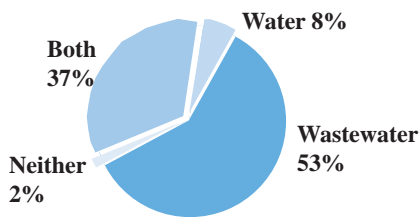


ATTENTION:
WATER & WASTEWATER FACILITY OWNERS & MANAGERS
SURVEY RESULTS ON GEOGRAPHIC INFORMATION SYSTEMS

The following is a summary of the results of the CET GIS Survey that was distributed earlier this year. CET thanks you for your participation in this survey and for the information you provided. If you have any questions or comments about these survey results, please contact Ray Myers at 1-800-643-8260 or e-mail rhmyers@cet-inc.com.

GIS SURVEY RESULTS
(49 RESPONDENTS)

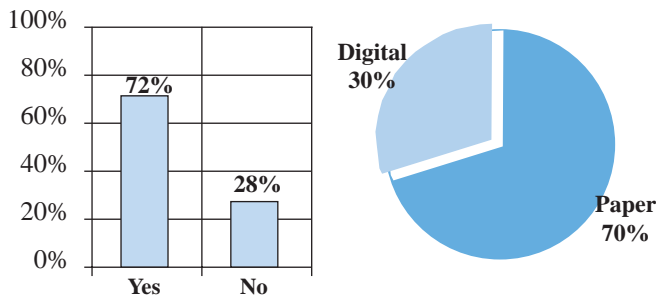
1. Do you operate a water or wastewater system, or both?



2. Miles of Distribution or Collection Lines

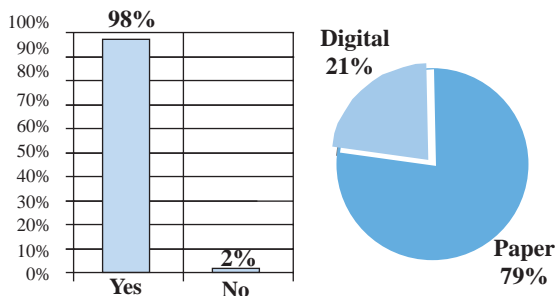
	Average	Median	Largest	Smallest
Water:	88.9	12	900	3
Wastewater:	45.6	27	210	3

3. Do you currently have a Base Map of your service area?



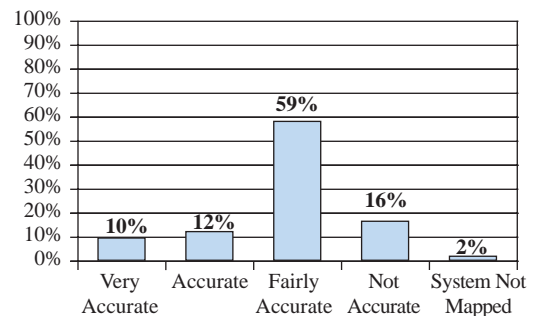
Of the survey respondents, 72% have a base map for their system's service area. The remaining 28% have no base map. However, only 30% of the respondents who have base maps keep them in a digital format. The remaining 70% keep their base maps in paper format.

4. Do you have your water or wastewater system mapped?



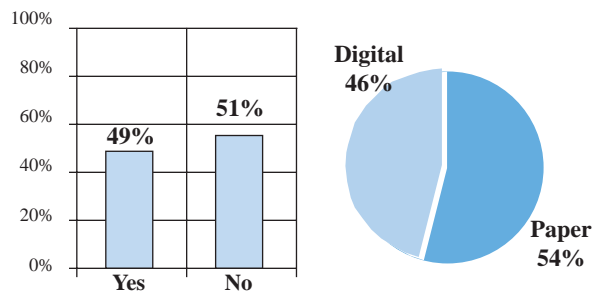
Almost all, 98%, of survey respondents have their systems mapped. Only one respondent does not have their system mapped. Of the respondents who do have their system mapped, 21% have their system in a digital format, while the remaining 79% have their system mapped in paper format.

5. Do you feel that your system maps are accurate?



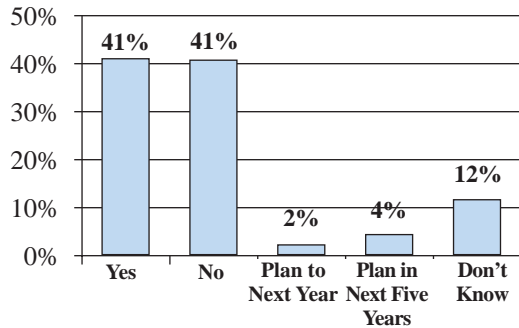
Most respondents, 59%, feel their system maps are fairly accurate. Only 12% of respondents feel their maps are accurate and 10% feel they are very accurate. Additionally, 16% of respondents feel that their system maps are not accurate.

6. Do you currently maintain a database for your system?



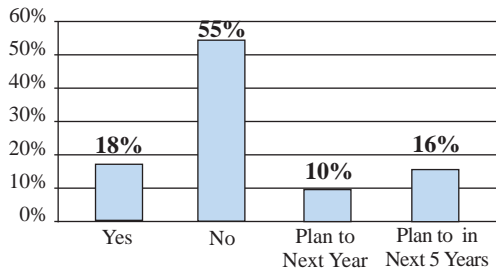
About half the respondents, 49%, maintain a database to store information for their system. The remaining respondents do not maintain a database. Of those who do maintain databases, 46% maintain this information on computers, while 54% keep this information in a paper format.

7. Has your municipality or county implemented a GIS?



About 41% respondents said their municipality had implemented a GIS, while an equal 41% said their municipality has not implemented a GIS. A few respondents, 2%, said that their municipality had plans to do it in the next year, and about 4% said their municipality has plans to implement a GIS in the next five years. About 12% of respondents did not know if they had a GIS implemented or not.

8. Have you implemented a GIS for your water or wastewater system?



Of the respondents, only 18% have a GIS in place for their system, compared to 55% of respondents who do not have GIS capabilities for their system. About 10% of respondents plan to implement a GIS next year and an additional 16% plan to implement a GIS in the next five years.

9. Integration of your GIS with your Municipality's GIS.

Of the respondents who had implemented a GIS or plan to in the next five years, 36% have integrated their GIS with their municipality's GIS and 32% plan to integrate the two systems. The remaining 32% of respondents have not integrated their system with their municipality's.

10. Advantages of Implementing a GIS.

Reporting	4%	Maintenance	
Field Work	28%	and Inventory	26%
Future planning	13%	Mapping	15%
I/I Program	11%	Other	3%

Some other responses included the use of GIS for customer locations, customer relations, and assisting in PA One Call requests.

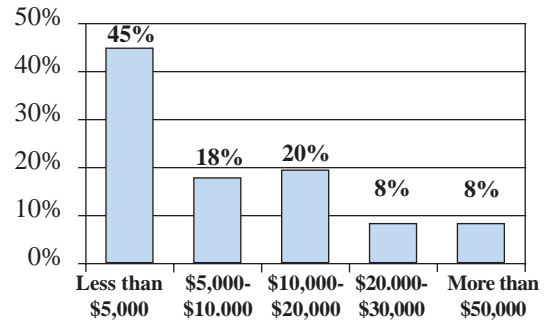
11. Concerns About Implementing a GIS

Too Expensive	40%	Not Enough Time	16%
Need To Update Computers	15%	Too Complicated	5%

See No Use For GIS 3%
Other 21%

Another important concern mentioned was the tasks of collecting data and keeping their data updated and current. Additional concerns included applicability to smaller systems, and how (to integrate) GIS will fit into existing systems of storing data.

12. What do you consider a reasonable cost to implement a GIS?

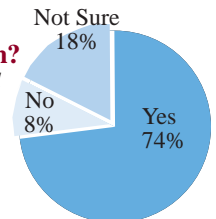


The majority of respondents, 45%, feel that less than \$5,000 is a reasonable cost to implement a GIS. About 18% of respondents would pay \$5,000 to \$10,000 while slightly more, 20%; feel \$10,000 to \$20,000 would be a reasonable cost for a GIS. About 8% of respondents feel \$20,000 to \$50,000 is a reasonable cost, and an equal 8% feel that more than \$50,000 is a reasonable cost.

13. Would a GIS be of benefit to your system?

Respondents that *do not* have a GIS implemented

Yes	74%
No	8%
Not Sure	18%



14. Questions for participants who *have* implemented GIS.

a. Do you have an employee whose duties include managing your GIS?

Yes	45%
No	9%
Responsibility Shared	45%

b. Does your staff have any formal training for your GIS?

Yes	55%
No	18%
Staff is Self Taught	27%

c. How often do you use your GIS?

Often	36%
Once a Day	18%
Once a Week	18%
< Once a Week	27%

d. Would you like to use your GIS more often and to do more tasks?

Yes	100%
No	0%

e. How much did your system cost to implement?*

Average	\$59,833
Avg. per Mile of Pipe	\$1,143
Max	\$150,000
Min	\$3,000

* Only 6 Respondents Answered This Question



CET Engineering Services is a full-service environmental engineering firm and is dedicated to providing practical, cost effective services from planning through operation. For more information on CET Engineering Services, please call or e-mail us, or visit us at www.cet-inc.com.