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PROMOTING EXCELLENCE IN MUNICIPAL GOVERNMENT

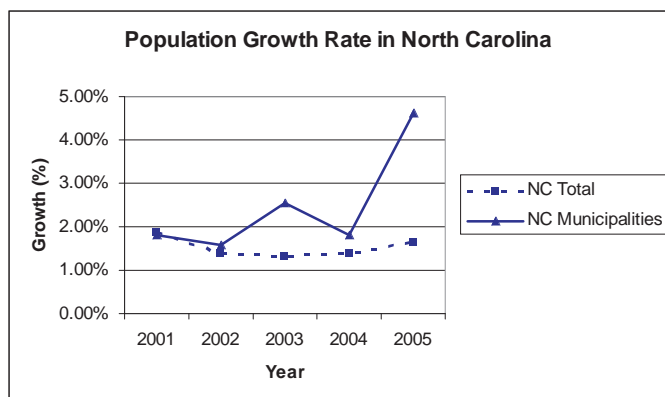
Public water and sewer infrastructure is critical to the economic well being of North Carolina

- A majority of North Carolinians now live in cities and towns, and the growth rate of municipalities exceeds that of the state as a whole.
- A typical municipality spends 23 percent of total expenditures on water and sewer utilities.
- Total municipal spending on water and sewer increased by 11 percent from 2003 - 2005.
- Cities and towns continue to incur more debt for water and sewer improvements.
- Most municipal water and sewer utilities operate close to the break-even point and have very little room for future capital improvements.
- Three-fourths of N.C. public utilities have water and sewer rates more than 1.5 percent of the community median household income, thereby exceeding a generally accepted standard of affordability.
- Thirty years ago, federal funding accounted for 75 percent of all new water and sewer construction. Today, it is about 5 percent.

Introduction

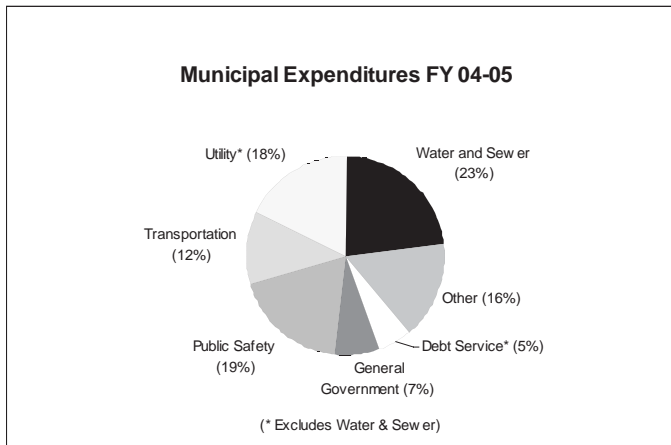
The maintenance, expansion and constant improvement of our public water and sewer infrastructure are critical to the proper development and economic well being of North Carolina. Investment in this infrastructure is a human health and economic development issue. We are reaching a critical stage in the operations and maintenance of our systems because of aging systems, accelerated growth, and a reduction of federal and state funding assistance. To further policy discussion on the merits of increased state funding for water and sewer infrastructure, this paper provides facts about municipal spending and financing patterns. In addition, it will discuss the relative contributions of state and federal partners. (Data sources for this memo are listed at the end.)

Municipal population growth continues to outpace growth of the state as a whole. North Carolina is growing rapidly with an increasingly metropolitan population. The last decennial census showed, for the first time, more people living in North Carolina municipalities than in unincorporated areas. As municipal and metropolitan area populations increase, so does the number of water and sewer users.



Growth rate of NC municipal population vs. state growth rate

Municipal water and sewer systems serve a majority of North Carolinians. Fifty-two percent of the state population is served by a municipal water system, slightly more than for sewer. Over 71 percent of water systems and 86 percent of sewer systems are owned and operated by municipalities.

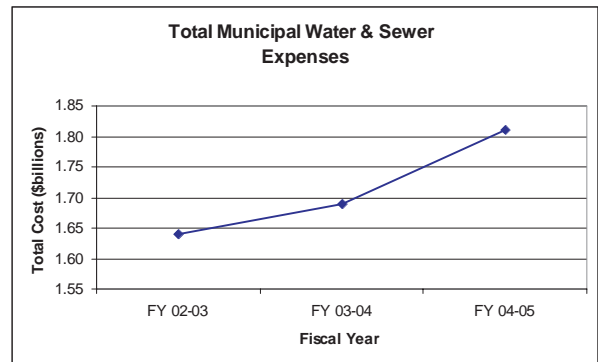


Water and sewer spending accounts for a significant portion of municipal budgets. Water and sewer utility expenditures account for 23 percent of the average municipal budget expenditures.

Water and sewer spending accounts for a significant portion of municipal budgets

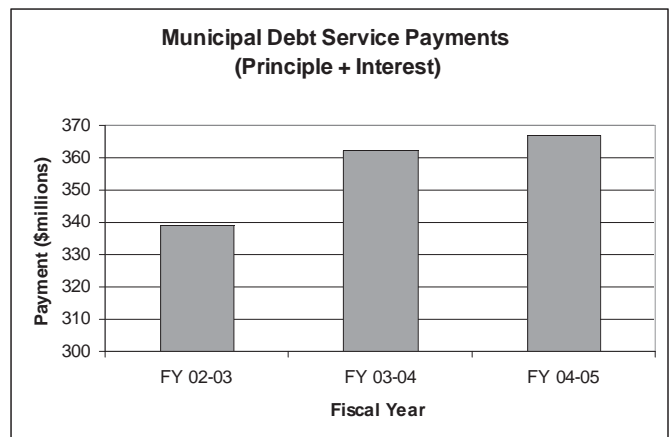
Water and Sewer Expenditures are increasing. Total municipal spending on water and sewer has increased 11 percent in the last three years, with overall expenses in FY 04-05 at \$1.81 billion.

Water and sewer costs as reported in the Municipal Annual Financial Information Reports (AFIR) include spending on existing infrastructure, capital spending on new construction, debt service and salaries. Even though the 1998 statewide bond funds have been obligated, capital spending continued to increase by 10.3 percent over the three year period ending in FY 04-05. Spending on existing infrastructure has increased by 14.9 percent in that same time period and salaries have also increased by 8.6 percent. Debt service payments have continued to increase by 8.1 percent, and this trend is expected to continue without additional funding.



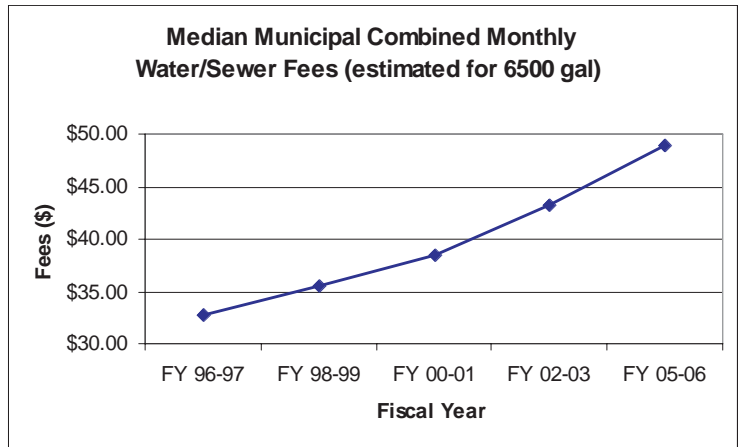
Municipalities continue to incur more debt for water and sewer improvements. An increasingly popular, and in most cases necessary, means of financing water and sewer improvements is through borrowing from either public funds or the private market. The median debt for all municipal water and sewer providers is \$415 per capita. There is considerable variation in per capita debt, from no debt at all to \$10,012 per capita.

Debt takes many different forms, including general obligation bonds, revenue bonds, and other short and long term obligations. Contrary to what might be expected, smaller communities normally have less per capita debt than do larger ones. Approximately 60 percent of North Carolina local governments lack the capacity to borrow, due in large part to the relatively small size of their customer base.



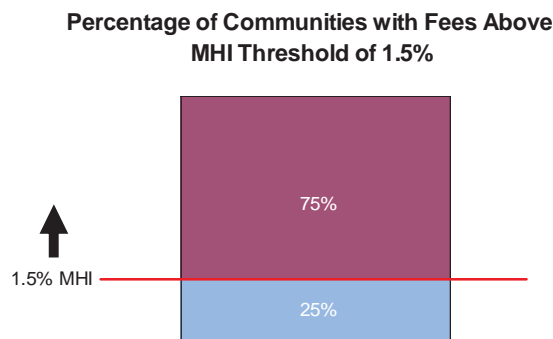
Municipal systems have significantly increased fees to cover expenses.

Water and sewer revenues for all public systems for FY 04-05 were \$1.6 billion, and \$1.4 billion for municipalities alone. This figure includes fees, charges and other miscellaneous revenue. The median fee charged for a residential combined monthly water and sewer bill for 6000 gallons was approximately \$48 in FY05-06. The percentage of respondents to the League water/sewer survey who indicated that they have raised rates has steadily increased from 32 percent in FY96-97 to 51 percent in FY05-06. Fees have increased by 51 percent over the last ten years.



Municipal water and sewer rates only allow most systems to "break even," leaving very little for future capital improvements. The operating margin, a common metric used as an indicator of the profitability of a water and sewer operation, is represented as a percentage of total water and sewer operating revenues. A low number indicates greater expenses relative to revenues. According to a report done by the N.C. Department of State Treasurer, the median operating margin for public water and sewer operations in FY 04-05 was 2.2 percent. This median is influenced by a considerable number of utilities that are operating at very slim or even negative margins. In fact, many of these systems augment their water and sewer operations from general funds. It is a common misperception that most water and sewer operations subsidize other funds within local government. Most municipalities do not transfer any funds in or out. Transfers from these funds do occur, but several communities utilize these accounts to hold money collected as part of a combined bill for other city services. The transfers are made regularly to pay for these services.

Municipalities are constrained by what their customers can afford. There is no universal standard measure of what constitutes "affordable" service; however, several state programs use 1.5 percent of the Median Household Income (MHI) for a combined water-sewer charge as the minimum criteria to receive grant funds.

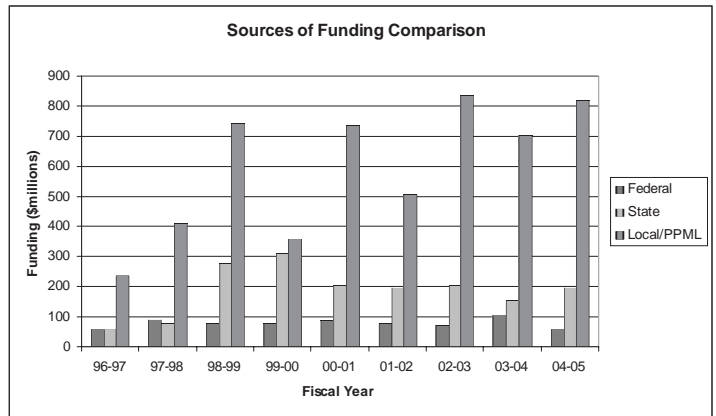


Seventy-five percent of utilities included in the joint water and sewer study conducted by the League and the Environmental Finance Center at UNC charge greater than 1.5 percent of their community MHI for water and sewer service, with a median value of 1.9 percent. To maintain affordable service, municipalities cannot continue to rely on rate increases to pay for all necessary infrastructure improvements.

Public water and sewer providers have significant capital needs. According to the N.C. Rural Economic Development Center Water 2030 Report, water and sewer capital needs exceed \$6 billion for the period of 2005-2010. Over the next 25 years, the report estimated that \$16.3 billion will be needed. Some factors contributing to this level of need include: increasing regulatory requirements that will require significant upgrades to treatment processes, the need to acquire alternative water supplies due to dwindling aquifers and the possibility of drought, and significant improvements to aged sewer collection systems, many containing vitrified clay pipe, which deteriorates over time causing sewage spills.

State and federal contributions have diminished at a time when investment needs are increasing.

Thirty years ago federal contributions to water and sewer infrastructure accounted for 75 percent of new construction. Today, it is about 5 percent. State funding has followed a feast-or-famine cycle resulting primarily from periodic bond initiatives. Although influenced by the availability of grant funds, public and private market loans are the most significant source of outside funding for municipal water and sewer providers. As demonstrated previously, debt is an increasingly prevalent means of funding infrastructure needs.



Relative contributions of federal and state grants and public/private market loans for water sewer funding

The data sources used in this report include:

NC Rural Economic Development Center Water 2030 Report

League Water/Sewer Reports 1996-2002

League and Environmental Finance Center Joint Report 2006

NC Department of State Treasurer AFIR Financial Reports

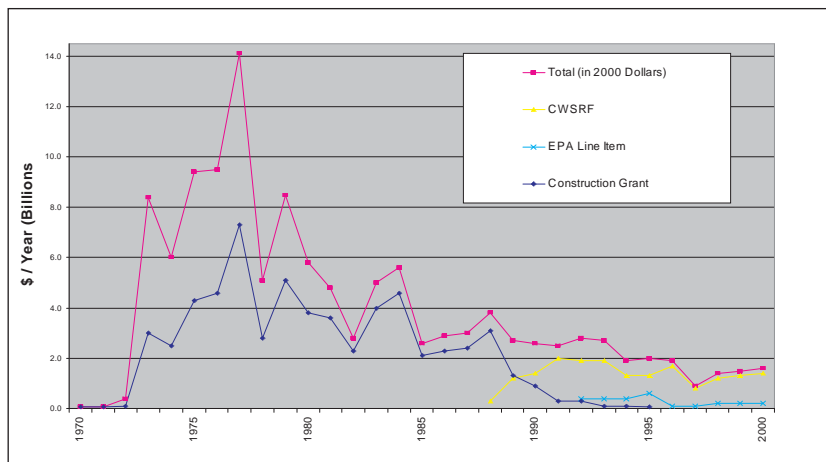
NC Department of State Treasurer Memorandum #1051

NC State Demographers Website

EPA SIDWIS Database

Data are from municipal Annual Financial Information Reports (AFIR). AFIR data are from FY 2004-2005 and represent the most recent year for which complete data are available. It is important to note that 548 municipalities provide information on AFIR forms, and do not all account for revenues and expenditures in the same manner. Potential data source inconsistencies should be considered when reviewing this analysis. In addition League water and sewer reports represent a significant, but incomplete, subset of municipal systems and is therefore not comprehensive data.

While the State Revolving Fund (SRF) program has provided a fairly constant federal funding stream since the late 1990's, it has not garnered the budget support received by its predecessor - the Federal Construction Grants Program. Federal investment, adjusted for today's dollars, in water pollution control was much higher than it is today, averaging more than \$10 billion per year during the grant program (1970 -1988).



EPA directed infrastructure funding (1970-2000)

require expensive rehabilitation. Unfortunately, the same federal commitment that was present earlier has now been drastically curtailed.

This has precipitated a significant shift in responsibility to local and state funding.

As an example of this continuing trend of significant reductions of federal funding, SRF funds continually face the prospect of deeper and more damaging cuts. In the proposed FY 2006 federal budget, the Administration recommended funding at a level of \$730 million, which represented an almost 50 percent reduction from the steady state level of \$1.35 billion that the program received for the seven years previous to FY 2005.

Conclusion

Water and sewer systems are costly to upgrade and maintain, and the options for financing these increasing costs are diminishing. The widespread availability of water and sewer across our state has greatly aided our state's economic development, which benefits everyone. We are reaching a critical stage concerning the operations and maintenance of our systems – aging systems, accelerated growth, and a reduction of federal and state funding assistance. Increasing fees or reliance on other traditional sources of revenue, such as property taxes, cannot pay for all the infrastructure needs.

This report was prepared by NCLM staff, January 2007

In the early days of the Clean Water Act, there was considerable federal funding being put into building treatment plants, pump stations, and distribution/collection lines. Significant capital dollars were expended to get treatment facilities in place. After these facilities were constructed, local utilities assumed the operation of them. Little maintenance, relatively speaking, was needed for these "new facilities" as they were well within their life cycle. Now, 30-40 years later, these facilities need to be replaced or