

# Financial Forecasting for North Carolina Local Governments

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Public administration expert John Luthy has observed that the ability to think strategically may be one of the most important legacies of a public official.<sup>1</sup> The observation may be even more applicable to budget preparation and enactment than to strategic planning. Incremental policy decisions made to balance the next year's operating budget can significantly affect the long-term financial condition of an organization.

An approach to long-term financial planning that is recommended by the National Advisory Council on State and Local Government Budgeting is to develop and implement a meaningful and flexible model for financial forecasting.<sup>2</sup> In North Carolina, financial forecasting helps local officials acquire the ability to consider long-term fiscal outcomes during a budget preparation and enactment process that is specifically designed to produce an annual balanced-budget ordinance.<sup>3</sup> It also helps local officials build an organizational culture that embraces strategic thinking. The reinventing government movement describes strategic thinking as steering the boat rather than just rowing it.<sup>4</sup>

The purpose of this article is to demonstrate the value of financial forecasting in local government. The article is based on the financial forecasting literature, interviews with North Carolina local officials, and a review of selected budget documents submitted to the Distinguished Budget Presentation Awards Program of the Government Finance Officers Association. The article begins with an overview of using financial forecasting to project the operating results of the general fund in local government. It then

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describes using forecasting models to analyze the long-term fiscal outcomes of common budget decisions and to communicate with bond rating agencies.

## Projecting the Operating Results of the General Fund

“Financial forecasting” is broadly defined as projection of revenues and expenditures over a selected period to show the future operating results of a fund on the basis of an agreed set of assumptions.<sup>5</sup> The Government Finance Officers Association encourages the use of financial forecasting as part of its recommended practices for state and local governments to assess the long-term financial implications of current and proposed policies, programs, and goals.<sup>6</sup>

In conducting my review, I identified five common themes among local governments that use financial forecasting to analyze the future operating results of the general fund:

- A five-year model is standard professional practice.
- The primary audience is elected officials.
- Expert and trend analysis are the most common forecasting techniques used for projecting both revenues and expenditures.
- Budget and finance staffs typically generate and update the projections.
- Each local government engaged in financial forecasting developed a model specifically tailored to its own circumstances and needs. So a standard methodology is not available for adoption.

The reason that local governments tailor the model is that they differ in how they will use the projections. For example, some models are developed around the future projections of fund balance, whereas other models are specifically designed to show how a five-year capital improvement program will affect the general fund.

Further, some local governments develop models that eliminate future operating surpluses and deficits by changing the tax rate for each projection year.<sup>7</sup> Such models do not follow the traditional format of financial forecasting. On the other hand, this hybrid approach

highlights the possibility of future tax-rate adjustments unless changes are made. Again, forecasting models must be developed on the basis of what the individual needs of an organization are and how it will use a model to make more informed decisions.

Table 1 (see page 8) contains a hypothetical example of a five-year forecasting model for a local government's general fund. The example is adapted from the forecasting models used by Lexington, North Carolina, and Scottsdale, Arizona. It follows the traditional definition of financial forecasting, according to which operating results are shown for each projection year. The local government in the example experienced a net increase in fund balance during fiscal years 2003–4 and 2004–5. A deficit of approximately \$370,000 for the current fiscal year results from a budgeted use of fund balance.

The model shows that additional deficits will occur unless the government makes policy decisions to address a long-term structural imbalance. Further

**Local governments should tailor their forecasting models to their own circumstances and needs.**



analysis provides valuable information to begin discussing policy alternatives from a long-term perspective. The historical and projected growth of property taxes, which represent the major revenue source of the organization, is minimal. A short-term solution is to consider a tax rate adjustment. A long-term solution is to explore economic development initiatives.

The annual interfund transfer from the water and sewer fund also represents a major funding source for the general fund. An analysis needs to be conducted to ensure that these transfers are not compromising the fiscal integrity of the water and sewer fund.

Calculating the percentage change in expenditures from 2004–5 to 2005–6 reveals that five categories increased by more than 10 percent: general administration, legal services, information technology, development, and sanitation. The local government should identify what is driving the expenditures in these functional areas and look for efficiency gains.

The local government plans to increase its reliance on pay-as-you-go financing, as shown by an increase in transfers out to the capital projects fund. Given low interest rates and the projected decrease in annual payments for debt service, the government also might consider debt financing for selected capital projects.

Table 1 shows that fund balance as a percentage of expenditures is projected to fall below 20 percent in fiscal year 2008–9. However, the local government's policy regarding fund balance requires that cash reserves remain at or above 20 percent of expenditures. Because of the importance of this ratio in local government, a conservative budgeting approach is recommended until policy changes are identified and implemented to reverse the trend.<sup>8</sup> The forecasting model prompts consideration of alternative policies with a long-term perspective rather than the perspective of their effects on the budget for the upcoming fiscal year.

Table 1. A Five-Year Financial Forecasting Model for the General Fund: A Hypothetical Example

Fiscal Year <sup>1</sup>	Actual FY 2003-4	Actual FY 2004-5	Current FY 2005-6	Forecast FY 2006-7	Forecast FY 2007-8	Forecast FY 2008-9	Forecast FY 2009-10	Forecast FY 2010-11
<b>Beginning fund balance<sup>2</sup></b>	\$ 5,390,258	\$ 5,591,381	\$ 5,616,831	\$ 5,245,993	\$ 4,791,266	\$ 4,406,777	\$ 3,748,878	\$ 3,324,163
<b>Revenues<sup>3</sup></b>								
Property taxes <sup>4</sup>	7,506,655	7,590,108	7,878,626	8,075,592	8,277,481	8,484,418	8,696,529	8,913,942
Local option sales taxes	3,039,928	3,290,342	3,412,936	3,515,324	3,620,784	3,729,407	3,841,290	3,956,528
Utilities franchise taxes	1,226,308	1,383,648	1,333,092	1,373,085	1,414,277	1,456,706	1,500,407	1,545,419
Payment in lieu of tax	426,032	433,535	490,441	505,154	520,309	535,918	551,996	568,556
Intergovernmental revenue	902,926	1,004,993	1,011,579	1,041,926	1,073,184	1,105,380	1,138,541	1,172,697
Permits and fees	137,377	142,295	125,000	128,750	132,613	136,591	140,689	144,909
Sanitation fees	722,620	711,252	712,950	734,339	756,369	779,060	802,432	826,504
Recreational fees	22,867	17,984	18,270	18,818	19,383	19,964	20,563	21,180
Charges for services	1,671,881	1,631,116	1,727,840	1,779,675	1,833,065	1,888,057	1,944,699	2,003,040
Interest income	109,044	185,583	240,462	247,676	255,106	262,759	270,642	278,761
Other taxes and revenues	610,062	463,019	437,535	450,661	464,181	478,106	492,449	507,223
<b>Total revenues</b>	<b>16,375,700</b>	<b>16,853,875</b>	<b>17,388,731</b>	<b>17,871,000</b>	<b>18,366,752</b>	<b>18,876,367</b>	<b>19,400,236</b>	<b>19,938,760</b>
<b>Expenditures<sup>5</sup></b>								
Governing board	115,399	113,820	122,740	125,195	127,699	130,253	132,858	135,515
City manager	383,462	401,500	441,217	450,041	459,042	468,223	477,587	487,139
General administration	1,997,660	1,967,012	2,315,184	2,361,488	2,408,717	2,456,892	2,506,030	2,556,150
Finance	556,251	582,928	634,424	647,112	660,055	673,256	686,721	700,455
Legal services	53,147	47,913	53,574	54,645	55,738	56,853	57,990	59,150
Human resources	168,140	150,963	165,601	168,913	172,291	175,737	179,252	182,837
Information technology	520,384	596,118	790,690	806,504	822,634	839,087	855,868	872,986
Building maintenance	251,374	462,150	283,508	289,178	294,962	300,861	306,878	313,016
Police	4,351,446	4,392,227	4,823,506	4,919,976	5,018,376	5,118,743	5,221,118	5,325,540
Fire	3,218,101	2,871,508	3,030,367	3,090,974	3,152,794	3,215,850	3,280,167	3,345,770
Development	446,815	447,849	597,563	609,514	621,705	634,139	646,821	659,758
Engineering	340,040	381,695	402,071	410,112	418,315	426,681	435,215	443,919
Streets	1,211,319	1,694,997	1,589,413	1,621,201	1,653,625	1,686,698	1,720,432	1,754,840
Sanitation	1,813,204	1,766,776	1,945,849	1,984,766	2,024,461	2,064,951	2,106,250	2,148,375
Parks and recreation	1,051,473	1,126,634	1,211,868	1,236,105	1,260,827	1,286,044	1,311,765	1,338,000
Debt service	800,000	850,000	850,000	850,000	700,000	700,000	700,000	700,000
<b>Total expenditures</b>	<b>17,278,215</b>	<b>17,854,090</b>	<b>19,257,575</b>	<b>19,625,727</b>	<b>19,851,241</b>	<b>20,234,266</b>	<b>20,624,951</b>	<b>21,023,450</b>

Other financing sources (uses) <sup>6</sup>									
Transfers in	1,628,289	1,680,000	1,935,000	1,900,000	2,000,000	1,900,000	2,000,000	2,000,000	2,000,000
Transfers out	524,651	654,335	436,994	600,000	900,000	1,200,000	1,200,000	1,200,000	1,200,000
<b>Total financing sources (uses)</b>	<b>1,103,638</b>	<b>1,025,665</b>	<b>1,498,006</b>	<b>1,300,000</b>	<b>1,100,000</b>	<b>700,000</b>	<b>800,000</b>	<b>800,000</b>	<b>800,000</b>
<b>Net change<sup>7</sup></b>	<b>201,123</b>	<b>25,450</b>	<b>(370,838)</b>	<b>(454,727)</b>	<b>(384,489)</b>	<b>(657,899)</b>	<b>(424,715)</b>	<b>(284,690)</b>	<b>(284,690)</b>
<b>Ending fund balance<sup>8</sup></b>	<b>\$ 5,591,381</b>	<b>\$ 5,616,831</b>	<b>\$ 5,245,993</b>	<b>\$ 4,791,266</b>	<b>\$ 4,406,777</b>	<b>\$ 3,748,878</b>	<b>\$ 3,324,163</b>	<b>\$ 3,039,473</b>	<b>\$ 3,039,473</b>
<b>Fund balance as percent of expenditures</b>	<b>32%</b>	<b>31%</b>	<b>27%</b>	<b>24%</b>	<b>22%</b>	<b>19%</b>	<b>16%</b>	<b>14%</b>	<b>14%</b>

**Notes**  
 This example was adapted from the forecasting models used by Lexington, North Carolina, and Scottsdale, Arizona.  
 1. The actual fiscal years (FY 2003-4 and FY 2004-5) represent audited financial data. The current fiscal year (FY 2005-6) represents the annualization of nine months of actual data. The remaining fiscal years represent forecasts based on historical trends.  
 2. Beginning fund balance represents cash reserves available for appropriation.  
 3. The growth rate for projecting property taxes is 2.5 percent. The growth rate for projecting all other revenue sources is 3.0 percent.  
 4. The growth rate for projecting property taxes is 2.5 percent. However, the growth rate of 2.5 percent was used for that fiscal year, given the council's desire to use a revenue-neutral tax rate after a revaluation.  
 5. With the exception of debt service, which is based on actual amortization schedules, the growth rate for projecting all expenditure categories is 2.0 percent.  
 6. The majority of transfers in represent an interfund transfer from the water and sewer fund (enterprise fund). The majority of transfers out represent an interfund transfer to the capital projects fund.  
 7. Net change represents the difference between revenues and expenditures plus total financing sources (uses). The projected deficit in FY 2005-6 is a budgeted use of fund balance.  
 8. Ending fund balance represents cash reserves available for appropriation for the next fiscal year.

### Using Financial Forecasting Models

From a general perspective, financial forecasting has been credited with creating an atmosphere of more rational budgeting.<sup>9</sup> It also can be a useful tool for monitoring the three-step economic cycle faced by local governments, which includes the growth stage of service expansion, the maintenance stage of service continuation, and the retrenchment stage of cutbacks and reorganization.<sup>10</sup>

**Governments might use financial forecasting to analyze the impact of a tax rate or fee adjustment over a multiyear period.**

Table 2 presents common budget decisions made by local governments and the role of financial forecasting in analyzing and making them. It begins with the relationship between organizational goals and financial forecasting. Research has shown that more local governments are adopting strategic plans and that feasibility assessment, which includes affordability, is a success factor in the implementation of strategic plans.<sup>11</sup> Financial forecasting provides feedback to local officials on the long-term costs of selecting and implementing specific strategies for goal attainment.

The use of financial forecasting to guide adjustments in tax rates and user fees is one of the most cited applications.<sup>12</sup> When a government must increase revenue to fund implementation of a new strategy or to continue existing services, it might use financial forecasting to analyze the impact of a tax rate or fee adjustment over a multiyear period. The goal is to establish rates and fees at levels

that reduce the likelihood of having to adjust them annually, allowing elected officials to spend more time on attainment of goals and provision of services.<sup>13</sup>

Various ways in which financial forecasting can be used to analyze common budget decisions relating to personnel emerged from the review, including approving new positions, approving salary and wage adjustments, changing benefit packages, and analyzing retirement incentives.<sup>14</sup> Using financial forecasting to analyze the long-term impact when approving new positions is extremely important, given the recurring liability

**Table 2. Common Decisions Made during Budget Preparation and Enactment**

Budget Decisions	Role of Financial Forecasting
Accomplishing organizational goals	To demonstrate affordability of funding strategies to accomplish long-term goals
Making tax rate and user fee adjustments	To provide revenue impacts of alternative rate adjustments beyond budget year
Creating new positions	To demonstrate affordability of adding new positions
Approving salary and wage adjustments	To demonstrate affordability of annual pay increases, including equity adjustments
Changing benefit packages	To demonstrate affordability of benefit adjustments
Analyzing retirement incentives	To support adoption of early retirement incentives, including succession planning
Analyzing changes in service delivery	To anticipate long-term results on program reduction or expansion
Approving equipment replacement and infrastructure maintenance	To support analysis of financing options for ongoing capital replacement and maintenance, including pay-as-you-go and lease-purchase financing
Analyzing alternative methods of providing services	To support service delivery options of privatization and managed competition
Adopting capital improvement program	To show how capital improvement plan will affect operating budget

Table 3. Forsyth County's Financial Forecasting Model

	FY 2007 Budget Projections	FY 2008 Adopted Budget	FY 2009 Budget Projections	FY 2010 Budget Projections	FY 2011 Budget Projections	FY 2012 Budget Projections
<b>Expenditures</b>						
Personal services	\$107,126,477	\$113,261,536	\$119,001,998	\$125,093,077	\$131,560,901	\$138,433,847
Professional and technical services	6,341,735	6,468,570	6,597,941	6,729,900	6,864,498	7,001,788
Purchased property services	6,204,297	6,868,383	7,545,751	7,696,666	7,850,599	8,007,611
Other purchased services	9,111,176	9,253,400	9,438,468	9,627,237	9,819,782	10,016,177
Travel	858,928	876,107	893,629	911,501	929,731	948,326
Materials and supplies	16,998,288	17,338,254	17,685,019	18,038,719	18,399,494	18,767,483
Other operating costs	24,915,236	25,413,541	25,921,812	26,440,248	26,969,053	27,508,434
Medicaid	13,919,968	15,242,365	16,690,390	18,275,977	20,012,194	21,913,353
Prior-year encumbrances	1,800,000	1,836,000	1,872,720	1,910,174	1,948,378	1,987,345
Contingency	1,282,550	1,114,616	1,114,616	1,114,616	1,114,616	1,114,616
Capital outlay	4,326,450	3,015,979	2,576,299	2,627,825	2,680,381	2,733,989
Existing/committed debt service	38,172,711	38,921,997	38,152,420	37,214,816	35,112,501	35,179,750
Payments to other agencies	121,615,728	129,104,314	136,349,730	142,838,717	149,928,152	156,492,160
Other financing uses	40,268	40,267	40,265	40,267	40,267	40,267
Future capital improvements	Included above	6,609,296	17,998,771	31,509,222	36,887,838	43,868,588
Capital maintenance in previous year's budget <sup>1</sup>		(2,358,500)	(2,738,000)	(2,504,700)	(2,040,000)	(1,892,000)
<b>Total expenditures</b>	<b>352,713,812</b>	<b>373,006,125</b>	<b>399,141,829</b>	<b>427,564,262</b>	<b>448,078,385</b>	<b>472,121,734</b>
<b>Revenues</b>						
Current-year property taxes	191,006,802	207,064,405	222,514,126	239,755,982	264,963,846	284,894,712
Other ad valorem taxes	3,850,000	3,927,000	4,005,540	4,085,651	4,167,364	4,250,711
Other taxes	600,000	612,000	624,240	636,725	649,459	662,448
Sales taxes	68,390,723	69,438,898	71,869,260	74,384,684	76,988,148	79,682,733
Licenses and permits	1,437,090	1,465,832	1,495,148	1,525,051	1,555,552	1,586,663
Intergovernmental transfers	41,924,240	45,650,934	53,529,518	61,800,092	54,090,417	54,577,596
Charges for services	22,150,444	22,593,453	23,045,322	23,506,228	23,976,353	24,455,880
Earnings on investments	4,656,207	4,749,331	4,844,318	4,941,204	5,040,028	5,140,829
Other revenues	7,904,095	8,062,177	8,223,420	8,387,889	8,555,647	8,726,760
Other financing sources	2,394,211	2,442,095	2,490,937	2,540,756	2,591,571	2,643,402
Subtotal revenues	344,313,812	366,006,125	392,641,829	421,564,262	442,578,385	466,621,734
Fund balance appropriated	8,400,000	7,000,000	6,500,000	6,000,000	5,500,000	5,500,000
<b>Total resources</b>	<b>352,713,812</b>	<b>373,006,125</b>	<b>399,141,829</b>	<b>427,564,262</b>	<b>448,078,385</b>	<b>472,121,734</b>

<b>Property tax rates without proposed CIP<sup>2</sup></b>	<b>65.76</b>	<b>69.17</b>	<b>71.06</b>	<b>67.34</b>	<b>68.97</b>	<b>70.85</b>
% change in property tax rate	0.0%	5.2%	2.7%	- 5.2%	2.4%	2.7%
<b>Property tax rates with proposed CIP<sup>3</sup></b>	<b>66.60</b>	<b>70.44</b>	<b>73.85</b>	<b>71.68</b>	<b>77.29</b>	<b>81.08</b>
% change in property tax rate	0.0%	5.8%	4.8%	- 2.9%	7.8%	4.9%
Tax base	29,265,000,000	29,996,625,000	30,746,540,625	34,128,660,094	34,981,876,596	35,856,423,511
Per penny	2,867,970	2,939,669	3,013,161	3,344,609	3,428,224	3,513,930
Projected tax base % change	3.81%	2.5%	2.5%	11.0%	2.5%	2.5%
Existing long-term debt <sup>4</sup>	38,116,096	38,921,997	38,152,420	37,214,816	35,112,501	35,179,750
Existing long-term debt as % of budget	10.8%	10.4%	9.6%	8.7%	7.8%	7.5%
Long-term debt (including CIP) <sup>5</sup>	38,116,096	41,910,804	49,618,287	61,803,737	64,121,954	69,335,493
Long-term debt (including CIP) as % of budget	10.8%	11.2%	12.4%	14.5%	14.3%	14.7%
Long-term debt (including CIP) after allowing for offsetting revenue (lottery proceeds for schools and city for training facility)	38,116,096	39,546,997	40,684,427	45,471,572	56,389,309	62,023,443
Long-term debt (including CIP) as % of budget, after allowing for offsetting revenue (lottery proceeds for schools and city for training facility)	10.8%	10.6%	10.1%	10.6%	12.5%	13.1%
Estimated year-end unreserved fund balance	\$62,690,942	\$62,990,773	\$64,077,210	\$65,963,817	\$68,666,794	\$71,703,500
Fund balance as % of following year's budget	16.8%	15.8%	15.0%	14.7%	14.5%	14.6%

**Notes**

This model is an abbreviated version of the actual model used by Forsyth County, which is based on a twenty-five-year projection.

1. Capital maintenance in the FY 2007 adopted budget is contained in several expenditure categories. Because the projection years are based on percentage increases of the expenditure categories, the capital maintenance in the previous year's budget is subtracted to avoid double-counting.
2. After all the categories of revenues and other financing sources are projected, including fund balance appropriated, total resources and total expenditures are balanced by changing the tax rate to produce the necessary current-year property taxes. The property-tax-rate decrease in FY 2010 represents a change after revaluation.
3. The property tax rates presented in this row represent the rates necessary to balance the budget and to amortize the additional debt contained in the capital improvement program.
4. Existing long-term debt represents the annual debt service that must be paid by the general fund.
5. Long-term debt (including CIP) represents the annual debt service of existing long-term debt and debt proposed in the capital improvement program that must be paid by the general fund.

of such a decision. Knightdale, North Carolina, supplements its forecasting model with a five-year position forecast.<sup>15</sup> Forecasting models also provide valuable information when analyzing the long-term impact of annual compensation packages, including cost-of-living and merit adjustments.

My review identified how forecasting models are used to make common budget decisions about service provision, including changes in service delivery, replacement of equipment, maintenance of infrastructure, and consideration of alternative methods of providing service.<sup>16</sup> An example relating to changes in service delivery would be a policy decision to invest in automated trucks for residential refuse collection. A financial forecast is beneficial in showing the implementation costs during the short term and the cost savings over the long term. The utility of financial forecasting for analyzing strategies to fund equipment replacement and infrastructure maintenance cannot be overstated, given local government's tendency to postpone these expenditures, which only increases an organization's long-term liability.

Supporting an alternative to the actual service producer stems from management initiatives like privatization and managed competition. When a local government decides to privatize a service or to embrace "managed competition" (under which internal departments bid against private vendors), the proposed costs should be analyzed over the period of the contract. A key reason for this long-term analysis is that contracts often contain annual inflationary adjustments. Therefore, privatizing a service may be beneficial from a cost perspective only in the short term. Another important factor in this type of analysis is service quality.

Using financial forecasting in conjunction with a capital improvement program (CIP) also represents one of the most cited uses of the management tool.<sup>17</sup> The purpose of a financial forecasting model in this situation is to overcome the natural disconnection between a one-year operating budget and a five-year CIP. The CIP burdens the operating budget with additional debt that must be amortized, with transfers from the general fund to the capital

projects fund (pay-as-you-go), and with additional personnel and operating expenditures once capital projects are complete. A five-year forecasting model shows how the CIP will affect the general fund if all the projects are actually approved and funded.

A use of financial forecasting not listed in Table 2 involves the “revenue-neutral tax rate,” a rate that when applied to the tax base after revaluation will produce current-year revenue. With legislation passed in 2003, local governments in North Carolina are required to publish a revenue-neutral tax rate in each year in which a general reappraisal of real property has been conducted.<sup>18</sup> Financial forecasting is an excellent tool for showing the long-term financial impact of adopting a revenue-neutral tax rate as compared with other proposed rates. The goal is to approve a tax rate after revaluation that considers the long-term perspective of providing cost-effective services and addressing infrastructure needs.

### Communicating with Bond Rating Agencies

My review also found that, in communicating with bond rating agencies, some local governments are using forecasting models to demonstrate their commitment to long-term financial planning.<sup>19</sup> The importance of using a long-term perspective to make revenue and expenditure decisions has recently increased, given that one bond-rating agency,

Standard & Poor’s, now is assessing financial management practices in local government. Rating agencies use four broad categories in assigning a bond rating to tax-supported bonds: the economic base of the community, the financial condition of the local government, a series of debt factors on existing and proposed debt, and the governance and the planning of the organization.<sup>20</sup> Historically, rating agencies have relied on intangible criteria in evaluating the governance and the planning of the organization as compared with the other three

#### One bond rating agency is assessing financial management practices in local government.

areas.<sup>21</sup> Standard & Poor’s has attempted to bring more objectivity to this judgment by creating a rating system to evaluate the financial practices of a local government in the following areas:<sup>22</sup>

- Revenue and expenditure assumptions
- Budget amendments and updates
- Long-term financial planning
- Long-term capital planning
- Investment management policies
- Debt management policies
- Reserve and liquidity policies

Each of these areas is evaluated as strong, standard, or vulnerable. The importance of financial forecasting is

related to the area of long-term financial planning. To be evaluated as strong in this area, a local government must have developed and implemented a forecasting model in which future financial issues and solutions are identified and revenue and expenditure decisions are being driven from a long-term perspective. A rating of standard is given to local governments that use multiyear financial projections informally or on an ad hoc basis, and a rating of vulnerable is assigned when no long-term financial planning exists.<sup>23</sup>

The importance of financial forecasting extends beyond long-term financial planning. To be evaluated as strong in debt management policies and reserve and liquidity policies, a local government must have well-defined policies in place and should have solid reporting and monitoring mechanisms to demonstrate compliance. The role of



financial forecasting is to demonstrate future compliance with these policies, which is extremely important to bond rating agencies.

Table 3 (see page 10) shows how a forecasting model would be used to demonstrate a commitment to long-term financial planning, including future compliance with policies regarding debt management and fund balance. The model is an abbreviated version of that used by Forsyth County. Future compliance with debt management policy is shown in the lines that read “Existing long-term debt as % of budget” and “Long-term debt (including CIP) as % of budget.” Future compliance with fund balance policy is shown in the line that reads “Fund balance as % of following year’s budget.” The percentages on debt service and fund balance are compared with the respective percentages in the debt management and fund balance policies for compliance.

Table 3 also shows that Forsyth County uses a hybrid approach to financial forecasting. After all revenue and expenditure categories are projected, the gap between total resources and total expenditures is eliminated by changing the tax rate to produce the necessary property tax revenue for the current year. Although this does not follow the traditional definition of financial forecasting, the elected officials in Forsyth County prefer the information in this format, given their need to anticipate possible tax-rate adjustments.<sup>24</sup> Another component of Forsyth County’s model is the forecasting of lottery proceeds to help amortize school debt.

## Summary

My review has revealed that financial forecasting models are becoming more common in local government as a management tool. Local officials are using these models to communicate why they make certain policy decisions within the long-term financial context of their organization. As is true in the adoption of any management tool, continuing leadership is required to ensure that financial forecasting is actually used to support ongoing decision making and to communicate with the organization’s stakeholders.



## Notes

1. John Luthy, “Strategic Planning: A Guide for Public Managers,” *IQ Report* 34, no. 8 (2002): 1–20.
2. National Advisory Council on State and Local Government Budgeting, *Recommended Budget Practices* (Chicago: Government Finance Officers Association, 1999).
3. See N.C. GEN. STAT. § 159-8 (hereinafter G.S.).
4. David Osborne and Ted Gaebler, *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector* (New York: Plume, 1992).
5. Larry Schroeder, “Local Government Multi-Year Budgetary Forecasting: Some Administrative and Political Issues,” *Public Administration Review* 42 (1982): 121–7.
6. Government Finance Officers Association, *Recommended Practices for State and Local Governments* (Chicago: Government Finance Officers Association, 2001).
7. Joseph P. Casey and Cecil R. Harris, “A Five-Year Financial Plan for a Smaller County: Linking Long-Term Planning to Annual Budgeting,” *Government Finance Review* 9, no. 5 (1993): 25–30.
8. The Local Government Commission recommends that available fund balance in the general fund not drop below 8 percent of expenditures. Local governments com-

monly maintain much higher percentages because of cash-flow needs, pay-as-you-go financing, and unforeseen expenditures. The average available fund balances as a percentage of expenditures for North Carolina counties and municipalities for the fiscal year ended June 30, 2006, were 20.67 percent and 36.27 percent, respectively. For fund balance information on each local government in North Carolina, visit [www.nctreasurer.com/lgc/units/unitlistjs.htm](http://www.nctreasurer.com/lgc/units/unitlistjs.htm).

9. Roy Bahl and Larry Schroeder, “The Role of Multi-Year Forecasting in the Annual Budgeting Process for Local Governments,” *Public Budgeting & Finance* 4, no. 1 (1984): 3–13.
10. Mark W. Nottley and John Kaczor, “An Automated Five-Year Financial Model: Applications in Michigan Cities,” *Government Finance Review* 13, no. 4 (1997): 46–48.
11. Theodore H. Poister and Gregory Streib, “Elements of Strategic Planning and Management in Municipal Government: Status after Two Decades,” *Public Administration Review* 65 (2005): 45–56.
12. Bahl and Schroeder, “The Role of Multi-Year Forecasting.”
13. Steve Wyatt, manager of Henderson County, telephone interview by author, winter 2006.
14. Bahl and Schroeder, “The Role of Multi-Year Forecasting”; Mark W. Nottley, “A Five-Year Financial Model for Municipal Decision Making and Resource Allocation,” *Government Finance Review* 11, no. 3 (1995): 46–47; Joanne Sylvis, “Financial Forecast Model: Council Members Learn by Doing,” *Government Finance Review* 13, no. 1 (1997): 46–47.
15. Ren Wiles, finance director of Knightdale, telephone interview by author, winter 2006.
16. Bahl and Schroeder, “The Role of Multi-Year Forecasting”; Nottley, “A Five-Year Financial Model.”
17. Eric J. Peterson, “Building a Better Budget through Trust and Communication,” *Government Finance Review* 11, no. 5 (1995): 17–21.
18. See G.S. 159-11(e).
19. Kai Nelson, finance director of Union County, telephone interview by author, winter 2006.
20. A. John Vogt, *Capital Budgeting and Finance: A Guide for Local Governments* (Washington, DC: International City/County Management Association, 2004).
21. Ibid.
22. Standard & Poor’s, *Public Finance Criteria 2007* (New York: Standard & Poor’s, 2006), [www2.standardandpoors.com/spf/pdf/products/PublicFinanceCriteriaBook2007.pdf](http://www2.standardandpoors.com/spf/pdf/products/PublicFinanceCriteriaBook2007.pdf).
23. Ibid.
24. Joe Bartel, budget director of Forsyth County, telephone interview by author, winter 2006.