Determining a County Road Fund Reserve

A Practical Guide to Financial Stability

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BACKGROUND

Operating reserves (or fund balance) are a prudent fiscal management tool and an important credit factor in the analysis of financial flexibility.

The accumulation of reserves in favorable economic times could be a resource to sustain communities in a downturn. During recessions, municipal budgets can be hurt by declines in economically sensitive revenues (e.g., sales taxes, interest income and bed taxes) and cuts in state revenue sharing funds. Unpredictable events — such as hurricanes, earthquakes and floods — also can drain budgets.

This advice comes from an article published January 1, 2003 in American City & County[1]. It reflects the realities of managing a Road Department (or any infrastructure department for that matter), and good financial practice. We recommend reading that short two page article to gain an appreciation of the reasons for doing so.

The following provides a methodology a County may choose to use to determine a reasonable balance to carry. It is based to a very large degree on work done by Pete Ringen in 2002, then the County Engineer of Lewis County[2] , also recommended reading.

In that document it states "*An unstated, yet assumed goal of Road Fund management is to deliver an appropriate quantity and quality of road program services at a rate that neither depletes the fund nor excessively grows the fund.*" That statement generally reflects a fiscal management policy of living within available means, and managing those funds to maximize their benefit.

RESERVE FACTORS

Factors to consider in establishing fund reserves include:

- reserve history period
- emergency expenditure preparedness
- revenue predictability
- expenditure trends
- philosophy toward financial risk, and
- interrelationship between fund reserve balance and unfunded need.

[1] This article is reproduced by permission of the Managing Editor of American City & County, and is available as a companion document on the CRAB website at www.crab.wa.gov.

[2] The original paper by Pete Ringen is available as a companion document on the CRAB website.

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With its six year planning windows, County road funds accounting provides an excellent historical basis on which reasonable forecasts may be based.

Forecast History Period

A 6-year revenue and expenditure history is recommended for assessing reserves. Assumptions necessary to cover a variety of variables typically include:

- the latest motor vehicle fuel tax forecast
- use of road fund interest for current expense fund
- a constant base level of locally funded road construction
- inflation rate for road maintenance and administration

While a shorter forecast period such as 4 years may provide more confidence in assumptions, it could also mask longer term trends.

Emergency Preparedness

A variety of emergency situations are typical of the Pacific Northwest. Flooding is a common occurrence, particularly in western Washington. Excessive snowfall is always a potential in the Cascades and eastern Washington. Other more rare events are major fires and earthquakes.

There will often be added maintenance costs, and from time to time, construction repair costs. Major emergencies are typically covered largely by disaster assistance programs. However, many lesser events without an emergency declaration do occur. Both declared and undeclared events should be factored into a reserve, with an included disaster contingency.

Review expenditure history and try to identify emergency events. Then try to quantify historic costs of those events as compared to overall expenses. Ultimately, the question of adequate emergency contingency funds becomes a subjective opinion.

Revenue Predictability

A significant piece of the Road Fund comes from the property tax. This source tends to be very stable and predictable. However, with the press of other business needs, it is becoming more common that Commissioners are legally diverting portions of the property tax to other uses. Take care to assess the probability of that event, and factor it into future revenue projections.

A portion of the motor vehicle fuel tax collected by the State of Washington is directly distributed to the County Road Fund. This source tends to be predictable in terms of fuel consumption and current tax rates; however it is not inflation sensitive.

Federal funding sources often help sustain the Road Fund. Federal programs are relatively stable in any six year period but tend to be fixed. Care should be taken to assess the general stability of such sources, but adjustments typically need only be made if discussion is occurring, with a bill in process, in Congress.

Uncertainty with overall County finances, coupled with continuation of programs at both the state and federal level translates to risk in the forecast of future road fund balance. This risk, while generally low, must be considered in any proposed fund balance.

Expenditure Trends

Expenditure trends should be considered looking at historical activity on accounts payable and how the construction program can affect the fund balance.

Accounts payable tend to increase dramatically during and immediately following the summer construction season. In a strong construction year, accounts payable could easily exceed any average 3-month total.

The planned construction program varies annually because the nature and scope of the projects changes. As work progresses, unforeseen problems tend to occur, and some projects get deferred to the next year. The funds set up for these deferred projects remain in the current year until the next budget cycle, and add to the appearance of extra money in the fund.

Nevertheless, for the purpose of planning and budgeting, it should be assumed that projects in the draft annual and six-year programs will proceed as planned. This is the best information available at the time budgets and fund balance forecasts are prepared.

Ask accounting for a monthly summary of Road Fund Expenditures for the previous six years. (See the “Tools” section below for a template.) The most informative aspect of this summary is the cumulative balance by month. A “profit” or “loss” is then calculable, subtracting the expenses from the revenues. The cumulative balance by month shows us which month our highest cumulative “loss” will be. Therefore, minimum reserves need to be at least this amount to cover basic cash flow requirements.

Financial Risk

An evaluation of risk factors and degree of risk associated with each, and subsequently compiling each factor to obtain a sense of cumulative risk, is a concept that could work well for some situations.

To reiterate some of the risk factors, we have; state and federal funding appropriations, a relatively unpredictable risk associated with various disasters, and potential for cost inflation affecting salaries, equipment, and supplies. Another is how new regulations may affect our programs.

The Commissioners determine the Counties risk policies. Discuss and agree on the relative risk that should be considered in forecasts.

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When the uncertainties of these various factors are considered in total, a subjective approach to risk, emphasizing awareness, is recommended. That subjective approach is based on those elements we can calculate (historical revenues & expenditures) combined with our best estimates of those elements that are less predictable.

Unfunded Need

If a perception develops that road fund reserves are becoming too large, the reality of unfunded need should come to light. This is an area where the long-term vision for the County road system becomes important. Your road system needs should be considered in terms of elements that may be below desired levels of development, both from a planning and citizen perspective. Those elements may include:

- congestion or capacity problems
- geometrics, including substandard widths of pavement, horizontal and vertical curvature inadequate for the posted speed limit, inadequate super-elevation, and poor angles of intersection
- roadside safety, including lack of or inadequate shoulders, roadside hazards such as steep slopes or fixed objects without guardrail, outdated or marginally functional guardrail, culverts with ends that are not properly beveled

Rather than reducing a fund balance that has grown large, a focus should be placed on attacking unmet capacity or safety needs. You want to send a message that a safer road system is a higher priority than short-term popularity gained through a tax cut.

Determine the focus on fund balance requirements and unmet needs and lay those out in your annual budget message.

OTHER COUNTIES

Any numbers of Counties have reserve policies in place. Inquiries of other Counties are encouraged. Answers to questions such as the following are helpful.

- What is your total budget, and what is your minimum fund balance?
- Do you include emergency reserve needs? If so, on what basis?
- How do you determine cash flow needs?
- What factors do you use to determine your reserve amount?

You may find additional information that is pertinent to your specific needs that will be helpful in formulating a policy appropriate to your County.

CONCLUSIONS

An acceptable fund balance is subjective, however certain premises are apparent.

- The fund must have adequate reserves to meet cash flow requirements.
- The fund must have a contingency for emergency expenditures.

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- 100% of programmed construction spending will rarely, if ever, occur. This will result in a cash flow "cushion" that can offset some risk of revenue variances.

An example to set an acceptable fund balance:

Previous Year Cash Flow Requirements	$3.3 million
Upward Adjust Cash Flow for Strong Construction	1.7 million
Downward Adjust for Construction Delivery "Cushion"	(1.0 million)
Emergency Contingency	$1.0 million
Net Total Acceptable Fund Reserve	**$5.0 million**

In this example, when the projected fund balance is significantly above $5.0 million, that part of the fund in excess of that amount should be invested for 6 to 12 month periods. At least the base reserve amount of $5.0 million should be readily accessible for operations, with 30 to 90 day investments. Work with your Treasurer for mutual understanding of cash flow needs so investments permit suitable cash access.

During the annual budget process, the projected fund balance at the end of the 6-year forecast period should be compared against the acceptable fund reserve balance. A projected fund balance below that level at the end of the next budget year will require expenditure reductions in the submitted budget.

If the fund is projected to drop below $5.0 million in years 2 through 6 of the forecast period, this should be taken under advisement with the County Commissioners. Expenditure reductions should be weighed against possible improved revenues in the forecast period, and against the impacts of cuts in road services.

TOOLS

A spreadsheet accompanies this document that gives you a basic template to look at cash flow.

1. Enter the revenue and expenditure data in the **Cash Flow** sheet. (The existing "data" in the spread sheet is simply to provide a view of how the sheet works.)
2. Review the three month averages in the Cash Flow sheet against the annual average. Review the **Avg Rev-Exp** sheet for the spikes and the "Profit" or "Loss". Make a decision if an average cash flow adjustment is necessary.
3. Based on your Annual Construction Program, determine if cash flow needs may result from a strong construction season. Note that amount.
4. Based on an assessment of project delivery and payment probabilities, note the amount of any cash flow "cushion" that may result in your construction program.
5. Based on your emergency contingency needs assessment, note a reserve amount.

Go to the **Fund Balance** sheet and make the appropriate entries. A Projected Reserve Fund Balance will be calculated.