

Planning for the Future

by Barney Whatley
Capacity Development Specialist

When a system has a sanitary survey performed on it, one of the questions that is on that survey is whether records exist that would allow the system to complete short and long term plans. The plans themselves are not required by current regulations, but planning for the future is always a good idea. The future that sneaks up on you is never as good as the one you see coming. There are several aspects to long range planning, and planners need to keep an open mind and refrain from getting “tunnel vision” during the process. Age of infrastructure, the possibility of growth or decline in the customer base, loss of key system personnel and aging or obsolete equipment are a few of the items that need to be considered.

With the passage of the American Recovery and Reinvestment Act, there is more money than ever available for replacing the aging infrastructure of American Utilities. When the crisis is over and it comes time to repay the money to reduce the national debt, there is a chance that some of the current programs may be cut. It is important, therefore, that systems begin the process of becoming sustainable and self-reliant. Long range planning and asset management will allow systems to determine the expected lifespan of the infrastructure and appurtenances within the system and will allow for the scheduled retirement and replacement of these items. Some systems have decided to allow future users to pay for needed replacements by borrowing the funding necessary for projects as they are needed, and others have the current users pay the bill by budgeting capital outlay funding for future projects. A good compromise would be to budget a portion of the planned projects and borrowing the remainder, thus allowing all users to share in the cost of keeping the system in good operating condition.

Planners also need to consider the possibility of the future growth or decline of their customer base. These considerations need to be based on fact and historical data rather than what you “hope” will happen. It is not good policy to build a system for twice your population if the actual population has been declining for the last forty (40) years. By the same token, it would be unwise to ignore potential growth or new industrial or commercial customers when designing improvements to the system, as this could limit the economic development of the area. A good planner will look at past history while not neglecting current or future endeavors to entice new industry or businesses to the area.

The average age of utility personnel in the state, especially in the water and wastewater areas is increasing every year, and it will not be too long before these employees retire. Planners need to keep this in mind in the planning process, as a good system without a good and experienced operator will not remain a good system for long. When experienced personnel leave a system, there is a lot of information that leaves with them, and this information may not be retrievable if

the employee in question moves away from the community. One method of keeping the information available is to have a record of it. GPS/GIS mapping is one good way to retain the information. The map itself will show the locations of all the major items of infrastructure, and the GIS portion allows a vast amount of information to be stored within the map. Hydrants and valves can have manufacturers, models, date of installation, maintenance and any other information you have attached directly to the map. The amount of information that can be kept on a well designed GPS/GIS map is only limited by the imagination of those persons designing the map.

Another area that needs to be considered when completing long range plans is the age of system equipment and how quickly it can become obsolete. A computer that was sufficient for the system billing and records fifteen (15) years ago will most likely be unable to handle the job today, and software used then will no longer be supported by technical assistance, while newer software requires newer operating systems, which require larger hard drives, etc. Copiers and other office equipment also become obsolete and need to be replaced. Planners need to balance the need for up-to-date equipment against the initial cost and the expected lifespan of the equipment. Getting a computer, copier or other piece of equipment that far exceeds the system's needs does not make sense if it will need to be replaced before its full potential can be utilized.

Long range planning should be utilized by all communities for all departments so that the decision makers can perform their duties based on valid information, good historical data and a realistic expectation regarding their customer base. Actions taken ahead of time can reduce the impact of system failures and allow for timely and effective steps to be taken during times of stress. Future projects can be planned and completed prior to the time when the components being replaced have completely failed, and interruptions in service can be minimized.