Vulnerability to Extreme Events

1. Identify Risks

What extreme events are you at risk for?

A	Severe weather events.
B	Pandemic.
C	Economic downturn.
D	Cyber attack.
E	Infrastructure failure; bridge collapse, train derailment, water supply, etc.

2. Assess Risks

What is your vulnerability to each extreme event, given past experience?

A	Severe weather is common and could result in responder casualties, loss of equipment. federal reimbursement. Revenue delays b/c of cyber attack.
B	Pandemic could cause severe reduction in workforce, access to needed supplies.
C	Recession could cause serious reduction in revenues.
D	Cyber attack could create inability to access data and software systems.
E	Infrastructure failure could create need for costly response.

3. Identify other risk mitigation approaches

What options do you have to avoid, reduce, or transfer the risk (i.e., manage it without reserves)

A	Insurance.
B	ERP programs.
C	Training.
D	System redundancies.

4. Considering the above, how important for you is it to retain the risks of extreme events through reserves ?

3 < Enter your score here

5 **Very important.** We are subject to extreme events of severe potential magnitude which would require a quick and decisive response from our government. There are few alternative risk management approaches.

4 **Important.** We are subject to extreme events of severe potential magnitude, but our government does not have an important disaster response role and/or we have other risk management alternatives.

3 **Neutral.** We do not face an unusually high or low level of risk from extreme events.

2 **Unimportant.** We are subject to one or two types of significant extreme events and we have other risk management options.

1 **Very unimportant.** We are subject to very few, if any, potential extreme events of significant potential damage

Revenue Source Stability

1. Identify Risks

What are your major revenue sources?

A	Property tax
B	Sales tax: general, PSST, Capital, Parks, vehicle, fuel
C	Franchise tax
D	Development fees

2. Assess Risks

How stable are your revenue sources?

A	State legislative changes threaten revenue sources.
B	Economic downturn and competition from other areas could impact sales taxes and development fees.
C	Weather patterns impact utility taxes.

3. Identify other risk mitigation approaches

What options do you have to avoid, reduce, or transfer the risk (i.e., manage it without reserves)

A	Development of alternative revenue streams.
B	
C	

4. Considering the above, how important for you is it to retain the risks of revenue instability through reserves ?

4	< Enter your score here
5	**Very important.** We rely on just one or two sources of revenue, and they are unstable
4	**Important.** We rely on unstable sources for a significant portion of our revenue and/or have particular unstable payers as part of our tax base (e.g., sales tax from an industry with volatile sales)
3	**Neutral.** We do not face an unusually high or low level of risk from revenue instability
2	**Unimportant.** While some portion of our revenue base has instability, the majority of revenues are pretty stable.
1	**Very unimportant.** Our revenues are very stable and diverse.

Expenditure Volatility

1. Identify Risks

What are sources of potential expenditure spikes?

A	Litigation. Severe winter. Cyber attack. Major system or equipment failure. Supply market volatility.
B	Insurance costs. Employment/benefit costs.
C	

2. Assess Risks

What is the potential cost of these spikes?

A	Litigation costs can cost millions. Other events can create more moderate spikes in expenses but are manageable.

3. Identify other risk mitigation approaches

What options do you have to avoid, reduce, or transfer the risk of these potential spikes? (i.e., manage it without reserves)

A	Cost reductions and reduction of service delivery are methods of addressing these risks. Procurement policy provisions are used to limit risks. Cyber security training and testing are used to reduce risk. ERP funds provide funding pools to prepare for future costs.

4. Considering the above, how important for you is it to retain the risks of expenditure spikes through reserves ?

3.5 < Enter your score here

5	**Very important.** There are expenditure spikes with very high potential to open a significant hole in our budget.
4	**Important.** We are subject to important potential expenditure spikes, such that we need reserves but we also have other risk mitigation approaches available.
3	**Neutral.** We do not face an unusually high or low level of risk from expenditure spikes
2	**Unimportant.** There are one or a few potential spikes but the risk of them occurring is low, the impact not great and/or we have other risk management options.
1	**Very unimportant.** We have no important risk from expenditure spikes.

<u>Leverage</u>

1. Identify Risks

What are major sources of leverage you are subject to?

A | GO debt issues, special revenue, tax incentive bonds, internal loans, leases.

2. Assess Risks

What are the implications of leverage for the organization's financial flexibility?

A | Economic downturn, sudden loss of special revenue sources, developer default for tax incentives.

3. Identify other risk mitigation approaches

What options do you have to avoid, reduce, or transfer the risk of leverage? (i.e., manage it without reserves)

A |

4. Considering the above, how important for you is it to retain the risks of expenditure spikes through reserves ?

3.5 < Enter your score here

5 **Very important.** We are subject to significant leverage and have no other risk management approach

4 **Important.** We are subject to significant leverage and do not have equally significant offsetting risk management approaches.

3 **Neutral.** We do not face an unusually high or low level of risk from leverage

2 **Unimportant.** We have one or two sources of leverage, but these are largely addressed with other risk management strategies.

1 **Very unimportant.** We have no important sources of leverage that aren't already managed with out reserves.

Liquidity

1. Identify Risks

What are your major sources of potential intra-period cash imbalances?

A	Fall construction season. Seasonality of property tax revenues.
B	
C	

2. Assess Risks

How likely are these risks to occur and what is their potential magnitude?

A	Items in #1 are routine impacts. Minimal magnitude.
B	
C	

3. Identify other risk mitigation approaches

What options do you have to avoid, reduce, or transfer the risk of liquidity? (i.e., manage it without reserves)

A	Laddering of securities portfolio.
B	
C	

4. Considering the above, how important for you is it to retain the risks of expenditure spikes through reserves ?

3 < Enter your score here

5 **Very important.** We have very important potential intra-period imbalances with few risk management alternatives.

4 **Important.** We have important potential intra-period imbalances, but do have some off-setting risk management alternatives.

3 **Neutral.** We do not face an unusually high or low level of risk from intra-period cash imbalances.

2 **Unimportant.** We have some minor potential intra-period cash imbalances.

1 **Very unimportant.** Our cash flows are very stable.

<u>Other Funds Dependency</u>

1. Identify Risks

What other funds rely on the general fund for an important part of their funding?

A	Internal service, PSST, Airport
B	
C	

2. Assess Risks

How likely is it that these funds will need the general fund to "backstop" them in an emergency?

A	For these funds, it is highly likely that they would depend on the General Fund in an emergency.
B	
C	

3. Identify other risk mitigation approaches

What options do you have to avoid, reduce, or transfer the risk of other funds' dependency? (i.e., manage it without reserves)

A	Insurance.
B	
C	

4. Considering the above, how important for you is it to retain the risks of expenditure spikes through reserves ?

4 < Enter your score here

5 **Very important.** A number of funds rely on the general fund for backstopping, with few, if any, risk management alternatives.

4 **Important.** We have at least some funds that rely on the general fund and this includes reliance for backstopping.

3 **Neutral.** We do not face an unusually high or low level of risk from other fund dependency.

2 **Unimportant.** There are a small number of funds that rely on the general fund, and the potential for the general fund to need to backstop them is small.

1 **Very unimportant.** No other funds rely on the general fund for backstopping.

Growth

1. Identify Risks

What are potential major sources of growth in the next three to five years?

A	SLR property. General development.
B	
C	

2. Assess Risks

What is the potential for these sources of growth to cause imbalances in the revenue received from the growth and the expenditures needed to serve it?

A	Public services provided to new development.
B	
C	

3. Identify other risk mitigation approaches

What options do you have to avoid, reduce, or transfer the risk of growth? (i.e., manage it without reserves)

A	Fiscal impact modeling. Development incentives policy. Comprehensive plan. Building codes. Adapting to environmental/climate changes.
B	
C	

4. Considering the above, how important for you is it to retain the risks of expenditure spikes through reserves ?

3 < Enter your score here

5 **Very important.** We expect significant growth with imbalances in the timing of revenues and expenditures

4 **Important.** We have some growth that will cause imbalances in the timing of revenues and expenditures.

3 **Neutral.** We do not face an unusually high or low level of risk from growth

2 **Unimportant.** We have a small potential for future growth and/or only minor potential imbalances in the timing between revenues and expenditures.

1 **Very unimportant.** We expect no growth or growth will fully pay for itself as expenditures are incurred.

Capital Projects

1. Identify Risks

What high priority capital projects don't have a funding source?

A	Stormwater utility. Future fire stations.
B	
C	

2. Assess Risks

What is the likelihood that reserves will be looked to as a funding source for the project?

A	Very minimal.
B	
C	

3. Identify other risk mitigation approaches

What options do you have to avoid, reduce, or transfer the risk of capital projects using reserves as a funding source? (i.e., manage it without reserves)

A	
B	
C	

4. Considering the above, how important for you is it to retain the risks of expenditure spikes through reserves ?

2 < Enter your score here

5 **Very important.** There are very high profile projects with out a funding source and reserves are likely to be considered as a funding source.

4 **Important.** There are at least some high profile projects where reserves may be called upon to provide at least some of the funding.

3 **Neutral.** We do not face an unusually high or low level of risk from unfunded high-priority projects

2 **Unimportant.** High priority capital projects will probably have funding sources, if they don't already.

1 **Very unimportant.** All high priority capital projects have funding sources.

Guiding Your Selection of a Fund Balance Target

Step 1. Determine your total score from the risk factors

26	Your total score from the risk factors (calculated if you entered a score in other sheets)

Step 2. Preliminary Analysis

Compare your score from Step 1 to the guidelines below.

Your Score	***Analytical Guidance***
8 - 16	You face minimal risk to retain through reserves. Consider a target equal to the GFOA minimum recommended reserve of 16.6% of revenues/expenditures.
17-24	You face a low to moderate level of risk to retain through reserves. Consider adopting a reserve target somewhat higher than the GFOA minimum (e.g. 17-25% of revenues/expenditures). Since risk is low, do not invest excessive analytical effort in determining an exact target amount. Consider a short, informal benchmarking study with peer agencies to provide guidance.
25-31	You face a moderate to high level of risk to retain through reserves. Consider adopting a target amount of reserves significantly higher than the GFOA recommended minimum (e.g., 26 - 35%). Consider a short, informal benchmarking survey as a starting point, but then analyze your most significant risk factors to make sure they are adequately covered by what the survey suggests is reasonable.
32 - 40	You face a high level of risk to retain through reserves. Consider adopting a much higher target than the GFOA minimum (e.g., greater than 35%). Consider performing a more in-depth analysis of the risks you face to arrive at target level of reserved that provides sufficient coverage.

Step 3. Consider Impact of Government Size, Budget Practices, & Borrowing Capacity

For each driver pick which description best fits you and enter the appropriate number of points.

0	**Government Size**
+2	We are under 50,000 in population
0	We are between 50,000 and 300,000 in population
-4	We are over 300,000 in population

-2	**Budget Practices**
-3	The budget has a formal contingency beyond what is being considered for this reserve.
-2	The budget has informal contingencies beyond what is being considered for the reserve.
0	The budget is lean and has no contingencies in it.

-3	**Borrowing Capacity**
-3	We have excellent external and internal borrowing capacity, including a good rating, little existing debt, and political will to use it.
-2	We have some external and/or internal borrowing capacity and political will could be mobilized to use it.

0 We have little or no borrowing capacity.

Step 4. Consider Impact of Commitments/Assignments, Outsider Perceptions & Political Support

Place an "X" next to each statement that applies to you.

	Commitments and Assignments
	We have commitments or assignments that designate fund balance for uses other than retaining the types of risk described in this analysis. If so, these commitments/assignments should not be included in the total reserve used to reach your target.
	Outsider Perceptions
	Rating agencies have given us a target level of reserve for getting a good rating. If so, use that target in place of or in addition to a benchmarking survey to provide guidance on starting point for your target.
X	The public is likely to question reserve levels as too high. If so, be sure to document your analysis findings in the other sheets.
	Political Support
X	The governing board places great weight on the policies of comparable jurisdictions. If so, conduct a benchmarking survey that includes governments the board perceives as relevant.
X	The board places great weight on rating agency recommendations. If so, tie the reserve target recommendation to rating agency recommendations or standards.
X	The board places great weight on GFOA recommendations. If so, use this analysis and GFOA's Best Practices to support your recommendation.

Step 5. Putting it All Together

A. Consider your adjusted risk score and re-consult the analytical guidance.

21 < Your adjusted risk score (risk score modified with results from Step 3)

B. Review results of Step 4.

Review each item you checked from Step 4 and add the advice to your analytical guidance.

C. Proceed with finalizing target

Proceed with setting a final reserve target based on analytical guidance.