Sizing your Reserves: How Much is Enough?

Sunday June 2, 2013 2:40pm – 3:30pm
Logistics

- Scan the QR code to download the presentation
- This session is 50 minutes long. There will be time for Q/A at the end.
  - Please use the microphones for Q/A
- This session is worth 1 CPE credit
  - Self-scan for credits or see a GFOA staff person
- Please complete the session evaluation
Our Speakers

1st Speaker: Pall Gudgeirsson, City Manager for the City of San Clemente, California and has been with the City since 1992 (previously Asst. City Manager and the elected City Treasurer).

- Previously Pall served in the US Air Force as a police officer, Kitsap County, WA. as Fiscal Officer, and Finance Director at the City of Redmond, WA.
- Pall developed a nationally recognized Long Term Financial Plan model which has been used successfully in San Clemente for over 20 years.
- For 15 years, Pall also taught budget and finance to police management personnel at CA. State University, Long Beach. He has a degree in Accounting from the University of WA, and an MBA in Finance from the University of Puget Sound.
Our Speakers

- **2\textsuperscript{nd} Speaker:** Kara Skinner, Chief Financial Officer for the City of Colorado Springs.
  - As a Navy Spouse, Kara moved several times over the course of her career, garnering wide experience in public finance. At one point she even worked as an Economist at the Hawaii Public Utilities Commission.
  - Kara earned a Bachelor’s Degree in Economics from the University of Colorado at Boulder and a Master’s Degree in Economics from Duke University.

- **3\textsuperscript{rd} Speaker:** Shayne Kavanagh, Senior Manager of Research for GFOA, at the GFOA Research & Consulting Center in Chicago.
  - Shayne has been developing the practice and technique of long-term financial planning for local government since 2002.
  - Shayne is the author of a number of publications on financial planning and budgeting, including: “Financing the Future: Long-Term Financial Planning for Local Governments”; the leading book on policies for establishing financial governance of an organization, “Financial Policies”; and the GFOA’s comprehensive website for recovering from financial distress, [www.gfoa.org/financialrecovery](http://www.gfoa.org/financialrecovery).
  - Also, Shayne has his MPA from Northern Illinois University.
Roadmap for the Session

o 1st Speaker: Pall Gudgeirsson will start this session by providing a general overview and philosophical discussion about fund balance; he will give us things to think about such as reserve levels, GFOA best practice, stress testing reserves and standard reserve risk factors.

o Next....
Roadmap for the Session

- Our 2nd and 3rd speakers, Kara Skinner and Shayne Kavahagh will provide a case study of how Colorado Springs applied the principles discussed by Pall and how GFOA helped provide Colorado Springs with a structured review, providing a methodology on how it is calculated, appropriate level and why. Finally Kara will tell us how the City incorporated Shayne’s GFOA analysis into their fiscal policy and operating budget.

- So without further ado, please welcome Pall Gudgeirsson.
Sizing Your Reserves: *How Much is Enough?*

June 2, 2013

PALL GUDGEIRSSON
City Manager, City Of San Clemente
The Napa Valley Reserve
‘Fixing a Hole’

Reserve

- That portion of fund balance that is set aside as hedge against risk
- It is a ‘bottom line’ measure
‘Tell Me Why’

How do you hit the *target* if you don’t know what the *target* is?

Can you improve your aim by applying *best practices*?

How are your *targets* rated?
‘Watching the Wheels’

From ZERO to AAA
- No reserves and fund balances
- Shifting savings to reserves
- Identifying which reserves come first

Long Term Financial Plan
- Annual scrutiny of reserve levels

‘Well, I tell them there’s no problem, only solutions’
‘Money (That’s What I Want)’

How do you hit the target if you don’t know what the target is?

- Fiscal policies are requisite
- Establish amounts, percentages, times
- Identify reserves to be established
  - Fund Balance
  - Rainy-Day funds
  - Emergency Reserve
  - Stabilization
  - Sustainability (economic uncertainty)

‘Just because you don’t have money now doesn’t mean you can’t start preparing for the future’
‘Help!’

The three categories that make up unrestricted fund balance include:

A. Nonspendable fund balance, assigned fund balance, unassigned fund balance
B. Committed fund balance, spendable fund balance, unassigned fund balance
C. Committed fund balance, assigned fund balance, unassigned fund balance
D. None of the above
‘All Together Now’

Can you improve your aim by applying *best practices*?

- “GFOA recommends that governments establish a formal policy on the level of unrestricted fund balance that should be maintained in the General Fund”
- 2 months of operating revenues or expenditures
- Base actual level on governments particular situation

‘You hit the *target* by practicing best practices’
‘We Can Work it Out’

Establishing level of restricted fund balance
- Predictability of revenues and expenditures
- Risk exposure
- Impact of other funds
- Liquidity
- Commitments and assignments

‘Unrestricted fund balances should conform to legal and regulatory restraints’
‘I Don’t Want to Spoil the Party’

Credit rating agencies monitor levels of fund balance and unrestricted fund balance to evaluate a government’s:

A. Solvency
B. Risk of Default
C. Creditworthiness
D. Financial condition soundness
E. All of the above
‘Do You Want to Know a Secret’

How are your targets rated?

- Rating agencies
  - Monitor levels of fund balance
  - Criteria for establishing levels of fund balance
‘Taxman’

The impact of rating agencies on fund balances:

- Reaction to what cities and counties are doing
- Are levels of fund balance thought out?
- Cash flow
- Seasonality of revenue
- Short term vs. long term
- Economic condition
- Sales tax dependence
- Ability to raise taxes
- GASB 54
- Risk factors
- Stress Tests
‘Get Back’

Analytical Characterization of Ratios

<table>
<thead>
<tr>
<th>Available Fund Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>æ Low</td>
</tr>
<tr>
<td>æ Adequate</td>
</tr>
<tr>
<td>æ Good</td>
</tr>
<tr>
<td>æ Strong</td>
</tr>
<tr>
<td>æ Very Strong</td>
</tr>
<tr>
<td>Below 15%</td>
</tr>
<tr>
<td>1%-4%</td>
</tr>
<tr>
<td>4%-8%</td>
</tr>
<tr>
<td>8%-15%</td>
</tr>
<tr>
<td>Above 15%</td>
</tr>
</tbody>
</table>
‘Carry that Weight’

<table>
<thead>
<tr>
<th>Available fund balance as a percentage of expenditures</th>
<th>Qualitative factors with a positive impact on the initial score</th>
<th>Qualitative factors with a negative impact on the initial score</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>&gt;15</td>
<td>8-15</td>
</tr>
<tr>
<td>Score</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Qualitative factors with a positive impact on the initial score**

- Demonstrated capacity and willingness to cut operating spending (by more than 2%) resulting from a flexible cost structure, flexible legislation, and/or widespread political support
- Existing state tax caps do not apply to the government, or the government retains substantial flexibility under the caps.
- Demonstrated ability and willingness to raise taxes when needed (and voter support is usually obtained when such approval is required)
- Timing of fiscal year and tax billing dates result in high cash with abnormally low fund balance levels
- Maintenance of a general fund balance exceeding 30% of general fund expenditures for three or more consecutive years.

**Qualitative factors with a negative impact on the initial score**

- High levels of questionable receivables or amounts due from other funds with deficit balances
- Limited capacity to cut expenditures due to infrastructure or operational needs or political resistance
- Limited capacity to raise revenues due to consistent and ongoing political resistance
- Where cash accounting is used, the criteria use cash balances instead of fund balances and the score is worsened by one.

The final budgetary flexibility score equals the initial score adjusted up or down based on the net effect of the qualitative factors. Variable measures that equal a cutoff point between two initial scores will equate to the higher score. For each relevant qualitative factor, the score changes by one.
‘From Me to You’

New York Times
☞ May 25, 2013

State of California
☞ A budget surplus?
☞ Fund on-going programs or reserves?

What is the right thing to do?
‘Your Mother Should Know’

TIPS...

Use reserve policy as
Use common sense
Establish reserves in ‘down times’
Be careful if reserves too high...or too low
Pay attention to ‘best practices’
Talk to rating agencies

& MORE TIPS

If you spend them...replace them
Don’t wait for ‘reality’ stress test
Establish reserves in all funds
Be able to explain what reserves are for, how used, and methodology used to create
Review levels annually
The End

And now, let me introduce to you, the one and only...

...Shayne Kavanagh!
General Fund Reserve

- History
  - Informal Fund Balance reserve goal of 10%
  - 2008 Recession dropped Unreserved, Undesignated fund balance in 2009 to 5.3%
  - 2011 Strong Mayor Elected with goal of 25% Available Fund Balance
General Fund Reserve

- Factors that Prompted GFOA Study
  - Citizen alarm
  - New definitions of Fund Balance Reserves
  - Questions about calculation
  - Increased risk
  - Mayor focus on Best Practices with 3rd party validation
A Risk-Based Analysis of General Fund Reserve Requirements

A Case Study of the City of Colorado Springs
Agenda

- Primary risks faced by Colorado Springs
- “Triple-A” approach to addressing uncertainty
- Applying the Triple-A approach
Three Primary Risks

- Volatility of sales tax revenue (and other revenues)
- Potential for the storm sewer and bridge infrastructure to fail
- Vulnerability to extreme events

Secondary risk factors
- Unexpected spikes in expenditures (lawsuits)
- Pension cost volatility
Triple-A Approach to Dealing with Uncertainty

- **Accept**
  - Uncertainty is inevitable, including black swans

- **Assess**
  - Find potential impact, using reference cases

- **Augment**
  - Uncertainty will usually be underestimated!
Revenue Volatility
Revenue Volatility

The graph illustrates the monthly revenue volatility from July 1996 to December 2011. The blue line represents the monthly revenue, while the red line indicates the trend-cycle. The graph shows fluctuations throughout the period, with notable peaks and troughs.
Triple-A Applied to Sales Tax

- **Accept**
  - Little random variation, but Black Swans are possible
  - Easy to imagine sources of future trouble

- **Assess**
  - Max length of down turn has been 25 months
  - Max decline during has been 0.53% per month

- **Augment**
  - Raise expectations for risk (1.5X)
  - Max 0.8% monthly decline

- **$23M loss over 25 months is “worst case”**
  - Budget can be reduced in response, though
  - $13M judged adequate to make a “soft landing”
Infrastructure - Bridges & Culverts

<table>
<thead>
<tr>
<th>Probability of Failure</th>
<th>Consequence of Failure</th>
<th>Assets</th>
<th>Value (in dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>1</td>
<td>104</td>
<td>$20,301,443.50</td>
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<tr>
<td></td>
<td>2</td>
<td>35</td>
<td>$9,967,537.00</td>
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<tr>
<td></td>
<td>3</td>
<td>13</td>
<td>$2,933,257.50</td>
</tr>
<tr>
<td>High</td>
<td>1</td>
<td>34</td>
<td>$97,543,123.50</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>6</td>
<td>$14,941,650.00</td>
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<tr>
<td></td>
<td>3</td>
<td>9</td>
<td>$17,601,117.00</td>
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<tr>
<td></td>
<td>4</td>
<td>2</td>
<td>$1,544,010.00</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>No</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Consequence of Failure:
- High
- Medium
- Low
Extreme Events - Wildfires

- Use most recent wildfire as a reference case
- $3.75M in personnel, mutual aid costs, & other expenses
- $2.15M eligible for 75% FEMA reimbursement
- FEMA ineligible expenses plus City’s 25% share equals $2.14M
- Limited data, so multiply $3.75M by 2x?
- May be excessive because City bears some cost in regular budget & FEMA reimburses
- $5M is a middle ground
## The Results

### Budgetary Uncertainty Reserve

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$13 million for sales tax economic uncertainty +</td>
<td></td>
</tr>
<tr>
<td>$7.5 million for economic uncertainty in other revenues +</td>
<td></td>
</tr>
<tr>
<td>$6.25 million for pension payment uncertainty =</td>
<td></td>
</tr>
</tbody>
</table>

*\$27 million or about 12.5% of general fund revenues as budgetary uncertainty reserve*

### Emergency Reserve

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5.25 million for critical bridge failure and $11.6 million critical storm sewer replacement, for a total of $16.85 million +</td>
<td></td>
</tr>
<tr>
<td>$5-7.5 million for extreme events +</td>
<td></td>
</tr>
<tr>
<td>$2-4 million for expenditure spikes from lawsuits =</td>
<td></td>
</tr>
</tbody>
</table>

*\$27 million or about 12.5% of general fund revenues as an emergency reserve*
Take-Aways

- Identify major risks
  - See GFOA’s Financial Policies for guidance
- Use the Triple-A approach to estimate uncertainty associated with risks
- Don’t ignore political considerations
  - Work them into the process of identifying and managing risks
  - Examples
    - Highlight other extreme event risk mitigating strategies
    - Address elected officials’ preferences
POST STUDY IMPLEMENTATION

What has happened since the final recommendation was made?
General Fund Reserve

- GFOA recommended 25% Fund Balance
  - 12.5% reserve for Budgetary Uncertainty
    - Economic uncertainty effects on taxes and revenue
    - Pension payment uncertainty
  - 12.5% reserve for Emergencies
    - Critical bridge or storm sewer failure
    - Extreme events
    - Law suits
Impacts to GF Reserve

- Preliminary 2012 End-of-Year Unrestricted Fund Balance
  - $54.3 million unrestricted fund balance
  - 23.3% of 2013 Expenditure Budget
Impacts to GF Reserve

- Transit Litigation Settlement Agreement reduces unrestricted fund balance by $8 million
  - $46.3 million unrestricted fund balance
  - 19.2% of 2013 amended Expenditure Budget
Waldo Canyon Fire

- Most significant fire in Colorado History
- Subsequent increased risk of flooding
Impacts to GF Reserve

- Current Supplemental Appropriation reduces unrestricted fund balance by $10.0 million
  - $36.3 million unrestricted fund balance
  - 14.4% of 2013 amended Expenditure Budget
The End

- Download the Colorado Springs research report at...

- www.gfoa.org/research

- Contact Shayne Kavanagh for questions

  skavanagh@gfoa.org