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Water Affordability Action Plan: Village of Lansing, Illinois

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TABLE OF CONTENTS

TABLES

FIGURES

EXECUTIVE SUMMARY

Nationally, the U.S. Environmental Protection Agency estimates that 12–19 million households lack affordable access to water. To better understand the challenges facing its residents, Cook County launched a Water Affordability Program, funded by the American Rescue Plan Act and administered by Elevate. As part of this initiative, the Village of Lansing, Illinois, received a water affordability analysis conducted by the Government Finance Research Center at the University of Illinois Chicago.

Demographic, Socioeconomic, & Built Environment Background

As of 2024, Lansing has an estimated population of over 28,000 residents, a slight decline of less than one percent since 2010. The village is racially and ethnically diverse, with high homeownership. However, much of Lansing's aging housing stock was built with lead plumbing. In addition, new construction has been limited, and housing values have declined. While the manufacturing sector has grown, Lansing has a lower share of working-age residents than the region. Median income is rising, and unemployment is falling, but both still trail regional averages. Further, a higher share of low-income and poverty-level households underscore persistent economic challenges.

Municipal Context

Lansing's Water and Sewer Department purchases Lake Michigan water from Hammond, Indiana, and supplies it to residents as well as the Villages of Lynwood and South Holland. The village uses a two-part, decreasing block rate and bills quarterly. As of 2025, a household using 5,000 gallons per month pays $47. Rates increase annually by inflation or 3%, whichever is lower. Residents also face additional water related costs. Starting service requires a $100 deposit. Bills are due about 15 days after issuance; a 10% late fee applies afterward. If a balance remains unpaid for more than 60 days, the account may be subject to disconnection after notice is posted. To restore service, customers must pay all outstanding charges, including a shutoff listing fee. Notably, Lansing ordinances do not mention financial assistance programs or payment plans.

Quantitative Overview

Based on billing records from the first quarter of 2025, covering 7,972 residential accounts, the average monthly bill in Lansing is $38. While this suggests that monthly water services are affordable, it obscures the financial strain from the village's quarterly billing structure. For residents in the 20th income percentile, quarterly bills can consume about 4% of their monthly income, well above the U.S. EPA's recommended affordability threshold. Although the monthly cost may be manageable, the infrequent billing schedule can create acute financial pressure, especially for residents living paycheck to paycheck. This burden is further illustrated by examining the number of work hours required to pay the water bill. A resident earning the federal hourly rate would need

approximately 5 hours of labor to cover the average monthly bill but would need 16 hours for the quarterly average. These metrics reflect lower-demand periods; water bills often spike in high-usage months, further exacerbating affordability challenges.

Affordability challenges are also reflected in delinquency and shutoff data. In Q1 2025, 33 residential accounts had balances over $1,000, averaging $4,084 and totaling $134,764 in unpaid debt. Additionally, 39 accounts faced shutoffs, with an average balance of $270, totaling $10,548. Across all metrics examined, income burden, hours of labor required, arrearages, and service shutoffs, the northern and central areas of Lansing consistently experienced the highest water burdens.

Qualitative Overview

In interviews, municipal staff identified quarterly billing as the primary affordability challenge and were interested in converting to monthly billing. They also noted the short period before bills incur late fees as a concern. While the village maintains reserves, they are insufficient for anticipated maintenance needs. As such, to avoid steep rate hikes, the village is considering a capital charge but stressed the need for community support before any rate changes. Staff also cited the impact of wholesale water suppliers on costs and advocated for greater regional pricing transparency.

Although Lansing ordinances do not formally establish assistance programs or payment plans, village staff offer residents opportunities to avoid disconnection, including a one-time bill adjustment and installment plans. Water shutoffs are treated as a last resort. In fact, while 10–12% of accounts are delinquent each quarter, only about 2% reach shutoff, due to the village's proactive, labor-intensive outreach. As for other strategies to improve affordability, the village is pursuing low-interest loans from the Illinois Environmental Protection Agency to replace lead service lines while reducing the financial burden on residents. The village has also expressed interest in a program to support households in financial distress.

Residents' Perspective

A survey of Lansing residents, yielding 93 responses, indicated that 66% of respondents had not missed payment in the past year, while 29% had missed one or more. Of those with missed payments, 82% cited the bill as unaffordable. Nearly half of respondents expressed concern about affording future bills, citing rising rates, quarterly billing, late fees, and limited payment flexibility. Requested support included clearer billing, budget billing, payment plans, and assistance programs. While 82% of respondents had never experienced a shutoff, 26% expressed concern about a future one. Income data reported by half of respondents showed a median household income of $78,500, aligned with the village's median of $76,113, suggesting the sample was reasonably representative.

Recommendations

Building on the analysis, the recommendations are ordered by implementation complexity, from short-term actions to those requiring more time and resources.

Key Finding 1 – Current communication efforts around billing and available assistance programs are not as effective as they could be.

Recommendation: Review and redesign the bill for clarity, improve communication through a multi-channel strategy, and invest in relationship-building with residents though automated, customer-focused tools.

Key Finding 2 – The lack of a codified, formal process for offering payment plans and assistance contributes to affordability challenges for residents.

Recommendation: Establish a formal payment plan and assistance policy that includes options like budget billing, a senior assistance program, and arrearage forgiveness. Clearly communicate this policy using multiple channels.

Key Finding 3 – The current quarterly billing cycle places a financial burden on residents, particularly those with limited incomes.

Recommendation: Incrementally transition to a monthly billing cycle. The first two recommendations focus on reducing operational burdens and laying the groundwork for this change by strengthening communication with residents, automating routine billing and outreach, and formalizing the payment plan and assistance process.

Key Finding 4 – The current reserve funds are not sufficient to meet projected infrastructure needs.

Recommendation: Develop and deploy a community engagement plan that includes clear communication materials and opportunities for resident feedback to build support for a rate structure change that converts the administrative charge into a capital charge.

Key Finding 5 – Wholesale water rates are set by the supplying entity, limiting the village's ability to shield its residents from future rate increases.

Recommendation: Explore regional partnerships and collaborations with neighboring municipalities. These can create opportunities to share resources and improve bargaining power, ultimately reducing the financial burden on residents.

1. Introduction

Nationally, the U.S. Environmental Protection Agency estimates that between 12.1 million and 19.2 million households lack affordable access to water services.[1] Despite growing recognition of the issue, water affordability policy in the U.S. remains fragmented.[2] To better understand the challenges facing Cook County residents, the county launched the Cook County Water Affordability Program.[3] Through this program, administered by Elevate on behalf of the county and funded through the American Rescue Plan Act, 10 municipalities were selected to receive water affordability analyses. Commissioned by Elevate, the Government Finance Research Center (GFRC) at the University of Illinois Chicago (UIC), conducted the analysis for the Village of Lansing, Illinois.

Water, as a household good, is non-rivalrous up to the point of system capacity, yet its provision depends on exclusionary infrastructure and complex pricing structures.[4] These pricing mechanisms, reflecting high fixed costs, often diverge from community well-being objectives, creating tensions between cost recovery and affordability.[5] In fact, municipalities managing water systems rely heavily on customer revenues to cover operations, maintenance, depreciation, and debt repayment.[6][7] However, many systems struggle to fully recover these costs, due in part to political resistance to rate increases and the decline in federal investment since the 1980s.[8,9]

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[1] Environmental Protection Agency. (2025). *Water affordability needs assessment*. https://www.epa.gov/waterfinancecenter/water-affordability-needs-assessment

[2] Pierce, G., Chow, N., & DeShazo, J. R. (2020). The case for state-level drinking water affordability programs: Conceptual and empirical evidence from California. *Utilities Policy*, *63*, 101006. https://doi.org/10.1016/j.jup.2020.101006

[3] Cook County Government. (n.d.). *Water affordability program*. https://www.cookcountyil.gov/service/water-affordability-program

[4] Stiglitz, J.E. (1977). The theory of local public goods. In: Feldstein, M.S. & Inman, R.P. (Eds.) The economics of public services. International Economic Association Conference Volumes, pp. 274–333. Palgrave Macmillan. https://doi.org/10.1007/978-1-349-02917-4_12

[5] ibid

[6] El-Khattabi, A. R., Gmoser-Daskalakis, K., & Pierce, G. (2023). Keep your head above water: Explaining disparities in local drinking water bills. *PLOS Water, 2*(12), e0000190.

[7] Medwid, L., & Mack, E. A. (2021). A scenario-based approach for understanding changes in consumer spending behavior in response to rising water bills. *International Regional Science Review*, *44*(5), 487–514. https://doi.org/10.1177/0160017620942812

[8] Massarutto, A. (2007). Water pricing and full cost recovery of water services: Economic incentive or instrument of public finance? *Water Policy 9*(6): 591-613. https://iwaponline.com/wp/article-abstract/9/6/591/31243/Water-pricing-and-full-cost-recovery-of-water?redirectedFrom=fulltext

[9] Congressional Budget Office. (2018). Public spending on transportation and water infrastructure, 1956 to 2017. https://www.cbo.gov/system/files/2018-10/54539-Infrastructure.pdf

These challenges are especially pronounced for small systems, where declining populations must support fixed operational and infrastructure expenses, leading to higher per capita costs than those faced by larger providers.[10,11] Affordability concerns are further heightened by the significant infrastructure investment needs projected over the next 25 years.[12] To understand affordability, the findings from the literature underscore the importance of examining both household-level metrics and municipal cost structures. Accordingly, this report relies on various information sources to assess water affordability in the Village of Lansing, as follows:

- **Section 2** provides background on the village by examining demographic, socioeconomic, and built environment variables.
- **Section 3** overviews the village's water provision process, rate structure, and related procedures.
- **Section 4** examines billing, arrearages, and shutoff information.
- **Section 5** summarizes qualitative insights from interviews with municipal staff.
- **Section 6** presents resident perspectives on water affordability.

Combined, findings from these sections inform the recommendations presented in **Section 7**, which are designed to help Lansing staff and officials align water services with residents' needs. The recommendations are presented in order of implementation complexity, beginning with those that are easier to adopt in the short term and progressing toward those requiring more time and resources.

2. Village Background

The Village of Lansing, located in Southeastern Cook County, Illinois, borders Munster, Indiana, and sits 22 miles south of downtown Chicago (see Figure 1). Spanning approximately 7.5 square miles, Lansing enjoys strategic access to regional transportation networks, including the I-80/294 corridor.[13] Its origins trace back to the early 19th century when it was settled by Dutch and German immigrants. The defining geographical feature of the area was a 25-foot-high sand ridge, now Ridge Road, which historically served as a Potawatomi trail. The arrival of the Pennsylvania Railroad in 1856,

[10] Raucher, R. S., Rubin, S. J., Crawford-Brown, D., & Lawson, M. M. (2011). Benefit-cost analysis for drinking water standards: Efficiency, equity, and affordability considerations in small communities. *Journal of Benefit-Cost Analysis, 2*(1), 1–24, https://doi.org/10.2202/2152-2812.1004

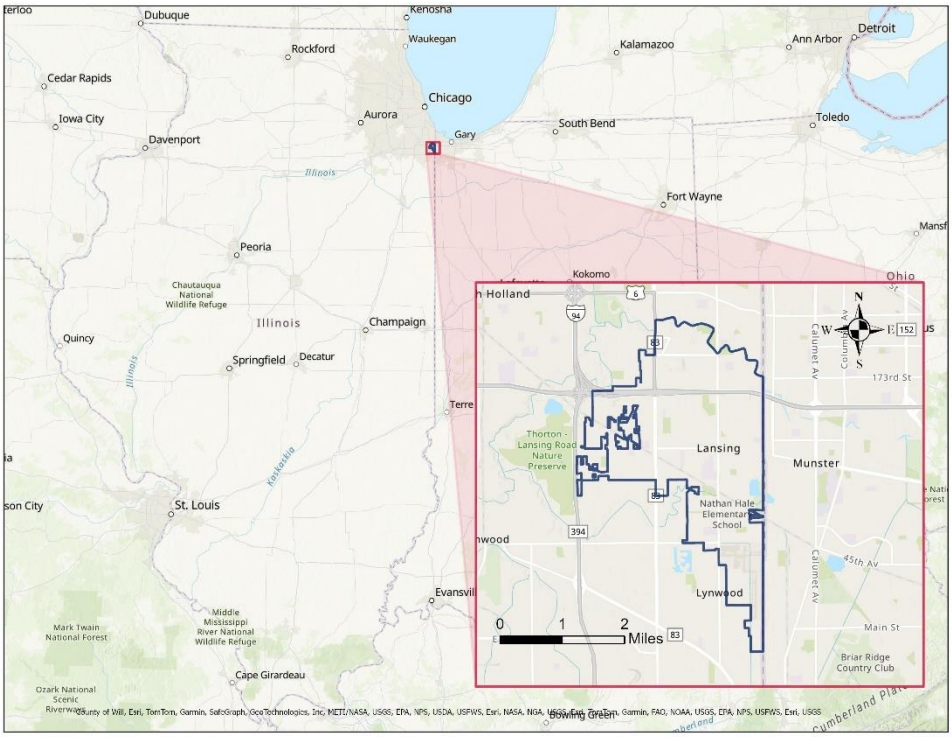
[11] Spearing, L., Osman, K. K., Faust, K. M., & Armanios, D. E. (2020). Systems vary, affordability should not: Trends of water sector affordability based on city attributes. In *Construction Research Congress 2022* (pp. 627–635). American Society of Civil Engineers, https://doi.org/10.1061/9780784482858.068.

[12] American Water Works Association. (2019). *AWWA reuse survey report: May 2019*. https://www.awwa.org/wp-content/uploads/AWWA-Reuse-Survey-Report-May-2019.pdf

[13] Houseal Lavigne Associates. (2014). *Re: Lansing: A Comprehensive Plan for Lansing, Illinois*. https://cms2.revize.com/revize/lansingil/how_do_i/docs/Lansing_Comprehensive_Plan_ADOPTED_July_2014.pdf

followed by the Grand Trunk Railroad, connected Lansing to Chicago's expanding rail network, fostering industrial growth. The village became a key supplier of bricks for Chicago's skyline due to its abundant sand and clay deposits. Following World War II, Lansing experienced significant population growth between 1930 and 1960. The expansion of highways in the 1960s and 1970s further integrated the village into the broader Chicago metropolitan area.[14]

Figure 1. The Village of Lansing, IL



Having briefly discussed the village's history, next we overview key demographic and socioeconomic variables. Figure 2 illustrates population trends for the village and Cook County from 2010 to 2024. Both areas appear to experience similar cyclical patterns; notably a 2020 population spike attributable to pandemic-induced migration patterns. During the pandemic years, many Americans moved away from densely populated urban centers into suburban or exurban areas, driven by the rise of remote work and the search for more space and lower costs.[15] Over the observed period, Lansing's population

[14] Houseal Lavigne Associates. (2014). *Re: Lansing: A Comprehensive Plan for Lansing, Illinois.* https://cms2.revize.com/revize/lansingil/how_do_i/docs/Lansing_Comprehensive_Plan_ADOPTED_July_2014.pdf

[15] Spell, L. & Perry, M. (2024). More people moved farther away from city centers since COVID-19. Census Bureau. https://www.census.gov/library/stories/2024/05/exurbs-city-population.html

effectively remained stable, decreasing from 28,353 in 2010 to 28,107 in 2024 (-0.87%). Similarly, Cook County's population decreased from 5,195,026 to 5,182,617 (-0.24%).

Figure 2. Population Over Time[16]

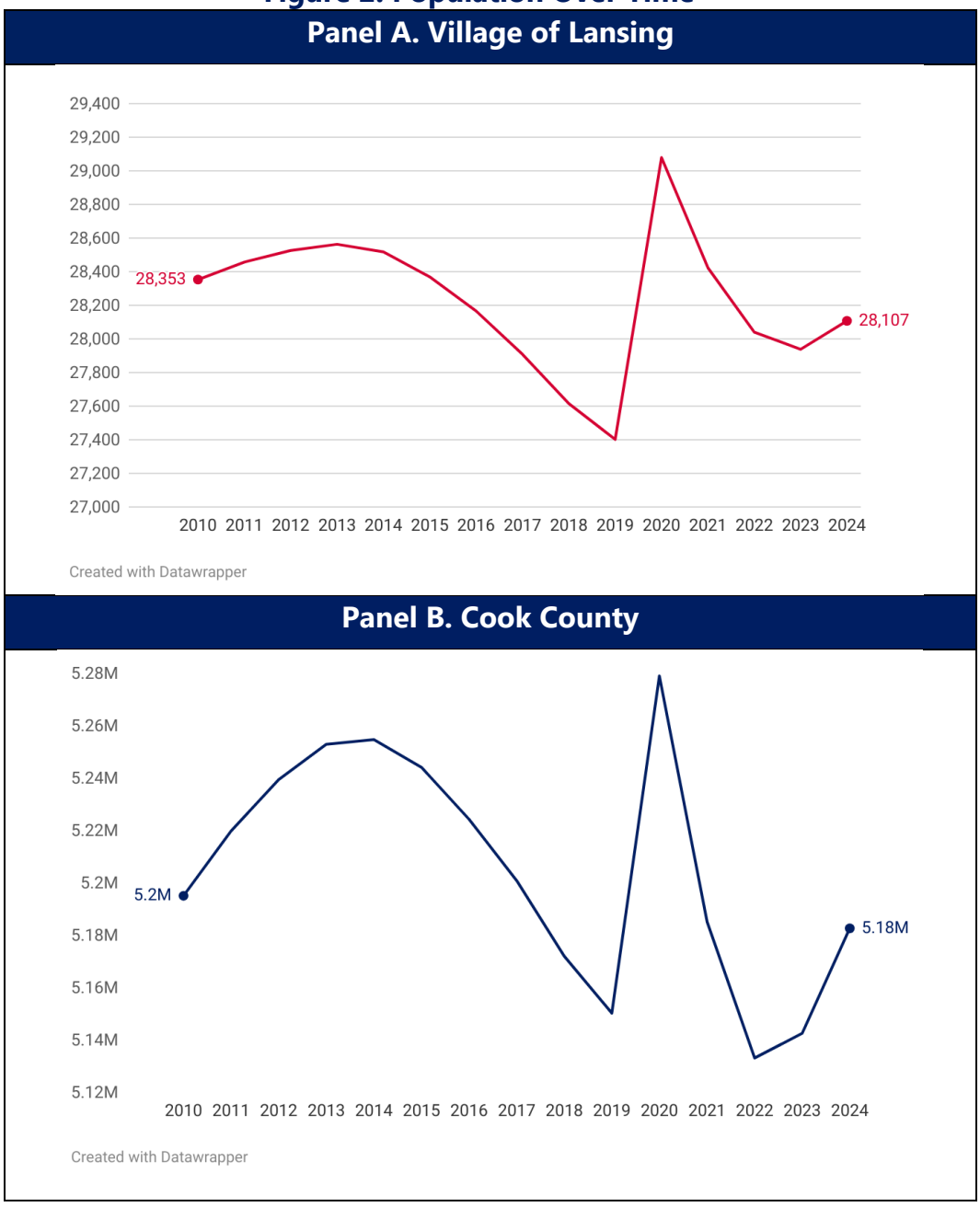


Figure 3 compares the age and gender distribution in the Village of Lansing and Cook County for 2023. Both areas follow a similar trend, with a broad base representing

[16] Figure 2 illustrates the population trend for the Village of Lansing and Cook County using data from the U.S. Census Bureau, accessed through https://www.census.gov/data/datasets.html.

younger populations and a narrowing shape toward older groups. However, Lansing shows a more irregular distribution, i.e., a lower portion of 20-24 compared to the county and more generally, a lower share of the working-age population. The gender balance displays a slightly higher proportion of females in older groups. This pattern is consistent with national trends, where in 2022, the average life expectancy for females was 80 years, compared to 75 years for males.[17]

Figure 3. Population Pyramid (2023)[18]

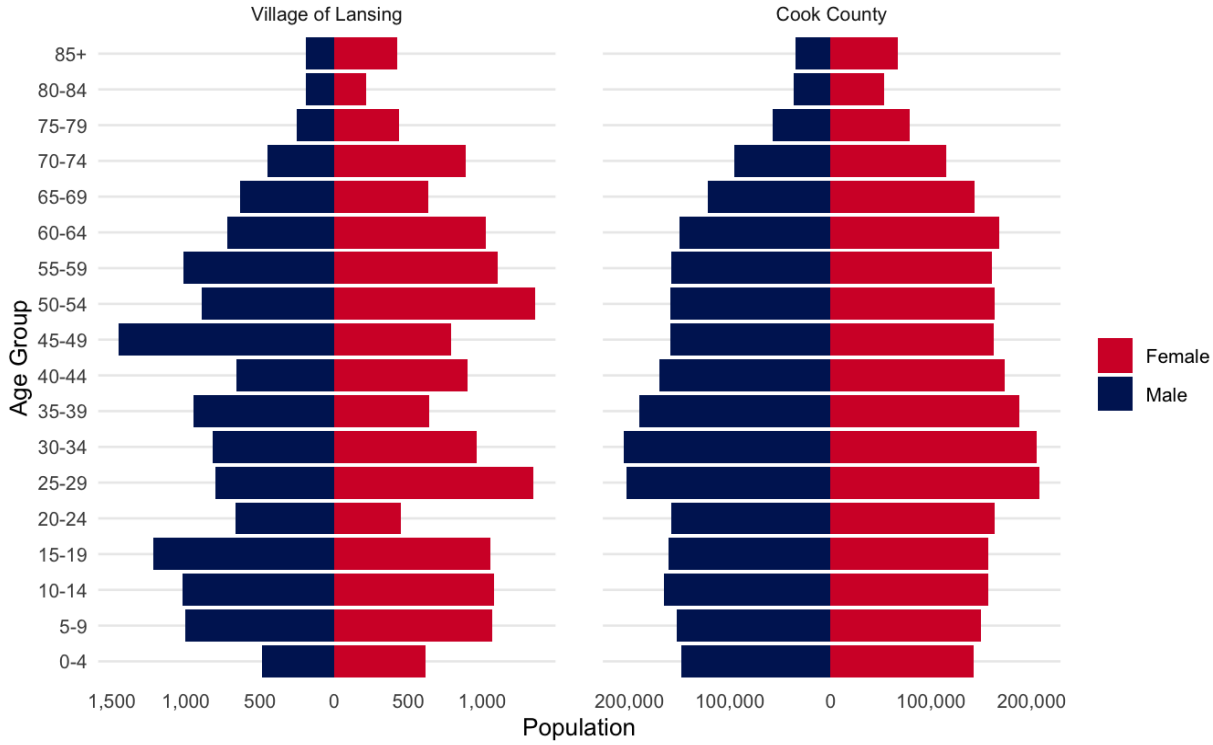


Table 1 highlights the changes in racial and ethnic composition in Lansing and Cook County from 2017 to 2023. Both areas experienced a notable decline in the White population, with Lansing seeing a drop from 52% to 32%, and Cook County from 57% to 46%. In contrast, the African American population increased in Lansing, rising from 39% to 52%, while it slightly declined in Cook County, from 24% to 22%. Additionally, the Hispanic or Latino population grew modestly in both areas, with Lansing's share rising from 15% to 17% and Cook County's from 25% to 26%. Asian, American Indian/Alaska Native/Hawaiian/Other Pacific Islander, and Some Other Race populations experienced

[17] Xu J.Q., Murphy S.L., Kochanek K.D., & Arias E. (2022). *Mortality in the United States, 2021*. NCHS Data Brief, no 456. https://dx.doi.org/10.15620/cdc:122516

[18] Figure 3 illustrates the age and gender distribution in the Village of Lansing and Cook County for 2023 using data from the American Community Survey (ACS) 5-year estimates accessed through the National Historical Geographic Information System (NHGIS).

small shifts in both Lansing and Cook County, with changes of less than a percentage point. The population identifying as Two or More Races increased in both areas, with Lansing's percentage rising from 2% to 7% and Cook County's from 2% to 11%.

Table 1. Racial and Ethnic Composition Over Time[19]

Race/Ethnicity	Village of Lansing		Cook County	
	2017	2023	2017	2023
African American	39.14%	51.84%	23.71%	22.48%
American Indian/Alaska Native/ Hawaiian/Other Pacific Islander	0.17%	0.04%	0.30%	0.79%
Asian	1.09%	2.38%	6.99%	7.76%
Hispanic or Latino	14.78%	17.41%	25.05%	26.50%
White	51.67%	31.78%	56.63%	46.45%
Some Other Race	5.82%	6.72%	9.87%	11.42%
Two or More Races	2.12%	7.24%	2.49%	11.10%

Table 2 compares household size distributions over time. In Lansing, there was a notable increase in households with four or more people and a decline in the share of two-person households, while the proportions of one- and three-person households remained relatively stable. In Cook County, the share of one-person households increased and households with four or more people decreased, while the shares of two- and three-person households remained stable.

Table 2. Household Size Over Time[20]

Household Size	Village of Lansing		Cook County	
	2017	2023	2017	2023
1-person household	32.41%	32.12%	32.56%	34.29%
2-person household	30.97%	27.74%	29.66%	29.88%
3-person household	16.77%	16.92%	15.04%	14.46%
4-or-more-person household	19.84%	23.22%	22.74%	21.37%

[19] Table 1 uses the American Community Survey (ACS) 5-year estimates accessed through the National Historical Geographic Information System (NHGIS). For reference, Lansing's population was 28,308 in 2017 and 28,415 in 2023, while the county's population was 5,238,541 in 2017 and 5,185,812 in 2023. Changes above a percentage point are highlighted in green (if positive) or red (if negative).

[20] Table 2 uses the American Community Survey (ACS) 5-year estimates accessed through the National Historical Geographic Information System (NHGIS). For reference, the number of households in Lansing was 11,243 in 2017 and 11,154 in 2023, while the county had 1,956,561 households in 2017 and 2,084,578 in 2023. Changes above a percentage point are highlighted in green (if positive) or red (if negative).

Figure 4 shows the inflation-adjusted median household income (MHI) for Cook County and the Village of Lansing from 2017 to 2023, expressed in 2025 dollars using the Consumer Price Index (CPI). Both areas experienced steady income growth until 2022, followed by a slight decline in 2023. Despite overall upward trends, a consistent income gap remains between the two, with Cook County maintaining a higher MHI throughout the period. Lansing's MHI increased from $63,335 in 2017 to $76,113 in 2023 (+20.17%), while Cook County's MHI rose from $77,848 to $86,704 over the same period (+11.38%).

Figure 4. Median Household Income Over Time[21]

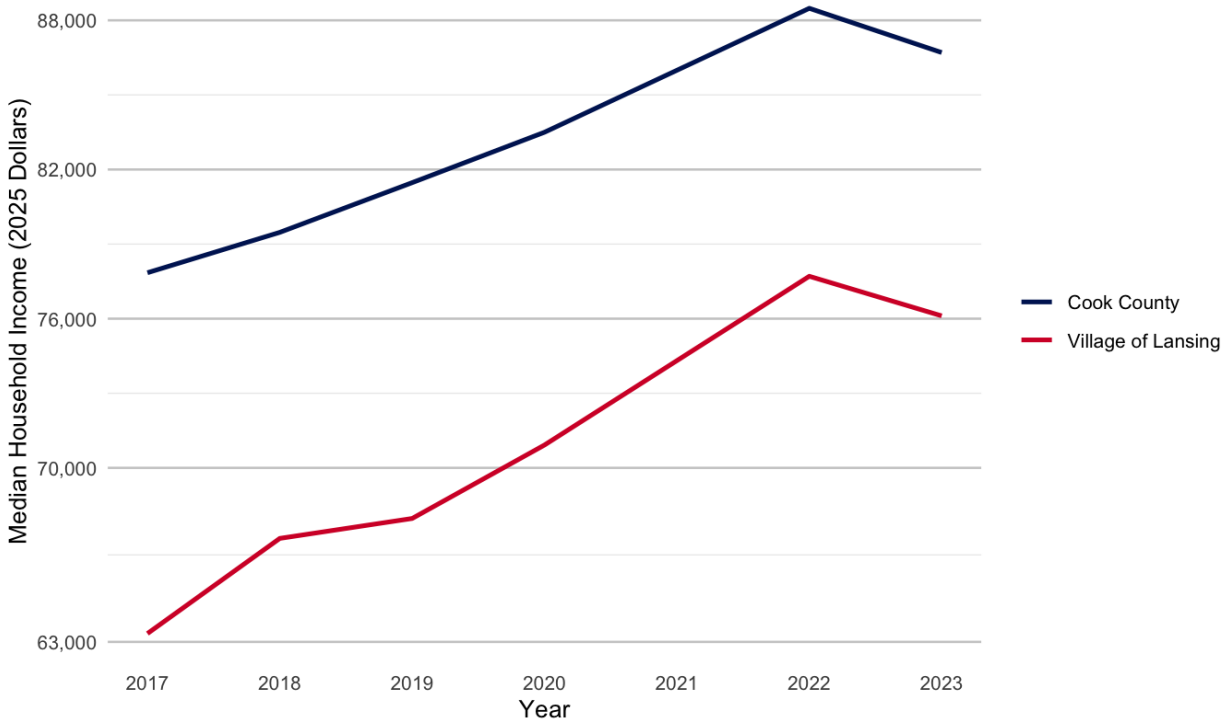


Figure 5 tracks the unemployment rates in Cook County and the Village of Lansing from 2017 to 2023. Throughout this period, Lansing consistently shows higher unemployment rates than Cook County. However, Lansing experienced a notable decline in unemployment from 2017 to 2018, followed by a period of relative stability and then a slight increase in 2020. Afterward, the rate gradually declined through 2023. This volatility in Lansing's unemployment rate may be due to local economic changes, such as industry shifts or business closures, with the 2020 spike likely linked to the COVID-19

[21] Figure 4 illustrates the inflation-adjusted median household income (MHI) for Cook County and the Village of Lansing from 2017 to 2023 using data from the American Community Survey (ACS) 5-year estimates accessed through the National Historical Geographic Information System (NHGIS). Data for the year 2021 was removed from the plot due to reliability concerns; however, the year remains labeled on the x-axis to preserve the continuity of the time trend.

pandemic's impact. The subsequent decline through 2023 suggests a recovery. In contrast, Cook County's unemployment rate decreased between 2017 and 2019 and remained steady at around 7% from 2019 onward. Notably, Lansing's labor force grew from 14,692 in 2017 to 14,949 in 2023 (+1.75%). Similarly, Cook County's labor force increased from 2,763,344 to 2,783,460 over the same period (+0.73%).

Figure 5. Unemployment Over Time[22]

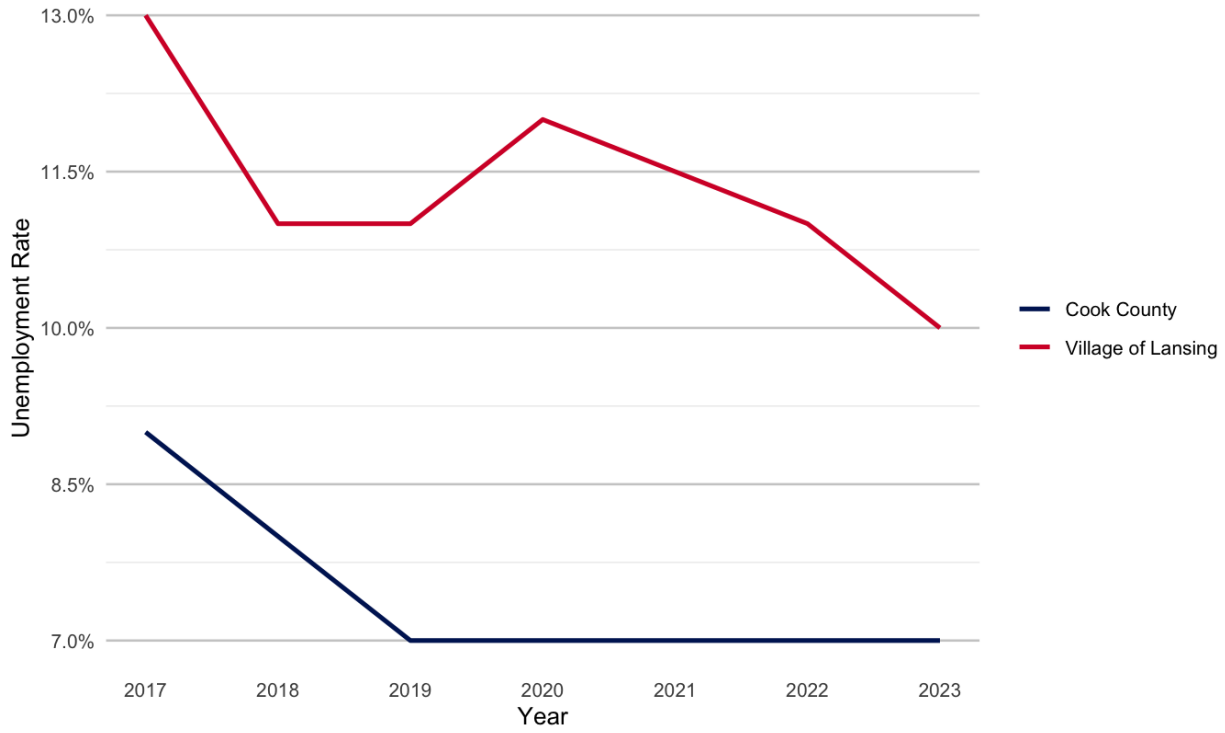


Table 3 compares income distributions in Lansing and Cook County over time. In Lansing, there was a significant decline in the share of low-income households (less than $50,000) and an increase in the shares of low-middle ($50,000- $74,999), high-middle ($100,000- $149,999), and high-income households ($150,000 and higher), while the share of middle-income households ($75,000–$99,999) remained relatively stable. In Cook County, the share of low-income households also declined, with notable increases in the shares of high-middle and high-income households, and relatively stable shares for low-middle income households.

[22] Figure 5 illustrates unemployment rates in the village and county from 2017 to 2023 using the American Community Survey (ACS) 5-year estimates accessed through the National Historical Geographic Information System (NHGIS). Data for the year 2021 was removed from the plot due to reliability concerns; however, the year remains labeled on the x-axis to preserve the continuity of the time trend.

Table 3. Income Distribution Over Time[23]

Income Distribution	Village of Lansing		Cook County	
	2017	2023	2017	2023
Low income (less than $50,000)	51.5%	32.9%	43.2%	32.2%
Low-middle income ($50,000- $74,999)	16.2%	19.8%	16.5%	14.3%
Middle income ($75,000- $99,999)	14.5%	14.8%	12.0%	12.3%
High-middle income ($100,000- $149,999)	13.1%	17.5%	14.2%	17.1%
High income ($150,000 and higher)	4.7%	15.0%	14.1%	24.1%

Table 4 compares housing occupancy trends in Lansing and Cook County over time. In Lansing, the share of owner-occupied housing increased, while the shares of renter-occupied and vacant units declined. In Cook County, the share of owner-occupied housing also increased, renter-occupied housing remained stable, and the vacancy rate declined. Lansing had 12,398 total housing units in 2017 and 12,081 in 2023 (−2.56%), while Cook County had 2,183,987 units in 2017 and 2,270,349 units in 2023 (+3.95%).

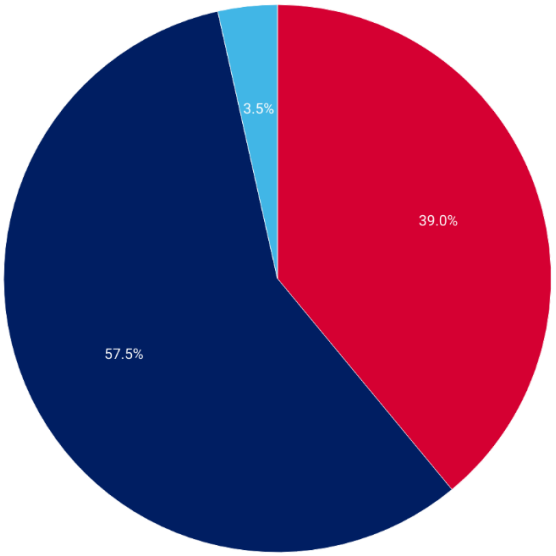
Table 4. Housing Occupancy Over Time[24]

Housing Occupancy	Village of Lansing		Cook County	
	2017	2023	2017	2023
Owner-occupied	60.1%	64.4%	50.9%	52.8%
Renter-occupied	30.5%	27.9%	38.7%	39.0%
Vacant	9.3%	7.7%	10.4%	8.2%

Figure 6 compares the age distribution of housing stock in Lansing (Panel A) and Cook County (Panel B) as of 2023. In Cook County, 49% of homes were built in 1959 or earlier, while 39% were constructed between 1960 and 1999. Only 12% of homes were built in 2000 or later, reflecting limited recent development. Lansing, by contrast, has a smaller share of homes built in 1959 or earlier (39%) but a larger share constructed between 1960 and 1999 (58%), with very few homes (4%) built in 2000 or later. Overall, Lansing and the county have a large concentration of housing from the era when lead plumbing was prevalent, although Lansing has considerably less new construction compared to the county.[25]

[23] Table 3 compares income distribution in the village and county from 2017 to 2023 using the American Community Survey (ACS) 5-year estimates through the National Historical Geographic Information System (NHGIS). Changes above a percentage point were highlighted in green (if positive) or red (if negative).
[24] Table 4 compares housing occupancy in the village and county from 2017 to 2023 using the American Community Survey (ACS) 5-year estimates through the National Historical Geographic Information System (NHGIS). Changes above a percentage point were highlighted in green (if positive) or red (if negative).
[25] U.S. Environmental Protection Agency. (2025, May 22). *Basic information about lead in drinking water*. https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water

Figure 6. Age of Housing Stock (2023)[26]
Panel A. Village of Lansing



Panel B. Cook County

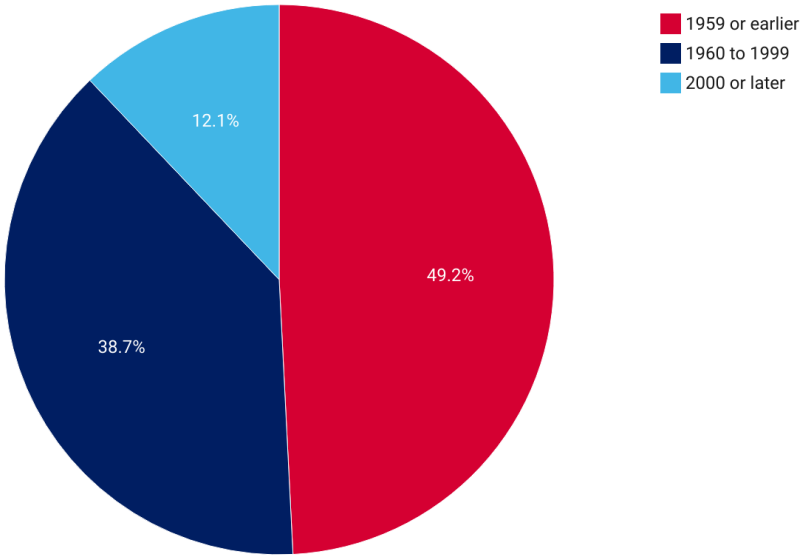


Figure 7 compares the distribution of housing units by structure type. Lansing's stock is heavily dominated by single-family homes, which account for 74% of all units, compared with 45% in the county. Small multifamily structures (2–4 units) make up a much smaller share in Lansing (4%) than in the county (20%), while medium and large multifamily buildings (5+ units) represent 21% of Lansing's housing versus 34% in the county.

[26] Figure 6 compares the age distribution of housing stock in Lansing and Cook County as of 2023 using data from the American Community Survey (ACS) 5-year estimates accessed through the National Historical Geographic Information System (NHGIS)

Unconventional homes, such as mobile homes, constitute a small share in both areas but are slightly more common in Lansing (1.4%) than in the county (0.8%).

Figure 7. Housing Structure Types (2023)[27]

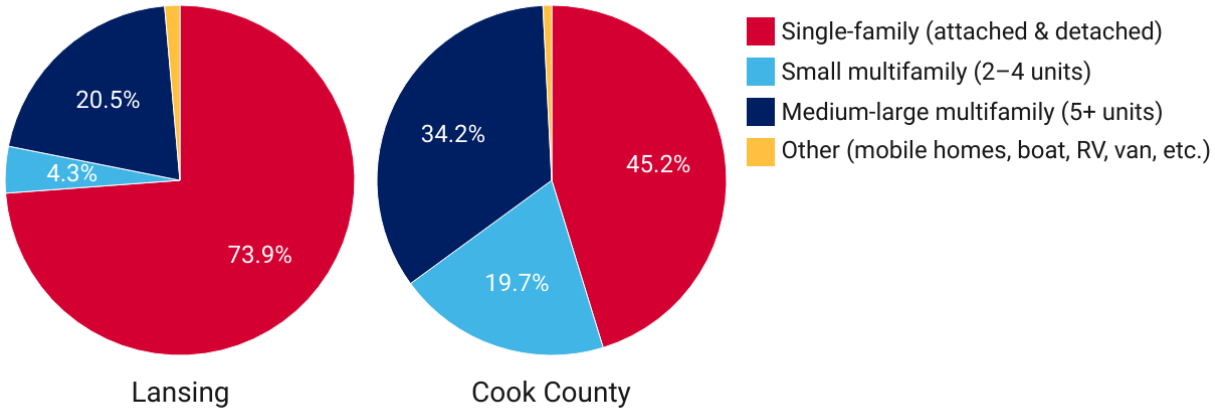


Figure 8 illustrates the trends in median housing values expressed in 2025 dollars from 2017 to 2023 for both the Village of Lansing and Cook County. Throughout this period, Cook County consistently experienced significantly higher housing values compared to Lansing. Cook County's median housing values remained relatively stable from 2017 to 2020, followed by a sharp decline from 2020 to 2022, and then was nearly unchanged in 2023. Lansing, by contrast, experienced a steady decline in housing values over the full period, with a modest rebound in 2023. Between 2017 and 2023, Lansing's median housing value decreased from $219,950 to $186,241 (-15.3%), while Cook County's declined from $398,539 to $337,333 (-15.4%). This parallel rate of decline reflects broader regional housing market trends.

[27] Figure 7 compares the distribution of housing units by structure type in Lansing and Cook County as of 2023 using data from the American Community Survey (ACS) 5-year estimates accessed through the National Historical Geographic Information System (NHGIS).

Figure 8. Housing Value Over Time[28]

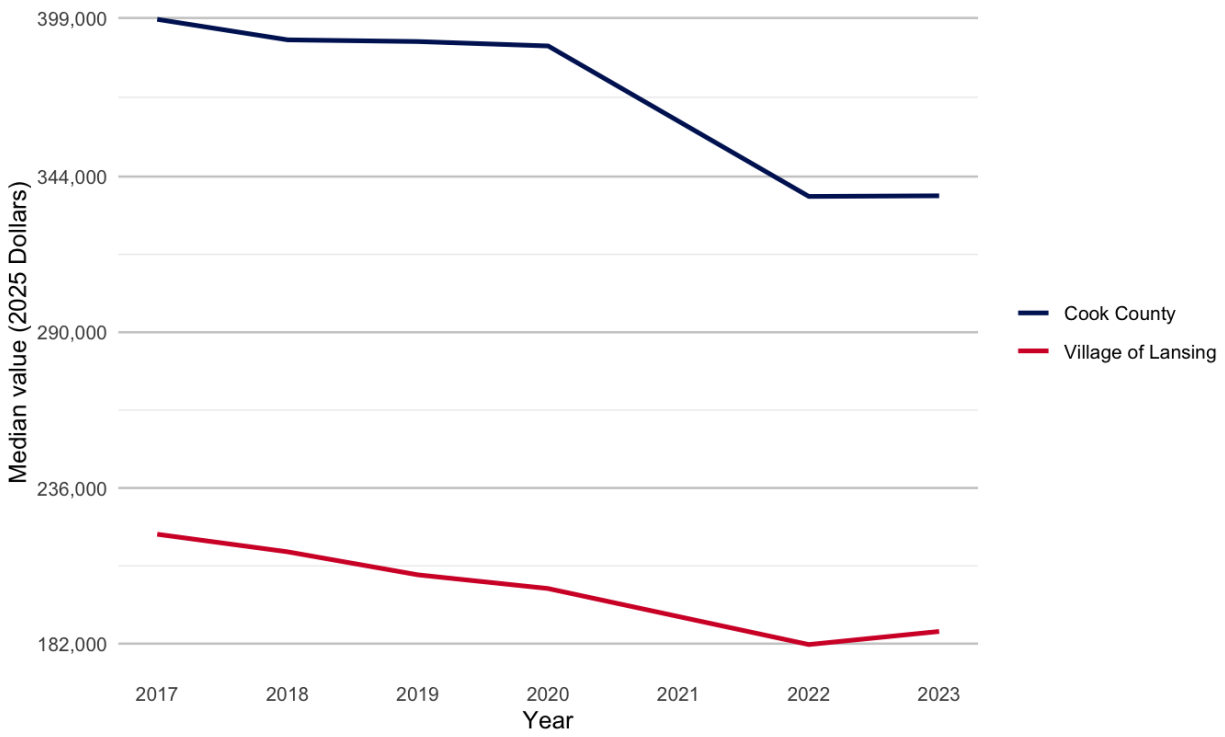


Table 5 groups the population into three income levels based on their income relative to the federal poverty level (FPL): the first group includes individuals earning under 100% of the FPL (below the poverty line), group 2 includes those earning between 100% and 199% of the FPL (near poverty to moderate income), and group 3 comprises those earning 200% or more of the FPL (above the poverty line). Across both Lansing and Cook County, a consistent pattern emerges between 2017 and 2023. The share of residents above the poverty line increased, while the proportions in the other two groups either declined or remained relatively stable. In Lansing, the share of those below the FPL saw a slight increase (15% to 16%), while the share of those near poverty decreased from 19% to 16%, and the share of those above poverty level grew from 66% to 68%. In Cook County, the trends were more pronounced. The share of those below the federal poverty line declined from 16% to 13%, while the share of those near poverty fell from 18% to 15%, and the share of those above poverty rose substantially from 66% to 71%.

[28] Figure 8 illustrates housing values in Cook County and the Village of Lansing from 2017 to 2023 using data from the American Community Survey (ACS) 5-year estimates accessed through the National Historical Geographic Information System (NHGIS). Data for the year 2021 was removed from the plot due to reliability concerns; however, the year remains labeled on the x-axis to preserve the continuity of the time trend. All dollar values in this figure are adjusted to 2025 dollars using the S&P CoreLogic Case-Shiller U.S. National Home Price Index (version dated May 2, 2025).

Table 5. Percentage of Population in Relation to Federal Poverty Level[29]

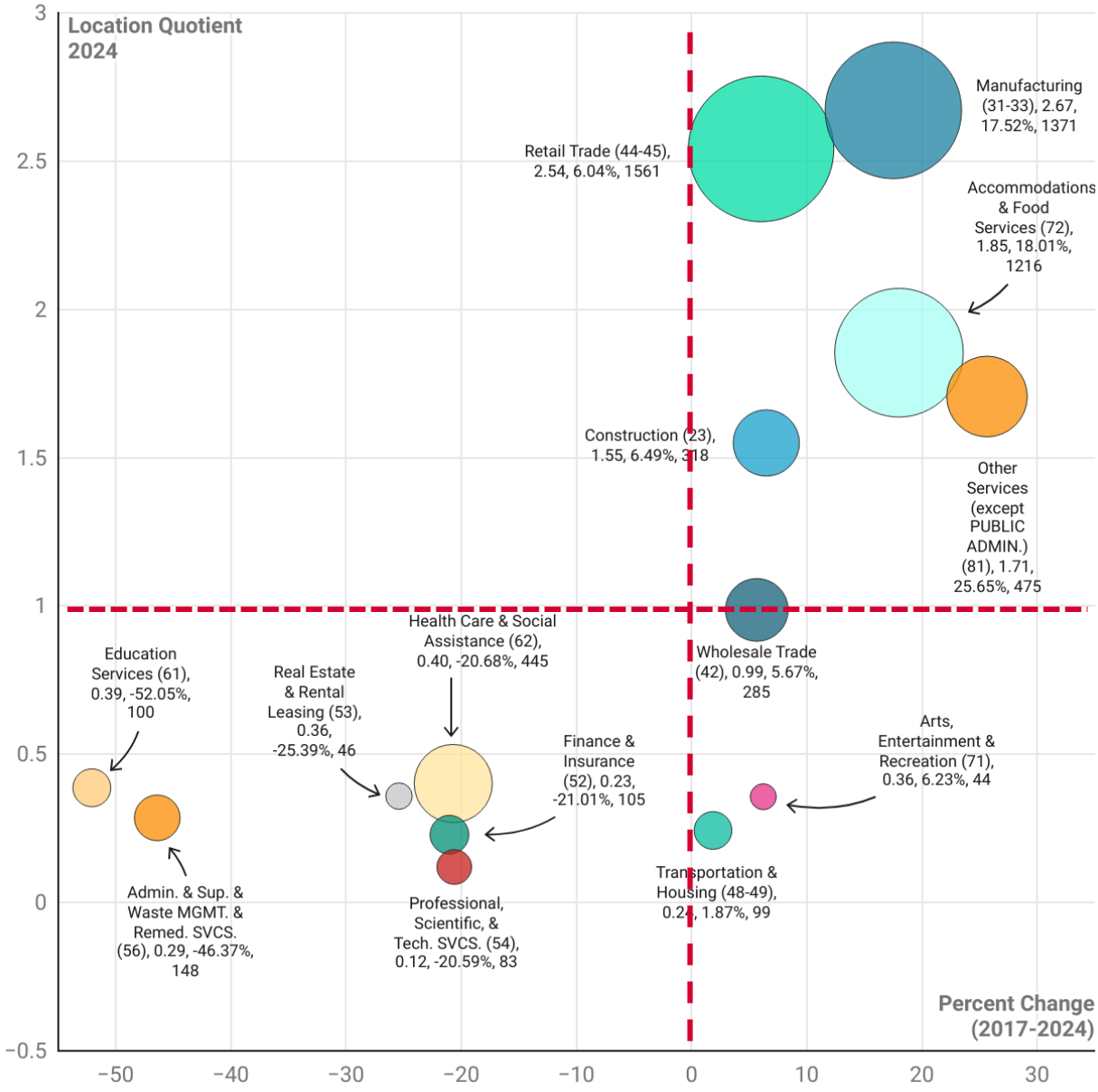
Ratio of Income to Poverty	Village of Lansing		Cook County	
	2017	2023	2017	2023
Under 100%	15.2%	16.0%	15.9%	13.3%
100% to 199%	19.2%	15.6%	18.2%	15.4%
200% and over	65.6%	68.4%	65.8%	71.3%

Finally, in this section, we examine industry clusters in the village, specifically location quotients. These are statistical measures used in economic and regional analysis to compare the concentration of a specific industry in a particular area to a larger reference area, here the county. It helps identify which sectors are more or less concentrated locally compared to the broader economy. A location quotient (LQ) greater than 1 indicates that the industry is more concentrated in the local area than in the reference region, suggesting a possible specialization or competitive advantage. An LQ less than 1 implies the industry is underrepresented locally. In Figure 9, the y axis represents the 2024 LQ while the x axis presents the percentage change in location quotients from 2017 to 2024. The size of the bubble represents industry employment in 2024.

As seen in Figure 9, Lansing's economy is highly concentrated in *Manufacturing* (LQ = 2.67; 1,371 jobs) and *Retail Trade* (LQ = 2.54; 1,561 jobs), which together account for the largest share of total employment in the village. These sectors also became more concentrated relative to the regional economy between 2017 and 2024, with manufacturing's LQ increasing by 17.5% and retail trade by 6.0%. *Accommodations and Food Services* similarly saw an increase in specialization (LQ = 1.85; 1,216 jobs; +18.0%). In contrast, the largest decreases in concentration occurred in sectors that make up a much smaller portion of local employment. For example, *Education Services* declined by 52.1% in LQ but accounted for only 100 jobs, and *Administrative and Waste Services* declined by 46.4% (148 jobs). *Health Care and Social Assistance*, though employing 445 workers, also declined in specialization by 20.7%.

[29] Table 5 illustrates the changes in percentage of population in Lansing and Cook County relation to federal poverty from 2017 to 2023 using data from the American Community Survey (ACS) 5-year estimates accessed through the National Historical Geographic Information System (NHGIS).

Figure 9. Industry Bubble Chart[30]



3. Municipal Water System

The Village of Lansing's Water and Sewer Department is responsible for providing water to residents. The village purchases Lake Michigan surface water from the Hammond

[30] In Figure 9, the y axis represents the 2024 location quotient while the x axis presents the percentage change in location quotients from 2017 to 2024. The size of the bubble represents industry employment in 2024. The label includes the industry name, location quotient, percentage change in location quotients, and employment. The figure uses data for the Village of Lansing and Cook County from the Illinois Department of Employment Security accessed through https://ides.illinois.gov/resources/labor-market-information/where-workers-work.html.

Water Works Department in Hammond, IN then sells drinking water to its residents as well as the Villages of Lynwood and South Holland. The Lansing municipal water system has 9,404 connections.[31] It uses a two-part rate structure with decreasing blocks. In 2025, the first block (1,000,000 gallons or less) is priced at $9.16 per thousand gallons. The second and final block (over 1,000,000 gallons) is priced at $7.89. Billing is quarterly and includes a $3 base charge. The water billing unit used is 1,000 gallons.[32] In 2025, the standardized water bill is $46.8. The standardized water bill is the price that residents pay for 5,000 gallons a month. This standardization is used in the literature and by federal and state agencies to assess the water burden on low-income households.[33]

The most recent significant increase in rates by the Village of Lansing occurred in June 2023.[34] Prior to that increase, the standardized bill was relatively stable ($27.85 in 2021, $26.75 in 2019, $25.85 in 2017, and $26 in 2015).[35] Codified village practices require that water rates are adjusted yearly, based upon the percentage increase during the preceding 12-month calendar period of the Consumer Price Index for all Urban Consumers for all items, or 3%, whichever is less.

Beyond billing, the water burden can impact residents through other elements of municipal policy.[36] Thus, we examine Lansing's ordinances and illustrate the codified process in Figure 10. In regard to service initiation, the village's code notes that each applicant is required to pay a deposit fee, that varies by structure type. While the fees are not written in the code, they are available on the village's website and equal $100 if the structure is residential, $150 if commercial or apartment with eight units or less, or $200 if industrial or apartments over eight units.[37]

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[31] Illinois EPA. (2025). *Water system details*. https://water.epa.state.il.us/dww/JSP/WaterSystemDetail.jsp?tinwsys_is_number=716156&tinwsys_st_code=IL&wsnumber=IL0311590

[32] Village of Lansing. (n.d.). Water bill info. https://www.villageoflansing.org/village_departments/water_bill_info.php

[33] Carroll, D. A., Albrecht, K., Medwid, L., Khalaf, C., Michnick, J., Huang, D., Wetmore, B., & Li, J. (2023). *Water rate setting in the Lake Michigan service area*. Government Finance Research Center, University of Illinois Chicago. https://drive.google.com/file/d/15DqG4v-S0_s75KOJ1sN-kextINqF79c3/view

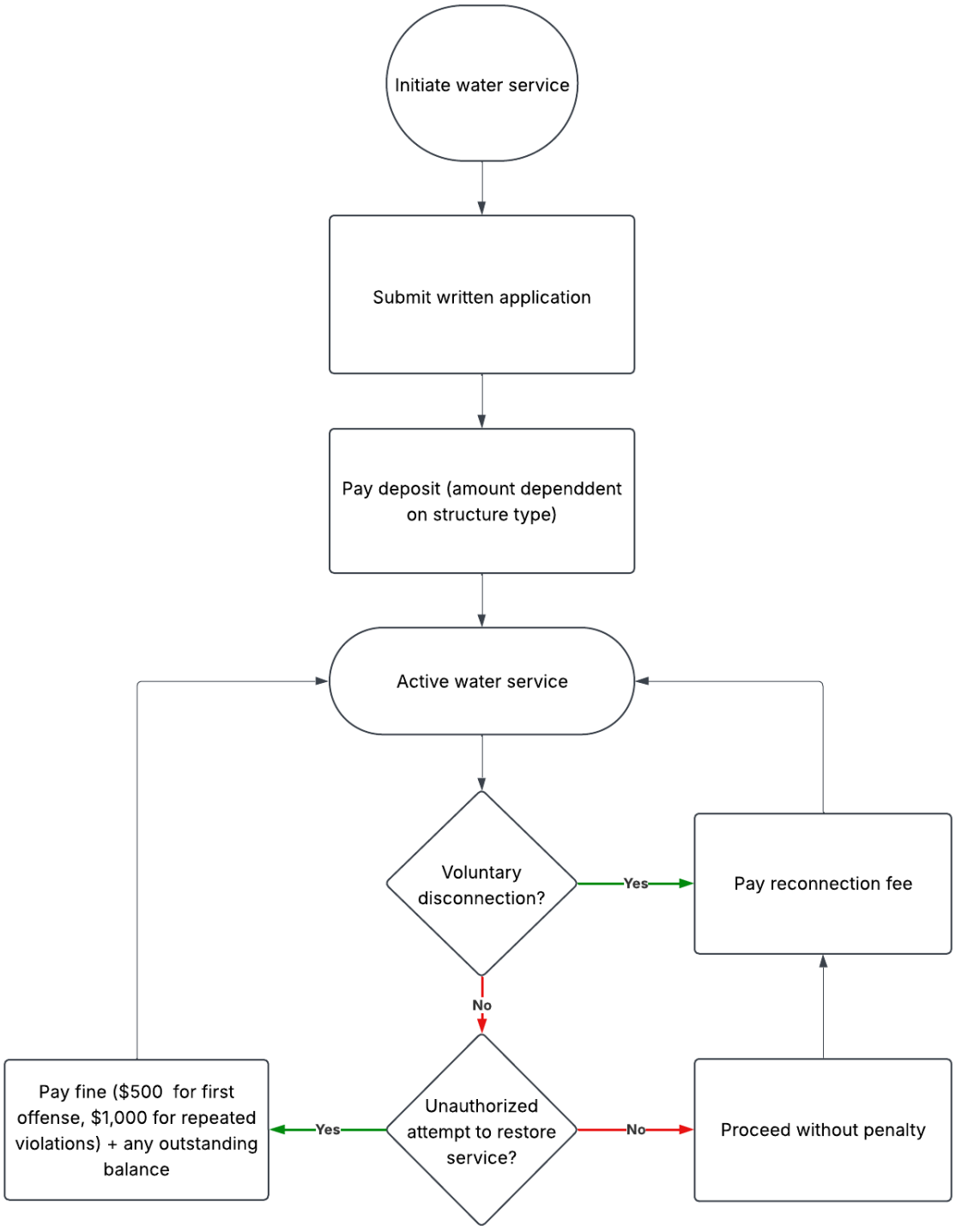
[34] The Village of Lansing (2023). *Ordinance number: 23-019*. https://library.municode.com/il/lansing/ordinances/code_of_ordinances?nodeId=1219585

[35] Data on current rates are available through the village website and historical rates through the Chicago Metropolitan Agency for Planning's Data Hub, https://datahub.cmap.illinois.gov/search?tags=drinking%2520water

[36] Medwid, L., Huang, D., Carroll, D. A., Khalaf, C., Albrecht, K., & Li, J. (2025). The Hidden Household Water Affordability Burden: An Examination of Municipal Ordinances and Racial Equity. *The American Review of Public Administration*, 55(5), 456-471. https://doi.org/10.1177/02750740251340063

[37] The Village of Lansing (2023). *Ordinance number: 23-019*. https://library.municode.com/il/lansing/ordinances/code_of_ordinances?nodeId=1219585

Figure 10. Lansing's Service Initiation Process[38]



[38] Figure 10 illustrates the process Lansing follows for water service initiation using information from *Village of Lansing*. (2024, July 26). *Article II. - Water and sewerage system*. https://library.municode.com/il/lansing/codes/code_of_ordinances?nodeId=PTICOOR_CH40UT_ARTIIWASESY

If service is voluntarily disconnected, a reconnection fee is charged upon restoration; however, there is no explicit mention of the fee amount in the code. Moreover, unauthorized attempts to restore service can result in fines of $500 for the first offense and $1,000 for any repeat violations.[39]

For customers wishing to dispute a water bill, the village allows residents to request a meter test through a written application. The customer must initially cover the cost of testing. If the meter is found to be inaccurate by more than three percent, the meter will be repaired or replaced, and the customer's bill will be adjusted retroactively for up to three months. The village also reserves the right to test meters at its own expense. In cases where a meter fails, estimated bills based on historical usage are issued.

Once a bill is issued, it is considered delinquent if payment is not received within about 15 days and charged a 10% late fee. If the delinquency extends to 60 days, the village has the authority to shut off the customer's water service. Before a shutoff occurs, however, a notice must be placed at the property at least three, but no more than five, days in advance. Unpaid bills that remain delinquent for 30 days automatically become a lien or liability on the property. To restore service following a shutoff, customers must pay all outstanding balance in full, including a shutoff listing fee determined by the board.[40] Figure 11 illustrates Lansing's process for penalizing late water bill payments.

While Lansing's water-related ordinances do not explicitly mention local financial assistance programs or payment plans, in practice, Lansing staff make multiple attempts to avoid disconnection by offering residents several opportunities to bring their account current. We discuss these in more detail in Section 4 which presents staff interview findings. In addition, residents may be eligible for broader regional assistance programs such as the Community Services Block Grant Program which provides aid with rental/mortgage, food, water/sewer payment, employment training/placement, financial management, and temporary shelter.[41]

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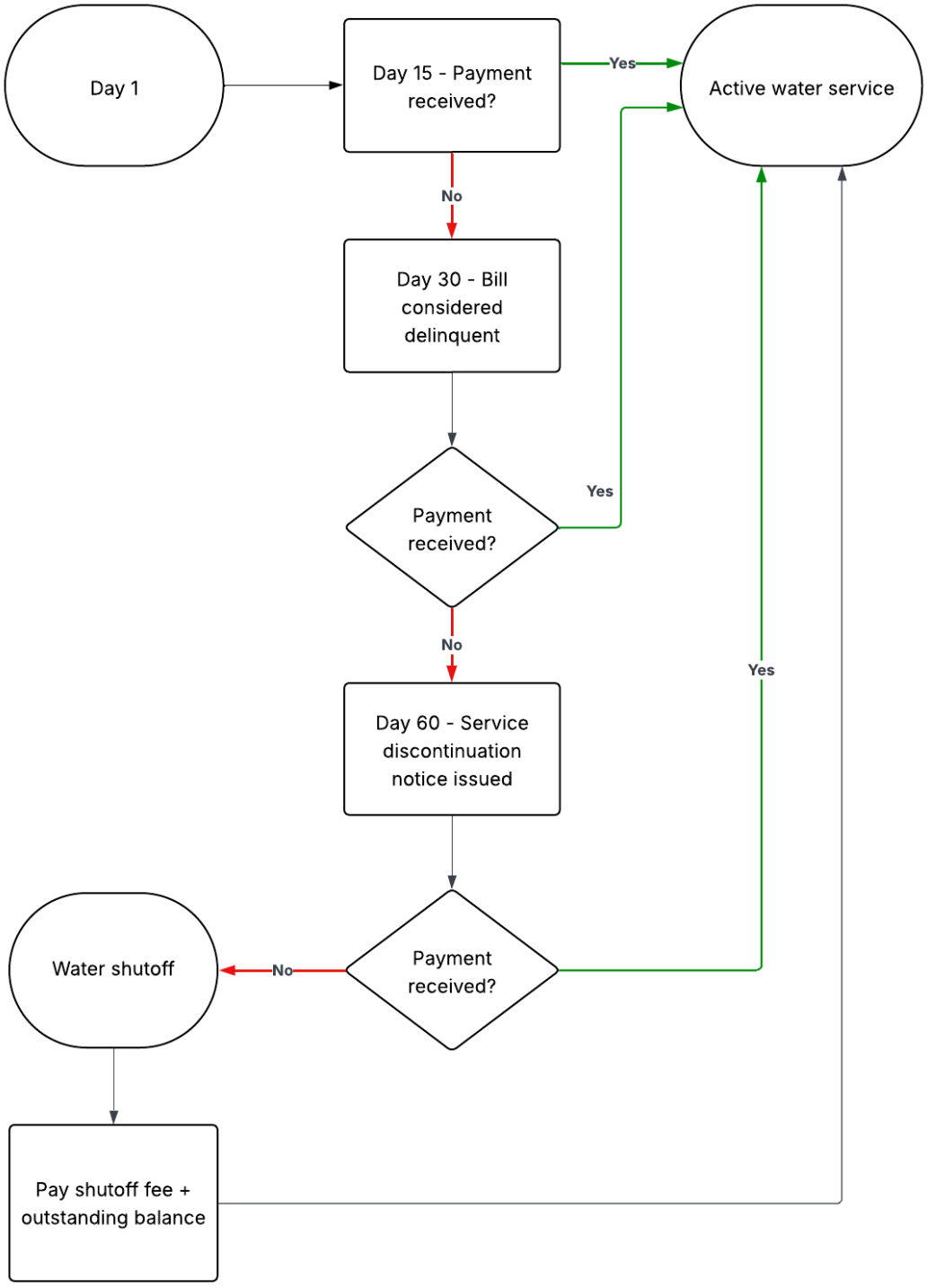
[39] Village of Lansing. (2024, July 26). *Article II. - Water and sewerage system*. https://library.municode.com/il/lansing/codes/code_of_ordinances?nodeId=PTICOOR_CH40UT_ARTIIWASESY

[40] ibid

[41] Illinois Department of Commerce and Economic Opportunity. (n.d.). *Community and Economic Development Association of Cook County, Inc. (CEDA)*. https://dceo.illinois.gov/communityservices/homeweatherization/communityactionagencies/ceda.html

Figure 11. Lansing's Process for Late Water Bill Payments [42]



[42] Figure 11 illustrates Lansing's process for penalizing late water bill payments using information from *Village of Lansing*. (2024, July 26). *Article II. - Water and sewerage system*. https://library.municode.com/il/lansing/codes/code_of_ordinances?nodeId=PTICOOR_CH40UT_ARTIIWASESY

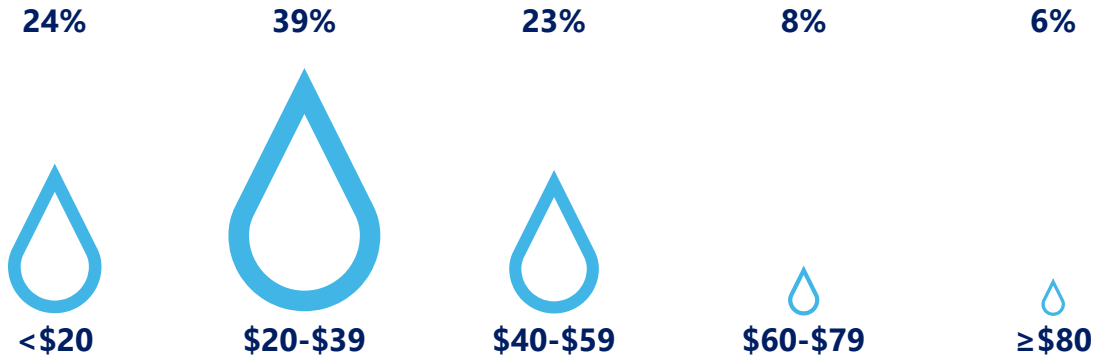
4. Quantitative Analysis: Billing, Arrearage, & Shutoff Data

This section presents a quantitative analysis of household-level water billing and usage patterns. It also examines affordability at the municipal and census tract level. Finally, it analyzes data on arrears and service shutoffs. Drawing on utility billing records, this analysis provides an empirical foundation for understanding the extent to which households in Lansing experience difficulty maintaining access to water services.

4.1. Water Billing & Usage

In a review of billing data provided by the Village of Lansing, from the first quarter of 2025, for 7,972 residential accounts, we found that the average monthly bill is $38.[43] Relying solely on averages can be misleading, so we also examine percentiles which are commonly used statistical measures to understand the distribution of data. For example, the 25th percentile means that 25% of the bills fall below that point. In the Lansing billing data, the 25th percentile is $21, the 50th percentile or median is $33, and the 75th percentile is $49. Figure 12 illustrates that 14% of households in Lansing are paying $60 or more monthly for water services.

Figure 12. Distribution of Bill Amounts[44]

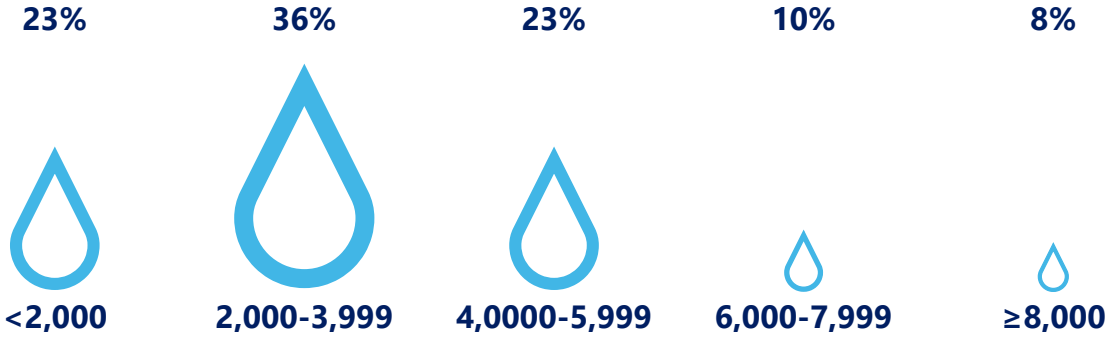


[43] The billing data provided by the village included information for 9,376 accounts. In preparing the data for analysis, we excluded 9 accounts with negative usage and positive bill values. Generally, these accounts reflect faulty meters. In some cases, the meter may have been installed backward, resulting in a lower read and consequently a negative or zero bill. These situations are typically resolved after on-site verification by Public Works. We also excluded 67 accounts with missing water bill values. These were mostly village owned facilities. In addition, we excluded 157 accounts with negative or zero water bills. Negative water bills may occur when an account is initially estimated. This is often due to issues accessing a meter for an accurate read, such as needing a repair or reconnection. Once an actual read is obtained, the correction can result in a negative balance if the original estimate was too high. Zero bills reflect no water consumption during the billing period. Unlike some municipalities that charge a minimum usage amount regardless of actual consumption, the Village of Lansing only bills based on actual usage. Further, we excluded 1,171 accounts not classified as residential because residential billing is the primary focus of this affordability analysis.

[44] Figure 12 uses residential billing data provided by the village and illustrates ranges of monthly bills and the associated share of households receiving these.

In terms of water usage, the average monthly volume is 4,053 gallons per household, with a total usage of 32,309,416 gallons across all residential accounts. In the Lansing water usage data from the first quarter of 2025, the 25th percentile is 2,133 gallons, the 50th percentile or median is 3,485 gallons, and the 75th percentile is 5,226 gallons. Figure 13 illustrates that 18% of households in Lansing use 6,000 or more gallons monthly. To benchmark, the Water Research Foundation estimates that national residential indoor water use (e.g., toilet, shower, food preparation, faucet/dishwasher, clothes washer, leaks) is equal, on average, to 52.1 gallons per capita per day, which implies that a household of four would use around 6,000 gallons in a 30-day period.[45]

Figure 13. Distribution of Usage Volume[46]



4.2. Water Affordability

Water affordability, the focus of this report, is typically assessed by evaluating the cost of water services in relation to household income. A common method involves calculating the percentage of a household's income spent on water services, then using benchmarks to determine affordability. Specifically, EPA's benchmark deems water unaffordable if household bills surpass 2.5% of a community's median household income (MHI).[47,48] More nuanced approaches assess affordability for low-income households, recognizing that the median measure can mask financial burdens on vulnerable populations.[49] Table 6 presents the median and average bill in Lansing as a percentage of income at five different percentiles.

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[45] The Water Research Foundation. (2023). *Residential End Uses of Water Version 2*. https://www.waterrf.org/research/projects/residential-end-uses-water-version-2

[46] Figure 13 uses residential billing data provided by the village and illustrates ranges of monthly and the associated share of households receiving these.

[47] Gallet, D., Pakenham, C. & Schneemann, M. (2020). *Water affordability in Northeastern Illinois: Addressing water equity in a time of rising costs*. Metropolitan Planning Council, Elevate Energy, and Illinois Indiana Sea Grant. https://iiseagrant.org/publications/water-affordability-in-northeastern-illinois/

[48] Goddard, Jessica J., Isha Ray, and Carolina Balazs. (2022). How should water affordability be measured in the United States? A critical review. *Wiley Interdisciplinary Reviews: Water*.

[49] Manuel, T. P. (2018). Measuring household affordability for water and sewer utilities. *Journal of the American Water Works Association*.

Table 6. Water Burden by Income Percentile – Share of Income[50]

Percentile	20th	40th	60th	80th	95th
Monthly Income	$2,627	$5,206	$7,445	$11,404	$19,454
Monthly Median Bill as %	1.25%	0.63%	0.44%	0.29%	0.17%
Monthly Average Bill as %	1.45%	0.73%	0.51%	0.33%	0.20%
Quarterly Median Bill as %	3.76%	1.90%	1.33%	0.87%	0.51%
Quarterly Average Bill as %	4.35%	2.20%	1.54%	1.00%	0.59%

While these metrics confirm that Lansing's water services are generally affordable on a monthly basis, they also underscore the increased financial burden created by the quarterly billing system. This impact is especially pronounced for lower-income households. For example, residents in the 20th income percentile face quarterly bills that amount to 3.76% to 4.35% of their monthly income. Although the total cost of water may be manageable, the infrequent, lump-sum billing schedule can place significant strain on household budgets, particularly for those living paycheck to paycheck.

While most studies assess affordability through indicators such as bill levels, researchers and policymakers have examined alternative approaches. In fact, there is still no standardized definition of affordability or consistent framework to guide local practice.[51,52,53] Given this and to further contextualize the economic burden of water services on Lansing residents, we estimate the number of work hours needed, at different minimum wage levels in 2025, to cover the water bill (Table 7). Unaffordable water bills require more than a full day's wages.[54]

Table 7. Water Burden – Hours of Labor at Minimum Wage[55]

	Monthly Median Bill	Monthly Average Bill	Quarterly Median Bill	Quarterly Average Bill
Federal	5	5	14	16
Cook County	2	3	7	8

[50] Table 6 uses residential billing data provided by the village.

[51] Patterson, L. A., Bryson, S. A., & Doyle, M. W. (2023). Affordability of household water services across the United States. *PLOS Water*, *2*(5), e0000123.

[52] Teodoro, M. P. (2018). Measuring household affordability for water and sewer utilities. *Journal - American Water Works Association*, *110*(1), 13–24. https://doi.org/10.5942/jawwa.2018.110.0002

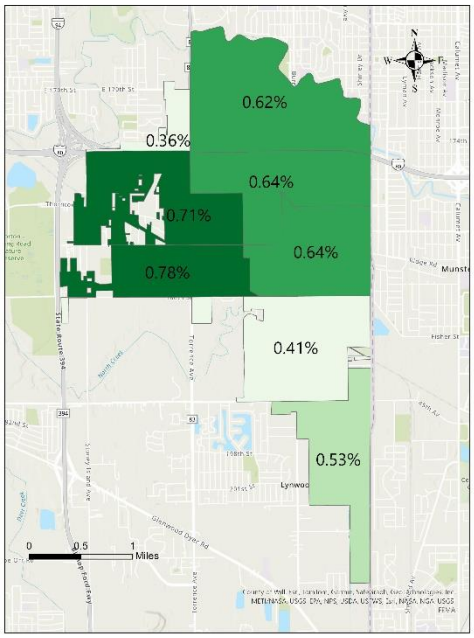
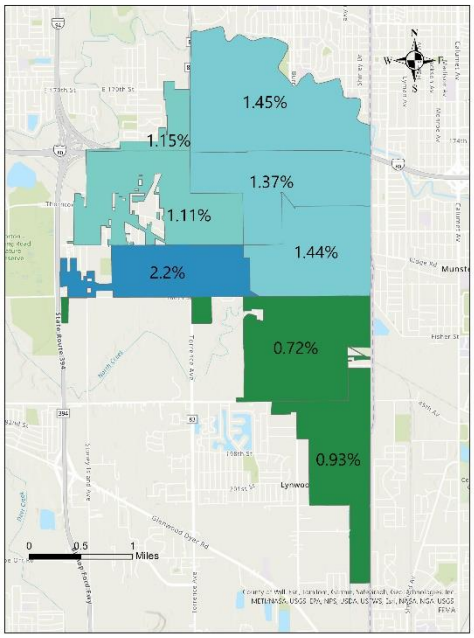
[53] Teodoro, M. P., & Saywitz, R. R. (2020). Water and sewer affordability in the United States: A 2019 update. *AWWA Water Science*, *2*(2). https://doi.org/10.1002/aws2.1176

[54] Patterson LA, Bryson SA, Doyle MW (2023, May 10) *Affordability of household water services across the United States.* PLOS Water 2(5): e0000123. https://doi.org/10.1371/journal.pwat.0000123

[55] Table 7 uses residential billing data provided by the village.

In Table 7, the work hours needed are calculated by dividing the average and median monthly and quarterly water bills by 2025 hourly wage rates. In 2025 the Federal minimum wage remained at $7.25 per hour, while both the Illinois and Cook County wages increased to $15.00 per hour.[56,57,58] The results reveal that 5 hours of work at the federal hourly wage rate would be needed to afford the monthly average water bill. However, 16 hours of work would be needed to afford the quarterly average bill, highlighting again the added burden on households of the current billing frequency. As examining affordability at the village level can hide underlying spatial heterogeneity, we illustrate the average bill at the census tract level, as a share of income (Figure 14).

Figure 14. Water Burden by Census Tracts – Share of Income[59]

Panel A. MHI	Panel B. 20th Percentile
	

[56] U.S. Department of Labor. (n.d.). *Minimum wage*. https://www.dol.gov/agencies/whd/minimum-wage

[57] Illinois Government (2023, December 19). *Illinois Minimum Wage Increases January 1.* [Press release]. https://www.illinois.gov/news/press-release.29436.html#:~:text=Press%20Release%20%2D%20Tuesday%2C%20December%2019,to%20a%20more%20equitable%20Illinois.%22

[58] Cook County Government. (n.d.). *Cook County minimum wage ordinance frequently asked questions (FAQ)* [PDF]. https://www.cookcountyil.gov/sites/g/files/ywwepo161/files/documents/2023-12/cook_county_minimum_wage_ordinance_faq_en_120123%20%281%29.pdf

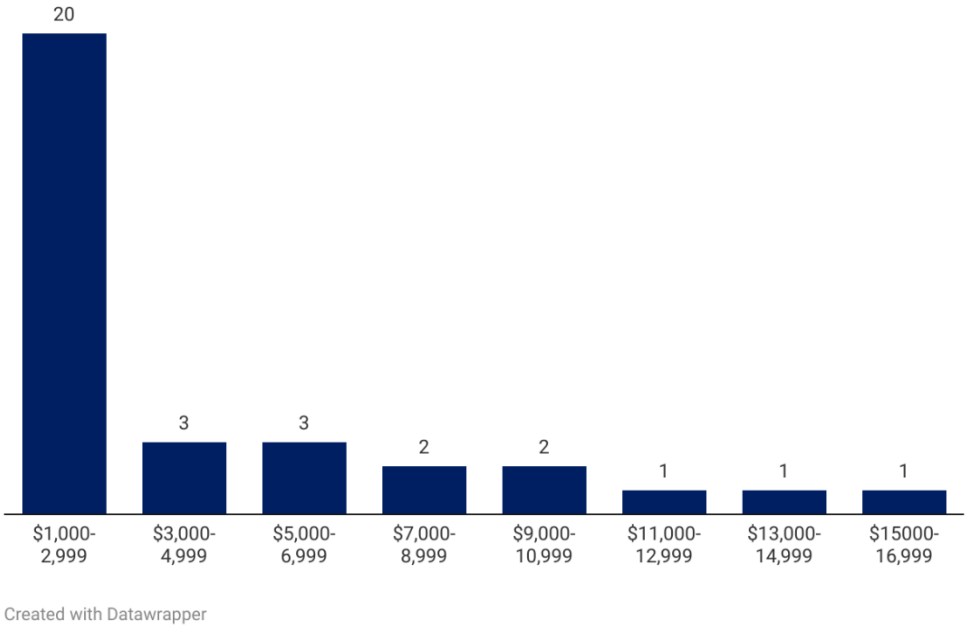
[59] Figure 14 illustrates Lansing's water bill burden by income level across census tracts using residential billing data provided by the village and household income data from the American Community Survey (ACS) 2022 5-year estimates accessed through the National Historical Geographic Information System (NHGIS). The spatial analysis includes 7,961 residential accounts, excluding 11 that were geocoded outside of the incorporated boundaries of the village.

Panel A in Figure 14 illustrates water burden on median income residents defined as the average bill by census tract divided by MHI, while Panel B illustrates the water burden on households at the 20th percentile income level defined as the average bill by census tract divided by the 20th percentile income. These maps highlight disparities in affordability across census tracts, with the highest affordability burden exhibited in the northern and central parts of the village, where the average bill is equivalent to 2.2% of income at the 20th percentile level. It is important to note that these figures reflect bills from the lower-usage season; in reality, quarterly bills during high-usage periods would likely increase the water burden even further.

4.3. Water Debt & Shutoffs

Another indicator of affordability challenges is the rate of delinquent water payments.[60] Water debt and service shutoff rates vary widely across systems, and delinquency tends to cluster geographically in low-income neighborhoods.[61] Thus, next, we evaluate water service arrearages and shutoff data for the Village of Lansing to understand patterns of customer debt and service disconnection. Figure 15 illustrates the distribution of total balances due across delinquent accounts with balances exceeding $1,000.

Figure 15. Distribution of Delinquent Accounts by Balance[62]



[60] Skerker, J. B., Verma, A., Edwards, M., Rachunok, B., & Fletcher, S. (2024). Alternative Household Water Affordability Metrics Using Water Bill Delinquency Behavior. *Environmental Research Letters*, https://doi.org/10.1088/1748-9326/ad5609

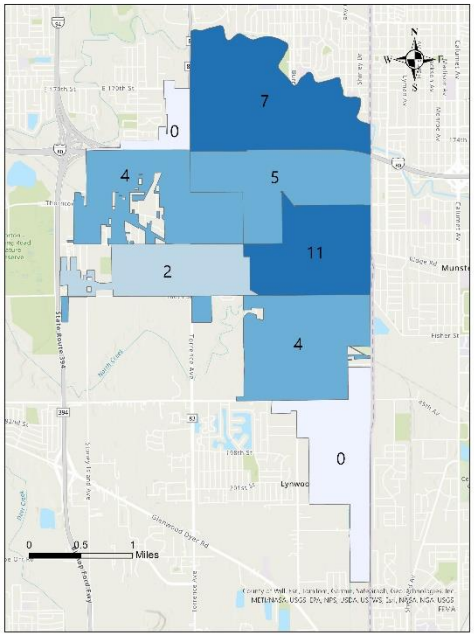
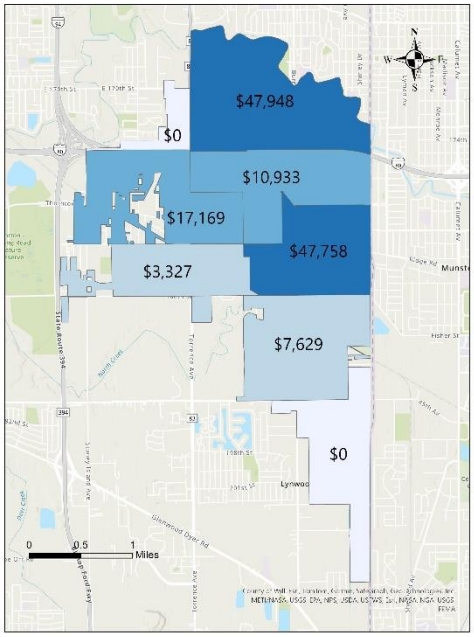
[61] ibid.

[62] Figure 15 illustrates the distribution of total balances due for delinquent accounts using utility billing data provided by the Village of Lansing.

As of March 2025, the village has 33 delinquent water accounts with balances exceeding $1,000. The median delinquent balance on these accounts is $2,156 and the average is $4,084. Collectively, these customers hold $134,764 in unpaid water debt. Most of these accounts (27 of 33) have a balance that is over 120 days due. Of the six remaining accounts, two have a balance that is over 60 days due, and four have a balance that is over 30 days due. Most accounts (20 of 33) owe less than $3,000. A small number of accounts (5) have balances of $9,000 or more.

To further understand geographic patterns of water debt, we aggregate arrears data at the census tract level for delinquent accounts with balances exceeding $1,000. Figure 16 illustrates arrearage data, showing spatial variation in both the number of delinquent accounts and total amounts owed. Similar to the pattern observed for affordability, the northern and central parts of the village exhibit the highest water debt burden.

Figure 16. Arrears Exceeding $1,000 by Census Tract[63]

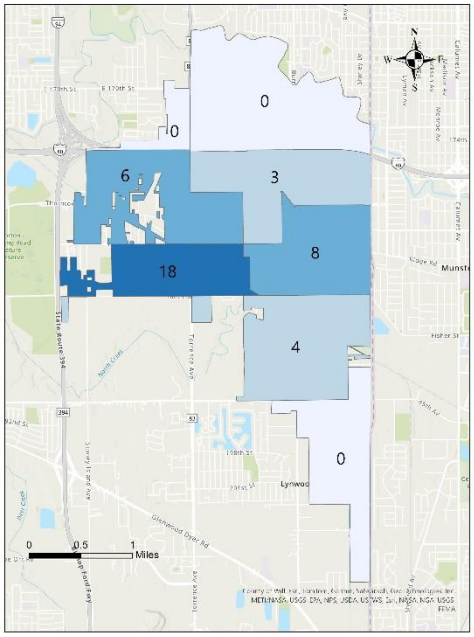
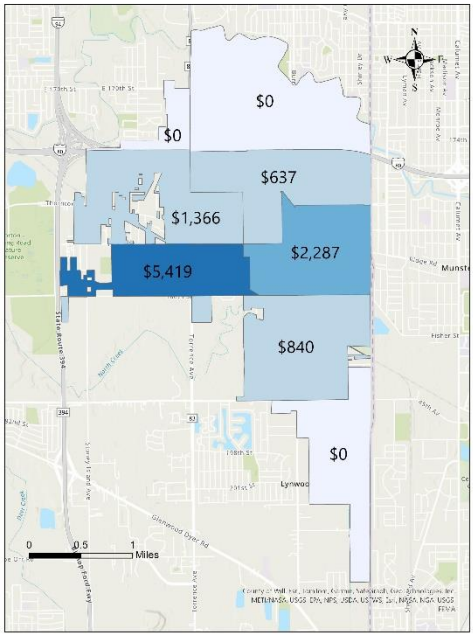
Panel A. Number of Accounts	Panel B. Total Due
	

In the first quarter of 2025, 39 (or 0.49%) of the village's 7,972 residential accounts were shutoff. These accounts correspond to customers whose water service was disconnected due to nonpayment. The average outstanding balance among these shutoff accounts is $270 resulting in a combined total delinquent amount of $ 10,548 across all 39

[63] Figure 16 illustrates the spatial distribution of water debts over $1,000 in Lansing using arrears data provided by the village.

accounts. The median is $217. Most shutoff accounts had balances below $350, with 80% of the accounts holding a balance under $342. Only three accounts had a balance of over $500, one of which exceeded $1,000. Figure 17 maps the shutoff data at the census tract level. Similar to the pattern observed for affordability and water debt, the northern and central parts of the village exhibit the highest water shutoff burden.

Figure 17. Shutoffs by Census Tract[64]

Panel A. Number of Accounts	Panel B. Total Due
	

5. Qualitative Analysis: Interviews with Municipal Staff

The following section presents findings from interviews with staff at the Village of Lansing. The goal of these interviews was to understand how water affordability challenges manifest at the municipal level and how the village is responding to these while balancing the financial and operational requirements for delivering water services. Drawing from the interviews, we summarize key takeaways around four themes: (1) water billing and rate structure, (2) affordability challenges for residents, (3) current municipal approaches to affordability, and (4) additional strategies for improving affordability.

[64] Figure 17 illustrates the spatial distribution of water shutoffs in Lansing using data provided by the village.

5.1. Water Billing & Rate Structure

Lansing's water system uses an enterprise fund, separate from its general fund, to collect fees for water and sewer services which then finance system operations. The village bills its residents quarterly, although ultimately the goal is to transition to monthly billing, as explained by a staff member:

> *We are looking at billing people monthly so that it's easier for them to manage their budgets similar to how they get billed by [other utilities], but we have not gotten there yet, because… we have got some logistical challenges to get through.*

Billing is processed in-house by the village, with the distribution of bills contracted to an external provider. Each household is billed quarterly. However, the village processes bills monthly by segmenting customers into three groups instead of billing all accounts simultaneously. In addition, the village replaced meters eight years ago and now relies on wireless reads of the units of water that residents consume.

The current billing structure includes charges for water and sewer, based on usage, as well as refuse services, along with a small administrative charge. A staff member noted:

> *We are hoping to convert [the administrative charge] to more of a capital charge to help us with infrastructure reinvestment for things like…water main replacement… our water system was established in the fifties and sixties and so it requires reinvestment which we have been doing, but… we are not doing it as fast as we need to.*

Lansing purchases water from the Hammond Water Works Department through a long-term individual supply agreement and then similarly sells water to Lynwood and South Holland. A staff member noted that the village would be interested in joining a water commission or agency, contingent upon a governance structure that ensures meaningful participation of members in decision-making. Water collaboratives increase the bargaining power of water purchasers, allowing them to negotiate lower wholesale rates, which are subsequently reflected in more affordable water bills.[65] Relatedly, another staff member notes:

> *If you want to look at affordability, we might want to look at the suppliers… what their actual costs are… the fact that there is only two of them [Chicago and Hammond] … should we be looking at ways to support the addition of suppliers [using Lake Michigan water] …[since] competition typically drives down prices.*

[65] Carroll, D. A., Albrecht, K., Medwid, L., Khalaf, C., Michnick, J., Huang, D., Wetmore, B., & Li, J. (2023). *Water rate setting in the Lake Michigan service area*. Government Finance Research Center, University of Illinois Chicago. https://drive.google.com/file/d/15DqG4v-S0_s75KOJ1sN-kextINqF79c3/view

To set rates, the village starts with the cost of water purchased from the City of Hammond, Indiana, currently $3.78 per 1,000 gallons. Then, it adds operations, maintenance, and overhead costs, equaling approximately $3 per 1,000 gallons, and finally a reserves component, equivalent to about $2. These sum to the overall residential water rate of $9.16 per 1,000 gallons.

Another staff member explained that the goal of the reserves component is to:

> *make sure that our water supply system is being well maintained, and that if any part of it needs to be replaced, that we are budgeting for those replacement parts.*

In explaining the motivation for how rates are set by the village, a staff member noted:

> *We, in Lansing, want to be the lowest in our area [in terms of water rates], and we have been fortunate enough to be the lowest in our area because of the supply agreement we have with Hammond, and because of how we bill."*

For background, the City of Hammond did not increase wholesale rates from 1985 to 2021.[66] In addition, the literature documents that less frequent water billing translates into lower bills to households.[67]

However, the staff member noted the need to revisit the rate structure:

> *We know we need to put money into the infrastructure. So, if we were to have a capital charge, that [would] probably [cover] the biggest gap that we have.*

The staff member added that including a capital charge in the rate structure is challenging because of the need to first secure resident support as well as recent rate increases by the village's water supplier, as noted here:

> *Trying to explain to residents that this [capital charge] is because we want to continue to have a viable, very strong, very good service… that's probably the biggest challenge that we have…It's become challenging in the last couple of years, because Hammond has changed their rate, increased it by like threefold or three and a half fold.*

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[66] The Chicago Tribune. 2021. Hammond, five water customers reach tentative rate hike agreement: Mayor. https://www.chicagotribune.com/2021/02/24/hammond-five-water-customers-reach-tentative-rate-hike-agreement-mayor/

[67] Carroll, D. A., Albrecht, K., Medwid, L., Khalaf, C., Huang, D., Senthilkumar, A., Zoh, D., Bonifant, J., Avelar, D. *Water Rate Setting in Northwestern, Central, and Southern Illinois*. https://gfrc.uic.edu/wp-content/uploads/sites/188/2025/01/GFRC_WRSS_Report-NCSI-2024.12.20-Final.pdf

The need for this capital charge was emphasized by another staff member stating:

> *We are short on what we need to adequately maintain the system… a lot of our water mains here are approaching 40, 50, 60 years old, we are beginning to experience, frequent water main breaks which are expensive to replace, to repair.*

This staff member also added:

> *Hammond has publicly stated that they are going to tie their rates to the rates that Chicago is passing on, so we know that there are more increases coming… So, our residents can probably expect that our rates would go up…to pay for the water.*

5.2. Affordability Challenges for Residents

The biggest affordability challenge that Lansing residents face is the billing frequency. While municipalities with limited staff prefer less frequent billing, households billed quarterly are more likely to consider their water bills unfairly high compared to those billed monthly.[68] This sentiment is echoed by a Lansing staff member who stated:

> *Our big challenge is we bill people on a quarterly basis… we would love to get to monthly billing, because I think that would help with affordability.*

Another staff member confirmed:

> *The bill comes quarterly, and it is usually pretty high…I think the residents would appreciate having that smaller monthly bill, as opposed to a larger quarterly bill that you sometimes forget about, and all of a sudden it comes due…[These bills can sometimes exceed $500 and] that's a lot to absorb in one month.*

Another affordability challenge for Lansing residents is the brief interval before bills are classified as overdue and subject to late fees, as this staff member notes:

> *You get a bill typically at the very end of a month or the first couple days of the next month, and it's due on the 15th which is a pretty quick turnaround.*

Another staff member added:

> *Water bills, generally speaking, go out at the end of a month, and they are due by the 15th of the following month, so structurally, that becomes a challenge… they have about two, two and a half weeks, max, to pay their bill.*

[68] Laura Medwid and Elizabeth A. Mack. (2022). An analysis of household perceptions of water costs across the United States: A survey based approach. *Water*. https://doi.org/10.3390/w14020247

Seasonal employment and water usage also play a role in creating affordability challenges, as a staff member notes:

> *[In] summertime, people that work at schools tend to be off, so they do not have some of the income they have during the school year…, and these tend to be the high use months.*

Another staff member added:

> *This time of the year, [summer], is when people are generating the most usage of water, so I think the time of the year that's probably the worst [for affordability] is now through July, August, September, because those billing cycles are picking up the summer months.*

5.3. Current Municipal Approaches to Affordability

While Lansing's water-related ordinances do not explicitly mention assistance programs or payment plans, in practice, Lansing staff offer residents several opportunities to bring their account current to avoid disconnection. When an account's overdue balance is around $2,000, the village offers a one-time adjustment, reducing charges to solely recuperate the amount owed to the supplier (Hammond, IN). In addition, the village offers installment plans. Formal payment plans are available for balances over $500, though flexibility is extended to residents with smaller debts as well. Further, customer assistance is provided on a case-by-case basis. The motivation behind the village's municipal approach to affordability, as a staff member explains, is that:

> *We understand that people run into financial issues… We try to work with residents as much as we can.*

Another staff member added:

> *Our elected officials and our staff here, we are all hardwired the same way. If somebody comes in and needs some help, we are going to give them help.*

However, the staff member adds:

> *You just have to tell us, just do not ignore it, because if you ignore it and you just do not pay your bill, then we are going to go out, and ultimately, after the proper number of notices, we're going to shut the water off, and then you are coming in anyway, just to pay extra to get it reinstated, so you might as well deal with it up front.*

A staff member also observed generational differences in residents' adherence to payment plans:

The younger group of consumers of our water tend to be less disciplined about following a payment plan than seniors.

The village considers shutoffs only as a last resort. After the initial late notice, a second notice is issued, followed by a third and final notice posted at the residence's door. These notices encourage residents to contact the village to arrange a payment plan or even a partial payment, before shutoffs begin (typically around 60 days after the due date). In each quarter, about 10-12% of accounts are delinquent, but through the labor-intensive approach of the village, only about 2% reach the shutoff stage. In fact, one staff member noted:

We will go out with a colored piece of paper, stick it on their door… It has dramatically reduced the number of shutoffs…there were times when we might have had over 100 to shut off in a month, and now we are typically down to 20 or 30.

While Lansing does not have a well-defined assistance program, it actively promotes relevant federal, state, or regional programs, as one staff member explained:

We pushed [CEDA] out through all of our social media accounts, had it on the website, and…even did a mailer on it.

Another staff member added:

The local township office, you know, whether it be Bloom or Thornton Township, sometimes they have assistance there. We direct them [the delinquent account holders] to the Salvation Army, they have funding at times, too. Sometimes CEDA does, and sometimes the county comes out with a program, like, the Cook County leak repair program.

CEDA refers to the Community and Economic Development Association of Cook County, which along with the Office of Cook County Board President, launched a low-income household water assistance program.[69] The Cook County Leak Repair program provides free plumbing repairs and fixture upgrades to help eligible suburban Cook County residents stop leaks and save money on water bills.[70] Explaining the administrative purview used, a staff member notes:

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[69] Community and Economic Development Association of Cook County. (2022). *Cook County and CEDA announce low-income household water assistance program*. https://www.cedaorg.net/cook-county-and-ceda-announce-low-income-household-water-assistance-program/

[70] Cook County Government. (n.d.). *Cook County leak repair*. https://www.cookcountyil.gov/service/cook-county-leak-repair

We do not want to charge penalties and late fees… It is the first thing we wave when a resident calls us to work out a payment plan.

5.4. Additional Strategies for Improving Affordability

The village is working with the Illinois Environmental Protection Agency (IEPA) on low-interest loans to replace lead service lines in an effort to minimize the impact of these massive expenditures on its residents. One staff member noted:

We have a couple of low interest loans. Hopefully, some of those will be forgiven.

The village also expressed an interest in a dedicated subsidy program for households in financial distress. Moreover, staff members noted the need for an equitable and transparent process to determine eligibility. However, interviewed municipal staff noted a couple of challenges with the implementation of such a program. One explained:

We have a lot of project needs [making] funding for people that have financial issues right now [aspirational].

Another staff member added:

I don't know how feasible it would be for the Village to have its own grant program, because then people would say, well, you are taking my money, and you are giving it to others.

Notably, municipal staff underscored that shifting from quarterly to monthly billing represents the single most significant step toward improving affordability for the village's residents. A staff member explained:

It is probably not going to change what you pay. But it's going to reduce it, it's going to get you, probably, to budget for it better than you do now… It is going to flatten out your expenses. You know what it is going to be, but now it will be easier to pay for it.

6. Residents' Perspective

To better understand the affordability challenges that residents face, we designed and fielded a survey that was shared by the Village of Lansing on its social media accounts. We received 93 total responses between August 15 and September 15, 2025. Among these, about 50% indicated that the water bill as a whole is very clear and easy to understand, over 32% expressed that it was somewhat clear, about 11% were neutral, and only 6% and 1% found it somewhat confusing and very confusing, respectively. When prompted as to if any elements of the bill were confusing, 43% selected usage rates, 37% indicated none, 26% chose fee calculations, and 19% identified basic service charges. Respondents could select multiple options; therefore, these percentages do not

sum to 100. In terms of suggestions to make the bill easier to understand, respondents primarily requested that rates be included on the bill in addition to total calculations as well as the use of "layman terms." Additional recommendations included:

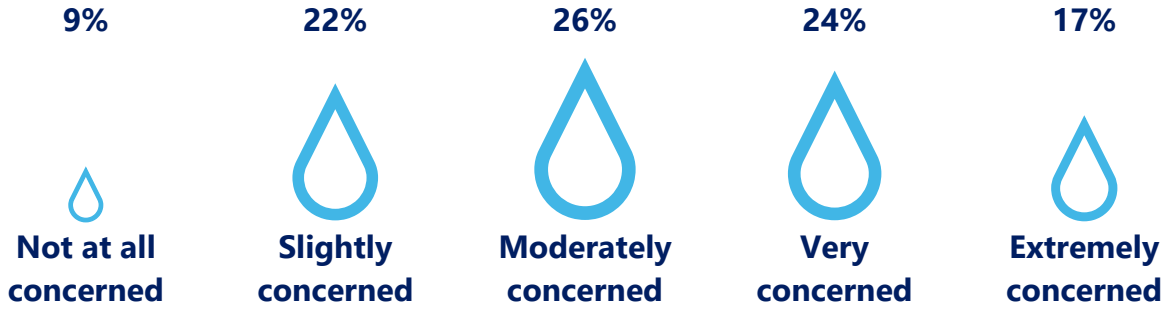
- *Add graphs and/or pie charts (infographic)*
- *If there are late fees associated just give a better breakdown of how the fees are calculated.*
- *A little more detailed clarity separate from trash removal and other charges!*
- *Clear usage time frames corresponding to billing*
- *Explain how usage rates are calculated. Because I am a single senior and every water bill I receive is over 2,500 to 3,000, I am assuming that it is gallons. I don't understand, no matter what I do I cannot get it lower.*
- *I don't water my lawn…My water bill seems very expensive and excessive for the amount of water I use.*

Respondents indicated that they pay their bills as follows: about 40% in person at city office, over 21% using the online payment portal, 13% with automatic bank withdrawal, about 10% by mail, with the remainder using a combination of the aforementioned choices as well as over the phone. Among the 93 respondents, about 66% indicated that they did not miss a water bill payment over the last year, over 18% missed more than one payment, over 11% missed one payment, and 5% preferred not to answer or did not respond. Those that missed payment were asked about the drivers. Among these 28 respondents, 82% selected that the bill was not affordable at the time. One of the respondents noted the reason as:

Due too soon I never know when I am going to get the bill

When prompted further, 61% indicated that other expenses took priority and 36% selected loss of income as a contributing factor in missing the payment. Respondents could select multiple options; therefore, these percentages should not be summed. Figure 18 illustrates share of respondents by level of concern about affording their water bill in the future.

Figure 18. Affordability Concerns for Residents[71]



Prompted to discuss reasons for concern, respondents offered:

- *Each quarter it [the bill] seems to rise, & water usage does not change, pretty routine!*
- *Prices have increased in the recent past, and I predict they will rise again. There is no cap.*
- *Month to month bills would be best.*
- *The late fees are a killer*
- *As a resident and retiree, I'd like to suggest that the village consider itemizing utility bills by separating charges for water, sewer, and garbage services… This kind of transparency would be especially helpful for retirees like myself who are managing tight budgets.*
- *Electricity and other bills are rising and with sometimes very high water bills if they all hit at the same time I could see it being an issue.*
- *Water bills are high but you have no options for budget billing or payment arrangements unless your bill is over $500 but you receive a notice of disconnection if you are late on a bill not over 500 … and you absolutely cannot make arrangements or extension*
- *The cost of water has increased significantly. Since it's a quarterly bill it's hard to budget for. Having it monthly as an estimated bill and then a final bill every quarter would be helpful.*
- *Water is a necessity, and I want to pay all my bills but sometimes we need more time and flexibility without added fees*
- *The water bill in this town was around $5.50 per 1,000 then Hammond raised the rate and a couple years ago it went up close to $9 per thousand and we're choking because we're on social security…*

[71] Figure 18 uses survey data, 2% did not answer the question and are included in the calculations but not the illustration.

- *I'm now in Social Security 1x/month. My check only covers mortgage..*
- *With everything that is going on, I worry that I may lose my social security. Also, if my medical insurance increases, will I be able to afford it.*

When asked what resources would help them better manage their water bills, respondents indicated: Budget billing (same amount each month) (45%), Payment Plan options (41%), Assistance programs information (35%). Respondents could select multiple options; therefore, these percentages do not sum to 100. Focusing on shutoffs, 82% indicated having never experienced shutoffs, 9% experienced shutoff once, and 3% experienced it multiple times, with the 6% not answering or selecting Prefer not to answer. Reflecting on the future, 26% indicated some level of concern about experiencing shutoffs: Moderately concerned (14%), Very concerned (10%), Extremely concerned (2%).

In terms of receiving information about assistance programs, 71% indicated they never received any, 18% were unsure, 5% did not respond, and 5% indicated receiving information. Among the 5 respondents that indicated receiving information, 80% selected that the information received was about the Low Income Home Energy Assistance Program (LIHEAP) while 20% indicated it was about local charity assistance and payment plans. In addition, 40% of respondents who reported receiving information acted on it.

Notably, 50% of survey respondents self-reported their household income, with an average of $79,907. This figure closely aligns with the village's MHI of $76,113, suggesting that the respondent pool is reasonably representative of the broader community in terms of income. Additional information shared about residents' experience with water affordability included:

- *Consistency with billing, omission of surprises when bill appears*
- *Please bill monthly!*
- *Water comes every 3 months. It would be much easier to manage if it were monthly bills.*
- *When we found out that the water bill was going up that was the last thing we really needed to hear. I understand that maybe Lansing didn't have any other choice but maybe they should offer a program or lower bills for senior citizens…We really do need some kind of help because that bill comes every 3 months, and my wife and I cringe.*

- *Why our water has to go through so many other towns before we see water this is why water is so expensive*
- *My house is old and needs some work. I haven't figured out if there are any water leakage, and no funds to pay someone to find out. I pray the bill doesn't continue to rise.*

To further contextualize the experience of Lansing residents with services, we reviewed recent news articles and public reports. Noteworthy findings include that in May 2024, Lansing residents experienced delays in water bill delivery, prompting the Village to extend payment deadlines by 16 days for some customers.[72] In addition, in a recent capital planning effort, the village elicited feedback from residents on spending priorities through a survey, where over 45% of respondents rated the condition of the existing water and sewer systems as excellent or good.[73] When asked what type of projects should take priority in the capital improvement plan, water and sewer system upgrades placed third behind road and street repairs and business district revitalization.

7. Key Findings & Recommendations

Drawing from both the quantitative data analysis and qualitative insights gathered through staff interviews and resident survey, the following section synthesizes key findings and presents targeted recommendations to improve water affordability in the Village of Lansing. These recommendations are evidence-based and organized in order of implementation complexity, beginning with those that are easier to adopt in the short term and progressing toward those requiring more time and resources.

Key Finding 1 – Current communication efforts around billing and available assistance programs are not as effective as they could be.

Recommendation:

Many survey respondents expressed a desire for clearer, more accessible billing that uses plain language and includes rate details alongside total charges. Additionally, while village staff reported actively promoting relevant federal, state, and regional assistance programs, only 5% of respondents recalled receiving any such information, indicating a gap between outreach efforts and resident awareness.

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[72] Bootsma, J. (2024, May 8). Lansing water bill delays extend due date to May 31 for some residents. https://thelansingjournal.com/2024/05/08/lansing-water-bill-delays-extend-due-date-to-may-31-for-some-residents/

[73] Chicago Metropolitan Agency for Planning. (2024). *Village of Lansing capital improvement plan*. https://engage.cmap.illinois.gov/village-of-lansing-capital-improvement-plan

Thus, before any other major initiatives in the village, it is important to address this communication gap. Best practices for water billing suggest including a breakdown of charges that clearly delineate the fixed charge, the variable fee, the volume consumed, among other elements. In addition, it is recommended that the bill clearly indicate the amount of water each resident has consumed, along with a comparison to their past usage trends and the average consumption of their neighbors.[74] Accordingly, Lansing can **review the existing bill format and redesign it** to include plain-language explanations of charges and usage rates, potentially incorporating visual aids such as charts or infographics to enhance understanding, in multiple languages. While not all information can be included on the bill, the village might consider a web page named, "Understanding your bill," that further explains rates and charges to residents.[75,76]

In general, for outreach, the village can leverage a consistent, customer-focused, multi-channel communication strategy that includes mailed inserts, which is what the village primarily relies on now, as well as email alerts, website updates, and social media posts.[77] This will have the added benefit of targeting a subset of the population that is not as responsive to mail. Taking steps to **streamline databases and improve communications with residents**, especially around billing and assistance programs can lead to less resident confusion and missed opportunities to access support.

Investing in building a relationship with residents through automated communication reduces the burden on village staff by eliminating the need to manually compile and relay information. This can range from simple solutions, such as sending automated SMS payment reminders to residents, to more advanced integrations that connect the village's existing smart meters with automated billing platforms and Customer Relationship Management systems. These integrated systems enable real-time data sharing, personalized alerts, and usage recommendations. Additionally, they can interface with customer portals or mobile apps, allowing residents to easily access relevant information and manage their accounts more independently. Ultimately, these efforts would help build trust and transparency, making residents more likely to accept future rate increases if they become necessary.

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[74] U.S. environmental Protection Agency. (2025). *Understanding your water bill*. https://www.epa.gov/watersense/understanding-your-water-bill

[75] East Bay Municipal Utility District. (n.d.) *Understanding your bill*. https://www.ebmud.com/customers/billing-questions/understanding-your-bill

[76] Cleveland Water. (n.d.). Understanding your bill. https://www.clevelandwater.com/customer-service/understanding-your-bill

[77] Vieyra, B. (n.d.). *Fluid Communication: 4 Strategies for Improving Communication with Small Water System Customers*. Environmental Finance Center Network. https://efcnetwork.org/fluid-communication-4-strategies-for-improving-communication-with-small-water-system-customers/

Key Finding 2 – The lack of a codified, formal process for offering payment plans and assistance contributes to affordability challenges for residents.

Recommendation:

While village staff currently extend payment flexibility on a case-by-case basis, the absence of standardized guidelines leads to inconsistent access to assistance and create confusion for residents seeking support during periods of financial hardship, as evidenced by the survey results. Establishing a formal, codified **payment plan** and assistance policy would improve transparency, equity, and predictability for both customers and administrators. Transparent communication about options builds trust, improves customer satisfaction, and can reduce late payments or service shutoffs. This plan can codify current municipal practices of a one-time bill adjustment and installment plans for balances over $500, that often extend to residents with smaller debts as well.

The village's payment plan policy can also offer a variety of options to accommodate different financial situations. Both municipal staff and residents indicated that seasonal usage spikes were a challenge, further exacerbated by the quarterly billing frequency. **Budget billing** can help keep water bills more affordable by averaging a customer's anticipated annual usage over 12 months, allowing for consistent monthly payments. This approach smooths out seasonal fluctuations and makes it easier for customers to plan and manage their expenses.

In addition, as expressed in the residents' survey responses, a **senior assistance program**, that offers specific discounts to low-income people over a specific age would be valued. The village of Lansing has precedent for such a discount as it offers senior citizens, defined as 65 years or older, a 25% discount on garbage and refuse rates.[78] Several municipal water utilities have similar programs, for example San Antonio waives later payment penalties for customers aged 60 or older.[79]

Affordability challenges are also reflected in delinquency and shutoff data. Thus, the village might consider including in its plan an **arrearage forgiveness program**, by which accounts with past due amounts are automatically enrolled in a payment plan. In assessing the village's ability to offer these programs, staff might rely on publicly available tools.[80]

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[78] Village of Lansing. (n.d.). *Garbage and refuse rates*. https://www.villageoflansing.org/village_departments/clerks_office/garbage.php

[79] Environmental Protection Agency. (2025). *Water affordability needs assessment*. https://www.epa.gov/waterfinancecenter/water-affordability-needs-assessment

[80] Natural Resources Defense Council. (2023*). A new tool for water utilities: the business case for affordability*. https://www.nrdc.org/bio/larry-levine/new-tool-water-utilities-business-case-affordability

Both village staff and residents indicated that the brief interval before bills are classified as overdue and subject to late fees created added burden. The village can incorporate innovative elements into their billing practices such as "pick-a-date" billings that allow customers to choose to receive the bill at a time of the month when they know they will have adequate cash flow to pay the bills.

Since the village considers water shutoffs a last resort, staff devote significant time and effort to helping residents avoid them. The implementation of a formal payment and assistance plan coupled with a better communication strategy and investment in customer management systems could decrease this burden on Lansing's human resources. Specifically, **increasing transparency about available bill assistance opportunities**, by clearly outlining these, both online and in printed communication, can help residents take proactive steps to stay current on their bills and reduce administrative strain on utility staff handling payment issues.

These recommended practices are in line with strategies to improve assistance and the utility-customer relationship that include the use of direct and modern approaches to make customers aware of payment plan options, user-friendly mobile options for customers to enroll in programs independently, and customizable payment plans without needing to speak to a staff member, among other practices.[81]

Key Finding 3 – The current quarterly billing cycle places a financial burden on residents, particularly those with limited incomes.

Recommendation:
Lansing's own billing data demonstrates that while the average monthly water bill is relatively affordable at $38, the quarterly billing structure leads to larger, lump-sum bills that can represent over 4% of monthly income for households in the bottom income quintile, well above the U.S. EPA's recommended affordability threshold of 2.5%.[82] Interview findings and survey results further support this recommendation, as staff members and many residents identified quarterly billing as a key affordability challenge and expressed a preference for monthly billing to make payments more predictable and manageable. Evidence from research also suggests that smaller, more frequent bills are

[81] US Water Alliance. (2023). Modern, effective, and compassionate billing: How Louisville made an overdue upgrade to assistance programs and improved the utility customer relationship. https://uswateralliance.org/wp-content/uploads/2023/09/FINAL-Louisville-case-study_1.pdf
[82] Gallet, D., Pakenham, C. & Schneemann, M. (2020). *Water affordability in Northeastern Illinois: Addressing water equity in a time of rising costs*. Metropolitan Planning Council, Elevate Energy, and Illinois Indiana Sea Grant. https://iiseagrant.org/publications/water-affordability-in-northeastern-illinois/

easier for households, particularly low-income residents to manage within monthly budgets, reducing the risk of delinquency and service shutoff.[83,84]

Village staff reported that the transition to monthly billing presents significant complexity, primarily because current operations are labor-intensive and require direct staff intervention to ensure timely payment. The first two recommendations, outlined in this section, focused on strengthening communication with residents, automating routine billing functions, and formalizing the payment plan and assistance process. These two recommendations are suggested as foundational measures to reduce operational burdens and establish the conditions necessary for an effective transition to a **monthly billing cycle**.

Building on these preparatory measures, the village can pursue an incremental transition to monthly billing. The village already issues monthly bills by dividing customers into three groups; thus, this structure provides a practical foundation for phased implementation. For example, the first group could be shifted to monthly billing at the start of a quarter while the remaining two groups maintain their existing quarterly schedule. This phased approach would allow the village to identify and resolve operational challenges before undertaking a full system-wide rollout. During the pilot period, the village could monitor key indicators such as payment timeliness, delinquency rates, staff workload, and administrative costs to assess readiness for broader adoption.

From a metering standpoint, the transition should be relatively seamless given that Lansing has already deployed smart meters. Ideally, issues of technology readiness, such as adopting automated billing software and expanding customer portal access, would be addressed in the short term, consistent with the earlier recommendations in this section. Thus, the piloting period would allow the village to evaluate the financial and operational implications of the transition. To illustrate, while monthly billing is expected to enhance revenue stability, its impact on administrative costs is less certain. Specifically, billing and processing expenses may increase, but the need for staff time devoted to collections could decline.

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[83] Matthews, P. (2012). *Moving toward monthly billing: Measure of improvements to cost-of-service equity*. Proceedings of the Water Environment Federation. https://www.accesswater.org/publications/proceedings/-280211/moving-toward-monthly-billing--measure-of-improvements-to-cost-of-service-equity

[84] Barrage, L., Chin, I., Chyn, E., & Hastings, J. S. (2020). *The impact of bill receipt timing among low-income and aged households: New evidence from administrative electricity bill data*. NBER. https://www.nber.org/brd/how-bill-timing-affects-low-income-and-aged-households?page=1&perPage=50

Key Finding 4 – The current reserve funds are not sufficient to meet projected infrastructure needs.

Recommendation:
While the village maintains reserves, they are insufficient to cover anticipated maintenance costs. Municipal staff have worked with the Illinois Environmental Protection Agency on low-interest loans to replace lead service lines to minimize the impact of these massive expenditures on the village's residents. Nonetheless, as a proactive approach to avoid the need for significant rate increases that would overburden residents, village staff expressed interest in converting the existing administrative charge into a capital charge.

Staff emphasized the importance of securing community buy-in before adjusting the water rate structure, which could be accomplished through a **community engagement plan**. This plan can help build public understanding and support for adding a capital charge to water bills to ensure sufficient reserves for infrastructure maintenance. The village can demonstrate the value of proactive funding by clearly explaining the long-term costs of deferred investment, such as service disruptions, emergency repairs, or higher future rate increases. Engagement efforts can include public meetings, accessible informational materials, and opportunities for residents to ask questions and provide feedback. Highlighting how a dedicated capital charge creates stability, ensures intergenerational equity, and aligns with practices in other municipalities can further build trust. The Village can increase buy-in and reduce resistance to changes in billing by involving the community early and transparently in the decision-making process.

Key Finding 5 – Wholesale water rates are set by the supplying entity, limiting the village's ability to shield its residents from future rate increases.

Recommendation:
From a cost standpoint, village staff highlighted the influence of wholesale water suppliers in determining the final price paid by residents. This underscores the need for greater oversight and transparency in regional water pricing. In response, village staff expressed interest in exploring **regional partnerships** as a strategy to reduce the financial burden on residents. Notably, the literature documents that municipalities that acquire water through an individual purchasing agreement charge their residents between $13.16 and $15.08 (per 5,000 gallons consumption) more on average than municipalities who self-produce their drinking water, and that for each additional

position in a supply chain, away from the original produce, municipalities experience an increase of $4.50 in the average standardized water bill.[85]

The Village can actively pursue regional partnerships to manage exposure to wholesale water costs. This could include initiating discussions with neighboring municipalities and regional water authorities to explore joint purchasing agreements or shared infrastructure projects. Lansing could participate in regional planning committees to identify opportunities for bulk procurement, cost-sharing for capital projects, and operational efficiencies. The village can also evaluate potential joint investments in alternative water sources or treatment facilities to diversify supply and increase bargaining power. Through these steps, Lansing can strengthen its financial resilience, reduce vulnerability to rate increases, and achieve more stable, predictable water costs for its residents.

8. Conclusion

The Village of Lansing faces a set of interrelated challenges that affect the affordability of water for its residents, from aging infrastructure and quarterly billing practices to limited financial assistance options and dependence on wholesale suppliers. While the average monthly bill appears affordable, deeper analysis reveals that billing frequency, late fees, and high seasonal usage contribute to financial pressure, especially for low-income households. These pressures are further reflected in debt and shutoff data as well as resident concerns about rising costs and limited payment flexibility.

Despite these challenges, Lansing has a strong foundation for progress. Village staff have demonstrated a commitment to proactive engagement, offering informal support to residents and seeking opportunities to minimize future cost burdens, such as pursuing low-interest infrastructure loans. Residents, too, have shown a willingness to engage, offering feedback and identifying areas for improvement, particularly around communication, billing practices, and support programs.

The recommendations in this report are designed to be actionable and responsive to both operational needs and community concerns. By prioritizing clear communication, formalizing assistance options, transitioning to monthly billing, and planning for long-term financial sustainability, Lansing can take meaningful steps to improve water affordability while maintaining the infrastructure and financial health of the system.

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[85] Carroll, D. A., Albrecht, K., Medwid, L., Khalaf, C., Michnick, J., Huang, D., Wetmore, B., & Li, J. (2023). *Water rate setting in the Lake Michigan service area*. Government Finance Research Center, University of Illinois Chicago. https://drive.google.com/file/d/15DqG4v-S0_s75KOJ1sN-kextINqF79c3/view

CONCLUDING REMARKS

Any questions or comments related to this report should be directed to the lead author, Dr. Christelle Khalaf (ckhalaf@uic.edu) or the Principal Investigator, Dr. Deborah A. Carroll (deborahc@uic.edu). The researchers at the University of Illinois Chicago's Government Finance Research Center (GFRC) are committed to providing innovative and unbiased public finance research that shapes and informs public policy and scholarly discourse. Thank you for working with us to make government agencies work better to improve the fiscal health of our communities.

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Lansing Affordability Recommendations					
Recommendation	**Timeframe**	**Action Steps**	**Timeline**	**Estimated Cost**	**Potential Funding Source(s)**
#1: Redesign Water Bill	Short-Term	1) Include plain-language explanations of charges and usage rates in bills; 2) Incorporate visual aids; 3) Create a web page that includes explanation of bill components.	FY2026	Varies, based on incorporated modifications, includes staff time, printing and mailing costs, and third party costs	Cook County Water Affordability Program
#2: Improve & Automate Communication	Short-Term	1) Leverage website updates and social media posts; 2) allow automatic reminder options through the new billing platform (EB2Gov).	FY2026	Varies, based on action steps taken, mainly includes staff time	Utility Fund Annual Revenues or Cook County Water Affordability Program
#3: Establish a Formal Payment Plan	Short-Term to Long-Term	1) Codify current municipal practices of a one-time bill adjustment and installment plans for balances over $500, that often extend to residents with smaller debts; (2) Increase transparency about available bill assistance opportunities; 3) Consider allowing budget billing (until transition to monthly complete); (4) establish a senior assistance program and/or a formalized arrearage forgiveness program.	FY2026 Going Forward	Varies, based on action steps taken and implemented programs	Cook County Water Affordability Program and Utility Fund Annual Revenues

#4: Transition to Monthly Billing Cycle	Medium-Term to Long-Term	1) Plan transition including assessing added workload and staffing capacity as well as financial and operational implications; 2) adjust systems and workflows, e.g., align meter reading schedules to monthly; 3) update printing & billing contracts; 4) announce change to residents; 5) pilot change	FY2026 Going Forward	Varies, based on needed system and workflow upgrades, includes staff time, printing and mailing costs, and third party costs	Cook County Water Affordability Program and Utility Fund Annual Revenues
#5a: Conduct a Community Engagement Plan	Long-Term	Build public understanding and support for adding a capital charge to water bills to ensure sufficient reserves for infrastructure maintenance through 1) Public meetings; 2) Accessible informational materials; 3) Opportunities for residents to ask questions and provide feedback.	FY 2026 Going Forward	$75,000-$125,000	Cook County Water Affordability Program and Utility Fund Annual Revenues
#5b: Explore Regional Partnerships	Long-Term	1) Initiate discussions with neighboring municipalities and regional water authorities; 2) Participate in regional planning committees; 3) evaluate potential joint investments.	FY 2026 Going Forward	Varies, based on action steps taken, could include engineering assessments of system interconnections, regulatory reviews, financial analyses, public engagement	Cook County Water Affordability Program and Utility Fund Annual Revenues