# From Routes to Riches



 $Image\ source:\ https://www.rawpixel.com/image/12302583/image-person-light-public-domain$ 

A Case Study Exploring the Relationship between Public Transit and Employment in Chicago

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#### 1 Introduction

"It used to take forever, for-ever, to get to my office!" explained a lawyer on his commute, describing his former journey from his home in Chicago's Roseland neighborhood to his downtown office. This attorney, Jeff, is just one of the 4,168 daily passengers who use the 95th/Dan Ryan rail station on an average weekday.<sup>1</sup> Situated as the final stop on the Chicago Transit Authority's Red Line, this station is crucial in linking the city's far south neighborhoods with the bustling economic hub of downtown. "Then they fixed it. Bang! Now I go there and back in no time!" he exclaimed before he ran to catch the bus outside the station. As if by magic, the commute had been transformed overnight and made his life significantly easier. Yet, this was no magic trick. Instead, it was a calculated effort led by then-Mayor Rahm Emanuel's administration to turn the station into a hotbed of economic opportunity on Chicago's South Side.<sup>3</sup> This area, along with the West Side, ranks among the city's poorest and most disconnected, with poverty rates reaching as high as 51% in 2023. According to Census Bureau data, employment is the most crucial determinant of poverty rates in these neighborhoods.<sup>4</sup> Connecting Jeff's experience with Emanuel's effort exposes a broader trend: neighborhoods with enhanced access to public transportation generally see better job opportunities and economic improvement. Such was the rationale behind the large-scale renovations that took place at 95th/Dan Ryan. By improving the commuting experience for South Side residents, and bettering their travels to employment hubs, their economic prospects would be renewed.

#### 2 Freedom of Movement is also Economic Freedom

Public transportation is fundamentally linked to socioeconomic mobility as it provides access to employment opportunities that might otherwise be inaccessible due to geographical limitations. Urban public transport systems facilitate commuting and can significantly improve individual performance in the labor market. Their availability also enhances job accessibility and raises employment rates and earnings. However, there is a critical dilemma: while public transit connects workers to better jobs, excessively long commutes can dissuade them from pursuing these opportunities. The dilemma is the foundation of the Spatial Mismatch Hypothesis (SMH), as proposed by researcher Thomas W. Sanchez at Texas A&M University.<sup>5</sup> The hypothesis suggests that low-skill workers with limited personal mobility are often unable to travel to distant employment locations and thus encounter limited job opportunities. As evidenced by Simon Franklin, search costs, exacerbated by cash constraints faced by

 $<sup>^{1} \</sup>hbox{``Annual Ridership Report," Annual Ridership Report, February 2, 2023, https://www.transitchicago.com/assets/1/6/2022\_Annual\_Report\_-FINAL.pdf}$ 

 $<sup>^2 \, \</sup>mathrm{all}$  interviewees in this analysis were given pseudonyms

 $<sup>^3</sup> S t a ff, \ ``Mayor \ Emanuel \ and \ CTA \ Welcome \ Riders \ to \ New \ 95 th/Dan \ Ryan \ Station \ North \ Terminal," \ CTA, \ January \ 4, \ 2019, \ https://www.transitchicago.com/mayor-emanuel-and-cta-welcome-riders-to-new-95 thdan_ryan-station-north-terminal/$ 

<sup>&</sup>lt;sup>4</sup>Bryce Hill, by Bryce Hill, November 8, Bryce Hill, Director of Fiscal and Economic Research, and Bryce Hill, "Black Brown Chicago Neighborhoods Endure Highest Poverty Rates," Illinois Policy, November 8, 2023, https://www.illinoispolicy.org/black-brown-chicago-neighborhoods-endure-highest-poverty-rates/.

<sup>&</sup>lt;sup>5</sup>Thomas W. Sanchez, "The Connection between Public Transit and Employment," Journal of the American Planning Association 65, no. 3 (September 30, 1999): 284–96, https://doi.org/10.1080/01944369908976058.

low-income workers and combined with high transportation costs, make optimal job searches particularly expensive.  $^6$ 



Image source: Interview with Jeff

In the majority of cases, public transit is the most affordable mode of transport for the average low-income commuter. Significant evidence from Sanchez's research in cities like Portland and Atlanta supports the SMH and describes a negative correlation between a worker's distance from public transit and their employment stability. A case in Denmark further illustrates this phenomenon with the construction of a central Metro station in Copenhagen. Connecting southern rural townships to the city center, the new Metro station dramatically improved earnings by enabling individuals to pursue better employment opportunities.

Workers, facing the decision to forgo local jobs for higher-quality positions accessible through public transit, often accept longer commute times as a necessary trade-off. This dynamic is evident in Santiago de Chile. Research by Ignacio Tiznado-Aitken and his team has demonstrated that efforts to reduce commute times increased public transportation use, showing that when public transit becomes faster and more efficient, more people are willing to use it. Lastly, safety is a critical aspect of public transportation use. In Mexico City, for example, frequent incidents of sexual abuse on public buses led to the implementation of womenonly bus shuttles. The initiative made transportation safer for women and encouraged their

<sup>&</sup>lt;sup>6</sup>Simon Franklin, "Location, Search Costs and Youth Unemployment: Experimental Evidence from Transport Subsidies," The Economic Journal 128, no. 614 (November 21, 2017): 2353–79, https://doi.org/10.1111/ecoj.12509.

 $<sup>^7 \</sup>text{Thomas W. Sanchez, "The Connection between Public Transit and Employment," Journal of the American Planning Association 65, no. 3 (September 30, 1999): 284–96,$ https://doi.org/10.1080/01944369908976058.

<sup>&</sup>lt;sup>8</sup>Gabriel Pons Rotger and Thomas Sick Nielsen, "Effects of Job Accessibility Improved by Public Transport System: Natural Experimental Evidence from the Copenhagen Metro," European Journal of Transport and Infrastructure Research, 2015, https://doi.org/10.18757/ejtir.2015.15.

<sup>&</sup>lt;sup>9</sup>Ignacio Tiznado-Aitken, Juan Carlos Muñoz, and Ricardo Hurtubia, "Public Transport Accessibility Accounting for Level of Service and Competition for Urban Opportunities: An Equity Analysis for Education in Santiago de Chile," Journal of Transport Geography 90 (January 2021): 102919, https://doi.org/10.1016/j.jtrangeo.2020.102919.

### 3 The Case of Chicago

To fully understand the mismatch phenomenon in Chicago, it is important to examine the city's history of residential segregation and inequality. Throughout the 20th century, minority populations, in-particular African Americans and Hispanics, were systematically displaced from the downtown area to the south and west sides of the city. The early century surge in urban population and Great Migration culminated in a spike in housing-related racial violence in Chicago from 1917 to 1921. In response to this turbulent period, the Chicago Real Estate Board initiated a campaign to enforce racially-charged restrictive covenants. These restrictions allowed planners to block property sales to "persons of African blood" and imposed exorbitantly high mortgage interest rates on Black homeowners. These restrictions directly exist today through habitation patterns in the city. 11

The period between the 1920s and the passage of the Fair Housing Act in 1968 featured nationally restrictive real estate practices embedded in strict redlining. For example, using the Great Depression as an excuse, the Federal Housing Administration explicitly refused to insure loans for African Americans or properties near Black neighborhoods for "profitability concerns." These barriers to federally-backed mortgages significantly hindered African American avenues for social mobility and expanded the wealth gap in Chicago. <sup>12</sup> Today, the wealth gap persists and even widens due to urban planning designs dating from the redlining period. <sup>13</sup>

The racial inequality created by discriminatory real estate practices continues to manifest in Chicago's differences in public transit accessibility, a measure for a household's ability to commute to services needed for upward mobility. In Chicago, areas of low accessibility have higher percentages of African Americans, Hispanics, Asians, low-income, low-educated, and elderly citizens. In their research on transit accessibility, Alireza Ermagun and Nebiyou Tilahun suggest that transit distribution in Chicago is not sensitive to measures of disadvantage such as race and income. Distance between the workplace and the city's ghetto has been found to be one of the strongest and most significant determinants of discrimination in the workforce. Compared to Los Angeles, where poor public transit and job dispersion are more pronounced, Chicago has a stronger effect between distance from the ghetto and workforce representation. Due to residential segregation, workforce discrimination, as well as

<sup>&</sup>lt;sup>10</sup>Amy Dunckel-Graglia, "Pink Transportation' in Mexico City: Reclaiming Urban Space through Collective Action against Gender-Based Violence," Gender & Development 21, no. 2 (July 2013): 265–76, https://doi.org/10.1080/13552074.2013.802131.

<sup>111.</sup> Heather Cherone, ed., "How Did Chicago Become so Segregated? By Inventing Modern Segregation: FIRSTHAND: Segregation," WTTW Chicago, February 24, 2022, https://interactive.wttw.com/firsthand/segregation/how-did-chicago-become-so-segregated-by-inventing-modern-segregation.

 $<sup>^{12} \</sup>text{Ta-Nehisi Coates, "The Case for Reparations," The Atlantic, October 2, 2023, https://www.theatlantic.com/magazine/archive/2014/06/the-case-for-reparations/361631/.}$ 

 $<sup>^{13}</sup>$  "Chicago's Racial Wealth Gap Examined in New UIC Report," Chicago's racial wealth gap examined in new UIC report — UIC today, accessed May 5, 2024, https://today.uic.edu/chicagos-racial-wealth-gap-examined-in-new-uic-report/.

<sup>&</sup>lt;sup>14</sup>Alireza Ermagun and Nebiyou Tilahun, "Equity of Transit Accessibility across Chicago," Transportation Research Part D: Transport and Environment 86 (September 2020): 102461, https://doi.org/10.1016/j.trd.2020.102461.

<sup>&</sup>lt;sup>15</sup>Jonathan S. Leonard, "The Interaction of Residential Segregation and Employment Discrimination," Journal of Urban Economics 21, no. 3

limited access to transportation and financial constraints, it has been found that low-income workers in impoverished areas of Chicago heavily rely on social networks to find employment, rather than independent job-seeking through the market. In most cases, individuals find work through family-members or friends presenting opportunities, rather than online job applications and public job listings.

# 4 The Study Area

The South Side of Chicago is massive, encompassing over 42 neighborhoods.<sup>16</sup> The 95th/Dan Ryan station, however, serves only certain neighborhoods with reasonable proximity to the terminal. As a result, the study area for this analysis encompasses the following six neighborhoods: Pullman, Burnside, Washington Heights, Auburn Gresham, Chatham, and Roseland. A study by Inshu Minocha from 2008 on the city's mismatch between public transit access and employment access sought to match neighborhoods with scores based on these two dimensions. Their analysis found that the majority of Chicago's South Side neighborhoods fall within the category of low public transit access and low employment access. The neighborhoods within the study area, however, do not fall into this category. Instead they are classified as having high access to public transportation but low access to employment.<sup>17</sup> Minocha's study dates back to 2008, before any renovations were made at the terminal, indicating that despite receiving high access to public transit, employment was still relatively inaccessible. Such a situation could perhaps be explained by the terminal on 95th/Dan Ryan being inefficiently set up, hindering the usage of the rail station it was supposed to provide.

### 5 Why & How did the Terminal Change?

On January 4th, 2019, Mayor Rahm Emanuel, alongside the CTA Board Chairman and CTA president, cut the ribbon that commemorated the completion of the revitalized rail terminal at 95h/Dan Ryan. The project gained nation-wide recognition; U.S. Senator Tammy Duckworth praised the project as a means of "enhancing Chicago's public transportation system" that would be instrumental in "bolstering workforce development." <sup>18</sup> This milestone marked a significant achievement in the context of an \$8 billion investment in public transit under Emanuel's administration. The project cost approximately \$240 million and received its funding from various public organizations including the Illinois Department of Transportation, the Chicago Transit Authority, and a grant from the Transportation Investment Generating Economic Recovery (TIGER) program. Roughly \$79.2 million was received as

<sup>(</sup>May 1987): 323–46, https://doi.org/10.1016/0094-1190(87)90006-4.

 $<sup>^{16} {\</sup>rm Hyde~Park~Township;~Chicago~annexed~neighborhood,~accessed~May~5,~2024,~http://livinghistoryofillinois.com/pdf\_files/HydeParkTownship-ChicagoAnnexedNeighborhood.pdf.}$ 

<sup>&</sup>lt;sup>17</sup>1. Inshu Minocha et al., "Analysis of Transit Quality of Service and Employment Accessibility for the Greater Chicago, Illinois, Region," Transportation Research Record: Journal of the Transportation Research Board 2042, no. 1 (January 2008): 20–29, https://doi.org/10.3141/2042-03

<sup>&</sup>lt;sup>18</sup>Staff, "Mayor Emanuel and CTA Welcome Riders to New 95th/Dan Ryan Station North Terminal," CTA, January 4, 2019, https://www.transitchicago.com/mayor-emanuel-and-cta-welcome-riders-to-new-95thdan-ryan-station-north-terminal/.

a loan from the Transportation Infrastructure Finance and Innovation Act (TIFIA), which was repaid with farebox revenues.<sup>19</sup>



 $Image\ source:\ https://milhouseinc.com/milhouse-celebrates-opening-of-new-cta-95th-street-terminal/source.$ 

Initially constructed in 1969, the station comprised only the North terminal building, however, its original design failed to anticipate the station's future usage levels. The additional changes in the areas surrounding the terminal only increased its usage over time. For example, ridership significantly increased with the opening of Chicago State University's campus on 95th in 1972.<sup>20</sup> As the Great Migration influenced the segregation of Black residents to southern Chicago and White residents to the north side, the 95th/Dan Ryan station became one of only four rail stations that linked the impoverished South Side to major employment centers.<sup>21</sup> Compared to the white-dominated north side which had 21 stops, overcrowding and bus stop congestion at the terminal were common. The limited space and inefficient layout meant that passengers often spilled into terminal areas to access the street, posing safety risks due to interactions with vehicular traffic.<sup>22</sup> 95th/Dan Ryan was built as a large terminal to serve the city's South Side, yet its conditions did not catch up to the changes in the surrounding neighborhoods, partially justifying its renewal.

Touted as "the largest construction project in CTA's history," the station underwent a massive transformation between 2012 and 2019.<sup>23</sup> The project aimed to rehabilitate the terminal

<sup>&</sup>lt;sup>19</sup>1. "CTA 95th Street Terminal Improvement," CTA 95th Street Terminal Improvement — Build America, accessed May 5, 2024, https://www.transportation.gov/buildamerica/projects/cta-95th-street-terminal-improvement.

 $<sup>^{20}95</sup> th \ street \ corridor \ plan \ public \ meeting \ 1-city \ of \ Chicago, \ accessed \ May \ 5, \ 2024, \ https://www.chicago.gov/content/dam/city/sites/95 th-street/pdfs/95 th_Meeting_Presentation_1.pdf.$ 

 $<sup>^{21} \</sup>mathrm{Diane\ Jones\ Allen,\ Lost\ in\ the\ Transit\ Desert,\ July\ 28,\ 2017,\ https://doi.org/10.4324/9781315667027.}$ 

<sup>22 &</sup>quot;CTA 95th Street Terminal Improvement," CTA 95th Street Terminal Improvement — Build America, accessed May 5, 2024, https://www.transportation.gov/buildamerica/projects/cta-95th-street-terminal-improvement.

 $<sup>^{23}</sup> Kelly \ Bauer, \ "95 th \ Street \ Red \ Line \ Station \ Reopens \ after \ 'largest \ Construction \ Project \ in \ CTA's \ History' \ (Photos), "Block \ Club \ Chicago, \ January \ 8, \ 2019, \ http://blockclubchicago.org/2019/01/04/95 th-street-red-line-station-reopens-after-largest-construction-project-in-ctas-history-photos/photos$ 

across various dimensions. Upgrades included upgrades to lighting, security, accessibility, soundproofing, mobility, and importantly, capacity. The main improvements encompassed the expansion of the Northern end of the terminal through the construction of ground-level retail and additional passenger areas, alongside the construction of a new three-story South Terminal connected to its northern counterpart by a sky-bridge. Additional improvements included efforts to decrease congestion and noise and increase accessibility through clearer organization and signage.<sup>24</sup>



Image source: https://www.transitchicago.com/95thTerminal/

### 6 How did the Renovation Affect Lives?

The improvements on 95th/Dan Ryan were undoubtedly a massive undertaking with a large scope. A \$280 million investment into public transit meant to bolster the South Side's workforce by reducing unemployment and increasing earnings, bringing economic growth to the historically under-served communities of Chicago's south. But how effective was Emanuel's administration at achieving this goal? How could I measure the success of this massive infrastructure investment at bringing economic vitality to the South Side?

I performed causal analysis to find a quantitative effect. I used data on economic characteristics from the Census Bureau and the American Community Survey to measure the impact of

 $<sup>^{24}\ {\</sup>rm `Project\ Project"}. This is Authority\ 95th\ Street\ Terminal\ Improvement\ Project", FHWA,\ accessed\ May\ 5,\ 2024,\ https://www.fhwa.dot.gov/ipd/project\_profiles/il\_95th\_street\_terminal\_improvement.aspx.$ 

the 95h/Dan Ryan improvements. <sup>25</sup> I used a Difference-in-Differences regression to study the improvements' impacts on labor market outcomes. These methods were deployed to control for the systematic changes that occurred as a result of the COVID-19 pandemic, which massively affected public transit usage and commuters' socioeconomic conditions. My results show that Census Tracts surrounding the station experienced a 2.07% decrease in unemployment, and a 1.00% increase in the share of employed civilians in the labor force. There were also changes in the industries in which residents work. There were significant increases in the shares of workers in production, transportation, and material moving, as well as the number of workers in service occupations. Other industries saw non-statistically-significant changes in the number of jobholders living in the areas surrounding 95th/Dan Ryan.



Image source: Interview with Frank

These findings are consistent with the SMH as employment opportunities and behavior were positively modified in the time span of three years. The results are also consistent with some conversations I had at the station, where, for example, Jeff expressed how the renovations on 95th/Dan Ryan had improved his commuting experience. However, this change was not as significant for every commuter. I spoke with a gentleman who owned a security detail with his brother and cousin, Frank, and he highlighted that the renovations had "not really" changed his commuting experience, pointing out to the main difference he noticed as "more staff." I spoke with another individual at the station who said he worked at a Hooters restaurant downtown as a cook, Leo. I asked him if the renovations had changed his commute in any meaningful way, to which he responded: "I think it's just the same."

 $<sup>^{25} \</sup>text{Explore census data, accessed May 5, 2024, https://data.census.gov/table/ACSDP5Y2022.DP03?t=Industry\&\#38;g=050XX00US17031\%241400000\&\#38;tp=false.}$ 

Through my conversations with multiple commuters, I began to realize that the renovations had not uniformly changed everyone's travel experience. In fact, many individuals had not noticed a difference in their journeys at all. While my quantitative analysis had shown some significant improvement in employment outcomes, it seemed like traveling times had barely changed for the majority of travelers. Maybe commuting time had not universally changed for all of its users, depending on the station they previously relied on. It appeared as if those who began using the South Terminal instead of the North Terminal had benefited more. Nevertheless, I contemplated the idea of the organizational layout of the terminal having improved, thereby enhancing the travel experience.

I had a conversation with a security guard, Robert, who worked at the terminal. He described using the station ever since he was a child. He admitted that, before the construction project the terminal was "bizarre, it wasn't as clear to get around." His view was also shared by a janitor, Stella, who works at the station. She argued that the primary change was the clearer organization of the terminal through improved signage and layout. "It used to be very confusing to get by the station, people stopped using it because they didn't know how to get to where they wanted to go," she explained. As highlighted by Stella, effective communication of a transit system's functionality and layout can greatly influence passenger satisfaction and usage of public transit. Research by A. Armougum has shown that novice travelers express higher cognitive workloads while moving through different rails in public transit systems.<sup>26</sup> As explained by Armougum, a great deal of information processing is required on the behalf of passengers when interacting with such transportation systems. Cognitive workloads have been used to design navigational visual aids around the world. For example, designers in Tel Aviv centered their navigational design on an emphasis on legibility and digestibility.<sup>27</sup>

My conversations with staff at the station confirmed my belief that the renovations had noticeably improved the terminal's organization and navigation. However, on both occasions I visited 95th/Dan Ryan, I had a pervasive feeling of desolation, as if there was too much space, and too little people. This feeling was shared by Leo, who pointed to the different empty rooms within the station "where's the corner store? Look at this [pointing to an empty room], what even is this? There's nothing in there." I suspected that the improvements had perhaps put an excessive emphasis on aesthetic enhancements, rather than improving commute times on a mass scale. Compared to other CTA rail stations on Chicago's South Side, 95th/Dan Ryan is far more flamboyant. As I made the journey down South Lafayette Avenue, I passed the rail stations on 69th, 79th, and 87th street, and they look like your average CTA stop, minimal and industrial. 95th/Dan Ryan, however, looks like a technological wonder. The modern architecture is reminiscent of train stations in Germany or the Netherlands. Yet, as I step inside, the terminal feels overly spacious, with only a couple of commuters waiting inside for their bus to arrive. The more time I spent at the station, I felt

 $<sup>^{26}</sup> A. \ Armougum \ et \ al., \ "Physiological Investigation of Cognitive Load in Real-Life Train Travelers during Information Processing," \ Applied Ergonomics 89 (November 2020): 103180, https://doi.org/10.1016/j.apergo.2020.103180.$ 

<sup>&</sup>lt;sup>27</sup>Anais Woyciechowicz and Rebecca Shliselberg, "Wayfinding in Public Transportation," Transportation Research Record: Journal of the Transportation Research Board 1903, no. 1 (January 2005): 35–42, https://doi.org/10.1177/0361198105190300105.

as if the architectural project had engaged in architectural facadism or window dressing: as if the terminal's flashy and technological appearance would make people forget about the lack of actual uniform improvement on commuting times. That said, the station is not all wasted space. In fact, the terminal is full of rooms behind glass windows, originally destined for convenience stores, fast food, or other businesses, but are ultimately completely unoccupied. Not a single one of these rooms is occupied however, suggesting that there may be potential concerns from businesses to operate in the terminal.

In brief, the renovations at 95th/Dan Ryan represent a monumental investment with the goal of economically revitalizing the South Side of Chicago and improving public transit infrastructure. Through a combination of quantitative analysis and qualitative insights from commuters and terminal staff, it is evident that the improvements have had mixed results in achieving the intended goals. While quantitative analysis showed some positive changes in employment outcomes in the study area, qualitative observations from commuters indicated that not all travelers experienced significant improvements in their commutes. The station's modern and flashy appearance stands in contrast to the utilitarian design of other CTA stops on the South Side. Much of it, however, appears to serve no purpose other than aesthetics reflecting a disproportionate allocation of resources toward surface-level enhancements. The lack of commercial activity within the station highlights unforeseen circumstances relating to the station.

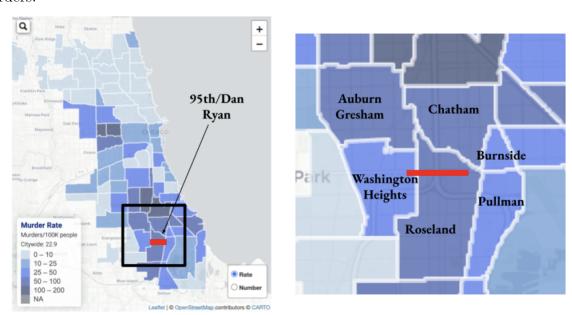
# 7 Unintended Consequences?

In my conversation with her, Stella asked, "Do you want me to respond as an employee, or as a commuter? Because as an employee, there are some things I cannot tell you." Her statement intrigued me. What could be hidden from a potential investigation into the effects of this renovation? Could there be unintended side effects that might negatively affect the public's perception of the mayor's investment? Determined to uncover more, I approached a different employee at the station. This time, I asked Robert about shortcomings in the renovation. "Other people come to this neighborhood from other places, and it kind of messes things up. They see each other more and it causes problems." Problems, in this case, referred to clashes related to the increased neighborhood connectivity of the terminal. "Now it's clearer and easier to get around. People come from different hoods, different areas. If you don't have a familiar face, people tend to have a problem with that." Pointing to the linking of the North and South terminals, he emphasized that bus usage was previously divided, where buses "on that side are for a certain kind of people, and those on the other side belong to another neighborhood."

Public safety and Chicago have a history of negative association. However, the distribution of crimes in Chicago neighborhoods is highly unequal. Low-income and minority neighborhoods disproportionately exhibit the highest rates of violent crime year after year.<sup>28</sup> The 95th/Dan

<sup>&</sup>lt;sup>28</sup>Christopher J. Schreck, Jean Marie McGloin, and David S. Kirk, "On the Origins of the Violent Neighborhood: A Study of the Nature

Ryan terminal lies at the intersection of six South Side neighborhoods, the study area. These neighborhoods exhibit some of the highest rates of violent crime as of 2024, particularly murders.<sup>29</sup>



 $Image\ source:\ https://abc7chicago.com/feature/chicago-safety-tracker-crime-stats-how-safe-is-my-neighborhood-zip-code-statistics/12385906/source-safety-tracker-crime-stats-how-safe-is-my-neighborhood-zip-code-statistics/12385906/source-safety-tracker-crime-stats-how-safe-is-my-neighborhood-zip-code-statistics/12385906/source-safety-tracker-crime-stats-how-safe-is-my-neighborhood-zip-code-statistics/12385906/source-safety-tracker-crime-stats-how-safe-is-my-neighborhood-zip-code-statistics/12385906/source-safety-tracker-crime-stats-how-safe-is-my-neighborhood-zip-code-statistics/12385906/source-safety-tracker-crime-stats-how-safe-is-my-neighborhood-zip-code-statistics/12385906/source-safety-tracker-crime-stats-how-safe-is-my-neighborhood-zip-code-statistics/12385906/source-safety-tracker-crime-stats-how-safe-is-my-neighborhood-zip-code-statistics/12385906/source-safety-tracker-crime-stats-how-safe-is-my-neighborhood-zip-code-statistics/12385906/source-safety-tracker-crime-stats-how-safe-is-my-neighborhood-zip-code-statistics/12385906/source-safety-tracker-crime-$ 

The fact that the increased connectivity and reliance of these neighborhoods led to an uptick in violent clashes between gangs is consistent with the behavior of violent crime in Chicago. Research in the Netherlands by Wouter Steenbek and David Weisburd has shown that street segments, portions of a street located between two interactions, rather than neighborhood units of analysis, account for the largest share of the total spatial variability of crime. This is also the case for Chicago, where the small neighborhood clusters that comprise larger geographic areas are the strongest determinants of violent crime incidents. Lying at the intersection of six neighborhoods with high rates of violent crime, the 95th/Dan Ryan station often serves as a location for aggressive encounters between territorial gangs. As Robert said, there are often people coming in and out from different "hoods," which is largely behind violent clashes in the terminal. The increased crime has also been noticed by commuters. In my conversation with Frank, he pointed out that "a lot of bad things happen around here [the terminal]." When asked about what could change or improve, he spoke on the higher need for security, and how "there needs to be more action taken."

The renovation of the 95th/Dan Ryan terminal ultimately succeeded in expanding capacity

and Predictors of Crime-type Differentiation across Chicago Neighborhoods," Justice Quarterly 26, no. 4 (October 12, 2009): 771–94, https://doi.org/10.1080/07418820902763079.

<sup>&</sup>lt;sup>29</sup> "Tracking Crime and Safety in Your Neighborhood," ABC7 Chicago, accessed May 5, 2024, https://abc7chicago.com/feature/chicago-safety-tracker-crime-stats-how-safe-is-my-neighborhood-zip-code-statistics/12385906/.

<sup>&</sup>lt;sup>30</sup>Wouter Steenbeek and David Weisburd, "Where the Action Is in Crime? An Examination of Variability of Crime across Different Spatial Units in The Hague, 2001–2009," Journal of Quantitative Criminology 32, no. 3 (December 24, 2015): 449–69, https://doi.org/10.1007/s10940-015-9276-3.

<sup>&</sup>lt;sup>31</sup>Cory Schnell, Anthony A. Braga, and Eric L. Piza, "The Influence of Community Areas, Neighborhood Clusters, and Street Segments on the Spatial Variability of Violent Crime in Chicago," Journal of Quantitative Criminology 33, no. 3 (July 14, 2016): 469–96, https://doi.org/10.1007/s10940-016-9313-x.

and improving its organizational layout, however, the renovation's impacts were not uniform. On one hand, the renovation benefited a number of commuters, such as Jeff, through lower commute times. On the other hand, other commuters were not impacted as positively since they already relied on pre-existing infrastructure. However, the improvements on the terminal are arguably having a steady positive effect by connecting people to employment hubs in Chicago's downtown area and taking steps to repair the city's unequal wealth distribution which was revealed through my causal analysis. Nevertheless, the renovation failed to account for the current conditions of crime in Chicago's South Side and inadvertently created a space where multiple gangs clash with each other on a more frequent basis. These clashes greatly concern commuters and could potentially hinder the terminal's usage.

# 8 Public Transit Policy in Impoverished Chicago

The investment into the CTA terminal was a well-intended, and somewhat successful, attempt to mobilize the South Side's workforce. However, decision-makers need to consider equity and equality when deploying transit services more explicitly, requiring their decisions to consider resident populations and demand for public transit.<sup>32</sup>

As of 2011, the CTA operated as the second-largest public transit system in the United States consisting of 154 bus routes and eight elevated and underground train lines. Yet, its growth has been disproportionate since the CTA was established in 1945. Research by Stephanie Farmer, has shown that the proposed allocations of transit reflect the interests growth-machine of the city's elites against the interest of the majority of Chicagoans. The social surplus granted by CTA investments has been redirected to construct premium network transit for capital and the affluent, thus contributing to the contributing inequality gap in the city.<sup>33</sup> Mayor Rahm Emanuel sought to change the status quo with his historic investment into the CTA to bolster Chicago's economy by connecting neighborhoods. His eight year-long tenure as mayor, however, focused primarily on ensuring that O'Hare International Airport was more accessible, thus perpetuating the aforementioned inequalities. His public transit policy was not too different from past administrations: follow the money. His governance was also marked by few renovations, leaving many of his CTA expansion projects unfinished, such as expanding the Red Line to 130th street.<sup>34</sup>

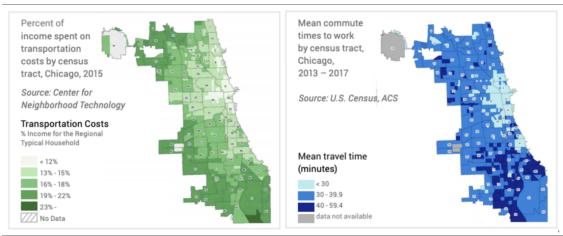
Chicago's South Side has been described as a "transportation desert," with the Chicago Tribune's Mary Wisniewski reporting that "it can be tough to get anywhere without a car," and that "residents sometimes need multiple buses to get anywhere." The South Side stands in stark contrast to the North Side where residents are rarely more than a stroll from the nearest CTA rail or bus stop.<sup>35</sup>

 $<sup>^{32} \</sup>mbox{Alireza Ermagun and Nebiyou Tilahun, "Equity of Transit Accessibility across Chicago," Transportation Research Part D: Transport and Environment 86 (September 2020): 102461, https://doi.org/10.1016/j.trd.2020.102461.$ 

<sup>&</sup>lt;sup>33</sup>Stephanie Farmer, "Uneven Public Transportation Development in Neoliberalizing Chicago, USA," Environment and Planning A: Economy and Space 43, no. 5 (May 2011): 1154–72, https://doi.org/10.1068/a43409.

 $<sup>^{34} 1. \ \ ^{3</sup>$ 

<sup>&</sup>lt;sup>35</sup>Mary Wisnieski, "Editorial: On the South Side, Not Enough Access to Transit Means Not Enough Access to Jobs," Chicago Tribune, June 18,



 $Image\ source:\ https://chi.streetsblog.org/2021/08/03/a-closer-look-at-cdot-plans-to-close-chicagos-transportation-equity-gap$ 

Transportation policy in the South Side of Chicago needs to focus less on renovation, and more on expansion. With so many neighborhoods with insufficient access to public transit, new rail stations and bus stops should meet the demands of residents with excessively high commuting times and transportation costs. The long-awaited extension of the Red Line shows promise in this direction. One of the commuters I spoke with, Joseph, highlighted this as a potential improvement to his commute, reducing his current travel time of an hour and a half. The extension project is still in its planning phase, with \$3.6 billion being allocated to move the terminal 6 miles south from 95th Street to 130th Street, including a new station on 111th street to support the Roseland neighborhood.<sup>36</sup>

As Inshu Minocha's research showed, the neighborhoods within the study area are quite different from the rest of the South Side, and fall within a classification of an area with high transit availability, but low employment accessibility. Such access to transit is evidence of the importance of the 95th/Dan Ryan terminal and its connecting bus routes to the area's transportation.<sup>37</sup> However, employment levels remain low with regards to the rest of the city: 18% compared to 10%. Moreover, residents in the study area report experiencing travel times between 60 and 90 minutes, in contrast to the city average of 30 minutes.<sup>38</sup> This situation is reminiscent of the dilemma at the core of the Spatial Mismatch Hypothesis: workers forgoing improved employment opportunities over excessively long commuting times.

#### 9 More than just Transit

In my interview with Leo, we talked about the economic state of the study area. "Some jobs coming this way would be needed, especially with the McDonald's across the street closing.

<sup>2019,</sup> https://www.chicagotribune.com/2019/06/18/editorial-on-the-south-side-not-enough-access-to-transit-means-not-enough-access-to-jobs/.

36 "CTA Red Line Extension Project," CTA, accessed May 5, 2024, https://www.transitchicago.com/rle/.

 $<sup>^{37}</sup>$ Inshu Minocha et al., "Analysis of Transit Quality of Service and Employment Accessibility for the Greater Chicago, Illinois, Region," Transportation Research Record: Journal of the Transportation Research Board 2042, no. 1 (January 2008): 20–29, https://doi.org/10.3141/2042-03.

 $<sup>^{38}1.</sup>$  95th street corridor plan public meeting 1 — city of Chicago, accessed May 5, 2024, https://www.chicago.gov/content/dam/city/sites/95th-street/pdfs/95th\_Meeting\_Presentation\_1.pdf.

That was a lot of jobs for us." He spoke more on the lack of employment in the study area. "There's not a lot of economic opportunity around here, you don't see any hiring signs." His insights are key to understanding a key dynamic underlying the state of the study area. There are simply no job opportunities that are close, and accessible.

Perhaps the problem is not just that there is not enough access to public transportation and ways of getting around, but rather that employment opportunities are simply too far. It would be disingenuous to wholly attribute the lack of job access in the areas surrounding the terminal to insufficient public transportation. The problem is more than just a transportation question, but also an urban design issue. There is lacking economic development in the study area, meaning that there is insufficient activity in terms of firms operating, and hiring in nearby locations. A policy solution would be to bring jobs and economic activity closer to neighborhoods.



Image source: https://medium.com/community-pulse/understanding-urban-hunger-food-deserts-behavior-poverty-63c501762dd

Robert Cervero's research focused on job-housing imbalances in Chicago demonstrated that serious mismatches are the result of low-income industry workers being priced out of neighborhoods that are close to the city's downtown area. As neighborhoods gentrify, they are forced to move further from their jobs. As a solution, he proposed moving away from the industrial-era logic of separating homes from smokestacks, slaughterhouses, and other nuisances. This includes advocating for inclusive zoning. Inclusionary zoning is defined as joint developments of offices, housing units, and retail services being encouraged through proper city planning. Such a policy could be achieved through conditional-use zoning, where em-

ployment development projects such as offices or stores can only begin if they are located within a specified radius of a high-density residential area. Tax credits and tax-exempt municipal bonds can help finance and incentivize mixed-use projects in urban environments.<sup>39</sup>

Mixed-use zoning policies have been used in the past, as was the example in 22 California cities. Scoring schematics were used in these cities to measure the adherence to ordinances to model mixed-use zones. This was modeled using quality control methods that rely on cloud computing technology and the development of search terms and techniques using Google Earth for capturing walking destinations within a zone. Research by Carol L. Cannon has shown that there is a significant correlation between the adherence to these principles and the mixture and breadth of walking destinations in mixed-use zones. As it stands, only a small fraction of the land in the Roseland neighborhood is mixed-use, the majority of the land is detached single-family homes with only 4.3% of the land permitted for commercial use. Mixed-use developments have a reputation for reducing housing affordability and reinforcing socio-spatial inequality. However, evidence by Markus Moos has found that these negative effects can be offset through appropriate affordable housing policies. These include inclusionary zoning, density bonuses linked to affordable housing, and affordable housing trusts.

Additionally, economic development has a negative correlation with crime. As people gain more opportunities for education or employment, the option of resorting to crime becomes less attractive. Research by James M. Anderson in Los Angeles has shown that mixed-use zoning areas are associated with lower crime than commercial-only and residential-only areas. Neighborhoods that experienced a zoning change also experienced a significant decline in crime, suggesting that mixing residential and commercial blocks may be a promising means of reducing crime.<sup>43</sup> Mixed-use zoning is another reason to introduce inclusionary practices in South Chicago, where crime is a prevalent and pressing issue.

## 10 Closing Remarks

The renovation of the terminal on 95th/Dan Ryan was undoubtedly a positive investment for Rahm Emanuel's administration. Increasing its capacity and layout permitted easier and frequent usage for commuters in the far South Side of Chicago. However, their commute still remains significantly longer than the city average, and, according to the Spatial Mismatch Hypothesis, still prevents residents from gaining meaningful improvements in labor markets and employment. Therefore, the rationale for renovating the station may have been

<sup>&</sup>lt;sup>39</sup>Robert Cervero, "Jobs-Housing Balancing and Regional Mobility," Journal of the American Planning Association 55, no. 2 (June 30, 1989): 136–50, https://doi.org/10.1080/01944368908976014.

<sup>&</sup>lt;sup>40</sup>Carol L. Cannon et al., "Testing the Results of Municipal Mixed-Use Zoning Ordinances: A Novel Methodological Approach," Journal of Health Politics, Policy and Law 38, no. 4 (August 1, 2013): 815–39, https://doi.org/10.1215/03616878-2208612.

<sup>41 &</sup>quot;Zoning Map Explorer," Chicago Cityscape - Zoning Map Explorer - Roseland Chicago neighborhood, accessed May 5, 2024, https://www.chicagocityscape.com/zoning.php?place=neighborhood-roseland.

<sup>&</sup>lt;sup>42</sup>1. Markus Moos et al., "Planning for Mixed Use: Affordable for Whom?," Journal of the American Planning Association 84, no. 1 (January 2, 2018): 7–20, https://doi.org/10.1080/01944363.2017.1406315.

<sup>&</sup>lt;sup>43</sup> James M. Anderson et al., "Reducing Crime by Shaping the Built Environment with Zoning: An Empirical Study of Los Angeles," SSRN Electronic Journal, 2012, https://doi.org/10.2139/ssrn.2109511.

misguided. Bolstering the workforce in Chicago's South Side is not as dependent on public transportation as advertised. The issue is not so much bringing residents to employment centers, but rather jobs coming to them. Mixed-use zoning policies, and tax incentives can provide a leeway to bring more jobs and economic activity to the neighborhoods surrounding the terminal. These policies must be carefully accompanied with affordable housing measures such as subsidies and funds to not price out current residents. All in all, the route to riches can be as fancy and organized as you like, but it's certainly nicer when it's short.

#### 11 Methods

Available through this link.

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