

VI. The Infrastructure

When you hear the word "infrastructure," you usually think of city streets, water and sewer mains, drainage systems, and related physical items that compose the city's overall operational plant. In fact, many of these items are the basic services for which cities were originally incorporated to provide to their citizens, so we expect to review them when first arriving in a new city. Most of us fail to realize, however, that there is another infrastructure which is not as self-evident as either streets or water mains, but which is just as important in the overall operations of a city.

This other infrastructure, which is called the "civic infrastructure" by the National Civic League, is composed of skills and processes which must be present for a city to effectively deal with its specific and unique concerns. A city needs both infrastructures in order to operate. Certainly, without a physical infrastructure, a city could not exist unless it were a service free city with no purpose. In a more subtle way, however, the civic infrastructure makes the physical infrastructure possible.

Without the civic infrastructure's community leadership, cooperation, education, and governance professionalism, citizens would not readily support bond issues that pay for the physical infrastructure. Nor would they allow the elected officials and/or the appointed officials the necessary discretion, or provide the positive input, needed for good problem solving. Unless the citizens agree that millions of dollars should be spent upon the physical infrastructure, then it will not happen. The civic infrastructure is the mechanism that ensures that the physical infrastructure is built and properly maintained in an efficient and effective manner! Think about it.

Consequently, when you first arrive in a city, you should attempt to evaluate both infrastructures, because they will both have a bearing on your job.

Physical Infrastructure

During the past 15 years, there has been much discussion about how the cities' physical infrastructures were being ignored or forgotten because of the loss of federal funding, new federally mandated programs which took away local resources from the infrastructure, and/or local political decision making. Below are a few of the local reasons for budgeting fewer funds for the physical infrastructure:

1. The maintenance of infrastructure items is not glamorous and does not achieve headlines. How can you compare the construction of a new facility such as a water treatment plant, streets, museum, library, etc., with typical maintenance type activities such as street seal coating, reroofing an existing structure, or replacing a pump at the sewage treatment plant? While new construction projects are usually heralded with headlines, pictures, and ribbon cutting, maintenance normally goes unnoticed.
2. Most infrastructure items do not have pressure groups representing them before the City Council. We have all heard of such support groups as "Friends of the Library" or "Friends of the Parks", but there are no "Friends of the Sewage Plant" or "Friends of the Water Distribution System."
3. Much of the infrastructure, with the exception of streets, parks, and buildings, is located out of sight and, mistakenly, "out of mind." Who can witness the crumbling of a sewer line, the corrosion of a water/gas line, the failure of a pump at the sewage treatment plant? Even streets may appear to be in good shape to most citizens, but base failure caused by the need for a maintenance sealcoat job may spell its eventual failure. Or parks may look good, but the playground is in non-compliance with the latest safety standards.

4. It is easy for the City Council to borrow from the street, utilities, and other maintenance items by budgeting less for infrastructure maintenance. When in a financial crunch, the Council will be inclined to look at the \$250,000 budgeted for street sealcoating and cut that amount by \$50,000 to \$100,000. No one will oppose it, because the problem resulting from less sealcoating will not be noticeable for several years.

5. Cities have increased their emphasis on such items as social services, image building, and beautification, while depending upon the same sources and levels of revenues, which has drawn money away from the infrastructure. A common comment heard from cities to support this de-emphasis on infrastructure is, "We can cut back on the street department budget this year because it is big enough, and a little cut will not hurt it." These street moneys are then used for day care centers, health clinics, alcoholic abuse programs, landscaping, community promotions, etc. There is nothing wrong with these new programs, but if a city is assuming responsibility for operating them, then there should also be a new revenue source.

6. Cities are postponing maintenance operations because they expect federal aid. "Over-dependence on federal grants for local streets and utility systems may actually accelerate the deterioration of those facilities because cities have used federal aid (the actual or projected receipt thereof) as the basis for reducing their own expenditures on infrastructure improvements."¹

How can you determine the condition and adequacy of your city's physical infrastructure? Initially, a simple windshield survey can tell you much about obvious defects such as deteriorating streets and sidewalks, antiquated fire hydrants, poorly maintained equipment, and buildings needing repair and maintenance. However, the unseen problems are the ones that will require more intensive work to find. Such problems as leaking water lines, inefficient sewer pumps, street base failure, corroding gas lines, and rubble filled sewer lines are not readily detectable until a major problem occurs.

Below are a few methods for determining the condition of the infrastructure before major problems occur:

Determining Condition of Physical Infrastructure

1. Visit with supervisors on the job and make on-the-job inspections (i.e., MBWA which is "management by walking around"). Check the sewage treatment plant and observe if the comminutor or bar screen is working, establish if the sludge pumps or blowers are efficient, and make sure the facility is well maintained. Check your street patching crews before and after pothole repairs for the quality of their work. Review the leak records and determine what the turnover time is on work orders. Observe the water crews' work on repairing a leak and check the condition of the main, type of material, depth of the main, etc. These activities should be SOP for managers in small cities, and certainly during the first few months on the job in most cities regardless of the city's size, because they give you a good feel for what is actually happening in the field.

Managers should not have a prima donna attitude about field inspections and visiting work sites. Your job is knowing what is going on in the field--much of the city organization's purpose is dependent upon the field work. A good example of the importance of management's knowledge of field work is from the military. General Norman Schwarzkopf, the alliance commander in the Persian Gulf War, was a lieutenant colonel in Vietnam and, upon assuming command of an infantry battalion, shocked his staff by visiting the infantry companies in the field. He found improperly camouflaged camps, no helmets being worn, and poor perimeter security. He observed all this just in

¹ *Texas Town & City*, December 1983, Vol. LXX. No. 12, Texas Municipal League, Austin, p. 18.

the first 10 minutes of visiting his first company. His battalion went from being called “the worst of the Sixth” to the best.²

2. Tabulate data concerning the basic services in such a manner that it provides a fully documented description of the problems. For example, a water department supervisor might inform you that the city has lots of leaks in the northern portion of the city. Such a statement gives you basic information, but it is not sufficient to sell a bond election or to make decisions about departmental priorities, pipe material selection, crew work standards, etc., because you do not know what caused the leaks. They may be caused by poor pipe material, shoddy workmanship by the original contractor, soil or geological conditions, improper city maintenance, etc.

By compiling all the leak records on a map, you may discover that an 8" cast iron pipe installed in 1925 in the north part of the city averages 10 leaks per mile per year, while the house services installed on a PVC main in a 1975 subdivision are leaking at the rate of the 25 leaks per mile per year. In other words, there are two different problems with two different solutions: first, the cast iron pipe has deteriorated because of acidic soil conditions and should be replaced with either an AC or PVC pipe which the soil will not affect. And second, the house service lines constitute a more serious problem because they are a type of plastic that is faulty and rapidly deteriorating, with a potential replacement of over 500 service lines.

3. Correlate the results of this chapter with that of Chapter IV on the Budget to determine if spending levels on the basic services for infrastructure maintenance have remained level, decreased, or increased when adjusted for inflation. These spending levels can give you a good indication of your city's maintenance priorities and may provide evidence concerning why the infrastructure is suffering. For example, if expenditures for street seal coating has declined over the years, then an increase in street potholes should not be surprising.

Civic Infrastructure

Did you ever wonder why some cities always experience political and local governmental problems? Why they have a high turnover of city managers? Why they have problems meeting federal or state mandates? Why they can not seem to solve a major local problem without involving other local political issues? There is no exact answer, but a close analysis of their processes and skills for problem solving may reveal a flaw in their civic infrastructure that leads to governance problems.

The National Civic League describes cities such as those that focus on meeting challenges versus those where the most effort goes into figuring out whom to blame for problems. The main areas of difference between the two types of cities are as follows:

Successful Cities

- * aggressively practice collaborative problem solving and consensus-based decision making,
- * strive to create win-win solutions, and
- * use their power to bring people together.

Non-Working Cities

- * marked by contentious and obstreperous behavior,
- * leaders are threatened by citizen involvement and input,

² H. Norman Schwarzkopf, *It Doesn't Take a Hero*, (Linda Grey Bantam Books, NY, 1992), p. 151-155

- * try to use their power to decide for others, and
- * attempt to convince citizens to follow a predetermined course of action.³

Certainly the successful cities have something that the non-working cities lack, and this is a good civic infrastructure. The civic infrastructure of a city is measured through the Civic Index, which was developed by the National Civic League for use in the selection process for the All-America City Award Program. The ten components of the Index serve as a description of the types of skills and processes that must be present for a city to effectively deal with its concerns. Simply put, a city must have the capacity to solve the problems it faces.

The Civic Index includes criteria such as citizen participation, community leadership, government performance, volunteerism, intergroup relations, capacity for cooperation and consensus building, and community vision and pride. Questions you should ask to measure your city's Civic Index include the following:

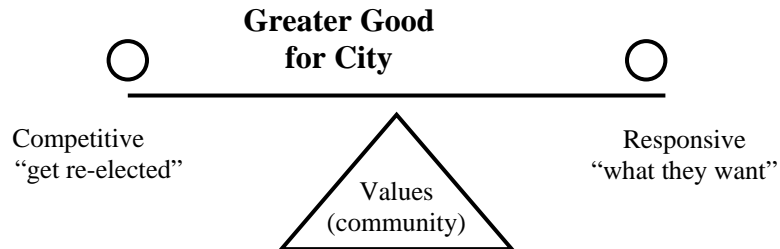
- * Is it difficult to find people to run for public office?
- * Is community leadership results oriented?
- * Is community leadership willing to take the long-term over the short-term view?
- * Is there an ongoing forum for local leaders, or do they only meet in times of crisis?
- * Are services provided equitably?
- * Is there a healthy climate for volunteerism and giving?
- * Are proactive approaches to problem solving utilized?
- * Are community planning activities viewed as "one shot" or ongoing?

An important component of the civic infrastructure is leadership, because what a city does starts with leadership and not the implementation process. Frequently mayors, city councils, and city managers attack a problem without laying the groundwork for ensuring success. This correlates with the National Civic League's position that the mayor and city council need to worry more about getting people and organizations to agree on a plan and then work together to solve problems rather than just agree on the problem. Key to the groundwork is knowing that your values are in the right place. Are they based on "what it takes to get reelected?" or on just doing whatever the electorate wants at that particular time? The point is that either extreme is not for the greater good of the community. The right place for the city council's values is basing their actions on "the greater good of the community."⁴

³ "A New Approach to Community Problem Solving," Christopher T. Gates, President National Civic League.

⁴ Presentation by Marilynne B. Davis, MBD & Associates,

Community Values



Appraising your city's civic infrastructure is not as easy as appraising its physical infrastructure, because most of the answers are not readily available from public records or immediate observation. However, discussions with local residents and city leaders will provide you with a good indication. Reviewing city council meeting minutes over the past few years will also provide you with some insight into your city's civic infrastructure. MBD has also developed an effectiveness index for mayors and city councilmembers to help determine if their leadership styles are helping or hindering community problem-solving (See Appendix VI-A.). Of course, the best way to learn is on-the-job experience by working through a problem-solving episode. There is nothing like locating and permitting a new landfill site or addressing a major community need such as a mental health and retardation center to help you gauge a city's civic infrastructure.

Conclusion

As explained above, it is very important to review your city's physical and civic infrastructures. After your initial review, the best time to do this is annually, prior to the beginning of the budget process. If problems are discovered, you can present physical infrastructural problems to the city council during the budget process, which is the best time to determine priorities (See Chapter I. "Determining Priorities"). Civic infrastructural problems are sensitive items to discuss in public, but can be brought to the attention of the mayor and councilmembers through internal memos or one-on-one meetings. The key to problems in either area is to realize that both infrastructures require continued maintenance on a regular basis. The physical infrastructure requires an inflow of funds for recapitalization and maintenance. The civic infrastructure requires ongoing leadership training, planning, information sharing with the public, and re-evaluation. Regardless of the city council's response to problems in either of the infrastructural areas, you, as city manager, must recognize the infrastructures' importance in order to manage the city properly.