

**HOW DO GOVERNMENT ORGANIZATIONS  
EVALUATE THEIR PERFORMANCE?**

**INTRODUCTION OF  
DYNAMIC GOVERNMENT PERFORMANCE MEASUREMENT**

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## **INTRODUCTION**

During a city council meeting, referring to a budget request from the Police Department for a few new positions, the mayor asks the police chief, "I see you are asking for more police officers. But, I would like to know the ratio of number of police officers to our community population and the same ratios for our comparable cities."

The key issue behind the mayor's question is whether more officers are required in order for the city to serve the community EFFECTLY. This question can be answered best by comparing with other cities. The acceptable performance level of local government agencies is formed within a group of cities that possess similar attributes (e.g., population, income, geographic location, etc.). These cities are also known as "comparables." In the context of this writing, measuring by comparison is defined as "horizontal comparison." In addition to horizontal measurement, local government agencies also measure their performance by comparing certain factors in different time periods. For example, they may compare the number of building inspections conducted in June last year against that number in the current year. This type of measurement is known as "comparing by trend."

Government performance measurement is an important management issue. Elected officials and agency administrators rely heavily on the results of these measurements for goal setting and planning. In addition, evaluating one's past performance will provide valuable information for performance improvements.

How do public agencies measure their performance? The first step in conducting horizontal comparison is to send out surveys to comparable agencies and collect performance data. The next step is to compile the data for reporting. The performance level of a particular agency is examined by ranking all participating agencies' data, and then locate the agency's performance in reference to its ranking. In the case mentioned earlier, the mayor is in fact asking for the referenced ranking between the city and its comparables. The seemingly easy process often takes a great effort from staff in terms of time and financial resources. For example, to send out paper surveys, for example, is a very time consuming process. Likewise, the responding agencies would spend much of their time on replying to the survey. As a result, most public agencies do not conduct surveys often.

The information technology provides an opportunity to change the way measurements are conducted. In this whitepaper, we will introduce a system jointly developed by Northwest Municipal Conference and CityTech USA, Inc. The creation of the system signifies a new era of government performance measurement.

## **THE CREATION OF DYNAMIC GOVERNMENT PERFORMANCE MEASUREMENT**

Northwest Municipal Conference (NWMC) is a professional organization that serves the needs of local governments through a variety of policy initiatives, programs and services that combine the resources of individual members to address regional issues. One of the services by NWMC was a Performance Measurement Program. Developed by the efforts of its member municipalities, this program utilized a survey to collect data from participating municipalities. Upon receiving the members' data, NWMC staff compiled and sent the data back to their members for further analysis. Having experienced the trends in Internet technology, NWMC decided to team up with CityTech USA, Inc. to move the program to another level. CityTech USA is an application services provider that serves public organizations exclusively. In addition to its expertise in providing online management tools for public organizations, CityTech USA, Inc. also specializes in survey and performance evaluation methods.

The formation of the project team by NWMC and CityTech USA paved the way for a successful program, Dynamic Government Performance Measurement (DGPM). Under the cooperation between the two parties, there is a single but rather ambitious goal: to provide a performance measurement and planning tool for member municipalities.

### **THE PROGRAM**

#### **Design of the Measurement Structure**

The previous version of NWMC program was designed to collect variables used for the measurement. The new program takes that approach one step further: it measures. The GASB (Government Accounting Standards Board) provides a framework for evaluating public agencies' operation.\* Under the framework, there are to 6 types of measures:

1. Efforts (Inputs). Financial and non-financial resources put into providing services including administrative, capital and personnel costs.
2. Activity/Process. Processes being used to provide services.
3. Output. The quantity of the service provided; the product of the work.
4. Service Quality. Evaluation of the service: timing, customer satisfaction, appropriate services provided.
5. Outcome. Results achieved from the outputs.
6. Efficiency. Relationship of inputs to outputs.

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\* GASB, (August, 2003). Reporting performance information: suggested criteria for effective communication.

The design of the DGPM is based on the three performance areas: *Efforts*, *Output*, and *Efficiency*. Table 1 below shows variables collected to apply the measurements. Please note, there are more than hundred variables included in the system. The chart only lists some examples.

**Table 1: Sample of Measurement Variables:**

Measured Areas:	Efforts	Output	Efficiency
<b>Sample Variables</b>			
V 1	Community Area (sq. miles)		
V 2	Total agency budget		
V 3	Total PWs budget		
V 4	Total Fire Dept. budget		
V 5	Total agency FTE		
V 6		Total # of fire Inspections	
V 7		Total Miles of Sidewalks	
V 8		Total # of speeding tickets	
V 9		# of fire stations	
V 10		Total # of PWs staff (FTE)	
V 11			Ratio of V 6 to V 4
V 12			Ratio of V 3 to V 7
V 13			Ratio of V 1 to V 9
V 14			Ratio of V 5 to V 2

What these variables are intended to measure are self-explanatory. However, as one may see, these variables alone do not offer meaningful measurement. Due to the non-profile nature of government services, there is lack of monetary value that can be utilized to measure government performance. Therefore, comparisons among comparables are the favorite measurement method.

As shown in Table 1, items V 11 through V 14 are the key variables for measuring. For example, V 11 is a calculated variables designed to show the ratio of Fire Dept Budget to Number of Fire Inspection conducted in a certain period of time.

$$\text{\$100 (Effort/Total Fire Dept Budget)} \div 10 (\text{Output/Number of Fire Inspections}) = \text{\$10/per Inspection (Efficiency)}$$

In this example, \$10/per inspection may not mean anything until such an Efficiency indicator is put against other cities. The program will not only display the ratio, but also automatically rank the ratio against existing members in the form of **Percentile** or **Mode**, depending on the number of participating members (N).

The system also offers an analysis of trend within the same agency. Data pulled from different periods of time will be compared.

The program, however, does not evaluate the satisfaction rate of the performance. It is up to the member agencies to determine what would be an accepted level of performance. By providing the ranking in a given group, the program helps decision-makers locate weakness of performance in a relative term.

### **Dynamic Measurement and Planning**

Perhaps, the most distinguishing feature of the program is the capabilities of dynamic measurement and planning. As the system stores the most updated data directly from member cities, the measurement is in fact conducted live. The program allows the measurement to be done on different schedules: monthly, quarterly and calendar year. During the year, as members enter their data, rankings of the measured performance may change accordingly. However, the system will lock the data on December 31 of each year for an annual report.

The dynamic measurement further provides a planning tool for city administrators. For example, the program will allow a city administrator to ask questions such as “if the number of permits is raised from 65 percentile to 75 percentile, how many more building inspectors will be required?” The system will reply based on data from other member cities. The answer can be “4 more inspectors” or “0” because other member cities may have the same number building inspectors but ranked 75 percentile. What system offers here is a “reversed efficiency measurement.”

### **System Management**

The system is based on a modular structure. The five modules include four major functions of a municipality: Police, Fire, Community Planning and Public Works. The fifth module is the base module that contains the demographic and financial data of the community and the city government. Operating on a distributed approach, each member agency enters and manages its own data.

The system is built with three unique management features. The first is that the system only allows those members who enter their data into the system to conduct horizontal comparisons, forcing members to enter their data. In other words, if a member does not enter any data, it will not see others' data at all. Or if a member only has data up to April, the comparison would not extend beyond April 30.

The second feature is that each municipal member is issued a master account that controls the four modular accounts. The city administrator can decide whether the program is managed by his office or by the four departments individually.

Finally, the program is offered to its members based on an annual subscription without other cost. In addition, because of the modular design, members may subscribe to all four modules or one of the four modules and add another later. Such a flexible subscription enables smaller municipalities to participate in the program.

## **FUTURE CHALLENGES**

Dynamic Government Performance Measurement is the latest attempt to utilize current technology to improve government services. However, the ultimate test in quality of government services will be from the consumers of these services—the citizens of the community. Therefore, staff from NWMC and CityTech USA, Inc. are seeking a way to incorporate citizen survey to the measurement.

A key component of the citizen survey process is random sampling. A random sampling process will allow the data collected to truly represent the entire community. However, today's Internet technology has not been brought the field of opinion polling or survey because if it does not meet the requirements for true random sampling.

The development team is currently researching and planning to bring a citizen survey component to DGPM.

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