

Appendix A

Mail Survey & Other Investigation Results, Findings & Recommendations

Docket No. 13-08-13

**PURA Investigation
of the Financial Capacity
and System Viability of
Small Community Water Systems**

**Mail Survey & Other Investigation
Results, Findings &
Recommendations**

Background

- Purpose was to study the financial capacity and the system viability of small community water systems (CWSs) not included as part of a water supply plan pursuant to Section 25-32d of the General Statutes of Connecticut (Conn. Gen. Stat.).
- Section 25-32d requires water companies which serve over 1,000 people to produce long term water supply plans in which the water company must plan for adequate supply to meet projected demand for the next fifty years.

Background (Continued)

- Given that CWSs serving populations less than 1,000 do not have to file long range plans and are not typically rate regulated, finding useful and available data on their financial situation and the condition of their infrastructure is difficult.
- To address this concern, the target group for this study is CWSs serving populations fewer than 1,000.

Major Objectives

- To identify potential factors affecting the costs necessary to maintain and operate CWSs safely and effectively.
- To identify potential benefits that could result from creating a financial assistance account to help CWSs defray the costs of essential infrastructure improvements.

Defining the Target Group

- There are currently 551 CWSs on the Department of Public Health's CWS list.
- There are 455 that serve a population of less than 1,000.
- Of the 455, 54 are owned by Aquarion Water Company, 42 are owned by the Connecticut Water Company and 11 are owned by the Southwestern Connecticut Water Authority, for a total of 107.

Defining the Target Group (Continued)

- Since the 107 CWSs are owned by entities that have the technical, financial, and managerial capacity to ensure their viability, they can be excluded.
- **This leaves a target group of about 348 CWSs.**

Investigative Process

- A mail survey instrument was used to obtain financial, operational and opinion data on the CWS target group.
 - Due to the uncertainty of a survey instrument response rate, a mail out to the entire target group was necessary to maximize the potential for a robust set of information to analyze.
 - Questionnaire responses were received during the period from late December 2013 through January 28, 2014.
 - Over 100 systems responded to the survey, which represents a 29% response rate.
- 65 CWSs were selected on a random basis from the 348 System Target List for evaluation of the DPH inspection reports on file.

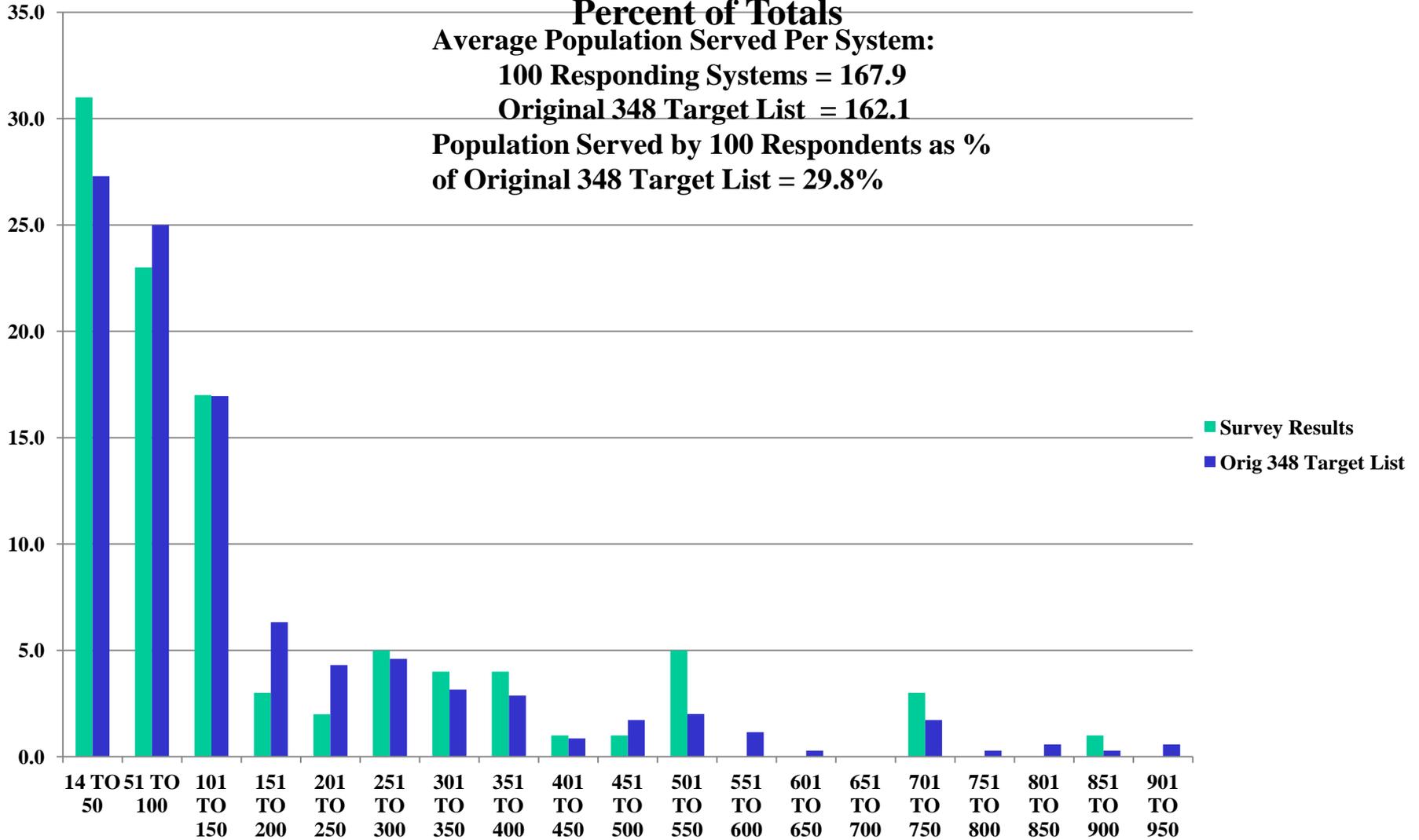
Investigative Process (continued)

- Discovery requests were issued to the major investor-owned water utilities, the regional water authorities, and some municipal water systems regarding their acquisition activities over the past 5 years and their views on issues related to future acquisitions of CWSs. Note: No publicly owned water systems or authorities responded to the discovery questions.
- The DPH's "Draft" Intended Use Plan was reviewed to ascertain the funds being allocated to assist the CWSs serving populations of 1,000 or less.
- The DPH violation data for the CWSs was reviewed.

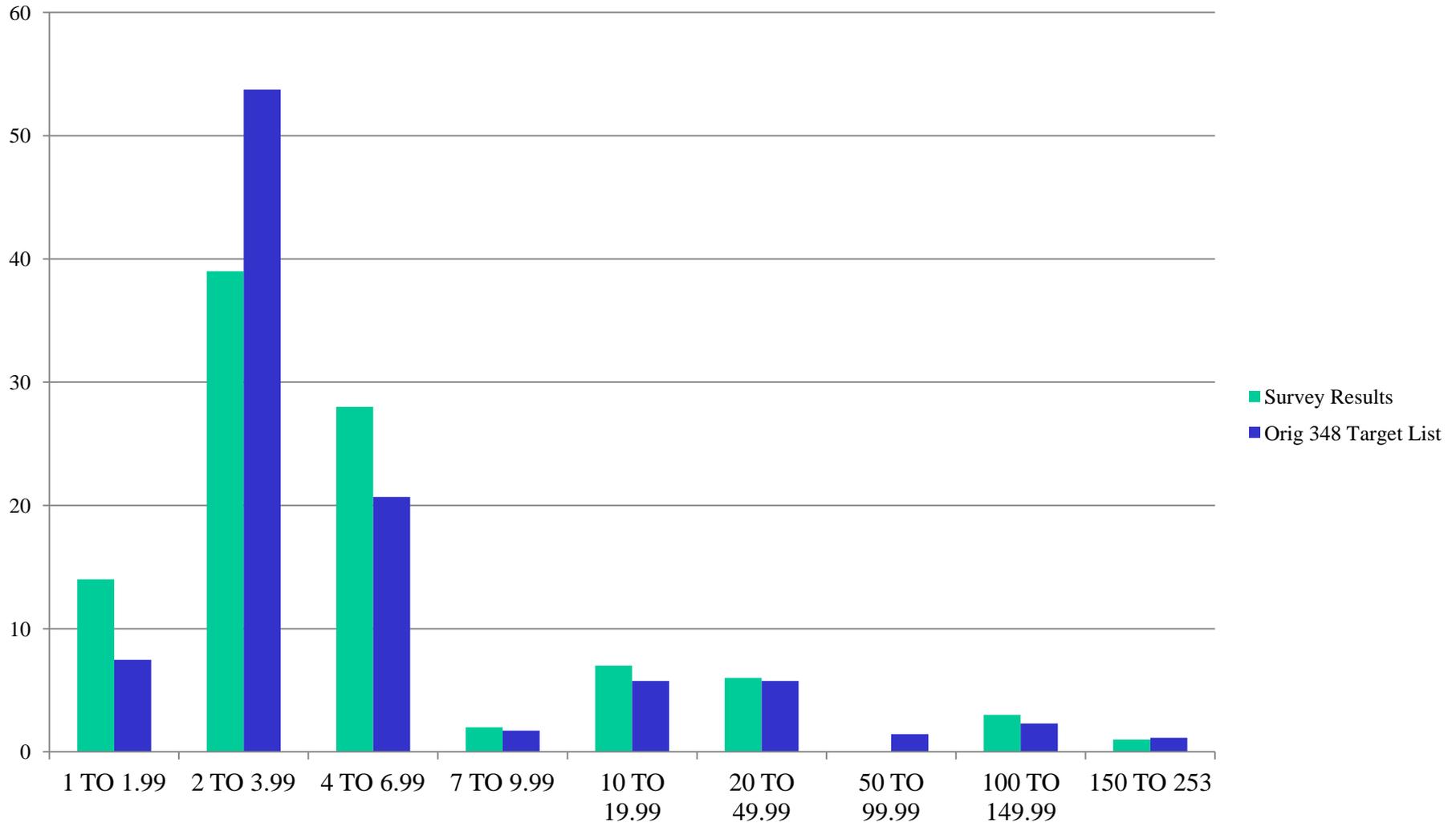
**The Following Exhibits Compare the
Survey Respondents Attributes
to the Original Target Population**

Number of Systems By Population Served Range 100 Survey Respondents vs. Original 348 Target List

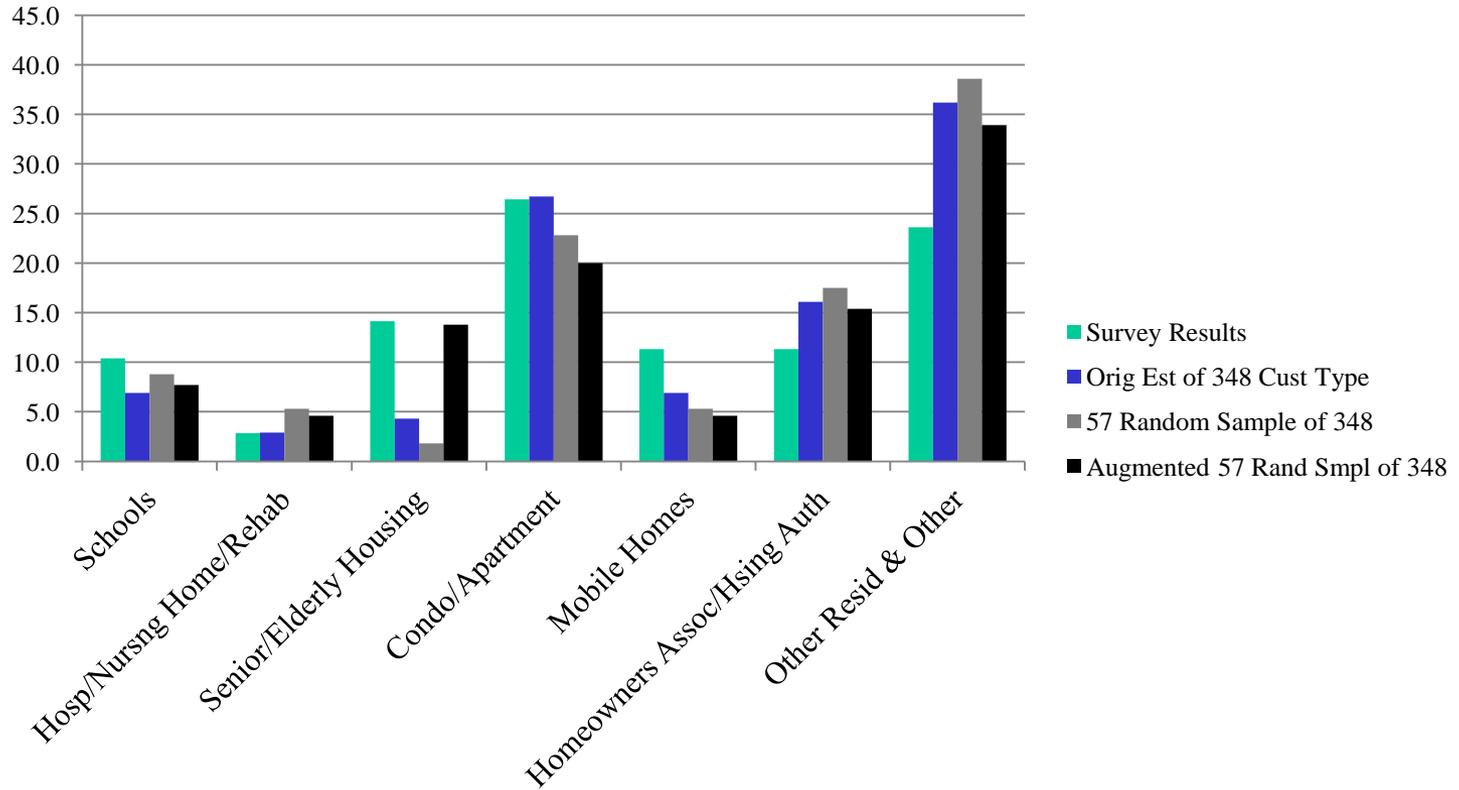
Percent of Totals
Average Population Served Per System:
100 Responding Systems = 167.9
Original 348 Target List = 162.1
Population Served by 100 Respondents as %
of Original 348 Target List = 29.8%



Number of Systems by Population Per Service Connection Range 100 Survey Respondents vs. Original 348 Target List Percent of Totals



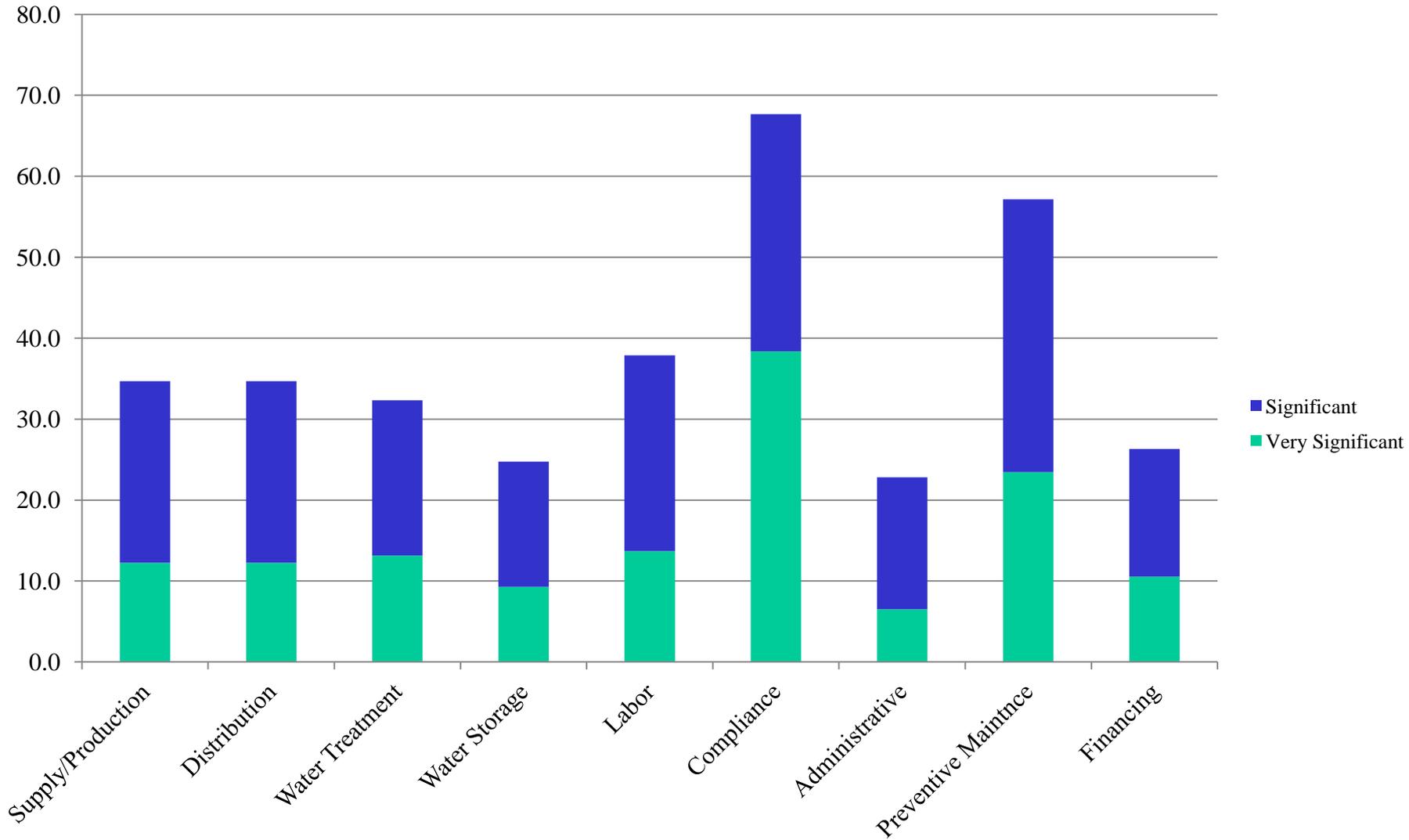
**Exhibit II-5
Comparison of Customer Types Served
Percentage of Totals**



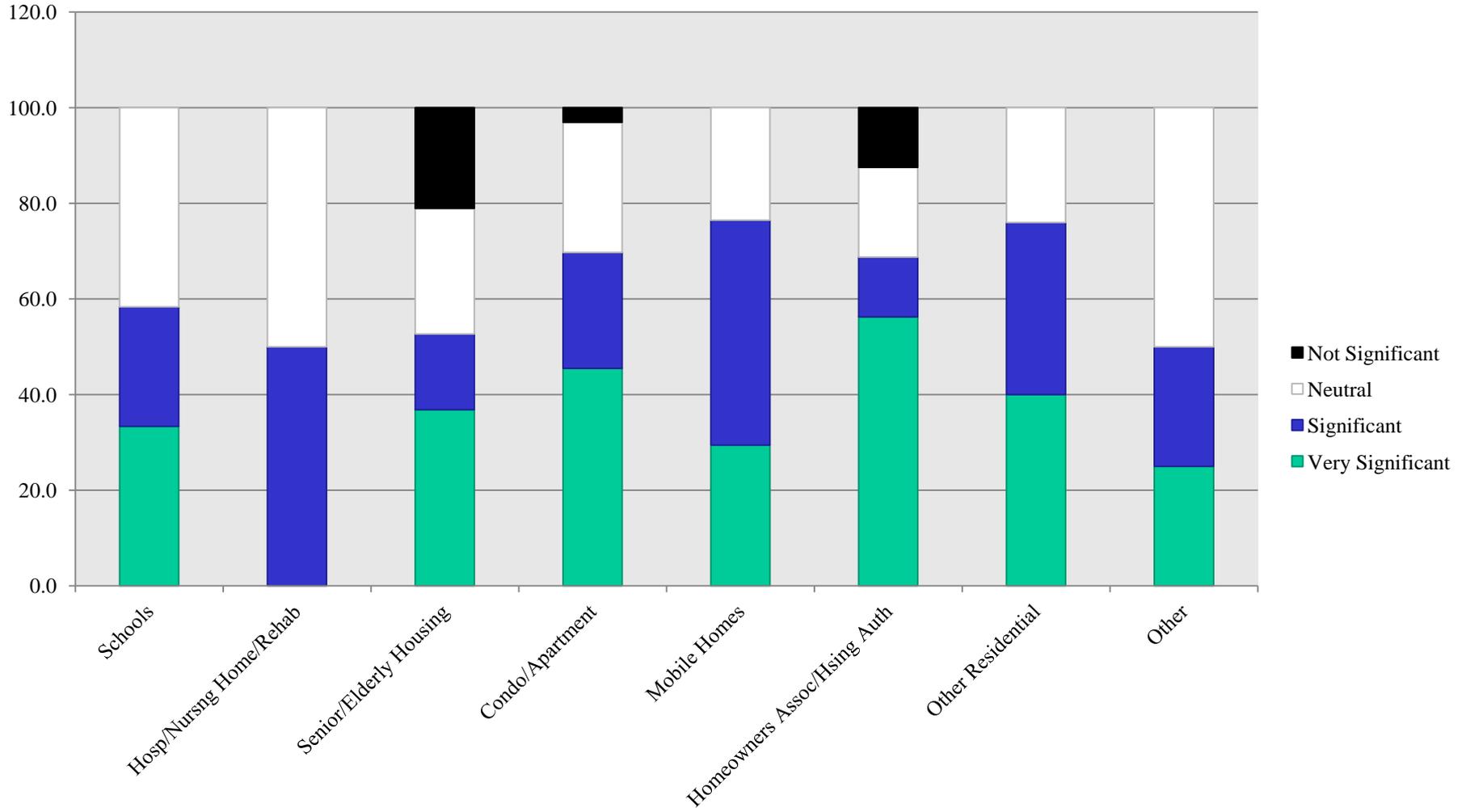
**The Next Set of Exhibits Describe the
Cost Attributes of the
Surveyed Systems**

Major Factors Affecting Costs for Safe & Effective Operations

Percent of Respondents



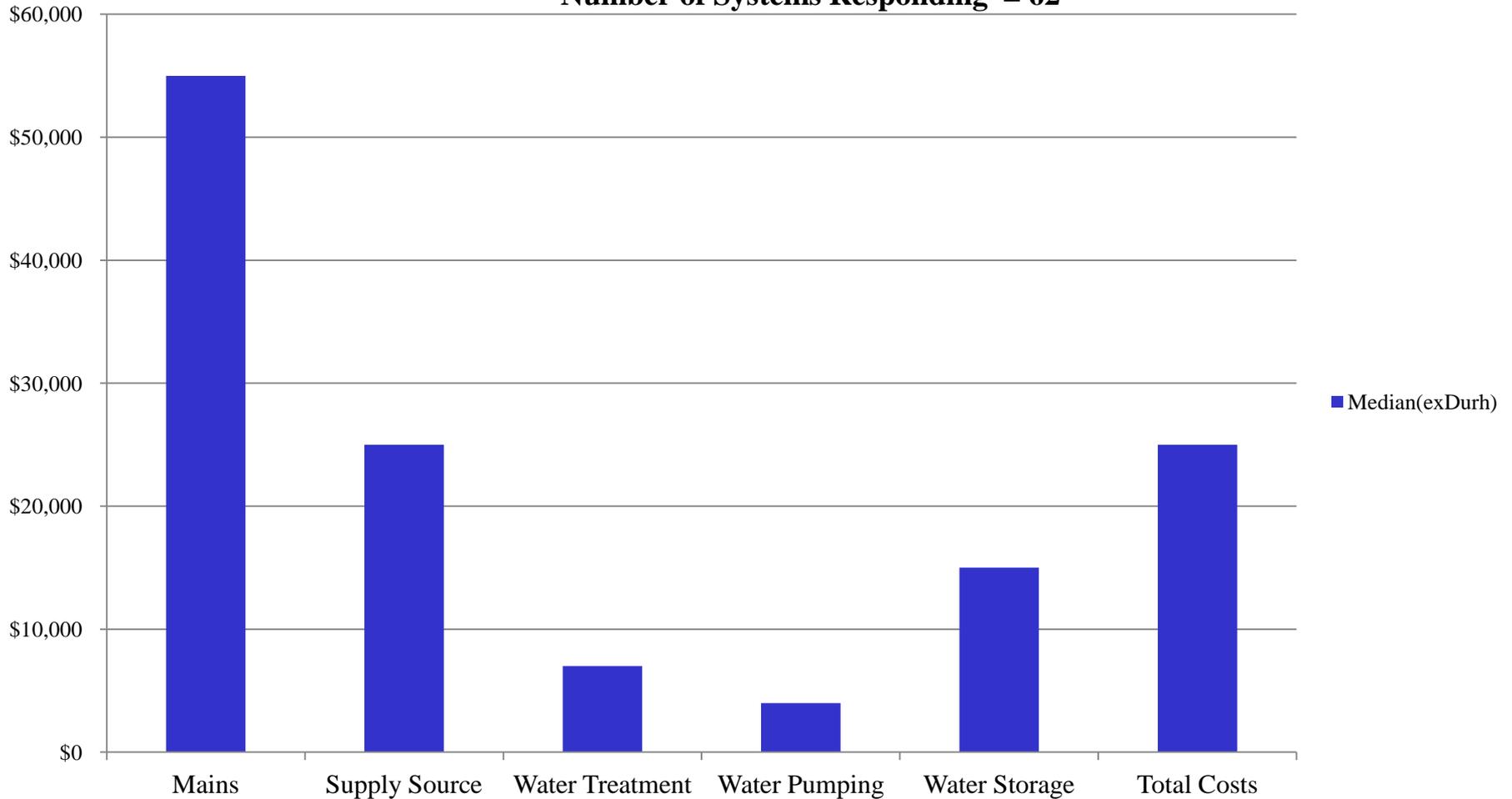
Significance of Cost of Complying (COMPLC) with Safe Drinking Water Act by Customer Served Type Percent of Totals



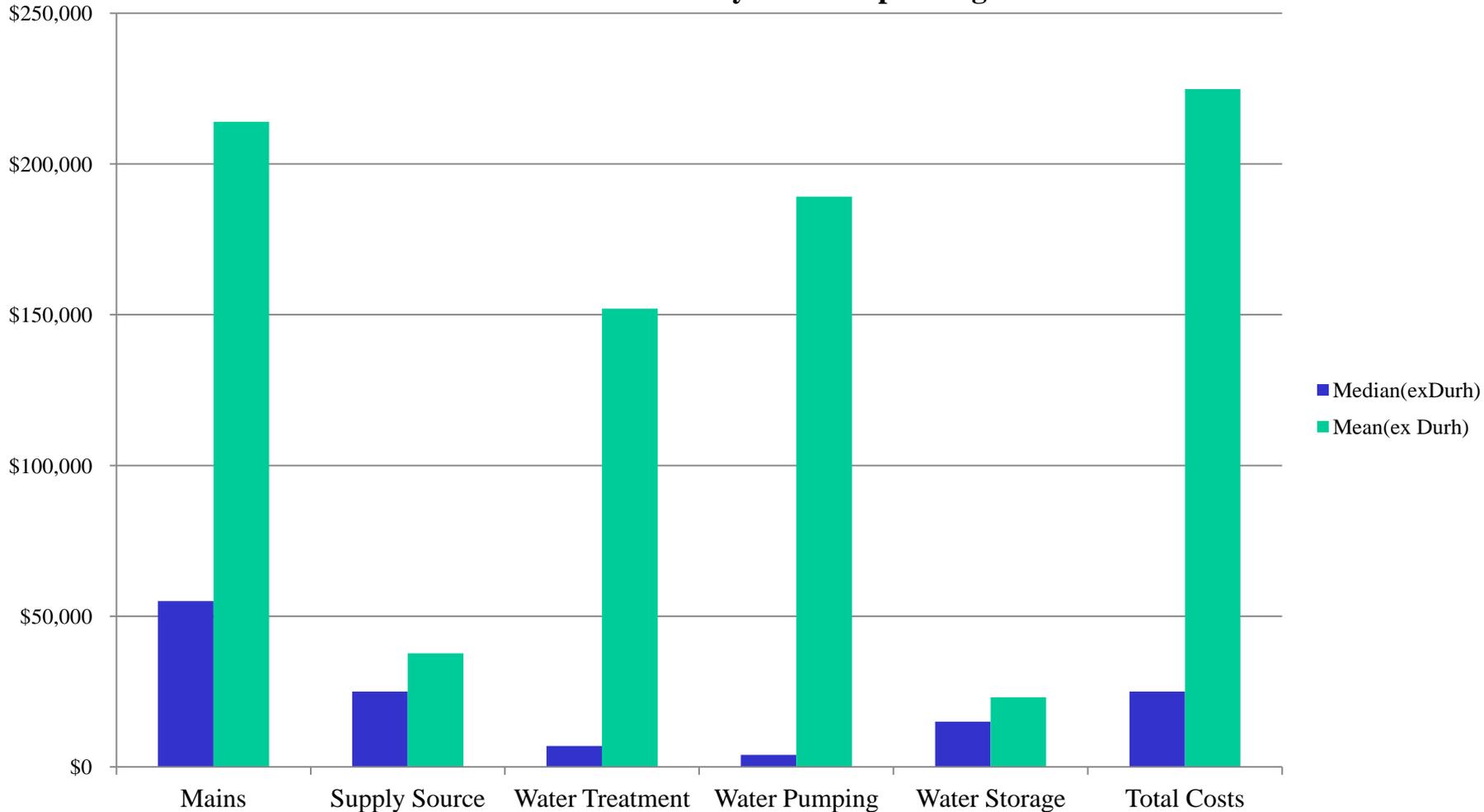
**The Next Set of Exhibits Describe the
Capital Infusion Needs Identified by
the Surveyed Systems and
Extrapolation to the
Original 348 Target List**

Capital Infusion Costs Needed to Ensure Future Safe and Effective Operations - System Median Average (Excluding Durham Center Division)

Number of Systems Responding = 62



Capital Infusion Costs Needed to Ensure Future Safe & Effective Operations - System Averages (Excludes Durham Center Division) Number of Systems Responding = 62



Total Capital Infusion Cost Survey Results

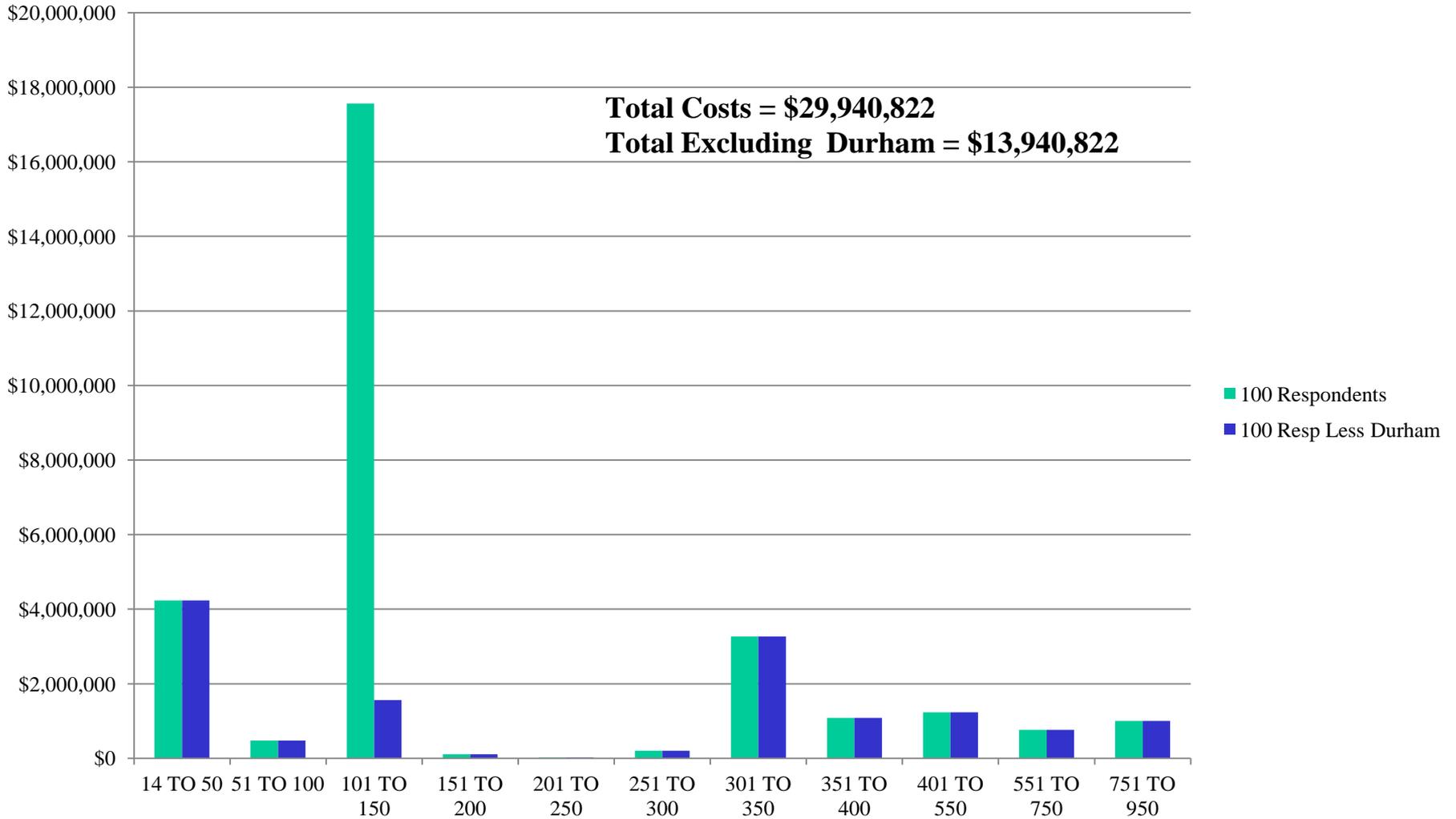
Cost Range	Total Dollars	Population Served	Dollars Per Pop Served	No. of Systems	Dollars Per System
\$1 to\$ 4 million	\$8,660,000	1868	\$4,636	5	\$1,732,000
\$200k to \$1 million	\$3,225,000	2110	\$1,528	5	\$645,000
Less Than \$200k	\$2,055,822	7939	\$259	52	\$39,535
Subtotal	\$13,940,822	11917	\$1,170	62	\$224,852
Durham Center Division	\$16,000,000	140	\$114,286	1	\$16,000,000
Total	\$29,940,822	12057	\$2,483	63	\$475,251

Total Capital Infusion Cost Survey Results Extrapolated* to Original 348 Target List

Cost Range	Total Dollars	Population Served	Dollars Per Pop Served	No of Systems	Dollars Per System
\$1 to \$4 Million	\$29,862,069	6,441	\$4,636	17	\$1,732,000
\$200k to \$1 Million	\$11,120,690	7,276	\$1,528	17	\$645,000
Less Than \$200k	\$7,089,041	27,376	\$259	179	\$39,535
Subtotal Durham Center Division	\$48,071,800	41,093	\$1,170	214	\$224,852
	\$16,000,000	140	\$114,286	1	\$16,000,000
Total	\$64,071,800	41,233	\$1,554	215	\$298,295

* Extrapolation based on ratio of 29% survey sample.

Total Capital Infusion Costs for Questionnaire Respondents by Population Served Range



Extrapolation of Survey Results:

Population Served

15,164 of the 56,397 Population Served by Systems in the Original 348 Target List Would Not Require Any Capital Infusion Costs.

Number of Systems

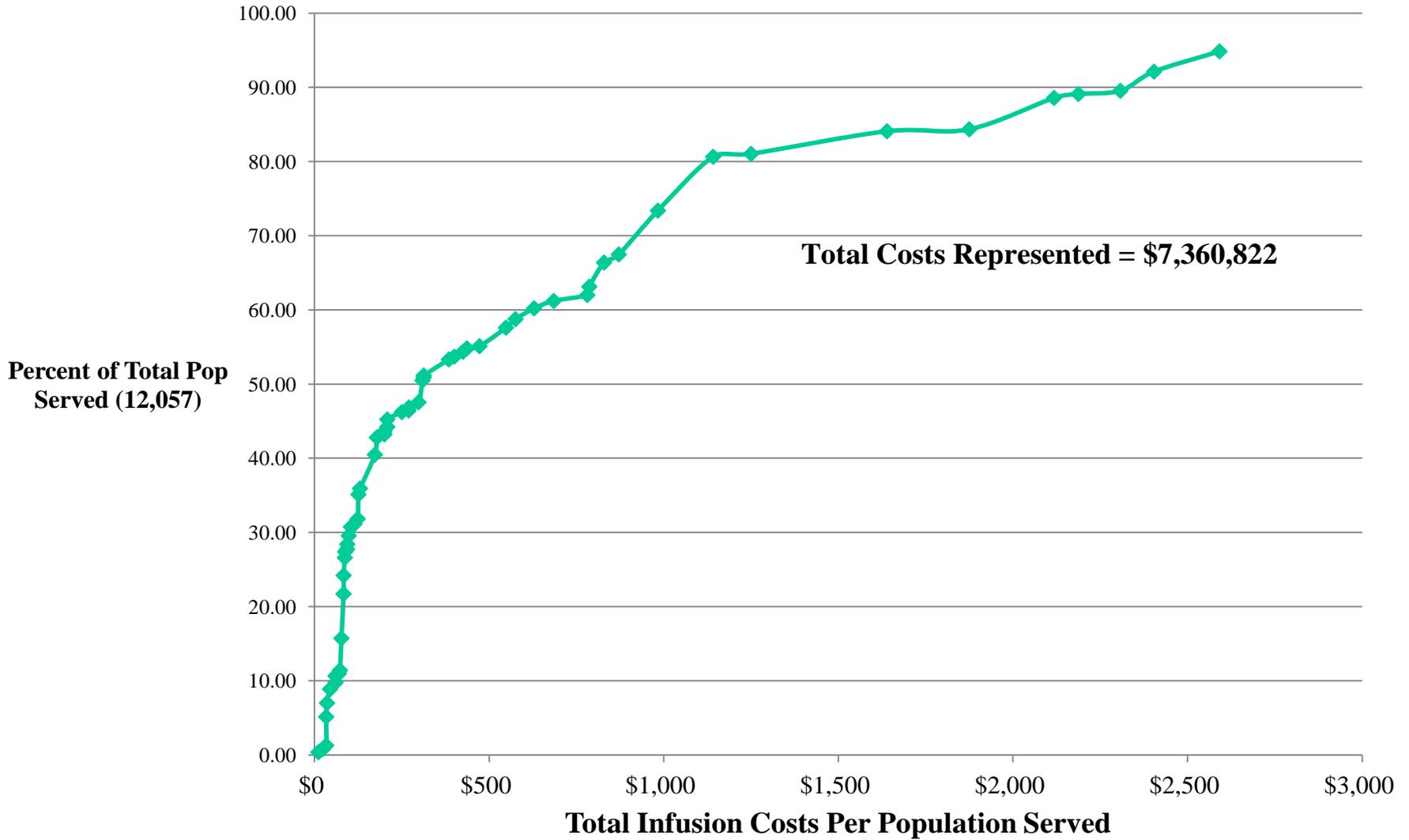
133 of the 348 Systems in the 348 Target List Would Not Require Any Capital Infusion Costs.

Statistical Error & Confidence Level

Sample Error of +/-7% At 90% Confidence Level

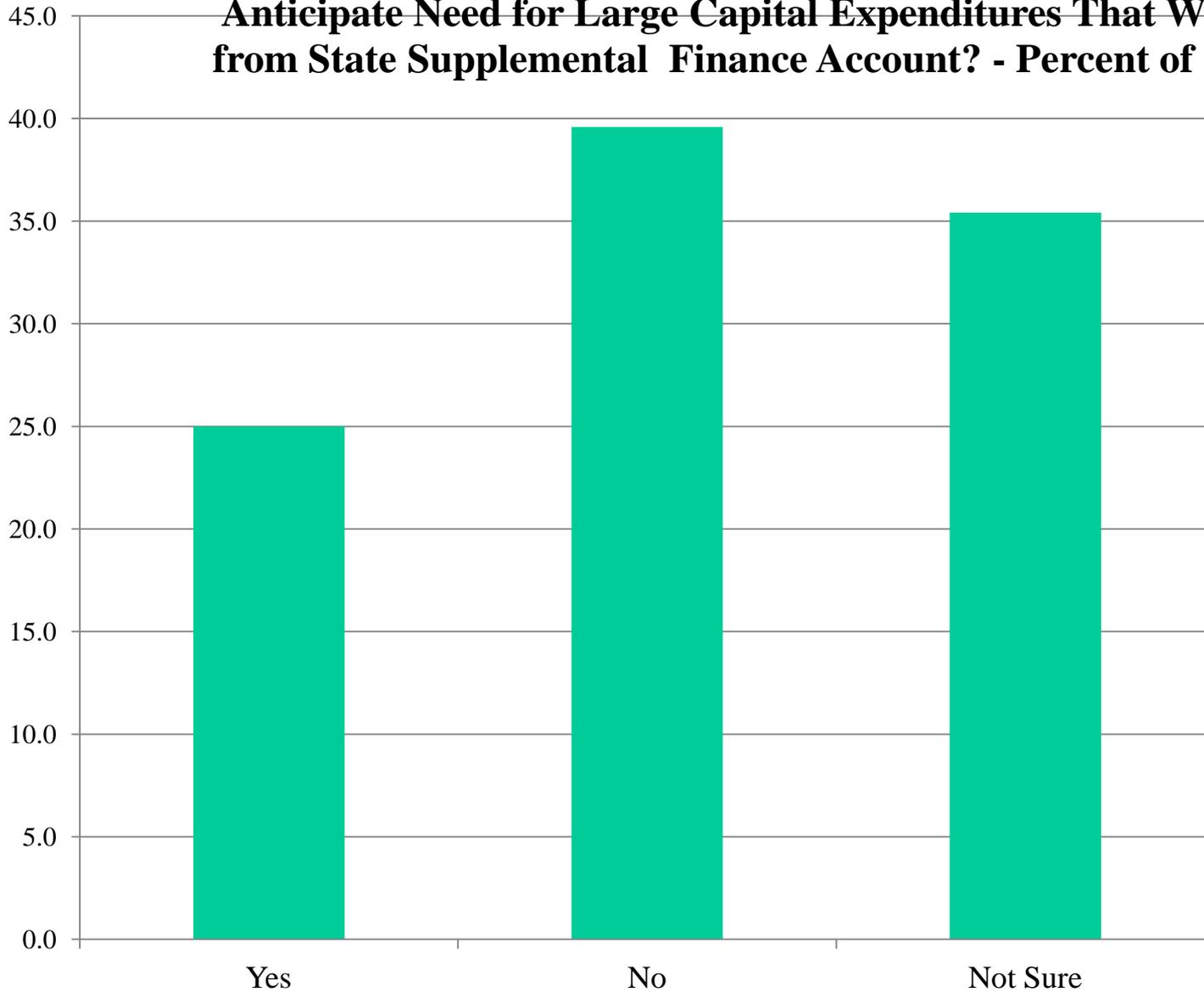
Capital Infusion Needs Cost Curve

(Excludes 4 Systems Totalling \$22,580,000)

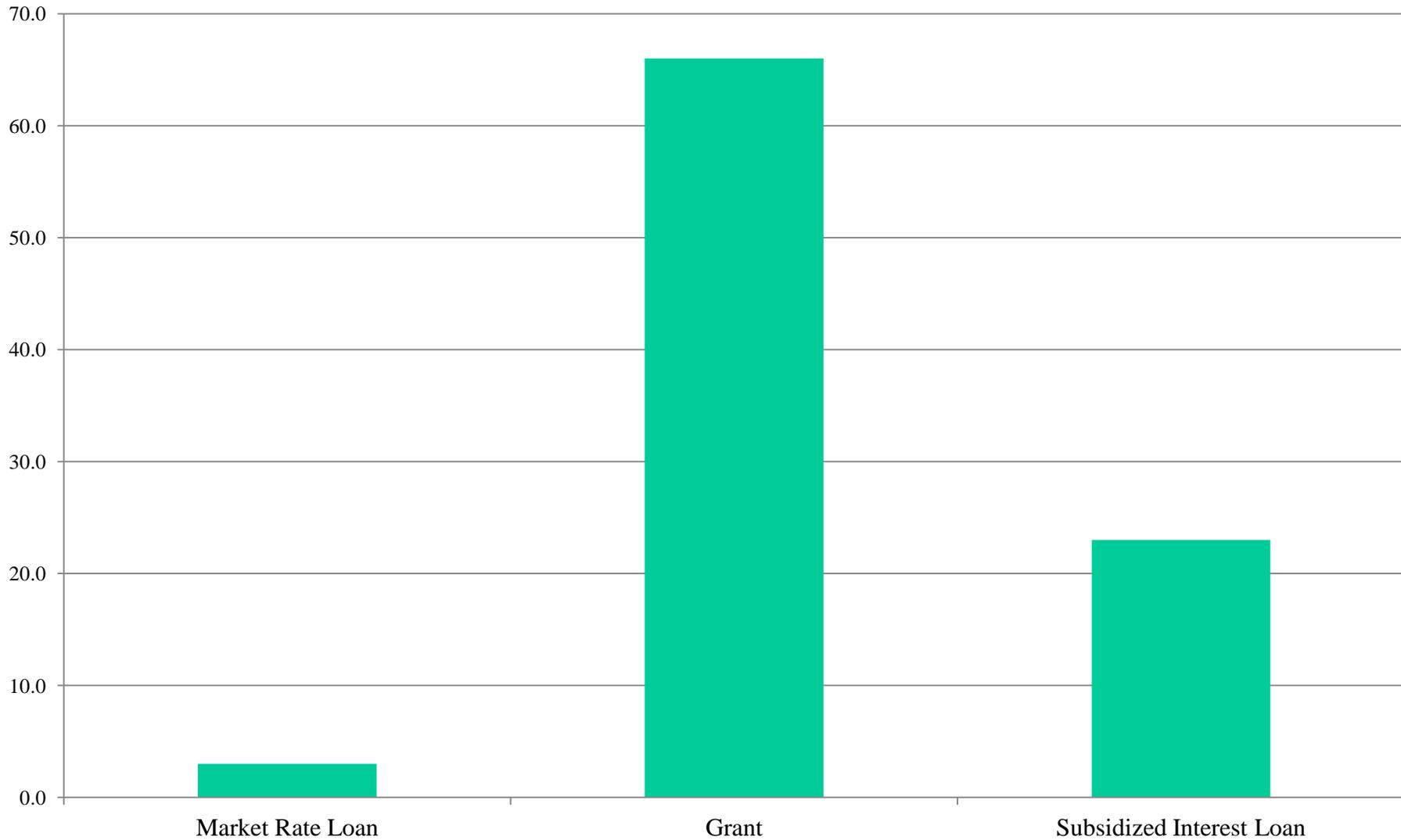


**The Next Set of Exhibits
Describe the Capital Sources
Identified by the Surveyed
Systems**

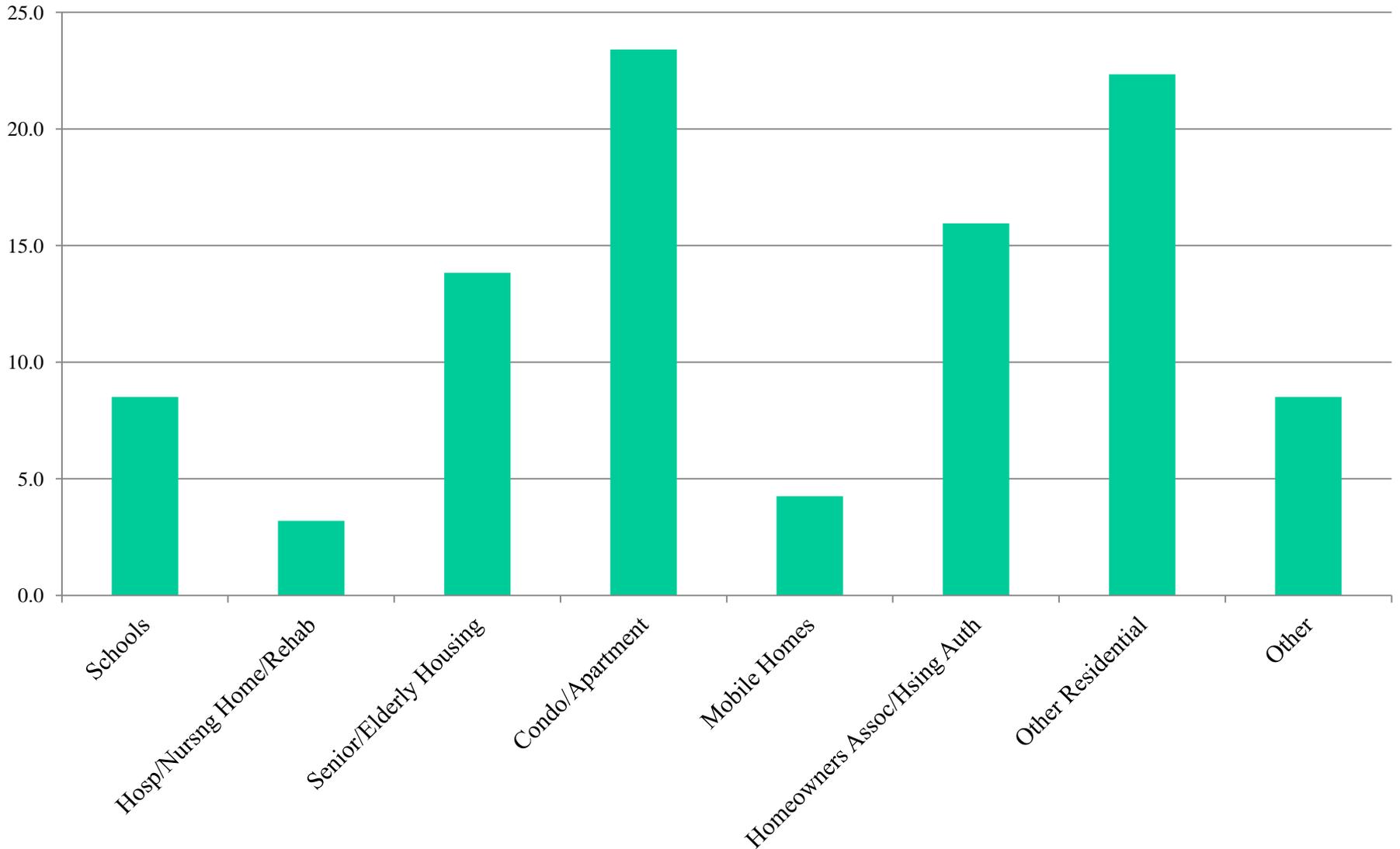
Anticipate Need for Large Capital Expenditures That Would Benefit from State Supplemental Finance Account? - Percent of Respondents



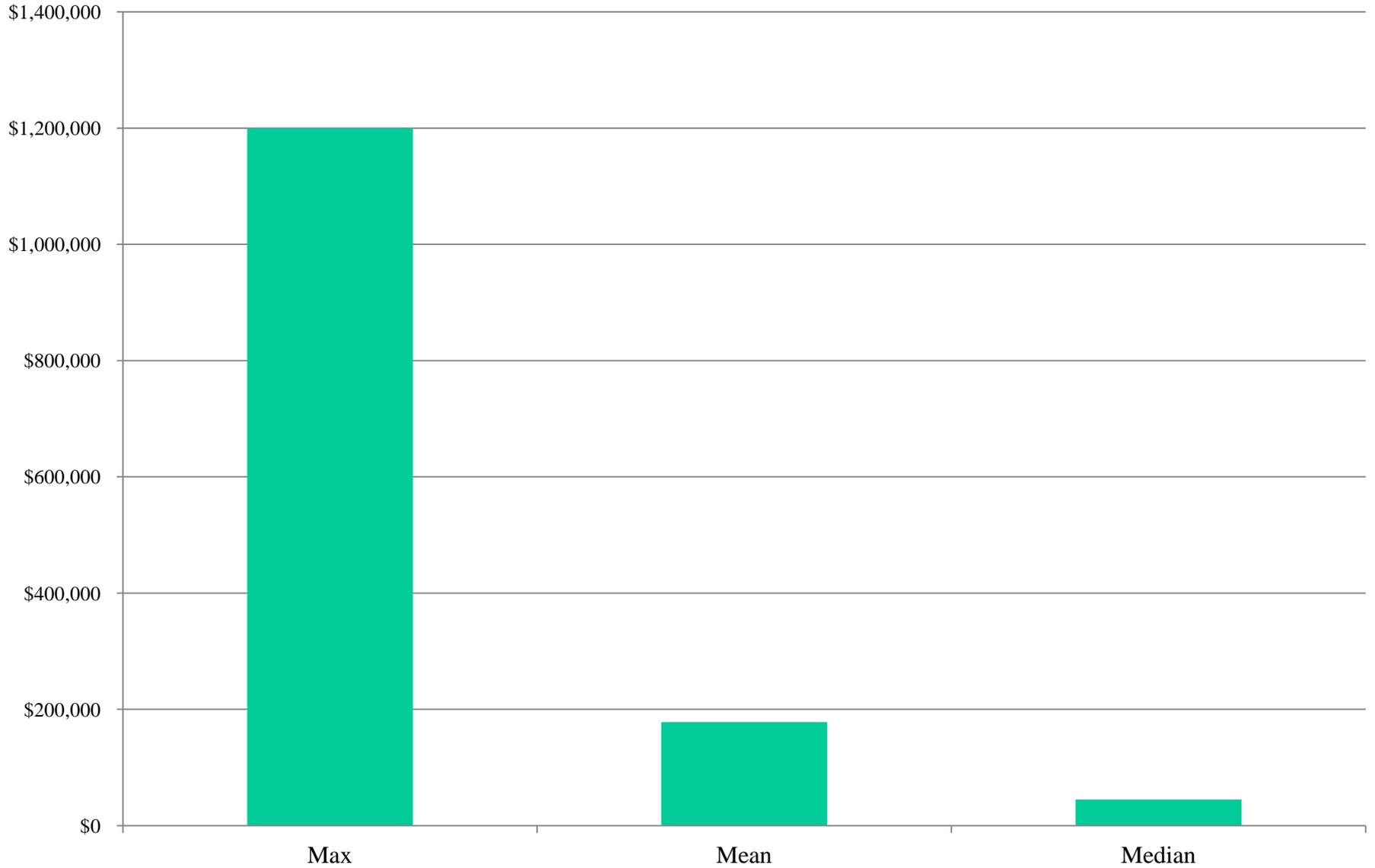
Type of Lending Arrangement Most Beneficial Percent of Respondents



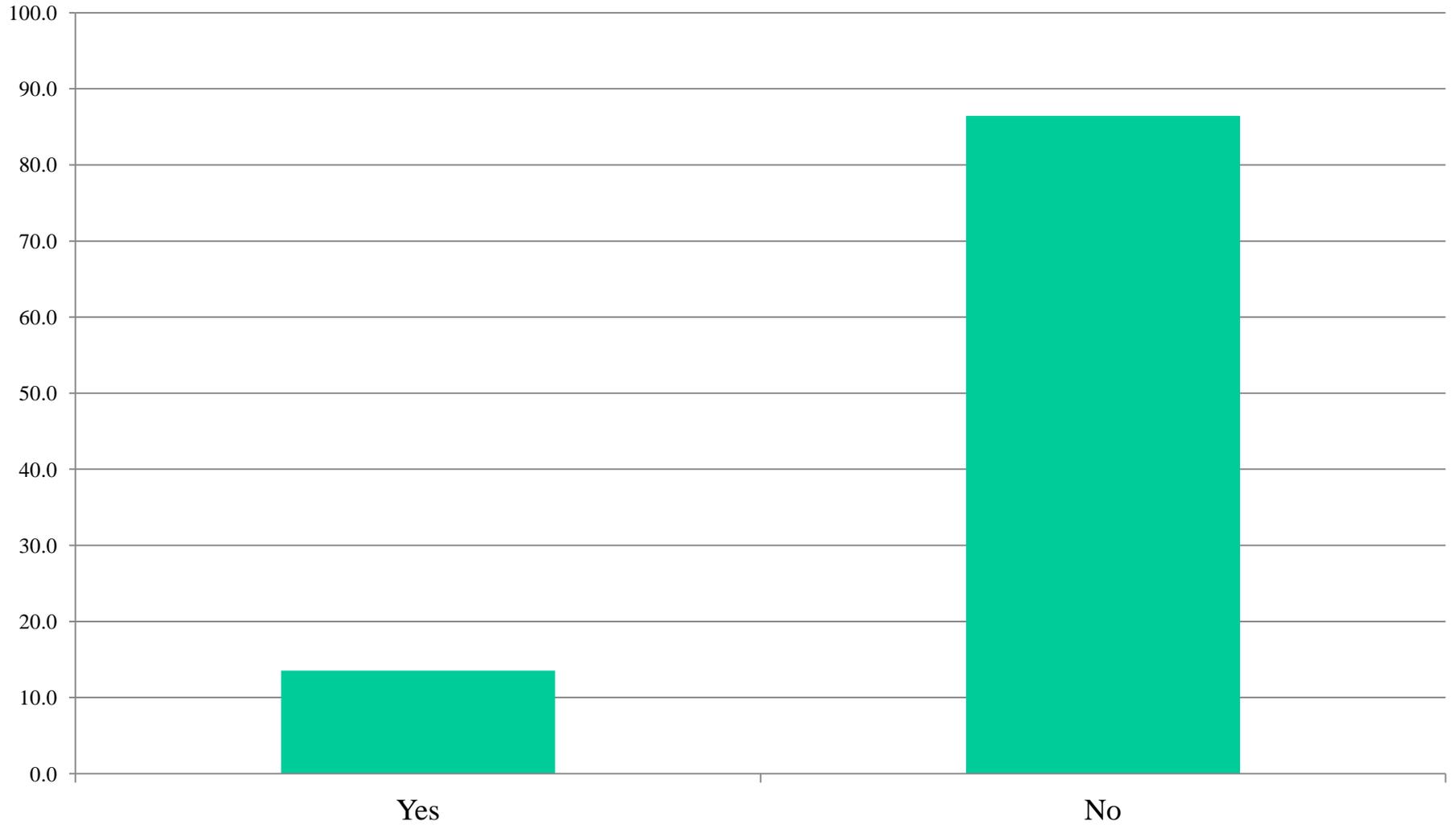
Grant Lending Arrangement Most Beneficial Percent of Total



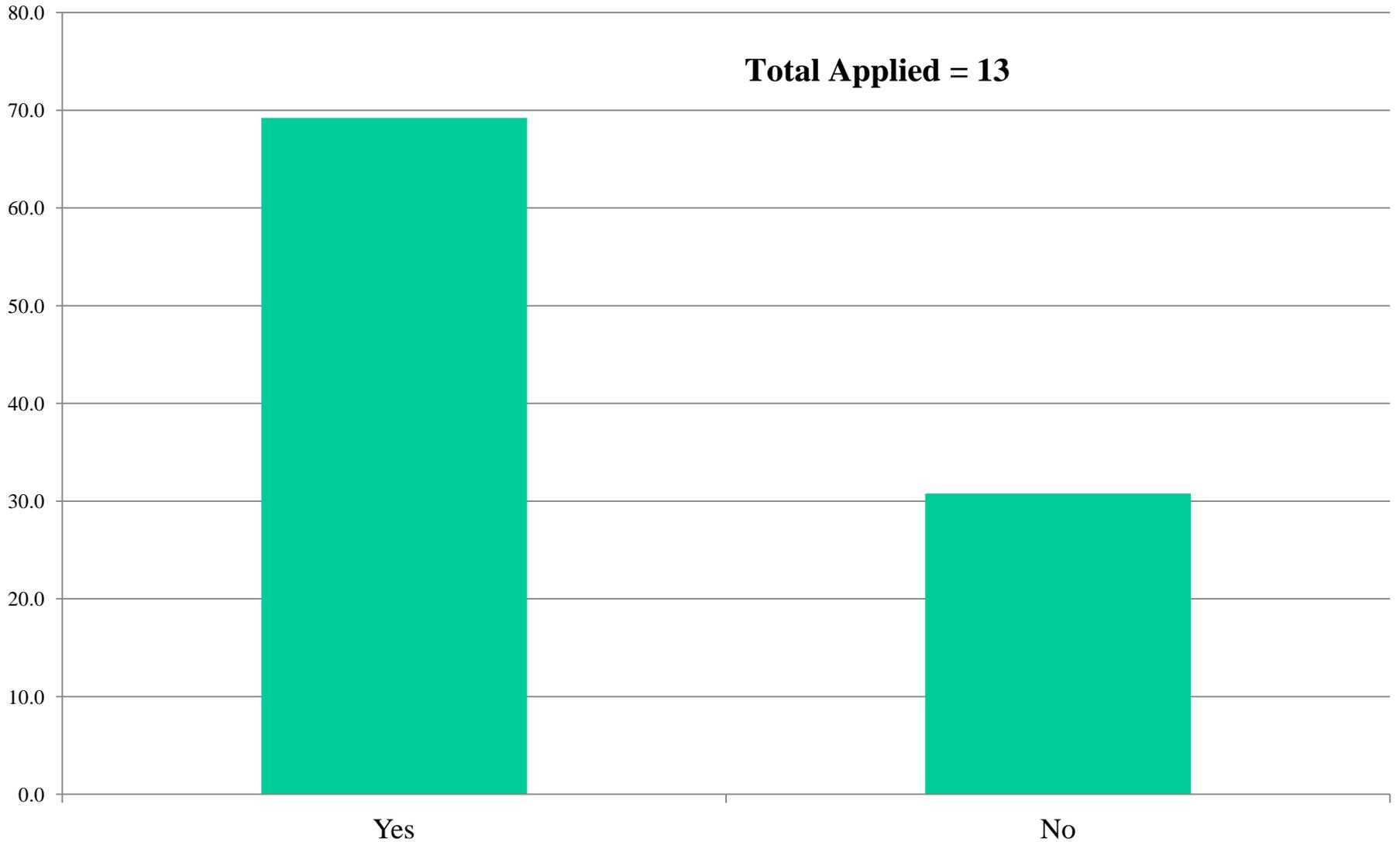
Level of Debt that System is Carrying



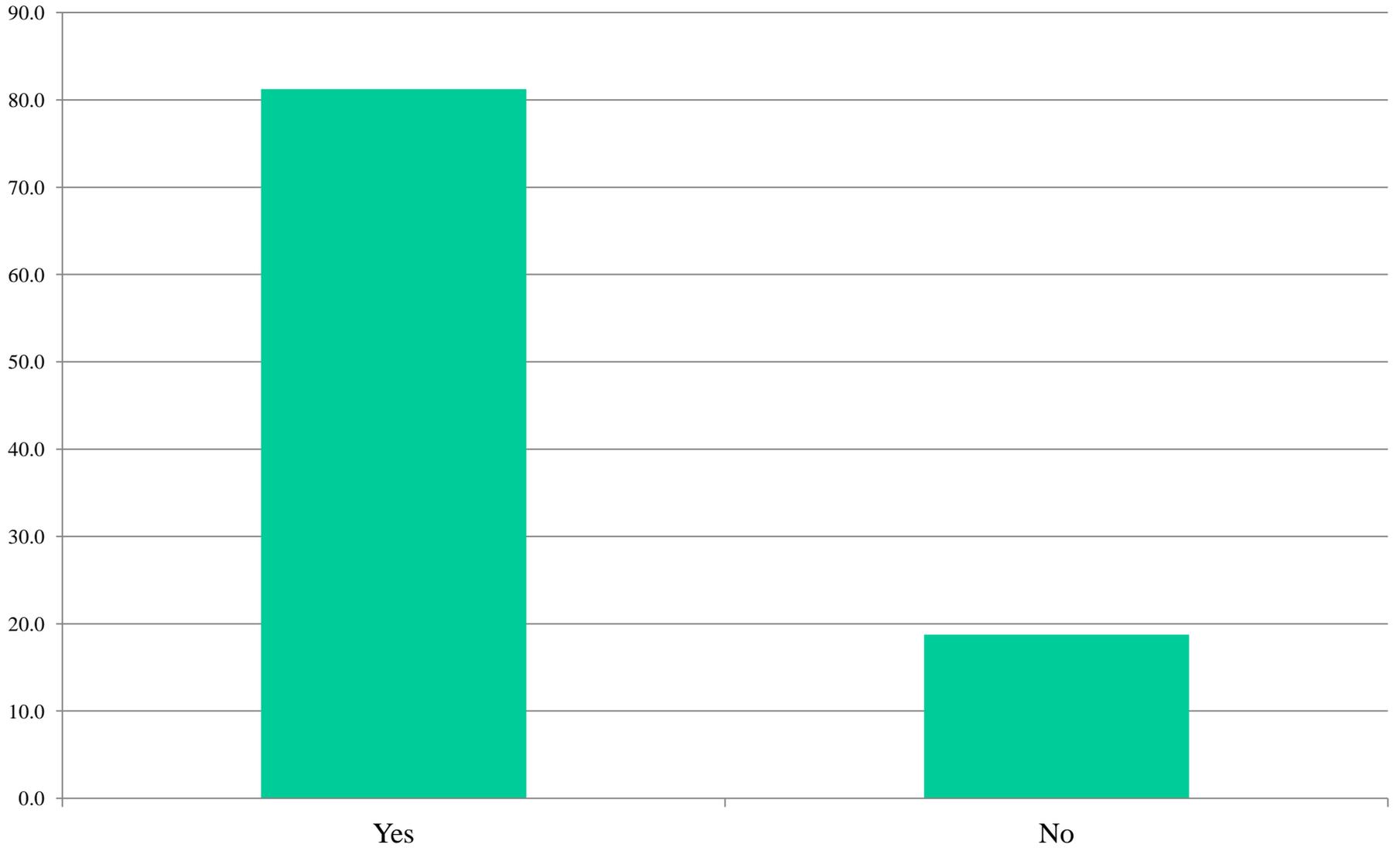
Has Company Ever Applied for a State Revolving Safe Drinking Water Fund Loan? Percent of Respondents



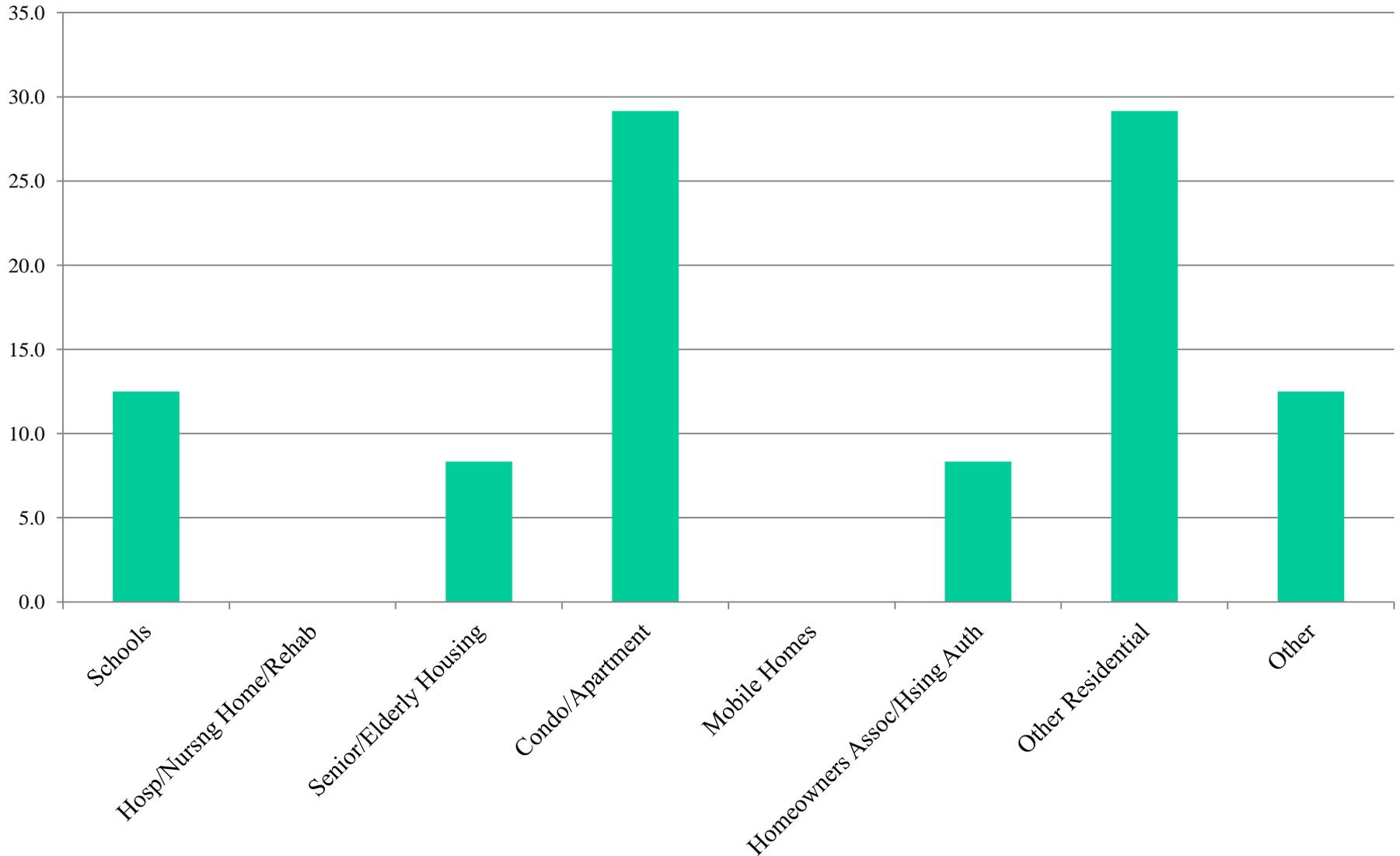
If Company Did Apply for a SRF Loan, Did It Receive the Loan? Percent of Respondents



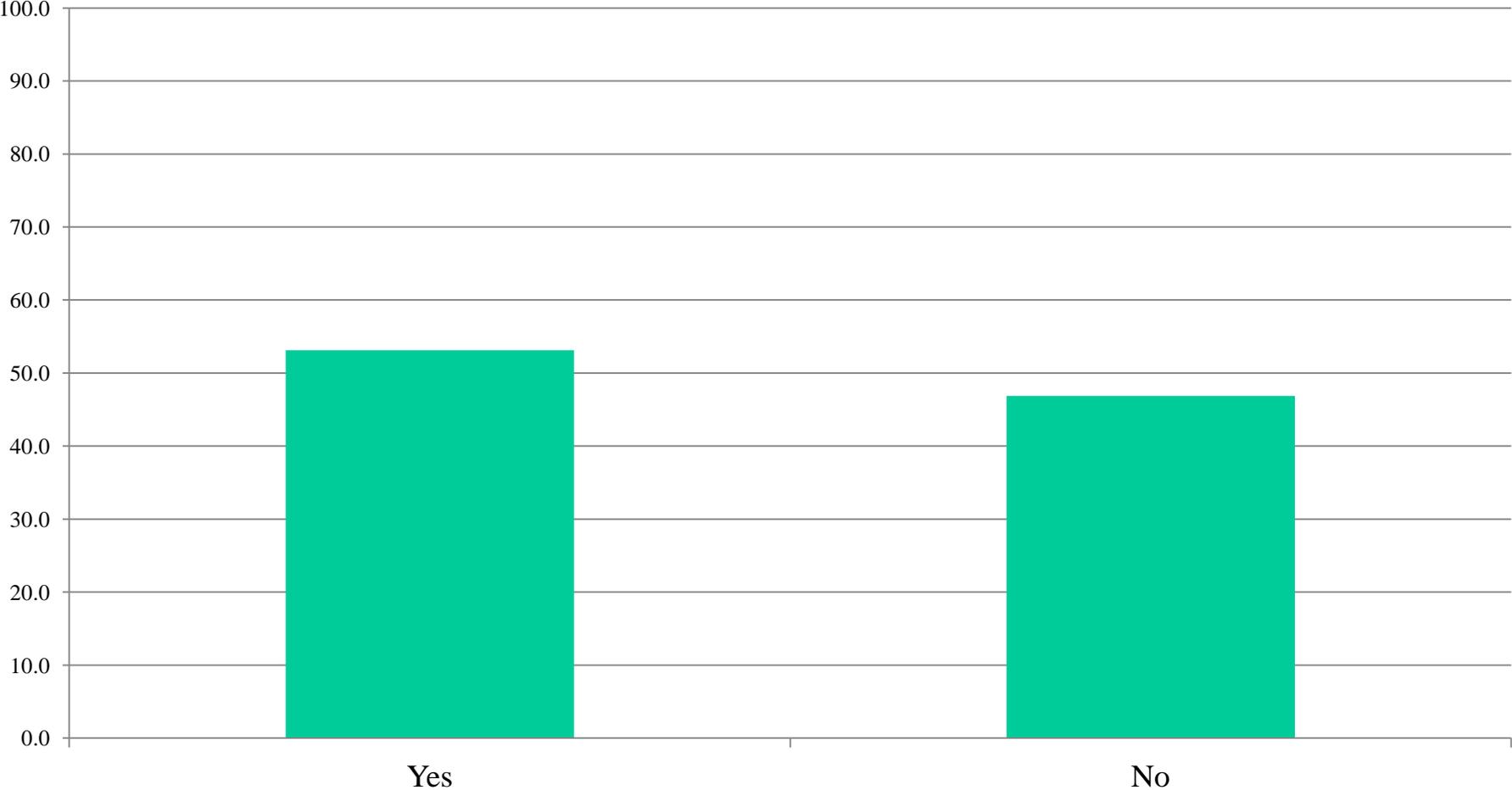
Are Revenues Adequate to Meet Current Daily financial Needs? Percent of Respondents



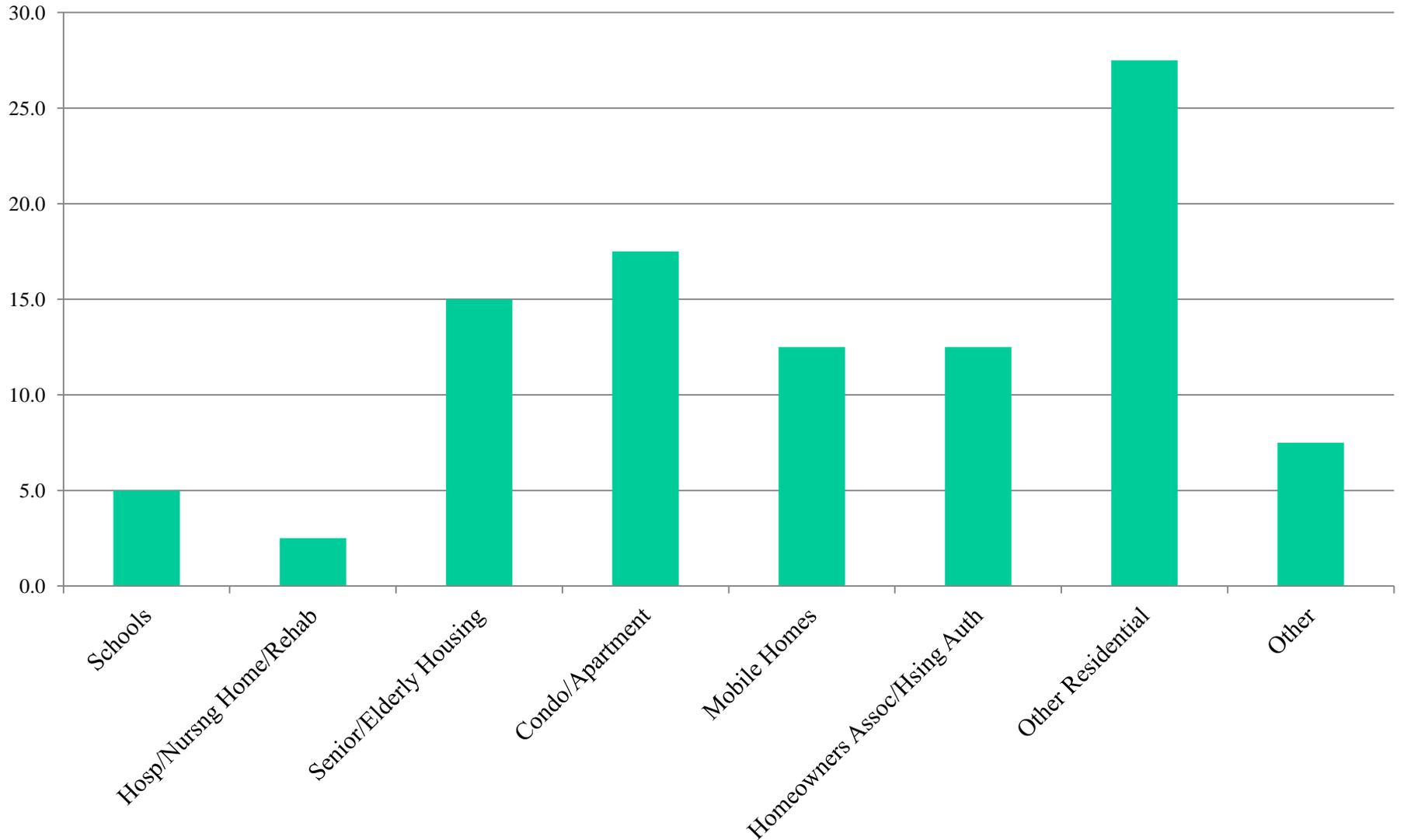
Systems Whose Revenues Not Adequate to Meet Daily Financial Needs - Percent of Total



If Revenues Adequate, Able to Consistently Fund an Escrow Account for Future Needs? - Percent of Respondents

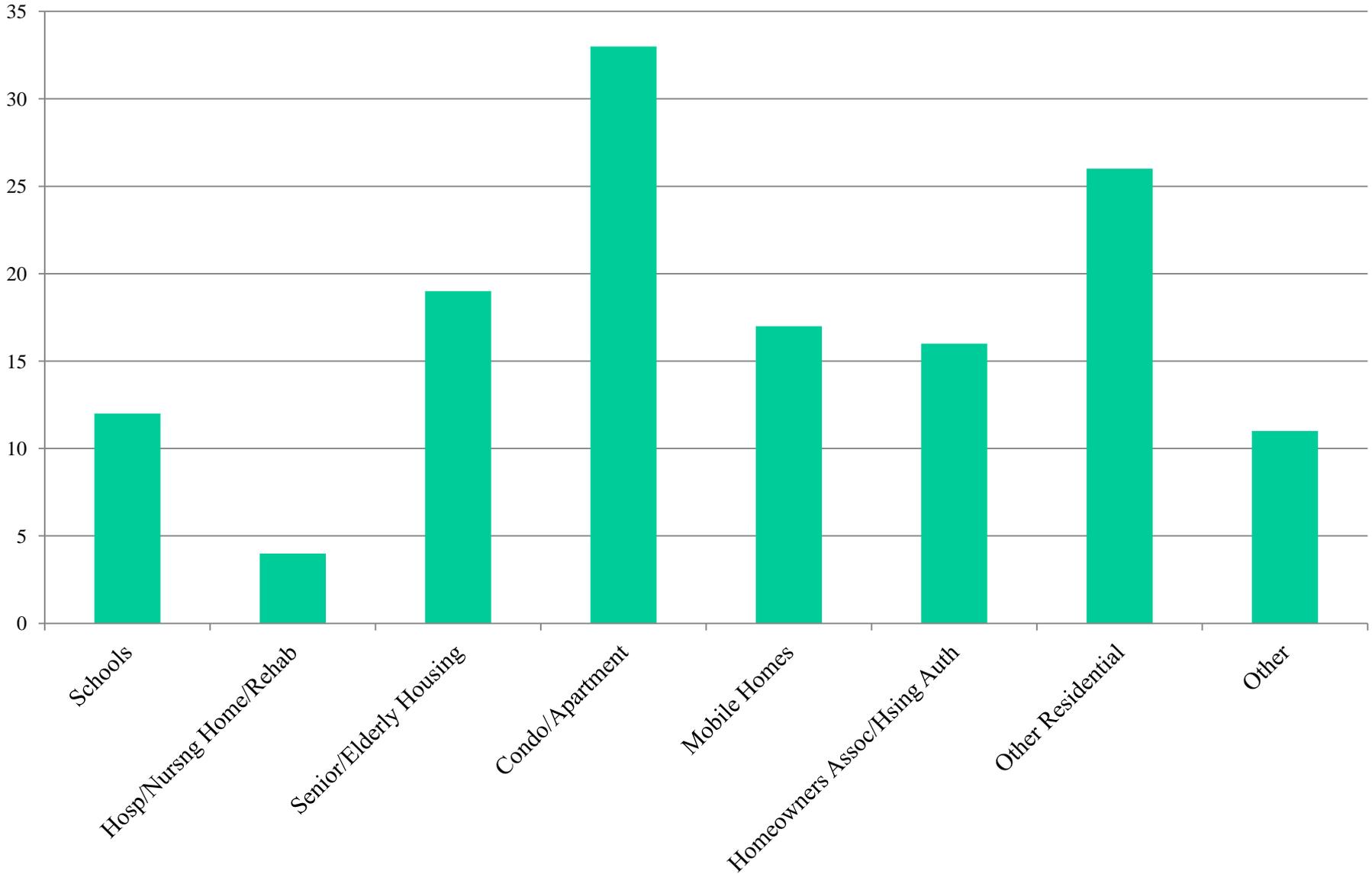


Systems Not Able to Consistently Fund an Escrow Account Percent of Total

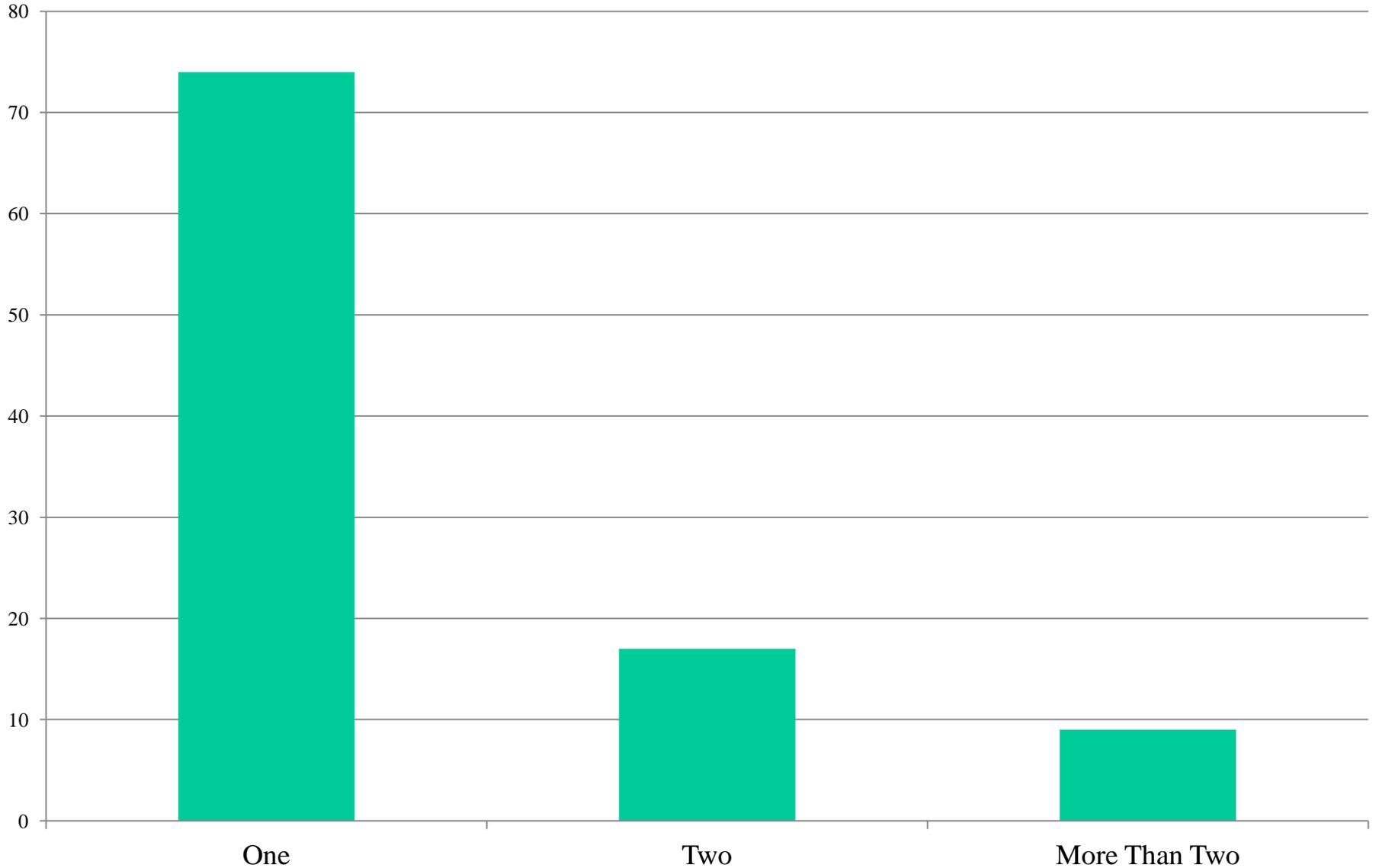


**The Next Set of Exhibits
Describe the Types of
Customers Served by the
Surveyed Systems**

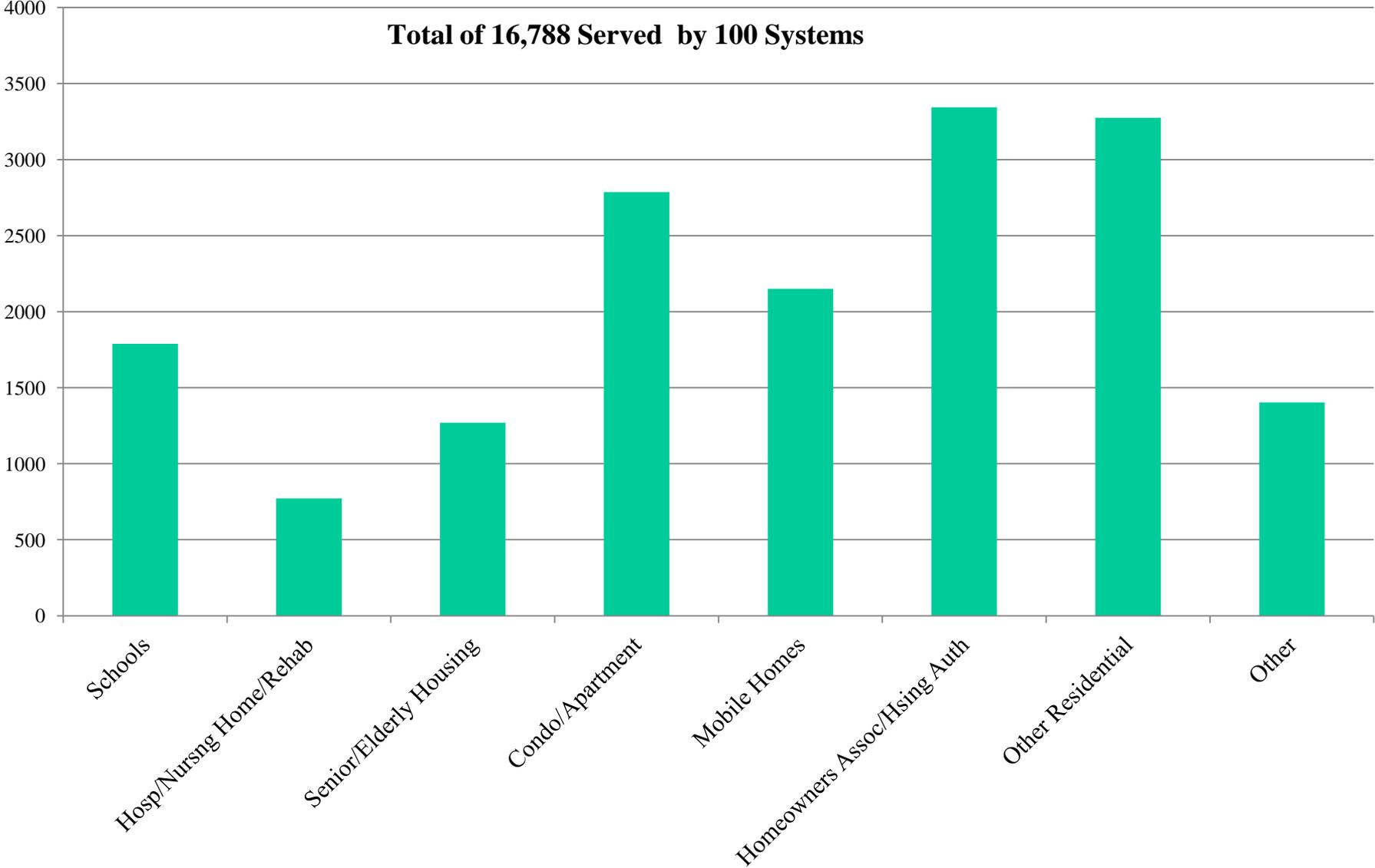
Number of Customer Types Served by Systems



Number of Customer Types Served By Systems

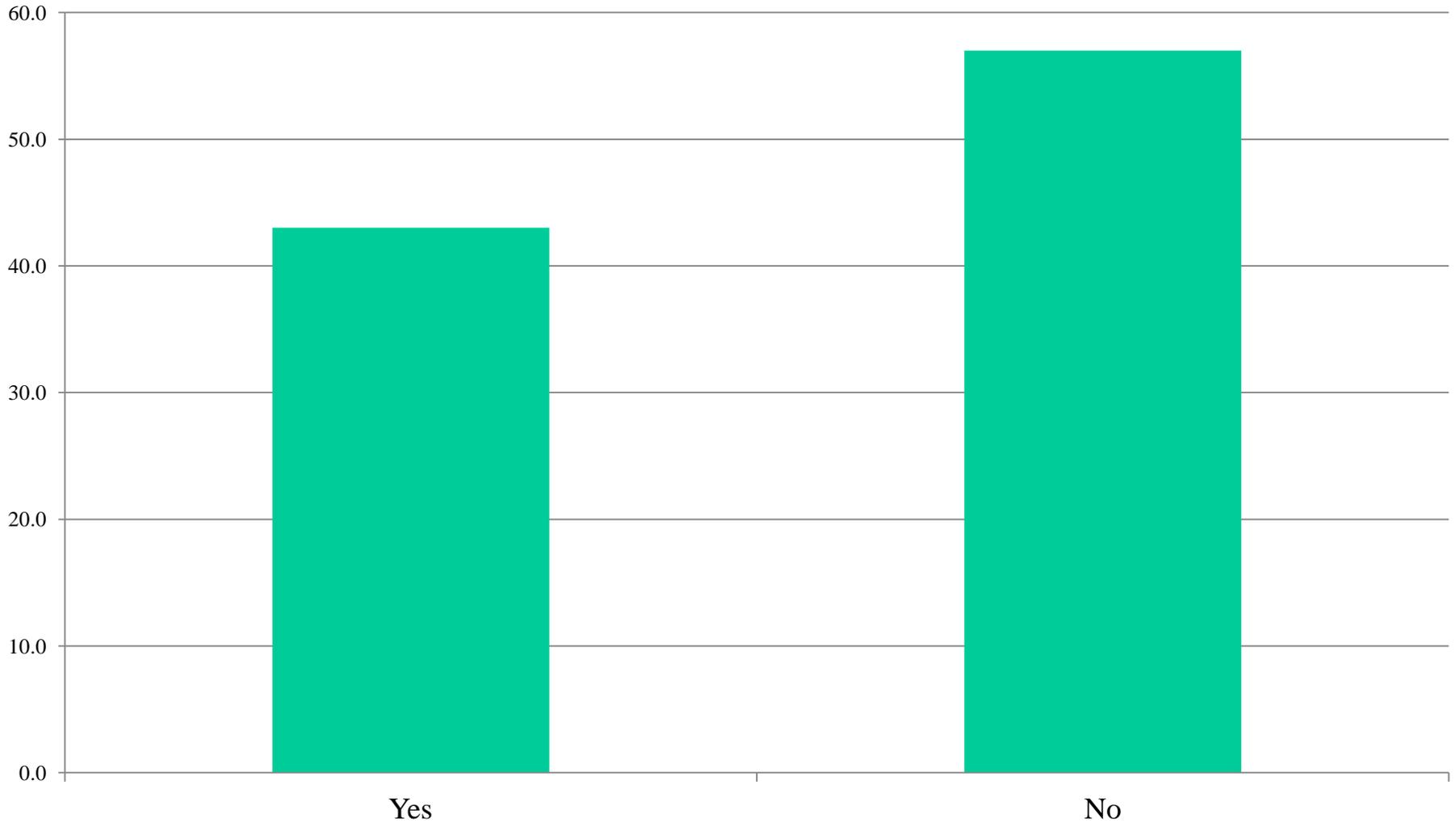


Total Population Served by Customer Type

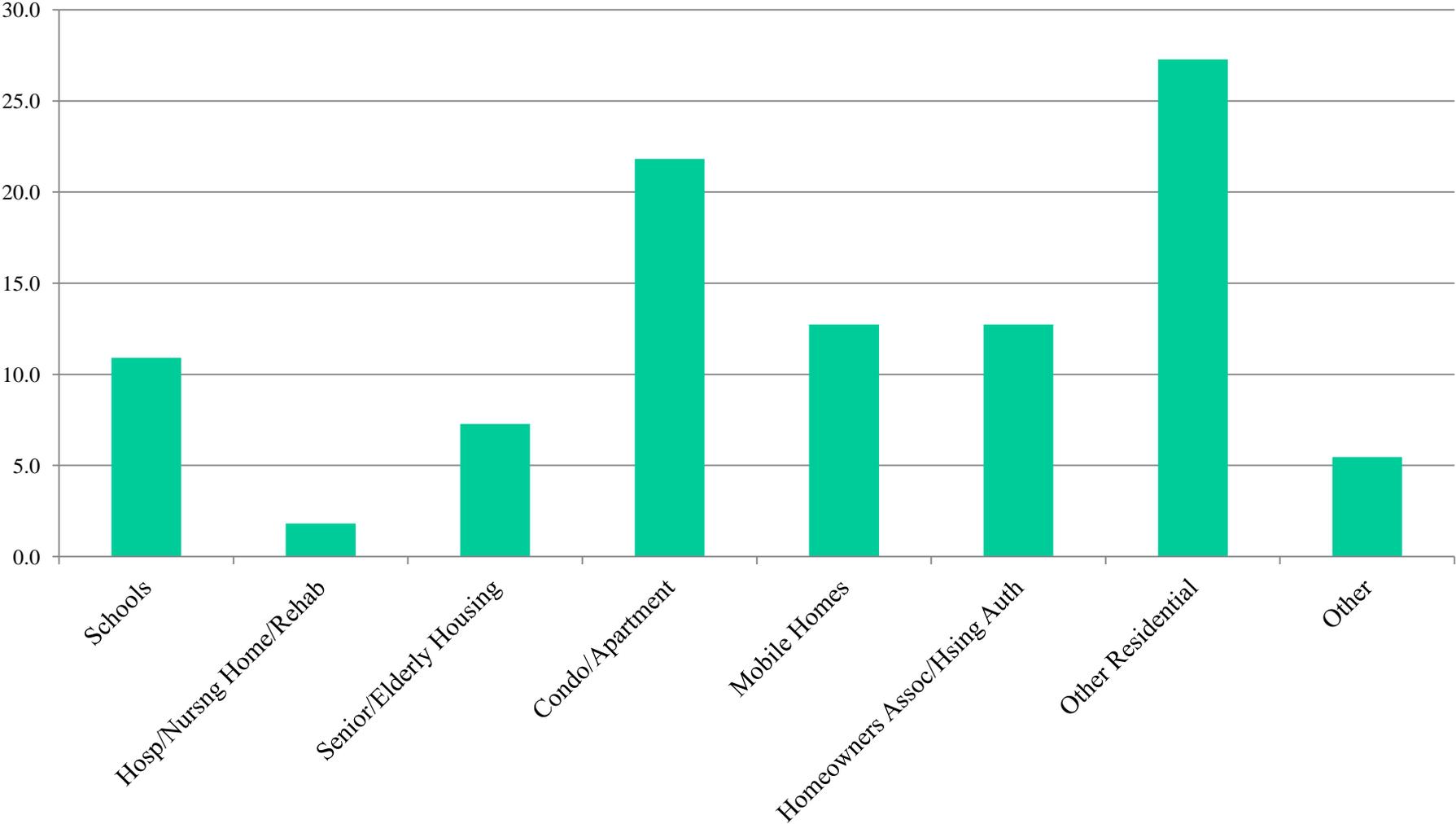


**The Next Set of Exhibits
Describe System
Acquisition, Sale, and
Merger Responses
By the Surveyed Systems**

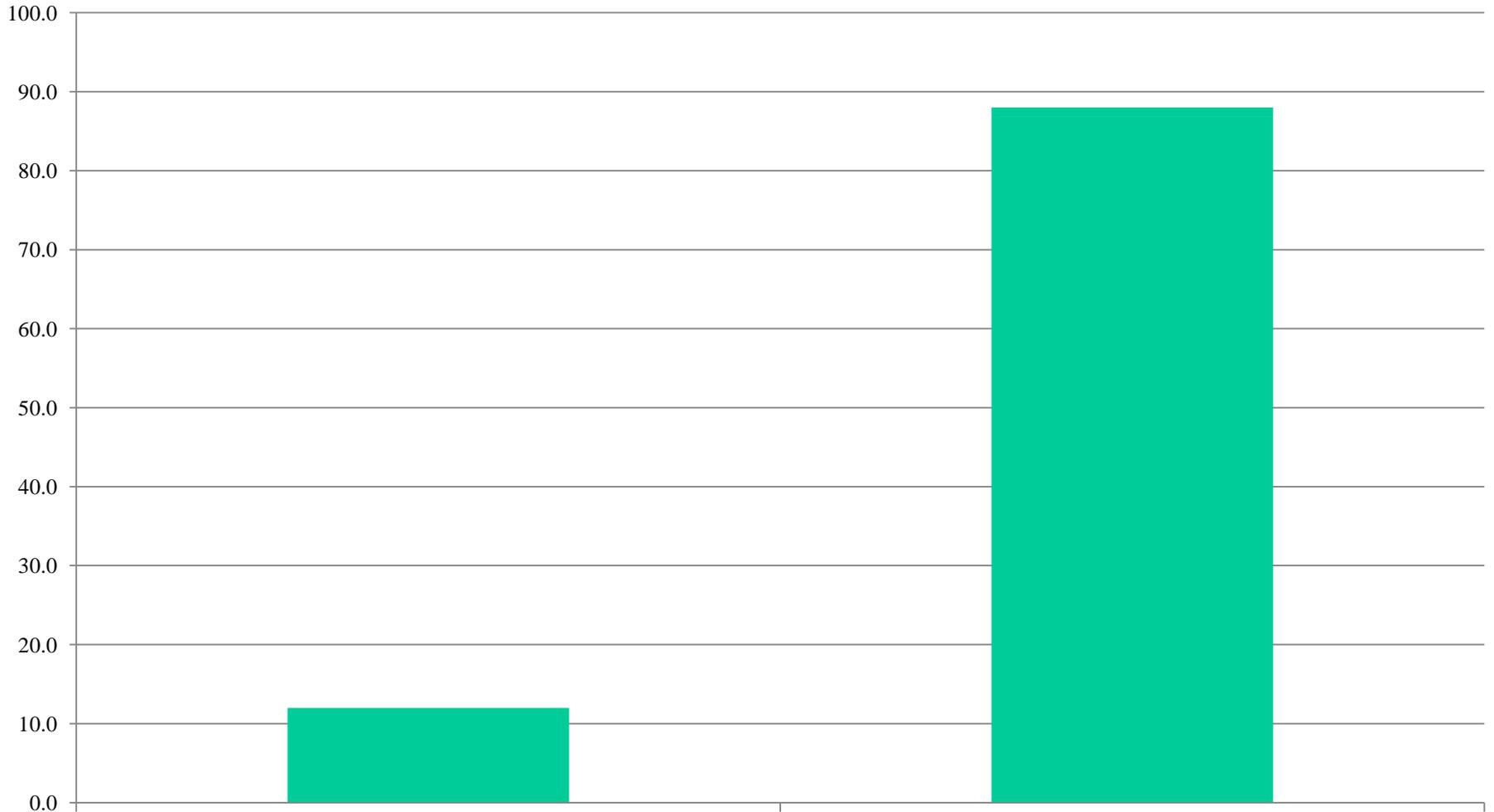
Would You Consider Having a Larger Water Entity Acquire and Operate Your System? Percent of Respondents



**Systems That Would Consider Having a Larger Water Entity
Acquire and Operate by Customer Type
Percent of Total**



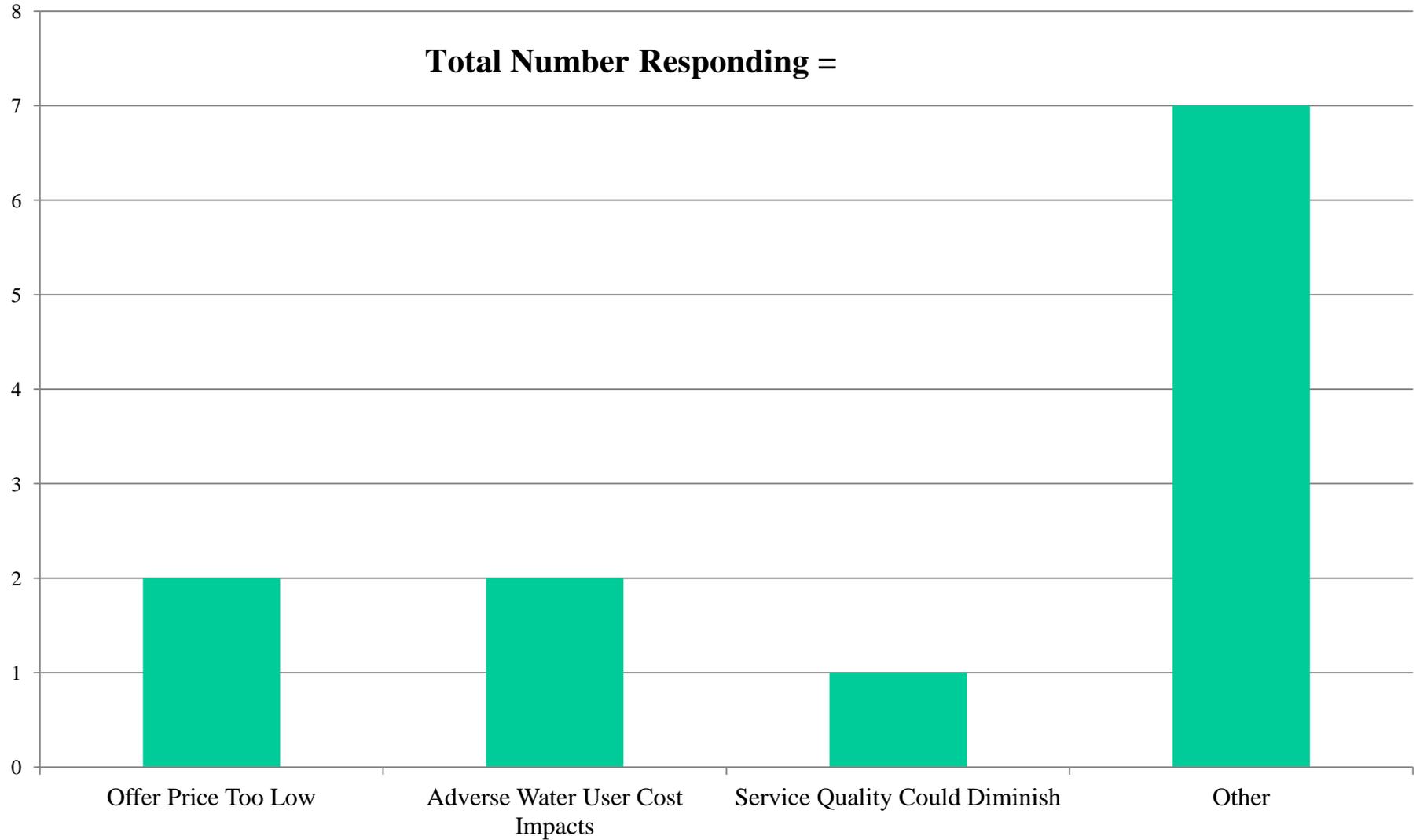
Has Your Company Ever Attempted to Sell Its Assets or Merge with Another Company? Percent of Respondents



Yes

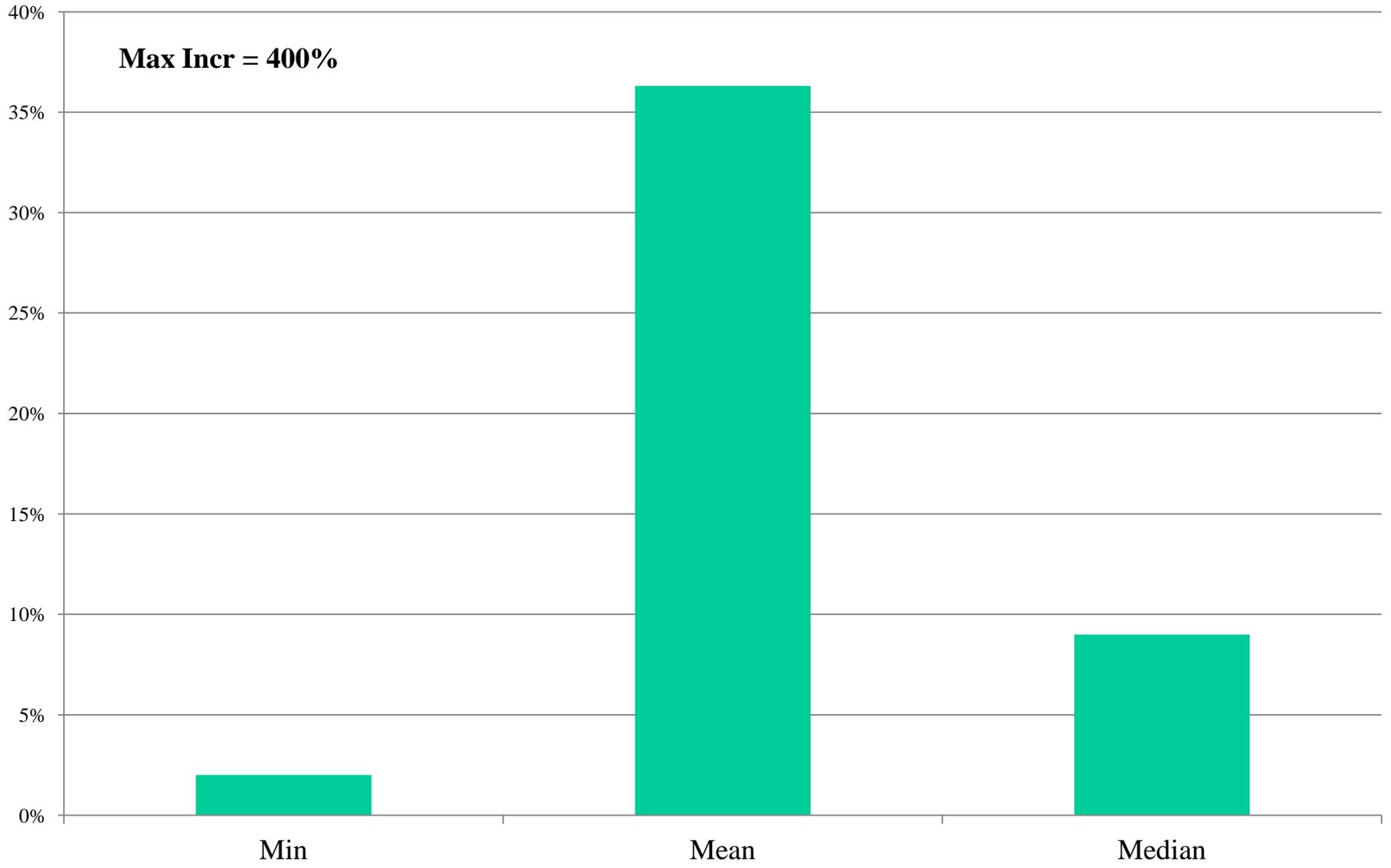
No

If Company Has Attempted to Sell or Merge, What Difficulties Encountered?

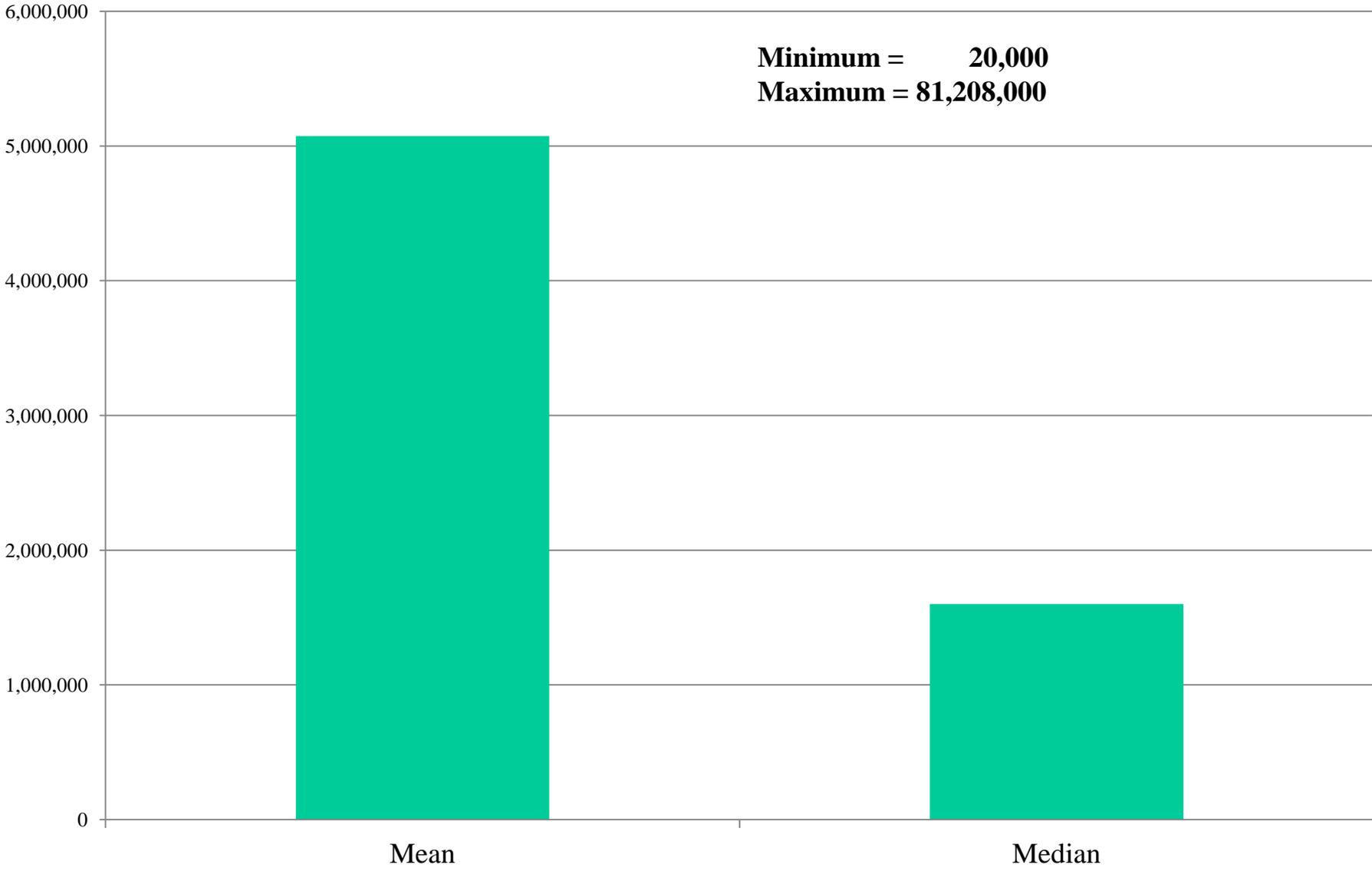


**The Next Set of Exhibits Describe Past
Revenue Increases,
Production, and Ownership Structure
of the Surveyed Systems**

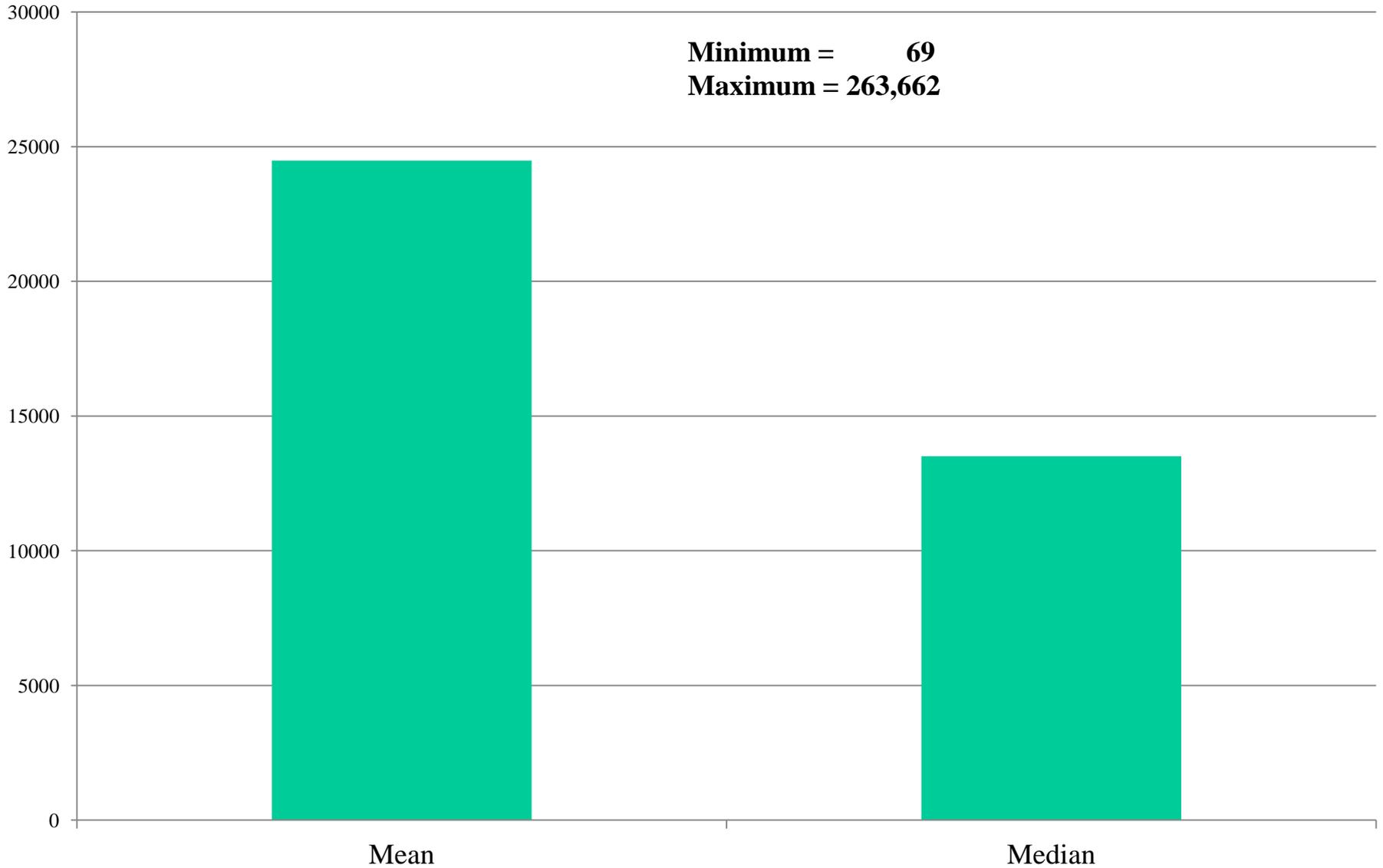
Aggregate Increase in Revenues Over Last Five Years (%)



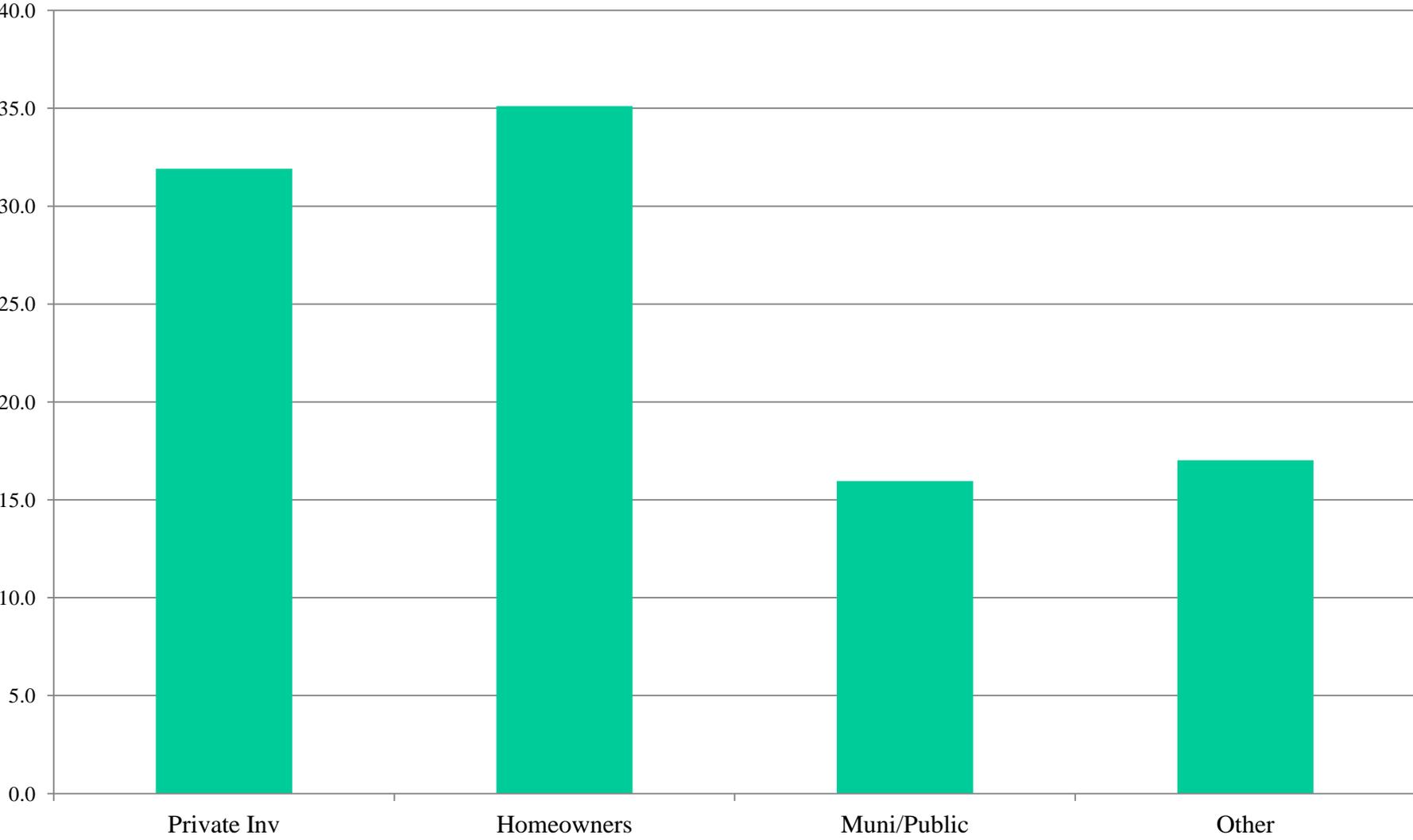
Annual 2012 Production (Gallons)



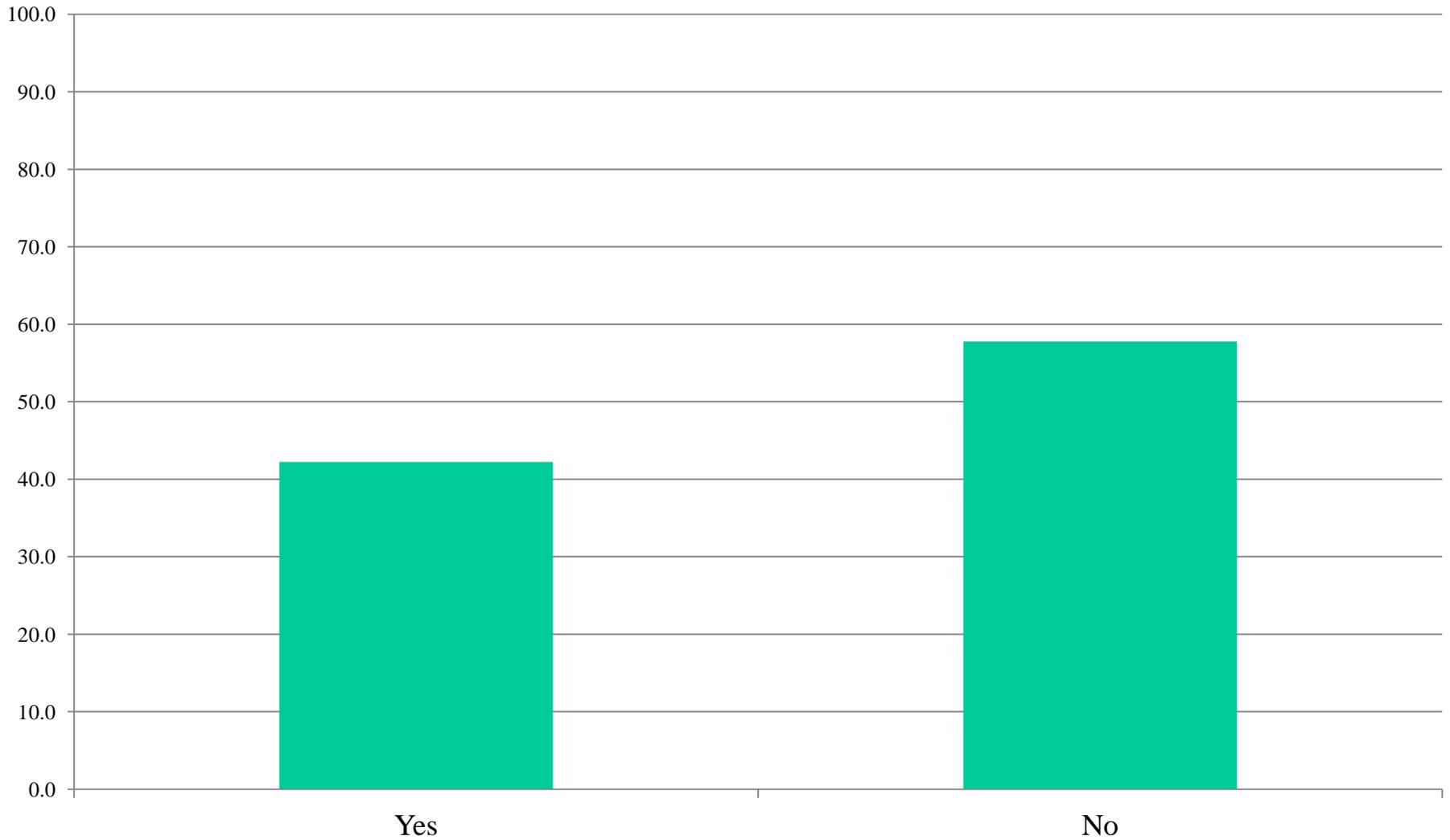
Production Per Population Served (Gallons)



Ownership Structure Percent of Respondents

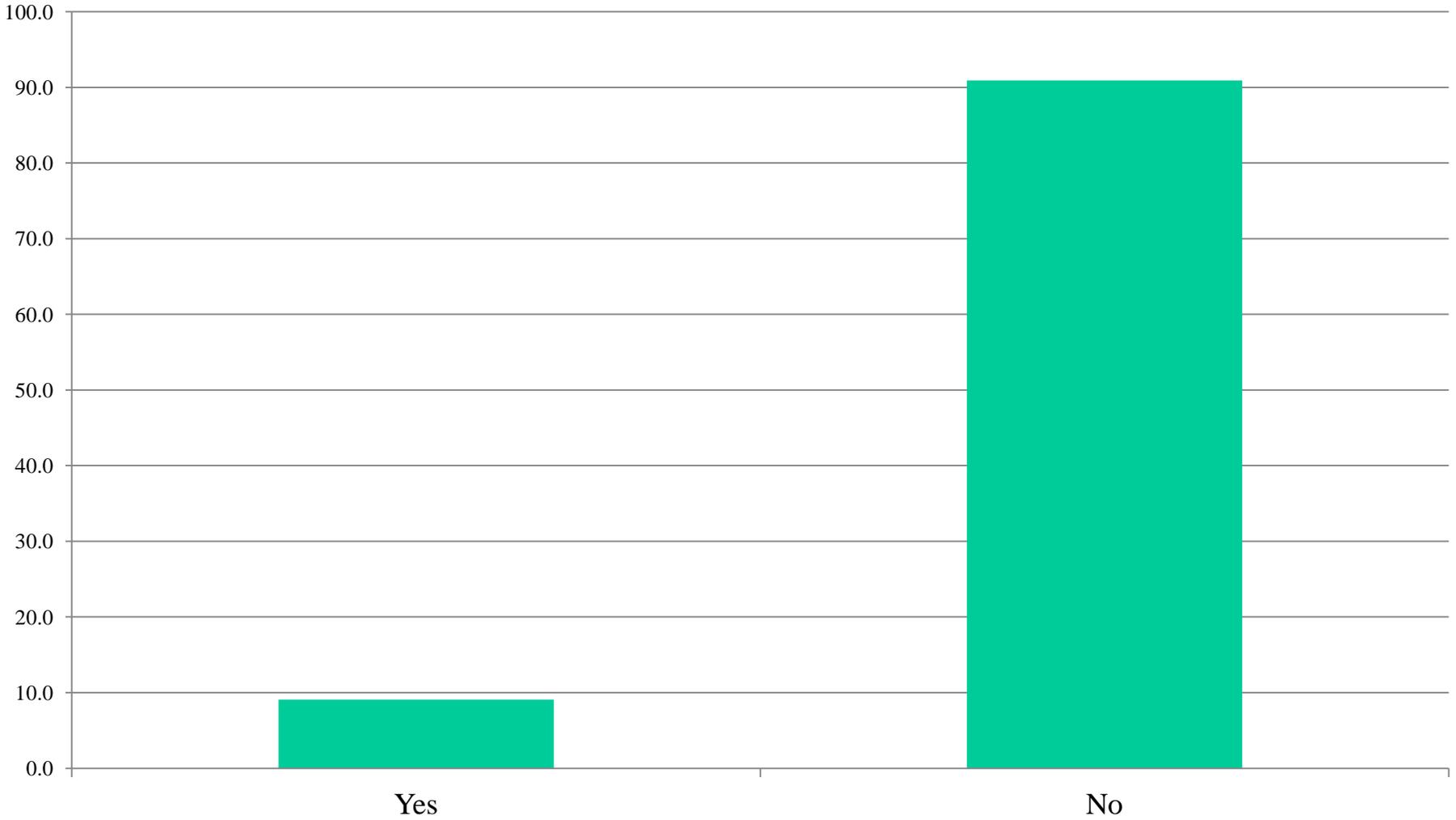


Does Company Have an Ownership/Management Succession Plan? Percent of Respondents

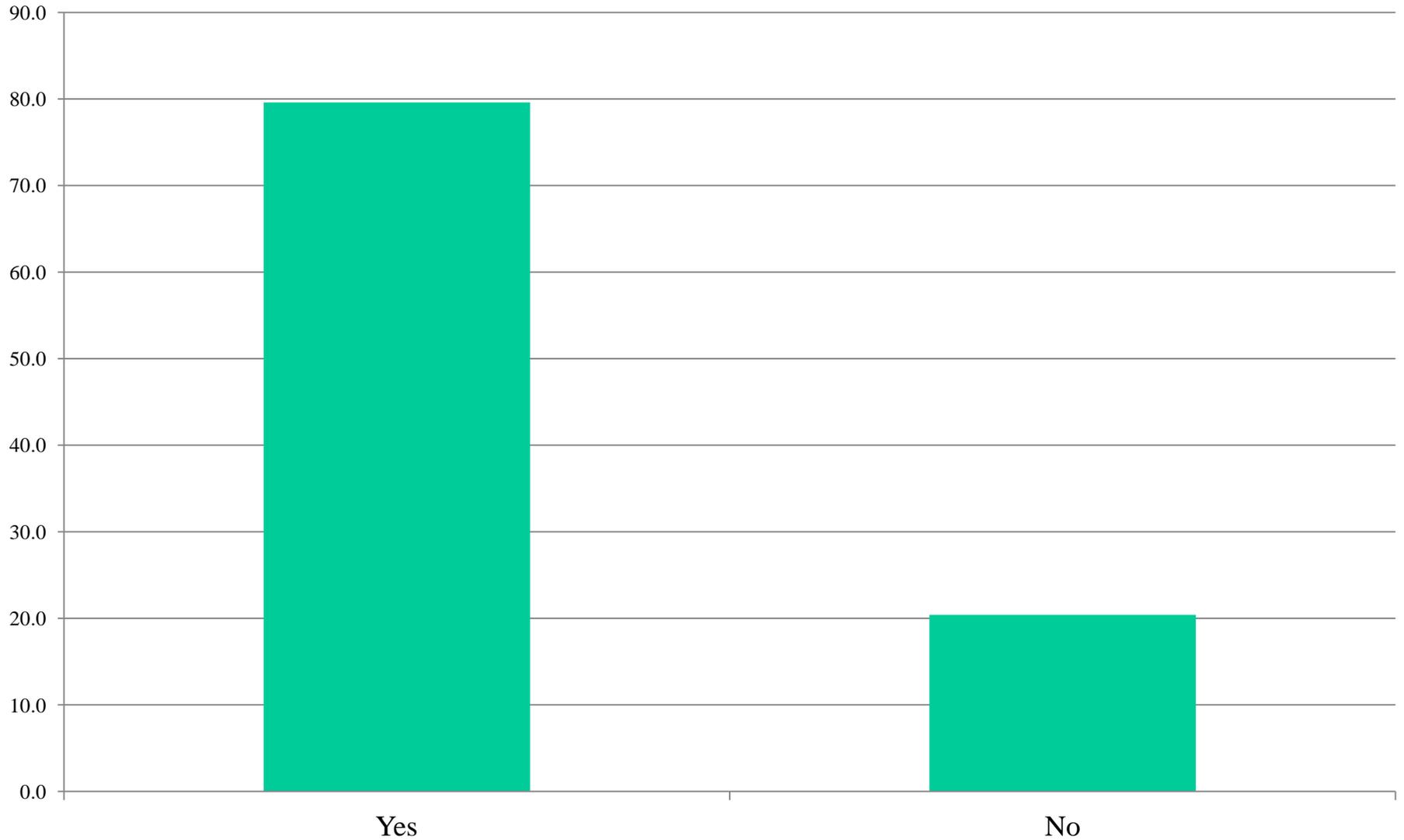


**The Next Set of Exhibits
Describe DPH Enforcement and
Emergency Action of the
Surveyed Systems**

Does Company Have Any Current DPH Enforcement Actions Against It? Percent of Respondents

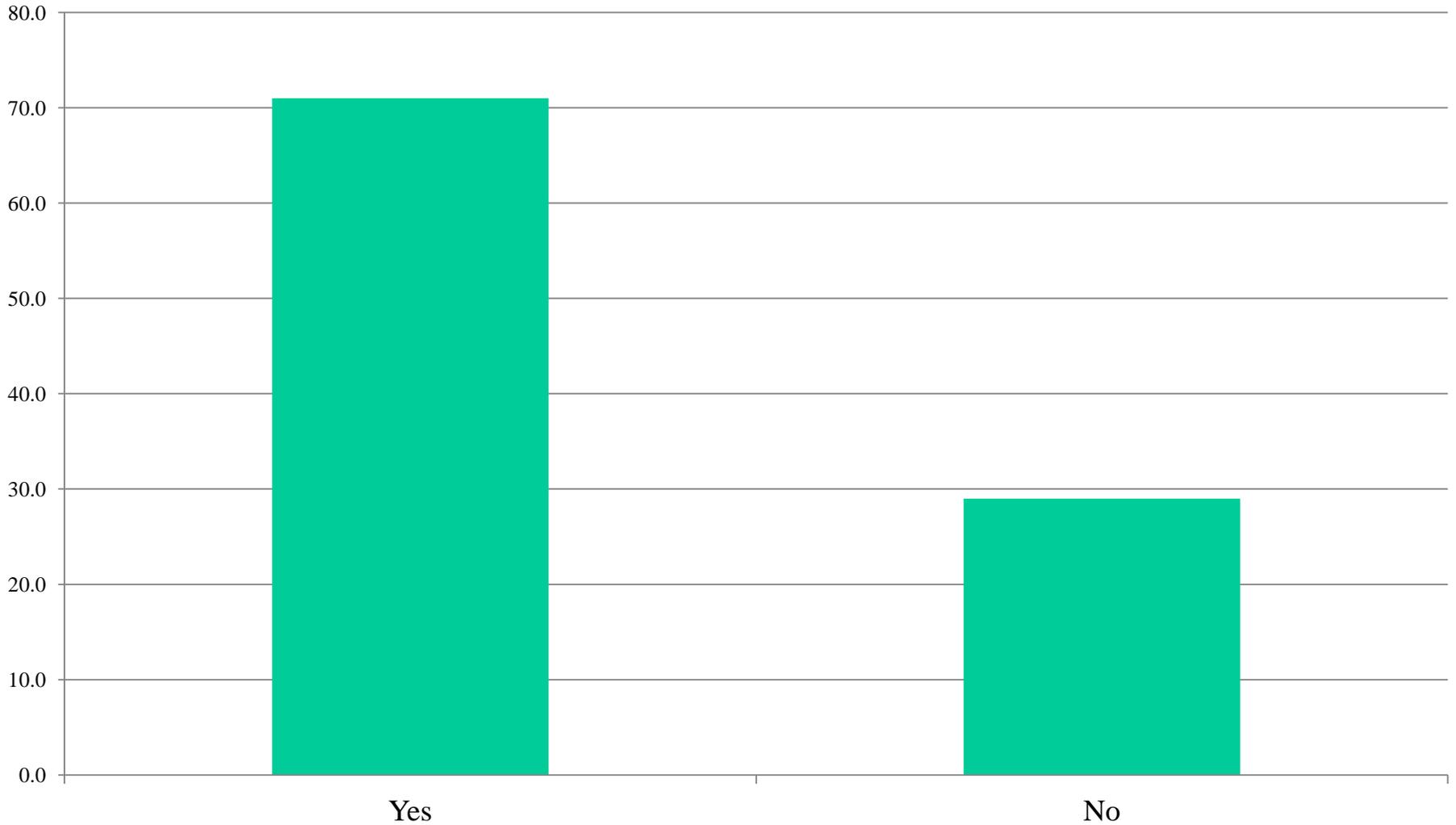


Does Company Have a Formal Plan for Dealing with Emergencies? Percent of Respondents

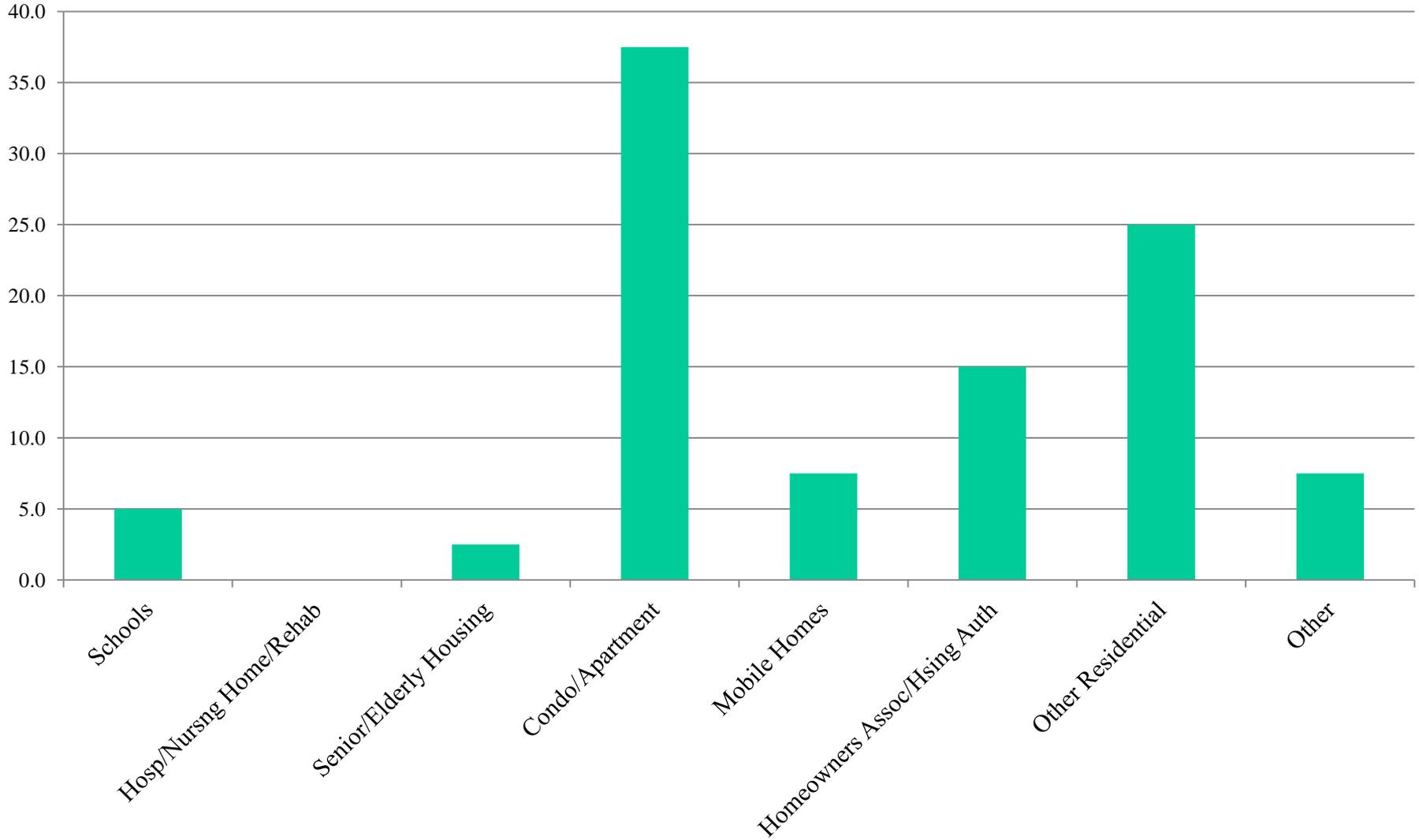


Does Your Company Have a Standby Generator Capable of Maintaining Normal Production in a Power Outage?

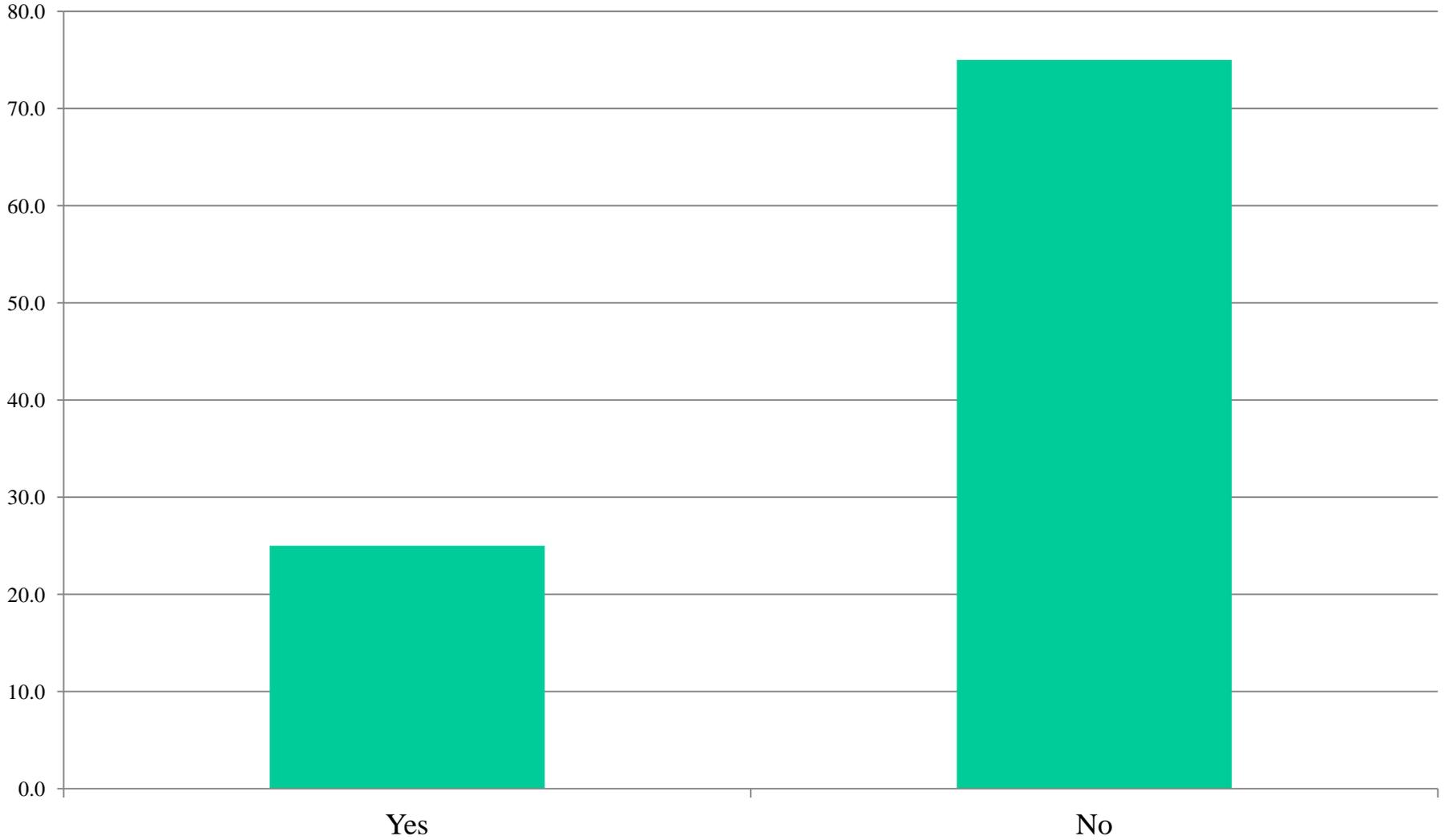
Percent of Respondents



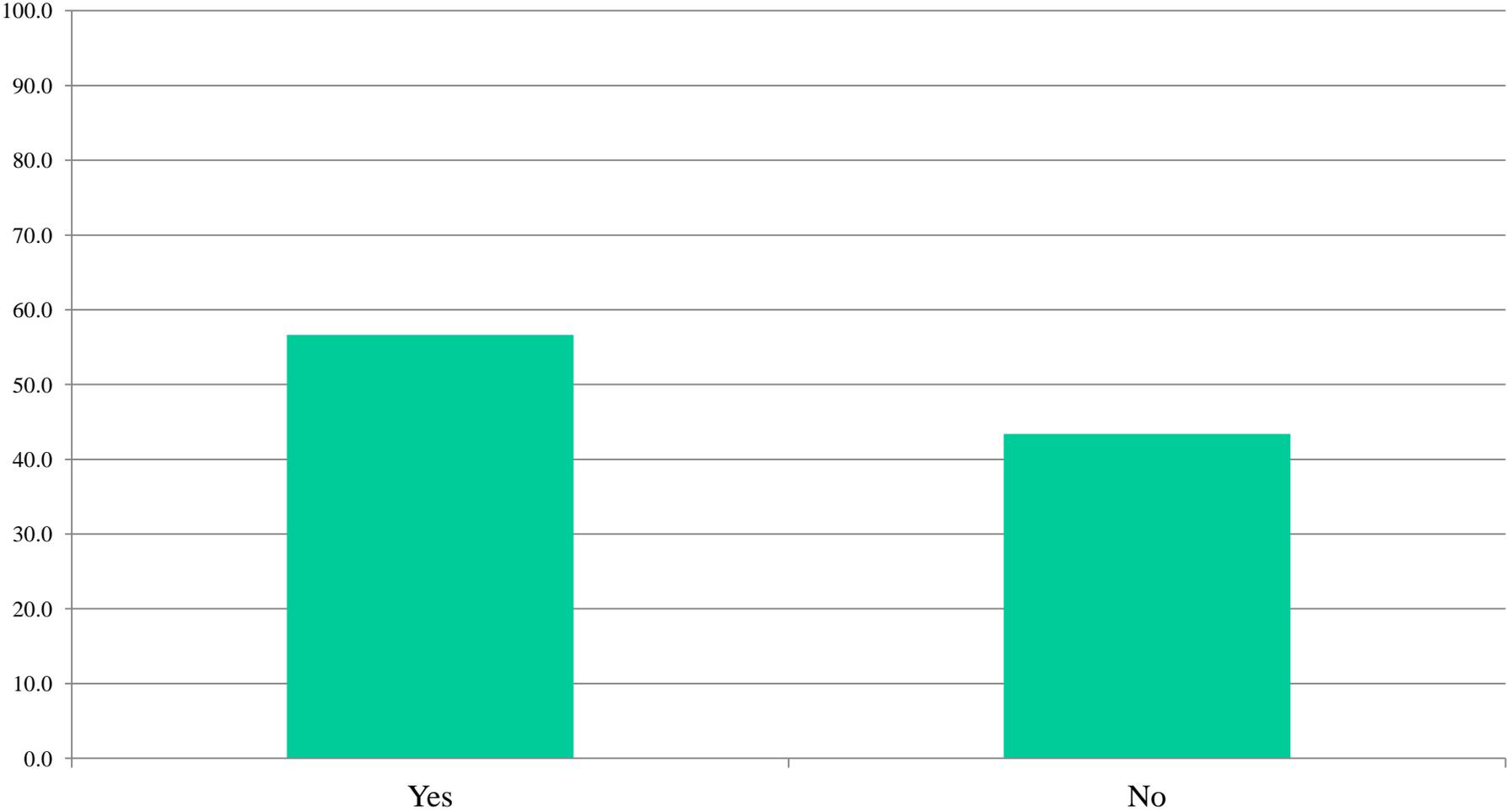
Systems With No Standby Generator by Type of Customer Served Percent of Total



Does Your Company Provide Fire Protection? Percent of Respondents

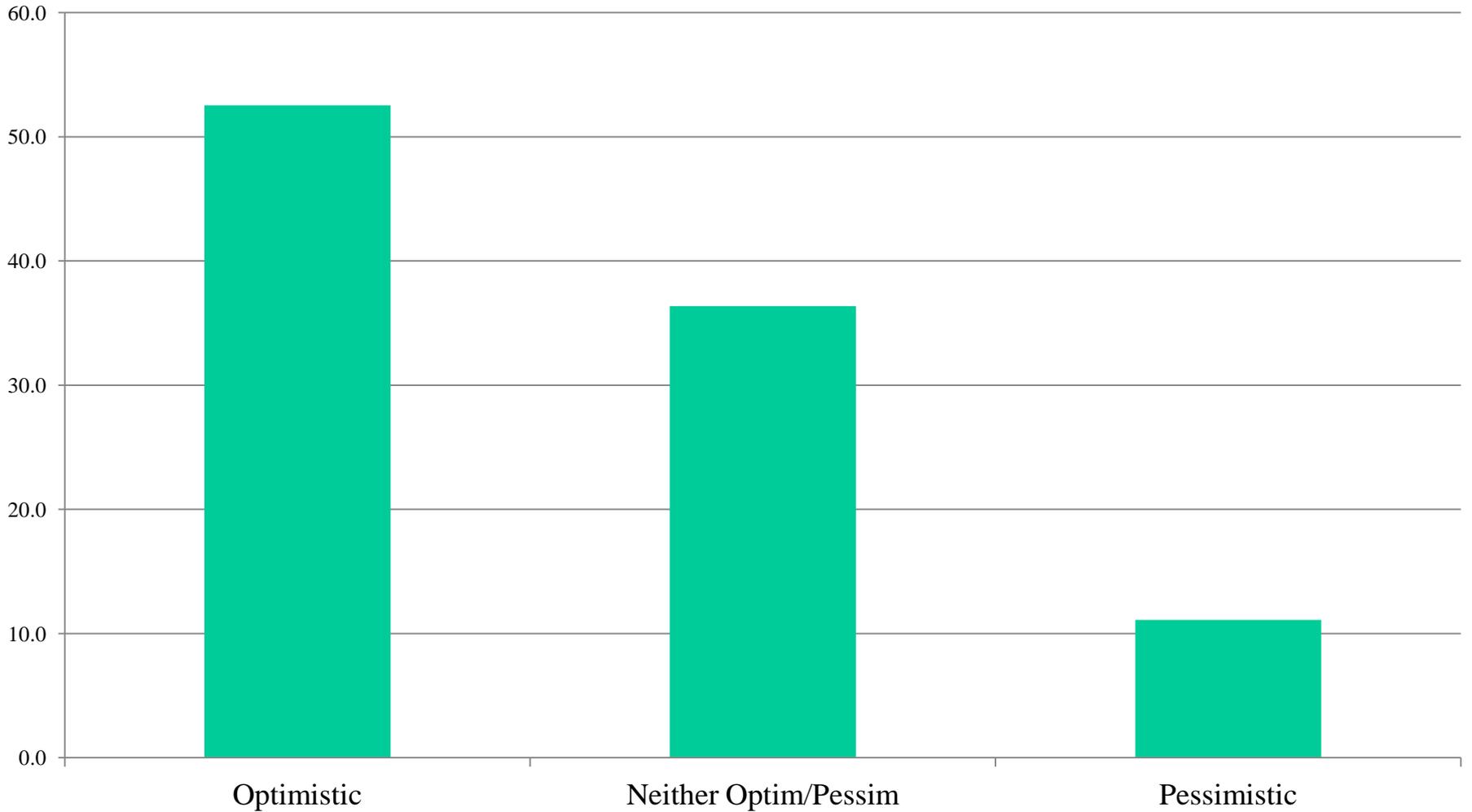


**Does Your Company Notify Its Customers of Needed Revenue
Increases for Cost of Plant Improvements/Operations
Via Meetings/Mail Prior to Implementation?
Percent of Respondents**



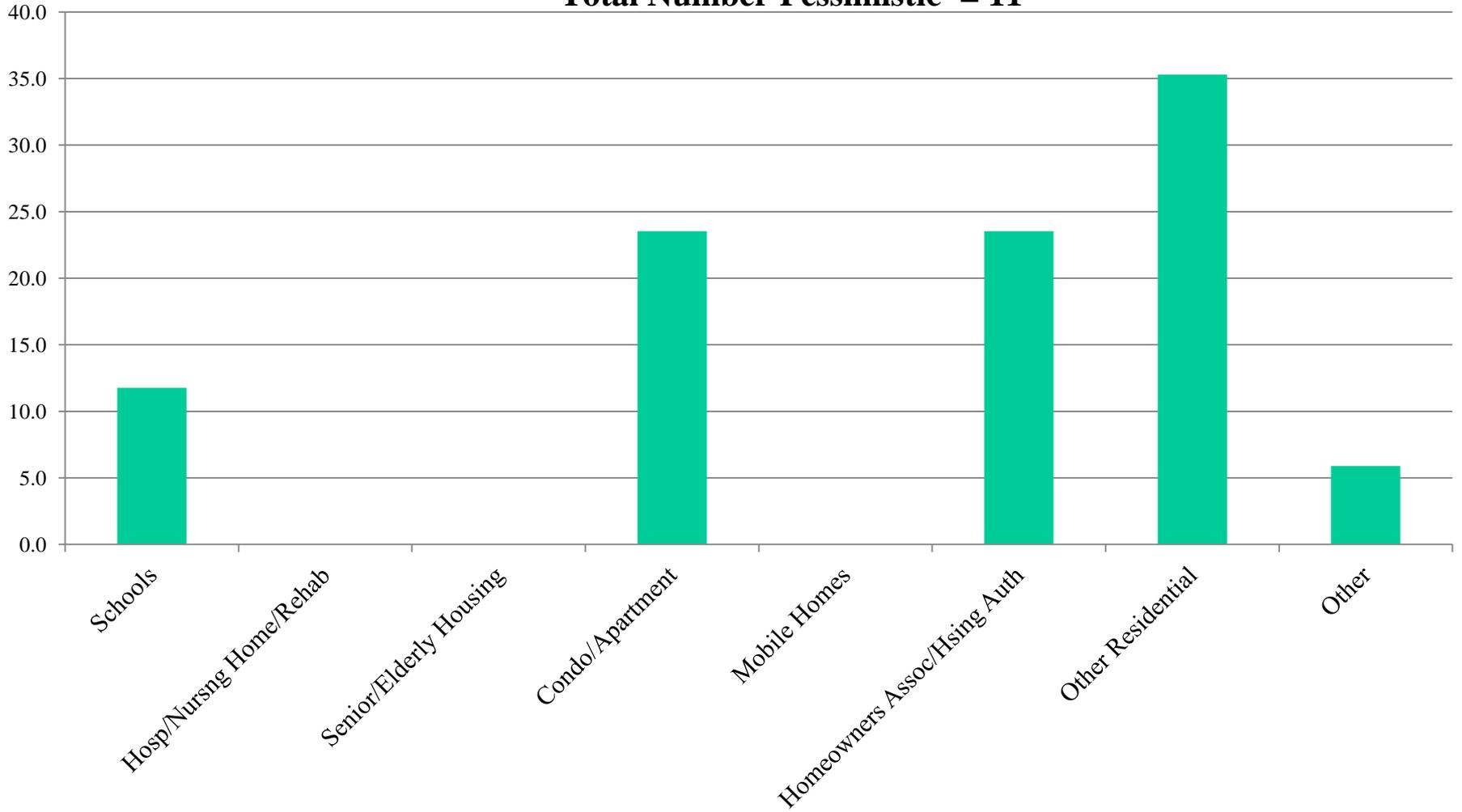
**The Next Set of Exhibits
Describe the Long-Term
Sustainability Opinions
of the Surveyed Systems**

How Optimistic Are You About the Long-Term Sustainability of Your System? Percent of Respondents



Pessimistic About Long-Term Sustainability of Existing System By Customer Type Percent of Total

Total Number Pessimistic = 11



**Department of Health (DPH) CWS
Inspection Report Review
and the DPH “draft” 2014
Intended Use Plan Dollars
As It Relates to the 348 Target Group**

Inspection Report Review Process

- For each inspection report TCG separated the report findings/recommendation into three areas: housekeeping, operation and maintenance, and improvements.
- TCG then rated each system as either **Good, Fair, or Poor**.
- **Good:** System is providing adequate service that meets standards.
- **Fair:** System currently able to provide adequate service to its customers but within the next few years will require improvements.

Inspection Report Review Process (Continued)

- **Poor:** System is not providing adequate service and will need to make major system improvements (source of supply, treatment, storage, distribution).

- This review process is specific only to the content of each inspection report.

Inspection Report Review Findings

- Inspections for the reports reviewed covered the following years: 2 from 2008; 1 from 2009; 18 from 2010; 13 from 2011; 16 from 2012; and 15 from 2013.

- Starting in 2009, inspection reports must comply with the following:
“Effective December 1, 2009, public water systems are required to comply with the provisions of the Groundwater Rule (GWR)...”

Inspection Report Review Findings (Continued)

- One of the requirements of the GWR is that immediate source water monitoring must be conducted any time a system is notified that a routine Total Coliform Rule sample is positive for total coliform bacteria.

- To meet this requirement, a dedicated sampling tap(s) need(s) to be installed to allow for collection of raw water sampling from the source of supply.

Inspection Report Review Findings (Continued)

- TCG found that most of the 65 CWSs did not have the required sampling tap(s) installed, which could result in them being subject to monitoring/reporting violations and potential civil penalties for failure to collect a raw water sample due to the lack of an appropriate raw water sample tap.

- The purpose of the GWR is to provide for increased protection against microbial pathogens (contamination) in public water systems that use groundwater sources.

Inspection Review Findings (Continued)

- The GWR employs a targeted risk-based strategy to address risks through an approach that includes significant deficiencies identified during periodic sanitary surveys.

- A groundwater system is subject to triggered source water monitoring if it does not already provide treatment to reliably achieve at least 99.99 percent (4-log) inactivation or removal of viruses.

- Based on the TCG's inspection report review, none of the 65 CWSs appeared to have a DPH approved 4-log treatment system in-service.

Inspection Report Review Findings (Continued)

- 7, or 11%, of the CWSs were determined to be **“Good”**.
- 54, or 83%, of the CWSs were determined to be **“Fair”**.
- 4, or 6%, of the CWSs were determined to be **“Poor”**
- 3 of the 8 additional CWSs serving senior housing (added to the original sample of 57) were rated **“Good”** and the remaining 5 were rated as **“Fair”**. None were rated **“Poor”**

Inspection Report Review Findings (Continued)

▪ 13, or 20%, of the CWSs were cited by DPH as having deficiencies identified by TCG as housekeeping. These included excessive vegetation around well facilities, storage of material near well facilities not related to water operations, pump house door not properly locked to prevent vandalism, etc.

▪ 61, or 98%, of the CWSs were cited by DPH as having deficiencies identified by TCG as operations and maintenance. These included lack of an annual flushing program and essential valve maintenance program, inadequate recording of weekly production, etc.

Inspection Report Review Findings (Continued)

▪ 19, or 29%, were identified by DPH as CWSs that should develop additional capacity (via a new well, additional storage, and/or interconnection to a neighboring water system with excess capacity) to help meet demand and redundancy in the event of a well failure.

▪ 36, or 55%, of the CWSs were identified by DPH as having inadequate sanitary separation, watertight seals, vent screening, etc. In addition, DPH cited wells that were subject to surface runoff and backwash.

DPH “draft” 2014 Intended Use Plan Dollars (IUP) As It Relates to the 348 Target CWS Group Review

- For 2014 the IUP has funding available for water system improvement projects totaling \$62.4 million.

- Of that amount about 1.2%, or \$737,000, is allocated to the 348 Target Group for emergency generators.

- There is another approximate 1%, or \$506,000, allocated to the 348 system target group for filtration, tank, valve and main projects.

DPH “Draft” 2014 Intended Use Plan Dollars (IUP)
As It Relates To The 348 Target SCWS Group
Review (continued)

- The IUP protocol requires that over 15% of the funds to be allocated be earmarked for systems serving populations of 10,000 or less.
- The survey data and other information indicates that requirements of the IUP process are a barrier to participation by the CWS.
- **The survey data indicates that the financial needs of the SCWSs over the next 5 years at about \$50 million and the 2014 IUP allocation rate is only about 2% of the need identified through this process.**

**Review of the Past 5 Years Acquisition Activity
Related to the CWSs
Based on the Major Water Utilities'
Filed Discovery Responses**

PURA Docket 13-08-13

Acquisition Activity

- Aquarion has acquired 10,253 customers (5.3%) through acquisitions over last five years; 7,332 customers by the United Water acquisition. It has acquired nine companies, 58 water systems
- Connecticut Water (CWC) has added 755 customers (0.85%) (seven companies) through acquisitions over the last five years.
- No other water company has completed an acquisition of a water system in the last five years (one is pending - Torrington);

Acquisition Costs

- Total acquisition costs (purchase price plus post acquisition investments) over the last five years on a per customer basis:
 - Aquarion - \$4,954/customer
 - Aquarion (w/o United Water) - \$2,223/customer
 - Aquarion (UW acquisition) - \$6,080/customer
 - CWC - \$2,594/customer
 - Average - \$4,792/customer
 - These costs per customer compare to total net plant for the acquiring company of \$3,982/customer and \$4,234/customer for Aquarion and CWC, respectively.

Acquisition Costs (continued)

- Aquarion has bought water companies that would normally put pressure on existing customers' rates absent shareholder and acquired customer responsibility.
- In fact, Aquarian's shareholders picked up about 1/3rd of the acquisition premium in the recent United Water purchase; our understanding is that the former United Water customers are continuing to pay the higher United Water rates

Post-acquisition Investments

- Post-acquisition investments as a percent of purchase price:
 - **Aquarion 21%**
 - UW 16%
 - Other 79%
 - **CWC - 165%**
 - **Average 24%**
 - Range (Aquarion) 6% (Dunham)- 465% (Birchwood)
 - Range (CWC) 22% (Country Manor) – 4,500% (Legend Hill)
 - Condition of the water systems acquired by CWC have likely been in much worse condition than those acquired by Aquarion. This indicates significant deferred maintenance.

**Potential Acquisition Cost of Acquiring the Remaining
CWSs**

- Applying the average acquisition cost/customer of \$4,792 to the number of remaining customers served by the CWSs results in a total acquisition cost of \$74 million.
- Removing the United Water acquisition from the calculation results in a total acquisition cost of \$34 million if the remaining small community water systems were purchased.
- It is likely that some future acquisitions may be more expensive on a per customer acquired basis, as they may need more work in proportion to the number of customers acquired.

Post-acquisition Rates

- Aquarion has either retained the acquired water systems' rates or moved the customers to its Eastern Division rates. No unique surcharges or special rates have been created. CWC has moved the acquired water system's customers to its rates. No special surcharges were established.
- Aquarion received an enhanced rate of return in its last rate proceeding and has, with the exception of a portion of the acquisition premium in the United Water acquisition, recovered these premiums from customers. CWC has not received an enhanced rate of return.
- All of Aquarion's post acquisition investments have been put into rate base. CWC's investments are either in rate base or will be placed in rate base for the next rate proceeding.

Acquisition Rate Impacts On Existing Customers

- Aquarion - existing customers' rates over the past 5 years were not affected by the acquisitions.
- CWC estimates that its existing customers' rates have increased by \$42,000 (0.06%) due to its acquisitions.

Unsuccessful Acquisitions

- Aquarion has reported that some potential acquisitions have not been consummated due to:
 - Sale price and poor condition of the water company
 - Cost to upgrade the small water company would far outweigh the revenues needed to serve the system.
- CWC has been approached by seven companies for which it did not consummate the transaction. The reasons include:
 - Poor water quality; Lack of supply; & Unrealistic sale price
 - Geographic locations outside of current operating area
 - Significant capital needs.
- **Voluntary acquisitions may not be possible for some systems.**

Potential Limits on Future Acquisitions

- Aquarion sees no limits to future acquisitions of small systems as long as the appropriate regulatory policies, such as recovery of acquisition premiums, and enhanced rates of return remain in effect. (Note: though they have walked away from some opportunities.)
- Likewise, CWC does not perceive limits on future acquisitions but does have concerns due to the complexity of the approval process and significant capital needs for small systems that are not supported by the customer base and revenues from the acquired system.

Additional Concerns

- In response to discovery, CWC expressed a concern about the creation of state programs that provide monies to small water companies that do not have the necessary technical or managerial skills to operate long term. Such grants may only mask a problem when acquisition of the company may be in the customers' best interest in the long run.

Potential for Streamlining of the Acquisition Process

- Concerns raised about the time and associated transaction costs associated with voluntary acquisitions (particularly the hearing processes) and with requiring acquiring company to be in compliance on day one with certain regulations
- **Streamlining the process may benefit by:**
 - **Employing a single “Joint” applications to PURA/DPH**
 - **Allowing ability to waive hearings, as decided by PURA/DPH, and/or opting for a less burdensome process for resolving disputes.**
 - **Avoiding the need for re-permitting if water supply, land use, and infrastructure are changing post-acquisition.**

Major Observations

- The CWSs have capital needs over the next five years that could approach \$50 million.
- At current 2014 “draft” DPH Intended Use Plan Levels the CWSs are receiving target Revolving Loan Fund allocations of just over \$1 million per year.
- About 18% of the CWSs are not currently collecting sufficient revenues to be meet their daily operational needs.
- The vast majority of the SCWS are currently providing adequate water service. However, most need more routine maintenance than they are receiving. About 6% are in poor condition, not providing adequate service, and need substantial work.

Major Observations (continued)

- The CWS acquisition initiatives by Aquarion and CWC have not had significant rate impacts for their existing customers over the past 5 years. Post-acquisition investments have been very significant.
- Over 56% of the survey respondents would “not” consider being acquired by a larger water system.
- If the consolidation of the CWSs through acquisition is to reach its potential for “voluntary” acquisitions, “streamlining” of the PURA and DPH processes needs to be implemented.
- A concerted effort is needed to quickly identify CWSs that potentially have very high future capital requirements or that are unable to obtain adequate revenues to meet their daily operational and maintenance needs and give them heightened oversight.

PURA Docket 13-08-13

Findings

1. Survey respondents of all customer types rated the cost of regulatory compliance (water quality testing) a significant or very significant cost factor. The mobile home and “other” residential customer categories rated it as a 75% significant or very significant cost factor. [Slide 15 & 16]
2. 5% percent of the survey respondents identified \$8.6 million in capital needs over the next 5 years, which accounted for over 60% of the total capital needs identified by the survey respondents. [Slide 20]
3. The total capital infusion needs of the CWS population over the next 5 years could approach \$50 million. [Slide 21]
4. About 27% of the population served by the CWS (or 40% of the CWSs) may not have any significant capital needs over the next 5 years. [Slide21]

Findings (continued)

5. Of the systems needing capital infusions over the next 5 years, about 80% would need \$1,200 or less per unit of population served. About 50% would need \$350 or less per unit of population served. [Slide 24]
6. About 25% of the survey respondents indicated they could benefit from a supplemental financing fund; 40% indicated they would not benefit; and 35% were not sure.[Slide 26]
7. About 65% of those needing assistance would prefer grants. [Slide27]
8. The average level of debt being carried by the CWs is \$190,000, though the median level of debt was less than \$50,000. [Slide 29]
9. Less than 15% of the respondents had applied for a State Safe Drinking Water Act Revolving Loan. Almost 70% of those who applied received a loan. [Slide 30 & 31]

PURA Docket 13-08-13

Findings (continued)

10. Over 80% of the respondents reported that their revenues would cover their daily financial needs. However, 18% were not able to cover their daily financial needs. [Slide 32]
11. Of those who had sufficient revenues to cover their daily financial needs, about 53% (roughly 40% overall) were also able to escrow some funds for future needs. However, approximately 46% of those who were able to cover their daily financial needs were not able to escrow funds for future needs. [Slide 34]
12. Of those CWSs that were able to cover their daily needs but not escrow funds for future needs, 15% were elderly housing; 18% were condo/apartment complexes; and 27% were “other” residential housing types. [Slide 35]
13. Over 56% of the respondents would not consider being acquired by a larger water company. [Slide 41]

PURA Docket 13-08-13

Findings (continued)

14. Only 10% of the respondents have considered being acquired by a major water company. [Slide 43]
15. The average aggregate increase in rates over the past 5 years among the respondents was 35%. However, the median was less than 10%. [Slide 46]
16. Over 65% of the respondents were owned by private investors or homeowner associations. [Slide 49]
17. Nearly 60% of the respondents have no management succession plan. [Slide 50]
18. Nearly 70% of the respondents have emergency generators, but about 30% do not. [Slide 54]
19. Only 55% of the respondents indicated that they notify customers prior to implementing a revenue increase. [Slide 57]

PURA Docket 13-08-13

Findings (continued)

20. Over 50% of the respondents were optimistic about their long term sustainability, 10 % were not optimistic, and the remainder were not sure either way. [Slide 59]
21. 83% of the DPH inspection reports reviewed were rated “fair”, meaning they were providing adequate service but needed maintenance. 6% were found in “poor” condition and were not providing adequate service. [Slide 68]
22. 98% of the inspection reports were cited by DPH as having operational and/or maintenance deficiencies. [Slide 69]
23. 29% of the inspection reports were identified by DPH as having supply deficiencies. And 55% were indentified as having inadequate sanitary separation. [Slide 70]

PURA Docket 13-08-13

Findings (continued)

24. The DPH 2014 “draft” Intended Use Plan (IUP,) which identifies the proposed water system projects most likely to be granted access to the State’s Safe Drinking Water Revolving Loan Fund, allocates about 2% of the available funds (about \$1.2 million) to the CWS target group. [Slide 71]
25. The financial need of the CWSs over the next 5 years is much greater than can be meet through the current IUP funding/allocation process. [Slide 72]
26. The major water IOUs, Aquarian and CWC, have acquired 63 CWSs over the past 5 years. [Slide 74]
27. The average acquisition cost per customer has been about \$4,800, including post-acquisition investments. On average, the acquisition costs for both companies has been below their net book value per customer, although there have been significant variances. [Slide 75]

PURA Docket 13-08-13

Findings (continued)

28. The post-acquisition costs for both companies have averaged 24% (i.e. 79% for Aquarion (excluding UWC) and 165% for CWC). [Slide 77]
29. Pursuing and acquisition strategy for all the remaining CWSs could require an investment of between \$ 34 million and nearly \$74 million. [Slide 78]
30. The rate impacts on the existing customers of Aquarian and CWC have been negligible over the past 5 years. [Slide 80]
31. Both Aquarian and CWC have pursued acquisitions that have not been successful. Therefore, there are limits on the number of CWSs consolidations that can be effected through acquisitions, no matter how significant the regulatory incentives may be. [Slides 81 & 82]
32. Streamlining of the PURA and DPH acquisition processes may be necessary for consolidations of the CWSs through acquisitions to reach their full potential. [Slide 84]

Recommendations

1. PURA should consider establishing a rate setting policy for newly created CWSs requiring some regulatory oversight to ensure initial rates are cost based and provide a reserve fund for future improvements and emergencies.
2. Smaller CWSs could benefit from a funding mechanism separate from the existing State Drinking Water Revolving Loan Fund. Not all CWSs are going to be attractive acquisition candidates. Funding criteria and administration should be geared to smaller CWSs' needs.

Recommendations-Continued

3. PURA and DPH should explore streamlining of the processes associated with uncontested CWS acquisitions. The need for re-permitting of the acquired CWS's infrastructure needs to be evaluated if there is no intended in use post acquisition. There are statutes in place governing the abandonment of wells, etc.
4. A concerted effort needs to be put in place to identify CWSs with inadequate financial resources and or high capital needs and provide them heightened oversight before options are limited.

Recommendations-continued

5. A process should be developed to identify CWSs in fair condition but based on recent operating performance may be at a high risk for system failure. Both DPH and PURA should work with troubled CWSs to set priorities and attempt to limit rate shock.
6. It could be beneficial for the DPH's triennial inspections protocols to be expanded to include more information on distribution system infrastructure condition, future capital needs and financial condition to help determine if more oversight is warranted by PURA & DPH.