

A Tale of Two Rivers:
Zoning Policy Conflict and the Production of Public Space on the Chicago River

By: Isadora Brito Kron



Submitted in partial fulfillment of the requirements of the Bachelor of Arts in
Environmental & Urban Studies
Public Policy Studies

Faculty Advisor: Professor Neil Brenner
Environmental & Urban Studies Preceptor: Kristi Del Vecchio
Public Policy Studies Preceptor: Kelsey Berryman

The University of Chicago
Chicago, Illinois
May 5th, 2023

Abstract

In his tenure as Mayor of Chicago from 2011 to 2019, Rahm Emanuel prioritized development that would draw corporate investment into Chicago and elevate the city on the world's stage. In order to do this, he prioritized zoning policy that would allow for public space development on the Chicago River as well as the redevelopment of the North Branch of the river from an industrial zone into an innovation zone. These policy changes succeeded in redeveloping the character and ecology of the North Branch, but did so through the intensification of polluting industrial activity on the South Branch of the river. This thesis examines the interactions among three pieces of zoning policy, the Chicago River Design Guidelines, the North Branch Framework Plan, and a draft Little Village Framework plan, analyzing the policy mechanisms with which the City has attempted to create public space on the river while encouraging the redevelopment of the North Branch and the continuation of industrial activity on the South Branch. I show that this diverging development scheme has created geographically-unique barriers to using the river as a public space in each area, and I ultimately argue that it has contributed to increased spatial and environmental inequality within the city. Finally, I argue that the City should halt the practice of selling public land to private developers and reform environmental, labor, and land-use policies to change the nature and geography of industrial activity in Chicago, two changes that would promote public access to the Chicago River while balancing the economic and environmental needs of the city.

Acknowledgements

My academic trajectory at UChicago has been guided by the ideas, mentorship, and encouragement of many people, all of whom have played a role in making this thesis possible. Thank you to my faculty advisor, Professor Neil Brenner, for encouraging me to think further about this project and its implications at every step of my writing process. Professor Brenner's mentorship has pushed me out of my comfort zone and towards a more complex understanding of cities and their relationship to the world. I am grateful for Dr. Sabina Shaikh, Dr. Topher Kindell, Kristi Del Vecchio, and Kelsey Berryman, whose guidance, edits, and encouragement helped me persevere through this project's many iterations.

I will always be thankful for my family, especially my parents, who taught me to seek out answers to my questions and who have always offered their support without hesitation. I could not have done the past four years without my incredible community of friends, whose cheerleading, coffee, and willingness to lend an ear have kept me smiling this entire time. A special thank you to my ENST thesis seminar classmates, whose feedback and positivity was so encouraging throughout this process.

Finally, I'd like to thank Trish Brubaker and my past and present UChicago Crew teammates for showing me the beauty and the potential of the Chicago River. This project would not have existed without four years of early mornings on the river, and I will always appreciate the joy, community, and purpose that my time rowing in Chicago has brought me.

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Introduction

In April of 1899, a pedestrian dropped a lit cigar into the Chicago River near the Kinzie Street bridge downtown. The water of the river was so polluted that the river burst into flames, inspiring news articles as far east as New York City.¹ Almost 10 years later, Bubbly Creek, an offshoot of the South Branch of the river in present-day Bridgeport, was the subject of political organizing as women of the neighborhood fought unsuccessfully to have it drained on account of its “foul gases.”² Nearly 100 years later, in a 1993 focus group studying how Chicago residents characterize the Chicago River, one participant described the North Branch of the river, less than two miles from the Kinzie Street bridge, as “The most disgusting, dangerous, foul, and dirty body of water in the Chicago area.”³ Despite its long history of pollution and industrial activity, however, some areas of the Chicago River are currently undergoing a transformation. On the banks of the North Branch is what will soon be called Lincoln Yards, a mixed-use development featuring residential and commercial space that will be the largest real estate development project in Chicago’s history.⁴ Transforming this section of river from an industrial zone to a destination for white-collar work, leisure, and upper-class living has been a political project, one that required rezoning, the courting of investors, and an unprecedented amount of capital.

Meanwhile, in areas on the South Branch of the Chicago River, the water continues to smell, and development along the river continues to be oriented towards Chicago’s heavy industries such as concrete and asphalt production. Prior to 2013, areas on both the North and South branches were designated as industrial corridors or Planned Manufacturing Districts

¹ “Chicago River on Fire,” *The New York Times*, April 19, 1899, sec. Archives.

² “Hetty Green Blamed,” *The Cairo Bulletin*, February 10, 1908.

³ “People and the River: Perception and Use of Chicago Waterways for Recreation,” ChicagoRivers Demonstration Project Report (Milwaukee, WI: U.S. Department of the Interior, National Park Service, 1998).

⁴ Kori Rumore and Ryan Ori, “Lincoln Yards: Timeline of an Ambitious Chicago Development,” *Chicago Tribune*, September 30, 2021.

(PMDs), areas within which development is limited to factories, warehouses, and other buildings that support manufacturing efforts. The North Branch Framework Plan, released in 2017, changed this designation for the North Branch, allowing for the residential and mixed-use development seen today.⁵ No changes of the sort have been put into effect for the industrial corridors on the South Branch, creating a distinction between the uses, appearances, and experiences of the two branches of the river.

This project examines the interactions among the Chicago River Design Guidelines and the relevant zoning policies on the North and South Branches of the river and investigates the nature of the public space that is formed by these policy interactions. My research was guided by a central question: How do the citywide Chicago River Design Guidelines align or conflict with area-specific zoning plans in producing and ensuring access to public space on the river? I broke this down into the following subquestions: How do the applicable zoning policies mitigate the impact of industrial uses on public space, what is the design and accessibility of the resulting riverfront, and what policies are in place to safeguard against exclusion through gentrification? I analyzed three relevant zoning policies to identify the ways in which these plans align and conflict in their uses and visions of the Chicago River: the Chicago River Design Guidelines (2019), the North Branch Framework Plan (2017), and the Little Village Framework Plan draft (2019). I argue that through its diverging zoning policies, the City of Chicago has engendered spatial inequality within the city by promoting the intensification of polluting industrial activity on the South Branch in order to facilitate the restoration and redevelopment of the North Branch. In doing this, the City has also created unique barriers to the realization of the Chicago River as a public space within the two areas including the privatization of space encouraged by the updated

⁵ Metropolitan Planning Council, “MPC Statement to Chicago Plan Commission on 2420 S. Halsted Proposed Zoning Change,” Metropolitan Planning Council, accessed December 12, 2022.

zoning policy on the North Branch and the exclusionary nature of the industrial use of land on the South Branch. These diverging development strategies therefore contradict the City’s stated goal of “[reclaiming] the river as an aesthetic and recreational resource to improve the quality of life for all Chicagoans.”⁶ Ultimately, I shed light on the ways that public policy can act as both a facilitator and a barrier to the creation and use of public space in different areas of the Chicago River and I offer recommendations for how policy can be improved to make access to the river easier and more enjoyable in both areas.

Background and Context



Figure 1: Relevant Character Zones on the Chicago River⁷

⁶ “Chicago River Design Guidelines” (Chicago: City of Chicago Department of Planning and Development, January 24, 2019), 4.

⁷ “Chicago River Design Guidelines” (Chicago: City of Chicago Department of Planning and Development).

The city of Chicago has been dependent on the Chicago River as a piece of infrastructure since settlement first began in the region. The Chicago River in the form that it takes today is the product of extensive engineering. Prior to its settlement as a trading post, Chicago was a swamp on the banks of Lake Michigan. This swamp was drained to make way for the construction of the city in the early 19th century by dredging a canal, which is now known as the Main Stem of the Chicago River. As the city was constructed, streets and buildings were raised to allow for a sewage system, which would otherwise have been impossible given the swampy ground. This sewage system flowed into the river, which flowed towards the lake. This rudimentary version of the river system established itself as an integral part of the city's metabolism by becoming the repository for its waste.⁸

Lake Michigan, as part of the world's largest freshwater system, has always served as the drinking water source for Chicago. The sewage system, therefore, posed a public health risk to residents of the city, as the water was sourced from the same body of water into which untreated waste was disposed of. This consisted of human waste, as well as the waste products of the booming meatpacking factories that were located upriver. The construction of the Chicago Area Waterway System (CAWS, which consists of the Chicago River and other canals that converge in the Chicago Ship and Sanitary Canal) as it exists today was designed in an effort to protect the health of the city.⁹

In 1900, the Chicago Ship and Sanitary Canal (CSSC), a 28-mile long canal, was built to connect the Chicago River to the Des Plaines River, which ultimately meets the Mississippi River and flows out into the Gulf of Mexico. The combination of the CSSC and locks at the points where the CAWS meets the lake allowed for the Chicago River to flow "backward," away

⁸ Dan Egan, "A Battle Between a Great City and a Great Lake," *New York Times*, July 7, 2021,

⁹ Dan Egan, "A Battle Between a Great City and a Great Lake."

from the lake, flushing with it all of the city's waste away from the freshwater source out towards the Mississippi River. While this was successful in promoting public health within the city, communities downstream of the Chicago Ship and Sanitary Canal became the recipients of the city's waste. This engineering feat made Chicago the only city along any of the Great Lakes to divert more water from the Great Lakes than it returns, incorporating the flow of water out of Lake Michigan as a tool for the waste disposal of the city in addition to its role as a drinking water source.¹⁰

Infrastructure projects that created and improved the river were always undertaken with the goal of increasing the river's efficiency in carrying out specific tasks, from flushing the city's waste to allowing for the transportation of goods. As Chicago grew in the 20th century along with its major industries of meatpacking and agricultural commodity trade, the river became increasingly important to the continuation of this growth because it allowed Chicago to establish itself as a transfer point for goods being shipped by train and by barge. Goods arriving in the city by barge could be repacked onto trains and vice versa, making Chicago a unique hub in national trade routes.¹¹ It is only in recent history that development oriented towards the river has aimed to fulfill non-industrial needs for the city.

An Exploration of Zoning, Public Space, and Urban Waterways

This project examines the mechanisms through which zoning policies interact in facilitating or creating barriers to the usage of the Chicago River as a public space. The Chicago River has experienced diverging development in the past two decades, with areas on the North Branch transitioning away from industrial uses towards residential mixed-use, while the

¹⁰ Peter Annin, *The Great Lakes Water Wars*, Revised edition (Washington, DC: Island Press, 2018).

¹¹ William Cronon, *Nature's Metropolis: Chicago and the Great West*, 1991.

industrial activities along the South Branch are being intensified. Site-specific and city-wide zoning policies claim to prioritize public access to the waterfront for recreation, but the diverging development of both branches of the river has created differing realities of this access. This section situates zoning policy in relation to public space creation within cities, addressing the benefits of the creation of such spaces, the feasibility of using zoning policy to create public spaces, the complications involved in the privatization of public space, and outlining a case study of public space created on an urban waterway. Drawing from this exploration, I argue that zoning and privatized public space can contribute to the expansion of public space in cities, but without careful implementation processes and the development of truly public land these planning policy mechanisms can also lead to increasing spatial, economic, and environmental inequality. The diverging development on the North and South Branches of the Chicago River exemplifies the benefits and risks of using zoning policy as a mechanism to create public space in cities.

Importance of “Natural” Public Space

Green space in cities is an important resource, promoting civic culture, ecological well-being, and population health. The health benefits of green spaces emerge for three reasons: improved psychological state, improved health-related behaviors, and environmental benefits.¹² The psychological toll of urban life has been well-documented throughout history. The routine overstimulation of crowded, loud environments has been theorized to lead to population changes and general unrest.¹³ Calm, green spaces within cities provide opportunities for mental recuperation, helping make dense living environments more tolerable.¹⁴ Proximity to green spaces such as parks with areas for exercise has also been shown to improve neighborhood

¹² Jon Sadler et al., “Bringing Cities Alive: The Importance of Urban Green Spaces for People and Biodiversity,” in *Urban Ecology*, by Kevin J. Gaston (Cambridge University Press, 2010).

¹³ Georg Simmel, “The Metropolis and Mental Life,” in *On Individuality and Social Forms*, 1903.

¹⁴ Daniel Aldana Cohen, “Seize the Hamptons,” *Jacobin Magazine*, January 9, 2021.

health by inspiring positive behavioral changes such as increased physical activity.¹⁵ Finally, green spaces can assist in mitigating the detrimental health effects of urban industrial activity by providing areas of respite from or even counteracting the polluting effects of industry. Children who grow up in close proximity to highways and factories have been shown to have higher rates of asthma and other pollution-related health conditions, and public green space can be used to separate residential areas from polluting activities while also being the site of ecological processes that reduce the quantity of pollutants in the air.¹⁶

Natural spaces in urban environments can take many forms, and the organic reclamation of highly anthropogenic spaces can lead to expansive definitions of what is considered to be a “natural” space. Historically, only areas of “pristine” nature have been considered natural spaces, creating a dichotomy between urban and natural environments.¹⁷ Such a dichotomy is troubling because it implies that nature cannot exist in cities, therefore erasing the ecological processes that occur in urban environments and benefit urban natural ecosystems. Areas such as bomb sites, unused infrastructure, and brownfield sites all have been documented as being overtaken by plants and wildlife in cities such as London, Berlin, and New York.¹⁸ The nature present in these spaces is not as readily acknowledged as nature in less urban environments due to the human-natural divide that has defined nature as areas untouched by human activity. This mentality is ultimately harmful because it allows for the destruction and reconfiguration of preexisting urban ecosystems to “construct” new “natural” spaces, harming ecologies that already exist within them. Urban park designers instead could support the coexistence of human

¹⁵ Jon Sadler et al., “Bringing Cities Alive: The Importance of Urban Green Spaces for People and Biodiversity,” in *Urban Ecology*, by Kevin J. Gaston (Cambridge University Press, 2010).

¹⁶ Hanneke Kruize et al., “Urban Green Space: Creating a Triple Win for Environmental Sustainability, Health, and Health Equity through Behavior Change,” *International Journal of Environmental Research and Public Health* 16, no. 22 (November 2019): 4403

¹⁷ Matthew Gandy, *Natura Urbana: Ecological Constellations in Urban Space* (Cambridge: MIT Press, 2022).

¹⁸ Gandy, *Natura Urbana*.

and non-human life already at play in cities by drawing from existing ecosystems and anthropogenic landscapes alike to create protected environments for biodiversity in urban environments.¹⁹

Green spaces play an important role in urban social and ecological life, and their protection should be made a priority. The acknowledgment of presently existing ecosystems should be ensured, however, in order to create public spaces that are ecologically sound and require minimal intervention and maintenance. If areas to congregate, be active, and reflect peacefully can be integrated into preexisting urban ecosystems they could provide a range of social and health benefits to the city without disrupting the organically-formed biodiversity that is already present. The Chicago River sustains a biodiverse ecosystem of flora and fauna that is able to coexist with the industrial uses of the river.²⁰ Design-related planning and zoning policies can mandate the creation of public green space on the Chicago River that would benefit Chicago residents and ecosystems, but doing so would require acknowledging the ecology that the river already sustains and prioritizing its protection.

Park Development and Community Displacement

The development of highly popular parks and recreational resources often has the effect of reshaping the areas in which they exist, contributing to gentrification and accompanying population shifts. When public space construction is included within larger development goals, it can be viewed as a mechanism to accelerate these community changes. The 21st-century restructuring in cities has yielded many examples of this phenomenon, many being linked to the rise of the so-called “innovation district.”

¹⁹ Gandy, *Natura Urbana*, 251.

²⁰ “River Ecology,” Friends of the Chicago River, accessed April 7, 2023.

An innovation district is an area whose economy has transitioned to one based on innovation, not manufacturing. Many city governments, including Chicago's, have come to view innovation districts as a necessary developmental tool to diversify city economies and attract companies and workers. Policymakers have identified certain planning features as facilitators of innovation, including mixed-use areas, residential and corporate density, and multi-modal transit access.²¹ These features attract young workers, maximize the interactions that take place between residents (which create knowledge spillover), and allow for a competitive market by making it easier for workers to switch jobs. One well-understood model of innovation district formation is known as the "re-imagined urban area." In this model, industrial or warehouse districts with proximity to a city's downtown, good transit access, and (often) a natural feature are redeveloped into districts with the features of innovation districts, attracting companies and workers to move to the area.²² The city of Chicago has come to view the Chicago River as an appealing feature to anchor new development strategies that attract knowledge-economy workers and corporate migration to the city, but the formation of innovation districts can have effects that amplify inequality.²³

Public spaces oriented towards the creation of innovation districts are often privately owned or operated and have historically been linked to gentrification and displacement in their surrounding areas. Examples of such parks include New York City's High Line, Chicago's Bloomingdale Trail (otherwise known as The 606), and Houston's Buffalo Bayou. These parks were developed with upper-class, knowledge economy workers in mind, and thus offer features such as striking architecture and running paths.²⁴ The High Line, for example, features a path for

²¹ Bruce Katz and Julie Wagner, "The Rise of Innovation Districts: A New Geography of Innovation in America," 2014, 34.

²² Katz and Wagner, "The Rise of Innovation Districts: A New Geography of Innovation in America."

²³ "Mayor Emanuel's North Branch Corridor Modernization: North Branch Framework," 23.

²⁴ Matt Eldridge, Kimberly Burrowes, and Patrick Spauster, "Investing in Equitable Urban Park Systems" (Urban Institute, July 2019), 6.

walking and areas from which to stop and view the city but lacks many places to sit and interact with other park users. Additionally, the park is patrolled by a security team, which police the uses of the park, ensuring that it is used in a prescribed way friendly to the desires of tourists and the park's wealthy neighbors. These ostensibly "public" spaces have reshaped the neighborhoods surrounding them, attracting tourists and new residents while displacing longtime working-class residents and small businesses from their surroundings.²⁵

It is possible to create public space while minimizing displacement effects, but this requires creating spaces that are adaptable to many uses, require minimal upkeep, and can be operated cheaply. One approach to this is referred to as "just green enough," where sufficient investment to green infrastructure is made as to meet the needs of a community without turning the community into a destination for tourists or outside investors.²⁶ Critics of this approach argue that it perpetuates historic under-investment in low-income communities and minimizes the importance of affordable housing policy and other equitable development plans that can protect communities from the negative effects of investment.²⁷

Loughran recommends "[letting] the rails rot," by which he means allowing for organic ecosystem formation in post industrial spaces to remain in its preexisting state when these areas are transitioned to parks, instead of pursuing radical, expensive architectural interventions. Highly engineered parks often require intensive landscaping and maintenance, raising operating costs. A more organic approach to landscaping in park development that incorporates pre-existing structures can be cheaper to operate, allowing for the elimination of public-private partnerships or park-specific nonprofits to fund park operations.²⁸ Such partnerships or

²⁵ Kevin Loughran, "Parks for Profit: The High Line, Growth Machines, and the Uneven Development of Urban Public Spaces," *City & Community* 13, no. 1 (March 1, 2014): 49–68.

²⁶ Eldridge, Burrowes, and Spauster, "Investing in Equitable Urban Park Systems," 6.

²⁷ Eldridge, Burrowes, and Spauster, "Investing in Equitable Urban Park Systems," 6.

²⁸ Kevin Loughran, *Parks for Profit: Selling Nature in the City* (New York: Columbia University Press, 2022), 182

organizations can wield significant power over the uses and resources of a park and can contribute to exclusivity of the public space, thus a cheaper operating model could make park spaces more inclusive.²⁹ This vision of public space creation is aligned with Gandy's concept of urban nature, which acknowledges the value of ecosystems already present in cities and advocates for a less interventionist approach to natural preservation.³⁰

Political desires to attract modern, profitable economic activity to a neighborhood can shape the configuration and nature of public space as well as the social dynamics of the area as a whole. If public space is viewed as a tool to attract wealth, it can be designed in such a way as to be desirable to wealthy users of the space, potentially excluding current community members or other potential users. This critique emerges in opposition to other, more pro-development ideologies. In order to expand access to public spaces on the Chicago River while preserving pre-existing communities, policy must combine affordable housing and social programs with public space designs that serve community needs, minimize operating costs, and avoid being viewed as “destinations.”

Zoning as a Tool for Public Space Creation

Zoning laws applying to the Chicago River address the use of the river as a public space by requiring the integration of a public riverwalk on privately owned land, a planning scheme that has been pursued to mixed success in other cities before. In New York City, zoning has been used as a tool to incentivize the creation of privately-owned public space (POPS) since 1961, when a zoning resolution was passed stating that developers could build additional floor area in

²⁹ Eldridge, Burrowes, and Spauster, “Investing in Equitable Urban Park Systems,” 25.

³⁰ Gandy, *Natura Urbana*, 247.

exchange for incorporating publicly accessible space on their lot.³¹ This ordinance succeeded in inspiring the construction of well over 500 POPS in the city.

The first iteration of the law simply called for the construction of public space on a lot, and other laws specifically banned the incorporation of important space-creating amenities like seating within these spaces. Many of the resulting spaces were therefore made unintentionally uninviting, with some architects believing that “the construction of a barren plaza devoid of amenities fronting their building actually increased the market value of their building, as powerful corporations seeking to project an image of affluence ‘indulged in the luxury of empty space.’”³² The minimal oversight of POPS of the era led to others being used as spaces for loading or vehicle circulation. Overall, New York’s early experimentation with POPS yielded spaces with relatively little value to the public.

In 1975, the POPS ordinance was overhauled to require approval of the public space by the planning department to receive higher floor-area bonuses. This overhaul led to the creation of more usable POPS, which now featured seating, planters, and other amenities. There was no oversight on the maintenance of POPS, however, so developers were free to renovate the spaces however they saw fit, at times adding exclusionary design features like gates or spikes on planters (to prevent seating) after the fact.³³ While technically open to the public, these newer POPS contain a variety of features that “filter” the type of user and the nature of the use of the space. For example, many POPS today contain outdoor food stands or kiosks, as well as seating so one can enjoy their food. It is unclear, however, if one must purchase food to use the seating, and some establishments have incorporated this seating within gates or barricades surrounding

³¹ Stephan Schmidt, Jeremy Nemeth, and Erik Botsford, “The Evolution of Privately Owned Public Spaces in New York City,” *URBAN DESIGN International* 16, no. 4 (December 1, 2011): 270–84,

³² Jeremy Németh, “Defining a Public: The Management of Privately Owned Public Space,” *Urban Studies* 46, no. 11 (October 1, 2009): 2463–90

³³ Schmidt, Nemeth, and Botsford, “The Evolution of Privately Owned Public Spaces in New York City.”

the food kiosk, giving the impression that it is for paying customers only.³⁴ Surveillance, whether by employees such as doormen or by cameras, coupled with consumption-oriented design, serves to determine the nature of the use of these spaces, though they ostensibly are accessible to the public.

Urban public space offers benefits to the civic and ecological health of cities. When designed thoughtfully and with an expansive perspective on the definition of natural ecosystems, presently existing spaces can be adapted and protected as habitats for urban wildlife and spaces for recreation for city-dwellers. Privately-owned public space allows for a dramatic increase in the quantity of public space in a city by requiring its integration into areas that otherwise may be off-limits to the public. The private nature of these spaces, however, offer an increased potential for filtration and exclusivity as compared to publicly-owned public spaces. When applied to the Chicago River, this literature suggests that the privately-owned public space emerging from present zoning guidelines can serve to increase the river's accessibility to the public, but alone will not succeed in making accessing the river possible and enjoyable for all city residents.

Urban Rivers as Public Space: Copenhagen Harbor Baths

Urban rivers around the world have historically been used to serve infrastructural roles, and therefore have been very polluted. The Chicago River is no exception to this norm, and one of the primary obstacles to its characterization as a public recreational space is the pollution that people do not typically associate with such environments. Successful recharacterizations of urban waterfront spaces in other cities show that such a re-understanding is possible given the right policy, design, and social contexts. One example of such a project is the famous Copenhagen Harbor baths, built in 2002.

³⁴ Németh, "Defining a Public."

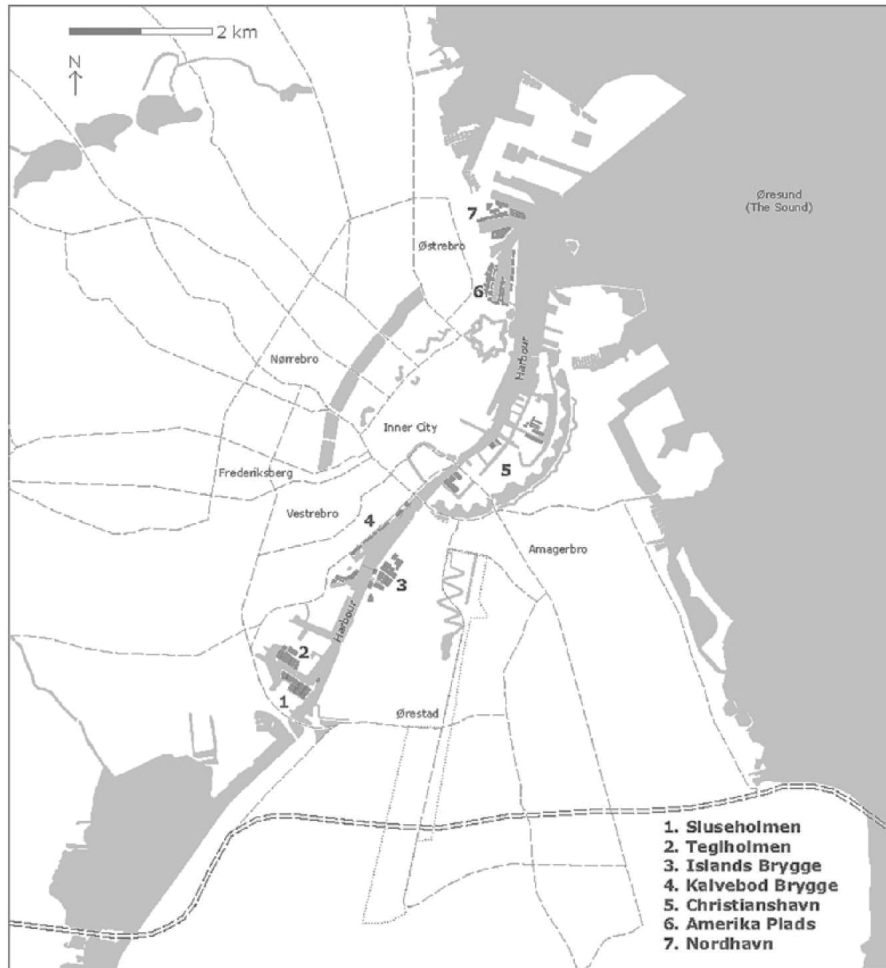


Figure 7: Map of Copenhagen with Postindustrial Redevelopments Labeled³⁵

Although not a river, the Copenhagen Harbor is a narrow, 10-kilometer-long bay that slices through the center of the city, geographically functioning as a river. The harbor was once the center of Copenhagen’s industrial activity, used for transporting goods produced in the pollutant-emitting factories along its banks. Districts in the inner-city, immediately adjacent to the banks of the harbor, largely consisted of working-class housing.

Beginning in the 1990s, a series of urban renewal projects transformed the worker housing and industrial buildings of the inner city into modernized neighborhoods that reflected the architectural and social history of the area. An early example of these urban renewal

³⁵ Florian Urban, “Copenhagen’s ‘Return to the Inner City’ 1990-2010,” *Journal of Urban History* 47, no. 3 (May 1, 2021): 651–73.

initiatives took place in the neighborhood of Nørrebro in the late 1970s. Nørrebro was the center of the Danish squatter movement early in the decade, but eventually “slum clearance” initiatives led to the demolition of most of the neighborhood’s old buildings. Instead of replacing them with the modernist towers popular in Europe at the time, the city responded to squatter protests by constructing low-rise buildings that resembled the style of housing that had previously existed. A law passed in 1983 prevented future “tabula-rasa” urban renewal initiatives by banning total demolition of a neighborhood, therefore requiring that subsequent urban renewal initiatives incorporate existing structures and therefore retain neighborhood character. In these steps, the Danish government affirmed a commitment to pedestrian-scale design and inner-city living.³⁶

The Copenhagen Harbor Baths, part of the Islands Brygge neighborhood, were designed by architect Bjarke Ingels in 2002. Islands Brygge, a waterfront neighborhood, was positioned ideally to be the subject of an urban renewal project, and residents of the neighborhood organized in the 1990s to fight against real-estate speculation in the area. In contrast to Kalvebod Brygge, the neighborhood directly across the harbor, which saw private developers constructing imposing, corporate buildings, the Islands Brygge redevelopment succeeded in retaining a pedestrian-scale, recreationally-oriented neighborhood feel. Taking advantage of the success of wastewater infrastructure improvements of the 1990s, which succeeded in cleaning the polluted waters of the harbor in order to make them swimmable, the Harbor Baths created an enclosed swimming area within the harbor adjacent to a public park. Nodding to the site’s industrial history, the project used docks, boat ramps, and other maritime structures to create the enclosure as well as areas for lounging, playing, and (popularly) jumping into the water.³⁷ The site is now one of Copenhagen’s most popular destinations for residents and tourists alike.³⁸ This popularity

³⁶ Urban, “Copenhagen’s ‘Return to the Inner City’ 1990-2010.”

³⁷ “BIG | Bjarke Ingels Group,” BIG | Bjarke Ingels Group, accessed March 9, 2023.

³⁸ Urban, “Copenhagen’s ‘Return to the Inner City’ 1990-2010.”

is an indicator of the potential for urban waterfront spaces such as the Chicago River to be transformed into sites for radically different activities than their historically industrial uses, given proper infrastructural, planning, and design interventions.

Urban renewal initiatives in Copenhagen's post-industrial inner-city neighborhoods attracted new residents and created gentrification, but this has not become a crisis in Copenhagen as it has in American cities. In Copenhagen, condominium-style building ownership arrangements are relatively uncommon, while publicly-owned housing projects are far more common than in the United States and are open to everyone. The majority of housing in Copenhagen is rental apartments, but Danish law prevents foreigners from owning real estate, preventing foreign real estate development firms from profiting off of renters and keeping international real estate investment from driving up prices. The redeveloped inner-city neighborhoods have less publicly-owned housing than the city does on average, and higher rates of private rentals as well as condominium-style ownership, indicating a degree of inequality as compared to the rest of the city. The high rates of families residing in these neighborhoods, as well as the socio-economic diversity present as compared to similarly desirable waterfront neighborhoods in other international cities, show that Copenhagen's housing policy partially mitigated some of the gentrifications that emerged from the inner-city urban renewal projects.³⁹

The achievements of the Copenhagen Harbor Baths show that public space along urban waterfronts like the Chicago River can be realized while minimizing resulting gentrification. One significant difference between the Copenhagen Harbor Baths, however, and the public space mandated by the Chicago River Design Guidelines is that the Copenhagen Harbor Baths were constructed on public parkland in tandem with national housing policy that preserved some affordability in the neighborhood. This example suggests that for amenity-filled public parks to

³⁹ Urban, "Copenhagen's 'Return to the Inner City' 1990-2010."

serve the whole public while minimizing their consequences, they must be free to access and be implemented along with thoughtful policy to preserve the strength of communities in the area.

My paper builds upon the work of these authors by applying their arguments to assess the mechanisms and consequences of zoning policies relevant to the Chicago River. I draw on their conclusions to inform improvements to Chicago's approach to public space creation on the river that can improve community and civic health while minimizing the growth of inequality.

Relevant Zoning Policies and Approaches

I focused my project on two areas on the Chicago River, the North Branch Zone and the South Branch south of Cermak Road. I chose to focus on the comparative evolution of these zones because they are the most indicative of the conflicting desires and ideologies informing today's transformation of the river. Both zones have a history of industrial activity that has defined their built environments for the past century. Both zones are also highly urban, and therefore are in the vicinity of residential areas. Finally, both zones were once designated as industrial corridors with Primary Manufacturing Districts, which limited the viability of any non-industrial development in these areas. Contemporary zoning policies have caused the histories of these districts to diverge. The rezoning of the North Branch Corridor has allowed for the development of mixed-use projects such as Lincoln Yards that incorporate the Chicago River as an aesthetic and recreational feature, while the policy discussions surrounding the Little Village Industrial Corridor have served to maintain its current industrial state. Both of these pathways can potentially limit access to the river as a public good, either by creating physically hostile environments or by privatizing and excluding the public from using the river via a neoliberal, wealth-driven development scheme. For this reason, they could both be considered

“hard” case studies, where the successful transformation of these zones would indicate the potential of such transformations along other sections of the river.⁴⁰

I analyzed three zoning documents published by the Chicago Department of Planning and Development that pertain to these areas, the 2017 North Branch Framework Plan, the 2019 draft Little Village Framework Plan, and the 2019 Chicago River Design Guidelines. My analysis of these zoning documents depended upon a conceptual understanding of effective public space on the Chicago River that was put forth in a 1998 study entitled *People and the River: Perception and Use of Chicago Waterways for Recreation*. This study laid out barriers that the public identified to using the Chicago River for recreation and listed a series of physical transformations that could overcome these barriers. A primary concern that city residents had regarding using the river as public space was related to water quality on the river. Residents viewed waste dumping, odor, and pollution as negative features of the river that could deter the use of public riverfront space. Aesthetics and nature formed another barrier – residents expressed a desire for the natural sense of the river, ideally, one that was friendly to wildlife. Interestingly, residents expressed that organic ecological reclamation of post industrial space created a desirable aesthetic as well as interesting spaces for play. Finally, city residents expressed a desire for public features that would enable a variety of uses of riverfront public space, including benches, bathrooms, tables, tennis courts, and other park amenities.⁴¹ I also drew upon author Naomi Klein’s concept of a sacrifice zone, a place that is sacrificed to the toxic pollution of fossil fuel use in order to allow for the continuation of carbon-intensive capitalist activities elsewhere. Sacrifice zones require the sacrifice of both places and “[people,] whose lungs and bodies can be sacrificed to work in the

⁴⁰ Charles Lipson, *How to Write a BA Thesis : A Practical Guide From Your First Ideas to Your Finished Paper.*, 109

⁴¹ “People and the River: Perception and Use of Chicago Waterways for Recreation” (National Park Service, Rivers, Trails, and Conservation Assistance Program, 1998).

coal mines, people whose lands and water can be sacrificed to open-pit mining and oil spills.”⁴²

The relationships between sacrifice zones and the zones that benefit from them are complex, and exposing them can shed light on the many interconnected systems of inequality whose existence undergirds the ultimately sacrificial nature of carbon-intensive capitalism.⁴³ These features and concepts provided me with a framework with which to analyze the quality of public space along the river and the ability of these spaces to fill the needs of residents.

Chicago River Design Guidelines

The development of the Chicago River as a public asset for the city was an important component of Rahm Emanuel’s tenure as mayor from 2011 to 2019. Emanuel’s administration prioritized development that would elevate Chicago’s global standing, incentivizing corporations to relocate to the city and tourists to visit. This agenda resulted in the completion of The 606 on the North Side, and the transformation of the West Loop from a warehouse district to a high-end mixed-use neighborhood, and other development-oriented projects.⁴⁴

Part of this agenda involved updating the Chicago River Design Guidelines, which outline the overall philosophy guiding the city’s approach to river-centered planning, defining the river as a public amenity and as an industrial advantage, and therefore setting minimum requirements for public space access while still allowing for industrial uses. The updated version of the guidelines, passed in 2019, built upon the 1999 Chicago River Corridor Development Plan, which was the first policy document to characterize the river as a public amenity and lay out plans for its revitalization. The Corridor Development Plan enabled the construction of the Chicago Riverwalk, whose success in drawing people to the river allowed for a revisioning of the

⁴² Naomi Klein, “Let Them Drown,” *London Review of Books*, June 1, 2016.

⁴³ Naomi Klein, “Let Them Drown.”

⁴⁴ Patrick Sisson, “Mayor Rahm Emanuel’s Legacy: How He Changed the Fabric of Chicago,” *Curbed Chicago*, May 17, 2019.

potential of the entire Chicago River as a recreational amenity for the city. The updated Chicago River Design Guidelines established a more detailed plan for the use of the Chicago River as a public space.⁴⁵

The central requirements of the updated Design Guidelines establish rules surrounding the design of the river and its banks.⁴⁶ Importantly, the Design Guidelines mandate that new development on the Chicago River must be set back a minimum of 30 feet from the banks of the river, and within that setback they must include a publicly accessible multi-use path, to be maintained by the property owner. This mandate aims to create continuous riverfront access for the public to engage in a wide range of recreational activities. Exceptions to the minimum setback requirement exist for developments whose uses depend on access to the waterway, requiring activity to be conducted on the river or on its banks. Examples of such developments include companies who ship goods by barge and thus must operate docks and loading zones. In the cases of these exceptions, the development must still include a publicly accessible multi-use path, whose route should be placed on the land side of the development (away from the river), thus avoiding conflict between recreational users of the path and river-adjacent commercial activity.⁴⁷

⁴⁵ “Chicago River Design Guidelines” (Chicago: City of Chicago Department of Planning and Development, January 24, 2019).

⁴⁶ “Chicago River Design Guidelines” 2019

⁴⁷ “Chicago River Design Guidelines” 2019, 18.

North Branch Framework Plan

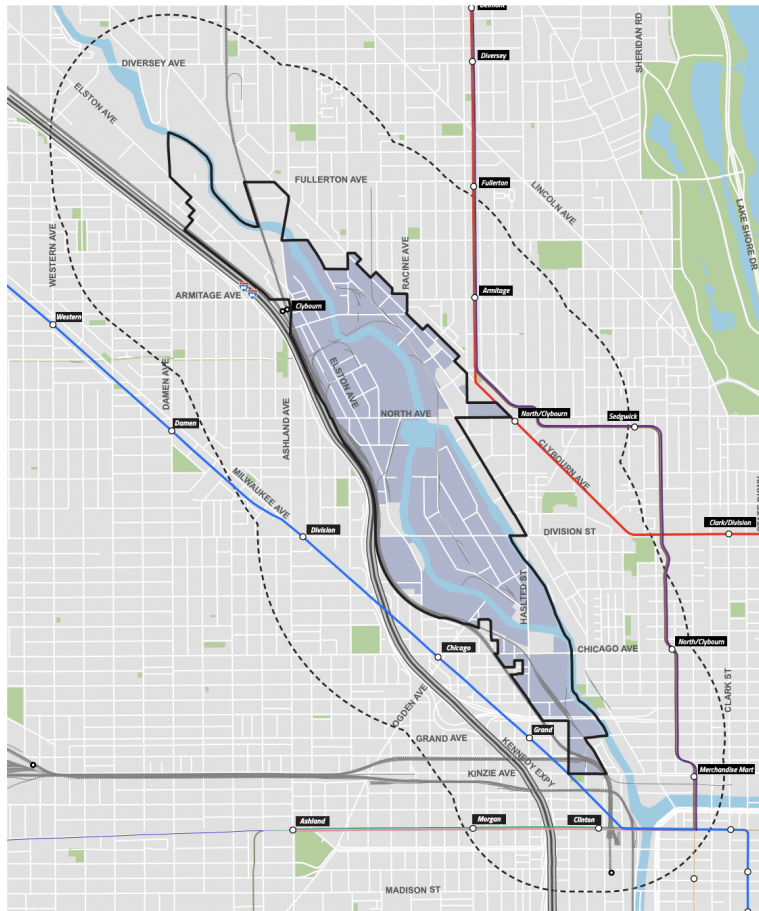


Figure 2: North Branch Industrial Area, Outlined with Solid Black Line⁴⁸

The North Branch Zone, which spans the area around the river between Kinzie Street and Fullerton Avenue, has been at the center of much of the land redevelopment along the river since Emanuel’s term in office. Previously known as the North Branch Industrial Zone and designated as a Planned Manufacturing District, development along the North Branch is now governed by the 2017 North Branch Framework Plan. This plan rezoned the North Branch Industrial Zone to allow for mixed-use development including housing, commercial spaces, nightlife, restaurants, and other features.⁴⁹ The primary goal of the framework was to “[modernize] existing land use

⁴⁸ “Mayor Emanuel’s North Branch Corridor Modernization: North Branch Framework” (Chicago: City of Chicago Department of Planning and Development, May 19, 2017).

⁴⁹ “Mayor Emanuel’s North Branch Corridor Modernization: North Branch Framework.”

regulations in the corridor to more effectively promote economic growth and job creation through the expansion of existing businesses and the attraction of new businesses, corporate headquarters, and companies that drive Chicago’s knowledge-based economy.”⁵⁰ This business-oriented approach is important to note because the approval of the updated plan was necessary to the beginning of the Lincoln Yards development and the overall transformation of the area away from its industrial roots.

Starting in 2015, real estate developers including Sterling Bay began purchasing large tracts of formerly industrial land in the North Branch region in anticipation of a change in the area’s zoning policy.⁵¹ The redevelopment of the area was accelerated by the 2013 closing of the A. Finkl & Sons Steel plant, which sat on a 22-acre riverfront property on Cortland Street. This property was purchased by Sterling Bay in 2016. In 2017, the current North Branch Framework Plan replaced the previous Planned Manufacturing District designation.⁵² Before the updated North Branch Framework was approved, Sterling Bay entered a buying spree, purchasing over 20 additional acres of formerly industrial property adjacent to the Finkl Steel property. Two months after the plan was passed, in July 2017, the City sold a Department of Fleet and Facility Management site on the North Branch to Sterling Bay for over \$104 million.⁵³

In 2017, months after the updated framework was approved, Sterling Bay announced their plan to develop their accumulated riverfront land into Lincoln Yards. That year, the project was included as one of the proposed locations for Amazon’s new headquarters in Chicago’s HQ2 bid. In an effort to further entice Amazon, Sterling Bay announced that they would include a soccer stadium and up to five music venues operated by LiveNation in the development. Neither

⁵⁰ “Mayor Emanuel’s North Branch Corridor Modernization: North Branch Framework.”

⁵¹ Kori Rumore and Ryan Ori, “Lincoln Yards: Timeline of an Ambitious Chicago Development.”

⁵² “Mayor Emanuel’s North Branch Corridor Modernization: North Branch Framework.”

⁵³ “City Selling 18 Acres along River to Sterling Bay for \$105 Million,” Chicago Tribune, July 31, 2017.

the Amazon headquarters bid nor the stadium and LiveNation partnerships ended up coming to fruition, but the attempt successfully positioned Lincoln Yards as the development that could reshape the neighborhood context of the North Branch Industrial Corridor.⁵⁴ The updated North Branch Framework Plan emerged as the result of a year-long public deliberation process, including input from community groups, but its proposal and passing were unsurprising given the redevelopment momentum already at work through the rapid accumulation of real estate in the area.



Figure 3: North Branch of the Chicago River, September 2022⁵⁵

Today, in addition to Lincoln Yards, the North Branch Corridor is the site of The Wild Mile, a floating eco-park on the eastern edge of Goose Island that aims to restore the natural

⁵⁴ Kori Rumore and Ryan Ori, “Lincoln Yards: Timeline of an Ambitious Chicago Development.”

⁵⁵ Photo by author

ecology of that portion of the river, creating a safe habitat for wildlife and a location for Chicago residents to commune with the river's natural environment. The Wild Mile is endorsed by the City and is written into the most updated versions of the North Branch Framework Plan as a means to transform development on the North Branch into a community asset.⁵⁶ Other stakeholders in the project include Whole Foods Market and REI, whose locations on the banks of what will be the Wild Mile will allow them to orient business around visitors to the space.⁵⁷ Although the North Branch Framework Plan includes plans for public amenities such as the Wild Mile, I will argue that the developer-led momentum of the area's redevelopment, the updated plan's focus on white-collar economic growth, and the private nature of nearly all riverfront land on the North Branch contribute to barriers to the public access of the river on the north and south branches.

South Branch Zoning Context

In the past decade as the North Branch has experienced deindustrialization and redevelopment, the South Branch of the river, especially south of Cermak Road, has seen the intensification of industrial activity. Many of Chicago's industrial corporations have historically located their activities on the South Branch, and the North Branch Framework Plan includes provisions for the city to provide financial assistance to companies currently located on the North Branch that seek to move to other areas of the city in response to the redevelopment of their current site.⁵⁸ The South Branch of the river is home to three designated industrial corridors, the Pilsen Industrial Corridor, the Little Village Industrial Corridor, and the Stevenson Industrial

⁵⁶ "Wild Mile: Framework Vision" (Chicago: City of Chicago Department of Planning and Development, June 2019).

⁵⁷ "Wild Mile: Framework Vision," 23.

⁵⁸ "Mayor Emanuel's North Branch Corridor Modernization: North Branch Framework," 34.

Corridor.⁵⁹ Within these industrial corridors, zoning is limited to industrial activities, and any proposed zoning changes must be approved by the Chicago Plan Commission, which can reject changes if they weaken the industrial integrity of the area.⁶⁰ The Pilsen Industrial Corridor is zoned as a Planned Manufacturing District, which goes beyond the zoning designation of industrial corridors to explicitly ban residential and retail development in the area.⁶¹ Despite these corridors on the South Branch featuring similar circumstances to the North Branch Corridor prior to rezoning, planning and development efforts along the South Branch have doubled down on industrial development at the expense of project proposals that could create similar transformations of relationships with the riverfront as those taking place on the North Branch.⁶² This policy context has served to intensify industrial activity in the area in the face of public disapproval of such decisions.

Three examples of such industrial development efforts are the proposal for a new MAT Asphalt production facility, a riverfront Amazon warehouse built in 2022, and a Cogle Foods chicken processing facility built on riverfront land with tremendous potential for park development. The proposed MAT Asphalt production facility would be constructed on the current site of the Damen Silos, a 23.4-acre lot where Damen Avenue meets the South Branch featuring abandoned grain silos that were made famous when they were featured in the 2014 Transformers film. The Damen Silos have long been popular amongst Chicago urban explorers. The site, which is owned by the State of Illinois, was put up for auction in the summer of 2022, and MAT Asphalt offered 6.52 million dollars with a plan to tear down the silos and build a

⁵⁹ “Mayor Emanuel’s Industrial Corridor Modernization: Little Village Framework (Draft for Public Comment).”, 14.

⁶⁰ Chicago Department of Planning and Development, “Industrial Corridor Modernization Initiative,” accessed April 6, 2023.

⁶¹ Chicago Department of Planning and Development, “Industrial Corridor Modernization Initiative.”

⁶² “Mayor Emanuel’s Industrial Corridor Modernization: Little Village Framework (Draft for Public Comment).”

second asphalt production facility in the neighborhood.⁶³ Although this development would be subject to the Chicago River Design Guidelines and therefore would be required to incorporate a publicly accessible riverwalk, residents of the neighborhood have been advocating for the halting of the sale due to concerns over pollution from the plant negatively impacting community health and working counter to the goals of creating a publicly appealing riverfront.

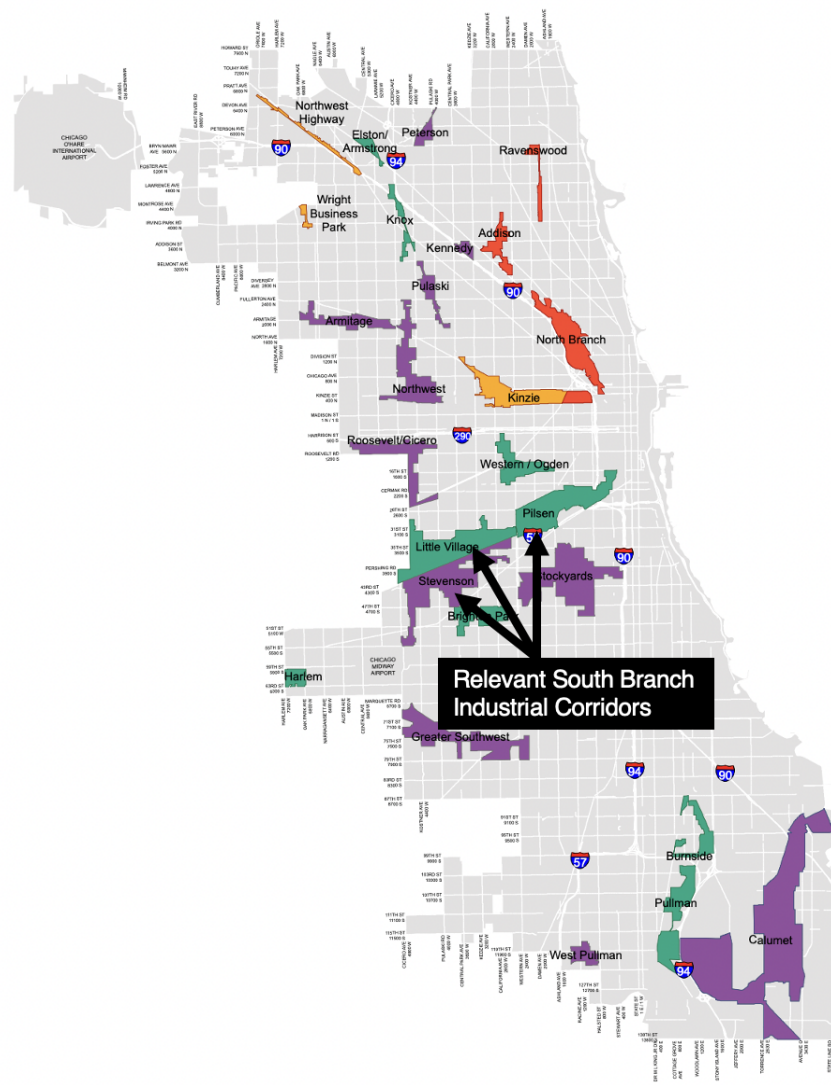


Figure 4: Industrial Corridors in Chicago, Relevant South Branch Corridors Labeled⁶⁴

⁶³ Kelly Bauer, “Damen Silos, Beloved By Urban Explorers, To Be Sold To MAT Asphalt Owner,” Block Club Chicago, November 7, 2022.

⁶⁴ “Mayor Emanuel’s Industrial Corridor Modernization: Little Village Framework (Draft for Public Comment)” (City of Chicago Department of Planning and Development, 2019), 17.

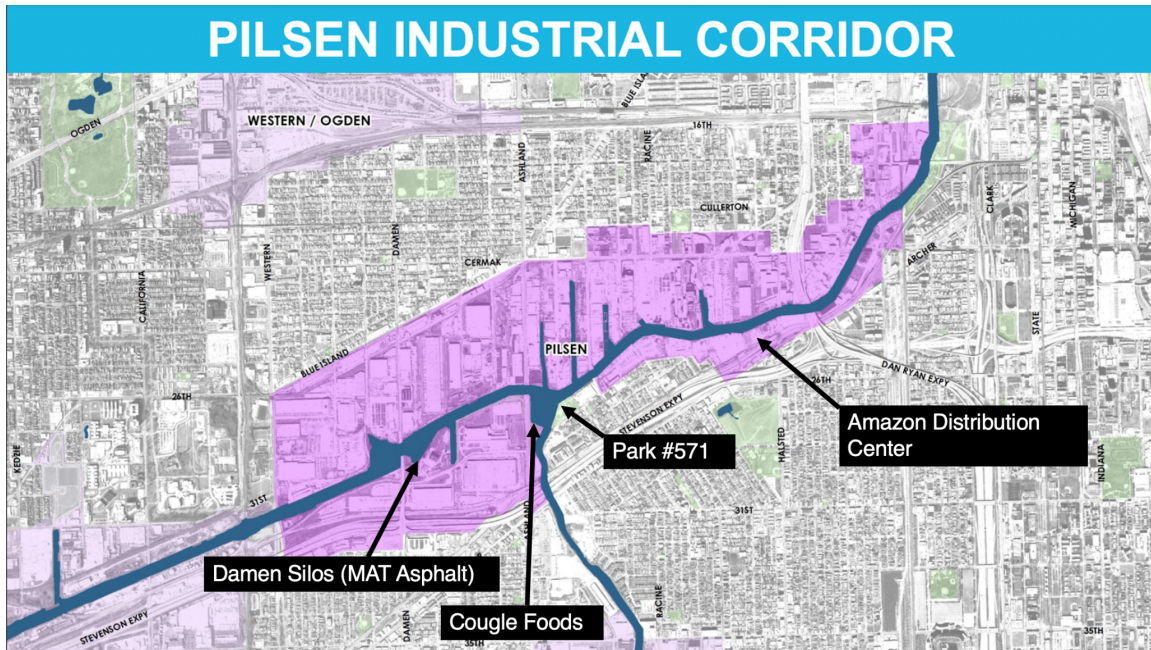


Figure 5: Recent Developments Within the Boundaries of the Pilsen Industrial Corridor⁶⁵

The Coughle Foods chicken processing facility and Amazon warehouse are similarly unpopular with residents but were not subject to extensive community meetings because their uses fall within the zoning regulations of the Pilsen Industrial Corridor, where they are located. The Coughle Foods site is across the city’s Park #571 boathouse and adjacent to Canal Origins Park on the banks of Bubbly Creek, the area of the river that is subject to the most stringent design guidelines because it holds high potential for ecological restoration. The site is also adjacent to the Ashland Orange Line stop, making it highly accessible via public transit.⁶⁶ The zoning regulation of the industrial corridor, however, made it impossible for the site’s unique potential as a public space to be realized. A similar struggle surrounded the construction of the Amazon warehouse on the southern bank of the river at Halsted Street. While the former owner of the site had hoped the property could be developed as a mixed-use project, the zoning of the corridor prohibited this. Instead, the tract was purchased in order to build an Amazon warehouse

⁶⁵ “Mayor Emanuel’s Industrial Corridor Modernization: Little Village Framework (Draft for Public Comment).”
⁶⁶ Jordan Bailly and Chloe Gurin-Sands, “Yesterday’s Zoning: Chicken Processing Facility Flies under the Radar,” *Metropolitan Planning Council* (blog), November 8, 2021.

despite criticisms from neighborhood residents. A significant aspect of concern in the construction of this project was the traffic from semi-trucks making access to the river dangerous for pedestrians and cyclists, therefore limiting the effectiveness of incorporating a riverwalk into the plan.⁶⁷ The approval of these developments despite public criticism indicates that the prioritization of industry that is built into the current zoning context of the South Branch limits opportunities for community feedback that are necessary for the creation of a riverfront that fulfills the needs and desires of the community.



Figure 6: Damen Silos, February 2021⁶⁸

⁶⁷ Jordan Bailly and Chloe Gurin-Sands, “Yesterday’s Zoning: Prologis and Amazon Open a Warehouse on the South Branch in Bridgeport,” *Metropolitan Planning Council* (blog), January 13, 2022.

⁶⁸ Photo by author

In my analysis of zoning policy on the South Branch, I chose to focus specifically on a draft of the Little Village Framework Plan that was released for public comment in 2019 but was never adopted. I chose to focus on this draft because it emerged from the same industrial corridor modernization initiative under Mayor Emanuel that led to the updating of the North Branch Framework Plan, therefore indicating the ways that planning officials view the evolution of the South Branch in relation to the broader reenvisioning of the Chicago River. The Little Village Framework Plan draft affirms and continues the use of the Little Village Industrial Corridor for industrial and manufacturing usages.⁶⁹ Community response to the draft was overwhelmingly negative, with community members expressing concern over the public health effects of industrial activity in the neighborhood, and frustration over the limited career prospects that those industries bring to the area.⁷⁰ In early 2019, the release of the draft was delayed when two of the aldermen of the four wards contained in the zoning area were enmeshed in legal trouble – one was charged with domestic violence and subsequently entered rehabilitation, another was the subject of a federal investigation and was later found to have been secretly recording another alderman for years and acting as an informant to the FBI.⁷¹ For reasons that are unclear, the draft was never revisited after 2019, so any proposed zoning updates have yet to be passed. Despite the stagnation of this draft, I argue that the retention and intensification of industrial uses that it calls for conflict with the goals of the Chicago River Design Guidelines, resulting in the creation of unwelcoming, unsafe, and ultimately ineffective public space on the South Branch.

⁶⁹“Mayor Emanuel’s Industrial Corridor Modernization: Little Village Framework (Draft for Public Comment).”

⁷⁰ Mauricio, “As City Rolls Out Plan To ‘Modernize’ Little Village, Frustrated Residents Say They’re Tired Of Warehouses And Pollution,” Block Club Chicago, January 28, 2019.

⁷¹ Mauricio, “With Ald. Danny Solis And Ricardo Muñoz Missing In Action At City Hall, Little Village Industrial Plan Stalls,” Block Club Chicago, February 8, 2019.

Analysis

I found that the Chicago River Design Guidelines, the North Branch Framework Plan, and the Little Village Framework Plan draft interact with each other in ways that collectively produce different barriers to the usage of the river as a public space in the North Branch and the South Branch. These interactions have the effect of treating the South Branch as a sacrifice zone, where industrial activity that conflicts with uses of the river as public space is consolidated in order to facilitate the redevelopment of the North Branch with minimal impact to the city's industrial economy. Meanwhile, the massive privatization of land on the North Branch allows for the filtration of users of the space and the gentrification of the surrounding areas. These two processes limit the utility and effectiveness of the resulting public space and contribute to increased inequality between the North and South Branches of the river.

	North Branch	South Branch
Facilitators of Public Space Access	<ul style="list-style-type: none"> •Natural aesthetic and features •Programming and architecture drawing users to the river •Pedestrianization of streets •Friendly environment for social amenities 	<ul style="list-style-type: none"> •Boathouses inviting recreational use of the river •Potential reclamation of Collateral Channel •El Paseo Proposal
Barriers to Public Space Access	<ul style="list-style-type: none"> •Continued transportation inaccessibility • Emphasis on “knowledge economy” workers could limit programming inviting others to the river 	<ul style="list-style-type: none"> •Heavy industry adjacent to the river •Emphasis on trucks and commercial traffic •Expansion of industrial activity, especially relocation of industrial businesses to South Branch from other areas of the city

The zoning and design of the South Branch area directly contradicts the Chicago River Design Guideline, resulting in the production of public space that is ineffective and oftentimes unsafe to access and use. The Design Guidelines calls for the riverfront to be naturalized with trees and plants when possible and for developments to be set back at least 30 feet from the river, suggestions that serve to better align the aesthetics of the river with those desired in a public park.⁷² The intensified industry of the South Branch, however, contains more developments that are exempt from these requirements due to their dependence on river adjacency to conduct activity such as shipping.⁷³ Publicly-accessible spaces on the South Branch are therefore further from the river, and in closer proximity to disruptive commercial activity, than corresponding spaces on the North Branch.

The Design Guidelines encourage the development of amenity businesses such as coffee shops on the ground floor of riverfront developments, to provide bathrooms and sustenance to users of the new riverwalk as well as to create a pedestrianized experience.⁷⁴ The location of these amenities in private businesses already creates a filtering effect in those who can use them, but the presence of a Planned Manufacturing District in the South Branch area explicitly prevents this type of commercial activity. This contradiction means that users of the riverfront path on the South Branch have extremely limited access to amenities such as restrooms as they use the space, making the use of the South Branch for recreation more challenging.

Transportation conditions near the South Branch make accessing the river for recreational use challenging as well. Truck traffic has been noted to pass through residential streets in the Little Village Industrial Corridor, and community members have expressed concern about

⁷² “Chicago River Design Guidelines,” 30

⁷³ “Industrial Usage of Chicago Area Waterway System” (Chicago Department of Planning and Development, March 31, 2015), 8-10.

⁷⁴ “Chicago River Design Guidelines,” 56

pedestrian safety.⁷⁵ The Little Village Framework Plan draft proposes the creation of an East/West industrial road, which would consolidate truck traffic, as well as bike and pedestrian infrastructure improvements such as repaired sidewalks and improved bike lanes.⁷⁶ The presence of businesses with heavy truck traffic such as warehouses and shipping logistics centers in proximity to viaducts that make road configurations inflexible makes the reduction of truck traffic challenging, however. This was made clear in 2021 when the Chicago Department of Transportation removed a bike lane on Halsted Street under the Orange Line viaduct in order to accommodate truck traffic accessing the new Amazon fulfillment center.⁷⁷ Existing features of the built environment place commercial traffic in conflict with pedestrian and cyclist access to the river, making the recreational access to the river challenging and dangerous in a way that is insufficiently addressed in zoning policy on the South Branch.

Certain city initiatives, both planned and already in place, seek to make the South Branch friendlier for recreational uses. These include the development of Park #571, a city-owned boathouse on the South Branch out of which 5 community rowing clubs conduct programming. El Paseo, a proposal for a linear park along an abandoned riverfront rail line, has been the subject of community discussion for a number of years, along with the proposed remediation of the Collateral Channel, an offshoot of the South Branch, to be converted into parkland. In 2022, however, both of these proposals were put on hold as result of concerns over concentrating pedestrians and cyclists in an area with so much truck traffic and air pollution.⁷⁸ When interviewed, Pilsen alderman Byron Sigcho-Lopez stated that “We want to have an industrial corridor that is in harmony with the residential area,” implying that the park proposals are at

⁷⁵ “Mayor Emanuel’s Industrial Corridor Modernization: Little Village Framework (Draft for Public Comment),” 36

⁷⁶ “Mayor Emanuel’s Industrial Corridor Modernization: Little Village Framework (Draft for Public Comment),” 36

⁷⁷ Courtney Cobbs, “Dozens of Advocates Protested Halsted Bike Lane Removal for Amazon Warehouse Turn Lane,” *Streetsblog Chicago* (blog), December 30, 2021,

⁷⁸ Madison Savedra, “Proposed El Paseo Trail On Hold, Southwest Side Aldermen Say,” *Block Club Chicago*, May 3, 2022`.

odds with the current state of the industrial corridor.⁷⁹ Political dialogue has established that the industrial corridors around the South Branch conflict with the creation of parkland in the area, ultimately leading to stalled. The Chicago River Design Guidelines, whose goal is to produce privately-owned public space, can be seen as conflicting with area zoning policy in the same way. Publically accessible space resulting from the guidelines cannot be safe, enjoyable, and effective for recreation without a significant re-envisioning of the role of industry on the South Branch.

Importantly, the number of industrial developments on the South Branch is growing because the city has offered to assist companies in moving their industrial activity from the North Branch to the South Branch as part of both the North Branch and draft Little Village framework plans.⁸⁰ This interaction between the two framework plans has the effect of consolidating industry on the South Branch to allow for the redevelopment of the North Branch. This is done in spite of public acknowledgement that pollution resulting from industrial activity on the Southwest side has led to increased rates of negative health outcomes, and in the face of community feedback from community members who do not wish to see more trucks and polluting activity in the area.⁸¹ As a result, the South Branch of the river can come to be viewed as a sacrifice zone, where polluting and unattractive activity is concentrated to allow for the redevelopment and restoration of the North Branch. This sacrifice is treated as an environmental victory because it allows for habitat creation on the North Branch, but this portrayal ignores the intensified pollution that the South Branch will experience as a result.⁸² Ultimately, the relocation

⁷⁹ Madison Savedra, “Proposed El Paseo Trail On Hold, Southwest Side Aldermen Say.”

⁸⁰ “Mayor Emanuel’s North Branch Corridor Modernization: North Branch Framework,” 34

⁸¹ “Mayor Emanuel’s Industrial Corridor Modernization: Little Village Framework (Draft for Public Comment),” 26; Mauricio, “As City Rolls Out Plan To ‘Modernize’ Little Village, Frustrated Residents Say They’re Tired Of Warehouses And Pollution.”

⁸² “Wild Mile: Framework Vision,” 34

of industrial activity from the North to the South Branch has the effect of widening the gap between the two areas, increasing spatial and environmental inequality within the city.

On the North Branch, the development of Lincoln Yards project as well as other nearby projects are slowly transforming the aesthetic of the riverfront, creating an environment that is more publicly accessible and park-like than what had previously existed. This is made easier by the cessation of industrial activity in the area, which means that few developments are exempted from the required shoreline restoration and riverwalk requirements outlined in the Chicago River Design Guidelines. Additionally, businesses along the North Branch, such as Whole Foods, REI, and the Salt Shed have come to view the river as an asset, financially supporting the development of areas such as The Wild Mile.⁸³ This relandscaping of the riverfront on the North Branch, in conjunction with generally cleaner water in that area of the river, has meant that the appearance and features of the North Branch of the river are increasingly in alignment with public desires for a naturalized, amenity filled riverfront.

The publicly accessible space on the North Branch, however, consists nearly entirely of POPS, which can have a filtering effect on users of the space. Resources popular amongst knowledge economy workers such as coffee shops, outdoor recreation amenities, and concert venues have emerged on the riverfront, but the private and consumptive nature of these developments can limit use of the spaces and their amenities.⁸⁴ North Branch developers are additionally required to implement open space in their projects for organized sports and recreation.⁸⁵ These areas fill a need for spaces to engage in team sports and recreation, but would need to be coupled with free programming in order to maximize value to the public. Overall the

⁸³ “Wild Mile: Framework Vision” (Chicago: City of Chicago Department of Planning and Development, June 2019).

⁸⁴ “Chicago River Design Guidelines” 2019, 56.

⁸⁵ “Mayor Emanuel’s North Branch Corridor Modernization: North Branch Framework,” 52.

North Branch is more accessible to the public than the South Branch, and is safer and more enjoyable as a space of leisure. However, the publicly-accessible spaces on the North Branch create a high possibility for the filtration of users by requiring payment to access amenities and programming in the area, making access potentially cost-prohibitive for lower-income city residents.

The development of the North Branch has already had an impact on the character and demographics of surrounding neighborhoods. Similar processes took place in nearby Logan Square and Humboldt Park surrounding the opening of The 606 linear park in 2015, where residents experienced displacement as a result of increased rent prices surrounding the park.⁸⁶ Concerns about displacement and gentrification of surrounding areas are therefore well established. Equally as important is the character of the North Branch developments themselves. The North Branch redevelopment scheme was envisioned as an “innovation district,” which seeks to incorporate features and amenities that draw highly-educated, knowledge-economy workers who will facilitate the development of white-collar industries in the area.⁸⁷ Developments on the North Branch have been intentionally designed to include such features, including smaller living areas and larger shared areas such as co-working spaces, at the expense of features that might better suit different demographics such as older people or those with large families.⁸⁸ Development on the North Branch plays a role in regulating the demographics of surrounding areas and the North Branch itself through the selection of amenities and living configurations and the spillover effects of economic activity within the area. As current residents areas surrounding the North Branch are displaced, they will have to find housing in other areas, generating economic inequality between the North Branch and the rest of the city.

⁸⁶ “Mayor Emanuel’s 606 Affordable-Housing Plan Draws Doubts,” Chicago Tribune, August 12, 2015.

⁸⁷ “Mayor Emanuel’s North Branch Corridor Modernization: North Branch Framework,” 3.

⁸⁸ Katz and Wagner, “The Rise of Innovation Districts: A New Geography of Innovation in America,” 12.

The Chicago River Design Guidelines ultimately contradict with the zoning environment on the South Branch, creating barriers to the use of the river as public space for neighborhoods on the Southwest side. The redevelopment of the North Branch offers the potential for a publicly-accessible, though still private riverfront, but this vision is dependent on intensifying industrial activity on the South Branch, sacrificing environmental and public health outcomes on the South Branch. These relationships show that the Chicago River operates as one system, requiring policymakers to weigh the benefits of an intervention in one area against the impacts on the system as a whole. The zoning contexts on the North and South Branches of the Chicago River have enabled different types of development in other areas, and ultimately have exacerbated spatial, environmental, and economic inequality.

Policy Recommendations

With intentionally applied policy, it is possible to successfully transform the Chicago riverfront into popular, accessible public space. Doing so would require transforming the riverfront to be publicly accessible, environmentally safe, and pleasant for users.

The Chicago River Design Guidelines have required that the redevelopment of the North Branch has included the creation of publicly accessible space in the form of POPS. While generally providing a benefit, the privatized nature of POPS allows for the implementation of “filtering” mechanisms such as fencing or the enclosure of amenities that make the usage of the public space possible, such as limiting public restroom use to paying customers of riverfront businesses.⁸⁹ The redevelopment of the North Branch has been made possible by the sales of huge city-owned land parcels to private developers. One such sale took place in 2018, when Sterling Bay purchased an 18-acre, city-owned site that had previously been used by the

⁸⁹ Németh, “Defining a Public.”

Department of Fleet and Vehicle Management for \$104.7 million. The site is now included in the Lincoln Yards development.⁹⁰ In order to make access to the North Branch riverfront affordable and enjoyable for the overall population, the City of Chicago should continue to encourage the development of POPS while also prioritizing the creation of public land with amenities such as restrooms, water fountains, and seating that are explicitly available to the public.

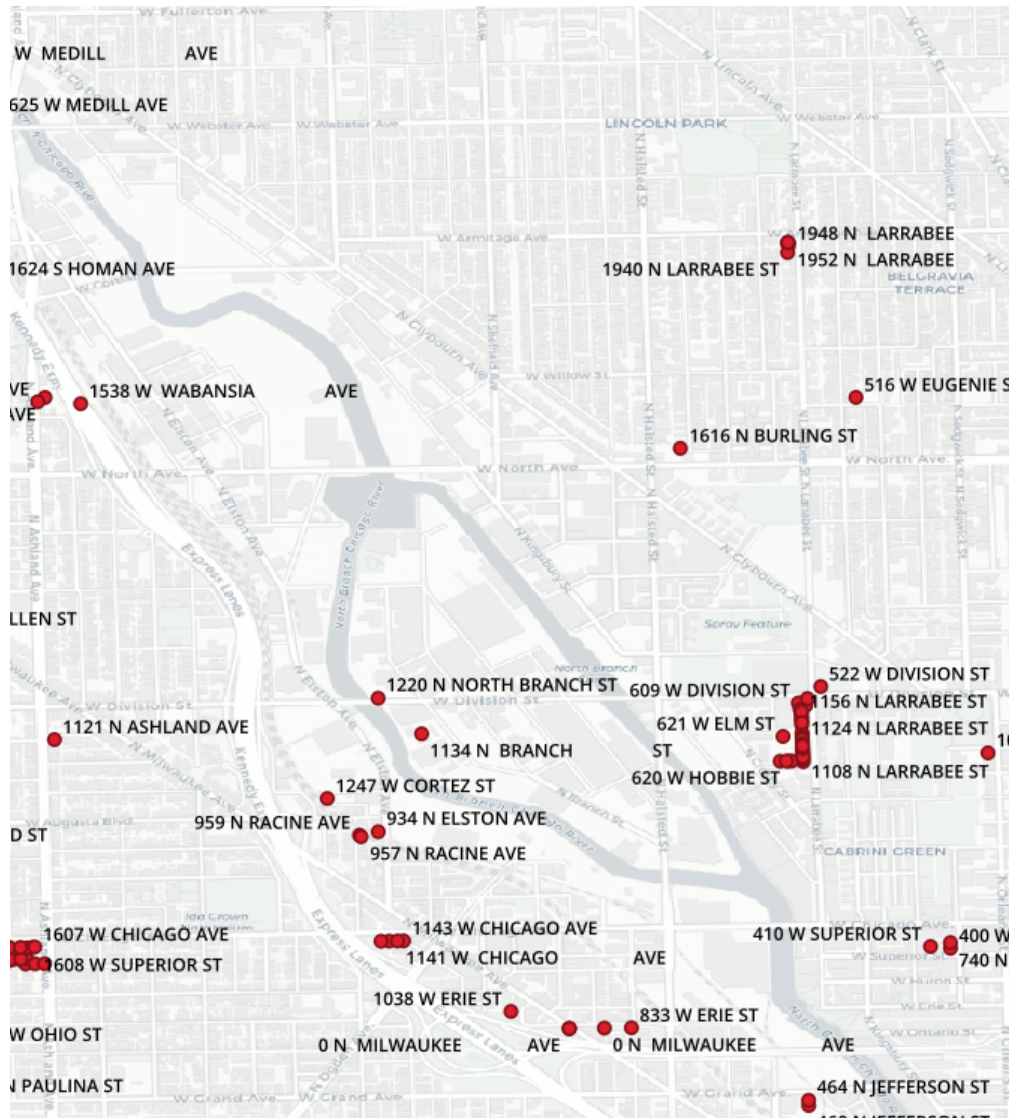


Figure 8: City-Owned Land Parcels Near North Branch⁹¹

⁹⁰ Kori Rumore and Ryan Ori, “Lincoln Yards: Timeline of an Ambitious Chicago Development.”

⁹¹ Chicago Department of Planning and Development, “City-Owned Land Inventory” (Chicago Data Portal, March 31, 2023).

In order to achieve this, the City should halt the practice of selling publicly-owned riverfront land to private developers and instead should transfer ownership of riverfront public land to the Chicago Parks District, who can administer the land as public space. Figure 5 shows land parcels currently owned by a City department. Two of these parcels, at 1220 N North Branch St. and at 1134 N. Branch St are waterfront parcels. With the addition of restrooms, seating, and signing, these parcels could supplement the presence of POPS on other riverfront properties by providing necessary amenities to the public for no charge. Because these land parcels are already publicly-owned, there would be no need for the purchasing of land to create these public spaces, significantly reducing the price of the project. Should the City continue the practice of selling public-land in the area to private developers, it will lose the opportunity to develop public space near the river at this price because it would then be forced to purchase the land at a premium caused by the rising value of land near the area as a result of the current development.

Additionally, Chicago should take inspiration from Copenhagen and strengthen its affordability schemes and paths to homeownership for river-proximate housing. Near the North Branch, redevelopment has increased the cost of housing and is driving displacement, effects that can be mitigated by affordability schemes preserving access and ownership within the neighborhood for current and future community members. This should be coupled by outreach and free events that will draw diverse groups of community members to the recreational spaces on the riverfront, making the space valuable and accessible to everyone. With a diverse and affordable array of programming coupled with strengthened accessibility schemes, the redevelopment of the North Branch could offer more community benefits while reducing its potential for displacement.

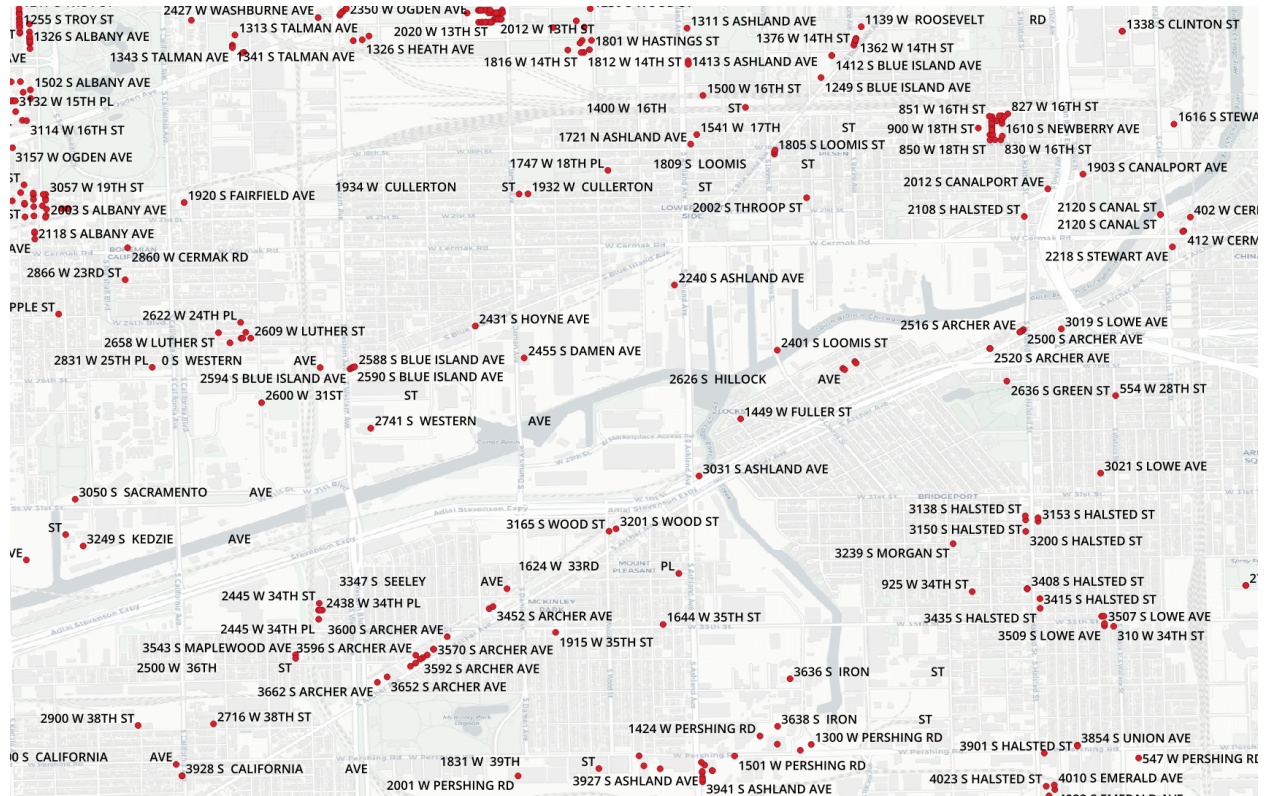


Figure 9: City-Owned Land Parcels Near South Branch⁹²

On the South Branch, the City owns comparatively more land, and the transition away from industrial activity has not accelerated in the same way as it has on the South Branch. For this reason, on the South Branch there is greater opportunity for the creation of expansive park space along the river, which could link POPS being developed and provide more opportunities for river-specific recreation. Because these spaces would be publicly owned, the City would have control over their use and could ensure the presence of amenities necessary to recreation without subjecting users to cost-prohibitive fees or interactions with industrial activity within the site. The City therefore should commit to the retention and redevelopment of public land on the South Branch, with an eye towards building recreation-oriented spaces.

One barrier to the creation of parks on the South Branch that has been noted in public discussion is the proximity of the river to industrial activity that would make such parkland

⁹² Chicago Department of Planning and Development, “City-Owned Land Inventory.”

unpleasant or even unsafe to access and use.⁹³ This barrier could be addressed via a two-pronged approach involving shifting the nature of industry that takes place on the South Branch and constructing separated bridges and pathways for pedestrians and cyclists. Currently, accessing the South Branch on foot or using forms of micro mobility is made challenging and dangerous by the necessity of using roads that are highly trafficked by semi-trucks and construction vehicles. Additionally, warehouses, logistics centers, and distribution centers occupy much of the riverfront land, and the highly securitized and commercial vehicle-oriented nature of these businesses makes finding safe, legal routes to the riverfront difficult. Through the construction of pedestrian and bicycle bridges and pathways, routes to the river could be created that would enable recreational users of the area to access public space without having to interact with hostile and exclusionary commercial vehicular traffic.

Finally, the quality of recreational space on the South Branch could be dramatically improved by reshaping the nature of industrial activity along the river. Today, the South Branch is already home to a scrap metal processing facility, a chicken packaging plant, and other polluting industries. With the current sale of the Damen Silos to MAT Asphalt, the State of Illinois is condoning the intensification of polluting industrial activity on the river. The City and State should work in tandem to implement new environmental policy limiting the nature of industry to be clean and compatible with a just transition to a more environmentally-friendly future. By requiring industrial activity to be powered by electricity, forbidding the usage and disposal of hazardous material, and restricting noise and emissions levels, the South Branch zone could be transformed into an environmentally-friendly industry. This – paired with labor organizing strategies – could retain the industrial strength of the area, keep jobs for the

⁹³ Savedra, “Proposed El Paseo Trail On Hold, Southwest Side Aldermen Say.”

neighborhood while increasing worker power, and set Chicago up to succeed in an economy shaped by climate change and evolving technologies.

A proposal for such an industrial transformation is laid out by the architecture firm UrbanLab in the design proposal that they title *Free Water District*. Their proposal takes advantage of Chicago's unique position in relation to the Great Lakes, which together contain 16% of the world's fresh water.⁹⁴ Chicago's industries have always relied on proximity to the Great Lakes, and diminishing access to fresh water in other areas of the country could incentivize the relocation of water-intensive industries to Chicago in a way that could minimize consumption and environmental impact if paired with the proper infrastructure.⁹⁵ UrbanLab proposes the construction of a large, landscaped basin which could collect rainwater and slowly dissipate it into the water system, and under which undesirable activities such as wastewater treatment plants could be built. When dry, the surface of the basin could also serve as a public space for city residents. In their proposal, factories would be constructed in proximity to the basin and could draw water for free from Lake Michigan, with the stipulation that each factory must treat and return their wastewater to the basin.⁹⁶ The basin would be connected to nearby factories, the lake, and the rest of the city with eco-boulevards, streets that facilitate multi-modal transportation while also including landscaping that can filter water as it flows from the basin to the lake.⁹⁷ Such a project could revitalize the industrial sector in Chicago by drawing in businesses that currently operate elsewhere, and could ensure that industrial activity in Chicago conforms to environmental regulations that would allow for the safe use of waterways such as the Chicago River for leisure.

⁹⁴ UrbanLab, Sarah Dunn, and Martin Felsen, *Bowling: Water, Architecture, Urbanism* (Gordon Goff, 2017), 50.

⁹⁵ UrbanLab, Sarah Dunn, and Martin Felsen, *Bowling: Water, Architecture, Urbanism*, 50.

⁹⁶ UrbanLab, Sarah Dunn, and Martin Felsen, *Bowling: Water, Architecture, Urbanism*, 50.

⁹⁷ UrbanLab, Sarah Dunn, and Martin Felsen, *Bowling: Water, Architecture, Urbanism*, 59.

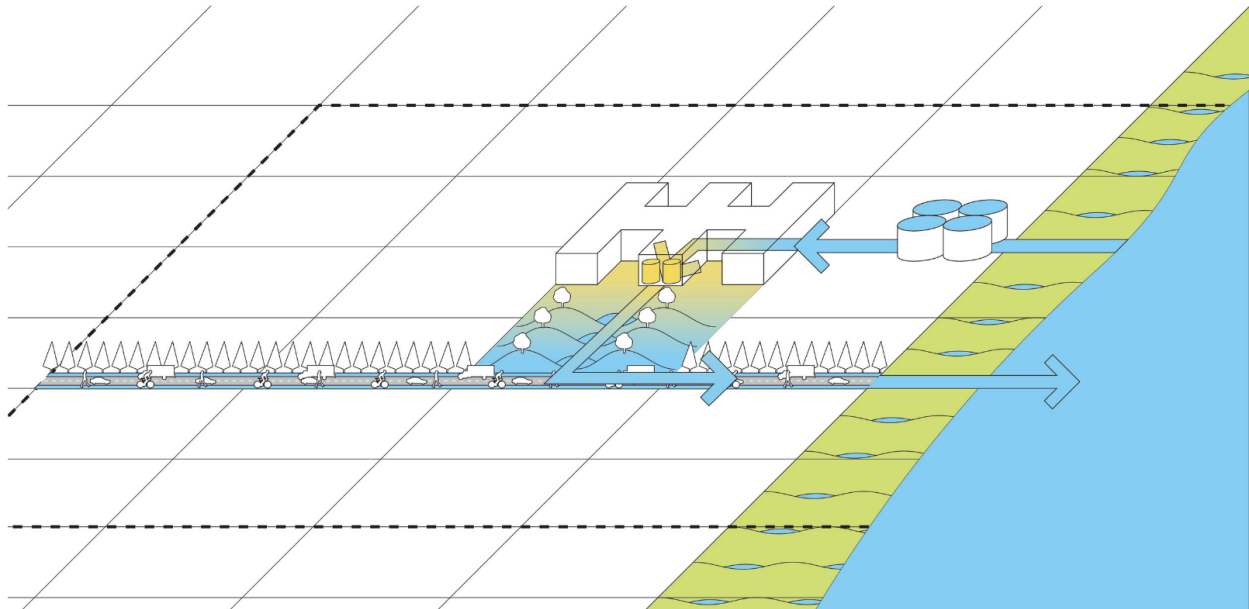


Figure 10: UrbanLab's Free Water District Diagram⁹⁸

Some might argue that the transformation of industry near the South Branch could have adverse economic effects on the community by impacting an important work sector for residents of the area. While such a change would likely shift the economic conditions of the area, these are changes that community members have already been advocating for. Community members have already long criticized existing industrial actors for failing to provide sufficient wages to workers in the area.⁹⁹ With strong labor organizing and training programs, greener and more electrified industries could employ local residents at higher wages while improving public health outcomes in the area. Were such policies to be implemented in tandem with strategic infrastructure investments (such as those laid out in the Free Water District), they could even be paid for by the business that they could attract to Chicago.

⁹⁸ “Free Water District — UrbanLab Architects Blend Design and Research to Produce Progressive, Site-Specific Buildings, Spaces and Places. Our Projects Set in Motion New Lifestyles, Vibrant Spatial Experiences, and More Sustainable Environments.,” UrbanLab, accessed April 17, 2023.

⁹⁹ Mauricio, “As City Rolls Out Plan To ‘Modernize’ Little Village, Frustrated Residents Say They’re Tired Of Warehouses And Pollution.”

Many components of such a policy approach could be politically appealing from a variety of perspectives, but it would require a comprehensive planning approach that views the Chicago River's distinct regions as operating in complementary relationships with each other and with the city as a whole. In order for this to be achieved, voters must come to see the value of such an approach and vote for legislators accordingly. Projects such as the Wild Mile on the North Branch prove to voters that with proper infrastructure and planning, the Chicago River can feature unique, enriching public spaces. The privatized nature of riverfront land however, coupled with hostile environments created by fossil-intensive industrial activity, prevent the realization of this vision. By legislating to make more public land on the riverfront and changing the types of industrial activity that takes place within the city, the Chicago River could be transformed into a welcoming environment for leisure and community-use, while positioning Chicago to thrive in an economy based on greener technologies.

Conclusion

This project studied the interactions between the Chicago River Design Guidelines and relevant zoning policies on the North and South Branches of the Chicago River to establish how these policies conflict in different ways to create unique pathways and barriers to the formation of public space in different areas of the river. I found that the interaction between the Chicago River Design Guidelines and the North Branch Framework plan, combined with the intensification of industrial activity enabled by South Branch zoning designations, have led to the characterization of the South Branch as a sacrifice zone, where industrial activity has migrated from the North to the South branch (a move subsidized by the city government) in order to allow for the redevelopment of the North Branch as a space of knowledge-based work and leisure. As a result, the recreational use of the South Branch has been put into conflict with the commercial

activity of the area, leading to the creation of unpopular and ineffective public spaces and the continuation of unpopular and polluting zoning and commercial policies. These findings are relevant to local planning policy in Chicago while having implications in the broader repurposing of post industrial spaces in cities worldwide.

Based on these findings, it is clear that the effects of fossil-intensive, industrial use of urban waterfronts contradicts the uses of these environments for recreation. As seen on the South Branch of the Chicago River, the presence of both types of developments can lead to unhealthy or unsafe areas for recreation and ultimately ineffective public space creation. The North Branch shows, however, that the ceasing of industrial activity is not the only step that must be taken to create enriching public spaces on urban waterways. Care must be taken to ensure that the resulting spaces are accessible and enjoyable to the public without the “filtration” that can occur in privately-owned spaces. The example of Copenhagen shows that, when coupled with social policy that protects housing affordability, the creation of new public spaces can offer civic benefits without widespread displacement of residents.

Cities are entering a new technological era, dominated by more environmentally friendly tools such as electric vehicles and renewable energy sources. These technologies offer the potential to recharacterize industrial spaces that are currently harmful to wildlife as ecological havens, allowing cities to be greener and more biodiverse. The Chicago River, especially on the South Branch, has the potential to serve as an example for a new paradigm of urban rivers, one that combines social and legal protections for workers and housing, new technologies, and urban and landscape design to make a river that is welcoming to all Chicagoans for a wide range of recreational, ecological, commercial, and transportation-related uses.

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