2010 Great Lakes Water Rate Survey

Janice A. Beecher and Jason A. Kalmbach
INSTITUTE OF PUBLIC UTILITIES ▪ MICHIGAN STATE UNIVERSITY
beecher@msu.edu ▪ ipu.msu.edu

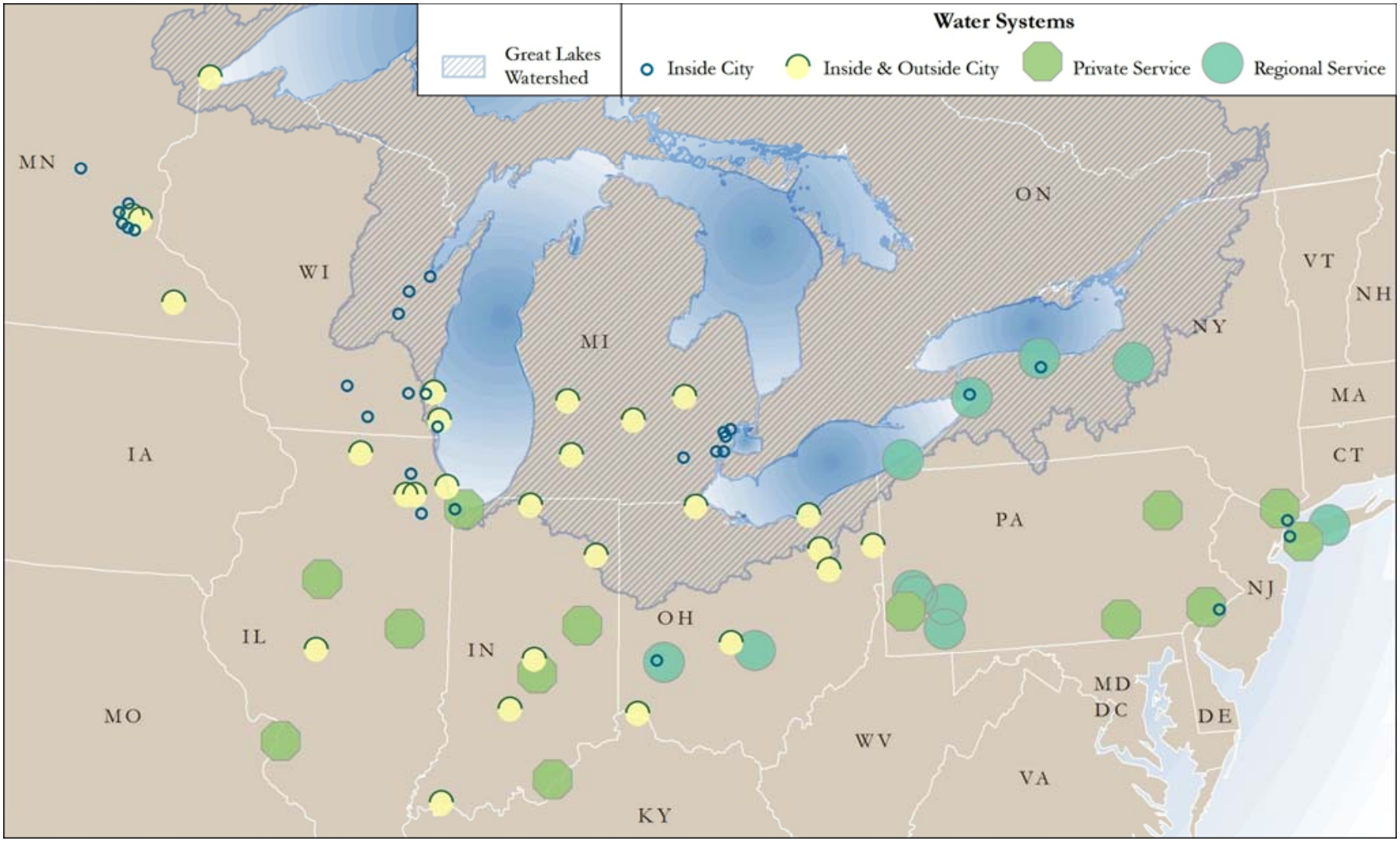
Please do not distribute by electronic or other means or cite without permission.

MICHIGAN STATE UNIVERSITY

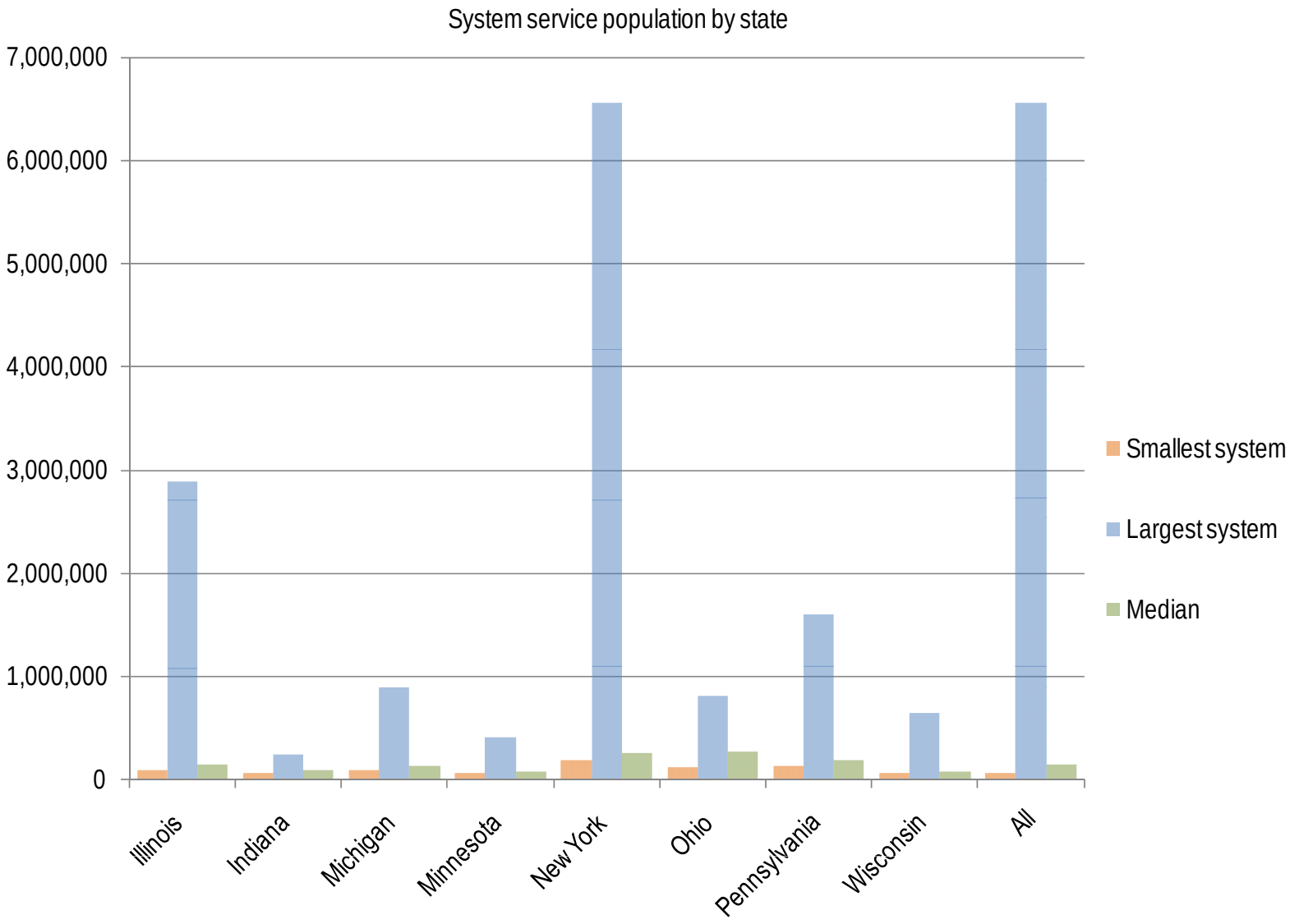
2010 Great Lakes Water Rate Survey

- 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



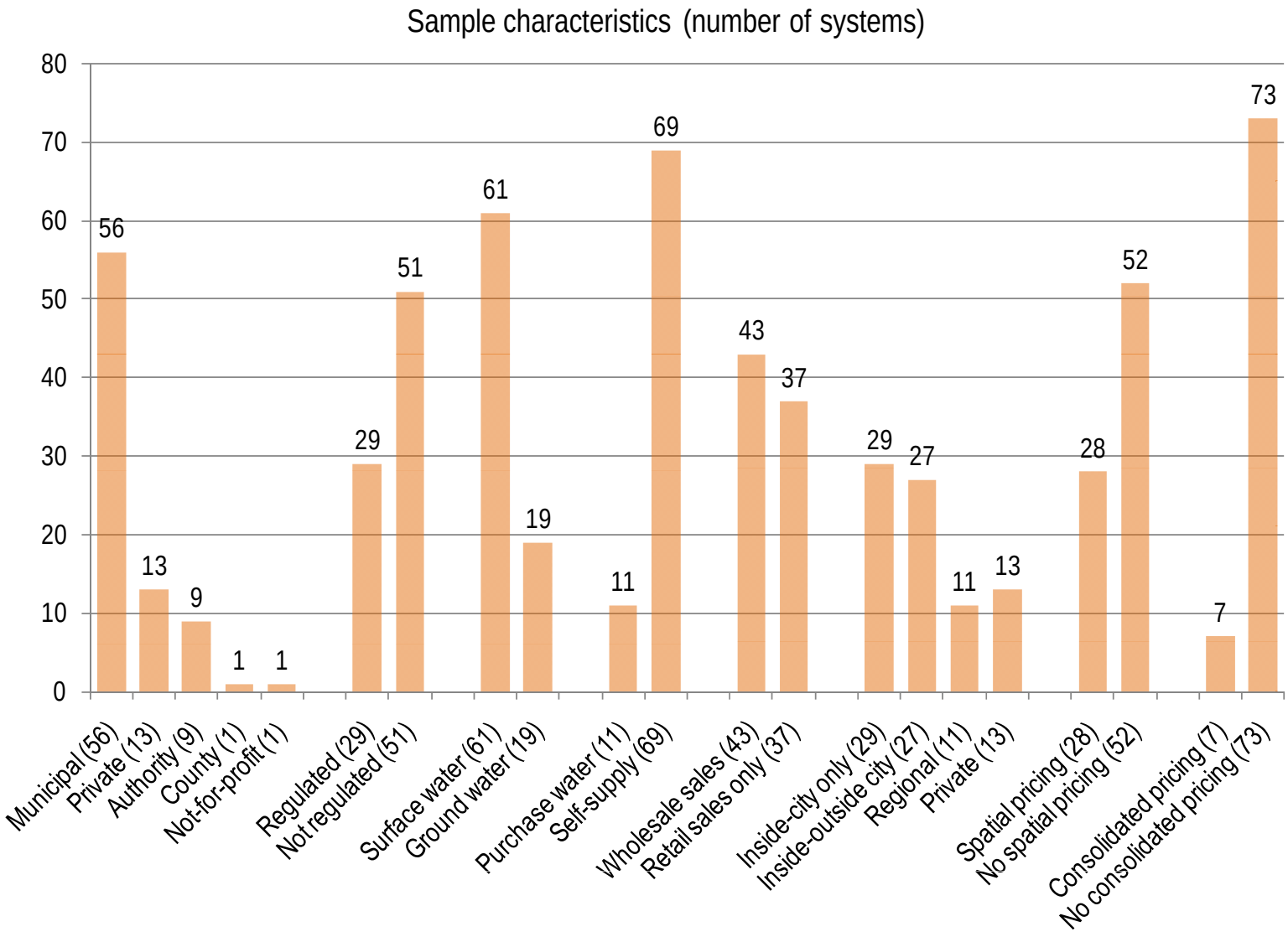
Service population



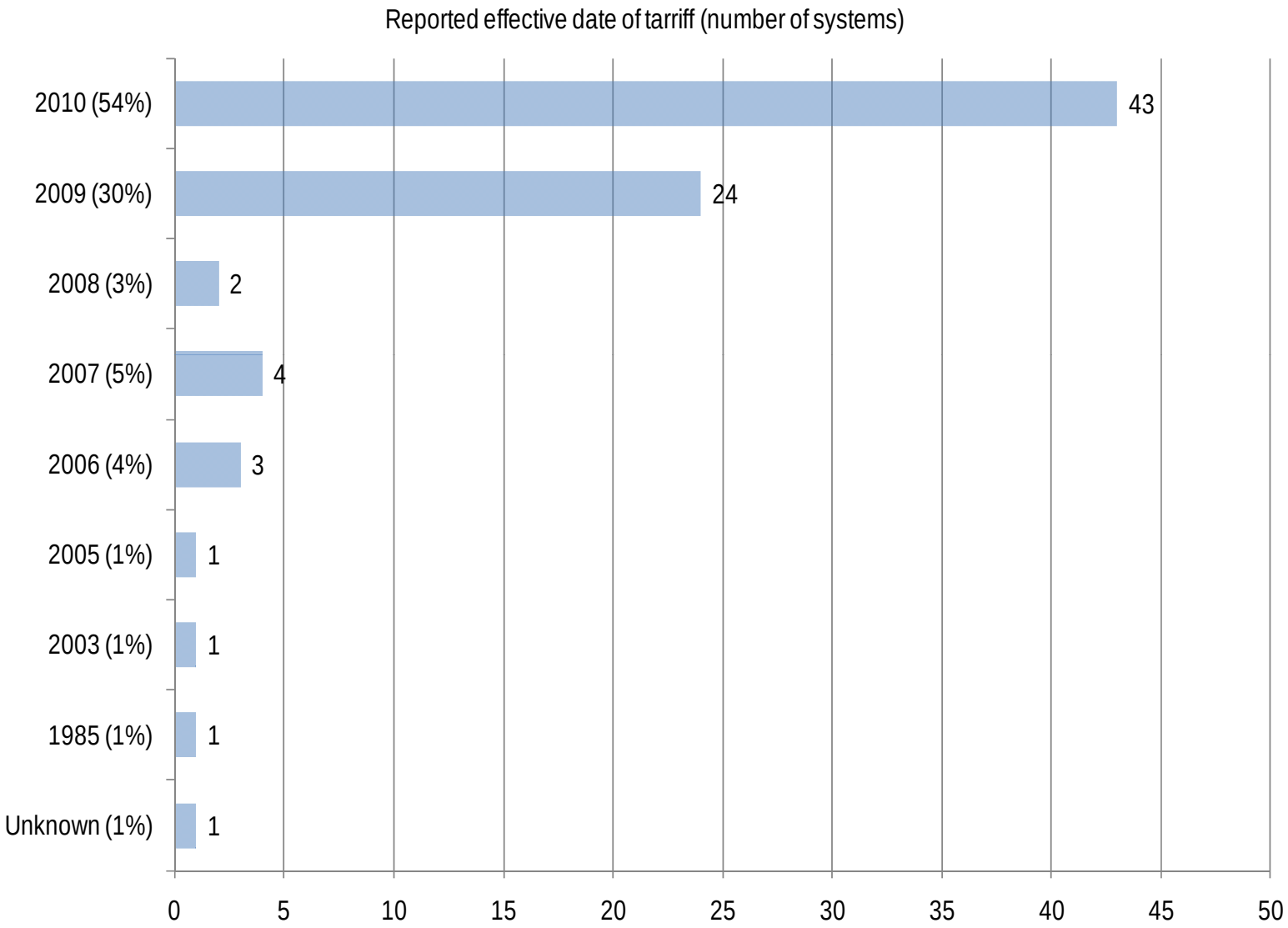
System service populations

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

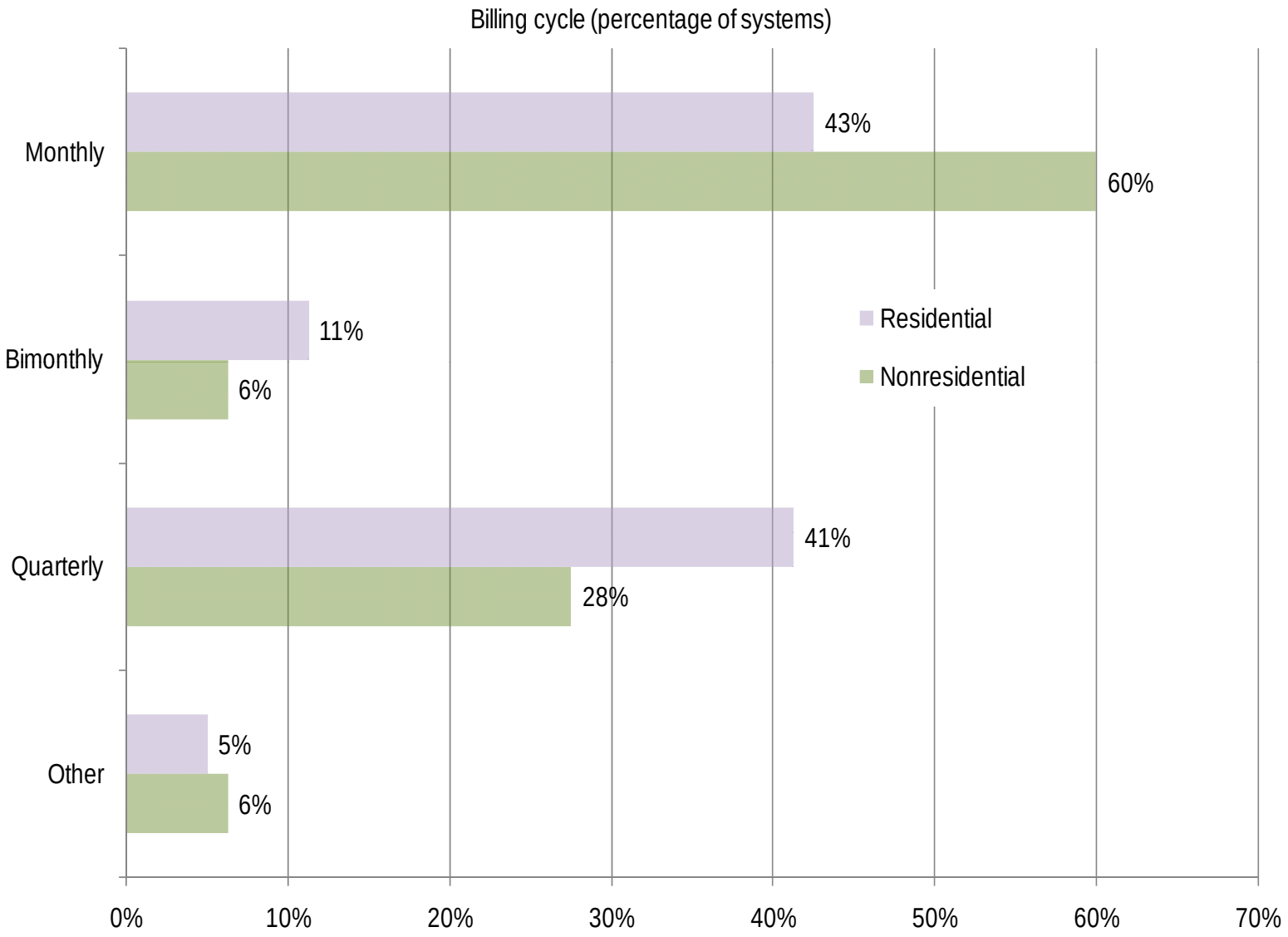
Sample characteristics



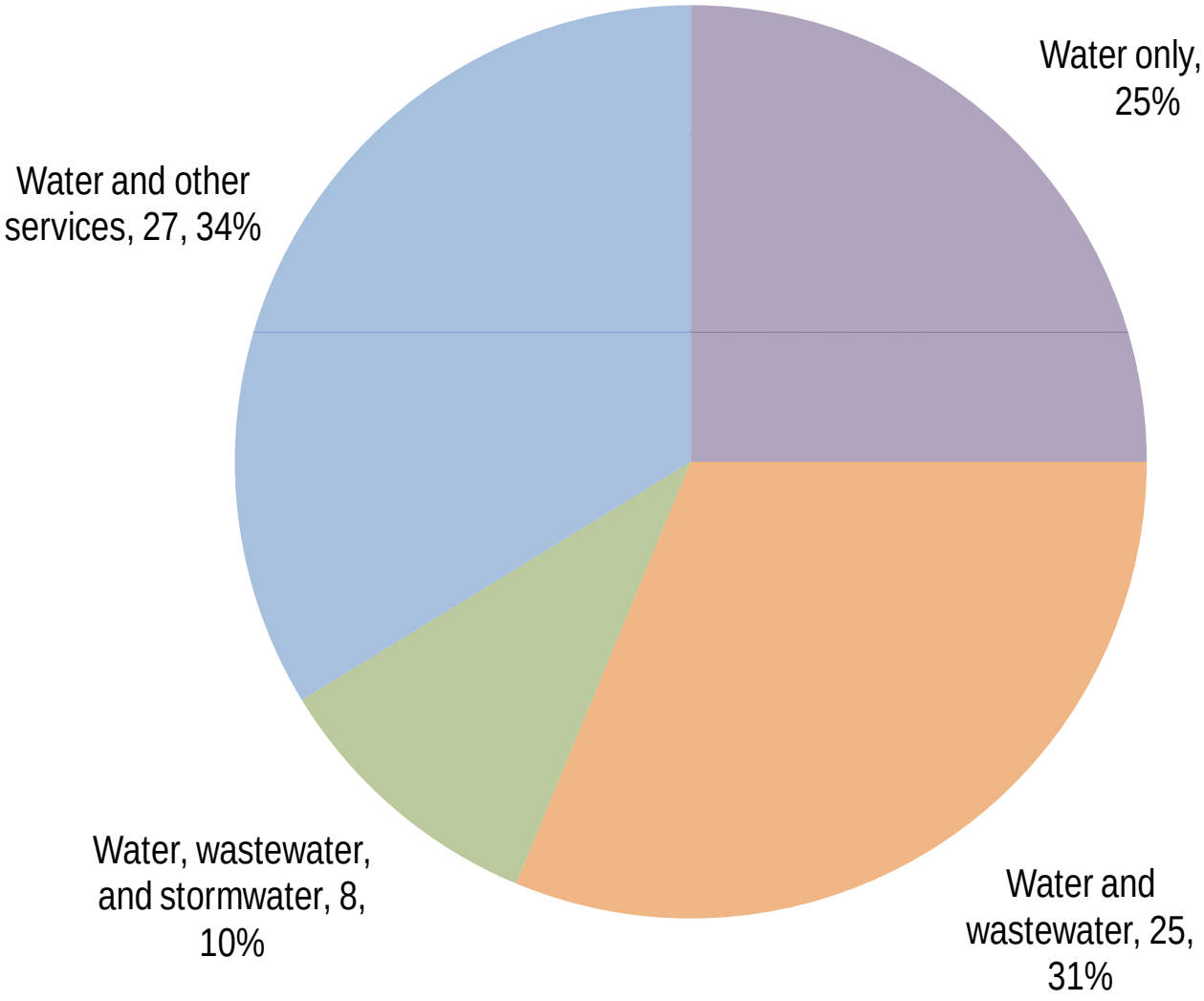
Effective date of tariff



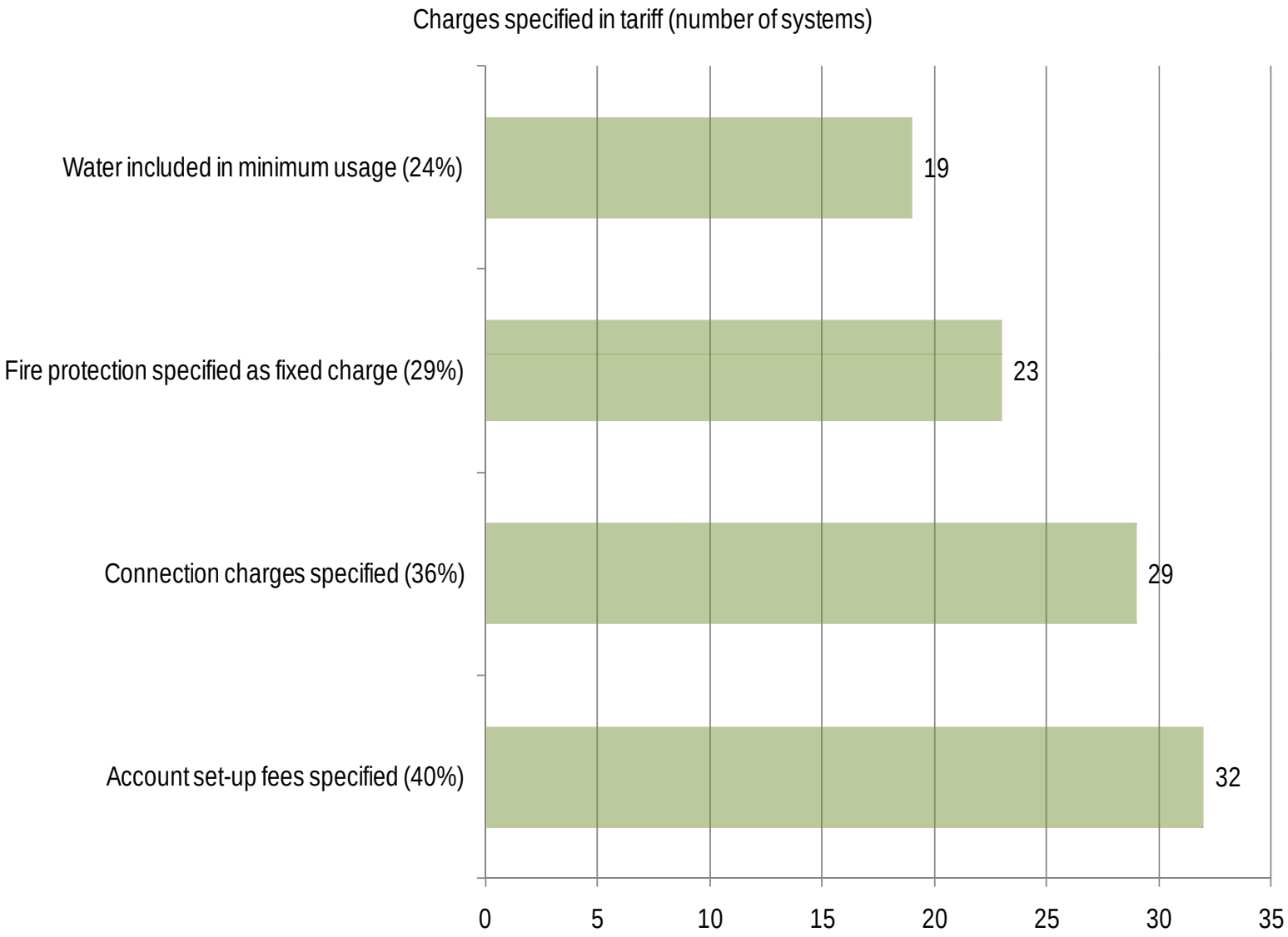
Billing cycles



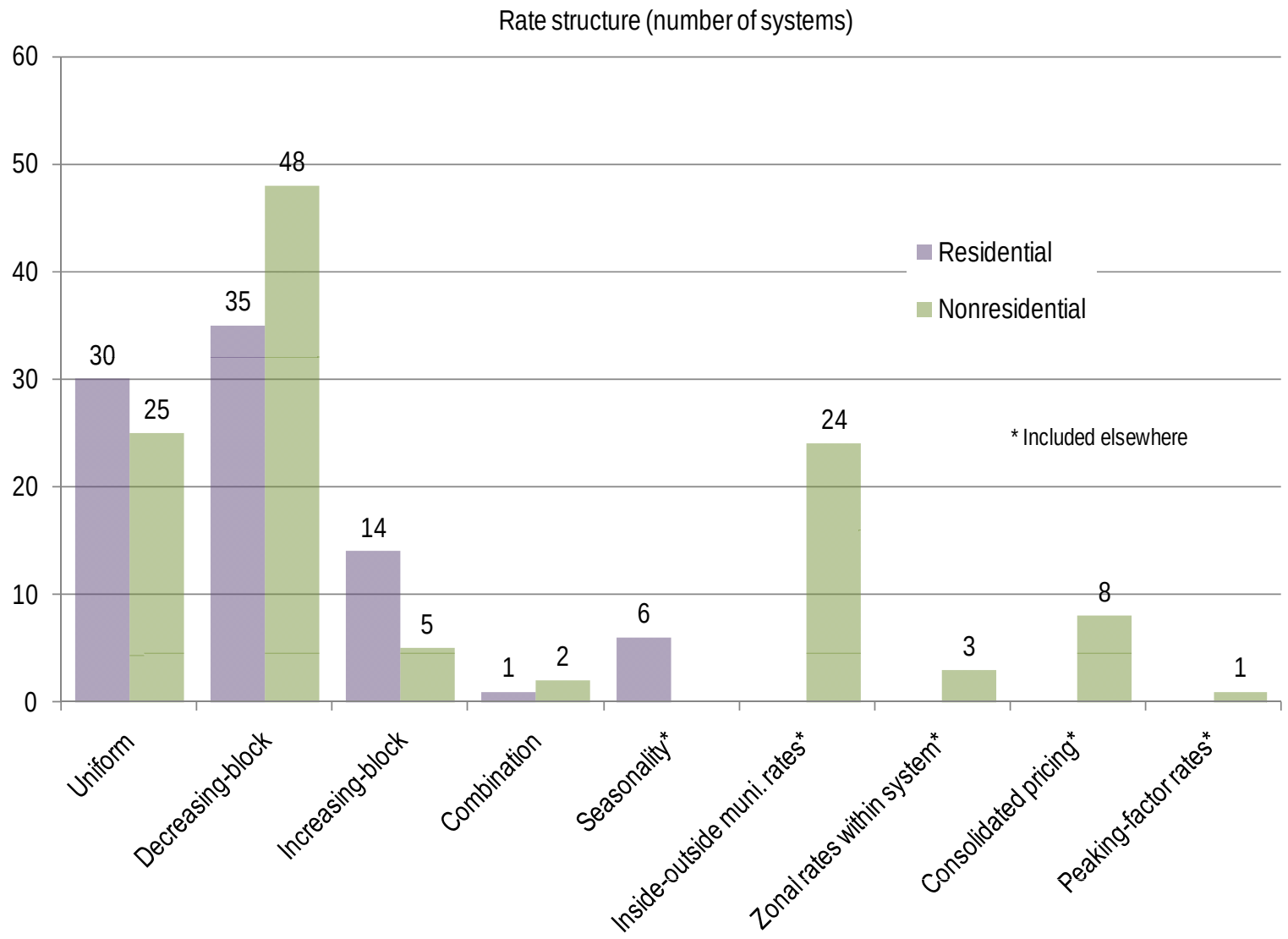
Billing combinations



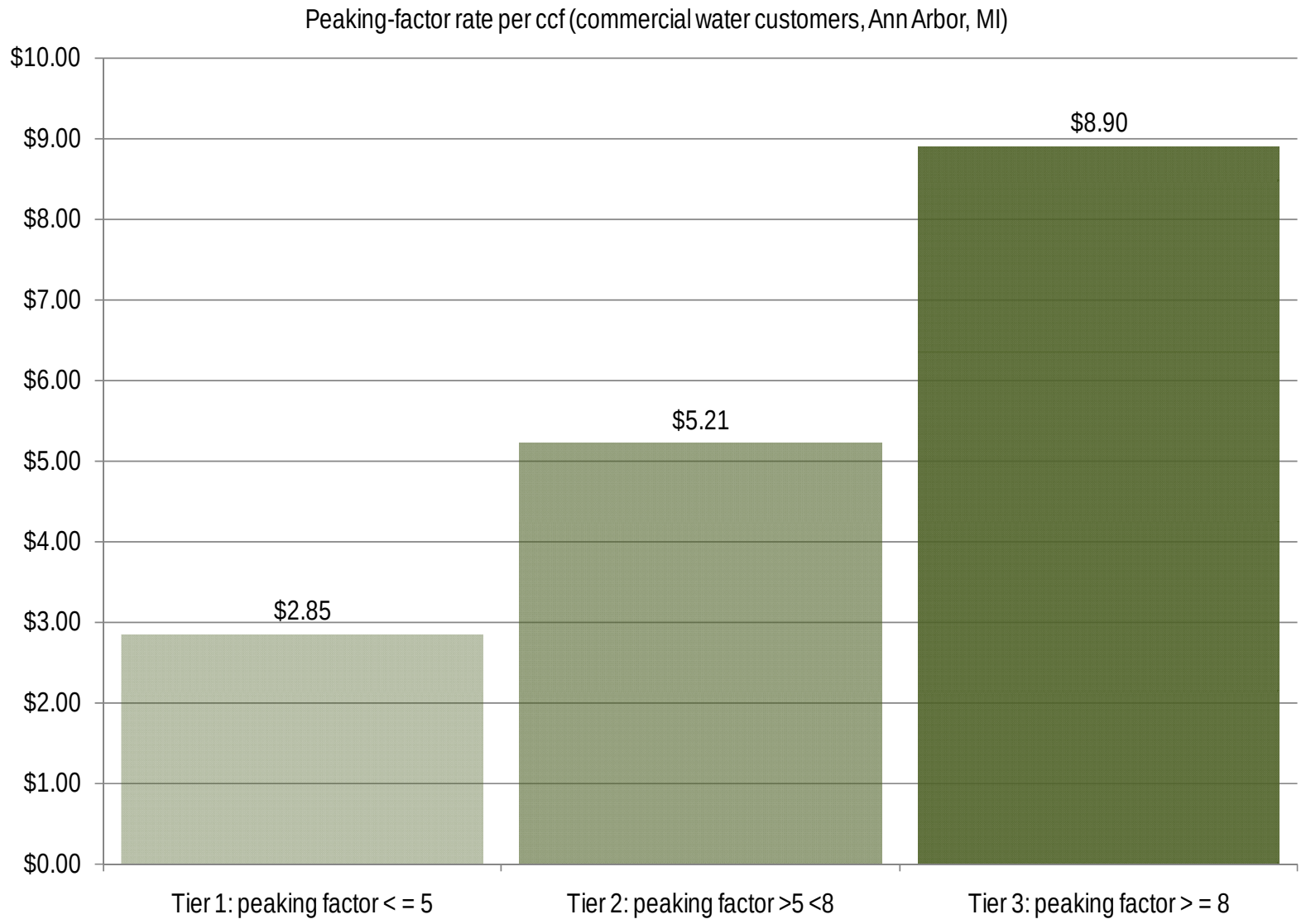
Tariff charges



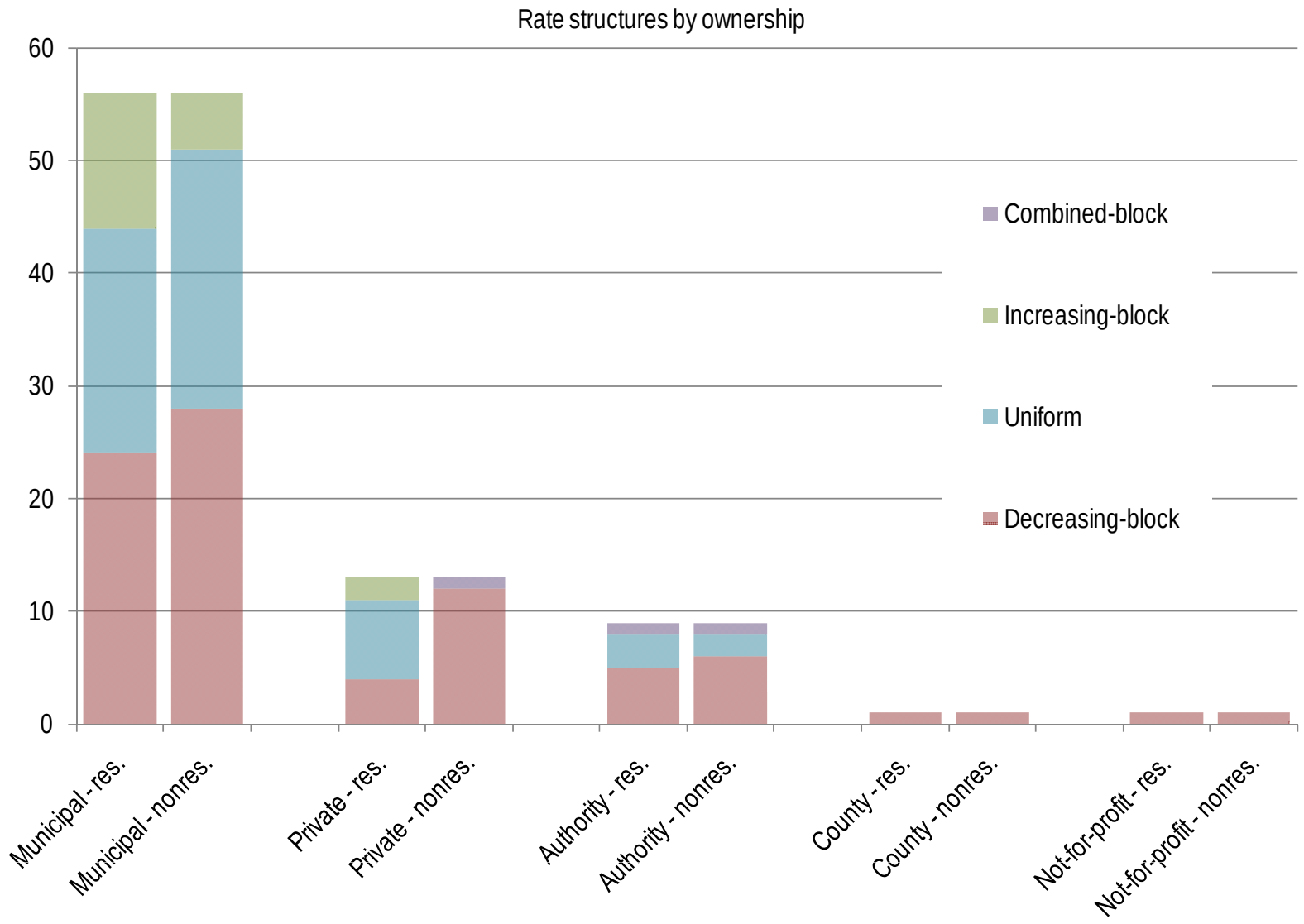
Rate structures



Peaking-factor rate (Ann Arbor, MI)

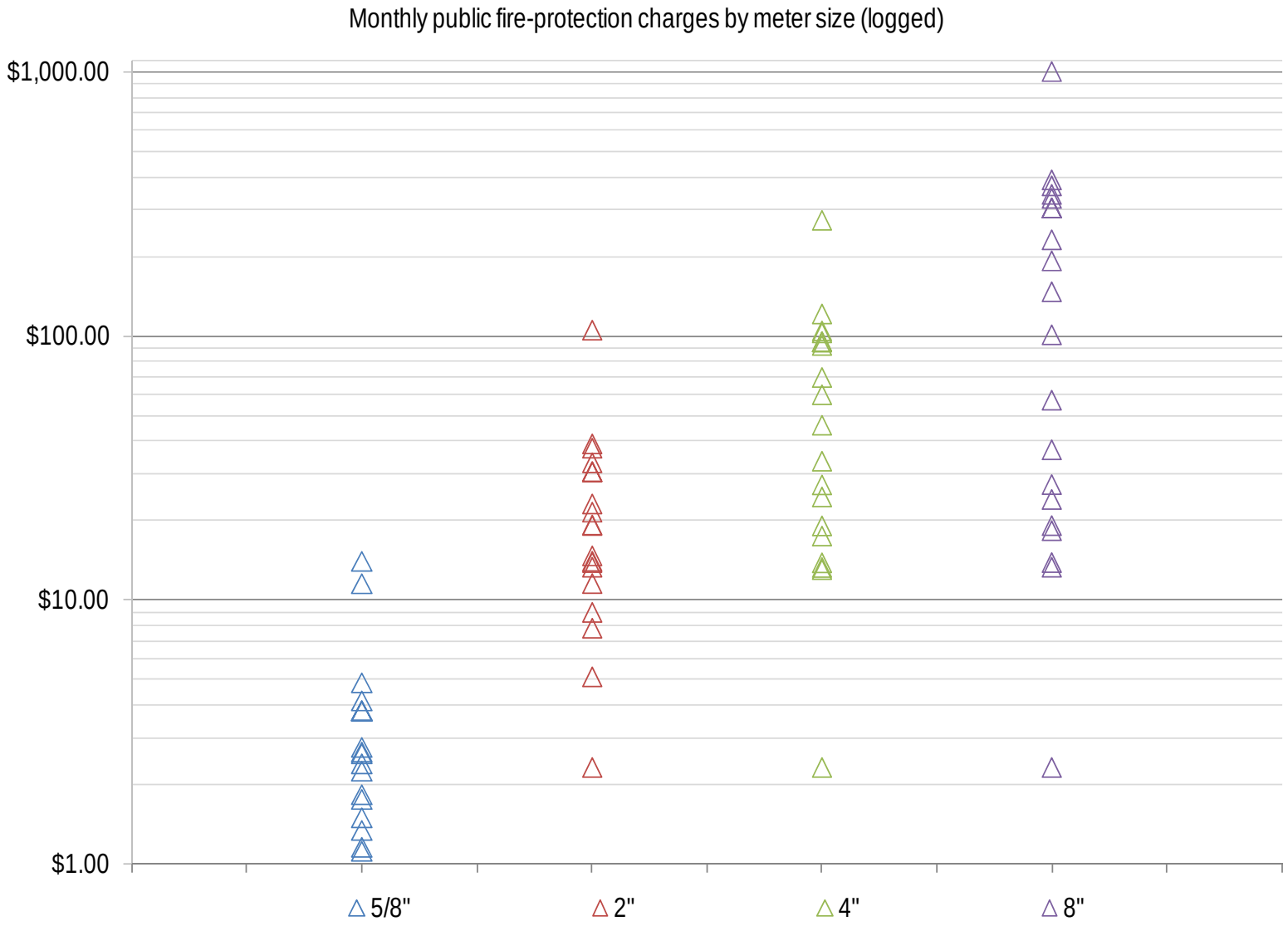


Rate structures by ownership

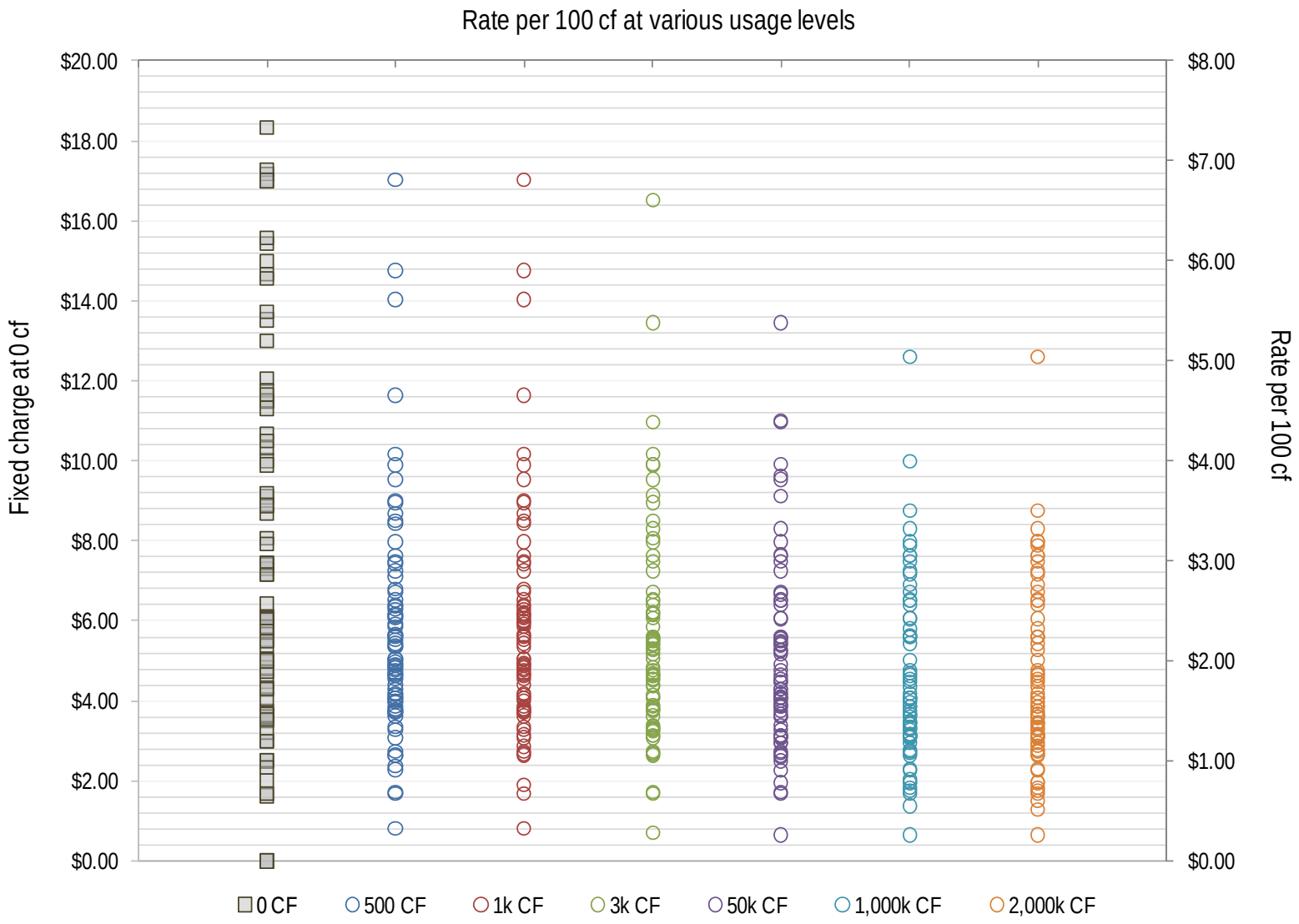


Public fire-protection in fixed charges: average by meter size

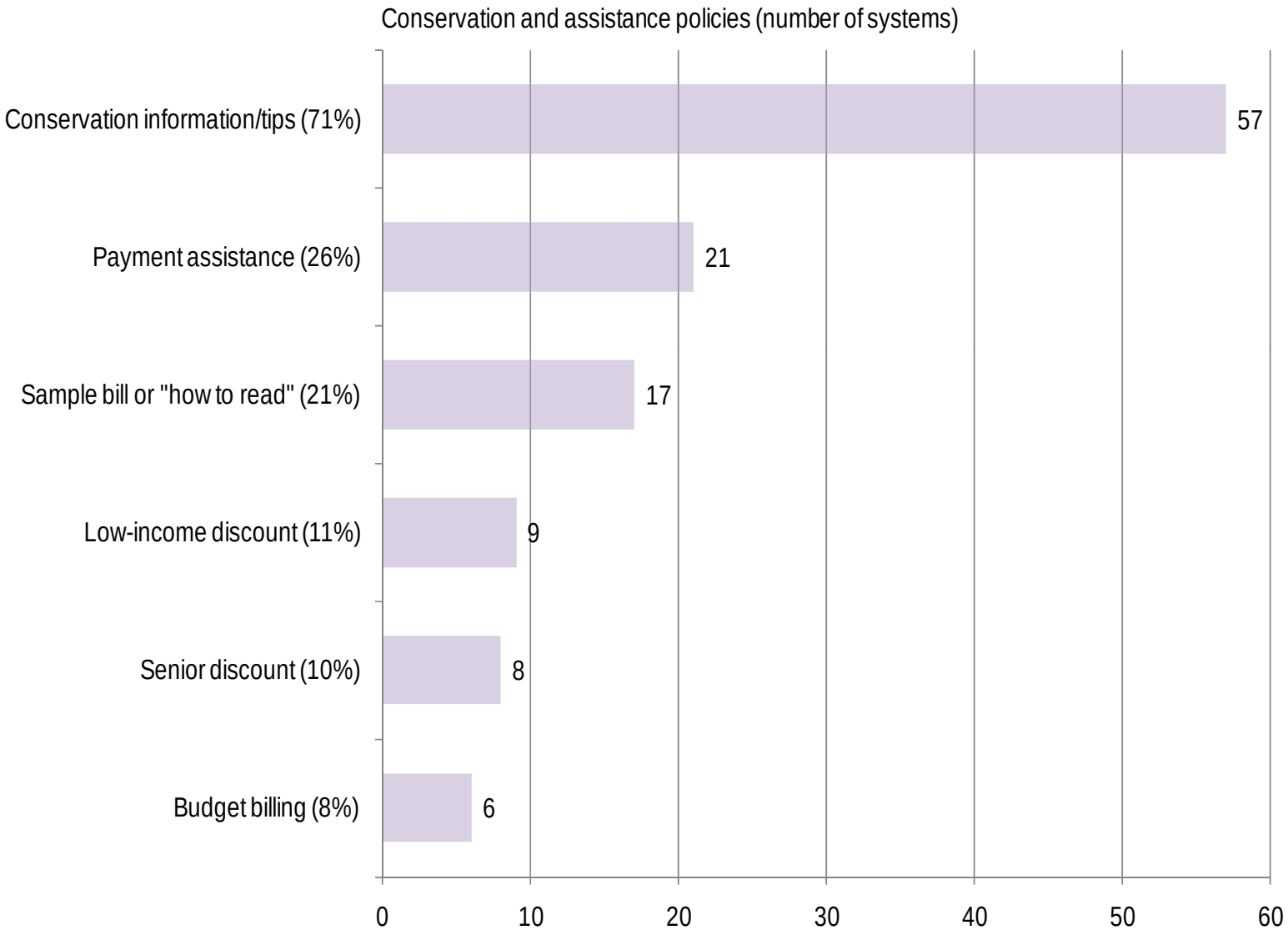
Public fire-protection in fixed charges: range by meter size



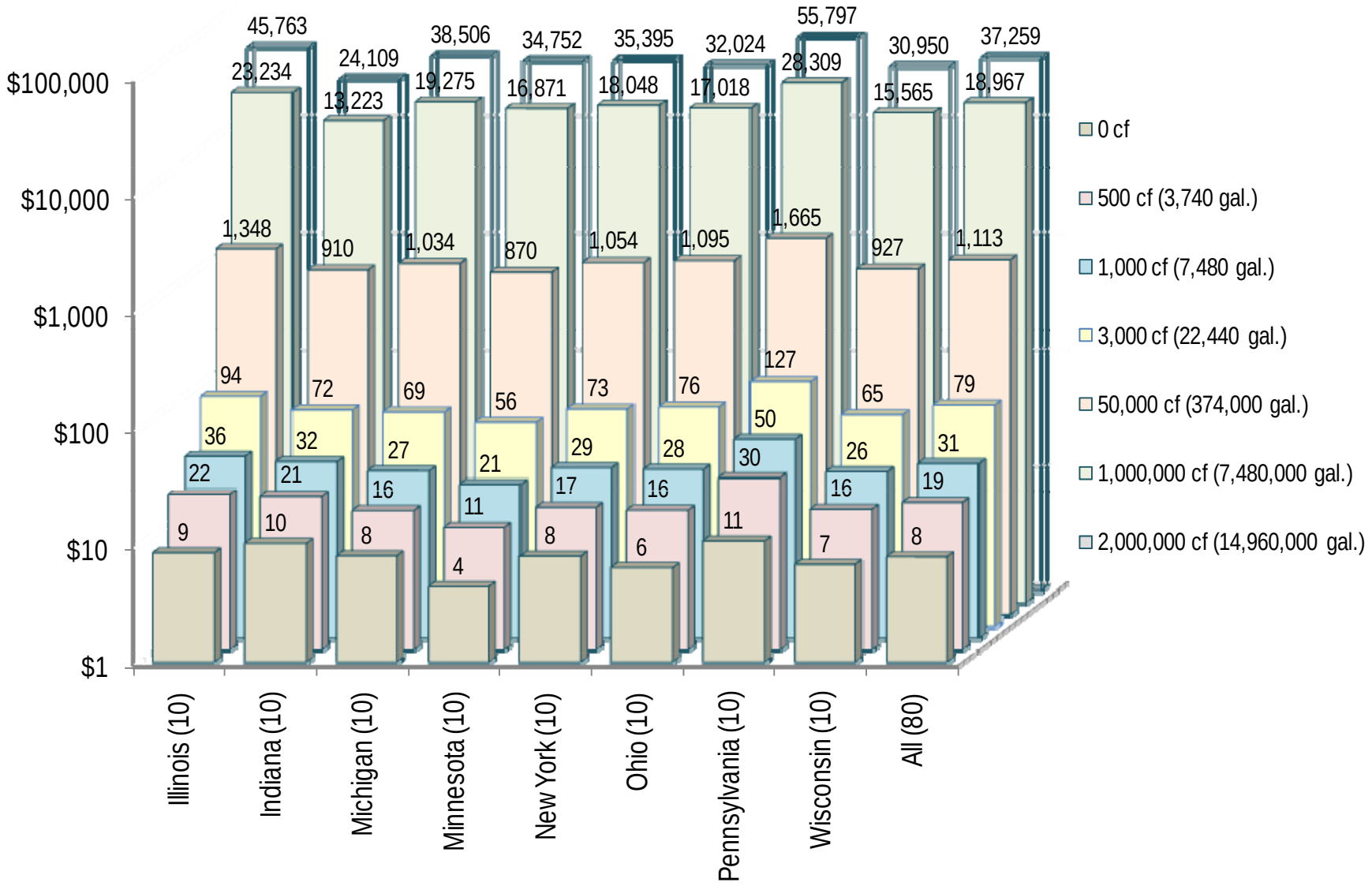
Fixed charges and variable unit rates for 100 cf by usage level



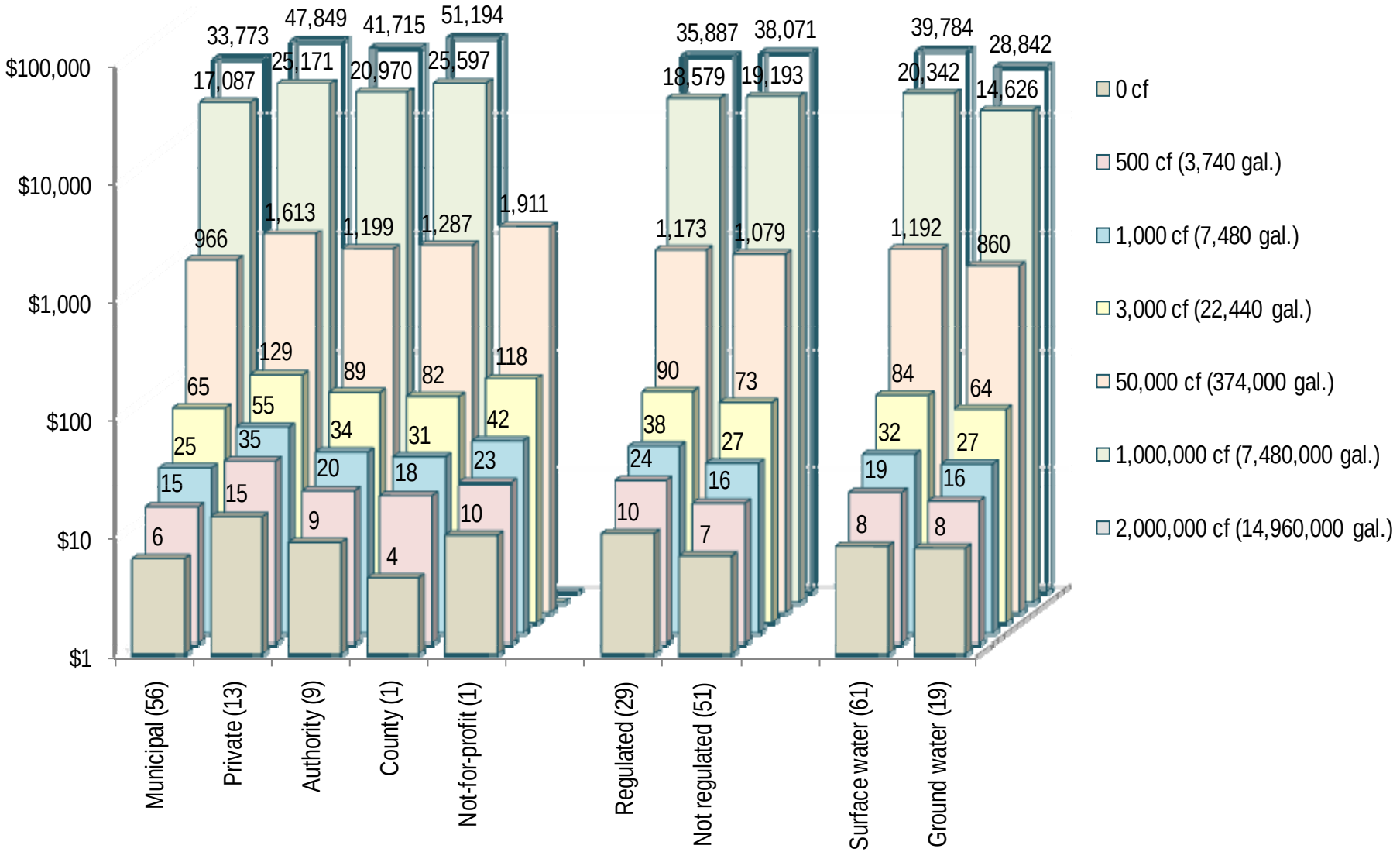
Conservation and assistance policies



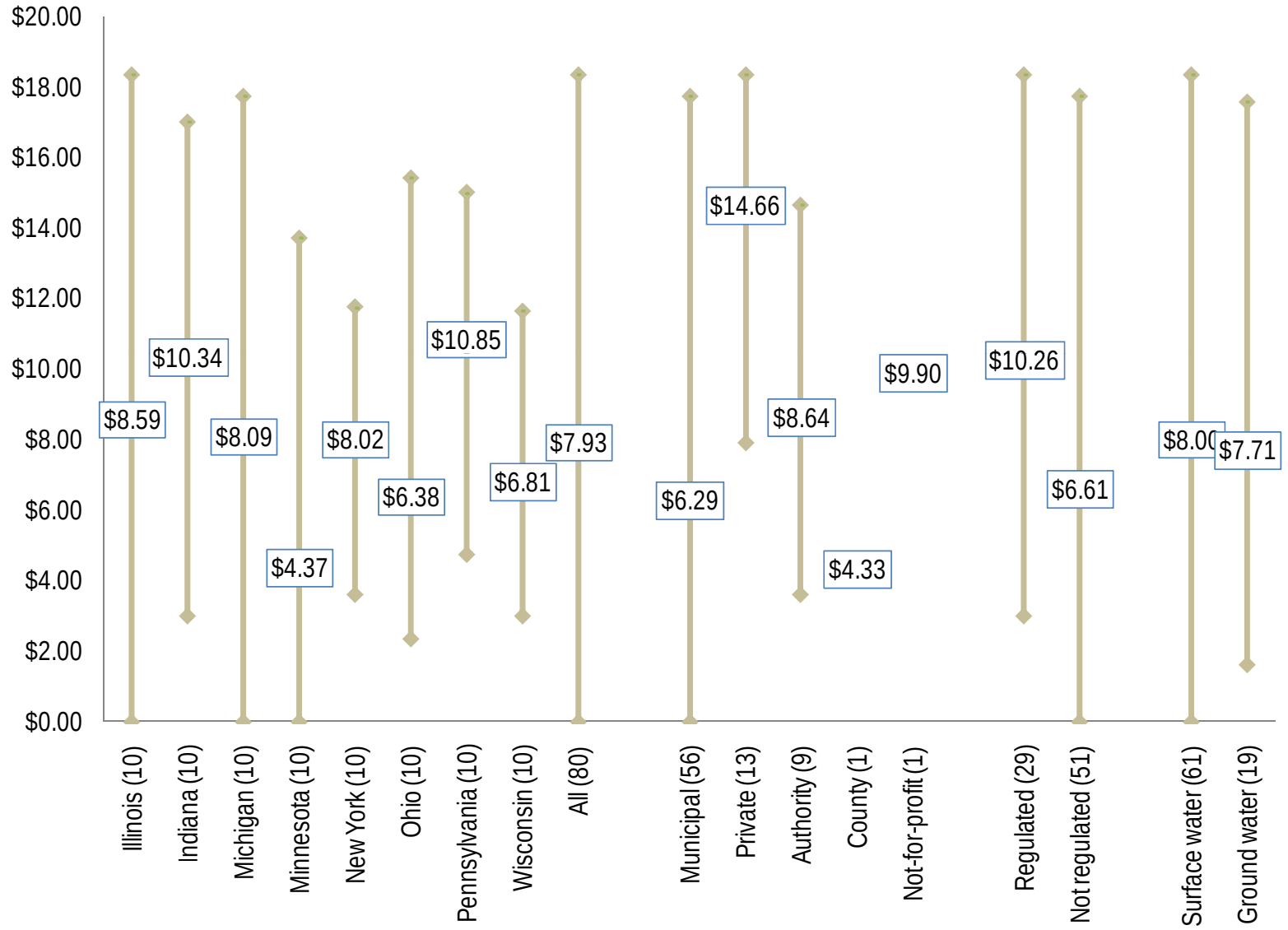
Average charges by state



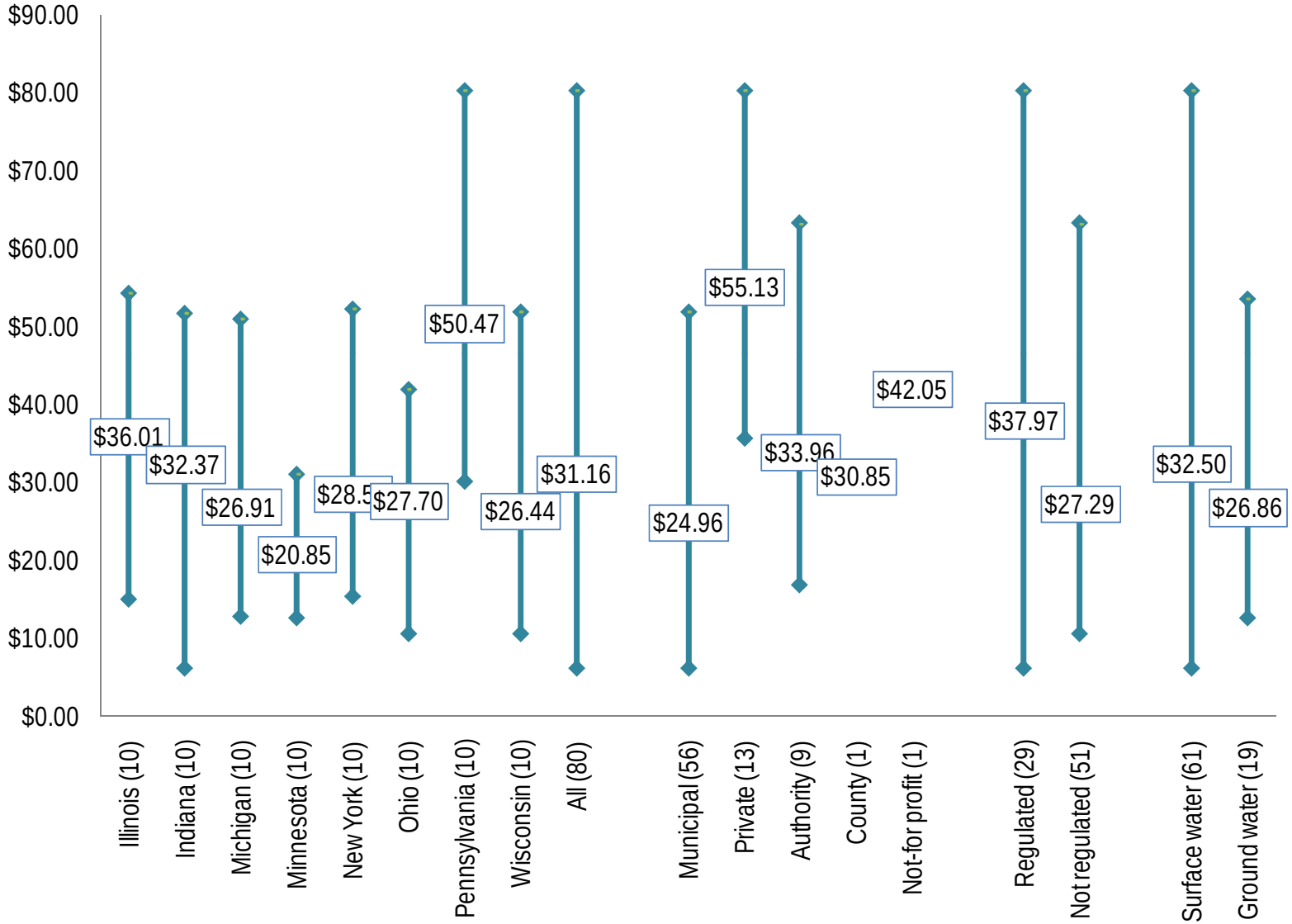
Average charges by system characteristics



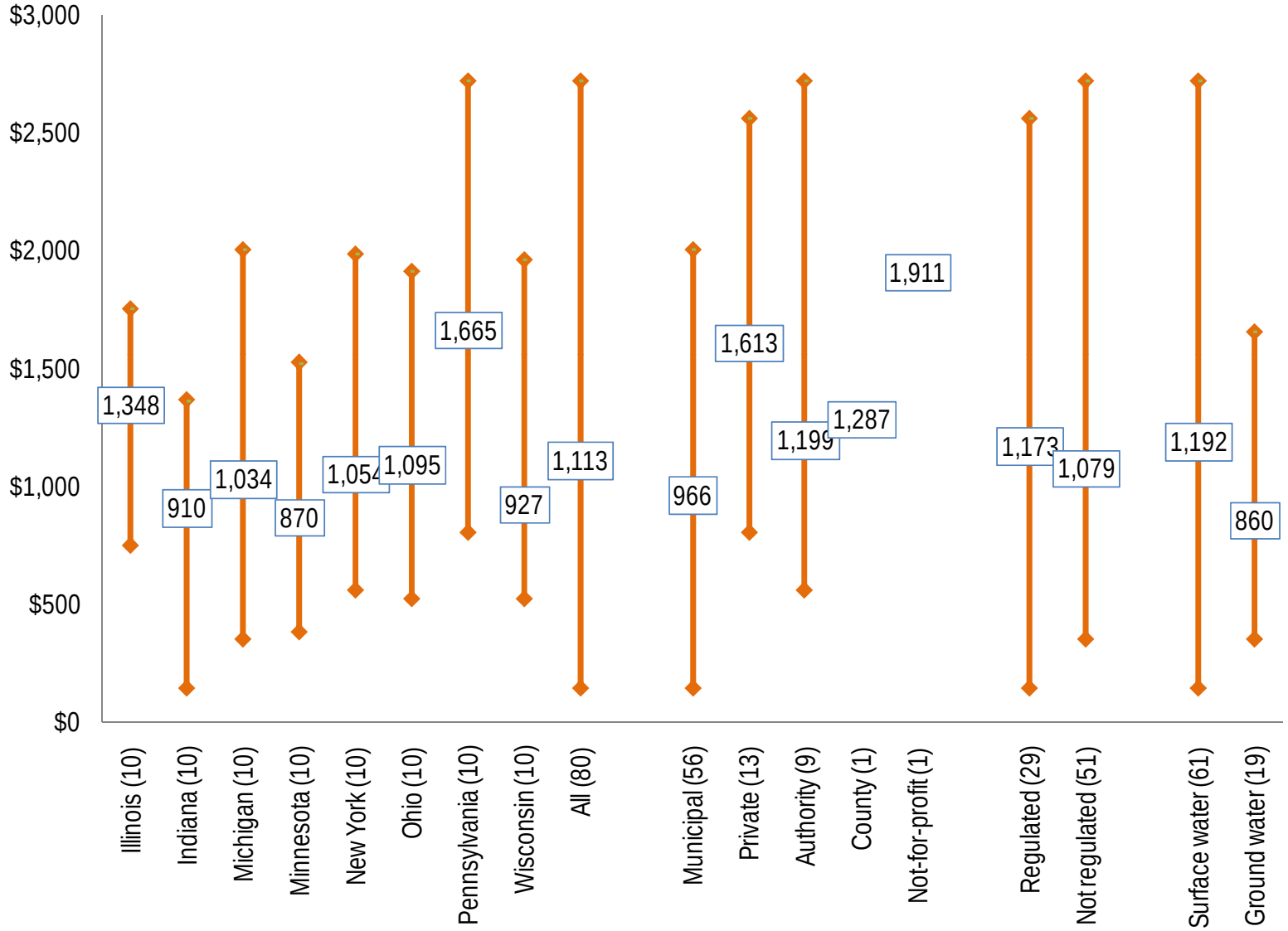
Average charges for 0 cf (0 gal.)



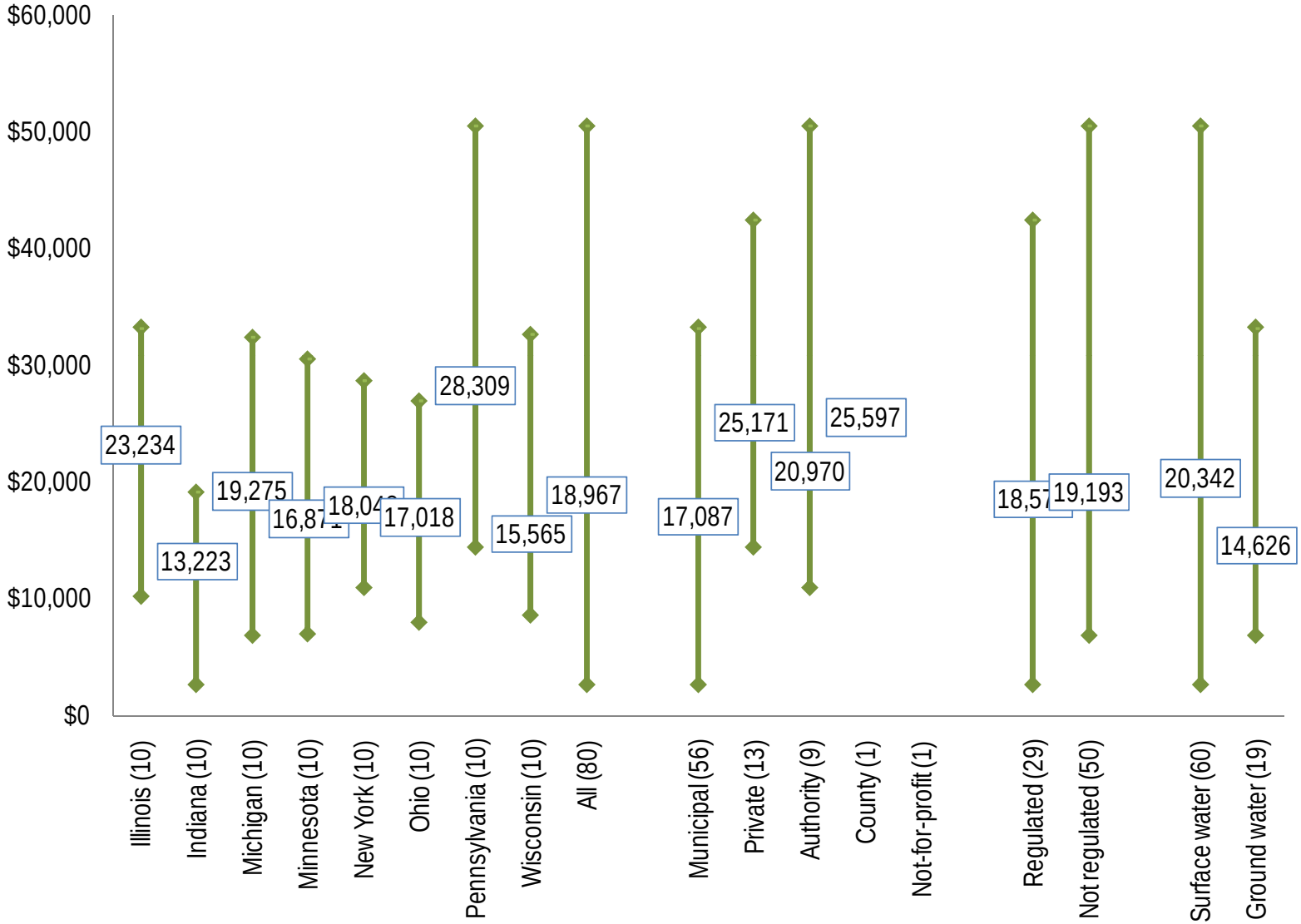
Average charges for 1,000 cf (7,480 gal.)



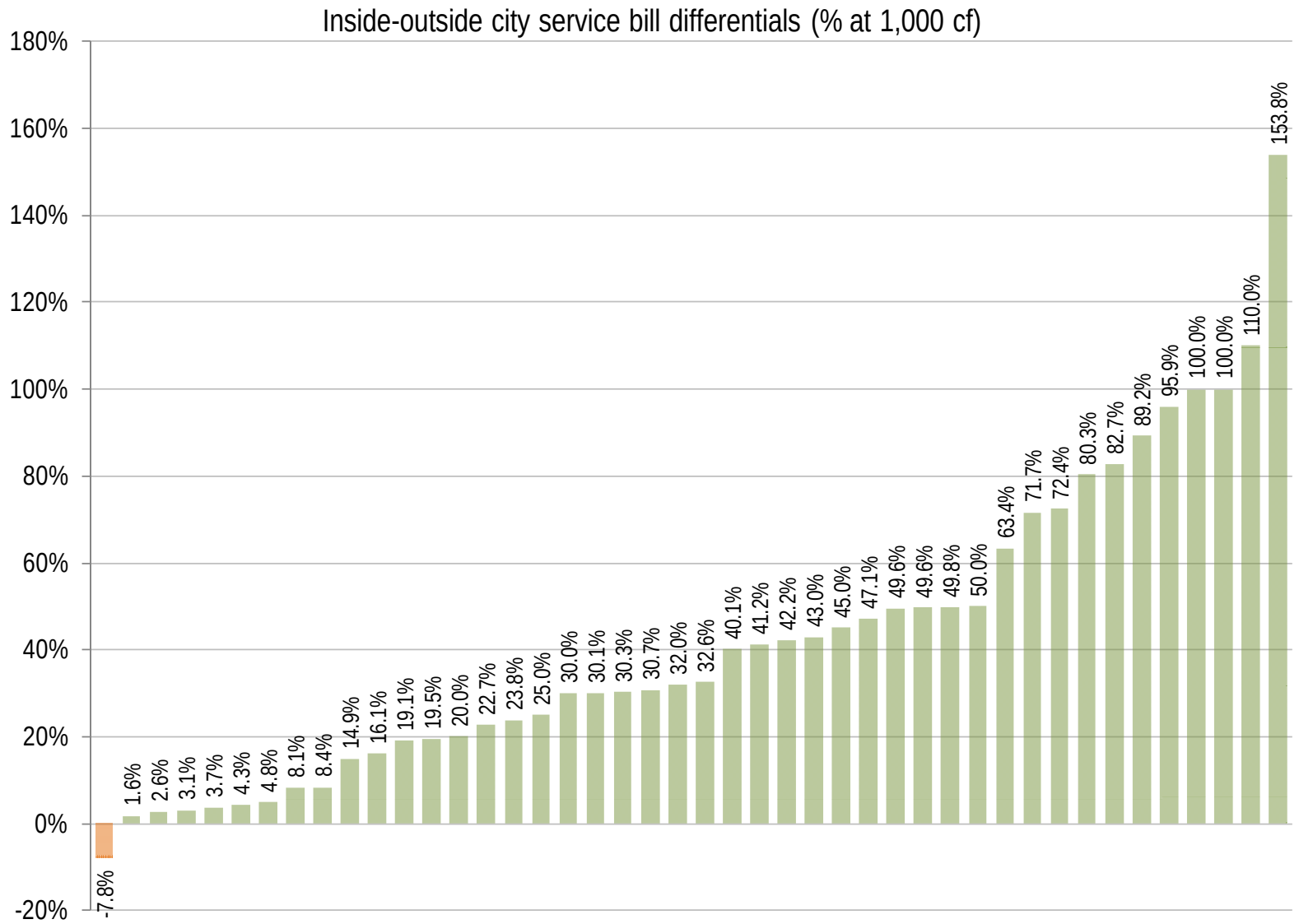
Average charges for 50,000 cf (374,000 gal.)



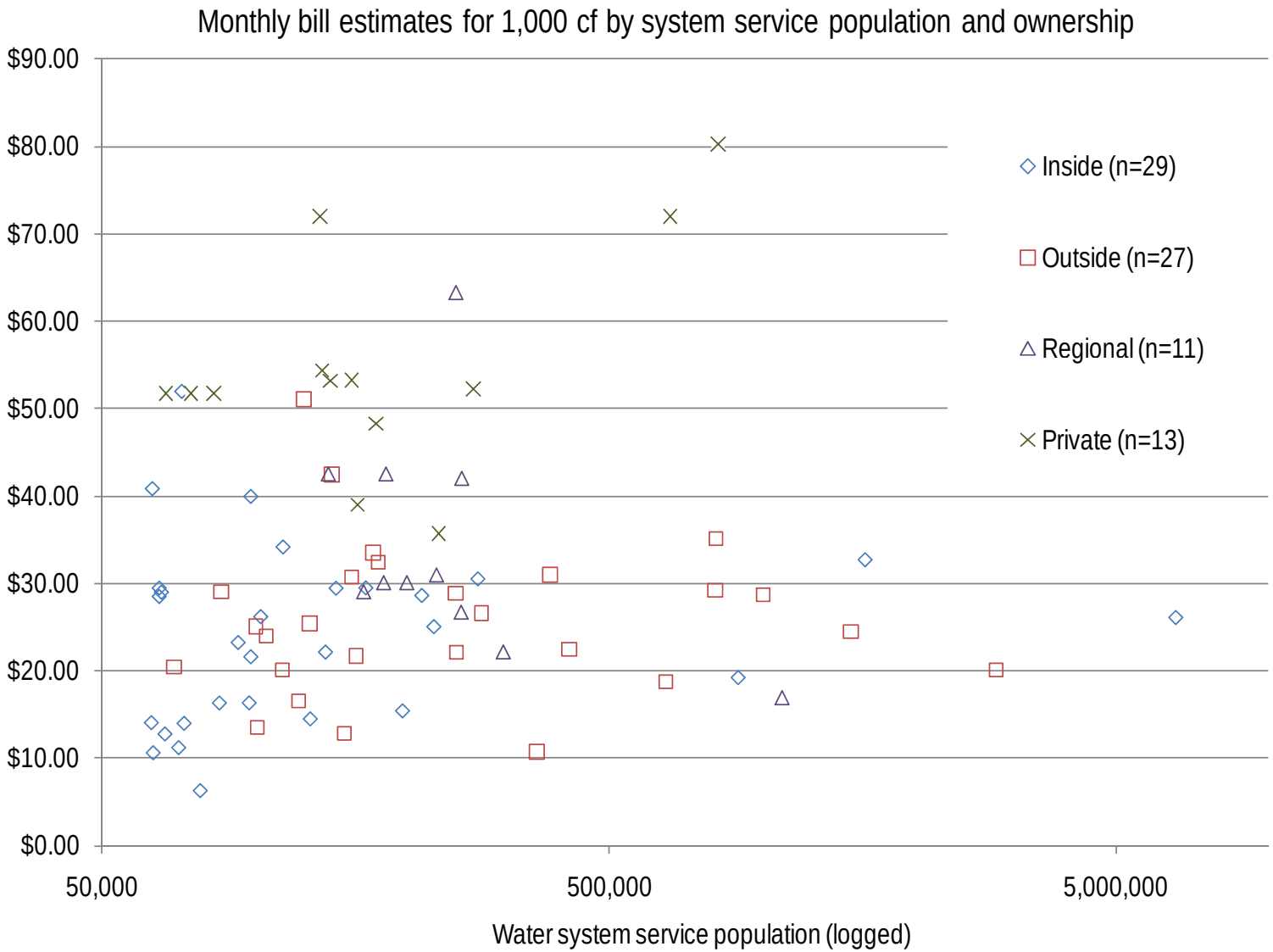
Average charges for 1 mil. cf (7.4 mil. gal).



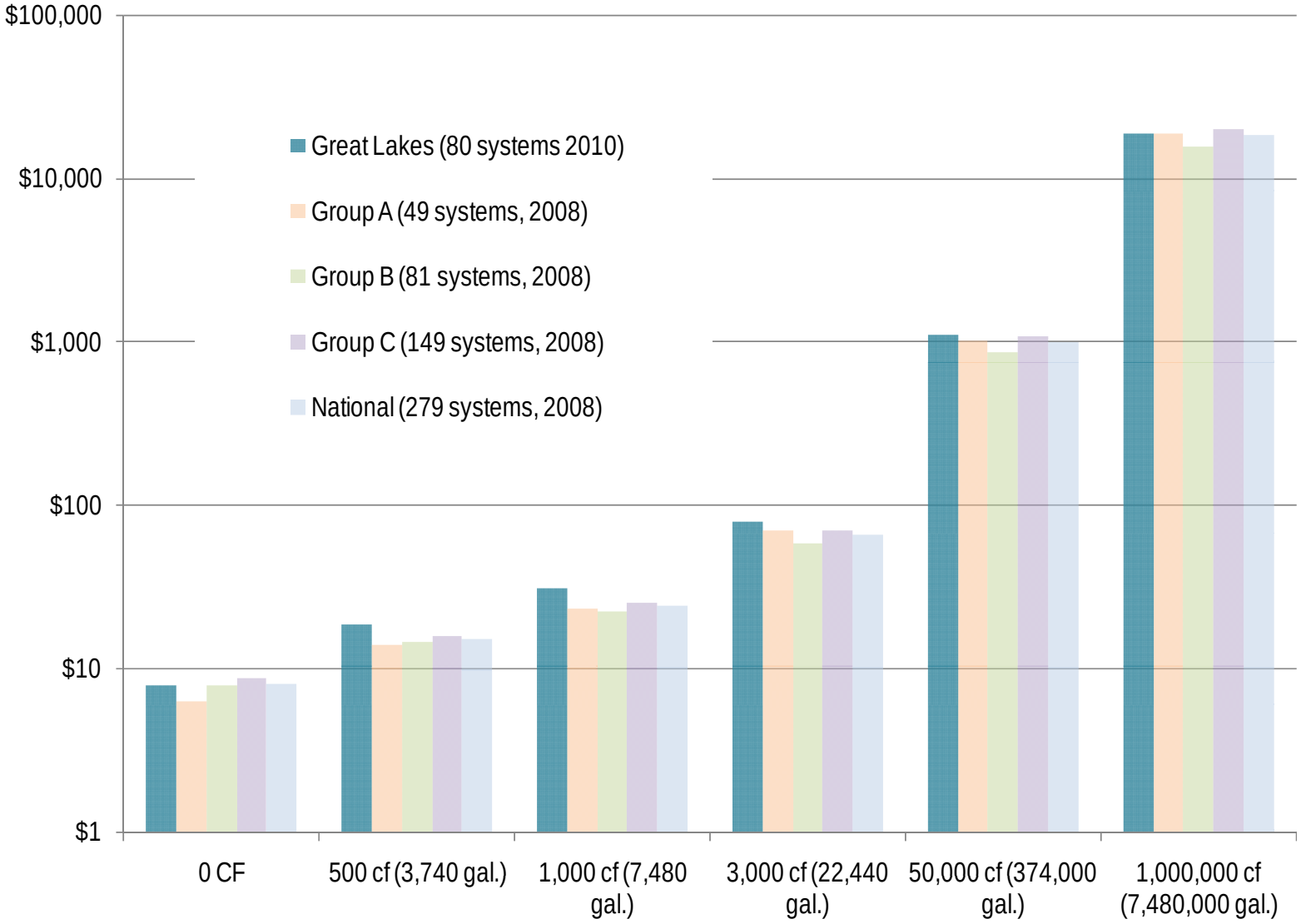
Bill differentials for systems serving outside of boundaries



Monthly bills by system size and ownership



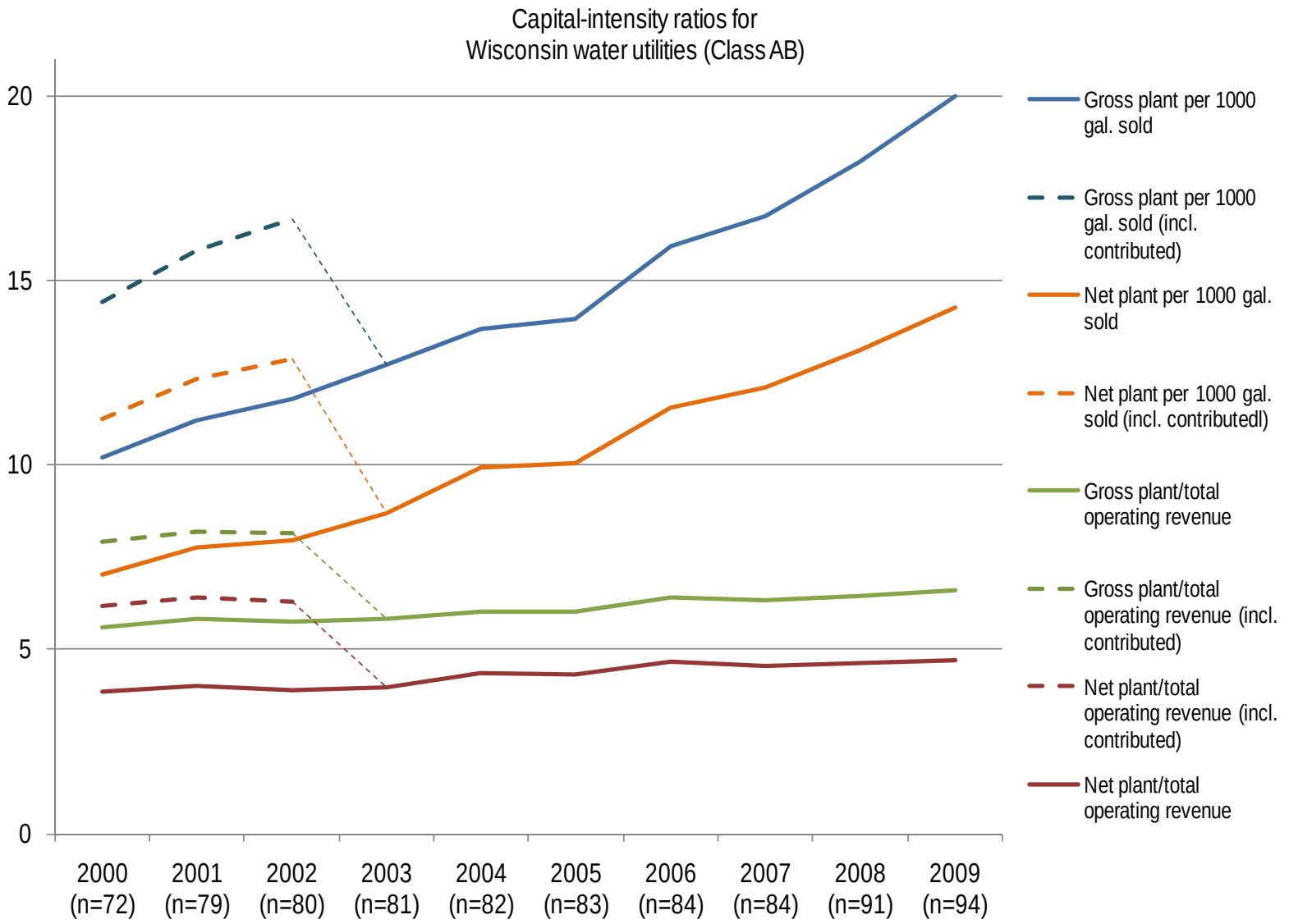
Comparison to AWWA rate survey (2008)



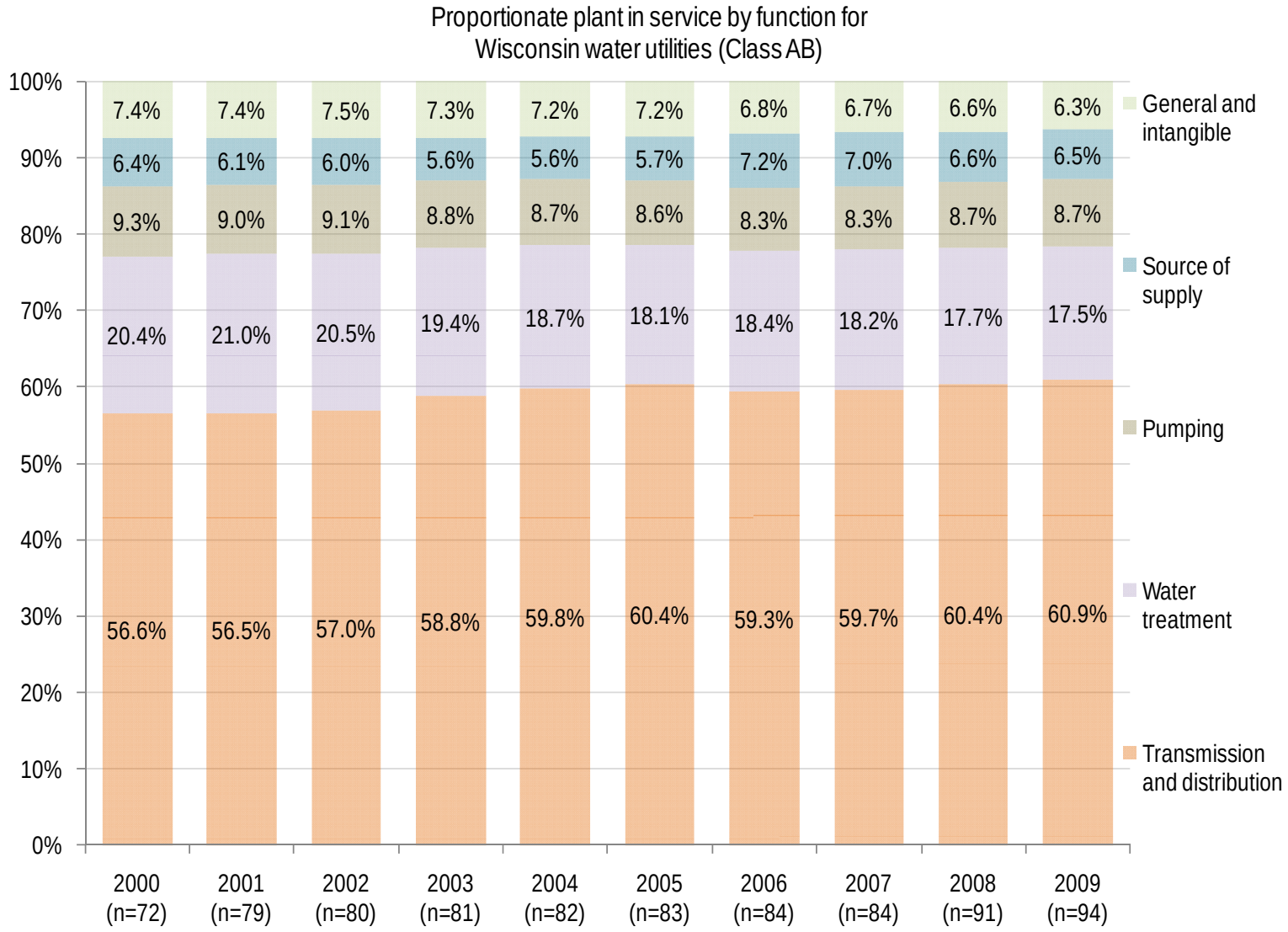
Water utility cost-trend analysis

- 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

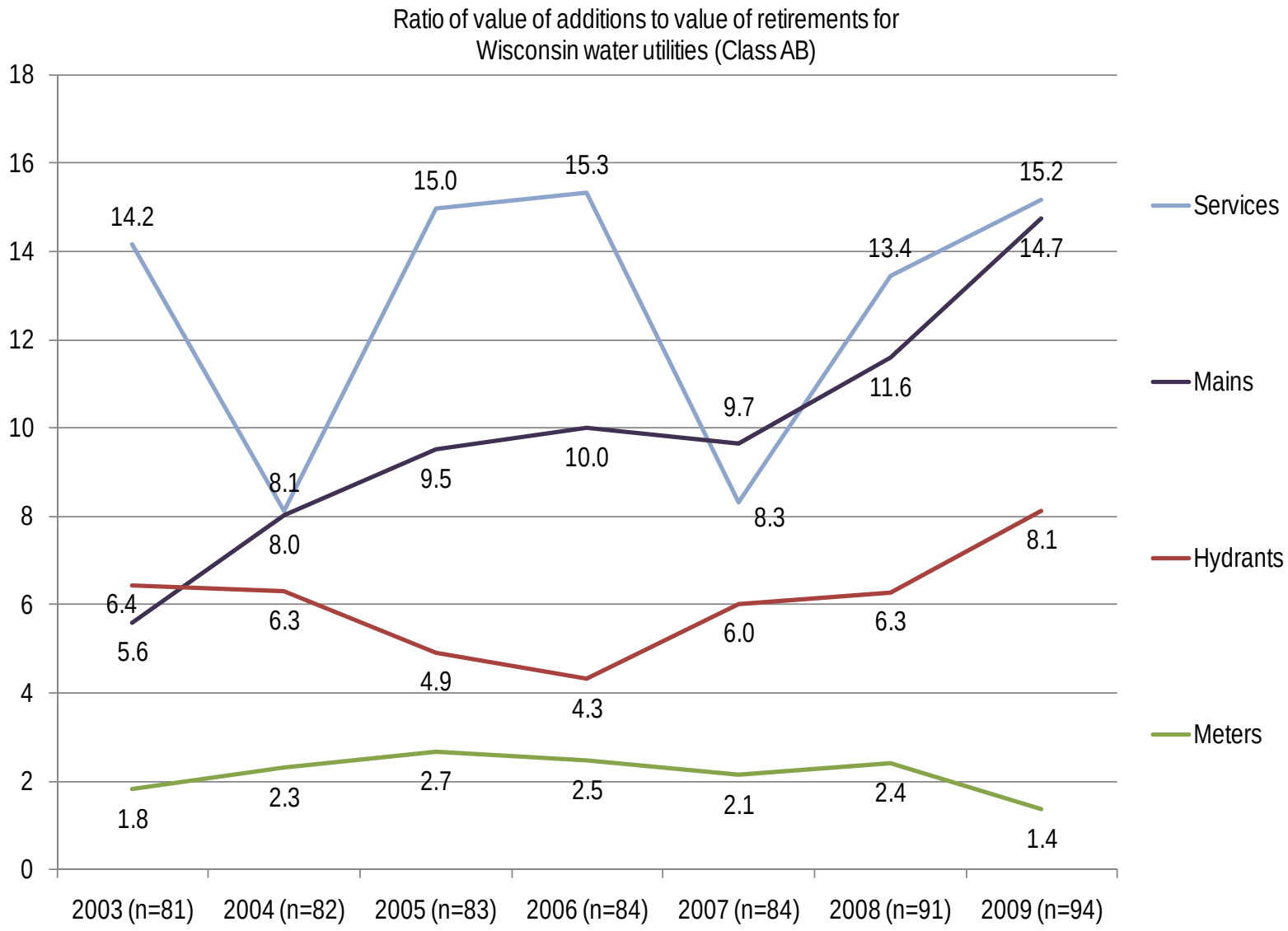
Utility plant to revenue ratios (capital intensity)



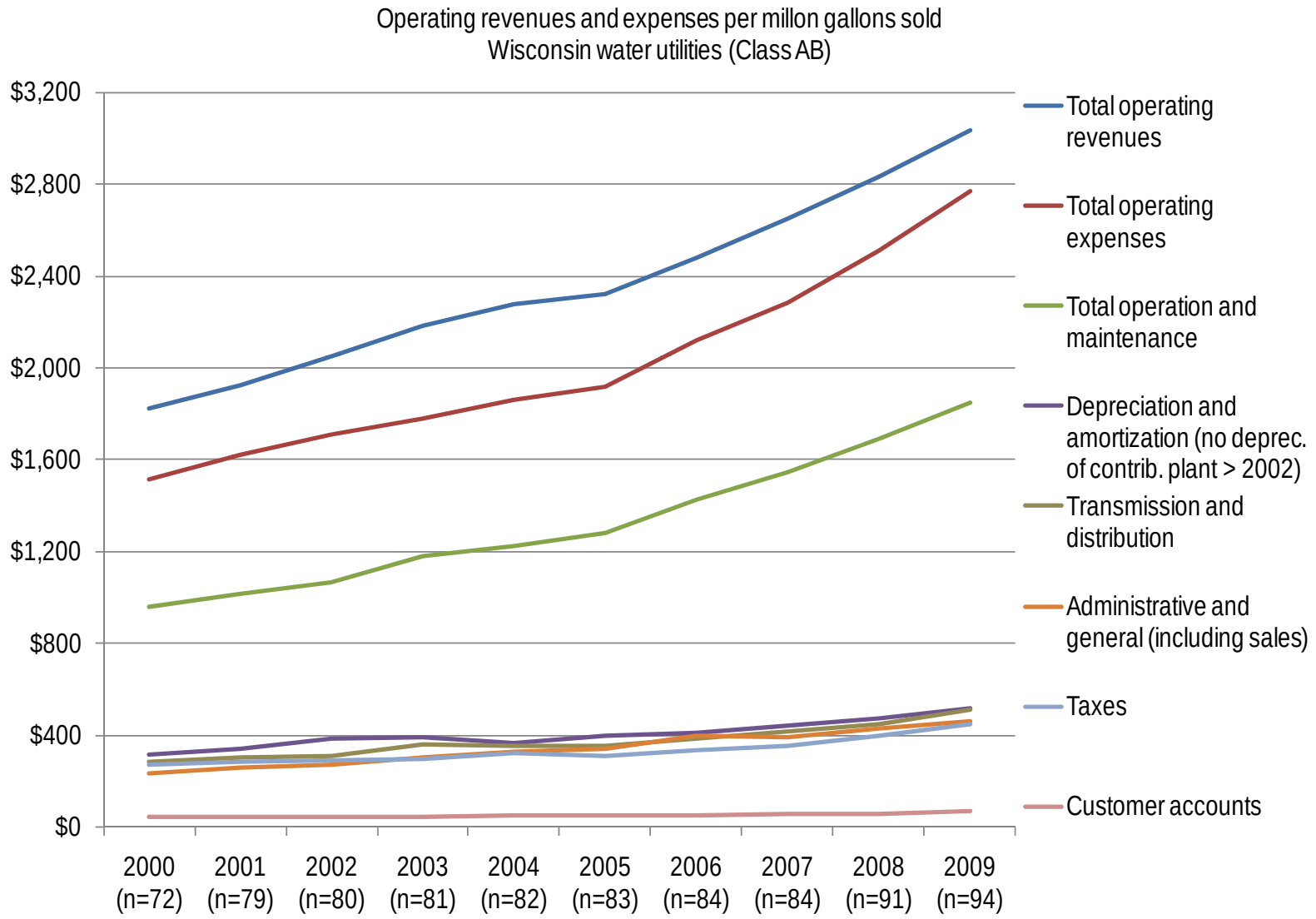
Utility plant investment by function



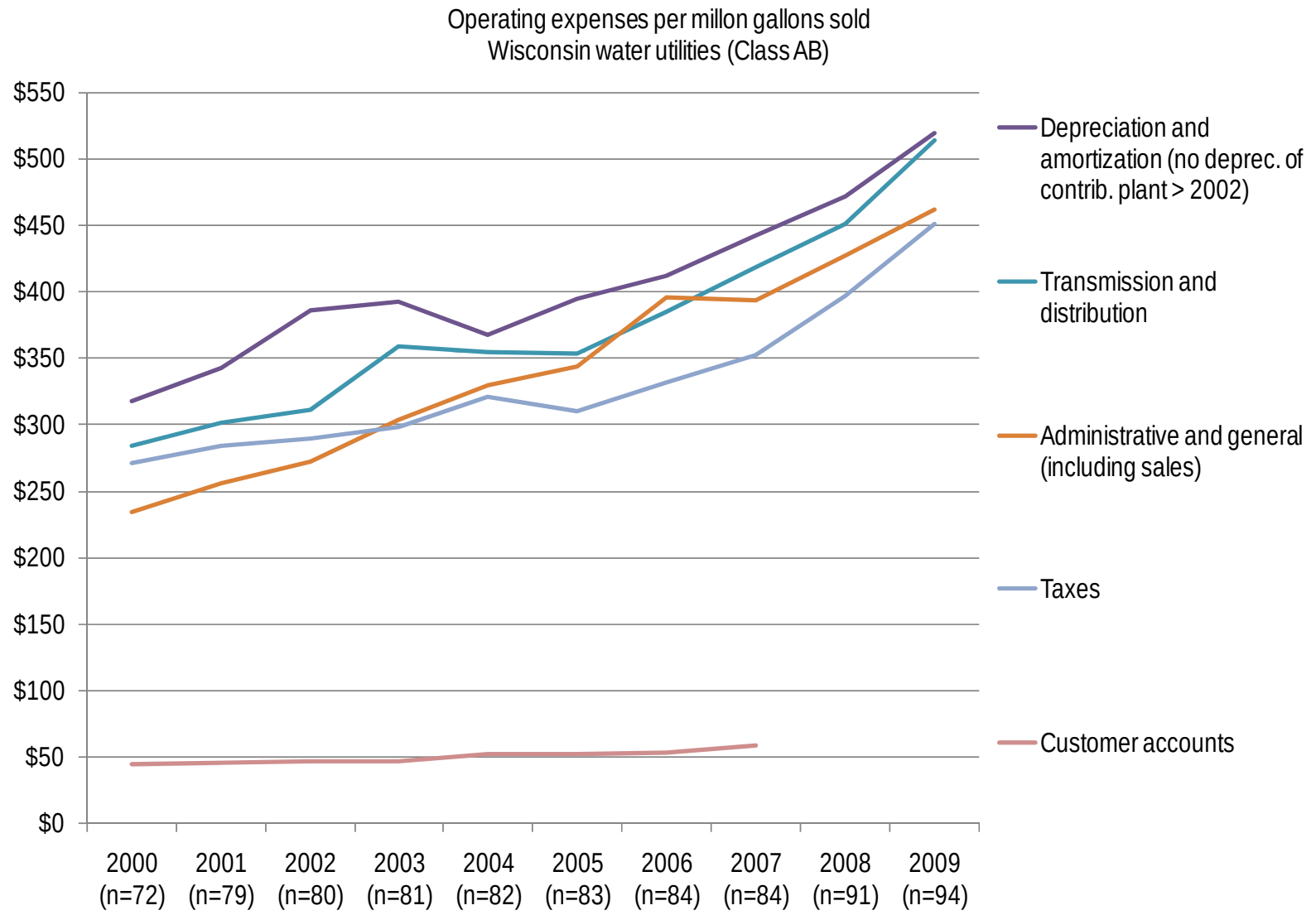
Ratio of value of plant additions to retirements



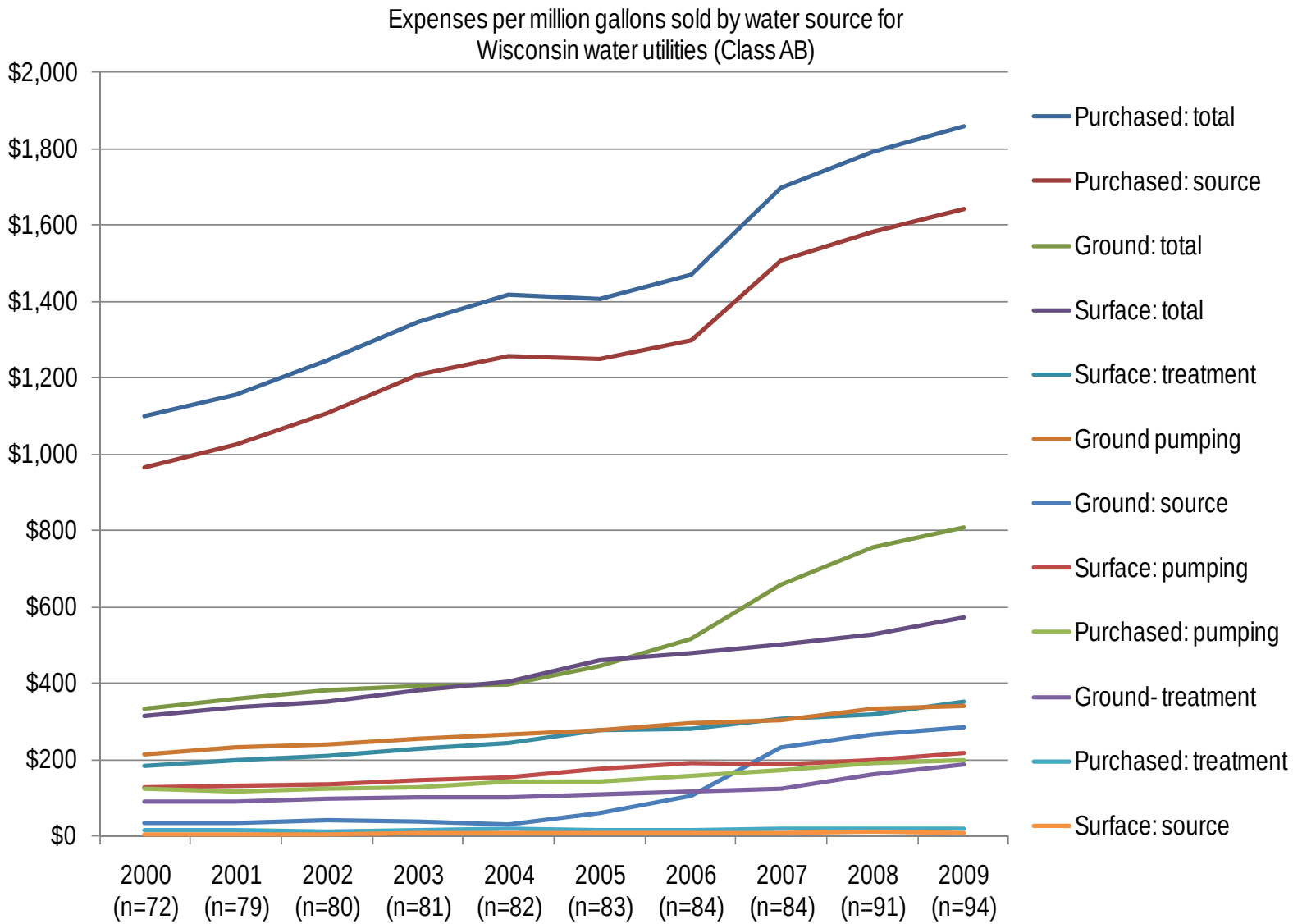
Operating revenues and expenses per water sold



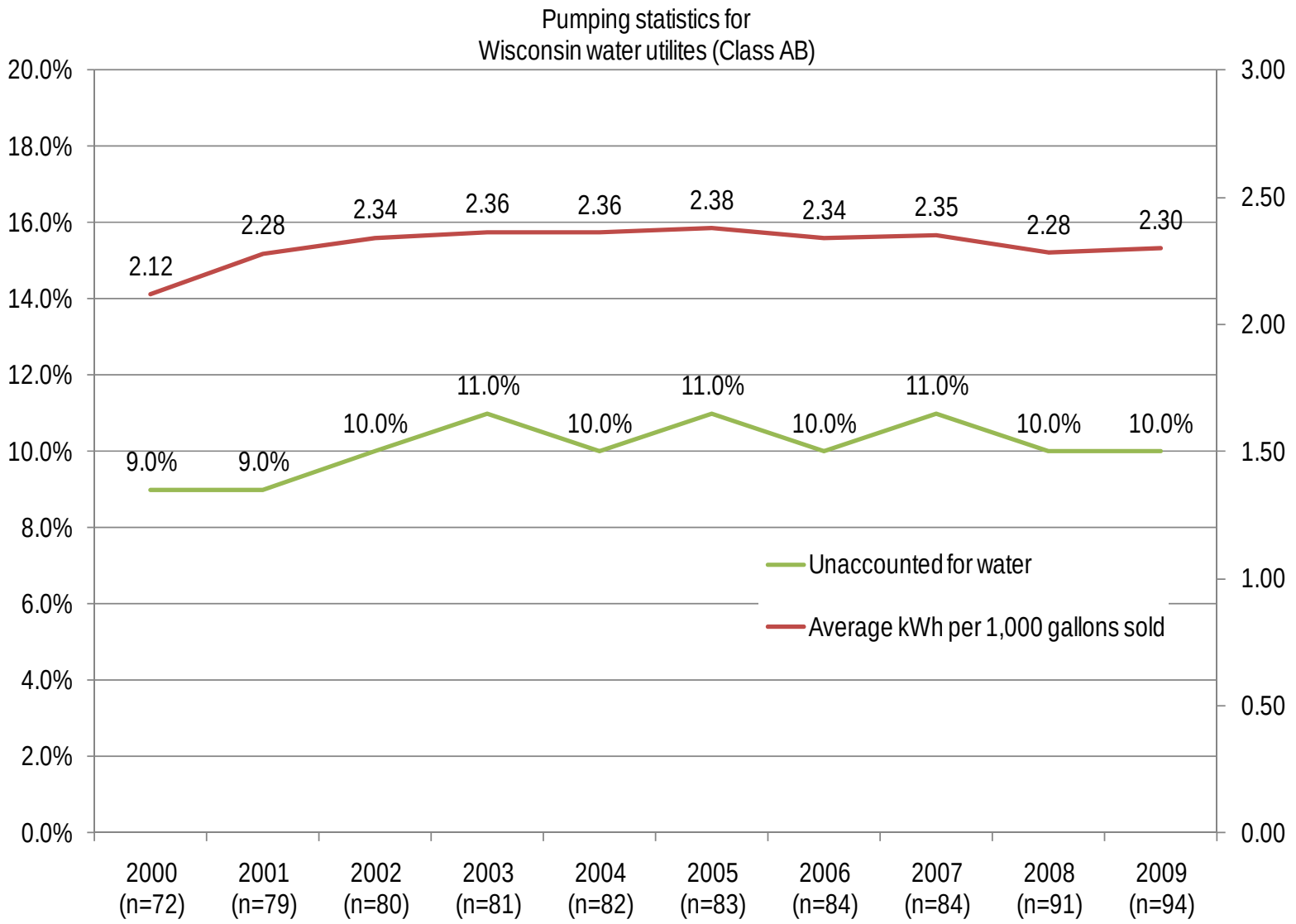
Operating expenses per water sold



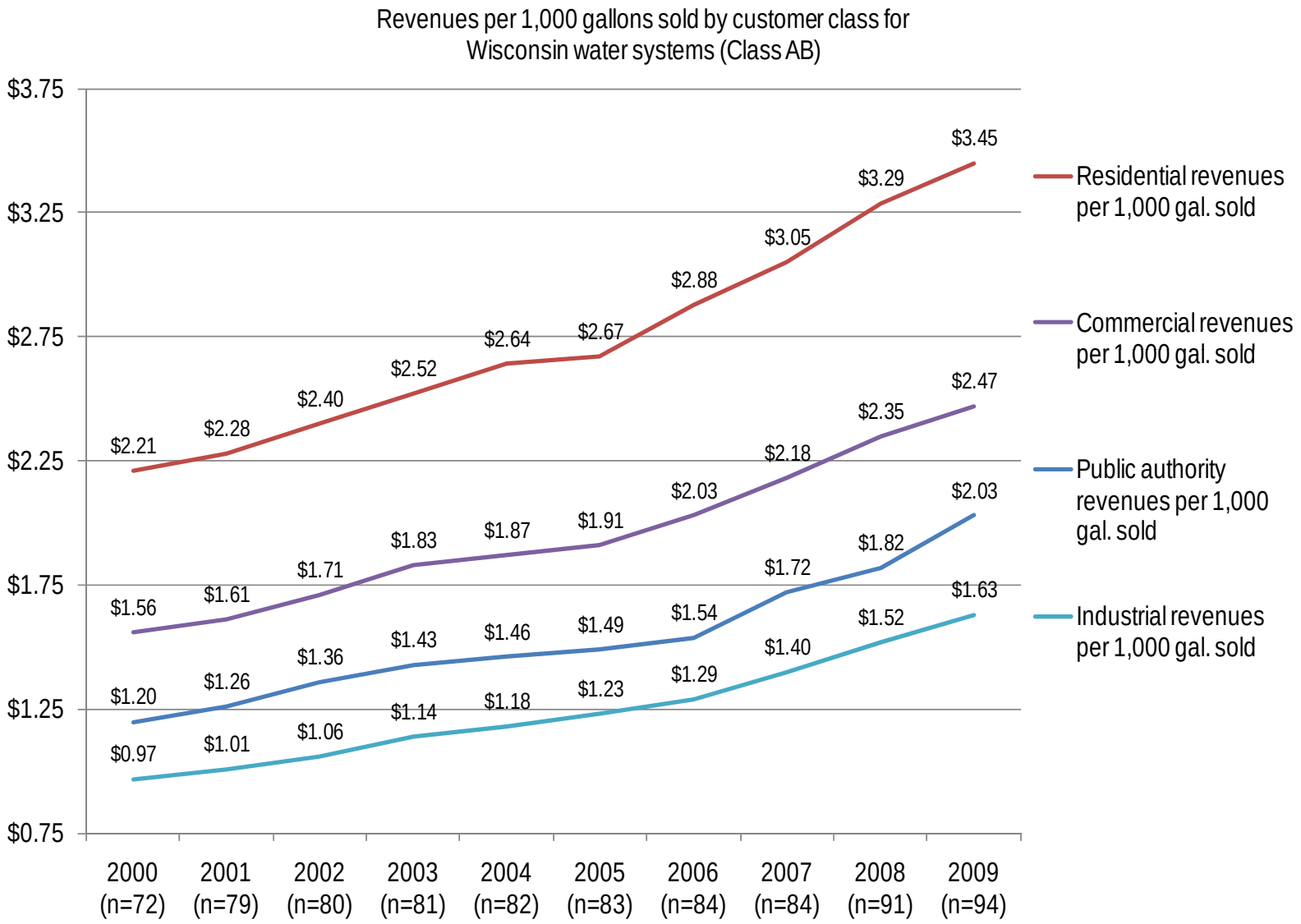
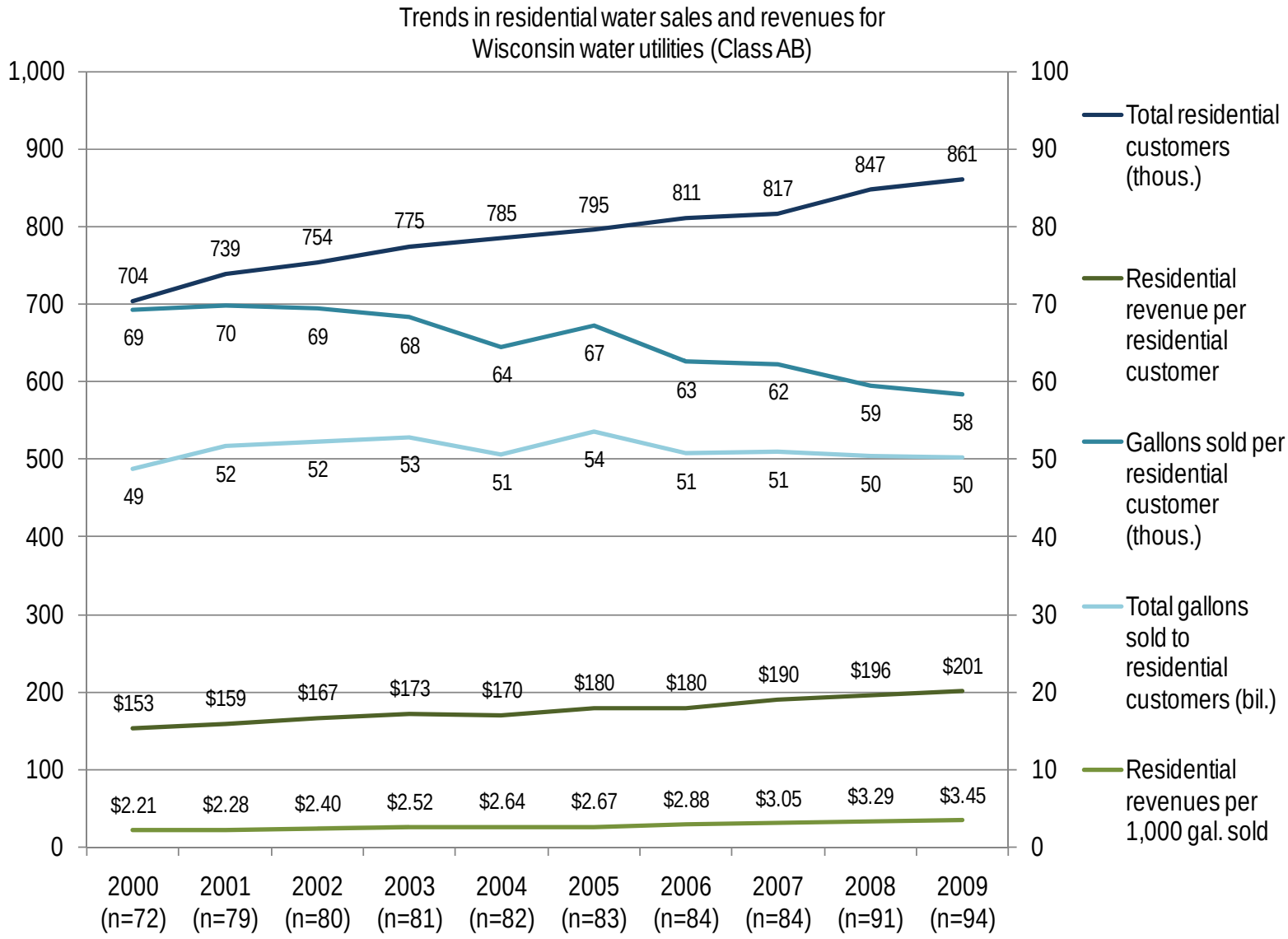
Operating expenses by water source



Pumping statistics



Revenue trends by customer class



Trends in residential water sales and revenues