COMPREHENSIVE WATER & SEWER RATE STUDY UPDATE

JULY 17, 2023



PRESENTATION OVERVIEW

- Current Revenue Drivers
- Rate Study Process
- Affordability Analysis
- Next Steps

INFLATIONARY PRESSURES

Cost Index	Historical	2022
CPI (2000 - 2020)	2.10%	7.90%
ENR CCI (2000 - 2020)	3.10%	7.20%
Cement & Concrete Product Manufacturing (2004 – 2020)	3.70%	15.10%

Water and sewer utilities are capital-intensive and are driven by prevailing economic conditions.

OPERATING EXPENSES

Expenses are Increasing

- General Inflation
- Increased Labor Costs
- Increased Electrical & Chemical Costs
- Increased maintenance due to aging system and deferred capital improvements

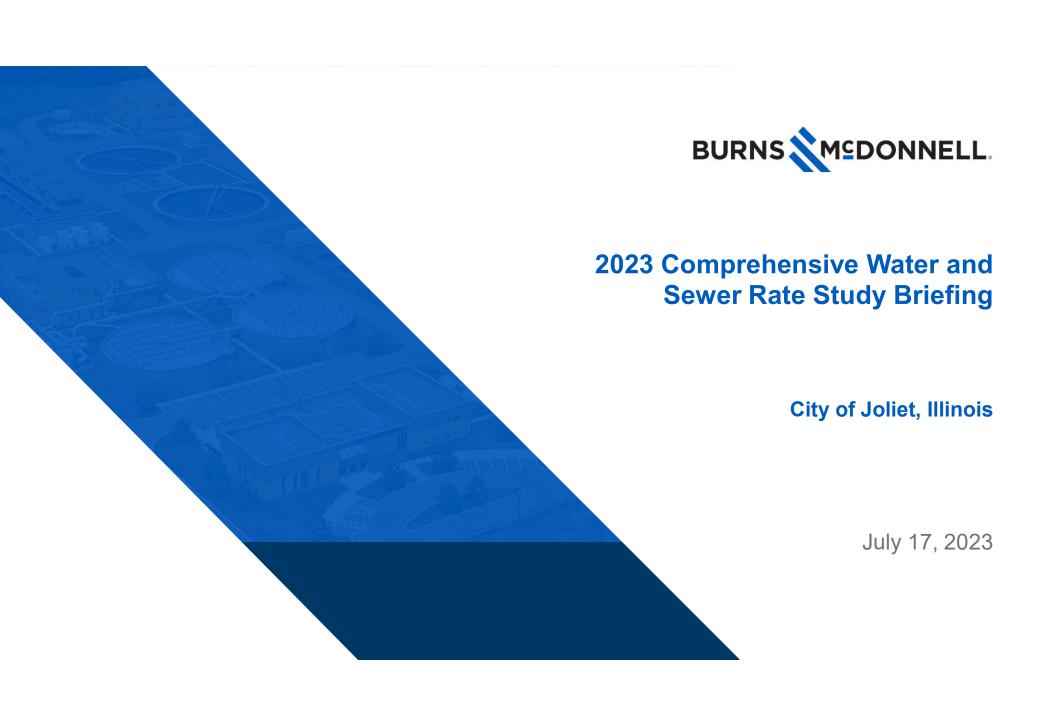
CAPITAL IMPROVEMENT NEEDS

WATER SYSTEM IMPROVEMENTS

- Alternative Water Source Program
- Water Main Replacement Program
- Lead Water Service Line Replacement

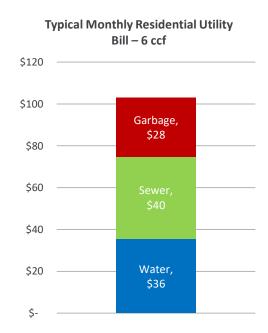
SEWER SYSTEM IMPROVEMENTS

- Combined Sewer Overflow Long Term Control Program
- Lift Station Rehabilitation Program
- Westside WWTP Expansion
- Sanitary Sewer Rehabilitation Program



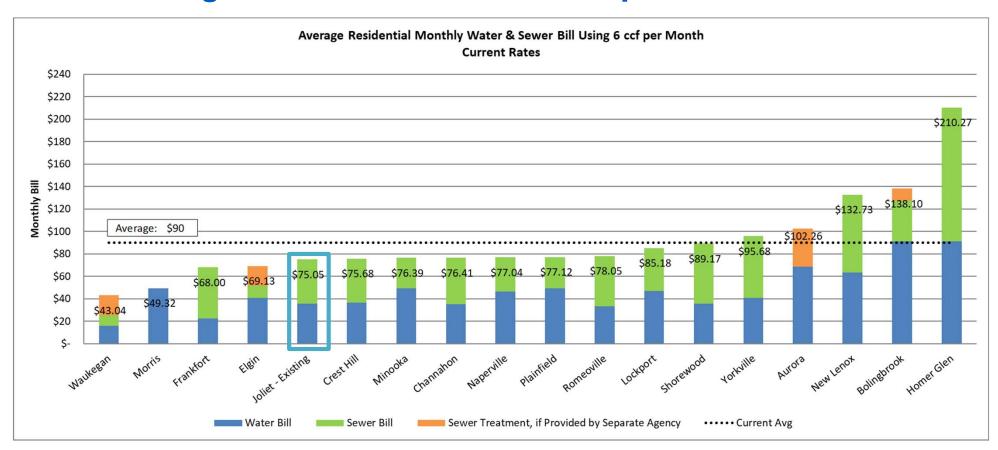
Joliet water & sewer billing basics

- Billings for water, wastewater, and garbage collection services come to each customer on a single bill each month.
- Water and wastewater services in Joliet are funded solely through revenues collected from utility bills. Property taxes are not used.
- ➤ Billings for water and wastewater services are based on customer type and the amount of water used by the customer each month.
- Billing for garbage collection services is also included on the utility bill at a flat rate daily charge.



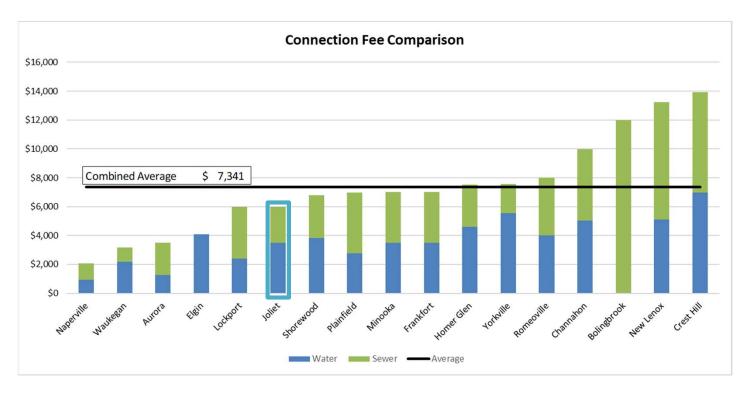


Current regional residential bill comparison





Regional residential connection fee comparisons



Connection fees can vary widely due to a variety of factors, including age and condition of system; population density; policies on growth-related charges; methodology; and length of time since last update.



Key components of the rate study

- Evaluate changes in water & sewer rate structure
 - Fixed fees that increase by meter size
 - Volumetric fees
 - Residential lifeline block and 3rd tier
 - Non-Residential block consolidation
 - Integrate sewer separation fee into fixed and volumetric charges
 - Review outside city multiplier
- Consider household affordability for water & sewer service in the rate structure evaluation
- Review miscellaneous fees and connection charges



2023 Rates by class

Owner (Inside City) Rates	Residential	<u>Commercial</u>	<u>Industrial</u>	Multi Family <u>Tenant or Owner</u>	<u>Senior</u>	Multi Family <u>Senior</u>	Rate Structure Changes under Consideration
Water Daily Charge (\$/Month)	\$7.55	\$7.55	\$7.55	\$7.55	\$6.76	\$6.76	Fixed charge that increases by meter size
Water Volume Charge (\$/Ccf)							
First 2 Ccf	\$2.00	\$2.21	\$2.21	\$2.21	\$1.38	\$1.60	Expand lifeline rate (block 1)
Over 2 Ccf	\$6.00	\$6.67	\$6.67	\$6.67	\$4.11	\$4.84	and add a 3 rd inclining block
Sewer Daily Charge (\$/month)	\$5.70	\$5.70	\$5.70	\$5.70	\$5.10	\$5.10	Consolidate into a single volumetric rate
Sewer Separation Fee (\$/month)	\$8.24	[1] Varies	[1] Varies	[2] Varies	\$8.24	[2] Varies	
Sewer Volume Charge (\$/Ccf)	\$4.26	\$4.26	\$4.26	\$4.26	\$4.02	\$4.02	Integrate with sewer fixed & volumetric charge

Notes

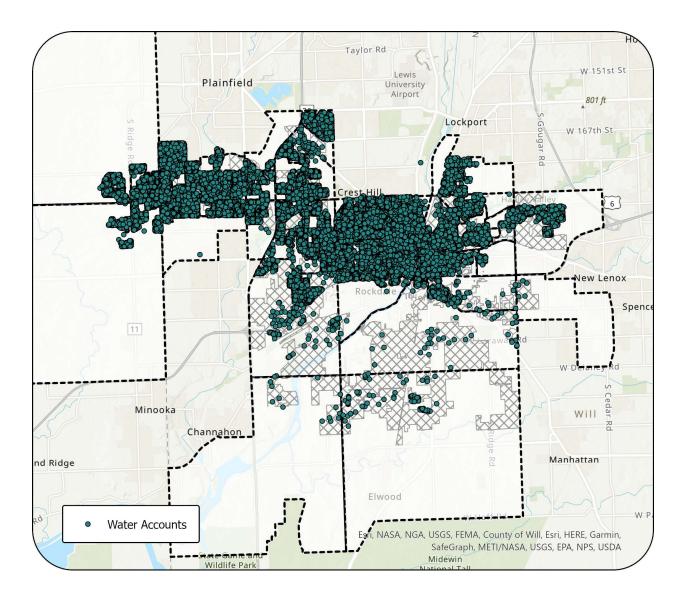
- [1] Fixed charge that increases based on water consumption. Minimum is \$8.36/month, max capped at \$406.63.
- [2] Fixed charge that decreases based on number of multi-family units. Maximum charge per unit is \$7.75/month

Ccf = 100 cubic feet = 748 gallons



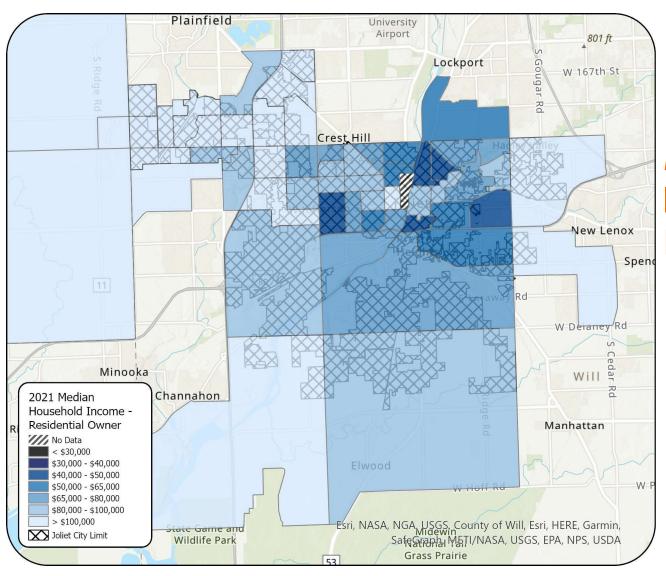
AFFORDABILITY ANALYSIS Baseline Observations





Joliet Water Accounts

- Joliet service area is crosshatched
- Census tracts represented by dashed outlines



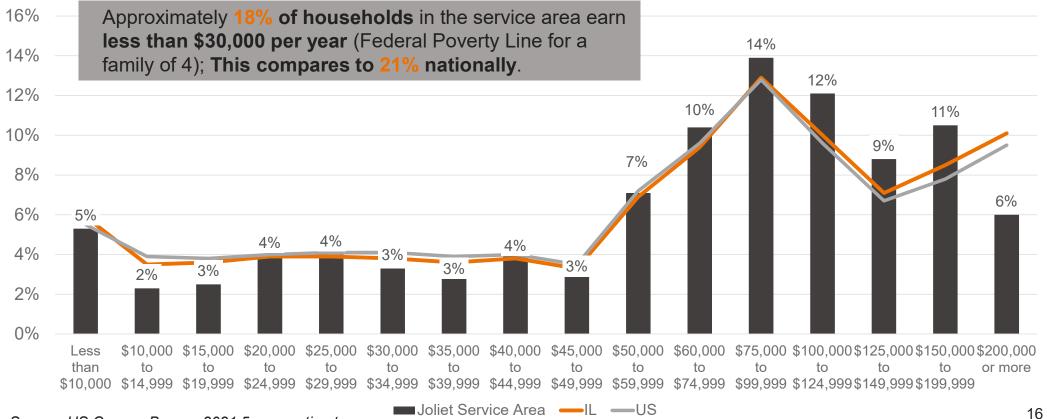
Median Household Income (MHI) for Residential Owners

- MHI = 50% of households earn more & 50% earn less
- Darker colors represent lower MHI by census tract

No Data indicates no available census data. Source: US Census Bureau 2021 5-year estimate

Median Household Income and Income Distribution

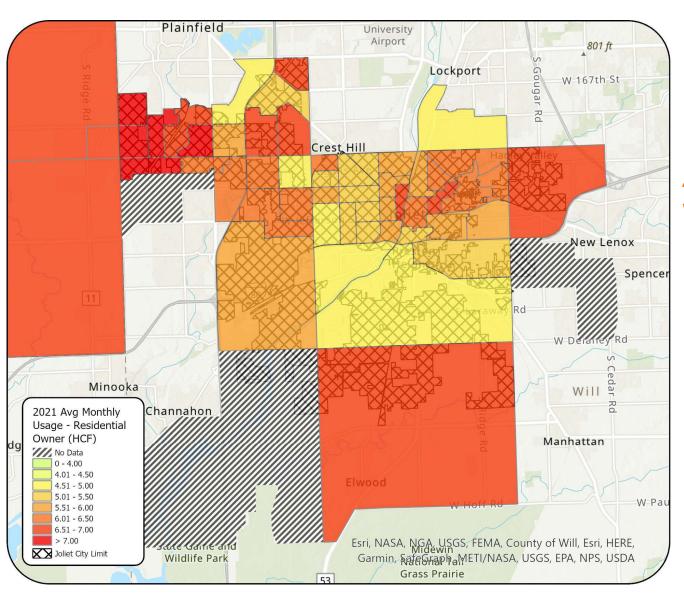
Geographic area	MHI (2021\$)
Joliet Service Area	\$77,373
Illinois	\$72,563
United States	\$69,021



Source: US Census Bureau 2021 5-year estimate

Typical Monthly Bill Characteristics of Joliet's Residential Community

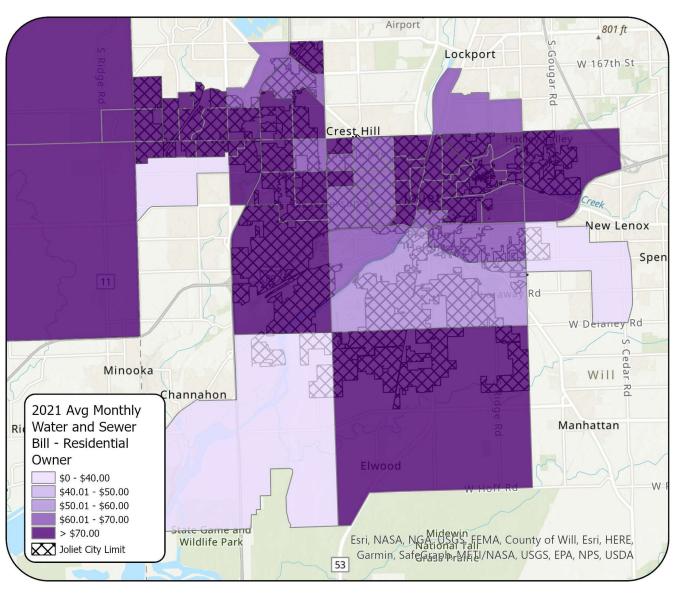
	Residential - Owner	Residential - Tenant	Residential - Senior
Avg Monthly Water Usage (2023)	6 HCF	5 HCF	4 HCF
Avg Monthly Water Bill (2023)	\$36	\$32	\$18
Avg Monthly Sewer Bill (2023)	\$40	\$35	\$21
Total Average Bill (2023)	\$76	\$67	\$39



Average Monthly Water Usage for Residential Owners

- 2021 billed usage average by census tract
- Darker colors indicate higher usage
- Average usage for service area = 6 HCF

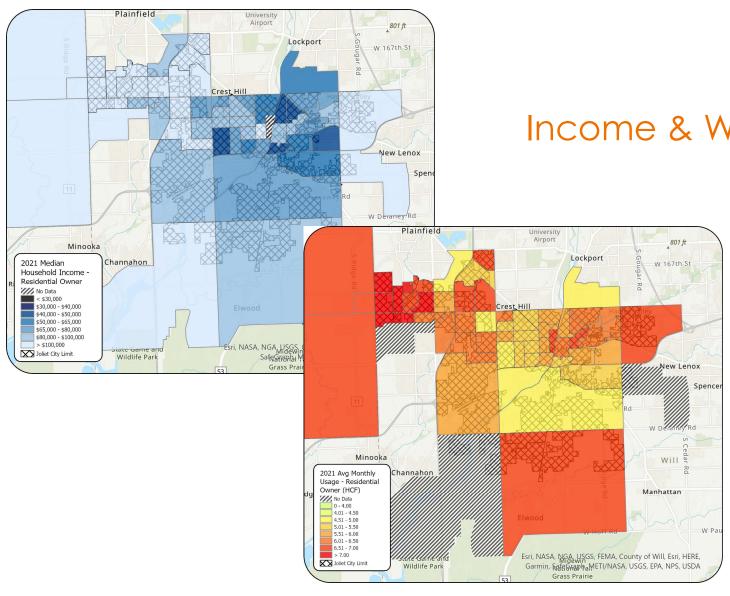
No Data indicates no Residential Owner customers in census tract.



Average Monthly Bill for Residential Owners

- Combined monthly water & sewer bill for average usage
- Darker color indicates higher bills due to higher usage

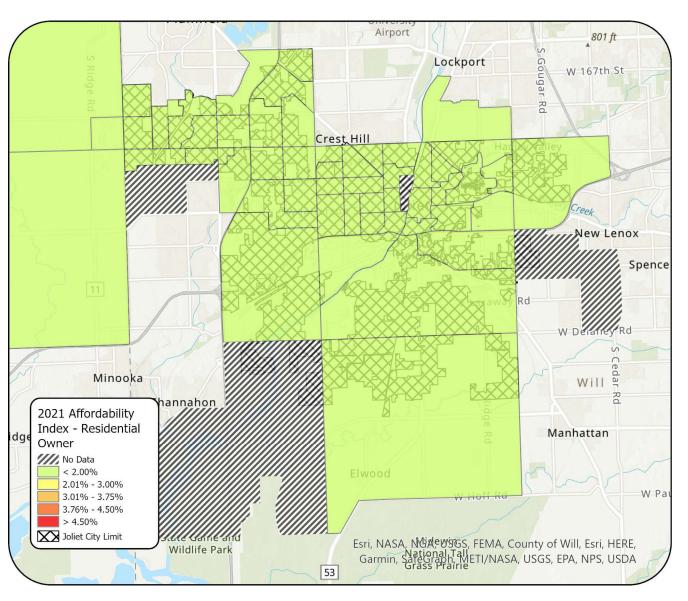
Bills calculated with 2021 usage and 2023 rates.



Income & Water Usage

Generally, higher MHI = higher water use

> No Data indicates no census data available/no Residential Owner customers in census tract.



Affordability Index for Residential Owners Based on MHI

- Annual water & sewer bills as a percent of MHI
- High burden threshold of 4.5% for water & sewer bills
- Lighter color indicates lower financial burden on customers

No Data indicates no census data available/no Residential Owner customers in census tract.

NEXT STEPS

- Complete drafting of rate recommendations in August
- Update affordability analysis
- Present to Council in early September
- Propose adoption in October
- Implement new rates in November

QUESTIONS

