

Developing a Performance Measurement Program

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Municipalities today use performance measures. The Municipal Performance Measurement Program (MPMP) requires municipalities to report on a number of performance measures including 5 measures for roads. MPMP alone will not provide the benefit at this time that a well thought out performance measurement program. MPMP is a beginning. This paper outlines a number of the steps that are required to develop a performance measurement program and suggests a number of dimensions and measures that could be used. The companion document “Continuous Sustainable Improvement through Benchmarking” sets out a process for using the measures to improve performance.

Using performance measures that are understandable by most customers demystifies government and allows customers to know how well services are being delivered. Performance measurement should be developed as a management tool to assist in the identification of operational strengths and weaknesses and to monitor achievement of the municipality’s goals and objectives.

It is not intended that a municipality or managers become overburdened with performance measurement or analysis. The objective is to measure what is important in your municipality and expand the local program over time. Start small, develop measures around those services/activities of importance to your municipality and within your capabilities to collect data. Measure the program against a standard. Standards may be legislated standards, industry accepted standards or the level of service set by policy for the municipality. To establish targets of achievement several alternatives are available. Set targets for achievement. A target may relate to the achievement of a local best practice or the benchmarks set by the best-in-class performers. A target may also identify when an improvement will occur or what is the expected outcome or both (within 5 years to increase the overall structural adequacy of the road system by 10%)

To develop a performance measurement program the following steps will be discussed in this paper:

- 1) The services/activities to measure;
- 2) The measures to be used and;
- 3) The targets to confirm achievement.

1) The service/activities to measure

In order to make the decisions where to start and what to measure a committee with representation from management and staff should be established. The tasks this committee must undertake are listed as follows:

- a) Determine and list all procedures for the department.
- b) From the list in (a) develop measures for the programs or activities deemed important to your municipality and where the use of the measures can lead to significant improvements or cost savings.



- c) Determine existing data gathering capabilities, future requirements and sources of data.
- d) Determine the method of acquiring customer input.
- e) Develop goals and objectives. This is an important step because this is when the actual level of desired performance is determined. In previous steps it was decided what would be measured. In this step it is decided what level of performance is both desirable and possible.
- f) Collect data and analyze the information and the measures. This involves looking at the measures to determine why any variations occurred between the goals and objectives set and the actual performance.
- g) Determine whether the measure created an accurate picture of the activity or identified a problem worth examining further.

This committee must also consider that:

1. Different levels within a municipality will require different measures. Senior management and council will require confirmation that objectives have been achieved while front-line employees require targets for daily service delivery.
2. Performance measurement programs are not one size fits all, different municipalities will require different measures. A township in rural Ontario may need information that their road system provides an adequate level of rider comfort. A large urban centre may need to measure traffic congestion in order to confirm that its system expansion plan is on target.
3. Different municipalities may require measures other than OGRA's suggested measures.
4. A process for reviewing and updating the measures must be included as a part of the program.
5. It is the quality of the data collected that is important and the consistency of reporting that will enhance your decision-making abilities not the quality of the measures used.

Performance measures will evolve. As you become comfortable with data collection and the interpretation of the performance results you will begin to look for more data and new measures. Performance measures should also be implemented within the context of a continuous improvement strategy or other strategic management tools. Otherwise performance measurement could be reduced to a control device with restricted focus.

A successful performance management program begins with a well-implemented set of performance measures focusing on outcomes instead of inputs and outputs. The program should measure the efficiency in which resources (dollars, man-hours, etc.) are transformed into services (outputs), the quality of those outputs and the effectiveness of the program. The measurement program must: use a balanced set of a few vital measures; be able to produce timely reports at a reasonable cost; make information available that can be easily shared and is



understood by most (if not all); support the municipalities values and the relationship it has with all stakeholders.

1.1) Start Small

Issues that must be overcome in the development of a local performance measurement program are:

- 1) the tendency to measure everything;
- 2) the tendency to make the measurement program complicated; and
- 3) to develop a measurement program that is meaningful to the organization.

The key thought to avoiding measuring everything, is to measure what matters in your municipality. Every municipality is unique in this regard. The road systems are different, the equipment used is different, the priorities for service delivery are different, and therefore what matters and the performance measurement program developed will be different for each municipality. This is okay, performance measurement programs were never intended to be one size fits all. To determine what matters will require input from council and senior management. If congestion is not a problem in your municipality don't measure it, if there are only a couple kilometres of unpaved road, again don't measure it. There are also activities every municipality does for the benefit of the community, such as placing barricades for parades. Would measuring this activity result in productivity improvements, if not, don't measure it. But if it is determine that the condition of the road system is important or that information of winter control would be beneficial to determine if you are providing the best possible service at the lowest possible price, then measures should be established. How many measures and how the data is collected is best determine by the capabilities of the municipality to collect data. If staff availability is a problem or the sophistication of computer programs or other equipment a concern, implement a measurement program with the minimum number of measures that will give council and senior management sufficient information for a thorough review and the ability to make good decisions.

1.2) Limitations

Performance measurement programs are best used to compare your own performance over time. This type of measurement can be done in any format, the municipality is free to use whatever method deemed appropriate to gather data and analyze results. However, today's trend is to look beyond your own municipality and compare your results to those of other similar service providers, which requires agreed upon measures and definitions. Measurement is not perfect, and probably never will be, especially in the context of an external benchmarking initiative. Measurement is a consistent and a mutually understood way of determining and comparing procedures. To compare procedures also requires an understanding of both the controllable and uncontrollable factors that



influence service delivery. Controllable factors are easily identified such as the number and type of trucks in a fleet, hourly wage, etc and easily accounted for in analysis. For uncontrollable factors such as the local terrain, snowfall intensity it is difficult to determine how these factors influence service delivery. In a measurement program controllable and uncontrollable factors need to be considered. Measurement gives you a result, but it does not give a reason why performance is changing. To find the reason why performance is changing or if a benchmarking study is being considered an understanding of how the controllable and uncontrollable factors affect service delivery is required.

There is a possibility that once measures become public knowledge, the measures could be misunderstood and used against the municipality by people who have very little understanding about the municipality's specific issues. To overcome this tendency the municipality must ensure that it stays away from complicated technical measures and use measures that are understood by most if not all stakeholders. Secondly, good data cannot be overemphasized. Good data will support the program and defend the municipality from people trying to use the results of the measurement program against you.

“There is a great temptation for local governments to cut corners on performance measurement procedures and not to worry about the accuracy and the validity of the information. Good information does not come from nothing. You get what you pay for. Sound data collection practices and quality control of the data will be required and should be provided” (Hatry, Harry P, 1980b pp 338-339, source Rosen p75).

While it may be necessary to revise or use new measures from time to time, you must ensure that the change in measures is not being made to mask poor performance. Certainly measures can be changed or revised, but it is suggested that both the new/revise and former measures be used simultaneously for a period of time.

2) The measures to be used

To avoid making a performance measurement program complicated and still measure what matters, first determine the dimensions that need to be measured that will provide a balanced overview of the service provided and being measured. The dimensions that could be measured are numerous and may include but not be limited to; financial, customer, quality and management dimensions (Figure 1). Once the dimensions have been determined the level at which a performance measurement program is developed must be determined (Figure 2). Measures can be developed at the strategic level, the service level and the activity level. Each level of measurement is of importance to those who use the measure. Activity level measures are important to front-line supervisors and staff as they measure units of work completed and progress towards achieving set targets (level of service). The department head will want to know



that the services provided are within budget and meeting the quality expectations of council and the municipality's customers. Council may or may not wish to be apprised of the activity or service level measures on a regular basis. Council's focus would be confirmation that their budgeting and program decisions are achieving the desired outcome. A mature

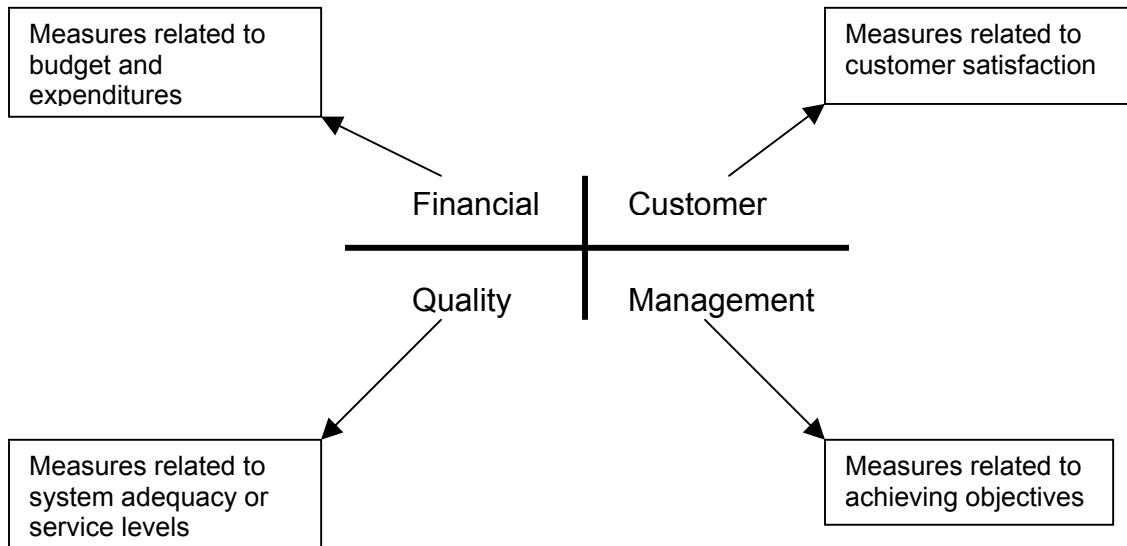


Figure 1

performance measurement program will have measures developed at each level. As a starting point a municipality may want to choose the level that is the best fit with their organization's capabilities to collect data. To ensure that a performance measurement program has meaning within the organization, the program should be linked to vision and mission statements, program objectives or other means of stating why you deliver a particular service or program. Care must be taken in selecting the appropriate statement as this statement sets the customer's expectation for the service provided. For example, at the strategic level, council determines that their vision is to provide the best possible service at the lowest possible price. The customer's expectation for good cost-effective service has now been set. Should the customer feel that they are not getting good reasonably priced service or the performance measurement program fails to provide the information needed to support the claim of good cost-effective service, the customer's confidence with municipal government will be diminished. As management becomes comfortable with the measurement program, the program will grow either by adding new measures to the existing services or creating measures for other services. Benchmarks can also be added to the program to ascertain the appropriate performance level has been attained. However, regardless of the level at which a measurement program is implemented those developing the program should not concentrate on selecting the right measure the first time. The program should start with a minimum of

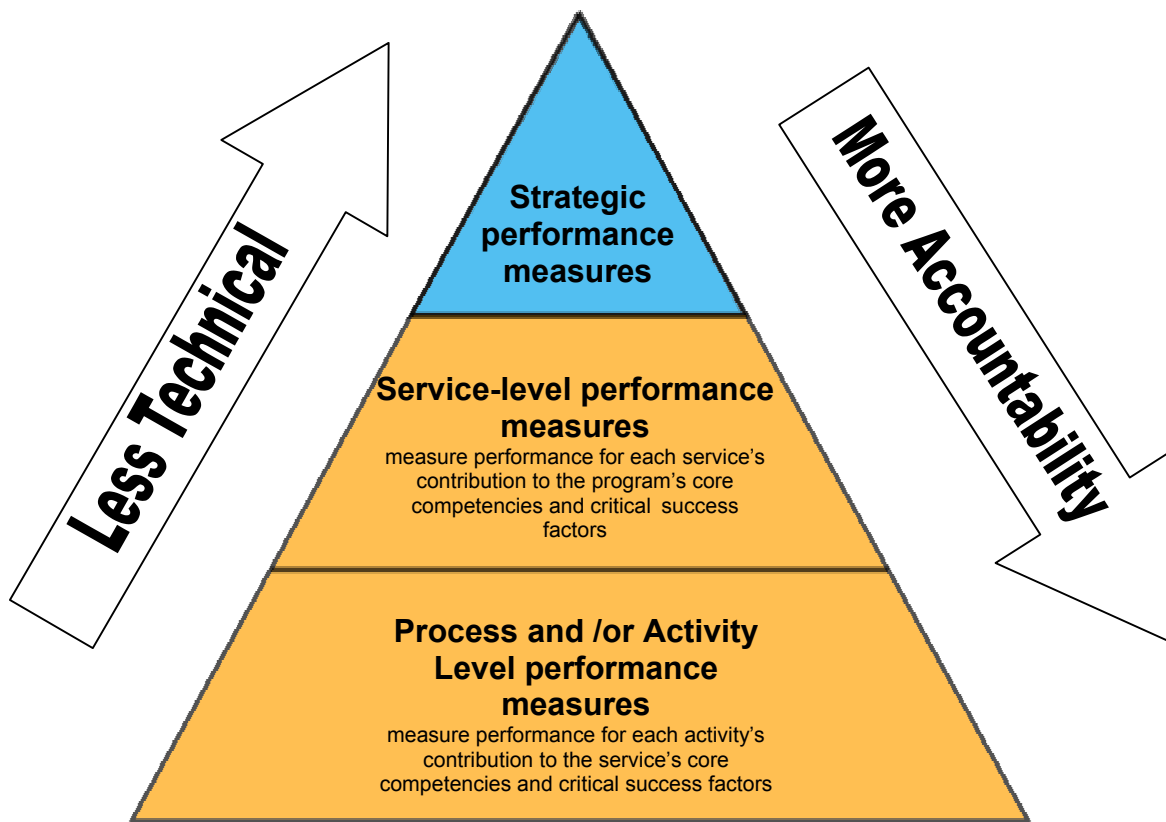


Figure 2

measures and include a process for revising and adding new measures over time.

2.1) Tying it all together

First of all the objective of the program must be determined. The objective must be determined with council and senior management input and in line with what matters to the municipality. For example non-winter objectives could be:

- 1) Pave all roads with 400 AADT or greater;
- 2) Deliver all services in accordance with the municipality's level of service policy;
- 3) Maximize the municipal investment in the road system by extending the useful life of the pavement;
- 4) Or any other pertinent objective or combination thereof.

Once the objectives are determined the measures can be developed. Measures should be developed at the strategic, service and activity level. Measures should support the stated objective (Figure 3) and should follow the parameters of Figure 2 to ensure that the measures will have meaning for those who use the measures. Setting the targets of achievement (Figure 4) is an important step, as these targets will be used to determine achievement of the stated objective and bring meaning to the measurement program. The municipality may wish to defer



the use of targets until the municipality gains confidence in the performance measure program and sufficient analysis of a service has been made.

Finally the benchmarks that will be used to determine progress towards achieving the stated target or objective can be developed from several sources. A benchmark may be the year the measurement program was implemented, the 5-year average cost of service delivery or the benchmark set by the best-in-class performer. Caution must be noted in the pursuit of the best-in-class performers' numbers in that the municipality using this as a benchmark must understand how numbers affect service in the best-in-class and how it will affect your level of service. In the pursuit of good numbers you do not want to give up the delivery of good service, unless the objective is to change the level of service.

Figure 3 Non – Winter Performance Measurements

Objective	Customer Expectation to protect the municipal investment in the road system, by extending the life of the pavement surface			
Strategic Level	<p style="text-align: center;">Financial</p> <div style="border: 1px solid black; padding: 5px;"> <p>% of total municipal budget allocated annually to roads operating and capital</p> <p>% annual (increase/decrease) in the value of backlogged work</p> </div>	<p style="text-align: center;">Customer</p> <div style="border: 1px solid black; padding: 5px;"> <p>% of complaints received regarding road condition</p> <p>%(increase/decrease) in the number of claims due to hazards on the road</p> <p>% of road system affected by unscheduled road closures lasting longer than 1 day</p> </div>	<p style="text-align: center;">Quality</p> <div style="border: 1px solid black; padding: 5px;"> <p>%(+ or -) in system level of service</p> <p>% of paved system rated as good to very good</p> <p>% of road system resurfaced/rehab. annually</p> </div>	<p style="text-align: center;">Management</p> <div style="border: 1px solid black; padding: 5px;"> <p>% of capital rehabilitation projects completed of time and within budget</p> <p>% of improvements that meet lifecycle targets</p> </div>
Service Level	<div style="border: 1px solid black; padding: 5px;"> <p>Capital \$/m² by rehabilitation type</p> <p>Operating \$ per lane km (by service)</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>% of complaints that did not receive a response within 5 working days</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>% of paved system with a PCI of 70 or greater</p> <p>% of base repairs requiring additional work within 1 year</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>% increase or decrease in the number of kms of NOW rated roads</p> </div>
Activity Level	<div style="border: 1px solid black; padding: 5px;"> <p>Cold mix patching \$/tonne</p> <p>Manhours/tonne of cold mix patching</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>% of potholes cold mix patched prior to the target time to respond</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>% of pothole patches intact 1 year later</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>% of employee productivity improvement ideas implemented annually</p> </div>



3) The targets to confirm achievement

Targets of Achievement	
Strategic Level	<ul style="list-style-type: none">• To complete 85% of capital projects on time and within budget.• To reduce the value of backlogged work to zero within 10 years• To maintain 70% of the road system at a pavement condition rating of good to very good within 10 years• To deliver 90% of resurfacing and rehab projects within the lifecycle targets per road class
Service Level	<ul style="list-style-type: none">• To respond to 90% of complaints within 5 days• To deliver road maintenance services within 10% \pm of target expenditure per work unit
Activity Level	<ul style="list-style-type: none">• 90% of potholes repaired to be intact 1 year later• 4.8 man-hours per tonne of cold mix patch• to patch 90% of potholes within the timeframe set out in level of service policy

Figure 4



4) Conclusion

Without measurement, a practice/process may be improved that didn't require improvement. Managers are no different than anyone else, they see someone with a new tool or piece of equipment and they want it for themselves. Certainly once purchased that new tool or piece of equipment does everything it claims to do, improve productivity and lowers cost. But was that practice/process the priority for improvement or even require improvement at all given the unique structure of one municipality when compared to the best in class. Without measurement you don't know. For example, the neighbouring municipality buys a new vacuum truck to clean catchbasins and the new truck does the work faster and cheaper than any other method of catchbasin cleaning. The neighbour cleans 5000 catchbasins and you less than 50. Would you buy the equipment stating that it is a best practice for the municipality to do so? No, it is only a best practice in the larger municipality with sufficient work to make the purchase practical. Would you even measure the current practice? Probably not, with so few catchbasins to clean, productivity improvements would result in marginal savings; therefore measure what matters, does it really matter if marginal savings in catchbasin cleaning are achieved.

5) References

Rosen, Ellen Doree *Improving Public Sector Productivity – Concepts and Practice*, Sage Publications 1993

Osborne, David and Gaebler, Ted *Reinventing Government*, Plume Publications 1993

