



### STANDARD

A standard set of metrics that are aligned with strategic goals should be developed and regularly measured by all units within the procurement function.<sup>1</sup>

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#### Definition

**Performance Metrics** is the term given to the measurement of performance. An analytical application of measurements that allows comparison of performance standards.<sup>2</sup>

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### Element 1.1: Types of Metrics<sup>3</sup>

#### Input Metric

- Inputs are resources used. They include labor, materials, equipment, and supplies.<sup>4</sup>
- Demand for services may also be considered an input indicator.<sup>5</sup>

#### Output Metric

- Outputs are the recording of activity or effort that can be expressed in a quantitative or qualitative manner (e.g. total number of new contracts, total number of employees who obtained professional certification, total spend).

#### Outcome Metric

- Outcomes are an assessment of the results of an activity and show whether expected results were achieved.<sup>6</sup> (e.g. customer service, improved performance of supplier, employee retention).

#### Efficiency Metric

- Efficiency measures are a ratio representing inputs to outputs or outcomes (e.g. turnaround time per purchase order processed, average administrative cost per contract, percentage of small business contracts as a percentage of total contracts issued).<sup>7</sup>

#### Explanatory Information

- Explanatory information should identify internal or external variables that affect performance. (e.g. staff workload, supplier performance).

### Element 1.2: Using Metrics with Targets

Setting performance targets helps to establish an expectation to measure against. Targets will vary depending on established goals and objectives (See Standard of Practice: Strategic Planning), however, quality metrics will allow for the collection of meaningful data for trending and analysis of rate-of-change over time (See Standard of Practice: *Performance Management*).

#### 1.2 (a) Trending against known standards

- The standards may come from either internal or external sources and may include benchmarks and/ or comparing service levels.
- When trending against comparable data, care must be given to ensure that metrics and the measurement system that are used are the same as those used to establish the comparable and/ or benchmark. (e.g. organizations of similar size, same start time for measuring turnaround times, same survey questions used in regard to customer satisfaction, etc.).



## Public Procurement Practice

### PERFORMANCE METRICS *(cont.)*

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#### 1.2 (b) Trending with standards to be established

- Usually this type of metric is used in conjunction with establishing a baseline.

#### 1.2 (c) Milestones achieved

- A Yes/ No metric, usually used in start-up cases when trends, baselines, and targets are not yet established. Because there is not a valid calibration of the level of performance for this type of measure it should be used sparingly.<sup>8</sup>

#### Element 1.3: Recommended Metrics<sup>9</sup>

The decision regarding which metrics to use will vary by organizational goals and objectives. It is recommended that, at a minimum, procurement should track the following metrics:

- I. Cost savings/ cost avoidance<sup>10</sup>
  - a. Realized/ implemented savings as a percent of identified savings
  - b. Level of savings due to new contract/supplier arrangements or purchasing initiatives
  - c. Value of negotiated additional benefits
  - d. Cost reduction due to using alternative goods or services
  - e. Value of improved warranties
  - f. Reduced stock holdings and improved payment terms
  - g. Savings due to improved waste management
  - h. Reduction in demand for a good or service (i.e. use of capacity metrics)
  - i. Percent of spend under management
  - j. Refunds, credit, and/or rebate payments made by vendors as a result of a savings project (e.g. pCard rebate programs)<sup>11</sup>
- II. Supplier and industry development
  - a. Potential local suppliers identified
  - b. Number of new sources of particular goods and services
  - c. Number of firms involved in local supplier development programs
- III. Supplier performance
  - a. Include a range of cost targets
  - b. Gauge whether contract requirements, service, and quality requirements are being met through the use of a consistently applied evaluation procedure
- IV. Efficiency of internal procurement systems and processes
  - a. Volume of procurement spend transacted electronically or through other transaction methods like pCards
  - b. Volume of transactions transacted through aggregated or standing-offer arrangements
  - c. Reduction in transaction and inventory management costs and distribution costs
  - d. Internal customer satisfaction with delegation of purchasing processes and service levels<sup>12</sup>
  - e. Response time between requisition submission and purchase order placement
  - f. Procurement cycle time from the beginning of a sourcing process to the time that a contract is executed
  - g. Simplicity, convenience, and effectiveness of procurement decision making and authority lines, systems, and processes
  - h. Procurement operating costs as a percentage of managed spend
- V. Procurement professional development and employee retention
  - a. Number of full time employees with a professional certification (e.g. CPPO, CPPB)
  - b. Number of employees in management that hold a professional certification (e.g. CPPO, CPPB)
  - c. Amount of spending per full time employee for professional development and training (e.g. training classes for CEU's, enrollment in a college degree program)
  - d. Average number of hours per full time employee spent on professional development and training
  - e. Total number of employees retained year-on-year
  - f. Total number of new employees as a percentage of total employees

# Public Procurement Practice

## PERFORMANCE METRICS *(cont.)*



PRINCIPLES AND  
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### Element 1.4: Evaluating Metrics<sup>13</sup>

Evaluate each metric by determining the following:

- Is it meaningful?<sup>14</sup>
- Is it relevant?
- Is it focused on customer needs and demands?
- Is the data used for the metric accurate and reliable?
- Is it simple enough to be understood?
- Is it cost effective to collect and report the data?<sup>15</sup>
- Can the data be compared over time?
- Have those who are responsible for the performance being measured been fully involved in the development of this metric?<sup>16</sup>

### Background

Appropriate performance metrics are critical to a performance measurement system (See Standard of Practice: Performance Measurement). Because performance metrics affect the performance measurement system, they will also affect performance management (See Standard of Practice: Performance Management).

Appropriate metrics need to be aligned with overarching organizational goals. Consideration should be given to collaboratively involving the individual(s) who will be responsible for decision making and performance management, when developing the metric.

- 1 Adapted from McClelland, J. (2006). *Review of public procurement in Scotland: Report & recommendations*. Edinburgh: Crown.
- 2 NIGP. (2011). NIGP online dictionary. Metric. Retrieved from <http://www.nigp.org/eweb/docs/education/OnlineDict/DictM.htm>
- 3 These distinctions in metrics are also commonly made in scorecard implementations that measure "internal process", along with financial, customer, and employee learning and growth perspectives. See Niven, P. (2008). *Balanced scorecard: Step-by-step for government and non-profit agencies* (2nd ed.). New York, NY: Wiley.
- 4 Adapted from NSAA. (2004). *Best practices in performance measurement: Developing performance measures*. Lexington, KY: NSAA.
- 5 NSAA. (2004). *Best practices in performance measurement: Developing performance measures*. Lexington, KY: NSAA.
- 6 For information see NSAA. (2004). *Best practices in performance measurement: Developing performance measures*. Lexington, KY: NSAA. Also see McCue, C. P. & Johnson, B. R. (2010). *Strategic Procurement Planning in the public sector*.
- 7 McCue, C. P. & Johnson, B. R. (2011). *Strategic procurement planning in the public sector*. Herndon, VA: NIGP.
- 8 Adapted from, Oak Ridge (2005). University of California approach: Developing performance metrics. Retrieved on February 8, 2011 from [www.orau.gov/pbm/documents/overview/c.html](http://www.orau.gov/pbm/documents/overview/c.html)
- 9 Adapted from, McCue, C., Johnson, B. (2011). *Strategic procurement planning in the public sector*. Herndon, VA: NIGP.
- 10 NIGP. (2010). *Public procurement dictionary of terms*. Herndon, VA: NIGP. Cost Avoidance: Those costs, both direct and indirect, that will be avoided if a certain action is taken by the government. Usually identified by a cost-benefit study.
- 11 NASPO. (2007). *Benchmarking cost savings and cost avoidance*. Lexington, KY: NASPO.
- 12 Hubbard, D. W., (2010). The ultimate measurement instrument: Human judges. In *How to measure anything: Finding the value of "intangibles" in business* (pp. 221-251). Hoboken, NJ: Wiley & Sons, Inc.
- 13 Adapted from, Oak Ridge (2005). University of California approach: Developing performance metrics. Retrieved on February 8, 2011 from [www.orau.gov/pbm/documents/overview/c.html](http://www.orau.gov/pbm/documents/overview/c.html)
- 14 See Teague (2005) Op. cit.
- 15 Scholtes, P., Joiner, B., & Streibel, B. (2003). Collect meaningful data. In *The TEAM handbook* (3rd ed.) (pp. 5-31 to 5-33). Madison, WI: Oriel.
- 16 A measurement system should be designed to support the individual buyer or the buying team in doing a better job. Correspondingly, these individuals should participate in designing the system and in establishing the standards that affect them and their work" (p. 689). See Dabler, D.W., & Burt, D.N. (1996). *Purchasing and supply management*. (6th ed.). New York: McGraw Hill.