Local Government
CENTER

PERFORMANCE MEASUREMENT, BENCHMARKING & OUTCOME-BASED BUDGETING FOR WISCONSIN LOCAL GOVERNMENT

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Table of Contents

Subject   **Page**

Performance Measurement & Outcome Based Budgeting Instructional Manual

Why Performance Measurement?

The local government environment is changing. Demand for services is increasing, supporting revenues from the state have stagnated and decreased, government is becoming more complex, and citizens are demanding property tax relief and government accountability. Complaints about the difficulty measuring government's performance, about diverse and contradictory objectives, unreliable measurement tools, and a lack of resources call for a system to improve efficiency, effectiveness, and accountability. A formal performance measurement program is becoming an increasingly popular management tool to provide a method of evaluating how well programs are operating, improving those programs, ensuring funding is spent in a cost-effective manner, and providing a method for understandable accountability to the citizens. It can also provide the supporting data necessary for some grant applications and bond sales.

The decision whether or not to adopt a performance measurement system is purely a local one. Some local governments may need a full performance measurement program, some may only need a minimal program, and other may feel they are doing fine without such a program but performance measurement programs remain a ready tool if needed.

A properly implemented performance measurement system can provide the data necessary to identify strengths and challenges in local government programs so those programs can be adjusted to perform at acceptable levels, thus saving scarce resources and improving citizen satisfaction.

Performance measurement is primarily a long-term strategic thinking methodology while performance or outcome budgeting is a year-to-year exercise for budget adjustment. It is necessary to understand the two concepts are separate but inextricably linked. Performance/outcome based budgeting cannot be done without a performance measurement system in place and the strategic visioning inherent to performance measurement.

Ultimately, performance measurement is a management tool to help government officials ask the right questions and find the best answers to the challenges of government, especially in times of fiscal stress.

Introduction

Performance measurement. Performance measurement is the regular systematic collection, analysis, and reporting of data that tracks resources used, work produced, and whether specific outcomes were achieved by an organization. Tracking such data is imperative to maximize the effectiveness of local government service provision.

Performance Measurement should be based on program goals and objectives that tie to a statement of program mission or purpose. The performance measurement systems must produce measurable **outcomes** directly related to specific programs. Those outcomes are used as indicators for resource allocation comparisons over a period of time, e.g. a decision-making tool.

Performance measurement provides for resource allocation comparisons over time and measures efficiency and effectiveness to encourage continuous improvement. Measurements must be verifiable to ensure their validity and usefulness is not questions; they must be understandable or they risk being wrongly applied or wrongly interpreted; and they must be timely to ensure conditions have not changed since the measurements and the measurements are available in a time frame to assist in making management decisions, particularly budget preparation. **Measurements must be consistent throughout and applicable to the strategic plan, the budget, and the current accounting and reporting systems.**

In addition to being necessary for management decision-making, there are several other factors that make performance measurement a necessity. Measurement data is required both internally and externally. Most Federal grants now require performance data/outcome evaluations as part of their application and reporting requirements. Bond sales require indicators of financial condition can be well represented by performance data. Both the Government Accounting Standards Board (GASB) and the Government Finance Officers Association (GFOA) are promoting performance measurement.

One of the most difficult tasks for local government officials is to find a way to convey to citizens what and how well their government is doing. Performance measurement provides a way to quantify to the citizens how well their local government is doing compared to previous years and other similar communities; i.e. "how much bang they're getting for their buck." Comparisons of outcome data from one year to the next (internal benchmarking) can show progression and improvement from one year to the next. Comparison between your local government and similar local governments in other local governments (external benchmarking) shows how well your local government is performing compared with other similar governments. Those other governments don't necessarily have to be from the same state or region provided the demographic and geographic discriminators are recognized.

<u>Performance Budgeting</u>. A word of caution is in order when discussing performance measurement as it relates to being a tool for management decision-making. Misunderstanding the uses of performance measurement data, especially when applied to budget preparation, can cause **catastrophic** results to program areas. One of the greatest mistakes is to make simplified assumptions based on misapplied evaluations or unrefined results, then apply that data to budgetary decisions, especially when considered as part of a performance measurement based system of rewards and punishments. Performance measurement is intended to provide data to facilitate management decisions, not to be used as a club to hold over the heads of department director's budgets. Incorrect application of performance measurement data can yield long-term adverse program impacts. All pertinent factors affecting performance need to be considered in any decision.

For instance: the police department's data shows the number of arrests is down by 10% from last year. Does this mean the police are not working as hard or as efficiently as they should be? Possibly, but more likely is the effect of other factors such as successes of crime prevention and community policing efforts. Possibly zoning changes have reduced the number of potential drug houses? All potential influences must be considered to make a legitimate evaluation of performance data. Decisions based upon raw data only risk punishing a 5% decrease in performance with budget cuts that yield a 20% reduction in performance in the following year. It cannot be stressed enough that the concept of performance measurement is intended to maximize what is working well in programs and finding ways to improve those programs which are under performing.

NOTE: In Performance Measurement It is important to remember the difference between **efficiency** and **effectiveness.**

Efficiency is related to cost effectiveness, i.e. the lowest costs for a given output level. In performance measurement, the ratio of total input to useful output or outcome is referred to as "efficiency." I can also be described as the production of the desired effects or results with minimum waste of time, effort, or skill.

Effectiveness is related to if the service level meets the demands of the citizens. An effort is effective if it is adequate to accomplish a propose and produces the intended or expected results.

You can be effective without being efficient. Efficiency is doing something with the least possible expenditure of resources; Effectiveness is doing something well without regard to cost or level of resource expenditure.

PART 1

Basics of Performance Measurement

Performance budgeting cannot be implemented without a performance measurement system. A performance measurement system is a complex, long-term endeavor that cannot be instituted overnight.

Interim solution

A rudimentary form of PBB to be implemented until a formal system can be produced could include the following in each department's budget request:

a. An explanation of the department's overall goals

Have each department director produce a narrative page with the department's budget proposal. In that narrative, have the department director produce a brief description of the departments overall goals for the next budget year and how they relate to long-term goals.

b. An explanation of what the department has accomplished in the past year

Include in the narrative what the department director feels have been the department's significant accomplishments in the previous year. Also included should be what challenges were encountered that prevented or hampered the accomplishments of goals that were not achieved.

c. An explanation of what the department intends to accomplish in the coming year

This forces the department director to think through what he/she hopes to accomplish in the coming year. Done in consideration of a capital improvement plan and a strategic plan, this can be an effective starting point for full performance measurement goal setting. In effect, it puts the department director on notice that things are not going to just remain status quo but are moving toward a measurable system of constant improvement and gives the elected officials a better idea of what's actually happening in that department.

d. An explanation as to what is different from last year in the proposed budget and why

This won't necessarily be obvious. A discussion of what is different from last year's budget and why it is different, i.e. what caused the changes, what funding streams may be different, are there personnel changes?

e. A GASB compliant budget showing past year budget expenditures

A budget, produced to GASB standards, will provide information on previous year's budgets and expenditures so that comparisons of budgets and expenditures compared with stated and met goals at a glance.

Example:

GENERAL FUND					FY 0?/0?	Dept. 100
100 Administration	(last year's budget)	(last year's actual expended)	(present year's budget)	(what you expect to spend)	(next year)	
Description	**FY0? Budget**	**FY0? Actual**	**FY0? Budget**	**FY0? Projected**	**FY0? Budget**	**Comments**
101 Wages & Salaries	$1,463,450	$1,461,320	$1,513,880	$1,520,420	$1,669,210	*Added new accountant*

While this "interim solution" by no means meets the requirement for a performance measurement system, it does improve administrative control and sets the manner of thinking necessary to implement a true performance measurement system.

Building the Performance Measurement System

Four Principles

Principle #1: **Establish broad goals to guide government decision-making.**

Probably the best place to start is to review the organization's Strategic Plan, Land Use Plan, Capital Plan, and any other plans which provide an indication as to what are the near-term and long-term goals for the community. This is the basis for developing policies, programs, service types, and service levels to be provided. The goals should be developed after an assessment of community conditions, a review of all applicable plans, and a review of internal operations.

Example: Improve __% of municipal streets to PASER level ____ by _____.

Principle #2: Develop approaches to achieve goals.

Set specific policies, plans, programs, and management strategies to define how long-term goals will be achieved. Through these the government determines how it will go about accomplishing its goals. Simply put, "How are we going to do this or get there?"

Principle #3: Develop a budget with approaches to achieve goals.

Develop and adopt a financial plan and budget that move toward achievement of goals with the constraints of available resources. The preparation of a financial plan, capital improvement plan, and budget options are part of this effort. In that financial plan, a borrowing plan that takes advantage of favorable interest rates at points where the government can afford to borrow to achieve pre-determined projects is critical to financial success.

Principle #4: Evaluate performance and make adjustments

This is where we'll spend the remainder of this manual, "How to do this." Program and financial performance should be continually evaluated and adjustments made to achieve goals. Budgets, policies, and/or plans may all need to be adjusted based on performance data. However, a word of caution; it is easy to fall into a trap of chasing the target when attempting to achieve goals. Small, incremental changes based on performance data are more effective than quick, major changes that may prove to be over reactions that cause more damage that improvement. Measured responses to data are more likely to produce the desired results.

Performance Indicators

Performance indicators are specific numerical measurements for each aspect of performance which is under consideration. A point that must be remembered is that, for performance measurement purposes, the amounts that are actually used, not the amounts budgeted, are the relevant numbers

Performance indicators generally include the following:

- **Input**
- **Output**
- **Efficiency**
- **Service Quality**
- **Outcomes**

The performance indicators should also be accompanied by **explanatory data.**

Performance indicators must be quantifiable, measurable, relevant, understandable, and timely. Although some indicators may seem to be neither quantifiable nor measurable at

first glance, an objective analysis of the program's components will commonly review some aspect that is quantifiable, measurable, and relevant.

Input Indicators. Input indicators represent the resources allocated to and expended by a program. They include costs, both direct costs and fringe benefits, and labor hours. For instance, if the police DARE program is considered, input indicators might include the person-hours expended by the DARE officer, vehicle costs, costs of DARE shirts, and cost of presentation materials, to name a few. Inputs are the resources used to produce outputs and outcomes

Output indicators. Output indicators relate to the quantity of units produced; how much work has been done. They are the products and services delivered and are typically under managerial control. Outputs include not only the products and services produced by your organization but also by contractors. Examples might be:

- How many miles of sewer pipe have been visually inspected?
- How many citizens have been served?
- How many fires have been responded to?
- How many arrests have been made?

Efficiency Indicators. Efficiency indicators are determined by using the ration of inputs used per unit of output (or output per unit). Examples might be:

Cost per unit:
- Cost per ton of refuse collected
- Cost per mile of street or road paved
- Cost per prisoner boarded
- Cost per counter transaction

Productivity:
- Hours per customer complaint
- Plans reviewed per reviewer
- Arrests made per officer
- Water bills processed per clerk

Service Quality Indicators: Service quality indicators relate to how satisfied customers/citizens are; how accurately a service is provided; and/or how timely a service is provided. Examples might be:

- Percentage of respondents satisfied with service
- Frequency of repeat repairs
- Average wait time.

Outcome Indicators: Outcome indicators are the qualitative results associated with programs and services. Outcome indicators are the result of your program efforts and resource expenditures; the accomplishment. They focus on the "why" of providing a specific service. While outputs are what work the organization does, outcomes are what these outputs accomplish. Examples might include:

- Reduction in fire deaths/injuries
- Increase in job trainees who hold a job for more that six months
- Decrease in low birth-rate babies.
- Contract cost growth
- Fire losses
- Percent of late bills collected

Four-Step Methodology

A four step methodology is widely used and is a practical and useful process used to develop department performance measures. This particular approach is used by Fairfax County, VA and has been used as a model for a number of other governments.

Step 1: Review and Evaluate Existing Department Mission and Cost Center Goals.

Commonly the mission used should be the one described or identified during strategic planning processes. Performance measurement is directly linked to strategic planning and cannot be effective if strategic planning has not taken place. Goals give specific direction on how the department will achieve the stated mission. Goals are not generally quantified and span multiple budget years.

A good goal statement should:

- Begin with "To" followed by what you intend to do
- Say what the department or program area does
- Identify its customers and stakeholders
- State "why" the program or department exists
- Be associated with an outcome indicator

Template example:

"To provide/produce (fill in service or product) to (fill in customer) in order to (statement of what you intend to accomplish)."

Examples:

Maternal and Child Health Services

"To provide maternity, infant and child health care and/or case management to at-risk women, infants, and children in order to achieved optimum health and well-being."

Highway Department:

"To provide construction and maintenance services to county roads and highways in order to achieve safe, continuous, uninterrupted flow transportation options for both citizens and commercial traffic within the county."

Step 2: Identify a Service Area.

Identify the department's **major** activities. Not everything the department does or every duty it performs, just the major activities that are critical to the success of the department's mission; that consume a significant portion of the department's budget; that are locally sensitive or frequently in the public or political spotlight; and those that have a significant customer service focus. It is also useful to group activities that have a common objective and/or common customers and stakeholders.

Example:

Police Service Areas = (1) Criminal investigation, (2) Traffic enforcement, (3) Community Policing, (4) Patrol, (5) Drug enforcement, (6) SWAT/TRT

How these are designated as service areas are entirely dependent upon how the organization operates and prioritizes. For instance, Drug Enforcement may be a separate service area or it may be part of Criminal Investigations depending on how the police/sheriff's department is organized; on what portion is funding by specific designated sources, such as federal or state grants funding; or department priorities.

Community Policing may include all outreach efforts, such as DARE, Neighborhood Watch support, school officers, community service officers, or even general patrol. Grouping to form a service area is entirely dependent on how the individual department organizes, funds, and prioritizes its functions and how the fit together in a way that logically lends toward performance measurement.

Step 3: Service Area Objectives

Service area objectives are outcome-based statements of what will be accomplished within the budget year. While strategic plans stretch across multiple years and usually cannot be accomplished in one year, the annual budget addresses the portion of the plan the agency can accomplish in a given fiscal year.

Each service area should have at least one objective statement and at least one indicator of each type, specifically output, efficiency, service quality and outcome. The service area objective should clearly demonstrate progress toward the department/cost center goal. Ideally, each objective should have an attainable target level with a basis of scientific research, industry practice, peer average, or Board policy. Departments should

focus on quantified objectives and develop applicable targets for the next annual budget process.

In most cases, a service area objective should address the following:

- Support the department/cost center goal statement
- Reflect planned benefits to customers
- Be written to allow measurement of progress
- Be quantifiable within the fiscal year time frame
- Describe a quantifiable future target level (if appropriate)

Example:

Fire Services

1) Achieve and maintain an ISO rating of 4 or better.
2) Maintain/reduce average response times to 7 minutes or less within the corporate municipal limits.
3) Reduce fire deaths to 1 per 10,000 population per year or less.

Caution is necessary with some objectives to ensure accurate performance data. For instance, it should be specified when the 7 minutes of the response time begins and ends. Does the time begin when the dispatch center receives the 911 call, when the fire department is paged, or when the trucks leave the fire station? Does the time end when the first fire apparatus arrives on the scene or when fire suppression/rescue operations actually begin? Being clear and consistent in the goal ensures valid performance data.

Template:

"To improve/reduce/maintain (<u>accomplishment</u>) by (<u>a number or percentage</u>), (<u>from x to y</u>) toward a target of (<u>a number</u>).

Additional example:

"To improve the immunization completion rate of children served by the Health department by 3 percentage points, fro77 percent to 80 percent, toward a target of 90 percent, which is the Health People year 2010 goal"

Step 4: Identity indicators that measure progress on objectives.

Indicators are the first-level data for reporting performance and, wherever possible, at least one output, efficiency, service quality, and outcome indicator should be developed for each service objective.

When developing indicators, you should ask how you can measure whether you are meeting your objectives.

Indicator Definitions and Examples

Category	Definition	Example
Input	Resources used to produce an output	Cost (direct costs plus fringe benefits) Staff hours
Output	Quantity or number of units produced. Activity-oriented, measurable and usually managerial control	Residential properties assessed Clients served Calls responded to
Efficiency	Inputs per unit of output or outputs per input	Cost per appraised Appraisals per appraiser
Service Quality	Timeliness, accuracy and/or customer satisfaction of the service provided	Errors per data entry operator Response time Percentage of customers satisfied

Input Indicators are the resources used to produce an output. They most often include funds and staff hours but may include other resources. Commonly included here are

- costs (budgeted and actual)
- Staff-year equivalents (SYE)
- Full-time equivalents (FTE)
- Direct labor hours (DLH)

Costs used as an input indicator commonly include direct costs plus fringe benefit costs. Direct costs are those devoted to a particular service and include:

- Personnel services
- Operating expenses
- Recovered costs
- Capital equipment

Output Indicators address what was produced or provided. They usually end with an "ed." They should answer the questions:

- "What services were delivered?"
- What volume was provided?
- How many units of service were provided?

Example:

Service Area	Indicator
Fire Suppression	Incidents responded to
Human Resources	Vacancies filled
Library	New materials circulated

Efficiency Indicators present inputs used per unit of output, such as the cost per unit where the input is in money/dollars or productivity where the input is staff hours per unit of output. This is where you first get an indication of what you're getting for the resources you expend. Examples include:

- Cost per senior lunch served (senior services)
- Cost per client (general government)
- Investigations conducted per detective (police/public safety)
- Hours per fire inspection (fire/public safety)
- Cost per vacancy filled (human resources)

Example:

Efficiency Indicators

Service Area	Indicator
Fire Suppression	Cost per incident
Human Resources	Cost per vacancy filled
Senior Services	Cost per client
Custodial Services	Cost per square foot cleaned

Service Quality Indicators measure customer satisfaction, timeliness, and/or accuracy of a service. Some ways in which we can measure service quality are through:

- Customer surveys
- Response logs
- Error rates
- Failure rates
- Grading systems, such as PASER

Examples:

Service Area	Indicator
Fire Suppression	Average suppression response time
Human Resources	Satisfaction rate with vacancy processing
Senior Services	Percent of clients satisfied with services provided
Custodial Services	Percent of customers satisfied with custodial services

Outcome Indicators describe the benefit of the service to the customer and what was changed or accomplished as a result of the service. Questions to ask might include:

- How has the customer benefited?
- Why is the customer better off?
- What is the impact of the service?

Examples:

Service Area	Indicator
Fire Suppression	Fire deaths per 100,000 population Fire Injuries per 100,000 population
Human Resources	Average recruitment time
Senior Services	Percent of clients who remain in the community after one year of service or information
Custodial Services	Percentile comparisons of cost per square foot to IFMA standards

When you place all of the indicators into a matrix with each service area and it's objective included, you get a chart like the following example:

Service Area	Objective	Input	Output	Efficiency	Service Quality	Outcome
Fire Suppression	To maintain fire loss at 0.02% or less of Total Property Valuation, while striving to minimize fire deaths and injuries by keeping civilian fire deaths to less than 1 per 100,000 and fire injuries to less than 10 per 100,000	Budget/actual costs Staff	Incidents responded to	Cost per incident	Average suppression response time (in minutes)	Fire deaths per 100,000 population Fire loss Fire injuries per 100,000 population
Capital Facilities	To monitor design and construction activities in order to maintain construction cost growth at no more than 5.0 percent	Budget/actual costs Staff	Projects completed	Engineering design costs as a percent of total project cost	Percent of projects completed on time	Contract cost growth (percent)

An example of how an indicator matrix may look when performance data is presented:

Service Area	Objective	Input	Output	Efficiency	Service Quality	Outcome
Street Reconstruction	5%	$1,374,500	4	4.7%	75%	7%
Capital Facilities	Maintain construction cost growth to no more than 5 percent	Budget/actual costs Staff	Projects completed	Engineering design costs as a percent of total project cost	Percent of projects completed on time	Contract cost growth (%)

Important when analyzing this data is to ensure consideration is made in explanatory data as to what conditions or circumstances may have caused or contributed to service quality and outcomes not meeting expectations.

The Logic Model

A logic model (or outcome-sequence chart) that diagrams the continuum of relevant factors for a performance measurement system is a useful way to summarize the flow across the information categories. It acts as a picture of a program and a way to show the relationship between what we put in (inputs), what we do (outputs) and what results occur (outcomes). It provides a sequence of "if/then" relationships that reflect the core of program planning and evaluation in which the short, medium and long-term outcome criteria can be applied to not only the present budget year but to the long-term capital and strategic plans.

When constructing the Logic Model, begin with the end in mind. Start by asking the questions:
- What results are we seeking?
- What are we hoping to accomplish?
- How will we accomplish it?

Logic Model

Inputs	Outputs	Outcomes		
What we invest	What we do	Short-Term	Medium-Term	Long-Term
Staff Dollars Volunteers Materials Equipment Technology	Workshops Outreach Inspections	Awareness Knowledge Attitudes Skills	Behavior Decisions Policies	Conditions Environment Social Economic Civic

Logic Model – Fire Suppression

Inputs	Outputs	Outcomes		
What we invest	What we do	Short-Term	Medium-Term	Long-Term
Staff Dollars Volunteers Materials Technology	Training Inspections Emergency response	Inspections Suppression responses Public education	Response time Fire containment Prevalence of smoke detectors	Protection of lives & property (fire deaths, injuries)

An alternative to the Logic Model is the Performance Management Model.

Performance Management Model

| GOALS | **General Goals of Program:**
| | • Provide quality services to all customers
| | • Maintain or improve performance
| | • Provide economical services

| INPUTS | **Resources:**
| | • Money
| | • Facilities
| | • Equipment
| | • Supplies
| | • Contracted services

| ACTIVITIES | **Work processes:**
| | • Salting roads
| | • Making arrests
| | • Processing bills
| | • Performing inspections

| OUTPUTS | **Goods & Services produced:**
| | • Statistical measurements
| | • Miles of roads repaired
| | • Tons hauled or recycled
| | • Positions filled

| OUTCOMES | **Results and Impacts:**
| | • 100% of customers will report being qualified
| | • 95% will be error free
| | • 90% of services will be within +/- 2% of comparable service within the private sector

| PEFORMANCE | **Measurement**
| | • Administration of customer satisfaction surveys
| | • Tracking number of jobs, error rates, average per job
| | • Cost comparison to private sector services
| | • Quarterly and annual reports summarizing services provided, outputs and outcome achievement

Either of these models provides a good basis for establishing a performance measurements system. Both direct you to the results you need provided quality data is applied in each step.

Points to Remember

Some points to remember are:

1. You must quantify your objectives. If you do not quantify, you can not accurately measure performance because non-quantified results become subjective and won't accurately relate to your system or to budgets.

2. Your objectives should be associated with an outcome.

3. To ensure relevance and understanding, your outcomes should be worded in the same manner as your objectives.

4. Produce and use a complete "family of measures":

    - Service area
    - Objective
    - Input
    - Output efficiency
    - Service quality
    - Outcome

5. Beware of confusing indicators, such as efficiency with service quality.

6. Ensure you reference the correct baseline to target year for your objectives.

7. Define your service areas by program objective/customers rather than process function

Part II
The First Steps

I. Desirable prerequisites for Performance Measurement

In his book "Performance Measurement: Getting Results," Harry Hatry states that there are three prerequisites for instituting a performance measurement system.

1. **High-level support for the performance measurement effort.** If the government's elected board or council does not support the effort, the effort is doomed to fail. The elected officials must recognize the performance measurement system is a means to improve and verify government performance or all of the efforts of the assigned committee and/or staff will be for naught.

2. **Reasonable program stability.** Programs undergoing changes in mission or personnel are poor candidates for a new performance measurement process. Wait until the situation has settled down to ensure valid data is collected.

3. **A least some basic data-processing capability.** Most such programs have such demanding data-processing requirements that manual collection and processing can be a mistake laden, time-consuming nightmare.

II. Determining what program activities to include

Because time, resources, and even needs are limited, it is probably unnecessary and even unwise to attempt to measure every activity in every program. Communities should try to determine which programs and activities to apply performance measurement based on the government's priorities and which programs are most likely to benefit from the process.

If the missions of a program's various projects are very similar, even if the approaches may differ, it is probably feasible and practical to fold them into one combined outcome measurement process.

III. Establishing a working group

A good place to start the process of implementing a performance measurement system is to form a working group. A working group may include:

- Members of the departmental staff
- Representatives from related program areas/departments
- The Finance Director
- The Manager/Administrator
- Someone knowledgeable about measurement
- A person knowledgeable about information processing
- Representatives from the elected body

IV. Key steps for Performance Measurement Working Groups

1. Designate someone to coordinate the effort.

2. Identify the mission, objectives and stakeholders of each department or program area.

3. Identify the results (outcomes) the program seeks to measure.

4. Solicit input from stakeholders.

5. Select specific indicators for measuring each outcome and efficiency indicator.

6. Identify appropriate data sources for each indicator and the specific procedures needed to obtain that data.

7. Identify appropriate benchmarks against which to compare program results.

8. Develop an analysis plan, i.e. ways the performance data will be utilized to make the findings useful for program improvement.

9. Select formats for presenting the performance information that are informative and user-friendly.

10. Plan, implement, and review a pilot test of any new or substantially modified data collection procedures.

11. Prepare a long-term schedule (**typically about three years**) for implementation, indicating the timing of data collection and analysis relevant to each year's budgeting cycle and the people responsible for each step of the process.

12. Identify the uses of the performance data by department and program personnel, such as helping improve programs and budgeting.

V. Defining the Program's Mission and Objectives

What is the program intended to accomplish? This is the most fundamental question in performance measurement. A **mission/objective statement** should identify the major results each program seeks to accomplish and acts as the starting point for identifying the outcomes to be measured and the performance indicators needed.

The term *mission/objectives* denotes both the overall vision of the program (the mission) and the more specific, although still qualitative, program purposes (objectives) that flow from the mission. Objectives should usually be stated in general, not qualitative, terms and should remain reasonably stable because specific targets are subject to change due to circumstances over time.

Referring back to the Four Step Methodology Step 1 template, you will commonly be providing or producing a service or product for a specific customer(s) in order to accomplish something.

Or build the mission/objective statement as below:

To: (Identify the basis objectives/results the program seeks).

By: (Identify the basic way the service e is provided.

Example:

Mission/Objectives Statement for Distance-Learning Programs
To: **Improve student learning and employability, including providing access to, and improving instruction in, a wide range of subjects**
By: **The use of distance-learning technologies**

Some recommendations for developing a mission/objective statement follow:

1) Focus on how program activities are expected to affect both the program's specific customers and the public at large.

2) Identify all of the major objectives that the program hopes to achieve.

3) Consider including objectives about *reducing the magnitude of unmet needs*.

4) Include objectives related to the quality of services delivered.

5) Include the objective of providing a service *as efficiently as possible*.

6) Include only qualitative, not quantitative, objectives to enhance the likelihood that the statement will remain stable over time.

7) Avoid vague or obscure wording that makes later measurement a guessing game about the original intent.

VI. Determining what Outcome to track

A performance measurement system is only valid and useful if it tracks the right outcomes. Each program/department needs to develop a list of outcomes most important to it. There is no hard and fast rule here; it's up to the judgment of those choosing the outcomes. It should be remembered that most government departments have multiple objectives and multiple categories of customers.

Consider categories that:

- Reflect the results sought by the specific program
- Minimize undesirable or negative effects
- Improve the quality of service delivery
- Reduce the amount of unmet needs
- Produce benefits for the general population by providing effective services to specific customer groups
- Provide equitable outcomes to customer groups

VII. Determining what Outcome Indicators to track

Outcome Indicators are not the same thing as Outcomes. Each outcome to be tracked must be translated into one or more outcome indicators. Outcome Indicators identify a specific numerical measurement that indicates progress toward an Outcome. Performance indicators usually begin with the words number of, percent of, ratio of, incidence of proportion of, or similar phrases. A note of caution is necessary here. Agencies often base their selection of indicators on how readily available the data is instead of how important the indicators are for measuring the achievement of Outcomes.

Outcome Indicators should be:

- Relevant to the mission/objective
- Understandable to those using the measurement data
- Useful; data that is measured but produces information that cannot be applied to management decision-making is useless
- Difficult to manipulate to falsely achieve desired results
- Not overly difficult to collect

Examples:

Objective	Outcome	Specific indicator
Street trafficability	Smooth streets	(1) Number of potholes per mile (2) Patches per mile of street (3) Percent of street "alligatored")
Fire safety	Fire hazards	(1) Number and percentage of rental properties with fire hazards

Comparing the outcomes to "benchmarks" is a fundamental and essential element of performance measurement and performance management systems.

PART III
Benchmarking

In performance measurement, benchmarks are used as the standard by which you measure your performance; what you compare your actual performance with to help determine whether you're meeting your established goals. Benchmarking is a process that enables comparison of inputs, processes or outputs between institutions (or parts of institutions) or within a single institution over time. Benchmarking, in practice, tends to be more about sharing good practice than undertaking formal comparative measurements.

A definition:

"Formal benchmarking is the continuous, systematic process of measuring and assessing products, services and practices of recognized leaders in the field to determine the extent to which they might be adopted to achieve superior performance."

"*Benchmarking & Best Practices," Treasury Board of Canada*

Possibly a less formal but practical definition is:

"Benchmarking is the practice of being humble enough to admit that someone else is better at something and wise enough to try and learn how to match and even surpass them at it."

"Benchmarking", presentation overheads from the International Benchmarking Clearinghouse, p. 20.

For our purposes, benchmarking can be divided into four categories:

- Internal

- External

- Operational

- Strategic

Internal benchmarks are those where the current year is compared with a previous year/years' performance. For instance, if your code enforcement department performed 65 inspections last year, you may use that number for the "benchmark" to which you compare the number of inspections the code enforcement department performs this year. You can also use an average of data from a number of previous years as your "benchmark" for comparison.

External benchmarks are a comparison of your performance versus that of a similar organization. External benchmarks may not only be comparisons with other similar governments but can compare with different levels of government, governments in other states, or private industry.

Operational benchmarks relate to your recent annual or periodic performance.

Strategic benchmarks relate to long term performance, commonly directly related to your strategic plan.

A benchmark may be either internal or external and either operational or strategic. Probably the most common benchmark used in local government is an "internal operational" which, as noted earlier, is a direct comparison between a previous year's performance which has been established as a "benchmark" against a current year's performance by the same program in the same department. A police department's comparison between criminal cases closed this year versus the average of criminal cases closed over the past ten years is an internal organizational comparison.

External organizational benchmarks are those of recent performance of a similar organization versus your recent performance. The following chart typifies an example of external organizational benchmarking.

2007 Total Structure Fire Incidents Per 10,000 Population
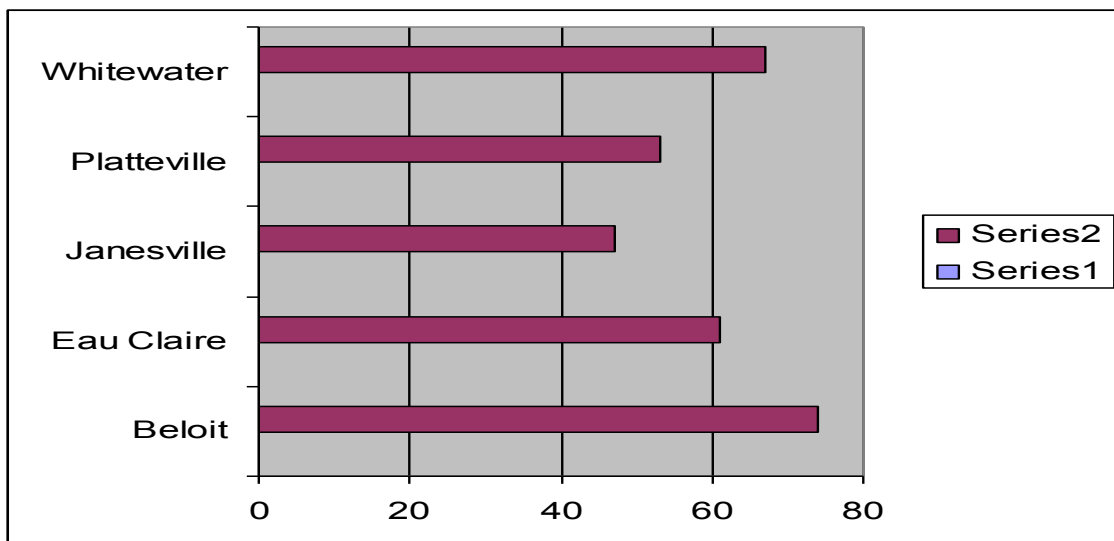
From this chart, any of these municipalities can compare their performance or experience to other similar municipalities in Wisconsin.

For a more widespread, national benchmarking comparison, the graph below relates to a law enforcement measurement.

POLICE
Violent Crimes Reported Per 1,000 Population
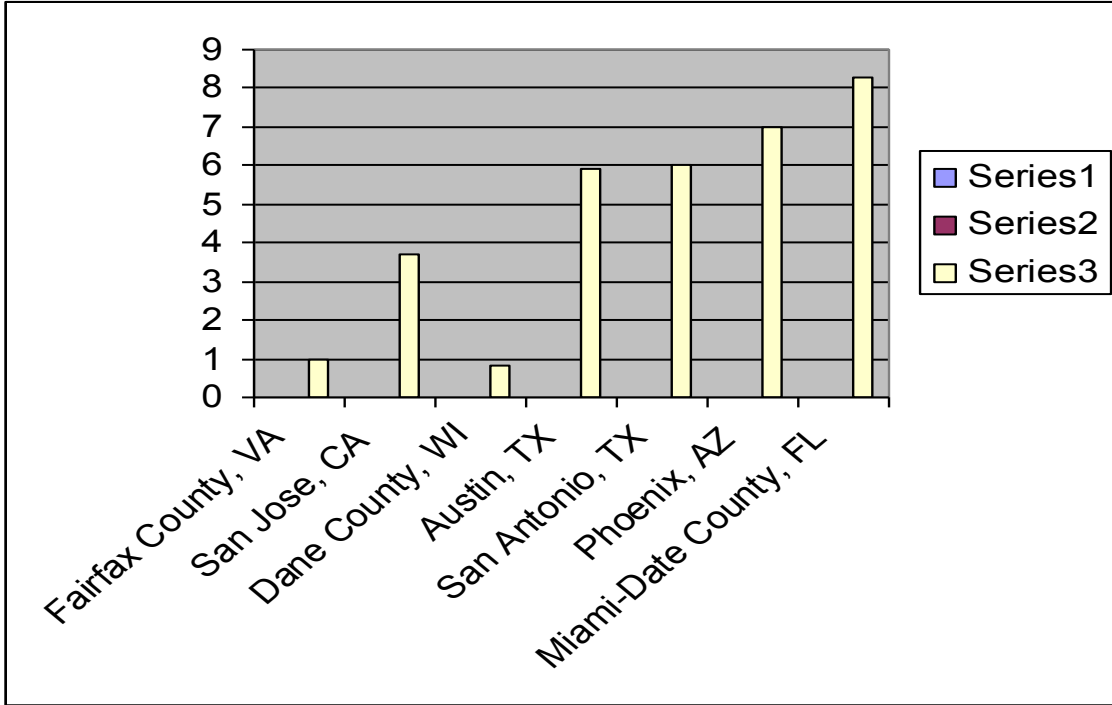
Some examples for benchmark comparisons might include:

Internal Benchmarks	**External Benchmarks**
Overall spending	Private sector wages
Growth in tax base	Neighboring cities
Growth in income	Similar size cities
New home starts	Statewide groupings
Miles within service area	Statewide averages

Some examples for benchmark standards might include:

- Program dollars spent per capita
- Spending per $1,000 property assessment
- Percentage growth over time
- Performance in the previous period
- Performance of similar organizations or geographical areas
- A recognized general standard
- Private sector performance
- Adjustments for inflation
- Other specific service standards

An natural question at this point is "what do we use as a basis for setting our benchmarking targets?" Some common places to look for ideas to help set benchmarking targets might include:

- Benchmarking workshops
- National standards
- Mandates from higher levels of government
- Direction of the county board or city council
- Past performance
- Internal goals
- Citizen demands

You should always make comparisons for similar periods, such as monthly, quarterly, or annually.

Setting targets/goals

You will need to select targets when comparing your performance to selected benchmarks. Some recommendations to consider might be:

- Set a target based on previous performance. Preferably some level of improvement that is reasonably attainable.

- Consider benchmarking against the best. How are we doing compared to the best, most efficient people providing the same services? If that is too daunting, benchmark against the average with a target of exceeding the average performance.

- Consider the outcomes achieved in the past by other sections of your own organization.

- Consider the performance levels achieved by other jurisdictions or private firms with similar activities, workloads, and/or customers.

- Ensure your selected targets are feasible based on your staffing levels and budget.

- Be cognizant of any changes or new developments which may affect your ability to achieve a selected target.

- Targets do not have to be for a single value; a target range is fully acceptable, especially in areas where there is a good deal of uncertainty.

SMART Goals

Set your goals using **SMART**. A SMART target or goal is:

- **S**pecific – Is the goal clear and to the point?
- **M**easurable – Can you tell if it has been accomplished?
- **A**ttainable – Is it a realistic goal?
- **R**elevant – Is it a priority of the organization?
- **T**rackable – Results are compared over time?

A **SMART** goal might read: "To respond to all fire calls within the city within 7 minutes of dispatch."

A goal which is **not SMART** might read "To protect all property within the city to a high level of safety."

Or:

"To process all building permit requests within 48 hours of application."   **SMART**

"To process all building permit requests in the shortest time possible." **Not SMART**

The "not SMART" examples are neither measurable nor trackable.

Part IV
Using Outcome Information

Analyzing the data

We have previously discussed the components and definitions of the elements of performance/outcome measurement and benchmarking. Now the question must be answered **"How do we use all of this to improve our government's performance?"**

A good starting point, after doing an "interim solution" as described earlier, is to use a Logic Model Worksheet as shown in the Marathon County, Wisconsin's Health Department example (**Appendix A**). The "Health Outcome Measurement Report", (**Appendix B**) used by Marathon County is an excellent example of a report that represents a useful analysis of performance data.

Please note that Marathon County is in the early states of implementing a performance measurement system and is only attempting to seek outcome measurement on a very limited number of programs.

Analysis of outcome data can be used to identify the conditions under which programs do well and do poorly. This can be used to determine remedial actions and, after more data is collected, whether and to what extent those remedial actions have been effective. The outcome data should offer clues and indications as to where improvements can be made to enhance performance.

Some findings to look for are trends and **changes over time**. When such trends or changes are observed, you should try to determine what caused them. Was there some external factor involved? Have special events or legislative changes affected the outcomes? Have there been key staff changes?

Performance indicator values with **substantial differences when compared to targets** require an attempt to identify what caused the disparity. One aspect to evaluate is whether or not this disparity occurs over the entire reporting period or just during a specific portion of the reporting period. If the latter holds true, a program that reports on a whole year system may be better served by a quarterly reporting period.

Comparison of indicators from other programs, departments, or jurisdictions can give a valuable indicator. Even comparisons with private industry may be pertinent depending on the service being considered.

Examine the breakouts from each performance indicator and compare the outcomes by customer characteristics, organizational units, workload difficulty, type and amount of service, and other pertinent characteristics to identify where the methods of those exhibiting particularly good performance can be applied to other units. For those with particularly bad performance, seek out the reasons and take corrective action.

Look for **consistency between inputs, outputs, and outcomes**. If your outputs are not consistent, your outcomes are likely to be unreliable..

When you have multiple outcome indicators for the same program, as will be the case in most programs, the indicators should also be **examined as a "set"** to ensure their inter-relationship is analyzed and the big picture of the program is better recognized. The temptation to only evaluate outcome indicators separately can lead to misinterpreted data. Be aware that programs sometimes have competing objectives that need to be reconciled before conducting the analysis.

Performance measurement systems often produce too much information. It is often necessary to **highlight the performance data that is most worthy of your attention**. While more data may seem desirable on it's face, it is necessary to identify the data that is most critical to performance improvement to enhance the decision-making process.

Look for explanations when you receive unexpected results. When the latest outcome data is considerably better or worse than you anticipated, you need to look for reasons for the unexpected results so you can identify any possible mistakes in the data collection, capitalize on what caused an unexpected positive result, or take immediate corrective action on the cause of an especially negative result. It is important to keep in mind that adopting the process outlined here helps reformulate and refine questions being asked by elected officials as well as professional staff.

When the data has been analyzed and conclusions drawn regarding the levels of successes and disappointments and what appears to have caused them, produce a list of recommendations for future actions to capitalize on the successes and minimize the disappointments the data indicated.

Using the performance information

Now that you have identified the appropriate data and assembled it, the next challenge is to put it to use. The following is a list of likely uses for the analyzed data:

1) **Respond to elected officials' and the public's demands for accountability.**

Because of the limited influence of governmental agencies over many outcomes, full accountability is rarely possible. Performance data provides an opportunity to prove the effectiveness of your programs in a statistically supportable way to elected officials or the public.

2) **Help formulate and justify budget requests.**

This is the primary place where performance information is used to determine what resources and activities are likely to produce the best outcomes. Using performance information to develop budget requests instead of formulating requests then including whatever outcome information may support the request puts the budget process back in the correct order.

3) Help allocate resources throughout the year.

Outcome information should enable program personnel throughout the year to identify where problems do or do not exist and reallocate resources accordingly.

4) Trigger in-depth examinations of why performance problems and successes exist.

Performance data invariably raises questions about the "why" of outcomes being good or bad and leads to in-depth examinations toward enhancing programs.

5) Help motivate personnel to continue improving the program.

Many employees are motivated by their desire to produce quality results. Regular performance information provided to employees is likely to provide an incentive to improve because the employees can see a black and white indicator of their work success and any reward systems are based on statistical evidence instead of just supervisor's opinions.

6) Formulate and monitor the performance of contactors.

Outcome based performance targets can be placed in the agreements with contractors if you contract for services, just as incentives and penalties may be included. This is simply called performance contracting.

7) Support strategic and other long-term planning efforts.

Strategic planning can be helped by performance measurement information. The plan developed from the planning activity should include outcome indicators that are explicitly related to the objectives identified in the plan and that can track progress toward meeting those objectives.

8) Analyze options and establish priorities.

No public organization ever has all of the resources it needs to do everything it wants or needs to do. Choices have to be made as to where scarce resources are to be expended. Performance measurement data can help make those choices needed for strategic planning and capital investment programs.

9) Communicate better with the public to build trust and support for public services.

Citizens can be involved with identifying the service outcomes an agency should track through focus groups and other citizen involvement techniques. If performance measurement data is presented to citizens in a clear, fair, and balanced manner, citizens are much more likely to be supportive of the government and its services.

10) Improve service effectiveness.

Probably the most important result of performance measurement. Performance data can be used to identify organizational units with disappointing outcomes and help them develop implementation plans for improvement.

11) Help reformulate and refine questions about mission, objectives, and strategies to achieve those objectives.

Another important benefit in that this clarifies what needs to be done to get where you want to go.

Part V
Institutionalizing Performance Measurement

Cautions

You can expect at least some level of resistance from staff when you make the decision to implement performance measurement and budgeting for outcomes. Some of the most common reasons you will hear as to why performance or outcome budgeting will not work might include:

- It does not matter what we do because we have federal/state funding.
- We just reorganized and we don't know what we're doing yet.
- Everything is just fine as it is; we've always done it this way.
- We're too busy getting REAL work done to bother with this.
- We need more staff, more money, more time, more *(fill in the blank)* to do this.
- We can't target outcomes; they're too specific.
- We can't measure what we do.
- You'll misinterpret any information we give you.
- We can't be accountable because we have no control over anything.
- We're different. This shouldn't apply to us. We need an exemption.

None of these are valid. As discussed earlier, the reason for performance or outcome budgeting is primarily for strategic planning and program improvement. Measures can always be found that apply to any department. Areas previously thought to be "immeasurable" such as education, welfare, and even internationals relations have been shown to be measurable if someone is motivated and creative enough to pursue an innovative approach. Some common examples are included in **Appendix C**.

It is highly unusual for anyone to have total control over an outcome but you have to be able to demonstrate impact on the results or there will be no reason to fund the program.

Another caution is the attitude of "All right, just give me a form and tell me what you want me to say" or "If I give them something, then they'll go away." Performance measurement is neither a "paper drill" nor something that can be ignored. Inaccurate information collection will readily appear to be what it is when analyzed. Demonstrating openness and accountability inspires trust so any manipulation of measures to make a program look good will defeat the purpose of improving the program. Be honest with your data collection and results. If staff is involved in developing the process they are more likely to have bought into the effort and be willing to support it.

You must manage the accuracy of your data. Get the right start by developing meaningful, valid, accurate, and reliable performance indicators.

Beware of:

- **High Balls and Low Balls** (unrealistically high or low performance targets)
- **Instant Replays** (reporting the same performance level over and over, regardless of circumstances)
- **Greased Pigs** (indicators for which name, definition, or method of calculation change so often that you can not get a handle on them)
- **Orphans** (indicators for which no one claims responsibility)
- **Statistical Illiteracy** (calculations that don't add up)
- **Limp Excuses** (meaningless explanations of performance variances)

Institutionalizing the System

Performance measurement should become an integral part of your management processes. Just as private manufacturing firms use statistical process control to ensure quality of the products they produce; local government needs to use performance measurement and outcome budgeting to ensure it provides quality services.

Sometimes it helps to ask "What is the worst thing that would happen if this service didn't exist?" to put the measurement into proper perspective.

Use performance measures to help translate your organization's mission, vision, and strategy into tangible objectives. Measure how well you're achieving your mission, not your specific strategies.

Metrics (performance indicators) can be used to understand and measure how a process works and the results it generates. The following diagram illustrates the relationships:

INSTITUTIONALIZNG PERFORMANCE MEASUREMENT:

Metrics (performance indicators) measure process and product.

Inputs
(Demand)
(Need)
(Size of Problem)
(Resources)

Process

Outputs & Outcomes
(Products)   (Results)
(Services)

Efficiency:

$$\frac{\text{Outputs}}{\text{Inputs}}$$

(Expenditures compared to productivity; caseload per staff member.)

$$\frac{\text{Outputs or Outcomes}}{\text{Cost}}$$

(Cost per item produced, service provided, or client served; cost per result achieved.)

$$\frac{\text{Outputs or Outcomes}}{\text{Time}}$$

(Production or turnaround time; timeliness of results.)

Quality: Effectiveness in meeting the expectations of customers, other stakeholders; and expectation groups.

Establish the link between resources and results early and maintain that link through budget development, appropriation and budget control processes. Set performance standards linked to budgetary levels. Performance standards are the expected levels of performance associated with a performance indicator for a particular period and funding level that link dollars and results. In this, performance standards are a way to document "return on investment", specifically, what we can expect to receive for our money.

It is also necessary to manage what performance data is used because the volume of information produced can be staggering. Watch out for the "shotgun" or "kitchen sink" approach–reporting just about every type of measurement or statistic that is already gathered or can be counted easily. This leads to a heavy emphasis on transactional data–inputs and outputs–rather than results. Concentrate on the development of balanced sets of performance indicators in order to provide a clear picture of performance without overwhelming users with needless detail. Avoid the pitfall of "paralysis by analysis".

Present performance information at different levels in order to surface key data while maintaining the availability of support and explanatory material. Get consensus among data users on indicator types and levels before indicators are reported.

It should be remembered that performance measurement is a "living" process. Because you have adopted a set of indicators and measures does not mean that you cannot revamp and revise those indicators and measures if they do not provide useful information, they provide poor measures, and the circumstances change that made them good choices.

Part VI
Putting It All Together

We have discussed the components and methodology of performance measurement and outcome budgeting in previous parts. Now it is time to put it all together. Using transportation related services (county highway or municipal street departments), we will look at addressing outcome measures for streets, roads, and sidewalks.

First, our mission statement might look something like this:

"To provide transportation access to and between desired destinations within, and to the corporate limits of, the community/county, in a quick, convenient, safe, and comfortable manner for all citizens with a minimum of harmful effects on the environment; By constructing and maintaining streets, roads, and bridges to PASER Level _____ standards and sidewalks to _____ standards."

This mission statement includes the "To" and "By" components where the "To" identifies the basic objectives and the "By" identifies the "how" the services will be provided to attain those objectives.

From this mission statement, you can follow the four Principles and the Four-Step Methodology discussed in Part 1 to determine your desired performance indicators and family of measures.

Outcome measures should state the objective, the quality characteristic, a specific measure, and how the data is to be collected. An example is provided in **Appendix D**.

For benchmarks, using the Pavement Surface Evaluation and Rating (PASER) System is an excellent reference. PASER ratings can be used alone, such as determining a benchmark of maintaining all streets at PASER Level 5 or higher, or they can be used against other jurisdiction's average PASER ratings. Whatever best suits your organization is probably acceptable.

The data collected can then be applied to the Logic Model or the matrix shown in Part 1.

Using the matrix, data for transportation using the data collected using Appendix D, the matrix might appear as the following:

Service Area	Objective	Input	Output	Efficiency	Service Quality	Outcome
Ride comfort & reliability	=>6	$375,000	11,250	$300	82%	7.24
Streets or Highway Dept.	PASER Level goal	Budget & man-hours	Sq. Feet of street resurfaced	Cost per foot resurfaced	Percent of streets rated PASER 6 or higher	Average street rating.

With this data you are able to determine how close you are coming to meeting your goal for street condition, what it is costing you per foot to resurface those streets, how many feet of street you've been able to resurface in the past reporting period, and the average condition of your streets. With this data, you can decide whether to budget more funds to street resurfacing, compare your data with other communities, whether you should shift to more or less reconstruction versus resurfacing, or if your streets are in good enough condition to shift funds to some other more pressing project.

Using the **Logic Model**, streets/highways may have a worksheet that looks like the following:

Department/Program Name: Streets – Maintenance
Program Descriptions: Cracksealing, patching, sealcoating, overlay and reconstruction
Program customer: Driving public

Inputs	Activities	Outputs	Initial Outcomes	Intermediate Outcomes	Long-term Outcomes
Budgeted funds:	Cold patching	Crack sealed Pine, Adams, and Oak Streets	Motorists travel on smoother surface	Motorists reach their destinations safely	Street surface and structure are protected from freeze/thaw
$640,000 local					
	Crack routering & sealing	Ground and resurfaced Chestnut (two blocks)	Roadways are open	Motorists do not suffer vehicle damage from street conditions	Subsurface infrastructure is protected
$237,000 state					
	Grinding & overlay	Reconstructed six blocks of Johnson St.	Motorists expectations are met	Streets are easier to plow during winter	Additional repair costs are avoided
Staff: 1 Superintendent					
2 Supervisors	Sealcoating				
	Reconstruction				
16 Street workers	Debris removal				
Maintenance equipment					
Contract work					

When applying performance measurement to your budgeting, neither the matrix or Logic Model provide all of the information necessary. You will still need explanatory data, benchmark comparisons, and some kind of outcome measurement report such as the following:

Streets & Highways
Street/Highway Maintenance
Outcome Measurement Report

Program Information: Brett Favre County and the City of Packerville consolidated Streets & Highways Department provides debris removal, crack sealing, cold patching, grinding & overlay, sealcoating, and reconstruction services for both the county and municipality through department and contractor

Desired Outcome: All streets and highways maintained to a PASER Level 6 or higher.

Expected Indicators: By end of fiscal year, 15,000 square feet of streets resurfaced and all streets meeting PASER Level 6 rating or higher.

Outcomes Achieved: Only 11,250 square feet of streets were resurfaced and only 82% of streets were rated PASER Level 6 or higher.

Analysis of program outcomes: While program expectations were not met, deficiencies were primarily due to contractor delays and equipment down time. Only six blocks of Johnson St. reconstruction project were completed versus the planned eight blocks due to a three month delay on the part of the primary contractor. Additionally, crack router was broken down and waiting parts for six weeks of the construction season.

Recommendation resulting from outcome information analysis: The amount of work planned and budgeted for was appropriate. In the coming year, the bidders list should be expanded to achieve a better choice of general contractors. Funding for a new crack router should be added to the capital budget as indications are that the present equipment is worn out.

When collecting and collating the actual performance data, probably the most effective and convenient method to do so is via a commonly used spreadsheet, such as Microsoft Excel where all of the different aspect of the data collection can be collected in individual columns, averaged, and collated for analysis.

Part VII
Example Scenarios

First of all, it should be noted that using performance measurement techniques is not limited to a prescribed methodology. Local governments can modify their approaches to whatever best suits their needs. In these scenarios, we simply seek to provide examples of how an issue might be approached. What is paramount is that a system be used that leads local governments to make decisions that are in their best interest; prevents the mistake of attempting to "fix" a problem that does not exist; and leads to addressing "the disease" rather than just "the symptoms."

Recognizing that performance measurement can be used both as a shorter-term problem solving tool as well as the traditional planning and budgeting management tool, the following scenarios represent examples of using performance measurement in those venues:

Scenario #1
Addressing a Problem

The issue:

Responses time for fire departments are critically important not only for how they affect fires suppression and life saving efforts but for the community's ISO rating and how that affects property insurance rates. The city council has been receiving complaints/allegations that the fire department's response times have become unacceptably slow. In response, the City Manager directs the Fire Chief to begin tracking the department's response times for the next month. The reasons for doing this performance tracking are:

(A) To defend the department's response performance from unwarranted criticism and avoid fixing a problem that may not exist;

(B) To determine if there actually is a problem, what is causing it and what can be done to remediate it;

(C) To use this as an opportunity to still improve performance even if it already meets the established goals

Establishing the Benchmarks:

Some of the benchmarks we can use might include:

Internal   1. Average response times for all municipal public safety departments
2. Response times per mile traveled

External   Average response times for fire departments in other comparable municipalities:

1. Possum Hollow
2. South Park
3. Bug Tussle
4. Rorke's Drift

Using external benchmarks with similar situations is an excellent way to ensure you're not "fixing" a "non-problem." If no one else is doing better than you are, you are probably not in need of major restructuring and you can concentrate on determining whether attaining any improvement is worth the monetary costs. A key here is to note any significant differences in how you provide the service compared with how your chosen benchmark provides the services.

The Four-Step Methodology:

We will want to utilize the Four Step Methodology in this process to ensure we have a clearly understood mission: the correct service area is being considered; we have a clear objective; and we've correctly identified the indicators we need to use in measuring our progress toward our objective.

Step 1: Review and evaluate existing department mission and cost center goals:

In this case, a reasonable response to this step might be **"To provide emergency and non-emergency services to anyone requiring assistance in our service area."** This keeps us focused on the department's true mission and avoids "mission creep."

Step 2: Identify a Service Area:

In this case, while the fire department also does fire prevention, fire prevention education, inspections, disaster planning and a variety of other services, we will concentrate on those service areas that require an emergency response: **Fire Suppression and Extrication/Rescue.**

Step 3: Identify the Service Area Objective:

Remembering our earlier discussion on objective statements and knowing we have a set goal of a seven (7) minute response time to anywhere in our area of responsibility, we make our objective statement:

"Arrival of first fire/emergency apparatus on scene within seven (7) minutes of dispatch anywhere within the municipality"

Step 4: Identify indicators that measure progress on objectives.

Since our objective specifically relates to response time, we're going to want to concentrate on those factors that may affect response time, such as time from dispatch to reporting on station:

- During normal workdays
- During rush hour traffic
- At night, after dark
- Under adverse weather conditions
- During unusual events (bridge washed out, parade on Main Street, etc.)
- Other calls requiring response at the same time
- During periods of reduced manning levels
- During times when equipment availability is diminished

In our present scenario we'll concentrate on adverse weather and reduced manning.

Data Collection:

Using a spreadsheet or data base to collect our performance data allows us to place all pertinent information in front of us for tabulation. Such a spreadsheet might look like the following:

Date	Call	Dispatch	On Station	Response time	Manning	Weather conditions	Other calls	Other conditions
5/18/2009	Structure fire – 1404 Elm Street	12:45 AM	12:54 AM	9 min	75%	Light rain	No	Construction on E. Washington
5/18/2009	Two car collision w/injuries at Lake & Jackson St.	7:23 AM	7:34 AM	11 min	75%	Light rain	Yes – Elm St. Fire	heavy rush hour traffic
5/18/2009	Alarm box malfunction – Menard's	9:10 AM	9:15 AM	5 minutes	75%	Cloudy	No	None

Data Compilations

Now we have collected our data and compiled it. In this case we are using the month of December 2008. We find that our fire department has responded to 342 emergency calls during the month and our average response time was 8 minutes and 4 seconds. We then place that information into a matrix with other pertinent known and related data. The matrix might look like this:

MATRIX

Service Area	Objective	Input	Output	Efficiency	Service Quality	Outcome
Fire Suppression	**To ensure arrival of first fire/emergency apparatus on scene within seven (7) minutes of dispatch anywhere within municipal limits**	**Actual costs equipment staff/firefighters**	**# incidents responded to**	**avg. cost per response**	**avg. response time**	**acceptable response time for ISO and benchmarks**
Response time	**7 minutes**	**1 engine, 1 truck, 6 firefighters, fuel**	**342**	**$1,055**	**8 minutes, 4 seconds**	**acceptable response time considering manning and weather conditions**

An analysis of the most applicable data related to manning and weather revealed a number of pertinent facts:

Number of responses during periods of reduced manning (75% manning or lower) **184**
Average response time: **7 minutes 15 seconds**

Number of responses during or within 24 hours of a 3 inch snowfall or an ice event: **127**
Average response time: **9 minutes 32 seconds**

Number of responses w/full manning and no weather event: **102**
Average response time: **6 minutes 30 seconds**

Note: The adding up the responses will not necessarily add up to the total number of responses because some responses will show up multiple times in the tracking process. This does not present a problem as we are considering average comparisons.

Additionally, when we compile the averages from our chosen benchmark communities for comparison, we find:

Average response time for all benchmark communities: **8 minutes 10 seconds**

Explanatory Data

Remember that we must include explanatory data regarding our performance data compilations to ensure we have recognized unusual circumstances and do not make faulty decisions based on skewed data. In this case, we conducted this study over the month of December, 2008 in southern Wisconsin. Our explanatory data statement may read like this:

> **"Data collection period was conducted during month of December 2008 when the municipality suffered the snowiest December in recorded history and budget deficits mandated 2/3 of shifts be manned at 75%. Some responses experienced both snow/ice events and reduced manning."**

This explanatory data assists us in analyzing our performance data to produce a summary, such as:

Summary

> **"After analyzing the collected data, and considering the conditions discussed in the explanatory data, we have determined that, while the department did not reach it's stated goal of seven (7) minutes or less for each response time, it did meet an acceptable response time average of 8 minutes, 4 seconds from dispatch to reporting "on station." The deviation from the 7 minute goal was caused by unprecedented manning reductions and record-breaking winter weather that hindered responses. Under normal conditions the department actually exceeded the set goal by nearly 8 percentage points and one half minute. Additionally, when compared to chosen benchmark communities, our department bettered their average response time by six (6) seconds under identical conditions."**

In preparing this summary, we have:

1) Verified that our fire department's response times are acceptable; i.e. we're not "broken" in that we need to make changes in how the fire department operates. Don't "fix" what isn't broken.

2) We have verified that reduced manning does, in fact, negatively affect response times but reduced manning only lengthened response times by an average of fifteen (15) seconds.

3) We have verified that snow and ice events posed the greatest detriment to meeting response time goals, to the point of adding an average to 2 minutes, 32 seconds to response times

With this information, we can now ask pertinent management questions, such as:

1) Is the cost savings realized by the manning reductions worth the additional average response time increase of 15 seconds?

2) Is there something that can be done to minimize the negative effects of snow on the fire department's response time? At what cost?

3) Is there something that can be done outside of the fire department's control to improve response times in bad weather? What coordination with or actions by the Street/Public Works Departments may be necessary to improve FD response times during adverse weather?

4) Since we've begun collecting data on response times, is it worth collecting data on other issues which could improve our ISO rating? Water pressure and availability? Vehicle condition? Specialized equipment?

5) Is there a specific location or general area where response times appear to be slower? Why?

6) What is the actual minimal acceptable response time before it becomes unacceptable

In such a situation, once management questions are being raised and the performance data has stripped away the distracters, a simple issue might come to mind such as changing the priority in snow plowing routes for the streets department. A "common sense" solution may come to mind that otherwise might not have been considered by merely focusing on the fire department, such as, has there been a major subdivision built since the snow plowing routes were established and prioritized and has that subdivision shifted the population center of the municipality? If so, the plow route priority may need to be adjusted to better serve that new area of population density both for fire protection and general transportation. Hence, the problem can be fixed with no additional cost. In collecting the data, we have already noted the location of the service call, the response time, and the weather conditions at the time so we already have the data proving our conclusion.

Analyzing the collected data can prove invaluable in your decision-making and efficiency efforts.

Scenario #2
Capital Planning & Decision-Making

The Issue:

The Baldwin County Board of Supervisors wants to maximize the value of their spending on road and highway maintenance and would like to tie performance data into their strategic and capital improvement planning. The county's strategic plan transportation chapter sets a goal of achieving and maintaining all county roads to a PASER rating of 6 or better within the next ten (10) years. They want you, the Highway Commissioner, to collect data that will help them prepare plans and budget for road and highway maintenance to maximize the value of maintenance dollars spent and move toward achieving the aforementioned transportation strategic plan goal based on the best performing maintenance methods for each type of road or highway. The reasons for this data collection will be to:

1) Determine whether chip seal, slurry coat, overlay or grind/resurface is most cost effective on county roads and highways

2) Provide data for decision-making on percentage of road maintenance dollars to be spent on each of the three maintenance methods

3) Determine the feasibility of the strategic plan goal of achieving and maintaining a PASER rating of 6 or better on all county roads within the next ten (10) years.

4) Determine a general cost estimate for achieving different levels of maintenance when maximizing maintenance dollars.

Establishing the benchmarks:

Some of the benchmarks we may use are:

Internal:

1) previous year's average per foot maintenance costs
2) Previous year's PASER ratings at one and five years following maintenance

External:

1) Steele County
2) Pine Barrens County
3) City of Murphy's Landing

The Four-Step Methodology:

Again in this scenario, we will utilize the Four-Step Methodology to we clearly understand and have properly addressed our mission, service area, objective, and indicators.

Step 1: Review and evaluate existing department mission and cost center goals:

In this scenario our answer might read like: **"To provide a well maintained motor vehicle transportation network throughout Baldwin County."**

Step 2: Identify a Service Area:

In this case, while the highway department does a variety of work, including it's own pavement repairs, snow plowing, litter pickup, etc., this service would apply to **"contractor and department provided pavement maintenance."**

Step 3: Identify the Service Area Objective:

Remembering here that our objective is related to both a capital expenditure plan and strategic plan, we are looking for data that will be collected and may change over time. When we revisit our tasking, a reasonable objective might read:

"Maintain all county highways and roads to a PASER rating of 6 or better within ten years at current funding levels (adjusted for inflation)"

While accomplishing this performance level at current funding levels may be rather optimistic, it sets a goal which emphasizes the need to find the most efficient and effective payment maintenance methods applicable to the county's location and circumstances.

Step: 4: Identify indicators that measure progress on objectives.

Since our objective relates to both quality of pavement condition and cost of maintaining that desired condition, we should look primarily at:

- Cost versus PASER rating at the end of 1 year
- Cost versus PASER rating at the end of 5 years
- PASER rating at the end of each period for each type of maintenance

  (1) reconstruction
  (2) grind/overlay
  (3) slurry seal
  (4) chip seal
  (5) crack router & fill

Data Collection:

As in the first scenario, we can easily use a spreadsheet to collect and collate the data we need to answer our performance and planning questions. While the data portrayed below is not necessarily realistic regarding current costs, it does reflect how actual data can be collected in a useful format.

Baldwin County Highway/Road Maintenance

Highway Road	Initial PASER rating	Maintenance applied	Number of feet maintained	Total Project Cost	Cost per foot	Avg. Traffic count per month	PASER Rating End of 1 Yr	PASER Rating End of 5 Yrs	Cost/PASER rating at end of 5 yrs	Explanatory Data
Foxboro Road	4	overlay	3,000	$34,000	$11.33	18,700	9	7	$4,857.14	
Highway 133	7	crack sealing	6,400	$8,700	$1.36	84,000	7	5	$1,740.00	10% state funded
Valley Road	1	Total reconstruction	2,500	$178,000	$71.20	16,050	9	7	$25,428.57	Includes replace washed out short bridge & culvert
Elm Street	5	Slurry seal	1,500	$15,800	$10.53	8,500	9	7	$2,257.14	

Now that we have collected our data and compiled it, we will again want to place our results and all pertinent data into a matrix for facilitate decision-making. Our matrix might look like this**:**

MATRIX

Service Area	Objective	Input	Output	Efficiency	Service Quality	Outcome
Highways & Roads	To maintain all county highways and roads to a PASER rating of 6 or better within ten years at current funding levels	Actual costs (in-house & contract)	# of feet, highway & road, receiving maintenance	Average cost per foot maintained	Average PASER rating after (1) & (5) year(s)	Probable avg. PASER rating after 10 years
Hwy & Road Maintenance	PASER 6+	$336,700	14,150 ft.	$23.63	8.26 6.71	5.16

From the data we have compiled, we can make some conclusions.

First, we have a snapshot average as to how much we are spending per foot of asphalt. From this, we can make policy decisions as to whether this is an acceptable level of efficiency. We can also make policy decisions based on our outcome for the amount of funds programmed for highway and road maintenance.

Most important to our stated goal is that we have used the data to come up with an estimate that indicates the highways and roads we perform maintenance on this year. If we continue to use our present "mix" of methods, will **probably not achieve** our stated strategic goal of maintaining a PASER rating of 6 or better after ten years.

Since we have determined that our present "mix" is not likely to achieve our stated goal, we can return to our compiled data to determine the optimal mix of maintenance methodologies that will most likely allow us to reach our goal. By analyzing the compiled data, we may find:

1) Crack sealing is necessary for the maintenance of new or recently reconstructed asphalt but is ineffective in maintaining our desired PASER levels on streets more than five years old

2) Chip seal is very inexpensive but is effective for no more than four years and impractical for surfaces with average daily traffic counts of 5,000. Hence, it is of little value in maintaining our PASER goal over ten years.

3) Slurry coat, while only effective on asphalt surfaces with an initial PASER rating of at least 5, offers an efficient method of maintaining highways and roads within the stated PASER goals.

4) Regrind & overlay is more expensive than slurry coat by ___% but far less expensive than reconstruction and the most cost-effective method of achieving the PASER goal for surfaces that are too deteriorated for only a slurry coat but do not have a compromised street foundation mandating reconstruction.

5) Reconstruction is the only option for highways and streets where the base is compromised but is far too expensive to be used except where no other option will work.

Considering these findings, we may decide to concentrate 60 or 70% of our highway and road budget on slurry coat and regrind/overlay to make most effective and efficient use of those funds and maximize our chances of achieving our ten year PASER goal. However, it must be remembered that this is only one year's findings and a strategic plan would continue to be updated as additional year's data becomes available and is analyzed.

Note: These findings are only an example to illustrate how the system would work; real findings on pavement maintenance may be far different than those shown here.

Explanatory Data

In this scenario, anomalies that might affect the validity of our data could include more (summer flooding or winter snow removal) precipitation than normal; extreme spikes in cost, such as fuel and asphalt; or changes in state mandates or highway aids. Explanatory data here might appear as:

> **"Asphalt costs for 2009 were 43% lower than 2008 due, largely, to the higher price of crude oil and played a major factor in the 2009 contract costs. A return to the prices of 2008 or higher in coming years may skew future data and require modification of the capital and strategic plans."**

Again, the explanatory data helps to ensure we don't make the wrong deductions from our compiled data and to remind us that there are factors that could significantly change the next year's data. Data is fluid and, when used to help produce and annually navigate a capital and strategic plan, so must the plans be flexible in the face of present conditions. The explanatory data assists us in analyzing our performance data to produce a summary, such as:

Summary

> **"After analyzing the collected and compiled data and considering the caution noted in the explanatory data, data indicates that the capital plan and strategic plan goals can best be achieved by a calculated "mix" of maintenance methodologies which concentrate efforts using a "slurry coat" after crack sealing at approximately seven years after reconstruction and a regrind/resurface at approximately the fifteen year mark to achieve an overall PASER goal of 6 or better on all streets and roads within ten years"**

By preparing the summary, we have set the basic parameters for how we can make our capital improvement plan work and achieve our strategic plan goals. We have also provided a basis for future year performance data collection and analysis. Since we are dealing with "plans" here, all assumptions made with one year's data are subject to change or revision when data from additional years is added to the performance data base. Again, it is important to emphasize the need for good explanatory data to identify unusual or artificial factors that could skew outcomes and wrongly bias decision-making.

When we also consider funding limitations, we may find we must make a recommendation such as:

> **Slurry and regrind/resurface should receive approx. 65% of the highway and road maintenance budget, with crack sealing included under those programs. Chip seal should be limited to no more than 5% of the budget with its use restricted to the most rural roads with daily average traffic totals of less than 1,000. Funding levels will not allow for reconstruction at the 25 year level as desired so the maintenance mix will budget 30% of the budget to reconstruction with a 30 – 32 year reconstruction schedule.**

With the summary as a basis, we can now continue to collect and analyze performance data each year to determine the optimal "mix" of crack sealing, chip sealing, slurry coating, grind/resurface, and full reconstruction. The optimal mix may change over time as conditions change and may also change if it becomes clear that funding levels must be reduced. In short, we have produced a verifiable tool to help us implement our capital and strategic plans while optimizing our available highways & roads funds.

Part VIII

Transitioning to Program and Performance-Based Budgeting

There are four common budget approaches used in local governments. Those are:

- Line-Item Budgets
- Program Budgets
- Performance-Based Budgets
- Zero-Based Budget

Line-Item Budgets are incremental budgets and the most commonly used approach. Line-item budgets emphasize control and oversight and allow elected officials to be intimately involved in the spending of all funds down to the smallest amount. The down side of this kind of budget is that it downplays trust in the department heads, stifles communication, lacks flexibility and is very difficult to use with performance measures to evaluate programs.

Examples of Line-Item Budgets:

Parks Department	
Expenses	
Salaries – Full-time	83,844.00
Salaries – Part-time	35,976.00
Office Supplies	2,400.00
Contracted Services	0.00
Computer Maintenance	0.00
Professional Dues	195.00
Travel Expenses	1,400.00
Training & Education	650.00
Car Allowance	2,800.00
Telephone	2,500.00
Heating Fuel	8,200.00
Electricity	5,800.00
Water	6,500.00
Building Supplies	2,500.00
Building Maintenance	2,500.00
Rent	500.00
Vehicle Repairs	800.00
Gas & Oil	850.00
Water Tests	96.00
Youth Ctr. Equipment	2,000.00
Program Equipment	3,900.00
Pool Supplies	4,200.00
Trophies & Awards	1010.00
Pool Maintenance	1,400.00
Health Insurance	7,650.00

Property Insurance			1,000.00			
Total Expenses			**178.771.00**			
Or:						

GENERAL FUND					FY 09/10	
100 Administration					**Dept 100**	
Description	**FY04 Budget**	**FY04 Actual**	**FY05 Budget**	**FY05 Project**	**FY06 Budget**	**Comments**
101 Wages & Salaries	**$1,463,450**	**$1,461,320**	**$1,513,880**	**$152,420**	**$1,609,210**	
101-1 City Manager	**$82,000**	**$82,000**	**$84,525**	**$84,525**	**$95,000**	**Board directed increase**
101-2 Office Staff	**$46,000**	**$46,293**	**$47,000**	**$47,442**	**$49,816**	**Increase per labor contract**
	Secretary	*$12.75 per hour*	$26,520			
	Insurance clerk	*$11.20 per hour*	$23,296			
	Total		$49,816			
Total	**$108,000**	**$108,293**	**$111,525**	**$111,967**	**$114,816**	
102 Benefits						

Program Budgets allocate funds to major program areas or activities unlike Line-Item Budgets that break down budgets to finely detailed line items. Program budgets utilize a more centralized approach and focus on program goals. When using program budgeting, a manager or department director will examine all alternatives that may achieve program goals and budget by program in order to focus on the most effective use of funds. Program budgeting requires elected officials to allow a good deal of flexibility to department directors and staff and have faith in their decisions and recommendations.

A Program Budget for a Police Department might break down by programs such as:

1. Administration
2. Patrol
3. Investigations
4. Community support
5. Tactical Response

Program Budgets include both revenue and expenses for the major activities of an organization. They help managers focus on sources of income from and related to programs that could be expanded or discontinued in order to achieve efficiency and maximize the best use of available funds.

A medically related program budget might look like:

($000's)	Oncology	Rhinoplasty	Cardiac	Total
Revenues	$ 40,000	$ 8,150	$ 50,000	$ 98,150
Expenses	$ 37,000	$ 17,000	$ 46,000	$ 100,000
Profit/(Loss)	$ 3,000	$ (8,850)	$ 4,000	$ (1,850)

Some difficulties with Program Budgets are that the goals can be difficult and formulate and subject to change. If the goals change, the program structure must also change. Objective measures are necessary for good program decisions but it can be difficult to obtain objective measures of benefits. These difficulties can also pose challenges when attempting to determine inter-program efficiency.

Performance-Based Budgets (PBB) commonly adopt a program budget format to the existing organizational structure. Performance budgets are essentially program budgets with a performance measurement methodology used to make budget and program decisions.

In Performance Budgets, the initiative in budget preparation lies with the performance unit or department. Government activities are divided into major functions and their various activities. Each activity must yield and identifiable output. Management, administrative, and overhead costs are distributed among the various activities of the performance unit. The performance budgeting process is used to better evaluate the results of program operations and provided decision-makers and the public with better information on the quality of public services. This form of budgeting is becoming increasingly popular with the public as citizens become increasingly distrustful of government.

Zero-Based Budgets (ZBB) organize financial and budgetary information into decision packages, i.e., incremental spending levels that reflect varying levels of effort and costs. In theory, each department prepares at least three (3) budget packages:

1) A base-level, meeting the program's minimum requirements
2) Current level funding
3) An enhanced package which meets previously unmet needs

The packages from all departments are then ranked according to perceived need for the package. Unlike Performance-Based Budgets, which use more objective criteria to make budgetary decisions, Zero-Based Budgeting relies on subjective judgment in its decision-making to rank packages.

Zero-Based Budgeting calls for a total re-evaluation of all programs and activities. It requires decision packages be prepared for each separable activity or level of activity and then ranks those packages. Submitted packages are either adopted or rejected. In theory, decision-makers conduct an annual evaluation on each program's purpose and priority, weighing it against all other spending possibilities. As a result, decision-makers may decide not to renew funding for an existing program and shift those funds to another, possibly entirely new, program. In reality, this reallocation rarely occurs.

The Transition

There are likely to be many concerns in making a transition from the more traditional line-item budget to program budgets. In fact, it may prove useful during the first year to maintain both a program budget with a companion line-item breakdown to cross reference until all are comfortable with the concept and the accounting.

The "Interim Solution" discussed in Part I can be used to help both elected officials and department heads conceptualize the idea of tying budgeting to program and performance evaluation versus the more onerous line-item methodology.

This rudimentary form of Performance Budgeting can be implemented until a formal system can be produced by including the following in each department's budget request:

- An explanation of the department's overall goals
- An explanation of what the department has accomplished in the past year
- An explanation of what the department intends to accomplish in the coming year
- An explanation as to what is different from last year in the proposed budget and why
- A GASB compliant budget* showing past year budget expenditures

Beginning the transition with just one department may help with this transition. For example, law enforcement, both police departments and sheriff's departments, already collect a great deal of performance related data and have more distinct program areas than many other departments. This may make them a logical first choice for the budgetary transition.

Remember that measuring performance specifically related to program success is necessary but attempting to measure everything is likely to result in "paralysis by analysis."

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* A GASB compliant budget is one that uses the format recommended by the Government Accounting Standards Board with fund accounting, previous year's budgeted amounts and actual expenditures per line item included. It is compiled using "fund accounting."

SUMMARY

Performance measurement and budgeting based on performance outcomes are tools to be used to assist local government officials in making their local government services as efficient and effective as possible. There is no "right" or "wrong" answer when collecting data. There is only data that works to assist elected officials and staff in asking the right questions, forming the best policies, getting the most value for their available funds, and doing the best possible job for their communities.

Elected officials and managers need to reassure their staff that performance measurement and performance-based budgeting are management tools intended to improve government programs and are not weapons with which to punish department heads for what appears to be substandard performance. Eliminating the staff's apprehension that there may be repercussions for providing truthful but negative data because that negative data is essential in helping to identify areas where programs can be improved.

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NOTE: This manual draws heavily and, in some cases, directly from the work of Harry P. Hatry.