls. The station will service the Capitol building, and the artist cites the imagery as symbolic of the political process and of the site itself. The flowing water symbolizes trade of goods and ideas, reflecting the port

history of the site. The frozen waterfall represents the geologic history of the area as well as the at-times slow nature of political processes. The art does have site-specific referents; however, the main focus of the art is on the geologic history of the area, making this design general art.

10th Street- Janet Lofquist

The design for the 10th Street station is glass and stone mosaics of past designs of ice palaces from the Saint Paul Winter Carnival. The architecture of the ice palaces in the mosaics mirrors the Romanesque stonework visible around Saint Paul. The ice palaces create references to Saint Paul history and to a very specific community event. The station design is thus site-specific.

4th Street- Roberto Delgado

The station design for this station follows a similar method to the Stadium Village and Snelling Avenue stations, designed by the same artist. It will feature columns and panels with photo overlays of images from the

neighborhood. Like the Snelling Avenue station, these images will include the entirety of the neighborhood. This design is specific art because it includes images specifically pertaining to the neighborhood community.

Union Depot- Andrea Myklebust and Stanton Sears

The design for the Union Depot station will feature similar themes as the Westgate and Raymond Avenue stations. The art will reflect the transportation history of the Central Corridor by referencing and repeating wheel imagery. The station will feature a granite wheel sculpture, a bronze sculpture inspired by stacks of wheels, and panels with transportation art. The design focuses on general transportation history, and is thus general art.

V. CONCLUSIONS

Based on my categorization scheme, the majority of the station art falls in the general category. This means that

the art represents themes that are not specific to the neighborhood immediately surrounding the community or to the site itself, but rather reflect a broader community. Many of the designs in this category represent Minnesota, either through history or nature, and some the Midwest in general. Although the majority of the themes may not be community specific, this does not mean that the works will not act as placemakers; nor does it mean that the community will not fully embrace the designs as a symbol for their community.

The spatial pattern of art type visually shows the predominance of general art along the corridor. However, it is informative to look at the locations of the stations that do not feature general art. Both of the stops serving the University of Minnesota feature site-specific art focused on the University. This shows the great importance and power of the University in the region.

The only community-specific stations are those at Snelling Avenue, Dale Street, and 4th and Cedar. The stations at Snelling Avenue and 4th and

Cedar are both designed by Roberto Delgado; his method of using photo images from the neighborhood leads to very community-specific art. The Dale Street station reflects the great diversity and cultural vibrancy of the Frogtown neighborhood.

Of the four downtown stations, only two feature general public art. The 10th Street Station is site-specific while the 4th and Cedar station is community specific. The lack of generalized stations is likely due to the role of downtown St. Paul as the location of many civic and cultural symbols, giving it a very distinct sense of place. However, due to the fragmented nature of the residents, it is interesting that there is a community-specific station as well.

The choice to utilize general representation in station art is one that largely derives from the transit context. A transit station is part of a larger transit system that must necessarily represent various communities on several scales. Transit systems service users from outside the parameters delimited by the transit system boundaries; station art thus serves the dual role of acting as a “gateway” to

the neighborhoods and as a wayfinder for transit users. The Central Corridor stations reflect the neighborhoods where they are located, but also the Twin Cities in general, and, especially because Saint Paul is the state capital, the state of Minnesota as well. When representing multiple communities on several scales, general forms of representation will allow the most people to feel a connection with the art.

While representing multiple communities is in itself a difficult project, even representing the entirety of one community can be very difficult. The Frogtown neighborhood, the location of the Dale Avenue station, is one of the most diverse neighborhoods in Saint Paul; thus it is not surprising that Seitu Jones had difficulty in reaching a consensus on imagery that would represent all groups. Finding imagery that will represent a community can be problematic because it requires defining a community in a way that can be summed up in the limited space available on the side of the transit station.

Limitations related to designing for transit stations and creating art for multiple communities tend to draw

artists towards generalized representations; however, this is not to say that the artists do not assert their own aesthetic and creative sensibilities. Nancy Blum often uses nature imagery in her art and although I have designated her station designs as general representations, they are also a reflection of her particular artistic style. Foster Willey, who used the Prairie architecture style representative of the Midwest and thus an example of general representation, says that this architectural style is one he often uses for design inspiration and has very personal meaning.

Finally, it is important to remember the subjective nature of this particular categorization scheme. Although it is a useful way to think critically and holistically about the station art along the corridor, it is based on my own analysis of the station designs and on interviews with the seven artists. Most of the designs provide some combination of general, community-specific, and site-specific art; I chose one categorization for each station based on what design element was most prominent or visible.

Although placemaking is the primary goal of public art, in practice it is difficult to achieve. Multiple community identities and differing definitions of the community to be represented all pose challenges to public artists. Public art at transit stations adds another layer of complexity because the art must serve both as wayfinder for transit users and as symbol for communities. Public art at transit stations will rarely be highly specific to one group because this group will not be reflective of all the communities served by the art.

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