# **Communicating Financial Condition** to Elected Officials in Local Government

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he public expects much of its elected officials in local government, who in many cases assume their positions facing a steep learning curve on a wide range of complex issues. A critical part of this learning curve involves financial management, in localities where elected officials possess the ultimate responsibility for the fiscal matters of their organizations.<sup>1</sup> To carry out this responsibility, the law requires an annual independent audit of the financial statements and requires that the auditor be selected by and report directly to the governing board.<sup>2</sup> One goal of this process is for the locality to receive an "unqualified audit opinion," meaning that its financial statements were prepared in conformity with generally accepted accounting principles (GAAP) and present, in all material respects, the *financial position* of the organization. Another goal, which may be overlooked by elected officials, is to analyze and interpret the financial statements to determine the *financial* condition of the local government.

Administrators play an extremely important role in helping elected officials manage the fiscal matters of local governments. They ensure that professional management practices are used to budget and account for the financial resources of the organization, they prepare monthly financial reports for elected officials to review budget-to-

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actual variances, and they ensure that annual financial statements are prepared in conformity with GAAP. In 1999, as part of their role, they were responsible for implementing Governmental Accounting Standards Board (GASB) Statement No. 34, Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments. This pronouncement expanded the financial reporting model for local governments to include government-wide and fund statements. One reason for expanding the model was to provide a more complete picture of financial position.<sup>3</sup> Another reason was to increase a local government's ability to compare itself financially with other local governments and thus to help readers of financial statements evaluate the financial condition of local governments through benchmarking.4

GASB Statement No. 34 now has been fully implemented in North Caro-

lina local governments, so the natural next step for administrators is to take advantage of the expanded model of financial reporting and provide elected officials with more robust information on the financial condition of their local governments. The purpose of this article is to present administrators with an approach for analyzing, interpreting, and communicating financial condition to elected officials. First, we define financial condition, responding to the lack of agreement on this concept in our profession.<sup>5</sup> Next, we present the criteria that we identified for creating our approach to evaluating financial condition. Then we describe how the approach relates to the expanded model of financial reporting, the dimensions and the indicators that we selected to measure financial condition, and the "dashboard," or the gauges, that are needed to communicate financial condition to elected officials in a written, numerical, and visual format.

#### **Defining Financial Condition**

The definitions of financial condition in the professional literature are either specific in nature or broad in scope.6 Therefore, in search of middle ground, we turned to the work of Robert Berne and Richard Schramm to guide our approach for evaluating financial condition.7 These scholars maintain that there are two basic reasons for how resources are presented in financial statements: to report on the flow of resources during a given period and to report on the stock of resources at a given point. Operating statements report on the inflow and the outflow of financial resources during the fiscal year. Balance sheets report on the stock of assets, liabilities, and net assets or fund balances at the end of the fiscal year. We concluded that a logical definition of financial condition would align with resource flow and stock as reported in annual financial statements.

Berne offers a definition of financial condition that is closely related to the concept of resource flow and stock: the probability that a government will meet, currently and in the future, its financial obligations to creditors, consumers, employees, taxpayers, suppliers, constituents, and others as they become due, and its service obligations to constituents.<sup>8</sup> The probability that a local government can meet these obligations, as interpreted from financial statements, increases with adequate resource flow to meet current obligations and with adequate resource stock to meet obligations over time.

An implied but missing element of Berne's definition is provision of capital assets. In response to this and other considerations, we offer the following definition of financial condition: a local government's ability to meet its ongoing financial, service, and capital obligations based on the status of resource flow and stock as interpreted from annual financial statements.

Although a local government's ability to meet its ongoing financial, service, and capital obligations is broad in scope, the specific component of our definition is how a local government's ability to meet them aligns with resource flow and stock as interpreted from annual financial statements. Another important aspect of our definition is that it focuses solely on financial condition. One of the most frequently cited definitions of financial condition comes from the International City/County Management Association (ICMA): a government's ability to finance its services on a continuing basis.<sup>9</sup> This definition aligns with financial factors that show financial condition and with economic factors that affect financial condition. However, this alignment represents a different form of analysis and requires data from sources outside annual financial statements.<sup>10</sup>

# Criteria for Creating an Approach to Evaluating Financial Condition

Similar to the situation with defining financial condition, our profession does not have an agreed-on approach for analyzing, interpreting, and communicating financial condition in local government. And again, the approaches that exist are either specific in nature or broad in scope. As an integral part of the development of our model, we reviewed and analyzed approaches contained in the literature. Ken Brown created the 10-point test (which was updated in response to GASB Statement No. 34) as an easy-to-use approach to evaluate the financial condition of a local government.11 An advantage of the 10-point test is the use of benchmark data for interpreting each financial indicator. A disadvantage is the limited analysis across all major funds.

The ICMA's model, on the other hand, provides a comprehensive approach to evaluating the financial condition of a local government, similar to bondrating agencies' approach to evaluating a local government's ability to manage systematic and unsystematic risk in the repayment of debt over time.<sup>12</sup> The disadvantage of this approach is the sheer number of indicators used to analyze both financial and economic factors of financial condition, making it a feasible tool for larger local governments only.

Because of the broad continuum of current methods for evaluating financial condition in local government, we started with the following criteria to guide our approach: systematicness, comprehensiveness, flexibility, comparability, and manageability. We based the criteria on a literature review and our own professional backgrounds.

Designing a systematic approach to evaluating financial condition was paramount, given the expanded financialreporting model created by GASB Statement No. 34. More specifically, the approach had to systematically evaluate the financial condition of the organization as a whole as reported in government-wide statements, and systematically evaluate the financial condition of each major fund.

The approach also had to be comprehensive, providing a thorough analysis of resource flow and stock at the government-wide and fund levels of the organization. The focus on resource flow and stock supported our definition of financial condition.

The criterion of flexibility acknowledged that administrators might want to augment our approach with additional financial indicators or even replace a financial indicator that we had selected with another. We have used the quick ratio to analyze the liquidity of a local government, for example, whereas others support the use of the current ratio.<sup>13</sup> Although we relied on the most prevalent indicators in the literature, individual circumstances might warrant change.

Comparability was one of the primary reasons for the passage of GASB Statement No. 34. Calculating a financial indicator like the quick ratio at one point would provide only limited information. Calculating it over time for trend analysis and benchmarking it against other local governments would provide the necessary context for interpreting the results. The reality is that evaluating financial condition is relative, requiring comparative information for analyzing, interpreting, and communicating it to elected officials.

Evaluating financial condition also had to be manageable, unlike the ICMA's model. Local governments of all sizes had to be able to implement it accurately from financial data taken from their annual financial statements—consistent with our definition of financial condition and had to have the organizational resources to manage it over time. Another important aspect of this criterion was the ability to use our approach successfully to communicate financial condition to elected officials. Doing so would require a careful balance of financial indicators selected for the evaluation. If the approach relied on a limited number of financial indicators, then communicating a comprehensive analysis to elected officials would not be possible. If the approach relied on too many financial indicators, then communicating the analysis would be unwieldy.

#### Understanding the Financial Reporting Model

Because our approach is designed to be systematic across the government-wide and fund statements, to use it, elected officials must possess some understanding of the model of financial reporting used in local government (for the model in which our approach is applied, see Figure 1). Elected officials must have a basic understanding of three important aspects of this model before they can be expected to use financial condition information effectively. First, financial statements in local government have two levels of reporting, the government-wide level and the fund

#### Figure 1. Revised Financial-Reporting Model for Analysis of Financial Condition

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	Primary Government				
Government-Wide Level	<b>Governmental Activities</b> (Economic Resources)	Business-Type Activities (Economic Resources)			
Fund Level	<b>Governmental Funds</b> (Financial Resources)	Enterprise Funds (Economic Resources)			

level. Second, financial statements for government-wide activities and enterprise funds measure economic resources using the accrual basis of accounting, whereas financial statements for governmental funds measure financial resources using the modified accrual *basis* of accounting.<sup>14</sup> Third, all North Carolina counties and municipalities are required to have a general fund, which is the main operating fund and one of several potential governmental funds. However, not all local governments have enterprise funds, which are used to account for the resource flow and stock of utilities (for example, water, wastewater, electricity, and natural gas).

Two important resources for understanding the aspects of the financial reporting model in local government

appear in previous issues of Popular Government: "How to Read Governmental Financial Statements, Part 1," by Gregory S. Allison, which explains the fund structure of governmental accounting; and "How to Read Governmental Financial Statements. Part 2," also by Allison, which explains the financial statements for governmental activities and business-type activities prepared at the governmentwide level.<sup>15</sup> The purpose of those articles is not to make elected officials experts in governmental accounting. It is to provide them with basic information on reading financial statements, which will be extremely useful in communicating financial condition to them. In other words, they need enough information to ask questions about the

**Government-Wide** 

# Table 1. Resource Flow for Government-Wide Activities and Enterprise Funds (Focusing on Economic Resources and Accounted for on an Accrual Basis)

<b>Financial Dimension</b>	Description	<b>Financial Indicator</b>	Calculation	
Interperiod Equity	Addresses whether government lived within its financial means during fiscal year	Total margin ratio	Total resource inflow (program revenues plus total general revenues and net transfers) divided by total resource outflow (total expenses)	
Financial Performance	Addresses extent to which govern- ment's financial position improved or deteriorated as result of resource flow	Percentage change in net assets	Change in net assets divided by net assets, beginning	
Self-Sufficiency	Addresses extent to which service charges covered total expenses	Charge-to-expense ratio	Charges for services (fees, fines, and charges for services) divided by total expenses <sup>2</sup>	
Financing Obligation	Addresses service flexibility, or amount of total expenses committed to annual debt service	Debt service ratio	Debt service (principal and interest payments on long-term debt) divided by total expenses plus principal <sup>4</sup>	

1. Trend and benchmark data are needed for a more robust interpretation of each financial indicator.

2. Depending on how self-sufficiency is defined for government-wide activities, some local governments may choose to use total program revenues rather than charges for services as the numerator.

3. Self-sufficiency may be defined as below 1.0 for selected enterprise funds, responding to state law and local policy.

4. Principal is added to the denominator because it is not included in expenses.

financial position and condition of the local government.

Figure 1 does not contain fiduciary funds because the resources accounted for in pension trust, investment trust, private-purpose trust, and agency funds are owned by parties other than the local government.

Figure 1 also does not contain internal service funds, one of the two types of proprietary funds (the other type being enterprise funds) because they inherently create redundancy in financial reporting.<sup>16</sup> To overcome this problem, the accumulated resources of these funds are disbursed back to either governmental activities or business-type activities at the end of the fiscal year on the basis of which group of activities used them the most. The profits or the losses of these funds then are divided between governmental activities and business-type activities on the basis of actual use. We acknowledge that local governments may want to use our approach to evaluate the financial condition of selected internal service funds on a case-by-case basis. Internal service funds that account for activities like fleet services may be appropriate for this form of analysis. An actuarial analysis

may be more appropriate for internal service funds that account for activities like health benefits, given the known and unknown risks involved with them.

### **Selecting Financial Dimensions** and Indicators

North Carolina local govern-

ments of all sizes will find

our approach to evaluating

financial condition compre-

hensive, but manageable.

Fortunately the literature contains a large number of financial dimensions and indicators to choose from in evaluating financial condition.<sup>17</sup> Our task was to pare them

down so that our approach would result in a comprehensive financial evaluation, but be manageable for local governments of all sizes in North Carolina. To begin selection, we used our definition of financial condition, which focuses on the status of resource flow and stock as interpreted from annual financial statements. We then identified fundamental financial dimensions that support the analysis of resource flow and stock.

Our intent was to identify one set of flow indicators and one set of stock

indicators for evaluating the financial dimensions that we selected. Doing so was not possible, however, given that certain financial statements measure economic resources, whereas other statements measure financial resources. We responded by selecting one set of flow and stock indicators for evaluating

the financial condition of government-wide activities and enterprise funds, given that their financial statements measure economic resources. We then selected another set of flow and stock indicators

for evaluating the financial condition of governmental funds, given that their financial statements measure financial resources. Although some overlap exists between the two sets of flow and stock indicators, there are some fundamental differences between them because of the accounting differences.18

#### **Evaluating the Financial Condition** of Government-Wide Activities and **Enterprise Funds**

We selected four financial dimensions and four financial indicators for eval-

Activities	Enterprise			
Data Source	Calculation	Data Source	Interpretation <sup>1</sup>	
Statement of activities	Total resource inflow (operating and nonoperating revenues plus transfers in) divided by total resource outflow (operating and nonoperating expenses plus transfers out)	Statement of revenues, expenses, and changes in fund net assets	Ratio of 1.0 or higher indicates that government lived within its financial means.	
Statement of activities Change in net assets divided by net assets, beginning		Statement of revenues, expenses, and changes in fund net assets	Positive percentage change indicates that government's financial position improved.	
Statement of activities	Charges for services divided by operating and nonoperating expenses	Statement of revenues, expenses, and changes in fund net assets	Ratio of 1.0 or higher indicates that service is self-supporting. <sup>3</sup>	
Statement of activities⁵	Debt service (principal and interest payments on long-term debt) divided by operating and nonoperating expenses plus principal <sup>6</sup>	Statement of revenues, expenses, and changes in fund net assets <sup>7</sup>	Service flexibility decreases as more resources are committed to annual debt service.	

5. Principal and interest payments on long-term debt for governmental activities are located on the statement of revenues, expenditures, and changes in fund balances. Principal payments on long-term debt for business-type activities are located in the notes to financial statements. Interest payments on long-term debt for business-type activities are located on the statement of revenues, expenses, and changes in fund net assets. 6. Principal is added to the denominator because it is not included in expenses.

7. Principal payments on long-term debt for enterprise funds are located in the notes to financial statements. Interest payments on long-term debt for enterprise funds are located on the statement of revenues, expenses, and changes in fund net assets.

uating resource flow for governmentwide activities and enterprise funds (see Table 1). The first dimension, interperiod equity, addresses whether a government lived within its means during the fiscal year.<sup>19</sup> The total margin ratio is used to evaluate this dimension. It represents the total inflow of resources divided by the total outflow of resources for government-wide activities and for enterprise funds. A ratio of 1.0 or higher indicates that the government lived within its means for the respective activity or fund. For government-wide activities, resource inflow includes the net of transfers in and out between governmental activities and business-type activities. For the enterprise funds, transfers in from other funds are included as resource inflow, and transfers out to other funds are included as resource outflow. These assumptions are consistent with the GAAP reporting format.

Whereas the total margin ratio analyzes the relationship between total resources available and total resources consumed, the financial indicator of percentage change in net assets used to evaluate our second financial dimension, financial performance, provides feedback on the extent to which a government's net assets improved or deteriorated as a result of resource flow.<sup>20</sup> A positive percentage change indicates that a government's financial position improved from the resource flow that occurred during the fiscal year. Periodic modest fluctuations are generally to be expected. Fluctuations that are significant in nature (in either direction) should be obvious and evaluated accordingly.

The financial dimension of selfsufficiency addresses the extent to which the government used service charges to cover total expenses. This dimension is especially important to business-type activities and to enterprise funds, for which the goal often is to cover total expenses on a charge-for-service basis. The charge-to-expense ratio is used to analyze this dimension. A ratio of 1.0 or higher indicates that the activity or the fund was self-sufficient.

An argument could be made that this financial dimension is not applicable for governmental activities because governmental services with public-good characteristics are not designed to be selfsupporting. However, elected officials and administrators often are interested in the mix between general taxation and user-fee revenue when preparing and adopting budgets for the forthcoming fiscal year. To this end, the financialindicator calculation does not include grants and contributions, which are an inherent part of program revenues in the government-wide financial statements.

Our final dimension for resource flow for government-wide activities and enterprise funds is financing obligation. This dimension is analyzed with the debt service ratio, which is calculated by dividing annual debt service of principal and interest payments by total expenses plus principal. Because of their measurement focus, both government-wide activities and enterprise funds do not report principal repayments on debt as an expense. To achieve a proper calculation of this debt service ratio, the principal amounts must be included in both the numerator and the denominator. The purpose of this ratio is to provide feedback on service flexibility, which decreases as more resources are committed to annual debt service.

We selected four financial dimensions and four financial indicators for evaluating resource stock for governmentwide activities and enterprise funds (see Table 2). An advantage of the stock indicators over the flow indicators is that they tend to be more recognizable in the profession because they are associated with the balance sheet, which more often is used to evaluate financial condition in the public and private sectors. In other words, balance sheets report on equity, or net position, at a given point.

Liquidity is the financial dimension used to analyze an organization's ability

**Government-Wide** 

<b>Financial Dimension</b>	Description	<b>Financial Indicator</b>	Calculation		
Liquidity	Addresses government's ability to meet short-term obligations	Quick ratio	Cash and investments divided by current liabilities (not including deferred revenue)		
Solvency	Addresses government's ability to meet long-term obligations				
Leverage	Addresses extent to which total assets are financed with long-term debt	Debt-to-assets ratio	Long-term debt divided by total assets		
Capital	Addresses condition of capital assets as defined by remaining useful life	Capital-assets condition ratio	1.0 – (accumulated depreciation divided by capital assets being depreciated)		

# Table 2. Resource Stock for Government-Wide Activities and Enterprise Funds (Focusing on Economic Resources and Accounted for on an Accrual Basis)

1. Trend and benchmark data are needed for a more robust interpretation of each financial indicator.

2. Deferred revenues are located either on the statement of net assets or in the notes to financial statements.

3. The Local Government Commission uses a different ratio for calculating the quick ratio for enterprise funds: current assets (less inventory and prepaid expenses) divided by current liabilities.

4. Deferred revenues are located either on the statement of net assets—proprietary funds, or in the notes to financial statements.

to meet short-term obligations. It is calculated with the quick ratio: cash and investments divided by current liabilities. A high ratio suggests that the government is more likely to meet its short-term obligations.

**Big problem: North Carolina** 

counties must include school

debt on their financial state-

ments, but they can't include

the value of the infrastructure

that they finance with that debt.

Solvency, on the other hand, is the financial dimension used to analyze an organization's ability to meet long-term obligations. It is calculated with the net assets ratio: unrestricted net assets divided by

total liabilities. As with the quick ratio, a high ratio suggests that the government is more likely to meet long-term obligations.

Some advocate using total assets as the denominator for this calculation rather than total liabilities.<sup>21</sup> We believe that standardizing unrestricted net assets with total liabilities provides a stronger indication of an organization's ability to meet long-term obligations. Furthermore, we believe that restricted net assets should not be a part of this equation because such assets are typically not directly related to an entity's ability to meet current or long-term obligations.

Leverage is the financial dimension that addresses the extent to which total assets are financed with long-term debt. The financial indicator used to analyze this dimension is debt-to-assets ratio: long-term debt divided by total assets. If a government becomes too reliant on debt financing to secure capital assets, it may compromise service flexibility as it commits more resource flow to annual debt-service obligations. An overreliance

> on debt also may have unfavorable implications for bond ratings.

This financial indicator may present challenges for North Carolina counties because school debt is included on their financial statements and the value of school in-

frastructure financed with that debt is not. One approach to getting around this problem is to use the flexibility criterion, eliminating or replacing the debt-to-asset ratio. The preferred approach is to calculate the indicator on the basis of the data contained in the financial statements, footnoting the discrepancy for the reader.<sup>22</sup> The reality is that counties are responsible for school debt but do not own the related infrastructure.

Capital, the final financial dimension of resource stock for government-wide activities and enterprise funds, is used to analyze the condition of capital assets as defined by their remaining useful life. The financial indicator to measure this dimension is capital-assets condition ratio. The data used for this calculation are located in the capital assets section of the notes to financial statements. To calculate the indicator, accumulated depreciation is first divided by capital assets subject to depreciation. The resulting percentage is then subtracted from 1.0, which results in the remaining useful life of the total capital assets being depreciated. A high ratio suggests that a government is investing in its capital assets.

#### **Evaluating the Financial Condition** of Governmental Funds

We selected three financial dimensions and three financial indicators for evaluating resource flow for governmental funds (see Table 3). This evaluation applies primarily to the general fund. At times a local government may want to analyze the financial condition of special revenue funds, debt service funds, capital project funds, or permanent funds. Our indicators may be used to evaluate the financial condition of these funds. However, we propose that they be captured as part of governmental activities unless a local government has a specific reason for disaggregating them. For example, a local government may have a major special revenue fund that it wants to disaggregate, given the amount of resources involved or the importance of services and activities being accounted for in the fund.

Service obligation is the first financial dimension for evaluating the resource flow for governmental funds. The

Activities	Enterprise Funds			
Data Source	Calculation	Data Source	Interpretation <sup>1</sup>	
Statement of net assets <sup>2</sup>	Cash and investments divided by current liabilities (not including deferred revenue) <sup>3</sup>	Statement of net assets— proprietary funds <sup>4</sup>	High ratio suggests that govern- ment is able to meet short-term obligations.	
Statement of net assets	Unrestricted net assets divided by total liabilities	Statement of net assets— proprietary funds	High ratio suggests that govern- ment is able to meet long-term obligations.	
Statement of net assets	Long-term debt divided by total assets	Statement of net assets— proprietary funds	High ratio suggests that govern- ment is overly reliant on debt for financing assets.	
Notes to financial statements	1.0 – (accumulated depreciation divided by capital assets being depreciated)	Notes to financial statements	High ratio suggests that govern- ment is investing in capital assets.	

5. The value of unrestricted net assets for governmental activities often is negative for North Carolina counties because the value of school assets financed with county debt is not included on the statement of net assets. Although the interpretation of the financial indicator remains the same, the fact that these assets are not included should be footnoted for explanation.

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#### Table 3. Resource Flow for Governmental Funds (Focusing on Financial Resources and Accounted for on a Modified Accrual Basis)

<b>Financial Dimension</b>	Description	<b>Financial Indicator</b>	Calculation	Data Source	Interpretation <sup>1</sup>
Service Obligation	Addresses whether government's annual revenues were sufficient to pay for annual operations	Operations ratio	Total revenues divided by total expenditures (plus transfers to debt service fund and less proceeds from capital leases and installment purchases)	ures nues, expenditures, debt and changes in fund less balances apital	Ratio of 1.0 or higher indicates that govern- ment lived within annual revenues.
Dependency	Addresses extent to which government relies on other govern- ments for resources	Intergovernmental ratio	Total intergovernmental revenue divided by total revenue	Statement of reve- nues, expenditures, and changes in fund balances	High ratio may indicate that government is too reliant on other governments.
Financing Obligation	Addresses service flexibility, or amount of expenditures com- mitted to annual debt service	Debt service ratio	Debt service (principal and interest payments on long-term debt, inclu- ding transfers to debt service fund) divided by total expenditures plus transfers to debt service fund <sup>2</sup>	Statement of reve- nues, expenditures, and changes in fund balances	Service flexibility de- creases as more expenditures are com- mitted to annual debt services.

1. Trend and benchmark data are needed for a more robust interpretation of each financial indicator.

2. Debt service may be part of expenditures, a transfer to the debt service fund, or both.

operations ratio, representing total revenues divided by total expenditures, is used to analyze this dimension. The data for this calculation come directly from the statement of revenues, expenditures, and changes in fund balances, and a ratio of 1.0 or higher indicates that a government lived within its means.

Transfers out are not part of this calculation unless the transfer is to a debt service fund. Also, GAAP require governmental funds to report the present value of the minimum payments on a capital lease or installment purchases as an expenditure in the year of the agreement's inception. If the total expenditures do include this amount (as would be evidenced by another financing source of an equal amount), they should not be included for purposes of this calculation and should be subtracted from total expenditures.

The remaining two dimensions capture important aspects of revenues and expenditures. Dependency is used to determine the extent to which governments rely on other governments for resources, as measured by the intergovernmental ratio: intergovernmental revenue divided by total revenue. Financing obligation is used to provide feedback on service flexibility by measuring, with the debt service ratio, the amount of resources committed to annual debt obligations. If transfers to a debt service fund have been made by the governmental fund, the transfer should be included in both the numerator and the denominator.

We selected three financial dimensions and three financial indicators for evaluating resource stock for governmental funds (see Table 4). The financial dimension of liquidity uses the quick ratio, which follows the same philosophy and calculation as the liquidity dimension for government-wide activities and enterprise funds.

The financial dimension of solvency is evaluated with one of the most recognized financial indicators in local government: fund balance as a percentage of expenditures, as calculated with available fund balance divided by total expenditures plus transfers out.<sup>23</sup> Transfers out is included in the denominator because the Local Government Commission standardizes available fund balance for comparison purposes by dividing it by expenditures and transfers out less the present value of any capital leases or installment purchases entered into during the fiscal year.<sup>24</sup>

The final financial dimension for evaluating resource stock for governmental funds is leverage, which is supported with the financial indicator of debt as a percentage of assessed value. The definition of "debt" is tax-supported, longterm debt, which is the amount prepared for a local government's sworn statement of debt.<sup>25</sup> The debt is standardized by dividing it by assessed value. State law prevents local governments from issuing debt that would result in net debt exceeding 8 percent of assessed value.<sup>26</sup> This financial indicator also plays a major role with bond-rating agencies when they are conducting a general-obligation rating assignment.<sup>27</sup>

#### Using a Dashboard to Communicate Financial Condition

Communicating with dashboards is becoming more common in local government.<sup>28</sup> One possible reason is people's ability to create them with common software packages like Excel. Another possible reason is our understanding that most people are visual learners. Dashboards capitalize on this reality by communicating critical information in a visual format. We selected the dashboard because it supports our approach of communicating financial condition in a written, numerical, and visual format, including a comparative analysis for a more robust interpretation of each financial indicator.

We created a four-page dashboard for communicating the financial condition

of local governments to elected officials (for an excerpt, see Figure 2).29 Page 1, the cover of the dashboard, contains the written interpretation of the analysis, which includes an overview of funds, an interpretation of the financial dimensions and indicators, a discussion of policy implications, and a summary of financial condition. The overview of funds is optional, given that this information also is contained in the notes to the financial statements. The discussion of policy implications also is optional, given that some administrators may want elected officials to draw their own conclusions about how the local government's financial condition affects organizational policy.

The interpretation of the financial dimensions and indicators should be completed with a written analysis of selected results. In other words, the focus is on the financial strengths and weaknesses of the organization. Trying to provide written information on each financial indicator would not reconcile with our criterion of manageability. In the previous section, we presented the first aspect of manageability: that local governments of all sizes in North Carolina should be able to implement our approach. Another aspect is that information should be presented in a manageable way for interpreting the results and making decisions. Therefore, the interpretation of this section

should focus on outliers, important trends, and key comparisons with the benchmark group.

The summary of financial condition is used to communicate to elected officials the overall financial condition with aggregate conclusions. For example: "The financial condition of Capital City is relatively strong on the basis of liquidity and leverage.<sup>30</sup> Capital City also has improved its ability to

live within its means over the past five years." Although elected officials may want concluding statements like "Capital City's financial condition is strong," adminis-

Local governments should choose as benchmark partners either jurisdictions of a similar size or jurisdictions that offer similar services.

trators understand that evaluating the financial condition of any organization, public or private, involves a subjective element that often prevents matter-offact conclusions.

The remaining pages of the dashboard, shown in the background in Figure 2, contain the financial indicators that we selected to evaluate the financial condition of local governments. They are presented in a manner consistent with our approach to communicating financial condition to elected officials. Adhering to the criterion of systematicness, we have displayed the financial indicators for the governmental activities on page 2 and the financial indicators for the major funds of the local government on pages 3–4. Adhering to the criterion of comprehensiveness, we have aligned the financial dimensions with the financial indicators that support the analysis of resource flow and stock for Capital City's governmental activities, enterprise fund (water and sewer), and general fund.<sup>31</sup>

The criterion of comparability was the primary driver for the dashboard's

design. The results of the financial indicators are based on the most recent fiscal year, plus four years of historical data. The charts take advantage of trend analysis, placing each indicator in the context of change over

time. The results of the financial indicators are then evaluated against averages that are calculated from the benchmark group, adding another comparative dimension.<sup>32</sup>

An issue in local government is selecting appropriate benchmark partners. We support two approaches for making this selection. One is to select local governments of a similar population size. Another is to select local governments that offer similar services, paying close attention to those that operate the same type of utility systems. This approach follows the strategy used by the Local Government

Accounted for on a Modified Accrual Basis)					
<b>Financial Dimension</b>	Description	<b>Financial Indicator</b>	Calculation	Data Source	Interpretation <sup>1</sup>
Liquidity	Addresses govern- ment's ability to meet short-term obligations	Quick ratio	Cash and investments divided by current liabilities (not including deferred revenue)	Balance sheet <sup>2</sup>	High ratio suggests that government can meet short-term obligations.
Solvency	Addresses govern- ment's ability to meet long-term obligations	Fund balance as percentage of expenditures	Available fund balance divided by total expenditures (less proceeds from capital leases) plus transfers out <sup>3</sup>	Balance sheet	High ratio suggests that government can meet long-term obligations.
Leverage	Addresses extent to which government relies on tax-supported debt	Debt as percentage of assessed value	Tax-supported, long- term debt divided by assessed value <sup>4</sup>	Notes to financial statements	High ratio suggests that government is overly reliant on debt.

#### Table 4. Resource Stock for Governmental Funds (Focusing on Financial Resources and Accounted for on a Modified Accrual Basis)

1. Trend and benchmark data are needed for a more robust interpretation of each financial indicator.

2. Deferred revenues are located either on the balance sheet of governmental funds or in the notes to financial statements.

3. G.S. 159-8 defines "available fund balance for appropriation" as the sum of cash and investments minus the sum of liabilities, encumbrances,

and deferred revenues arising from cash receipts.

4. This calculation follows the requirement of G.S. 159-55 that the net debt of the unit not exceed 8 percent of assessed valuation.

#### Figure 2. Excerpt from a Dashboard for a Hypothetical City



#### Capital City Evaluation of Financial Condition June 30, 2008



Commission to report on fund balance as a percentage of expenditures for cities that operate electric utilities and cities that do not. When data from other local governments are not used for establishing benchmarks, professional standards and internal policies may be used for establishing them.

We explain how the dashboard is designed because it is not simply a collection of financial indicators. It is specifically designed to increase the ability to communicate financial condition effectively to elected officials in local government. It also is designed to support our definition of financial condition and the financial dimensions that we have selected to analyze resource flow and stock in annual financial statements.

#### Summary

Local officials, both elected and nonelected, may never reach a consensus on a professionally accepted set of financial indicators for evaluating the financial condition of local governments. Although there are pros and cons associated with any individual financial indicator (or any set of indicators), our focus is on providing administrators with an effective approach for analyzing, interpreting, and communicating financial condition to elected officials. We have offered the following definition of financial condition to guide our approach: a local government's ability to meet its ongoing financial, service, and capital obligations based on the status of resource flow and stock as interpreted from annual financial statements. We then selected financial dimensions and indicators that supported the analysis of resource flow and stock as shown on the numerous operating statements and balance sheets contained in annual financial statements.

Unlike previous models for evaluating the financial condition of local governments, our approach recognizes that financial reporting contains government-wide and fund statements and that some financial statements measure economic resources while others measure financial resources. This recognition provides a more systematic and comprehensive approach to evaluating financial condition, responding to the complexities of local government financial statements. We also capitalize on the strengths of a dashboard for communicating financial condition to elected officials, using trend and benchmark data for a more robust interpretation of each financial indicator.

Historically, more attention has been placed on financial position in local government than on financial condition. With the implementation of GASB Statement No. 34, an opportunity has been created to shift the focus to financial position and condition in local government. This represents the ultimate goal of our approach: to give administrators a management tool that facilitates their including financial condition when they are helping elected officials embrace the responsibility of managing the fiscal matters of local governments.

#### **Notes**

1. For a complete definition of financial management, *see* Jerome B. McKinney, *Effective Financial Management in Public and Nonprofit Agencies* (3d ed. Westport, CT: Praeger, 2004). G.S. 160A-67 states that the government and the general management of the city shall be invested in the council. G.S. 153A-101 is even more specific, stating that the board of commissioners shall exercise the responsibility of developing and directing the fiscal policy of county government.

2. See G.S. 159-34(a).

3. Dean Michael Mead, *An Analyst's Guide to Government Financial Statements* (Norwalk, CT: Governmental Accounting Standards Board, 2001).

4. Governmental Accounting Standards Board Statement No. 34, *Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments* (Norwalk, CT: Governmental Accounting Standards Board, 1999). Although GASB Statement No. 34 applies to both state and local governments, this article focuses solely on local governments.

 Xiaohu Wang, Lynda Dennis, and Yuan Sen (Jeff) Tu, "Measuring Financial Condition: A Study of U.S. States," *Public Budgeting & Finance* 27, no. 2: 1–21 (2007).
 Ibid.

7. Robert Berne and Richard Schramm, *The Financial Analysis of Governments* (Englewood Cliffs, NJ: Prentice Hall, 1986).

8. Robert Berne, "Measuring and Reporting Financial Condition," in *Handbook* 

of Public Administration, ed. James L. Perry (2d ed. San Francisco: Jossey-Bass, 1996), 66–96.

9. International City/County Management Association, *Evaluating Financial Condition* (4th ed. Washington, DC: International City/County Management Association, 2003).

10. A financial factor that shows financial condition is fund balance as a percentage of expenditures. An economic factor that affects financial condition is the annual growth rate of the assessed value of the community's property.

11. For information on the original test, see Ken W. Brown, "The 10-Point Test of Financial Condition: Toward an Easy-to-Use Assessment Tool for Smaller Cities," *Government Finance Review* 9, no. 6: 21–26 (1993). For information on the updated test, see Dean Michael Mead, "A Manageable System of Economic Condition Analysis for Governments," in *Public Financial Management*, ed. Howard Frank (Boca Raton, FL: Taylor & Francis, 2006), 383–419.

12. International City/County Management Association, *Evaluating Financial Condition*.

13. The quick ratio represents a more conversational approach to evaluating an organization's ability to meet its short-term obligations, preventing current assets like inventory from increasing a local government's liquidity. For more information on quick and current ratios, *see* Earl R. Wilson, Susan C. Kattelus, and Jacqueline L. Reck, *Accounting for Governmental and Non-profit Entities* (14th ed. Boston: McGraw-Hill Irwin, 2007).

14. Robert J. Freeman, Craig D. Shoulders, and Gregory S. Allison, *Governmental and Nonprofit Accounting* (9th ed. Upper Saddle River, NJ: Prentice Hall, 2009).

15. Gregory S. Allison, "How to Read Governmental Financial Statements, Part 1," *Popular Government*, Spring 2000, pp. 23–34; "How to Read Governmental Financial Statements, Part 2," *Popular Government*, Fall 2001, pp. 24–31.

16. Stephen J. Gauthier, *Governmental Accounting*, *Auditing*, *and Financial Reporting* (Chicago: Government Finance Officers Association, 2001).

17. See, for example, Wilson, Kattelus, and Reck, Accounting for Governmental and Nonprofit Entities.

18. If a local government chooses to include an internal service fund in its analysis, it would use the set of financial dimensions and indicators selected to evaluate the financial condition of governmental activities and enterprise funds, given that financial statements for internal service funds measure *economic resources* using the accrual basis of accounting.

19. Wilson, Kattelus, and Reck, *Accounting for Governmental and Nonprofit Entities*.

20. Financial performance represents a relatively new financial dimension in local government. For more information, *see* Stephen J. Gauthier, "Interpreting Local Government Financial Statements," *Government Finance Review* 23, no. 3: 8–14 (2007).

21. Wang, Dennis, and Tu, "Measuring Financial Condition."

22. The authors, in consultation with the Local Government Commission, recommend this approach.

23. G.S. 159-8(a) defines "available fund balance" as the sum of cash and investments minus the sum of liabilities, encumbrances, and deferred revenues arising from cash receipts.

24. The Government Finance Officers Association standardizes available fund balance by dividing it by general-fund operating revenues. For more information, *see Appropriate Level of Unreserved Fund Balance in the General Fund*, which was adopted by the executive board of the Government Finance Officers Association on February 15, 2002. It can be found at www.gfoa.org. Click on GFOA Recommended Practices.

25. See G.S. 159-55.

26. G.S. 159-55(c).

27. Linda Hird Lipnick and Yaffa Rattner, *The Determinants of Credit Quality* (New York: Moody's Investors Service, 2002).

28. *See, for example,* David Edwards and John Clayton Thomas, "Developing a Municipal Performance-Measurement System: Reflections on the Atlanta Dashboard," *Public Administration Review* 65: 369–76 (2005).

29. The full dashboard is available as an appendix to the online version of this article. Go to www.sog.unc/edu/popgov/.

30. We used actual data from a local government to construct the dashboard for Capital City. However, the purpose is to present the approach rather than to draw specific conclusions from an actual local government.

31. Because Capital City, like many local governments in North Carolina, has only one enterprise fund, the dashboard does not contain business-type activities, given that the data would be approximately the same as for the enterprise (water and sewer) fund.

32. We used hypothetical benchmarks for Capital City, realizing that local governments may use a variety of sources for establishing their benchmarks.

## Appendix A. A Dashboard for a Hypothetical City Capital City Dashboard Evaluation of Financial Condition, June 30, 2008

Overview of Funds (optional)

Interpretation of Financial Dimensions and Indicators

Discussion of Policy Implications (optional)

Summary of Financial Condition

Capital City is a pseudonym for a North Carolina municipality. The benchmark-group data are hypothetical.

### Assessment of Financial Condition at the Government-Wide Level

#### Key: Capital City

Benchmark Group

#### **Governmental Activities**



### Assessment of Financial Condition for the Enterprise Fund

2.92,

3 00

0.23.

0.40

0.45,

0.35

0.68

0 50

Key: Capital City

Benchmark Group



Water and Sewer Fund

Interperiod equity measures whether a local government lived within its financial means. The total margin ratio is calculated as total financial resources divided by total financial obligations.

Financial performance shows how much a government's financial position improved or deteriorated as a result of resource flow. The percentage change in net assets is calculated as the change in net assets divided by net assets, beginning.

Self-sufficiency addresses the extent to which service charges covered total expenses. The charge-to-expense ratio is calculated as charges for services divided by total expenses.

Financing obligation addresses service flexibility, or the amount of total expenses committed to annual debt service. The debt service ratio is calculated as annual debt service divided by total expenses.

Liquidity

Solvency Net assets ratio

Leverage

Debt-to-assets ratio

Capital

Capital-assets condition ratio



Liquidity measures a government's ability to meet its shortterm obligations. The quick ratio is calculated as cash and investments divided by current liabilities.

Solvency measures a government's ability to meet longterm obligations. The net assets ratio is calculated as unrestricted net assets divided by total liabilities.

Leverage measures the extent to which total assets are financed with long-term debt. The debt-to-assets ratio is calculated as long-term debt divided by total assets.

Capital is the condition of capital assets as defined by their remaining useful life. The capital-assets condition ratio is calculated as accumulated depreciation divided by capital assets being depreciated. The result is then subtracted from 1.0.

### Assessment of Financial Condition for the General Fund

Key: Capital City 📃 Benchmark Group



Capital City =

19.1%.

Benchmark =

40.0%

#### **Resource Stock**

Liquidity

Solvency

expenditures

Quick ratio



3% 2% 1% 0% Capital City = 0.7%, Benchmark = 2.5%

2005

2006

2007

2003

2004

Liquidity measures a government's ability to meet its short-term obligations. The quick ratio is calculated as cash and investments divided by current liabilities.

Solvency measures a government's ability to meet longterm obligations. Fund balance as a percentage of expenditures is calculated as available fund balance divided by expenditures plus transfers out.

Leverage measures the extent to which a government relies on tax-supported debt. Debt as a percentage of assessed value is calculated as tax-supported, long-term debt divided by assessed value.

### Leverage

Debt as percentage of assessed value

Fund balance as percentage of