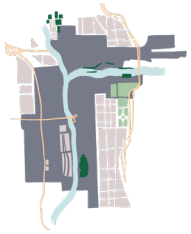
This document is part of MPC's 'Understanding Our Rivers' research project, which notes how the Chicago river system and its surrounding communities have changed over time. Consistent with the project structure, the findings are organized into the themes of inviting, productive, and living.



Understanding the Main Stem/Downtown/South Branch (Reach 3)



This reach includes the Main Stem of the Chicago River and parts of the South Branch of the Chicago River. It touches the community areas of West Town, Near North Side, the Loop, Near West Side, Near South Side, Lower West Side, and Armour Square. This reach is heavily characterized by Chicago's downtown. The river in this area is home to the Riverwalk, and the river edge is commonly seawall, rather than a naturalized edge. This part of the river is also more heavily trafficked by recreational and tourism boats than other parts of the river system, due to it's downtown location and connection to Lake Michigan.

KEY TO ICONS

Increasing | Decreasing | Same or Similar | Good | Fair | Poor

How has the area changed over time?

(2014-2022)

Demographics

The population in the Main Stem river tracts grew by more than 30% between 2014 and 2022, a net increase of over 23,000 residents. This was the greatest population increase across all river tracts in the city.

Population change along Reach 3 (Main Stem Downtown)

	Total population (2014)	Total population (2022)	% Change in population	# Change in population
River tracts - Reach 3	74,607	97,717	31.0%	23,110
River adjacent tracts - Reach 3	63,755	76,768	20.4%	13,013
Citywide river tracts	322,090	346,447	7.6%	24,357
All tracts citywide	2,712,209	2,721,126	0.3%	8,917

Source: U.S. Census Bureau American Community Survey 2010-2014 and 2018-2022 Five-Year Estimates

Population growth was greatest among Asian and white residents, who each grew by roughly 8,500 in river tracts. It's worth highlighting that the Latinx population in river tracts increased the fastest at 76%, a net increase of 4,100 new Latinx residents. The completion of the downtown riverwalk in phases finishing in 2017 and 2019 and increase in residential land use in the area may have contributed to the growing population concentrated along the river.

Population change by race and ethnicity along Reach 3 (Main Stem Downtown)

	% Change in total population (2014-2022)	# Change in total population (2014-2022)	% Change in Black population	# Change in Black population	% Change in white population	# Change in white population	% Change in Latinx population	# Change in Latinx population	% Change in Asian population	# Change in Asian population
River tracts - Reach 3	31.0%	23,110	3.2%	187	17.8%	8,535	76.2%	4,098	64.9%	8,451
River adjacent tracts - Reach 3	20.4%	13,013	6.3%	644	19.8%	7,602	25.0%	1,023	23.3%	2,274
Citywide river tracts	7.6%	24,357	−0.4%	−156	6.5%	9,326	−5.8%	−5,049	37.5%	16,549
All tracts citywide	0.3%	8,917	−9.5%	−81,381	2.1%	18,473	0.4%	2,784	22.1%	34,061

Source: U.S. Census Bureau American Community Survey 2010-2014 and 2018-2022 Five-Year Estimates

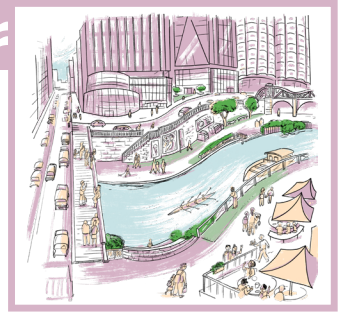
Socioeconomics

The median household income, rent, and home value all increased along the Main Stem at similar rates to adjacent tracts and citywide overall, which indicates these increases likely follow a trend across downtown and the city overall.

Changes in household incomes, rents, and home values along Reach 3 (Main Stem Downtown)

	Average median HH income (2014)	Average median HH income (2022)	% Change in average HH income	Average median rent (2014)	Average median rent (2022)	% Change in average median rent	Average median home value (2014)	Average median home value (2022)	% Change in average median home value
River tracts - Reach 3	$91,012	$137,369	50.9%	$1,707	$2,371	38.9%	$374,385	$483,858	29.2%
River adjacent tracts - Reach 3	$81,440	$118,777	45.9%	$1,515	$2,196	44.9%	$412,617	$543,308	31.7%
Citywide river tracts	$60,888	$92,926	52.6%	$1,081	$1,499	38.6%	$279,536	$384,242	37.5%
All tracts citywide	$49,019	$73,178	49.3%	$992	$1,316	32.6%	$239,511	$328,859	37.3%

HH stands for Household
Source: U.S. Census Bureau American Community Survey 2010-2014 and 2018-2022 Five-Year Estimates



Land Use

Multifamily land use predominates the Main Stem, making up nearly 45% of the share of land in 2020. This is an increasing typology in the area. From 2010 to 2020, almost 200 acres of multifamily land use was added to the area, an increase of 8.6 percentage points.

Commercial land use is the second most common typology, making up about 30% of the total land area along the Main Stem. Commercial land use declined however between 2010 and 2020, by about 260 acres, or 6.8 percentage points.

Land uses along the Main Stem Downtown reach
The share of each tract grouping's total land area comprised of each land use category in 2020

	% share SF residential	% share MF residential	% share commercial	% share industrial	% share institutional	% share open space	% share transportation	% share ROW	% share utility and waste	% share vacant
River tracts	3.0%	43.7%	30.5%	1.9%	7.5%	1.6%	3.3%	5.2%	0.5%	2.5%
River adjacent tracts	6.4%	29.3%	46.2%	2.8%	7.7%	1.7%	0.6%	4.1%	0.0%	1.1%
Citywide river tracts	16.5%	10.8%	10.4%	16.7%	6.4%	9.9%	10.9%	10.2%	4.6%	3.3%
All tracts citywide	32.2%	15.8%	14.2%	9.0%	8.0%	5.4%	4.1%	6.8%	1.2%	3.2%

Excludes the following land use categories: "Other Residential" and "Non-Parcel or Unclassified." SF stands for Single-Family; MF stands for Multi-Family, ROW stands for Right-of-Way.
Source: Chicago Metropolitan Agency for Planning Land Use Inventory (2020)

Land use changes along the Main Stem Downtown reach
The change or difference in the share of each tract grouping's total land area comprised of each land use category from 2010 to 2020

	% change SF residential	% change MF residential	% change commercial	% change industrial	% change institutional	% change open space	% change transportation	% change ROW	% change utility and waste	% change vacant
River tracts	0.3%	8.6%	-6.8%	-0.5%	-0.0%	-0.2%	-1.9%	0.7%	0.0%	-0.2%
River adjacent tracts	-1.2%	5.7%	-4.0%	-1.7%	-0.2%	0.3%	-0.1%	1.0%	-0.2%	0.3%
Citywide river tracts	-0.2%	0.6%	-0.8%	0.1%	0.7%	1.5%	-1.1%	1.8%	-0.2%	-1.8%
All tracts citywide	0.1%	0.1%	3.8%	-0.7%	0.7%	-0.3%	-4.2%	1.2%	0.0%	-0.4%

These percentages reflect percentage point changes, or the difference in the share of each tract groupings that are comprised of each land use category. Excludes the following land use categories: "Other Residential" and "Non-Parcel or Unclassified." SF stands for Single-Family; MF stands for Multi-Family, ROW stands for Right-of-Way.
Source: Chicago Metropolitan Agency for Planning Land Use Inventory (2020)

Physical Infrastructure

The Main Stem benefits from an expansive trail system provided by the downtown Riverwalk. Around 60% of the reach has a completed trail, and there are 58 access points for the trail system in this reach. The Riverwalk has become more inviting over time as more amenities have located there, such as the McCormick Bridgehouse & Chicago River Museum, boat tours, and restaurants.

Access to trails along Chicago's river system

	Length of existing trail (ft)	Length of river edge (ft)	% Share of river edge with a trail	# Total river trail access points
Citywide river edge	245	669	37.0%	313
Reach 1 (North Branch/North Shore)	129	132	98.0%	43
Reach 2 (North Branch/Goose Island)	33	84	40.0%	186
Reach 3 (Main Stem Downtown)	23	38	60.0%	58
Reach 4 (South Branch)	17	90	18.0%	17
Reach 5 (Calumet)	14	258	6.0%	4
Reach 6 (Des Plaines)	28	67	42.0%	5

Source: Chicago Department of Transportation, Chicago River Edge Access Study (2024)



Office, Industrial, and Multifamily Development

The average sale price per square foot for office, industrial, and multifamily property within 2 blocks of the river in this reach is $103, lower than the citywide average of $131. The downtown reach was one of the only reaches to see a drop in sale price over the last 10 years. The decreasing sale price may be a factor in the declining trend of the number of properties up for sale as well. Conversely, this reach has by far the greatest rental cost per square foot of $42, which has increased over the last decade.

Vacancy rates in office, industrial, and multifamily units in existing buildings increased by 11 percentage points in the last decade, and were at 23% in 2025. The COVID pandemic was likely a factor in the vacancy rates, especially in downtown office space.

Development conditions and property sales activity along the Main Stem Downtown reach

Vacancy rates, asking rents, and sale prices for all office, industrial, and multifamily properties located 2 blocks of the Main Stem Downtown reach from 2015 to 2025

	Average vacancy rate (2015)	Average vacancy rate (2025)	% Change in vacancy rate	Average asking rent/sqft (2015)	Average asking rent/sqft (2025)	$ Change in asking rent/sqft	Average sale price/sqft (2015)	Average sale price/sqft (2025)	$ Change in sale price/sqft	# Total for sale properties (2015)	# Total for sale properties (2025)	# Change in for sale properties
City of Chicago	8.8%	13.8%	4.9%	$19.60	$25.52	$5.92	$178.25	$131.00	-$47.25	3,810	3,231	−579
Reach 1 (North Branch/North Shore)	12.1%	1.3%	−10.9%	$11.65	$15.63	$3.98	$99.00	$171.50	$72.50	27	6	−21
Reach 2 (North Branch/Goose Island)	5.3%	24.1%	18.8%	$15.45	$20.85	$5.40	$117.50	$340.33	$222.83	41	97	56
Reach 3 (Main Stem Downtown)	12.0%	23.2%	11.2%	$33.97	$41.79	$7.83	$264.25	$103.00	-$161.25	124	91	−33
Reach 4 (South Branch)	8.9%	2.3%	−6.6%	$7.28	$18.31	$11.03	$51.00	$63.50	$12.50	42	25	−17
Reach 5 (Calumet)	6.1%	6.2%	0.1%	$5.73	$9.06	$3.32	$28.00	$33.50	$5.50	18	16	−2
Reach 6 (Des Plaines)	7.3%	15.0%	7.7%	$14.86	$19.92	$5.06	$100.25	$71.33	-$28.92	63	46	−17

City of Chicago includes the entire city. Source: CoStar Group, costar.com

Vacancy

The share of parcels that are vacant with no existing building in river tracts in the downtown reach decreased by 16 parcels between 2014 and 2022. This is distinct from river adjacent tracts, which saw a 72% increase in vacant parcels, or an increase of 133 parcels. This means the downtown riverfront is seeing vacancy reduce, while downtown areas further from the river are seeing an increase in vacancies.

Change in vacancies along Reach 3 (Main Stem Downtown)

	Total vacant parcels (2014)	Total vacant parcels (2022)	% Share of parcels vacant (2014)	% Share of parcels vacant (2022)	% Change in vacant parcels	# Change in vacant parcels
River tracts - Reach 3	402	386	6.1%	5.9%	-4.0%	-16
River adjacent tracts - Reach 3	184	317	3.3%	5.6%	72.3%	133
Citywide river tracts	4,562	4,396	6.3%	6.1%	-3.6%	-166
All tracts citywide	32,227	33,712	5.3%	5.6%	4.6%	1,485

Source: Cook County Assessor's Office (2014 and 2022)

Jobs and Businesses

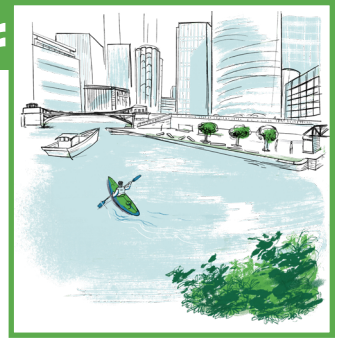
Jobs increased in this reach by 10%, slightly more than in river adjacent tracts, and at about the same rate as in citywide river tracts overall.

The number of **businesses decreased**, following the citywide trend.

Change in businesses and jobs along Reach 3 (Main Stem Downtown)

	Total businesses (2013)	Total businesses (2023)	% Change in total businesses	# Change in total businesses	Total jobs (2012)	Total jobs (2021)	% Change in total jobs	# Change in total jobs
River tracts - Reach 3	8,348	5,622	-32.7%	-2,726	525,396	578,035	10.0%	52,639
River adjacent tracts - Reach 3	3,560	2,802	-21.3%	-758	119,487	127,050	6.3%	7,563
Citywide river tracts	14,629	10,106	-30.9%	-4,523	651,406	712,116	9.3%	60,710
All tracts citywide	56,115	42,171	-24.8%	-13,944	1,279,376	1,320,135	3.2%	40,759

Source: City of Chicago data portal business licenses (2013 and 2023); U.S. Census Longitudinal Employer-Household Dynamics (2012 and 2021)



Water Quality

The Main Branch/Downtown reach benefits from relatively infrequent combined sewer overflow (CSO) events. There were just 3 in 2021, the last year we have data for. Between 2016 and 2021, there were 435 CSO events total. The number of CSO events has declined over time with the Metropolitan Water Reclamation District's (MWRD) efforts in the Tunnel and Reservoir Plan (TARP), that built large, deep tunnels and reservoirs that store stormwater and sewage until it can be treated, mitigating CSO events. The TARP reservoir that affects this reach is the McCook Reservoir. The first stage of the McCook Reservoir began operations in 2017. It is located between the Des Plaines River and Chicago Sanitary and Ship Canal in Bedford Park, and captures stormwater along the Des Plaines River, Salt Creek, Addison Creek, and the Chicago River from the North Branch and North Shore Channel, through the Main Steam, South Branch, Bubbly Creek, to the Chicago Sanitary and Ship Canal. This first stage of the McCook reservoir was designed to contain up to 3.5 billion gallons. The second stage, set to be completed in 2032, has capacity for an additional 6.5 billion gallons. The tunnels and reservoirs built under TARP have played a major role in reducing CSOs in Chicago's water system. The number of CSOs notably declined across all Chicago river reaches and the Des Plaines reach after the McCook Reservoir became operational in 2017. CSO events are complex: the severity of each event depends on the location, amount of impervious surfaces that exacerbate runoff, weather conditions, and other factors. Our region has not seen a complete elimination of CSO events, and some years continue to see more severe CSOs than others. It is important to continue to make ongoing efforts to reduce stormwater runoff and mitigate CSO events, as the effects of climate change, such as the heavy rainfall events we saw in the summer of 2026, continue to pose pollution and flooding challenges to the Chicago region.

Combined sewer overflows along Chicago's river system

The total number of Combined Sewer Overflows (CSOs) across all outfall locations along Chicago's river system by reach, 2016 to 2021

	2016	2017	2018	2019	2020	2021	# Total CSOs (2016-2021)	% Change in total CSOs (2016-2021)
City of Chicago	1,025	1,879	601	494	244	33	4,276	−97%
Reach 1 - North Branch/North Shore	161	197	61	44	12	0	475	−100%
Reach 2 - North Branch/Goose Island	462	923	218	238	113	8	1,962	−98%
Reach 3 - Main Stem Downtown	122	234	36	39	1	3	435	−98%
Reach 4 - South Branch	248	484	264	153	90	12	1,251	−95%
Reach 5 - Calumet	0	1	0	0	0	0	1	0%
Reach 6 - Des Plaines	32	40	22	20	28	10	152	−69%

Source: Metropolitan Water Reclamation District of Chicago, processed by The Field Museum

Fish biodiversity along Chicago's river system	# Total species of fish
Reach 1 (North Branch/North Shore) - Albany Ave	4
Reach 2 (North Branch/Goose Island) - Wilson Ave	19
Reach 2 (North Branch/Goose Island) - Diversey Pkwy	14
Reach 3 (Main Stem Downtown) - Wells St	No Data
Reach 4 (South Branch) - Loomis St	14
Reach 4 (South Branch) - Archer Ave	No Data
Reach 4 (South Branch) - Cicero Ave	29
Reach 5 (Calumet) - Halsted St	19
Reach 5 (Calumet) - Indiana Ave	22
Reach 6 (Des Plaines)	No Data

Fish species diversity is based on the annual average of each station between 2016 to 2021. Albany and Wilson Ave stations sit near the border between reach 1 and 2. The MWRD does not monitor fish species diversity in reach 3 or 6.

Source: Metropolitan Water Reclamation District of Greater Chicago, GeoHub.

Open Space

Open space is very limited in this reach, making up less than 2% of the share of land area, consistent with the development pattern of Chicago's downtown.

Change in open space land use along Reach 3 (Main Stem Downtown)	% Share open space (2010)	% Share open space (2020)	% Change in share open space	# Change in acres of open space
River tracts - Reach 3	1.8%	1.5%	−0.3%	−9
River adjacent tracts - Reach 3	1.4%	1.7%	0.3%	6
Citywide river tracts	8.4%	9.8%	1.4%	384
All tracts citywide	5.7%	5.4%	−0.3%	−346

The % change in open space reflects the percentage point change, or the difference in the share of each tract groupings that were comprised of open space land use between 2010 and 2020.
Source: Chicago Metropolitan Agency for Planning Land Use Inventory (2010 and 2020)

Methodology

Research Approach
This project examined how areas (census tracts) along the river changed over time, from approximately 2015 to 2025. Data related to demographic, socioeconomic, and development changes, and ecological and river quality changes, were compiled to understand how areas along the river evolved over the decade. Trends/variables included:

- Population changes by racial and ethnic group
- Rent and home value changes
- Job, business, and vacancy rate changes
- Land uses
- Trails and access points
- Community projects and activations
- Fish count and water quality changes

In addition to breaking down the river geography at the citywide and "reach"-level scale, we examined data by census tracts based on their proximity to the river:

- River tracts: Census tracts that touch a river in the City of Chicago
- River adjacent tracts: Tracts that touch the "river tracts." Data in these tracts act as a proxy to the nearby neighborhood in order to differentiate general neighborhood trends from findings that are unique to tracts that directly abut the river.

Research Questions
For each data area, we asked the following questions, which allow for a nuanced look at how river areas have developed, when compared to other parts of the city:

- How do trends/changes compare across specific river areas (aka "reach areas")?
- How do trends/changes along the river compare to changes in areas immediately adjacent to river census tracts (i.e. comparison group)?
- How do trends/changes along the river compare to changes across the city as a whole (all city census tracts)?