GOVERNMENT FINANCE RESEARCH CENTER

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Water Rate Setting in Northwestern, Central, & Southern Illinois

Policy Bite

The Illinois General Assembly commissioned the Government Finance Research Center (GFRC) to conduct a "Water Rate Setting Study." This brief is based on the second report from the study, which focuses on Northwestern, Central, and Southern Illinois (NCSI). Drinking water rates have been increasingly making headlines as systems manage outdated infrastructure and new regulations. The ways in which water systems recuperate the costs of water provision determine the rates or bills that households pay.

- Rate structures vary across the 595 NCSI municipalities for which the GFRC researchers collected rates, with over 93% using a two-part rate structure and only 4% using a flat rate, followed by less than 3% solely using a volumetric rate.
- To facilitate comparisons across the region, the GFRC researchers use a standardized water bill equal to the price residents would pay for 5,000 gallons per month. Across NCSI, the median standardized monthly bill is about $45.
- Both operational and political managers of water systems are involved in setting water rates.
- Incremental rate increases are used to avoid sudden and significant financial burdens on customers. In some municipalities, rate increases only occur when necessary, often in reaction to infrastructure needs or regulatory requirements.
- Many municipalities face budget limitations that prevent them from adopting well-established best practices or building sufficient reserves for infrastructure improvements.

Research Brief

Drinking water rates have been increasingly making headlines as systems manage outdated infrastructure and new regulations. For example, Springfield has raised its water price substantially, with a 32% increase in 2024 and another 32% increase planned for 2025, making a bill of $14.78 become $25.75 in just two years. Increases like these have been partly spurred by the need to pay for state-mandated lead service line replacements. This example of recent rate increases highlights the need to understand how water systems recuperate the costs of water provision, which influences affordability.

Rate structures are the framework used by water providers to determine the rates or bills that households pay. In addition to ensuring that systems can adequately fund water services, the design of these structures, which depends on providers' priorities, can promote efficient water use and fairness, among other goals.

To examine rate structures in NCSI, the GFRC researchers constructed an original dataset of water rates directly collected from communities between July 2023 and March 2024. Through this effort, which included contacting 859 municipalities where residents receive drinking water from municipal systems or water commissions and districts, the GFRC researchers collected water rates from 595 or 70% of municipalities. This water rate collection initiative is the single largest in Illinois and only the third effort among researchers nationwide to collect water rate data outside of urban areas.

Rate structures vary across NCSI, with 554 municipalities or over 93% using a two-part rate structure and only 4% using a flat rate structure, followed by less than 3% solely using a volumetric rate structure. A two-part rate structure combines flat and volumetric rates. The flat rate, more commonly known as a base charge, serves as a minimum bill that all customers pay regardless of the amount of water consumed. In addition to the base charge, customers also pay an amount that reflects their volumetric water usage.

Depending on the municipality, the base charge sometimes includes a water consumption allowance so that households are not charged a volumetric component until they exceed the base charge consumption threshold. Over 18% of municipalities relying on a two-part rate structure do not include a water allowance in the base

charge. For these municipalities, the base charge averages $17. For the 454 NCSI municipalities that include a water allowance in the base charge, it ranges from 8 to 8,000 gallons. Among these municipalities with a water allowance, the base charge averages $26.

Another element of a volumetric or two-part rate structure is including blocks. Using these blocks allows a municipality to charge a varying rate depending on a resident's level of consumption.

Given the variation in rate structures across NCSI municipalities, the GFRC researchers use a standardized water bill for analysis. This bill reflects what residents would pay for 5,000 gallons of water consumption per month. Figure 1 presents the distribution of standardized water bills in NCSI, while Figure 2 shows the distribution geographically. The average monthly standardized water bill is about $48. With this background on rate structures and water bills in NCSI calculated, the GFRC researchers interviewed municipal water providers and found:

- The process of setting water rates involves multiple stakeholders, including municipal staff, elected officials, water boards, and sometimes engaging consultants for water rate studies.
- In many municipalities, water rate-setting processes are informed by benchmarking.
- Some community water systems use a decreasing block rate to incentivize water use by the largest industrial users, effectively subsidizing them.
- Incremental rate increases can avoid sudden financial burdens on customers. In some municipalities, rate increases occur when necessary, often in reaction to infrastructure needs or regulatory requirements.
- Best practices in terms of rate setting include maintaining accurate records of expenditure and revenue data over time, setting rates that cover both operating and capital costs, and regularly assessing system conditions.
- Additional best practices include setting and maintaining reserve targets, conducting yearly rate reviews to stay aligned with changing costs, and preventing the diversion of rate revenue for non-utility purposes.
- Some municipalities report challenges related to unique budget limitations, political pressures, or administrative and technical capacity limitations.
- Several municipalities face budget limitations that prevent them from adopting well-established best practices or building sufficient reserves to finance infrastructure improvements.
- Political considerations can also lead to municipalities diverging from best practices. Elected officials may be reluctant to approve rate increases due to fears of public backlash, even when such increases are necessary for maintaining system sustainability.
- Another factor contributing to divergence from best practices is limited administrative capacity.

Read the full report HERE.

The **Government Finance Research Center** at the University of Illinois Chicago shapes and informs public policy and scholarly discourse on government and public finance by identifying, planning, and executing research, providing reports and informed analyses, delivering educational opportunities and technical training, and offering inclusive venues to convene national and local discussion on fiscal and governance issues.

Figure 1. Distribution of Standardized Water Bills

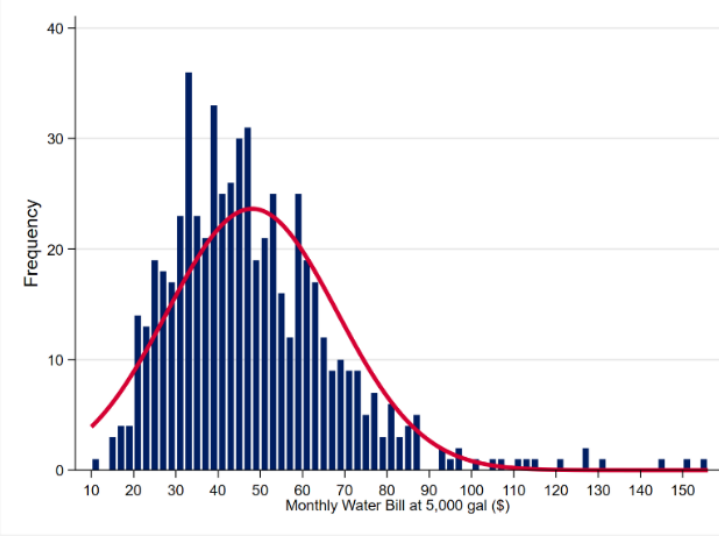
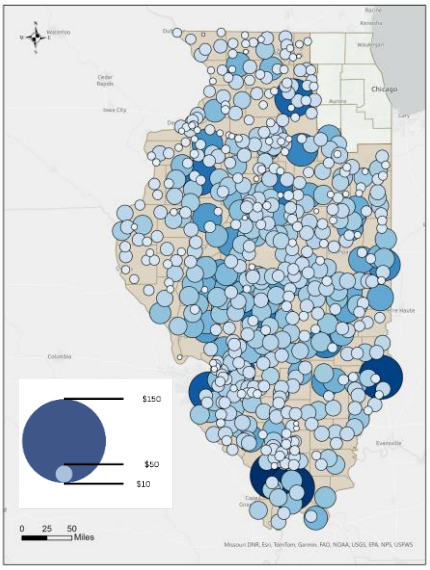
Figure 2. Geographic Distribution of Water Bills