

Performance Measurement in North Carolina Cities and Towns

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North Carolina cities and towns often are included on national lists of local governments that are noteworthy for the extent to which they measure their performance. Charlotte, for example, has long been counted among the leaders of the performance measurement movement in city government. Recently it has emerged as the nation's premiere municipal example of the "balanced scorecard" approach to performance measurement.¹

A handful of North Carolina's large cities have long histories in the measurement of municipal services. Several others have made dramatic strides in recent years. Additionally, twenty-four cities

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Table 1. Performance Measurement and Reporting among a Sample of North Carolina Cities and Towns

Population	Number	Do You Measure and Report Performance?	
		Yes (%)	No (%)
200,000 or greater	3	100	0
100,000–199,999	3	67	33
50,000–99,999	8	75	25
25,000–49,999	7	71	29
Subtotal (25,000 or greater)	21	76	24
15,000–24,999	13	15	85
10,000–14,999	4	25	75
5,000–9,999	17	6	94
Subtotal (5,000–24,999)	34	12	88
Total	55	36	64

Note: This table is based on responses to a survey of 60 cities, including all 22 with 25,000 or more in population and a random sample of 38 with populations from 5,000 to 24,999. The response rate was 91.7%.

and towns have drawn national attention through their participation in the North Carolina Local Government Performance Measurement Project. This project, designed to provide participating governments with reliable, comparative data on cost and performance, now is emulated in at least two other states.

From this information a person could easily conclude that performance measurement is deeply and firmly entrenched in North Carolina local governments, permeating the state's communities, large and small. However, a 2001 Institute of Government survey shows the practice to be widespread only among the state's larger communities, with a sharp drop-off among smaller units. This article reports the results of that survey.

Review of Performance Measurement Reports

In January and February 2001, the Institute of Government asked officials from 60 North Carolina cities and towns (hereinafter referred to as "cities") to report on the status of performance measurement in their local government, either by submitting copies of the reports that they use to document municipal performance or by indicating that they neither measure nor report performance. The 60 that were surveyed included all 22 of the state's cities with populations of 25,000 or more and a random sample of 38 cities with populations from 5,000 to 24,999. A total of 55 cities responded to the request, for a response rate of 91.7 percent. Among the cities that reported their performance, most did so by including measures in their budget, but some prepared a separate annual or quarterly performance report (for examples, see Exhibits 1 and 2).

Performance Measurement Activity

Twenty-one of the 22 cities of 25,000 or more in population responded to the request. Three-fourths of the respondents in this set of medium and large communities provided performance-reporting documents, thereby corroborating the reputation of North Carolina's cities for considerable activity in performance measurement (see Table 1).

Table 2. A Sample of Higher-Order Performance Measures Reported by North Carolina Cities and Towns

Effectiveness Measures

- Case clearance rates
- Investment yield
- Percentage of fires confined to room of origin
- Survival rate for patients found in cardiac arrest
- Percentage of fire code violations corrected
- Percentage of calls correctly dispatched
- Accuracy of revenue forecast
- Percentage of population registered in recreation center programs
- Utility bill collection rate
- Percentage of students in after-school program improving at least one letter grade

Responsiveness (a subcategory of effectiveness)

- Response time to high-priority police calls
- Response time to fire emergency calls
- Percentage of accounting payments made within terms
- Percentage of potholes repaired within twenty-four hours of their being reported
- Percentage of monthly financial reports distributed within five days of month's end
- Percentage of 911 calls answered (telephone picked up) within nineteen seconds
- Average waiting time for customers

Customer Assessment (a subcategory of effectiveness)

- Percentage of citizens "satisfied" or "very satisfied" with service provided by police department
- Percentage of citizens seldom or never fearful of crime in their neighborhood
- Percentage of recreation programs rated "satisfactory"
- Percentage of respondents rating athletic facilities as "good" or "excellent"
- Rating of landscape attractiveness
- Percentage of participants who rate fishing clinics as "helpful" or "very helpful"

Efficiency Measures

- Cost per dispatched police call
- Incoming calls per patrol officer
- Fire safety inspections completed per inspector (full-time equivalent)
- Cost per centerline mile of streets maintained
- Average cost to repair asphalt failure
- Average cost to repair sidewalk, per linear foot
- Person-hours per nonresidential building inspection
- Repairs per mechanic
- Cost per soccer field marked
- Maintenance cost per park acre

Performance measurement in firefighting focuses on such indicators as average time responding to alarms and percentage of fires contained within the room of origin.



Exhibit 1. Winston-Salem’s Performance Report for Fire Suppression

Fire Suppression

Program Goals

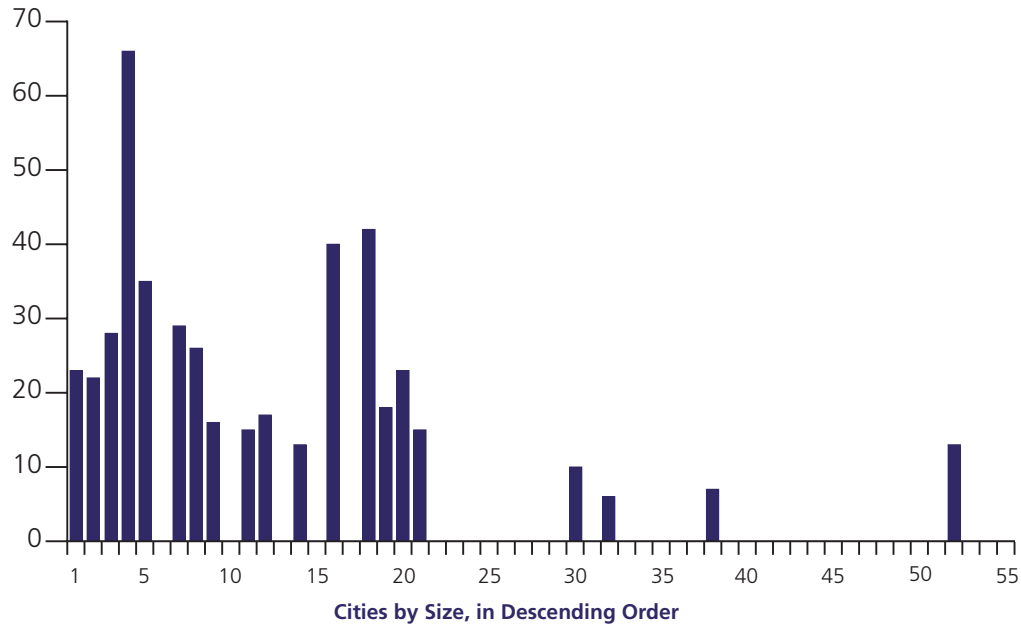
1. To maintain an equitable level of fire protection to all the citizens within Winston-Salem
2. To respond to all emergency alarms within 4 minutes or less
3. To contain all fires to their place of origin
4. To improve suppression performance through professional development and training
5. To provide first responder medical service to the citizens of Winston-Salem

Performance Measurements

	Actual 1998–99	Objective 1999–00	Actual 1999–00	Objective 2000–01
Effectiveness				
• Average emergency response time	2.48 min.	< 4 min.	2.55 min.	< 4 min.
• Percentage of emergency alarms responded to in 4 minutes or less	84%	86%	81%	86%
• Percentage of fires contained within room of origin	81%	82%	80%	82%
Efficiency				
• Expenditures per dollar value of property protected	\$.0011	\$.0011	\$.0011	\$.0011
Workload Indicators				
• Residential building fire loss	\$3,583,122	\$3,630,000	\$3,938,568	\$3,630,000
• Nonresidential building fire loss	\$5,806,684	\$2,117,500	\$1,517,041	\$2,117,500
• No. of training hours	78,907	80,000	85,208	85,000
• No. of building fires	471	470	444	470
• No. of medical calls	981	4,400	5,253	9,500
• No. of prefire surveys	1,282	1,000	1,420	1,000
• No. of hydrants inspected	8,736	8,660	9,024	8,660

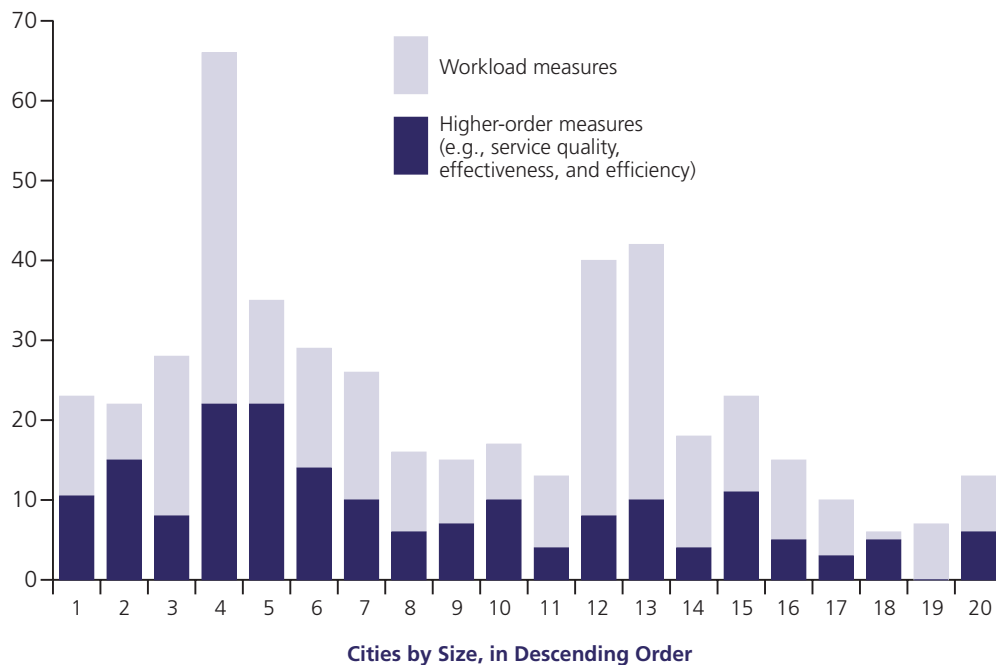
Source: CITY OF WINSTON-SALEM, FIRE: 1999–2000 PERFORMANCE REPORT AND 2000–2001 BUSINESS PLAN, at 3 (Oct. 2000).

Figure 1. Median Number of Performance Measures per Department in 55 North Carolina Cities and Towns



Note: The data are from the fifty-five cities that responded to the survey. They are based on a review of performance measures for five services: finance, fire, parks and recreation, police, and streets.

Figure 2. Median Number of Performance Measures per Department in 20 North Carolina Cities and Towns



Note: The data are from the twenty cities that reported measuring performance. They are based on a review of performance measures for five services: finance, fire, parks and recreation, police, and streets.

Among cities with smaller populations, however, performance measurement was much less common. Only 4 of the 34 responding cities with populations from 5,000 to 24,999 measure and re-

port their performance. However, Knightdale, the third-smallest city in the set at a population of 5,242, not only reports its performance but does so in a reasonably advanced fashion.

Nature and Extent of Performance Measurement

To assess the nature and the sophistication of performance measurement among North Carolina's cities, the measures

Finance Department Performance Measures & Workload Indicator Results

Measure/Indicator	Target	FY 2000 Actual	FY 1999 Actual
ACCOUNTING			
√ Bank statement reconciled within seven days of receipt	83%	83%	91%
√ Month closed out within fifteen days of month end	83%	67%	75%
√ CAFR [comprehensive annual financial report] awards received since initial entry in 1991	N/A	9	8
√ Month-end financial reports complete within 20 days of month end	83%	67%	75%
√ Accuracy of bank deposits submitted to the bank	100%	99%	98%
BUDGET			
√ Annual operating budget submitted to GFOA [Government Finance Officers Association] by three months after budget is adopted	Yes	Yes	Yes
√ Number of budget amendments requiring council approval	N/A	28	16
√ Average accuracy rate in forecasting all major revenues	90%	99%	88%
√ Accuracy rate in forecasting ad valorem taxes	90%	96%	95%
√ Number of GFOA budget awards since first awarded in 1995	N/A	6	5
INVESTMENTS			
√ Average rate of return on investments			
First Citizens	N/A	5.93%	4.27%
North Carolina Capital Management Trust—Cash Portfolio	N/A	6.37%	5.05%
LICENSING			
√ Privilege licenses issued within 10 days of application, except during the billing month	90%	50%	95%

Some data for FY 2000 Actual did not meet target this year. The Finance Department installed new software for privilege licenses, all financial operations, and the utility billing process. Although the new software installation has been completed, the new system did cause some delays in our normal operations, and therefore staff did not meet all targets.

Source: TOWN OF KNIGHTDALE, ANNUAL BUDGET: FISCAL YEAR ENDING JUNE 30, 2001, at 88–90 (May 17, 2000).

reported for five common local government services—finance, fire, parks and recreation, police, and streets—were examined for each responding government. To the extent practical, across units, various functions within these departments were uniformly included in or excluded from analysis (for example, information technology and purchasing were excluded from finance).

In some cities, many measures were reported for a given function. Charlotte and Winston-Salem, for instance, published more than 100 measures of po-

lice performance in the documents provided for this analysis. High Point and Winston-Salem reported 221 and 145 measures, respectively, in their parks and recreation functions, although many of these were measures repeated from one recreational facility to another.

In contrast, only a few measures appeared for selected functions in some cities. Among cities that measured and reported performance at all, the median number of measures per department ranged from a low of 6 in one city to a high of 66 in another (see Figure 1). The

median city in this group reported about 20 measures per department.

Some performance measures are simple to collect. Others may be a bit more complicated. Often, however, the more advanced measures are more informative and of greater value for management of operations and for accountability. Although simple to collect, raw counts of activity or workload, often called “outputs,” reveal nothing about the quality of a service, its effectiveness, or its efficiency. Beyond their ability to gauge service demand and their usefulness in the

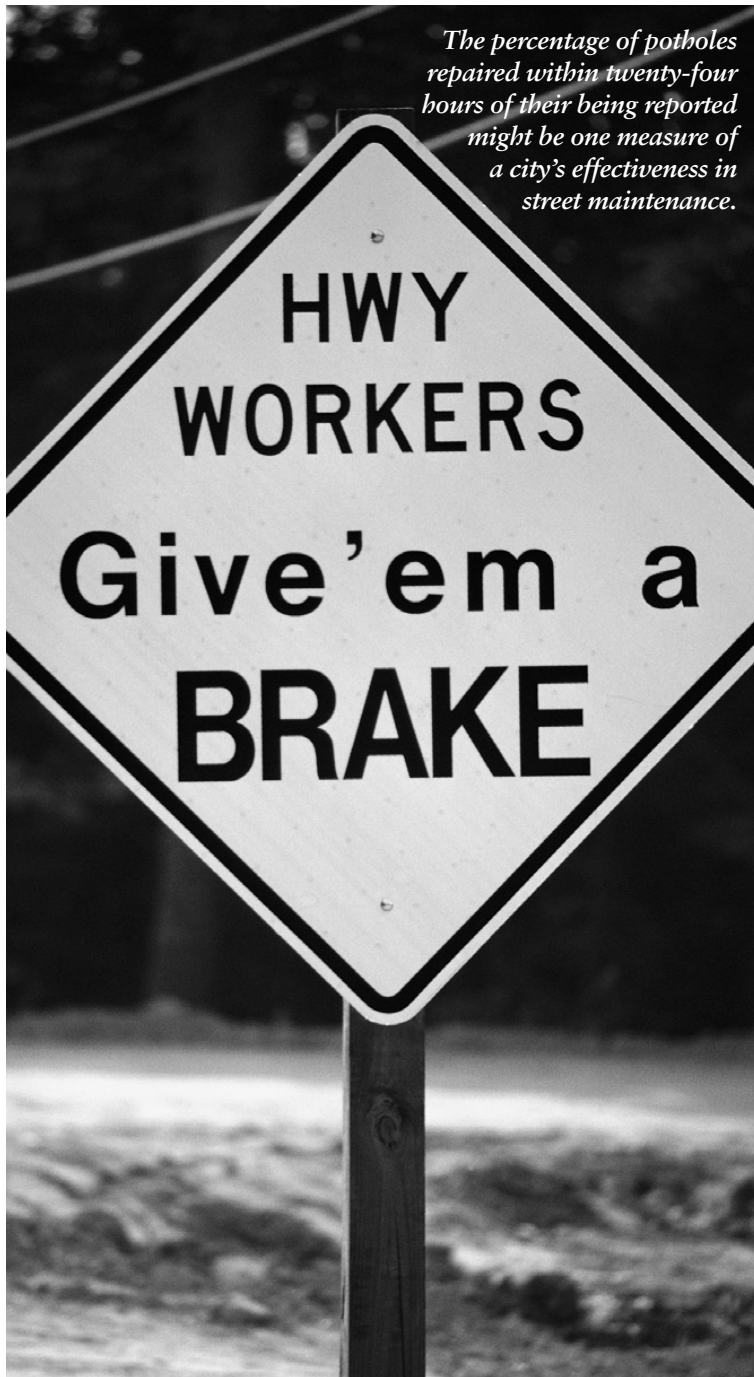


Figure 3. Effectiveness Measurement among 20 Cities and Towns Measuring Performance

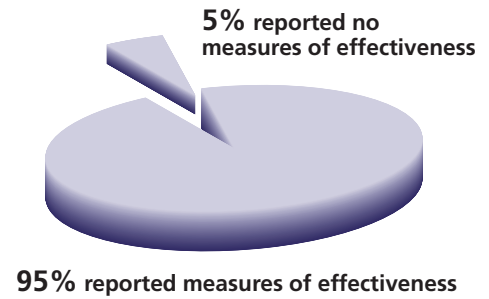


Figure 4. Citizen Assessment among 20 Cities and Towns Measuring Performance

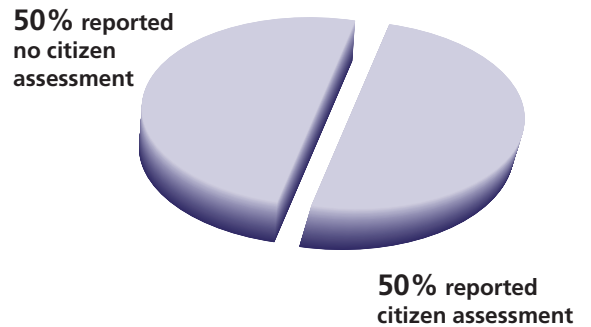
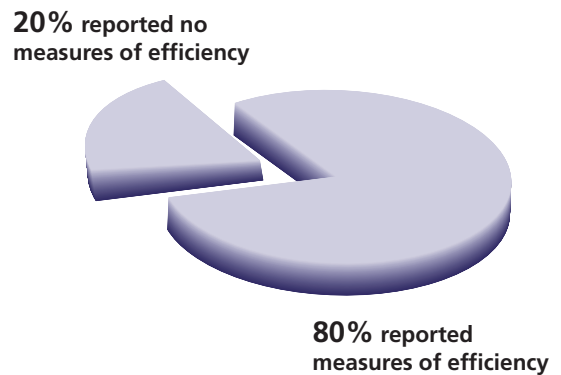


Figure 5. Efficiency Measurement among 20 Cities and Towns Measuring Performance



calculation of higher-order measures, they have relatively little managerial or policy value in their raw form. Measures of efficiency and effectiveness, the latter often called “outcomes,” are of much greater value to managers. An accounting manager, for example, is unlikely to be moved to action by a raw count of accounts payable checks produced the previous quarter—a simple workload measure. On the other hand, he or she is likely to investigate if measures show a decline in the number of checks pro-

duced per account clerk or an increase in the error rate for issued checks—measures of efficiency and effectiveness.

Many of the local governments across the United States that measure performance rely heavily or exclusively on workload measures. They report raw counts of activities but seldom address departmental efficiency, service quality, or effectiveness. This is rarely the case in North Carolina. Of the 20 responding cities that measure performance, only 1 uses workload measures alone. The oth-

ers supplement workload measures with higher-order measures of efficiency, service quality, or effectiveness, ranging from a median of 3 higher-order measures per department in one community to 22 per department in two other cities. (For the use of workload and higher-order measures among the responding cities that measure performances, see Figure 2.) Although larger units tended to report more measures of various types, the pattern is far from uniform. Many of the smaller units reported more



An efficiency measure for a government's recycling program might be cost per ton of recyclable material collected.

measures, and more higher-order measures, than at least some of their larger counterparts.

Types of Higher-Order Measures in Use

Local governments that move beyond the tabulation of mere workload or output measures begin to address dimensions of performance in a manner that is more significant to management and policy decisions than raw counts of activities and participants. These higher-order measures gauge efficiency, service quality, and outcomes (see Table 2). They focus less on how busy a department is and more on how efficient and how effective its services are. Within the broad category of effectiveness measures, two major subcategories used by North Carolina jurisdictions are service responsiveness and citizen assessments of services or community conditions.

Nineteen of the 20 responding cities that measure performance included indicators of effectiveness among their measures (see Figure 3). The typical unit

reported an average of six effectiveness measures per department.² All 19 cities included measures that gauged service responsiveness, but only 10 included measures that reported citizen assessments of services or conditions (see Figure 4). Among the cities that reported measures of responsiveness and citizen assessment, the typical unit reported an average of 1.4 measures of responsiveness and 0.6 measures of citizen assessment per department.

Sixteen of the 20 responding cities that measure performance included indicators of efficiency among their measures (see Figure 5). Among these, the typical unit reported an average of 3.2 efficiency measures per department.

Conclusion

Almost all North Carolina cities of 25,000 or greater in population measure and report performance, and they do so in more than a rudimentary fashion. The drop-off in the practice of performance measurement among communities at lower population levels is sharp. Even

among small North Carolina cities, however, a few serve as models of good performance measurement. They demonstrate not only that performance measurement is possible in small communities but also that the use of more sophisticated, higher-order measures is not confined to their larger counterparts.

Notes

1. The “balanced scorecard” is an approach to measurement that provides balance between “short- and long-term objectives, between financial and non-financial measures, between lagging and leading indicators, and between external and internal performance perspectives.” ROBERT S. KAPLAN & DAVID P. NORTON, *THE BALANCED SCORECARD* at viii (Boston, Mass.: Harvard Business School Press, 1996).

2. In this and subsequent uses, the “typical” city is the one with the median value in the range. In this particular case, the range extended from 0.0 effectiveness measures per department in one community to an average of 27.4 effectiveness measures per department in another. The median value was 6.0.