HEALTHY CORRIDOR FOR ALL:

A COMMUNITY HEALTH IMPACT ASSESSMENT OF TRANSIT-ORIENTED DEVELOPMENT POLICY IN SAINT PAUL, MINNESOTA

--Technical Report--

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Healthy Corridor for All: Partners

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ISAIAH *is a faith-based community organization with 100 member congregations, including several situated in the immediate vicinity of the Central Corridor Light Rail Transit (CCLRT) line.*

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Foreword

The new Central Corridor light rail line has generated mixed feelings among residents of the Twin Cities who stand to benefit from increased transit access, new development, and greater opportunity to regional resources. On the one hand, many of these residents, representing racially diverse and low-income communities, are looking forward to the promise of this new light rail line and accompanying transit-oriented development: economic opportunity, affordable housing, increased transit access, and public investment in pedestrian safety and streetscaping. On the other hand, many are concerned that the increased desirability of the corridor will increase housing and small business costs, and price current residents out of their homes and businesses. They worry that the social support systems and the ethnic markets they depend on will not be able to withstand the community changes. Still, having largely been the victims of disinvestment, they are hungry to take advantage of this new investment as long as they can be sure that their communities will benefit.

Responding to community concerns, our three organizations came together to form a unique partnership bringing together community organizing, advocacy, and technical analysis. We set out to engage a diverse set of community groups along the Central Corridor as well as technical experts to assess the potential implications of the proposed transit-oriented development rezoning policy that would set the foundation for development and growth in the corridor. We used a tool called health impact assessment (HIA) to guide our analysis, along with principles of community participatory research and community organizing.

Health impact assessment is a tool that can infuse the consideration of health and equity outcomes into critical decision-making processes. Using this tool, decision makers can be fully informed of the implications of their decisions on the health of a community prior to implementing changes. Health impact assessments, first pioneered in Europe, are catching on in America as health practitioners, community groups, researchers, and advocates work to prevent ill health before it starts.

Research shows deep connections between health outcomes and the built environment—for example, people who live in areas with access to transportation, affordable housing, fresh foods, good schools, and safe parks for physical activity tend to enjoy overall better health and an improved quality of life than those who lack access to those amenities. Stark disparities exist in the built environments of low-income communities versus affluent communities. This disparity is reflected in the health outcomes of low-income people and communities of color.

The Healthy Corridor for All Health Impact Assessment made important contributions to the rezoning debate, and helped to increase community participation, build capacity, and leave an indelible mark on the region as a whole. Through the organizing and advocacy of community leadership, the concepts of health and affordable housing were placed at the center of the rezoning debate and helped educate the media, policymakers, and the general public. The level of community participation—particularly from low-income people and communities of color—in the rezoning process was unique for the city. In addition, through the HIA process and analysis, the Twin Cities region now has a model in place for community engagement and analysis to help address community needs as it plans for other transit corridors.

This document presents the full range of findings, detailed descriptions of the issues, data sources and methodology. A summary of the key components this analysis can be found at

www.PolicyLink.org/HealthyCorridorforAllHIA. We hope this report will help inspire other communities facing similar issues to conduct assessments, come together in coalition, and support healthy, equitable transit-oriented policies. In particular, we hope the Healthy Corridor for All Health Impact Assessment is seen as a model for the careful analysis and consideration of important community priorities such as health, affordable housing, and economic opportunity in transit and land use planning, as well as a process for community participation that responds to the leadership and wisdom of communities.

We want to sincerely thank the Healthy Corridor for All Community Steering Committee and Technical Advisory members for their invaluable leadership and contributions to this project and report.

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Introduction

Healthy Corridor for All: Supporting Equitable Transit-Oriented Development

Across the country, a movement is building to develop and expand light rail transit systems, as demand increases for more urban and less autocentric lifestyles. Light rail systems in Austin, Baltimore, Denver, Los Angeles, Miami, Seattle, and Saint Paul, among other cities, exemplify this trend. With this development have come changes, not only to transportation systems, but to land use patterns in which compact, walkable communities are created, centered around high-efficiency transit—also known as transit-oriented development.

Transit-oriented development (TOD) has been shown to be a healthier model for development than urban sprawl[1], the expansion of low-density, single-family detached housing farther and farther away from the urban core. TOD can lead to increased walking and biking, rather than long car commutes, and even to shorter car trips to park-and-rides and other neighborhood amenities.[2] The potential results include decreasing car pollution, which improves air quality; denser, more energy-efficient housing,[3] which is more supportive of affordable housing production; and more efficient access to, and delivery of, goods and services.

Yet, as TOD has been constructed in many cities, including Portland and Washington, DC, it has often been accompanied by displacement of low-income persons and communities of color.[4] Higher-income populations are finding compact living near transit desirable, driving up the property value of land near transit. This has resulted in increased rents and/or property taxes for existing residents, who may ultimately be displaced because of the higher cost of living. In response to these circumstances, PolicyLink, along with other groups, has developed tools to support *equitable* transit-oriented development—an approach to ensure that low-income households and communities of color benefit from TOD without being displaced.

As part of this larger TOD trend, the Twin Cities is planning to build approximately four transit corridors as part of the Corridors of Opportunity Initiative; at least two will be fixed rail.[5] The mode of the other two has not been established at the time of this report. The first of these light rail lines, the Central Corridor Light Rail Transit line (CCLRT), is currently under construction. An 11-mile transit corridor connecting downtown Minneapolis with downtown Saint Paul, the CCLRT is a $1 billion transit investment estimated to spur as much as $6.78 billion in public and private investment in local development during the next 20 years.[6]

The Central Corridor, home to over 60,000 people in the Saint Paul segment, passes through some of the region's most diverse and most low-income communities, including the second largest Hmong population in the United States, a large Somali refugee population, as well as Rondo, a historic African American community that has been negatively impacted by a large transportation infrastructure project before—the interstate highway system. Several hundred homes and businesses were demolished and families displaced as Interstate 94 was constructed right through the community, devastating the community's growth and economic prospects. What the people of Rondo and the broader Twin Cities community learned was that transportation planning and land use regulations must be carefully designed in order to ensure that everyone benefits, including the very people who stand to benefit the most: low-income people and people of color.

This time, with opportunity knocking in the form of increased transit access and public and private investment, the Central Corridor (CC) communities did not want history to repeat itself. While looking forward to benefiting from the new transit line and increased public and private investment, they voiced fear that they may ultimately be involuntarily displaced due to increased housing and business costs and began to worry that the large-scale community changes may lead to cultural and social upheaval with the communities' health taking a toll.

Overview of Healthy Corridor for All Project

The community expressed concern that not enough analysis had been done to understand the impacts of the light rail line and subsequent land use changes on existing communities. Based on this, ISAIAH, the Hmong Organizing Program of TakeAction Minnesota (TAM's HOP), and PolicyLink partnered together to conduct a health impact assessment (HIA) of the rezoning ordinance that would lay the foundation for the implementation of transit-oriented development (TOD) along the Central Corridor. A health impact assessment was the tool of choice because of the potential impacts of infrastructure development on the health and well-being of existing communities and the universal aspiration for improving community health in the Central Corridor. The project partners dubbed the HIA, "Healthy Corridor for All."

ISAIAH and TAM's HOP worked closely with community groups to lead, organize, build capacity, and, in particular, support the engagement of community partners, especially low-income people and communities of color, in the rezoning process and the health impact assessment. PolicyLink served as the technical partner, conducting the research, and providing technical assistance and capacity building. The project partners convened a leadership team to guide the project—the Healthy Corridor for All Community Steering Committee (CSC). The CSC identified the focus for the analysis, advised on research, prioritized and advocated for policy recommendations, and informed policymakers and their constituency every step of the way. The project partners also convened a Technical Advisory Panel (TAP) to provide technical support, expertise, data resources and help integrate and coordinate related existing and ongoing analyses with the HIA. The project partners worked closely, each with different, but complementary roles, and worked closely with the CSC and TAP, together creating a well-rounded leadership team for the HIA.

The goals of the Healthy Corridor for All Health Impact Assessment were to:

- Assess the impacts of the rezoning proposal on community health, health inequities, and underlying conditions that determine health in the Central Corridor.
- Ensure positive health benefits are maximized and negative health impacts are addressed in the decision-making process.
- Empower Central Corridor local communities to meaningfully engage in the rezoning process.

The core values that guided this HIA included equity, community empowerment, collaboration, accountability, and scientific integrity.

Why Focus on Rezoning?

Rezoning along the Central Corridor enables the City to create a foundation for anticipated future investment and transit-oriented development. In anticipation of this future investment, the City led a community process to develop the Central Corridor Development Strategy (CCDS) in 2006 and 2007. The

process brought together diverse stakeholders to create a vision and guiding principles for future development of the corridor and the surrounding neighborhoods. In preparation for the higher density development envisioned in the CCDS, the City of Saint Paul carried out a rezoning process and recently adopted amendments to the zoning ordinance to rezone a large portion of the corridor.

The rezoning of the Central Corridor was one of the first major regulatory steps undertaken by the City of Saint Paul to implement the Central Corridor Development Strategy, following the adoption of station area plans in 2009. The CCDS recommended that the zoning ordinance be amended to align more closely with a transit-supportive regulatory framework. The City's stated overall goals for the rezoning were "higher density development, reduced demand for parking, pedestrian, and transit-oriented environments."[7] The specific amendments proposed to the zoning ordinance will increase allowable densities and heights, reduce parking requirements, increase the amount of residential uses allowed, restrict auto-oriented uses, and provide design standards that promote pedestrian and transit-friendly environments. This rezoning will undoubtedly have an effect on the built environment of the Central Corridor and surrounding neighborhoods over the next few decades.

There is a large and growing body of research that has documented the connections between land use and health. Many studies have shown that our physical and social environments—where we live, learn, work, and play—affect our health even more than we previously imagined. Some neighborhoods provide opportunities for residents to make healthy decisions, such as areas with affordable housing, high performing schools, safe places for children to play outside, and access to healthy grocery stores. Those who live in neighborhoods that lack these healthy opportunities—often low-income communities and communities of color—experience the worst health outcomes, such as high rates of obesity, diabetes, asthma, and heart disease. Furthermore, Myron Orfield, professor at the University of Minnesota and Director of the Center for Race and Poverty, notes that the segregated nature of these often low-opportunity neighborhoods is more strongly associated with poor health than any other measured demographic factor. Segregation by race and income plays a significant role in widening the disparity health gap, as well as the achievement gap, between racial groups.[8] This condition exists in many cities and regions across the country, as well as being prevalent throughout the Twin Cities region, despite relative progress compared to some of the other regions.

What is a Health Impact Assessment?

Health impact assessments (HIAs) have been conducted in Europe and Australia for many years. In recognition that many policies, plans, and projects outside of the health arena have important health implications, groups in the United States have started to conduct HIAs in the last ten or so years to evaluate and support the consideration of health in decision-making processes.

A health impact assessment may be defined as "a combination of procedures, methods and tools that systematically judges the potential, and sometimes unintended, effects of a policy, plan, program or project on the health of a population and the distribution of those effects within the population. An HIA identifies appropriate actions to manage those effects."[9] Such an assessment provides a common-sense and evidence-based approach, to ensure that potential impacts of policies and plans are appropriately addressed before final decisions are made. HIAs, such as the one conducted in Healthy Corridor for All, often focus on the "social determinants of health." These have been defined by the World Health Organization as "the conditions in which people are born, grow, live, work and age, including the health system. These circumstances are shaped by the distribution of money and resources at global, national and local levels, which are themselves influenced by policy choices. The social determinants of health

are mostly responsible for health inequities—the unfair and avoidable differences in health status seen within and between countries, [among race, income, gender, and geography within a given location]."[10]

Health Impact Assessments have four values as identified by the World Health Organization:

- *Democracy*. Allows individuals to participate in the development and implementation of policies, programs, or projects that may have an impact on their lives.
- *Equity*. Assesses the effects of a proposal on the whole population, with particular reference to vulnerable individuals and groups (in terms of age, gender, ethnic background, and socioeconomic status).
- *Sustainable development*. Considers both short- and long-term impacts, along with the obvious and less obvious ones.
- *Ethical use of evidence*. Identifies and uses the best available quantitative and qualitative evidence. Ensures a wide variety of evidence is collected, using the best possible methods.[11]

A set of steps guides a practitioner through an assessment, including:

- *Screening***.** Determines the need and value of an HIA.
- *Scoping*. Determines the project partners; health and social impacts requiring assessment; methodology for the analysis; and a research and work plan.
- *Assessment*. Provides an analysis of existing conditions; an assessment of the policy, project, or program under study; and an evaluation of the potential impacts of the policy, project, or program on existing conditions.
- *Recommendations*. Develops a set of recommendations for maximizing health outcomes.
- *Reporting*. Develops a report for communicating findings and recommendations.
- *Monitoring*. Tracks the impact of the HIA on the proposed policy, program, or project, and the impacts of the final policy, program, or project on existing conditions.

The role of health impact assessments goes beyond collecting and analyzing data on existing health disparities and impacts on health. The HIA process can be an instrument to engage and empower communities, emphasize everyday experiences in decision making, build consensus around decisions, and build lasting relationships and collaborations across diverse constituencies.[12] Embedded in the HIA process are opportunities for community engagement and leadership, with the end of achieving a participatory research process that reflects and resonates with resident concerns and aspirations.

Why Focus on Health?

A health impact assessment is fundamentally about the health of the community. The goal of this particular assessment is to analyze whether, how, and to what extent the adoption of new zoning by the City of Saint Paul is likely to change a set of specific neighborhood health conditions. The emphasis is on how the economy, housing, and transportation effects on health will be distributed across populations by race, income, and geographies. While an environmental impact assessment relating to the construction of the CCLRT was prepared, no documents have examined the specific impact of land use decisions on physical indicators of health or carefully analyzed social determinants of health prioritized by the community.

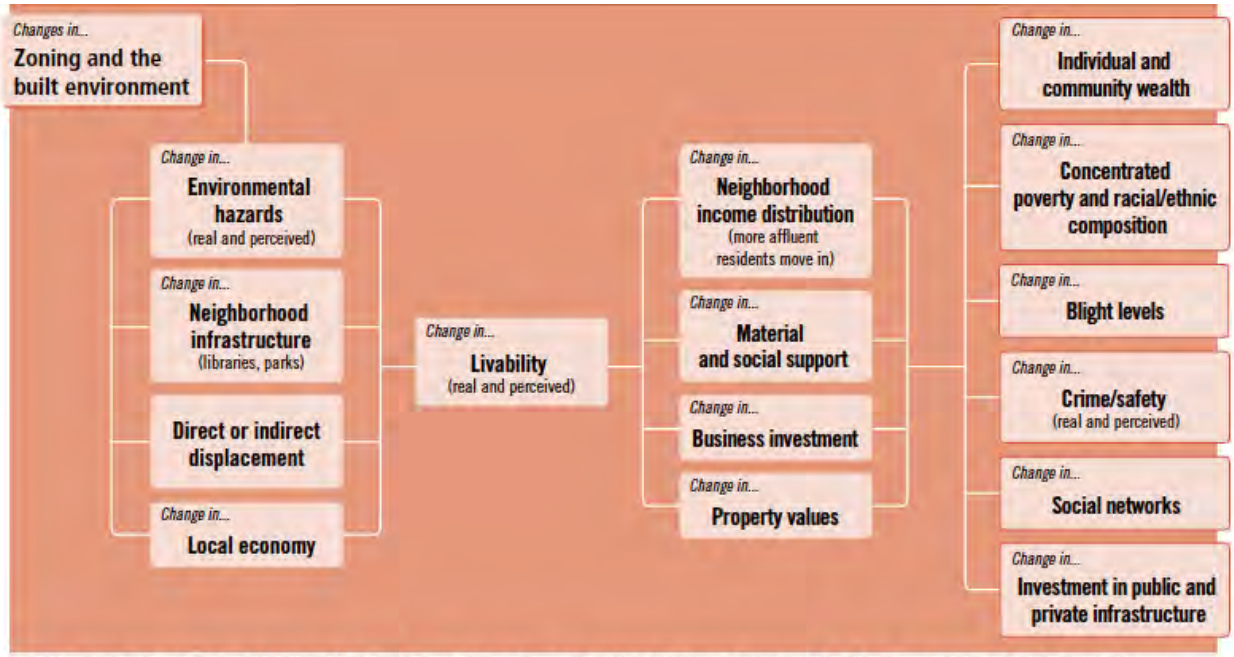
Health is a universal issue. The ability of individuals to fully experience and enjoy life depends on the quality of their physical and mental health. A health impact assessment can bring communities together—regardless of their race, ethnicity, or socioeconomic status—in a unique way, to discuss and evaluate the ways in which individual and community health may be affected by a proposed policy or project. The relationships and coalitions formed can continue building upon the information gathered, working toward healthier communities.

In this case, the HIA provides an opportunity to establish precedent on how to ensure that new transit-oriented development supports equitable and healthy outcomes for all. The Central Corridor LRT is one of several new proposed light rail line expansions across the country that traverses lower-income neighborhoods and communities of color. In addition, for the Twin Cities region, the Metropolitan Council has planned several additional transit corridors to undergo construction in the next decade or so.

The health benefits of TOD are well documented in the urban planning literature;[13] this type of development supports transit usage and active transportation lifestyles, thus reducing carbon emissions and increasing physical activity. These positive outcomes, though, are not necessarily distributed evenly by race or income. Research has shown that transit investments can result in more expensive housing, more wealthy residents, and higher vehicle ownership, which, in some newly transit-rich neighborhoods, can price out core transit users, such as renters and low-income households.[14] Investments in transit alone do not impact all neighborhoods in the same ways, however; transit-rich neighborhoods exist across the country that are still racially segregated and lacking in investment and access to opportunity.

In the case of Saint Paul, transit-oriented development can have several positive effects on the corridor and surrounding communities: new, higher-density development can increase the number of jobs and housing units near light-rail stations; improved design standards can help to create a safer environment for pedestrians and bicyclists; increased density can help expose more individuals to the wide variety of local and diverse businesses throughout the corridor. These zoning changes could also have unintended negative consequences, however. Increased development potential on rezoned properties could result in commercial and residential displacement if property values and rents rise above sustainable levels for current tenants. The shift in land uses from industrial to office may promote further bifurcation of the economy into high-education–high-wage and low-education–low-wage jobs. Figure A below depicts various pathways for the ways in which rezoning can impact the social determinants of health.

FIGURE A: CHANGES IN NEIGHBORHOOD LIVABILITY AND HEALTH



Source: Adapted from Human Impact Partners, 2011.

Components of this Report

This document is written for advocates and decision makers in the Twin Cities area as a way to demonstrate the clear connections between land use decisions and health and equity outcomes as the Central Corridor LRT develops and the corridor develops. This report can also be used to inform city and regional decisions regarding other proposed TOD or transit planning projects. This report presents a methodology for conducting equitable TOD analysis with community leadership. You will find the following components herein:

- *Background*, which details the history of the Central Corridor and surrounding neighborhoods; gives information about demographic and neighborhood characteristics of the corridor and an overview of the Saint Paul real estate market.
- *Methodology*, in which the process of implementing the HIA is discussed and where you will find data sources and research methods.
- *Rezoning Proposal Analysis*, which describes the City of Saint Paul rezoning proposal and the implications it can have on land use in the Central Corridor.
- *Assessment Findings,* in which the existing conditions of the Central Corridor and potential impacts of rezoning are included and organized by the CSC priorities.
- *Prioritized Policy Recommendations,* which detail the policies the CSC has designated as highly important for implementation as a result of the assessment findings.
- *Monitoring Plan, which* identifies indicators to monitor the impacts of actual development enabled by the rezoning on the social determinants of health prioritized by the CSC.

This report reflects the connection between health and the HIA priorities established by the Community Steering Committee (CSC), including specific references to peer-reviewed research on these topics.

1. Healthy Corridor for All: HIA Process and Methodology

Implementation Process

The health impact assessment (HIA) process began in May 2010 and continued through April 2011, when the Saint Paul City Council passed the new rezoning to accommodate higher-density transit-oriented development (TOD). The HIA was embedded in the community, engaged in advocacy, and building capacity with community partners. Each iteration of the HIA process involved significant discussion, capacity building and opportunities for feedback from community advocates, technical advisers, and policymakers. In the end, the Community Steering Committee made recommendations to the city council in preparation for its decision on the rezoning proposal. The HIA was conducted to help inform the city council decision.

Screening: Does a Health Impact Assessment Add Value?

In this initial phase, the project team—PolicyLink, ISAIAH, and TakeAction Minnesota—worked with community leaders and organizations to determine the need for, and value of, a health impact assessment. The rezoning of the Saint Paul portion of the Central Corridor was especially significant because it was the first decision to codify the city's vision for the community into laws that all development would have to abide by.

In the last ten years, public health and urban planning research has shown that the built environment, of which zoning forms the architecture, has profound impacts on community health. Zoning shapes physical design, safety, access to food, recreation, and jobs and economic opportunity. As well, it influences the composition and social connectivity of a neighborhood and can facilitate affordable housing. Health effects related to zoning decisions may include rates of traffic injuries, respiratory disease, physical activity, obesity, income, violence, and mental health issues. Negative results are often borne disproportionately by the most economically disadvantaged communities. While Minnesota as a whole is one of the healthiest states in the country, some of America's starkest health disparities across race, income, and education levels exist there.[15] With appropriate planning and policies in place in the rezoning, the health of current residents can benefit from improved community design, enhanced services and infrastructure, and increased home and business values.

Some of the region's most vulnerable populations reside in neighborhoods near the Central Corridor: a large African American population, a thriving Asian, predominantly Hmong, immigrant community of many small businesses, and low- and middle-income persons of all ethnic and racial backgrounds. These populations have the most to lose and to gain from the rezoning along the corridor. Residents and business owners have limited safety nets on which to rely. They stand to lose their homes and businesses should increased property taxes result from rezoning.

The team recognized that health had not been discussed in the zoning debate, and equitable transit-oriented development was not the explicit goal of the zoning. Given the interest in the community in participating in a forum to discuss and examine this type of development and the lack of discussions on health, the team decided to conduct an HIA as a way to evaluate the potential impacts of the rezoning and to provide the community and decision makers with timely recommendations that would assist them in assuring a healthy, equitable community.

Scoping: Creating the Framework for the Project

Developing a Community Steering Committee and Technical Advisory Panel

In June 2010 the project team created a Community Steering Committee (CSC) of more than 20 organizations representing diverse constituents living and working along the Central Corridor. These groups represent diverse interests from labor to small business. Bringing together the CSC required care, identifying the landscape of advocates and interests along the Central Corridor, and building relationships through numerous conversations. The team also identified a key set of stakeholders who were not able to join the CSC, but given their interests, they would be kept updated on the project's progress.

The project team then created a Technical Advisory Panel (TAP) made up of more than 20 varied organizations, including the City of Saint Paul Planning and Economic Development Agency and university professors, affordable housing developers, and economic development associations. In addition, a set of key policymakers in the zoning and transit planning process were identified to ensure consistent communication with decision makers throughout the HIA.

Membership in both the CSC and the TAP was strictly voluntary, though, in order to participate, members made a number of agreements and commitments, fundamentally to the HIA goals and core values delineated in the first section of this report's introduction. Members committed to work together to conduct the HIA in accordance with these goals and values, and not to challenge them during the process. The project team documented the structures and functions of the CSC and the TAP, as well as the principles of the HIA, the process and timeline, ground rules for engagement, and decision-making process in a Rules of Engagement memo, which all CSC and TAP agreed upon. See Appendix A for this memo.

Developing a Research Proposal for the HIA

In July 2010, the project team brought together the full CSC and TAP to launch the Healthy Corridor for All Health Impact Assessment. This two-part meeting included a significant capacity-building portion, where participants discussed HIAs, land use and transportation connections to health and equity, and the political timeline and process of zoning. The group spent time creating a collective vision of a healthy Central Corridor, and through discussions and a vote, prioritized three elements they believed were crucial in achieving a Healthy Corridor, then worked to identify two objectives for each element. Table 1.1 lists the community objectives and the related questions that guided the impact analysis.

TABLE 1.1: HEALTHY CORRIDOR FOR ALL HIA PRIORITIES

Healthy Economy

Objective 1: High Quality, Healthy Jobs that Increase Wealth, Income, and Equity for All Residents
How will the proposed zoning change the number and quality of jobs available to residents in the corridor neighborhoods?

Objective 2: Develop and Support Diverse, Local Businesses—Existing and New
How will the zoning changes affect small, locally and minority-owned businesses located along the corridor?

Affordable, Healthy Housing

Objective 3: Protect Residents from Negative Impacts of Gentrification

How will the proposed zoning affect the likelihood of neighborhood gentrification and the involuntary displacement of current residents because of rising rents and the loss of rental housing—particularly residents who are low-income and/or transit dependent?

Objective 4: Construct and Preserve Affordable and Diverse Housing In Proportion to Demand

How will the proposed zoning impact the cost of neighborhood housing and the availability of affordable housing, in terms of new housing construction and the preservation of existing affordable homes?

Safe and Sustainable Transportation

Objective 5: Maintain and Improve Affordable and Accessible Transportation

How will the proposed zoning coordinate with, and affect, affordable and accessible public transportation for the Central Corridor?

Objective 6: Safe, Connected Biking and Walking to, from, and across Transit Stops

How will the proposed zoning coordinate with, and affect, access to safe and connected biking and walking routes to, from, and across rail and bus stops?

Next, the project team worked with the CSC to develop a research proposal to establish a set of indicators to best evaluate the zoning based on the community's priorities, given our constraints in terms of data availability, time, and resources. Approximately 50 indicators were selected for the research plan, to ensure the following:

1. Measurability in terms of current conditions and over time.
2. Availability and accessibility of data during the study period and at the relevant geographic scale.
3. Time and resources to adequately address the indicators.
4. Ability of the indicator to answer the associated research question(s) or prioritized objectives.
5. Relevance to the proposed development strategy and zoning or to a possible future scenario for the community affected directly by the possible development.

The research proposal, finalized in October 2010, also included explanations when community-identified priorities were not fully addressed or connected to the indicators. There were a few instances when a lack of data availability or accessibility limited the team's ability to include certain measures important to the community. The team shared the research plan with the CSC and the TAP for feedback.

Enhancing Advocacy and Building Community Capacity

The Healthy Corridor team saw the HIA process as a promising tool, under the inclusive framework of healthy communities, with which to forge an alliance of stakeholders along the CCLRT who might otherwise not work with one another. This included the African American residents, Hmong and other Asian business owners and residents, as well as white residents. ISAIAH has relationships with both African American and white churches along the corridor and participates in alliances and coalitions with

other organizations that represent various parts of its diverse community. The Hmong Organizing Project (HOP) of TakeAction Minnesota has relationships with Hmong business owners and residents. HOP is also deeply invested in local coalition building and multiorganizational cooperation.

The Community Steering Committee was the primary decision maker in the scoping process and throughout the HIA. Yet, scientific integrity was a primary HIA value that could not be overridden. The TAP provided data, reviewed methodology, and many of its members were deeply engaged in planning in a variety of ways and helped inform the process. The CSC and TAP built relationships with one another and across committees. The TAP was able to hear community concerns and aspirations firsthand and access new data and inform analyses.

The team held a public launch of the Healthy Corridor for All Health Impact Assessment in early October, once the CSC and TAP had become sufficiently engaged and committed to the work, and the scope was nearly complete. The CSC brought their constituents to the event, the TAP brought colleagues, and policymakers attended, as did other key stakeholders and journalists. Approximately 150 people were present at the gathering.

Capacity building was incorporated into each phase of the HIA to ensure the CSC was familiar with the data, the political process, and any new developments in the zoning or planning process. During each CSC meeting the project team shared data, discussed political opportunities, and described any technical matters. In addition, TAP members—such as Minnesota Center for Environmental Advocacy and William Mitchell College of Law—co-hosted a Zoning 101 for the CSC. The CSC also kept the project team and one another abreast of issues arising in the communities and of political opportunities, and made certain the HIA was reflective of the local experience.

A second large public meeting was held, with about 320 participants when the baseline assessment was complete; initial findings on current conditions were shared, the Minnesota health commissioner discussed the importance of the project to public health, policymakers shared their perspective on the CSC objectives, and expressed interest in continuing to work with the public, and CSC members shared their stories about, and their concerns and hopes for, the Central Corridor.

The CSC ultimately became a coalition, calling itself Healthy Corridor for All, and began to engage in the city zoning decision-making processes, armed with new capacity, new partnerships, and new data. Organized to advocate for the findings of the HIA, once the recommendations were identified, the CSC provided testimony at hearings and held meetings with planning commissioners and city council members throughout the HIA.

Assessing Conditions and Potential Impacts, Making Recommendations

As a framework for understanding how rezoning would impact the prioritized objectives and affect the health of Central Corridor residents, the project team:

1. Assessed the existing conditions in the community.
2. Explored key features of the zoning proposal.
3. Analyzed how the existing conditions would be influenced by the zoning proposal.
4. Made recommendations for alternative zoning approaches and improvements where necessary.

In the existing conditions analyses, the team assessed the identified 50 indicators in order to reveal current conditions in the Central Corridor. The goal was to forecast how the rezoning proposal could

impact these current conditions. From October through December 2010, the project team measured approximately eight indicators for each objective. The research team remained flexible. Some indicators included in the original research proposal were excluded due to data availability issues and new indicators were added as new data became available. Appendix B lists all indicators that were analyzed, with their data sources and respective methodologies.

Using the research questions outlined in the research proposal to guide the analysis, a methodology was then developed to analyze how the anticipated changes in the built environment would affect existing conditions in the corridor, according to two different scenarios. One was market-based, using estimates from a market analysis conducted by the real estate firm Colliers Turley Martin Tucker, now named Cassidy Turley, commissioned by the Saint Paul Planning Department. The second scenario used the maximum allowable development outlined in the rezoning proposal. A further technical explanation of the impact analysis methods is detailed in the next section.

When the impact analysis was complete, best practices in equitable development were identified, related to the priorities of the Community Steering Committee. The project team then created an inventory of policy recommendations—many, but not all, of which related specifically to zoning—focused on mitigating the potentially negative impacts of the rezoning that were identified in the impact analysis. The CSC and TAP reviewed and provided feedback on the list and then developed their top five policy priorities for the rezoning. These priorities were developed into more detailed policy briefs; see Appendix C for an example brief.

Technical Methods: Compiling the Research

Data Sources

This analysis was limited by time, resources, and available data within the time frame of the HIA. Data for 1990 is from the Census 1990 Long Form (dataset SF3) in 2000 Boundaries package released by Geolytics, Inc. All 2000 data is from the Census 2000, retrieved from the US Census FactFinder web site (http://factfinder.census.gov). Demographic, transportation, and housing data cited for the 2005–2009 period is from the American Community Survey 2005–2009 five-year estimates, which have replaced the long form of Census 2010 and were recently for Minnesota in mid-December 2010. Data cited from 2010 is from the Census 2010 redistricting data or the short form (dataset SF1); the latter was released in June 2011.

Most economic data on larger trends regarding jobs, workers, and industries was obtained from the Longitudinal Employment and Household Dynamics (LEHD) data set for 2008, released by the Bureau of Labor Statistics and retrieved using their OnTheMap web site (http://lehd.did.census.gov/led/onthemap/). The team used the 2008 numbers, as the 2009 data set will not be released until later in 2011.

Data on affordable housing was compiled from the HousingLink Inventory of Subsidized Housing and the HUD Picture of Subsidized Households for 2008. Small and minority-owned business data, as well as information about on-street parking losses, was provided by U-PLAN, which conducts ongoing surveys of businesses located along University Avenue. GIS boundary data for maps was obtained from the Metropolitan Council MetroGIS DataFinder web site, the City of Saint Paul, and Ramsey County. Foreclosure data was provided by the Minnesota Center for Environmental Advocacy.

Current data on bus routes, headways, and ridership was provided by MetroTransit. Data on bicycle and pedestrian accidents along University Avenue was provided by the City of Saint Paul Department of Public Works for the years 2003–2007; this is the most recent data available, to the authors' knowledge.

For specific data sources by indicator see Appendix B: Indicators and Methodology.

Geographic Boundaries of the Central Corridor

A majority of the indicators were collected for census block groups located completely or mostly within a half-mile radius of the Saint Paul portion of the proposed LRT route along University Avenue, and then along Cedar Avenue through downtown to Union Station. Some indicators were collected at the census tract level when data was not available at the block group level for one or more years. All block group data was gathered for the Census 2000 block group boundaries. LEHD data was gathered at the block level because of its availability. Data for Census 2010 was gathered at the block level and aggregated to the 2000 Central Corridor and submarket boundaries. Affordable housing data was collected for properties located within a half-mile radius of the proposed LRT line. Small and minority-owned business data from U-PLAN was collected for all businesses, nonprofits, and governmental organizations located along University or within one block north or south of the avenue.

The team created submarket boundaries based on those provided in the Central Corridor Development Strategy. They were modified such that they contained all block groups located wholly or mostly within their boundaries. These market areas vary widely in size and are not meant to be uniform in distribution.

Existing Conditions and Impact Analyses

During the scoping process, the CSC prioritized three focus areas with six objectives and research questions to explore. A full list detailing each indicator, data source, and the geography used is located in Appendix B.

To calculate the impact analysis of change in land use by station area, the project team created two possible scenarios for development. In the *market build-out scenario*, the team used numbers identified in the individual station area plans representing the market potential in each station area by 2030. This projection represents the city consultant's assessment of real estate market support for development through the next 20 years. In the *maximum allowable build-out scenario*, the team took the ratio of residential, office, retail, and hotel uses anticipated from the market scenario and applied it to the maximum floor area ratio allowed for each zoning district by parcel. The team did not include a "no build-out" scenario due to the existence of several studies suggesting that development will occur as a result of the light rail line, once it is in operation and potentially before then. A more detailed and complete list of methods and assumptions for the impact analysis is listed in Appendix B.

For the economy section, the team obtained the anticipated number of jobs by dividing the expected office and retail floor area projections by the average square feet that an office worker and a retail worker uses, according to the *Planner's Estimating Guide for Projecting Land Use and Facility Needs*.[16]

To anticipate the potential impact of the rezoning on small and minority-owned businesses as well as on existing subsidized affordable housing, the project team created three categories of development potential to classify each parcel being rezoned. Parcels with a *high* potential for development are those that primarily fall into areas in the Central Corridor Development Strategy identified as "major

opportunities for investment." Parcels classified with a *medium* potential for development are those identified with a greater than 2.0 difference between the current floor area ratio (FAR) and proposed allowable FAR—meaning the rezoning will allow the land to double in its allowable density (see Section 3, Why Zoning is Important, for an explanation of FAR) —and are adjacent to at least one vacant parcel. This additional criterion was included as site developers may desire to assemble several parcels in order to make the project financially feasible. Parcels with *low potential* for development are all others being rezoned to increase development potential, but which do not meet the criteria described for the other two categories.

It should be noted that although the team identified these three tiers of potential development, there are several other factors influencing the development of properties in the Corridor. The rezoning establishes a parameter of expectations for development; market forces such as current vacancy rates, feasible rents for development, opportunities for land assembly, and lender liquidity have significant impact on the potential for parcels to be developed, as well.

Finally, for the transportation analysis, the team obtained the projected new population numbers within the station areas of the Central Corridor by taking the total number of housing units and multiplying it by the average household size of the corridor (2.39) in the 2005–2009 period.

2. Central Corridor: Demographics and Neighborhood Characteristics

History of Central Corridor Neighborhoods

The story of the Central Corridor is not just the history of University Avenue—it also represents the amalgamation of several histories involving the various peoples and cultures that make up the surrounding neighborhoods and communities. The corridor, while shaped by the various modes of transportation that traverse it, is defined by its various working-class racial and ethnic communities, many of which are composed of immigrants who have called the area home since the late nineteenth century. Many of the corridor neighborhoods emerged as working-class streetcar suburbs following the 1890 opening of the University Avenue streetcar, which linked the downtowns of Minneapolis and Saint Paul. Early residents of distinct neighborhoods in the Central Corridor—Frogtown, Rondo, the North End, Summit-University, Western Park, Cornmeal Valley, and Oatmeal Hill, among others—included European immigrants or African Americans working on the railroad or in the several manufacturing industries in the Midway area. The Central Corridor has also historically hosted some of the region's most vibrant commercial and manufacturing districts: prior to the 1950s the Midway area from Westgate to Hamline Street, and today the emerging World Cultural Heritage District on the east end that encompasses the large variety of Southeast Asian and African American businesses.

Transportation has shaped several of the neighborhoods within the Central Corridor (CC)—in both constructive and destructive ways—since the late nineteenth century. The creation of Interstate 94 through the Central Corridor in the 1950s wreaked substantial damage on many neighborhoods, most significantly Rondo, a longtime thriving African American community in Saint Paul. Several acres of housing and businesses in Rondo were condemned as blighted and were demolished for the interstate as well as for a redevelopment project authorized by the Federal Housing Act of 1949. Hundreds of families were displaced, businesses were lost, and many owners lost significant equity in their properties. Despite federal requirements to mitigate displacement with some replacement units, none were constructed, and the protests of the community were largely ignored.

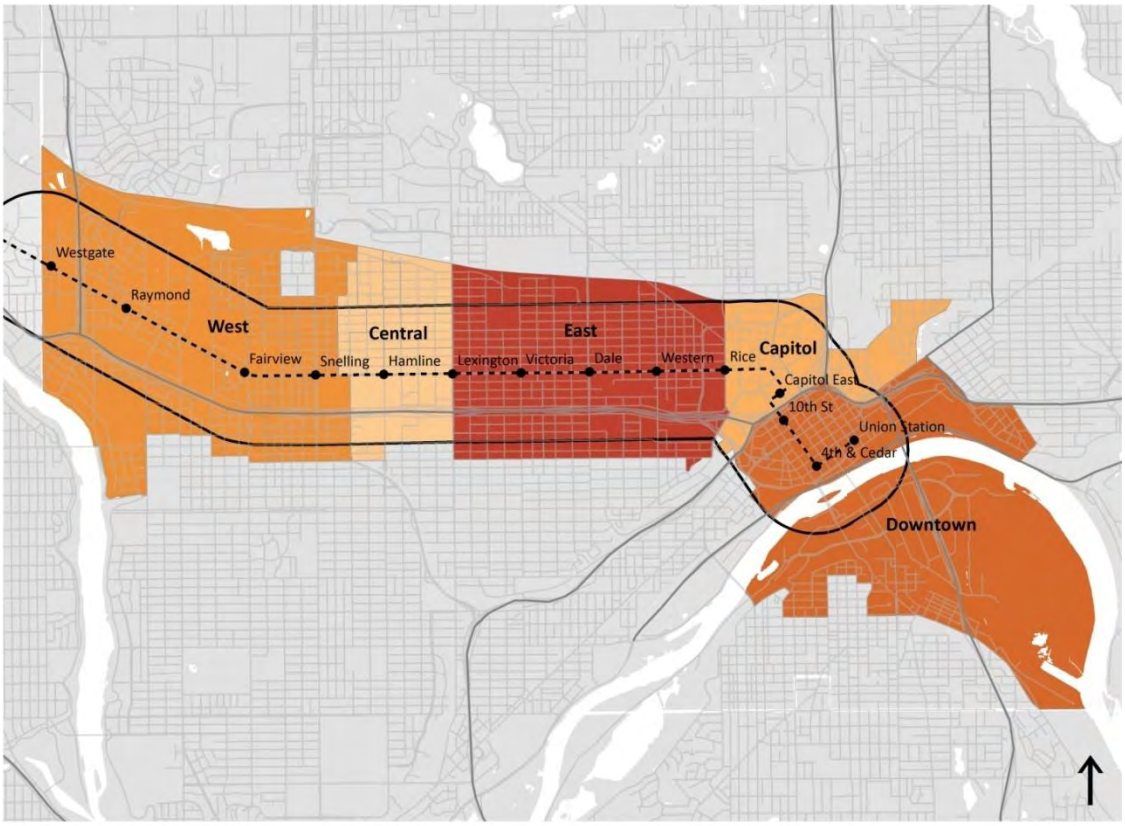
In the last few decades, immigrants and other newcomers have played a primary role in shaping the character of the Central Corridor. In the late 1970s, Hmong people began settling in the neighborhoods near University Avenue. Since the end of the U.S.–Vietnam War, thousands of Hmong, Lao, Vietnamese, and Cambodians have moved to the Central Corridor; starting in the late 1970s the U.S. granted them refugee status. In the 1990's many Somali refugees also came to live in the Central Corridor following the Somali civil war. Recently affluent, white families have been resettling in the neighborhoods with older housing stock.

Demographic and Neighborhood Characteristics

The Central Corridor light-rail line traverses several neighborhoods, each with a distinct character and demographic profile—the corridor is a multifaceted place. Many of its sections are quite diverse racially and ethnically. Some have significantly young populations, and several are lower-income. This assessment focuses on the corridor as a whole and the neighborhoods it includes, as well as five smaller sections, called submarkets. The concept of submarkets and their boundaries originated with the Central Corridor Development Strategy (CCDS), which divided the corridor into five markets based on their real estate potential—and determined by their different land use characteristics and demographic profiles. Healthy Corridor for All uses this framework of analysis, as the HIA is focused on impacts

resulting from changes in land-use regulations. Figure 1.1 depicts the geography of the submarkets as laid out by the CCDS.

FIGURE 1.1: CENTRAL CORRIDOR SUBMARKETS

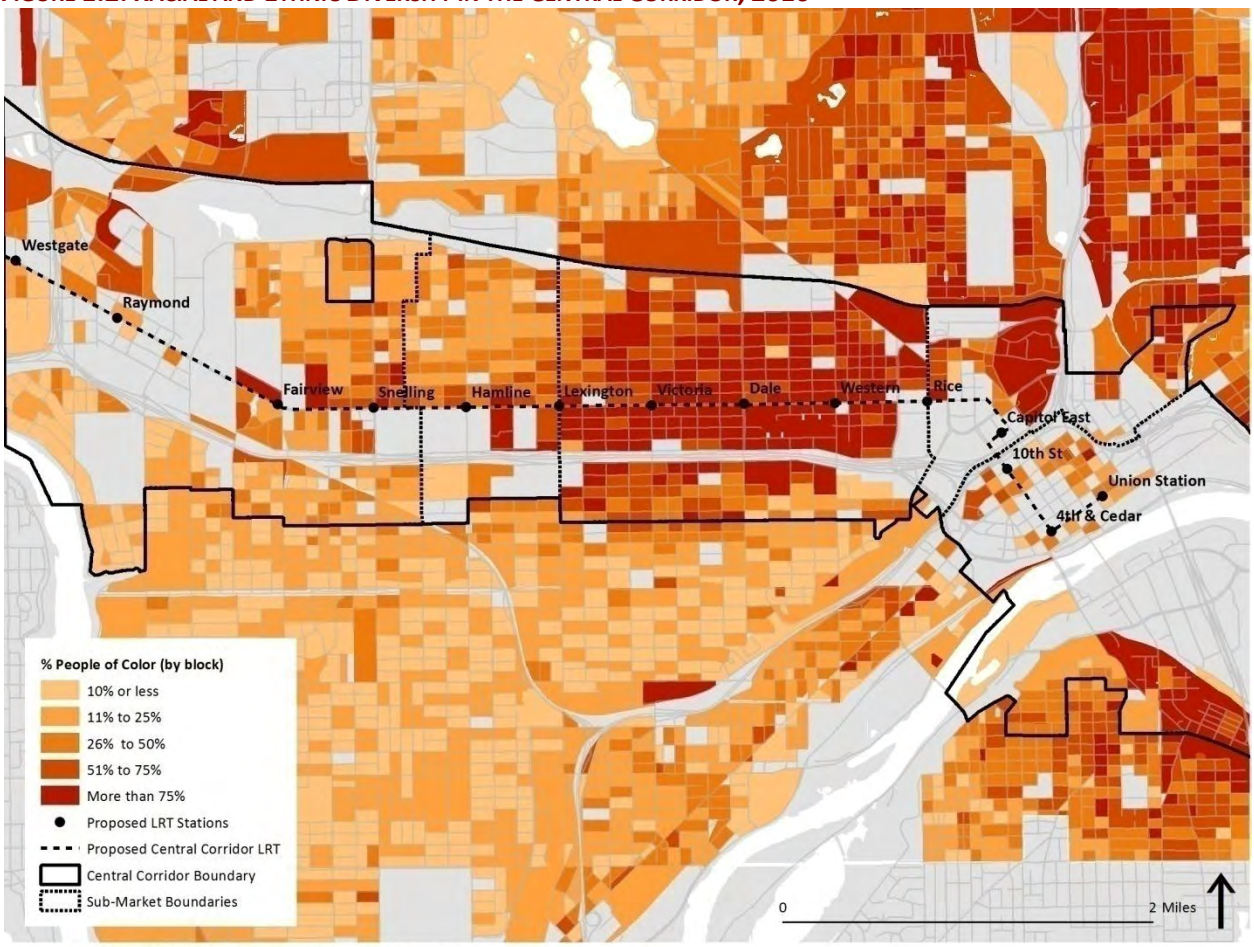


Source: US Census 2000; City of Saint Paul; Metropolitan Council GIS

More than one-fifth of the Saint Paul population resides in Central Corridor neighborhoods—a total of 62,356 people in 2010. This area includes about 28,000 housing units, nearly one-quarter of the total housing stock of the city. The corridor also contains 62 percent of the total jobs in Saint Paul, and the Minnesota state capitol is located along University Avenue.

The Central Corridor is racially and ethnically diverse. Persons of color represent an estimated 53 percent of the Central Corridor population in 2010, compared to 44 percent in Saint Paul and 33 percent in Ramsey County. As the figure below depicts, communities of color are especially prominent in the neighborhoods in the east and central submarkets, as well as across the river from downtown.

FIGURE 1.2: RACIAL AND ETHNIC DIVERSITY IN THE CENTRAL CORRIDOR, 2010

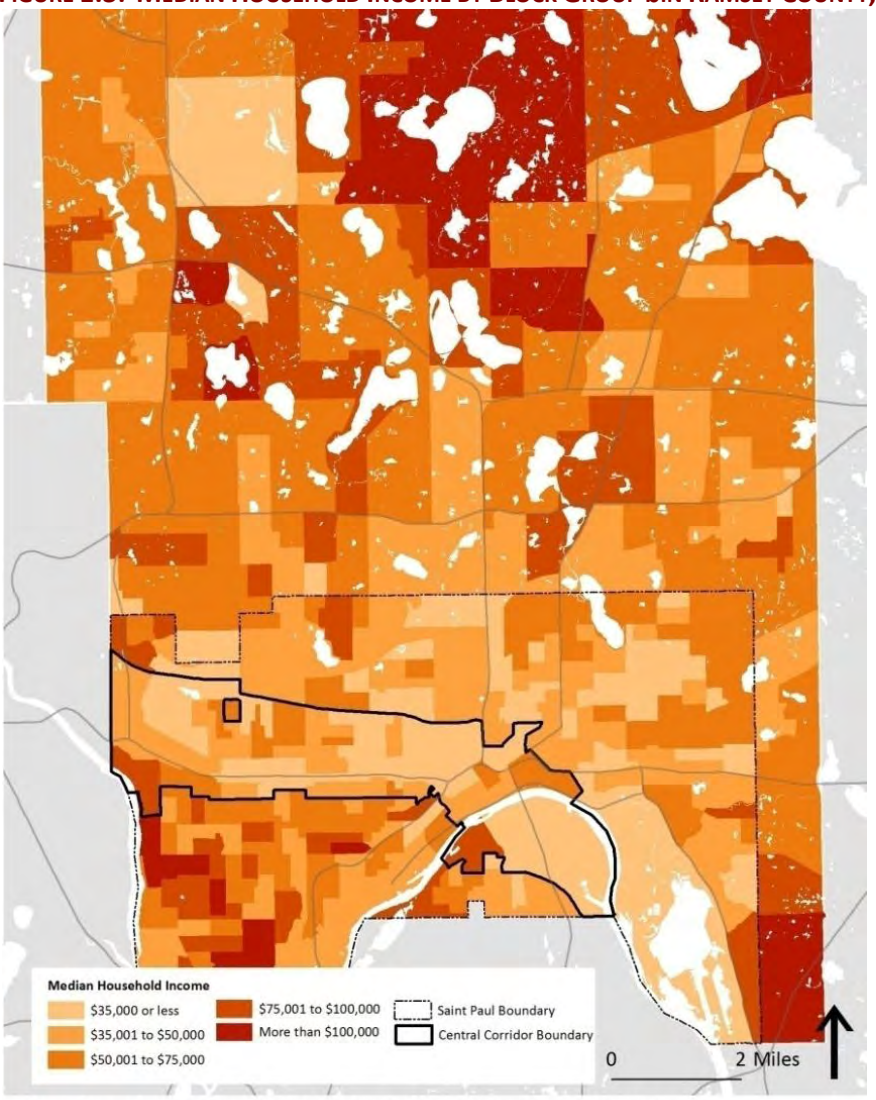


Source: US Census 2010; Metropolitan Council GIS; City of Saint Paul

Poverty is prevalent and rising in corridor neighborhoods. In the 2005–2009 timeframe, the estimated poverty rate in the corridor was 27 percent, up from 23 percent in 2000. Not only does this represent a significant number of people, but the Central Corridor also contains some of the poorest neighborhoods compared to the city and county (see Figure 1.3). Furthermore, five of Ramsey County's nine extreme poverty neighborhoods[a] are located in the corridor. The poverty rate is highest and increased most significantly during the last decade in the east and capitol submarkets, which contain significant concentrations of communities of color.

[a] "Extreme poverty neighborhoods" are defined as census tracts that have a poverty rate greater than 40 percent, as of the 2005–2009 American Community Survey.

FIGURE 1.3: MEDIAN HOUSEHOLD INCOME BY BLOCK GROUP [b] IN RAMSEY COUNTY, 2005–2009

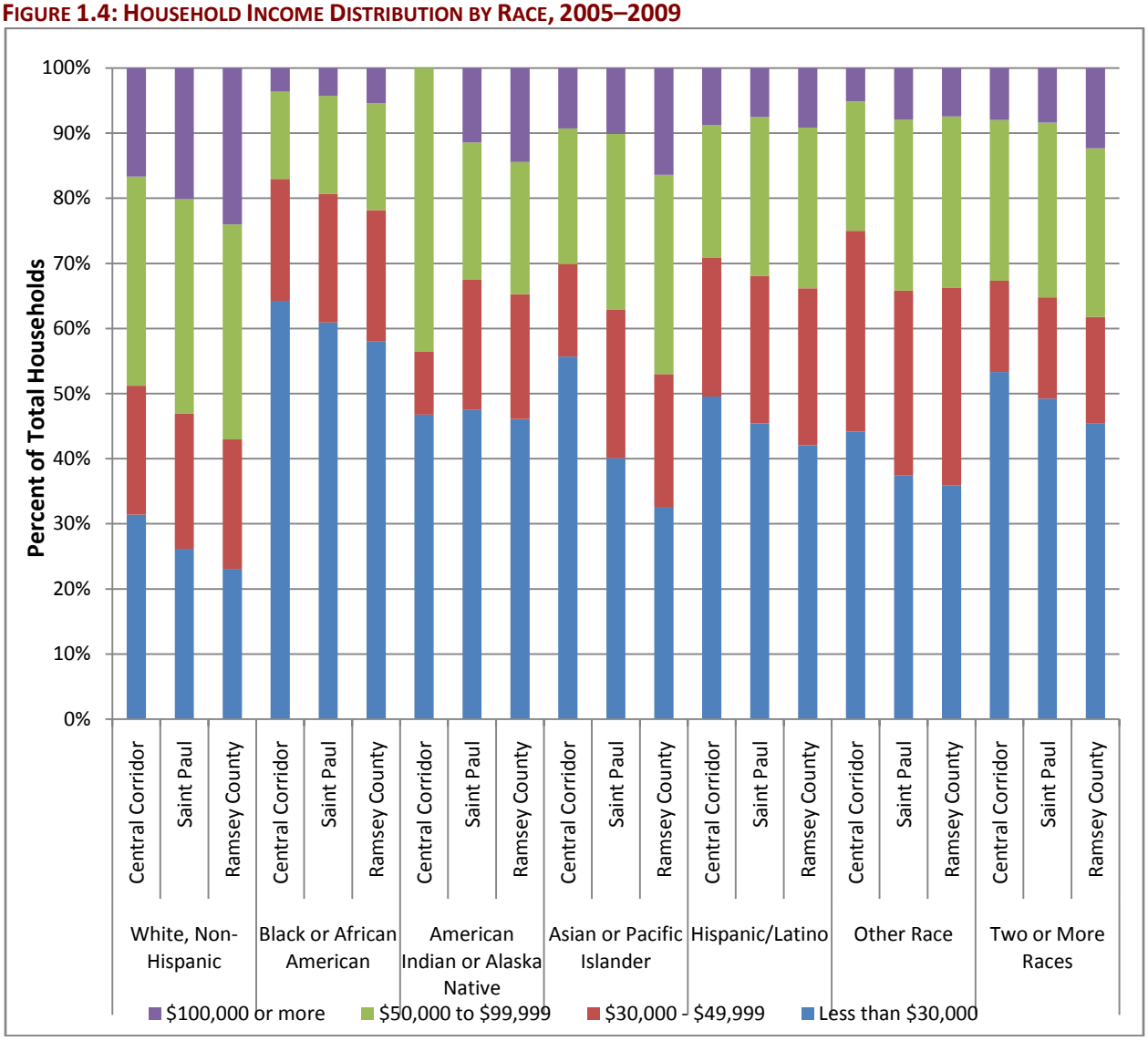


Source: American Community Survey 2005-2009 5-Year Estimates; Metropolitan Council GIS; City of Saint Paul

Racial disparities exist, even within the Central Corridor. The Central Corridor is a heterogeneous place; not all residents are poorer, less educated, or more likely to be unemployed than Saint Paul or Ramsey County residents as a whole. These disparities tend to fall upon color lines. As Figure 1.4 demonstrates, household income distribution varies widely by race and ethnicity. In the Central Corridor, at least 50 percent or more of black/African American, Hispanic/Latino, Asian or Pacific Islander households, or those headed by someone of two or more races had an annual income of less than $30,000, compared to just 31 percent of white households in the 2005–2009 period. As a reference, in 2010 the federal threshold for low-income households is $27,465 for a family of three.

[b] A block group is a geographic area designated by the US Census Bureau that is between the size of a Census block and a Census tract. Block groups typically have a population of between 600 and 3,000 persons.

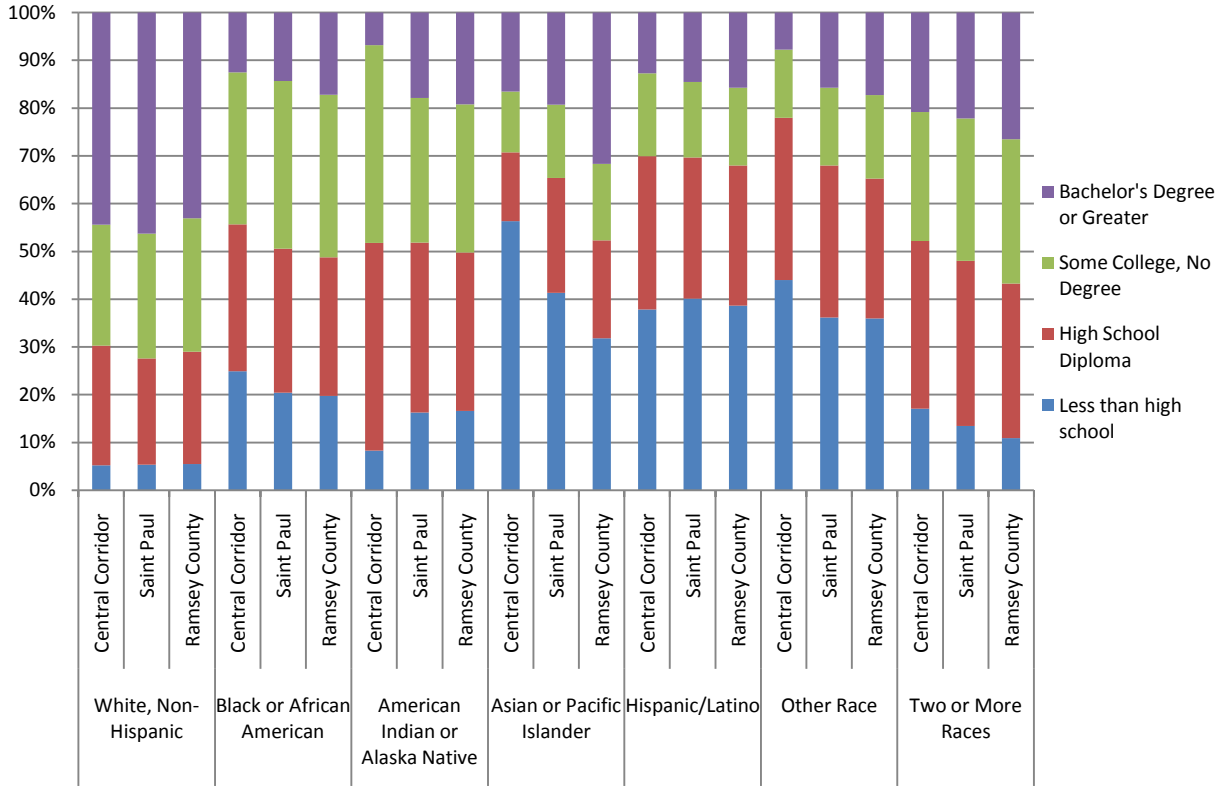
FIGURE 1.4: HOUSEHOLD INCOME DISTRIBUTION BY RACE, 2005–2009



Source: American Community Survey 2005–2009 5-Year Estimates

Disparities by race also exist in educational attainment within the corridor. Where only 5 percent of the white population has less than a high school diploma, an estimated 56 percent of Asians and Pacific Islanders in the Central Corridor lack a high school diploma. See Figure 1.5 for a depiction of the differences in educational attainment by race.

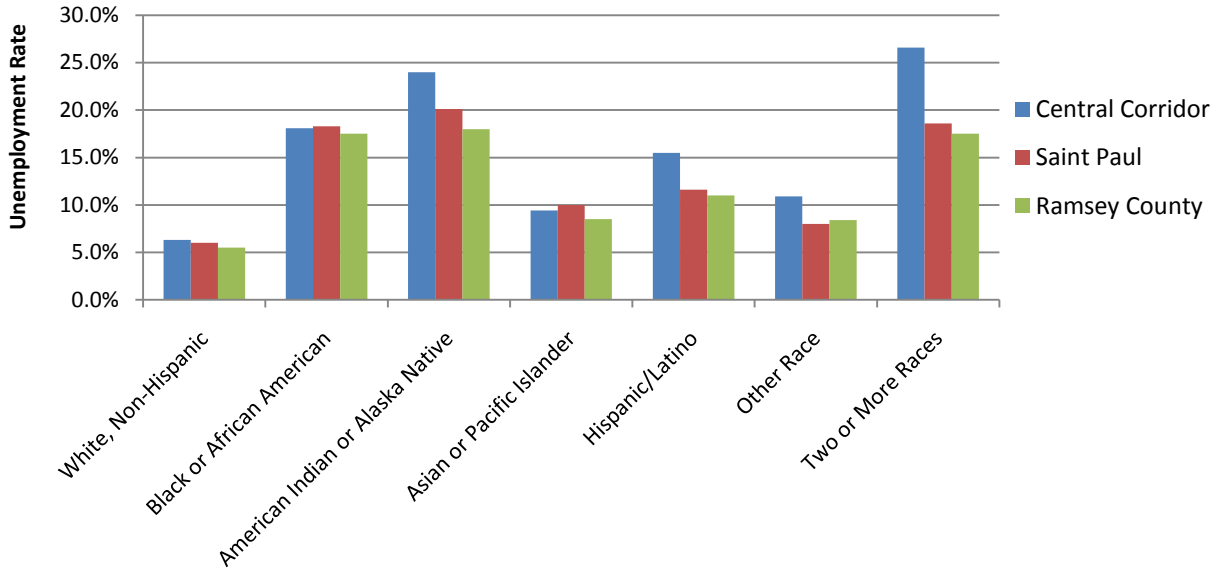
FIGURE 1.5: EDUCATIONAL ATTAINMENT BY RACE, 2005–2009



Source: American Community Survey, 2005–2009 5-Year Estimates

Finally, racial disparities are clearly evident in unemployment rates within the Central Corridor. As Figure 1.6 shows, white unemployment is several percentage points below that of other races and ethnicities. Asian and Pacific Islander unemployment, however, is relatively low (compared to other races), at 9.4 percent, especially considering the lower level of educational attainment and lower incomes in the Central Corridor Asian community.

FIGURE 1.6: UNEMPLOYMENT BY RACE, 2005–2009



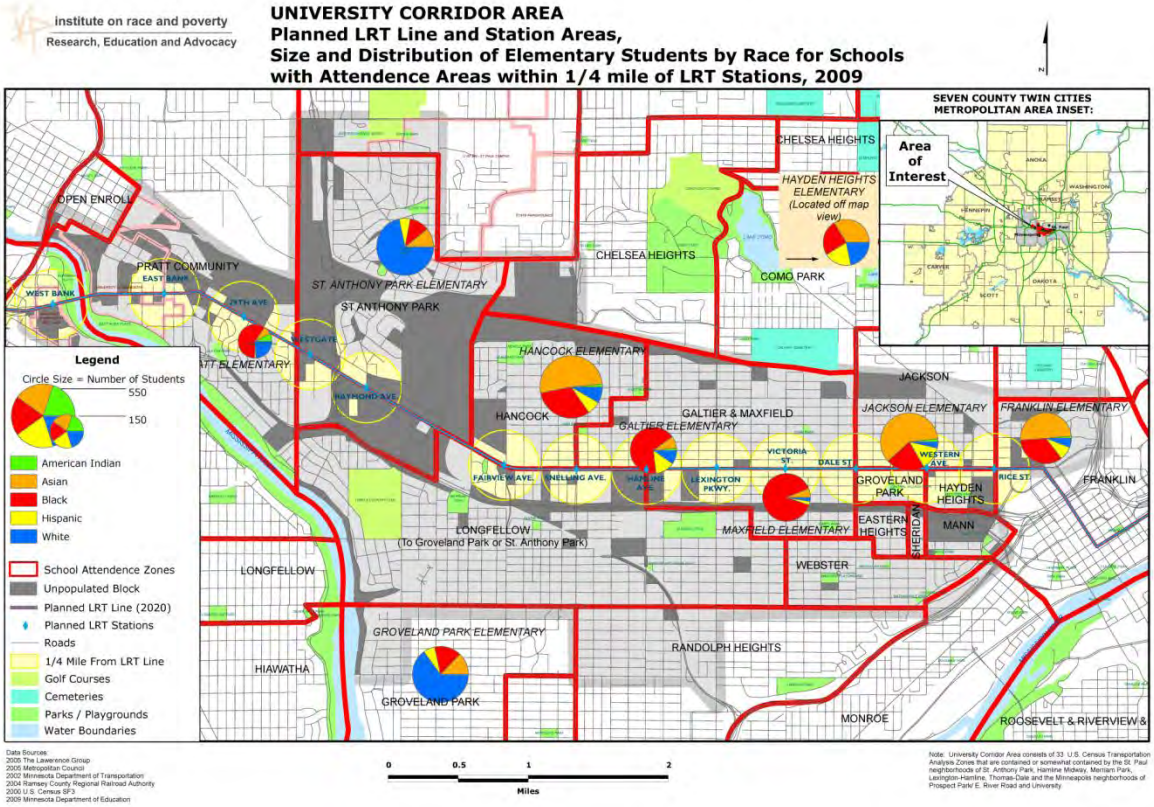
Source: American Community Survey 2005–2009 5-Year Estimates

Many corridor neighborhoods have been or are currently immigrant gateways into the Twin Cities. In several Central Corridor neighborhoods, more than a quarter of the population is foreign-born. On the east side of the corridor and near the Capitol, immigrants comprise nearly half of the population; many of them have entered the country in the last decade.

A majority of households in the Central Corridor are renters, in contrast to the city and region. In the Central Corridor, an estimated 56 percent of housing units are renter-occupied, compared to 44 percent in Saint Paul and 36 percent in Ramsey County. Neighborhoods with high concentrations of renters are scattered across the corridor in every submarket.

Schools in the Central Corridor are becoming increasingly segregated by income and race. Based on research by Myron Orfield and others at the Center for Race and Poverty at the University of Minnesota, schools on the east side of the corridor are racially segregated and poor and have some of the lowest test scores.[17] See Figure 1.7 provided by Orfield et al, for more details.

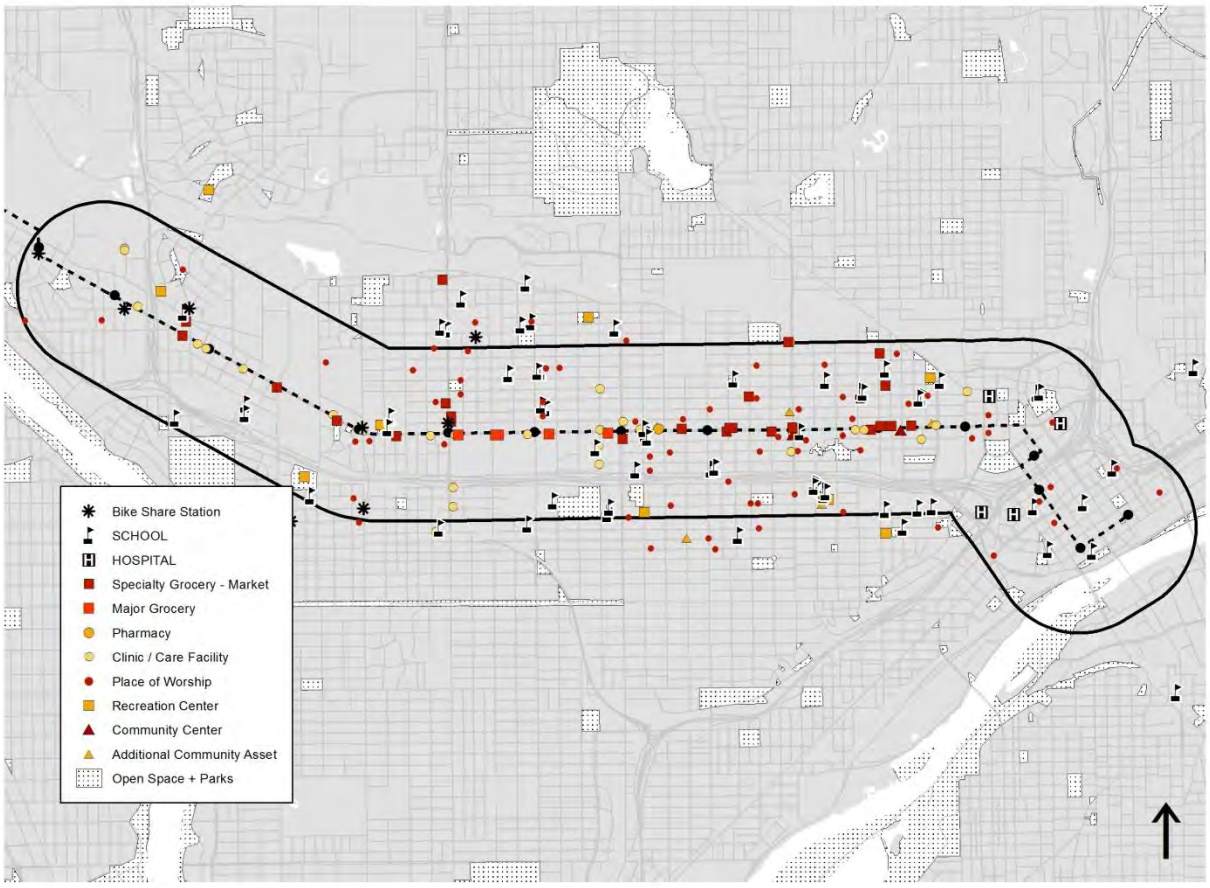
FIGURE 1.7: RACIAL BREAKDOWN OF SCHOOLS IN THE CENTRAL CORRIDOR



Source: Institute on Race and Poverty

The Central Corridor contains several asset-rich neighborhoods. While the Central Corridor faces a number of challenges related to poverty, high housing cost burdens, and unemployment, as the light rail is constructed and development follows many community assets are worth highlighting and preserving. Figure 1.8 identifies some of the assets along the corridor, which include parks and open space, community centers, schools, grocery stores, and places of worship among other places valuable to the community.

FIGURE 1.8: CENTRAL CORRIDOR COMMUNITY ASSETS



Source: ESRI; Minnesota Center for Environmental Advocacy; Metropolitan Council GIS; GoogleMaps

A Snapshot of the Current Saint Paul Real Estate Market

Because the HIA focuses on the impacts of land use regulations that enable real estate development, it is important to explore current and forecasted conditions for the Saint Paul real estate market, which help determine the timing and intensity of development. While rezoning is the regulatory tool that enables development to occur at desired density levels and uses, there must be a steady real estate market in order for projects to be financially feasible. Without a steady market, it is difficult for private developers to obtain construction financing.

There are two primary studies that examined the Central Corridor market and are pertinent to this rezoning. A market analysis for the CC station area development potential was commissioned by the City of Saint Paul and conducted by Colliers, Turley, Martin, Tucker (now Cassidy Turley) in 2006. Additional modifications were made in 2008 to account for the new Victoria, Western, and Hamline station areas, as well as some corrections for the recent economic downturn. This market study looked at the 20-year future development potential of the Central Corridor. On the supply side, it analyzed current vacancies and trends in office, residential, industrial, and retail land, to see if any of those markets were oversaturated. On the demand side, the study emphasized the potential upward effect of current and

projected employment and demographic trends on new housing and commercial uses. The station area plans project the number and type of development projects that the market can support by 2030.

More recently, the Center for Transit Oriented Development (CTOD) released a spring 2010 report that examined the financial feasibility of development in the CC and how that might influence public investment projects. The report identified a few key trends for future corridor development. First to occur would be the construction of rental apartment projects, as the real estate market strengthens. Because a gap still exists for all types of development between current rents and financially feasible ones, the report suggests that projects including affordable housing may come first, as a way to close the rent gap and satisfy demand for housing. Second, development is most likely to occur initially on the western edge of the corridor in Saint Paul, around the Westgate, Raymond, and Fairview stations. Finally, until current office vacancy rates drop and the market becomes unsaturated, office development is not anticipated to occur for quite some time.

The CTOD also interviewed developers for the report to ascertain how they see the corridor developing over time, and CTOD reports a fairly speculative market. It found that "owners are reportedly optimistic about transit's potential to increase property values and, as a result, are holding their land based on the expectation of higher sales prices in the future. While this is positive in the sense that it indicates a strong potential for future investment in the corridor, landowners may perceive the value of their land to be higher than what is currently justified given the real estate market, creating an inhospitable climate for new development."[18] This viewpoint validates the HIA finding that related property value has increased near station areas in the last few years, as discussed in further detail later in this report.

Current Health Conditions in the Central Corridor

This analysis is rooted in how land use regulations—specifically, rezoning—impact the social determinants of health. The Community Steering Committee's priority of examining economy, housing, and transportation shows a broad understanding of these social determinants. While none of the indicators in the three priority elements directly measure an illness or ailment, collectively they allow us to paint a picture of housing, business stability, employment, and mobility conditions that determine resident and community health.

To better understand how the rezoning might impact current health conditions in the Central Corridor, the Healthy Corridor project has compiled a set of public health indicators that other agencies have provided. Table 1.2 below illustrates this issue.

TABLE 1.2: CENTRAL CORRIDOR HEALTH INDICATORS

	Indicator	Existing Conditions
Health, Illness, and Disease	Infant Mortality Rates	7.1 deaths per 1,000 live births, compared to 6.4 in the Twin Cities, 4.8 in Minnesota[19]; highest rates in zip codes near downtown and Capitol submarkets.
	Asthma Rates	About 17 asthma hospitalizations per 10,000 persons, compared to 11 in the Twin Cities, 9 in Minnesota; highest rates in zip codes near downtown and Capitol submarkets. Nearly 10% of adults in Ramsey County told they have asthma at some point.[20]

	Babies Born with Low Birth Weight	7.4%, compared to 7.1% in Ramsey County, 4.8 percent in the Twin Cities;[21] highest rates in zip codes near downtown and Capitol submarkets.
	Lead and Copper in Tap Water	Very little testing conducted so far; of all homes tested, all had lead, one exceeded EPA action level; copper detected in all homes tested.[22]
	Lead Poisoning in Children	Highest results in east submarket, especially north of University Avenue.
	Obesity Rates	Only county-level data available: 25% adults, Ramsey County,[23] state of Minnesota, 24.6%.
	Diabetes Rates	Only county-level data available: 7.2% adults 20+ years, Ramsey County, 2008,[24] state of Minnesota, 5.8%.[25]
	Cancer Rates	Only county-level data available: leading cause of death, Ramsey County, 2009; rates particularly high, African American males, American Indian males and females.[26]
	Cardiovascular Disease Rates	Only county-level data available: second leading cause of death, Ramsey County; African Americans have higher rates (including heart disease and stroke) compared to white population.[27]
Land Use and Environment	Acres of Parks	11.8 acres for every 1,000 residents, higher than National Recreation and Parks Association recommended 6–10 acres; less than Saint Paul, 18+ acres for every 1,000 residents.[28]
	Underused or Polluted Land	Several potential Brownfield sites[c] identified; many located in downtown and west submarkets.[29]
	Air Pollution	Estimated levels highest near major highways and arterials with high average traffic volume; significant portion of CC in Saint Paul "highest estimated concentration" of air pollution due to proximity to I-94 and SR-280.[30]
	Easy Access to Healthy Foods	About 64% of residents within walking distance of a grocery store; 80% within walking distance of store with prepared meals; areas of CC in Saint Paul with less access to healthy foods include area south of I-94, western side of downtown, some neighborhoods on north side of central and west submarkets.[31] Comparative data for city and county not found.
	Asbestos Abatements[d]	Not many concentrations of buildings in Saint Paul portion of CC have had asbestos abatement.[32]
Health Care Access	Proximity to Health-Care Facilities	Shortage of primary care health professionals and/or considered medically underserved[33] in many neighborhoods in east, capitol, and downtown submarkets.

[c] A Brownfield is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant (EPA, About Brownfields, http://www.epa.gov/brownfields/about.htm).

[d] Asbestos abatement refers to the removal of asbestos in older buildings, where it was used for insulation and as a fire retardant. When inhaled into the lungs, asbestos can cause significant health problems. (US EPA, 2011)

	Uninsured Population	14% in Saint Paul, compared to 13.1% in Ramsey County, 11.2% in Minnesota, 2004; persons of color more likely to be uninsured part or all of the year, especially Hispanic/Latino population.[34]

Geographic health disparities exist in the Central Corridor. The indicators clearly show that Central Corridor residents have higher health risks than residents in Ramsey County, the Twin Cities, or Minnesota statewide. Central Corridor residents are disproportionately burdened by infant mortality, low birth weight, and asthma. Persons of color, who are concentrated in the corridor, are more likely to suffer from cardiovascular disease and cancer, the two leading causes of death in the county. Therefore, as major development begins in the corridor, it is critical to be vigilant about issues that influence health in the area.

3. Central Corridor Rezoning: Analyzing the Proposal

What is the Function of Zoning?

In order to clearly assess the impacts of rezoning and the subsequent changes in land use likely to occur as the corridor redevelops, the HIA team analyzed the rezoning proposal to identify key elements and their implications for the built environment in the Central Corridor. Before going into the specifics of the proposal, below is some basic information about zoning: what it is, what it does, and why it is important in shaping the way neighborhoods develop. Zoning can:

- Create standards for the allowable *uses* on a piece of land according to location. It is usually classified into categories based on *allowable uses*, such as retail, office, industrial, single-family residential, multifamily residential (apartments), industrial, or mixed-use. The latter allows for a combination of residential with retail/commercial or office uses, or both. Mixed-use, in this context, can be both vertical—where different land uses are combined over one another in the same building—or horizontal—where different land uses are in separate buildings, but on the same parcel of land.

  Not all land uses in a city have the same value. Planners often refer to the "highest and best use" of land, meaning the use that can obtain the highest dollar value in the particular location—depending on factors such as proximity to highways or transit, proximity to a scenic vista, or proximity relative to noxious uses (such as a landfill, a refinery, and so forth). In an urbanized area, industrially zoned land is generally worth less per square foot than land zoned for commercial or residential uses.[35] Rezoning a property to allow for a higher value use, then, can increase the value of the property.

- Create development standards for the physical structure of buildings. Such standards create requirements or criteria for how much can be developed on a parcel—density, height, floor to area ratios, for instance—as well as how the development will look—setbacks, location of doors, accessibility to buildings, among other elements.

  Density can be thought of in terms of the height of the building and the space it consumes on the property where it stands. This is often referred to as the floor area ratio (FAR), or the ratio between the total floor area of a building and the area of the land upon which it is built. A higher floor area usually implies a taller building or a building that takes up more land area, or both. When land is rezoned to allow for an increase in density, it increases the number of residential units allowed, or the floor area allowed for office or retail uses. Often, this translates into an increase in the height of the building. Properties with a higher allowable density can have a higher value per square foot of land area because their potential for higher density and value development is greater.

- Create a set of procedures for the review and evaluation of development proposals, in order to help ensure development meets the needs of the city and the community. Examples include requiring discretionary review, developing a set of objectives the city aims to meet with zoning, balancing the mix of uses as they develop, and assessing nonconforming uses on a case-by-case basis.

In the Central Corridor rezoning proposal, density is increased and many sites that are currently zoned for industrial, retail, office, and even residential uses, are being rezoned to allow for a mix of residential and retail or office uses on the same property.

Key Rezoning Elements for the Central Corridor

The rezoning of the Central Corridor is the result of the Central Corridor/Traditional Neighborhood Zoning Study, conducted by the City of Saint Paul in 2010, in two phases. The first examined the existing traditional neighborhood (TN) zoning districts for their efficacy in promoting pedestrian and transit-friendly mixed-use development, while not stifling development; the second phase involved identifying properties along the corridor to be rezoned to align more closely with the Central Corridor Development Strategy.

Properties within the area to be rezoned (also called the "Area of Change" by the City of Saint Paul) are being consolidated into five zoning districts, as detailed below:

T2 -Traditional Neighborhood District. Designed for existing or potential pedestrian and transit nodes; will support compact, pedestrian-oriented commercial and residential development that can support transit usage. Special attention is given to areas of transition adjacent to residential neighborhoods.

T3 -Traditional Neighborhood District. Provides for higher-density pedestrian and transit-oriented mixed-use development; designed for development or redevelopment of land on large sites. Also intended for smaller sites in existing mixed-use neighborhoods.

T4 -Traditional Neighborhood District. Provides for high-density, transit-supportive, pedestrian friendly, mixed-use development.

I1 -Light Industrial District. Intended to accommodate wholesale, warehouse, and industrial operations whose external physical effects are restricted to the area of the district and in no manner affect surrounding districts in a detrimental way; also intended to permit the manufacturing, compounding, processing, packaging, assembly, or treatment of finished or semi-finished products from previously prepared material.

IR -Industrial Restricted District. Intended to provide sites for commercial, office, and light industrial uses that are compatible with any nearby parks, parkways, or residential uses.

The City's full documentations on the rezoning proposal can be found at: http://www.stpaul.gov/index.aspx?NID=3881.

Proposed Central Corridor Land Use Changes

After a review of the City's rezoning proposal, the HIA project team identified the following general changes to land use along the Central Corridor:

Office space will significantly increase. Currently, there are just over two million square feet of office space within the rezoning area. Along University Avenue, the main thoroughfare, there are several offices within moderate one- to two-story stand-alone buildings. In the western end of the corridor, there are a few larger buildings of three to six stories that house several small businesses and nonprofits. While a significant majority of the corridor is already zoned for office and commercial uses, the increase in allowable density and heights for many properties will allow them to redevelop with buildings that are at least three stories and cover much more land area. Areas that will experience the

greatest growth in office uses, according to the station area plans and the Central Corridor Development Strategy, will likely be near the Raymond, Westgate, and Rice stations. If the area is developed to its maximum allowable potential after the rezoning, the most significant increases in office space—more than doubling what now exists—will be in the Westgate, Raymond, Fairview, and Lexington station areas.

The current market for office space in the corridor, however, tempers this development potential. Developers interviewed for the recent Central Corridor Investment Framework study pointed to a weak office market with high vacancies in the Twin Cities; recovery is not anticipated until the economy recovers.[36] Signs of the recovery are already showing in the region[37] though, and the increased development potential and connectivity of the corridor will facilitate growth there.

Retail will increase fairly moderately. Retail already comprises a fairly substantial portion of the total square feet in the Central Corridor; currently, there are more than six million square feet of retail space in the Areas of Change[e] or rezoned areas--a significant portion of it is in the Midway section. The conversion of industrial land to mixed-use and the increase in allowable densities and heights will increase the amount of retail that could potentially be developed in the corridor. But most station areas will likely not see a substantial increase in retail, with the exception of the Snelling and Hamline station areas, where existing retail shopping centers are expected to expand in the next 20 years. Outside of those areas, retail will most likely be in the form of small-scale, bottom-floor businesses in mixed-use buildings.

As many as 6,775 new residential units may develop along University Avenue and within the station areas within the next 20 years. If the corridor is developed to its maximum potential after the rezoning, this number could be as high as roughly 31,000 units—more than twice the current stock. Most residential development currently within the rezoning area is apartment buildings and some mixed-use buildings, many of which contain affordable units. Single-family homes do exist in this area, but are very limited in quantity. The Central Corridor Development Strategy and the station area plans call for a significant increase in residential development to support the new transit line and encourage more walkable neighborhoods. There is market demand for residential development in the corridor, especially near the western station areas. While there is currently an estimated gap between feasible rents and current rents along the corridor, developers have indicated that as the market improves and the CCLRT approaches completion, apartment projects will be the first to be constructed—many of which may contain affordable housing, as developers look toward subsidies to fill the rent gap.[38]

A significant portion of industrial land near station areas is being rezoned to allow for higher-density, mixed-use development. Currently, most industrial land in the corridor is in the Midway industrial area, between Westgate and Snelling. Most of the conversion is around the land immediately adjacent to the Westgate, Raymond, and Fairview station areas. Near Westgate, some of the industrial land has already been converted to housing, retail, and office uses. In the Raymond area, industrial uses are interspersed with small offices and retail shops.

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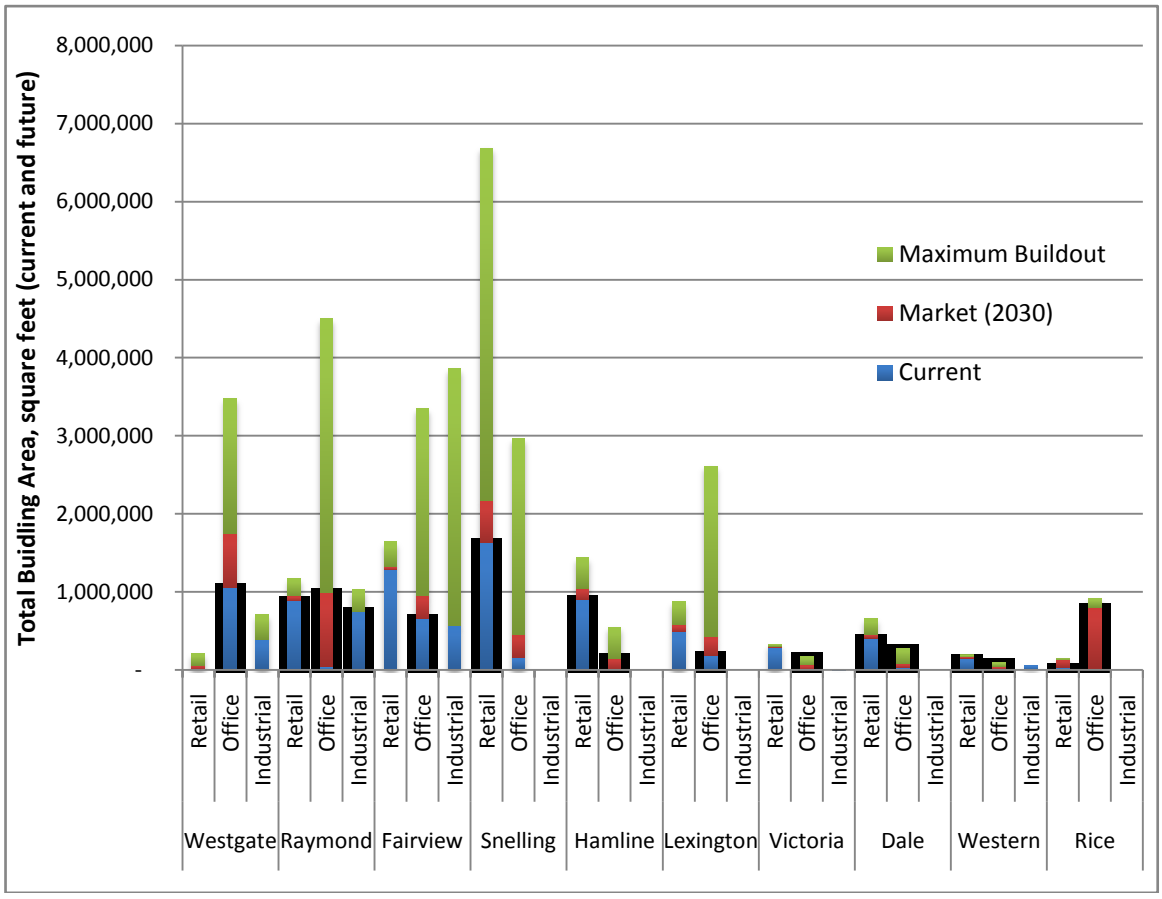
[e] "Areas of Change" is the terminology used by the City Planning and Economic Department Agency to define the geographic regions where the rezoning is taking place. The term was first identified in the Central Corridor Development Strategy to delineate where development would be focused to accommodate the higher density as a result of the new light rail line.

Currently, a majority of the land in the conversion area is zoned for industrial uses (about 251 acres). Under the rezoning proposal, the amount of industrially zoned land will decrease by more than half (to 114 acres) and will be replaced by mixed-use traditional neighborhood zoning districts, which allow for residential, retail, and office commercial uses. Also, while the market study does not explicitly discuss the potential for new open space within the corridor, it should be noted that city policy requires land be set aside for parks and open space or that cash be paid to a fund for the development of open space.

Below is a figure that depicts land use changes by station area near where rezoning is proposed. Both the market build-out scenario and maximum allowable build-out scenarios, as described earlier in the Technical Methods section, are included.

FIGURE 3.1: POTENTIAL CHANGE IN LAND USE BY STATION AREA

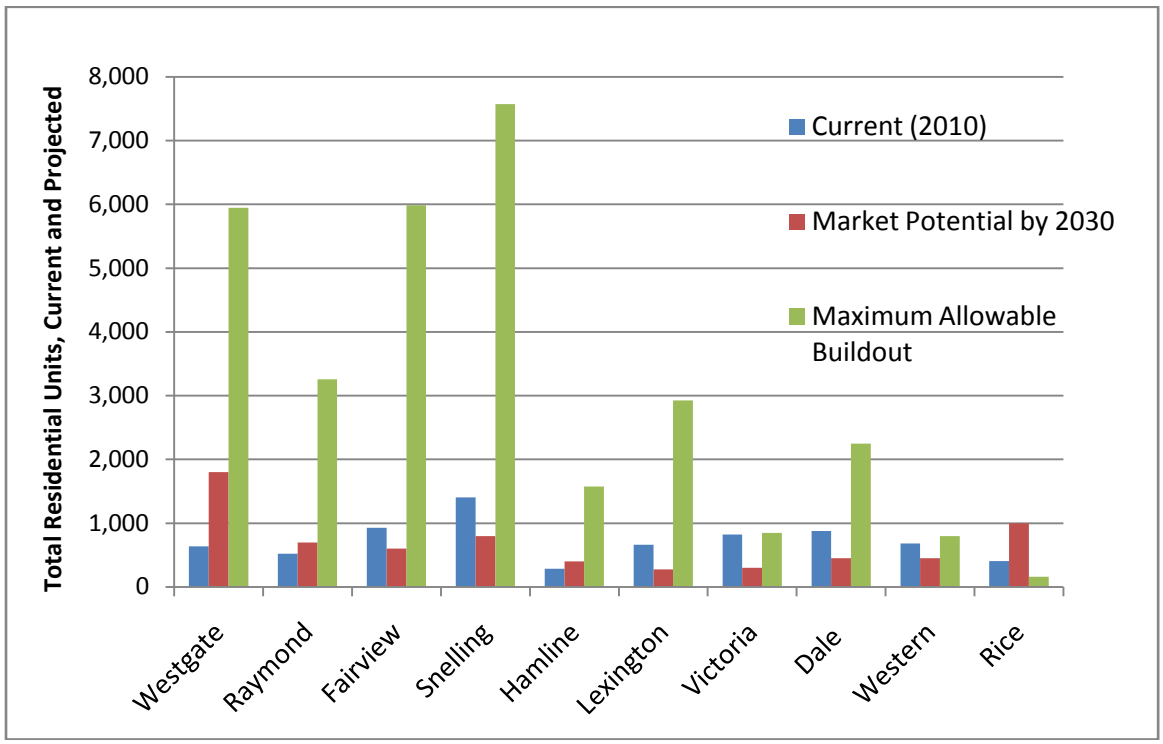


Source: City of Saint Paul, Central Corridor Station Area Plans, Ramsey County

This figure shows that the majority of development will be concentrated in the station areas on the western end of the Central Corridor and that the maximum allowable build-out scenario permits significantly more development than the City estimates the market will withstand by 2030.

This next figure, 3.2, documents the potential change in residential units by station area under both the market 2030 and maximum allowable build-out scenarios. Most residential development will likely be near the Westgate, Raymond, Fairview, and Snelling station areas, where there is greater potential for higher density development.

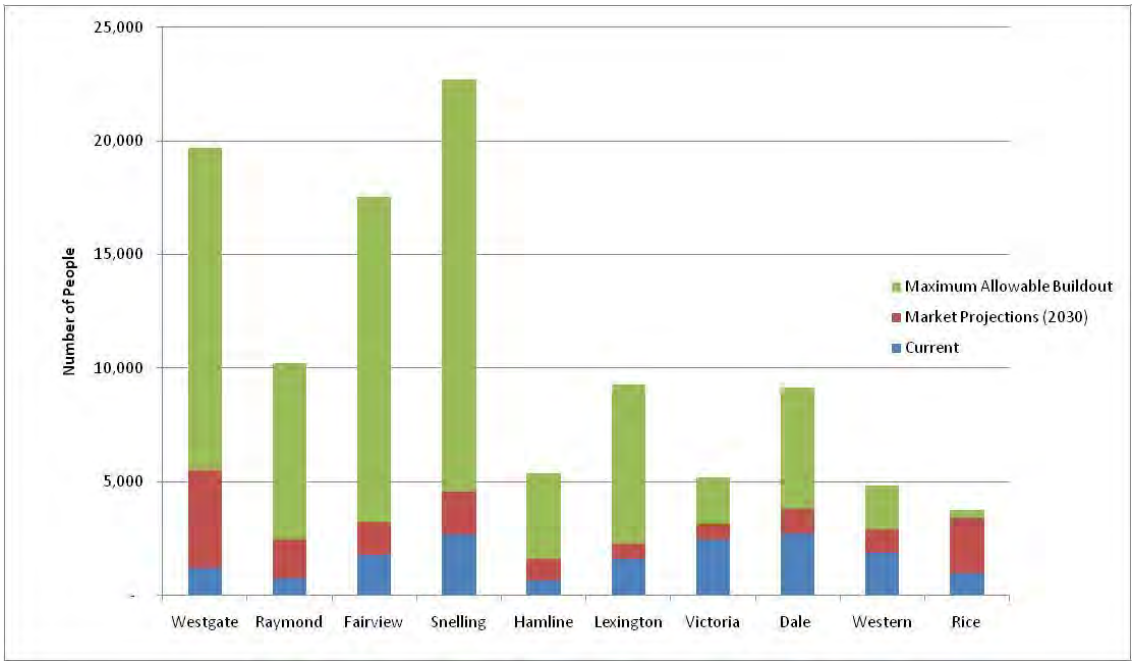
FIGURE 3.2: POTENTIAL CHANGE IN RESIDENTIAL UNITS BY STATION AREA



Source: Census 2010, City of Saint Paul, Central Corridor Station Area Plans

Finally, Figure 3.3 depicts the potential for population growth by station area, a result of the potential new development around the transit stations. Clearly, population growth will follow the areas with large increases in housing units—near the Westgate, Fairview, and Snelling station areas. It should be noted that, according to the maximum allowable build-out scenario, the population of the Central Corridor could grow by as many as 75,000 people—a number more than twice the current population of approximately 62,500 people.

FIGURE 3.3: POTENTIAL CHANGE IN POPULATION BY STATION AREA



Source: Census 2010, PolicyLink analysis of City of Saint Paul, Central Corridor Station Area Plans

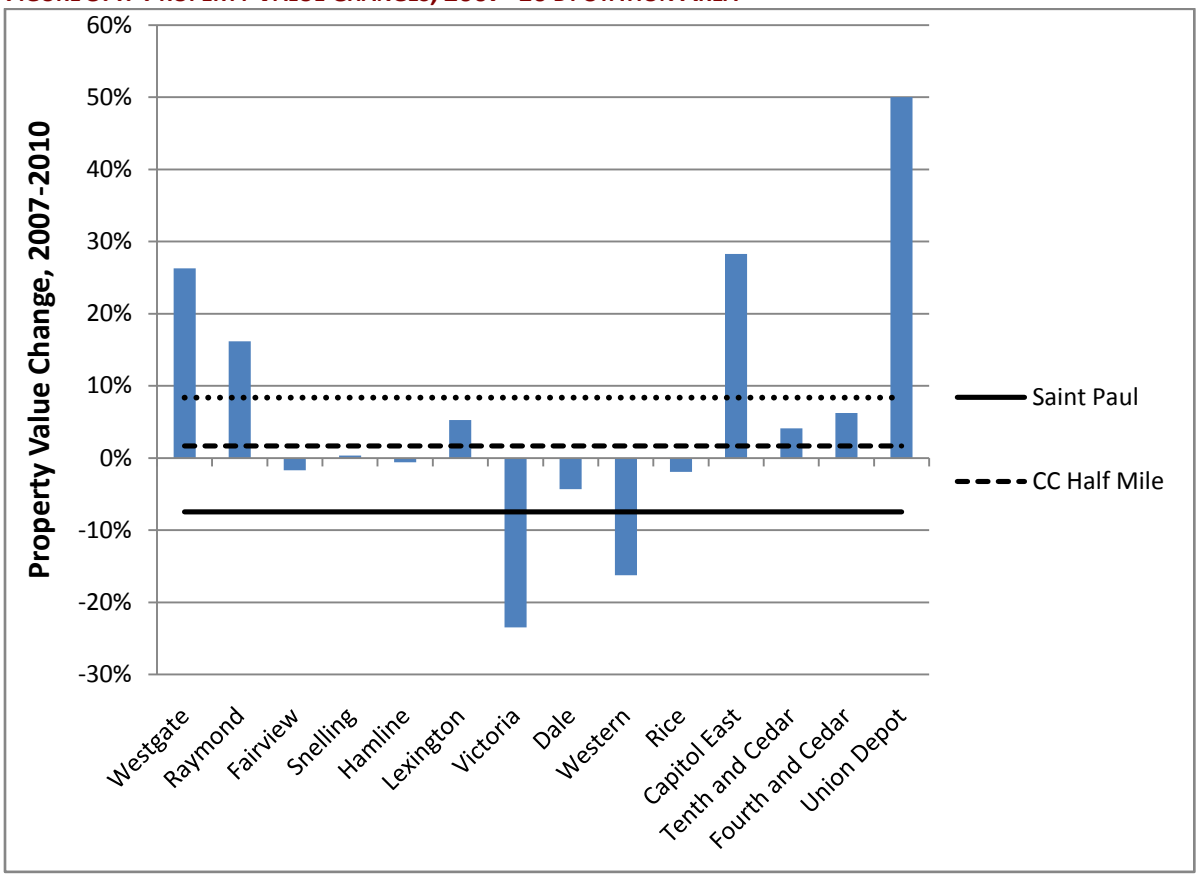
The HIA team's assessment of this rezoning plan is that it appears to be attempting to strike a balance between what the current market will support and a longer-term vision for development. It is important to recognize that when a building is developed on a piece of land, it is typically decades before the building will be torn down or significantly changed, yet markets fluctuate on a regular basis.

Property Value Changes to Date

Property values are increasing dramatically near a number of station areas. Property values within a quarter mile and half mile of the station areas along the Central Corridor have increased even as the City is seeing a decline in property values. The properties within a quarter mile of the station areas have cumulatively *risen* by 8 percent between 2007 and 2010, while the City of Saint Paul as a whole has seen an 8 percent *drop* in property values during the same time period. In addition, property values between a quarter mile and a half mile of station areas also rose, but only by 1.5 percent. This is a strong indication that, overall, there is an increased demand for properties around the planned light-rail line stations in anticipation of increased development potential and increased desire to live and work near station areas.

Despite these increases in property values near station areas in the aggregate, increases in property values vary significantly by station area. For example, station areas near the west, capitol, and downtown submarkets have seen dramatic increases in property values—up to 47 percent, while the majority of the remaining station areas have risen or decreased only slightly in comparison to the city as a whole. Interestingly, the property values around two station areas in the east submarket have decreased fairly dramatically. Coincidentally, this is the submarket with the highest proportion of low-income and communities of color. It is unclear why the east market has not experienced property values that have increased or stayed the same, as other station areas have experienced. Figure 3.4 demonstrates the property-value changes for each station area between 2007–10.

FIGURE 3.4: PROPERTY VALUE CHANGES, 2007–10 BY STATION AREA



Source: Ramsey County Assessors' Office

In addition to property value changes by station area, the project assessed the property value changes by land-use category, finding that, with the exception of single-family, detached homes, all other land uses within a quarter mile of station areas had risen, some dramatically. As one moves farther away from the station areas, the less distinct the increase in property values is. For example, industrial parcels within a quarter mile of a station area have increased by 55 percent in the last four years; industrial parcels within a half a mile of a station area have risen approximately 27 percent. See Figure 3.5 for details.

FIGURE 3.5: PROPERTY VALUE CHANGES, 2007–10 BY LAND USE

Land-Use Category	¼ Mile Parcels	½ Mile Parcels	Saint Paul
Industrial	55.05%	26.5%	7.25%
Commercial	12.12%	10.21%	9.12%
Multifamily	2.83%	-2.32%	-7.84%
Mixed Use	368.89%	332.26%	139.97%
Single-Family Detached	-25.94%	-23.29%	-17.77%
All Parcels	8.39%	1.65%	-7.46%

Source: Ramsey County Assessors' Office

4. Healthy Corridor for All: Assessment Findings

The potential changes to land use that may result from the rezoning, as described in the previous section, will impact community conditions and health outcomes. In assessing impact, the Community Steering Committee (CSC) focused on three priorities: healthy economy; affordable, healthy housing; and safe and sustainable transportation. For each priority, the CSC identified community objectives and related questions to guide the impact analysis—see Table 1.1 for details. Each objective was assessed through an existing conditions analysis and an impact analysis.

This section details the results of the health impact assessment relative to each of the Community Steering Committee's priorities:

- Healthy economy
- Affordable, healthy housing
- Safe and sustainable transportation

Under each element, the following considerations are discussed:

- A broad overview highlighting the connection to health
- An existing conditions analysis that includes research questions guiding the process and key findings under each objective
- An impact analysis that projects the effects of the proposed rezoning on existing conditions
- Recommendations and potential policies intended to maximize health and mitigate health and racial inequities

Healthy Economy

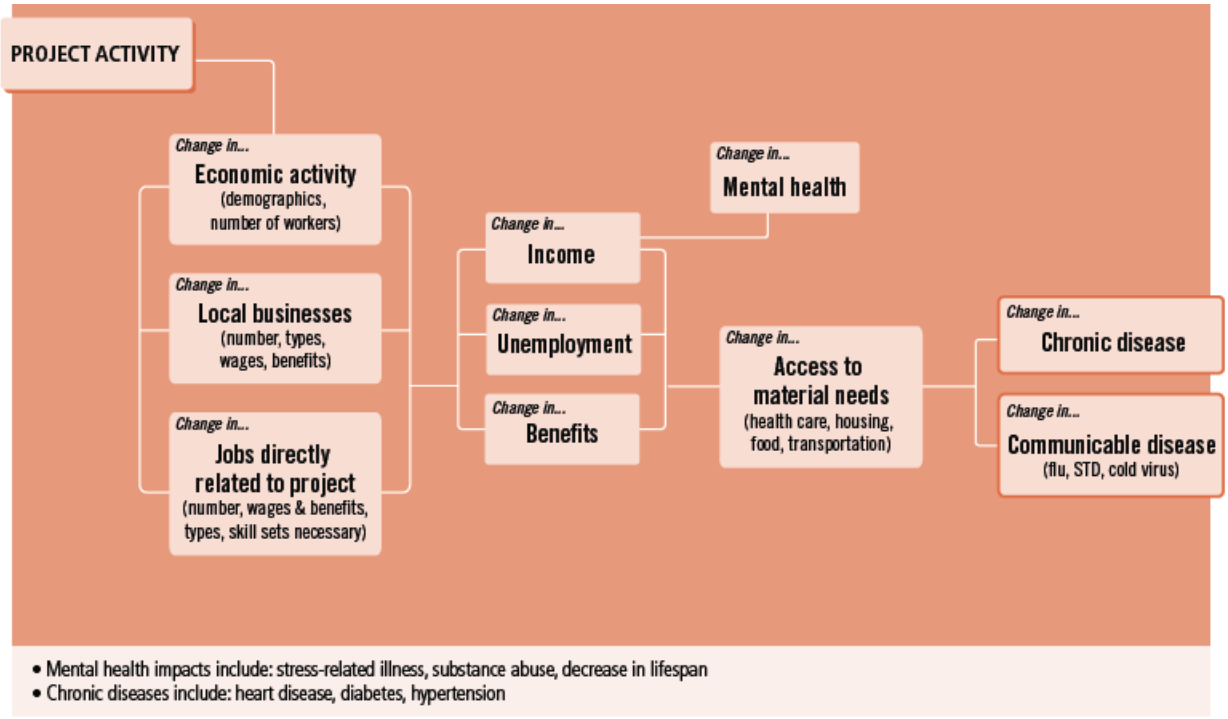
Overview

The new transit line and potential redevelopment will impact the economy of the corridor neighborhoods in many ways, including the availability of employment opportunities for residents (both along the corridor itself and in areas accessible via the broader transportation network); the success or failure of local, small, and/or ethnic businesses; and the availability of a variety of goods and services. The construction aspect of the transit line itself, as well as the new development it engenders, will create job opportunities for residents and contracting opportunities for area businesses. Construction of the transit line will also create disruptions to existing businesses along the corridor, and may destabilize small businesses. In addition, the changes in parking, customer base, and redevelopment may impact small businesses after the construction is complete.

The relationship between the state of the economy and health is well documented in the literature. Research has shown that income is one of the strongest and most constant predictors of health and disease, and that the strong relationship between income and health is not limited to a single illness or disease.[39] A decrease in income levels or sudden unemployment can impact a person in several ways. If these events leave them unable to pay for basic needs such as food, shelter, or health care, their physical health and resistance to short-term, communicable, and/or chronic disease can be affected negatively. Regardless of a person's ability to meet basic needs, a decrease in income or loss of

employment can negatively impact mental health as well. Figure 4.1 shows the connection between economic factors and physical and mental health.

FIGURE 4.1 EMPLOYMENT EFFECTS ON HEALTH



Source: Adapted from Human Impact Partners, 2011.

The Healthy Development Measurement Tool (HDMT), created by the San Francisco Department of Public Health[40], is an evaluation metric used to consider health in urban plans and projects. Many research articles have utilized the HDMT to provide evidence that economic conditions are related to health. The list below, Economy and Health-Based Rationale, presents a sample of such findings showing the relationship between economics and health.

Economy and Health-Based Rationale[41]

- Income is one of the strongest and most consistent predictors of health and disease in public health research literature. The strong relationship between income and health is not limited to a single illness or disease. [42]
- The adoption of a living wage is associated with decreases in premature death from all causes for working adults. Among the offspring of low-wage workers, a living wage was associated with improved educational outcomes and a reduced risk of early childbirth.[43]
- Local balance between jobs and housing reduces vehicle travel and associated environmental and health costs.[44]
- Attainment of self-sufficiency income predicts better health, improved nutrition, and lower mortality.[45]
- In the epidemiological literature, neighborhood deprivation is commonly measured by analyzing neighborhood unemployment, income, education, and social class. Numerous large-scale studies have found that neighborhood deprivation is associated with increased risk of physical inactivity, unhealthy diet, smoking, and obesity. Additionally, increased neighborhood

deprivation significantly predicts poor self-reported health, cardiovascular disease, and death. The fact that these relationships are still significant regardless of individual attributes suggests that the neighborhood context influences both individual health behaviors and health outcomes.[46]

- In a large-scale study involving over 600,000 residents in Sweden, the neighborhood unemployment rate predicted coronary heart disease risk for the neighborhood's residents, even after controlling for individual demographic and socioeconomic measures.[47]
- Metro areas with relatively high income inequality have lower average life expectancy and higher rates of violence.[48]
- Persons with lower incomes have higher risks than those with higher incomes for giving birth to low birth-weight babies, for suffering injuries or violence, for getting most cancers, and for getting chronic conditions.[49]
- Individuals living in states with a high level of income inequality were at a 12 percent increased risk of mortality.[50]
- Unemployment is associated with premature mortality,[51] cardiovascular disease, hypertension, depression, and suicide.[52]
- In Northern Ireland, those who were unemployed had twice the prevalence of high alcohol consumption, compared to those who were employed (28 percent and 14 percent, respectively), and more than one-third the prevalence of smoking (48 percent compared to 30 percent).[53]
- Unemployed men in France have 2.6 times more prevalent rates of depression, 1.5 times more prevalent rates of smoking, 1.7 times more prevalent rates of heavy drinking, and 3.6 times more consumption of psychoactive drugs than the working population.[54]

The health of the Twin Cities' regional economy is important to future development opportunities, made feasible by the rezoning, and is integral to the implementation of the Central Corridor Development Strategy (CCDS) and the subsequent station-area plans. Similar to the rest of the country, the Twin Cities area is in a recession and facing numerous job losses, high unemployment, and a struggling housing market with many foreclosures. However, a recent Brookings Institution report ranked the Minneapolis-Saint Paul region as sixth poised to recover best from the economic crisis, compared to other metropolitan areas in the United States, and ranked 44th region in the world to recover.[55] Furthermore, job growth was documented in all quarters of 2010 in the Minneapolis-Saint Paul area, even in the manufacturing sector.[56]

While our focus is specifically on jobs located in the Central Corridor, and the accessibility of new or changing industries to residents of the nearby neighborhoods, it should be noted that economic dynamics are typically regional. Individuals are often willing to commute to work outside of their city or county, and the commuting patterns in the Twin Cities reflect that willingness. The HIA project is assessing local impacts of rezoning, which is a localized land-use shift. The rezoning also presents a specific chance to increase job and income opportunities for those most in need; the Central Corridor is home to higher-than-citywide unemployment rates and lower-income households.

Zoning can also lead to increased commercial rents and changing markets or new customer bases or loss of customers, reflecting the changing population of the community. Additionally, rezoning can cause the

displacement of more vulnerable businesses, such as small and/or minority-owned[f] ones. For example, if properties are upzoned[g] to allow for greater density, height, or higher-value uses, such as multifamily residential uses, property values will likely increase as described above in Section 3. Where development is financially feasible, property owners may redevelop a site in order to maximize the new potential value of their asset, which may displace current businesses or residences. Even if redevelopment is neither financially feasible nor desirable, property owners may raise rents to compensate for the increase in their property values and/or possible increases in property taxes, or because of the enhanced desirability of the location to businesses.

Objective 1: High Quality, Healthy Jobs that Increase Income, Wealth, and Equity for All Residents

Existing Conditions Analysis Jobs and Opportunity

Summary of Findings: Existing Conditions

- There is a fairly even split between well-paid jobs and those that do not pay well in the Central Corridor (CC).
- Approximately 21 percent of all workers in Saint Paul, and 11 percent of all workers in Ramsey County live in the CC, yet only 6 percent of the jobs in the CC are filled by CC residents. This may be partly due to the fact that downtown Saint Paul is a regional employment hub.
- The need for employment is high in the CC, with an estimated 9.9 percent unemployment rate in 2005–2009, compared to that for Saint Paul (8.5 percent) and Ramsey County (7.2 percent).
- People of color in the CC have high unemployment rates. The unemployment rate for African Americans in the Central Corridor was 18.1 percent, 24.0 percent for American Indians, 15.5 percent for Latinos, and 9.4 percent for Asian/Pacific Islanders, compared to just 6.3 percent for non-Hispanic whites in the 2005–2009 period.
- Jobs in the CC held by CC residents are more likely to be the lowest-paying—those that pay less than $14,400 per year.
- There is a jobs and educational attainment mismatch in the CC: approximately 7 percent of CC jobs are filled by those with less than a high school education, yet 13 percent of CC residents ages 25–64 and older have less than a high school education. In contrast, 74 percent of jobs in the CC require some college or above, while 63 percent of CC residents have attained this level of education.
- Manufacturing stands out as an industry in the CC that is high paying (fifth highest paying industry in the County), and employs a relatively high number of CC residents.

Are there well-paid jobs available in the corridor? Sixty-two percent (108,833) of all jobs in the City of Saint Paul are located in the CC. Not surprisingly, there is a very high concentration of jobs in the

[f] It should be noted that minority-owned businesses are often small businesses as well. We distinguish the two as they are not interchangeable though they share many similarities.

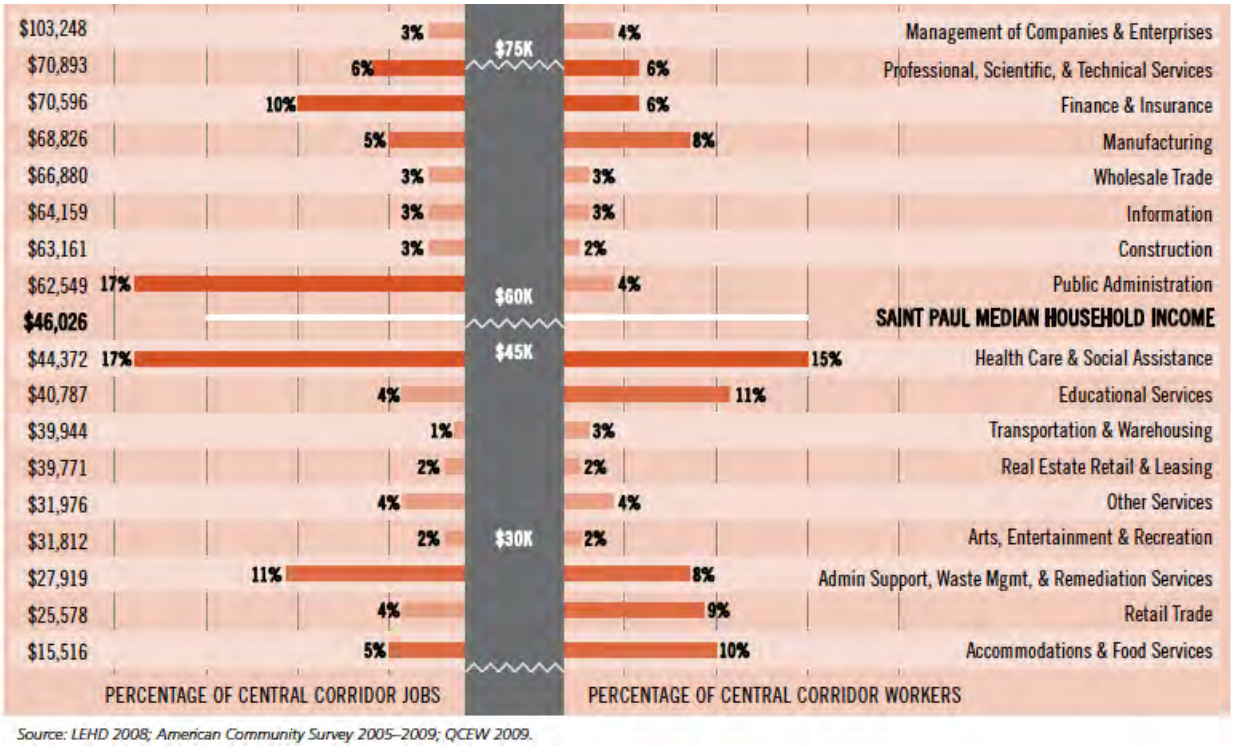
[g] Upzoning can be defined as the rezoning of a property to allow for greater density, height, or higher value uses, such as multi-family residential or office space.

downtown area, where twice as many jobs are located in comparison to anywhere else along the corridor.

Well-paid jobs do exist in the corridor, as do non–well-paid jobs. The HIA team loosely defines a well-paid job as one that pays approximately $40,800—the highest income category listed in the data obtained from the Bureau of Labor Statistics.[h] While this salary is considerably lower than the median wage in Ramsey County—about $51,000 as of 2009—it is the best available data to measure wages by job categories at the geographic scale of the Central Corridor. Around 30 percent of jobs in the CC are in industries that average about $40,000 or less annually and are among the nine lowest-paying industries in the County.

Table 4.1 displays the top 20 industries in the CC ranked by the number of jobs the industry represents in the CC, thus defining the most important employers in the corridor. The table then describes the average wage for jobs within the various industries. Red type indicates the industries that are the largest employers of CC residents.

TABLE 4.1: AVERAGE ANNUAL WAGES BY INDUSTRY RELATIVE TO PROPORTION OF CC JOBS AND WORKERS EMPLOYED IN THOSE INDUSTRIES



Source: LEHD 2008; American Community Survey 2005–2009; QCEW 2009.

[h] The Bureau of Labor Statistics' Local Employment and Household Dynamics data set contains data for workplaces and places of residence for all industries by age group and income category. The Bureau only collects data for three income categories: jobs with annual wages of less than $14,400, those with annual wages between $14,400 and $40,800, and jobs with average annual wages greater than $40,800. It should be noted that $14,400 is just below the Federal standard for 150 percent the poverty rate for an individual (FTA Technical Memorandum 2009).

Are those jobs accessible to and filled by corridor residents? Approximately 21 percent of all workers in Saint Paul and 11 percent of all workers in Ramsey County live in the CC (total of 27,080), yet only 6 percent of the jobs (6,005) in the CC are filled by CC residents, as of 2008. This is likely due to the fact that downtown Saint Paul is a regional employment hub. Those who live and work in the CC tend to hold a disproportionate number of the low-wage jobs available in the CC—those that pay less than $14,400 per year. Furthermore, despite the significant number of jobs in the area compared to the City or County, the unemployment rate in the Central Corridor is estimated at 9.9 percent in the 2005–09 period, higher than the Saint Paul (8.5 percent) and Ramsey County (7.2 percent) unemployment rates.

While unemployment affects many in the Central Corridor, persons of color are disproportionately more unemployed. In the 2005–09 period, the unemployment rate for Central Corridor residents was an estimated 18.1 percent for African Americans, 24.0 percent for American Indians, 15.5 percent for Hispanic/Latinos, and 9.4 percent for Asian/Pacific Islanders, compared to just 6.3 percent for non-Hispanic whites.

With the exception of the manufacturing and health-care industries, the top industries employing CC residents are among the lowest-paying in the County.[i] Manufacturing stands out as the highest-paying industry that employs a considerable number of CC residents, while retail trade, accommodations and food service, and administrative industries are lower paying. CC residents, similar to the distribution of CC jobs, are split into industries that are well paid and those that are not. Approximately 48 percent of CC residents work in the nine top-paying industries and 52 percent in the nine lowest-paying industries.

A mismatch exists between educational attainment and jobs. Figure 4.2 shows the industries that hire the greatest number of CC residents and the average educational attainment levels for that industry. Figure 4.3 demonstrates that the educational attainment level of CC residents ages 25 to 64 does not match the average educational attainment necessary for employment within the industries currently doing business in the CC. The CC has a high percentage (13 percent) of individuals with less than a high school education, and approximately 7 percent of jobs accept this educational level. In contrast, nearly 74 percent of the jobs in the CC require some college or above, and 63 percent of CC residents ages 25 to 64 have attained this level of education.

TABLE 4.2: TOP EMPLOYERS OF CENTRAL CORRIDOR (CC) RESIDENTS BY AVERAGE EDUCATIONAL ATTAINMENT

Top Industries Employing Greatest Number of CC Residents	Average Educational Attainment of Workers per Industry in Ramsey County
Health Care and Social Assistance	22% H.S.[j] or less 78% ≥ some college[k]
Educational Services	16% H.S. or less 84% ≥ some college
Accommodations and Food Services	51%- H.S. or less 49% ≥ some college

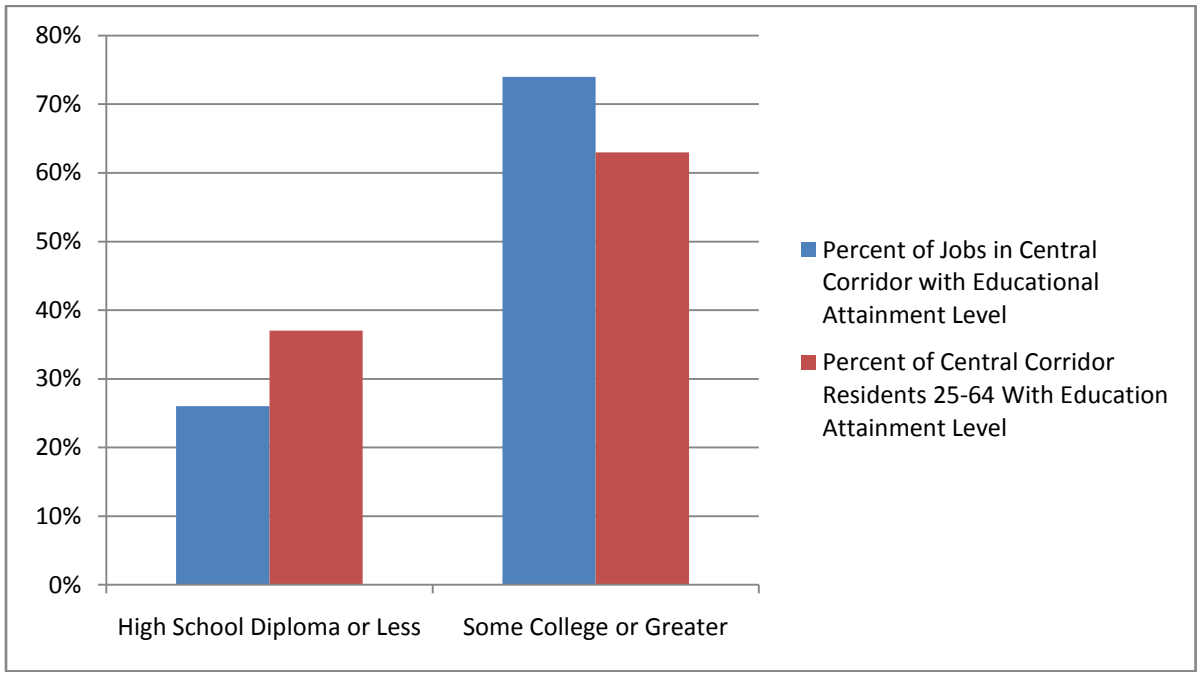
[i] Data was unavailable on average annual wages in the agriculture, forestry, fishing, and hunting industry, as well as the mining, quarrying, and oil and gas extraction industry for Ramsey County. As a result, these industries were left out when we calculated higher- and lower-paying average annual wages.

[j] H.S. represents high school.

[k] Some college or higher educational attainment level.

Retail Trade	39% H.S. or less 61% ≥ some college
Manufacturing	25% H.S. or less 75% ≥ some college
Administrative, Support, Waste Management and Remediation	34% H.S. or less 66% ≥ some college
TOTAL	62% of CC all workers in the Central Corridor

FIGURE 4.3: JOBS AND EDUCATIONAL ATTAINMENT MISMATCH IN THE CENTRAL CORRIDOR



Source: American Community Survey, 2005–2009 5-Year Estimates; Census EEO 2000

Central Corridor residents, in general, fall slightly below Ramsey County educational attainment levels for those with a bachelor's degree, graduate degree, or professional degree. However, the proportion of corridor residents with a bachelor's degree has increased from 14 percent in 1990 to 22 percent in 2005–09. The percent of CC residents 25 years and older with less than a high school diploma has decreased from 24 percent in 1990 to 16 percent in 2005–09. Yet, the corridor continues to have a larger proportion of persons with lower educational attainment levels than Saint Paul or Ramsey County. The proportion of persons 25 years and older with less than a high school diploma in 2005–09 was 13 percent in the city and 10 percent in the county.[I]

[I] It should be noted that when comparing rates of educational attainment over time, we used data for the total population 25 years and over instead of only those between 25 and 64 years of age because data was not consistently available in the 1990 and 2000 Census data. Whereas where we made statements about the most recent data (2005-09), especially in the context of

Overall, CC residents currently fill very few jobs in the Central Corridor and many do not have the educational attainment needed to work in the majority of industries currently in the CC: Those with less than a high school education have limited work options. Many Central Corridor residents of color are particularly disadvantaged because they have lower educational attainment levels on average, compared to the non-Hispanic white population—see Section 2 for a chart of educational attainment by race. CC residents also hold lower educational attainment levels than the County average, and, therefore, are at a disadvantage when competing for jobs against other Ramsey County residents.

An important caveat to this very localized analysis of jobs compared to workforce is that jobs and economic factors are typically regional. People are willing to travel to and from work upwards of an hour or even more. Yet, it is also to note that commute times—long car commutes, in particular—have negative health, air-quality, and congestion outcomes, and are, therefore, discouraged in healthy, smart-growth communities. Hence, the availability of public transportation diminished the need for a car to make a long commute, and opens up job accessibility in outside communities. This section provides a localized analysis in order to gauge whether the rezoning proposal will open up new opportunities for industries or limit industries that would best suit the employment needs of current residents. The rezoning presents an occasion to open up new jobs and promote industries that provide unemployment relief to those most in need of employment.

Impact Analysis: What Jobs Will be Lost and Who Will Get the New Jobs?

Summary of Findings: Impact Assessment

- Several thousand jobs will likely be added to the CC over the next two decades, most of which will be near the station areas on the western end of the corridor.
- There will be less opportunity for growth in the manufacturing sector.
- The number of higher-paying jobs for lower-educated workers will likely decrease over time.
- The majority of new jobs added will likely be higher-paying and require higher education.

Nearly 55 percent of current industrial land will be lost in the corridor, potentially eliminating the opportunity for future manufacturing uses that can support higher paying jobs that require lower educational attainment. As the amount of land available for office and retail uses increases in the Central Corridor, the area available for industrial uses will decrease substantially. This may result in industrial businesses on property rezoned for higher-density, mixed-use development facing pressure to relocate as property values rise because of increased development potential. In turn, a loss of jobs associated with industrial uses could occur, including higher-paying jobs in the manufacturing and wholesale-trade industries.

A recently published report by the Brookings Institution stated that manufacturing can be a key sector for bolstering economic recovery and providing higher-paying jobs for individuals with less education.[57] There are several hundred manufacturing jobs and dozens of industrial businesses located on the land

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unemployment or an educational attainment mismatch, we used data for the working age population (25-64) to be as precise as possible.

to be rezoned. While this is not a tremendously significant number of jobs in relation to the total number of jobs in the corridor, the proposed rezoning not only makes several industrial businesses vulnerable to market forces, it also precludes the growth of the manufacturing sector and innovative businesses drawn to that type of land.

Jobs will increase in the Central Corridor. As the regional economy recovers, the number of corridor retail institutions and businesses requiring office space will increase, raising the number of jobs available around the station areas. The types of jobs that are likely to increase as a result of these changes, especially those that fall within the office category, will depend upon factors such as which industries are growing in the Minneapolis-Saint Paul region, and which services are in greater demand locally.

The mismatch between education levels and job opportunities will likely be exacerbated. New jobs attracted to the Central Corridor will not provide sufficient job opportunities for low-educated workers in CC neighborhoods. Retail jobs, which typically require less education than office jobs, are only projected to comprise less than one-fifth of new jobs in the market and maximum allowable build-out scenarios.[m]

Table 4.3 describes potential changes in each industry represented in the Central Corridor, based on the land-use changes anticipated as a result of the proposed rezoning and employment and jobs projections. Average wages and educational attainment are included to connect these changes to the quality of jobs (as defined here by level of pay) that may result and to whom these opportunities may be available (as defined by educational attainment). Industries are ranked by the total number of jobs in that sector current within the Central Corridor. The table also includes the percent of total corridor workers within the industry across the Metropolitan Statistical Area.

TABLE 4.3: POTENTIAL CHANGES IN CENTRAL CORRIDOR (CC) INDUSTRIES

CC Industries by Total Number of Jobs	Average Annual Wages in County (in $)	Average Ed. Attainment	Percent of CC Workers in Sector	Land Use Cate-gory	Potential Changes Based on Rezoning Proposal
Health Care and Social Assistance	44,372	78% with some college or higher ed.	16%	Office	Likely to significantly increase. Industry projected as second fastest-growing in country[58]; in Twin Cities, sector grew even during recession. Many new jobs in sector anticipated to be in home health care, which requires less education but is typically lower-paid.[59]
Public Administration	62,549	83% with some college	4%	Office	Likely to stay the same. Jobs in sector not likely to grow in Saint

[m] As a reminder, the market scenario estimates the development in the Central Corridor based on market projections, while the maximum build-out scenario uses the maximum allowable development under the rezoning plans. See Section 2 under Technical Methods for more details on how each scenario was calculated.

		or higher ed.			Paul. Current local government budget constraints prevent hiring of new workers, despite demand.
Administration and Support and Waste Management	27,919	34% with high school diploma or less	8%	Office	Likely to increase. As number of offices and new residential units in CC increases, demand for occupations in industry—janitors, office clerks, security guards, landscaping workers—will also increase. These jobs require less education/lower skill level; tend to be lower paid.[60]
Finance and Insurance	70,596	82% with some college or higher ed.	6%	Office	Likely to increase. Industry is growing, though slower than other sectors.[61] May not increase significantly in short term; as economy recovers and office space increases in CC, number of jobs will likely rise. Increase in households will likely stimulate demand for new retail banking institutions.
Professional, Scientific, and Technical Services	70,893	88% with some college or higher ed.	6%	Office	Likely to significantly increase. Fast-growing industry, not just in country, but in Minnesota.[62]
Accommodation and Food Services	15,516	51% with high school diploma or less	10%	Retail	Likely to increase. Sector is growing in country; increase in new households in CC and increase in land zoned for retail, hotels will increase demand for service workers in industry.
Manufacturing	68,826	25% with high school diploma or less	8%	Industrial	Likely to decrease significantly. Loss of industrially zoned land will put short- and long-term pressure on existing firms to relocate outside CC. Many jobs in industry lost in Minnesota due to recession. Some gains predicted in next few years; not expected to return to pre–2007 levels.[63]
Other Services	31,976	40% with high school diploma or less	4%	Retail and Industrial	Unclear. Number of jobs in sector growing across country and Twin Cities.[64] Increase in jobs is related to occupations typically retail-related. Sector includes automotive- and machine-repair services, jobs typically in industrial areas, which

					may decrease in the CC as industrially zoned land is lost and new regulations placed on auto-oriented uses.
Educational Services	40,787	84% with some college or higher ed.	11%	Institutional or Office	Likely to increase. Rapidly growing in country and Minneapolis-Saint Paul metro area.[65] Projected increase in households in CC will create a need for expanded capacity at existing schools and potential demand for new schools.
Retail Trade	25,578	39% with high school diploma or less	9%	Retail	Likely to increase. Projected increase in households in CC, addition of land zoned for retail, and increase in transportation access by light rail combine to increase demand for retail institutions in CC, serving neighborhoods and region. Retail jobs declined during recession, but MSP-metro area poised to have strong recovery, strengthening demand for retail goods.
Construction	63,161	43% with high school diploma or less	2%	Industrial[n]	Likely to increase temporarily. New development will increase in the CC; number of jobs will likely increase, though sustainability uncertain in long-term. Met Council has projected CC will produce about 2,500 construction jobs in next four years.[66] Construction jobs, as part of larger trend, have been declining since recession.[67]
Management of Companies and Enterprises	103,248	81% with some college or higher ed.	4%	Office	Unknown
Information	64,159	80% with some college or higher ed.	3%	Office	Increase uncertain. More office space would accommodate demand for information workers, though no significant increase in jobs in metro area in last decade.[68]

[n] While construction jobs are often classified as industrial, construction workers often do not have an official "workplace." Because new development will significantly be increasing in the corridor, the number of construction jobs will likely increase substantially as well, although their sustainability is uncertain in the long-term.

Wholesale Trade	66,880	27% with high school diploma or less	3%	Industrial	Likely to decrease. Wholesale industry not declining across country nor in Twin Cities.[69] Loss of industrially zoned land, combined with rising land prices likely to encourage demolition or conversion to residential or office uses of existing warehouses.
Arts, Entertainment, and Recreation	31,812	28% with high school diploma or less	2%	Retail and Office	Likely to increase. Includes occupations such as public relations agents or graphic designers; will likely grow as office space builds out in CC.
Real Estate and Rental and Leasing	39,771	31% with high school diploma or less	2%	Office	Likely to stay the same or slightly increase. Growing real estate market—especially residential in CC—will increase demand for real estate services. As new residential buildings constructed, maintenance workers and rental clerks will probably be needed. Job growth is slow in sector[70]; not many new jobs will likely appear in CC.
Transportation and Warehousing	39,944	34% with high school diploma or less	3%	Industrial	Likely to decrease. Loss of industrially zoned land and increasing price of land in CC likely to cause existing firms in long run to relocate to areas with lower land premiums and fewer nearby residences.

Summary of Rezoning Impacts

With the increase in allowable density (in the form of increases in Floor Area Ratio) for new development in the corridor, the number of jobs is likely to significantly increase as the market improves and as new offices and mixed-use buildings are constructed. The quality of these jobs, and the degree to which they will be available to Central Corridor residents, is less certain. Industries that will likely fill the office space projected to increase in the corridor include health care and social assistance; finance and insurance services; professional, scientific, and technical services; and administration and support and waste management. Wages and educational attainment requirements for these jobs vary. It is likely that job growth for lower-educated workers in these industries will be in occupations that include janitors, home health-care workers, and administrative workers—all of which have low average wages.

As the amount of retail and hotel space increases in the corridor, the number of jobs in the retail trade and accommodation and food services industry will likely increase. These jobs have less educational attainment requirements as well as low wages. The increases in office space will likely result in a fairly large increase in higher-paid jobs, which require higher educational attainment.

The loss of industrially zoned land could also have some negative impacts on employment in the corridor. While current industrial uses that become non-conforming will not have to relocate, they may face pressure to do so anyway in the event that property values rise due to the rezoning and there is substantial profit to be made in redeveloping these sites. As a result, manufacturing, as well as other jobs that are often located on industrial land, will likely be lost.

Rezoning Impacts on Health

Increased job opportunities for both higher- and lower-educated workers could reduce the unemployment rate in the Central Corridor if jobs are filled by current residents. To the extent that these new jobs increase real income for households in the corridor, the result could be positive mental-health outcomes, as well as a reduction in the severe racial disparities related to health—particularly for African Americans and American Indians, who have very high unemployment rates along with chronic-disease rates, such as for cancer and heart disease. Increasing employment opportunities, especially for workers with less education, will also benefit other people of color—who also have higher relative unemployment rates and are more likely to be low-income—but may not appear to have as many health disparities due to the aggregated nature of the health data.

Despite the prospect of new job opportunities for individuals of all skill and educational levels in the Central Corridor, it appears that few jobs will provide substantial wages to lift corridor families out of poverty. If this is the case, many health disparities that exist in Ramsey County and the Central Corridor may persist despite apparent economic progress in corridor neighborhoods. Part of the health-disparities issue is beyond the scope of zoning. There are some actions, however, that the City can take to mitigate the effects of health disparities by supporting increased opportunity for low-income people and people of color. Some of these efforts could be included in the rezoning plan; others could be programs that are separate from the plan.

TABLE 4.4: OBJECTIVE #1 RECOMMENDATIONS AND POLICIES FOR CONSIDERATION

Broad Potential Negative Impacts	Recommendations	Potential Policies to Consider
Less opportunity for growth in manufacturing jobs	• Protect existing manufacturing jobs • Ensure that future opportunities for manufacturing and light-industrial uses are identified and planned for within the CC	**Zoning** • Establish industrial districts that include regulations and incentives to protect industrial-use land viable to promote the creation of manufacturing jobs • Identify opportunity sites for future industrial development and/or innovation centers or economic investment zones; establish criteria before approving nonindustrial redevelopment on those sites

Number of high paying jobs for low-educated workers will likely decrease Unemployment and/or underemployment may persist despite addition of new jobs	• Provide job-training programs in growing industries • Provide job opportunities for current residents in the construction phase of the light-rail transit (LRT), as well as when new development occurs along the CC	**Zoning** • Establish clear procedures in zoning ordinance for community involvement to negotiate, approve, and enforce community benefit agreements for projects that involve direct or indirect public subsidy • Specify minimum office and retail FAR requirements in mixed-use areas to ensure an adequate amount of space to meet needs of new businesses • Require ground-floor retail space for new, mixed-use projects • Include objectives and purpose statements in the rezoning that demonstrate the connections to the goals and objectives related to the promotion of economic opportunity in the CCDS **Other** • Work with the Disadvantaged Business Enterprise program to help local residents train for and capture living-wage employment opportunities associated with LRT[71] and subsequent redevelopment opportunities • Enforce current policies to ensure and exceed training and hiring goals associated with federally funded projects, including the Corporate Subsidy Accountability Law and HUD Section 3 requirements • Assist minority contractors to prepare proposals and capture contract opportunities for LRT and subsequent redevelopments • Encourage 50% local hiring when possible • Establish a first-source referral system with training and hiring opportunities targeted for persons of color and low-income persons • Reduce size of bid contracts to ease access of small minority companies into contractual opportunities • Seek job and small-business measures in disposition of publicly owned land and in public works projects • Utilize local and minority hires, and pay living wage for streetscaping, landscaping, and clearing of snow along the CC • Establish legislation at the state level that will legalize development agreements between developers and the city

There are policies and programs currently being implemented that help achieve the objective of increasing high-quality, healthy jobs that increase income, wealth, and equity for all residents. For example, the Saint Paul Living Wage Ordinance was passed in 2007. The intent of the ordinance is to provide security for all workers to receive a wage that provides for living expenses in the city. This

ordinance calculates living wage to be $12.91/hour for a family of four when an employer is not offering health insurance, and $10.91 when the employer is offering insurance. At $12.91/hour the annual gross income for a family of four, in 2010 dollars (accounting for inflation), would be approximately $26,300.[72] These numbers are low for the region. Therefore we used an alternative measure to define a well-paid job, described under Objective #1, *Existing Conditions Analysis*.

Objective 2: Diverse, Local Businesses—Existing and New –Are Developed and Supported

Existing Conditions Analysis: Small Businesses along University Avenue

Summary of Findings: Existing Conditions

- Eighty-three percent of all businesses along the Central Corridor (CC) are small businesses. These account for over a third (38 percent) of all employees in University Avenue businesses, with a total of 4,406 employees.
- Twelve percent of all businesses along the CC are minority-owned.
- U-Plan has found that 87 percent of on-street parking spaces will be lost along University Avenue because of light-rail construction and implementation, from 1,215 current spaces to 212 from the intersection of Emerald and University to Marion and University. A majority of these parking spaces will be lost in the central and west submarkets and may have implications on small businesses.

Small businesses, which make up a significant proportion of total businesses, are vulnerable. Small and minority-owned businesses are typically more disadvantaged than their white-owned and larger counterparts. For example, small and minority-owned businesses tend to have lower average sales volumes and a smaller market base, and are thus more vulnerable to changes in business volume and sales. Minority-owned businesses are less likely to be connected to business networks, so they receive less information about successful practices than majority businesses. They also have smaller amounts of risk capital, have less fall-back savings, and are less likely to receive large-scale contracts.[73] All of these factors make small and minority-owned businesses vulnerable to disruption in their sales volumes and bottom line.

There are 1,068 businesses, nonprofit organizations, and governmental organizations along University Avenue and one block north and south of the avenue within Saint Paul. Together, they employ 14,898 people. Data was not available for the capitol and downtown areas, where the Central Corridor turns from University to follow Cedar Street.

The five industries with the greatest number of total businesses (not square footage) include:

1. Health care and social assistance
2. Other services
3. Professional, scientific, and technical services
4. Retail trade
5. Accommodation and food services

Eighty-three percent of all businesses along the Corridor are small businesses, which are defined by the Small Business Administration as those having “revenues up to two million dollars.” These businesses

account for over a third (38 percent) of all employees in University Avenue businesses, with a total of 4,406 employees. Twelve percent (102) of all the businesses are minority owned.

Loss of on-street parking will result from rezoning. U-Plan has noted that 87 percent of on-street parking spaces will be permanently lost along University Avenue due to light-rail construction and implementation, from 1,215 current spaces to 212, starting at the intersection of Emerald and University to Marion and University. A majority of these parking spaces will be lost in the central and west submarkets of the corridor. Although the east submarket will retain a relatively high amount of street parking, businesses on these blocks may be affected most, because of the small amount of off-street parking available for parking sharing agreements. Furthermore, there are some portions within the East submarket—a minimum of one block east and west of the Lexington, Victoria, Dale, and Western intersections—that will lose all on-street parking. While all businesses located near station areas in the Central Corridor are posed to possibly benefit from the increased foot traffic resulting from greater accessibility, they face significant risks in the near-term before light-rail transit (LRT) starts operating.

Impact Analysis: Displacement Risk for Small and Minority-Owned Businesses

Summary of Findings: Impact Assessment

- More than one-third of small businesses and nearly one-quarter of minority-owned businesses are on parcels with high or medium potential for redevelopment.
- Property values in many station areas have already increased dramatically –see Objective #3 for more details –potentially placing many small and minority-owned businesses at risk for displacement as redevelopment occurs in the corridor and rents rise due to increased property values.
- Small and minority-owned businesses that rely on on-street parking for customers may lose some business due to permanently lost parking, especially near station areas within the east submarket
- Increased residential and office density will expose significantly more individuals to businesses along University, potentially increasing the customer base of small and minority-owned businesses

More than one-third of small businesses and nearly one-quarter of minority-owned businesses are on parcels with either medium or high potential for redevelopment. As a reminder, parcels with medium potential for redevelopment are those with a floor area ratio (FAR) differential of two or greater and a location adjacent to at least one vacant parcel. Those with high potential for redevelopment have been identified in the Central Corridor Development Strategy (CCDS) as major opportunities for investment. If these parcels develop, it is likely that businesses currently located on the sites will have to relocate temporarily during building redevelopment. Permanent relocation may occur if new uses are proposed or rents increase significantly. A smaller proportion of minority-owned businesses are affected by the rezoning, compared to small businesses, because several of them are located on the eastern blocks of University Avenue, where less intense development is anticipated. Table 4.5 illustrates the number and percent of businesses on parcels with high, medium or low potential for redevelopment as a result of the rezoning.

TABLE 4.5: BUSINESSES LOCATED ON PARCELS WITH POTENTIAL FOR HIGH OR MEDIUM REDEVELOPMENT

Redevelopment Potential	High		Medium		Low		Total
	Number	*Percent*	*Number*	*Percent*	*Number*	*Percent*	
Total Businesses	129	15%	181	21%	570	65%	880
Small Businesses	113	15%	155	21%	464	63%	732
Minority-Owned Businesses	16	13%	18	14%	94	73%	128
Total Employees	2,231	19%	1,946	17%	7,441	64%	11,618

Source: U-PLAN University Avenue Business Survey, December 2010

Figure 4.3 shows the location of small and minority-owned businesses relative to sites with high and medium potential for redevelopment. There are a number of parcels proposed for rezoning, which could place these types of businesses at risk for displacement.

FIGURE 4.3: SMALL AND MINORITY-OWNED BUSINESSES IN THE AREA OF CHANGE

Source: U-Plan; Central Corridor Development Strategy, City of Saint Paul; Metropolitan Council GIS

Small and minority-owned businesses across the corridor may face higher rents as property values increase near transit. Even if redevelopment is not imminent for many businesses, the potential for commercial rents to rise is likely. Property owners will likely adjust rents to match rising property values brought on by the transit premium (15 percent premium in the CC, as estimated by CTOD) and the increased development potential of the property. Between 2007 and 2010, property values for parcels

located within a quarter-mile of station areas rose 8.39 percent, compared to a rise of 1.45 percent for parcels within a half-mile of station areas, and a decrease of 7.46 percent in Saint Paul. See Figure 3.4 for more details. While property value increases can potentially have negative effects on the stability of small and minority-owned businesses, such increases can also present an opportunity for businesses to grow and thrive if policies and programs are put in place to mitigate displacement. Bigger customer bases owing to the addition of new residents, transit access, potentially increased foot traffic, and infrastructure improvements are some of the positive results.

The loss of on-street parking may have negative impacts on small businesses but those impacts may be mitigated by transit access. The proposed rezoning does not prevent the loss of on-street parking. The expected larger population and lower parking requirements may worsen its availability. At the same time, the increased foot traffic, access through the LRT, and number of residents in close proximity to the CC, or within it, become an additional customer base for businesses.

Summary of Rezoning Impacts

Three scenarios have been identified that may negatively impact small and minority-owned businesses in the corridor: redevelopment, rising commercial rents due to property value increases, and loss of parking. While the latter may lower the number of customers, the increase in foot traffic from the transit line may counterbalance this loss. One-third of small businesses and one-quarter of minority-owned businesses are located on parcels that have high or medium potential for redevelopment. The timeline of this development is uncertain and depends on the current economic climate, the ability to secure financing, and the relative ease of assembling land, among other factors. Small and minority-owned businesses across the corridor will be affected if property values rise as rents have risen. Businesses that do not own their building(s) or are in short-term leases are particularly vulnerable. Even for small and minority-owned businesses that are building owners, rising property values can be problematic if tax burdens become unaffordable. Due to increased transit access and a larger local population, positive results may also occur because of a larger population having access to existing businesses.

Rezoning Impacts on Health

If increased rents, redevelopment, and/or loss of parking cause small and minority-owned businesses to fail, the losses of wealth and income that result may negatively impact mental health and exacerbate existing chronic-disease health disparities. Furthermore, the displacement of minority-owned businesses, especially those that are central to the Hmong, Vietnamese, other Asian and African American communities present in the corridor, may decrease social cohesion within these neighborhoods, causing negative physical and mental health outcomes to occur. See overview to Healthy Economy at the beginning of this section for more details.

The incoming light rail and subsequent benefits owing to rezoning can have positive impacts on health as well. A larger customer base for existing small and minority-owned businesses can increase income and potential job opportunities at these businesses. Table 4.6 presents several policies that have the potential to help them capture the many positive benefits that will result from the rezoning.

TABLE 4.6: OBJECTIVE #2 RECOMMENDATIONS AND POLICIES FOR CONSIDERATION

Broad Potential Negative Impacts	Recommendations	Potential Policies to Consider
Many small and minority-owned businesses may be at risk for displacement as redevelopment occurs	• Ensure that protections exist to minimize displacement of small and minority-owned businesses, and support their ability to thrive as redevelopment occurs • Ensure that existing neighborhood-serving uses are protected (such as ethnic grocery stores, etc.) and new opportunities are promoted	**Zoning** • Establish special discretionary review procedures for construction applicants proposing to combine small lease spaces • In the Central Corridor Development Strategy (CCDS), include objective and purpose statements in rezoning that demonstrate connections to goals and objectives related to prevention of small- business displacement **Other** • Require large developments to provide incubator retail space for lease to existing businesses displaced by redevelopment • Establish community oversight process to select commercial tenants in large projects • Create World Cultural Heritage District that would be used in marketing campaigns to draw customers. Businesses in district would be protected from sharp rent increases and would receive aid toward owning their buildings. • Require below-market leases for qualifying small businesses in large redevelopment projects
Potential loss of customer base for small and minority-owned businesses that depend on car traffic, particularly in the east submarket	Provide support for small and minority-owned businesses negatively impacted by the loss of parking along University Avenue	**Zoning** • Establish zoning regulations to allow creation of temporary parking on vacant parcels **Other** • Facilitate land assembly and logistics to support shared parking opportunities between businesses and land owners • Provide adequate mitigation funds for small businesses affected by loss of parking • Create citywide marketing campaign to shop the CC

Many institutions and organizations are aware of the potential effects of the construction and operation of the light-rail line on existing small and minority-owned businesses. There are current policies and programs that could protect such businesses from the negative impacts of the light rail line.

- The Central Corridor Development Strategy (CCDS) offers principles, objectives, and strategies to ensure that existing residents benefit from revitalization and are not displaced. The publication, *City of Saint Paul: Overview of Central Corridor Affordable Housing Policies and Current Implementation Activities, January 2011*, says that care must be taken to "help stabilize and support the retention and enhancement of area households under threat of revitalization displacement… [and] leverage light rail investment and related development to…foster wealth-building opportunities for existing residents." There is a need to ensure specific plans for the implementation of these stated objectives.
- The Asian Economic Development Association (AEDA) and other community-based organizations are providing information to local small and minority-owned businesses to prepare them for the consequences associated with LRT construction and redevelopment.
- The Central Corridor Business Resources Collaborative provides construction communications, technical assistance, and financial support for existing businesses, as well as orchestrates the "Buy Local" campaign. The collaborative also works on long-term economic development and has launched www.readyforrail.net to assist businesses in attaining support.
- The Metropolitan Council Disadvantaged Business Enterprise Program (Met Council) has established a 15 percent overall hiring goal for Central Corridor contracts.
- The City of Saint Paul and the Met Council are collaborating to address the loss of on-street parking on University Avenue. They have conducted parking workshops with business and property owners, established the Neighborhood Commercial Parking Program, and have issued a plan, Mitigating the Loss of Parking in the Central Corridor.
- For projects receiving city financing, the City of Saint Paul implements a number of requirements to support equity, such as affirmative action, targeted vendors, Section 3, Federal Davis Bacon, "Little," Davis Bacon, living wage.

Healthy, Affordable Housing

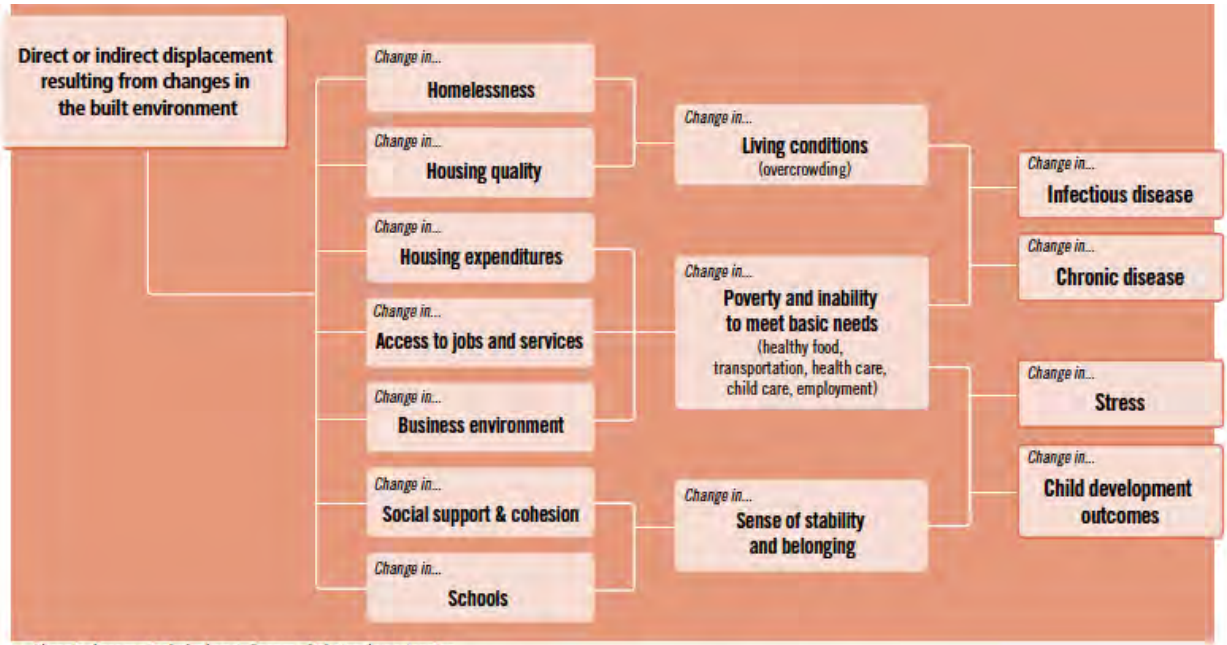
Overview

Research and precedent have shown that new, fixed-rail transit investments tend to lead to greater housing demand and increased land values around revitalized transit stations because individuals will often pay more to live near transit. This increased demand drives the private sector to provide new development consisting of new housing product types such as smaller units, multiunit housing, and loft apartments, which often bring in new residents.

How these changes impact the existing neighborhood depends, to a large extent, on the strength of the original housing market. A neighborhood with a weak housing market, characterized by many blighted homes, vacant properties (including foreclosed properties), and a lack of reinvestment by existing homeowners/landlords, can accommodate new demand for housing by filling in vacant spaces and units. In this case, new development can lead to neighborhood revitalization and provide amenities without displacing existing residents or significantly increasing prices for them. By contrast, in a neighborhood with a stronger housing market and few vacancies, existing houses are renovated and resold at higher values; apartments are converted to condominiums, renovated, and sold; and older, more affordable buildings are demolished to make way for newer ones. In this last scenario, without proactive strategies and policies to maintain the affordability of the housing stock, new investment can lead to speculation, rising housing costs, the loss of affordable homes, and the displacement of existing residents.[74]

There are several ways that housing security and quality are related to health. In the Central Corridor, there is the potential for rents and home values to rise with the introduction of the light rail and higher-density, mixed-use development. Because of rising housing costs, housing burdens, and the potential for involuntary displacement of low-income residents, may rise. Persons of color, who are statistically more likely to be low-income than whites, may be disproportionately affected. Displacement can have several negative health outcomes, including increases in infectious disease, chronic disease, stress, and impeded child development. Figure 4.4 demonstrates the pathway between displacement and health outcomes.

FIGURE 4.4: DISPLACEMENT EFFECTS



Source: Adapted from Human Impact Partners, 2011.

In addition to displacement, there are other impacts on health stemming from the direct and indirect consequences of high housing costs and the unavailability of affordable housing. The Healthy Development Measurement Tool (HDMT), an evaluation metric used to consider health in urban plans and projects, created the Housing and Health-Based Rationale shown below, which demonstrates the impact that housing can have on health outcomes.

Housing and Health-Based Rationale

- Involuntary displacement can cause or contribute to mental stress, loss of supportive social networks, costly school and job relocations. Displacement also increases risk for substandard housing and overcrowding.[75]
- Increased mobility at childhood was strongly associated with adverse childhood events such as abuse, neglect, household dysfunction, smoking, and suicide. Odds of health risks for adolescents with high mobility during childhood ranged from a 1.3 times higher risk for smoking to a 2.5 times higher risk for suicide.[76]
- Increased mobility in childhood (moving three or more times by the age of seven) resulted in a 36 percent increased risk of developing depression.[77]

- Increased mobility at childhood correlated to academic delay in children, school suspensions, and emotional and behavioral problems.[78]
- High housing costs relative to the income of an individual or household result in one or more outcomes with adverse health consequences: spending a high proportion of income on housing, sharing housing with other individuals or families, accepting lower-cost substandard housing, moving to where housing costs are lower, or becoming homeless. Spending a high proportion of income on rent or a mortgage means fewer resources for food, heating, transportation, health care, and child care. Sharing housing can mean crowded conditions, with risks for infectious disease, noise, and fires. Lower-cost housing is often substandard, with exposure to waste and sewage, physical hazards, mold spores, poorly maintained paint, cockroach antigens, old carpeting, inadequate heating and ventilation, exposed heating sources and wiring, and broken windows. Moving away can result in job loss, difficult school transitions, and the loss of health-protective social networks.[79]
- A lack of affordable housing within communities may compromise the health of low-income residents as they spend more on housing costs and less on other health needs. It can also put residents at greater risk of exposure to problems associated with poor-quality housing (mold, pests, lead, and other hazardous substances), and cause stress and other adverse health outcomes as a result of potential housing instability.[80]
- Overcrowded housing conditions contribute to tuberculosis[81] and respiratory conditions.[82]
- Studies have found evidence of an independent relationship between child and adult TB infection and overcrowding in deprived areas, such as the Bronx, New York.[83]
- 78 percent of homeless children have suffered from either depression, behavior problems, or severe academic delay.[84]
- Age-adjusted death rates were four times higher in the homeless population than in the general U.S. population in a study conducted in New York City.[85]
- Homeownership positively impacts the social cohesion and civic participation of a neighborhood, which, in turn, can impact health. Homeowners are more likely to feel invested in their community. They are more likely to participate in nonprofessional associations and vote in local elections. Additionally, for residents, a higher rate of homeownership in a neighborhood has been associated with fewer years of life lost due to cardiovascular disease.[86]

Neighborhood change will occur as a result of the light-rail construction, and to some extent, regardless of zoning changes. Zoning will be crucial in determining the extent and type of new development allowed in the Central Corridor. As mentioned in the Healthy, Affordable Housing Overview Section, it is necessary to grasp the market dynamics in order to understand the most advantageous zoning policies in each section of the Central Corridor. Because of the limited time frame of the HIA, the project is focused on examining pre-identified indicators of gentrification. The analysis of these indicators measures neighborhoods at risk for gentrification. It will be supplemented with some localized market analysis using property-tax trends around station areas, existing assessments of the housing market, including the Environmental Impact Statement, and reports from the Planning Department as well as the Center for Transit-Oriented Development (CTOD).

Objective 3: Protect Residents from the Negative Impacts of Gentrification

Existing Conditions Analysis: Gentrification and Risk of Displacement

The indicators for Objective 3 identify the demographics of residents living in Central Corridor neighborhoods and describe the housing needs of the population in terms of unit type and affordability

based on income. By analyzing demographic characteristics, and by tracking these indicators over time, it is possible to assess whether neighborhoods have been gentrifying or are at risk for gentrification. This analysis uses pre-identified indicators of gentrification and risk for gentrification. The indicators are then matched against the housing supply indicators outlined in Objective 4 to describe whether the current housing needs of residents match the current supply of housing.

Summary of Findings: Existing Conditions

- The majority of the CC is at risk for gentrification.
- Home values have increased significantly in the CC—up 73 percent in the last decade, significantly higher than City and County increases. While rents have increased, they have done so at a much lower rate—up 8 percent since 2000.
- CC residents spend a high percentage of their income on housing. Fifty-nine percent spend more than 30 percent compared to 40 percent in the city and 37 percent in the county. Twenty-seven percent of CC households spend 50 percent or more on housing.
- Property values have increased by 8 percent within a quarter mile of the CC planned station areas, while the City of Saint Paul has experienced an 8 percent decrease in property values.
- The CC has a higher percentage of lower-income residents than the City or County. For the 2005–09 period, the estimated poverty rate was 27 percent in the CC, compared to 20 percent in Saint Paul and 14 percent in Ramsey County.
- Educational attainment has increased in the CC. The proportion of CC residents 25 years and older with a bachelor's degree has increased by 29 percent over the last decade, compared to 15 percent in Saint Paul and 11 percent in Ramsey County.
- The CC is significantly more diverse racially than the city or county. Persons of color represented 53 percent of the CC population in 2010, compared to 44 percent in Saint Paul and 33 percent in Ramsey County.
- Despite high diversity, the racial and ethnic composition of the CC is changing; while the non-Hispanic white population remained steady at about 47 percent of the total, the black/African American population rose from 22 percent in 2000 to 26 percent in 2010, and the Asian/Pacific Islander population declined from 17 percent in 2000 to 15 percent in 2010.

Are Central Corridor neighborhoods at risk of gentrification? Using nationally recognized indicators of gentrification, as identified by the Brookings Institution and the Dukakis Center,[87] [88] we have concluded that while many neighborhoods are at risk of gentrification throughout the corridor, no one submarket meets all six indicators for gentrification during the 2005–09 period. While an important indicator for gentrification is decreasing population diversity, gentrification is ultimately an economic phenomenon, which is noted by changes in income levels and property values. Table 4.7 presents information that demonstrates the existence of a speculative real estate market trend, in some station areas, indicating that gentrification should be carefully monitored.

TABLE 4.7: INDICATORS OF GENTRIFICATION IN THE CENTRAL CORRIDOR (CC)

Indicators of Gentrification	Conclusion	Current CC Conditions
Rising rents and home values	Rents slowly rising Home values rising sharply	Rents rising at low rate; over past two decades they have risen about 8% in Saint Paul, 7% in Ramsey County, and 10% in CC; rising slightly faster in the last decade. For example, real median gross rent in CC[o] rose from $672 per month in 1990 to $737 in 2009, an increase of $65 per month (all rents adjusted to 2010 dollars). Home values increased 73% since 2000 in CC, compared to 68% in Saint Paul and 48% in Ramsey County. Largest home value increases in last decade were in east submarket (90%) and capitol submarket (112%).These areas experienced significant number of foreclosures in last few years.
Decreased racial diversity	No	CC is significantly more diverse racially than County. Persons of color represent 53% of total CC population, compared to 44% in Saint Paul and 33% in Ramsey County. Diversity of CC remained steady in last decade after increasing 1990–2000. This is in contrast to Saint Paul and Ramsey County, which saw decreases in non-Hispanic white population in last decade. Racial and ethnic composition of CC shifted in last corridor to include a greater proportion of African Americans and fewer Asians and Pacific Islanders.
An influx of higher-income residents/outmigration of lower-income residents	Somewhat	CC has higher percentage of lower-income residents than County as a whole. 2005–09 data shows poverty rate 27% in CC, compared to 20% in Saint Paul and 14% in Ramsey County. This represents increase of 4 percentage points in last decade; in 1990, poverty rate was same as today, 27%. Increased poverty is trend developed in last decade. Overall, income distribution within the CC is becoming more bipolar. The percent of CC households with an income of less than the Ramsey County median ($52,329 in 2009) is high, at around 60%, and has increased from 34% in 2000. The percent of households making more than twice the Ramsey County median income has increased from roughly 10% in 2000 to 12% in the 2005–2009 period. It is not clear from the data whether the changes in income levels are due to an influx of new residents with different incomes or a change in the incomes of existing residents. While we know that more people moved into the CC than into Saint Paul or Ramsey County, we do not have data on their income levels.
Increases in	Yes	Educational attainment has increased in the CC. The proportion of CC

[o] Note that any median statistic for the overall Central Corridor geography, including the median gross rent, is an aggregate median of medians at the block group level.

educational attainment of residents		residents 25 years and over with a bachelor's degree has increased by 29% over the last decade, compared to 15% in Saint Paul, 11% in Ramsey County. About 32% of CC residents have a bachelor's or a graduate or professional degree, compared to just 21% in 1990. The largest increase of residents with higher education in the last decade was in the downtown submarket. Furthermore, the proportion of CC residents with less than a high school diploma has decreased to an estimated 16% in the 2005–2009 time frame, from 22% in 2000.
Conversion of apartments to condominiums	Do not have data	The project does not have data on condo conversions.
Increases in property values	Yes	Within a 1/4 mile of the planned CC station areas, property values *increased by* 8% between 2007–10, whereas the City of Saint Paul experienced an 8% *drop* in values. Property values rose in western, capitol, and downtown submarkets; sharp decreases in property values observed near some station areas in east submarket. See Section 3 for more information.

While all the submarkets along the Central Corridor vary significantly, the downtown submarket stands out because it has long been a center of regional economic activity. It has a limited number of public and senior housing projects, and recently began developing additional market-rate residential units. Responding to suggestions from stakeholders, the HIA project examined gentrification in the Central Corridor excluding data from the downtown submarket, to produce an assessment of gentrification in the areas that have more of a residential and retail focus. Table 4.8 below depicts the findings, which demonstrate that gentrification is not currently in progress in the Central Corridor, excluding downtown.

TABLE 4.8: INDICATORS OF GENTRIFICATION IN PROCESS IN THE CENTRAL CORRIDOR (CC) (NOT INCLUDING DOWNTOWN SUBMARKET)

Indicators of Gentrification	Conclusion	Current CC Conditions (excluding Downtown)
Rising rents and home values	Rents slowly rising Home values rising at nearly same rate of city	Rents rising at fairly low rate: during past two decades have risen at about 8% in Saint Paul, 7% in Ramsey County, 5% in CC, falling in first decade, then rising by nearly 8% in last decade. Home values increased significantly—65% since 2000, compared to 68% in Saint Paul and 48% in Ramsey County. East and Capitol submarkets experienced high increases in home values in last decade as noted in 2005–09 estimates.
Decreased racial diversity	Diversity has increased slightly in last decade	CC is more diverse racially than County. Proportion of persons of color in CC 56% in 2010, compared to 44% in Saint Paul and 33% in Ramsey County. Diversity of CC increased in last decade; number of non-Hispanic whites declined by nearly 1,000 since 2000. Racial and ethnic composition changing: black/African American population grew by 4 percentage points in last decade; Asian population declined by nearly 2,000 persons or 3 percentage points in last decade.

An influx of higher-income residents, outmigration of lower-income residents	Percent of higher-income residents increasing, percent of lower-income residents decreasing	CC has higher percentage of lower-income residents than County as a whole. 2005–09 data shows poverty rate 28%, compared to 20% in Saint Paul and 14% in Ramsey County. Poverty increased in last decade from 22% in 2000. Percent of CC households with income of less than Ramsey County median is high, at about 61%, though it decreased from roughly 65% of households in 2000. The percent of households making more than twice the Ramsey County-median income has increased from roughly 9% in 2000 to 12% in 2005–09 period. West submarket more than tripled number of households with income greater than $150,000. It is not clear from data whether changes in income levels are due to influx of new residents with different incomes or change in incomes of existing residents.
Increases in educational attainment of residents	Yes, proportion of residents with bachelor's degree increasing, though at lower rate than City of Saint Paul	Educational attainment increased in CC. Proportion of CC residents 25 years and older with bachelor's degree has increased by 13% over last decade, compared to 15% in Saint Paul and 11% in Ramsey County. 30% of CC residents have bachelor's, graduate, or professional degree, compared to 20% in 1990. West and capitol submarkets have seen increases in number of higher-educated residents. Proportion of CC residents with less than high school diploma decreased to estimated 17% in 2005–09 time frame, from 22% in 2000.
Increased property values	Yes	Property-value increases observed downtown; sharp increases near Westgate, Raymond, and Capitol East station areas. This analysis does not remove downtown from average property-value changes experienced in CC.

In addition to evaluating the current extent of gentrification, we used another set of indicators to assess whether the community may currently be at risk for future gentrification. Using these indicators we can better estimate where gentrification may occur next. The Center for Community Innovation at the University of California, Berkeley, has assessed the factors that make neighborhoods more likely to gentrify and identified a set of gentrification risk factors[89] shown in Table 4.9.

Evaluating gentrification risk across the Central Corridor presents a clearer picture than assessing whether gentrification is currently in process. The Central Corridor as a whole meets the majority of factors that indicate *risk* for gentrification. See table below for details.

TABLE 4.9: INDICATORS OF GENTRIFICATION RISK IN THE CENTRAL CORRIDOR

Indicators of Gentrification Risk	Conclusion	Current Central Corridor (CC) Conditions
Close proximity to transit	Yes	CC is fairly well served by transit. More than 81% of population lives within 1/4 mile of high-frequency bus route—one with less-than-20-minute intervals between buses during peak hours; dependability and quality of bus system was not assessed. Community members note current transit system is not adequate. Not many north-south bus routes traverse CC. See *Safe and Sustainable Transportation* findings section for more details. New light-rail transit line has been approved and construction begun. Community, developers, and other interested parties aware of coming light-rail line and station locations, which places CC land at risk to speculators and new residents interested in transit-oriented development.
High density of amenities including youth facilities and public space	Somewhat	Project has not analyzed density of amenities comparing CC and City or County, but there are many assets and amenities in the CC, such as schools, places of worship, community and recreation centers, and ethnic and full- service grocery stores. See Demographics and Neighborhood Characteristics section for asset map. The CCDS, released several years ago, proposes public space and amenities, but projects have not begun.
High percentage of workers taking public transit	Somewhat	Transit riders represent 12% of CC population 16 years and older who work outside of home. City ridership somewhat lower at 9%; County almost two times lower at 7%. Percentage has remained about the same between 2000 and 2005–09. The new light-rail line currently under construction will likely increase transit use among CC residents and bring in new residents interested in connecting to employment centers and other locations via transit.
High percent of non-family households	Yes	CC has a higher proportion of non-family households compared to Saint Paul and Ramsey County. Presence of non-family households in the CC has increased by 6 percentage points in last two decades, from 50% of all households in 1990, to 56% in 2009. Corresponding with this trend, proportion of one-person households also slightly increased across CC, from 43% in 1990 to 46% in 2009. While proportion of non-family households is also increasing in Ramsey County and Saint Paul, it is rising at a slower rate than in the CC.
High percent of	Yes	CC unique compared to Saint Paul and Ramsey County; has relatively

buildings with three or more units		high proportion of buildings with 3 or more units; proportion remained about the same across all geographies between 1990 and 2005–09; higher-density buildings (3 or more units) still make up 37% of Saint Paul housing types and 33% of Ramsey County's, in comparison with 48% in the CC. CC has high number of buildings with 50 units or more (22% of total number in 2009); second to single-family, detached houses. In Saint Paul and Ramsey County, buildings with 50 units or more are 12% of total occupied housing stock.[p]
High number of renters compared to owner occupancy	Yes	Estimated 56% of occupied housing units in the CC were renter-occupied in 2005–2009 period, compared to 44% in Saint Paul and 36% in Ramsey County. CC number dropped 4 percentage points from 2000. Conversely, proportion of owner-occupied housing units in CC has grown, up to 44% in 2009 from 40% in 2000.
High number of households paying a large share of household income spent on housing (housing-cost burden)	Yes	Based on 2005–09 estimates, 59% of CC households (10,843 households) pay more than 30% of income on housing.[q] Housing-cost burden higher in CC than in Saint Paul or Ramsey County, which is 40% and 37%, respectively. 27% of CC households pay 50% or more of income on housing, considered extreme housing burden. High housing-cost burdens concentrated in east and capitol submarkets, where 50% or more of occupied housing units have households paying 30% or more of income on housing. **Rents**. Renters particularly burdened; 68% pay more than 30% of income on housing; 36% pay more than 50%, according to 2005–09 estimates. Significantly higher than rent burden trends for Saint Paul and Ramsey County, where 50% and 49% of renters, respectively, pay more than 30%. High rent burdens impact lowest-income residents of CC; more than 75% of households with $20,000 or less income pay more than 30% of income on rent. **Home Ownership**. 47% of CC homeowners pay more than 30% on ownership costs, 16% pay more than 50%. Ownership burden considerably less at 33% of owners in Saint Paul and 30% in Ramsey County paying more than 30% on homes, according to 2005–09 estimates. Low- and middle-income CC residents impacted by high ownership-cost burdens; 56% of households with annual incomes $35,000–$50,000, and 74% of households making less than $35,000 annually, pay more than 30% of income on ownership costs.

[p] Note about data: Mobile homes, boats, and recreational vehicles were not included in the percentages for this analysis. This analysis was also conducted using census tracts instead of block groups as the base level of analysis due to lack of data at the block group level; as a result, the boundaries of the CC are slightly different than the boundaries used to describe the CC in all other indicators.

[q] The Federal Housing and Urban Development defines housing that is affordable to be 30 percent or less of a household's gross annual income.

Impact Analysis: Potential for Involuntary Displacement

Zoning is the key regulatory tool used to accommodate the increased housing demand around transit stations. In the Central Corridor, many properties along and near University Avenue that were previously zoned for business commercial, or industrial uses are being rezoned to traditional neighborhood, mixed-use zoning districts to allow for multifamily residential uses. This change will not only accommodate demand for housing as the market improves, but, when coupled with the completion of the LRT, the change also has the potential to trigger greater increases in property values because of the higher-density, higher-value development allowed under the zoning. This increase in property values can translate into higher residential rents on the properties rezoned, higher property taxes, and increased home values. As mentioned previously in this report, CTOD has projected a 15 percent increase in property values and rents due to transit.[90]

Summary of Findings: Impact Assessment

- Property values are increasing around many station areas, whereas property values are decreasing across the city—see Section 3 for more details.
- Higher property values have the potential to increase wealth for existing homeowners in CC neighborhoods who do not already have a high housing-cost burden and can absorb any increases in property taxes.
- Given the high housing cost burden, many in the CC will not be able to absorb increases in rent.
- Many neighborhoods at risk for gentrification may start gentrifying as new development occurs around transit, increasing the potential for involuntary displacement, particularly for low-income and persons of color—especially those who are renters.
- Potential loss of a neighborhood's historic and cultural character due to gentrification.

Rents and accompanying rent burden, as well as property taxes, are anticipated to increase with rising property values. The new transit line and the increase in development potential will likely increase the demand for living and working in the Central Corridor. This increased demand, plus increased development potential, will likely increase property values, increase rents, and increase property taxes, which will, in-turn, increase the existing rent and housing burden in the Central Corridor. Because housing burden, especially for renters and low-income residents is high (as described under Objective #3 *Existing Conditions Analysis* section), the potential for the increase in housing burden resulting in displacement is a real possibility.

This process is more likely to occur in the west submarket first, where the highest-density development is anticipated. This aspect of development is the closest to being financially feasible in the current market, according to the Center for Transit Oriented Development (CTOD).[91] The west submarket is a prime location for students and those who work in and around the University of Minnesota. In addition, there are a large number of renter-occupied housing units in the west end of the corridor. While several of these units are currently subsidized affordable housing, many have funding contracts which expire in the next ten years.[92]

Neighborhoods will likely start gentrifying as a result of the rezoning. As demonstrated in Table 4.10 below, the rezoning proposal may further tip neighborhoods toward gentrification, especially those close to station areas with property values trending upward.

Table 4.10 forecasts changes to existing conditions of key indicators of gentrification, measured in the Objective #3 *Existing Conditions Analysis,* that may result from the implementation of the rezoning.

TABLE 4.10: ESTIMATED IMPACT ON EXISTING CONDITIONS RELATED TO GENTRIFICATION

Indicator of Gentrification	Overview of Existing Conditions	Estimated Forecast
Rising rents	Moderately increasing; rose 10% in CC in last decade	Will continue to rise at increasing rate. As property values increase, landlords likely to increase rents. CTOD estimates completion of light rail will lead to increased rents and property values by 15%.[93] Rents already increasing in west and downtown submarkets, where property values have risen in last few years.
Rising home values	Yes; significantly increasing; rose 73% in CC in last decade	Will continue to rise. Increases in allowable density will aid in raising property values. Transit expected to increase property values by around 15% within half mile of light-rail line.
Influx of higher-income residents	Somewhat; percent of CC households making more than twice Ramsey County median income increased by 2 percentage points.[r]	Rezoning allows for more housing in CC, particularly near western CC station areas. If housing constructed at market rate, combined with 15% expected increase in rents, new residents who will be able to afford housing will likely have median household income higher than current CC residents.
Outmigration of lower-income residents	Somewhat; while income levels increased, poverty rate also increased in last decade.[s]	As rents and home values continue to rise, housing burden of many lower-income residents will continue to rise beyond current levels, potentially forcing residents out of CC neighborhoods. Process will likely not occur evenly across CC; pressure on western neighborhoods first, where development feasibility is more likely in short term.
Increase in educational attainment of	Yes; percent of CC residents with bachelor's degree	Will likely continue to increase. As higher-income residents move into neighborhood due to increase in supply of market-rate housing, educational levels will likely be

[r] The data is unclear on whether there is an influx of new residents with higher income levels or existing residents are dramatically increasing their income.

[s] The data is unclear on whether existing low-income residents are leaving the corridor or existing residents increasing their income.

residents	rose by 29% in last decade	higher, as higher education is correlated with income.[94]
Decrease in racial diversity	Diversity remained steady while increasing in City and County	Racial diversity will likely decrease. Due to racial income gap in Twin Cities and CC, incoming households able to afford higher prices in CC likely to be white, non-Hispanic. Owing to correlation between income and race, if displacement of lower-income residents occurs it will also likely mean a loss of residents of color.

The Final Environmental Impact Statement (FEIS) on the development of the new light-rail line also identifies gentrification as a potential effect of development along the Central Corridor. It states: "[I]n recent years, the Midway area has experienced growth in multifamily housing and new commercial/office enterprises. These development activities are expected to continue along the corridor in response to market demand…Underutilized land and buildings near some station areas that are now prime development and redevelopment sites will be built out. More housing opportunities will be available for current residents in the corridor, but population composition and neighborhood character may change as new residents move into the neighborhoods (gentrification) to take advantage of transit."[95]

The potential impacts of gentrification on low-income and persons of color have also been recognized by the US District Court in their recent summary judgment made in a lawsuit by the Saint Paul NAACP in a coalition of local advocates: "…the Court recognizes the validity and magnitude of Plaintiff's concerns with respect to the impact that the CCLRT Project could have on the previously disrupted Rondo community and the potential impact that gentrification could have on low-income and minority populations…If the relevant groups—including the Metropolitan Council, the City of Saint Paul, and Ramsey County—fulfill their commitments to mitigate the displacement of the impacted communities due to gentrification of the area and to minimize impacts to the Rondo community, they will revisit these issues with Plaintiffs and resolve them in the best interest of all concerned."[96]

Summary of Rezoning Impacts

The proposed zoning will likely impact the cost of housing and availability of subsidized, affordable housing in the Central Corridor. As stated previously, if property values continue to increase due not only to the completion of the light-rail line but also due to the increased development potential from the rezoning, rents and home prices will likely increase to reflect these changes. This concern is highest in the western, capitol, and downtown submarkets, where property values are already rising fairly quickly. This could affect not just current market- rate properties in corridor neighborhoods but also subsidized housing, unless provisions are made to both preserve existing units and ensure that new units constructed in the corridor are built for a variety of income levels. Given the high housing burden documented for Central Corridor residents, increases in housing costs may result in displacement.

Rezoning Impacts on Health

The rezoning could have a few different, indirect impacts on the health of current residents in the Central Corridor related to gentrification and its unintended effects. Even as the process of gentrification increases in some corridor neighborhoods, this could be beneficial if accompanied by increased economic opportunities and amenities due to the influx of new residents in the neighborhood and decreased segregation within neighborhood schools. For current property owners, gentrification and the

subsequent increase in property values could boost the potential to build wealth if owners can afford to stay, considering the likely increase of their property tax burden.

However, the negative consequences of gentrification can have some damaging impacts on existing health disparities in the Central Corridor. The influx of new residents and amenities that serve them can affect social cohesion and a sense of belonging for current residents, [97] who may experience multiple, negative consequences on general health—both physical and mental.[98] If rents and/or home values increase substantially due to gentrification, this will limit current residents' ability to meet their basic household needs, further exacerbating the conditions that make poorer populations more susceptible to chronic and infectious diseases. This decrease in affordability may also cause existing residents to consolidate households and crowd into small spaces to save on rent, just to remain in their neighborhood. These factors can have damaging impacts on mental health, chronic diseases related to stress, and the spread of infectious diseases. In addition, if housing burden causes residents to become involuntarily displaced, child development can be impacted by exposures to increased stress, and poor environmental conditions found in affordable, but substandard, housing.,

According to the indicators, the gentrification process in neighborhoods within the Central Corridor is not widespread, but is underway in a few small neighborhoods. With the operation of the light-rail line and the subsequent increase in development along University Avenue, this dynamic will likely change, increasing the likelihood for gentrification, especially adjacent to places where gentrification is already in process. To reiterate, some degree of gentrification can have positive effects on a neighborhood. However, the potential for displacement or decline of social cohesion in corridor neighborhoods should be mitigated to the extent possible. There are several policies and programs that have the potential to capture the value of public improvements to the Central Corridor to ensure that current residents can not only remain in their neighborhoods but also thrive within them. Table 4.11 provides broad recommendations for the potential negative impacts assessed and identifies policies for the steering committee to consider. However, not all policies are appropriate for the Central Corridor. The priority policy recommendations of the Community Steering Committee that are specifically tailored for local conditions are listed in Section 5 under *Prioritized Policy Recommendations*.

TABLE 4.11: OBJECTIVE #3 RECOMMENDATIONS AND POLICIES FOR CONSIDERATION

Broad Potential Negative Impacts	Recommendations	Potential Policies to Consider
Gentrification process likely to speed up, increasing potential for involuntary displacement, particularly for low-income and persons of color; potentially decreasing	• Create protections for existing residents against rapidly rising housing costs due to transit and redevelopment • Protect existing affordable housing • Create new, affordable-housing options	**Zoning** • Consider rent control or rent stabilization to protect existing low-income renters • Amend zoning ordinance to require notification to tenants living within the area whenever notification to owners is required • Require replacement of affordable rental units or payment to Housing Trust Fund as condition of approving demolition of rental units • Create a neighborhood preservation overlay district • Include objective and purpose statements in rezoning that demonstrate connections to goals and objectives

social cohesion and sense of community. particularly in communities of color		related to neighborhood stabilization and antidisplacement in the Central Corridor Development Strategy (CCDS) • See *Objective #4 Recommendations and Policies for Consideration section* for relevant recommendations, policies, and programs regarding preservation and creation of affordable housing **Other** • Consider creating and adopting a Neighborhood Preservation Plan[t] as described in the CCDS
	• Protect existing homeowners from sharp increases in property-tax burden • Protect existing affordable housing • Create new, affordable-housing options	**Zoning** • Create neighborhood-preservation overlay district **Other** • Consider refunding large-scale property tax increases to low-income CC homeowners • See *Objective # 4 Recommendations and Policies for Consideration section* for recommendations, policies, and programs regarding preservation of existing and creation of new affordable housing
	• Create and codify protections against displacement for existing apartment dwellers living in buildings that may be converted to owner-occupied units as market increases • Provide protections against large-scale loss of rental units	**Zoning** • Adopt condo-conversion ordinance • Require approval of a use permit based on determination of compliance with specific requirements to mitigate impact on existing low-income tenants • Consider adopting antiharassment district to protect renters from being pushed out of homes
	• Protect existing residents from involuntary displacement • Preserve and enhance the culture of the community	**Other** • Create a World Cultural Heritage District to help with marketing campaigns and drawing customers, and to include protections against sharp increases in rent and aid in helping tenants shift toward owning their buildings • Rename the Dale station Historic Rondo • Create a Hmong Community Garden along the CC • Ensure all station information and new signage in multiple languages

[t] The Neighborhood Preservation Plan included in the CCDS includes rent control, home improvement and weatherization loans, affordable housing for seniors who wish to stay in the neighborhood, among other provisions to preserve the existing community.

There are policies and programs currently being implemented that help achieve the objective of protecting residents from the negative impacts of gentrification For example, the City of Saint Paul, through Invest Saint Paul, has dedicated funding to the eastern end of the corridor. The purpose of this program is to stabilize blocks that are heavily impacted by foreclosures and vacant properties by purchasing, rehabilitating, and reselling vacant homes. The Invest Saint Paul Initiative and Neighborhood Stabilization programs, as of summer 2010, acquired approximately 39 one- and two-family units within Central Corridor neighborhoods. See *Objective # 4* for a list of additional city programs to increase and preserve affordable housing.

Objective 4: Construct and Preserve Affordable and Diverse Housing in Proportion to Demand

Existing Conditions Analysis: Housing Needs

The indicators for this objective focus on the physical buildings in the Central Corridor and the housing market. Are there vacancies and vacant lots? How much does housing cost for renters and owners? What types of units are available? What housing is currently affordable, both in terms of affordable market-rate units and subsidized units? By understanding these aspects of the existing housing supply we can identify how the current housing stock meets community needs, where opportunities for new development exist, and what affordable housing must be preserved or developed.

Summary of Findings: Existing Conditions

- In 2010, the vacancy rate was at 9 percent in the CC, compared to 8 percent in the City and 7 percent in the County. The downtown submarket had the highest vacancy rate (13 percent), compared to the central submarket with a low vacancy rate of 5 percent.

Affordability

- 14 percent of the total housing units in the CC are subsidized, affordable units available to households making 80 percent of Area Median Income (AMI) or less, compared to roughly 12 percent in Saint Paul and 8 percent in Ramsey County. An estimated 65 percent of CC residents make less than 80 percent AMI, compared to 63 percent in Saint Paul and 57 percent in Ramsey County.[u]
- Housing burden is high and rising: 59 percent of CC residents pay more than 30 percent of their income on housing, compared to 40 percent in Saint Paul and 37 percent in Ramsey County. Conditions are getting worse. After decreasing between 1990 and 2000, this proportion increased by 12 percentage points in the last decade, up from 34 percent in 2000.
- Renters are particularly burdened. An estimated 68 percent of households pay more than 30 percent of their income on rent in the 2005–09 period, up from 41 percent in 2000. 47 percent of owners pay more than 30 percent on ownership costs[v] in 2005–09 and a much lower 21 percent in 2000.
- The increase in housing burden for homeowners has been dramatic as well, rising 26 percentage points between 2000 and the 2005–09 period. While there were increases in the housing burden for owners in Saint Paul and Ramsey County, they were not as stark.

Housing Size

- The average household size fell considerably, by about 7 percent, between 2000 and 2005–09 across the CC, dropping from about 2.57 to 2.39 persons per household, compared to a minimal 3 percent decrease in the City and 2 percent in the County.
- The CC is about twice as overcrowded as the City or County. Around 2 percent of households in the CC live in overcrowded conditions as compared to 1 percent in Saint Paul and Ramsey County. Overcrowding in all geographies increased significantly from 1990 to 2000 but fell in the last decade.
- The CC has a significantly higher proportion of one-bedroom or fewer units. Around 40 percent have one bedroom or less, as compared to 26 percent in the City.

[u] Based on a family of three for the Area Median Income in the Minneapolis-Saint Paul-Bloomington Metropolitan Statistical Area (MSA) in 2009. MSAs are metropolitan geographic boundaries that combine a number of jurisdictions and gather data and analyze statistics for the area.

[v] Ownership costs include a mortgage, real estate taxes, condo fees, homeownership insurance, and utilities.

Does the current housing stock provide for the housing needs of current residents?

TABLE 4.12: DEMAND FOR AFFORDABLE HOUSING COMPARED TO HOUSING SUPPLY

Demand	Supply
Housing Burden Significant demand for affordable housing. Conditions worsening: proportion of CC residents paying more than 30% of income on housing, which had decreased 1990–2000, rose from 34% in 2000 to current high of 59%, compared to 40% in Saint Paul and 37% in Ramsey County, per 2005–09 estimates. Lower- and middle-income households more impacted by higher housing burdens. In 2005–09, more than 75% of renter households with annual incomes of less than $20,000 estimated to pay more than 30% of income on housing. For homeowners, about 74% of households making less than $35,000 annually, and 56% of households with annual income $35,000–$50,000 paid more than 30% of income on ownership costs. **Income Levels** Income levels in the CC lower than in the City of Saint Paul and Ramsey County; thus CC residents require lower-cost housing to ensure affordability. In addition to generally lower income levels, poverty is prevalent in the CC; rate estimated at 27% in 2005–09, compared to 20% in Saint Paul and 14% in Ramsey County. Persons of color in CC more likely to be low income—median household income for African Americans, Asian/Pacific Islanders, and Hispanic/Latinos significantly less than that for whites—at $17,790, $24,904, and $14,326, respectively. Poorer households primarily concentrated in east submarket, where more than 67% of households make less than Ramsey County median. In smaller capitol submarket, about 80% of all households make less than Ramsey County median. These	Roughly 14 percent of CC housing units (3,928 total) are subsidized, affordable units. Majority available for households making less than 30% Area Median Income (AMI) (53%); there is high demand for affordable units at this level. See Figure 4.7, showing housing demand in CC. A majority of affordable units are in high-density buildings with 50 or more units. In addition to subsidized, affordable housing, several block groups in the CC also have relatively affordable rents compared to other areas in region. In 2005–09 period, at least 30 of 53 total block groups in CC had median gross rent less than HUD Fair Market Rent (FMR) for Minneapolis-Saint Paul-Bloomington MSA.[w] The CC has a high percentage (about 54%) of pre war (built in 1939 or earlier) housing units, compared to 46% in Saint Paul and 28% in Ramsey County. Concentrations of older housing units primarily in west, central, and east submarkets, all of which have housing stock composed of more than half pre-war buildings. In some metropolitan regions, older housing stock can correlate with more affordable housing. Anecdotally, the HIA project understands this to be true in the CC, but has not analyzed data on the topic.

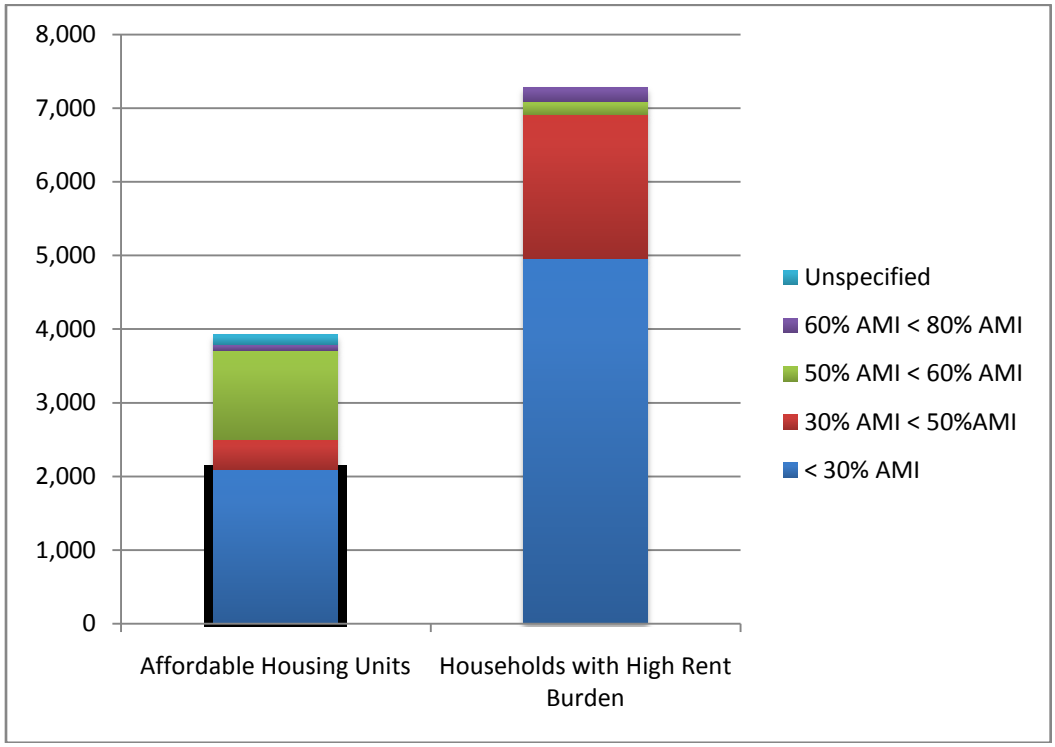
[w] Based on the 2011 Fair Market Rent for the Minneapolis-Saint Paul-Bloomington MSA for a one-bedroom dwelling ($761).

submarkets also have extremely high poverty rates; in 2005–09, east submarket poverty rate estimated at 35%, 53% in capitol submarket. Nearly 17% of households in west submarket make more than double Ramsey County median. Number of single-parent families with children younger than 18 increased 1990–2000 and remained steady in last decade, equaling about 25% of all families in CC, compared to 16% of all families in Ramsey County. Single-parent families typically have more difficult time making ends meet.	

Overall, the CC is a place with a high proportion of low-income residents that are in need of affordable-housing options in order to remove from their income the high housing burden that can cause stress and deplete cash that could be used for healthy, fresh foods; transportation; childcare; and health care. While the proportion of low-income households has not changed significantly in the last decade, the rent and ownership burden in the corridor has increased by a wide margin. This is another indication of increasing housing costs and a mismatch in the affordability of the housing supply relative to what corridor residents can reasonably afford.

Figure 4.7 illustrates that there is not enough subsidized, affordable housing at any income level to meet the demand of Central Corridor households that pay an unaffordable amount of their income on housing. It is important to note that community groups feel that comparisons to AMI are problematic. The Twin Cities Metro area has an AMI that is far higher than the median household income for the City of Saint Paul or the Central Corridor. Other cities and geographies in the metro region drive up the median income for the area. Since much of the affordable housing are priced using the area median income, the deficit between the city of Saint Paul and the regional median create a situation where the subsidized affordable housing units in the city are in fact not truly affordable to low-income people in the city. For example, 80 percent of AMI would continue to be unaffordable to the majority of Saint Paul city residents. Many advocates in Saint Paul have recommended deeper subsidies in Saint Paul for housing in order to make up for this deficit.

FIGURE 4.7: SUPPLY OF AFFORDABLE HOUSING IN THE CENTRAL CORRIDOR RELATIVE TO DEMAND



Source: HousingLink, HUD Inventory of Subsidized Housing 2008, American Community Survey 2005-2009 5-Year Estimates

TABLE 4.13 HOUSING SUPPLY AND DEMAND IN RELATION TO SIZE OF HOUSEHOLD AND SIZE OF HOME

Demand	Supply
Household Size Average household size fell considerably, by about 7% between 2000 and 2005–09—dropping from about 2.57 to 2.39 persons per household, compared to minimal decreases in Saint Paul and Ramsey County of 2%. Some areas still have higher average household size compared to Saint Paul (2.51 in 2005–09 period), notably east and capitol submarkets, with estimated average household sizes of 2.73 and 2.93 in 2005–09, respectively. Note average household size in East submarket, while high, decreased in last decade from 3.1 to 2.73 persons per household. **Overcrowding**[x] Overcrowding is low in general; in CC it is approximately twice as high as in city or county.	CC has higher proportion of studios and one-bedroom units (40% in 2005–09 period) compared to Saint Paul and Ramsey County, with 26% and 21%, respectively. Majority of these smaller units located downtown. Proportion of units of varying sizes across CC has remained stable between 1990 and 2005–09, with around 40% of units having one bedroom or less, and 60% having two or more bedrooms. Family-size units (three bedrooms or greater) are located primarily in west and east submarkets. While the central submarket has fewer total units, more than half of housing stock has units with three or more bedrooms.

[x] Overcrowding is defined by the census as more than 1.5 persons per room, not counting the bathroom and kitchen.

About 2% of households (372 total) in CC are overcrowded, compared to 1% in Saint Paul and Ramsey County, in 2005–09. Overcrowding in all geographies increased from 1990 to 2000, but fell in the last decade, notably in east submarket, which went from 9 percent overcrowding in 2000 to 1 percent in 2005–09.	

In general, it appears that the CC housing stock is composed of a varied number of bedrooms that can accommodate small and large households. Yet, while the average household size is higher in the CC than the city or county, the CC has a significantly higher number of one-bedroom-or-less housing units. This mismatch has not resulted in significantly high overcrowding rates for the CC at this time.

The status of current housing stock in the Central Corridor varies by submarket. The total number of housing units in the corridor has increased by more than 2,500 units in the last decade. While the vacancy rate fell from 11 percent to 4 percent between 1990 and 2000, following a net loss of total units, the vacancy rate increased in the corridor to 9 percent in 2010. While the vacancy rate in both Saint Paul and Ramsey County increased by a few percentage points in the last decade as well, their rates in 2010 were still lower than the corridor at 8 percent and 7 percent, respectively. Vacant housing units are not distributed evenly across the Corridor. The downtown submarket has the highest vacancy rate (13 percent), compared to the central submarket with a low vacancy rate of 5 percent. While the Central Corridor has a relatively high vacancy rate, recent reports show that the rate in the first quarter of 2011 for the Twin Cities metro area was 3.1 percent and 3.2 percent for the City of Saint Paul; these rates are expected to go through a downward trend. Unsurprisingly, as vacancy rates in the region are declining, rents are rising.[99]

Within the corridor, somewhat surprisingly, rents are highest in the east submarket and lowest downtown. One reason for this may be that rents are widely varied between block groups within submarkets.[y] In addition, while the east submarket contains several subsidized affordable housing properties, many of the higher-density, subsidized housing projects are located in other submarkets, which may bring median rents down despite the location of market-rate housing in those areas. The east submarket also houses some of the poorest households, which may be one reason why this submarket holds one of the highest housing burdens.

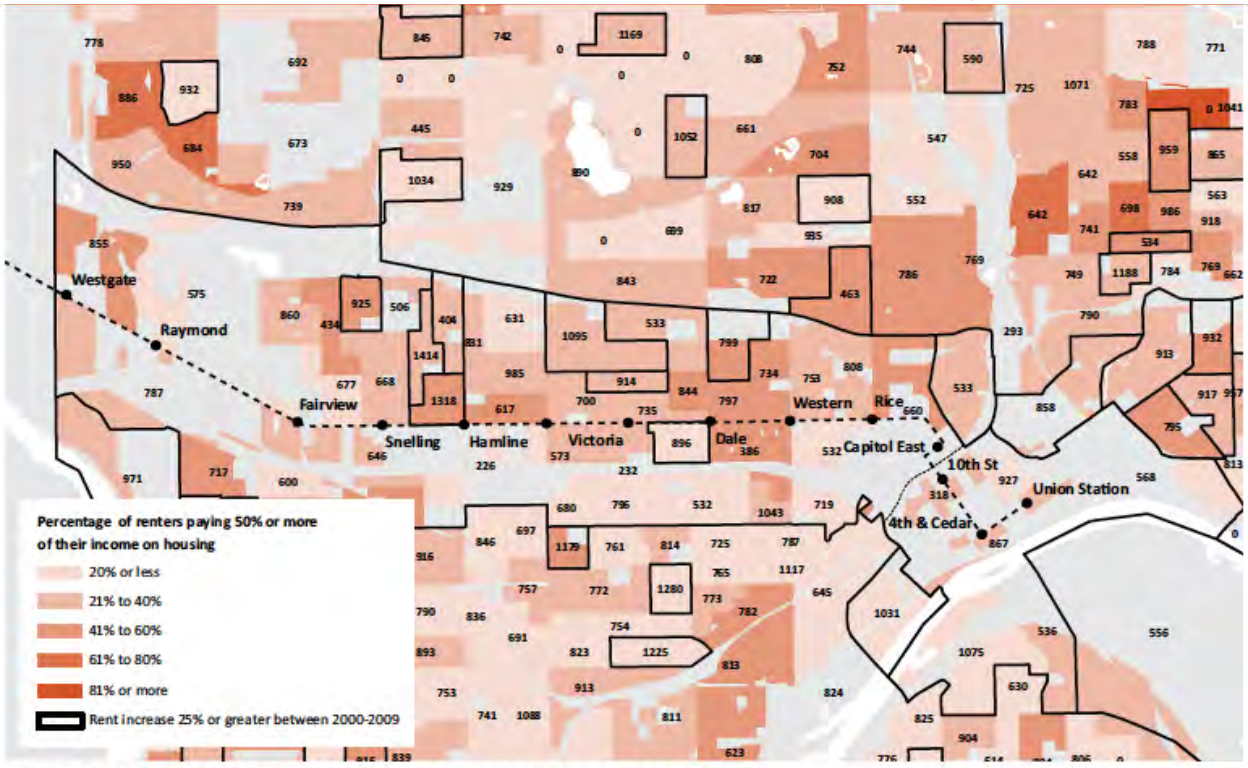
Similar to the rest of the Twin Cities region and the country, foreclosures are an issue in Saint Paul and the Central Corridor. While vacant and foreclosed properties in Saint Paul peaked in 2008, they remained high in 2009[100] and 2010 and are starting to decrease in 2011.[101] The Frogtown neighborhood within the CC was hit particularly hard by the foreclosure crisis; more than 500 units were vacant as of 2010.[102]

[y] A limitation to rent and home value data is that the median calculated for submarkets is an aggregate of medians, or the mean of the medians at the block-group level. Because of this, the final submarket median is not necessarily weighted by the total number of housing units and therefore does not fully portray the diversity within markets.

Is the neighborhood becoming more or less affordable? The Central Corridor is becoming less affordable. Rents are rising at a moderate pace, but slightly faster than rents in Saint Paul or Ramsey County. Home values are rising significantly in the corridor–much faster than values in Saint Paul and Ramsey County. Finally, the proportion of households paying more than 30 percent of their income on housing is significantly increasing. An estimated 68 percent of households pay more than 30 percent of their income on rent, and 47 percent of owners pay more than 30 percent on mortgage costs in the 2005–09 period, up from 41 percent for renters in 2000, and a much lower 21 percent for owners in 2000. In particular, the increase in housing burden for homeowners has increased dramatically—a 124 percent increase in the CC between 2000 and 2005–09. This striking increase is not mirrored in the City of Saint Paul and Ramsey County, whose ownership cost burdens increased by 68 percent and 71 percent, respectively, in the last decade.

Figure 4.8 shows the variation in extreme housing burdens across the corridor with the median gross rents labeled by block group. Note that areas with a high proportion of households with an extreme rent burden do not necessarily overlap with areas having a relatively high median gross rent. This is a possible indication that the current supply of affordable housing is still not meeting the affordability levels needed by low-income residents in the area.

FIGURE 4.8: EXTREME RENT BURDEN AND MEDIAN GROSS RENTS IN THE CENTRAL CORRIDOR, 2005–09



Source: American Community Survey 2005–2009 5-year Estimates; City of Saint Paul; Metropolitan Council GIS.

Impact Analysis: Availability of Affordable Housing

Summary of Findings: Impact Assessment

- According to market projections, nearly 7,000 new residential units may be built in the station areas by 2030, of which several hundred may be affordable if projects use the city or Housing and Redevelopment Authority (HRA) funding.
- The percent of existing subsidized affordable housing units likely to decrease, increasing existing housing burdens and potentially leading to involuntary displacement.
- Rising rents and home values will decrease the amount of market-provided affordable housing.
- If property values near transit stations continue to rise, acquisition of land for affordable housing near transit will be more difficult due to higher land costs.

There are a few ways that the rezoning can affect affordability and involuntary displacement in corridor neighborhoods. Current, subsidized affordable housing units located on properties being rezoned to accommodate for higher density may be under the greater pressure of their affordability contracts lapsing and converting to market-rate units. Pressure may also cause complete redevelopment as property values increase. Residential properties not being rezoned, but adjacent to land with high or medium potential for redevelopment within the rezoning area, may experience pressure for redevelopment, especially if a large development is proposed nearby.

Many subsidized, affordable housing units may be lost due to rising property values, redevelopment, and expiring funding contracts. While few subsidized properties are located on parcels identified to have high or medium redevelopment potential, many subsidized units (1,143) are located in the rezoning area. None of these units are public housing and only one is publicly owned. In this area, as the allowable density and uses increase on parcels—even though they may not redevelop in the short or medium term—property values may rise with the transit premium, leaving subsidized properties in private ownership vulnerable to potential conversion to market-rate housing as their contracts expire. The City of Saint Paul Housing Action Plan has stated that 399 currently subsidized units in the Central Corridor will be preserved by 2013. It is unclear what mechanisms will be used to ensure that those units are preserved. It should be noted that it costs about one-third less to preserve existing rental housing than to construct new units.[103]

New residential construction in the corridor may increase the amount of affordable housing, but not enough to meet current affordability needs. Under current rezoning, without city or Housing and Redevelopment Authority (HRA) assistance, these new residential units will be constructed at market rate. Where the City provides assistance for development, city policy mandates that, for rental housing, 30 percent of the total number of units be affordable to households at less than 60 percent Area Median Income (AMI); one-third of the units must be available to households at 50 percent AMI, and one-third available to those at 30 percent AMI. For owner-occupied homes, 20 percent of new units constructed with City or HRA assistance must be affordable for households earning up to 80 percent AMI, and an additional 10 percent must be affordable to households at 60 percent AMI.[104] Furthermore, the City of Saint Paul 2010–13 Housing Action Plan estimates that around 215 of the new units currently slated to be constructed in the Central Corridor within that period will be affordable to households earning 60

percent AMI or less. It is unclear what policies and programs will ensure the construction of affordable housing after 2013, or if there will be sufficient funding allocated to these goals.

Rising rents and home values will decrease the amount of market-provided affordable housing. Many block groups in the Central Corridor (30 out of the 53 block groups in the corridor) have a median gross rent less than the HUD fair-market rent for a one-bedroom household in the metropolitan area. As property values rise with the premium of transit and increased development potential, the market rate in these block groups will likely rise, leaving households in market-provided affordable housing with a higher rent burden. The City has stated, however, that maintaining the quality and affordability of this housing is a priority: "…much of the existing housing along the Central Corridor is already affordable, and the focus should appropriately be on maintaining the quality and affordability of that housing."[105]

New siting of affordable housing should be conducted with careful consideration of current school segregation by race and income. Professor Myron Orfield's research at the University of Minnesota identifies schools in the eastern submarket of the Central Corridor to be segregated and poor performing.[106] See Section 2, *Demographics and Neighborhood Characteristics* for more information. The Federal Fair Housing Act acknowledges the challenges faced by segregated schools and prohibits further segregation of schools through inappropriate concentrations of affordable housing.

Many are working passionately to ensure that all children have the opportunity to attend high-performing schools and ensure that poor performing schools to not in turn drive an economic downturn for neighborhoods. One way to support this goal is to provide choice plans where students are able to attend higher-performing schools that may not located in their neighborhoods, or by adding integrated, high-performing magnet schools such as Capitol Hill and Central High School—two high performing and integrated magnet schools in Saint Paul.

Summary of Rezoning Impacts

We have identified a few key ways that rezoning can affect affordability and involuntary displacement in corridor neighborhoods. Current subsidized affordable housing units located on properties being rezoned to accommodate for higher density may experience greater pressure to let their affordability contracts lapse and convert to market-rate units. This pressure may also precipitate complete redevelopment to capitalize on increased property values. Residential properties that are not being rezoned, but are adjacent to land with high or medium potential for redevelopment within the area being rezoned may experience pressure for redevelopment, especially if a large development is proposed nearby. Given the high housing burden in the Central Corridor, the increases in rents and property taxes may result in displacement.

Rezoning Impacts on Health

The Objective #3 impacts on health also hold for Objective #4. The housing and commercial markets in the Central Corridor is likely to change due to the addition of several thousand new residential units and increased development potential enabled in the rezoning. This will have impacts within the rezoned areas and beyond. The impact of new development on affordability can be positive for existing residents if precautions are taken to maximize the benefits of new investment. Table 4.14 outlines several policies and programs that could be implemented to ensure this outcome.

TABLE 4.14: OBJECTIVE #4 RECOMMENDATIONS AND POLICIES FOR CONSIDERATION

Broad Potential Negative Impacts	Recommendations	Potential Policies to Consider
Percent of affordable housing units likely to decrease, raising existing housing burdens, and potentially leading to involuntary displacement	• Ensure that current, subsidized units are protected from demolition or conversion to market-rate housing through clear, mandatory policies for preservation • Codify commitment to affordable housing by establishing mandatory provisions in zoning ordinance to facilitate construction of new, affordable units • Ensure those who are transit dependent and stand to benefit most from more transit, are able to live near the new light-rail line • Phase in new policies related to affordable-housing production as the market strengthens and CC becomes more densely developed.[z] Examples of triggers for phasing could include predetermined	**Zoning** • One-to-one replacement policy for affordable housing units at similar affordability levels • Require use permit based on determination of compliance before demolition of any affordable rental unit. This would minimize impact on lower-income renter households, and include relocation payments and right of first refusal to replacement units • Allow demolition of existing housing units only when it is determined that cost of repair would exceed replacement cost, or demolition is necessary to allow construction of new residential development including comparable affordable units • Establish an inclusionary zoning program or pilot inclusionary program • Reduce by right FAR and height limits to facilitate implementation of provisions that entitle developers to increased FAR and height if their project includes a specific percentage of affordable units. This will increase the likelihood that a density bonus will be feasible and used as an incentive to create affordable housing. • Provide additional incentives including expedited processing, FAR/height bonuses and/or modification of development/parking requirements in exchange for including additional affordable housing • Adopt an Accessory Unit[aa] Ordinance to create market-provided affordable housing in existing and new lower-density neighborhoods; provide additional income for lower-income and senior

[z] The Central Corridor TOD Investment Framework study released in December 2010 notes that value-capture strategies are most effective when used in conjunction with private market investment, rather than well in advance of it (Center for Transit-Oriented Development, Bonestroo and Springsted. 2010. Central Corridor TOD Investment Framework).

[aa] Accessory Units—also known as accessory apartments, guest apartments, in-law apartments, family apartments or secondary units—provide supplementary housing that can be integrated into existing single family neighborhoods to provide a typically lower priced housing alternative with little or no negative impact on the character of the neighborhood. Because the units are usually small, they are more affordable than full-size rentals (State of Massachusetts, Smart Growth/Smart Energy Toolkit. 2012. http://www.mass.gov/envir/smart_growth_toolkit/pages/mod-adu.html).

	vacancy rates, property value increases, certain percentages of residential units, schedule of dates.	homeowners • Establish linkage program requiring new retail and office development that exceeds certain gross floor area to pay fee to Housing Trust Fund, earmarked for affordable housing development on the project site or on an alternative site; alternative sites would allow developers to develop affordable housing off-site or provide land/gap financing to permanent affordable housing built by others • Specify minimum FAR requirements for residential development in mixed-use districts to help ensure development sufficient to meet housing needs • Include objective and purpose statements in the rezoning that demonstrate connections to goals and objectives related to preservation and construction of affordable housing in the CCDS **Other** • Work with City and Rondo Community Land Trust to continue land banking of properties as they become available in CC for affordable-housing development • Consider allocating 20% of new tax base raised from new development for community benefits, including development of affordable housing[bb] • Promote development of permanent affordable housing by supporting and expanding capacity of nonprofit organizations to develop and maintain affordable housing • Establish a transit-oriented development land-acquisition fund to ensure properties are banked for affordable housing near new LRT stations • Establish a financial incentive program to ensure that new affordable-housing units built in the City are a priority along the CC • Work with Minnesota state legislators to ensure low-income housing tax credits for new developments near transit • Establish property-tax abatements for new transit-oriented developments that include affordable housing and other community benefits

[bb] The recent CTOD report released in December 2010 provides this as an example of value-capturing strategies for new Corridor development.

		• Create Minnesota state law to support tax increment financing for transit-oriented development in order to support community benefits such as affordable housing and other amenities

The City of Saint Paul has several policies and programs in place to preserve, construct, and finance affordable housing in the Central Corridor. The following policies and programs that support this objective are currently being implemented.[107]

- The City Housing Plan, Housing Action Plan 2010–13, and the Central Corridor Development Strategy include policies to create and preserve affordable housing. We are aware of a few strategies for the implementation of some of these policies.
- Where the city provides assistance for development, city policy mandates that, for rental housing, 30 percent of the total number of units must be affordable to households earning less than 60 percent Area Median Income (AMI); one-third to households at 50 percent AMI; and one-third to households at 30 percent AMI. For owner-occupied homes, 20 percent of new units constructed with City or Housing and Redevelopment Authority (HRA) assistance must be affordable for households earning up to 80 percent AMI, and an additional 10 percent to households at 60 percent AMI.[108]
- The City received a $2 million loan from the Met Council and Family Housing Fund to acquire sites through the Land Acquisition for Affordable Housing (LAAND) program for future affordable housing development along the CC. The city has acquired two properties upon which it will build within the next five years.[109]

Safe and Sustainable Transportation

Overview

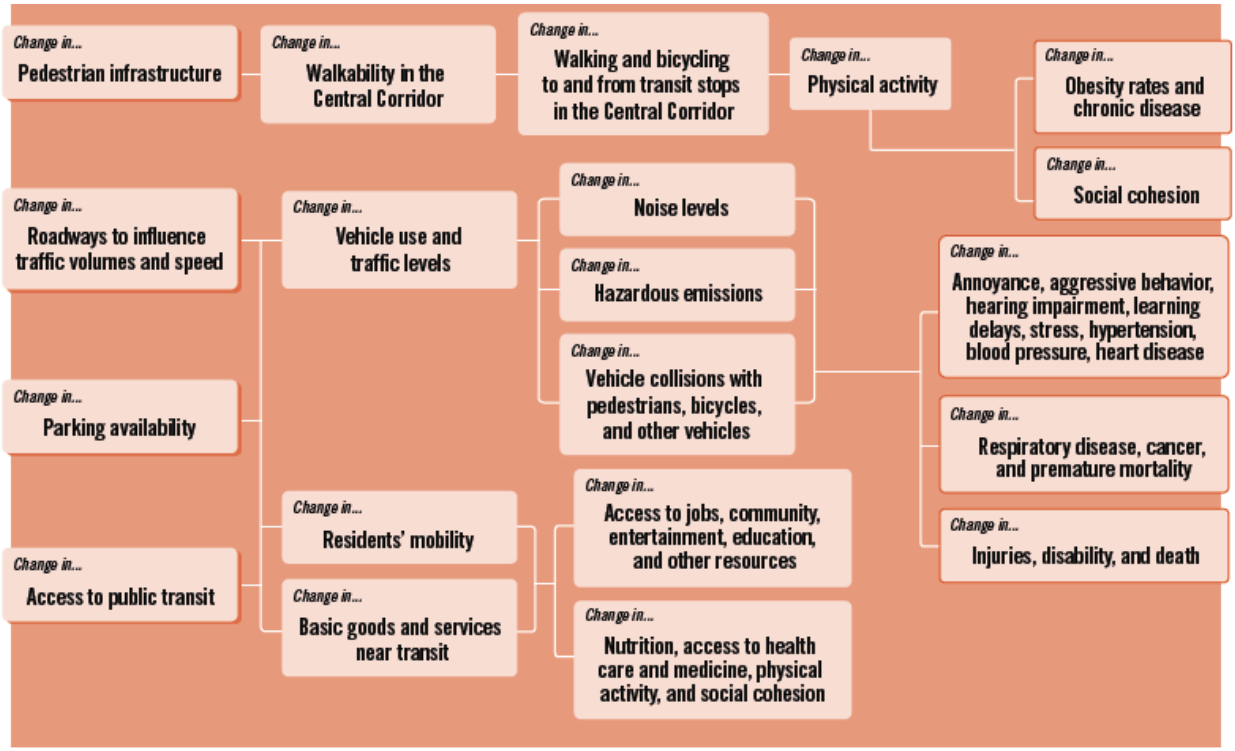
The development of the Central Corridor light-rail line will provide a new source of mobility for corridor residents. The zoning changes along the corridor will be instrumental in creating more transit riders, potentially reducing dependence on car use, and increasing access for transit-dependent, disabled, and low-income residents. The new light rail is only one piece of the neighborhood transportation system. Promoting use of, and access to, reliable bus service and bicycle and pedestrian infrastructure is also necessary for a truly sustainable transportation system. All three components must be coordinated with one another and with the new changes to the built environment that will result due to the transit line and the rezoning.

The increase in land zoned for residential uses will undoubtedly add to the population in the Central Corridor, giving more people access to transit, potentially increasing ridership levels not just for the new light rail line but also on existing bus lines that traverse corridor neighborhoods. This potential increase in ridership could further exacerbate demand for safer pedestrian and bicycle connections throughout the corridor and, without adequate safety improvements, may result in increased pedestrian or bicyclist injuries.

There are many documented connections between transportation and health outcomes. For example, without adequate public transportation, transit-dependent residents will not have easy access to

employment and educational opportunities or amenities that significantly influence health. Another impact on health relates to noise and air quality. Neighborhoods close to roads with high traffic volumes may suffer from increased noise levels and polluted air. Also, adequate pedestrian and bicyclist infrastructure are necessary provisions to create safe opportunities to get around and allow people to increase physical activity levels. Physical activity helps to reduce risk of some diseases. Figure 4.9 illustrates the various connections between transportation and health.

FIGURE 4.9: TRANSPORTATION EFFECTS ON HEALTH



Source: Adapted from Human Impact Partners, 2011.

There is a significant amount of research regarding the relationship between safe, sustainable transportation availability and health. Several research findings, complied by the HDMT, are listed below.

Transportation and Health-Based Rationale

- Research has found that proximity to public transit helps to determine travel choice.[110]
- Twenty-nine percent of people using transit to get to work meet their daily requirements for physical activity from walking to work.[111]
- "Neighborhoods characteristics shape whether people use public transportation, walk, bike, or drive. These factors are commonly referred to as the 5 D's. They are: 1. Net-Residential Density– "denser developments generate fewer vehicle trips per dwelling unit than less dense developments"; 2) Job-Housing Diversity - "having residences and jobs in close proximity will reduce the vehicle-trips generated by each by allowing some trips to be made on foot or by bicycle"; 3) Walkable Design - "improving the walking/biking environment will result in more non-auto trips and a reduction in auto travel" (with synergistic effects with density and diversity); 4) Destinations - "households situated near the regional center of activity generate

fewer auto trips and vehicle-miles of travel"; 5) Distance to Rail Mass Transit Station - "transit ridership rates among station-area residents increase exponentially as the distance to a rail station declines. Land use and transportation planning that does not incorporate the above factors contributes to increases in miles driven in motor vehicles, along with the associated hazards from air and water pollutants, noise, and vehicle collisions. Heavy volumes of local vehicle traffic also create traffic "hotspots" and contribute to unfair burdens of air pollution, noise, and stress for those living adjacent to busy streets and highways, and degrade the environment for walking, biking, and public transit."[112]

- Walking or biking to work helps individuals meet minimum requirements for physical activity.[113] Twenty-nine percent of those using transit to get to work meet their daily requirements for physical activity by walking to work. Health benefits of physical activity include a reduced risk of premature mortality and reduced risks of coronary heart disease, hypertension, colon cancer, and diabetes mellitus.[114]
- Extensive travel in motor vehicles (many trips and/or long travel times); choosing driving over other transportation modes; and unsafe traffic mixes of motor vehicles, pedestrians, and cyclists all lead to increased risk of injury and death.[115]
- Traffic volume increases the risk of pedestrian, cyclist, and motorist injury and death.[116] Pedestrians, cyclists, and motorized two-wheeler users bear a disproportionate share of the global road-injury burden and are all at high risk of crash injury. A high-quality pedestrian environment can support walking both for utilitarian purposes and for pleasure. Recent studies in the United States have demonstrated that people walk, on average, 70 minutes longer in pedestrian-oriented communities.[117]
- Increased physical activity reduces risk of premature mortality and coronary heart disease, hypertension, colon cancer, and diabetes mellitus. Regular participation in physical activity appears to reduce depression and anxiety, improve mood, and enhance ability to perform daily tasks throughout the life span.[118] [119]
- Parental concerns about the lack of traffic lights and controlled crossings on their child's school route reduce the likelihood that their child will actively commute to school.[120]
- In an evaluation of a Safe Routes to School program, the presence of pedestrian safety measures at street crossings was associated with a greater likelihood of walking to school for children.[121]

Objective 5: Maintain and Improve Affordable and Accessible Public Transportation

Existing Conditions Analysis: Transit Access in the Central Corridor

The importance of zoning for transit is in the coordination between transportation and land use. A quarter mile is the distance that most people are willing to walk to transit regardless of the pedestrian infrastructure available. Therefore, areas within a quarter mile of key transit stations are critical areas of coordination between zoning and transit use.

Transit accessibility is especially critical for lower-income residents and other transit-dependent populations who rely heavily on transit to travel to work, the grocery store, medical appointments, and other basic needs. According to national data, racial minorities are four times more likely than whites to rely on public transportation for their commute to work.[122] Effective transit can also be a potent vehicle for economic stabilization, because when residents can get by without a car—as many low-income families must due to high expenses associated with car ownership—they can save an average of $9,500 annually based upon 2008 gas prices.[123] In addition, given low-income people and people of color's high reliance on transit, this population's increased ridership can create consistent revenues to maintain a

financially sustainable transportation system. Therefore, transit systems can benefit from careful coordination and planning for future concentrations of low-income households and other transit-dependent populations to ensure their system is not only financially sustainable, but also serves those most in need of transit access.

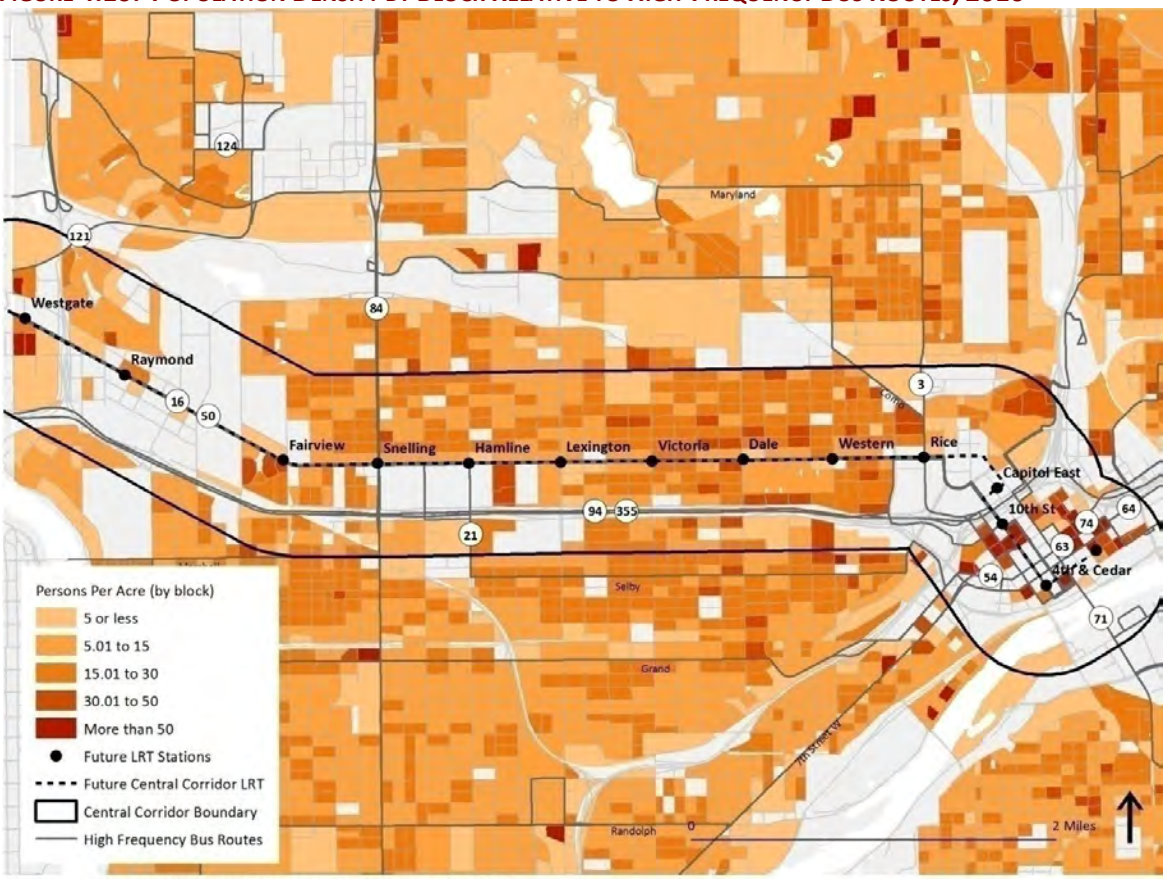
Transit ridership is high in the Central Corridor. Transit riders represent 12 percent of the corridor population 16 years and older who work outside of the home, compared to 9 percent in the city and 7 percent in the county. These percentages have remained steady between 2000 and 2005–09 period.

Where do current transit riders live? In the 2005–09 period, the west, east, and downtown submarkets had the highest estimated number of commuters in the CC taking public transportation to work, with just under 1,100 located in the east submarket alone. Areas with high percentages of transit commuters correlate with block groups that have a high proportion of households without access to a car. See Figure 4.10 for details and geographic distribution.

What geographic areas does the current transit system serve? In general, the corridor is well-served by transit based on data from Metro Transit, the region's transportation operating agency. About 81 percent of the population currently lives within a quarter-mile of a high-frequency bus route, which is defined as a route with peak-hour headways[cc] of 20 minutes or less. Figure 4.10 shows population density by block, relative to the location of high-frequency bus routes that traverse the corridor. Note that the east side of the corridor lacks substantial connectivity to north-south routes. In addition, community members have voiced concerns about transit access in the CC.

[cc] A headway is a measurement of the distance/time between vehicles in a transit system.

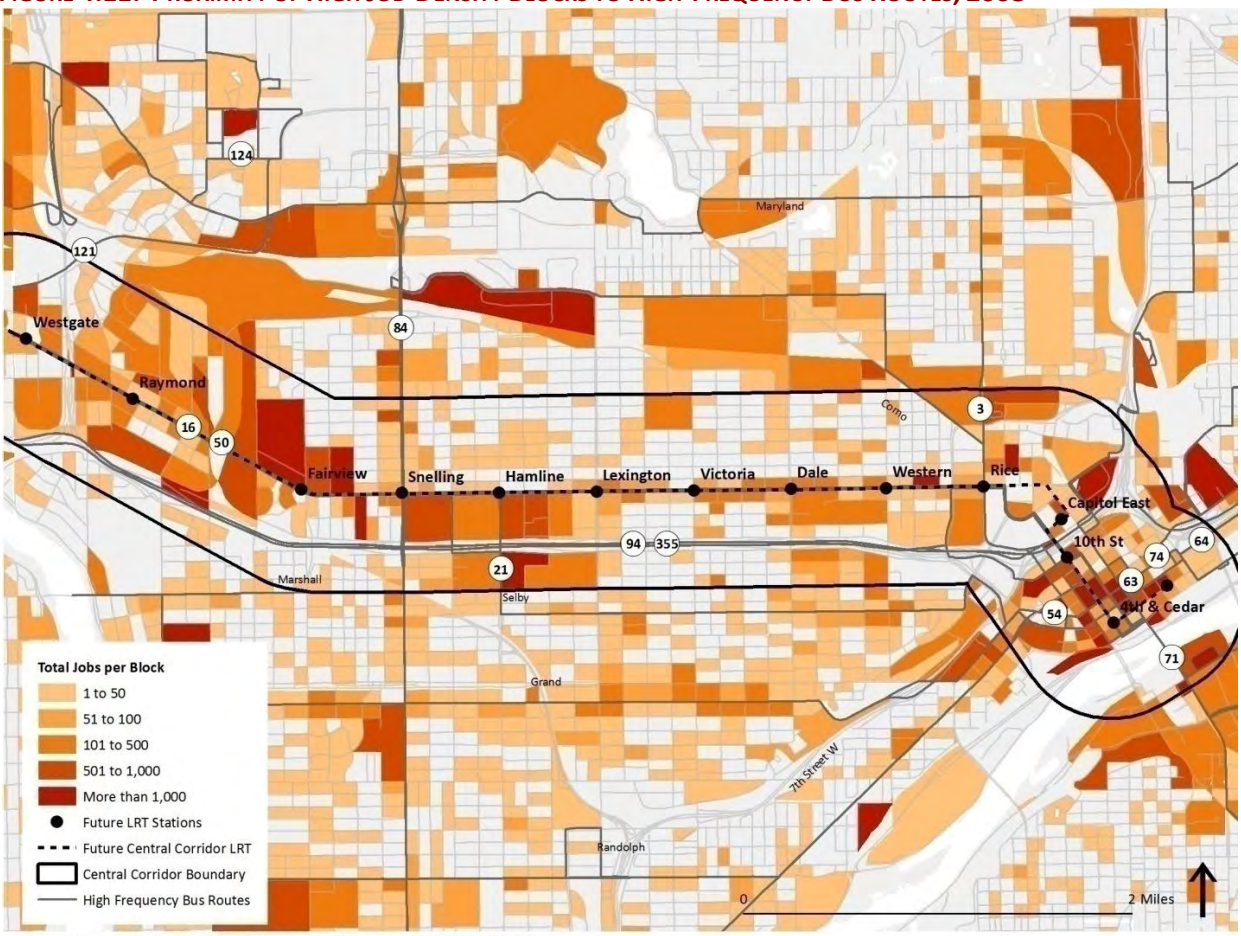
FIGURE 4.10: POPULATION DENSITY BY BLOCK RELATIVE TO HIGH-FREQUENCY BUS ROUTES, 2010



Source: US Census 2010; Metro Transit; Metropolitan Council GIS; City of Saint Paul

Some parts of the corridor are better served than others, with access downtown being far superior to other submarkets. This is logical considering that downtown Saint Paul is a major economic center in the region, with the highest proportion of total jobs in the Central Corridor. Figure 4.11 shows job density in relationship to high-frequency bus routes.

FIGURE 4.11: PROXIMITY OF HIGH JOB-DENSITY BLOCKS TO HIGH-FREQUENCY BUS ROUTES, 2008



Source: Bureau of Labor Statistics, 2008; Metropolitan Council GIS; City of Saint Paul

Block groups that are not within a five-minute walk of these high-frequency routes are located on the northern side of the corridor. While there is a local bus route that travels along Minnehaha Avenue that serves the northern side of the corridor, it arrives only twice an hour during rush hours and does not qualify as high frequency. These block groups are not within walking distance of the high-frequency north-south bus routes that run in the corridor. The buses are the 84, along Snelling, and the 3, along Rice and Como.

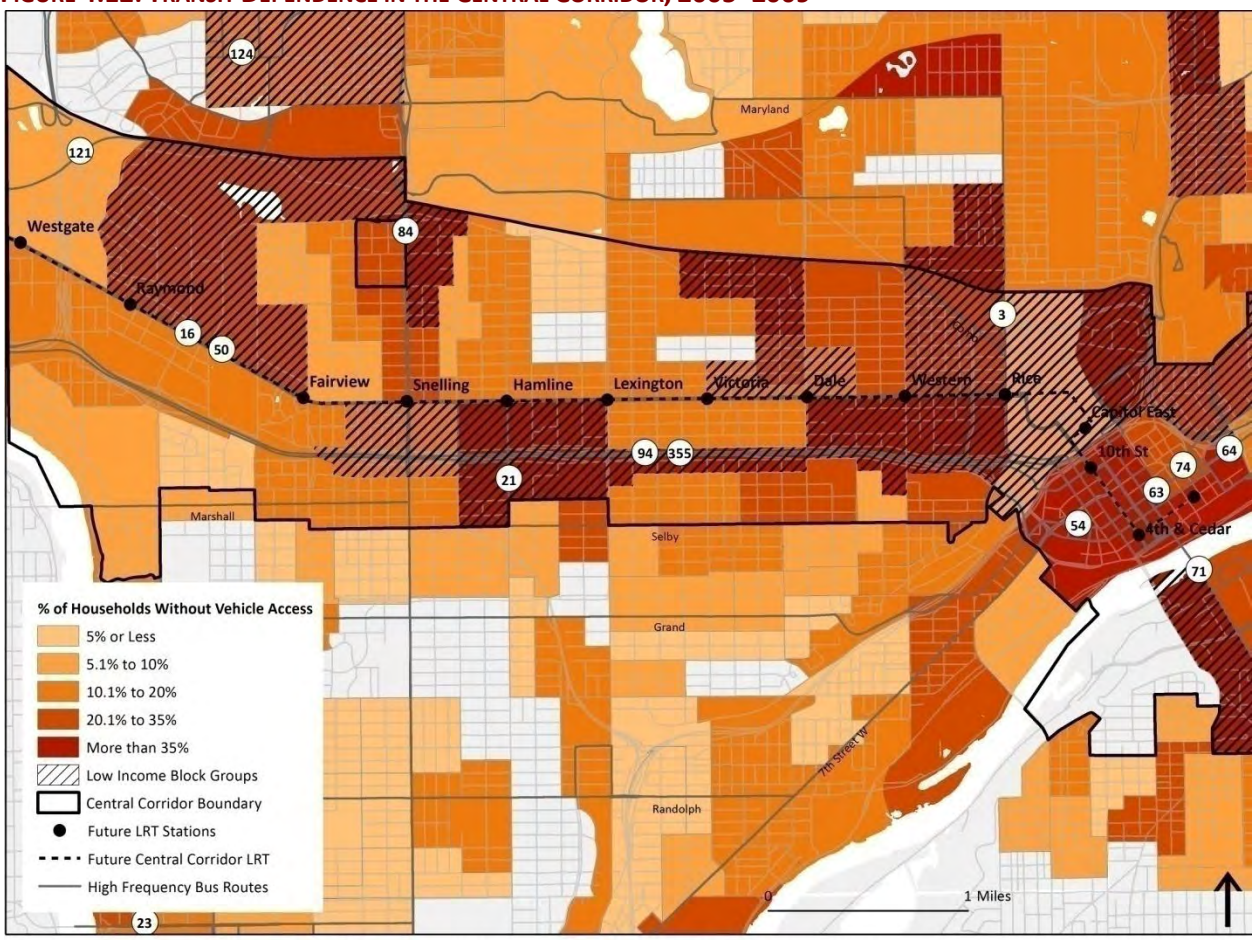
Do vulnerable populations have access to transit? A majority (92 percent) of low-income households[dd] live in block groups that are located within a quarter-mile of a high-frequency bus route.[ee] A large majority of affordable housing units are also well-served by transit.

[dd] Low-income households are defined here as those with a household income at or less than 150 percent of the federal poverty rate for a family of three.

[ee] Data on income is not available at the block level, so the project used data at the block-group level. There may be some block groups that are farther from transit than a quarter-mile, but have erroneously been designated as being within a quarter of a mile. As a result, some low-income households may be counted as being closer to transit than they actually are. There is no way for us to account for this discrepancy.

Figure 4.12 shows the proportion of households without access to a vehicle, in relationship to low-income block groups. Many block groups that have higher levels of households without car access are also low-income, particularly those in the east submarket, the southern half of the central submarket, and the eastern side of the capitol submarket. In contrast, there are some block groups in the downtown area that have high levels of households without car access, yet are not low income. The higher-density environment of the downtown area may be attracting "choice riders," those who voluntarily relinquish their cars and take transit, ride bikes, or walk not out of necessity, but for other reasons.

FIGURE 4.12: TRANSIT DEPENDENCE IN THE CENTRAL CORRIDOR, 2005–2009



Source: American Community Survey 2005-2009 5-Year Estimates; City of Saint Paul; Metropolitan Council GIS; MetroTransit

The ridership within the corridor is, in general, well-connected via public transportation, but there are some neighborhoods with higher proportions of transit-dependent populations[ff] that are not located within a convenient distance to transit. In particular, there are blocks in the east submarket, on its northern edge, that are predominately low-income, include many households without access to a vehicle, and are not located within a quarter mile of a high-frequency bus route.

[ff] Transit dependence is defined as block groups with a high number of low-income households without access to cars.

Overall, transit use in the Central Corridor is high and rising. There are also a significant number of low-income households in the CC, as discussed in Section 2, *Demographic and Neighborhood Characteristics*; as national and metropolitan statistics indicate, low-income households are more likely to ride public transportation than their higher-income counterparts.[124] The east and capitol submarkets are areas where many of the lowest-income households reside. Therefore, these areas are in the most need of reliable, affordable, and quick transit access. Because many households are already located in close proximity to transit, infrastructure that connects individuals to bus stops and transit stations will be key to ensuring safe transit access.

Impact Analysis: Changes in Demand for Transit

Summary of Findings: Impact Assessment

- Increases in residential and employment density will increase total number of residents with access to transit
- There will be more demand for north/south bus service connecting to, and from, the light rail

Increased access to transit will likely increase ridership along existing bus routes. The Central Corridor population around the station areas alone is expected to increase by over 16,000 people according to the market build-out scenario and up to nearly 75,000 people according to the maximum allowable build-out scenario; the latter of which would more than double the existing Central Corridor population. This anticipated increase in population will most likely result in increased transit ridership. Increased ridership along University Avenue, where higher density projects will be concentrated, will likely result in increased demand for additional north/south bus connections beyond what currently exists in the corridor. In particular, as described in the Objective #5 *Existing Conditions Analysis* section above, there is a need for additional north/south bus connections in the east and central submarkets, which will be exacerbated by the addition of new residents and increased ridership.

It must also be noted, however, that an increase in transit-oriented development will not necessarily bring new residents or workers who rely primarily on public transportation for mobility. Research has shown that as neighborhoods near transit stations become wealthier, vehicle ownership also goes up.[125]

In addition, residents have expressed concern about the potential loss in frequency of the number 16 bus once the light-rail line begins. The 16 travels east/west along University Avenue, making numerous stops that are about a quarter mile apart while the majority of the light-rail stations will be approximately a half mile apart. Residents have expressed a need to maintain the full schedule of east-west bus routes in addition to the light-rail line, because the bus route makes more stops between downtown Saint Paul and downtown Minneapolis.

Summary of Rezoning Impacts

The largest potential impact of the rezoning on transportation access is the expected increase in the populations of workers and new residents. This development will likely increase ridership along the light rail and along existing bus lines that traverse the corridor, with the potential to push up demand for more transit service and additional routes.

Rezoning Impacts on Health

The increase in residential and job density around transit will likely have positive impacts on health. To the extent that new residents and workers are transit dependent, the increased density can help increase mobility and access to jobs and retail services that were not previously accessible. In addition, increased transit ridership means fewer vehicle miles traveled, which, in turn, will lower air and water pollution. However, if development brings in residents that do not switch their mode of transportation from driving to public transit, any positive health outcomes could be cancelled out. Table 4.13 shows policies and programs that could be implemented to encourage positive health impacts for the Central Corridor.

TABLE 4:13: OBJECTIVE #5 RECOMMENDATIONS AND POLICIES FOR CONSIDERATION

Potential Broad Negative Impact	Recommendations	Policies
Increased demand for north-south bus routes that do not currently exist	Explore providing new routes to give more access to the publicly funded LRT	**Other** • Maintain and expand north-south bus connections throughout CC, in particular in areas with limited north-south connections • Require the development of or offer incentives (via development exactions) to create supportive infrastructure for transit in new developments, such as indoor waiting rooms and secure bike parking
Loss of frequency of east-west bus route	Ensure that current transit routes are maintained	**Other** • Maintain the 16 bus at current levels

Objective 6: Safe, Connected Biking and Walking Routes to, from, and across Transit Stops

Bicycle and pedestrian infrastructure must also be coordinated with zoning. Quality infrastructure, such as sidewalks comfortably wide enough to accommodate a considerable number of pedestrians; ADA accessible sidewalks; clearly marked and well-connected bike paths, and; safe, ADA-accessible street crossings, can impact the accessibility of public transportation. In particular, they can expand the geography of transit stops from a quarter mile to a half mile or in some cases even further with adequate and safe walking/biking infrastructure. People can feel safer and well connected to transit even when the distance is longer.

Bicycle and pedestrian infrastructure can also affect car usage for short trips and the viability of neighborhood retail. People may opt to walk or bike short distances or walk or bike to transit, if the infrastructure is safe and adequate. This decreased motor vehicle miles travelled and increased foot traffic for neighborhood retail. Areas with existing high densities or rezoned for high densities, particularly densities of low- income and transit-dependent people, should receive special attention in evaluating the need for bicycle and pedestrian infrastructure in order to maximize benefits.

Existing Conditions Analysis: Active Commuting in the Corridor

Summary of Findings: Existing Conditions

- Seven percent of CC commuters walked to work in the 2005–09 period, compared to 5 percent in Saint Paul and 3 percent in Ramsey County. Many of these walkers are in the downtown area, where they represented 22 percent of commuters.
- Only 25 percent (14) of intersections from a sample of 55 met the definition of a safe intersection. Additionally, only one intersection along University Avenue met the criteria for a safe pedestrian intersection (University and Western).
- There is a relatively substantial proportion of bike commuters in the CC: 2 percent of workers in the 2005–2009 period. Most bike commuters live in the west submarket.
- Cars running into pedestrians are a more common incident than cars running into bikers. Almost half of all pedestrian crashes in the 2003–2007 period occurred in the West submarket.

Where in the Central Corridor do individuals walk and bike? Approximately 2 percent of CC workers 16 years and older who commute to work did so via bike in 2005–09, compared to 1 percent in the city and county, which is up from 1 percent in 2000. Block groups with the highest proportions of bike commuters are located in the west submarket. Interestingly, there were no estimated bike commuters in 2009 in the capitol and downtown submarkets.

Many Central Corridor residents walk to work, representing 7 percent of commuters in 2005–09, compared to 5 percent for Saint Paul and 3 percent for Ramsey County. A large majority of those walking to work are in the downtown area, where an estimated 22 percent of commuters walked to work in 2005–09.

Does the current pedestrian environment promote safe walking and biking? There are several intersections in the Central Corridor that are hazardous for pedestrians. After studying a sample of 55 intersections within the corridor, we found that only 25 percent (14 in total) met commonly accepted criteria for adequate pedestrian infrastructure such as:

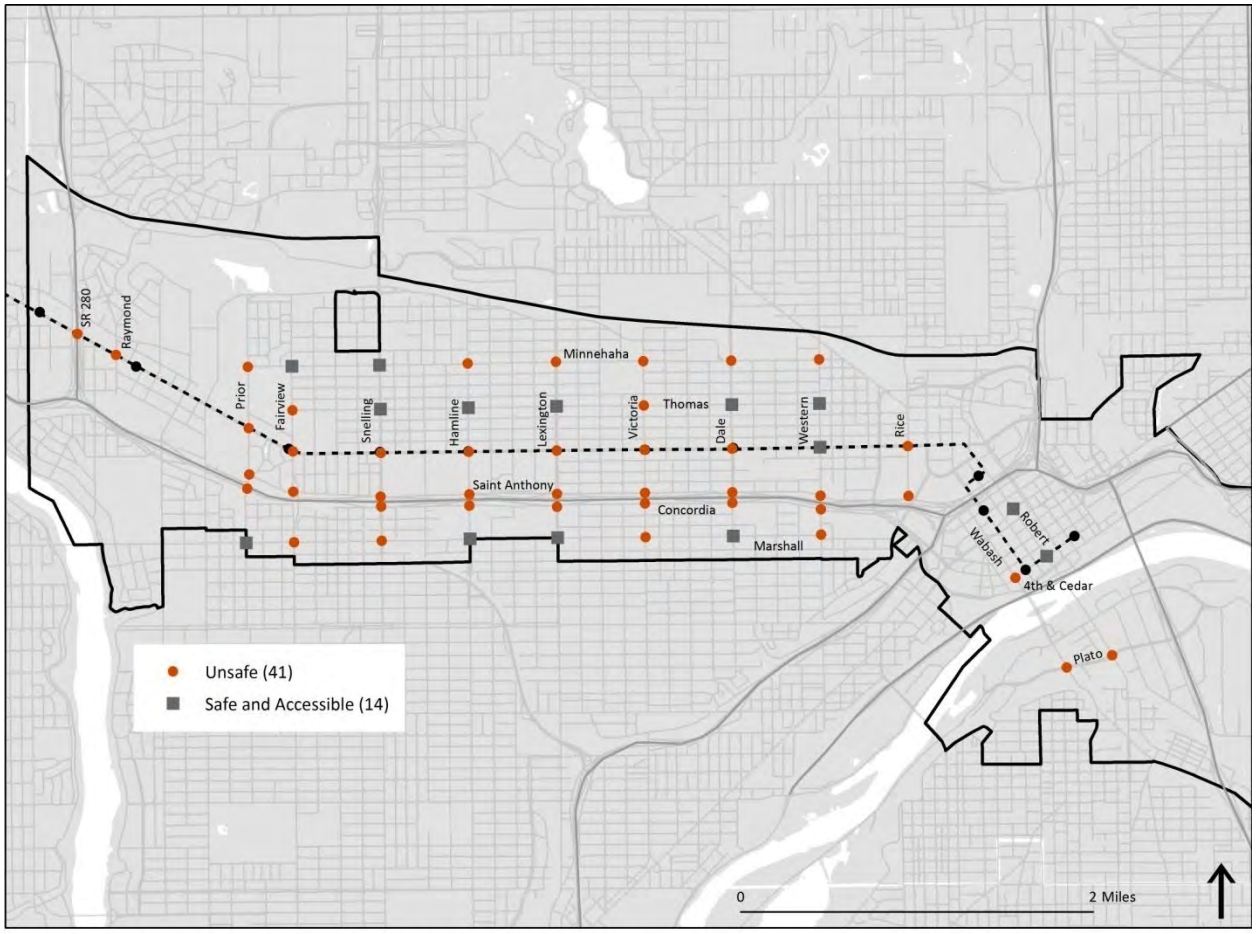
1. Presence of a curb cut on each corner
2. Striping at the crosswalks
3. Presence of a timed signal for pedestrians (if intersection had a signal)
4. Absence of the following hazardous conditions:

    - Extremely narrow sidewalks
    - Wide curb radii at intersections
    - Designated right-hand turning lane for vehicles
    - Large driveways adjacent to the intersection
    - Extremely long crossing distance.

Figure 4.13 shows that only one intersection along the proposed LRT line is classified as safe for pedestrians, at University and Western. It is clear that more must be done to ensure safe pedestrian access to new transit, new amenities, housing and jobs that are in the future of the Central Corridor. During the period 2003–07, there were a total of 35 bike crashes and 48 pedestrian crashes along

University Avenue between Beacon and Cedar. Nearly half the pedestrian crashes occurred between Beacon and Hamline alone (22), in the western portion of the corridor.

FIGURE 4.13: INTERSECTION QUALITY IN THE CENTRAL CORRIDOR AT SELECT CROSSINGS



Source: City of Saint Paul; Metropolitan Council GIS; Google Earth data digitized by Human Impact Partners.

How is current pedestrian and bike access around bus stops and proposed light rail station areas? As demonstrated in Figure 4.13, only one intersection along the proposed light-rail transit line has the appropriate infrastructure to qualify as safe for pedestrians. It should be noted that the City has proposed making several improvements to bike and pedestrian infrastructure in the immediate areas around light-rail stations. There are plans for a larger network of pedestrian and bike connectivity beyond the station areas, but many projects are awaiting funding.

Impact Analysis: Pedestrian Safety

Summary of Findings: Impact Assessment

- Increased exposure to unsafe pedestrian infrastructure resulting from higher residential and employment density near station areas
- Development standards in the rezoning will help support site design that promotes pedestrian-friendly environments

Increased pedestrian injury and/or fatalities from exposure to unsafe intersections with inadequate pedestrian infrastructure are likely.[gg] Research has shown that growth in residential density predicts increases in vehicle injury collisions[126]: this is the case independent of traffic volumes.[127] [128] In addition, if the increase in density along the corridor increases vehicular traffic due to an upsurge in residents or in commercial destinations, then pedestrians will be at a greater risk for collision-related injuries if safety measures are not included.[129]

Contrary to the research cited above on vehicle injury collisions, there is also research showing that there is safety in numbers: increases in the number of pedestrians can increase driver awareness and reduce the number of collisions.[130] This is somewhat controversial, because the safety-in-numbers hypothesis has been challenged in the literature for relying too heavily on the correlation between pedestrian fatality rates and regional walking behaviors to explain the risk or incidence of injury. One study argues that while the risk of injury falls with increasing pedestrian numbers, the absolute number of injuries will rise due to the sheer number of persons walking.[131]

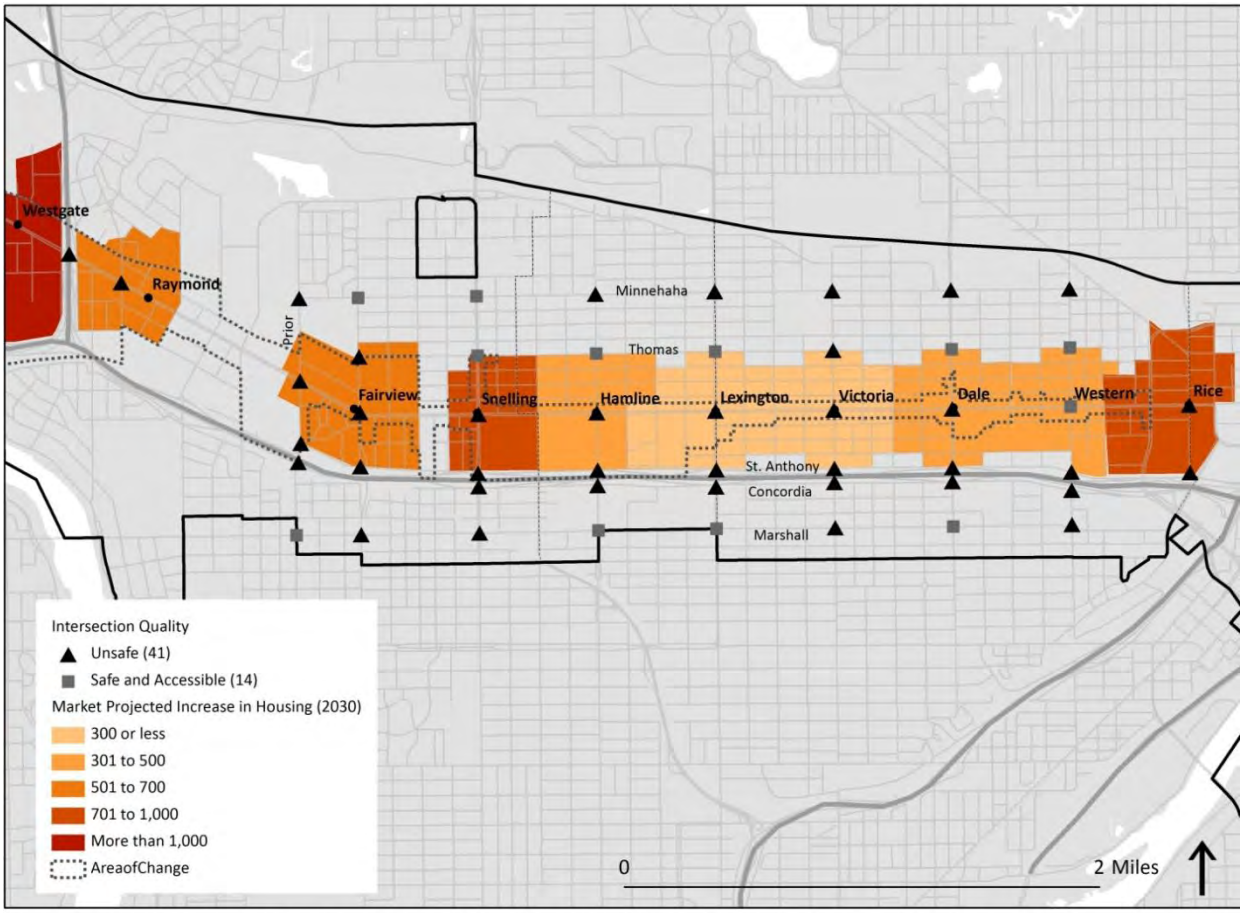
While the increase in walking and biking in the corridor has several positive health and environmental benefits, these benefits will not be fully attained if a safe infrastructure is not created. Figures 4.14 and 4.15 delineate intersections within the corridor that have less-than-adequate pedestrian infrastructure. Figure 4.14 has an overlay of the anticipated increase in jobs by station area, according to the market scenario. Figure 4.15 has an overlay of the anticipated increase in housing units, according to the market scenario. Note that the station areas with the highest projected population growth (Westgate, Fairview, and Snelling) also have poor pedestrian infrastructure at key intersections within the rezoned areas.

[gg] See definition of safe pedestrian infrastructure above for more information.

FIGURE 4.14: UNSAFE INTERSECTIONS FOR PEDESTRIANS RELATIVE TO PROJECTED INCREASES IN JOBS BY STATION AREA

Source: Central Corridor Development Strategy; Planner's Estimating Guide; City of Saint Paul; Metropolitan Council GIS; Google Earth data digitized by Human Impact Partners

FIGURE 4.15: UNSAFE INTERSECTIONS FOR PEDESTRIANS RELATIVE TO PROJECTED INCREASES IN HOUSING BY STATION AREA



Source: Central Corridor Development Strategy; Planner's Estimating Guide; City of Saint Paul; Metropolitan Council GIS; Google Earth data digitized by Human Impact Partners

Summary of Rezoning Impacts

The anticipated increase in development resulting from the rezoning will likely increase the population of the Central Corridor—both workers and residents. This increase in population, as well as the increase in transit opportunities, will increase the number of persons walking and biking in and around key intersections along University Avenue and parallel streets. While the city has proposed several improvements to the pedestrian and bicycle infrastructure in the corridor, the current state of infrastructure at key intersections poses a risk to pedestrians.

Rezoning Impacts on Health

More residents engaging in physical activity can reduce obesity rates and the incidence of other chronic diseases related to diet and exercise. However, the availability of pedestrian and bicycle infrastructure is important to secure these outcomes. Lower-income and transit-dependent populations who may walk or bike regardless of infrastructure improvements are increasingly at risk for collisions with vehicles. The anticipated increase in redevelopment in the Central Corridor will likely have a positive effect on the availability and quality of pedestrian and bicycle infrastructure in the corridor. The development standards included in the rezoning will ensure that site design will promote pedestrian-friendly

environments. To ensure that these positive benefits of increased pedestrian and bicycle activity are maximized, below are a set of policies and programs that could be implemented to increase safety in the Central Corridor.

TABLE 4:15: OBJECTIVE #6 RECOMMENDATIONS AND POLICIES FOR CONSIDERATION

Broad Potential Negative Impact	Recommendations	Policies
Increased exposure to unsafe pedestrian infrastructure due to increased population density	• Improve pedestrian and bike infrastructure to provide safe access to transit stations, commercial districts; improve walkability overall • Ensure that areas ¼–½ mile are also included in pedestrian and cyclist improvements in order to expand transit access from ¼ to ½ mile • Require or provide incentives for new developments to assist in installation of infrastructure improvements for pedestrians and bicyclists	**Zoning** • Require or provide incentives for large-scale developers to provide funding to support off-site pedestrian and bicycle infrastructure improvements, bus shelters, and other amenities **Other** • Enforce ADA requirements at transit stations, sidewalks, and commercial districts • Ensure that snow clearance is coordinated and enforced to clear sidewalks, bike paths, rail lines, bus stops, light rail stations • Consider allocating 20% of new tax base raised from new development for community benefits, including new infrastructure linking residents living ¼–½ mile away from transit • Clarify what new amenities community residents can expect as a result of LRT and new development

The City of Saint Paul has already expressed a commitment to improving bicycle and pedestrian safety and accessibility in the Central Corridor. The following policies and programs that support this objective are currently being implemented:

- More than $18 million has been allocated for the construction of an additional LRT station, as well as enhancements to the streetscape, including existing pedestrian crossings along University Avenue.
- The City has also adopted the Bike Walk Central Corridor Action plan, which delineates priorities for installation of new bike and pedestrian infrastructure. See http://www.stpaul.gov/index.aspx?nid=2842 for more information.
- Complete streets ordinance will be implemented given funding from a Federal Department of Transportation TIGER II grant received by the city.

Overview: Summary of Assessment Findings

Based on the project's analysis, there will be positive and negative outcomes. Rezoning University Avenue to accommodate higher-density, mixed-use, transit-oriented development will likely increase the number of jobs available, because of office and retail development growth. The anticipated increase in housing, due to the expansion of land zoned for higher-density residential development will bring more people to the corridor, increasing the customer base for businesses, transit access, and demand for additional bus service, especially along key north/south corridors.

However, disadvantages may arise for existing corridor residents and business owners. While the increase in jobs may aid in decreasing unemployment for some corridor residents, many of the jobs that match educational attainment of current residents will be low paying and result in little movement up the income ladder. Higher-wage jobs will likely increase as well, but these jobs will most likely be in occupations that require a bachelor's degree or higher, which will prevent many corridor residents from applying, unless there are new training and educational programs put in place. Furthermore, as industrial land is rezoned for commercial and residential uses, many manufacturing and wholesale-trade jobs with decent wages and lower-education requirements may eventually relocate as property values rise. The loss of industrial land also limits the city's ability to plan for future industries linked to industry uses that could provide higher-wage careers for those with limited education levels and/or those with language barriers.

Small and minority-owned businesses along University Avenue may be pressured to relocate because of impending redevelopment, or they may face rising commercial rents if property values increase and market changes occur. Technical and/or financial support may help these businesses avoid displacement, which threatens to undermine the cultural identities and networks found in the corridor today. The reduction in allowable densities east of Lexington Parkway along University Avenue, however, will help to reduce the pressure on existing small and minority-owned businesses in the east submarket.

Although an increase in land zoned for higher density residential units will make it easier to construct affordable housing in the Central Corridor, the likelihood of the creation of *subsidized* affordable housing that meets the current demand of CC residents hinges on incentives and policies to support such development. The influx of market-rate housing currently enabled by the zoning may encourage the gentrification in areas where the CC is already at risk for gentrification—without careful planning, the process could lead to displacement. As property values continue to rise, rents and home values may also rise to a point where current residents may have to choose between paying a higher rent burden and moving out of the neighborhood. The current housing burdens in the corridor are high, allowing limited room for increased housing costs to be absorbed in already tight household budgets. The city, in several documents, has stated goals that aim to mitigate these impacts, but there are no direct provisions in the proposed rezoning to prevent displacement, offer incentives for new affordable units, or maintain existing affordability.

Finally, the anticipated population increase resulting from higher allowable densities and more land zoned for residential development means that more residents will have access to both light rail and bus transit. Unfortunately then, more persons will also be exposed to hazardous pedestrian conditions, especially along the western end of the corridor. There are policies outside of zoning that the city is looking to employ in order to support pedestrian and bike infrastructure.

Across the board the most important finding of this analysis is the vulnerability of communities of color and low-income individuals in the Central Corridor to the potential negative impacts of the rezoning and new light rail line. With lower educational attainment, higher unemployment, lower incomes, higher housing burdens and less access to cars, low-income people and communities of color must be carefully considered and heard in any decision-making processes that make significant changes in the Central Corridor. The community organizing and leadership among low-income people and communities of color in the Central Corridor are also inspiring. The assets of the community must be recognized, built upon, and supported as the light rail line is built and the Central Corridor develops.

5. Creating a Healthy Corridor for All: Five Policy Recommendations for Moving Forward

Based on the findings of the impact analysis described in the previous section, the project team developed an inventory of policy options selecting from best practices in equitable development. The policy options provided recourse to mitigate the negative impacts identified in the analysis and maximize positive health outcomes.

After consideration of the local context and community needs, the Community Steering Committee (CSC) prioritized five policy recommendations and decided to focus much of their advocacy around the development and preservation of affordable housing. The risk for gentrification and potential for displacement is of concern to the CSC. They want to see the City Planning and Economic Development Agency carefully consider and develop their policies in order to limit displacement possibilities and minimize the burden of potential increases in housing and business costs.

Saint Paul, not unlike the greater Twin Cities region, is experiencing the strains of the current Great Recession. This places a higher burden on developers to secure funding sources and take risks on new development. These regional and national market trends are an important consideration for any rezoning proposal. Despite these larger trends in the economy, however, it must be acknowledged that markets are fragmented and driven to some extent by different factors. Some smaller markets, for example, may be thriving in the midst of harsher economic conditions. It is also important to note that although the market fluctuates, the built environment remains for decades, if not centuries. It is, therefore, important to maintain in the zoning the flexibility and provisions that hold a long-term vision.

The CSC recognized the current market dynamics of Saint Paul and crafted five priority policy recommendations for the rezoning proposal that would not inhibit development. Appendix C provides an example of the detailed policy briefs developed for each recommendation. The five recommendations are described in the bullets listed below. These priorities aim to maximize health and focus on community concerns while carefully considering feasibility in the current context of Saint Paul. The recommendations were shared with city council members to inform their final decision on the rezoning proposal.

- **Community Equity Program:** This proposed pilot program, modeled after a narrowly targeted inclusionary zoning program, is intended to recapture a portion of the increased value of development sites close to proposed light rail stations to help cover the cost of reserving some of the housing on these sites for lower-income households. The program would require residential and mixed-use projects on sites within a quarter-mile radius of transit stations to make a percentage of the units in those projects affordable or to facilitate the production of affordable housing by paying in-lieu fees to the Housing Trust Fund or by providing gap financing or land for deed-restricted permanently affordable development on alternative sites.

  Developers subject to the requirements of the pilot program would also be entitled to any incentives for providing affordable housing that are available throughout the Central Corridor. Because it is anticipated that little new development would not occur until the light rail line is completed and the housing market improves, the initiation of the program for each station area could be tied to the indicators of improved housing market conditions such as increased property values and/or lower vacancy rates.

- **Codifying the Commitment to Affordable Housing:** Codify the City's commitment to affordable housing by specifying housing objectives as a purpose of the Traditional Neighborhood (T) zoning regulations that will apply to the Central Corridor. Establishing the provision of affordable housing and maintenance of diverse communities among the specific purposes of regulations will provide a nexus or link between underlying adopted policies and implementing regulations. The proposed changes to the zoning ordinance would include:

    - Explicit statements of the ordinance's intent to promote diversity by providing a range of housing types affordable to all economic groups, maintaining neighborhood cohesion by increasing housing choices for residents who desire to continue living in neighborhoods undergoing redevelopment, and improving opportunities for residents to work close to where they live.
    - Specific cross-references to adopted plans and policies to strengthen basis for regulation (e.g., Housing Plan 2010, Central Corridor Development Strategy, etc.).

- **Density Bonus Program:** The proposal is to expand the incentives that the ordinance would offer to include increased density in the form of floor area and height bonuses and/or modification of development and parking requirements to developers who provide affordable housing in new residential and mixed-use development projects anywhere in the Central Corridor. The incentives would be available to developers who reserve a specific percentage of units or floor area for housing affordable to households with incomes that do not exceed 80 percent of AMI adjusted for household size. The program could be designed with a sliding scale that increases the size of the bonus or incentive relative to the percentage of affordable housing provided and the level of affordability.

- **Relieving the Lack of Commercial Parking:** Adopt regulations that would allow use of undeveloped parcels for temporary parking lots to relieve parking problems during construction of the light rail line and in the near term. The temporary lots would be subject to specific standards to control potential impacts on local traffic conditions and to minimize their aesthetic impact.

- **First Source Hiring:** The First Source Hiring Program would require that all applicants for development require construction contractors to notify the Saint Paul Human Rights and Equal Economic Opportunity Department or a comparable designated referral program of available job openings and provide a description of job responsibilities, qualifications, and terms. After receiving notification, the referral system shall identify targeted applicants who meet the contractor's qualifications. The contractor would be required to maintain a log of referrals and applicants hired to allow the program to monitor compliance.

The city council voted to approve the rezoning proposal on April 20, 2011. The next section of this report, Section 6, details the status of these recommendations within the final zoning decision. Beyond the immediate impacts of the HIA on the zoning ordinance there are additional ways to further these recommendations. For example, amendments can be made to zoning codes after they have been passed. The city council will be reviewing affordable housing recommendations in the fall of 2011 and may decide to amend the zoning code.

Strategies outside of the zoning process may also be taken to support these recommendations outside

of the zoning process. The full Healthy Corridor report presents a set of policy options outside of zoning that can help mitigate the negative impacts of the zoning policy. The Community Steering Committee, the Technical Advisory Panel, city agencies, or other advocates and coalitions may decide to further any of the policy options laid out in this health impact assessment.

6. Key Impacts of the Assessment: Health Lessons for All

The Healthy Corridor for All Health Impact Assessment process includes a final monitoring phase, which is split into two distinct parts: tracking the impact of the HIA and tracking the effects of rezoning policy on present conditions, in order to gauge how implementation of the policy is affecting the community objectives. This section describes the impacts of the HIA, while the following section, Section 7, provides a plan to monitor the rezoning policy's effects. Monitoring is important in that it helps assess the success of the HIA in influencing health outcomes and helps track, whether and to what degree the rezoning policy benefits or harms health over time.

The Healthy Corridor for All Health Impact Assessment project has impacted the community in a number of ways, impacting the rezoning debate, as well as the larger conversation on transit expansion and TOD in the region.

Community Impacts

The Healthy Corridor for All Community Steering Committee (CSC) is a diverse group of advocates representing various interests, backgrounds, races and ethnicities who came together inspired by the vision of a healthy Central Corridor. An important effect, not to be taken lightly, was the group's ability to create a common vision and collectively prioritize a key set the issues to support the vision—affordable housing, healthy economy, and safe transportation. This common vision and prioritizing helped build a foundation which allowed the diverse set of community actors to focus on their commonality and work together, instead of focusing on differences in their agendas.

This led to the forging of relationships among CSC members who had never worked together in the past and had never seen their interests aligned. They have now expressed an interest in and a willingness to work together beyond the course of the rezoning and the HIA. The CSC also built relationships with the Technical Advisory Panel (TAP), who could be an asset to community efforts across various situations and projects. Members of the TAP further built relationships within the community, which enables them to be better connected to community needs, aspirations, and solutions. The TAP also built its own capacity by learning from the experiences, deep knowledge, and expertise of the CSC.

Before the HIA, the majority of the CSC had never worked on land use policy, was unfamiliar with zoning, unaware of the rezoning occurring in its community, and did not make connections among land use, transportation, and health outcomes. Throughout the HIA process ISAIAH, TakeAction Minnesota's Hmong Organizing Program (TAM's HOP), PolicyLink, and members of the Technical Advisory Panel supported the CSC in building their capacity around such issues. For example, the Minnesota Center for Environmental Advocacy and the William Mitchell College of Law hosted a Zoning 101 session for the CSC. The Planning and Economic Development Agency made a presentation to the CSC on the city's rezoning proposal and provided information about the rezoning process. During almost every one of the 12 CSC meetings there was a component of capacity building around land use policy, advocacy, the political process and timeline, and the HIA research. In addition to this work ISAIAH and TAM's HOP organized two large public gatherings to help inform, build capacity, and share opportunities for civic participation with a larger audience or community leaders.

In addition to the capacity of the community, the research serves as an asset that the leaders continue to use beyond the scope of the HIA. Members of the CSC have already used various parts of the analysis

in their work unrelated to the Healthy Corridor for All Health Impact Assessment project. The research on existing conditions —found in Section 2: *Healthy Corridor for All: Assessment Findings*—reflects the most recent data on the highest priority issues for the CSC and can be used beyond the scope of the HIA for other relevant community efforts.

Through the HIA, ISAIAH and TAM's HOP facilitated the participation of the CSC in the rezoning decision-making process. The two groups helped organize a set of educational visits between the CSC members and key decision makers on the rezoning policy, including the Saint Paul Planning Commission, the first body to review the rezoning proposal put forth by the planning department, as well as city council members and the planning department itself. ISAIAH and TakeAction Minnesota's HOP worked with the CSC to provide testimony at the planning commission and city council hearings on the rezoning proposal.

The capacity building, relationship building, and civic participation, as well as the power to make decisions and set the course for the HIA, all contributed to create an empowering situation for the CSC. Members were able to set the direction for the research that would help them better understand the rezoning implications. They were also able to voice their opinions and share their knowledge and experiences with key decision makers as a powerful collective engaging in the often esoteric, but important process of land use policy.

Policy Impacts

The rezoning proposal was published in the *Legal Ledger* on May 5, 2011, by the Saint Paul City Council and went into effect on June 4, 2011. The rezoning did not specifically include the priority recommendations of the CSC. Before the final decision, during the first city council hearing on the rezoning proposal, the community expressed concerns and identified solutions advocated in the HIA. Based on this input, the city council postponed their final decision in order to hear more about the proposed community solutions. The council made the decision to move ahead with the rezoning, but to put in place mechanisms to address the affordable housing issues raised by the CSC. The council requested feasibility analyses of proposed affordable housing solutions from the planning department as well as created a forum for consensus building among diverse housing interests to identify the viable solutions.

The city council, under the recommendation of Councilmember Russ Stark—who serves a district that the Central Corridor LRT runs through—included a resolution, as part of the final rezoning decision, to create an affordable housing workgroup to identify a set of recommendations to preserve and enhance affordable housing options for city council consideration within approximately six months. This work group includes community advocates and city agencies, as well as developers. As a result of the HIA process, ISAIAH was asked to join, given their leadership on affordable housing issues throughout the HIA.

As part of the zoning decision, the city council also commissioned feasibility analyses on a number of the affordable housing recommendations, including two prioritized and advocated for by the Healthy Corridor for All CSC—density bonuses and targeted inclusionary zoning (see Section 5 for more information on these policy recommendations). The workgroup recommendations, as well as the findings of the feasibility analyses, will be presented to the city council early in 2012 for consideration.

Finally, the policy debate around the rezoning shifted as a result of the Healthy Corridor for All HIA. The HIA helped engage community groups in the zoning debate, introduce health into the discussion, and advocate for important affordable housing policies. While many community members had previously engaged in discussions about the vision for development around the new transit line, that level of engagement did not extend to the rezoning debate, which many viewed as a too technical process. The HIA and the work of the Community Steering Committee helped involve more community groups, build capacity, and facilitate their participation. The HIA also introduced the notions that land use has important health and equity implications that must be considered before the final rezoning decision. Overall, the HIA finding and the efforts of the CSC engaged a whole new set of players into the city's land use debate.

Regional Impacts

The HIA is also having impacts on transportation and land use planning at the regional level. The Twin Cities region is in the process of restructuring its regional planning process through support from a number of places including a federal Sustainable Communities Regional Planning grant and a Living Cities grant. Together, these two funding streams comprise the Corridors of Opportunity Initiative that will identify a process for interagency collaboration to better synchronize transportation and housing plans through collaboration, community engagement, evaluation, and an equity lens.

The HIA is seen as an opportunity to learn from a community participatory analysis of transit-oriented development policy with a focus on equity. The Sustainable Communities grant proposal to the Department of Housing and Urban Development listed the Healthy Corridor for All HIA as an example of how to effectively conduct and incorporate community engagement. The HIA partners were asked to present the HIA and have discussions with the team responsible for developing evaluation measures for the Corridors of Opportunity project. The HIA indicators and our analysis were shared and the community leadership component of the HIA was lifted up as an important practice. The HIA team has also been working closely with the Community Engagement Team of the Corridors of Opportunity project to support their robust and meaningful participation in the interagency regional planning process and provide technical assistance.

7. Monitoring the Impact of Rezoning

In order to monitor the impact of any policy, baseline data is necessary, and then new data must be collected using the same indicators at some later point after the policy has been implemented. This allows you to gauge the actual impact of the policy on the health and social indicator that the community identified as priorities. This analysis has thus far described baseline data and forecasted impacts of rezoning. This section lays out a plan to monitor the actual effects of the rezoning of the Central Corridor over time.

In order to have a focused and feasible monitoring plan, the HIA team has selected a subset of the indicators for data collection at five-year intervals. The indicators target the objective that was ultimately most interesting and powerful for the Community Steering Committee—protecting against the negative impacts of gentrification. A list of the most critical indicators for monitoring changes in gentrification is listed in Table 7.1.

The Metropolitan Council (Met Council) and the Corridors of Opportunity (COO) evaluation team are considering many of these indicators as important measures of success for their regional planning processes. The Met Council's evaluation plan for the COO includes many of the measures listed in Table 7.1. Because the Met Council plans to collect much of this data, the HIA project partners—ISAIAH, PolicyLink, and TakeAction Minnesota's Hmong Organizing Program—aspire to work with them to access their data and analysis. Project partners will consolidate the material into a memo for the community describing the impacts on baseline conditions. Based on a review of the trends across the indicators, the memo will identify actions that community, government, elected officials, and other technical advisors may need to take in order to ensure the rezoning results in positive health and equity outcomes. Additional funding will have to be secured for the monitoring phase.

Monitoring the zoning impacts and subsequent transit-oriented development will help track who can benefit from the public and private investment the Central Corridor will experience over time.

TABLE 7.1: MONITORING INDICATORS: A FOCUS ON GENTRIFICATION

Indicator	Monitoring Questions	Organization Responsible for Collecting Data *(Tentative Suggestions)*
Total number and location of subsidized affordable units by AMI level	How is the quantity of affordable housing changing over time?	HousingLink and Met Council as part of Corridors of Opportunity (COO) Evaluation
Average rents across the Central Corridor	What level of income is necessary to afford the average rent? Are rents increasing?	HousingLink and Met Council, as part of Corridors of Opportunity (COO) Evaluation
Home sales and values by neighborhood	How much do residents/prospective residents need to spend to buy a home, and how much will they	Met Council as part of Corridors of Opportunity (COO) Evaluation

	profit/lose by selling a home? Do numbers vary by neighborhood? Did these numbers increase or decrease in the last 5 years?	
Property value changes within a ¼ mile, ½ mile, and 1 mile from station areas, in comparison to average city changes	How are property values changing in response to station area development?	Met Council as part of Corridors of Opportunity (COO) Evaluation
Housing cost burden for both renters and owners	What percentage of residents pays an unaffordable amount on rent/mortgage relative to income? Has affordability increased or decreased in the last 5 years?	Met Council as part of Corridors of Opportunity (COO) Evaluation
Racial/ethnic diversity	What is the racial/ethnic breakdown of residents? How has that changed in the last 5 years?	Met Council as part of Corridors of Opportunity (COO) Evaluation
Average household size/type	How big or small are households and what types of families reside in the CC? How has that changed in the last 5 years?	Minnesota Center for Environmental Advocacy
Median HH income and HH income breakdown by AMI category	Did the median HH income increase or decrease? What is the breakdown of HH income by AMI category? How has the breakdown of income levels changed in the last 5 years?	Met Council as part of Corridors of Opportunity (COO) Evaluation
Educational attainment	What is the educational attainment of residents, and how has that changed over the last 5 years?	Minnesota Center for Environmental Advocacy
Level of community engagement in land use and transportation planning, in particular low-income and communities of color,	Do community groups, particularly low-income and communities of color; have the opportunity to fully participate in land use and transportation planning? Is their input fully integrated into the final decisions?	Met Council as part of Corridors of Opportunity (COO) Evaluation
Year householder moved into unit by tenure	How many residents are newcomers in the last 5 years? Are newcomers more likely to rent or own?	Minnesota Center for Environmental Advocacy
Number of vehicles available	Has the number of households	Minnesota Center for

by household	with one car or more changed over time? Are there fewer transit-dependent households?	Environmental Advocacy
Overcrowding	Do residents have to double up in the same home? How has the rate of overcrowding changed over the last 5 years?	Minnesota Center for Environmental Advocacy

Conclusion

The Healthy Corridor for All Health Impact Assessment has been a community action research project under the vision of a healthy Central Corridor for all—including and especially for those current residents that are low-income and people of color who have experienced disinvestment and historic discrimination.

With a $1 billion dollar investment in light rail, expected to be followed by an estimated $6 to $7 billion in public and private investment, this is the largest opportunity this community has ever seen. Community members are excited for the opportunity but also apprehensive. Community members and business owners have expressed significant concern that the transit-oriented development along University Avenue will not benefit them, their families, or their long-standing communities. In fact, many are concerned that not only will they not benefit, but they will be harmed.

In cities across the United States transit-oriented development and redevelopment have not always brought relief from existing challenges, but in fact have sometimes brought displacement, diminished social connections, and an eroded sense of community. The Twin Cities has the benefit of learning from the experiences of other cities and taking the precautions necessary to ensure that community concerns are not only heard but addressed with concrete and creative solutions.

While the vision of the redevelopment in the Central Corridor, as expressed by the community-engaged process that led to the Central Corridor Development Strategy, is inclusive and describes the values and strategies of anti-displacement, economic opportunity, and small business protection, the rezoning proposal did not go far enough and was not creative enough to maximize this vision. The zoning focused on enabling transit-oriented development (TOD) whereas in the Central Corridor it is particularly important to lay a foundation for *equitable* transit-oriented development in order to support existing communities.

This health impact assessment helped draw out some of the challenges to equitable TOD with the proposed zoning plans. Health impact assessments can be a powerful tool to better understand the implications of policies before they are passed and to support community leadership and participation in decision making processes that impact residents' lives. They also help to promote health and equity.

The Healthy Corridor for All Community Steering Committee continues to be hopeful. There is good reason, considering the city council has resolved to analyze the feasibility of affordable housing policies—including two of those prioritized by the HIA, the targeted inclusionary zoning we termed the Community Equity Program and the density bonus—and to create an affordable housing working group to identify policies that support the preservation and development of affordable housing.

The Community Steering Committee will continue to work with the city council and planning commission as they review affordable housing policies in the fall of 2011 and beyond, as well as work in other venues to accomplish the objectives they collectively identified to support the vision of a healthy, equitable Central Corridor. The Healthy Corridor for All Health Impact Assessment will continue to provide an example of a community-guided analysis of transportation and land use plans that holds technical rigor, serves communities, and helps policymakers make informed decisions.

Appendixes

Appendix A: Guidelines for Engagement in Healthy Corridor for All HIA

Appendix B: Indicators and Methodologies

Appendix C: A Policy Brief on the Community Equity Program: A Proposal to Support Affordable Housing without Stifling Development

Appendix A

Guidelines for Engagement in Healthy Corridor for All HIA

Healthy Corridor for All

Guidelines for Engagement: Goals, Values, Collaboration, and Roles and Responsibilities

Project Description

Work has begun on a new transit line, the Central Corridor Light Rail Transit line (CCLRT), connecting downtown Minneapolis with downtown St. Paul. The CCLRT is a $1 billion transit investment with potentially up to $2 billion investment in local development. The Central Corridor Development Strategy (CCDS) has been developed to guide this investment. The City of St. Paul is currently undergoing a rezoning process along the corridor in order to enable the CCDS. The anticipated timeline for the rezoning to be complete in Spring 2010.

ISAIAH, Take Action Minnesota/Hmong Organizing Project, and PolicyLink are conducting a Health Impact Assessment (HIA) on the proposed Central Corridor rezoning to identify health benefits and burdens associated with the rezoning, and to make recommendations to alleviate negative health impacts stemming from the rezoning.

HIA Definition: Health impact assessment may be defined as a combination of procedures, methods and tools that systematically judges the potential, and sometimes unintended, effects of a policy, plan, program or project on the health of a population and the distribution of those effects within the population. HIA identifies appropriate actions to manage those effects. *(International Association of Impact Assessment, 2006)*

Purpose: To analyze the potential positive and negative health implications of land use changes resulting from the new Central Corridor Transit Line.

Timeline and Final Product: *Healthy Corridor for All* will begin in Summer 2010. Preliminary findings are anticipated in late Winter of 2011 with a final report available in Spring of 2011, with monitoring continuing into Fall 2011. The final product will be a report detailing the findings of the HIA and recommendations. The conveners and the Community Steering Committee will hold a community meeting to share preliminary findings and recommendations with stakeholders in late Winter or early Spring of 2011.

HIA Goals:

- Assess the impacts of the CCLRT zoning on overall community health, health inequities by race, income, and place, and underlying conditions that determine health in the Central Corridor and the East side.
- Ensure positive health benefits are maximized and negative health impacts are addressed by the decision-making process.
- Empower Central Corridor and East side local communities to effectively and meaningfully engage in the CCLRT zoning process.

HIA Core Values:
The core values that will guide this HIA include:

- Equity
- Racial justice
- Community empowerment
- Collaboration
- Accountability
- Scientific integrity

HIA Collaborators:
These goals and values are central to how the *Healthy Corridor for All* project team will carry out the HIA, from the scoping to the monitoring phase. To support this process, the project team will establish a voluntary Community Steering Committee made up of community stakeholders and a Technical Advisory Panel composed of partners with technical expertise relevant to the project.

The *Community Steering Committee*, made up of constituency-based organizations representing or serving community members, particularly low-income people and people of color, living and working in the East and Central Corridor communities, will be at the center of the HIA. Specifically, the Community Steering Committee will make key HIA decisions and help drive HIA activities, including developing a scope, identifying indicators, developing recommendations, and communicating findings. There may also be opportunities to collect information. Community Steering Committee members have a commitment to improving community health and well-being, promoting equity and have a commitment to grass-roots community building in East and Central Corridor communities

The *Technical Advisory Panel*, made up of agencies, organizations and individuals with an interest in the rezoning process, will provide technical expertise to the HIA. The Committee will review the scoping plan, review assessment methods and findings, share qualitative and quantitative data, and participate in the monitoring process. Technical Advisory Panel members have a commitment to improving health and well-being in the City of St. Paul and the region. Members will commit to providing technical knowledge, data and resources to the Community Steering Committee to conduct the HIA.

The Community Steering Committee will convene for up to five in-person meetings of 3-5 hours each over a one year (ending in July 2011). Technical Advisory Panel members will be consulted as needed. Specific roles and responsibilities of both groups are described in detail below.

Principles of Collaboration:
Membership in both groups is strictly voluntary. However, a number of agreements and commitments must be made in order to participate on either the Steering Committee or the Technical Advisory Panel. Participants must agree to the delineated HIA goals (see above), and also to the core values of equity, racial justice, community empowerment, collaboration, accountability, and scientific integrity. This means that members will work together to conduct the HIA in accordance with these goals and values, and will not challenge these goals and values throughout the process.

In addition, ground rules for participation include:

- Providing constructive and proactive input (rather than obstructive and reactive input)
- Practicing solution-seeking “both/and” thinking (rather than “either/or” thinking)

- Being inclusive by respecting different priorities and concerns
- Trying on new ideas and perspectives
- Attending t all Community Steering Committee meetings, or finding a proxy in the case of unavoidable absence
- Providing feedback and reviewing HIA materials as requested
- Being responsive to outreach regarding the needs of the HIA

Decision-making Process:
During the health impact assessment, the Community Steering Committee and the conveners will be making decisions on the direction of the project. The Technical Advisory Panel will be providing technical guidance and support. The Community Steering Committee will be making many decisions, including: what issues to include in the HIA and how to define the groups of special concern; what information is used in the findings; what the recommendations are; and how to use the HIA to take action.

During the HIA process, decisions should be made by consensus whenever possible. Participants will attempt to bring issues to each other's attention to avoid making unilateral decisions. The partners will recognize and consider different perspectives. The conveners and the Technical Advisory Panel will work with the Community Steering Committee to ensure empirical integrity.

Leadership Team
ISAIAH, TakeAction Minnesota and PolicyLink will manage and conduct the HIA and convene the Community Steering Committee and Technical Advisory Panel. ISAIAH is the primary grantee and fiscal agent for the project. TakeAction Minnesota's Hmong Organizing Program is ISAIAH's primary local partner and PolicyLink is the project's Technical Partner. These organizations work closely together, each with different, but complementary roles:

- **ISAIAH and Take Action Minnesota**
    - ***Role:*** ISAIAH is fiscal agent and lead organization for the project. ISAIAH leads the process to identify and invite key constituencies into the *Healthy Corridor for All* Community Steering Committee and Technical Advisory Panel. ISAIAH also leads the coordination between the local partners and Technical Partner. TakeAction Minnesota's Hmong Organizing Program is particularly focused on inviting the participation of Hmong leaders in the project, and assists with general community engagement. Both organizations collaborate to understand the political dynamics relevant to the success of the HIA and the timelines, processes, and materials relevant to the HIA analysis.
    - ***HIA Project Manager:*** ISAIAH has hired, on contract, a project manager for the HIA. The project manager will manage the stakeholder engagement, and serve as the point-person for the project, acting as the primary contact, coordinator and communicator between the various groups and agencies cooperating on the project.
- **PolicyLink**
    - ***Role:*** Technical partner directing the research and empirical HIA process and supporting the overall HIA. PolicyLink will lead the technical aspects of the HIA with support from partners

Stakeholder Engagement:

Stakeholder:

Definition: Stakeholders are persons or groups who are directly or indirectly affected by a project, as well as those who may have interests in a project or the ability to influence its outcome, either positively or negatively.

Engagement: A set of high-level stakeholders will engage in the HIA through participating on a Community Steering Committee. The Steering Committee will engage a broader group of stakeholders through individual conversations, community meetings, interviews, surveys and focus groups. The conveners of the HIA will also hold meetings with stakeholders, hold community meetings to share HIA findings with interested stakeholders, and strive to engage with as many stakeholders as possible.

Community Steering Committee:

Definition: A group of high level stakeholders who are responsible for providing guidance on overall direction of the HIA. They will help to obtain strategic input and buy-in from a larger set of stakeholders.

- **Purpose**
    - Provide strategic direction for the scope and implementation of the HIA representing the views of the group or organization the Committee member represents
    - Review and provide input on data, materials, and analyses developed throughout the HIA
    - Develop recommendations based on HIA analysis
    - Support HIA to ensure partnership and linkage to other stakeholders and key relevant processes
    - Mobilize and sustain high level of engagement, political commitment and momentum to achieve the HIA objectives
    - Identify available resources and activities relevant to the HIA
    - Provide a communication channel to other stakeholders not formally represented on the Committee
    - Monitor ongoing HIA progress
- **Internal Process**
    - Potential Community Steering Committee members will be identified through ISAIAH, TakeAction Minnesota and the Community Steering Committee based on representation of key constituent groups located in the areas affected by Light Rail.
    - Membership is organizational and not individual.
    - Any members joining the Steering Committee will sign onto an understanding of the goals and purposes of the HIA, and will ensure their participation is constructive to that end.
    - New members or alternates will accept all decisions, analyses and input provided in the past in order to engage in present and future activities.
    - Committee decisions will be made on a consensus basis. Dissenting views may be recorded if required.
    - Committee members may appoint alternates to replace the representatives in the event of an absence.
    - Committee members' input and decisions must be received by the deadlines requested. The HIA efforts and activities will move forward based on input and decisions received by indicated deadlines.
    - The Community Steering Committee will convene in-person a minimum of five times for the following purposes:

1. Launch of Community Steering Committee and Development of HIA Scope (July 12th and 13th from 6pm to 9pm).
2. Input on baseline data analysis and next steps (date to be determined).
3. Input on predictions on health impact of proposal (date to be determined).
4. Development and prioritization of recommendations based on analysis (date to be determined).
5. Sharing full analysis with larger stakeholder group (date to be determined).

- In addition to scheduled meetings, the Committee may hold periodic conference calls with a set agenda on an as-needed basis.
- Individual members may be called upon for expertise on issues within their area of knowledge.

Meeting notes will be prepared by the chairs of the Committee with a record of what decisions were made and what actions need to be taken and by whom. The minutes will be prepared within two weeks of the meeting and sent to all members via email. Committee members will have the opportunity to add to the notes if anything is left out.

Technical Advisory Panel:

Definition: A group of researchers, experts, and government staff with expertise on key issues related to the Central Light Rail Corridor HIA project.

- **Purpose**
  - Using best possible technical expertise, review and improve HIA methodologies and analyses
  - Identify and, when possible, provide information, data, activities and resources
  - Support HIA to ensure linkages to other technical advisors and key relevant processes
  - Share perspective of organization or agency Advisor is representing
  - Help identify appropriate monitoring mechanisms to examine the progress of several health indicators
- **Internal Process**
  - Potential Technical Advisory Panel members will be identified through ISAIAH, TakeAction Minnesota and PolicyLink and Community Steering Committee based on a review of the Committee's technical needs, data needs, and an overall understanding of the scientific context of the Central Corridor Light Rail HIA.
  - Membership is organizational and not individual.
  - Technical Advisory Panel members may appoint alternates to replace them as representatives in the event of an absence.
  - Group members' input and decisions must be received by the deadlines requested. The HIA efforts and activities will move forward based on input and decisions received by indicated deadlines.
  - New members or alternatives will accept all decisions, analyses and input provided in the past in order to engage in present and future activities.
  - The Advisory Group will not be formal voting members of the Community Steering Committee but will provide guidance, advice and materials to the Committee advice as needed, in order to help the Committee in their decision-making
  - The Advisory Panel members will join as many of the Community Steering Committee meetings as possible to provide technical advice. Their expertise during the meetings will be valuable. The foreseeable Committee meetings include approximately five in-person meetings between July 2010 and May 2011. These meetings include the following:

1. Launch of Steering Committee and Development of HIA Scope (July 12th and 13th from 6pm to 9pm).
2. Input on baseline data analysis and next steps (date to be determined).
3. Input on predictions on health impact of proposal (date to be determined).
4. Development and prioritization of recommendations based on analysis (date to be determined).
5. Sharing full analysis with larger stakeholder group (date to be determined)

- Individual members may be called upon for expertise on issues within their area of knowledge.

Appendix B

Indicators and Methodologies

Indicator	Data Source	Methodology
Number of employees by industry[hh] for all geographies	US Census LEHD Workplace Area Characteristics, 2008	Aggregated total workers in each block by industry for the Central Corridor (CC), Saint Paul, and Ramsey County in SPSS
Average wages by industry for all industries	BLS Quarterly Census of Employment and Wages, 2009	At QCEW web site, downloaded average annual pay by 2-digit NAICS code for all industries, total covered ownerships, all establishment sizes, and all employees in Ramsey County. For Public Administration, took average of the average annual pay for local, state, and federal government
Number of employed residents by industry	US Census LEHD Resident Area Characteristics, 2008	Aggregated total workers in each block in the CC by industry in SPSS
Number of jobs in the CC by place of worker residence	US Census LEHD Origin-Destination Employment Statistics, 2008	In SPSS, selected all blocks with jobs in Ramsey County; from those blocks, selected all blocks with workers in Ramsey County. Coded those blocks to identify those for workers that reside in Saint Paul in the CC
Number of employed residents in the Corridor by place of work	US Census LEHD Origin-Destination Employment Statistics, 2008	In SPSS, selected all blocks with residents who live in the CC. Coded those blocks to identify those who work in the CC, Saint Paul, and Ramsey County
Educational attainment of workers by industry	Census Equal Employment Opportunity data set, 2000	Downloaded Educational Attainment (5 levels) by Census Occupational Codes by worksite for Ramsey County. Downloaded Employment by Census Occupational Codes and Industry by worksite for Ramsey County. Used Access to relate the data sets and calculate the percentage of workers with less than high school education, a high school diploma, some college or an Associate's, Bachelor's, and Master's degree or greater by industry
Educational attainment distribution overall and by race, age	US Census 1990, 2000; American Community Survey 2005–2009 5-year estimates	Aggregated educational attainment for all residents and by race for all block groups in the CC; aggregated educational attainment by age for all census tracts in the CC (2005–2009 data only); downloaded educational attainment overall and by race/age for Saint Paul and Ramsey County on US Census Bureau's American FactFinder
Unemployment overall	American Community	Aggregated total civilian, nonmilitary labor force

[hh] Industry as defined by two-digit NAICS code.

and by race	Survey 2005–2009 5-year estimates	and unemployed workers for all residents and by race for all census tracts in the CC. Calculated unemployment rate by dividing total unemployed by total civilian, non-military labor force. Calculations for overall unemployment are for the civilian population ages 16–64; calculations by race are for the civilian population age 16 and older
Businesses by type and size along University Avenue	U-PLAN survey of University Avenue businesses	Selected all businesses located in Saint Paul (only); eliminated institutions identified as government or nonprofits
Small and minority-owned businesses by type and size along University Avenue	U-PLAN survey of University Avenue businesses	Selected all businesses located in Saint Paul (only); summed institutions identified as "small" and as "minority-owned"
Number and location of lost on-street parking due to light rail construction	U-PLAN	U-PLAN created a map of the number of on-street parking spaces lost per block due to LRT; summed numbers for totals
Distribution of population by race/ethnicity	US Census 1990, 2000, 2010	Aggregated total residents by race (non-Hispanic) and ethnicity by *block group* for the CC, Saint Paul, and Ramsey County (1990, 2000); aggregated total residents by race (non-Hispanic) and ethnicity by *block* for the CC (2010)
Proportion foreign born	US Census 2000; American Community Survey 2005–2009 5-year estimates	Aggregated total foreign born residents by block group for the CC (2000); aggregated total foreign-born residents by census tract for the CC (2005–2009)
Median household income overall and by race	US Census 1990, 2000; American Community Survey 2005–2009 5-year estimates	Measured the mean of each median household income overall and by race for the aggregate of block groups in the CC; downloaded median household income overall and by race for Saint Paul and Ramsey County on the US Census FactFinder
Household income distribution overall and by race	US Census 1990, 2000; American Community Survey 2005–2009 5-year estimates	Aggregated total households by income category overall and by race by block group in the CC; downloaded total households by income category overall and by race for Saint Paul and Ramsey County on the US Census FactFinder
Poverty status	US Census 1990, 2000; American Community Survey 2005–2009 5-year estimates	Aggregated total persons in poverty and total population for whom poverty is determined by block group in the CC (1990, 2000) and by census tract in the CC (2005–2009); downloaded total number of persons in poverty and total population for whom poverty is determined for Saint Paul and Ramsey County at US Census FactFinder. Poverty rate is calculated by dividing the total number of persons in poverty by the total population for whom poverty is determined

Tenure by single-family and multifamily units	US Census 1990, 2000; American Community Survey 2005–2009 5-year estimates	Aggregated total renter-occupied and owner-occupied units for two categories: single family units (both attached and detached) and multifamily units (two units or more) for each block group in the CC; downloaded total renter-occupied and owner-occupied units by number of units for Saint Paul and Ramsey County on US Census FactFinder; summed into the categories in Excel.
Housing cost burden[ii]	US Census 1990, 2000; American Community Survey 2005–2009 5-year estimates	Summed total renters who pay 30% or more of their income on housing (from four subcategories); summed total renter-occupied specified units (renters with unspecified % of income on housing); summed total owners who pay 30% or more of their income on housing (from four subcategories); summed total owner-occupied specified units (owners with unspecified % of income on housing). Aggregated total renters who pay 30% or more of their income on housing, total renters who pay 50% or more of their income on housing, total renter-occupied specified units, total owners who pay 30% or more of their income on housing, total owners who pay 50% or more of their income on housing, total owner-occupied specified units by block group (1990, 2000) and by census tract (2005–2009)
Housing cost burden by income category	American Community Survey 2005–2009 5-year estimates	Summed total renters who pay 30% or more of their income on housing by income category (from four subcategories); summed total renter-occupied specified units by income category (total renters with unspecified % of income spent on housing); summed total owners who pay 30% or more of their income on housing by income category (from four subcategories); summed total owner-occupied specified units by income category (total owners with unspecified % of income spent on housing). Aggregated total renters who pay 30% or more of income on housing, total owners who pay 30% or more of their income on housing, total renter-occupied specified units, total owner-occupied specified units for every census tract in the CC
Proportion of households living in	Census 1990, 2000; American Community	Aggregated total occupied housing units with 1.5 persons or greater and total occupied units for

[ii] The 30 percent threshold has been generally accepted by federal agencies as an indicator of a housing affordability problem for several decades (http://www.census.gov/hhes/www/housing/special-topics/files/who-can-afford.pdf).

overcrowded conditions[jj]	Survey 2005–2009 5-year estimates	every block group in the CC. Downloaded total occupied housing units with 1.5 persons or greater and total occupied units for Saint Paul and Ramsey County on US Census FactFinder
Number of persons living within ¼ mile of high-frequency transit lines	US Census 2010; Metro Transit	Selected all high-frequency bus routes—those with weekday peak-hour frequencies of 20-minute headways or less. In ArcGIS, selected all blocks in the CC within ¼ mile of high-frequency bus routes. Aggregated total population residing in those blocks in SPSS for all blocks within the CC
Percent of workers taking public transportation to work	US Census 1990, 2000; American Community Survey 2005–2009 5-year estimates	Aggregated total number of workers age 25 and older who take public transportation to work (including bus, subway, trolley, light rail, heavy rail, ferry) for all block groups in the CC. Downloaded same categories for Saint Paul and Ramsey County on US Census FactFinder
Average household size	US Census 1990, 2000; American Community Survey 2005–2009 5-year estimates	Aggregated total households and total population for all block groups in the CC. Calculated average household size by dividing total population by total number of households. Downloaded total households and total population for Saint Paul and Ramsey County on US Census FactFinder
Distribution of population by age	US Census 1990, 2000; American Community Survey 2005–2009 5-year estimates	Aggregated total population by age category for each block group in the CC. Downloaded total population by age category for Saint Paul and Ramsey County from the US Census FactFinder
Proportion of households with and without children	US Census 1990, 2000; American Community Survey 2005–2009 5-year estimates	Aggregated total number of households with children under 18 for each block group in the CC. Downloaded total number of households with children under 18 for Saint Paul and Ramsey County from US Census FactFinder
Distribution of housing stock by year built	US Census 1990, 2000; American Community Survey 2005–2009 5-year estimates	Aggregated total number of renter-occupied, owner-occupied, and vacant housing units by decade unit was built for all census tracts in the CC. Downloaded total number of renter-occupied, owner-occupied, and vacant housing units by decade unit was built for Saint Paul and Ramsey County from US Census FactFinder
Number of subsidized rental units by type of subsidy	HousingLink Inventory of Assisted Rental Housing; Housing Preservation Project; HUD Picture of Subsidized	Downloaded total number of subsidized households by program in Saint Paul; clipped total number of subsidized households by program for CC in ArcGIS. Combined this data with lists on currently subsidized housing from HousingLink and Housing Preservation Project. Verified funding and total

[jj] A threshold of 1.5 persons per room is the most common standard for measuring overcrowded conditions (http://www.huduser.org/publications/pdf/Measuring_Overcrowding_in_Hsg.pdf).

	Households, 2008	number of affordable units, and level of subsidy (30/50/60/80% AMI) from HousingLink Inventory of Assisted Rental Housing
Number of vacant housing units	US Census 1990, 2000, 2010	Aggregated total number of vacant housing units and total housing units for every block group in the CC (1990, 2000) and for every block in the CC (2010). Downloaded total vacant and total housing units for Saint Paul and Ramsey County from US Census FactFinder
Median home values and rents and distribution of home values and rents	US Census 1990, 2000; American Community Survey 2005–2009 5-year estimates; Bureau of Labor Statistics Consumer Price Index (seasonally adjusted for Twin Cities region)	Adjusted median gross rents and median home values for each block group for Saint Paul, and Ramsey County for inflation to reflect 2010 dollars. Aggregated the mean of each median home value and median gross rent for all block groups in the CC. Downloaded median gross rents and median home values for Saint Paul and Ramsey County from US Fact Finder, adjusted numbers for inflation to reflect 2010 dollars
Distribution of housing units by number of bedrooms	US Census 1990, 2000; American Community Survey 2005–2009 5-year estimates	Aggregated total number of housing units by number of bedrooms for each block group in the CC. Downloaded total number of housing units by number of bedrooms for Saint Paul and Ramsey County from US Census FactFinder
Number of housing units within ¼ mile of high-frequency transit line	Census 2010; Metro Transit	Selected all blocks in the CC whose centroids are located within ¼ mile of a high-frequency transit route—those with weekday peak-hour frequencies of 20-minute headways or less—in ArcGIS; aggregated total number of housing units in those blocks
Number of jobs within ¼ mile of high-frequency transit line	Bureau of Labor Statistics LEHD Workplace Area Characteristics, 2008; Metro Transit	Selected all blocks in the CC whose centroids are located within ¼ mile of a high-frequency transit route in ArcGIS; aggregated total number of jobs within those blocks
Number of affordable housing units within ¼ mile of high-frequency transit line	HousingLink Inventory of Subsidized Housing; Metro Transit	Created ¼-mile buffer around all high-frequency transit routes in the CC; aggregated total number of subsidized affordable housing units
Transit service frequency by route	Metro Transit	Averaged frequency between buses during weekday peak hours (7–9a and 4–6p) for each route that traverses the CC
Average ridership per transit route, by weekday/weekend	Metro Transit	Summed total ridership for all routes that traverse the CC (including weekday/peak, weekday/off-peak, weekend/peak, weekend/off-peak). Data spans November 2009–October 2010
Commute mode share	US Census 1990, 2000; American Community	Aggregated total number of workers age 25 and older by mode of transportation to work: car (alone

	Survey 2005–2009 5-year estimates	and carpool), public transportation (including bus, subway, trolley, light rail, heavy rail, ferry), bike, walk, or other (taxi, motorcycle, other unspecified) for all block groups in the CC. Downloaded same totals by those categories for Saint Paul and Ramsey County from US Census FactFinder
Location of safe and accessible pedestrian crossings	Google Earth	Coded 55 intersections (using major north-south and east-west streets within ½ mile of CCLRT) for presence or absence of following hazardous conditions: extremely narrow sidewalks (less than 3 feet in width), wide curb radii and intersections, designated right-hand turning lane for vehicles, large driveways adjacent to intersection, extremely long crossing distance for pedestrians. Infrastructure conditions were identified using Google Earth.
Location of bicycle and pedestrian collisions	City of Saint Paul, Department of Public Works, 2003–2007	Summed total number of bicycle and pedestrian collisions along University Ave. between Beacon and Cedar Sts. in the CC

Appendix C

A Policy Brief on the Community Equity Program: A Proposal to Support Affordable Housing without Stifling Development

Background

The Central Corridor light rail transit line is a $1 billion transit investment that has the potential to leverage up to $6.8 billion in public and private investment, only 7 percent of which is estimated to come from public funding.[132] The rezoning of many properties surrounding the Central Corridor—to accommodate higher-density development, reduced demand for parking, and pedestrian and transit-oriented environments, combined with public investments in streetscape and infrastructure improvements—will magnify this great opportunity for the city and the region. Transit-oriented development is an important trend across the nation that supports sustainable growth and resource management and provides new opportunities for those who desire to live less car-oriented lifestyles. While examples of transit-oriented development nationally are abundant, there are few that have considered or successfully achieved *equitable* transit-oriented development.

This type of transit-oriented development promotes the development of new housing and commercial space while ensuring that current residents and business owners are able to enjoy and benefit from the improvements in their communities. Involuntary displacement has often turned out to be an unfortunate outcome of transit-oriented development. It takes careful and creative planning to minimize displacement of residents.

Saint Paul, not unlike the greater Twin Cities region, is experiencing the strains of the current recession, which places a higher burden on developers to secure funding sources and take risks on new development. These regional and national market trends are an important consideration for any rezoning proposal. Despite these larger trends in the economy, however, we must acknowledge that markets are fragmented and driven to some extent by varied factors. This can result in some smaller markets thriving in the midst of harsher economic conditions. It is also important to note that while markets fluctuate, the built environment remains. It is therefore important, in the rezoning process, to maintain flexibility and provisions that have a long-term vision.

We recognize the current market dynamics of Saint Paul and have crafted five policy recommendations for the current zoning proposal that will not inhibit development.

- A community equity program designed to leverage private investment for affordable housing only when local market conditions indicate that economic improvement is occurring
- Language in the zoning proposal to codify the city's demonstrated commitment to affordable housing, emphasized in the Central Corridor Development Strategy, among other plans
- Facilitating the use of vacant properties as shared commercial parking
- Awarding density bonuses as incentives for the production of affordable housing when the demand for high-density projects emerges
- Using a first-source hiring program to allow local workers first opportunity for employment

These recommendations, if enacted, will not stifle development. As illustrated in the proposal section directly below, the recommendations have been crafted to take into account the realities of the diverse

markets in the Central Corridor. Yet they build in opportunities to support existing communities in their desire to benefit from the public investment in transit and city zoning decisions that will impact the future development of their neighborhoods.

In particular, the proposed Community Equity Program can begin to address some of the affordable housing concerns of the community.

Policy Proposal

We recommend that the Saint Paul City Council adopt a narrowly targeted requirement for affordable housing within a quarter-mile radius of specified transit stations, tied to an upturn in the current market. This would recapture a portion of the increased value of development sites for the development and/or preservation of housing for lower-income households. The program would require residential and mixed-use projects on sites within a quarter-mile radius of specified transit stations. The aim would be to make a percentage of the units in those projects affordable to households with incomes at or less than a percentage of area median income; or, to facilitate the production and/or preservation of affordable housing by payment of in-lieu fees to a Housing Trust Fund; or, by providing gap financing or land for deed-restricted permanently affordable development on alternative sites; or, by providing gap financing and subsidies to ensure that currently subsidized affordable units within a quarter-mile of transit remain permanently affordable. Developers subject to the requirements of the pilot program would also be entitled to incentives for providing affordable housing available throughout the Central Corridor. The selection of certain station areas for implementation can be contingent on meeting certain thresholds of economic indicators, such as decreased vacancy rates or rate of property value increase throughout the Central Corridor, two variables that indicate a tightening housing market.

Rationale

Numerous studies have demonstrated the premium of transit on land values. As shown by studies of the Hiawatha line and of transit systems elsewhere in the United States (St. Louis, Portland, for example), the addition of transit often has a significant positive effect on property values in the surrounding area.[kk] The Center for Transit Oriented Development estimates a 15 percent premium for property values and rents on the Central Corridor Transit line.[ll]

The Hiawatha line study, which examined price trends within station areas both prior to and after completion of the line in 2004 and in comparison to a control area of southeast Minneapolis, found that there was a positive effect on property values and greater residential investment in station areas compared to the control area. Multifamily homes on the west side of the line also benefited from increased accessibility. Overall, completion of the Hiawatha line generated an estimated $18,374,284 worth of housing premiums for single-family homes, and $6,900,598 for multifamily homes. The average property value increase for single-family homes was about $5,229 (4.2 percent) more than other homes, and the average value of multifamily property increased by $15,755. In addition to the premium of transit on land values, zoning mechanisms can have a significant effect on property values. According to the Center for Transit Oriented Development, "[m]uch of the additional value of TOD to developers is in

[kk] Center for Transportation Studies, University of Minnesota, 2009. "The Hiawatha Line: Impacts on Land Use and Residential Value."
[ll] Center for Transit Oriented Development, Bonestroo, and Springsted, 2010. Central Corridor TOD Investment Framework: A Corridor Implementation Strategy.

the changing entitlements that allow higher densities, lowered parking ratios, and a mix of land uses. As a result, the timing of changing land regulations can have some influence on the pace of speculation and development."[mm] Thus, the premium of transit is compounded by a premium of upzoning and a promise of public investment in streetscaping and other public infrastructure improvements.

Property values are already rising quickly in the Central Corridor, despite the effect of the economic downturn on property values in cities across the country. Compared to the City of Saint Paul, from 2007 to 2010, property values for parcels within a quarter-mile of proposed station areas in the Central Corridor *rose* nearly 8.4 percent, compared to a 1.7 percent *increase* for parcels within a half-mile of station areas in Saint Paul and a *decrease* of 7.5 percent in the city of Saint Paul for that same time period. This same pattern of increasing property values for parcels located within a quarter-mile of station areas compared to the city of Saint Paul holds for commercial, industrial, multifamily, and mixed-use properties. Some station areas are experiencing more rapid increases than others. Parcels near the Westgate, Raymond, Capitol East, and Union Depot stations saw increases of more than 10 percent since 2007, despite an overall city decline in property values.

Much of the increase in the Westgate and Raymond station areas is being driven by large increases in industrial property values, while the increases in the Capitol East and Union Depot areas are mainly the result of large increases in the value of mixed-use properties. In the Westgate and Raymond station areas, particularly, the increases are likely the result of speculation on the conversion of existing industrial land (which is mostly vacant) to higher-density mixed-use development. This is reflected by the very high property value increases for land being rezoned to TN3 and TN4, which saw increases in value of nearly 20 percent and 15.6 percent between 2007 and 2010, respectively. Other evidence that the real estate market is heating up in the Central Corridor is reflected in lower vacancy rates for blocks within a quarter-mile of a number of station areas. In the Hamline, Westgate, and Raymond station areas, the average vacancy rate was at 5 percent or less in 2010.[nn]

Furthermore, the significant investments that the City of Saint Paul has made in affordable housing throughout the Central Corridor could be at risk from the ongoing speculation and rise in property values along and near University Avenue. Many of the subsidized affordable units that have been constructed with City/HRA assistance in the last decade—nearly a thousand units, altogether—are located in station areas experiencing a tightening of the housing market. Despite that, these affordable units represent a significant proportion of the new housing stock constructed in the last decade within the corridor. Without other policies in place, this proportion will become smaller as the market tightens and developers begin construction on higher-density, market-rate apartments in the western station areas. The implementation of the Community Equity Program can help ensure that the city's current investment in affordability in these areas remains permanent.

Affordable housing needs remain high, and existing affordable housing is at risk. Both the Housing Plan and Central Corridor Development Strategy support the development of new mixed-income housing along the Central Corridor in the area identified for redevelopment (the "area of change"), along with preservation of existing affordable housing in the established neighborhoods along the corridor. The affordability goals for new-construction housing along the Central Corridor are those

[mm] Center for Transit Oriented Development, 2008. "Realizing the Potential: One Year Later. Housing Opportunities Near Transit in a Changing Market."
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articulated in the adopted Housing Plan, which apply citywide. City staff has concluded that by locating new housing next to transit, the cost of transportation will be lower, which will be especially helpful to low-income households. They also point out that constructing at higher densities lowers per-unit land and infrastructure costs, which also promotes affordability. Moreover, City staff suggests that because much of the existing housing along Central Corridor is already affordable, policies and regulations should focus on maintaining the quality and affordability of that housing.[oo] Despite the relative affordability of some of the housing stock in the Central Corridor, the HIA existing conditions analysis has shown that the need for more subsidized, permanently affordable housing is great—with nearly half of corridor residents paying 30 percent or more of their income on housing in 2009. Furthermore, the current subsidized affordable housing stock in the corridor (approximately 15 percent of the total) is not all permanently affordable—leaving a substantial amount of vulnerability for current residents, as property values on multifamily and single-family residential parcels recover from the bust and rise to levels beyond the city average.

Density enables more affordability in housing, but does not guarantee affordable housing. The per-unit cost of housing lowers with higher quantities. Therefore, denser development allows for a higher potential for lower housing prices, if development savings are passed on to consumers. This is usually an issue for nonprofit developers, who need to ensure the density is available to balance out development with limited subsidies. Density also enables for-profit developers to pass along the savings to consumers. This typically does not result in housing that is affordable to low-income residents, but could support more moderate-income households. Therefore, increased densities without other programs to require, promote, or incentivize the production of affordable units will likely not support the housing needs of low-income families.

In the Westgate station area, despite an increase in the number of higher-density rental housing units in the last decade, the median gross rent in adjacent block groups also increased, even after adjusting for inflation. Increasing density can increase affordability at a city or regional scale; however, it will not increase the amount of affordable housing available to lower-income households making substantially less than the area median income.

The success of a program that has inclusionary housing requirements is contingent upon how well the program is designed to meet the unique considerations of the regional housing market. The inclusionary zoning ordinance in Madison, Wisconsin, has been cited as an example where the regulation significantly deterred development in the city and was eventually rescinded after a few years. Madison did not enact their ordinance, however, as a result of a unique public investment that was creating significant increases in property values or development potential; instead, the ordinance was adopted citywide in the face of rising housing prices for working-class people, a common issue in college towns. The impact of light-rail transit investments and zoning regulations on the housing market and land prices is well documented throughout the country. The potential for displacement, especially around lines in newer transit systems, is not something to be ignored. In regions with developing light-rail transit systems, there is more potential to capture pent-up demand for transit-oriented development than in cities with more established transit systems. However, if the ordinance is targeted only to areas that exhibit significant demand for housing and development potential, then this will not have a significant impact. The proposed Community Equity Program simply recognizes that as a result of

[oo] City of Saint Paul: Overview of Central Corridor Affordable Housing Policies and Current Implementation Activities, January 2011

a substantial public investment, the value of a limited supply of land close to LRT stations will increase—and that all households should have an opportunity to benefit from the results of this public investment.

The proposed program is a way to recoup a relatively small proportion of the increased value of property that will result from the initial substantial public investment in the LRT.
This proposal recognizes that the City of Saint Paul has a unique housing market compared to many other jurisdictions where affordable housing requirements have been successfully implemented. Many neighborhoods in the city are still recovering from the 2008 housing market bust and are still filled with foreclosures and vacant properties. The data is clear, however, that the market is heating up in some areas of the Central Corridor, particularly around the western station areas. This policy brief recommends adopting this proposed ordinance before speculation further drives up the price of land prior to the operation of the light-rail line, rendering the development of affordable housing very difficult.

Policy Implementation

Inclusionary zoning works best when implemented in tighter housing markets. The Central Corridor is comprised of several different submarkets, each with varying demographic and market conditions. This proposal envisions this ordinance mandating the provision of affordable housing only in station areas experiencing large increases in property values as a result of the coming light-rail and increased development potential. The ordinance should be crafted to require the provision of a percentage of affordable housing units for developments within the Westgate and Raymond station areas. Data on property values, residential vacancy rates, and rents indicate a tightening housing and real estate market there. Affordable units can either be in the form of hard units on-site or gap financing to ensure that other units within the corridor remain permanently affordable.

Although construction of the system itself is for the most part financed by public money, the cost of redeveloping the Central Corridor for transit-oriented development will primarily come from private investment. Redevelopment strategies typically emphasize approaches that use public sector investment to stimulate private development that will generate public benefits. A major objective of the investment strategy for Central Corridor is to create a framework for public investment that will leverage it to “attract, shape, and accelerate appropriate private investment in the Central Corridor.” Rather than relying on the additional tax revenues that will be generated from new development to help finance needed affordable housing, the community equity approach would recapture part of the original public investment from the properties that have received the most significant benefit from that investment—a more efficient way to ensure that the public benefits are more proportional to the public investment.

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