CALIFORNIA SOCIETY of MUNICIPAL FINANCE OFFICERS
Dedicated to Excellence in Municipal Financial Management
1215 K Street, Suite 940
Sacramento, CA 95814

CSMFO Awards Program (2016)
152 Innovation Award

ADWvPExg

Excel-based Pension Funding Amortization Model

Indicate the type of program nominated.

> Budgeting

Describe the innovation being nominated and all materials submitted with this application.

> The City of Newport Beach Finance Department developed an Excel-based Pension Funding Amortization Model to calculate the savings impact of accelerating the California Public Employees' Retirement System (CalPERS) payments. This analytical framework allows for accurate and quantifiable savings associated with various alternative payment options when comparing each to the default CalPERS payment schedule.
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> As of the last actuarial valuation date of June 30, 2015, in total, the City had an Unfunded Accrued Liability (UAL) of $276 million. This is expected to grow to $315 million by June 30, 2016. While the City had deployed many strategies to mitigate its pension liabilities, quantifying the merits of paying down our unfunded liability sooner had always been a challenge since the expected payment schedule had been difficult to replicate and analyze.
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> The City has also elected to estimate and start paying on unfavorable events as soon as they are known. For example, the CalPERS investment experience loss is already known but will not show up in our rates until fiscal year 2018-19 while accruing additional interest in the interim. The City is able to estimate and amortize the loss over a shorter term than the minimum required schedule. Now that PERS has announced they will reduce their assumed discount rate to 7% ultimately phased-in over 8 years, the City will assume the 7% discount while preparing its 2017-18 budget and likely fund the pension plans assuming an even more conservative discount rate.
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> Having the tools and knowledge to replicate minimum pension contribution and alternative schedules in-house has proven to be a valuable tool demonstrating the economic benefits to our Council, committee and constituents.

What is the purpose and/or goal of the innovation?

> Local agencies are accumulating large actuarial accrued liabilities (AAL) relative to their budgets at an alarming pace. In a survey of Orange County retirement plans, the average local agency Actuarial Accrued Liabilities (AAL) grew at an annualized rate of 7% per year between 2007 and 2014 when annual revenue growth averaged only 0.8% per year. At 7% growth per year, accrued pension obligations would double every 10 years. It is difficult to imagine that revenue growth could possibly keep pace. Further, even if these obligations are fully funded, agencies are becoming increasingly vulnerable to the growing size of their AAL and potential adverse plan experiences. The City's practice is to amortize all gains and losses no longer than a 20-year closed period and to avoid asset smoothing or "rate phase-in" schedules if possible. Analyzing our payment options each year using this model and choosing a responsible payment option has saved taxpayers millions of dollars over time.

Describe what the innovation has done to improve operations and efficiencies in your organization.

> The model is in service to the concepts, standards and techniques described in GFOA's best practice "Core Elements of a Pension Funding Policy." The City of Newport Beach is committed to fund the cost of benefits in an equitable and sustainable manner and, to this end, has established the following pension funding principles:
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> • Contribute no less than Actuarial Determined Contribution (ADC) each & every year. • Start funding experience losses as soon as they are known. • Analyze schedule of amortization bases each year to attempt to avoid negative amortization. • Amortize all gains/losses no longer than 20-year closed period. • Avoid asset smoothing or "rate phase-in" schedules if possible. Otherwise do not exceed 5 years for any one smoothing cycle. • Dedicate a portion of any annual budget surplus to accelerate payments. • Maintain a contingency reserve to project against economic recessions and to avoid negative impacts of asset smoothing and rate phased-in schedules.
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> This model should have wide applicability to the finance profession because its multi-year horizon helps agencies strategically address pension funding issues that can significantly impact their future financial position.
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> Creditors, rating agencies, and the public will have confidence that the City Council and City management are addressing the City's pension obligation head-on and the funded status of the plan will improve more rapidly, avoiding "kicking the can down the road" to future taxpayers. Over the long-term, use of the model has provided us a tool to avoid negative amortization and improving the funded status of the City's retirement plans faster than the default funding schedule.
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> Staff first employed the model in 2013 and as the result; the City opted to accelerate payment of the City's unfunded liability by amortizing payments on a fixed declining schedule, rather than a rolling 30-year amortization schedule. Paying over a fixed and shorter time period helped the City to potentially avoid $113 million of interest expense over 30 years.
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> Using the same model, Finance Department staff was able to identify and recommend a new pension funding schedule that saved the City $129 million over 30 years. This represented a savings of $47 million (in today's dollars) when discounted at 3%. This action was adopted by the City Council in 2015. Continued utilization to analyze more efficient, accelerated payment will prove to save millions more.

What was the commitment of money and staffing required to implement the innovation? How difficult would it be for other agencies to replicate this innovation?

> Since this is a working dynamic model, any CalPERS non-pooled entity can use this Excel model to replicate its expected payment on its unfunded liability and select payment terms that best suits the organization. Consulting with their retirement system actuary, entities have the tools to analyze their payment options, at no out-of-pocket cost. Analyzing their payment options each year and choosing a responsible payment option could save their taxpayers millions of dollars over time.
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> To use the model, an agency should have a solid understanding of their actuarial valuation, but only basic to intermediate Excel skills and an understanding of the time value of money (NPV) are necessary to use and maintain the Funding Amortization Model.

Originality: Is there evidence of creativity and imaginative thinking in the development of the innovation?

Quality of Application: Is the application and supporting documentation submitted clear, concise and comprehensive?

Effectiveness: Does it appear that the innovation produced the intended effect?

Practicality: Does this seem like a reasonable expenditure of time and effort given the stated goals and objectives?

Benefit: Is the innovation of benefit to other agencies and identifiable as a potential best practice?

Reviewer's Discretion: Overall impression of the innovation.

Log in to csmfo.awardsplatform.com to see complete entry attachments.

PDF	PDF	XLSX
Pension Model Sc. 758KiB	Examination of A.. 866KiB	PERS Incrementa.. 511KiB