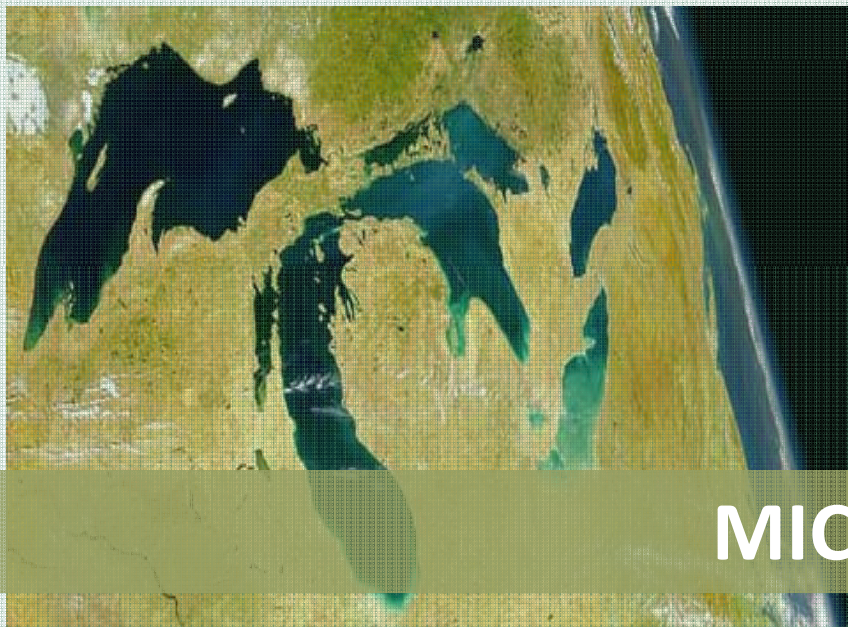


# 2010 Great Lakes Water Rate Survey

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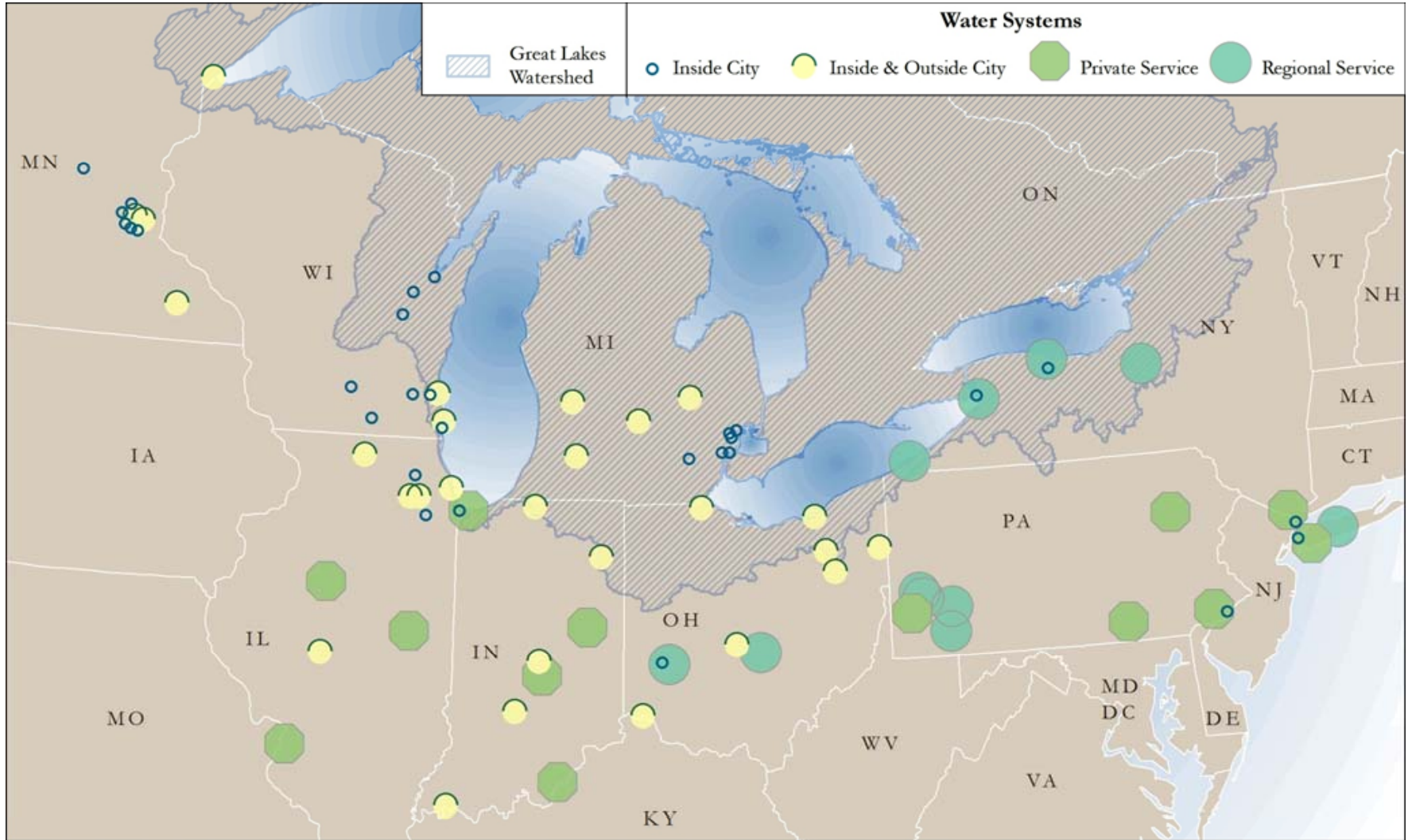
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## 2010 Great Lakes Water Rate Survey

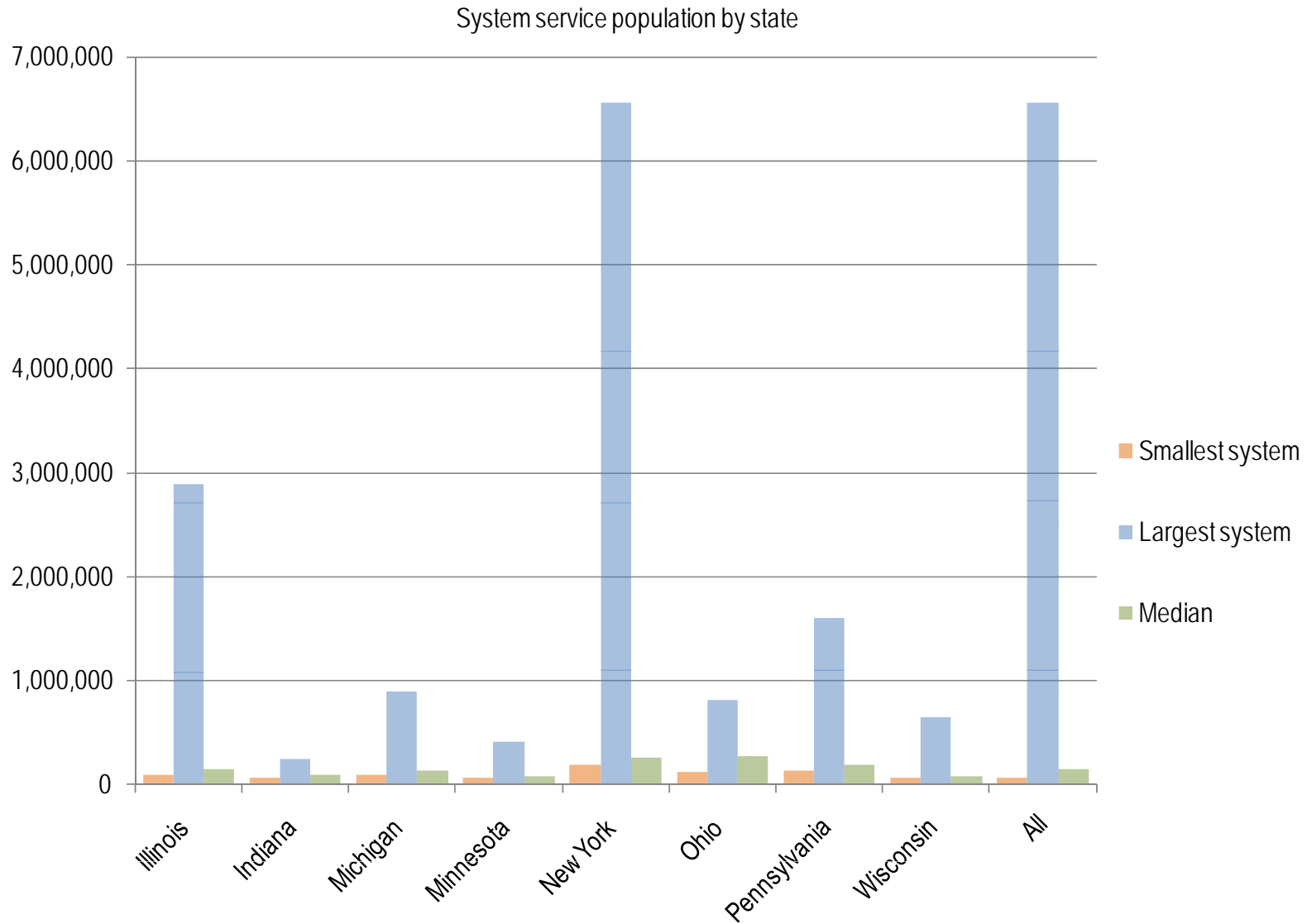
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- Top ten water systems by service population from eight Midwestern states, by service population size as reported in EPA *Consumer Confidence Reports*
  - ▶ Illinois, Indiana, Michigan\*, Minnesota\*, New York, Ohio, Pennsylvania, and Wisconsin (\*no economic regulatory authority)
- Detailed data were mined from tariffs and websites and supplemented with personal communications.
  - ▶ Nine water providers had no rate information available directly on the website
- Cautionary notes about interpretation
  - ▶ Survey provides a snapshot in a very dynamic area
  - ▶ Rates vary for a variety of reasons, including not limited to cost differences
  - ▶ Rates alone cannot be used to draw conclusions about operational performance, including efficiency

# Great Lakes watershed map and systems in the sample



# Service population

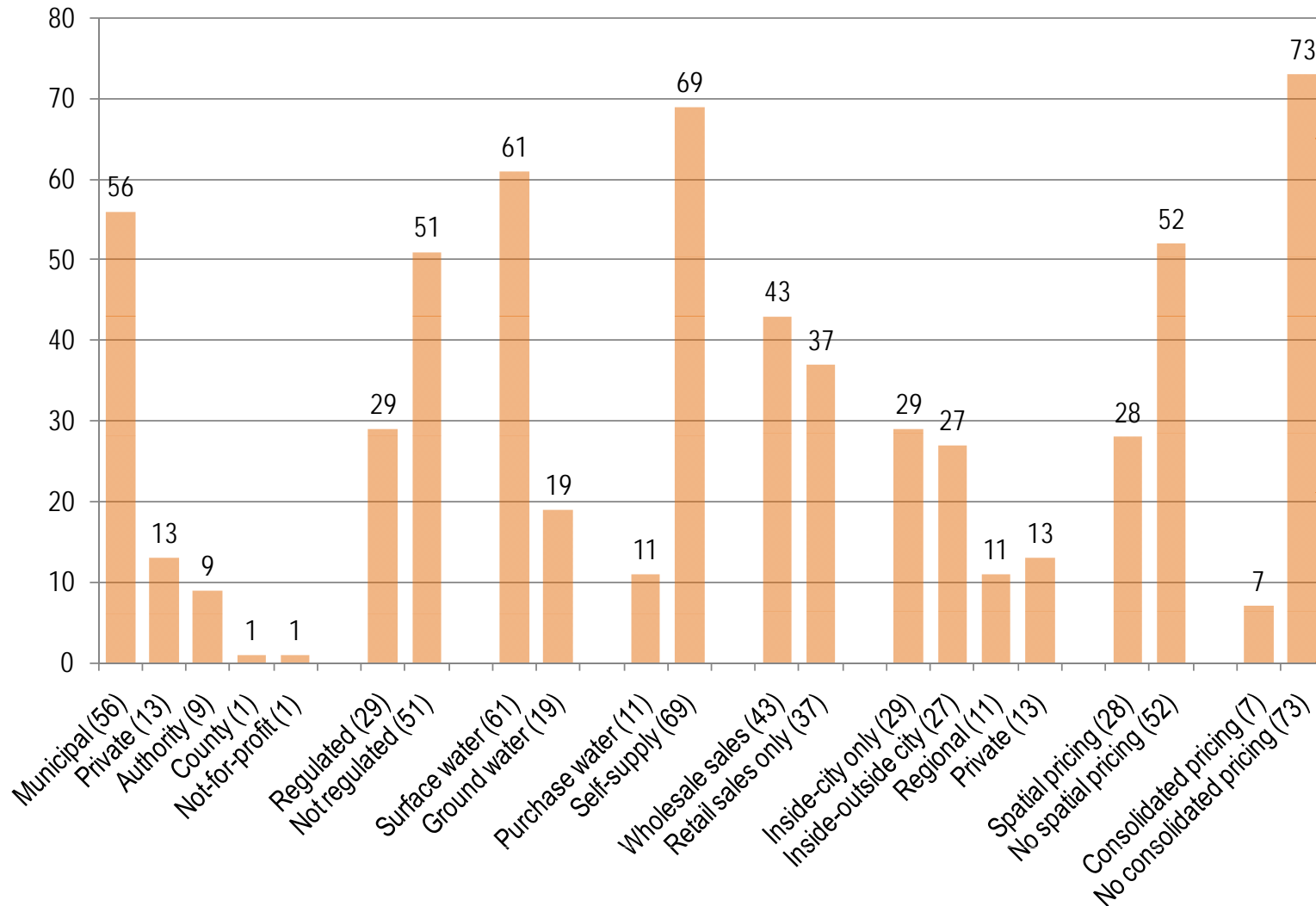


## System service populations

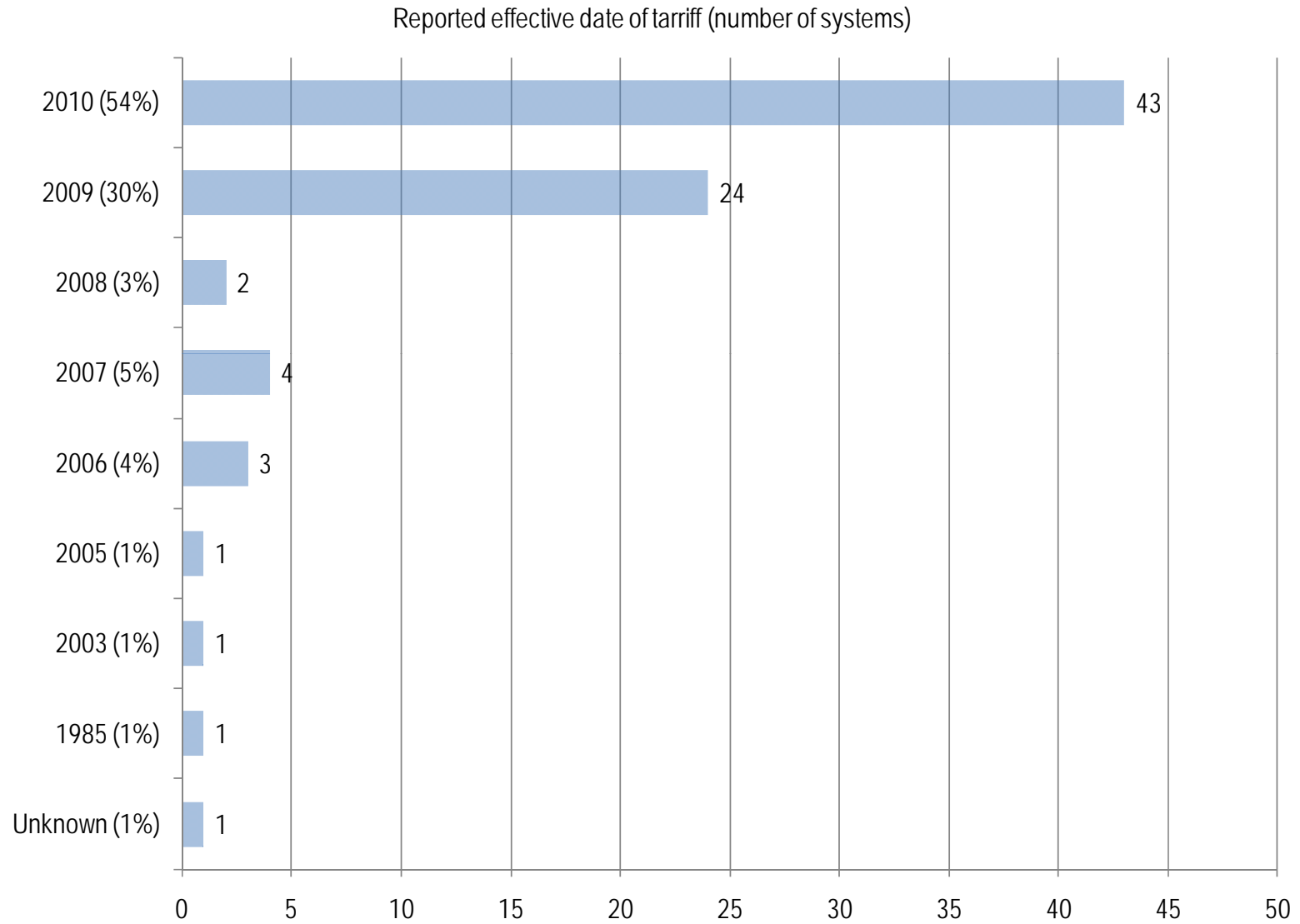
State	Smallest system	Service population	Largest system	Service population	Median
Illinois	Elgin	98,500	Chicago	2,896,016	143,000
Indiana	American Water Johnson County	66,868	Fort Wayne	250,000	98,232
Michigan	Dearborn	97,775	Detroit	899,387	133,624
Minnesota	Eden Prairie	65,000	St. Paul	416,759	79,080
New York	Yonkers	196,086	New York	6,552,718	263,000
Ohio	Canton	122,000	Cincinnati	813,000	268,358
Pennsylvania	Westmoreland County Authority	140,000	Philadelphia	1,600,000	190,960
Wisconsin	Janesville	62,720	Milwaukee	647,290	82,500
All systems	Janesville	62,720	New York	6,552,718	155,191

# Sample characteristics

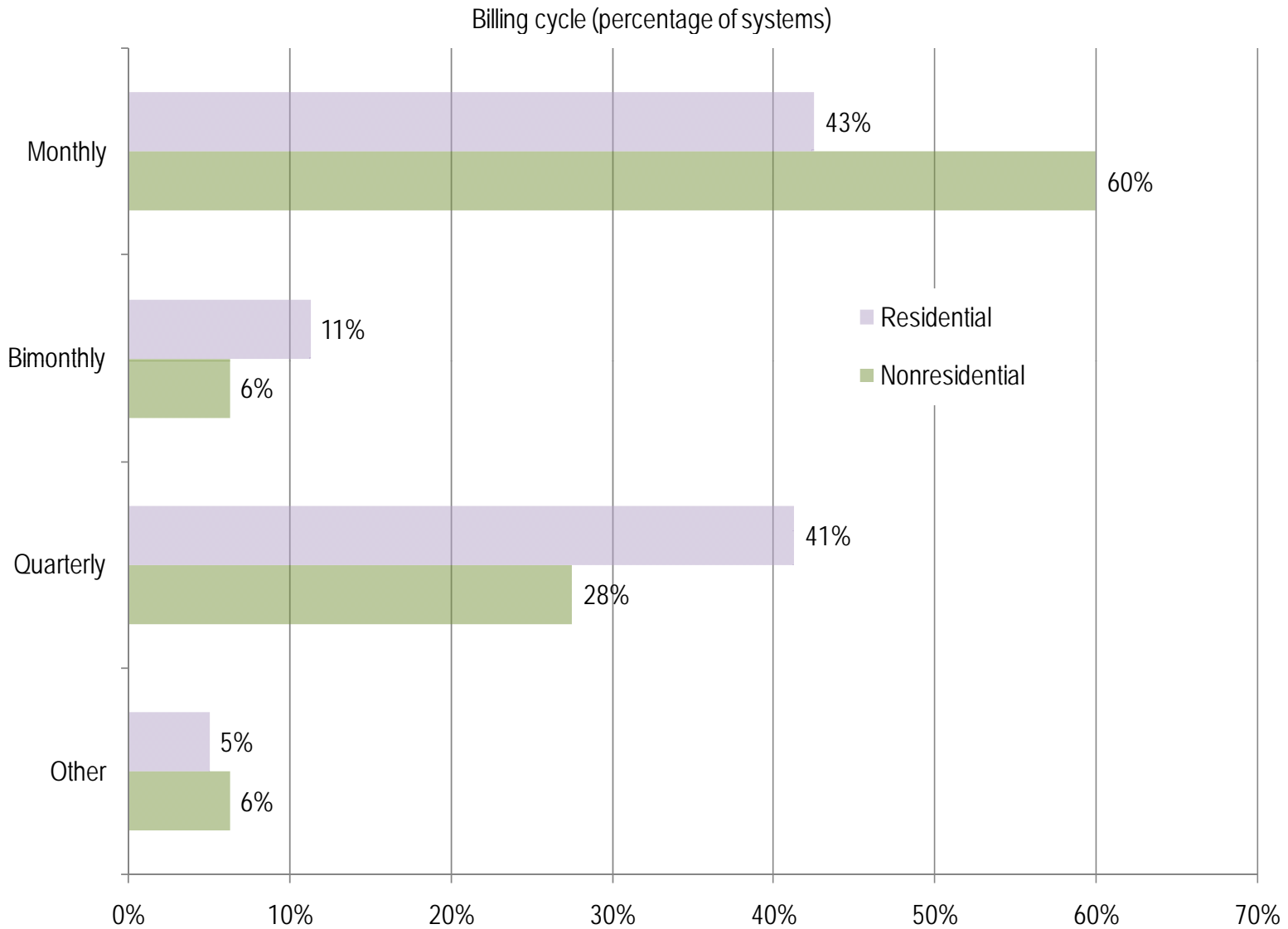
Sample characteristics (number of systems)



# Effective date of tariff

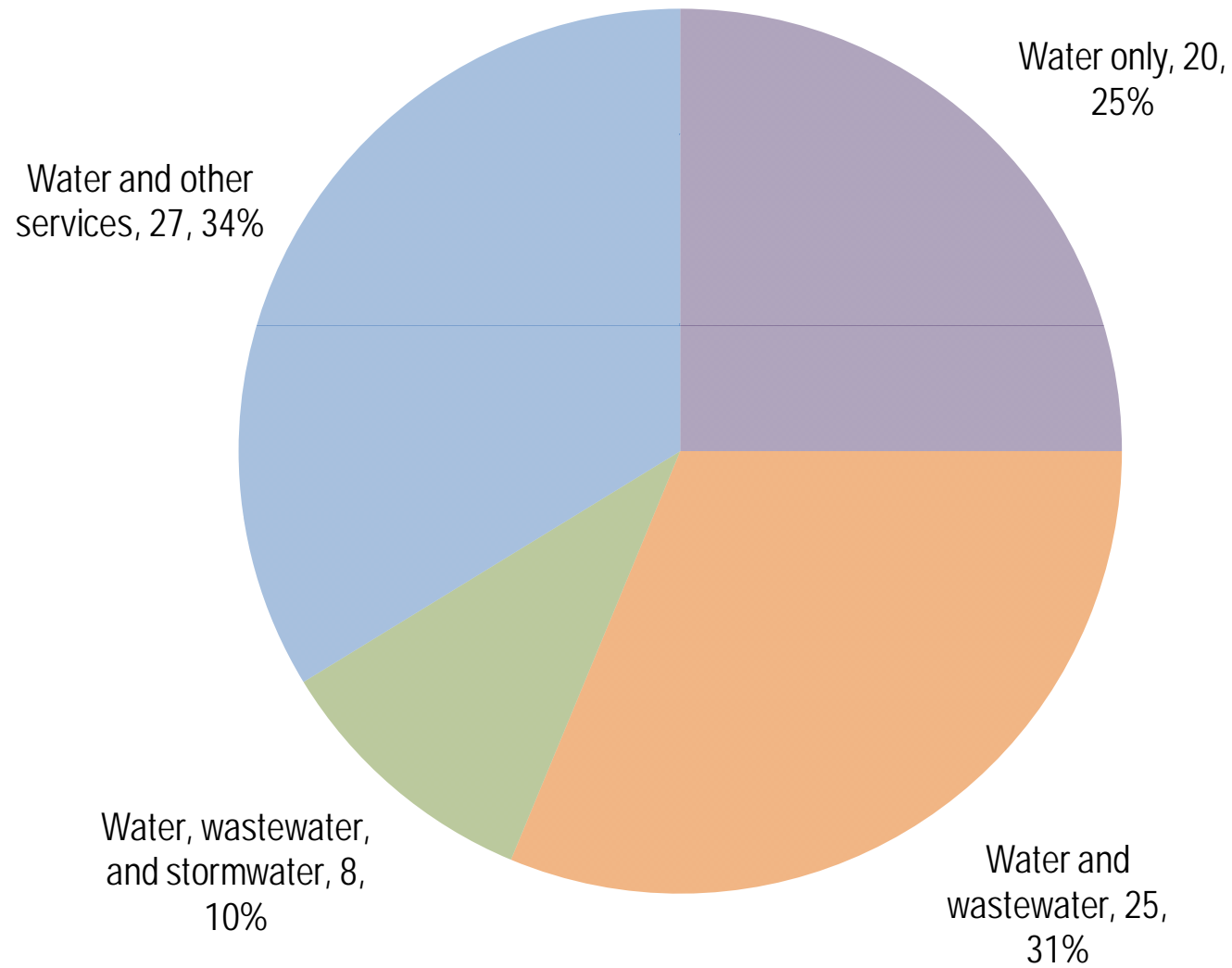


# Billing cycles



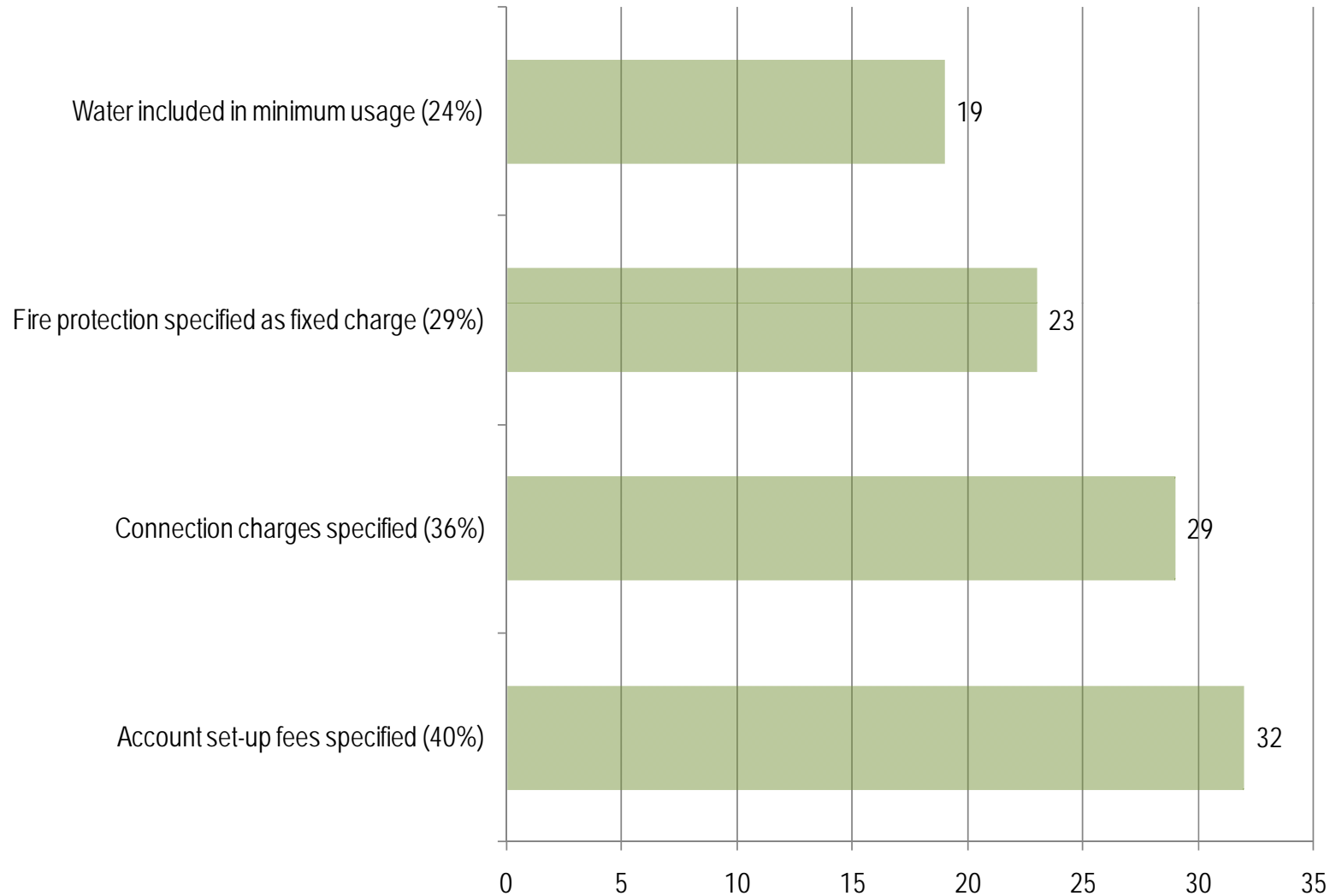


# Billing combinations

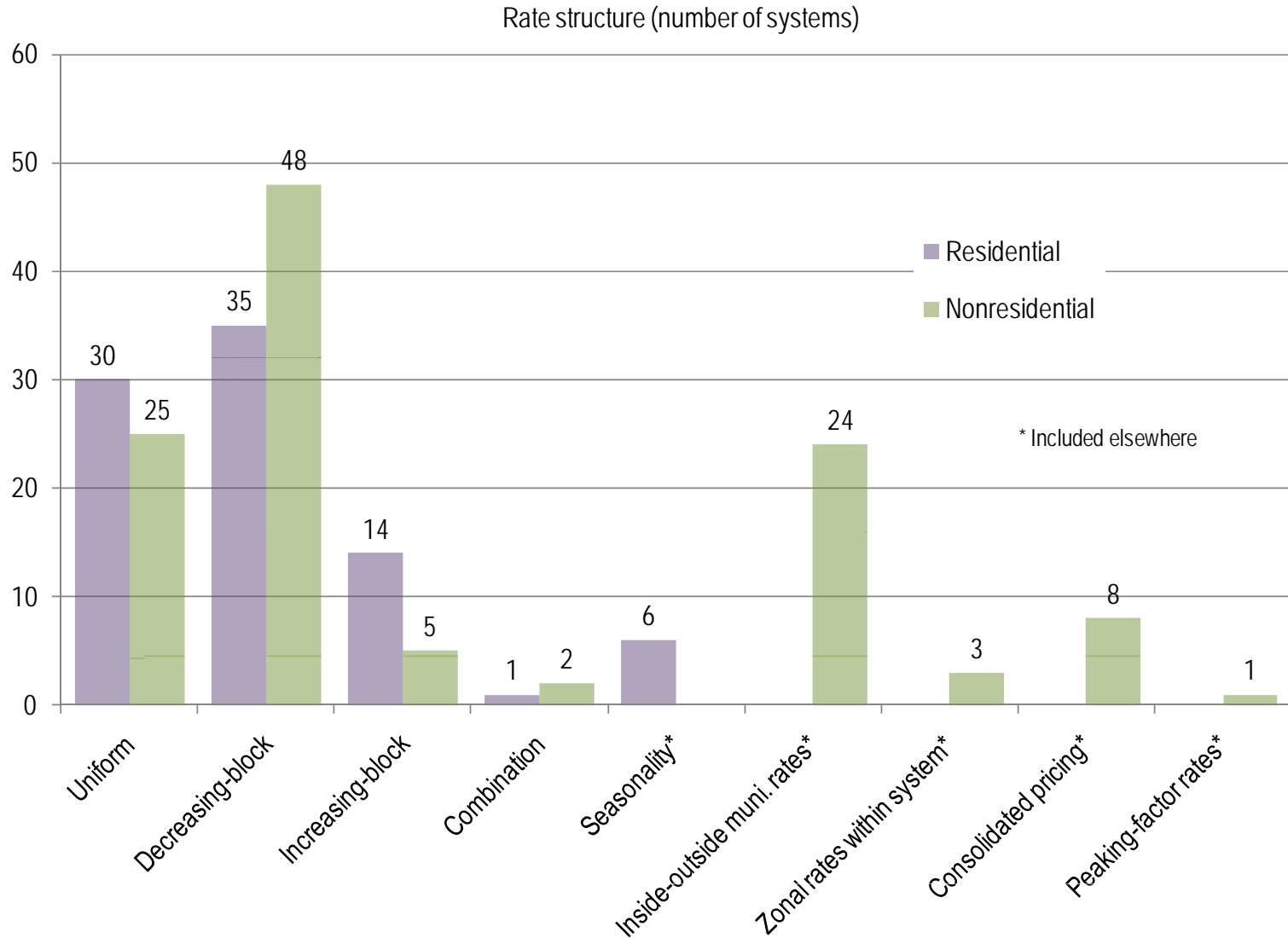


# Tariff charges

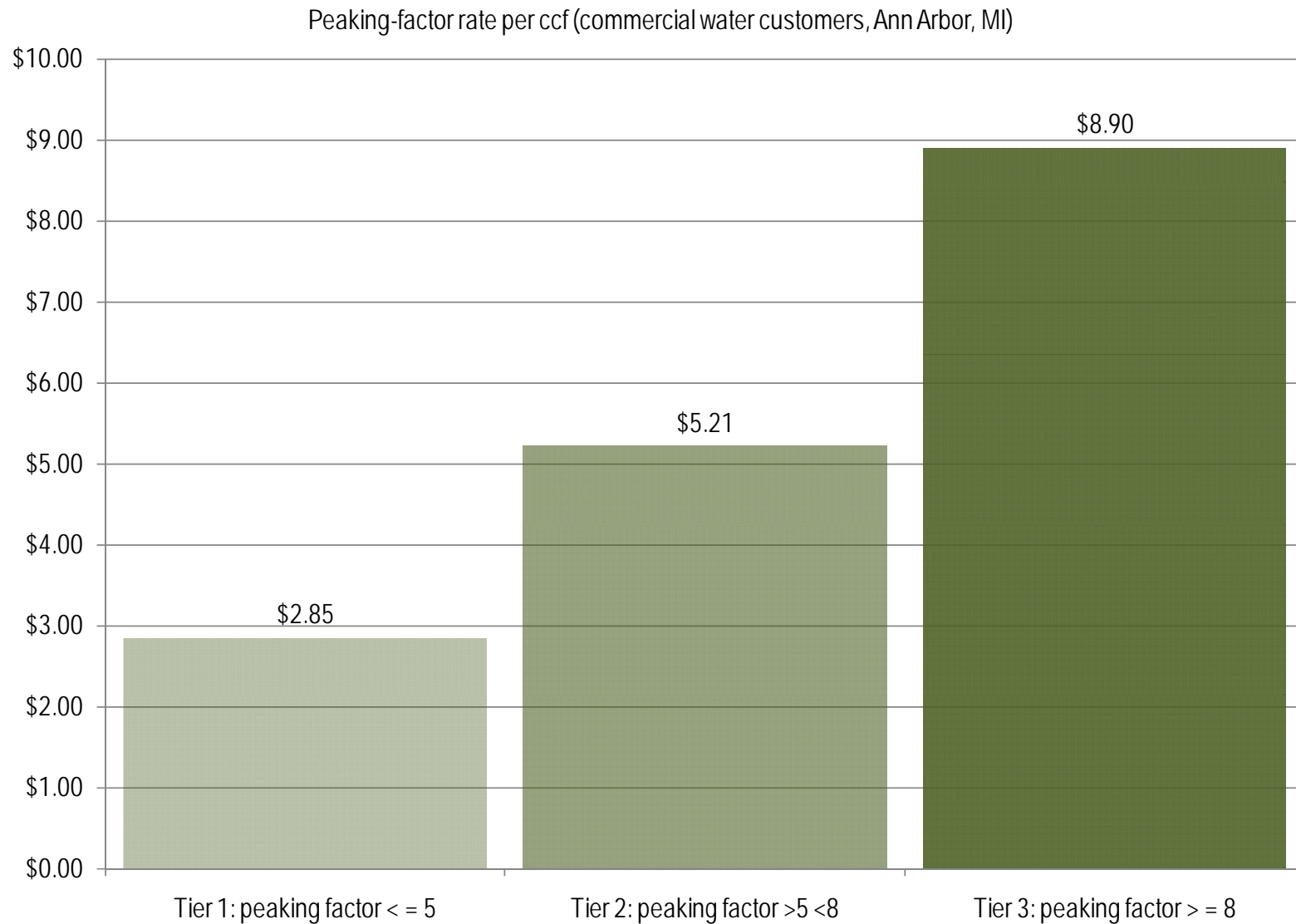
Charges specified in tariff (number of systems)



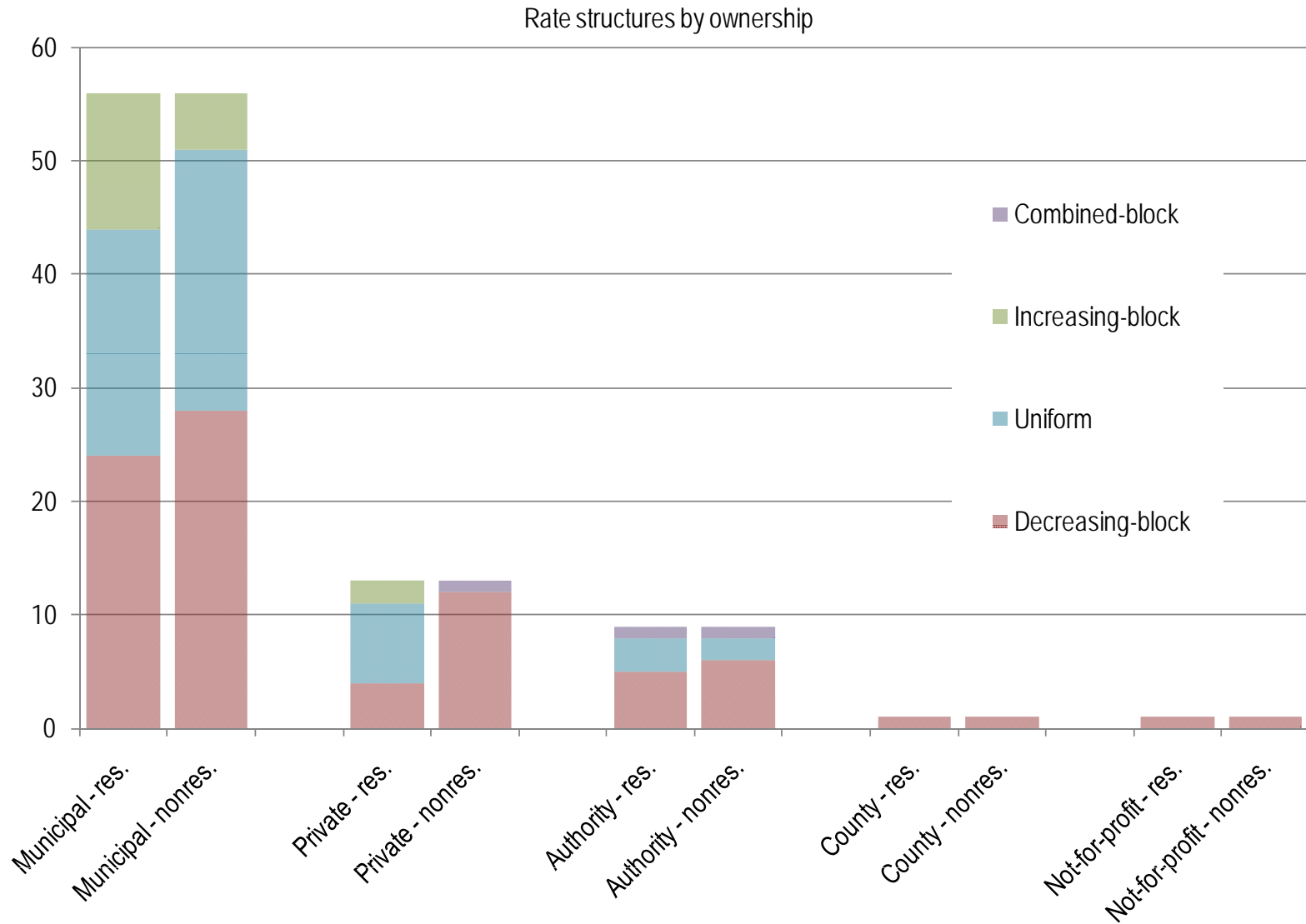
# Rate structures



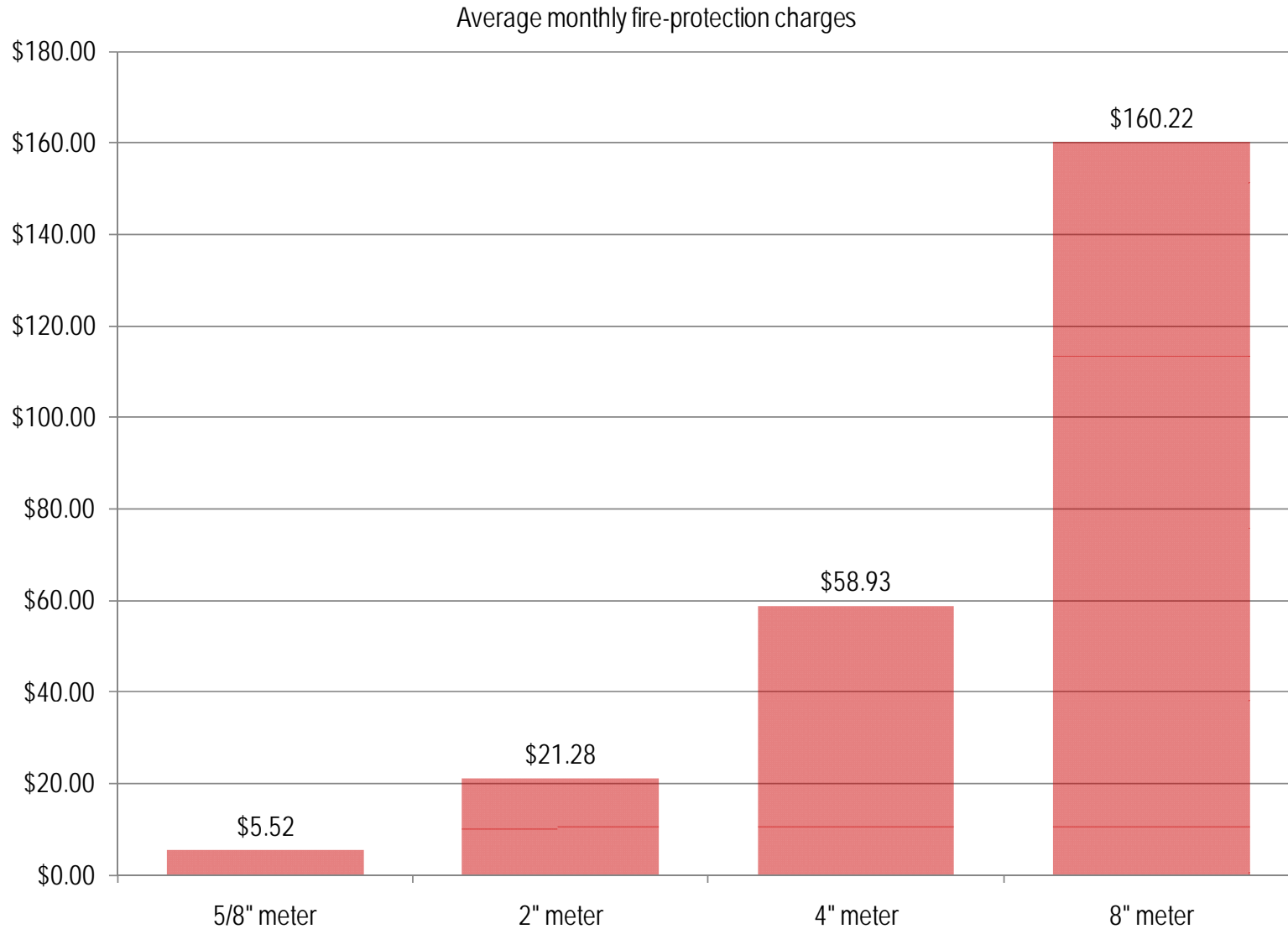
# Peaking-factor rate (Ann Arbor, MI)



# Rate structures by ownership

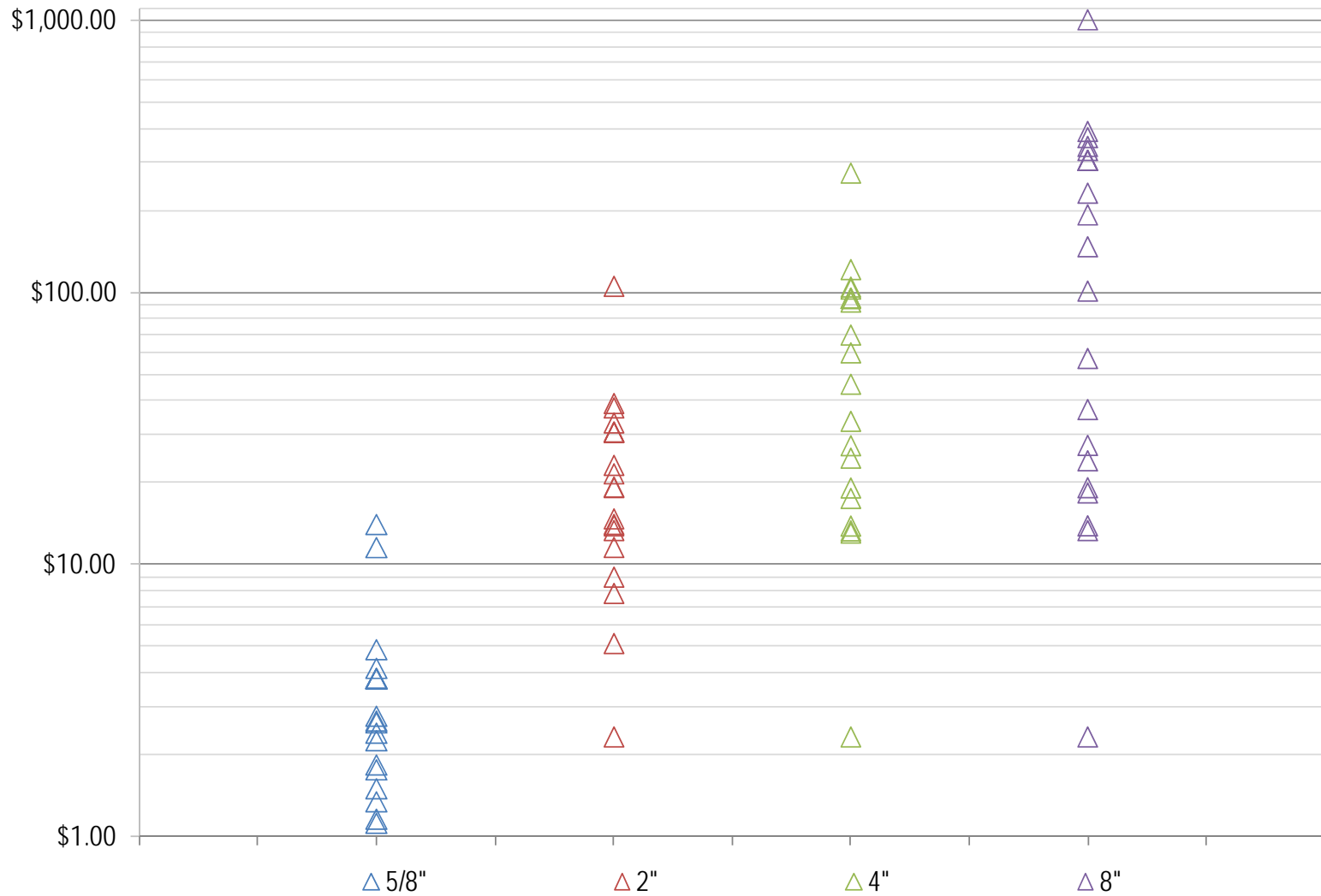


# Public fire-protection in fixed charges: average by meter size

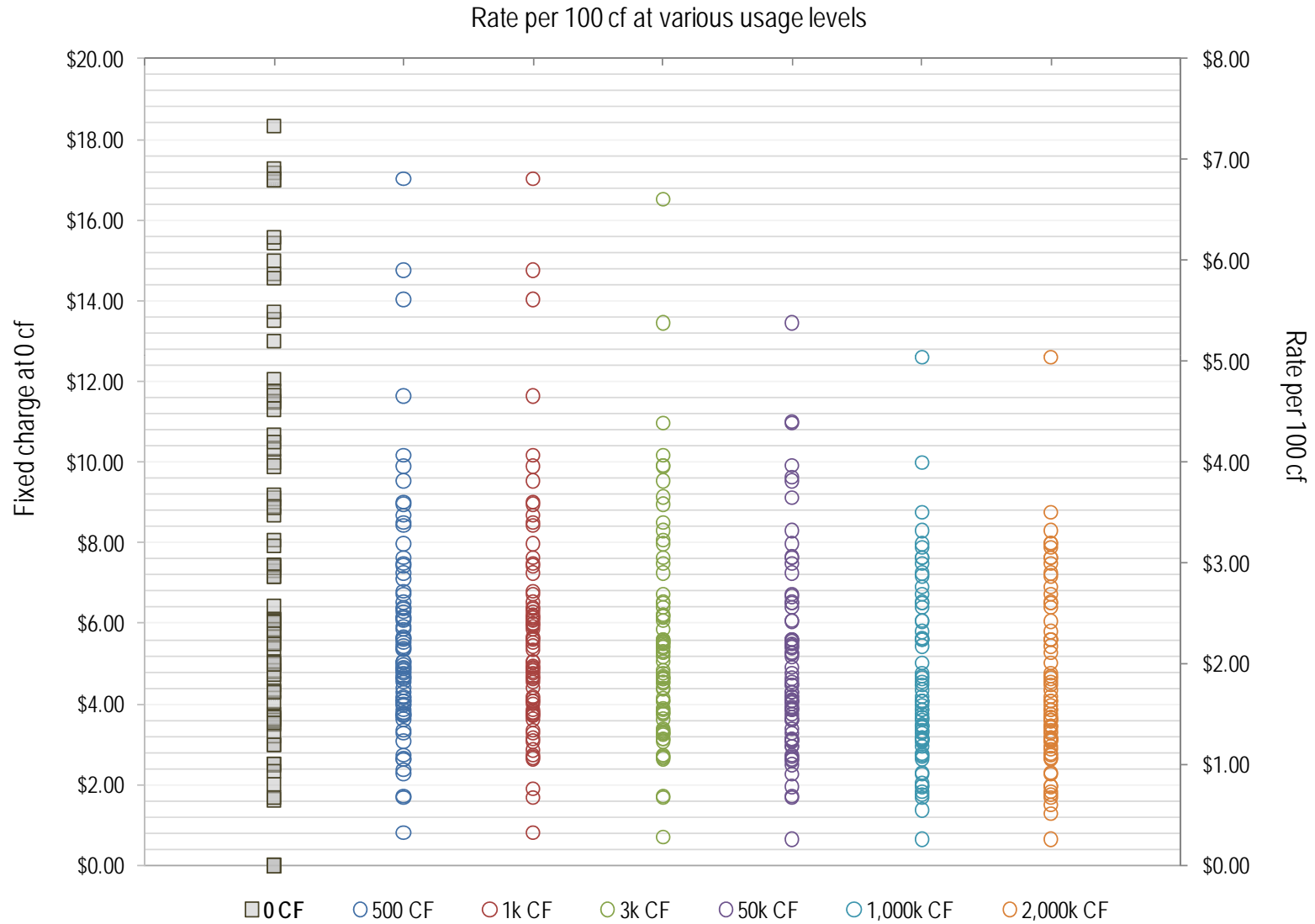


# Public fire-protection in fixed charges: range by meter size

Monthly public fire-protection charges by meter size (logged)

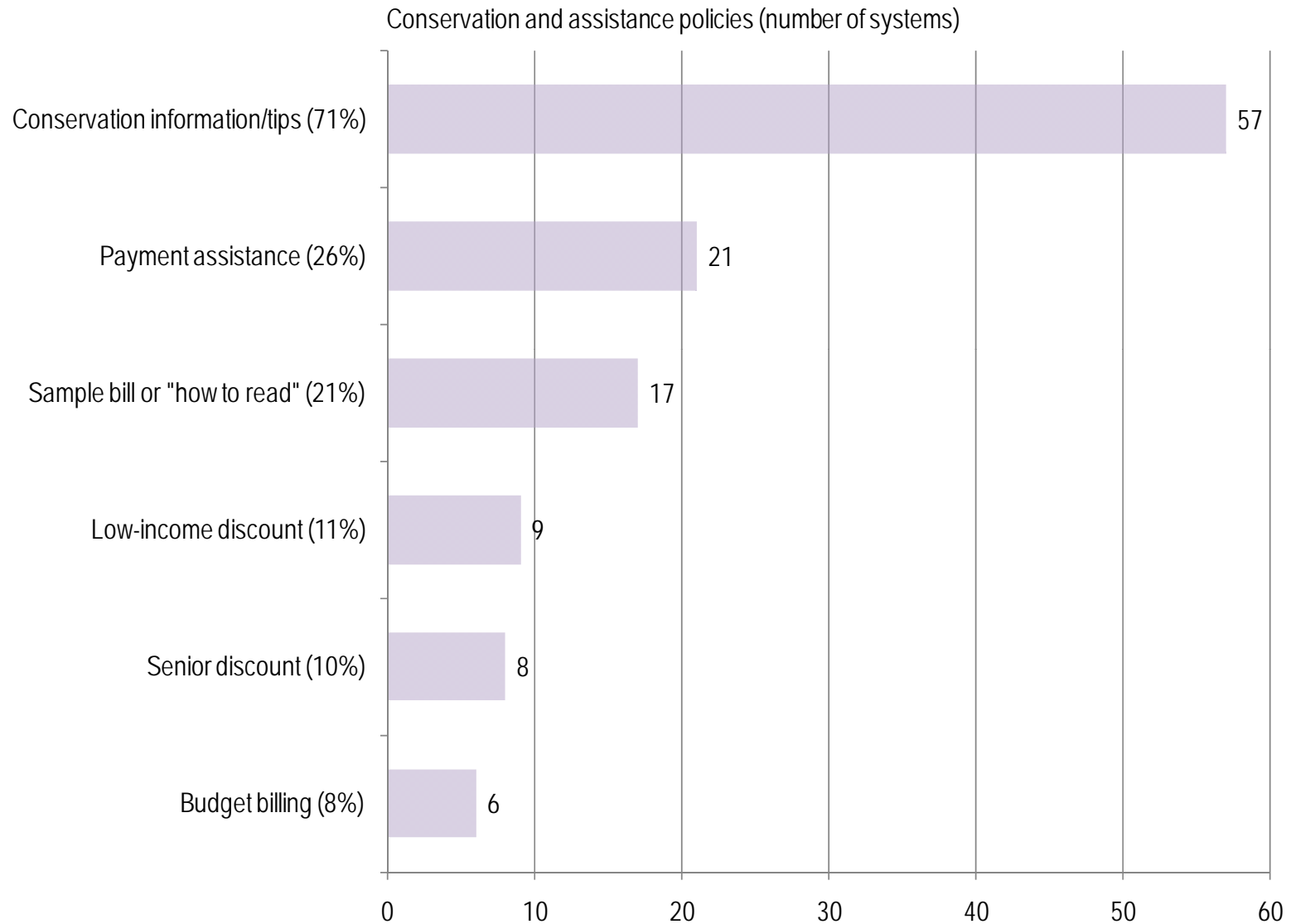


# Fixed charges and variable unit rates for 100 cf by usage level

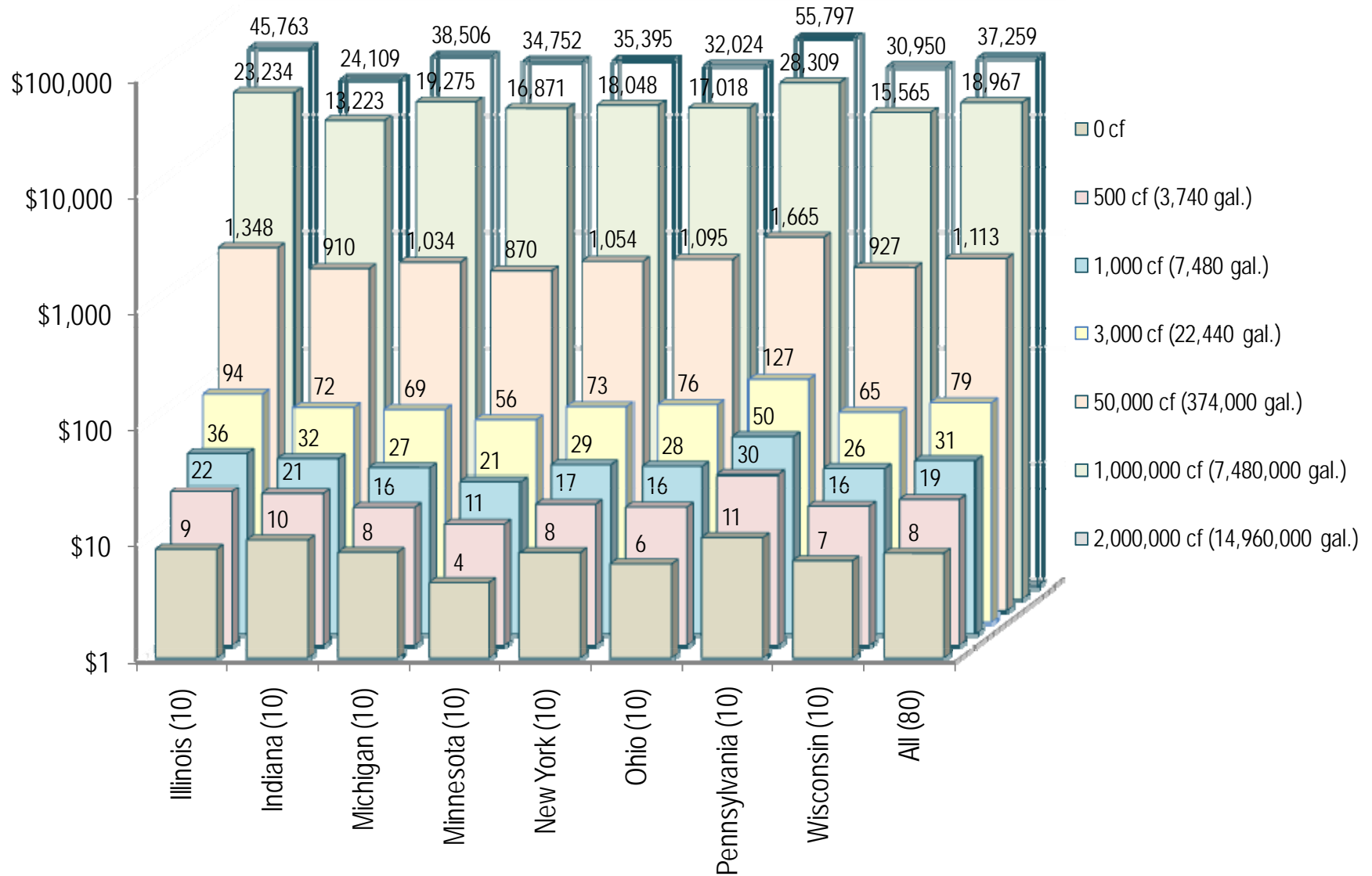




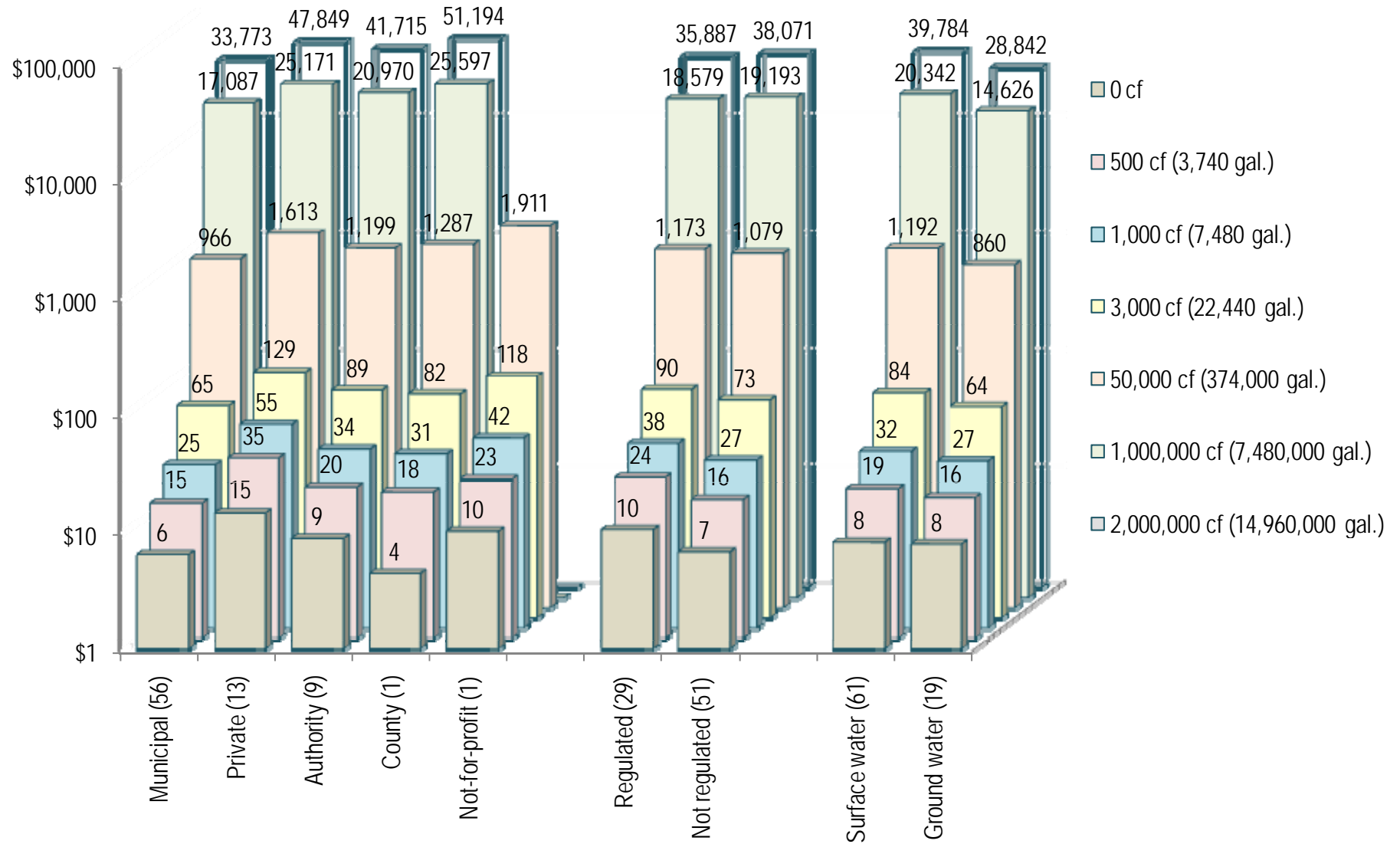
# Conservation and assistance policies



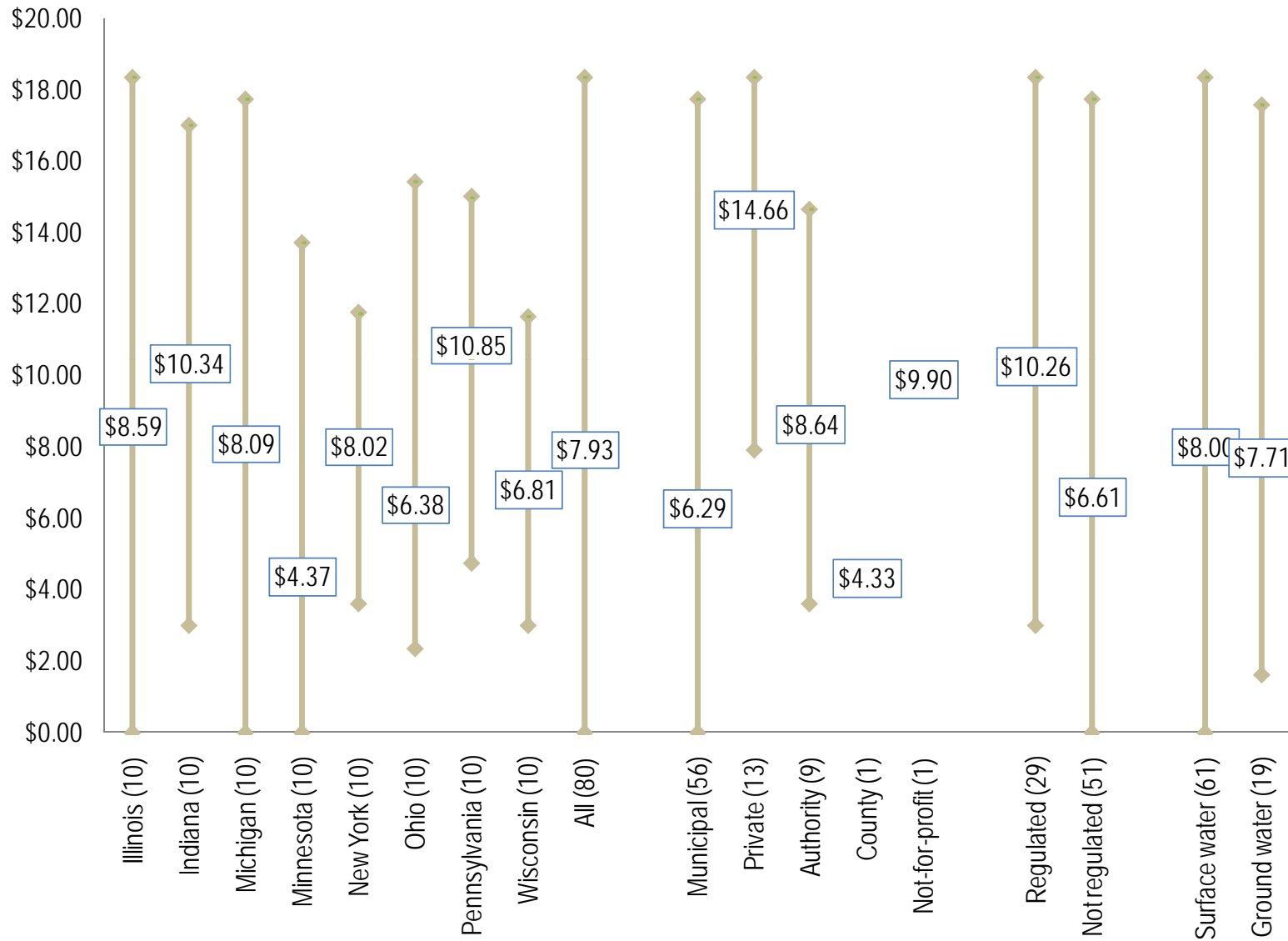
# Average charges by state



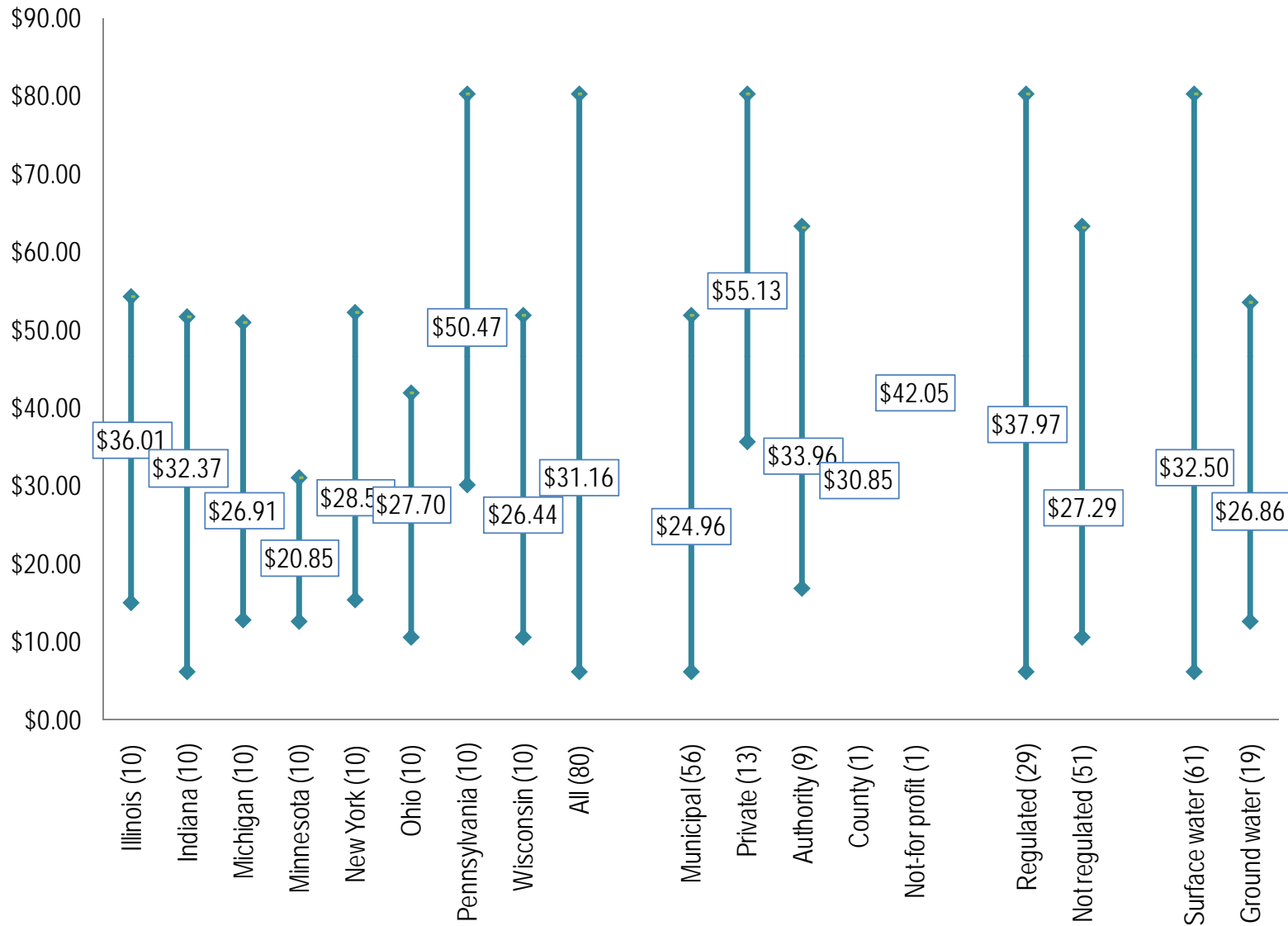
# Average charges by system characteristics



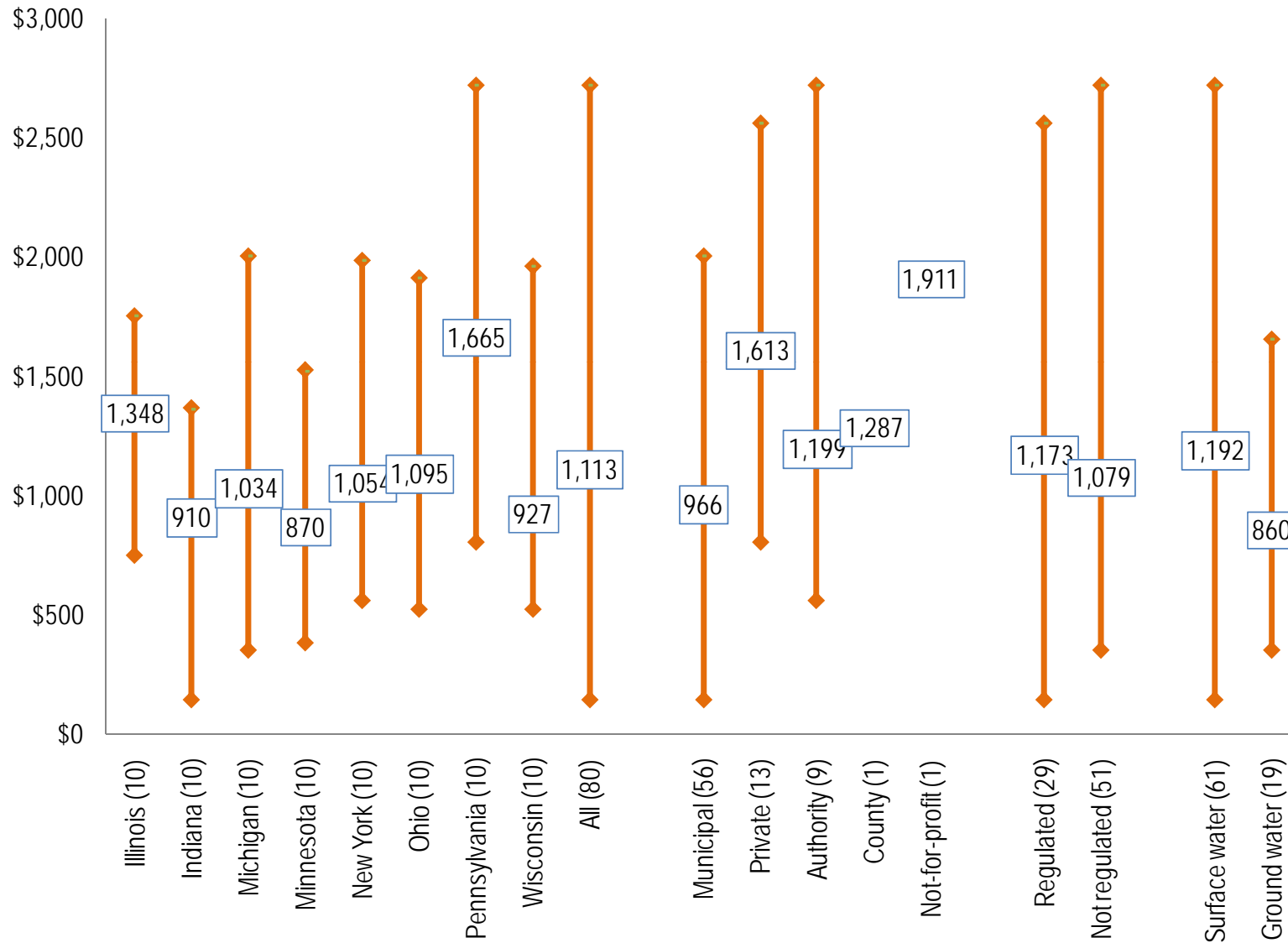
# Average charges for 0 cf (0 gal.)



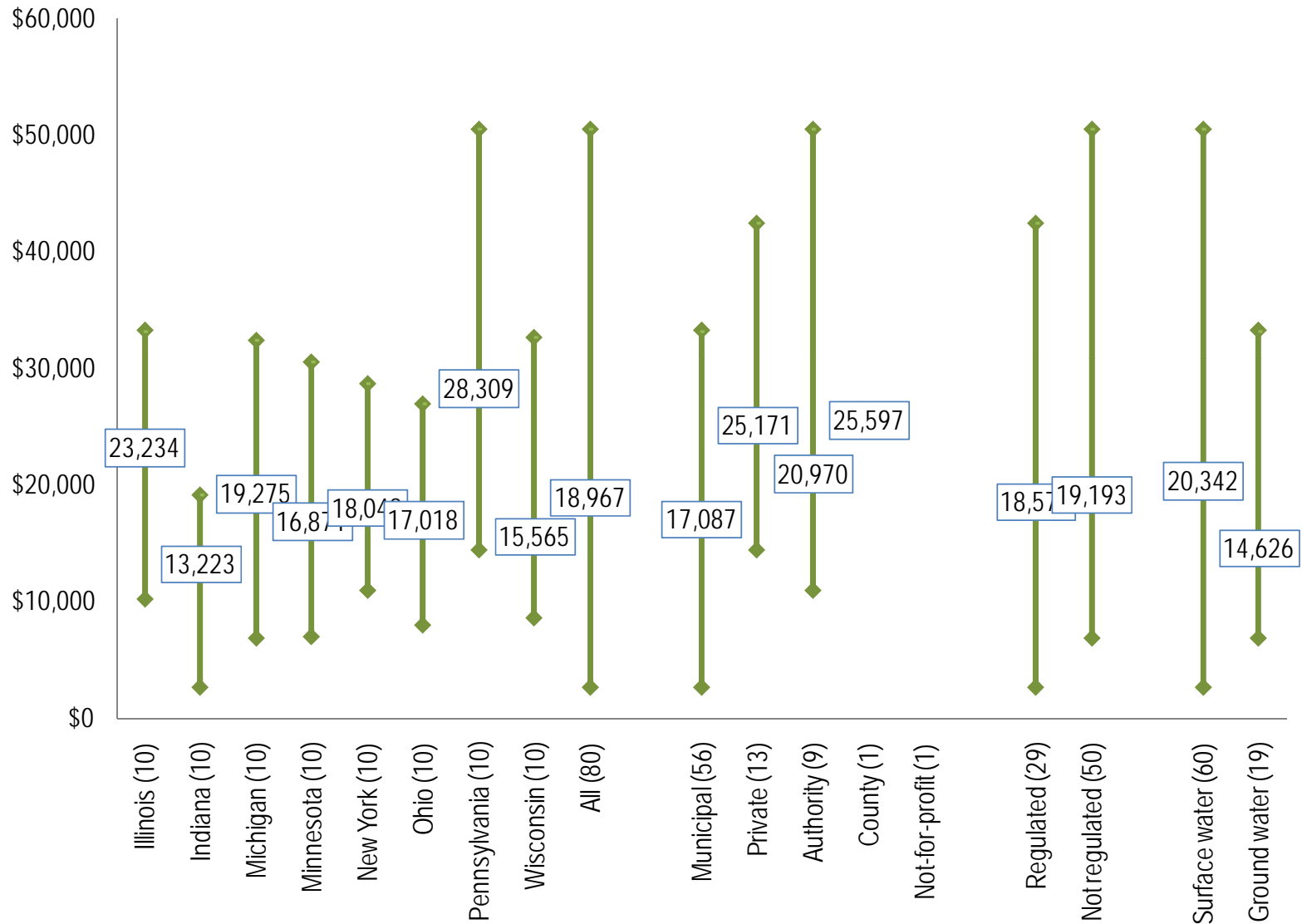
# Average charges for 1,000 cf (7,480 gal.)



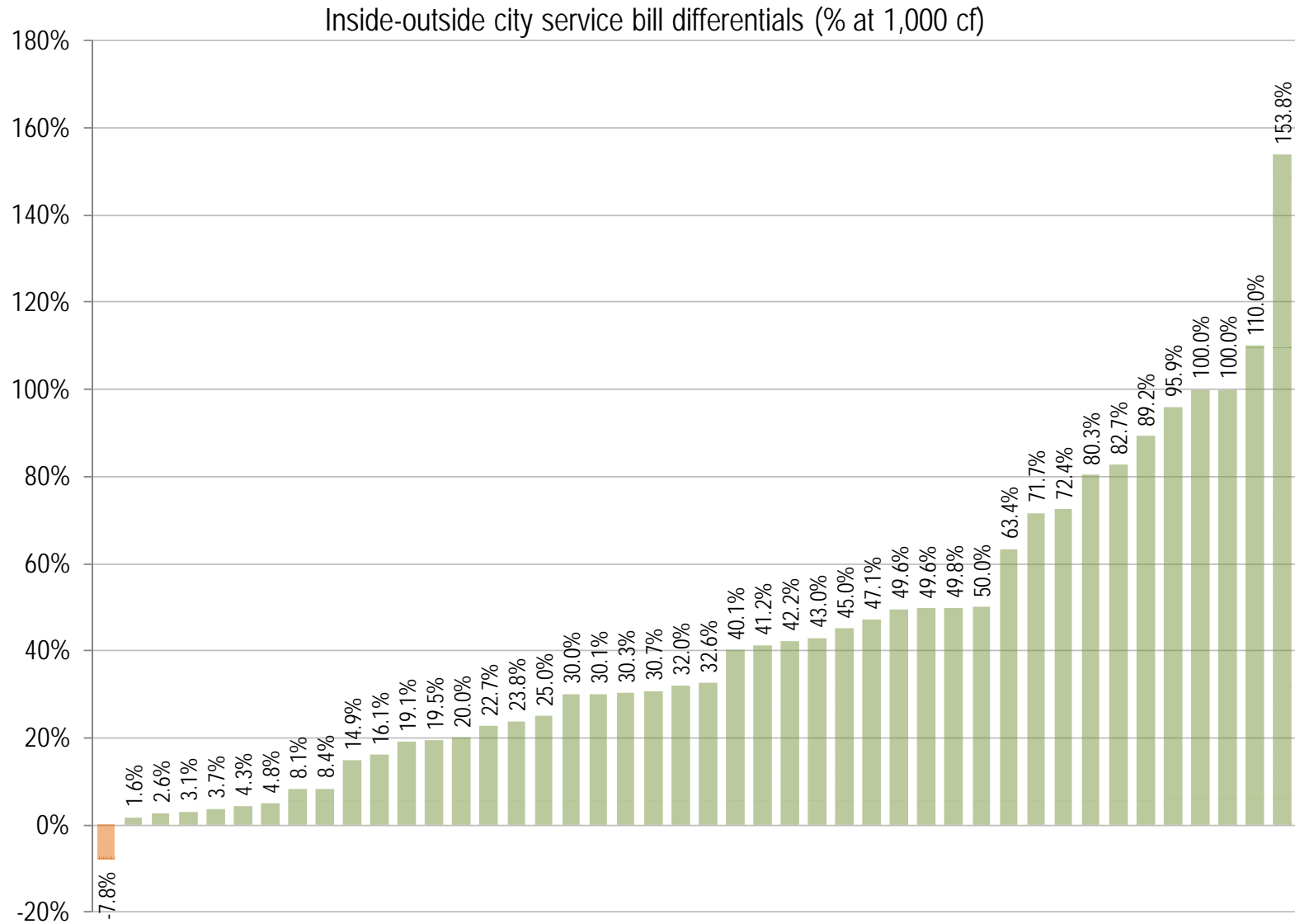
# Average charges for 50,000 cf (374,000 gal.)



# Average charges for 1 mil. cf (7.4 mil. gal).

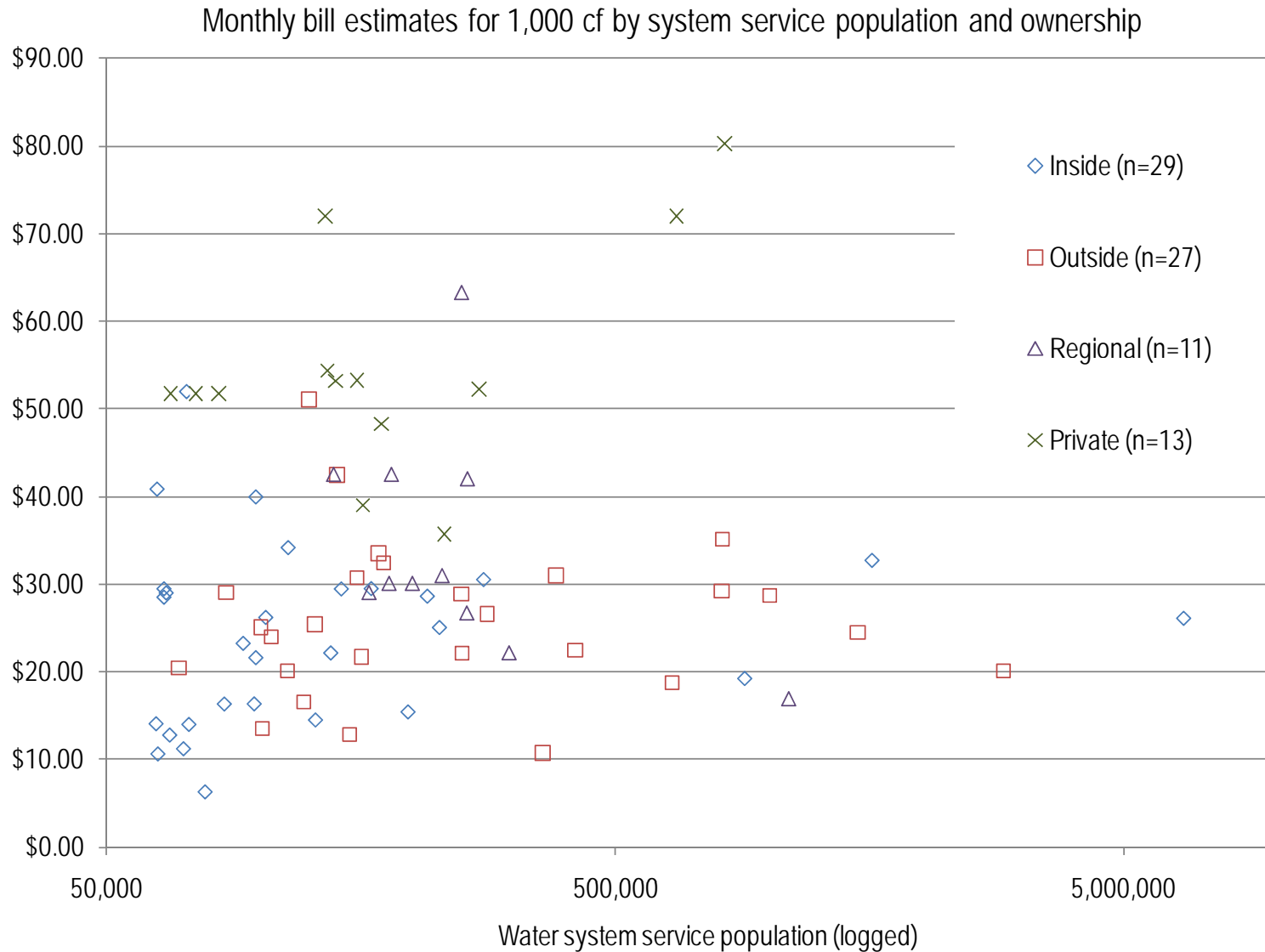


# Bill differentials for systems serving outside of boundaries

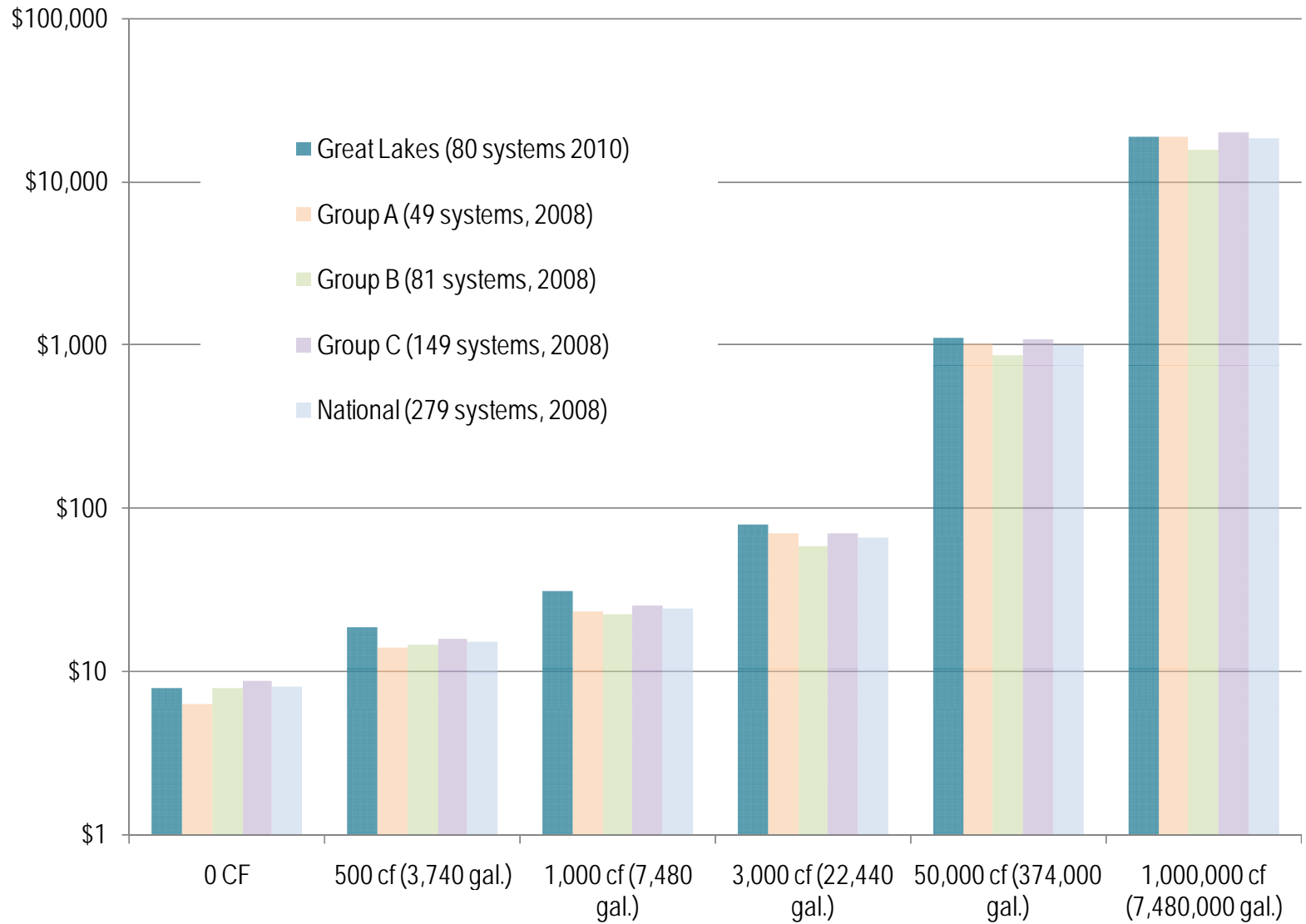




# Monthly bills by system size and ownership



# Comparison to AWWA rate survey (2008)



# Water utility cost-trend analysis

- Data from the Wisconsin Public Service Commission
  - ▶ Period: 2000-2009
  - ▶ Benchmarking analysis
  - ▶ Annual financial reports
- Class AB water utilities
  - ▶ N ranges from 72 to 94
- Informative but not generalizable to other water systems



The screenshot shows the Wisconsin Public Service Commission website. The header includes the PSC logo and navigation links for Electric, Natural Gas, Telecom, Water, and Consumers. Below the header is a search bar and a menu for 'Water & Sewer' with options like Consumer Issues, Water Conservation, Utility Education, Resources, Report & Tariffs, Rates, and Contacts. The main content area is titled 'Water Utility Statistical Benchmarks' and contains text explaining the benchmarking process and a list of items to note.

**Water & Sewer**

Consumer Issues	⊕
Water Conservation	⊕
Utility Education	⊕
Resources, Report & Tariffs	⊕
Rates	⊕
Contacts	

**Water Utility Statistical Benchmarks**

The Public Service Commission of Wisconsin calculates benchmark data for about 600 water utilities and sanitary districts, based on figures within their annual reports. The purpose of these benchmarks is to establish a maximum, minimum and weighted average for expense, revenue and pumping statistics. Individual utilities can then compare their numbers to the statewide statistics.

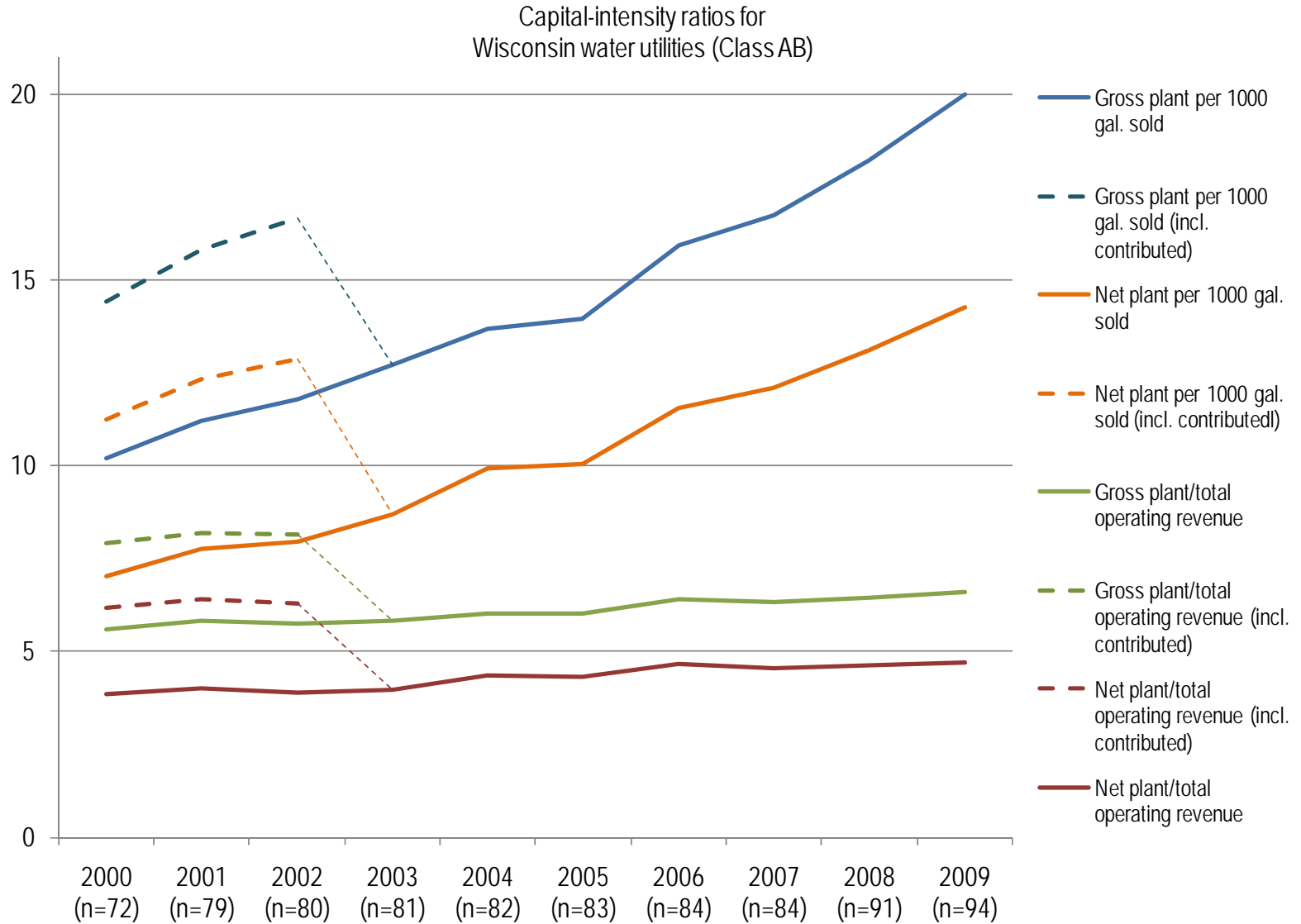
Water utilities and sanitary districts are grouped as class AB, C or D, by the number of customers served. Class AB utilities have 4,000 or more customers, Class D utilities have less than 1,000 customers and Class C utilities have between 1,000 and 4,000 customers. Benchmarks by class are established so utilities can compare with others of similar size.

Items to Note:

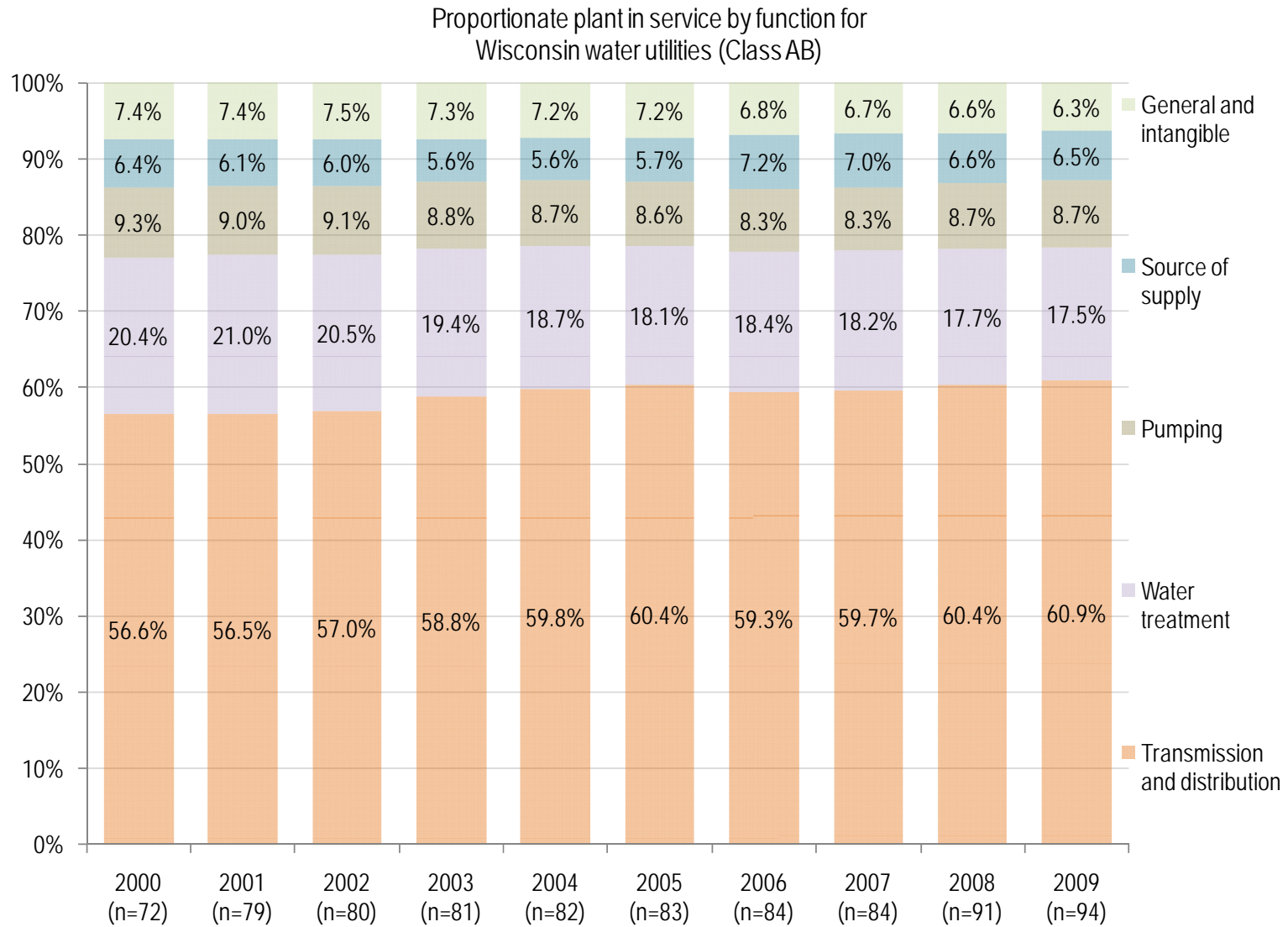
- Benchmark reports can be exported to Microsoft Excel.
- Most annual reports are filed in March and April. During this time frame adding new annual report data will cause the benchmarks to fluctuate daily.
- These benchmarks may contain errors for individual companies. While the averages are relatively unaffected by these errors, the minimum and maximum values can be greatly distorted.

Statewide Benchmark: These benchmarks are grouped by utility class and water source (surface, ground or purchased).

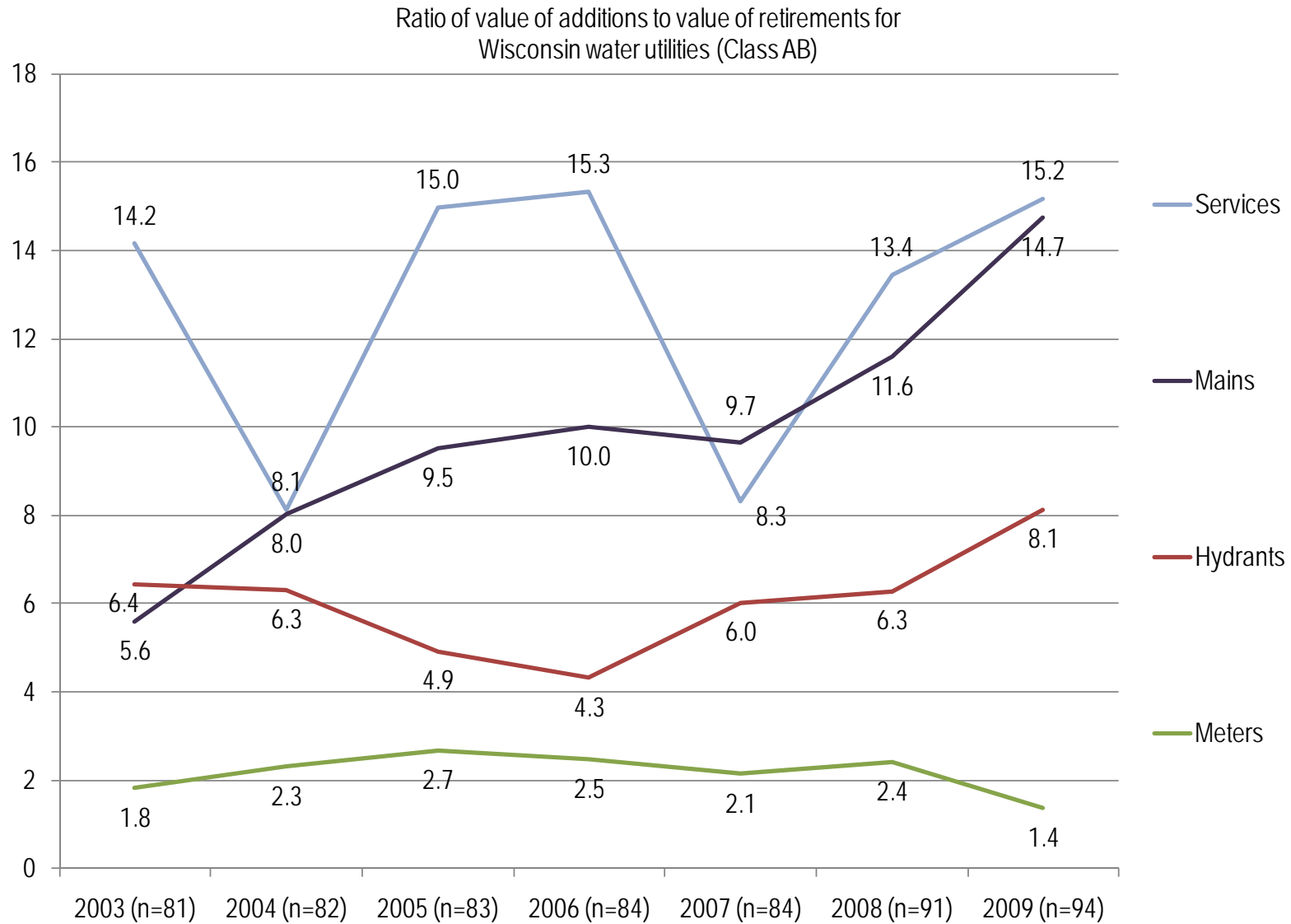
# Utility plant to revenue ratios (capital intensity)



# Utility plant investment by function

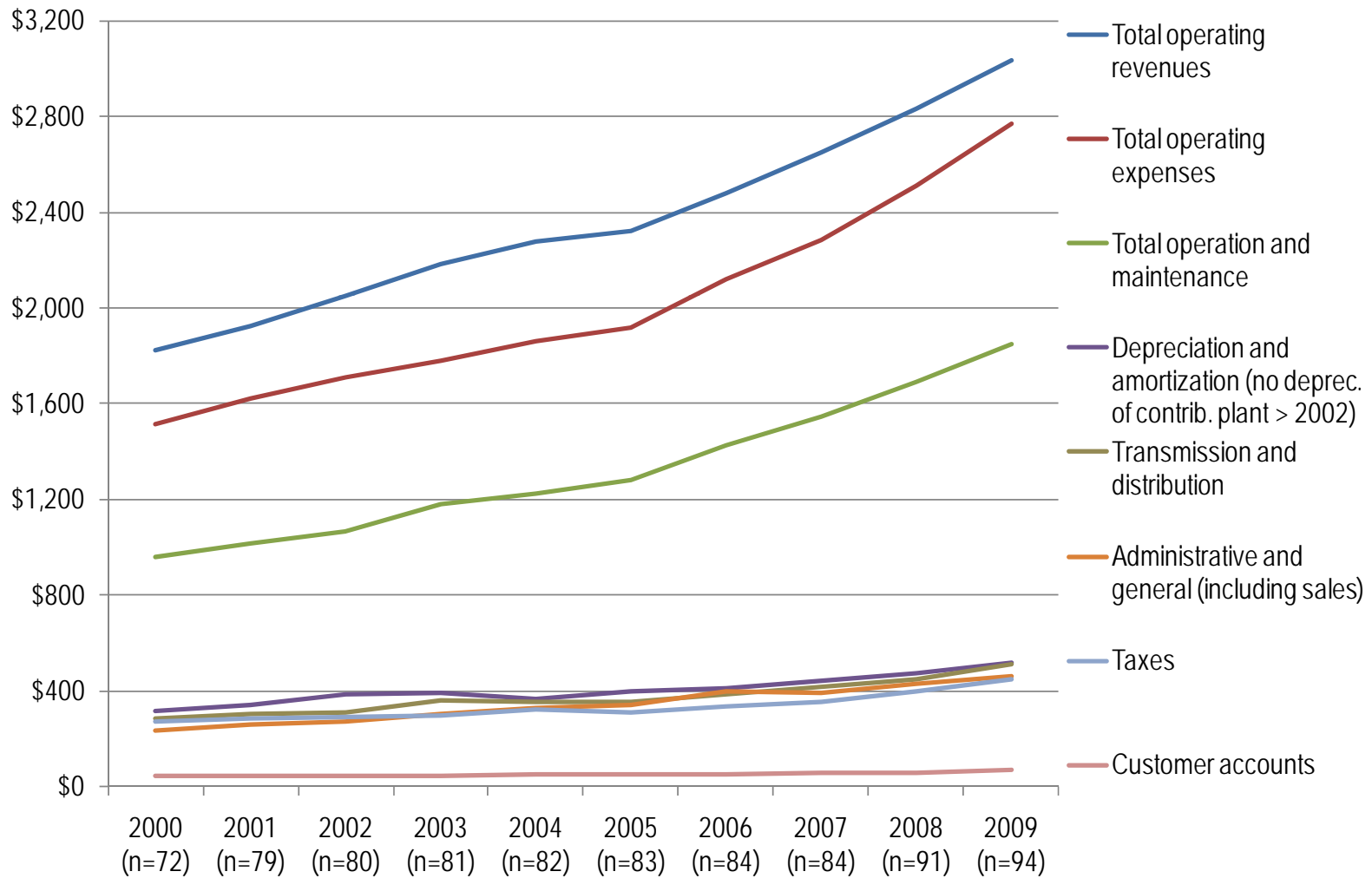


# Ratio of value of plant additions to retirements



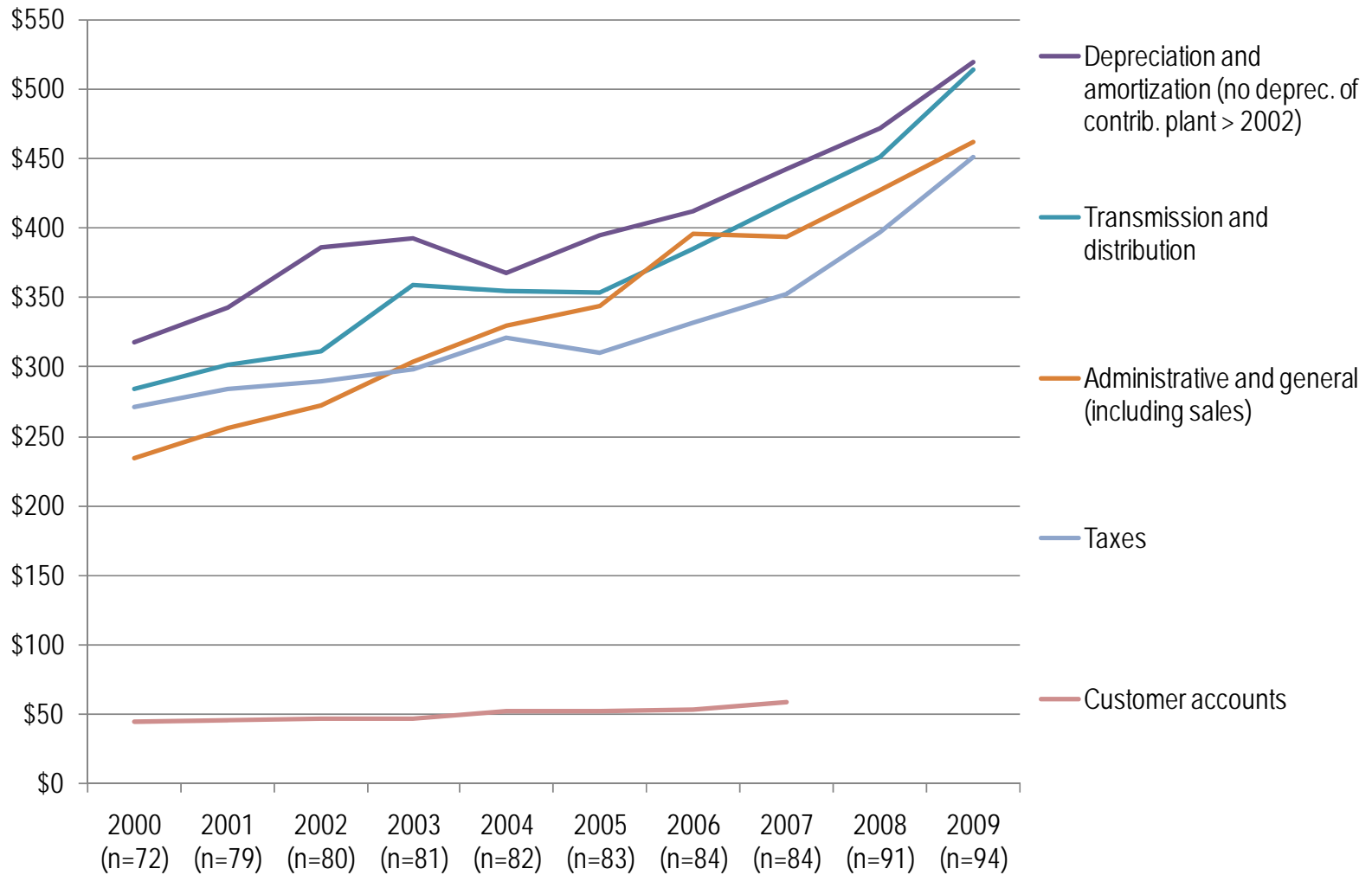
# Operating revenues and expenses per water sold

Operating revenues and expenses per million gallons sold  
Wisconsin water utilities (Class AB)



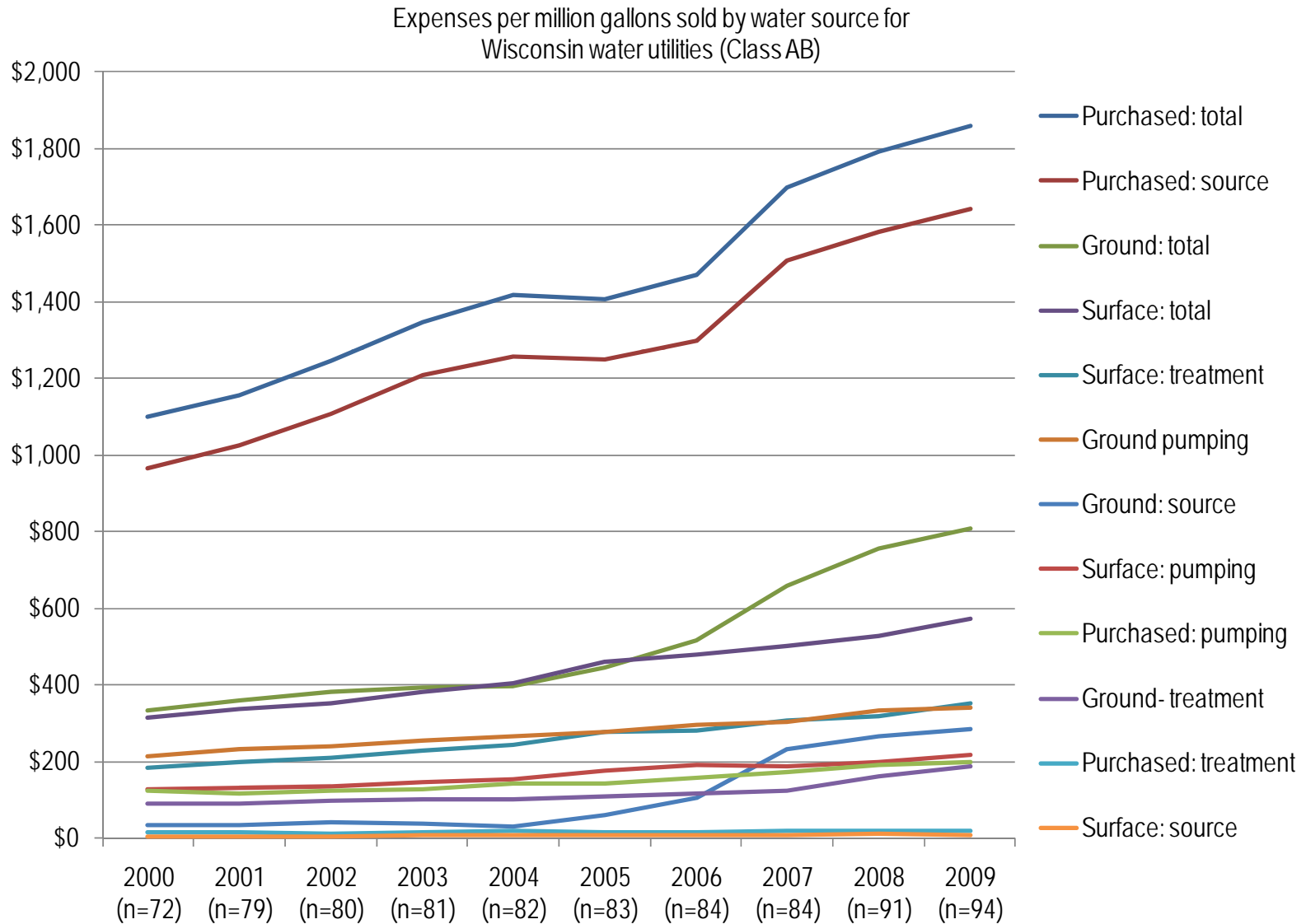
# Operating expenses per water sold

Operating expenses per million gallons sold  
Wisconsin water utilities (Class AB)

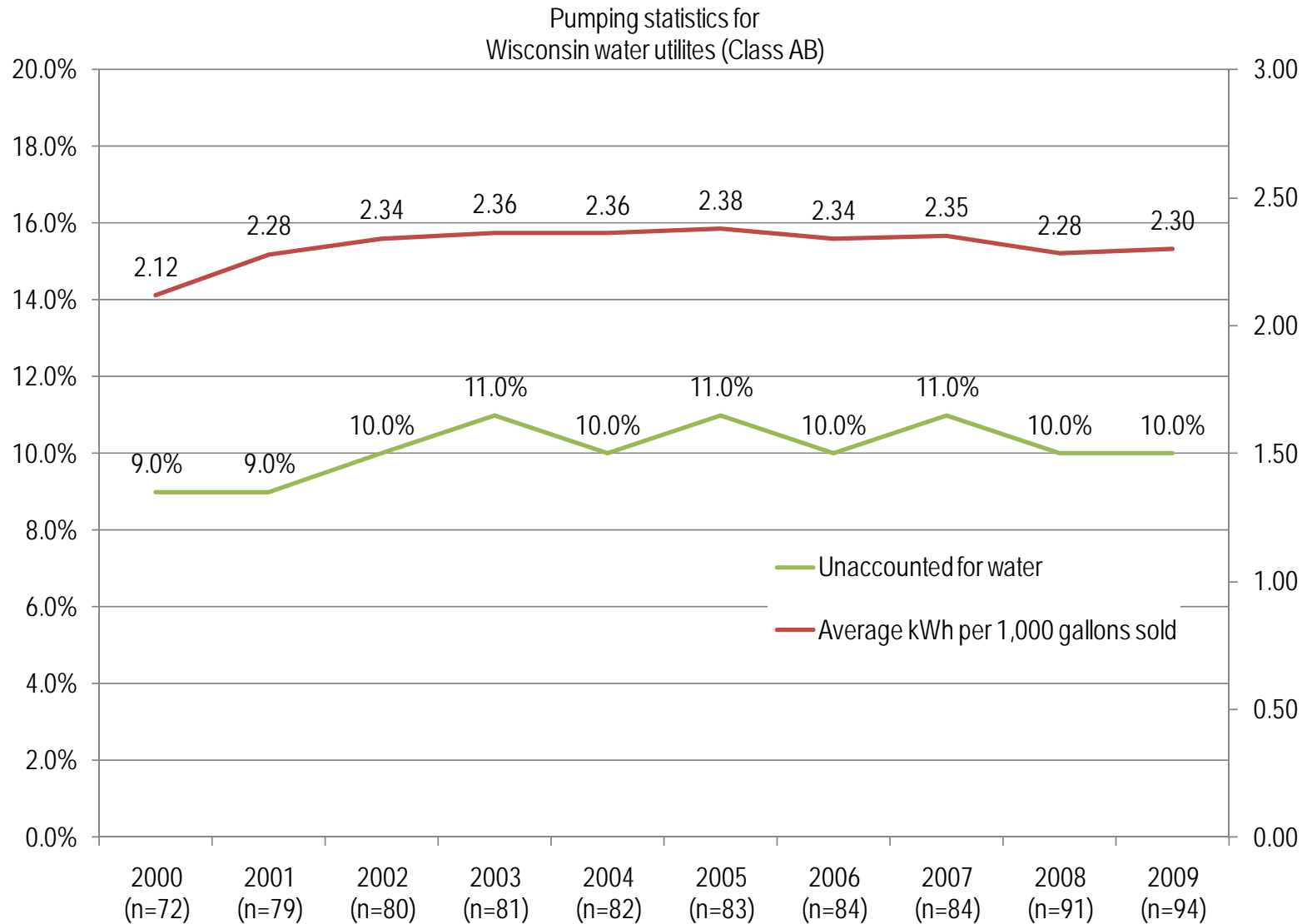




# Operating expenses by water source

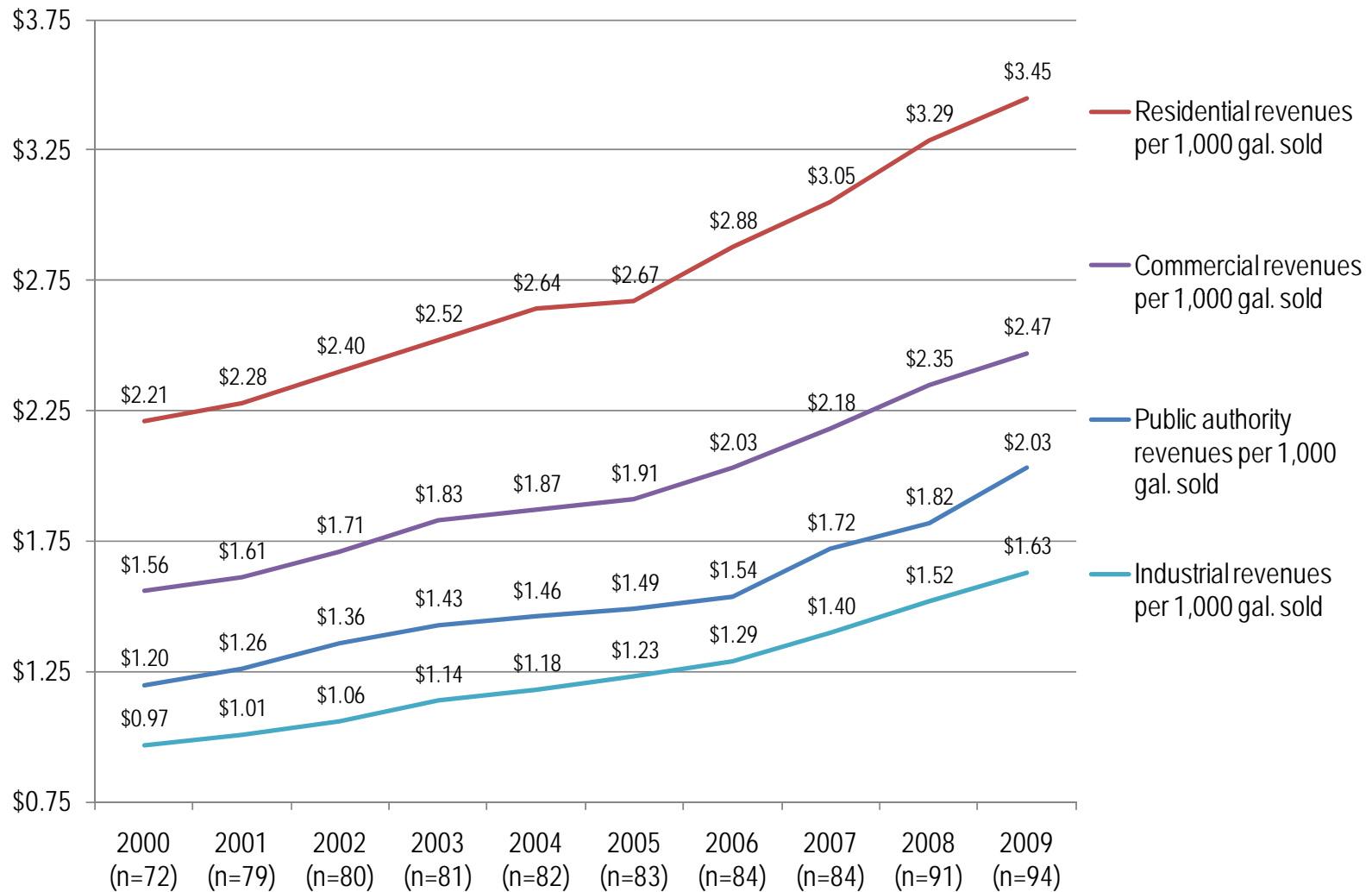


# Pumping statistics



# Revenue trends by customer class

Revenues per 1,000 gallons sold by customer class for Wisconsin water systems (Class AB)



# Trends in residential water sales and revenues

