Shifting Tides

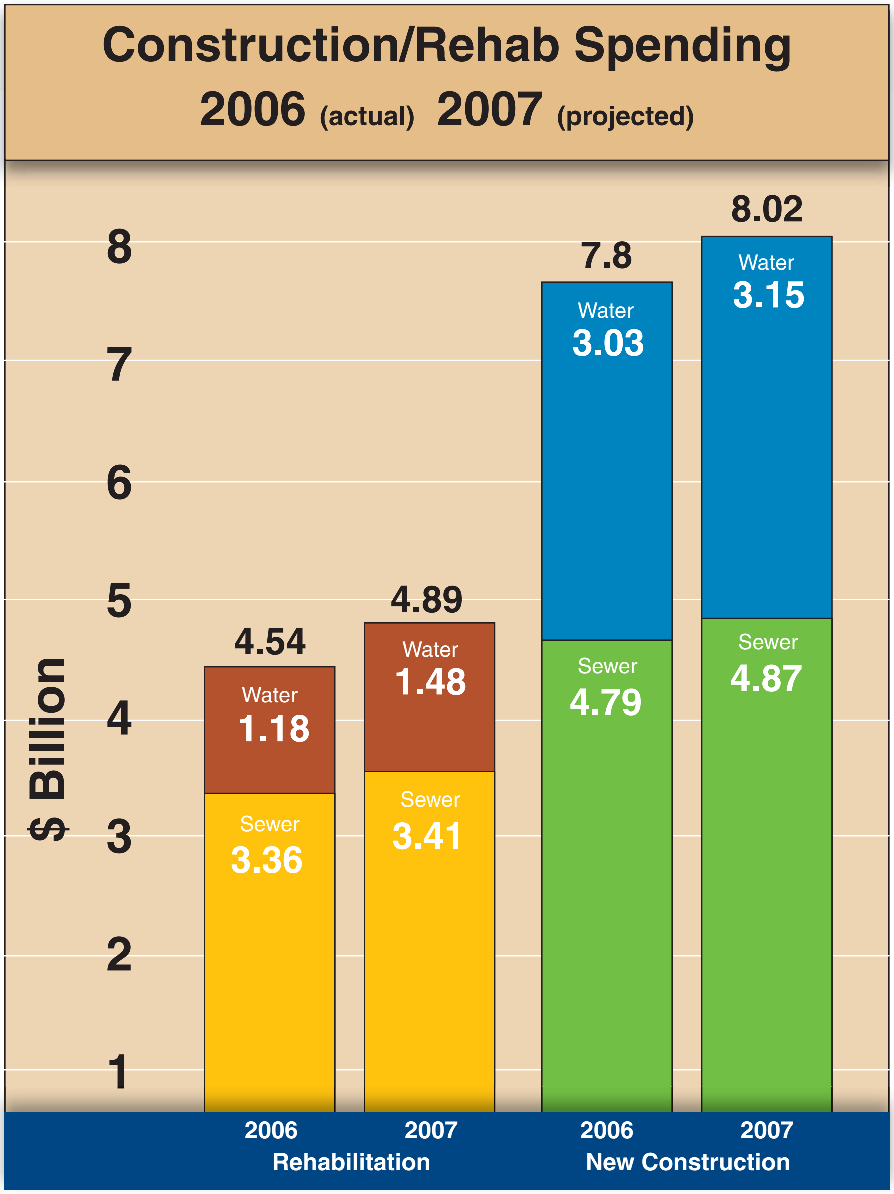
by Robert Carpenter ■ Editor

Funding Issues Become Increasing Important Issue For Cities

For most city sewer and water departments across the country, 2006 was a year of uncertainty, politics (both local and federal) and a heaping dose of spending reality. Going forward into 2007, over 75 percent of the respondents to *Underground Construction's* 10th Annual Municipal Sewer & Water Survey perceive a funding gap between what is budgeted and what is actually needed to meet growth demands, while still maintaining their sewer and water infrastructure.

As a result, actual spending in 2006 fell short of what was hoped for by many cities, yet was still a strong year. And, despite funding issues, most city sewer and water officials anticipate a growth in 2007 expenditures – though at a smaller rate than in 2006.

New sewer and storm water construction projects are expected to total $4.87 billion in 2007, an increase of 1.6 percent over $4.79 billion in actual spending in 2006. New water construction is anticipated to grow by 3.8 percent to $3.15 billion.



Sewer/storm water rehabilitation was $3.36 billion in 2006 and should rise a modest 2.5 percent to $3.41 billion in 2007. Still, sewer rehabilitation growth continues to outpace that of new construction.

But the biggest jump in spending will be in water rehabilitation, further validating a trend that first emerged in 2005. About $1.12 billion was spent in 2006 on water rehab and cities estimate increasing that spending by a whopping 24.4 percent to $1.48 billion in 2007. Cities across America plan to spend, on average, $276,000 on water rehab, a marked change from just five years ago. Various public relations programs by the EPA and a host of associations advocating clean water continue to make an impact.

Surveys were distributed to approximately 8,201 municipal sewer/water management personnel directly involved or responsible for underground piping infrastructure. Responses are categorized by region and city size to avoid artificially skewing results.

Respondents varied in size from tiny towns such as Watson, AR, population 288; Napoleon, IN, population 350; and Blue River, WI, population 420; to large cities such as New York City, Los Angeles, Chicago, Kansas City, Dallas, Miami and Phoenix. Cities submitting reports came from as far away as Hawaii, Alaska and Puerto Rico.

Solid year

For many cities, 2006 was a solid year. For the most part, local economies have remained stable and funding budgets were met. But in 2007, many municipal sewer and water departments are concerned that there may be a regression to wrestling with the age-old issue of getting their fair share of the tax dollar pie. As city coffers remain healthy, city governments can be quick to invest heavily in other infrastructure needs or even “feel good” projects, often at the expense of much-needed sewer and water projects. In essence, after a couple of years of refocused public attention on the problems of the underground infrastructure, the notoriously short attention spans of some city governments have turned elsewhere.

Yet, pressure remains on sewer and water departments to repair and expand their systems. The EPA is continuing to monitor and, if deemed necessary, file suit against cities out of compliance with environmental regulations. Also, state departments of environmental quality are working closely with the EPA to oversee compliance and cooperation of local municipalities. The city of Houston, for example, has pledged to spend between $60 and $90 million per year strictly on rehabilitation. The city worked out this program in conjunction with the Texas DEQ who, in turn, is acting as the liaison to the EPA. This enforcement partnership between the EPA and state DEQs is expected to spread throughout the country.

To complicate funding matters further, programs such as the State Revolving Funds and Clean Water Act have steadily seen their funding levels decrease over the past 20 years. These programs were never intended to be a permanent free money program; rather, they were funded as short-term solutions intended to boost much needed infrastructure repairs and upgrades. With the availability of future federal monies in question, cities are having to become creative to address their funding issues. (see the special report in the January issue of *Underground Construction*).

Mixed bag

Construction and rehabilitation projects around the country in 2006 presented somewhat of a paradox. Many areas experience strong growth while others struggled to fund and let projects. While it's not unusual for growth or stagnation to vary from different regions of the country, in 2006 the ups and downs often came from adjacent states from the same region. Based upon the reports of several respondents, if funding was obtained, construction and rehab programs aggressively went forward. Yet, other areas fell back into same old habit of delaying projects another year.

Most city respondents estimated they need to increase their funding annually by 25 - 50 percent in order to start catching up with their infrastructure needs. About 54.3 percent of cities said they will be forced to consider raising sewer and water rates to meet funding demands. Not surprisingly, cities report that, on average, it's been four years since their last rate increase. "Keeping up with inflation has never been a goal for a utility rates," lamented one assistant public works director from the Northeast. "It's been over seven years since our last sewer rate increase yet, we're expected to continue stretching our dollars further."

An even greater concern for this California utility was the "ability to roll back sewer and storm rates by popular vote."

Going hand-in-hand with funding issues, almost 60 percent of respondents cited dealing with state/federal regulations and the EPA as being a top concern. In addition, 45.3 percent indicated safety issues as a concern, 37.1 said finding qualified employees was a major issue, and 35.6 percent believe community relations is a serious issue.

A new industry buzz term, "buried asset management," continues to make a market impact as increasing numbers of municipal personnel realize the potential aid such a program can bring to their market. An overwhelming 85.1 percent expect asset management to be incorporated into their operations within the near future.

Trenchless impacts

Trenchless construction and rehabilitation methods continue to make an impact on the sewer and water community. In fact, survey respondents displayed an increased appreciation of the role trenchless is continuing to play in their market. About 63 percent said they used trenchless methods on projects in 2006, up from 59 percent last year. Of those who have not used trenchless, 56.1 percent expect to do so in 2007 and 84.1 percent anticipate using trenchless within five years.

About 60 percent of respondents said they actual prefer to use trenchless methods if practical. The introduction of trenchless methods within their programs have had a major impact for 19.5 percent of respondents and a moderate impact for 41 percent. About 39 percent said trenchless work has had only a minimal impact on operations.

Though many municipalities are reluctant to embrace horizontal directional drilling, about 44.6 percent said they will use HDD in 2007, primarily for water projects or force mains, though use for on-grade sewer work continues to increase, albeit very slowly. About 5.6 percent of respondents actually own rigs of which 60 percent are small (under 50,000 pounds of pullback) and 40 percent are mid-sized (between 50,000 and 100,000 pounds of pullback).

Attention to manhole rehabilitation continues to draw keen interest from cities. On average, cities expect to replace or rehab almost 100 manholes each during 2007, compared to 75 in 2006.

Municipalities continue to be big customers for underground construction equipment with a fleet valued at over $1 billion.

Healthy relationships with contractors and consulting engineers is extremely important for any sewer and water department. With that in mind, the survey asked municipal personnel several questions about their relationships with contractors and engineers.

Contractors

Asked to rate contractors they work with on a scale of one (worst) to five (best) in terms of quality of work, timely project completion, fair price and dependability, city personnel gave contractors a rating of 3.7, identical to last year's rating.

As to the most important qualities, from the municipal personnel perspective, for contractors: 93.8 percent cited quality of work; 79.9 highlighted timely completion of projects; 79.8 believed experience is a desirable contractor quality; and 53 percent think contractors should do a better job with their community relations.

A common theme to many of the comments regarding how contractors could do a better job for cities was taking care of the actual job site. "Keeping the job site clean, especially in big cities" is critically important, said this muni manager from the Northeast. "Restore the job site in a timely manner," offered this Midwest respondent. And another Northeast city representative cited the need for both "neatness and working together."

Several city personnel indicated frustration caused by too many change orders – something that always seems to surface in the annual survey. "Don't bid low and expect to get change orders for every little thing," said this Midwestern respondent. "Bidding accurately and avoiding change orders is very important to us," according to this public works director from a mid-sized Southwest city.

Engineers

Rating consulting engineering companies based upon similar qualities, a rating of 3.61 was obtained, down for the third year in a row (3.68 in 2006 and 3.76 in 2005).

Overwhelmingly, the quality of work by engineers was cited by 87.2 percent of municipal managers as being an important characteristic. Technical know-how was cited by 58.5 percent; productive relationships with contractors was important to 50.5 percent; and cost concerns of engineering companies was indicated by 49.5 percent.

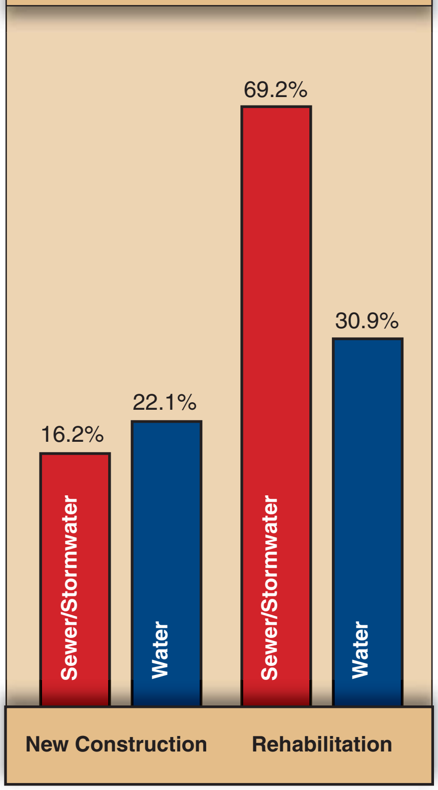
With changing and new technologies, particularly for trenchless work, keeping current is extremely important. On that point, 75.9 percent of municipal personnel believe consulting engineers are doing a good job.

There was no shortage of suggestions for consulting engineers on how they could do a better job for cities. Among the most commonly cited needs were professionalism and experience.

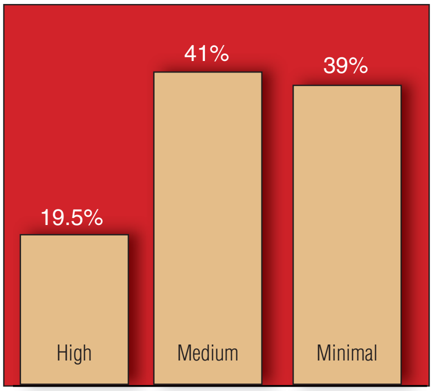
"Give us what we actually need, not what you think we need," stressed this Southeast respondent. A manager from the West Coast pointed out that engineers should spend more time "learning the needs of the (utility) district," while another West Cost representative said that better "understanding client's needs and requirements" would be of great benefit.

Several respondents cited a need for more timely completion of projects. But perhaps the most insightful comment came from this small town municipal manager from the Midwest who observed that consulting engineers need to acquire the "ability to wear the hat of a professional rather than a businessman." ■

How Much Of The Market Is Trenchless?

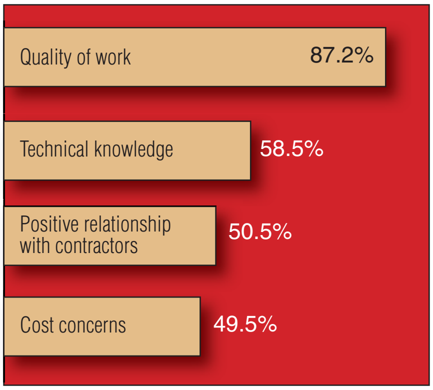


Impact Of Trenchless Methods



Muni Personnel Performance Rating

Most Important Consulting Engineer Qualties



Most Important Contractor Qualities