THE UNIVERSITY of TENNESSEE
MUNICIPAL TECHNICAL ADVISORY SERVICE

In cooperation with the Tennessee Municipal League

TECHNICAL bulletin

July 24, 2008

CONSIDERATIONS FOR ANY CITY THINKING ABOUT DEVELOPING A NEW SEWER SYSTEM:

Ask why, what, how, how much, when, where and who

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WHY BUILD A NEW SEWER SYSTEM?

The usual reasons are:

1. To solve health, environmental and ground water concerns caused by failing septic tanks/drainfields;
2. To attract new or expanded commercial/business/industrial growth;
3. To serve new residential growth; and
4. To preserve and increase property values.

WHAT TO CONSIDER?

1. Are citizens in favor of centralized sewer service? City leaders will have to do a good job of public education to get the residents on-board with the idea.
2. Sewer systems provide a needed service, but they are **not financially profitable**. The primary reasons for having a sewer system are public health and growth. Having centralized sewer likely will increase property values and business tax revenues.
3. If your city decides to develop a sewer system, mandatory hookup is a must. For financial viability, cities with standalone sewer systems (those where the town does not own the water system) should require mandatory hookup where sewer is available.
4. The financial capability of the sewer system is subject to state law and enforcement. The Water and Wastewater Financing Board, under the state comptroller, regulates financial capability of municipal water and sewer systems. Those systems must be operated as enterprise funds (be financially self sufficient, i.e., revenues from user fees must cover expenses).
5. Building a new sewer system may be the biggest project any community ever undertakes. It will be administratively and financially challenging, especially in the first few years.
6. Sewer systems will change your community. For growth to occur, centralized sewer service must be available. Growth will occur where centralized sewer service is available.
7. When city A's wastewater is treated and discharged by city B and city B owns the national pollution discharge elimination system (NPDES) permit, there are advantages and disadvantages for city A.
   a. The advantage is that the contributing city (city A) does not have the liability of the NPDES permit and does not have to operate and maintain a sewage treatment plant.

b. The disadvantages are that city A is dependent on city B for short-term and long-term capacity to handle wastewater from city A in its lines and its plant. City A has no control over rates passed on by city B.

8. If city B treats wastewater from city A, a contract satisfactory to both sides must be developed. City A will still have the administrative, financial, and operating and maintenance responsibilities that go along with operating a sewer collection system. Considerations include:
   a. A contract between two municipalities that includes the following and is prepared and or reviewed by an attorney:
      i. Identifies parties and purposes;
      ii. Specifies each party's responsibilities;
      iii. Has a dispute resolution and/or termination clause;
      iv. Is specific about what rates are to be charged and how, how often and on what basis they can be changed;
      v. Describes the services to be performed;
      vi. Stipulates how and when payments are to be made;
      vii. Includes an indemnity or hold harmless clause; and
      viii. Includes a severability clause.
   b. Administrative responsibilities:
      i. Developing and managing the contract between the two cities;
      ii. Planning, engineering, and construction responsibilities and managing those functions, for instance, procuring engineering services and obtaining easements;
      iii. Procuring financing for the project, including setting tap fees;
      iv. Keeping residents and businesses informed;
      v. Developing policies and procedures such as a sewer use ordinance;
      vi. Determining how billing and revenue collection will be done;
      vii. Setting sewer rates; and
      viii. Receiving and handling complaints.
   c. Operation and Maintenance
      Determining who will be responsible for operation and maintenance and managing the work, i.e., will you hire certified operator(s) or contract for these services?
   d. Funding the project
      i. Several options for grants and loans are available. The city will have to decide how to proceed on funding questions.
      ii. Be aware that the cost of installing a sewer main is only part of the costs. The construction costs to install collector sewers to residences that are widely dispersed can be enormous.

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HOW TO PROCEED

1. Retain an engineering firm to propose viable alternatives and cost estimates.
2. Be in charge. Don't turn the project over entirely to your engineer. Appoint a champion — a person or committee who will coordinate the project, devote time to it and promote it.
3. Get buy-in from as many local groups and citizens as possible. Develop a consistent message about why you are doing this.
4. Ask for free help from state agencies. Check out cities that have been through this process, and talk to them and learn from their mistakes.
5. Have realistic expectations. Keep your eyes wide open. Don't get tunnel vision by listening to one way of doing things and thus not considering other options. Check out everything.
6. Organize. Have a written list of action steps and concrete plans. Work your plan, but stay loose and flexible.
7. Keep excellent detailed records of all contacts, costs, etc.

HOW MUCH WILL IT COST?

Cost depends on the selected alternative. There usually are many different methods that a city can choose from to provide sewer service, for instance, the city could:

1. Build collection lines and a discharging plant;
2. Build collection lines and a non-discharging treatment system such as a drip field discharge (applies only to small systems);
3. Build collection lines and a trunk line to another city and discharge into a neighboring city's system;
4. Allow a neighboring city to build collection mains within your city limits. The neighboring city would "own" all the system and customers. Your city would have no vested interest in the sewer system, but could benefit from the growth that will occur; or
5. Allow a private company to build and operate a sewer system within your city limits.

WHEN?

1. Set goals and deadlines for when certain actions must occur. This will require close communication with other parties involved in the project. Don't get into a situation where you have to make crisis decisions. Allow enough time to think things through and get the information you need to make good decisions. Make sure you understand the financial consequences of your decisions.
2. If seeking grants, become aware of application deadlines.

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WHERE?

1. Phasing in sewer systems may make sense for your city especially if houses are widely dispersed. Again, know WHY you are installing sewers.
2. Start with areas of greatest need. Plan and budget to add other areas later.

WHO?

Again, appoint a spokesman or committee who will commit the time and effort it will take to make this project successful. Consider the skills needed — good communication skills, organizational capabilities, etc.

In summary, ask lots of questions and get answers you can live with before building a centralized sewer system.

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MTAS1297 • E14-1050-000-004-09