



City of Harvey

Water Affordability Analysis

FEBRUARY 2023



Acknowledgements

HARVEY MUNICIPAL PARTNERS

Christopher J. Clark, Mayor Rosa Arambula, City Clerk Timothy Williams, City Administrator Chandralyn Ellis, Deputy City Administrator Camille Soria, Water Department Supervisor

PROJECT TEAM

Justin Keller, Strategist, Water Programs, Elevate Alec Singer, Research Manager, Metropolitan Planning Council Jourdan Nash, Project Manager, Research and Innovation, Elevate

SUPPORT TEAM

Drew Williams-Clark, Senior Director, Metropolitan Planning Council Caroline Pakenham, Associate Director, Water Programs, Elevate Margaret Schneemann, Water Resource Economist, Illinois-Indiana Sea Grant

Funding Support

Metropolitan Planning Council (MPC) wishes to express our sincere appreciation to Crown Family Philanthropies, Grand Victoria Foundation, and McDougal Family Foundation for their support of our water affordability work. We also wish to thank the following for supporting MPC's robust water agenda: the Charles Stewart Mott Foundation, the Crown Family Philanthropies, the Grand Victoria Foundation, the Gaylord and Dorothy Donnelley Foundation, the John D. and Catherine T. MacArthur Foundation, the Joyce Foundation, and the Prince Charitable Trusts.

Elevate wishes to thank the Charles Stewart Mott Foundation, McDougal Family Foundation, and the Joyce Foundation for their ongoing support of projects related to, research into, and collaborations on water affordability.

About Elevate

Elevate is a nonprofit organization that works nationally and is headquartered in Chicago. Elevate designs and implements programs to ensure that everyone has clean and affordable heat, power, and water in their homes and communities — no matter who they are or where they live. For more information, visit <u>ElevateNP.org</u>.

About MPC

An independent planning and policy organization founded in 1934, Metropolitan Planning Council changes perceptions, conversations, and the status quo. MPC works to shape a Chicago region where every community is valued, every person has a voice, and every neighborhood thrives. For more information, visit <u>Metroplanning.org</u>.

This report is part of a larger body of work – including a literature review, a program and policy solutions paper, an interactive tool, and more – which can be found at <u>ElevateNP.org/Water-Affordability</u> and <u>Metroplanning.org/WaterAffordability</u>.

Contents

Executive Summary	5
Project Background	8
Project Context	10
Water in Harvey	14
Quantitative Analysis	19
Qualitative Analysis	24
Key Findings & Recommendations	28
Conclusion	35
Appendix A: 2019 Bill of Rights	36
Appendix B: Further Reading	37

Executive Summary

Building on a body of work aimed at addressing water affordability in northeastern Illinois, Metropolitan Planning Council and Elevate, with support from Illinois-Indiana Sea Grant, entered into a limited partnership with the City of Harvey for a pro bono technical assistance project.

The project includes analysis of the City's water billing data to understand the scope of water billing, debt, and bill burden. This quantitative analysis is supplemented by interviews with local stakeholders including residents and municipal staff to gather experiential data related to the City's water and sewer service.

This report provides staff and municipal officials in the City of Harvey with an overview of water affordability issues identified through our analysis. It includes key findings and recommendations to guide future water rate discussions and the adoption of affordability-based programs and policies, ensuring they meet the needs of both the City and its ratepayers.

Municipal Context

- Harvey is an Illinois municipality located in the Chicago Southland region with a 2020 population of 20,234 individuals and 7,100 households. The city is 65% Black and 27% Hispanic or Latino, totaling greater than 90% of the total population. Nationwide deindustrialization and loss of manufacturing employment has impacted Harvey, and the city now has a 22% housing unit vacancy rate and a median income of \$32,635, less than half of the rest of the county. The median year homes were built is 1958, which is comparable to the county median.
- Harvey purchases treated Lake Michigan water from the City of Chicago. Harvey sells water to local customers, and is a wholesale provider to several neighboring municipalities, including the Villages of Dixmoor, Posen, and Hazel Crest. Until recently, wholesale customers included East Hazel Crest and Homewood (which also provides water to Flossmoor), but these contracts expired in December 2022 and were not renewed.
- Harvey employs a decreasing block rate structure for its water billing, with higher consumers receiving a
 discount based on usage. Harvey's water customers are fully metered, with approximately one-quarter
 (mostly commercial accounts) on smart meters. Bills include charges for refuse collection and sewer
 maintenance in addition to water.
- Shortly after taking office in May 2019, the current Mayor suspended the City's water shutoff policy and implemented an amnesty program whereby, upon full payment of water charges, all fees and penalties are removed from a customer's account – including fees for late payment, disconnection, and tampering.

Quantitative Overview

- The study covered water and sewer billing data for a period of two years, from January 2018 to December 2019. The bills were for four customer account types – residential, commercial, institutional, and other – but the analysis focuses primarily on residential billing data.
- There were differences in consumption and billing by customer type, most notably between commercial and residential customers. Commercial customers accounted for 86% of water and sewer consumption

but were billed 70% of systemwide billed water and sewer costs. Conversely, residential customers accounted for 13% of Harvey's consumption but represented 28% of total billed costs.

- For residential accounts, we received and analyzed active standard rate and senior rate residential customer billing history for 3,816 accounts. Median and average residential water and sewer bills were, respectively, \$59.02 and \$75.53 per month. Because of several high-value outliers, median and average values were both considered in the analysis.
- An analysis of water debt for active residential accounts with sufficient billing history at the end of 2019 showed approximately 25% of residential customers held outstanding water and sewer debt, with a median arrears of \$75.91. Of those residential customers with water-related debt, the majority (68%) pay off their debt within two months or less.
- Accounts with greater than \$300 in debt account for nearly 45% of total outstanding debt but represent just 2% of overall residential accounts in the analysis. Higher debt was also associated with higher monthly bills (i.e., new volumetric-based charges).
- The median bill represents a water bill burden of 19% for the lowest income quintile. In other words, for the bottom 20% of earners in Harvey, nearly one-fifth of annual income goes toward water bills.

Qualitative Overview

- Interviews were conducted with residents and Municipal staff. Researchers were unable to meet with Municipal officials, but their feedback is also represented based on a combination of staff conversations, news reports, and other sources.
- Based on a limited sample size, resident interviews demonstrated the gradations and degrees of affordability challenges, from short-term arrearages to consistently past due with increasing outstanding balances.
- Staff had some success in providing assistance to customers via revised billing practices and connecting people with the Low Income Household Water Assistance Program and other aid. Accounts with high past due balances are an ongoing issue, despite repeated engagement with account holders by staff.
- Under the current mayoral administration, priorities have included customer service, an initiative to waive penalties and fees, and the passage of the Water, Sewer, and Refuse Bill of Rights.

Recommendations

The report focuses on recommendations based on the findings of the data analysis and stakeholder engagement. These include:

KEY FINDING 1 – The City of Harvey has taken many steps to address water affordability challenges, and staff work hard to assist water-burdened customers.

Recommendation: Continue working to regain customer trust with transparent communication about rates and billing policies, and conduct follow-up research to determine the efficacy of existing programs and policies to identify where additional assistance is needed.

KEY FINDING 2 – A significant number of residential customers (approx. 25%) have water and sewer debt, with a median outstanding balance of \$75.91. The majority of these customers with debt (68%) bring their account current within two months or less, but the overall burden on Harvey's lowest earners remains substantial.

Recommendation: Assess rate structures and affordability-based programs and policies to ensure water is consistently affordable to all.

KEY FINDING 3 – A small number of Harvey's total residential customers (2.3%) held nearly 45% of outstanding debt during the study period, and existing assistance programs and policies appear to be insufficient for these customers.

Recommendation: Explore creative solutions to subsidize universal access to water, especially for disadvantaged and eligible low-income customers, whether through a customer assistance program, discounted base charge and/or volumetric rate, income-indexed billing, or other mechanism.

KEY FINDING 4 – Customers with outstanding water-related debt of greater than \$300 had median monthly bills roughly double those with less than \$50 of debt. In other words, high debt is associated with high usage, as indicated by higher monthly volumetric charges.

Recommendation: Explore the cause of high water usage and pair customers with appropriate interventions, such as educational materials on water conservation and efficiency, a municipally funded leak detection and repair program, and so on.

KEY FINDING 5 – Because of the decreasing block rate structure, commercial and residential customers' water charges are potentially incongruous with their respective share of consumption.

Recommendation: After conducting a cost-of-service study to apportion costs to different user types, determine the top rate-setting priorities and, if appropriate, redesign rates with a particular emphasis on ensuring universal access to, and affordability of, water and sewer service for residential customers.

Foundational recommendations are also included from previous water affordability reports – namely, reduce costs, promote water conservation, design and implement equitable rates, strengthen customer assistance programs, target the hard-to-reach, and develop a water workforce.

Project Background

Purpose

This report provides staff and municipal officials in the City of Harvey with an overview of water affordability issues identified through quantitative and qualitative analyses. The report includes key findings and recommendations to ensure future water rate structures and affordability-based programs and policies can meet the needs of both the City and its ratepayers. This report intends to help City officials and staff make informed decisions as Harvey continues to work toward ensuring universal access to – and affordability of – water service.

Water Affordability in Northeastern Illinois

In 2018, Metropolitan Planning Council (MPC), Elevate, and Illinois-Indiana Sea Grant collaborated to produce the report, "Water Affordability in Northeastern Illinois: Addressing Water Equity in a Time of Rising Costs."¹ This report analyzed water affordability challenges across northeastern Illinois and concluded:

- Affordability is a continuum, not a dichotomy, meaning the same water bill might be affordable to some and a considerable burden to others.
- As opposed to being concentrated in certain parts of the region, potential water affordability issues were found throughout northeastern Illinois, and every municipal drinking water utility should take steps to identify and address local impacts.
- As water system maintenance costs and rates rise, careful examination of ability to pay within a municipal drinking water utility's customer base will become increasingly important.

As an outgrowth of this work, MPC and Elevate, with support from Illinois-Indiana Sea Grant, worked with the cities of Chicago and Evanston to conduct water affordability analyses and identify potential solutions to affordability challenges.

Upon completion of these projects, the team sought partnerships with municipalities with lower median incomes to identify the unique challenges and applicable solutions for such municipalities. To that end, MPC and Elevate partnered with the City of Harvey and the Village of Broadview on water affordability technical assistance projects.

Goals & Objectives

This water affordability analysis for the City of Harvey includes analyses of actual water and sewer billing data to understand the scope of water billing, debt, and bill burden by account type, focusing primarily on residential accounts. This quantitative analysis was supplemented by interviews with local stakeholders, including residents and municipal staff, to identify water affordability challenges and opportunities in the city.

¹ MPC & Elevate (2020). Water Affordability in Northeastern Illinois: Addressing Water Equity in a Time of Rising Costs. <u>elevatenp.org/publications/water-affordability-in-northeastern-illinois-addressing-water-equity-in-a-time-of-rising-costs/</u> ©2023 Elevate Energy

These analyses sought to identify the scale, scope, and impact of water affordability issues and to propose solutions tailored to Harvey's needs.

These services were provided to the City on a pro bono basis by MPC and Elevate with additional pro bono analytical support provided by Illinois-Indiana Sea Grant.

Scope of Work

The City of Harvey entered into a limited partnership with MPC and Elevate to fulfill the following scope:

1. Conduct qualitative analysis with officials, staff, water customers, and other stakeholders to identify potential issues related to water affordability.

Purpose: To learn stakeholder perspectives on water billing, data management, customer service, etc. in the city

Task: Elevate will conduct one-on-one interviews and hold focus groups with elected officials, staff, water customers, and other relevant stakeholders to gather and understand experiential data related to the provision and consumption of water in the city. This will support and build on past research with local and national water service providers, customers, and advocates.

Deliverable: Completion of qualitative analysis with key takeaways highlighted

2. Analyze residential water utility billing account data (anonymized) relevant to water affordability (e.g., billing, late payments, debt, shutoffs) to identify potential issues and inform understanding.

Purpose: To understand the impact of water burden, debt, shutoffs, and consumption patterns in the city

Task: MPC will work with City staff or consultants to pull relevant data from the City's billing software to inform a better understanding of the unique water affordability challenges posed to the City and its customers.

Deliverable: Completion of basic quantitative analysis with key takeaways highlighted

3. Produce a water affordability report summarizing the analysis and recommending tailored solutions.

Purpose: To make recommendations for addressing issues of water affordability in the city, including those related to infrastructure conditions

Task: Elevate and MPC will produce a report summarizing the findings of the quantitative and qualitative analyses and recommendations for the City to address any water affordability-related issues and opportunities uncovered through our work. As available, select stakeholders interviewed as part of the qualitative analysis (item #1 above) will vet these findings and recommendations prior to finalizing the report. The final report will then be presented to City officials and staff at a venue deemed appropriate, after which Elevate and MPC will transition to a support role for implementation.

Deliverable: Completion of a final summary report and presentation(s) to the City

Project Context

Overview

Harvey is a home rule municipality located in Cook County, Illinois, with a population of 20,234 individuals and 7,100 households as of the 2020 Census.² Harvey operates as an incorporated city and general-purpose unit of local government with a purpose of assuring the health, safety, and welfare of its municipal residents.³

Located in the Chicago Southland region, Harvey is approximately 20 miles south of downtown Chicago and 10 miles west of Hammond, Indiana, and sits at the junction of several interstate highways and rail lines.⁴ The city has two Metra Electric commuter rail stations and extensive Pace bus service, including the Pace Harvey Transportation Center that was recently awarded a \$20 million Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant by the U.S. Department of Transportation. This grant will support rehabilitation of, and other improvements to, the transportation center.⁵

Additionally, Harvey worked with the Regional Transportation Authority on a transit-oriented development (TOD) plan,⁶ and a comprehensive plan is under development in partnership with the Chicago Metropolitan Agency for Planning.⁷

History

Land in the vicinity of what became Harvey was granted in the 1850s to Illinois Central Railroad by the Illinois state legislature. Illinois Central Railroad sold a 1,700-acre plot of this land to C.P. Holden in 1865. Holden, in turn, sold this land to a syndicate which divided it and advertised the sale of "large lots and gardens for \$100, with free transportation to and from Chicago for a year to those who actually became settlers."⁸

In 1890, Turlington W. Harvey purchased substantial quantities of land and conveyed ownership to the Harvey Land Association, and Harvey incorporated one year later with Peter B. Lamb as its first Mayor.⁹ Rapid growth followed, and the population grew to 5,395 as of the decennial census of 1900.¹⁰ Many residents were employed locally as industrial workers and merchants or commuted to jobs in Chicago.

² Chicago Metropolitan Agency for Planning (2022). Harvey, Community Data Snapshot, Municipality Series, July 2022 Release. <u>cmap.illinois.gov/documents/10180/102881/Harvey.pdf</u>

³ City of Harvey (n.d.). General Information. <u>cityofharveyil.gov/general-information/</u>

⁴ City of Harvey (n.d.). About Us. <u>cityofharveyil.gov/about-harvey/</u>

⁵ Metra (2022). Harvey Transportation Center project awarded \$20M grant. <u>metra.com/newsroom/harvey-transportation-</u> <u>center-project-awarded-20m-grant</u>

⁶ Regional Transportation Authority (2022). Transit Oriented Development Plan moves Harvey toward a more vibrant, connected future. <u>rtachicago.org/blog/2022/05/13/transit-oriented-development-plan-moves-harvey-toward-a-more-vibrant-connected-future/</u>

⁷ Chicago Metropolitan Agency for Planning (2022). Harvey Comprehensive Plan. <u>engage.cmap.illinois.gov/harvey-</u> <u>comprehensive-plan</u>

⁸ City of Harvey (n.d.). About Us. <u>cityofharveyil.gov/about-harvey/</u>

⁹ City of Harvey (n.d.). About Us. <u>cityofharveyil.gov/about-harvey/</u>

¹⁰ Bigott, J.C. (n.d.). Harvey, IL. Encyclopedia of Chicago. <u>encyclopedia.chicagohistory.org/pages/568.html</u> ©2023 Elevate Energy

Demographics

The population peaked at 35,810 individuals in 1980, and Harvey became known as a manufacturing and industrial "powerhouse" with major employers like Allis-Chalmers (agricultural equipment manufacturer) and Wyman-Gordon Co. (metal components manufacturer).¹¹ The period of peak population was preceded by massive demographic change. Between 1960 and 1980, the share of Black population grew from 7% to 66%.¹² As of the 2020 census, Harvey is 65% Black and 27% Hispanic or Latino, totaling greater than 90% of the total population.

The period of demographic change coincided with nationwide deindustrialization and loss of manufacturing employment.¹³ Allis-Chalmers and Wyman-Gordon Co. both closed their Harvey facilities in 1986.^{14,15} Along with it, the Dixie Square shopping mall (which opened in 1966) and many other commercial establishments in Harvey closed. Harvey has mostly lost residents in the years since 1980 (see Fig. 1).



FIGURE 1. HARVEY POPULATION CHANGE^{16,17}

This aligns with regional and national trends of structural racism and disinvestment in Black and Latino communities.¹⁸ As in many parts of the country, policies and practices in the northeastern Illinois region led to racial and economic segregation over several generations and resulted in inequitable access to the resources

¹² Bigott, J.C. (n.d.). Harvey, IL. Encyclopedia of Chicago. <u>encyclopedia.chicagohistory.org/pages/568.html</u>

¹¹ Corley, C. (2017). Once A Blue-Collar Powerhouse, A Chicago Suburb Now Faces A Dim Future. All Things Considered (National Public Radio). <u>npr.org/2017/09/06/545794591/once-a-blue-collar-powerhouse-a-chicago-suburb-now-faces-a-dim-future</u>

¹³ Harris, K. (2020). Forty years of falling manufacturing employment. U.S. Bureau of Labor Statistics. <u>bls.gov/opub/btn/volume-9/forty-years-of-falling-manufacturing-employment.htm</u>

¹⁴ Drew, C. (1985). Allis-Chalmers to close down Harvey plant. Chicago Tribune. <u>chicagotribune.com/news/ct-xpm-1985-04-</u> 05-8501190524-story.html

¹⁵ 350 jobs to be lost in Harvey (1986, January 21). Chicago Tribune. <u>chicagotribune.com/news/ct-xpm-1986-01-21-</u> <u>8601060179-story.html</u>

¹⁶ Wikipedia (n.d.). Harvey, Illinois. <u>en.wikipedia.org/wiki/Harvey%2C_Illinois</u>

¹⁷ Bigott, J.C. (n.d.). Harvey, IL. Encyclopedia of Chicago. <u>encyclopedia.chicagohistory.org/pages/568.html</u>

¹⁸ Turner, M.A. & Greene, S. (n.d.). Structural Racism Explainer Collection: Causes and consequences of separate and unequal neighborhoods. Urban Institute. <u>urban.org/racial-equity-analytics-lab/structural-racism-explainer-</u> <u>collection/causes-and-consequences-separate-and-unequal-neighborhoods</u>

needed to live, work, and thrive. The outcomes can be seen throughout the region and beyond in public school performance, business investment, access to employment, and much more – as shown in MPC's "The Cost of Segregation" report.¹⁹

Income & Housing

Median income in Harvey is less than half that of Cook County, and there are a higher proportion of low-income households (see Table 1). According to 2017 data, 100% of Harvey's census tracts are considered low income – meaning 50% of the tract's population is at or below 80% Area Median Income.²⁰

Within the range of middle-class incomes – i.e., \$50,000-\$149,999²¹ – Harvey residents skew toward low-middle income, though this income bracket represents a similar percentage as both Cook County and the seven-county region of northeastern Illinois. That is, there are higher percent of low-income households in Harvey, but a similar share earning \$50,000 to \$75,000 as the county and region.

Geography	Median household income	Low income (less than \$50,000)	Low-middle income (\$50,000- \$74,999)	Middle income (\$75,000- \$99,999)	High-middle income (\$100,000- \$149,999)	High income (\$150,000 and higher)
Harvey	\$32 <i>,</i> 635	64.7%	16.2%	7.0%	7.2%	9.0%
Cook County	\$67,886	38.0%	15.9%	12.3%	15.9%	17.9%
Region	\$76,606	33.5%	15.7%	12.7%	17.6%	20.4%

TABLE 1. INCOME CHARACTERISTICS, 2016-2020²²

Harvey's homeownership rate is lower than Cook County and the region, with housing occupancy split nearly equally between owners and renters, as shown in Table 2. Currently, vacancy is high, with 22% of housing units sitting empty.

TABLE 2. HOUSING OCCUPANCY ESTIMATES, 2016-2020²³

Geography	Owner-occupied	Renter-occupied	Vacant
Harvey	51.8%	48.2%	21.8%
Cook County	57.2%	42.8%	9.4%
Region	64.2%	35.8%	7.8%

¹⁹ For more information, see MPC (2017). The Cost of Segregation. <u>metroplanning.org/costofsegregation/default.aspx</u>

²⁰ American Community Survey (2017). ACS 5-Year Estimates. <u>data.census.gov</u>

²¹ A Pew Research Center study defines "middle income" or "middle class" as approximately \$52,000-\$156,000 annual income for a family of three in 2020 dollars. (Kochhar, R. & Sechopoulos, S. (2022). How the American middle class has changed in the past five decades. Pew Research Center. <u>pewresearch.org/fact-tank/2022/04/20/how-the-american-middle-class-has-changed-in-the-past-five-decades/</u>)

²² Chicago Metropolitan Agency for Planning (2022). Harvey, Community Data Snapshot, Municipality Series, July 2022 Release. <u>cmap.illinois.gov/documents/10180/102881/Harvey.pdf</u>

²³ Chicago Metropolitan Agency for Planning (2022). Harvey, Community Data Snapshot, Municipality Series, July 2022 Release. <u>cmap.illinois.gov/documents/10180/102881/Harvey.pdf</u>
©2022 Elevate Energy

Harvey's housing stock is predominantly single-family detached, accounting for 70% of homes. The next most common types – though notably smaller percentages – are 20+ units (8%), two units (7%), and three- and four-unit buildings (6%).²⁴

As seen in other municipalities in Cook County, much of this housing was built in the post-World War II era. In Harvey, 55% of housing units were built between 1940 and 1969, and the median age of homes dates to 1958. (The median year built for Cook County is 1959.) Another 25% were built between 1970 and 1999, and 17% were built before 1940. Only 3% of Harvey's housing stock – 337 total housing units – has been built since the year 2000.²⁵

Many homes built in post-war period are old enough to need significant plumbing repairs.²⁶ Given that the housing stock is comparatively old and residents have less disposable income to spend on repairs that may not be visible until it is too late, it is reasonable to assume (though certainly not guaranteed) that many homes have leaky pipes, fixtures, or toilets. Homeowners who report having high water bills despite using water only for basic necessities – cooking, cleaning, and hygiene – can often trace the source to plumbing inefficiencies.²⁷

²⁷ Alliance for Water Efficiency (n.d.). Household Leak Detection and Mitigation Introduction.
 <u>allianceforwaterefficiency.org/resources/topic/household-leak-detection-and-mitigation-introduction#</u>
 ©2023 Elevate Energy

²⁴ Chicago Metropolitan Agency for Planning (2022). Harvey, Community Data Snapshot, Municipality Series, July 2022 Release. <u>cmap.illinois.gov/documents/10180/102881/Harvey.pdf</u>

²⁵ Chicago Metropolitan Agency for Planning (2022). Harvey, Community Data Snapshot, Municipality Series, July 2022 Release. <u>cmap.illinois.gov/documents/10180/102881/Harvey.pdf</u>

²⁶ Polson, M.E. (2017). Postwar Home Challenges. Old House Online. <u>oldhouseonline.com/repairs-and-how-to/postwar-home-challenges/</u>

Water in Harvey

Source Water

Lake Michigan is the source of potable water for 56% of the population of the State of Illinois, including the City of Harvey.²⁸ Harvey has purchased treated Lake Michigan water from the City of Chicago since 1917.²⁹ In turn, Harvey is a wholesale provider to several neighboring municipalities – including the Villages of Dixmoor, Posen, and Hazel Crest. Until recently, Harvey also provided water to East Hazel Crest and Homewood (which also provides water to Flossmoor), but the contracts expired in December 2022, and those municipalities now receive Lake Michigan water via an agreement with Hammond, Indiana.

Water Quality

The City of Chicago has two water treatment plants, the Jardine Water Purification Plant and the Eugene Sawyer Water Purification Plant. The latter delivers water to the City of Harvey. Although Lake Michigan is a freshwater lake, the untreated water is not clean enough to drink, and Chicago's water purification plants use industry-standard processes to treat it before pumping it to customers throughout the region.³⁰

Per the Harvey Water Quality Report for the 2021 reporting period (January 1-December 31, 2021), city tap water met all required U.S. Environmental Protection Agency (U.S. EPA) and State of Illinois health standards.³¹ However, in February 2021 and at a follow-up inspection in November the same year, Illinois Environmental Protection Agency (IEPA) and then U.S. EPA performed sanitary surveys and found "significant deficiencies" related the City's water reservoirs. Namely, the reservoirs were found to be damaged and peeling and had potential gaps that could be a source of contamination. As this was not deemed to be an emergency, no boil orders or other corrective actions were taken, and the City expects to resolve the situation in July 2023.³²

City of Harvey Water Department

Treated, potable water is delivered via the Eugene Sawyer Water Purification Plant to the City of Harvey Water Department. The water department is divided into two parts – customer service and the pumping station. The Customer Service Center is located within the Harvey Municipal Center at 15320 Broadway Avenue. The C.J. O'Connor Station is located at 51 W 149th Street in Harvey.³³

In 2017, water loss for the City was 13%.³⁴ Water loss is the percent of water that enters the system but does not reach a paying customer due to leaks, theft, metering inaccuracies, etc. Authorized unbilled consumption,

14

 ²⁸ Illinois State Water Survey (2017). The Distribution of Water Use in Illinois (SWS Map Series 2017-01). <u>isws.illinois.edu/maps</u>

²⁹ Nolan, M. (2021). Harvey regains control of water system, seeks to negotiate new payment terms. Chicago Tribune. <u>chicagotribune.com/suburbs/daily-southtown/ct-sta-harvey-water-system-st-0117-20210115-</u> <u>ftjdqcmosjbdhgomxnyrw5hvpi-story.html</u>

³⁰ City of Chicago (n.d.). Water Treatment. <u>chicago.gov/city/en/depts/water/supp_info/education/water_treatment.html</u>

³¹ City of Harvey (2021). Harvey Water Quality Report 2021. <u>cityofharveyil.gov/public-works-department/</u>

³² City of Harvey Public Water System (2022). Important information about your drinking water. <u>cityofharveyil.gov/wp-content/uploads/2022/08/COH-Public-Water-System.pdf</u>

³³ City of Harvey (n.d.). Public Works Department. <u>cityofharveyil.gov/public-works-department/</u>

 ³⁴ Chicago Metropolitan Agency for Planning (2022). Harvey, Community Data Snapshot, Municipality Series, July 2022
 Release. <u>cmap.illinois.gov/documents/10180/102881/Harvey.pdf</u>
 ©2023 Elevate Energy

such as municipal public works operations, is not considered water loss.³⁵ Per the Illinois Department of Natural Resources, 10% water loss is the threshold for Water Year 2019 and beyond for Lake Michigan Allocation Program permittees, meaning Harvey will need to identify and address sources of water loss in their system.

To help address maintenance and repair needs, U.S. Senator Tammy Duckworth allocated \$3.5 million of Congressionally Directed Spending (also known as earmarks) to renovate and update Harvey's water and sewer systems.³⁶ At the time of writing, the funds have not been disbursed, but the project is scoped with preliminary cost estimates.³⁷

Court-Ordered Receivership

In 2014, the City of Chicago sued Harvey for unpaid water payments totaling approximately \$20 million plus almost \$4 million in late fees.³⁸ A Cook County Circuit Court judge ruled in 2017 that water funds had been illegally diverted and, generally, mismanaged.³⁹ The court took control of the water system away from Harvey and placed it into receivership to oversee operations.⁴⁰ Under the leadership of current Mayor Christopher Clark who came into office in 2019, Harvey fought to regain control of the City's waterworks operations.⁴¹ After three years under court-appointed receivership, control was returned to the City of Harvey.⁴²

Chicago Water Rates

To cover the cost of pipe replacement and other needs,⁴³ the City of Chicago began adjusting rates upward by significant percentages starting in 2008. Rate increases in the range of 14% to 25% were seen over a period of several years between 2008 and 2015.⁴⁴

These rate increases affected Chicago's suburban wholesale water customers. That is, in addition to ratepayers within Chicago city limits, suburban municipalities and other suburban water customers were charged higher rates for water by the City of Chicago. Beginning in 2016, Chicago adopted a policy whereby, "the annual water

³⁵ American Water Works Association (2016). The State of Water Loss Control in Drinking Water Utilities. <u>awwa.org/Resources-Tools/Resource-Topics/Water-Loss-Control</u>

³⁶ Amethyst J. Davis, A.J. (2022). Harvey's aging water and sewer lines slated to get \$3.5 million overhaul. Harvey World Herald. <u>harveyworld.org/articles/health-the-environment/water-sewer-system-congressional-direct-spending</u>

³⁷ T. Williams, personal communication, January 30, 2023.

³⁸ Mahr, J. & Walberg, M. (2014). Chicago wants Harvey's water collections seized. Chicago Tribune. <u>chicagotribune.com/news/ct-suburb-water-debt-met-20140829-story.html</u>

³⁹ Mahr, J. & Walberg, M. (2017). Harvey illegally diverted water cash owed to Chicago, millions missing, judge rules.

Chicago Tribune. chicagotribune.com/news/ct-harvey-water-receiver-met-20170720-story.html

⁴⁰ Koeske, Z. (2020). Harvey seeks to resume control of water operations, alleging receiver appointed to oversee department is ineffective. Chicago Tribune. <u>chicagotribune.com/suburbs/daily-southtown/ct-sta-harvey-water-receiver-st-</u> <u>0126-20200125-gduokoydejgzlke7d4lilq76va-story.html</u>

⁴¹ Koeske, Z. (2020). Harvey seeks to resume control of water operations, alleging receiver appointed to oversee department is ineffective. Chicago Tribune. <u>chicagotribune.com/suburbs/daily-southtown/ct-sta-harvey-water-receiver-st-</u> <u>0126-20200125-gduokoydejgzlke7d4lilq76va-story.html</u>

⁴² Nolan, M. (2021). Harvey regains control of water system, seeks to negotiate new payment terms. Chicago Tribune. <u>chicagotribune.com/suburbs/daily-southtown/ct-sta-harvey-water-system-st-0117-20210115-</u> <u>ftjdqcmosjbdhgomxnyrw5hvpi-story.html</u>

⁴³ Elevate & MPC (2022). City of Chicago Water Affordability Analysis. <u>elevatenp.org/publications/city-of-chicago-water-affordability-analysis/</u>

⁴⁴ City of Chicago (n.d.). Water and Sewer Rates. <u>chicago.gov/city/en/depts/fin/supp_info/utility-billing/water-and-sewer-rates.html</u>

rates shall be adjusted upwards, if applicable, by applying the previous year's rate of inflation [...] based on the Consumer Price Index."⁴⁵ Thereafter, rate increases were more modest: 1.8% in 2017, 1.5% in 2018, 0.8% in 2019, and so on. The highest increase was in 2022, when rates jumped 5% based on the rate of inflation.

Over the past 20 years, the rates charged by the City of Chicago have gone up from approximately \$1.20 to \$4.33 per 1,000 gallons, and these rates are almost certain to continue to rise. Suburban municipalities that purchase treated Lake Michigan water from Chicago – like the City of Harvey – must decide when and how to pass these increases on to their water customers, whether immediately or over time.

Harvey Water Rates & Billing

Harvey employs a decreasing block rate for water customers within the city (i.e., retail customers), meaning higher volume consumers are charged a lower rate. Seniors receive a 10% discount on water charges. All other customers are charged the same volumetric-based rate.⁴⁶ Bills include charges for refuse collection and sewer maintenance.

Harvey's water customers are fully metered, with approximately one-quarter (mostly commercial accounts⁴⁷) on smart meters that upload usage data once per hour and are able to identify leaks and high usage. The remainder are read once per month via a drive-by system.⁴⁸ Harvey switched from quarterly to monthly billing to improve the customer experience, especially for those on a fixed income. Compared to quarterly billing, monthly billing is more expensive for Harvey – i.e., printing, postage, administrative costs. The City explored bi-monthly billing to keep costs down, but monthly billing was ultimately chosen as the best option for customers.⁴⁹

Payments can be made in person at the Harvey Municipal Center, mailed, or paid online. The City uses utility bill payment services provided by Invoice Cloud, Inc., for online payments. Using the online service, customers can schedule payments and set up automatic debits as well as view past payments and print receipts.⁵⁰

Payment arrangements are made on a case-by-case basis with the Customer Service team. A formal, written policy is under development.⁵¹ Generally, the Customer Service team requires 50% of the past due balance immediately and the remaining balance to be paid within three months. Payment arrangements are usually not available for customers whose water has already been disconnected; instead, full payment is required.

⁴⁵ City of Chicago (n.d.). Water and Sewer Rates. <u>chicago.gov/city/en/depts/fin/supp_info/utility-billing/water-and-sewer-rates.html</u>

⁴⁶ C. Soria, personal communication, January 30, 2023.

⁴⁷ Note, Harvey had planned to use American Rescue Plan Act funds to install smart meters for residential customers, but pandemic-era microchip shortages meant smart meters were unavailable for purchase (T. Williams, personal communication, January 30, 2023).

⁴⁸ T. Williams, personal communication, September 19, 2022.

⁴⁹ C. Soria, personal communication, September 19, 2022.

⁵⁰ City of Harvey (n.d.). Public Works Department. <u>cityofharveyil.gov/public-works-department/</u>

⁵¹ C. Soria & T. Williams, personal communication, January 30, 2023.

Recourse for Non-Payment

Bills are due 15 days from the date of billing. A 10% penalty is applied for any unpaid portion remaining on the 16th day, and notices are mailed. The notice includes information about the late payment and informs the customer that water can be shut off after a specified date.⁵²

Accounts that remain unpaid 30 days from the billing date are deemed delinquent and become eligible for water service disconnection. Customers are notified via the posting of a red card notice that water will be shut off and given 10 days to challenge by scheduling a hearing. Alternatively, customers can pay the bill in full or make a payment arrangement with the Water Department Supervisor to avoid disconnection.⁵³

The Water Department assesses a fee of \$25 to cover the cost of shutoff and reconnection. Because of union requirements, this fee is \$40 if outside of regular business hours or on holidays or weekends.⁵⁴

When accounts remain delinquent for 60 days, the City may file a lien against the property.

IMPORTANT NOTE REGARDING THESE POLICIES: Shortly after taking office in May 2019, Mayor Christopher J. Clark suspended the City's water shutoff policy and implemented an amnesty program whereby, upon full payment of water charges, all fees and penalties are removed from a customer's account – including fees for late payment, disconnection, and tampering. Additionally, under the current administration, the City has not been filing liens, but these are scheduled to restart in early 2023.⁵⁵ The City also plans to participate in the Illinois Office of Comptroller's Local Debt Recovery Program.⁵⁶

Wholesale Water Customers

In addition to customers within Harvey, the City sells water wholesale to several neighboring municipalities. Until recently, these customers included the Villages of Dixmoor, Posen, Hazel Crest, East Hazel Crest, and Homewood (which also provides water to Flossmoor).

These had been long-term relationships – Homewood, for example, had water supply contracts with Harvey dating back to 1982 and renewing every 10 years.⁵⁷ The former Village Manager of Hazel Crest, Marlo Kemp, was quoted in 2014, saying, "It's Harvey or bust for all of the Villages that actually rely on Harvey water. Nobody has the money to try to build the infrastructure to get water from any other Village."⁵⁸

⁵² City of Harvey (n.d.). Public Works Department. <u>cityofharveyil.gov/public-works-department/</u>

⁵³ City of Harvey (2022). Harvey Municipal Code: A Codification of the General Ordinances of the City of Harvey, Illinois. Code Publishing Company. <u>codepublishing.com/IL/Harvey/</u>

 ⁵⁴ C. Soria, personal communication, February 21, 2023.

⁵⁵ C. Soria, personal communication, January 30, 2023.

⁵⁶ For more information, see: Illinois Comptroller's Office (n.d.). Local Debt Recovery Program.

illinoiscomptroller.gov/constituent-services/local-government/local-debt-recovery-program

⁵⁷ Nolan, M. (2021). Harvey regains control of water system, seeks to negotiate new payment terms. Chicago Tribune. <u>chicagotribune.com/suburbs/daily-southtown/ct-sta-harvey-water-system-st-0117-20210115-</u> <u>ftjdqcmosjbdhgomxnyrw5hvpi-story.html</u>

⁵⁸ Mahr, J. & Walberg, M. (2014). Chicago wants Harvey's water collections seized. Chicago Tribune.

https://www.chicagotribune.com/news/ct-suburb-water-debt-met-20140829-story.html

Despite their reliance on Harvey, some municipalities feared the 2014 Chicago lawsuit would prompt Harvey to raise their prices. This, in turn, could result in affordability challenges for those municipalities and their residents or prompt them to look elsewhere for water.

The contracts for two wholesale customers, Homewood and East Hazel Crest, ended in December 2022 and were not renewed.⁵⁹ Homewood signed a new contract to buy treated Lake Michigan water from Hammond, Indiana, which it will receive via a connection to Chicago Heights.⁶⁰ (East Hazel Crest is presumably purchasing from Homewood.⁶¹) Under the agreement, Homewood is authorized to sell water to additional municipalities, including Country Club Hills, Hazel Crest, Matteson, Olympia Fields, and Sauk Village.⁶²

Meanwhile, Harvey is seeking new municipal water customers and, when the current wholesale contracts expire, is planning to renegotiate rates with existing customers. Many of these existing customers have negotiated deals dating back decades that do not reflect the current cost of service. The City plans to use volumetric-based contracts going forward, charging each wholesale customer the same rates based on usage.⁶³ Harvey only pays Chicago for the water they receive – i.e., there is no minimum charge – but they currently have surplus capacity and can provide water to additional municipalities.

Dixmoor Water Crisis

One of Harvey's wholesale customers, the Village of Dixmoor, experienced low water pressure in October 2021, lasting about two weeks and during which a boil order was in effect. At first, it was unclear whether the problem lay within Dixmoor or Harvey's infrastructure, but water and wastewater services provider M.E. Simpson inspected the transmission line between Harvey and Dixmoor and found no problems. The issue was ultimately identified as a leaky water main within Dixmoor's system.⁶⁴ To be clear, water flows from Harvey to Dixmoor – meaning the latter's system does not affect water quality, water pressure, etc. within Harvey.

⁶³ T. Williams, personal communication, September 19, 2022.

⁶⁴ Buckley, M. & Yan, J. (2021). What went wrong with Dixmoor's water? How squabbling and crumbling infrastructure left thousands in Chicago suburb without 'a human right.' Chicago Tribune. <u>chicagotribune.com/news/breaking/ct-dixmoor-water-crisis-chicago-south-suburbs-20211108-sg3umru7nzeaffzxhrbcgjcxne-story.html</u> ©2023 Elevate Energy 1

⁵⁹ T. Williams, personal communication, November 21, 2022.

⁶⁰ Nolan, M. (2021). Harvey regains control of water system, seeks to negotiate new payment terms. Chicago Tribune. <u>chicagotribune.com/suburbs/daily-southtown/ct-sta-harvey-water-system-st-0117-20210115-</u> <u>ftjdgcmosjbdhgomxnyrw5hvpi-story.html</u>

⁶¹ Johnson, N. (2021). East Hazel Crest gets 6 months to study water switch. Homewood-Flossmoor Chronicle. <u>hfchronicle.com/2021/10/04/east-hazel-crest-gets-6-months-study-water-switch/</u>

⁶² Ormsby, D. (2022). Chicago Heights Officially Opens Valve to Homewood for Water Delivery. Patch Media. <u>patch.com/illinois/chicagoheights/chicago-heights-officially-opens-valve-homewood-water-delivery</u>

Quantitative Analysis

Overview

With this background in mind, we proceed to the analyses conducted by MPC and Elevate. For the quantitative analysis, MPC worked with City staff to collect, clean, and analyze water and sewer usage, billing, and other data to understand the unique water affordability issues and opportunities in Harvey.

A summary of our findings follows.

Data Overview

Important notes regarding the quantitative analysis include the following:

- The study covered water and sewer billing data for a period of two years, from January 2018 to December 2019.
- The bills received were for four customer account types residential, commercial, institutional (e.g., schools, nursing homes, day care facilities), and other (e.g., industrial facilities, houses of worship, government buildings) but the analysis focuses primarily on residential billing data.
- For residential accounts, we received and analyzed water and sewer service costs for active standard rate and senior rate customers with sufficient billing history, representing 3,816 accounts.
- Accounts with billing data for less than 90% of the study period, as well as those that became active or inactive during the two years, were excluded as these skewed the analysis. Accounts with irregular usage or billing habits – potentially related to waived fees and penalties under the amnesty program (see note under "Recourse for Non-Payment" section) – were also removed.

Consumption & Billing by Account Type

Mentioned previously, Harvey employs a decreasing block rate whereby higher consumers are charged a lower rate. As shown in Fig. 2, commercial customers consume more but are charged comparatively less than residential customers.

In 2019, 86% of water and sewer consumption in Harvey was by commercial users. However, these commercial users paid 70% of systemwide billed water and sewer costs. Conversely, while residential customers accounted for 13% of Harvey's consumption, they represented 28% of total billed costs.

FIGURE 2. COMPARISON OF CONSUMPTION AND TOTAL BILLED AMOUNT BY CUSTOMER ACCOUNT TYPE 2A. Consumption by Customer Type



Median & Average Monthly Bills

Billing data used in this analysis include water and sewer service costs for active standard rate and senior rate residential customers with sufficient billing history, totaling 3,816 accounts. See Fig. 3 for a breakdown of billed amounts, ranging from \$20 to over \$200. The median residential water bill for this period was \$59.02 per month, meaning half of bills were under \$60. Between January 2018 and December 2019, the average monthly cost of residential water and sewer service was \$75.53.

28%

1% 1%



FIGURE 3. DISTRIBUTION OF BILL AMOUNTS

Water Debt

70%

For the 3,816 residential accounts included in the analysis, 906 customers (approximately 25%) held outstanding water or sewer debt, with a median arrears of \$75.91. Roughly 60% of customers with outstanding debt held less than \$100 dollars, totaling 20% of outstanding water and sewer debt (see Table 3).

Accounts with greater than \$300 in water debt represent 10% of past-due accounts but hold nearly 45% of outstanding debt. These customers represent 2.3% of overall residential accounts in the analysis.

At year-end 2019, outstanding water-related debt held by Harvey residents totaled \$127,113.

TABLE 3. 2019 RESIDENTIAL WATER DEBT BY AMOUNT

Amount	# Customers	% Customers	Total Debt	% Debt
\$50 or Less	275	30.4%	\$8,365	6.6%
\$50 to \$100	267	29.5%	\$18,971	14.9%
\$100 to \$300	277	30.6%	\$45,142	35.5%
\$300 to \$500	47	5.2%	\$17,970	14.1%
\$500+	40	4.4%	\$36,665	28.8%
Total	906		\$127,113	

Debt Duration

The majority of Harvey's residential water-related debt (68%) is paid within two months or less – i.e., prior to the third billing cycle – as shown in Fig. 4. It is important to note that while customers are largely not holding outstanding debt for extended periods, associated penalties and threats of service disconnection compound affordability challenges. Furthermore, with the limited scope of this analysis, we cannot determine whether customers are attempting to remain current on water bills at the expense of other necessities.

FIGURE 4. 2019 RESIDENTIAL DEBT BY RECEIVABLE DATE⁶⁵



Water-related debt for active accounts at the end of 2019 in Harvey can be split into two broad categories: 1) small dollars values stemming from unpaid balances from recent bills; and 2) larger dollar values across a range of delinquency periods.

From the first category, roughly 46% of outstanding water-related debt in Harvey at the end of 2019 was delinquent for less than one month. Virtually all accounts with outstanding debt of less than \$50 were delinquent for less than one month. For the second category, accounts greater than \$300 dollars in debt show a less clear relationship to delinquency duration, with debt unevenly distributed across delinquency duration.

⁶⁵ Note, "Less than 5 months" and "Less than 6 months" were not included in the data received. ©2023 Elevate Energy

This implies that accounts holding smaller amounts of water-related debt are paying this off within one month of delinquency (i.e., before the next bill is due), whereas accounts with larger amounts of debt are seeing it continue to accumulate. It appears that once water debt surpasses \$100, it is increasingly likely that customers will continue to accrue debt and hold it for longer periods.

Bill Amount & Debt

Customers who hold high amounts of water-related debt have higher monthly bills than those who hold low amounts. Averages can be skewed by high values (i.e., outliers), so we analyzed both average and median bills, and both demonstrate this relationship (see Table 4). Customers with outstanding debt of less than \$50 had median monthly bills – i.e., new volumetric-based charges, not including penalties – totaling roughly half those of individuals with greater than \$300 in water- and sewer-related debt.

Debt	# Customers	Average Bill	Median Bill
\$50 or Less	275	\$ 61.93	\$ 50.72
\$50 to \$100	267	\$ 71.50	\$ 66.41
\$100 to \$300	277	\$ 84.98	\$ 76.45
\$300 to \$500	47	\$ 111.35	\$ 95.26
\$500+	40	\$ 148.56	\$ 115.04
Total	906	\$ 78.19	\$ 66.76

TABLE 4. MONTHLY BILL BY 2019 DEBT AMOUNT

Water Bill Burden

Bill burden refers to the percentage of a household's income that goes toward paying bills. There is no commonly accepted definition of "high" water bill burden – i.e., the threshold at which the percentage of household income consumed by water costs is deemed unaffordable. The oft-cited U.S. EPA standard, though, is 2.5% for water charges and 4.5% for water and sewer charges combined.⁶⁶ Based on this methodology, if water and sewer bills account for less than 4.5% of household's income, it is considered affordable at a system level.

Important notes on this water bill burden analysis:

- The 2.5% and 4.5% thresholds (and even the use of a single percentage as a measurement of affordability) are disputed: we reference them here as a point of comparison only.
- As mentioned previously, high monthly bill outliers skewed the analysis, so we include both median and average values for comparison.

⁶⁶ Note, this methodology is frequently cited incorrectly as a measurement of household-level affordability when, in fact, it was intended for assessing community level financial capability. (Teodoro, M.P. (2019). Water and Sewer Affordability in the United States. mannyteodoro.com/wp-content/uploads/MTeodoro-2019-Water-Affordability-in-US pre-print.pdf) ©2023 Elevate Energy

- We use income quintiles rather than median household income. A quintile is a measurement that represents 20% of the given population, and income quintiles offer a more nuanced understanding as compared to the median income of the municipality as a whole.
- In this analysis, quintiles are representative of 2019, the final portion of the study period and the same time period as the debt analyses.

To determine what proportion of Harvey is cost-burdened by water and sewer charges, the median and average annual bills were compared with Harvey's average income quintiles (see Table 5). Looking at median bill as a percent of income, 20% of Harvey's residential customers – i.e., the lowest income quintile – have an extremely high water and sewer bill burden. Indeed, median bills account for almost one-fifth of annual income. If we look at average bills instead of median, one-quarter of the lowest earners' income goes toward water and sewer charges, and, for the second income quintile, water and sewer bill burden is greater than 5%.

TABLE 5. 2019 INCOME QUINTILES AND WATER AND SEWER BURDEN

Quintile	Income Thresholds ⁶⁷		Median Bill as % Income	Average Bill as % Income
First	\$	3,752	18.2%	24.7%
Second	\$	17,637	3.9%	5.2%
Third	\$	31,000	2.2%	3.0%
Fourth	\$	52,521	1.3%	1.8%
Fifth	\$	123,379	0.6%	0.8%

 ⁶⁷ American Community Survey (2019). ACS 5-Year Estimates: Mean household income of quintiles (B19081).
 <u>data.census.gov</u>
 ©2023 Elevate Energy

Qualitative Analysis

Overview

Building on the quantitative analysis, Elevate conducted interviews with the following stakeholder groups:

- 1. Residents
- 2. Municipal Officials
- 3. Staff

The purpose of these interviews was to gather experiential data and identify potential issues and opportunities related to water affordability. Interviews covered topics including water billing, data management, assistance programs, customer service, and more. Our findings are compiled and summarized below. See the following section, "Key Findings & Recommendations," for an analysis of the findings.

Residents

City staff assisted the project team in connecting with five residential customers for stakeholder interviews. Discussions were designed to help us learn about the experiences and concerns of Harvey's residential water customers as they relate to billing, billing assistance, customer service, and other topics involving water affordability.

Customer Case Studies

We acknowledge the small sample size and, therefore, difficulty in making generalizations based on the feedback received. Accordingly, we focus on two residents (referred to by pseudonyms) whose experiences effectively illustrate the highly nuanced nature of water affordability. As opposed to being a dichotomy – affordable or not – these residents show there are unique challenges at all points along a continuum.

- SHORT-TERM CHALLENGES: Dave suffered a job loss and, as a result, was unable to pay his water bill for a period of time. He received a shutoff notice, which was extremely stressful, but he found a new job and was able to bring his account current and avoid a water shutoff. Dave has not had major issues with his water bill since.
- **CONSISTENTLY PAST DUE:** Eleanor has had high water bills and growing water debt since 2018. Despite entering into a payment plan to bring her water debt down, the arrangement added \$150 onto her \$300-\$400 monthly water bills. As a retiree living on a fixed income, the combined payment was too much for Eleanor, and unpaid balances continued to accrue, topping \$7,000 at one point. The source of the high bills was ultimately traced to an extremely leaky toilet, and she received \$1,500 from CEDA to help with the debt, but a large sum remains unpaid.

As these customer stories show, even within the same municipality there remains a mix of circumstances and factors impacting ability to pay and requiring a different set of affordability-focused interventions.

Other feedback from residential interviews follows:

- Several long-term residents had the same water meter for approximately 20 to 30 years. After receiving a new meter,⁶⁸ these customers believe it is the cause of high water bills.
- One residential customer expressed difficulty in understanding their water bill and is not aware of any educational resources for assistance.
- Due to news reports of low water pressure in Dixmoor in October 2021 and the initial uncertainty over the cause, one residential customer expressed lingering doubts about the safety of Harvey's water.

Municipal Officials

Elevate researchers were unable to connect directly with municipal officials (rather, the project was supported via multiple contact points among staff members). The feedback included here results from a combination of staff conversations, news reports, and other sources.

- A newspaper from the time when Mayor Clark was an alderman reports that he advocated for a "water bill of rights" after some residents received bills of \$400 to \$500. "People are suffering as a result of this water crisis," he said. "For some, such high water bills are a life changing event."⁶⁹ Note that this was during the period when the City's water utility was under court-appointed receivership.
- In 2019, City Council adopted the Water, Sewer, and Refuse Bill of Rights, which has been included in <u>Appendix A</u>. The Bill of Rights declares that a clear explanation of bills will be provided, offers to connect customers with assistance programs, promises to provide notice of pending service disconnection, and lays out the conditions under which service will not be disconnected, among other things.
- Mayor Clark believes water should be free for residential customers. Although we did not hear this directly from the mayor, the viewpoint was confirmed in conversations with staff.
- Staff also reported that Mayor Clark prioritizes customer service and wants to provide additional training to improve compliance with policies and procedures. Based on a report from a City newsletter, staff participated in a customer service training program at South Suburban College in 2019.⁷⁰
- Mayor Clark participated in a meeting in 2022 along with other south suburban mayors, members of U.S. EPA, IEPA, and Congressman Bobby Rush to discuss water infrastructure concerns in their municipalities and advocate for financial assistance from federal and state agencies.⁷¹

⁷¹ Cauguiran, C. (2022). Southland mayors meet with state, federal leaders to address chronic water infrastructure problems. ABC7 Eyewitness News. <u>abc7chicago.com/what-is-infrastructure-chicago-southland-water-main-break-robbins/12571786/</u> ©2023 Elevate Energy

⁶⁸ Note, these residential customers did not receive smart meters.

⁶⁹ Harvey alderman proposes lower water bills creates water bill of rights (2018, December 19). South Suburban Citizen. <u>issuu.com/chicagocitizennewspapers/docs/ss</u> 121918

⁷⁰ City of Harvey (2022). The Official Publication of the City of Harvey, Summer Edition. <u>cityofharveyil.gov/wp-</u> <u>content/uploads/2022/04/Spring-Edition_Working-Draft_New-Cover.pdf</u>

Staff

One-on-one conversations and monthly check-in meetings with members of staff informed our process and added deeper understanding to both the quantitative and qualitative findings. Since staff was our primary source of engagement, these findings are slightly more expansive and, to aid comprehension, are broken down into categories of Customer Relations, Customer Assistance, Past Due Balances, Water Rates, and Water Infrastructure.

CUSTOMER RELATIONS

- We spoke with four clerks in the Water Department's Customer Service Center. All reported that the majority of calls they receive are from residential customers who cannot afford their bills, frequently with bills of \$300 or more. Many of these high bills eventually lead to posting of red card notices for shutoffs.
- Per the Water Department Supervisor, there is lingering distrust from the period when water bills were high, and revenue was diverted from the Water Fund.
- As mentioned previously, staff reported that despite the higher costs associated with printing, postage, administration – Harvey switched from quarterly to monthly billing because it was the best option for customers, especially those on a fixed income.

CUSTOMER ASSISTANCE

- Staff refers customers to the Community and Economic Development Association of Cook County (CEDA) for financial assistance as well as the hardship programs run by Thornton Township and the Salvation Army.
- The Low Income Household Water Assistance Program (LIHWAP), administered by CEDA, has been beneficial for both the City and its residential customers. Harvey receives a promise to pay before the actual check arrives. The promise to pay amount is applied to the customer's account right away, which is especially helpful when water is disconnected i.e., water service can be restored based on the promise to pay. Customers are eligible for up \$1,500 in one-time assistance, but they had one customer who requested and was approved for a much lower amount of \$32. That said, the main challenges are awareness and a hesitance to report personal information. Harvey's administration is working with their communications team to raise awareness of LIHWAP and other assistance programs, and Water Department staff help customers to apply.
- The Mayor's Chief of Staff informed us that some residential customers have not completed paperwork to claim ownership of their property, meaning they do not qualify for CEDA and other customer assistance programs.

PAST DUE BALANCES

• Staff reported that some customers who are on payment plans may not ever be able to bring their account current. Staff shared a similar story to the "consistently past due" case study in the Residents section above. One woman, they said, has been on a \$120 per month payment plan for many years, but

new charges are more than \$120, rendering the combined bill unaffordable and resulting in new arrearages.

- The City used to prevent properties from being sold or otherwise conveyed until water charges are paid. That is, staff would withhold property transfer stamps until the account was paid in full. Now the goal is to get properties back on tax rolls. After the property is transferred, staff still try to collect from the previous owner but have minimal leverage, and Harvey will have no choice but to write off those costs, in some cases. The new owner is only responsible for payments from the date they took possession.
- One of Harvey's wholesale customers has a high outstanding balance. Since the water was already delivered to Harvey, this water is reflected in bills to Harvey from the City of Chicago. That is, Harvey must pay for the water it delivers to its retail and wholesale customers, regardless of whether they receive payment from those customers.

WATER RATES

- Staff confirmed that water and sewer rates are not posted on the City's website, and customer bills do not include information about rates.
- Harvey used to absorb cost increases from the City of Chicago but now passes those on to customers.

WATER INFRASTRUCTURE

 The City's engineering consultant explored strategies to increase affordability, such as addressing water loss and seeking funding to replace water infrastructure in coordination with other capital improvements. The City worked with water and wastewater services provider M.E. Simpson and has seen some cost savings based on infrastructure repairs.

Key Findings & Recommendations

Overview

Based on the findings of both the quantitative and qualitative analyses, we now proceed to a summary of the key findings and recommendations for addressing issues of water affordability in Harvey.

Findings & Recommendations for the City of Harvey

Every community is unique, and a one-size-fits-all set of solutions does not exist for local water affordability challenges. Many factors impact the availability and potential efficacy of policies and programs aimed at improving water affordability. These factors include socio-demographic characteristics, community financial and management capacity, age of the water system, source water quality and quantity, customer base size and makeup, housing and land use characteristics, customer water-use patterns, vulnerability to climate change and other risks, and more.

Based on our analysis, the following key findings and recommendations stand out as priorities for the City of Harvey:

KEY FINDING 1 – The City of Harvey has taken many steps to address water affordability challenges, and staff work hard to assist water-burdened customers.

Recommendation: Continue working to regain customer trust with transparent communication about rates and billing policies, and conduct follow-up research to determine the efficacy of existing programs and policies to identify where additional assistance is needed.

Explanation: Mayor Clark has prioritized customer service, and, based on our conversations with staff and residents, we have heard clear evidence of sincere, dedicated public servants who work hard to meet customer needs. City Council's 2019 adoption of the Water, Sewer, and Refuse Bill of Rights is an important step toward regaining trust after the period when utility operations were under receivership. Also, we commend the City for its decision to switch from quarterly to monthly billing because it was the best option for customers, despite the higher administrative costs for the City. However, with one resident expressing difficulty in understanding their bill, and staff confirming that water and sewer rates are not posted, work remains to improve transparent and clear communication about charges, which is included in the Water, Sewer, and Refuse Bill of Rights.

Suspension of the City's water shutoff policy and implementation of an amnesty program to forgive penalties and fees was likely very impactful for water-burdened customers. We recommend the City conduct follow-up analysis to determine the impact of these policies – both on customers and Harvey's water revenue – and **explore options** to make permanent policies focused on water affordability.

Potential areas for impact include the following:

• **Build flexibility into how and when customers pay.** Examples of payment flexibility include: a) allowing "budget billing" so customers receive a consistent bill based on historical usage, leveling out seasonal spikes in consumption and helping customers budget accordingly; and b) exploring flexible payment cycles and due dates including paying monthly, bi-monthly, quarterly, or on days that align with customers' financial circumstances.

- **Design adaptable policies for payment arrangements.** It may be infeasible for some customers to pay of 50% of past due balances before entering into a payment arrangement. Flexible policies improve the customer experience and may help Harvey recoup additional revenues.
- End the practice of filing liens for non-payment of water charges. Liens potentially resulting in foreclosure proceedings and loss of shelter is a disproportionate punishment for the nonpayment of water bills. We strongly urge Harvey to end this practice and explore alternative methods to incentivize timely payment and conservation of water resources.

KEY FINDING 2 – A significant number of residential customers (approx. 25%) have water and sewer debt, with a median outstanding balance of \$75.91. The majority of these customers with debt (68%) bring their account current within two months or less, but the overall burden on Harvey's lowest earners remains substantial.

Recommendation: Assess rate structures and affordability-based programs and policies to ensure water is consistently affordable to all.

Explanation: This finding indicates that water is broadly affordable to most residential customers. As previously stated, though, affordability is not a dichotomy. Rather than "affordable" and "not affordable," there are unique experiences at all points along a continuum. An outstanding balance of \$75.91 may seem small to some, but others may find this to be a significant stressor. Indeed, our analysis found that the median water and sewer cost burden accounted for nearly one-fifth of a household's annual income for Harvey's lowest income quintile – i.e., the lowest-earning 20% of Harvey's residential customers. Additionally, late payments come with penalties and potentially other fees, which can compound affordability challenges for customers who must decide between paying utility bills and other essentials like groceries, medical care, mortgage/rent payments, and more.

Between "affordable" and "not affordable" are gradations and degrees of affordability, and the goal should be to ensure that water remains accessible and affordable to all. The Water Affordability Advocacy Toolkit⁷² provides a thorough examination of water affordability challenges and promising practices – the sections on Affordability & Assistance Programs and Equitable Water Rates, in particular, may provide useful information for the City of Harvey (see <u>Appendix B</u> for a list of additional resources). Some of the practices included in that Toolkit are as-yet-untested, as water affordability is still a growing field of research, and practical examples are limited or have not been around long enough to draw conclusions. Accordingly, MPC and Elevate use the term "promising practices" instead of referring to these interventions as proven "best practices."

That said, a variety of municipal examples exist. The Cleveland Public Water Systems program offers a lower base charge and lower per-unit rate for eligible customers, and partners with a nonprofit to provide a 40% discount on water charges.⁷³ Some local examples include the City of Chicago's Utility Billing Relief program, which provides a 50% rate discount for eligible customers and the ability to have past due balances wiped out after 12 payments at the reduced rate.⁷⁴ The City of Evanston adopted a reduced water and sewer rate for

⁷² For more information, see: Natural Resources Defense Council & National Consumer Law Center (2022). Water Affordability Advocacy Toolkit. <u>nrdc.org/resources/water-affordability-advocacy-toolkit</u>

⁷³ Vedachalam, S. & Dobkin, R. (2021). H₂Affordability: How water bill assistance programs miss the mark. Environmental Policy Innovation. <u>policyinnovation.org/publications/h2affordability</u>

 ⁷⁴ City of Chicago (n.d.). Utility Billing Relief. <u>chicago.docugateway.com/main/guest/billing_relief/</u>
 ©2023 Elevate Energy

income-qualified owners and renters. Evanston households that do not pay a bill directly can receive an annual rebate reflecting their estimated savings.⁷⁵ Chicago's program addresses arrearages directly through debt relief, while Evanston attempts to keep arrearages from accumulating. Chicago also recently ended the practice of residential water service disconnection for nonpayment of charges related to water, sewer, and refuse collection.⁷⁶

These are relatively new programs and practices, and their impact has not yet been studied fully. The City of Harvey should explore which, if any, programs would be appropriate for their customers.

KEY FINDING 3 – A small number of Harvey's total residential customers (2.3%) held nearly 45% of outstanding debt during the study period, and existing assistance programs and policies appear to be insufficient for these customers.

Recommendation: Explore creative solutions to subsidize universal access to water, especially for disadvantaged and eligible low-income customers, whether through a customer assistance program, discounted base charge and/or volumetric rate, income-indexed billing, or other mechanism.

Explanation: A small number of past due accounts have high debt. Once water debt surpasses \$100, our research shows it is increasingly likely that customers will continue to accrue debt and hold it for longer periods. Harvey should continue referring customers to hardship assistance programs offered by CEDA, Thornton Township, and the Salvation Army, promoting LIHWAP, and working with customers to take full advantage of eligible benefits. However, even with this assistance, staff reported that some customers on payment plans may continue to struggle to bring their account current. For these customers, more expansive offerings may be necessary.

As discussed under the previous recommendation, there are gradations and degrees of affordability, and Harvey should explore whether a small group of income-eligible customers' consumption should be subsidized to ensure access to water. We propose a limited and carefully targeted subsidy coupled with debt relief to increase water equity as a complement to volumetric-based charges for other users to support daily operations, maintenance, and replacement of system elements.

KEY FINDING 4 – Customers with outstanding water-related debt of greater than \$300 had median monthly bills roughly double those with less than \$50 of debt. In other words, high debt is associated with high usage, as indicated by higher monthly volumetric charges.

Recommendation: Explore the cause of high water usage and pair customers with appropriate interventions, such as educational materials on water conservation and efficiency, a municipally funded leak detection and repair program, and so on.

Explanation: To clarify, median monthly bill amounts here refer to the cost of water and sewer service. In the data provided, Harvey's debt was reported as year-end receivables separate from billing information. This

reporting. <u>chicago.legistar.com/LegislationDetail.aspx?ID=5725331&GUID=A11D231D-19A8-4D70-AE49-322DA5642A70&Options=&Search=</u>

⁷⁵ City of Evanston (n.d.). Affordable Water/Sewer Rate. <u>cityofevanston.org/government/departments/public-</u> works/services/water-sewer-rates/affordable-water-sewer-rate

⁷⁶ City of Chicago, Office of the City Clerk (2022). Amendment of Municipal Code Chapters 2-164, 3-12, 7-28 and 11-12 regarding water shutoffs, water privatization and associated

means bills are not higher because they also include outstanding debt. Instead, the customers with high outstanding debt also received and were billed for higher volumes of water. This is a potentially indicative of leaks in internal home plumbing, inefficient fixtures and faucets, or both.

Given the overlap of comparatively older housing stock and limited disposable income to spend on repairs, it is reasonable to assume that inefficient plumbing and leaks are a source of high bills and debt. If true, customers with high outstanding debt and high monthly bills will likely need: 1) debt relief to return to good standing; and 2) assistance to identify and correct the source of high consumption to prevent debt from accruing again. There is a cost to the municipality, of course, of offering this type of assistance, but there are also administrative costs of collecting unpaid debt, especially for properties that have already been conveyed to new owners. Considering Harvey must pay Chicago for the water it receives, there is potential for mutual benefit for Harvey to help customers bring excessive usage under control.

Public education is another important element. There are a number of publicly available resources^{77,78} that can be repurposed by Harvey. These should be made available in multiple locations, such as posted on the City's website and social media, included in municipal newsletters, and made available as handouts at the Harvey Municipal Center.

KEY FINDING 5 – Because of the decreasing block rate structure, commercial and residential customers' water charges are potentially incongruous with their respective share of consumption.

Recommendation: After conducting a cost-of-service study to apportion costs to different user types, determine the top rate-setting priorities and, if appropriate, redesign rates with a particular emphasis on ensuring universal access to, and affordability of, water and sewer service for residential customers.

Explanation: In 2019, 86% of water and sewer consumption in Harvey was by commercial customers, but commercial users paid 70% of systemwide billed water and sewer costs. Conversely, residential customers accounted for 13% of Harvey's consumption but represented 28% of total billed costs. A municipality's goals are often in conflict when it comes to setting rates. On the one hand, municipalities may wish to provide discounts to higher volume users as an economic development tool to make a business-friendly environment and attract certain types of commercial and industrial enterprises. On the other, ensuring access and affordability for residential customers may require setting rates so that the high-volume commercial and industrial users are allocated costs in a way that reflects their impact on (and benefit from) the system.

Further complicating this process, though, are the differences in fixed costs for providing water service to the two groups of customers. For example, are the fixed costs of delivering a high volume of water to manufacturing and industrial facilities via a single large diameter pipe significantly lower than costs associated with operating and maintaining the network of smaller diameter pipes that serve homes and small businesses? If so, the decreasing block rate structure may be appropriate. Conversely, some locally-owned small businesses that use high volumes of water may be negatively impacted by changes to the rate structure – such as laundromats, home-based day care providers, and small child care centers.

⁷⁷ For an example, see: Elevate (2022). Water Affordability: Need to Know for Your Home. <u>elevatenp.org/publications/water-affordability-need-to-know-for-your-home/</u>

⁷⁸ Another example: Alliance for Water Efficiency (n.d.). Water Saving Tips: Residential Water Use. <u>allianceforwaterefficiency.org/resources/topic/water-saving-tips-residential-water-use#</u> ©2023 Elevate Energy

In short, after determining the revenue requirements of a water utility, the process of allocating costs to the various users and then designing a rate is rife with not-insignificant trade-offs. The outcome is driven by multiple priorities and objectives and guided by input from a broad spectrum of stakeholders. As the purpose of this report is to ensure affordability for all users, an equitable and community-informed approach should be considered whereby rates reflect the apportioned demand placed on the system by each user class in a way that ensures universal access to, and affordability of, water and sewer service without overburdening municipal finances, which are ultimately born by residents.

A cost-of-service study should include an assessment of, among other things: 1) the semi-fixed charges related to purchasing, treating, and pumping water plus any administrative costs; 2) revenue requirements to operate and maintain the system; and 3) the cost of subsidizing universal access to water, especially for disadvantaged and eligible low-income customers, whether through a customer assistance program, discounted base charge and/or volumetric rate, income-indexed billing, debt relief program, leak detection and repair program, and other mechanism.

Foundational Actions for All Municipalities

In addition to the targeted actions above, we include foundational actions that all municipalities should consider to ensure equitable access to water and affordable water in their community. These recommendations were developed based on a nationwide review of water affordability policies and programs conducted by Illinois-Indiana Sea Grant.⁷⁹

Foundational actions for all municipalities include:

Strategy 1: Reduce Costs

Addressing escalating water service costs is one way to make water bills more affordable. Strategies to reduce water costs include: 1) asset management, 2) fully leveraging federal or state funding sources, such as the State Revolving Fund, and 3) regional collaboration, such as service sharing and joint procurement.

Strategy 2: Promote Water Conservation

Strategy 2A. Water conservation at the utility scale decreases water costs and, for water utilities at or near capacity, can reduce or delay the need for infrastructure expansion. Examples of utility scale water efficiency strategies include: 1) leak detection and repair, 2) metering (which Harvey has already undertaken), 3) water conservation planning, and 4) water re-use (where legal).

Strategy 2B. Customer level conservation and efficiency measures can impact affordability by keeping consumption low. There are costs for the municipality, of course, in funding these initiatives, but, as they can result in lower bills and improved water affordability, there is potential to lower administrative costs associated with collections and more severe penalties, and such measures can reclaim system capacity and limit the need for system expansion. In other words, less water wasted means more water can be used for other customers. Customer level conservation and efficiency measures include: 1) municipally funded retrofits and rebate

 ⁷⁹ For more information, see: Illinois-Indiana Sea Grant (2019). Water Affordability Programs & Policies: A National Review. <u>iiseagrant.org/publications/water-affordability-programs-policies-a-national-review/</u>
 ©2023 Elevate Energy

programs for things such as low-flow toilets and fixtures,⁸⁰ 2) water conservation ordinances, such as limiting lawn watering to certain days or times,⁸¹ and 3) conservation-focused outreach and education campaigns.⁸²

IMPORTANT NOTE (STRATEGY 2B.1 – "municipally-funded retrofits and..."): Although low-income households may stand to benefit most from the cost-saving potential of conservation and efficiency measures, programs should be designed in ways that ensure all can participate. For example, a rebate program may preclude participation by households that cannot afford to purchase low-flow toilets and water efficient fixtures or pay a contractor to install them. Instead, a program designed for and targeting low-income households may involve vouchers rather than rebates, giveaways, and direct installation.⁸³

Strategy 3: Design and Implement Equitable Rates

Water rate structures can be designed to provide targeted assistance to specific customer groups, though it may be difficult to benefit all customers who need assistance and may involve making trade-offs with other utility objectives. Rate design strategies include: 1) setting rates based on periodic cost-of-service studies informed by capital improvement and asset management plans, 2) reducing the fixed charge, minimum bill, and/or minimum use allowance, and 3) exploring lifeline rates and other rate strategies to address affordability.

Strategy 4: Strengthen Customer Assistance Programs

Customer assistance policies can assist customers with being able to afford water bills. Examples of customer assistance policies include: 1) providing income-based rate discounts, arrearage forgiveness, and crisis assistance, 2) adopting budget billing practices to help customers who find it easier to pay smaller, more regular bills, 3) revising collections policies and breaking the cycle whereby utilities investing in debt recovery results in higher water rates and fees, and 4) piggy-backing on other existing federal assistance programs for low-income customers to provide water assistance.

IMPORTANT NOTE (STRATEGY 4.3 – "revising collections policies and..."): Utilities generally use penalties and disconnections to incentivize payment. However, as our research shows, 68% of past due residential customers bring their account current within one month or less (KEY FINDING 2), and 2.3% of residential accounts in the analysis accumulated debt of \$300 of more (KEY FINDING 3). It is unclear if the short-duration past-due customers bring their account because of the penalty, while it is very clear that the strategy is not working for longer duration past-due customers. We encourage Harvey to explore the efficacy and impact of their collections policies, such as applying a 10% penalty for the unpaid portion of bill 16 days after billing. How much revenue is collected from penalties? Are these

⁸⁰ For a municipal example, see: Village of Oak Park (2015). Free water-saving kits available. <u>oak-park.us/newsletters/january-2015/free-water-saving-kits-available</u>

⁸¹ Note, Harvey's municipal code includes "Lawn sprinkling unlawful—Time period designation," prohibiting irrigation between 7 a.m. and 8 p.m. during summer months – i.e., May 15 through September 15. However, this is not currently being enforced. (T. Williams, personal communication, January 30, 2023.)

⁸² For a municipal example, see: City of La Verne (n.d.). Residential Audit Checklist for Water Use Efficiency. <u>cityoflaverne.org/DocumentCenter/View/1601/Residential-Audit-Checklist-for-Water-Use-Efficiency-PDF?bidld=</u>

⁸³ Shimabuku, M. & Snyder, J. (2022). Ensuring Water Conservation and Efficiency Programs Are Accessible to All—In California and Beyond (blog). Pacific Institute. <u>pacinst.org/water-conservation-efficiency-accessibility/</u> ©2023 Elevate Energy

revenues vital to the continued operation and maintenance of the system? Are there alternative incentive strategies that could be equally or more effective?

Strategy 5: Target the Hard-to-Reach

Water affordability assistance programs typically target owner occupiers who receive a water bill. Alternate interventions are often required to reach households that do not directly pay for water, such as renters and multi-family building occupants who generally pay for water through rent and homeowner association fees and, accordingly, experience water bill increases in the form of higher rents or assessments. Providing assistance to these customers requires a different set of strategies, including: 1) providing vouchers, rebates, and discounts to landlords or tenants, and 2) targeting conservation programs and water efficiency improvements to multi-family buildings to lower water bills.

Strategy 6: Develop a Water Workforce⁸⁴

A variety of jobs and job types exist within the water sector and can yield transferrable skills and improved job prospects.⁸⁵ As a complement to water affordability programs, workforce development initiatives provide water utilities with the opportunity to invest in the community's people as they invest in its infrastructure, especially in an era of historic Federal infrastructure investments. Strategies include: 1) partnering with a training or educational institution to develop a water workforce, such as local community colleges or the Illinois Section American Water Works Association's Operator in Training Program.⁸⁶

Final Note

Some of these Foundational Actions may be infeasible or inappropriate for Harvey, but, in tandem with the Key Findings & Recommendations above, they comprise a suite of recommendations for consideration by municipal decision makers. These recommendations can be implemented over time, either by going for the "low hanging fruit" first or, the opposite, taking on one or two big-impact initiatives. The City of Harvey's staff capacity and the availability of resources to secure the help of consultants, as needed, will impact this decision.

Water touches on every aspect of municipal life. Accordingly, water plans and recommendations reports should not exist in a vacuum. Rather, they should be referenced in – or incorporated into – land use decisions, area plans, comprehensive plans, capital improvement plans, and other documents and decisions guiding the future of Harvey.⁸⁷

⁸⁴ Note, this recommendation was not included in the report on water affordability policies and programs conducted by Illinois-Indiana Sea Grant. It has been added for the sake of this report.

⁸⁵ Kane, J.W. & Tomer, A. (2018). Renewing the water workforce: Improving water infrastructure and creating a pipeline to opportunity. The Brookings Institution. <u>brookings.edu/research/water-workforce/</u>

⁸⁶ Illinois Section American Water Works Association (n.d.). Utility Resource Center. isawwa.org/page/Utilities

 ⁸⁷ Hansman, H. (2021). Integrating Land Use and Water Planning for a Sustainable Future. Planning
 Magazine. <u>planning.org/planning/2021/summer/integrating-land-use-and-water-planning-for-a-sustainable-future/</u>
 ©2023 Elevate Energy

Conclusion

Water affordability is a highly nuanced issue, and no two municipalities are the same. MPC and Elevate with support from Illinois-Indiana Sea Grant partnered with the City of Harvey to identify the unique challenges and potential solutions for municipalities with lower median income. The data analysis and stakeholder engagement culminated with a suite of recommendations based on what the City is doing well and where additional work is needed. We recognize, however, that socioeconomic limitations mean Harvey can accomplish only certain recommendations on their own. For others, external assistance will be required, such as from the county or state.

As with other initiatives focused on diversity, equity, and inclusion, affordable water is a journey, not a destination. Water affordability solutions will require iterative phases of implementation, assessment, revision, and reassessment. Over time, the composition of Harvey's customers will change – both within and beyond city limits – meaning this work will demand adaptation to meet the changing needs of the community. The partnership between MPC, Elevate, and the City of Harvey is an important step in that process.

Upon delivery of this report, MPC and Elevate will transition to a support role to advise on implementation and assist with the steps beyond. It was our sincere honor to collaborate with such dedicated and committed public servants, and we look forward to partnering in the ongoing work of ensuring water is affordable for all.

Appendix A: 2019 Bill of Rights

In 2019, City Council adopted a Water, Sewer, and Refuse Bill of Rights,⁸⁸ reproduced here:

There shall be established a water, sewer and refuse bill of rights. The water, sewer and refuse bill of rights shall be as follows:

- A. The city of Harvey shall provide you with a clear and complete explanation of all items on your bill.
- B. The city of Harvey may refer you to programs that may be able to assist you with paying your water and sewer bill.
- C. The city of Harvey shall provide you with a written notice of pending disconnection of service for nonpayment prior to disconnection of service. The notice of pending disconnection shall be issued by certified or registered mail no sooner than thirty (30) days after nonpayment. The notice of pending disconnection shall be issued in compliance with Section 13-04-280 of this code.
- D. The city of Harvey shall not disconnect service for nonpayment on any Saturday or Sunday or any holiday observed by the city, unless the city is open to accept payment and restore service on those days.
- E. The city of Harvey shall not disconnect service for nonpayment when the National Weather Service for Harvey has issued a freeze warning or excessive heat warning as of eight a.m. on the day of the scheduled disconnection.
- F. The city of Harvey shall not disconnect your service for nonpayment for a period of thirty (30) days when you provide a written notice from a medical doctor licensed to practice in the state of Illinois certifying that disconnection of service would create a life-threatening situation for you or another permanent resident of your household.
- G. The city of Harvey shall not disconnect service for nonpayment because a former occupant, not of the same household, failed to pay a prior bill.
- H. The city of Harvey shall allow you to designate another person to receive all information regarding your service including notices regarding past due bills and disconnection of service.
- I. The city of Harvey shall restore your service by the following day after making the required payments when your services have been disconnected for nonpayment.
- J. The city of Harvey shall issue a credit, in the amount of twenty-five (25) percent of the current waste disposal rate, to all households with a current zero balance, if there is an interruption in trash pickup due to the city of Harvey's failure to pay for waste disposal services.

 ⁸⁸ City of Harvey (n.d.). Harvey Municipal Code, 13-04-205 Water, sewer and refuse bill of rights (Ord. 3378 § 1(A), 2019).
 Code Publishing Company. <u>codepublishing.com/IL/Harvey</u>
 ©2023 Elevate Energy

Appendix B: Further Reading

Water Affordability in Northeastern Illinois: Addressing Water Equity in a Time of Rising Costs

elevatenp.org/publications/water-affordability-in-northeastern-illinois-addressing-water-equity-in-a-time-ofrising-costs/

MPC & Elevate (2020)

Water Affordability Programs & Policies: A National Review

iiseagrant.org/publications/water-affordability-programs-policies-a-national-review/ Illinois-Indiana Sea Grant (2019)

Water Affordability Advocacy Toolkit

<u>nrdc.org/resources/water-affordability-advocacy-toolkit</u> Natural Resources Defense Council & National Consumer Law Center (2022)

Affordability and Equity Considerations for Rate-Setting

doi.org/10.1002/awwa.1766 Journal AWWA (2021)

Beyond the Water Bill: A strategy guide for developing a water and community affordability action plan <u>cnt.org/publications/water-and-community-affordability-action-planning-guide</u> Center for Neighborhood Technology (2020)

Community Task Force for Water Equity

ourwatersecurity.org/ctf The Center for Water Security and Cooperation & DigDeep (2022)

H₂Affordability: How Water Bill Assistance Programs Miss the Mark

policyinnovation.org/publications/h2affordability Environmental Policy Innovation Center (2021)

Ten Tenets of Water Equity: Considerations for Community Water Systems

<u>morrisoninstitute.asu.edu/content/ten-tenets-water-equity</u> Morrison Institute for Public Policy (2021)

Advancing Equity Across the Water Sector: A Toolkit for Utilities

<u>uswateralliance.org/initiatives/water-equity/racial-equity-toolkit</u> U.S. Water Alliance (2022)

Full-Cost Water Pricing Guidebook for Sustainable Community Water Systems <u>cmap.illinois.gov/programs/water/supply-planning/full-cost-pricing</u> Chicago Metropolitan Agency for Planning, Illinois-Indiana Sea Grant, & University of Illinois Extension (2012)

The State of Water Loss Control in Drinking Water Utilities awwa.org/Resources-Tools/Resource-Topics/Water-Loss-Control

American Water Works Association (2016)