

# COMPREHENSIVE WATER & SEWER RATE STUDY

SEPTEMBER 5, 2023



# PRESENTATION OVERVIEW

- **Current Revenue Drivers**
- **Financial Planning and Rate/Fee Recommendations**
- **Affordability Assessment**
- **Water Conservation Opportunities**
- **Next Steps**

- Inflationary pressures impacting both capital and operational expenses
- Intensive capital improvement program through 2030

### **WATER SYSTEM IMPROVEMENTS**

- Alternative Water Source Program: \$1.04 billion
  - Joliet's contribution to GPWC infrastructure: \$839 million
  - Joliet's internal improvements: \$196 million
- Water Main Replacement Program & Lead Water Service Line Replacement: \$594 million

### **SEWER SYSTEM IMPROVEMENTS**

- Combined Sewer Overflow Long Term Control Program Phase IV: \$14.6 million
- Annual Lift Station Rehabilitation Program: \$10 million
- Westside WWTP Expansion: \$75 million
- Annual Sanitary Sewer Rehabilitation & Investigation Program: \$45 million

## **REVENUE DRIVERS**

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



# 2023 Financial Planning and Rate/Fee Recommendations

City of Joliet, Illinois

September 5, 2023

# Financial plan update – proposed system wide increases

## Annual Proposed Revenue Increases

	<u>Water</u>	<u>Sewer</u>	<u>Combined</u>
<b>2023</b>	17.25%	6.00%	11.48%
<b>2024</b>	17.25%	6.00%	11.77%
<b>2025</b>	17.25%	6.00%	12.05%
<b>2026</b>	17.25%	6.00%	12.33%

## Financial plan goals

- ▶ Continue implementing new water source
- ▶ Meaningfully reduce non-revenue water
- ▶ Continue being proactive in addressing aging infrastructure
- ▶ Take advantage of low-cost loans to reduce borrowing costs

# Connection Fees

# Basic approach to connection fee development



- ▶ Absent connection fees, growth-related costs would be recovered by existing ratepayers
- ▶ Using the buy-in approach, resulting fees are designed to put new customers “on par” with equity created by prior ratepayers
- ▶ Joliet’s connection fee structure establishes a fee per residential equivalent, estimated to be 350 gallons per day of volume
- ▶ Calculated fees represent the maximum potential fee per residential equivalent

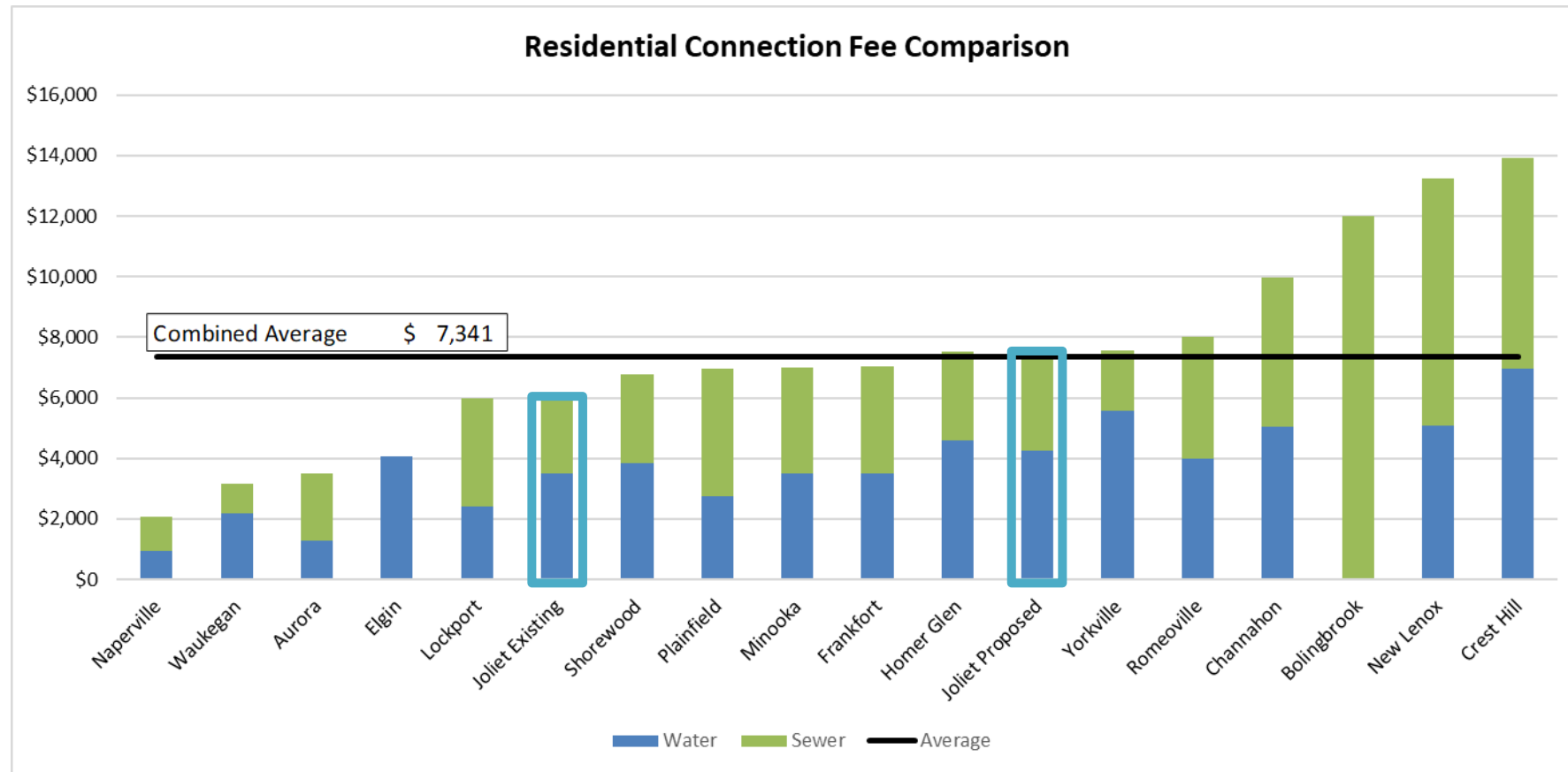
# Proposed water & sewer connection fees

	<u>Connection Fee Per Residential Equivalent</u>			<u>Difference</u>	
	<u>Existing</u>	<u>Maximum Calculated</u>	<u>Proposed</u>	<u>Proposed vs Existing</u>	
				<u>Dollars</u>	<u>Percent</u>
Water	\$ 3,500	\$ 4,947	\$ 4,250	\$ 750	21%
Sewer	\$ 2,500	\$ 4,611	\$ 3,250	\$ 750	30%
Total	\$ 6,000	\$ 9,558	\$ 7,500	\$ 1,500	25%

- ▶ Using the buy-in methodology results in a maximum fee of \$9,558 per residential equivalent
- ▶ Fees may be implemented less than the maximum taking into consideration regional competitiveness, degree of change in existing fees, and other factors
- ▶ We propose indexing connection fees beyond 2023 to increase in accordance with the national Consumer Price Index (CPI-U), with a formal review every five years



# Proposed Joliet connection fees are regionally competitive



- ▶ Proposed connection fees amount to \$7,500 per residential equivalent, in general alignment with regional averages

# **Water and Sewer Rates**

# Rate design considerations

Goal	Adjustments
Promote affordability while implementing new water source	Expand 1 <sup>st</sup> tier water block to 3 HCF Add 3 <sup>rd</sup> tier for residential water usage > 7 HCF Treat multi-family accounts like residential accounts
Improve cost recovery of large water connections with low usage	Restructure water daily fee to increase as meter size increases
Sustain the senior discount but simplify it	Create uniform 25% discount on water and sewer daily fee and volumetric fees, and phase out the bill credit
Adjust outside city retail rates based on a uniform multiplier	Set water and sewer rates to be 1.15x inside city rates, compared to a regional average of 1.30x

- ▶ Sewer daily fee and volumetric fees are proposed to increase, but no changes to the structure are recommended

# Proposed water rate schedule (Inside City)

		Proposed			
Inside City	Code	2023	2024	2025	2026
<b>Water Monthly Meter Charge</b>	RO/RT/MO/MT/C/I/G				
5/8"		\$9.00	\$10.55	\$12.37	\$14.50
3/4"		\$9.90	\$11.61	\$13.61	\$15.96
1"		\$12.60	\$14.77	\$17.32	\$20.31
1.25"		\$14.40	\$16.88	\$19.79	\$23.20
1.5"		\$16.20	\$18.99	\$22.27	\$26.11
2"		\$26.10	\$30.60	\$35.88	\$42.07
3"		\$99.00	\$116.08	\$136.10	\$159.58
4"		\$126.00	\$147.74	\$173.23	\$203.11
6"		\$189.00	\$221.60	\$259.83	\$304.65
8"		\$261.00	\$306.02	\$358.81	\$420.70
10"		\$342.00	\$401.00	\$470.17	\$551.27
12"		\$450.00	\$527.63	\$618.65	\$725.37
<b>Water Volume Charge (per HCF)</b>					
<u>Customer Class</u>	<u>Code</u>				
Residential	RO/RT				
Tier 1 - First 3 HCF		\$2.35	\$2.76	\$3.24	\$3.80
Tier 2 - Next 4 HCF		\$7.84	\$9.19	\$10.78	\$12.64
Tier 3 - Over 7 HCF		\$8.20	\$9.61	\$11.27	\$13.21
Multi-Family	MO/MT				
Tier 1 - First 3 HCF		\$2.35	\$2.76	\$3.24	\$3.80
Tier 2 - Over 3 HCF		\$7.84	\$9.19	\$10.78	\$12.64
Commercial/Industrial/Governmental	C/I/G				
All HCF		\$7.84	\$9.19	\$10.78	\$12.64

- ▶ Senior rates proposed to receive a discount of 25% from all Inside City rate elements.
- ▶ Outside City retail rates proposed to be 1.15x higher than Inside City meter and volume charges.
- ▶ Rates proposed for 2024-2026 increase by the system-wide adjustment

# Proposed sewer rate schedule

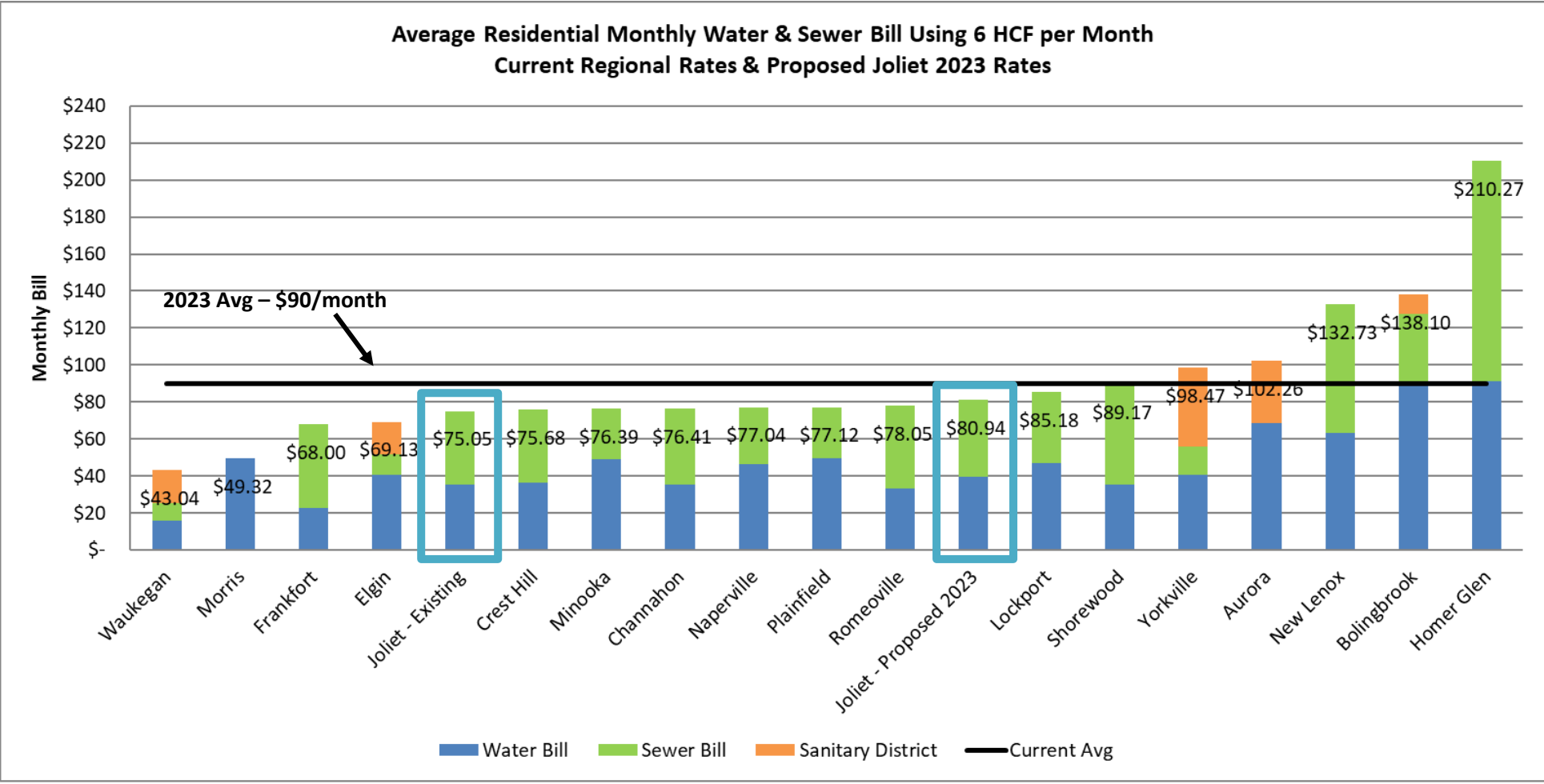
Inside City	Code	Proposed			
		2023	2024	2025	2026
<b>Sewer Monthly Charge</b>	RO/RT/MO/MT/C/I/G				
All classes, excluding seniors		\$5.95	\$6.37	\$6.81	\$7.28
<b>Sewer Volume Charge (per HCF)</b>					
Measured Volume, all classes except seniors		\$4.53	\$4.85	\$5.18	\$5.54
<b>Unmeasured Flow (per month charge)</b>					
based on average flow of 14 HCF		\$63.42	\$67.90	\$72.52	\$77.56
<b>Sewer Separation Fee</b>					
\$0/30 days residential		\$8.24	\$8.24	\$8.24	\$8.24
Multi Family based on # of units/30 days					
2 units, per unit		\$7.98	\$7.98	\$7.98	\$7.98
3 units, per unit		\$7.59	\$7.59	\$7.59	\$7.59
4 units, per unit		\$7.21	\$7.21	\$7.21	\$7.21
5 units, per unit		\$6.84	\$6.84	\$6.84	\$6.84
All Non-Residential Customer Classes					
Fee based on usage (cubic feet):					
0-700 (base charge)		\$8.36	\$8.36	\$8.36	\$8.36
701-1,200		\$15.96	\$15.96	\$15.96	\$15.96
1,201-2,100		\$22.77	\$22.77	\$22.77	\$22.77
2,101-2,800		\$28.84	\$28.84	\$28.84	\$28.84
2,801-3,500		\$34.20	\$34.20	\$34.20	\$34.20
>3,500					
Base Charge = 3,500 HCF		\$34.20	\$34.20	\$34.20	\$34.20
+ \$1.51 for each 700 CF		variable	variable	variable	variable
Maximum Charge		\$406.63	\$406.63	\$406.63	\$406.63
<b>Sewer Surcharge Fees</b>					
Biological Oxygen Demand (>400 mg/l)		\$0.55	\$0.59	\$0.63	\$0.67
Suspended Solids (>520 mg/l)		\$0.32	\$0.34	\$0.36	\$0.38

- ▶ Structure of sewer monthly fees, volumetric fees, and sewer separation fees remains unchanged
- ▶ No increase in sewer separation rates
- ▶ Senior rates proposed to receive a discount of 25% from sewer monthly charge and volume charge.
- ▶ Outside City retail rates proposed to be 1.15x higher than Inside City monthly and volume charges.
- ▶ Rates proposed for 2024-2026 increase by the system-wide adjustment

# How will these water and sewer rates affect customers in 2023?

- ▶ About 24% of residential bills use 3 HCF per month or less, and about half of those will see a bill decrease of \$0.44/month
- ▶ Almost 40% of residential bills with usage in the 1<sup>st</sup> and 2<sup>nd</sup> tiers will see a bill increase of about \$1.67 to \$5.89 per month
- ▶ About 25% of residential bills have usage of 8 HCF or more will see higher than average increases
- ▶ Nearly all residential senior accounts will receive either a slight reduction in bills or an increase of no more than \$1/month, unless usage exceeds 8 HCF
- ▶ About half of the commercial users are small with 5/8” meters and 5 HCF or less per month – bill increases of \$8-18/month are expected due to elimination of lifeline rate
- ▶ Commercial / industrial / government with large meters and low usage will see a higher increase to acknowledge readiness to serve
- ▶ Outside city retail multiplier of 1.15x, while lower than regional average of 1.30x, acknowledges they are not assuming the risk of system ownership

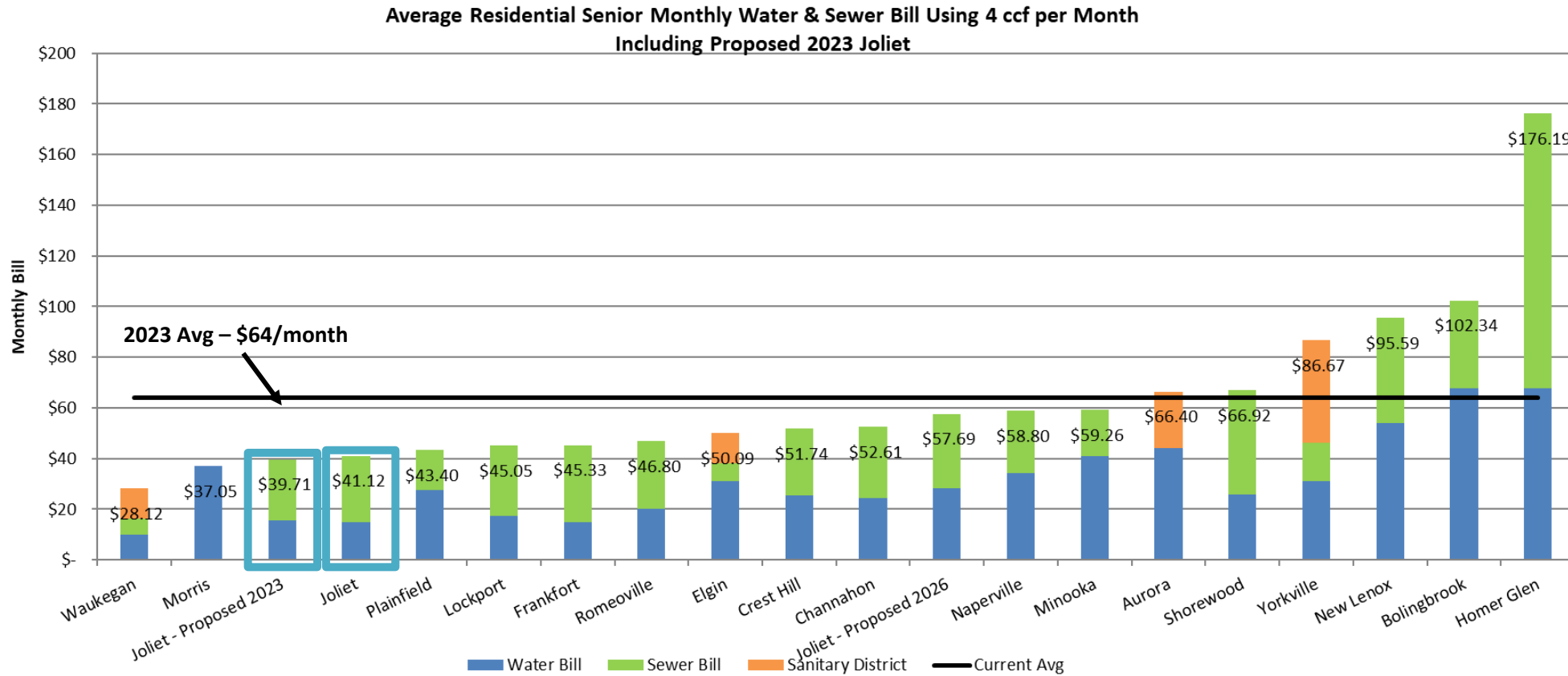
# Joliet's residential water and sewer bill expected to remain regionally competitive



*Assuming the \$90/month regional average increases 5% per year, Joliet's 2026 proposed bill of \$113 will be narrowly above the average of \$109.*

(a) Information in the graph excludes trash, reflecting water and sewer costs only.  
 (b) Communities with combined water and sewer rates have a solid blue bar. Except for Joliet - Proposed 2023, all communities shown with current rates.

# Joliet's water and sewer bill for seniors also expected to remain regionally competitive



*Assuming the \$64/month regional average increases 5% per year, Joliet's 2026 proposed bill of \$58 will be well below the average of \$78.*

(a) Information in the graph excludes trash, reflecting water and sewer costs only.

(b) Communities with combined water and sewer rates have a solid blue bar. Except for Joliet - Proposed 2023, all communities shown with current rates.



# **Miscellaneous Fees**

# Joliet existing miscellaneous fees

Fees *	Fee	Estimated Revenue
Turn-on Fees	\$120 business hours / \$240 other	\$100,000
Tap Fees	\$300-\$500 depending on meter size	\$25,000
Hydrant Meter Rental	\$2,500 deposit \$1/day base fee \$30 one-time service charge Water use billed at commercial rate	\$330,000 (mostly for usage)
Meter Fees	Cost of meter	\$200,000
Frozen/Stolen Meter	\$95	

\* Excludes late payment fees and permit fees administered by the Community Development Department.

- ▶ Recommendation for all fees except Turn-on Fees: codify practice of annual review and approval of miscellaneous fees by City Administration

# Turn On Fees

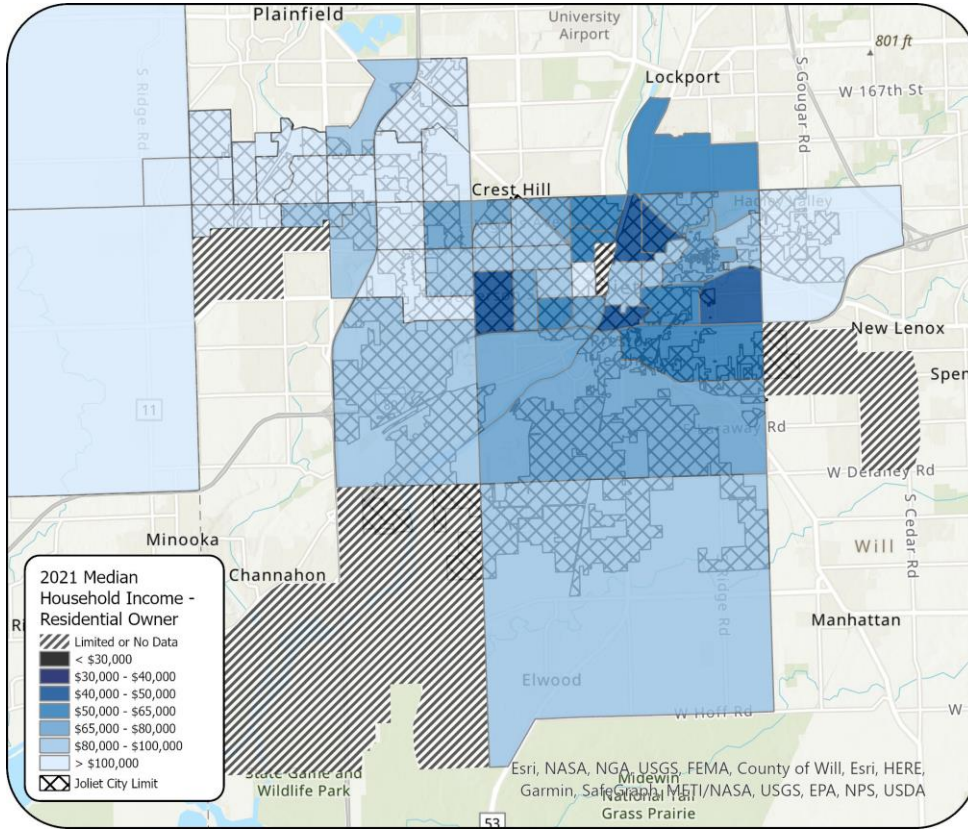
- ▶ Turn-on fees represent charges for initiating service or resuming service after:
  - Shut off for non-payment
  - Private plumbing repairs
  - Temporary vacancy (seasonal)
  
- ▶ Current Joliet fees are at the high end of the regional survey, where the average is about \$50
  
- ▶ Proposal: eliminate Turn-on Fee during working hours (7:00 AM – 7:00 PM); After hours Turn-on Fee recommended to be \$100

Community	Business Hours	After Hours
Chicago	\$0	\$0
Naperville	\$15	\$15
Evanston	\$25	\$75
Brookfield	\$30	\$30
Hoffman Estates	\$30	\$60
New Lenox	\$35	\$35
Highland	\$50	\$50
Skokie	\$50	\$50
North Chicago	\$50	\$50
Arlington Heights	\$50	\$50
Plainfield	\$50	\$50
Oak Park	\$50	\$150
Schaumburg	\$50	\$75
Clarendon Hills	\$75	\$115
Gurnee	\$100	\$150
<b>Joliet</b>	<b>\$120</b>	<b>\$240</b>
Oaklawn	\$125	\$225

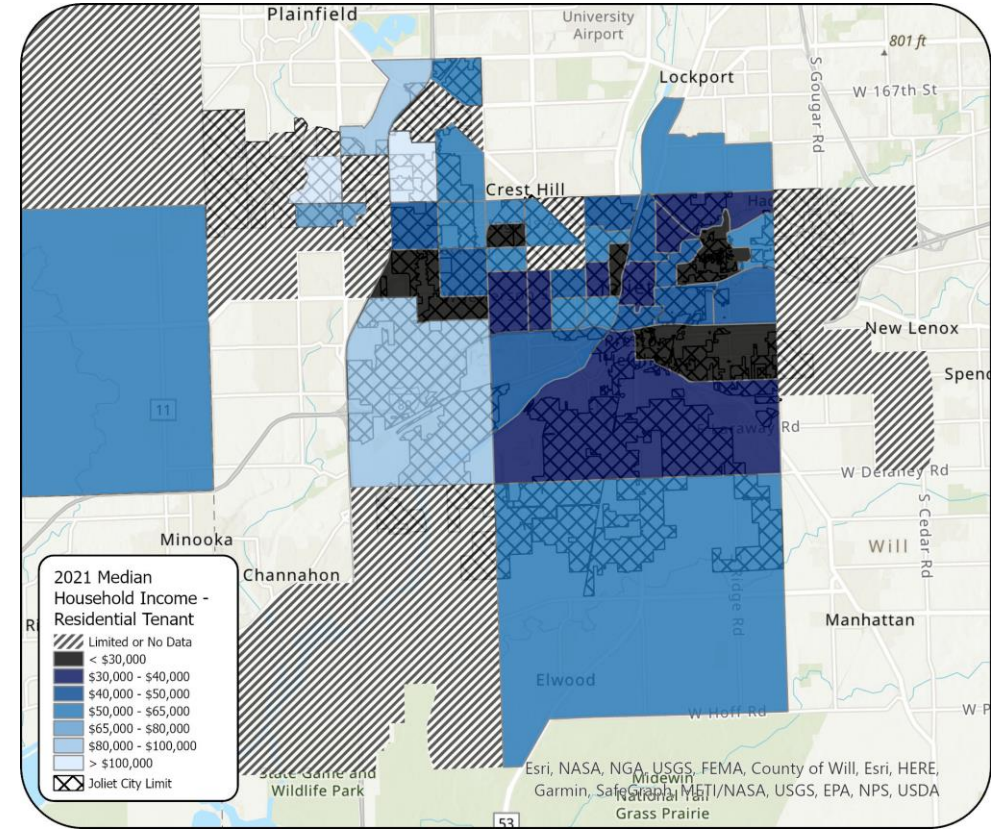
# Affordability Assessment

The background features a light blue gradient on the left that transitions into a darker blue on the right. On the right side, there are several overlapping, semi-transparent blue circles of varying sizes, resembling bubbles or lenses. At the bottom of the image, there is a horizontal bar composed of several colored segments: orange, teal, yellow, light green, dark blue, and white.

# Median Household Income Values: 2021

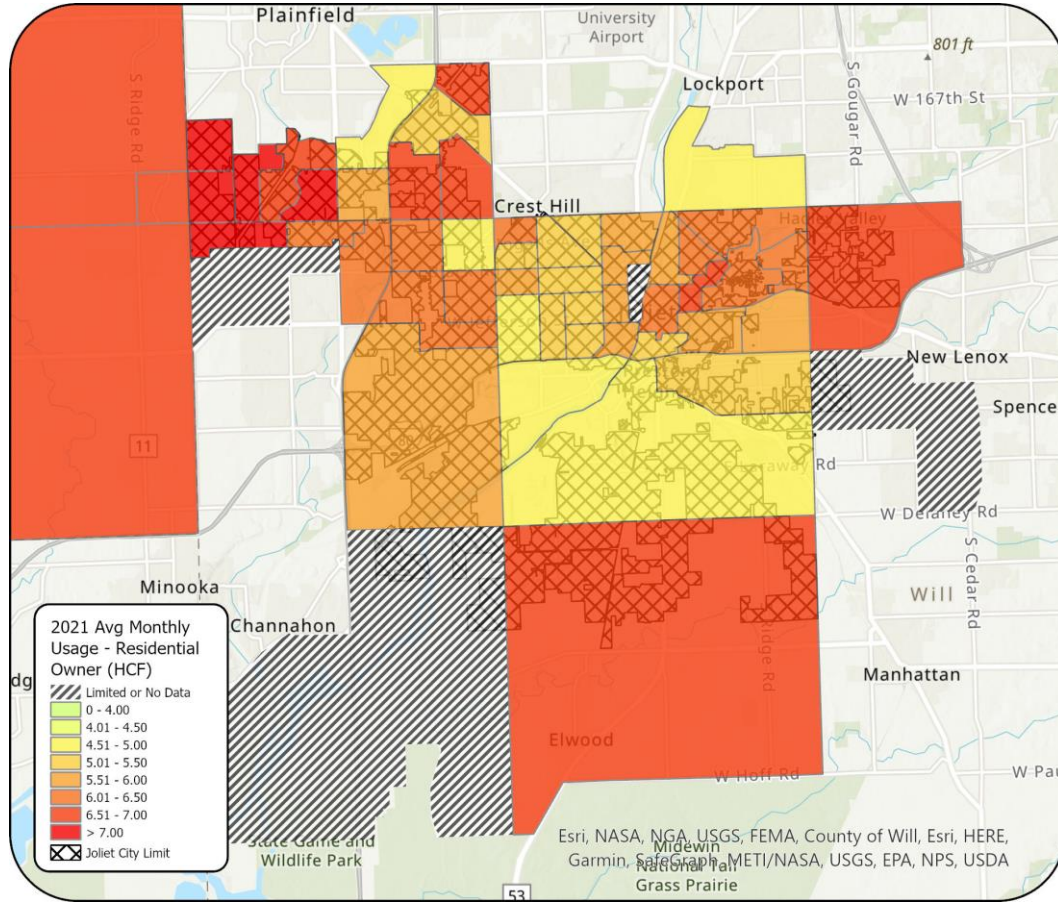


**2021 MHI  
Residential Owner  
MHI = \$97,570**

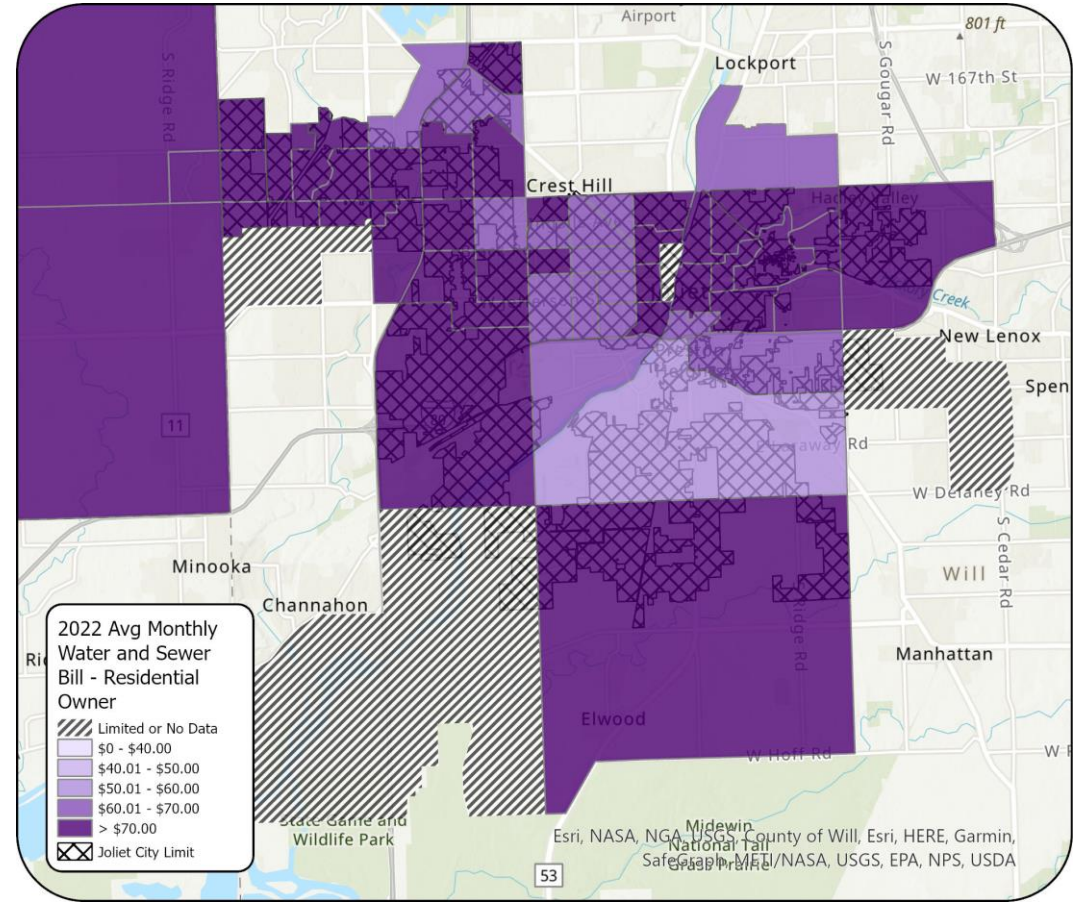


**2021 MHI  
Residential Tenant  
MHI = \$38,592**

# Average Residential Water Usage and Bills



2021 Average Monthly Water Usage – Residential Owner



2022 Average Monthly Water and Sewer Bill – Residential Owner

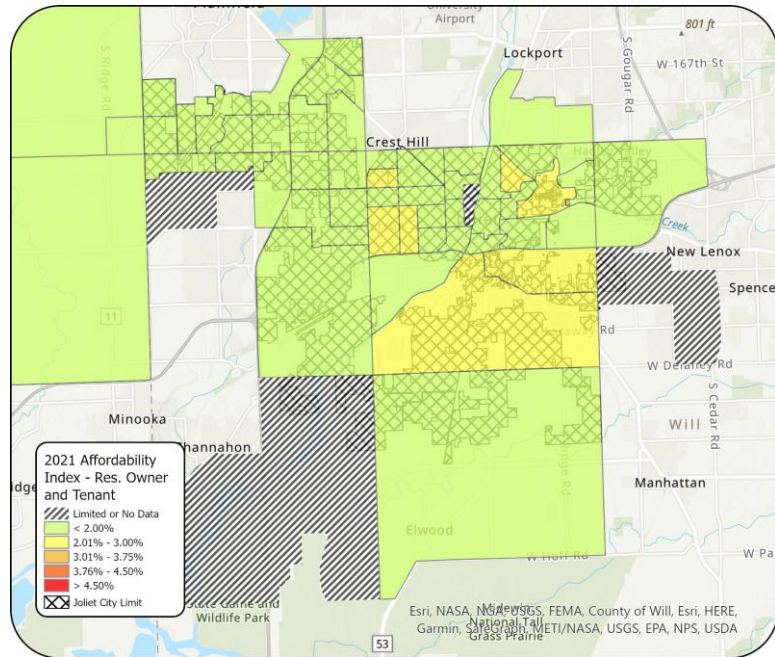
# Affordability Index



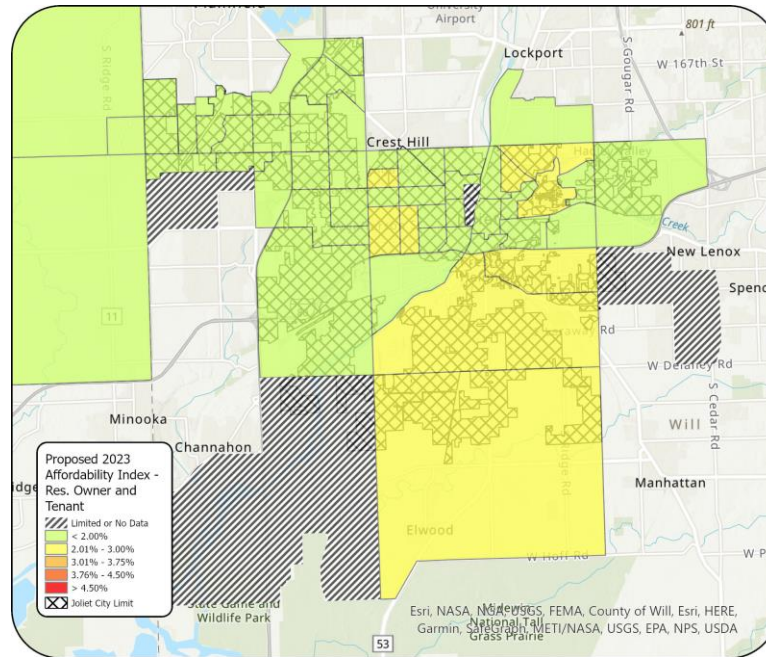
$$\text{Affordability Index or Residential Indicator} = \frac{\text{Average Water and Sewer Bill}}{\text{Median Household Income}}$$

- Generalized indication of burden associated with water and sewer costs
- More detailed analyses include consideration of additional indicators:
  - Lowest Quintile Poverty Indicator
  - Financial Capability Indicators

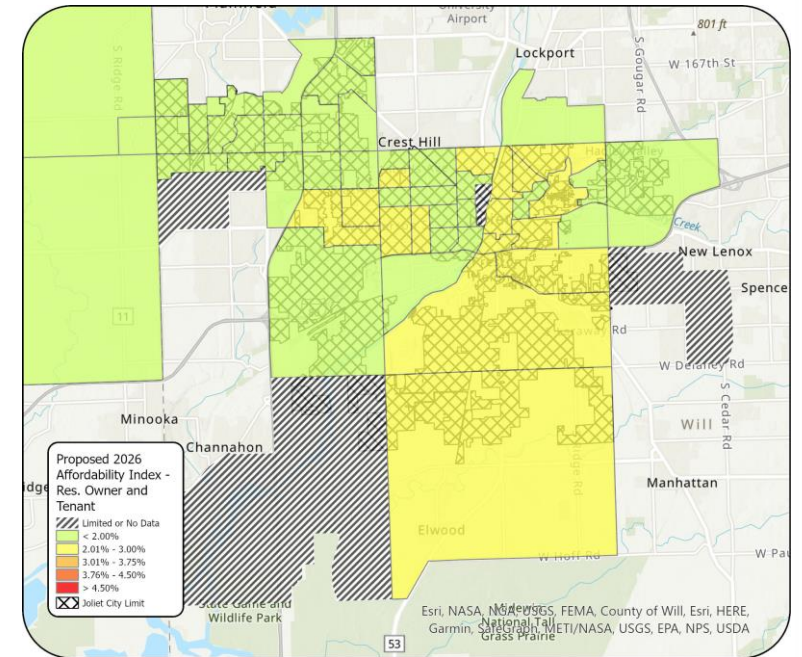
# Affordability Index Residential Owner, Tenant



2021 Affordability Index  
Residential Owner, Tenant



2023 Affordability Index  
Residential Owner, Tenant



2026 Affordability Index  
Residential Owner, Tenant

Future MHI estimated based on Congressional Budget Office projections of consumer price index increase (~2.3% per year)



# Water Conservation Opportunities

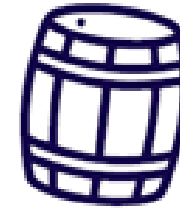
The background features a light blue gradient with a large, semi-transparent water droplet on the right side. Inside the droplet, several smaller bubbles are visible. At the bottom of the slide, there is a horizontal bar composed of several colored segments: orange, teal, yellow, light green, dark blue, and white.

# HOW CAN RESIDENTS CONSERVE TO REDUCE WATER & SEWER BILLS?



- Sign up for and use the City's free **customer water portal**.
- Take advantage of the programs offered by the City (**rain barrel subsidy** & **low flow toilet rebate** programs)
- Learn about **water saving measures** inside & outside the home

Collect the rain!



Replace your old toilets!



Turn off the tap while brushing your teeth!



Hand washing a lot of dishes?



Only full loads!



Take shorter showers!



MONITOR WATER USAGE

SET ALERTS

CHECK FOR LEAKS

VIEW IN GALLONS / CUBIC FEET

PAY YOUR BILL

& SO MUCH MORE!



CLICK  
HERE TO  
**SIGN-UP**  
& LEARN  
MORE

## Monitor Water Usage

In near-real time monitor your water usage hourly, daily, weekly, or monthly

## Water Management

Empower yourself, take control in making decisions about your water usage, track your usage, and conserve water

## Set Alerts

Set Billing Cycle Usage Alert, Daily Usage Alert, Multi-Day Alert, and Vacation Alerts

[JOLIET.GOV/CUSTOMERWATERPORTAL](http://JOLIET.GOV/CUSTOMERWATERPORTAL)

# CITY-SUPPORTED CONSERVATION PROGRAMS



**JOLIET**

**Rain Barrel Subsidy Program:**

A low tech way to conserve water and save




City of Joliet  
Department of Public Utilities  
[ReThinkWaterJoliet.org](http://ReThinkWaterJoliet.org)

- Joliet water customers can purchase one rain barrel per household at the subsidized cost of \$35 (including delivery)
- One rain barrel can save about 1,300 gallons of water during peak summer months
- 150 rain barrel subsidies are available each year
- For information on how to order, visit:

<https://www.joliet.gov/government/departments/public-utilities/customer-programs/rain-barrel-program>

**JOLIET**

**Low Flow Toilet Rebate Program**



City of Joliet  
Department of Public Utilities  
[ReThinkWaterJoliet.org](http://ReThinkWaterJoliet.org)

- \$100 rebate available to water customers who replace a high volume toilet with a high efficiency toilet
- Old toilet must use 1.6 gallons/flush or more and be replaced with an EPA WaterSense model
- Contact the Dept. of Public Utilities at 815-724-4220 to schedule an inspection to confirm eligibility
- For more information, visit:

<https://www.joliet.gov/government/departments/public-utilities/customer-programs/low-flow-toilet-rebate-program>

# NEXT STEPS

- Discuss further affordability measures such as modifications to late payment fees at September 19, 2023 finance committee meeting.
- Present updated water and sewer rate ordinance to council for adoption at October 3, 2023 council meeting
- Implement new rates effective November 1, 2023
- Ongoing education of customers regarding water conservation

# QUESTIONS

