

Building equity

Management of Resources

SECTION OVERVIEW

After having built an understanding of our city's and region's **assets and resources** (water, energy, materials and food) this section explores **resource management**, meaning:

Are we effectively managing our assets and resources to create desired outcomes, such as health and wellbeing?

KPIs for Resource Management are:

- **Information Technology, Smart City & Artificial Intelligence**
- **Land Use & Planning**
- **Mobility & Access**
- **Economy**

In the following chapters, we ask

- What systemic challenges and historic legacies carry ongoing costs and liabilities that lead to the loss of equity?
- What are the consequences of these costs and liabilities for people, businesses and communities?
- What future risks are not yet accounted for?
- How can restorative development address these challenges?

INFORMATION TECHNOLOGY

Minneapolis has a good and reliable internet infrastructure and mobile networks with high-speed options, which were first developed in more affluent neighborhoods and business/finance districts downtown before expanding to the rest of the city. Minneapolis also offers an outdoor internet network for residents and visitors that covers almost the entire city.

The cost of high-speed internet can be prohibitive for low-income communities, which impedes their access to this vital 21st-century resource. This disparity has been exposed during the COVID-19 crisis where low-income communities had a difficult time connecting to online classes.

In response, the city worked with private internet providers to offer low-cost internet options to residents.

A “smart city” strategy to monitor and optimize all resource flows, including water, energy, materials, and food, as well as smart transportation infrastructure, including drone infrastructure, has not yet been conceived or implemented. The increase in commercialization of artificial intelligence (AI) and automation and its impacts on employment and wealth distribution poses a threat that Minneapolis, like many cities, is not yet prepared for.

LAND USE

creating connectivity through inclusion, proximity & beauty

Seen through a restorative development lens, how we use land—and the equitable interplay between various uses—is the single-most-important factor in what makes or breaks the urban quality of life. Unfortunately, decisions that were made decades ago reverberate throughout the present with many mistakes of the past leaving deep scars in the urban and social fabric of Minneapolis today.

1. Inclusion

From the 1930s onwards the practice of redlining entire neighborhoods to inform lending practices, and later, the proliferation of racial covenants that forbid sales of homes to certain demographics, instilled racial discrimination into the DNA of neighborhoods in a way that is still visible today. To a large extent, these redlined maps read like a blueprint that reproduces itself on many of today's maps showing disparities in homeownership, income, health, educational attainment in Minneapolis neighborhoods.

Redlined neighborhoods were considered prime candidates for highway construction and other projects of “Urban Renewal.” In the 1950s, the construction of I-94 connecting Minneapolis and St. Paul tore apart thriving, self-sustaining neighborhoods such as Rondo in St. Paul. Rondo was a community that was home to most of St. Paul's African-Americans, before many residents were displaced to areas such as North Minneapolis and East St. Paul without the ability to bring along the social fabric and upward mobility that sustained Rondo. Decades later, in the 1980s, new highways tore through these communities as well,

creating barriers between North Minneapolis and downtown that still loom large today.

These policies and land use practices, as well as many others that played out at the national and local level, created a de facto segregation by zip code. In a landmark 2019 study, researchers showed to what extent growing up in a particular census tract influenced a child's success in life, compared to a similarly poor child in a different census tract. For example poor children growing up in the Minneapolis Harrison neighborhood are expected to make \$25,000 in their adult households, whereas poor children from the neighboring Bryn Mawr neighborhood are expected to make twice as much, at \$51,000 per household.¹

As *The New York Times* put it:

“The researchers believe much of this variation is driven by the neighborhoods themselves, not by differences in what brings people to live in them. The more years children spend in a good neighborhood, the greater the benefits they receive. And what matters, the researchers find, is a hyper-local setting: the environment within about half a mile of a child's home.”²

Minneapolis Redlining (HOLC) Map, 1934

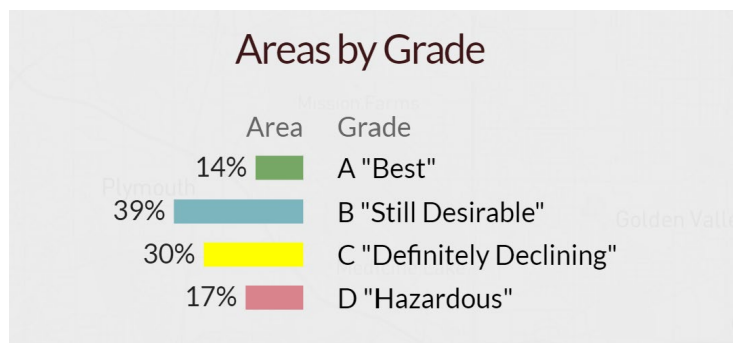
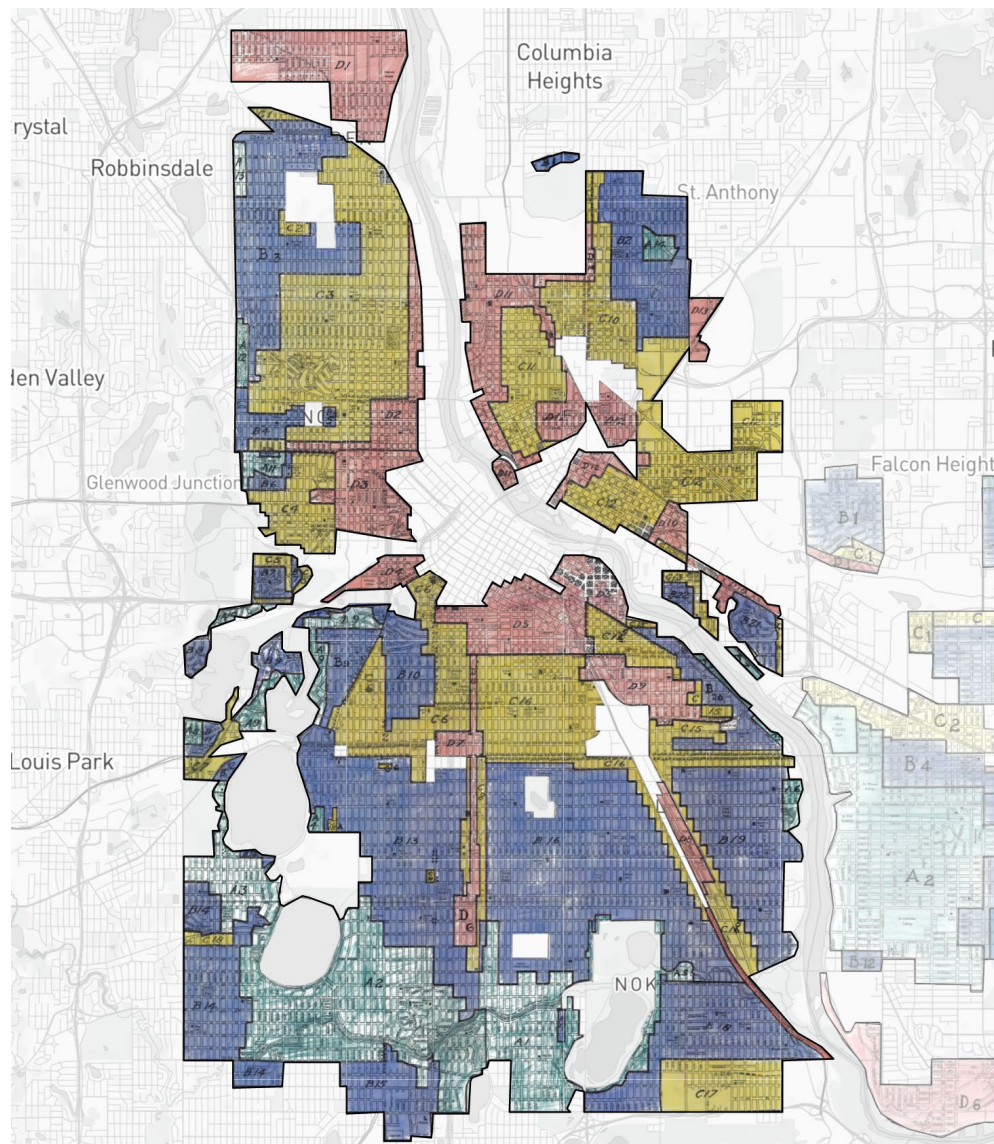


Image: Retrieved from *Mapping Inequality*^d



2. Proximity

The second legacy of historic land-use decisions is the fractured, car-dependent character that is not only felt in the metro area but even at the neighborhood levels. Minneapolis neighborhoods that may have once had characteristics of a self-contained urban village are no longer safe or pleasant to traverse on foot or by bike, even in affluent areas. Rarely are children able to walk to school or parks by themselves, requiring the addition of a \$50 million school bus expense to the city's budget. Senior living is often isolated in gated communities or, for more affordable options, is relegated to land near highways or other areas on the outskirts of the city. Large areas of land are used for surface parking or for commercial activities, bisecting neighborhoods in ways that require motorized mobility. Often large sections of land within neighborhoods are occupied by low-wage employers forming clusters in areas that already suffer from economic distress. Although the city no longer requires parking spots for new developments, it comes at a time where other key elements that are needed for car-less living are not in place.

Principles of regenerative urbanism call for safe and healthy proximity between key institutions such as schools, senior care facilities, health care, and religious institutions, sports and recreation, grocery and other businesses and services.

Urban planners and local governments recognize the need for greater density and proximity, and "Complete Neighborhoods" are championed as one of the main goals of the Minneapolis 2040 comprehensive plan. As they seek to undertake the difficult task of changing the historically grown structures of the urban landscape, they need to ensure accessibility to spaces for "live, work and play" exists for all people of all generations and socioeconomic status, including children and seniors.

When this proximity is lacking for most residents, new multi-use developments designed to achieve a neighborhood feel tend to serve a particular demographic, such as young professionals, and continue to act as non-local 'destination stops' for everyone else, ensuring the continued use of cars as the preferred and safest way of travel within the city. The lack of proximity further exacerbates social and economic disparities.

For example, amongst people who don't own cars, more blacks than whites live in poverty, indicating that if owning a car is a lifestyle choice, it is more likely one made by whites.

The Restorative Mindshift

The lack of proximity of institutions and businesses to live, work, and play is perhaps the single-most-important barrier to social cohesion and greater quality of life for all residents. For example, many parents spend hours per week driving their children to and from after-school activities, adding stress and pressure to roads, traffic, and family time. While this may be the chosen way of life for many mid- and upper-income families, many parents in the lower-income brackets are not able to drive their kids to after school activities due to long work hours. This risks deepening social exclusion for children and adults alike and acts as a barrier for social integration and equality in the city.

Looking at other countries offers valuable perspectives. In Iceland, for example, schools and after-school activities are built into each neighborhood in such a way that no child needs to cross a major road. Children in Reykjavík usually do not have to travel more than half a mile to school. A study shows that 84% of school children in Reykjavík, including those of elementary age, walk or cycle to school and after-school activities, even in winter.⁵

3. Beauty

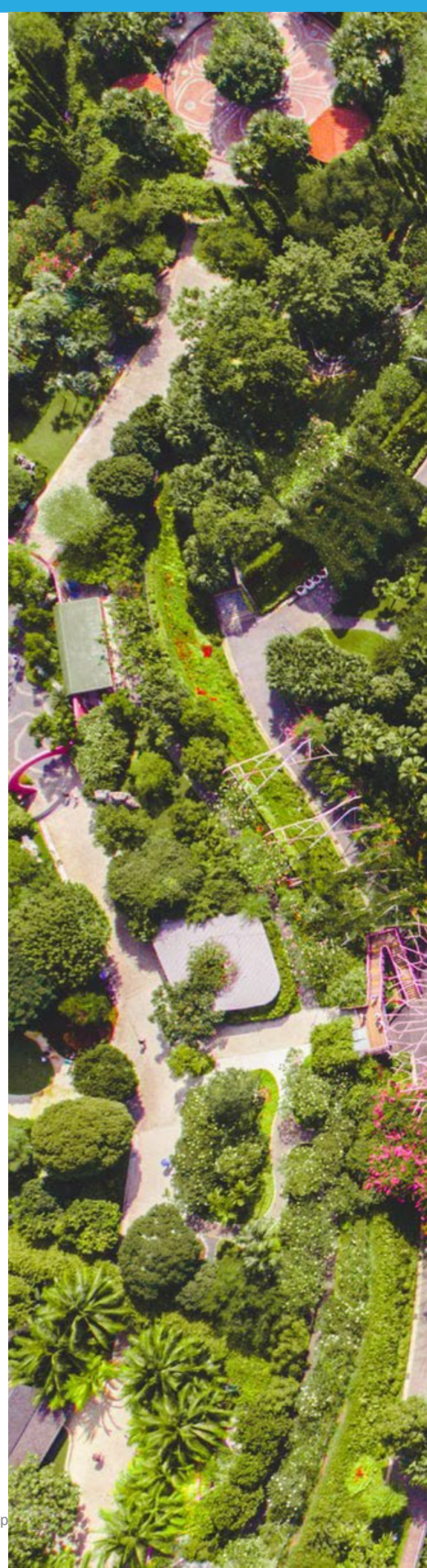
Cities are a panopticon of the human experience, holding the promise of connection and happiness alongside the specter of isolation and despair. Emerging research that links how cities affect mental health suggests that living in a city can increase mood disorders, anxiety disorders, and the risk of schizophrenia; yet it can also decrease the risk of suicide, dementia, and Alzheimer's disease.³ The degree to which one experiences connection or, conversely alienation, is largely determined by land use and urban design practices. In addition to inclusion and proximity, beauty—which can be broadly defined as a harmonious integration between architectural and natural forms—plays an important role in the wellbeing of residents.

Like many American cities in the late 19th and early 20th century, Minneapolis and its downtown were once home to many architectural jewels. Aesthetic forms and details were engrained into the built environment as an expression of civic pride during a time when the creation of beauty was a valued public good. In the 1960s and 1970s, large swaths of downtown gave way to a new, more utilitarian building style, as well as a significant increase of surface parking lots. Today, the revival of the North Loop with its historical warehouse architecture offers a glimpse of what was lost, revealing an enduring, perhaps even timeless beauty that seems to have outlasted the futuristic utilitarian architecture of the 1960s and 1970s that now dominates much of downtown.

With regard to natural areas, Minneapolis was home to pioneers of urban park design and managed to preserve a world-class park system to this day (Minneapolis and St. Paul regularly trade top spots on the Trust for Public Land's national ranking for best park systems). While the Minneapolis Park and Recreation Board (MPRB) has managed to preserve and expand the park system and is focused today on ensuring inclusion and equity, access to greenspace is somewhat limited by the car-centric surrounding urban infrastructure. Parks are often destination points that are not integrated into communities through safe walk and bike paths, making them an underutilized asset for many populations.

Beyond the formal park system, blue infrastructure—the integration of water into the public realm—is underdeveloped within communities. The Mississippi River and its riverfront are largely underutilized, and past land use and urban design practices caused streams and wetlands to be hidden to make space for development. Likewise, urban agriculture, although championed by many non-profit organizations and explored by MPRB for its parks, is not yet integrated into public spaces on a significant scale or as a part of a larger comprehensive strategy.

Parks, plazas, and other attractions such as water features and public art, are not a part of the typical neighborhood design in Minneapolis or the region. Similarly, biophilic design is not systematically planned for or measured as a part of city development. As the integration of nature, art,





MOBILITY & ACCESS

towards people-centered connectivity

Historic urban sprawl and the subsequent development of a car-centric culture in the United States is deeply ingrained in the fabric of today's U.S. cities. This has led to a historic approach to mobility centered on the built environment. Today, cities like Minneapolis face the challenge of transitioning to a "people-centered" approach to mobility that prioritizes equal access and equity.

1. Car-Centric Commutes

In Minneapolis, residents spend an average of 25 minutes commuting to work, or 50 minutes each day, the 4th best amongst metropolitan areas in the country⁶. However, in 2017, the last year measured, additional traffic delays have reached an all-time high of 56 hours per person per year, putting the cost of congestion for each resident at \$1100 in lost time and additional gas money.⁷ All in all, Minneapolis residents spend a little over 250 hours each year on their commutes, which equals more than 6 workweeks. However, what was accepted as an inevitable part of life before the pandemic no longer seems so self-evident or desirable, as people working from home are discovering an additional hour of stress-free time every day.

The desire to reduce car commutes predates the pandemic. A city survey of approximately

5,000 residents from 2018 shows that about 50% typically commuted by car, however, when asked about their preferences for commute or mobility, every category (transit, biking, walking, ride share, car share, and other) saw an increase as a desired travel mode, except for the private car.⁸

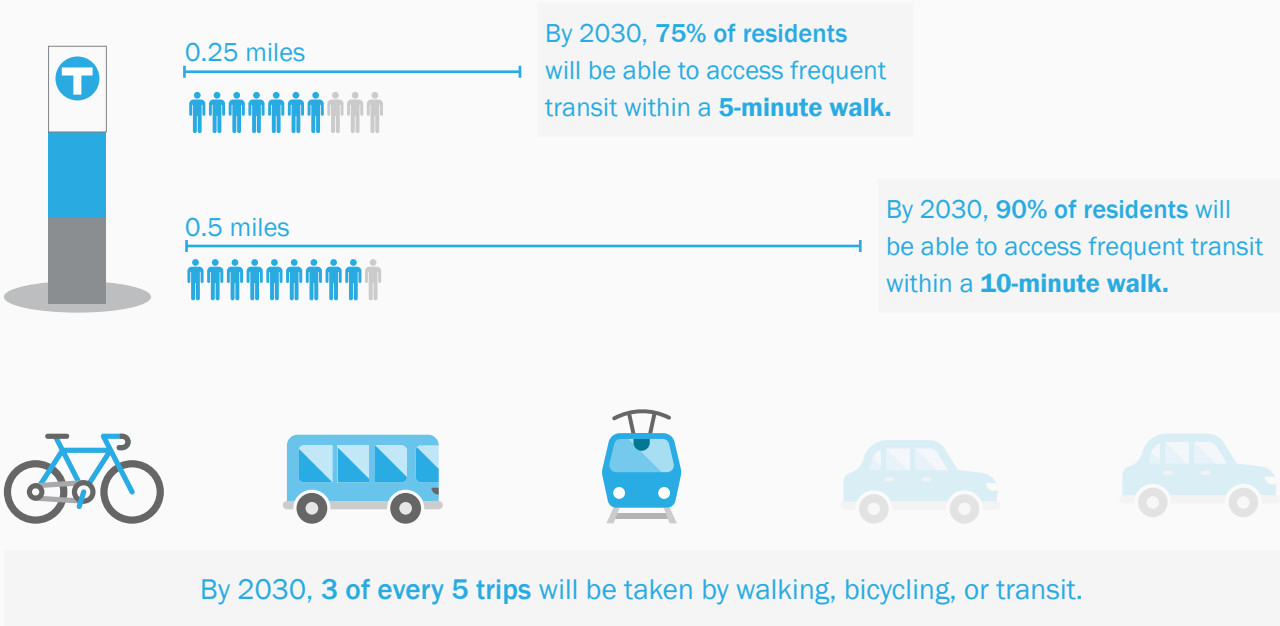
Following efforts to reduce traffic, vehicle miles traveled are down 2% in Minneapolis between 2007 and 2016, even as the city gained roughly 30,000 residents.⁹ This is a consequence of new residents moving to dense areas, where new apartment buildings serve as urban infill, and of investments in public transit and bike infrastructure. However, Minneapolis's climate goal is to reduce total miles driven in the city by 40% by 2050, even as the metropolitan region is expected to gain more than 800,000 new residents by 2040, potentially adding more than 675,000 personal vehicles to metro area roads.¹⁰

Currently, approximately 47% of Minneapolis residents have a quarter-mile access, or about a 5-minute walk, to a high-frequency transit. The Draft Transportation Action Plan (TAP) has set a 2030 goal of 75% of city residents located within a quarter-mile and 90% of residents located within a half-mile walk of high-frequency transit corridors.¹¹

By 2030, the plan sets a goal that 3 of every 5 trips be taken by walking, bicycling, or transit.

Reaching these ambitious goals will require a concerted, holistic effort, not only focused on infrastructure and transit but also on land use, urban design, and the strengthening of hyper-local economies, where technical and vocational training and work can take place in the neighborhoods where people live. Local resource management offers opportunities for shorter work commutes, and less truck traffic coming from the transportation of goods and waste management.

Key Targets of the Draft Transportation Action Plan



Before the pandemic, Minneapolis residents
spent more than 250 hours each year on
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Minneapolis

2. Existing Infrastructure

Within Minneapolis, there is an extensive transportation system that includes networks of streets, sidewalks, bikeways, and transit routes that offer people many options for getting around. The City of Minneapolis owns and operates some, but not all, of this transportation system. According to the Minneapolis Draft Transportation Plan, there are:

- 1,062 miles of streets and 394 bridges (Minneapolis owns 107 of the bridges)
- More than 2,000 miles of sidewalks
- 150 miles of on-street bikeways and 105 miles of off-street bikeways and trails
- 811 traffic signals, operated and maintained by the City of Minneapolis
- 207 local transit routes and 11 high-frequency transit routes
- Many street trees, boulevards, and public spaces

Although Minneapolis is considered one of the most bikable cities in the United States and has a relatively high walk score of 70, it does not compare favorably with international cities. Biking and walking are not safe choices for most people for most trips, with cars being the default option. There are still many hazardous roads and intersections, poorly managed side and crosswalks, and a lack of safe passage through tunnels and bridges.

As it stands, the existing system is expensive to maintain, with few resources left to change infrastructure at a more fundamental level. For example, state-wide, the Minnesota State Highway Investment Plan (MnSHIP), published in 2017, estimates that state roads are underfunded by \$17.7 billion over the next 20 years, which equals an annual funding gap of \$885 million. Without significant public investment, the state and local roads and bridges will continue to fall into disrepair. (The 2018 Report Card for Minnesota's Infrastructure by the American Society of Civil Engineers gives the state's roads a D+, Transit a C- and Bridges a C.)

Taking a long view, knowing that foundations need to be put into place today, restorative development challenges urban planners to rethink the concept of proximity more deeply and think beyond mixed-use developments that combine retail and residential and tend to serve young professionals. It calls for creating intentional proximity between institutions (schools, senior living, places of worship) and amenities (grocery stores, parks, etc.) which must be connected by blue and green infrastructure that is walkable and bikable. With ride-share apps and electric scooters at their disposal, young professionals can already make the choice not to own a car. When this becomes possible for families and senior citizens as well, true restorative development is taking place.

Left: A view of Minneapolis showing bodies of water, park land and "areas of interest" (yellow) as defined by Google Maps. How would today's planners rethink connectivity if they could go back to the drawing board?

3. Transportation and Equity

Transportation is one of the top two household costs, accounting for approximately 19% of household income in Minneapolis.¹² During the drafting of the Transportation Action Plan, one common feedback received through its engagement with the community was that free transit fares, lower transit fares or more affordable transit were desired by most people as the current transit fares were considered a barrier for many individuals.¹³

Car-centric cities have high traffic accidents and fatalities. Every year from 2007-2016, an average of 95 people either died or experienced a life-altering injury on Minneapolis' streets.¹⁴ These injuries are disproportionately suffered by those walking and bicycling in lower-income neighborhoods, and by the Native American population.¹⁵ In 2017, the City adopted a Vision Zero Policy and in 2019 the City Council passed the 2020-2022 Vision Zero Action Plan, which commits to zero traffic-related fatalities and severe injuries by 2027. Through these actions, Minneapolis has unequivocally committed itself to improve safety on the streets for all people regardless of income, race, or age.¹⁶

Although multiple levels of government—cities, the Metropolitan Council, and the state, are taking significant actions, such as building neighborhood mobility hubs; the real challenge of the next decades—with first action steps needed today—consists of finding new models within neighborhoods that can create proximity and equitable access to ecosystems of work, live and play for all, not just for those for whom not owning a car is a lifestyle choice facilitated by the ability to live in upscale, mixed-use developments.

Today, not owning a car is mostly a function of income, not choice. As such, income inequalities and inequities have an impact on car-ownership, and by extension, access to opportunities. African-Americans and people of color are more likely to live in households that do not own cars. In Minneapolis, 31% of people of color did not own cars compared to 12% of whites in 2017.¹⁷

Land-use practices that force car ownership as a condition for access to jobs and services are by definition inequitable, allowing those who have a personal vehicle to build equity, while those without continue to lose equity.

A restorative city is an accessible city. It provides a coordinated network of emissions-free, safe, and easy to access mobility options such as separated sidewalks, lanes, and trails for walking and bicycling and it supports electric hydrogen, and biogas filling stations for zero-emission vehicles. (With regards to low-emission vehicle adoption, currently, just 2.4% of the cars, buses, and trucks in Minneapolis are hybrid or electric. It is estimated that by 2040, 55% of all new car sales will be electric.¹⁸ No plans appear to exist to introduce fuel cell technologies in public transit or school busing.) In restorative development, placing jobs within neighborhoods, and providing low-cost, emission-free public transport ensures equal and equitable access for all. It understands that every hour saved in traffic can be an hour invested in child development, elderly care, or personal health and wellbeing; time that today is severely lacking especially for low-income families.

African Americans have access to 31% fewer jobs requiring an associate degree or less, on average, via a 30-minute transit ride than whites.

A multi-city study on equity and mobility that included Minneapolis found that access to transit, in general, is equitably distributed amongst all income and racial groups, but that access to quality transit—frequent service to key destinations—is not equitably available.¹⁹ According to this study, African Americans have access to 31% fewer jobs requiring an associate degree or less, on average, via a 30-minute transit ride than whites, even as they disproportionately depend on such jobs for their livelihoods.

In Minneapolis, only 5% of jobs requiring less than a High School education are accessible by transit, walking, or biking for workers within 30 minutes.²⁰ 23% of such jobs are accessible within 60 minutes without a car. This means 70% of these jobs take longer than 2 hours each day to reach without a car.

Another measure indicates that 88% of all jobs are near frequent transit, meaning they are within a roughly 10-minute bike ride or walk of a frequent transit stop. However, this measure is of questionable usefulness, as having to combine public transit and biking is not practical for most people, not least because bike space on buses is very limited and cumbersome to use on the light rail.



MOBILITY & ACCESS

towards people-centered connectivity

In restorative development, access is defined not only in terms of access to geographical locations through physical infrastructure but also in terms of access to vital resources such as education, housing, and healthcare. Equitable and affordable access to these resources is the precondition for a productive workforce and flourishing inclusive local economy. When entire groups of people lack these resources, communities lose equity and resilience.

1. Education

Select indicators paint a stark picture of the disparities that exist in Minneapolis concerning access to education, homeownership, and health care.

Minnesota has the worst achievement gap in the nation. This hasn't always been the case. Minneapolis, once a model of integration where less than one percent of Black students attended highly segregated public schools (where 90 percent or more of the student body was not white), now has many more highly segregated schools. In 2018, a quarter of the region's Black students were attending highly segregated schools.²¹ These schools tend to have fewer resources, less experienced teachers, and lower graduation rates, leading to lower rates of college attendance and lower income earning potential for those students. Studies have shown that in general Minnesota equitably distributes funding to districts that have a higher proportion of students in need, as measured by free and reduced lunch, with districts with mostly students of color receiving 8 percent more funding than predominantly white districts. However, schools that serve mostly poor, white students receive \$509 more per student than poor, non-white school districts.²²

There are many contributing factors to the achievement gap that are outside of a school's direct control, such as food insecurity, lack of family support, and the absence

of summer learning programs. In addition to strengthening existing institutions and services, new ways of thinking are required to create new support systems to fill the gaps.

It takes a village to raise a child, and restorative development considers the role of neighborhoods—designed for inclusion, proximity, and beauty—to help raise a city's youth. Even in neighborhoods that cannot be built from the ground up, where blight, pollution, and gang violence have rendered streets unsafe, restorative hubs could serve as a safe space for learning and play, and act as a catalyst for change. For example, they could offer youth mentorship and training in connection with food production, energy generation, and manufacturing, including the preparation for vocational career pathways.

Creating more vocational and technical career pathways within neighborhoods is going to be essential in adapting to the structural change to come. Already, there is a misallocation of resources, where Minneapolis and Minnesota are experiencing a shortage of skilled workers, including technical labor, even as unemployment is high in some communities. With the increase in automation, even more people will find themselves out of work, with cities shouldering the social and socio-economic costs while corporations benefit from the gains. More than ever, neighborhoods need to serve as engines of the local economy, and they can do so through smarter management of resources, such as food, energy, water, and materials.

2. Homeownership

The increase in housing costs nationwide, but especially in growing cities like Minneapolis, has become a burden for many households while putting pressure on cities and their budgets. Over 57% of people of color and 47% of whites who rent in Minneapolis are cost-burdened, meaning they spend more than 30% of their incomes on rent.²³ In addition, in 2019, the city saw more than 10,000 people experiencing homelessness, a record high since 1990. This record was again broken in 2020 when the COVID-19 pandemic led to unprecedented growth in homeless encampments. At the time, Hennepin County officials estimated that it would cost \$1 million per week to house and protect the homeless from COVID-19 exposures, and in late 2020, \$22 million were allocated to six new facilities.

By 2040 the population of Minneapolis is projected to be 485,000 people²⁴, an increase of 50,000 people from 2019 levels. The seven-county Minneapolis-St. Paul region is projected to gain 893,000 people by 2040.²⁵ In addition to the existing shortage of housing supply, other trends are decreasing the availability of affordable housing: nationally, the fastest rise in home prices is at the low end of the market, removing affordable options. At the same time, the labor shortage in the construction market and a rise in material costs have increased the cost of building, making the development of new housing only financially attractive at the upper echelons of the market.

Today's renters are at a historical disadvantage: Since 1960, renters' median earnings have gone up 5 percent nationally while rents increased 61 percent. (For reference, homeowners earn 50 percent more while home prices have gone up 112 percent.)²⁶ Unfortunately, homeownership has also become harder to access, especially for some populations.

Since 1987, white homeownership rates have increased by 3.6 percent, while black homeownership rates have fallen by 2.7 percent.

Homeownership is the prime driver of the wealth gap between blacks and whites. Unfortunately, trends are pointing in the wrong direction. Since 1987, white homeownership rates have increased by 3.6 percent, while black homeownership rates have fallen by 2.7 percent.²⁷ Minneapolis-St. Paul has the largest homeownership gap in any metropolitan area in the nation. Blacks and African-Americans have a homeownership rate of 25.6 percent in Minneapolis compared to a much higher rate for whites at 76.8 percent, a gap of 51 percentage points²⁸ This is a direct reflection of historical patterns that prevented black Minneapolis residents from building intergenerational wealth, of today's significant income disparity, and of persistent structural barriers, such as reduced access to loans and mortgages.

A plethora of measures to increase housing affordability have been taken by the city and other levels of government, some of which caused heated debate. The Minneapolis 2040 Comprehensive Plan revolutionized single-family zoning to allow for greater density, and an inclusionary zoning ordinance requires developers to set aside a certain percentage of new units at affordable levels. Mayor Frey, for whom housing affordability is a priority, put forth \$40 million in the city's 2020 budget to fund various programs in 2020, with a \$7.2 million increase in ongoing funding pledged for 2021. While this is a historic high and places Minneapolis as a national leader, the city acknowledges that these investments need to be embedded in a larger effort of inclusive economic growth.

Restorative Spotlight: Affordable Housing

Rising income inequality and its effect of skewing the housing market towards high-income earners have a profound impact on the city's resilience as an ecosystem. As prices increase, service and other workers—many of whom have proven to be essential to our society's functioning during the COVID-19 pandemic, are no longer able to live near the place of their work. This displacement leads to sprawl, longer commutes, and less time spent at leisure or with family.

The increase of cost-burdened households has significant opportunity costs. According to an analysis of the National Equity Atlas, if all Minneapolis renters paid only what they could afford on housing they would have an extra \$233 million to spend in the community each year, or \$5,600 per household, which is more than an annual food budget. That amount would also be the equivalent of 77% of the cost of childcare or 52% of tuition at the UofM.²⁹ Bringing rents down to an affordability level (no more than 30% of income) would also be a significant step towards closing racial disparities, giving Blacks 20% more disposable income. (For reference, whites would have 5% more disposable income).

There is no single solution for an issue as complex as housing affordability, especially when the problem definition is equally complex: is the market working exactly as intended? Is it working too well, or not at all? Will increasing supply drive down rent, or will it drive developers and their investors to look for markets elsewhere? And is change possible in a system where governments are faced with limited funds, and developers spend multiple years patching together dozens of competitive tax breaks and grants to finance an affordable housing project? (According to some estimates, addressing affordable housing challenges in the Twin Cities region would require an investment of at least \$1.1 billion in public funds, of which 30 percent would go to housing preservation and production, and 70 percent to direct subsidies to low-income renters.³⁰)

Restorative Development makes a case for not tackling affordable housing in isolation, but pulling levers at the system level, to create the “inclusive economic growth” that the City of Minneapolis is seeking to develop. Restorative development offers a pathway to creating 21st-century local economies that attract well-paying employers and providing career paths designed to graduate people out of publicly-subsidized housing. It looks to leverage public investment in restorative infrastructure as an incentive for the private sector to build for net-positive outcomes.



In Hawthorne-McKinley, 270 out of 1500 people (15%) don't have health insurance.

3. Health Insurance

Access to health insurance continues to be a challenge in the United States, and consequently in cities such as Minneapolis, even as the city scores a few percentage points better than the national average. In 2018, 67% of residents had private insurance, 34% had public coverage and 7% had no health insurance. In some neighborhoods, such as Hawthorne-McKinley, uninsured rates were as high as 15% in 2018. While this data does not exist on the neighborhood level, nation-wide research has shown most people remain uninsured either because of affordability concerns tied to the marketplace, or because of administrative burdens imposed by Medicaid and Medicare, especially during re-enrollment.³¹ While Minnesota is a leader in increasing access, significant barriers still remain, especially in areas of concentrated poverty.

However, even in a system where health insurance is tied to employment, having a job is no guarantee for coverage: in fact, amongst those residents who are in the labor force and employed in Minneapolis, slightly more than the Minneapolis average—7.8%—have no insurance. (Another 14.5% has public coverage). This indicates that employment does not remove barriers to health insurance for those who work part-time, are entrepreneurs, or receive no benefits for other reasons. While local governments do not create healthcare policies, they have a vital interest in attracting employers that offer good benefits, as the consequences of underinsurance are felt community-wide at the local level.

Access to private health insurance is not a sufficient indicator of the financial burden posed by health care. A person earning just above the threshold for public assistance will likely experience considerably higher stress paying private insurance deductibles and out-of-pocket costs than someone who earns somewhat less but qualifies for public coverage. According to the Federal Reserve, almost 40% of American adults would not be able to cover a \$400 emergency expense with cash, savings, or a credit card charge that they could quickly pay off.³²

The Milliman Medical Index, which takes the position that healthcare costs paid by the employer would otherwise be paid in wages to the employee, estimates that the typical American family of four insured by the most common employer-sponsored health plan can expect to spend more than \$28,000 on healthcare in 2019. Of this amount, \$15,788 is paid by the employer; \$7,674 is paid through employee payroll deduction, and \$4,704 are out-of-pocket expenses.³³

ECONOMY

growth through equity

In 2019, Minneapolis was listed as the 47th most livable city in the world and 10th in the United States, as ranked by the Economist Intelligence Unit's Livability Index.³⁴

The economy in Minneapolis has long benefited from the city's proximity to a large number of Fortune 500 companies, as well as to many private businesses operating in diverse industries. Minneapolis-St. Paul ranks first in Fortune 500 Companies per capita among the top 30 metro areas.³⁵ Minneapolis also regularly shows up in top spots for rankings such as the healthiest city, the best place for women in the workforce, and the best place to retire.

However, these accolades belie a deeper, more troubling truth. While the Minneapolis-St. Paul placed 6th in median household income amongst U.S. metro areas³⁶, and Minnesota has the 6th lowest poverty rate amongst all states³⁷, it has some of the biggest disparities nationwide on both

measures. Amongst all U.S. states, Minnesota ranks 49th in median annual income gaps and 48th in poverty rate gaps between blacks and whites.³⁸

After the tragic and troubling events of 2020—a public health emergency that shut down the city's economy and disproportionately affected people of color, and the social unrest following the death of George Floyd in Minneapolis—the city is coming face to face with the toll of inequality. A new approach is needed to equitably revive the local economy, and consequently, increase community health and wellbeing, and create a sense of culture, identity and pride in the city that is truly shared by all residents.

1. Economic Inequity: Key Figures and Opportunities

Minnesota has one of the highest racial disparities in the United States. A recent study comparing the socio-economic characteristics of blacks and whites places Minnesota 45th in racial integration, 49th in homeownership rate gap, 48th in poverty rate gaps, 50th in percentage gap of adults with at least a high school diploma, and 45th in racial progress.⁴⁴

The significant disparities in homeownership are one of the main barriers to building intergenerational wealth and equity for black Minnesotans. Minnesota's overall homeownership rate is 71.6 percent, one of the highest in the U.S. However, blacks and African Americans only have a homeownership rate of 25.6 percent in Minneapolis compared to a much higher rates for whites at 76.8 percent.⁴⁵

While income for Minnesotans is ranked as the 6th highest in the Nation, when divided by race the numbers differ significantly. In 2017, the median income for a White household was \$65,845, while that of a Black household was \$40,165, or 61 percent of a white household's income. These disparities are more pronounced in Minneapolis, where the median black family income was \$36,000 in 2018, compared to \$83,000 for a typical white family.⁴⁶

Since the last economic recession and despite a significant effort and millions in investment, our region has only narrowed the wage gap between white Minnesotans and Minnesotans of color by \$840 between 2007 and 2017.⁴⁷ While there are other cities with equally low values, others have made more progress, such as Baltimore (+\$4158) and San Francisco (+\$6680).

This slow progress in wage growth for people of color takes place in a national context of wage stagnation for all low-income workers. Between 1965 and 2015, workers in the top 5 percent had their wages double from \$70,000 to \$145,000, while for the bottom 10 percent the wages increased only \$5,000, from \$15,000 to \$20,000.⁴⁸

The Business Case for Equity

The case for equity is strong: according to a study, Minnesota's GDP would have been \$16 billion higher in 2011 if there were no racial disparities in income.³⁹

Nationally, the numbers are equally staggering. In "The Business Case for Equity" the authors write:

*"Minorities make up 37% of the working-age population now, but they are projected to grow to 46% by 2030, and 55% by 2050. Closing the earnings gap by 2030 would increase GDP by 16%, or more than \$5 trillion a year. Federal tax revenues would increase by over \$1 trillion and corporate profits would increase by \$450 billion. By 2050, closing the gap would increase GDP by 20%. This is roughly the size of the entire federal budget [...]"*⁴⁰

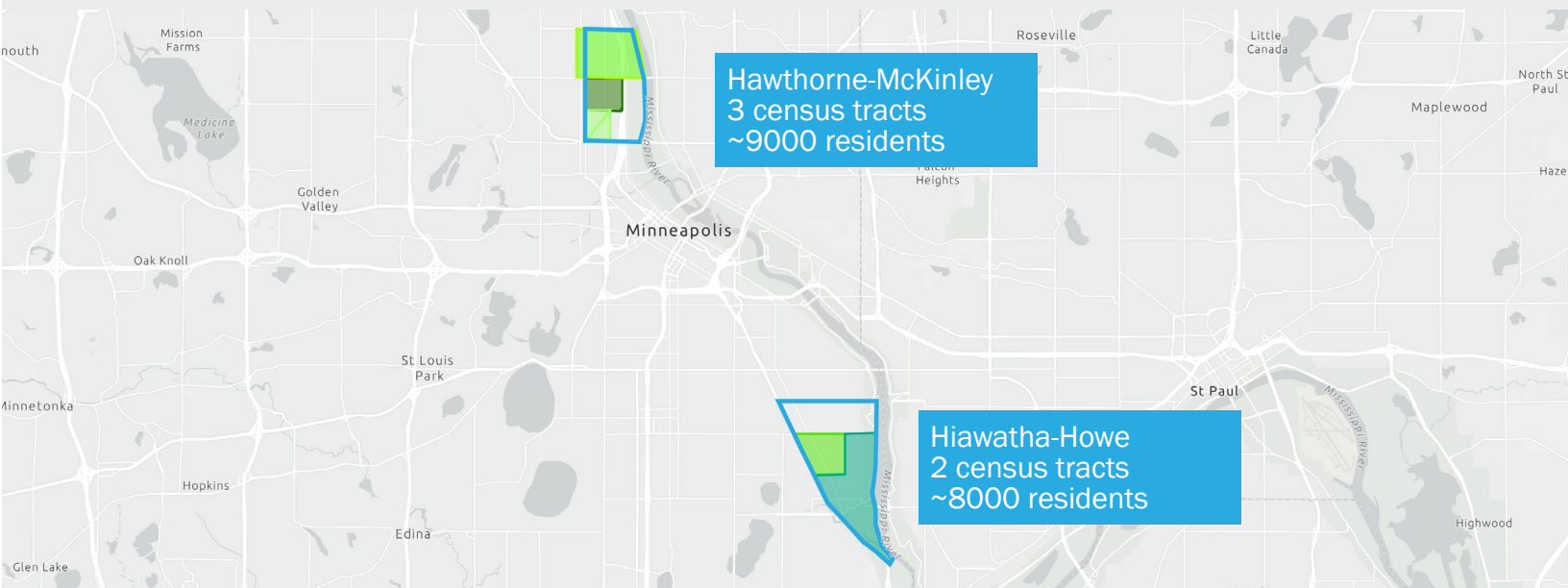
Closing the earnings gap in the United States would grow the national GDP by 20 percent by 2050.

While minorities represent about 22 percent of the Twin Cities metro population, minority-owned businesses represent just 7 percent of all employer firms.⁴¹ According to the Center for Economic Inclusion, if the minority-owned business ownership rate was on parity with whites, an additional 87,000 people could be employed across the state.⁴²

Lastly, the City of Minneapolis, like many economic hubs, will have to contend with a multitude of structural changes. The region is facing a talent shortage that is projected to worsen into the future, even as increased automation will eliminate jobs for those who are most economically vulnerable. Eliminating racial disparities represents as much as 70 percent of all opportunities to address the talent gap⁴³, while also increasing the workforce's resilience to weather deep structural economic change.

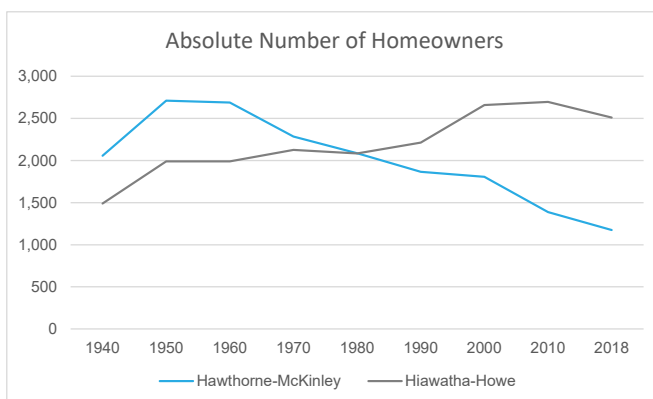
2. Case Study: A Tale of Two Neighborhoods

Comparison of historic homeownership, income and education levels in Hawthorne-McKinley (North Minneapolis) and Hiawatha-Howe (South Minneapolis) based on U.S. Census data from 1940 -2018.

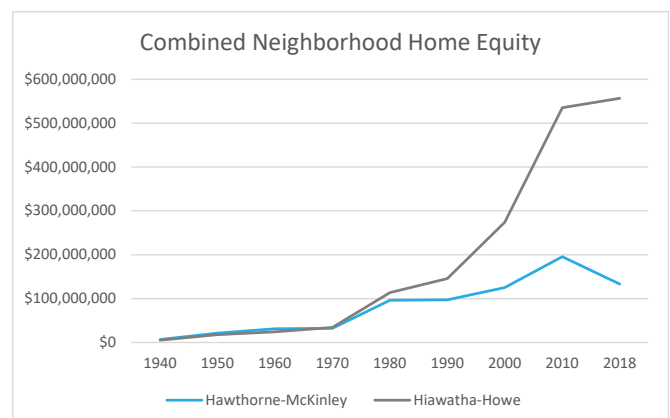


2.1 Homeownership Equity Gap

Hawthorne-McKinley experienced a significant exodus of homeowners in the 1950s, 60s, and 70s. As a result, the neighborhood has lost an amount of potential neighborhood home equity that is larger than the combined home equity that exists in the neighborhood today.



- Note that Hawthorne-McKinley has had more homeowners for many decades
- In absolute terms, Hawthorne-McKinley homeownership has almost halved since 1950, due to population decrease, racial covenants, redlining, and other discrimination that prevented or failed to support new homeownership



- "Combined neighborhood home equity" describes number of homeowners multiplied by median home value
- Dramatic growth took place in Hiawatha-Howe in last 30 years
- Significantly slower growth registered in Hawthorne-McKinley
- Hawthorne-McKinley more vulnerable to downturns: 2018 home values similar to 1980s

Thought experiment: What would the combined equity be today if there were the same number of homeowners in each neighborhood as there were in 1950?

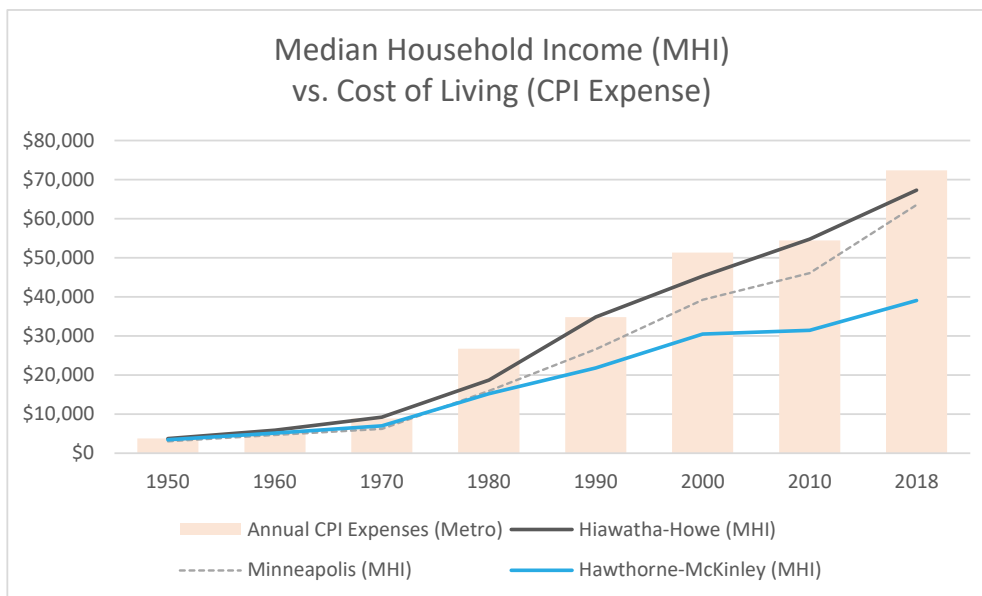
	Hypothetical equity*	Real Equity 2018	Equity Gain/Loss
Hawthorne-McKinley	\$307,766,275	\$133,278,350	\$(174,487,925)
Hiawatha-Howe	\$441,653,575	\$556,780,750	\$115,127,175

* Figure is based on number of homes owned in 1950 and today's neighborhood home values

The gap between Hawthorne-McKinley's hypothetical and real equity (\$174M) is greater than its entire real neighborhood equity today. Further, this is based on today's lower home values in Hawthorne-McKinley; the real difference is likely much higher since higher homeownership rates generally lead to higher home values.

2.2 Quality of Life Gap

Economic inequality has widened to a point where it would take two household incomes for a Hawthorne-McKinley household to reach the average quality of life in the metro area. The quality-of-life gap for the neighborhood's 9000 residents is over \$91 million every year. .



- In 1950, HMK median income covered 90% of expenses; today it covers only 54%
- Household incomes for a Hawthorne-McKinley household would have to double to reach the CPI metro area average
- This gap is partially covered by government aid, increasing household debt, etc.
- The “quality-of-life gap” for the neighborhood’s 9,000 residents is over \$91 million.

2.3 Education-Income Equity Gap

Disparities in incomes between neighborhoods are often perceived to be a result of different educational attainment. While this is true, it is only a part of the gap. If the college-degree graduation rates were brought to the same level as graduation rates in Hiawatha-Howe, an additional 1000 people would have to obtain a bachelor's degree in Hawthorne-McKinley. As a consequence, the district would realize additional incomes of \$45M.

However, graduation rates are only a part of the equation. If in addition, income disparities between people with equal levels of educational attainment were also eliminated, another \$50M of income would be available to Hawthorne-McKinley residents.

If this income disparity gap of almost \$50M—which is largely driven by high school and associate pay disparities—was closed, it would be the equivalent of adding 250 fully-owned homes or 500 4-year college degrees to the “collective equity” in the district every year. Hypothetically, this would be more than enough to graduate every 18-25 year-old in the district.

Income by Degree: Gaps in Hawthorne-McKinley (HMK) Compared to Hiawatha-Howe (HH) - 2018

	Highest Degree Earned in HMK	Income in HMK	Individual Income Gap compared to HH	Collective Income Gap
High School Degree	32% 1607 people	\$22,255	(\$11,965)	(\$19,227,755)
Associate Degree	29% 1464 people	\$23,774	(\$16,953)	(\$24,819,192)
Bachelor Degree	11% 554 people	\$41,831	(\$10,274)	(\$5,691,796)
				\$(49,738,743.00)

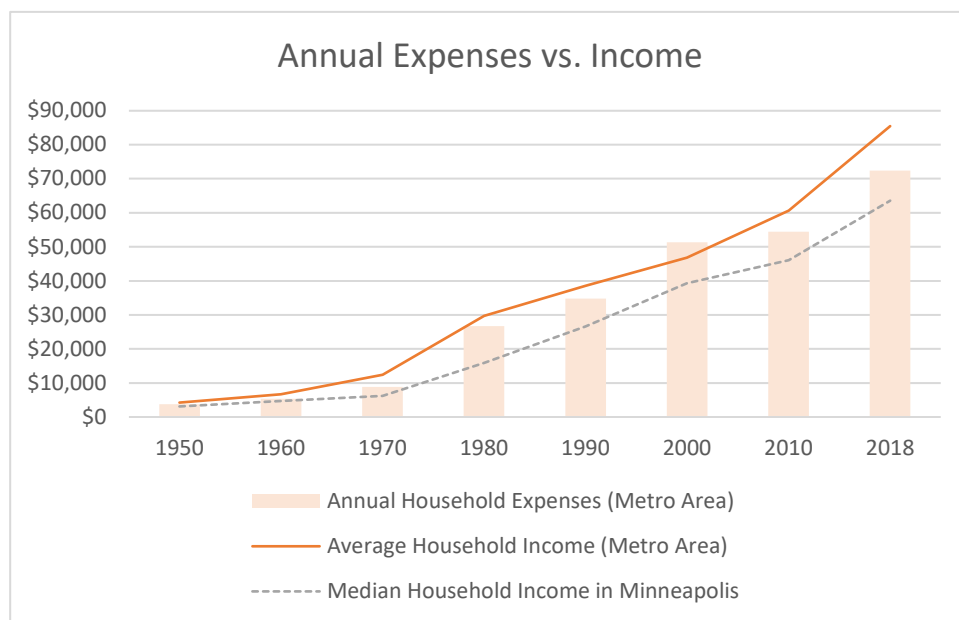
All data retrieved from the U.S. Census Bureau Decennial Census (1940-2010) and the American Community Survey 2018.

Read the full analysis at [\[Link to Google Doc\]](#)

3. Minneapolis: The Income Opportunity Gap

Traditional metrics, such as average area income, don't always tell an accurate story of the lived experience of many residents. Below is a different approach to offer a new perspective on collective equity gained and lost by residents and the local economy.

The Consumer Expenditure Surveys (CE) program provides data on expenditures, income, and demographic characteristics of households in the Minneapolis-St.Paul-Bloomington statistical area. The graph below describes the evolution of cost of living and affordability over time.



While expenses have risen at an increasing pace, the average metro household income has largely kept pace.

A gap begins to appear when we map the median Minneapolis household income against the average metro area expenses. While the mean household income is lower than the metro average, it does not reveal the extent of the opportunity missed by the city's economy and its residents.

The gap increases dramatically when we consider the bottom 30% percent of households, who earn less than \$35,000 a year. At this point, living expenses cannot be scaled back indefinitely, and liabilities likely accumulate in the system, such as an increase in household debt and public expenditures that make up for parts of the gap.

The table below illustrates the “standard of living” gap, meaning the combined amount that each percentile of low-income households is short of meeting the metro area average annual expense. It's a thought experiment that offers a glimpse into what is at stake: a total of 2.8 billion dollars. This figure describes the order of magnitude of the liabilities that are currently accumulating in the system, but also the social and city-wide economic opportunity of raising low-income earners to levels that approach the average standard of living.

Income	Percentage of Households	Total Number of Households	Combined Annual Income	Combined Expenses (Metro Average)	Standard of Living Gap
Less than \$10,000	8.70%	15131	\$151,306,920	\$1,095,189,748	\$943,882,828
\$10,000-14,999	5.50%	9565	\$143,471,135	\$692,361,335	\$548,890,201
\$15,000-\$19,999	4.40%	7652	\$153,038,428	\$553,889,068	\$400,850,640
\$20,000-\$24,999	4.60%	8000	\$199,995,400	\$579,065,844	\$379,070,444
\$25,000 to \$29,999	4.40%	7652	\$229,561,468	\$553,889,068	\$324,327,600
\$30,000 to \$34,999	4.20%	7304	\$255,649,216	\$528,712,292	\$273,063,077
				Total	\$2,870,084,791

Designing for net-positive

Outcomes



SECTION OVERVIEW

After having built an understanding of our city's and region's **assets and resources** and **resource management**, this section asks:

What are the outcomes of the status quo, and how do we begin to envision a different future?
What concrete action steps can we take today to work towards that future?

KPIs for Outcomes are:

- Health & Wellbeing
- Culture & Identity

Please note: In addition to examining the health of people and communities, this section has a heavy focus on the health of businesses. In restorative development, businesses exist inside of neighborhoods, serving as an important contributor to community health by providing career pathways and living wage jobs.

HEALTH & WELLBEING

a salutogenic approach

Neighborhood health, like the health of an ecosystem, is the expression of a complex interplay of a multitude of factors. At the most basic level, however, a neighborhood can only be as healthy as the sum of its parts. When residents experience a high prevalence of chronic disease, it impacts their physical, psychological, and even economic well-being. The resulting chronic stress impacts engagement and the ability to contribute to the community.

Of course, aging and its accompanying ailments are a fact of life: however, when chronic diseases are acquired because of social, economic, or environmental factors, they represent a liability that society still struggles to understand and quantify. Restorative development recognizes that a sick community cannot operate at a net-positive level, that disease causes individual and collective costs that need to be accounted for, and that we need to take a “salutogenic” rather than a pathogenic approach. This means a refocus on factors that support human health and wellbeing, rather than focus only on isolated factors that cause disease.

For example, we must stop accepting chronic stress as an unavoidable fact of modern life, and instead reexamine how our urban design and infrastructure, and our social and economic structures, contribute to its proliferation, especially in low-income neighborhoods. Restorative development builds towards wellbeing, understanding, for example, how beauty, such as the beauty of water and trees revealed through walkable blue and green infrastructure—can contribute to healing, especially when coupled with local strategies to increase economic security, reduce commutes and increase family time.

1. Disparities in Health Outcomes

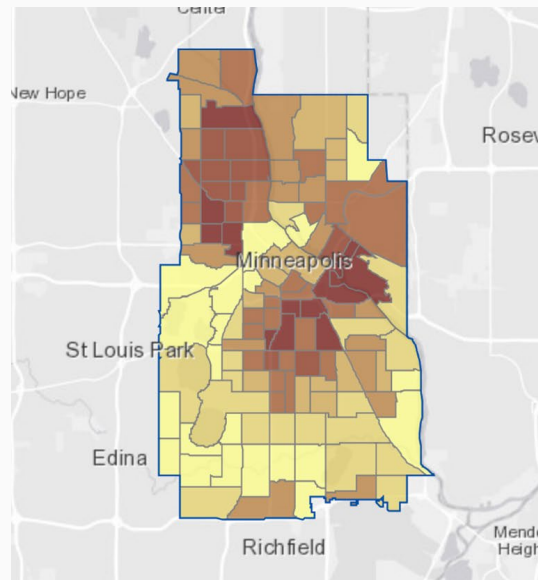
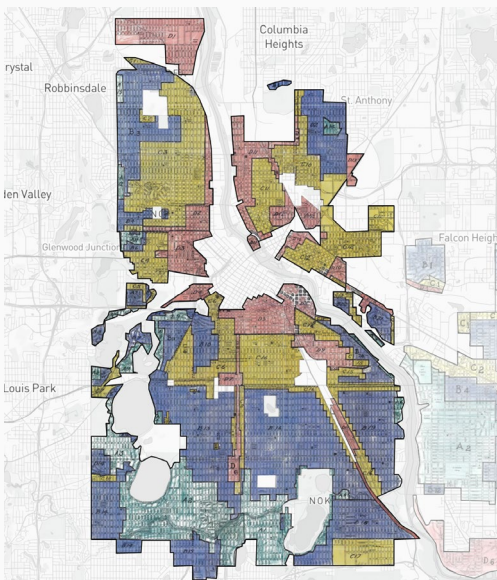
Minneapolis has significant socioeconomic and racial health disparities that are manifested at the neighborhood level. There is perhaps no starker illustration of these disparities than the measure of life expectancy. While Hennepin County has a high average life expectancy of 80 years, that figure varies considerably from zip code to zip code.⁴⁹ In Minneapolis, residents in affluent areas can expect to live into their mid-80s, with some census tracts reaching a life expectancy as high as 88 years. However, residents in low-income areas generally have a life expectancy in the low-70s, with some neighborhoods, such as a census tract in Hawthorne McKinley, only reaching 68 years. This means that city-wide there is a life expectancy gap of 20 years between the best and worst-performing tracts.

Life expectancy can vary as much as 20 years between Minneapolis neighborhoods.

These differences in life expectancy are mirrored by the differences in health status amongst neighborhoods. In some neighborhoods in Minneapolis, especially in areas of concentrated poverty, as many as 17% of residents report to be of poor physical health, and 19% report not being in good mental health.

From Land Use to Health & Wellbeing: History's Long Echo

The outline of the redlining map reads like a blueprint for many socio-economic maps of present times, including health outcomes. While the relationship is complex, it shows that structural differences in neighborhoods have not changed in almost a century.



Left: Minneapolis Redlining map, 1930s. (See Land Use Chapter)

Right: Mental Health Prevalence, 2017. Respondents aged ≥18 years who report 14 or more days during the past 30 days during which their mental health was not good. The lightest yellow mean a prevalence of 7-8% amongst respondents, the darkest reds indicate a prevalence of 16-19% amongst respondents. The map for “physical health” is nearly identical.

2. The Role of Social Determinants of Health

Amongst health experts, insurers, and policymakers, there is increased awareness of how social determinants of health—such as access to food, social connectedness, and safe neighborhoods—affect population health. Research has shown that half of all health outcomes are due to economic, social and environmental factors, with behaviors and clinical care accounting for 30% and 20% respectively.⁵⁰

There is increasing evidence that a person's zip code is a stronger predictor of health than their genetics. Since American cities are highly segregated by race, many disparities in health are racial disparities.

Every 7 minutes a Black or African American person dies prematurely in the United States. This amounts to 200 people a day who would not die if they had health outcomes similar to white people.⁵²

For example, data that maps the level of physical activity amongst Minneapolis residents mirrors almost exactly the health outcomes map on the previous page. In the deepest red areas, such as Hawthorne-McKinley, as many as 35.5-42% of the population report no leisure-time physical activity among adults. Areas with low physical activity share similar characteristics: they are low-income, experience high levels of crime, and adults are more likely to be unemployed, or conversely, work multiple jobs with unpredictable schedules. Knowing the importance of exercise does not easily translate into action when streets are not safe to run, green space is out of reach, childcare is not accessible, and people experience chronic stress about not being able to make ends meet after an exhausting day of work.

This is one of the many cascading effects when a neighborhood loses equity, where ill-conceived infrastructure and economic distress have a direct and daily impact on individual and community health and wellbeing. Unhealthy outcomes, in turn, further undermine the economic potential of a district, starting a vicious cycle that is hard to escape.

Health insurers, with Blue Cross Blue Shield of Minnesota being a leader among them, have begun to think about the long-term consequences of social determinants of health. Addressing these factors in a targeted and concerted way not only fits with the non-profit mission of Blue Cross, but it also makes financial sense wto take a step back from quarterly results and take a long-term view instead. The insurer made a pioneering move with its “Healthy Together Willmar”⁵¹ initiative, investing multiple millions of dollars in a rural town that was both experiencing increasing poverty, and an influx of immigrants drawn to jobs at the nearby poultry processing plant. Recognizing that health happens in communities, the funds supported citizen-lead initiatives, which included businesses such as grocery stores and senior care services, as well as places and spaces that foster connectivity. Today, downtown Willmar does no longer resemble a dying rural town, but a vibrant place with populated sidewalks and storefronts, where people who were born in the region are forming friendships with new residents coming from Latin America and Northeast Africa. With access to social connectivity, healthy food, and good local jobs, all Willmar residents now have a much better chance of leading healthy and fulfilling lives.

Zooming out even further to include all infrastructure, such as water, energy, food and materials management, restorative development provides a model for building healthy neighborhoods—physically, socially and economically. When metrics take into account the cost of disease, investments in structural change that would otherwise be unfeasible become possible, kickstarting a virtuous cycle that can pay dividends many times over.

3. Health of Business and Industries: The Long View

When we consider health and wellbeing in restorative development, we don't focus only on people and communities. The health of businesses and industries is equally important as a foundation for net-positive outcomes.

While many businesses and large corporations in the Minneapolis-St. Paul metropolitan area have been doing well in the pre-COVID-19 economy, local governments cannot rely on them to sustain the region indefinitely. Just like ecosystems, corporations have a life cycle, and it is shortening dramatically. A study by McKinsey found that the average lifespan of companies listed in Standard & Poor's 500 was 61 years in 1958. Today, it is less than 18 years. If McKinsey's projections are correct, 75% of the companies currently quoted on the S&P 500 will have disappeared as soon as 2027⁵³.

The shortening lifespan of companies is partially due to accelerating technological disruptions and other structural factors. It has implications about the future of work, requiring more flexibility in the labor markets and more mobility for workers. (This is coupled with the rise of the gig workers—people who earn income outside of traditional, long-term employer-employee relationships—which the Bureau of Labor Statistics reported in 2017 to be 34 percent of the U.S. workforce.⁵⁴) Cities are likely to experience this shift as a decrease of long-term financial security of their residents, as well as increased vulnerability to downturns. These externalities originate in the private sector but are borne by municipalities, and are generally not measured and accounted for anywhere in the system. In this case, these externalities are adding to growing socio-economic problems that governments continuously need to invest in.

3.1 Barriers to Sustainability

Technology is not the only reason why companies will die, or at least, will be forced to reinvent themselves. Given the finite horizon of our resources and accelerating environmental crises, it is simply not conceivable that companies will be able to continue to operate and do business as usual over the next decades and century.

Many companies have set sustainability goals and are actively reducing their footprint. But they are doing so in a broken system, where incremental improvements will not be enough to avoid crossing the tipping point towards irreversible damage. Sustainability is not an attainable end state when externalities are not measured and accounted for at a system-wide level. As a consequence, well-intentioned people in well-intentioned companies are finding themselves with a circle they cannot square, wanting to prove sustainability while having to grow profits at the same time.

A few companies, such as Patagonia are attempting a radical shift towards a business model of circularity. They mean it when they tell shoppers "Don't buy this jacket" and refuse to open their stores on Black Friday. They don't shy away from posting less than flattering pictures of foreign manufacturing factories in the spirit of radical transparency next to every item they sell online. Given their rising popularity, this seems like a winning business strategy.

However, Patagonia's circular efforts are hindered by a lack of proper public and shared circular infrastructure. Their quest is one of a single circular company attempting to be successful in a linear system, forcing them to absorb higher costs per unit. What's more, they are attempting to prove a

business case in a world where their competitors continue to lobby and succeed in obtaining permissions to pollute.

Corporations, like any self-interested actor, are looking for the path of least resistance within the system that they operate in. While sustainability has become a strategic pillar for many companies, they seldom reengineer their structures, processes, and operations to truly achieve a net-zero impact. Instead, improvements happen in silos, such as optimizing supply chains or building operations. While some achieve impressive results, they risk only becoming greener on the margins, even as production, profits, and pollution grow. Sometimes the attempt to adopt sustainability in their business practices has not only proven to be unsuccessful but also misleading, resulting in accusations of greenwashing that diminish a company's 'social license to operate'.

3.2 Lack of Circular Infrastructure

In general, companies have few, if any, incentives to question the system that they and the rest of the world operate in. Even if they recognize the finite nature of the linear take-make-waste model of production and consumption, they may not know how to step out of it, and that there is a place for their voice in shaping 21st-century infrastructure.

Traditionally, industries have not participated in infrastructure development, leading to suboptimal outcomes.

For example, the rise of the plastics industry was met by the public sector with increased recycling infrastructure, where recyclables are quickly and efficiently moved out of the sight of households and businesses. However, most plastics

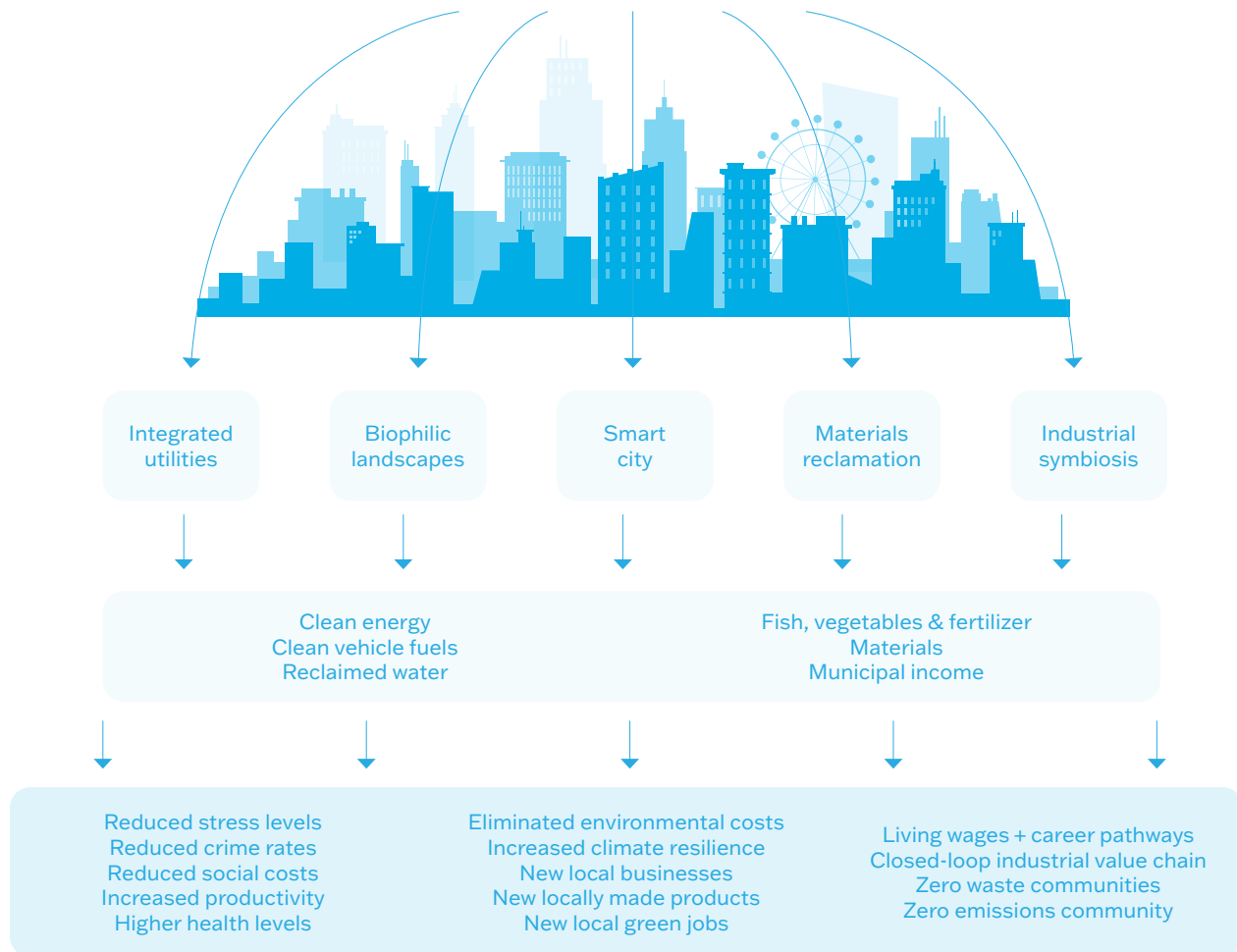
Companies are making incremental improvements in a broken system, putting true sustainability out of reach

are contaminated and not recycled, and when they are, they usually end up as vastly inferior materials. This system, which is working well only on the surface, has allowed for the proliferation of plastics rather than incentivize and enforce the early development of alternatives. Sparked by the environmental crisis, recent innovation such as packaging made from bioplastics are preferable alternatives in many ways, but cannot be managed by the current infrastructure, and are instead creating harmful methane and other gases in landfills.

With stricter regulation, coupled with public sector commitments to support the private sector's material innovation through new infrastructure, the plastics crisis could have been averted decades ago.

In the absence of such strong collaboration, the government has no choice but to permit certain levels of pollution to secure economic growth, and even well-intentioned companies cannot innovate due to the lack of shared infrastructure. The gulf between the public and private sector is further exacerbated by their siloed natures, and the differences in language they each use.

Restorative Districts & Cities



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3.3 Economic and Equitable Growth for the 21st Century

In recent years, some large international corporations have taken a deeper interest in circularity. While not moving as fast as smaller companies, such as Patagonia, their knowledge has matured to a point where they too are looking for shared public infrastructure that can enable circular materials management. Rather than virgin resources, they are looking for reliable, high-quality used materials that they can remanufacture into new products. Just like mining for virgin resources provided the economic lifeblood for rural towns in the 20th century, so does “mining” for used resources present an opportunity for cities and metropolitan areas in the 21st century.

It presents an opportunity to build a new local economy and industry in a way that creates equitable growth and wealth for businesses and communities alike. While the circular economy is defined by closed-loop material management, restorative development scales this approach to other resources, creating a closed-loop infrastructure for water and energy, and creating further opportunities for industrial symbiosis that small and large companies can tap into. Coupled with career pathways and living-wage job opportunities, integrated green and blue space, affordable housing, and safe and accessible neighborhoods, these restorative developments can become attractive 21st-century places to live, work, and play.

SPOTLIGHT ON ECO-INNOVATION: AN OPPORTUNITY FOR SMALL AND LARGE BUSINESSES

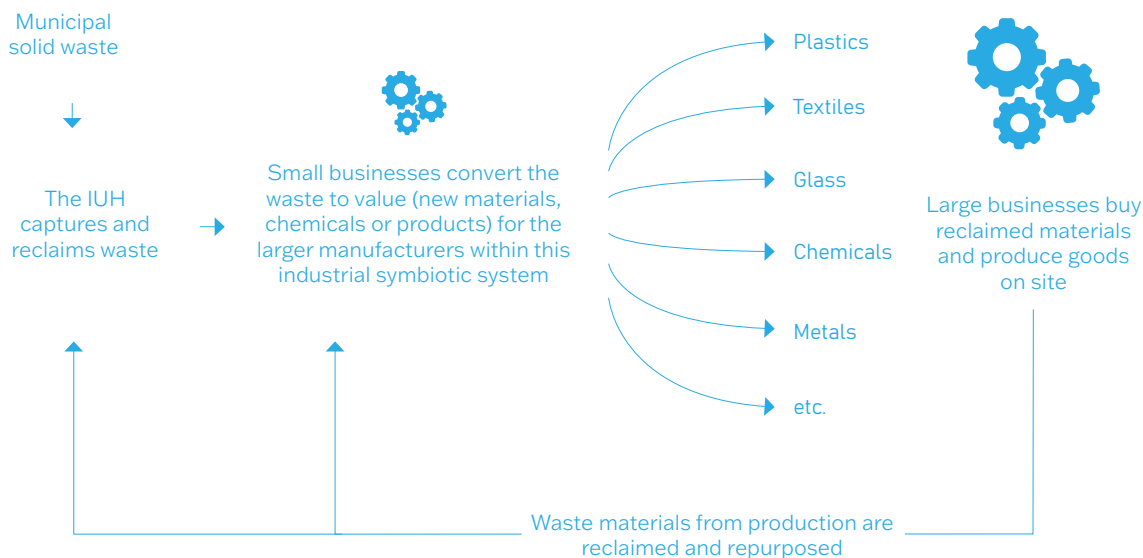
The IUH's material reclamation and re-purposing system creates multiple circular loops that can serve small and large businesses while creating new jobs on site.

Pulling from the municipal solid waste stream, IUH equipment and technologies separate and treat materials, which can then be processed and converted to value by specialized small businesses, including local startups.

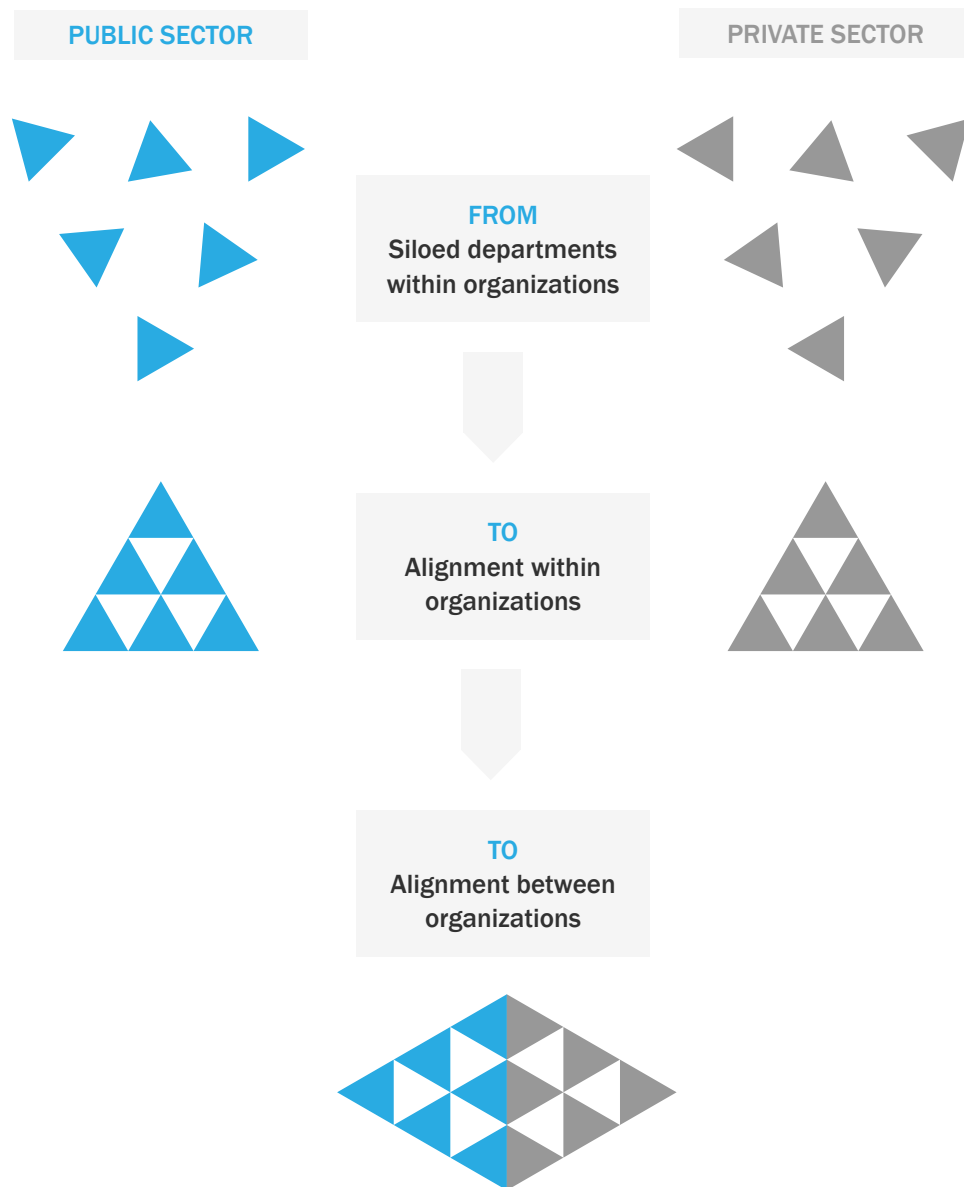
Small businesses serve an important role as they turn materials from the IUH into value and then supply it to larger manufacturers looking for access to reclaimed materials. Large manufacturers may set up local production facilities on site, creating additional jobs. Waste created by these on-site manufacturing processes can then be captured within the system and continue to be processed in ways where waste from one system is an input for another.

This shared materials reclamation infrastructure allows companies to reach resource-positive goals that will allow them to compete in the 21st century economy. In addition, it provides an opportunity to create a thriving local economy with new green jobs growth, while also eliminating landfills and cutting costs related to waste management and associated environmental and social costs.

INTEGRATED MATERIAL RECLAMATION, TREATMENT AND REMANUFACTURING PROGRAM



Public-Private Alignment for Circular and Restorative Infrastructure



3.4 Public-Private Alignment for Circular and Restorative Infrastructure

Creating this economic opportunity requires local governments to take the first step in building the foundational blocks of circular and restorative infrastructure. However, just like companies, governments tend to operate in silos. While their work may be tied to common goals and objectives, departments are not integrated sufficiently with one another to truly plan and implement change at the systems level.

Therefore, restorative development requires departments within local governments to align on the need and benefits of an integrated infrastructure. Likewise, more companies need to fully understand and seize the circular opportunity and align their own departments for systems change. Next, alignment is needed between government and businesses on the role of each partner, on their commitments, and their tolerance of risk. Lastly, they need to align on what kind of materials management infrastructure and other closed-loop infrastructure best serves the region and the circular business ecosystem.

CULTURE & IDENTITY

Minneapolis is home to a vibrant and diverse population with over 130 nationalities and indigenous cultures. Increased national recognition of the cultural identity of indigenous peoples has become an increasing part of Minneapolis's identity, with indigenous art and places names increasingly becoming part of the cityscape.

Sports are within the city's cultural DNA and are well supported in Minneapolis. The Vikings, Timberwolves, and the Twins stadiums are all within the immediate downtown area and access to Gopher games, the MN Wild hockey, and MN United soccer matches are all within 30 minute trip on the light rail. Similarly, the city has countless theaters, music venues, art, and cultural centers, restaurants, and cafés, representing a vast array of genres and cultures that make up a large portion of the city's identity. An unmatched amount of parks and green spaces, and the more recent commitment to building out bicycle infrastructure, which is now the nation's largest, also contributed heavily to Minneapolis being recognized as one of the nation's most livable cities.

Minneapolis is an economic hub and home to countless organizations that together form a healthy and diverse economic base. But it is also home to countless non-profit organizations that represent the gap between government performance and community needs. In the wake of the death of George Floyd and the subsequent protests, Minneapolis experienced a collective reckoning, as its polished identity turned into a worldwide symbol for racial inequity. City leaders have made closing the equity gap their top priority, even as established processes perpetuate ingrained patterns. The city must grapple with the reality of continuing to build against community demands, as evidenced for example

in the approval of a new music venue proposition at the Upper Harbor Terminal district in North Minneapolis.

Typical for U.S. cities that have grown fast in the last century, Minneapolis is a car-centric city marked by a lack of proximity between key institutions, services, and work. Beyond infrastructure, land use, and economic development practices played a key role in forming the city's current identity. The built environment reflects the economic growth cycles of the past 100 years. While these cycles created prosperity for many, they left marks on the built environment that feel outdated today. For example, historic sites, landmarks, beautiful architecture, and monuments in Downtown had to make way for bland office buildings and surface parking in the 1960s. In more recent decades, many neighborhoods attracted lucrative redevelopment agendas that often led to gentrification and dislocation of communities and people. This comes on top of the equity flight that followed the widespread suburbanization and highway development that cut through the city, which left a long-lasting mark on many communities, where it depleted social and economic capital and cultural authenticity.

Aiming to become a livable city for all will require leaders to rethink existing growth models to foster a more inclusive economy for the 21st century.. Restorative Development offers a pathway to more locally resilient economic development that has the potential of not only tapping into unused local resources but also attracting industries by providing an infrastructure for eco-innovation and circularity. In doing so, it can respond to community needs for equity and a better quality of life.

- 1 Census Bureau. Opportunity Atlas. Retrieved from:
<https://www.census.gov/programs-surveys/ces/data/analysis-visualization-tools/opportunity-atlas.html>
- 2 The New York Times. Detailed Maps Show How Neighborhoods Shape Children for Life. 2018. Retrieved from:
<https://www.nytimes.com/2018/10/01/upshot/maps-neighborhoods-shape-child-poverty.html>
- 3 The Centre for Urban Design and Mental Health. Facts and Figures.
Retrieved from: <https://www.urbandesignmentalhealth.com/facts-and-figures.html>
- 4 Robert K. Nelson, LaDale Winling, Richard Marciano, Nathan Connolly, et al. Mapping Inequality. *American Panorama*.
Retrieved from:
<https://dsl.richmond.edu/panorama/redlining/#loc=12/44.975/-93.254&mapview=graded&city=minneapolis-mn>
- 5 Erna Bára Hreinsdóttir. Paper presented to “Road Safety on Five Continents” Conference. 2018. Retrieved from:
<https://www.diva-portal.org/smash/get/diva2:1204073/FULLTEXT01.pdf>
- 6 Minnesota DEED. Average Time Spent Commuting to Work. Retrieved from:
<https://mn.gov/deed/ed/compare/compare-metro/logistics/commute.jsp>
- 7 Texas A&M Transportation Institute. Urban Mobility Report 2019. Retrieved from:
<https://static.tti.tamu.edu/tti.tamu.edu/documents/mobility-report-2019.pdf>
- 8 City of Minneapolis. Draft Minneapolis Transportation Action Plan. Retrieved from:
http://go.minneapolismn.gov/application/files/2315/8376/3048/Draft_Transportation_Action_Plan_Full_App_web.pdf
- 9 Streets Blog USA. How Two Cities Actually Reduced Driving. 2019. Retrieved from:
<https://usa.streetsblog.org/2019/02/08/minneapolis-and-seattle-have-achieved-the-holy-grail-for-sustainable-transportation/>
- 10 Shared Use Mobility Center. Twin Cities Shared Mobility Action Plan. 2017. Retrieved from:
https://sharedusemobilitycenter.org/wp-content/uploads/2017/10/SUMC_TWINCITIES_Web_Final.pdf
- 11 City of Minneapolis. Draft Minneapolis Transportation Action Plan. Retrieved from:
http://go.minneapolismn.gov/application/files/2315/8376/3048/Draft_Transportation_Action_Plan_Full_App_web.pdf
- 12 2013 American Housing Survey; American Community Survey 2009-2013 (5 year estimates).
- 13 City of Minneapolis. Draft Minneapolis Transportation Action Plan. Retrieved from:
http://go.minneapolismn.gov/application/files/2315/8376/3048/Draft_Transportation_Action_Plan_Full_App_web.pdf
- 14 City of Minneapolis. Vision Zero Crash Study (2018), Minneapolis Public Works and MnDOT. Retrieved from:
<https://www.minneapolismn.gov/media/minneapolismn.gov/content-assets/documents/VZ-Crash-Study-2018-1.pdf>
- 15 City of Minneapolis. Vision Zero Crash Study (2018), Minneapolis Public Works and MnDOT. Retrieved from:
<https://www.minneapolismn.gov/media/minneapolismn.gov/content-assets/documents/VZ-Crash-Study-2018-1.pdf>
- 16 City of Minneapolis. The 2020-2022 Vision Zero Action Plan. Retrieved from:
<https://www.minneapolismn.gov/government/programs-initiatives/visionzero/>
- 17 National Equity Atlas. Car Access. Retrieved from:
https://nationalequityatlas.org/indicators/Car_access#/?geo=07000000002743000
- 18 City of Minneapolis. Draft Minneapolis Transportation Action Plan. Retrieved from:
http://go.minneapolismn.gov/application/files/2315/8376/3048/Draft_Transportation_Action_Plan_Full_App_web.pdf
- 19 Center for Neighborhood Technology (CNT). Equity and Smart Mobility. Retrieved from:
<https://www.cnt.org/sites/default/files/publications/Equity-and-Smart-Mobility-Report.pdf>
- 20 Institute for Transportation & Development Policy. Indicators for Sustainable Mobility. Retrieved from:
<https://naindicators.itdp.org/explore/>
- 21 NBC News. How Minneapolis re-segregated its schools and set the stage for a national crisis. 2020.
<https://www.nbcnews.com/specials/minneapolis-re-segregated-schools-set-the-stage-national-crisis/>
- 22 MPR News. Minnesota’s school funding formula provides some students of color less than their white peers. 2019.
<https://www.mprnews.org/story/2019/03/05/mn-school-funding-formula-shows-disparity>
- 23 National Equity Atlas. Housing Burden. Retrieved from: https://nationalequityatlas.org/indicators/Housing_burden#/
- 24 City of Minneapolis. Minneapolis 2040 Comprehensive Plan. 2019. Retrieved from:
<https://minneapolis2040.com/goals/more-residents-and-jobs/>

25 Metropolitan Council. What Lies Ahead: Population, Household and Employment Forecasts to 2040. Retrieved from:
https://www.minnpost.com/wp-content/uploads/sites/default/files/attachments/MetroStats_Forecasts.pdf

26 Joint Center for Housing Studies of Harvard University. The State of the Nation’s Housing 2018. Retrieved from:
https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard_JCHS_State_of_the_Nations_Housing_2018.pdf

27 Joint Center for Housing Studies of Harvard University. The State of the Nation’s Housing 2018. Retrieved from:
https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard_JCHS_State_of_the_Nations_Housing_2018.pdf

28 NAAPC. Twin Cities Economic Inclusion Plan. 2019. Retrieved from:
<https://www.naapc.org/wp-content/uploads/2019/12/EconomicInclusionPlanTwinCities-3.pdf>

29 The National Equity Atlas. When Renters Rise, Cities Thrive. Retrieved from:
<https://nationalequityatlas.org/sites/default/files/Minneapolis-Fact-Sheet.pdf>

30 Next City. Minneapolis Mayor Unveils Plan to Undo History of Segregation. 2018. Retrieved from:
<https://nextcity.org/daily/entry/minneapolis-mayor-unveils-plan-to-undo-history-of-segregation>

31 The Common Wealth Fund. Who Are the Remaining Uninsured, and Why Do They Lack Coverage? 2019. Retrieved from:
<https://www.commonwealthfund.org/publications/issue-briefs/2019/aug/who-are-remaining-uninsured-and-why-do-they-lack-coverage>

32 ABC News. 40% of Americans don’t have \$400 in the bank for emergency expenses: Federal Reserve. 201. Retrieved from:
<https://abcnews.go.com/US/10-americans-struggle-cover-400-emergency-expense-federal/story?id=63253846>

33 Becker’s Hospital Review. \$28k: The average price a family of 4 will spend on healthcare in 2018. Retrieved from: <https://www.beckershospitalreview.com/finance/28k-the-average-price-healthcare-will-cost-a-family-of-4-in-2018.html>

34 Pacific Business News. Honolulu is the most ‘livable’ city in the U.S., here’s what that means. 2019.
<https://www.bizjournals.com/pacific/news/2019/09/05/honolulu-is-the-most-livable-city-in-the-us-heres.html>

35 Minnesota DEED. How Minnesota Ranks. Retrieved from: <https://mn.gov/deed/ed/how-we-rank/>

36 MN Compass. Economy Overview. <https://www.mncompass.org/economy/overview>

37 Minnesota DEED. How Minnesota Ranks. Retrieved from: <https://mn.gov/deed/ed/how-we-rank/>

38 WalletHub. States with the Most Racial Progress. 2020. Retrieved from:
<https://wallethub.com/edu/states-with-the-most-and-least-racial-progress/18428/>

39 Policy Link. Minnesota’s Tomorrow: Equity Is the Superior Growth Model. 2014. Retrieved from:
https://www.policylink.org/sites/default/files/MNT_032514.pdf

40 Ani Turner, Altarum Institute: The Business Case for Racial Equity. Retrieved from:
<https://altarum.org/sites/default/files/uploaded-publicationfiles/WKKF%20Business%20Case%20for%20Racial%20Equity.pdf>

41 MinnPost’s analysis of the first Annual Survey of Entrepreneurs by the U.S. Census Bureau, the Ewing Marion Kauffman Foundation and the Minority Business Development Agency. Retrieved from:
<https://www.minnpost.com/business/2016/09/when-it-comes-number-minority-owned-businesses-twin-cities-are-decidedly-not-above/>

42 Center for Economic Inclusion. Regional Data. Retrieved from: <https://www.centerforeconomicinclusion.org/regional-data>

43 Center for Economic Inclusion. Regional Data. Retrieved from:
<https://www.centerforeconomicinclusion.org/benefits-of-inclusive-growth>

44 WalletHub. States with the Most Racial Progress. 2020. Retrieved from:
<https://wallethub.com/edu/states-with-the-most-and-least-racial-progress/18428/>

45 NAAPC. Twin Cities Economic Inclusion Plan. 2019. Retrieved from:
<https://www.naapc.org/wp-content/uploads/2019/12/EconomicInclusionPlanTwinCities-3.pdf>

46 Washington Post. Racial Inequality in Minneapolis is among the Worst in the Nation. 2020. Retrieved from:
<https://www.washingtonpost.com/business/2020/05/30/minneapolis-racial-inequality/>

47 Brookings Institution. Metro Monitor 2019: Inclusion remains elusive amid widespread metro growth and rising prosperity. Retrieved from:
<https://www.brookings.edu/research/metro-monitor-2019-inclusion-remains-elusive-amid-widespread-metro-growth-and-rising-prosperity/>

48 MinnPost. Wage inequality increased in most U.S. cities in the last 40 years, but the increase in the Twin Cities has been relatively mild. 2019. Retrieved from:
<https://www.minnpost.com/economy/2019/12/wage-inequality-increased-in-most-u-s-cities-in-the-last-40-years-but-the-increase-in-the-twin-cities-has-been-relatively-mild/>

49 American Community Survey 2018, 5-year Estimate.

- 50 County Health Rankings. County Health Rankings Model. Retrieved from:
<https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model>
- 51 Blue Cross Blue Shield of Minnesota. Healthy Together Willmar. Retrieved from: <https://healthytogetherwillmar.org/>
- 52 Robert Wood Johnson Foundation. Why Discrimination is a Health Issue. 2017.
- 53 IMD. Why you will probably live longer than most big companies. 2016. Retrieved from:
<https://www.imd.org/research-knowledge/articles/why-you-will-probably-live-longer-than-most-big-companies/>
- 54 International Labor Organization. Helping the gig economy work better for gig workers. Retrieved from:
https://www.ilo.org/washington/WCMS_642303/lang--en/index.htm.