ONEWATER ECON

Water Affordability Action Plan: Village of Hazel Crest

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Contents

Acknowledgements

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This report could not have been completed without assistance and insights from key staff at the Hazel Crest Public Works Department.

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Executive Summary

Introduction

Water affordability is a pressing issue for many communities in Cook County, IL. To help utilities and suburban residents facing affordability challenges, the Cook County Bureau of Economic Development together with Elevate, a Chicago-based non-profit, established the Cook County Water Affordability Program. A key element of this program is the Water Affordability Technical Assistance Program, which has supported affordability assessments and development of Water Affordability Action Plans for ten local municipalities. The Program intends to award pilot project funding to some of these municipalities to support implementation of recommended affordability actions from respective Plans.

This report presents the results of One Water Econ's water affordability analysis and Affordability Action Plan for residential customers in the Village of Hazel Crest, Illinois. The goals of this analysis are to understand affordability drivers and challenges for residential water and sewer customers, identify actions that Hazel Crest can adopt to help address those challenges, and develop an affordability action plan that provides recommendations for affordability-related actions and a high-level roadmap to implementation.

Hazel Crest Water and Wastewater Services

Hazel Crest Public Works Department (PWD) serves as the water and wastewater supplier for Hazel Crest, handling water treatment and distribution, wastewater services, stormwater collection and detention, and water main replacements. Hazel Crest is a wholesale customer of the City of Harvey, which purchases water from the City of Chicago.

PWD currently serves approximately 4,045 residential accounts. The combined water and sewer rate has not changed or been adjusted for inflation since 2013. Hazel Crest is challenged by aging water and sewer infrastructure and is currently undergoing a rate analysis to determine how best to cover future increases in management and maintenance costs. A rate increase will be needed to cover expected operating expenses in the next five years, especially given rising rates by the City of Harvey and Chicago.

Hazel Crest's PWD has received funding to install Advanced Metering Infrastructure (AMI) and a new water billing system. These investments are already being implemented and can support several affordability actions that can help low-income Hazel Crest residents.

Key Findings

Socioeconomic conditions and affordability challenges

Hazel Crest is a small, relatively economically disadvantaged community, with more than 20% of all residents earning less than 100% of the Federal poverty level. The MHI is lower than in many surrounding areas and has decreased over the past decade. While the lowest quintile income has increased in recent years, MHI and LQI

remain well below those for the County and State overall. Data indicates that the lowest 20% of income earners are not able to cover their basic expenses. Many households earning 200% of the poverty level or less - approximately 36% of Hazel Crest households - also do not earn enough to meet basic needs. These low-income households should be a key target for Hazel Crest for affordability solutions, especially as Hazel Crest will likely be increasing their water and sewer rate soon to cover increasing operating costs.

Most residents of Hazel Crest live in single-family households, and a high percentage own their homes. These households are more likely to pay their water bill directly to PWD rather than through rent, meaning that they have a direct relationship with the utility. At the same time, a high percentage of homes in the Village (15%) are vacant; this means that PWD has fewer households over which to spread the costs associated with fixed utility assets and operations.

Hazel Crest does not exceed most of the affordability thresholds associated with common metrics. This is largely because of the relatively low water and sewer rates that the Village currently charges. For example, while the demographic analysis shows that 20%, and up to 36%, of households likely face challenges paying for basic expenses, water and sewer costs as a percentage of incomes fall below established thresholds. Metrics that do not include water/sewer costs reflect a significant prevalence of overall affordability challenges within the Village.

Input from Hazel Crest residents and local experts

The project team conducted a survey of Hazel Crest residents to gain insights on perceptions related to water affordability and key challenges. We also interviewed representatives from local organizations and agencies with specific local knowledge and expertise on the subject. Key findings included:

- Many survey respondents are concerned with PWD communications with PWD and would like to receive more frequent/better communications regarding water bills, late payments, shutoffs, and water use.
- Most survey respondents are concerned about affording future water bills and/or having their water shutoff.
- Most survey respondents in Hazel Crest do not find their water bill very clear or easy to understand.
- When asked about affordability solutions, survey respondents expressed the most interest in levelized billing (where households are charged the same amount each billing period based on their average use across the year), expanding payment plan options, and receiving more information about affordability assistance programs.
- Water services in Cook County are very disaggregated across several utilities, making it hard to reach economies of scale in investments. Some smaller utilities have reported not being able to break even so they cannot afford infrastructure maintenance.
- Many residents of Cook County are struggling to afford basic needs and services, and must often make choices between healthcare, groceries, and their water bill.
- There is often a lack of data tracking related to affordability, including the number of customers eligible for affordability programs and the financial benefits of providing them.

Key Recommendations

Based on results from the quantitative and qualitative analyses, the project team developed an initial set of affordability recommendations for review and discussion with PWD. We conducted a workshop with PWD staff to discuss technical feasibility, implementation timeline and challenges, and cost considerations. PWD staff were asked to rank solutions against the following factors:

- Technical feasibility:
    - Definition: The likelihood of implementation of this solution based on current or projected staff expertise and capacity, regulatory, legal or policy restrictions or opportunities, public and local stakeholder support, and software or operations limitations.
    - Ranking: Low, Medium or High feasibility of being implemented.
- Implementation time
    - Definition: Amount of time it would take the PWD team to implement this solution.
    - Ranking: Short (1 year), Medium (1-2 years), or Long (2+ years) to implement the solution.
- Cost considerations:
    - Definition: The cost to implement in considering the number of FTE staff and/or lost revenue.
    - Ranking: Low, Medium or High cost to implement.

Based on input from the workshop, we revised our final recommendations, categorizing them as short-term, shovel-ready recommendations (those that can be implemented by November 2026) and medium- and long-term recommendations. Table ES-1 provides an overview of our final affordability recommendations (high to medium/high priority), including PWD's ranking against the three criteria and the final priority/timeline determination from the project team.

As noted above, PWD is currently in the process of installing AMI and a new billing system, which will be integrated with Sensus Analytics online platform. They expect the system to be up and running by Fall 2026. AMI provides water utilities and their customers with data that can be used to lower water bills by detecting leaks, promoting conservation, and improving customer service. The real-time, two-way communication of AMI systems replaces manual meter reading with a more accurate process that benefits both utilities and ratepayers. There are several affordability solutions that can be implemented quickly once these infrastructure elements are in place, and these are categorized as short-term. The project team also recommended several solutions that are not dependent on AMI and a new water billing system.

Note: Recommendations are numbered/identified based on whether they are recommended for short-, medium- or long-term implementation (S, M, L) and solution area category (1 – 6 – water loss through "other solutions").

ES-1. Summary of affordability recommendations, Hazel Crest PWD

Solution Area	Affordability Solution	Rec. #	Hazel Crest Public Works Inputs			Final determination - Priority/timeframe
			Feasibility	Timeline	Cost	
Water loss	Support or advocate for a regional leak alert repair program	S1A	High	Short	Low	High priority, short-term. Low relative effort with potentially significant impact for participating customers.
	Text and email alerts for high usage / leaks	S1B	Med/High	Medium	Low/Med	High priority, short term. Medium effort with potential to reach large number of customers/prevent costly bills, and increase collections
Billing/data management improvements	Consider monthly billing	M2A	High	Medium	Medium	Med/high priority, medium term. Should be evaluated within context of other rate/billing changes, including levelized billing.
	Education on water use through online portal (after installation of AMI)	S2A	High	Medium	Low/Med	High priority/short term. Low relative effort and can be done in tandem with new AMI system. Will reach broad range of customers that are online.
	Review existing bill format / better itemize to improve understanding of use.	S2B	High	Medium	Low	Medium/high priority, short term. Low relative effort but may take some additional resources to tie in with new billing system.
Customer service opportunities	Educate residents on new AMI system / opt in for text/email reminders	S3A	High	Medium	Low	High priority, short-term. AMI capabilities will allow customers to better understand their water use and identify ways to save water.
	Ensure adequate notice of shut offs and supplement notice letters with online notifications/reminders.	S3B	High	Medium	Low/Med	High priority, short-term. Significant impact for affected customers, provides customer opportunity to establish payment plan/avoid shutoff.
	Issue water bill payment reminders, ideally via text and/or email.	M3A	High	Medium	Med/High	High priority, medium term. Potential to enhance revenue stability, reduce collection costs, and serve as touchpoint on affordability communications.

Solution Area	Affordability Solution	Rec. #	Hazel Crest Public Works Inputs			Final determination - Priority/timeframe
			Feasibility	Timeline	Cost	
Water rate changes	Consider affordability friendly rate structures (e.g., lifeline rate, minimum first tier).	L4A	Medium	Long	Med/High	High priority, long term. Potential to more equitably distribute costs. Must be weighed w/in context of overall community ability to pay, affordability programs, and cost of service requirements.
	Develop a rate communication strategy	S4A	High	Long	Low	High priority, short-term. Clearly communicating need for pending rate increase and how it will affect customers is important part of broader affordability strategy.
Customer assistance programs (CAPs)	Formalize flexible terms/payment program for late payments/ arrearages	S5A	High	Medium	Low	High priority, short-term. Formalizing these offerings could increase reach and provide significant relief. Program would serve as a foundation for a broader future affordability strategy.
	Quantify cos of shutoffs/ arrearages and evaluate benefits of a bill discount program	M5A	Low	Medium	Low/Med	High priority, medium term. First step to developing more equitable rates and evaluating the potential for a low-income discount (or other affordability offerings).
	Temporary assistance	L5A	Medium	Med/Long	Med/High	High priority, long term. Hazel Crest's small size and high percentage of low-income customers present challenges for establishing a CAP. However, a well-designed program could improve collections, reduce shutoffs, and stabilize revenues. PWD should consider CAP options within context of pending rate increase and new AMI/billing system. Option(s) may require significant resources to establish but can offer meaningful relief and support long-term financial health.
	Offer bill discounts for low-income residents	L5B	Low	Long	Med/High	
	Target low-income customers for water efficiency installations	L5D	High	Long	Medium	
	Leak/plumbing repair assistance	L5E	Low	Med/Long	Medium	
Other solutions	Ban lien sales of homes based on water debt	M6A	Low	Short	Low	Med/high priority given the very low lien rate. However, potentially significant impact for affected customers.
	Eliminate late fees/penalties for low-income customers that cause debt to increase	M6B	High	Medium	Low/Med	High priority, medium term. Avoids adding costs to water debt. PWD already implements this solution to some extent to alleviate hardship.
	Formalize policy to limit shutoffs to Mon-Thurs	S6A	Medium	Short	Low/Med	Med/high priority. Short term. Ensures continuation of current/best practice.

1 Introduction

This report presents the results of One Water Econ's water affordability analysis for residential customers in the Village of Hazel Crest (Hazel Crest), located just outside of Chicago in Cook County, Illinois. One Water Econ completed this analysis in partnership and with funding from Elevate, a non-profit organization with a mission to ensure that all Cook County residents have access to clean and affordable heat, cooling, power, and water. Elevate administers the Cook County Water Affordability Program, which is funded by Cook County.

The objectives of this analysis include:

- Understand affordability drivers and challenges for residential water and sewer customers
- Develop a *Hazel Crest Water Affordability Action Plan* that provides recommendations for short-, medium-, and long-term affordability-related actions and a high-level roadmap to implementation
- Support Elevate and the Cook County Water Affordability Technical Assistance Program by helping communities identify affordability projects that may be eligible for grant funding through the program.

This report is organized as follows:

- The remainder of Section 1 defines the concept of household water affordability, and provides an overview of the project team's methodology
- Section 2 presents an overview of Hazel Crest's current billing and rate structure, recent and upcoming capital investments, delinquencies, shutdowns and debt, and water losses
- Section 3 presents socioeconomic data for households within Hazel Crest and an overview of the affordability challenges they face
- Section 4 presents affordability metrics for Hazel Crest households
- Section 5 provides results from a qualitative analysis of Hazel Crest residents and community organizations' perceptions on water affordability challenges and opportunities
- Section 6 provides recommendations for a *Water Affordability Action Plan* covering short-, medium-, and long-term recommendations
- Section 7 discusses conclusions

1.1 Background on affordability

Water affordability is a pressing issue in many communities across the United States. The U.S. Environmental Protection Agency (EPA) estimates that between 12.1 and 19.2 million households nationwide (approximately 9% to 15% of all households) struggle to afford basic water services.[1] For some, water affordability is a chronic

[1] U.S. EPA. 2024. *Water Affordability Needs Assessment: Report to Congress.* EPA 830-R-24-015. Retrieved September 2, 2025 from: https://www.epa.gov/system/files/documents/2024-12/water-affordability-needs-assessment.pdf.

issue; others have unexpected crises that affect their ability to pay. Low-income households who do pay their water bill are often forced to make trade-offs that affect their health and well-being.[2]

At the same time, the cost of providing clean, safe, and reliable water services is growing. Cities, towns, and utilities nationwide will continue to require higher levels of investment to address aging infrastructure, regulatory requirements, climate change impacts, emerging contaminants, lead service line replacements, and other issues. With limited external funding, water and sewer utility rates will necessarily increase, exacerbating affordability challenges for low-income households.

In the water sector, affordability has historically been examined within the context of nationally mandated regulatory requirements and/or community and utility financial capability to sustainably deliver water services in full compliance with applicable laws and regulations. Traditional affordability metrics, such as the U.S. EPA's Residential Indicator (RI), were initially developed with this lens. Over the past decade, practitioners have developed more robust approaches and methods for examining affordability at the household level. This can help water sector utilities better understand the drivers and extent of affordability challenges within their community and identify actions to address them.

While there is no universally accepted definition of household water affordability, it is often referred to the ability of households to pay for water services in full and on time without facing undue economic hardship.3 Undue economic hardship refers to the need for fiscally challenged households to sacrifice other essential goods and services to pay their water sector utility bills. Examples of economic hardship may include forgoing medical prescriptions or doctor visits, sacrificing healthy meals, facing the inability to fully pay for childcare, essential transportation, or heating and energy services. Households at risk of water service shut off because of arrearages also face undue economic hardship, and the loss of water services may in turn result in the loss of the habitability of their home or apartment.

1.2 Overview of methodology

This assessment holistically examines household level affordability for residential water and sewer customers within Hazel Crest by characterizing affordability challenges across household types, understanding the effect of water utility policies and programs on low-income households, and using this information to inform recommendations for action.

As a first step, the project team analysed socioeconomic data for Hazel Crest residents to identify potentially vulnerable populations and key affordability drivers. Data sources for this analysis include the U.S. Census American Community Survey (ACS), the Bureau of Labor Statistics (BLS) Consumer Expenditure Survey, and other locally available sources as relevant. For context, we compare statistics for Hazel Crest with those for Cook

[2] Environmental Financial Advisory Board. 2025. *Advancing Water Affordability Nationwide: A Framework for Action.* U.S. Environmental Protection Agency.
[3] U.S. EPA, 2025. *Water Affordability Landscape.* Accessed 9/9/2025 at: https://www.epa.gov/waterfinancecenter/water-affordability-landscape#:~:text=Water%20affordability%20refers%20to%20the,affordability%20is%20a%20growing%20issue.

County (comprised mainly of the City of Chicago), the Chicago-Naperville-Elgin metropolitan area (CNE), and the State of Illinois.

We also worked closely with staff from the Hazel Crest Public Works Department (PWD) to obtain information and data related to residential water use, current rates (and the city's ongoing cost of service rate study), cost drivers, and utility policies related to affordability (e.g., payment plans, shutoff policies). Through meetings and interviews, PWD representatives also provided important information on broader affordability issues and utility challenges.

With input from PWD, we identified regional stakeholders to speak with to gain additional insights on affordability challenges and programs available to assist low-income households with utility bills, housing, and other basic needs. We spoke with representatives from the following organizations (see Appendix 1):

- University of Illinois Chicago Government Finance Research Center
- Cook County Leadcare Program
- Cook County Leak Repair Program
- Blacks in Green
- Bremen Township

Finally, we conducted additional outreach by administering a survey to Hazel Crest residents (see Appendix 2), aiming to better understand their thoughts related to water rates, bills, and affordability. We administered the survey via an online software program, Qualtrix. Hazel Crest PWD distributed the survey using several distribution channels, including water bill inserts, flyers available at the main office, and social media channels.

2 Hazel Crest Water and Wastewater Services

Hazel Crest PWD serves as the water and wastewater supplier for Hazel Crest, handling water treatment and distribution, wastewater services, stormwater collection and detention, and water main replacements. Hazel Crest is a wholesale customer of the City of Harvey, which purchases water from the City of Chicago.

2.1 Water rates and billing

There are approximately 4,671 occupied households in Hazel Crest. PWD serves 4,045 residential accounts,[4] including an estimated 1,700 households that are currently non-metered. Apartment buildings or multiple units may be served through one meter. In these cases, water rates and charges are allocated across the number of dwelling units. Customers are billed once every three months; PWD's billing cycle is such that they bill one-third of residents each month. Water bills are ultimately the responsibility of property owners.

For all metered customers, the current rate for water and sewer (combined) is $11.78 per 1,000 gallons of water usage, with a minimum fee of $25 per billing cycle (this covers the first 2,122 gallons of usage over the three-

[4] Based on billing data from the 1st quarter of FY 2023.

month period). The average household water bill is $49.29 per month based on an average monthly household usage of 4,184 gallons;[5] this amounts to $147.88 over the three-month billing period.

The combined water and sewer rate has not changed or been adjusted for inflation since 2013. Hazel Crest is challenged by aging water and sewer infrastructure and is currently undergoing a rate analysis to determine how best to cover future increases in management and maintenance costs. A rate increase will be needed to cover expected operating expenses in the next five years, especially given rising rates by the City of Harvey and Chicago.

2.2 Recent and upcoming investments

Hazel Crest's most significant water projects are generally funded through Federal or state appropriations. PWD recently completed repairs to their water reservoir at a cost of over $1 million and received $10 million through the state revolving fund to replace lead service lines. Ongoing and upcoming capital projects include replacing and installing water meters with Advanced Metering Infrastructure (AMI) systems and installing a new water billing system, Sensus. To date, 530 meters have been updated, and an estimated 1,000 more meters will be updated within the next year. Combined, the new water billing system and AMI will allow Hazel Crest PWD to obtain more accurate water readings, avoid the use of estimated bills for some households, track water leaks in a timely manner, send timely alerts to customers, and better itemize water bills.

2.3 Account delinquencies, shutoffs, and debt

Water bills are due on the 21st of the month for relevant customers, and bills are sent one month in advance of the due date. Payments not received by the 21st are considered late. PWD sends late notices via U.S. postal mail and provides customers an additional two weeks to pay, after which their water service may be shutoff. Hazel Crest's PWD may shut off approximately 175 – 200 accounts every quarter, contingent upon repeat behavior – for example, they are willing to work with customers if this is the first time they are facing a shutoff. PWD does not currently offer any formal shutoff exemptions. For late payments, customers are charged an extra 10% of their water bill. For water shutoffs, the service reconnection fee is $35 during business hours and $75 during non-business hours.

Delinquency encompasses six months of non-payment. During PWD's last quarter, there were 1,254 residential customers with outstanding balances totalling $503,572. This represents 31% of all residential accounts.

2.4 Water losses and leaks

Water losses account for almost 18% of total water supplied, on average, and result from unauthorized consumption, customer metering inaccuracies, systematic data handling errors, and leakages and overflows on

[5] Based on average use per account from FY 2020 through FY 2023

mains, service connections, and storage tanks. Unbilled and unmetered authorized consumption accounts for another 1.3% average non-revenue water.

Water losses (both real and apparent) result in an average loss in revenue of $550,100 per year from 2021 to 2023. This is equivalent to approximately 11% of total annual operating costs for the Hazel Crest water system. Table 1 summarizes the last three years of PWD's water audit data.

Table 1: Water losses for Hazel Crest 2021 – 2023 (2024 USD)

	2021	2022	2023
Water supplied (MG/Yr)[1]	403.5	394.4	378.4
Authorized consumption (MG/Yr)[2]	333.0	316.5	317.3
Water losses (MG/Yr) [3]			
Apparent losses (MG/year) [4]	8.5	8.1	8.1
Real losses (MG/year)[5]	62.1	69.8	52.9
Unbilled unmetered:	5.0	4.9	4.7
Total non-revenue water[6]	75.6	82.8	65.8
Total annual cost of operating water system (2024 $)[7]	$4,890,232	$4,660,487	$5,964,250
Total annual revenue loss from apparent and real losses (2024 $)	$589,939	$590,781	$469,566
Annual cost of apparent losses (2024 $)	$116,312	$102,670	$98,745
Annual cost of real losses (2024 $)	$473,627	$488,111	$370,821

[1]Water supplied equals water imported to a system minus water exported.
[2]Authorized consumption refers to all water used by registered customers and the water supplier.
[3]Water losses are the difference between water supplied and authorized consumption.
[4]Apparent losses include unauthorized consumption, customer metering inaccuracies, systematic data handling errors.
[5]Real losses result from leakage on transmission and distribution mains, leakage and overflow at storage tanks, and leakage on service connections up to point of customer metering.
[6]Non-revenue water includes water losses and unbilled unmetered and metered water.

Source: Hazel Crest PWD AWWA Water Audits 2021-2023

3 Socioeconomic Characteristics and Affordability Challenges

This section presents socioeconomic characteristics and key economic indicators for households within Hazel Crest. To provide additional context, and as applicable, we compare statistics for Hazel Crest with those for Cook County (comprised mainly of the City of Chicago), the Chicago-Naperville-Elgin metropolitan area (CNE), and the State of Illinois.

3.1 Population and households

The total population of Hazel Crest is 13,493. Over the past 10 years, the population has decreased by 4%. Residents are predominantly (86%) Black / African American. Approximately 6% of Hazel Crest are White/Caucasian, while other races account for a total of 8% of the population.

There are approximately 4,671 occupied households within Hazel Crest; this includes households living in multi-family buildings and single-family homes. Most households are owner-occupied (70%) and/or single-family structures (85%). These households are more likely to pay their water bill directly to PWD, rather than through rent or similar fee. Approximately 33% of householders are over 65 years old (**Error! Reference source not found.**) and are more likely to be on fixed incomes.

There are 788 vacant housing units in Hazel Crest, representing 15% of the total number of residences. This is slightly higher than the 10-year average vacancy rate for the Village of 13%.

Table 2: Percentage of Hazel Crest households by household type

Household Type	Total
All Households	4,671
Single-family	85%
Multi-family	15%
Renter-occupied	30%
Owner-occupied	70%
Elderly	33%

Source: 2023 ACS, 5-year estimates

3.2 Income levels

In 2023, the 5-year estimate for median household income (MHI) for all households within Hazel Crest was $62,773. This is much lower than MHI across the region and state - $81,797 for Cook County, $88,850 for CNE, and $81,702 for Illinois.

Figure 1 presents the income distribution for households in Hazel Crest compared to households within Cook County, CNE, and Illinois overall. As shown, approximately 19% of households in the service area earn less than $25,000 a year, compared to 16%, 14% and 15% for Cook County, CNE and Illinois, respectively. On the opposite end of the income spectrum, 31% of households in Hazel Crest have incomes of more than$100,000 per year; this compares to 41%, 45% and 41% for Cook County, CNE and Illinois, respectively.

Figure 2 and Figure 3 demonstrate the change in real MHI and the upper limit of the lowest quintile income (LQI) for Hazel Crest, Cook County, CNE, and Illinois over the past decade. Overall, the MHI for Hazel Crest residents has decreased by 3% in real terms (i.e., after adjusting for inflation). In comparison, MHI increased by 16%, 12%, and 11% over this same period for Cook County, CNE, and Illinois, respectively. Lower income households across the four geographic scales experienced real growth in income over the past decade, with Hazel Crest experiencing the highest growth (26% in real terms) compared to 13%, 12%, and 10% for Cook County, CNE, and Illinois. While Hazel Crest has experienced a greater increase, the 20th percentile income remains significantly lower than the other locales.

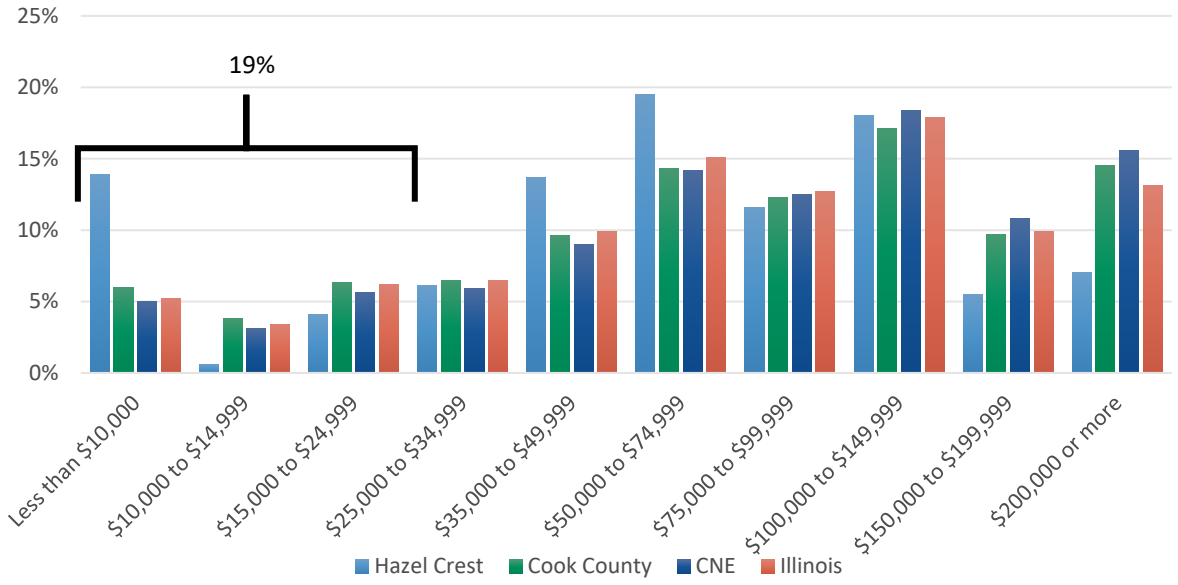

Figure 1: Household income distribution for service area vs Cook County, CNE, and Illinois
Source: 2023 ACS, 5-year estimates

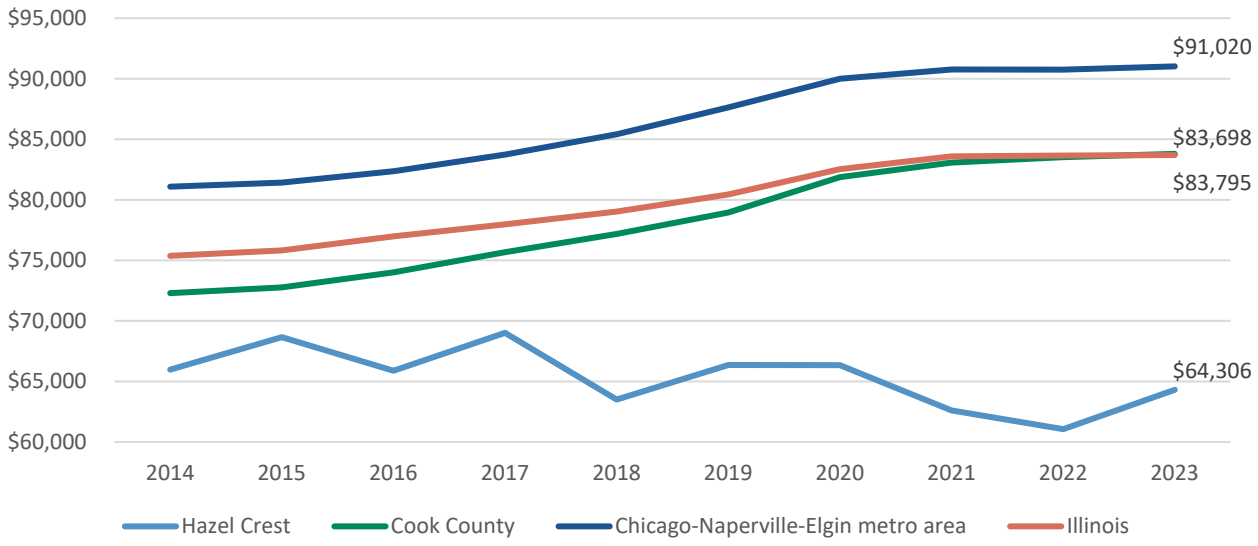

Figure 2: Real Median Household Income for 2014 – 2023 for Hazel Crest, Cook County, CNE, and Illinois
Source: 2014 - 2023 ACS, 5-year estimates (adjusted for inflation, 2024 USD)

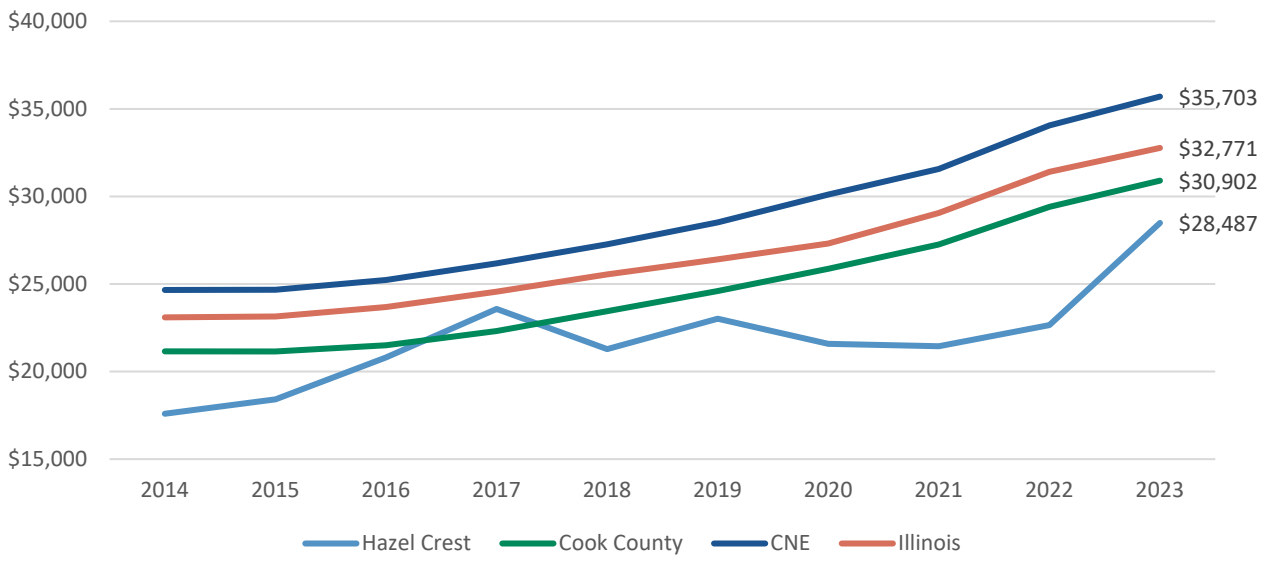

Figure 3: Real Upper Limit LQI 2014 -2023 for Hazel Crest, Cook County, CNE, and Illinois
Source: 2014 - 2023 ACS, 5-year estimates (adjusted for inflation)

3.3 Income by household type

Figure 4 shows the income distribution for renter and owner households, demonstrating that there are a relatively equal percentage of renter and owner households in lower income groups in the Village (i.e., households earning below $50,000 per year). However, a higher percentage of owner-households fall within the highest income category.

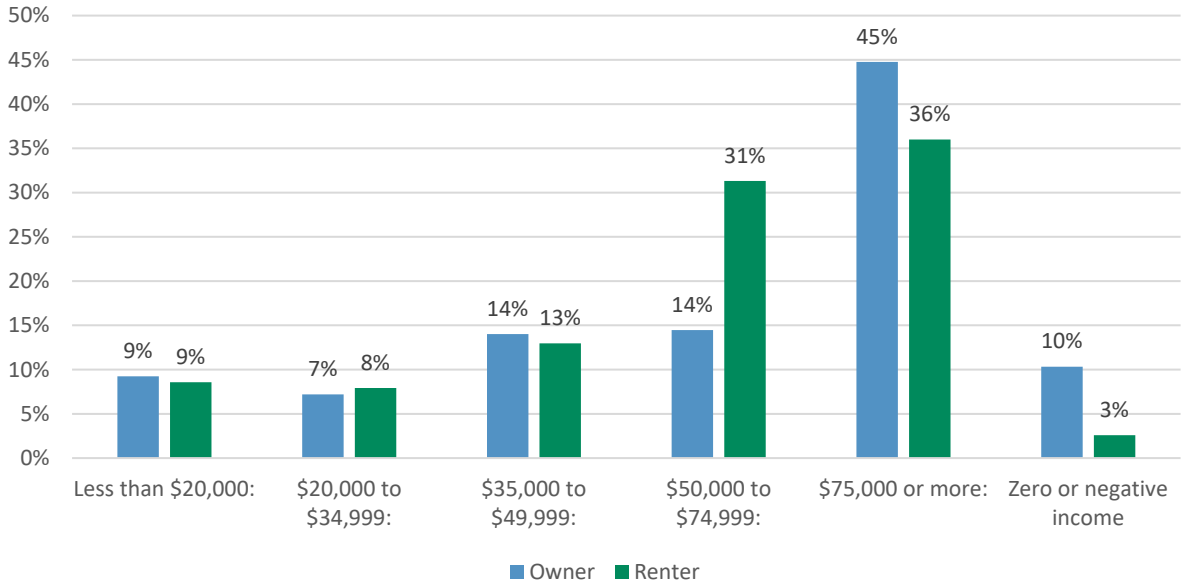

Figure 4: Percentage of owner- and renter-occupied households by income category
Source: 2023 ACS, 5-year estimates

3.4 Poverty rates

As shown in Figure 5, poverty rates inside Hazel Crest were relatively stable between 2014 and 2020, but have increased relatively significantly since 2020, aligning with the COVID pandemic. Poverty rates within Hazel Crest are higher than rates for Cook County, CNE, and Illinois for all years, but show a starker contrast between 2020 and 2023.

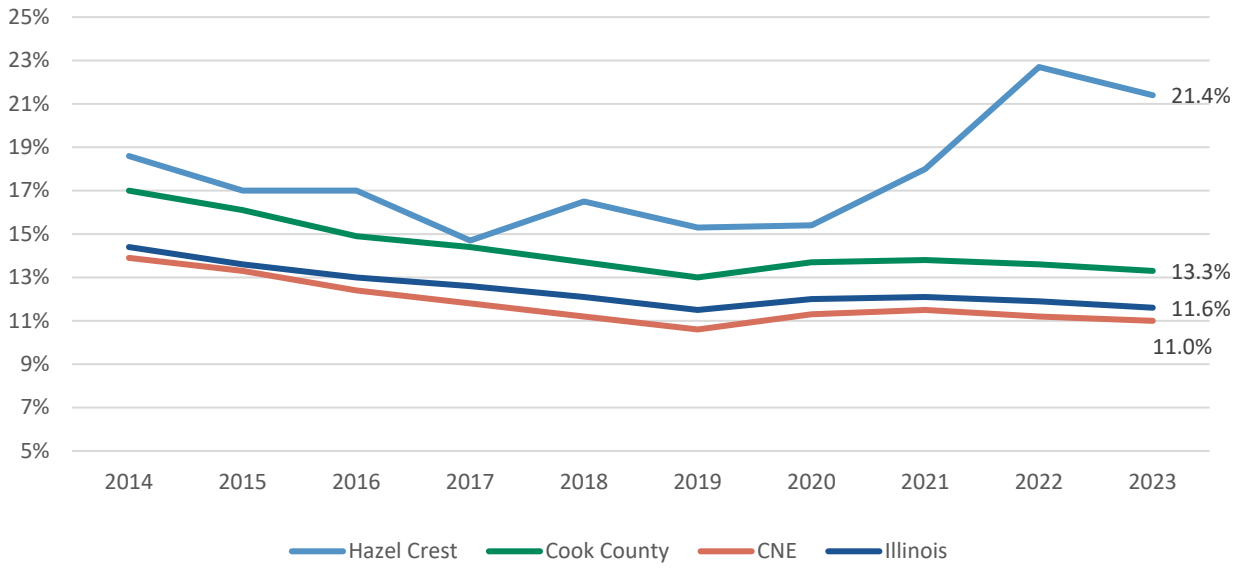

Figure 5: Percentage of population below Federal poverty threshold, Hazel Crest, Cook County, CNE, Illinois
Source: 2014 - 2023 ACS, 5-year estimates

Table 3 shows that the poverty rates for residents under 18 and residents 18 to 34 years old are higher for Hazel Crest than for Cook County and Illinois. Poverty rates are relatively equal for older age groups across the three geographic areas. As shown in Table 4, poverty rates are highest for Hispanic residents and residents of two or more races for Hazel Crest, followed by Black residents. For other geographic areas, poverty rates are highest for Black residents followed by Hispanic residents.

Table 3: Poverty rates by age, Hazel Crest, Cook County, CNE and the State of Illinois

	Hazel Crest	Cook County	CNE	Illinois
Under 18 years	35%	18%	15%	15%
18 to 34 years	24%	13%	12%	14%
35 to 64 years	11%	11%	9%	10%
65 years and over	13%	13%	10%	10%

Source: 2023 ACS, 5-year estimates

Table 4: Poverty rates by race, Hazel Crest, Cook County, CNE and the State of Illinois

	Hazel Crest	Cook County	CNE	Illinois
White	8%	7%	6%	8%
Black or African American	22%	24%	23%	25%
Hispanic	37%	14%	13%	14%
Other	16%	16%	15%	15%
Two or more races	44%	12%	11%	13%

Source: 2023 ACS, 5-year estimates

3.5 Unemployment rate

As shown in Figure 6, the unemployment rate for Hazel Crest over the past decade has been consistently higher than that for the County, CNE, and Illinois. Based on data from the U.S. Census ACS, the unemployment rate for Hazel Crest over the past 5-years has averaged 14.7% of the working age population, compared to 6.9%, 6.1%, and 5.8% for the county, CNE, and Illinois, respectively. Hazel Crest's poverty rate has also increased in recent years.

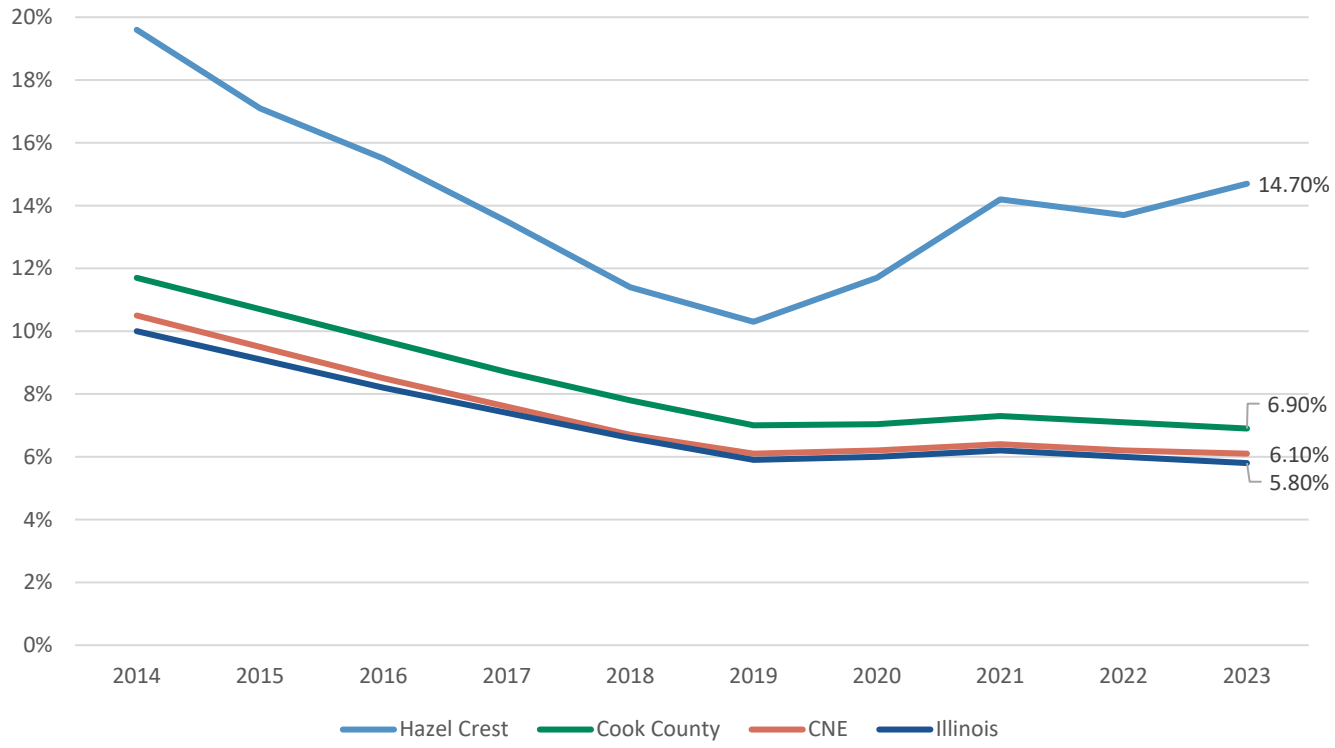

Figure 6: Unemployment rate for Hazel Crest, Cook County, CNE, and Illinois
Source: 2014-2023 ACS, 5-year estimates

3.6 Affordability challenges for low-income households

Affordability cannot be viewed solely in the context of water service provision and instead, should reflect a more complete characterization of the economic burdens households face. The cost-of-living includes non-discretionary spending for "essential" goods and services, such as housing, medical and childcare, food, and all forms of utilities. Affordability analyses should account for the multiple essential expenses households face, including water services. To consider only one of those costs in isolation would ignore the challenges of limited income households in allocating resources.

Based on BLS consumer expenditure data for the Midwest region of the U.S., Figure 7 shows average household expenditures (in urban areas) for basic expenses including food, shelter, utilities, and healthcare as a percentage of household income by income category. As shown, households in the lowest two income categories (which account for approximately 20% of Hazel Crest households) do not earn enough to cover basic expenses. Moving up the income scale, non-discretionary expenses still constitute a significant percentage of income for many households.

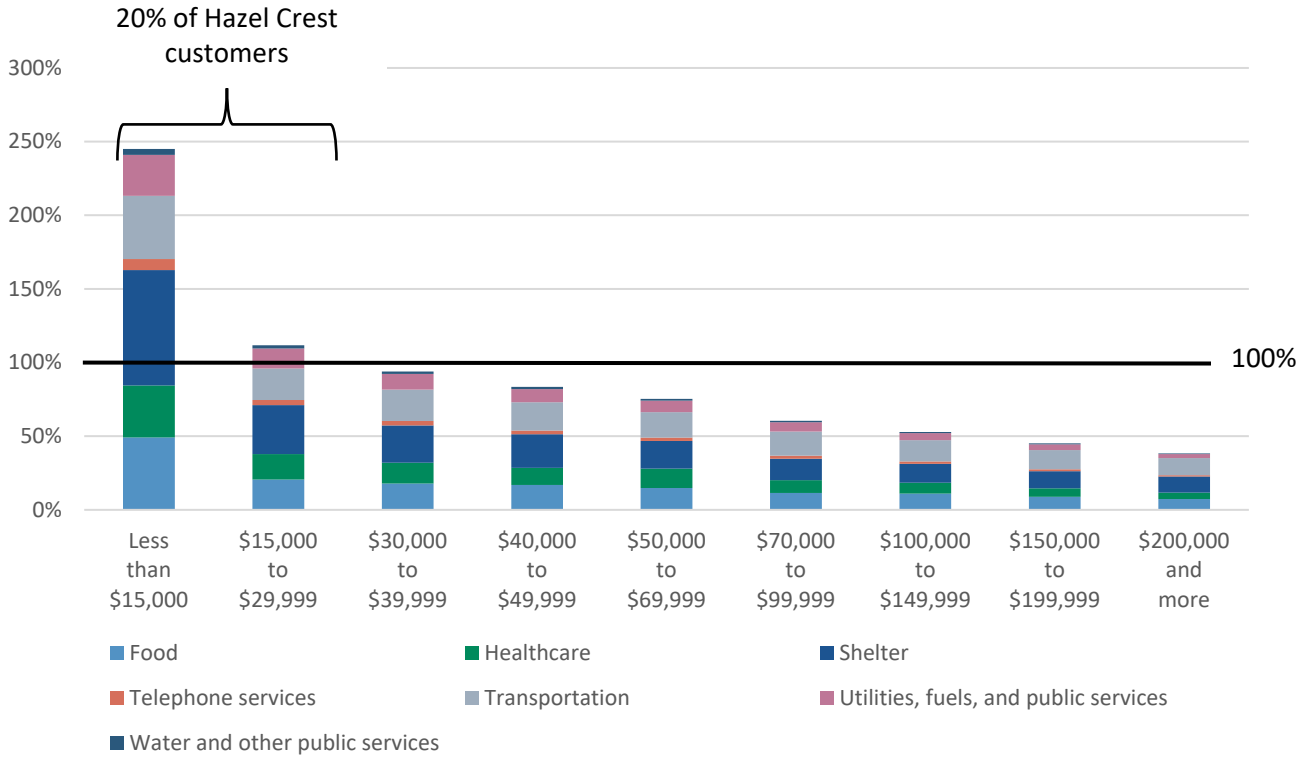

Figure 7: Select household expenditures as a percentage of household after-tax income, by income category, Midwest region of United States
Source: BLS CE 2023

The Living Wage Calculator, published by MIT and updated each year for every County in the U.S., provides further insights on affordability challenges for low-income households in Cook County. The Living Wage is a measurement that accounts for geographically specific expenditures to calculate the amount of money that an individual(s) must earn to be able to support themselves and their family. It differs from the Federal poverty

threshold in that it varies based on the ages and work status of household members and includes costs for food, childcare, health insurance, housing, transportation, and other essential items to determine the minimum employment earnings necessary to meet a family's basic needs. The living wage is intended to represent a minimum income standard that draws a line between financial independence of the working poor, and the need to seek assistance for food and housing insecurity.[6]

Table 5 shows the hourly wage equivalent for the Illinois minimum wage, and the MHI and 20th percentile income levels for Hazel Crest, compared with two metrics of liveability: 1) MIT's living wage metric for Cook County; and 2) 200% and 250% of the Federal Poverty Level. The household types considered for this sample include a single person household, a 2-person (both adults) household with one person working, and a 4-person household with two working adults and two children.

Table 5: Hourly wage comparison (per worker) for Cook County, IL

	1-person HH	2-person HH (1 worker)	4-person HH (2 workers)[a]
Minimum wage	$15.00	$15.00	$7.50
20th percentile upper limit ($28,487 annually)	$14.03	$14.03	$7.02
MHI ($64,306 annually)	$30.92	$30.92	$15.46
MIT Living Wage (Cook County)	$24.42	$33.36	$27.93
200% FPL	$14.48	$19.65	$15.00
250% FPL	$18.10	$24.57	$18.75

Source: MIT Living Wage Calculator

Results of this analysis indicate that across all household sizes, the minimum wage and 20th percentile incomes are not enough to meet basic needs in Cook County, according to MIT's living wage estimate. For families of 4 (with 2 kids), even the MHI is insufficient to achieve financial independence. In addition, while past studies suggest that that households must earn at least 200% of FPL to meet basic needs; this income level is lower than the MIT Living Wage Estimate.

3.7 Summary of socioeconomic characteristics and affordability challenges

Hazel Crest is a small, relatively economically disadvantaged community, with more than 20% of all residents earning less than 100% of the Federal poverty level. The MHI is lower than in many surrounding areas and has decreased over the past decade. While the lowest quintile income has increased in recent years, MHI and LQI remain well below those for the County and State overall. Data indicates that the lowest 20% of income earners

[6] MIT Living Wage Calculator. https://livingwage.mit.edu/

are unable to cover their basic expenses. Many households earning 200% of the poverty level or less (approximately 36% of Hazel Crest households) also do not earn enough to meet basic needs. These low-income households should be a key target for Hazel Crest for targeting affordability solutions.

Most residents of Hazel Crest live in single-family households, and a high percentage own their homes. These households are more likely to pay their water bill directly to PWD rather than through rent, meaning that they have a direct relationship with the utility. At the same time, a high percentage of homes in the Village (15%) are vacant (the national average is 10.4%); this means that PWD has fewer households over which to spread the costs associated with fixed utility assets and operations.

Table 6 provides a summary of key socioeconomic indicators.

Table 6: Summary of key socioeconomic characteristics for Hazel Crest

DATA	DESCRIPTION
Household type and tenure	• Mostly single-family (85%) • Mostly owned (70%) • 1/3 of population is elderly • There are 788 vacant residences (15% of total)
Income levels	• Median income $64k, about 20k less than surrounding county, city, and state area • 20% of residents make below $25k a year • 31% of residents make above $100k • MHI has decreased by 3% over past 10 years • LQI has increased by 26% over past 10 yrs
Poverty rate	• 21.4% of residents earn less than 100% of the FPL; 36% earn less than 200% • Has increased since 2020 at a higher rate than surrounding county, city, and state • Poverty rate is highest for population under 35 • Poverty rate is highest for Hispanic population and lowest for White population
Unemployment	• Higher than surrounding county, city, and state • Has decreased by 4% over past 10 years, while surrounding county, city, and state have seen a decrease of 35%
Affordability challenges	• Households earning less than $30k do not earn enough to cover basic expenses. This accounts for ~20% of the population • For families of 1, 2, and 4 people, the minimum wage and 20th percentile incomes are not enough to meet basic needs. For families of 4, even the MHI is not sufficient.

4 Affordability of Current Water and Sewer Rates

While it is important to understand the larger context of affordability challenges for low-income households, it is also important to understand the extent to which water sector services contribute to these challenges. This section presents several affordability metrics to help Hazel Crest's PWD better understand the impact of current water and sewer bills on households within the service area. First, we provide a brief background on affordability metrics, including the methods and metrics used in this assessment.

EPA initially developed household affordability criteria to identify when federal *wastewater*-related mandates might result in "undue economic hardship" within a community (EPA 1996, 1997). The objective of these criteria was to indicate when EPA might accommodate some flexibility for utilities striving to meet applicable regulatory compliance obligations. Known as the Financial Capability Assessment (FCA) Framework, EPA's criteria included metrics for assessing both residential customer affordability and utility capability for financing required investments. EPA's initial FCA framework focused on wastewater; however, as part of Integrated Planning efforts in 2012 and 2014, EPA indicated that the full costs of clean water services (including stormwater costs), may be included in FCA calculations. For this metric and context, a combined annual water and wastewater bill of less than 4.5% of MHI has traditionally been considered "affordable" (2.5% for water, plus 2% for wastewater services).

However, as extensively documented (AWWA, U.S. Conference of Mayors, and WEF 2013[7]; Raucher et al. 2019[8]), MHI (and EPA's RI) can be a highly misleading indicator of affordability and does not accurately capture the impact of water services on lower-income households. Further, EPA's metrics are intended for the specific purpose of assessing regulatory compliance for communities; they are not intended to help utilities understand and address affordability challenges. In recent years, several alternative methods for assessing household affordability and identifying potentially vulnerable populations have been introduced. EPA also recently released updated FCA Guidance that incorporates additional affordability metrics. To varying degrees, these metrics aim to better understand the household economic burden of water-related costs by accounting for the costs of other essential items, focusing on lower income households, and understanding the prevalence of affordability challenges in a community.

Table 7 provides a summary of the metrics we examined and/or applied to assess the affordability of current water and sewer bills within Hazel Crest, including how each is calculated, applicable thresholds, and relevant sources. Each metric is further explained in subsequent text.

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[7] U.S. Conference of Mayors, American Water Works Association, & Water Environment Federation, 2013. *Assessing the affordability of federal water mandates: An issue brief.* Available at: https://www.awwa.org/Portals/0/awwa/government/Affordability-IssueBrief.pdf.

[8] Raucher, R. 2019. Developing a New Framework for Household Affordability and Financial Capability Assessment in the Water Sector. Available at : https://www.acwa-us.org/wp-content/uploads/2019/05/Developing-New-Framework-for-Affordability-Report-Final.pdf.

Table 7: Summary of Affordability Metrics

Metric Name	Equation	Affordability Threshold
EPA-based metrics[1]	Wastewater/stormwater (WW/SW) + drinking water cost per household / MHI of service area	4.5% (2% WW/SW, 2.5% DW)
EPA LQPI[2]	Weighted average of six poverty indicator scores, with LQI accounting for half of weighted score	<1.5 (high impact) 1.5 – 2.5 (medium impact) >2.5 (low impact)
Household Burden Indicator (HBI)[3]	Basic water service costs (50 gpcd) / LQI[c] of service area	<7% (moderate-high burden) 7% – 10% (high burden) >10% (very high burden)
Poverty Prevalence Indicator[4]	% of households earning < 200% FPL	>35% (very high burden)
Teodoro Affordability Ratio (AR)[5]	Basic water service costs (50 gpcd) / Discretionary income of LQI	10% for customers at 20th percentile income, 4-person household
Hours of Minimum Wage Equivalent[6]	Basic water service costs (50 gpcd) / Hourly Minimum Wage Rate	8 hours, 4-person household

[1] Combines EPA Residential indicator (RI) and assessment of drinking water costs compared to MHI
[2] LQPI = Lowest Quintile Poverty Indicator (EPA 2024)
[3] HBI calculated for average household size; water service costs include costs for water, WW, and SW, assuming basic level of water use of 50 gallons per capita per day (gpcd, Raucher et al. 2019).
[4] FPL = Federal Poverty Level (Raucher et al. 2019)
[5] Basic water service costs include water/WW; discretionary income is defined as after-tax household income minus essential costs including shelter, health care, food and home energy (Teodoro 2018).
[6] Typically calculated for 4-person household; includes water/WW costs for 50 gpcd (Teodoro 2018).

4.1 EPA-Based Metrics (comparison to MHI)

Table8 shows the household sewer and drinking water bill associated with average residential water use in Hazel Crest (per account), at a billing rate of $11.78 per 1,000 gallons, compared to community MHI. Results are based on average household water use from 2020 to 2023. As shown, the typical sewer and water bill amounts to less than 1% of Hazel Crest MHI, which is below the affordability threshold of 2.5%.

Table 8: Annual water and sewer bills compared to MHI for Hazel Crest

	Average drinking water use (gallons/month/hh)	MHI (2024 $)	Annual sewer and water bill (per account)	Annual drinking water bill / MHI
Hazel Crest	4,184	$64,306	$591.50	0.92%

4.2 EPA Lowest Quintile Poverty Indicator

EPA's Lowest Quintile Poverty Indicator (LQPI) is a recommended indicator in EPA's Financial Capability Assessment Guidance (EPA 2024); it is intended to help assess the financial burden of Clean Water Act (CWA) requirements on low-income households in a community. The LQPI Score is calculated based on six indicators, most of which are benchmarked to national values (Table 9). The first indicator, which compares the upper limit of the LQI in a community to the national upper limit of the LQI is weighted more heavily than the other five indicators in EPA's scoring rubric. Importantly, the LQPI does not account for the cost of household water and sewer services in individual communities. It therefore provides more of a snapshot of community affordability.

Table 9: Percent Difference between Hazel Crest and National LQPI Values

LQPI metric	Hazel Crest	National	Difference
LQPI #1 Upper Limit of Lowest Quintile Income	$28,487	$32,232	-12%
LQPI #2 Percentage of Population with Income Below 200% of Federal poverty level	36%	28%	28%
LQPI #3 Percentage of Households Receiving Food Stamps/SNAP Benefits	19%	12%	53%
LQPI #4 Percentage of Vacant Housing Units	15%	10%	50%
LQPI #5 Trend in Household Growth	-1.1%	1%	N/A
LQPI #6 Percentage of Unemployed Population 16 and Over in Civilian Labor Force14	15%	5%	183%

Source: U.S. Census ACS 5-year average estimates

A LQPI score between 1.5 and 2.5 indicates medium impact in terms of affordability, while a score of less than 1.5 indicates a high impact. Hazel Crest's score of 1.6 falls right on the cusp of a medium/high rating (Table 10). EPA strongly encourages additional subsidy or grant consideration from governmental funding sources for entities that show a "medium" or "high" impact LQPI Score.

Table 10: EPA Lowest Quintile Poverty Indicator (LQPI) for Hazel Crest

LQPI metric	STRONG 3	MID-RANGE 2	WEAK 1	WEIGHT	Hazel Crest	Hazel Crest SCORE
LQPI #1 Upper Limit of Lowest Quintile Income	More than 25% above national LQI	±25% of national LQI	More than 25% below national LQI	50%	-12%	2
LQPI #2 Percentage of Population with Income Below 200% of Federal Poverty Level	More than 25% below national LQI	±25% of national value	More than 25% above national value	10%	28%	2
LQPI #3 Percentage of Households Receiving SNAP Benefits	More than 25% below national LQI	±25% of national value	More than 25% above national value	10%	53%	1
LQPI #4 Percentage of Vacant Housing Units	More than 25% below national LQI	±25% of national value	More than 25% above national value	10%	50%	1
LQPI #5 Trend in Household Growth	> 1%	0%- 1%	<0%	10%	-1.1%	1
LQPI #6 Percentage of Unemployed Population 16 and Over in Civilian Labor Force	More than 25% below national LQI	±25% of national value	More than 25% above national value	10%	183%	1
		Score for LQPI #1				**2.0**
		Average Score for LQPI #2 to #6				**1.2**
		LQPI Score				**1.6**

4.3 Household Burden and Poverty Prevalence Indicators

A report prepared for AWWA, WEF, and NACWA[9] proposed two key metrics for assessing household affordability: the household burden indicator (HBI) and the poverty prevalence indicator (PPI). The HBI reflects the economic burden of water services for low-income households. The PPI measures the degree to which low-income households are prevalent in a community.

The HBI considers annual water service costs (including water, sewer, and stormwater) associated with a basic level of use (50 gpcd) for the average household size, as a percent of the upper limit of the LQI. To calculate the HBI, we estimated water bills associated with a basic level of water use (50 gpcd) for an average sized household

[9]Raucher, R. 2019. Developing a New Framework for Household Affordability and Financial Capability Assessment in the Water Sector. Available at : https://www.acwa-us.org/wp-content/uploads/2019/05/Developing-New-Framework-for-Affordability-Report-Final.pdf

in Hazel Crest (2.86 people per household). As shown in Table , the HBI for Hazel Crest customers is 2.1%, which is below the threshold for high or very high burden. The total annual water bill is for water and sewer only, as Hazel Crest does not have a stormwater fee.

Table 11: HBI for average household size and use of 50 gpcd

Total annual water bill	Total bill/LQI
$614.91	2.1%

The PPI reflects the percent of the population living below 200% of the federal poverty level (FPL). The FPL provides a measure of income that corresponds to a minimum standard of living for different household sizes. This measurement is often criticized for being inadequate because the base data is outdated, and FPL does not account for geographic variations in the local cost of living. For Hazel Crest, the PPI is 36% of the population. Combined with the HBI, this PPI level indicates that Hazel Crest is rated with a moderate-high burden based on Raucher et al. 2019 (Table 12).

Table 12: HBI and PPI rating matrix for Hazel Crest

HBI (Water Costs as % of LQI)	PPI (Percent of Households Below 200% of FPL)		
	>=35%	20% to 35%	<20%
>=10%	Very High Burden	High Burden	Moderate-High Burden
7% to 10%	High Burden	Moderate-High Burden	Moderate-Low Burden
<7%	Moderate-High Burden	Moderate-Low Burden	Low Burden

4.4 Affordability ratio

As noted by the authors[10], a limitation of the HBI is that it does not account for non-discretionary expenses that lower income households face. However, households who struggle to meet basic needs face significant tradeoffs in the allocation of their budgets. To better understand the impact of household water and sewer bills within this context, researchers have developed metrics that compare household water service costs to discretionary income levels.

[10] Raucher, R. 2019. Developing a New Framework for Household Affordability and Financial Capability Assessment in the Water Sector. Available at : https://www.acwa-us.org/wp-content/uploads/2019/05/Developing-New-Framework-for-Affordability-Report-Final.pdf

Teodoro (2018)[11] developed the affordability ratio (AR), which compares the cost of basic water and sewer service (at 50 gpcd) for a given household size to household discretionary income. In this case, discretionary income is defined as after-tax income minus costs for essential items, including shelter, health care, food, and home energy, for households at the 20th percentile income. The ratio was developed to be applied to a 4-person household at the upper limit of the LQI but can be calculated for various household sizes and income levels.

Table estimates the AR for a 2-person household at the upper limit of the LQI for Hazel Crest. In 2023, the lowest 20% of income earners in Hazel Crest earned approximately $28,487 per year. Based on BLS Consumer Expenditure (CEX) data for the Midwestern region of the U.S., we estimate that a 2-person household in this income category spends approximately $19,530 per year for taxes, shelter, food, home energy, and healthcare. We use a 2-person household for this analysis because it is reflective of the size of average household in the CEX data for relevant income categories. Teodoro suggests a 10% threshold for the AR20 for a 4-person household; for a 2-person household, Hazel Crest's AR_{20} estimate is 5%.

Table 13: AR for Hazel Crest, 2-person household at 20th income percentile

	AR20 Inputs
Annual income (Hazel Crest LQI)	$28,487
Monthly gross income	$2,374
Monthly essential expenditures	$1,627
Ratio of essential expenditures to income	69%
Remaining monthly income	$746
Monthly water and sewer bill, basic use, 2 person HH	$35.34
AR - 2 person household	5%

Note: Essential expenditures represent average costs from the CEX for shelter, food, home energy, healthcare, and taxes for households earning $15,000 to 39,999, with an average household size of 1.75.

4.5 Hours of minimum wage equivalent

Teodoro (2018)[12] also developed the HM metric – the hours of labor at minimum wage (before taxes) required to cover basic household water and sewer costs. Table 14 shows the HM metric for a 2- and 4-person household assuming a level of basic use of 50 gpcd, and a minimum wage of $15 per hour for Cook County and the federal minimum wage of $7.25.[13] Again, there is no hard and fast threshold for this metric. However, Teodoro (2018)[14]

[11] Teodoro, M., 2018. Measuring Household Affordability for Water and Sewer Utilities. Journal AWWA.
[12] Ibid.
[13] Cook County Government. 2024. Cook County issues Notice to Minimum Wage Ordinance: Minimum Wage Reaches $15.00. Available at: https://www.cookcountyil.gov/news/cook-county-issues-notice-minimum-wage-ordinance-minimum-wage-reaches-1500#:~:text=Cook%20County%E2%80%94On%20December%202nd,and%20%249.00%20for%20tipped%20employees.
[14] Teodoro 2018. Op cit.

suggests a threshold of 8 hours per month for the HM for a 4-person household using 50 gpcd. This threshold is not exceeded for a 2- and 4-person household in Hazel Crest based on the Cook County minimum wage.

Table 14: Hours of minimum wage work to afford annual water bill

	Annual bill	Equivalent hours per month	
		Cook County minimum wage	Federal minimum wage
Basic use, 2-person household	$430	2	5
Basic use, 4-person household	$860	5	10

4.6 Summary of affordability metrics

As summarized in Table, Hazel Crest does not exceed most of the affordability thresholds associated within common metrics. This is largely because of the relatively low water and sewer rates that the Village currently charges. For example, while the demographic analysis shows that 20%, and up to 36%, of households likely face challenges paying for basic expenses, water and sewer costs as a percentage of incomes fall below established thresholds. The LQPI and PPI (highlighted in red in the table below) both reflect a significant prevalence of overall affordability challenges within the Village.

Table 15: Affordability metrics for Hazel Crest

Metric Name	Affordability Threshold	Hazel Crest
EPA Lowest Quintile Residential Indicator[1]	Household water costs >2% MHI (WW only) = High Impact > 4.5% MHI (water/WW) = High Impact	0.92% water/WW
EPA LQPI	Water and sewer costs compared to LQI: >2% = High Impact	1.5
Household Burden Indicator (HBI)[2]	Water/WW/SW bill to compared to LQI: 7% – 10% = High Burden >10% = Very High Burden	2.1%
Poverty Prevalence Indicator (PPI)	Percent of HH below 200% FPL: ≥ 35% = Very High Burden	36% (moderate to high burden)
Affordability Ratio (Teodoro 2018)3	Water/WW bill > 10% discretionary income for customers at 20th percentile income	5% for 2-person household at 20th percentile income
Hours of Minimum Wage Equivalent[4]	> 8 hours per month worked at minimum wage to afford water/WW bill	5 hours (4-person household, Cook County min. wage)

1. Represents household drinking water and wastewater costs associated with average water use.
2. Represents water and sewer costs for average household size assuming basic level of use of 50 gpcd.
3. Affordability ratio calculated for a 2-person household at the 20th percentile income (upper limit of LQI). Discretionary income includes LQI income minus expenses for health care, food, shelter, home energy, and taxes. Expenses based on BLS data for representative income category and the Midwestern region.
4. Calculated for a 4-person household assuming basic level of use of 50 gpcd.

5 Hazel Crest Qualitative Analysis Results

This section describes available water affordability offerings for Hazel Crest residents and presents results from the project team's qualitative analysis. The qualitative analysis included one-on-one interviews with Hazel Crest Public Works and community leaders in affordability challenges, and a survey of Hazel Crest residents. Survey and interview questions focused on the following topics:

- Affordability drivers/challenges paying water bill
- Awareness of, and experience with, affordability programs
- Types of assistance programs that would be helpful
- Communications with Hazel Crest PWD (both directions)
- Awareness of water usage and understanding water/sewer bills

5.1 Ongoing affordability programs

Currently, Hazel Crest PWD does not have an official financial assistance program for water and sewer bills. PWD does allow residents to develop a payment plan if they need more time to pay their water bill. For example, residents may pay a late bill over a three-month period (until their next quarterly bill). In some very rare cases, the utility can place a lien against the customer's home to pay the outstanding water bill. PWD does not advertise the payment plan option; however, staff will work with customers who contact PWD to let them know they are struggling to pay their bill.

Other agencies/programs in the area offer affordability assistance for qualifying Hazel Crest residents:

- The **Cook County Leak Repair Program (CCLRP)** provides free plumbing repairs and fixture upgrades to eligible residents to help save money on water bills. To qualify, households must live in an income-qualified Census tract or have a gross income of less than 120% of the Area Median Income. Qualifying households must also live in single-family homes or multi-family buildings with no more than four units. Owners and renters can both apply. Residents of Hazel Crest are eligible for the program, but the CCLRP recently stopped accepting applications because the waitlist has reached over 200 people. To date, the program has received 15 applications from the Village of Hazel Crest and Village of South Chicago Heights, combined.
- **Bremen Township,** which consists of 13 communities including Hazel Crest, offers water assistance to residents who have a disconnection notice before the disconnection date.
- **The Salvation Army** assists with water bills if Bremen Township clients meet their program eligibility criteria.
- **Thornton Township** also offers some affordability assistance for residents but the project team was not able to connect with staff to obtain details on available programs.

5.2 Qualitative analysis – resident survey and interviews

This section describes key findings from the project team's qualitative analysis, which focused on one-on-one interviews with Hazel Crest Public Works and local experts on affordability issues, as well as a survey of Hazel Crest residents. Subsections detail more specific findings.

Some key insights based on the survey and interviews include:

- **The affordability challenge:** Most survey respondents who had missed a water bill payment did so because of an inability to pay. The majority of respondents also indicated they are concerned with future water bill affordability and/or having their water shutoff in the future. Respondents and experts stated that affordability is a challenge in this area of Cook County because of the rising cost of living (including the cost of basic services), stagnant salaries, and silent leaks.
- **PWD communications:** Hazel Crest PWD has some room for improvement in formatting their water bills and communicating with residents to avoid late payments and water shutoffs. Most respondents find their water bill at least somewhat confusing and would like more detailed itemization covering usage rates, fee calculations, basic service charges, payment terms and late fees, and due dates. Many respondents who had struggled with late payments and water shutoffs indicated they were not communicated with in advance, or they forgot to pay. Experts confirmed that utilities in this area need to improve communications and employ more diverse communication channels. However, they recognized that utilities are also struggling with rising costs, infrastructure maintenance expenses, and limited staff capacity.
- Water affordability solutions:
    - Respondents were most interested in the following water affordability solutions:
        - Payment plan options
        - Improved communications on payment plan and affordability options
        - Switching to levelized or budget-based billing (where water use is averaged over a set period to create a consistent predictable monthly/quarterly payment) and/or from quarterly to monthly billing
    - Experts on local affordability noted best practices and/or expressed interest in the following affordability solutions for the region:
        - Improved communications with residents by employing several communication channels and options for paying bills
        - Piggybacking on communications around leaks and bills with information on affordability programs
        - Developing long-term plans for emergency funds to cover shocks
        - Having regional funds and collaboration opportunities
        - For utilities with customer assistance programs:
            - Automatic enrollment in payment programs for qualifying residents
            - Tying enrollment in water affordability programs to other affordability programs to reduce the administrative burden on residents.

5.2.1 Key findings from residential ratepayer survey

Overall, 42 residents responded to the survey. The MHI of respondents was $44,000, much lower than the MHI for Hazel Crest overall. With a small sample size, survey respondents are not representative of the overall population of Hazel Crest. However, respondents provided valuable input related to water bills, payments, and affordability.

- Payment and understanding of water bill
    - 75% of survey respondents reported paying their water bill in-person at the city office, while 20% pay through an online portal. The remainder pay through automatic bank withdrawals or through their rent.
    - 51% of respondents find their water bill somewhat to very confusing. The most confusing components are usage rates, basic service charges, fee calculations, and payment terms or late fees.
    - The most frequently suggested ideas for making Hazel Crest water bills easier to understand include itemizing bills and showing usage rates, fee calculations, basic service charges, payment terms and late fees, and due dates.

- Missed payments and water shut offs
    - 33% of respondents indicated they have had to miss a water bill in the last year, with 18% of respondents indicating they've missed a bill more than once.
        - For respondents who indicated they had missed a water bill at some point, 67% stated that it was because of an inability to pay. Factors that contributed to a lack of affordability included a water leak, a water bill being exorbitantly high (almost $600), and unemployment.
        - 22% of respondents who have missed a water bill report this was because they forgot to pay.
    - Respondents reported prioritizing mortgage payments, electricity/gas, food and basic supplies, over their water bill. Phone/internet, credit cards, medical bills, and other loans were prioritized after water bills.
    - 90% of respondents are concerned about being able to afford their future water bills. This is primarily because of increasing costs for basic expenses and other utilities, with several respondents stating their monthly pay is not increasing at the same rate.
    - 22% of respondents stated they have had their water service shut off, with most shut offs lasting less than a week. Reasons for shut offs have included missed payments (2), the respondent being unaware of an outstanding balance (2), and an administrative error (1).
        - Many of these respondents stated they were not communicated with in advance.
    - 73% of respondents state they are concerned about having their water shut off in the future.

- Water bill assistance
    - Respondents were asked to rank potential affordability solutions to help them better manage their water bills. Figure 8 presents the responses to this question.

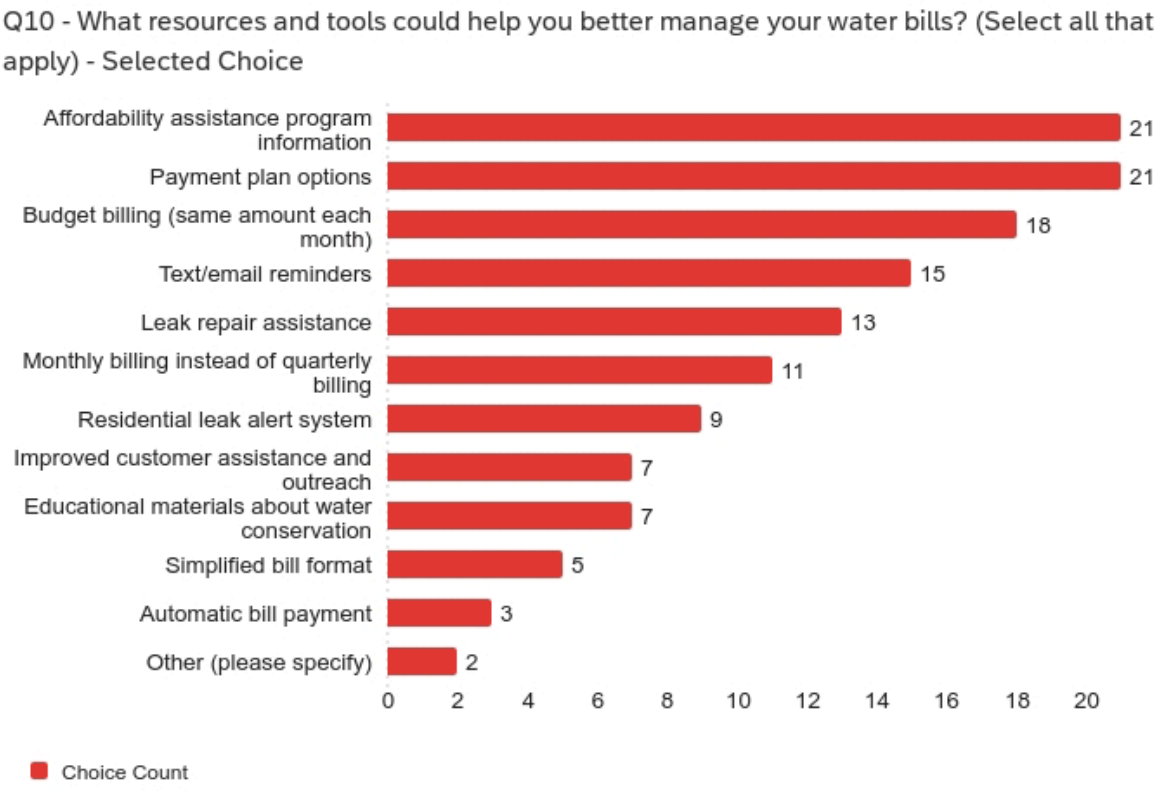

Figure 8: Hazel Crest survey respondents' ranking of affordability options

- 72% of respondents state that they have never received any information on affordability options or programs to help pay their water bill. For the five respondents who had enrolled in an affordability program, duration was less than a year and was considered helpful.
- Respondents were asked if they would be interested in donating to an affordability program that would help low-income customers pay their water bills: 16% of respondents stated “yes”; 16% of respondents stated “no”; and 68% of respondents stated they were “not sure.”

5.2.2 Key findings from interviews

The experts we interviewed had broad expertise on affordability issues and programs for Cook County, including but not limited to Hazel Crest and other water utilities. For the most part, experts confirmed findings reported elsewhere in this report and offered additional insights.

- Affordability challenges for water utilities
  - Like many areas of the country, water rates are increasing all over the county because of aging infrastructure and the need to replace lead service lines. Water utilities have varying ability to project future costs and to cover operating and maintenance costs.
  - Water utilities are also struggling to modernize their infrastructure and technology, specifically to deal with water leaks and improve customer outreach.

    - Water utilities in Cook County often lack expertise in water affordability analysis, and knowledge about the experience of not being able to afford water.
    - Water services in Cook County are very disaggregated across several utilities, making it hard to reach economies of scale in investments. Some smaller utilities have reported not being able to break even so they cannot afford infrastructure maintenance.

- Affordability challenges for residents
    - Many residents of Cook County are struggling to afford basic needs and services, and must often make choices between paying for healthcare, groceries, and their water bill.
    - Many residents are on a fixed income and/or experiencing gentrification in their neighborhoods. Residents are also experiencing rising property taxes, utility costs, and rising unemployment rates.
    - Many residents face challenges with silent leaks, sometimes receiving exorbitant water bills without knowing they had a leak. In addition, some residents cannot have leaks repaired because they have other utilities shut off.

- Barriers to implementing affordability programs / financial assistance
    - There is a lack of intentional outreach and evaluation of effectiveness by water utilities. Some utilities, including Hazel Crest PWD, intentionally do not advertise affordability options because of concerns around potential impacts on revenues.
    - There is often a lack of data tracking, including metrics like number of eligible customers for affordability programs.

- Barriers to residents for enrolling in affordability programs
    - Residents, especially elderly residents, single parents, and adults working more than one job, find it challenging to navigate affordability resources/program applications.
    - Some residents also lack internet and/or email access.
    - Water utilities often do not employ automatic enrollment in the area, but this has been found to be beneficial in states like California.

- Communication between residents and water utilities
    - Experts advised that utilities use standard water bills, websites and emails, and social media.
    - Hosting or leveraging community events, gatherings, and clubs (e.g., garden clubs, neighborhood safety teams), can help get the word out on affordability issues. It's important that water utilities develop relationships and have a presence with their customers.

- Water affordability options
    - Experts recommended a variety of affordability options:
        - Switch to monthly billing
        - Deploy AMI / smart meters
        - Improve data collection to better understand who is having affordability challenges
        - Automatic enrollment in payment programs for qualifying residents
        - Tie water affordability programs to other affordability programs.
        - Long-term plans for emergency funds to cover shocks
        - Regional funds and collaboration opportunities

        - Piggyback on communications around leaks and bills with information on affordability programs.
        - Improve communications with residents by employing several communication channels and options for paying bills. This includes advertising accessible payment plans
        - Allowing transfers between water funds and other municipal services (although the authors of this report note that this can create challenges for utilities if funds are directed from water funds to other municipal services, and can also create more competition for limited resources)
    - One expert believes there is a national move away from assistance based on age. The authors of this report agree with this assessment.

6 Water Affordability Action Plan

Based on results from the quantitative and qualitative analyses, we developed an initial set of affordability recommendations and reviewed them with PWD, discussing potential technical feasibility, implementation timeline and challenges, and cost considerations. We worked with PWD staff to evalute solutions against the following factors:

- Institutional/technical feasibility:
    - Definition: The likelihood of implementation of this solution based on current or projected staff expertise and capacity (or with additional funding), regulatory, legal or policy restrictions or opportunities, public and local stakeholder support, and software or operations limitations.
    - Ranking: Low, Medium or High feasibility of being implemented.
- Implementation time
    - Definition: Amount of time it would take the PWD team to implement this solution.
    - Ranking: Short (1 year), Medium (1-2 years), or Long (2+ years) to implement the solution.
- Cost considerations:
    - Definition: The relative cost to implement in considering the number of FTE staff and/or lost revenue. Estimated at a high level.
    - Ranking: Low, Medium or High cost to implement.

Final recommendations are divided into short-term, shovel-ready recommendations and then medium- and long-term recommendations. Table 16 provides an overview of the final affordability recommendations (high to medium/high priority) and PWD's ranking against the three criteria, as well as the final priority/timeline determination from the project team. The subsequent sections provide a brief description of each solution based on available resources, findings from this research, and the project team's expertise/experience. Note: Recommendations are numbered/identified based on whether they are recommended for short-, medium- or long-term implementation (S, M, L) and solution area category (1 – 6 – water loss through "other solutions").

Table 16: Summary of affordability recommendations, Hazel Crest PWD

Solution Area	Affordability Solution	Rec. #	Hazel Crest Public Works Inputs			Final determination - Priority/timeframe
			Feasibility	Timeline	Cost	
1. Water loss	A. Support or advocate for a regional leak alert repair program	S1A	High	Short	Low	High priority, short-term. Low relative effort with potentially significant impact for participating customers.
	B. Text and email alerts for high usage / leaks	S1B	Med/High	Medium	Low/Med	High priority, short term. Medium effort with potential to reach large number of customers/prevent costly bills, and increase collections
2. Billing/data management improvements	A. Consider monthly billing	M2A	High	Medium	Medium	Med/high priority, medium term. Should be evaluated within context of other rate/billing changes, including levelized billing.
	B. Education on water use through online portal (after installation of AMI)	S2A	High	Medium	Low/Med	High priority/short term. Low relative effort and can be done in tandem with new AMI system. Will reach broad range of customers that are online.
	C. Review existing bill format / better itemize to improve understanding of use.	S2B	High	Medium	Low	Medium/high priority, short term. Low relative effort but may take some additional resources to tie in with new billing system.
3. Customer service opportunities	A. Educate residents on new AMI system / opt in for text/email reminders	S3A	High	Medium	Low	High priority, short-term. AMI capabilities will allow customers to better understand their water use and identify ways to save water.
	B. Ensure adequate notice of shut offs and supplement notice letters with online notifications/reminders.	S3B	High	Medium	Low/Med	High priority, short-term. Significant impact for affected customers, provides customer opportunity to establish payment plan/avoid shutoff.
	C. Issue water bill payment reminders, ideally via text and/or email.	M3A	High	Medium	Med/High	High priority, medium term. Potential to enhance revenue stability, reduce collection costs, and serve as touchpoint on affordability communications.

Solution Area	Affordability Solution	Rec. #	Hazel Crest Public Works Inputs			Final determination - Priority/timeframe
			Feasibility	Timeline	Cost	
4. Water rate changes	A. Consider affordability friendly rate structures (e.g., lifeline rate, minimum first tier).	L4A	Medium	Long	Med/High	High priority, long term. Potential to more equitably distribute costs. Must be weighed w/in context of overall community ability to pay, affordability programs, and cost of service requirements.
	B. Develop a rate communication strategy	S4A	High	Long	Low	High priority, short-term. Clearly communicating need for pending rate increase and how it will affect customers is important part of broader affordability strategy.
5. Customer assistance programs (CAPs)	A. Formalize flexible terms/payment program for late payments/ arrearages	S5A	High	Medium	Low	High priority, short-term. Formalizing these offerings could increase reach and provide significant relief. Program would serve as a foundation for a broader future affordability strategy.
	B. Quantify cos of shutoffs/ arrearages and evaluate benefits of a bill discount program	M5A	Low	Medium	Low/Med	High priority, medium term. First step to developing more equitable rates and evaluating the potential for a low-income discount(or other affordability offerings).
	C. Temporary assistance	L5A	Medium	Med/Long	Med/High	High priority, long term. Hazel Crest's small size and high percentage of low-income customers present challenges for establishing a CAP. However, a well-designed program could improve collections, reduce shutoffs, and stabilize revenues. PWD should consider CAP options within context of pending rate increase and new AMI/billing system. Option(s) may require significant resources to establish but can offer meaningful relief and support long-term financial health.
	D. Offer bill discounts for low-income residents	L5B	Low	Long	Med/High	
	E. Target low-income customers for water efficiency installations	L5D	High	Long	Medium	
	F. Leak/plumbing repair assistance	L5E	Low	Med/Long	Medium	
6. Other solutions	A. Ban lien sales of homes based on water debt	M6A	Low	Short	Low	Med/high priority given the very low lien rate. However, potentially significant impact for affected customers.
	B. Eliminate late fees/penalties for low-income customers that cause debt to increase	M6B	High	Medium	Low/Med	High priority, medium term. Avoids adding costs to water debt. PWD already implements this solution to some extent to alleviate hardship.
	C. Formalize policy to limit shutoffs to Mon-Thurs	S6A	Medium	Short	Low/Med	Med/high priority. Short term. Ensures continuation of current/best practice.

6.2 Short-term, shovel-ready projects

This section identifies projects that are of high interest to Hazel Crest's PWD and have a high feasibility of being implemented by November 2026. PWD is currently in the process of installing Advanced Metering Infrastructure (AMI) and a new billing system, which will be integrated with Sensus Analytics online platform. They expect the system to be up and running by Fall 2026. AMI provides water utilities and their customers with data that can be used to lower water bills by detecting leaks, promoting conservation, and improving customer service. The real-time, two-way communication of AMI systems replaces manual meter reading with a more accurate process that benefits both utilities and ratepayers. There are several affordability solutions that can be implemented quickly once these infrastructure elements are in place, and these are categorized as short-term. This section also considers solutions that are not dependent on AMI and a new water billing system, but which can also be implemented quickly.

6.2.1 Water loss

S1A. Support or advocate for a regional leak alert and repair program

Description: Should the Cook County Leak Repair program receive additional funding and accept more participants, Hazel Crest PWD can increase awareness of the program for residents to improve participation. Alternatively, PWD can advocate with other water utilities to develop a new regional affordability assistance program focused on water loss and addressing water leaks.

No one utility in the region is necessarily better suited than another to lead this effort, as many seem to be constrained by limited staff capacity and resources, particularly those utilities participating in the Elevate Affordability program/assessment. As more of a regional agency, the project team recommends that Elevate (or similar agency/non-profit organization) consider leading and coordinating this effort across utilities.

For a program to be sustainable, it is necessary to have sufficient funding and resources. Important elements of advocating for countywide funding include making the business case for such a program. This may include quantifying the prevalence and costs associated with household leaks, demonstrating affordability benefits for low-income households, and estimating savings (e.g., reduced emergency repairs, lower arrears, avoided water loss).

Another potential element is to link the program to other county goals and initiatives – for example, affordable housing, sustainability, and public health. Leveraging partnerships with relevant agencies could potentially help to leverage additional funding sources.

Local utilities (and Hazel Crest in particular, as it is in the process of implementing AMI) are well suited to identify customers who may be in need of leak repair services, and as detailed below, can leverage their new AMI system to reduce damages associated with ongoing leaks.

Estimated cost/level of effort: Relatively low for Hazel Crest PWD; would require third-party organization/funding and resources to coordinate across utilities.

Priority/Impact: High priority. While efforts toward implementation could be taken in the short term, such a program may not provide significant cumulative benefits for some time. However, the program does make a significant difference for the customers it serves.

S1B. Text and email alerts for high usage / leaks

Description: Hazel Crest PWD should work to ensure they have updated and accurate contact information for customers and issue leak alerts via text and email. PWD already plans to do a complete audit of customer accounts once new meters are installed. Staff indicated that while they believe Sensus Analytics' water billing software system will provide them with capability to proactively warn customers about high usage and/or leaks, they are not yet sure how this will work or what additional actions will be needed. Sensus Analytics does offer a Service Management Application that allows utilities to manage meters remotely and monitor them in real time.

Estimated cost/level of effort: Low/Medium, if implemented with new AMI program

Priority/Impact: High priority. High usage and leak alerts have the potential to provide significant savings to affected customers by preventing more costly damage and high bills. This program will be facilitated with the adoption of AMI and new billing system.

6.2.2 Billing or data management improvements

S2A. Education on water use through online portal (after installation of AMI)

Description: In addition to more timely water leak alerts, the AMI system and associated online portal provides an opportunity to engage and educate residents on their water use. Sensus Analytics services include an online customer portal that allows users to view daily water use, set leak/high usage alerts, and access conservation tips and usage trends. This recommendation will be enhanced by recommendation 3A, related to educating residents on the new AMI system.

Estimated cost: Low/Medium, if implemented with new AMI program

Priority/Impact: High priority. While additional information on water use may not directly impact affordability, it does allow users to identify potential ways to reduce their bill. Communication and access to this information can increase trust in the utility and serves as a foundation for a larger affordability strategy. This action also will likely require low additional effort, as the AMI system and Sensus software is already being installed. It is best to take advantage of the new system and integrate new processes upfront. This recommendation should be a "quick win."

S2B. Review existing bill format and determine if it can be better itemized to improve understanding of use and to provide information on water use.

Description: For customers who may not access the online system, paper bills could be improved to provide customers with more information on their water use and related charges. As noted above, 51% of survey respondents indicated they did not find their water bill very clear and easy to understand. Providing more detailed water bills may help improve understanding of water usage and rates. Residents indicated they would like to see the following components covered on their bill:

- Current and historic usage rates
- Basic service charges

- Fee calculations
- Payment terms and late fees
- Due dates
- Instructions on how to dispute a bill or access resources/payment plan

Note that the current bill, which is sent as a postcard (see Figure 9), does provide some of this information.

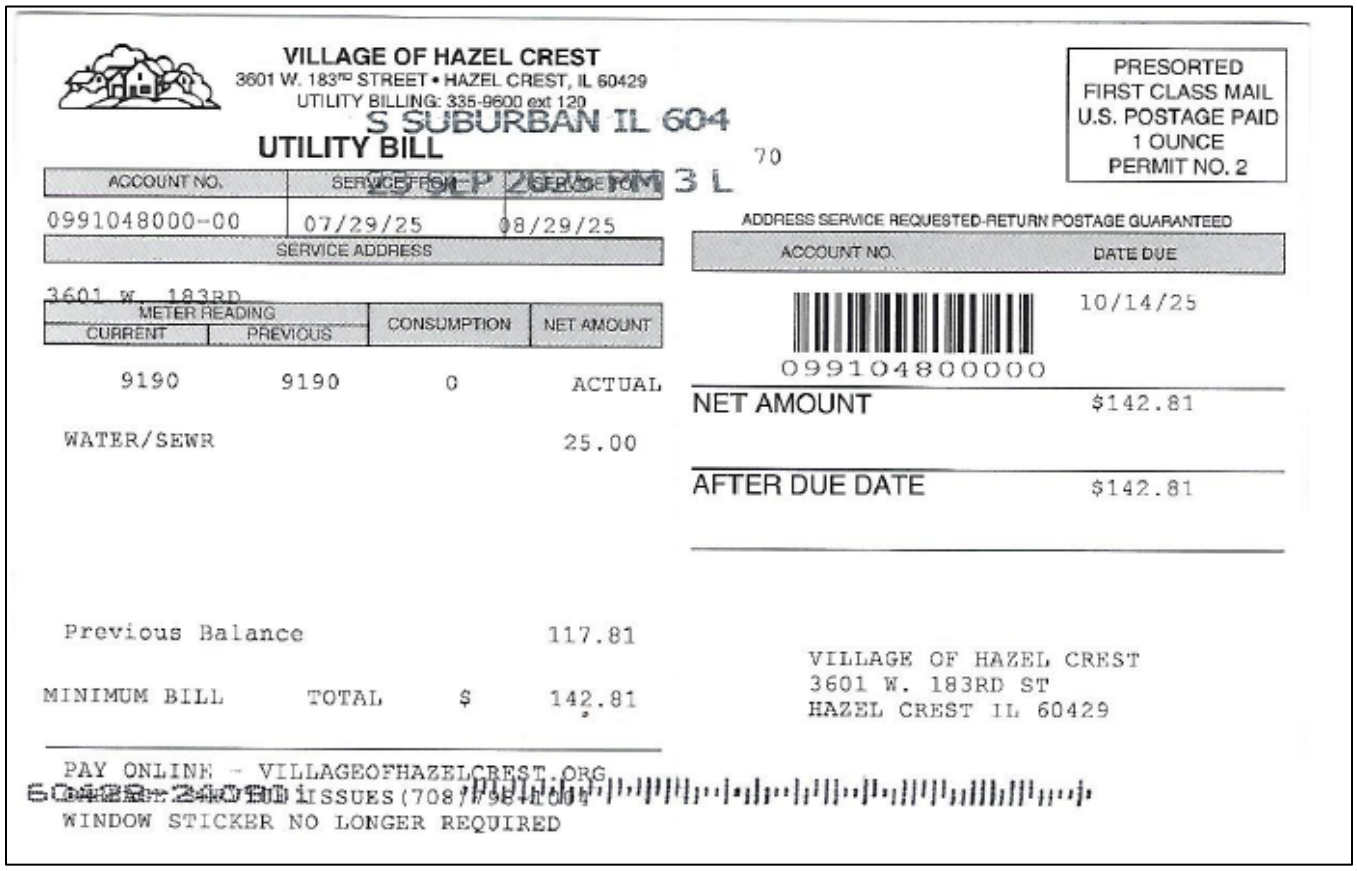
VILLAGE OF HAZEL CREST
3601 W. 183RD STREET • HAZEL CREST, IL 60429
UTILITY BILLING: 335-9600 ext 120
S SUBURBAN IL 604
UTILITY BILL
70
PRESORTED
FIRST CLASS MAIL
U.S. POSTAGE PAID
1 OUNCE
PERMIT NO. 2
ACCOUNT NO. | SERVICE FROM | SERVICE TO
0991048000-00 | 07/29/25 | 08/29/25
SERVICE ADDRESS
3601 W 183RD
METER READING CURRENT | PREVIOUS | CONSUMPTION | NET AMOUNT
9190 | 9190 | 0 | ACTUAL
WATER/SEWR 25.00
ADDRESS SERVICE REQUESTED-RETURN POSTAGE GUARANTEED
ACCOUNT NO. | DATE DUE
10/14/25
099104800000
NET AMOUNT $142.81
AFTER DUE DATE $142.81
Previous Balance 117.81
MINIMUM BILL TOTAL $ 142.81
VILLAGE OF HAZEL CREST
3601 W. 183RD ST
HAZEL CREST IL 60429
PAY ONLINE - VILLAGEOFHAZELCREST.ORG
ISSUES (708)
WINDOW STICKER NO LONGER REQUIRED

Figure 9. Example Hazel Crest water/sewer bill.
Source: Provided by Hazel Crest PWD

In addition, a best practice in the industry is to compare water use to similar households, to usage at the same time last year, and/or to average overall household use. Once the AMI program and new software system is up and running, this information should be relatively easy to provide.

Estimated cost: Low/Medium. Additional information on the bill could require bills to be larger in format (e.g., mailed in an envelope), which would increase costs. Initial costs associated with selecting information and bill formatting should be relatively low.

Priority/Impact: Med/High priority. While additional information on water use may not directly impact affordability, it does allow users to identify potential ways to reduce their bill. Communication and access to this information can increase trust in the utility and is part of the larger affordability framework. This action will require a bit more effort to merge with the AMI and new billing system and is therefore rated as medium/high priority.

6.2.3 Customer service opportunities to improve affordability

S3A. Educate residents on new AMI system / opt in for text/email reminders

Description: PWD has not yet issued educational materials or alerts to residents about the AMI system. PWD could offer a Town Hall, attend other community meetings, send out information with upcoming water bills, update the Village website, and leverage additional communication channels to alert residents on the benefits of AMI, including how it can help them reduce their water bills, increase visibility on water usage and bills, and allow for quicker and easier payment options (when tied into new billing system), among others. Educational campaigns should include avenues for residents to opt in to bill reminders/leak alerts via text and email. The timing of this campaign should be paired with educational efforts related to expected rate increases (see Recommendation 4A) and affordability options.

Estimated cost: Medium.

Priority/Impact: High priority. AMI capabilities will allow customers to better understand their water use and identify ways to save water. Communication and access to this information can increase trust in the utility and serves as a foundation for a larger affordability strategy. Should be implemented as part of comprehensive rate communication and affordability strategy.

S3B. Ensure adequate notice of shutoffs and supplement notice letters with online notifications/reminders

Description: While PWD does send shutoff notices in advance of a potential shutoff, 63% of survey respondents who have had their water shutoff stated that they did not receive communication from the utility beforehand. While unclear, this may be because of issues with mail / postal service in general.

Hazel Crest PWD has an opportunity to provide additional outreach regarding shut-off notifications, including via text, email, and/or phone, as a supplement to letters. Relevant contact information for customers should be collected as part of the account audit that PWD plans to conduct with the adoption of the AMI system, related software, and new billing system.

Estimated cost: Low/Medium

Priority/Impact: High priority. Adequate notice of a potential shutoff can provide customers an opportunity to communicate with the utility, establish a payment plan, and/or otherwise put together the resources to pay their bill. High impact for affected customers.

6.2.4 Water rate changes

S4A. Develop a water rate change communication strategy

Description: As noted above, PWD is currently working with the Delta Institute to conduct an evaluation of its current rates and establish necessary rate increases. In advance of implementation, PWD should develop a comprehensive communication strategy regarding the need and benefits of rate increases and how the change will affect customers. As we have recommended strategies related to specific affordability strategies (e.g., flexible terms, formalized payment program), these options should also be clearly communicated.

Communicating water and sewer rate increases is challenging. The key is to lead with transparency, empathy, and a clear connection to community benefits.[15] This means explaining the need for increases, offering support options, and showing how the investment translates into better service, infrastructure, and equity. Key elements of a comprehensive rate communication strategy typically include:[16]

- Explain the "why": Link rate increases to specific improvements like pipe replacements and water loss reduction or leak repair programs.
- Be transparent by explaining where the money goes, especially toward long-term system health and reliability.
- Offer support options, including payment plans and other affordability resources.
- Send the message across multiple channels: Use fact sheets, town halls, social media, and the Village website to reach diverse audiences.
- Ensure staff and board members have consistent, empathetic talking points. Develop key talking points, anticipate tough questions and responses.
- Use a consistent/shared message plan across all departments and channels.
- Track feedback and adjust messaging as needed.
- Share updates and results from projects funded by the rate increase.

It is important to note that a rate communication strategy should not be a one-time engagement. Rates and the importance of investments in water infrastructure should be continuously communicated to customers.

Estimated cost: Medium

Priority/Impact: Given the pending rate increases, and the fact that rates have not increased in 13 years, developing a rate communication strategy is high priority. Clearly communicating the need for rate increases and how they will affect customers is important for building trust, an essential foundation for an overall affordability strategy.

6.2.5 Customer assistance programs

S5A. Formalize payment program for late payments/arrearages, consider some level of debt forgiveness or incentive for participants enrolled in program

Description: Formal payment plan programs can improve payment consistency (which helps to stabilize utility revenues), increase collections, and reduce administrative costs associated with late payments and shutoffs. Recent success stories include utilities using online software programs, such as PromisePay, to allow customers to enroll in payment plans to reduce their water debt.[17] In many cases, this has resulted in measurable financial benefits for utilities and customers. While many of these examples are for utilities with much larger service

[15] Willis and Kimble. 2017. Setting Rates; What's appropriate and how to communicate with customers. Presentation: https://www.epa.gov/sites/default/files/2018-02/documents/setting_rates_what_is_appropriate.pdf

[16] Pereira and Moore. 2025. How to tell customers you're increasing rates without losing their trust. Available: https://www.esource.com/how-to-tell-customers-increasing-rates,

Alliance for Water Efficiency. Protocol and Guidelines for Using AWE's Water Rates Message Plan. Available: https://allianceforwaterefficiency.org/wp-content/uploads/2024/09/AWE-Message-Protocol-QAs_FINAL.pdf

[17] Promise Pay website provides several utility examples. Available: https://www.promise-pay.com/utilities

areas, we recommend that PWD take small steps to formalize payment program options for customers with arrearages and/or facing difficulties paying their bill on time.

PWD does currently work with customers to establish flexible payment options. However, options are somewhat limited. For example, typically residents are provided an additional billing period to pay an overdue bill (i.e., until their next quarterly bill). PWD does not advertise the payment plan option; it is generally limited to customers who contact PWD to let them know they are struggling to pay their bill.

We recommend that PWD enhance its current program / informal policy by establishing a formal and proactive payment plan option with the following elements:

- Allow customers to push back payment date by up to ten days without late fees. Based on our experience working with utilities, low-income customers often need some additional time to make a payment – e.g., until the next paycheck or time to reallocate spending. Allowing for some flexibility in payment date can provide relief in these circumstances. Currently, PWD initiates a shutoff two weeks after a bill is due and remains unpaid. This process could commence after the ten-day period for customers who arrange a different date. This option should be advertised / communicated as part of an overall flexible payment/payment plan option.
- Continue with current strategy of allowing payments to be made the following quarter, for customers unable to pay their bill. Advertise as part of overall flexible payment/payment plan option.
- Establish a formal payment plan for arrearages. As an example, the City of Chicago's Utility Billing Relief (UBR) Program works with customers who have built up water debt to establish a payment plan. Their debt does not accumulate fees while they are enrolled in the program, and they are protected from shutoffs. Customers in the UBR Program also receive a discount on current bills and if they pay their bill on time for a year, their past debt is forgiven. The program operates in partnership with the Community & Economic Development Association (CEDA) of Cook County, which also operates LIHEAP in Chicago.[18] Despite several attempts, we were unable to reach CEDA as part of this study, but there may be opportunity for them to assist Hazel Crest with a similar program.
- While Hazel Crest PWD is not ready to take the step of providing bill discounts to low-income customers, we do encourage them to incorporate some level of incentive or debt forgiveness as part of their formal payment plan program. For example, for every dollar paid toward past debt, $0.50 is forgiven, or like Chicago, some percentage of debt (or the full debt) could be forgiven for customers who make on-time payments for a set period.
- We also recommend that Hazel Crest PWD evaluate how their new billing system might help them easily identify residents with high water debt or with a history or non-payment/partial payment, allowing for proactive outreach. The formalized payment program should be integrated into the new billing system.

[18] U.S. Water Alliance. 2022. Addressing Customer Debt: Guidance for the Water Sector. Available: https://uswateralliance.org/wp-content/uploads/2023/09/Addressing-Customer-Debt-Guidance-for-the-Water-Sector.pdf

Estimated cost: Uncertain, depending on administrative and communications cost to establish the program, including if income verification is needed. Once implemented, PWD should track program success in terms of increased cost recovery, reduced delinquent payments, reduced shutoffs (and associated costs).

Priority/Impact: High priority. Formalizing flexible terms and payment plan offerings could provide significant relief to affected customers. Establishing the program could serve as a foundation for a future affordability strategy that encompasses medium- and long-term recommendations outlined in this report.

6.2.6 Other solutions

S6A. Formalize internal policy to limit shutoffs to Monday through Thursday

Description: PWD currently does not have any shut-off exemptions but is in the practice of only conducting shutoffs Monday through Thursdays so that residents are not left the weekend without water or faced with paying higher fees for reconnection (which apply on Saturday / Sunday). We recommend PWD formalize this as an internal policy to ensure this practice continues in the future.

Estimated cost: Low/minimal

Priority/Impact: Med/high priority. Relatively low impact in the short-term as this ensures continuation of a current/best practice.

6.3 Medium-term recommendations

6.3.1 Billing or data management improvements

M2A. Consider monthly billing

Description: Currently, Hazel Crest PWD bills residents quarterly resulting in less frequent, but higher bills. While this reduces administrative and operational expenses for the utility, many survey respondents and PWD themselves indicated they would be interested in monthly billing. Monthly billing provides customers with a smaller, regular monthly bill which is often easier to plan for, budget, and pay. Monthly billing also could enable PWD to send out more regular correspondence such as bill inserts and messages about beneficial tips for conserving water, fixing leaks, information about affordability options, and the latest news on infrastructure improvements.

One challenge for PWD in switching to monthly billing will be that many residents currently do not pay their bills online and their staff has limited capacity to process more frequent water bills. However, PWD could install kiosks in their lobby to allow for payment which would reduce burden on their staff to process water bills more frequently.

Estimated cost: Medium.

Priority/impact. Med/High priority. Monthly billing allows low-income households to better plan for monthly expenses and pay water/sewer bills in smaller, potentially more manageable amounts.

6.3.2 Customer service opportunities to improve affordability

M3A. Issue water bill payment reminders

Description: Twenty-two percent of survey respondents who missed paying a bill in the last year indicated that they did so because they forgot to pay; another 11% stated they missed paying a bill because they did not receive it. Issuing water bill payment reminders through multiple means (e.g., letters, texts, voicemails, and emails) can reduce the number of missed payments, which in turn can help stabilize revenue collection and reduce other utility administrative costs. They can also provide customers facing affordability challenges an opportunity to contact PWD to establish a flexible payment arrangement or payment plan. Finally, it provides another opportunity for PWD to communicate about easier payment methods (automatic payment, online portal) and affordability options.

Currently, PWD does not issue water bill payment reminders, but their new water billing system has the potential to automate this process. As noted in other recommendations, PWD will be updating contact information and new methods of communication will be adopted.

Estimated cost: Medium. Some late payment reminders may be easily sent via email or text once automated communications are in place. However, many may still need to be mailed to customers who do not access the online portal/communications.

Priority/Impact: High priority. Has the potential to provide multiple benefits to customers and PWD.

6.3.3 Customer assistance program

M5A. Conduct business case assessment to quantify costs associated with shutoffs/arrearages and evaluate the benefits of a bill discount program for low-income customers.

Description: Costs of shutoffs and arrearages are not currently expressly delineated in Hazel Crest's current Water and Sewer fund account. Late fees and fees for reconnection of service are currently charged to the customers who are late on their bills or who experience a shutoff. However, some argue that the costs of maintaining water services for all households (i.e., avoiding shutoffs) should be included in the cost of service for all customers because it ensures a broader public benefit. Including these costs in rates charged to all customers can reduce the burden on low-income households, while ensuring that PWD's total costs are fully and fairly covered. At this juncture, we recommend that PWD work to better understand these costs and how they are distributed.

In addition, while Hazel Crest PWD has indicated it is not yet ready to implement a bill discount program, we recommend that they begin to study the potential benefits a program might offer. The Natural Resources Defense Council (NRDC) recently (2023) developed a tool to help water utilities make the business case for affordability programs, with aim of supporting development of low-income discount programs by demonstrating the cost of unaffordable water bills. The premise of the tool is that a utility's ability to fund operations, maintenance, and improvements to their infrastructure is threatened when people cannot afford to pay their water bills. Unaffordable bills result in unreliable payments from customers; this in turn can increase costs

associated with collections, shutoffs, and other aspects of financial management.[19] The project team was not able to collect sufficient data to apply the tool to Hazel Crest; however, this data could be developed over time.

A key challenge for Hazel Crest is that a high percentage of residents are disadvantaged. In addition, the community is relatively small. Any changes to rates or low-income assistance must ensure that the total cost of service is collectively covered. This may limit the flexibility for rate changes and the ability to provide comprehensive customer assistance programs.

Estimated cost: Medium

Priority/Impact: High priority. While an initial study will not directly impact affordability in the near term, it is a first step to developing more equitable rates/rate structure and evaluating the potential for a low-income bill discount or other affordability program.

6.3.4 Other solutions

M6A. Ban lien sales of homes based on water debt

Description: Even though PWD rarely engages in liens as a method of water bill payment, they can ban the sale of liens on homes. In many areas, liens can be sold to third parties. This can trigger additional fees, interest, aggressive collection tactics, and additional legal fees, and/or can lead to foreclosure and eviction. Banning the sale of liens can prevent home loss for low-income households. It is not clear if Hazel Crest already has a ban on the sale of liens in place.

Estimated cost: Low

Priority/impact: Med/high priority given the very low lien rate. However, potentially significant impact for affected customers.

M6B. Eliminate late fees and penalties for low-income customers that cause debt to increase

Description: PWD can remove or reduce reconnection fees and late fees for low-income residents to avoid adding to their water debt and monthly financial obligations. PWD already implements this solution to some extent to alleviate hardship.

Estimated cost: Low/medium

Priority/impact: High priority. As described earlier, these costs could be recovered through a more equitable distribution of costs/alternative rates. Positive effect on affected customers who face increasing costs the longer a bill goes unpaid or a shutoff occurs.

[19] Environmental Financial Advisory Board. 2025. Advancing Water Affordability Nationwide: A Framework for Action. Available : https://www.epa.gov/system/files/documents/2025-01/efab-water-affordability-report.pdf

6.4 Long-term recommendations

6.4.1 Water rate changes

L4A. Consider/evaluate affordability-friendly rate structures

Description: Based on the earlier analyses in this report, we estimate that 20% to 30% of Hazel Crest's residents are struggling to afford basic services. Hazel Crest will likely be implementing rate increases that will exacerbate challenges for these customers. Currently, Hazel Crest charges a volumetric fee for water, with a minimum charge of $25, which covers a nominal level of use that is difficult not to achieve. This structure is beneficial because it allows customers to make changes that directly reduce their bill. In the future, Hazel Crest may want to consider alternative rate structures and/or the development of different rates for different customer classes (although only a small portion of accounts are non-residential) that provide additional affordability benefits. Example rate structures that can support low-income households include:

- *Increasing block rates:* This option can enhance affordability by providing a first block or tier that covers a basic level of water use at a lower price. This is not a complete solution in that it will not cover every scenario. For example, larger low-income households or low-income households living in older buildings with leaks that are costly to repair (or beyond their control because they are renters), may not be able to keep their water use to within the first tier. However, in many cases increasing block rates can provide a critical level of water security by offering lower costs to all customers for a level of basic use.
- *Individualized lifeline rates:* Establishing individualized lifeline rates based on a water budget can overcome some of the challenges associated with higher water use by low-income households. For example, some utilities, such as Denver Water, rely on average monthly water use in the winter (or a portion thereof) to establish a customized first tier for individual customers. In areas where little water use occurs outdoors in colder months (such as in Cook County), this can serve as a proxy for a baseline level of indoor use. This approach can have the unintended consequence of discouraging indoor water conservation but is also a more equitable way to offer lifeline rates. Other utilities have used property characteristics (e.g., irrigable area, frontage) to establish water budgets for a first tier.
- *Class-based volumetric rates and seasonal rates*: rates that increase water rates in summer months, while not specifically designed to address affordability, may have ancillary benefits by potentially shifting revenue responsibilities to customers with larger outdoor water use. In addition, charging higher rates to customer classes that place more demand on the system (e.g., through higher peak volume demands) can be more equitable.
- *Levelized billing (ideally paired with monthly billing).* A high percentage of survey respondents indicated that they would be interested in levelized billing as a potential affordability strategy. Levelized billing is a payment program that smooths out seasonal fluctuations by averaging a customer's water bills over a rolling 12-month period, resulting in more predictable payments. Predictable bills make it easier to stay current, reducing the risk of service interruptions. Levelized billing is common in electric and gas utilities but has increasingly been offered by water providers seeking to improve affordability.

A key challenge for Hazel Crest is that a high percentage of residents are disadvantaged. In addition, the community is relatively small. Any change to rate structures must ensure that the total cost of service is

collectively covered. This may limit the flexibility for rate changes and the ability to provide comprehensive customer assistance programs.

Estimated cost: Medium/High

Priority/impact. High priority. Immediate changes to the rate structure may be difficult. Hazel Crest is interested in first passing its pending rate increase and re-evaluating rate structures over the longer term. Examining the potential for more equitable distribution of costs could enhance affordability for many customers.

6.4.2 Customer assistance program

As noted above, a significant portion of Hazel Crest residents face economic hardship and the community is relatively small size; these factors present unique challenges for affordability program design. Any program must be carefully evaluated to ensure it does not compromise the utility's ability to recover the full cost of service or inadvertently create affordability issues for households just above the qualifying income threshold. These constraints may limit the scale or structure of potential programs.

However, as outlined in Recommendation M5A, a well-designed low-income assistance program can yield multiple benefits—including improved collections, reduced shutoffs, and more predictable revenue streams. The following menu of program options is recommended for Hazel Crest's consideration after the rate increase is implemented, and the new AMI and billing system are in place. While each option may require significant resources to establish, they offer the potential for meaningful relief for low-income customers and support long-term financial and operational stability. To select relevant options, PWD should carefully evaluate each to assess need, understand financial implications, and identify customers most in need of assistance to whom the program could be targeted.

L5A. Offer temporary billing assistance

Description: Provide short-term or one-time support to households experiencing unexpected hardship—such as job loss, medical emergencies, or domestic crises—regardless of income level. Assistance may include bill credits, partial forgiveness, or waived late/reconnection fees. Often referred to as emergency or crisis assistance, this program helps prevent disconnection and supports customers during transitional periods.

L5B. Offer bill discounts for low-income residents

Description: Offer a percentage-based or flat rate bill discount to income-qualified customers (best practice can depend on the rate structure/utility objectives). These programs are common in the water sector and have been shown to improve overall revenue by increasing payment consistency.

However, participation rates are often low due to administrative burdens, limited outreach, and structural barriers (e.g., renters who do not receive direct bills). [20] Hazel Crest should explore best practices such as:

- Categorical eligibility (e.g., enrollment in LIHEAP or SNAP)
- Multiple enrollment pathways (online, phone, in-person)
- Partnerships with trusted third-party organizations

[20]Levine, L., S. Whillans, O. Wein, K. Lusson, and B. Haynes, 2022. *Water Affordability Advocacy Toolkit*. NRDC and National Consumer Law Center.

- Automatic enrollment for customers already receiving other assistance from other programs
- Identifying a capable partner to administer the program will be critical to success.

L5C. Target low-income customers for water efficiency installations

Description: Provide direct installation of water-efficient fixtures and appliances to income-qualified households. This approach removes financial and logistical barriers associated with rebate programs and ensures equitable access to conservation benefits.

Targeted installations may include:

- WaterSense-certified toilets, showerheads, and faucet aerators
- Leak detection and repair for indoor plumbing and irrigation systems
- Smart irrigation controllers or hose timers
- On-site education and usage tips during installation

Installations should be performed by qualified contractors or nonprofit partners and scheduled directly with eligible households to maximize participation and impact.

L5D. Offer plumbing repair assistance

Description: Offer reduced- or no-cost plumbing repairs to low-income households experiencing leaks, fixture failures, or water-related damage. This type of program would support affordability, housing stability, and conservation goals. While Hazel Crest may not currently have resources to support this directly, it could advocate for a regional assistance program to fund and implement these repairs (see Recommendation S1A). Services could include:

- Toilet, faucet, and valve repairs
- Minor pipe replacements
- Leak mitigation and water damage prevention

This program should contract with licensed plumbers to make the repairs.

7 Conclusion

Water affordability is a complex challenge for many communities in Cook County, IL. The goal of this analysis for the Village of Hazel Crest was to understand affordability drivers and challenges for residential water and sewer customers and to develop a *Water Affordability Action Plan* that provides short-, medium-, and long-term recommendations and a high-level roadmap to implementation. The analysis includes a quantitative assessment of socioeconomic data and affordability metrics, and qualitative research including a survey of Hazel Crest residents and interviews with local affordability experts. One challenge for the quantitative assessment is that due to Hazel Crest's size, census data is only available at the 5-yr interval level and the project team was not able to disaggregate data in many cases as Census Public Use Microdata Series (PUMS) data is not available for this geographic scale.

Results of the quantitative and qualitative analyses indicate that water burden exists in Hazel Crest mostly for the lowest-quintile income households (the lowest 20%) – i.e., those earning less than $30,000 a year - who

struggle to afford all household expenditures within a given month. However, additional data indicates that even households earning 200% of the federal poverty level cannot meet basic needs (36% of all households in Hazel Crest). Residents of Hazel Crest, like other communities in Cook County, are also facing a decrease in median household income, an increase in poverty levels, and rising costs of living. The resident survey further indicates that most respondents are concerned with future water bill affordability and the risk of shutoffs. Finally, the analysis also finds that most households in Hazel Crest are single-family and owner-occupied so are directly accessible by PWD.

The recommendations outlined in this report are designed to help address these water affordability issues as well as improve relations between Hazel Crest, PWD and its community members. Short-term recommendations are largely based on leveraging PWD's plans to finalize implementation of a new water billing system and AMI meters.

Appendix 1: Interview Guide

About our project:

One Water Econ is currently leading water affordability analyses for two municipalities in Cook County, IL: the Village of Hazel Crest and the Village of South Chicago Heights. These analyses support the Cook County Water Affordability Program, which is administered by Elevate, and funded by the County of Cook. Each analysis will include:

- An overview of water affordability barriers for residents
- Data analysis covering key affordability metrics (e.g., Household Burden Indicator, US EPA Water Affordability Threshold)
- A Water Affordability Action Plan that will include recommendations for short-term (6-12 months), medium-term (12-24 months), and long-term (24+ months) shovel-ready projects and policies to improve affordability for residents.

Questions:

1. Tell us about your affordability program. Who do you help and how do they find you?
2. Is there a growing need for assistance in this region or has it remained constant?
3. How long do participants stay enrolled in the program?
4. What process do you use to determine if people are eligible for assistance?
5. How do people access your program?
6. What are the biggest financial stressors for households in Cook County?
7. What are the typical barriers you see when it comes to financial or utility assistance?
8. Are you aware of people facing challenges to pay their water bills?
9. Do you know if people who are paying their water bills are prioritizing water over other essential needs such as groceries?
10. What are the best methods of outreach to the communities you serve?
11. How could we remove barriers for enrollment in customer assistance programs?
12. What affordability solutions should be prioritized in this area (e.g., bill reductions, lifeline rates, arrearage management and forgiveness, crisis funding, Advanced Metering Infrastructure) and which should be prioritized over the short-, medium-, and long-term?
13. What affordability or assistance programs are you aware of that municipalities in Cook County can access?
14. How can our analyses help you to achieve your mission?

Appendix 2: Resident Survey

Default Question Block

Village of Hazel Crest Water Affordability Study

Thank you for your interest and willingness to share feedback about water affordability in your community.

Objectives

The Village of Hazel Crest wants to better understand water affordability challenges for residents and identify potential ways to address these challenges. As a resident of Hazel Crest, we are asking you to answer questions about your own experiences with water bills and affordability. The survey will require about 20 minutes of your time.

Confidentiality

Taking part in this survey is voluntary. It's up to you if you want to participate. You may change your mind and stop participating at any time. Confidentiality will be maintained to the degree permitted by the technology used. Your participation in an online survey involves risks similar to a person's everyday use of the Internet. We will keep your

information confidential by not sharing it with others outside the study team. While there can never be a guarantee of complete confidentiality because of everyday internet risk, your name and other personal information will be removed from your data and deleted forever after analysis and publications. When data from this research is shared, no one will know it was you. We will report all results anonymously and at a summary level (this means that they will not be tied to specific individuals).

Incentive

Respondents have the chance to win a $100 Visa gift card for completing this survey. Please provide your contact information in the survey if you are interested in entering the raffle.

About this survey

If you need to stop the survey at any point, your results will be saved. To continue, open the survey link again and you will start where you left off. If you have any questions about this survey or your participation, you can email Erin Gray at egray@onewaterecon.com.

Are you a resident of the Village of Hazel Crest?

- ○ Yes
- ○ No

Are you interested in entering a raffle to earn a $100 Visa gift card? Please enter your name and your email and/or phone number to enter.

First name

Email address

Phone number

About your water bill

How do you most typically pay your water bill? Please select one, and provide details if possible when selecting not applicable or other.

- ○ Mail (check or money order)
- ○ Online payment portal
- ○ Automatic bank withdrawal

- ○ In-person at city office
- ○ It is included in my rent
- ○ It is included in my building or condo association fee
- ○ [ ] Not applicable (please describe why not)
- ○ [ ] Other (please specify)

How clear and easy to understand is your water bill?

- ○ Very clear and easy to understand
- ○ Somewhat clear
- ○ Neutral
- ○ Somewhat confusing
- ○ Very confusing and difficult to understand
- ○ I don't generally review my bill

Are there any specific components of your water bill that you find confusing? (Select all that apply)

- ☐ Basic service charges
- ☐ Usage rates
- ☐ Fee calculations
- ☐ Payment terms or late fees
- ☐ Due dates

- [ ] None, the bill is clear
- [ ] Other (please specify)

What suggestions do you have for making your water bill easier to understand?

Water bill payment

Have you ever had to miss a water bill payment in the last year?

- ○ Yes, once
- ○ Yes, more than once
- ○ No
- ○ Prefer not to answer

What factors contributed to the missed payment? (Select all that apply)

- [ ] Forgot to pay
- [ ] Did not receive bill
- [ ] Was away / traveling
- [ ] Bill was not affordable at the time (please explain why)

- [ ] Other (please specify)

Household expenses

Households face multiple expenses; how would you prioritize which to pay first? (Rank from highest to lowest priority by dragging)

Credit cards

Mortgage

Electricity / gas bill

Food / basic supplies

Water bill

Phone / Internet bill

Medical bills

Other loans

Other (please specify)

Future water bill payment

How concerned are you about affording your water bill in the future?

- Not at all concerned
- Slightly concerned
- Moderately concerned
- Very concerned
- Extremely concerned

Please share why you are concerned about affording your water bill.

What resources and tools could help you better manage your water bills? (Select all that apply)

- [ ] Payment plan options
- [ ] Automatic bill payment
- [ ] Text/email reminders
- [ ] Simplified bill format
- [ ] Budget billing (same amount each month)
- [ ] Improved customer assistance and outreach
- [ ] Affordability assistance program information
- [ ] Educational materials about water conservation
- [ ] Monthly billing instead of quarterly billing
- [ ] Residential leak alert system
- [ ] Leak repair assistance
- [ ] Other (please specify) _____

Affordability programs

Have you received information about any programs to help pay your water bill? Please indicate which ones and /or list any additional programs.

- [ ] Low Income Home Energy Assistance Program (LIHEAP)
- [ ] Cook County Leak Repair Program
- [ ] Cook County Leadcare

- [ ] Bremen Township emergency assistance program
- [ ] Yes, but I don't remember the name of the program
- [ ] Other (please specify)
- [ ] None

Have you ever applied for assistance in paying your water bill from local programs?

- ○ No, I do not need assistance paying my water bill
- ○ No, I could use assistance but do not have time to apply
- ○ No, I could use assistance but do not qualify for assistance programs
- ○ Yes, for temporary assistance or help in paying my past due bills
- ○ Yes, I applied for assistance
- ○ Other

If you applied and were enrolled, how long were you in the program?

- [ ] Less than 3 months
- [ ] 3 to 6 months
- [ ] 6 to 12 months
- [ ] More than one year
- [ ] Still enrolled
- [ ] Not sure

How helpful was the program in assisting you with your water bill?

- [ ] Not at all helpful
- [ ] Slightly helpful
- [ ] Moderately helpful
- [ ] Very helpful
- [ ] Extremely helpful

If you were informed of programs, but did not apply, why did you make that decision?

Please share with us what aspects of the programs you enrolled in were helpful.

Please share with us what aspects of the programs you enrolled in were not helpful.

Water service shut offs

Have you ever had your water service shut off?

- ○ Yes, once
- ○ Yes, more than once
- ○ No
- ○ Prefer not to answer

What led to the water shutoff? (Select all that apply)

- ☐ Missed payments
- ☐ Unaware of outstanding balance
- ☐ Administrative error
- ☐ Other (please specify)

How long before your water service was turned back on?

- ○ Less than a week
- ○ 1-2 weeks
- ○ 2-3 weeks
- ○ 1 month
- ○ Longer than 1 month

Did your municipality communicate with you before your water was shut off?

- ○ Yes, and the communication was clear
- ○ Yes, and the communication was not clear
- ○ No, I received no communication
- ○ Not sure

If you received communication, how were you notified? (Select all that apply)

- ☐ Mail
- ☐ Email
- ☐ Phone call
- ☐ Text message
- ☐ Door hanger / notice

☐ Other (please specify)

How concerned are you about having your water shut off in the future?

- ○ Not at all concerned
- ○ Slightly concerned
- ○ Moderately concerned
- ○ Very concerned
- ○ Extremely concerned

Donation

If you had the option on your water bill to donate to an affordability program that helped low-income customers pay their water bills, would you donate?

- ○ Yes. Please indicate how much
- ○ No
- ○ Not sure

Household info

Please indicate the number of people living in your household by age group:

	0	1	2	3	4	5	6
Under 18 years old	☐	☐	☐	☐	☐	☐	☐
Over 18 years old	☐	☐	☐	☐	☐	☐	☐

Employment status of people over 18 in your household. Please indicate the number of people in your household who are:

	1	2	3
Full-time employment	☐	☐	☐
Part-time employment	☐	☐	☐
Self-employed	☐	☐	☐
Student	☐	☐	☐
Retired	☐	☐	☐
Unemployed	☐	☐	☐
Unable to work due to disability	☐	☐	☐

	1	2	3
Other (please specify)	☐	☐	☐

If you feel comfortable, please share your household income from 2024. Please enter a number in US dollars, without commas or symbols. For example: 45000