El Dorado County 2017-2018 Grand Jury

How El Dorado County Can Navigate the CalPERS Crisis

Case 17-06 • June 4, 2018

California's giant pension agency, California Public Employees Retirement System (CalPERS), finds itself in the headlines, and that is not necessarily a good thing for El Dorado County, since its employees are covered by the CalPERS retirement system. Reports of underperforming investments and increased costs passed along to member employers are common. City and county governments face budget shortfalls, or in some cases, bankruptcy. While El Dorado County does not appear to be in imminent danger, addressing CalPERS issues will be an increasing challenge for the County's executive management and elected leaders.

CalPERS increases mandatory contribution levels to make its trust fund healthy enough to cover pension obligations to millions of state and local government workers. City and county governments, school districts, special districts and other public agencies in the CalPERS family struggle to find a balance between rising CalPERS expenses and ongoing government program costs.

Balancing a budget is difficult, and El Dorado County's (EDC) budget is no exception. When operating costs outpace revenues, the outcome is predictable, even during a predominately healthy economy. The County's obligation to pay pension costs is growing over time, redirecting resources from ongoing County service needs including public safety, road maintenance, and human services. Without change, the ability to provide for the health, safety, and welfare of citizens may be compromised.

The Grand Jury seeks to bring the challenge of balancing rising pension expenses and ongoing County program costs into focus, using layman's terminology to better understand the CalPERS process, and provide suggestions to address a growing fiscal concern. Of course, El Dorado County is not alone, but is the situation actually that bad? Is our County at risk? The Grand Jury believes that without quickly and intelligently implementing steps to slow the growth of the County's CalPERS debt, the problem will get much worse. Of course, there is not much this County can do to address the Statewide issues, but EDC needs to take steps that are within its control.

Methodology

The Grand Jury Reviewed:

- "Understanding CalPERS", an overview document published by CalPERS
- CalPERS Website
- Federal and State laws related to CalPERS
- Annual CalPERS Actuarial Valuation Reports for El Dorado County
- News articles related to CalPERS
- Grand jury reports about CalPERS from other California cities and counties
- El Dorado County 2002-2003 Grand Jury Report
- El Dorado County budget and financial documents

In preparing this report, the Grand Jury had difficulty locating information pertinent to making its recommendations. Although the flow of information regarding the pension status has improved between County staff and the Board of Supervisors (BOS), the Grand Jury feels the County could improve the communication flow with the public. It is particularly important to provide complete and accurate information to the public when an issue involves huge numbers like a "$346 million unfunded liability". Without complete information to put that number into context, it is easy for the public to react with a sense of doom.

The Grand Jury Interviewed:

- Representatives of the County Chief Administrative Office
- Representatives of County Human Resources
- Representatives of the County Auditor's Office
- County Board of Supervisors
- CalPERS management staff

The Grand Jury Attended:

- County Board of Supervisors Meetings
- El Dorado County Audit Committee Meetings

NOTE: Unless otherwise specified, references to statistical data in this report are contained in the 2015-16 actuarial report provided by CalPERS. The most recent data available is current through June 30, 2016 and is available at these internet links:

https://www.calpers.ca.gov/docs/actuarial-reports/2016/el-dorado-county-miscellaneous-2016.pdf
https://www.calpers.ca.gov/docs/actuarial-reports/2016/el-dorado-county-safety-2016.pdf

BACKGROUND

CalPERS is the largest public pension fund in the nation with approximately 3,000 employers representing more than 1.9 million members. The system administers pension benefits for all state employees and employees of other governmental agencies such as counties, cities, special districts, and school districts. Thirty-nine of 58 California counties are CalPERS members, including El Dorado County.

CalPERS is an independent agency with sole authority to administer retirement funds of contracting agencies. It is a significant component of public employee compensation intended to guarantee employees a predictable income in retirement that is protected by California Law[1]. The cost of benefits is tied to date of hire, salary, and negotiated cost-sharing between the employee and the employer. CalPERS is responsible for collecting both employee and employer contributions, placing them in a pension trust, managing the investment of those funds and distributing them to employees after retirement. The objective is to accumulate sufficient assets to pay benefits over the remainder of employees' lifetimes.

[1] California Public Employee Retirement Law (PERL) January 1, 2016

Employer contributions to CalPERS are determined by actuaries utilizing complex financial models to estimate the amount of contributions needed to fund each employer's future pension plan obligations. CalPERS has sole authority to determine assumptions used in the financial models, including lifespan estimates and projected return on investments. CalPERS provides annual actuarial reports to member employers.

Failure to collect and set aside adequate funds, or investing in underperforming assets, causes a gap between funds available and funds needed for retiree benefits, referred to as Unfunded Accrued Liability (UAL). It is the responsibility of employers to compensate CalPERS for pension under-funding. Recent calculations place the UAL for EDC at approximately $346 million.

HISTORY OF CALPERS

CalPERS was created in 1932 as a public-sector pension system. CalPERS acts as a common investment and administrative agent for public entities within the State of California that provide retirement and disability benefits with annual cost of living adjustments and death benefits to plan members and beneficiaries. Retirement benefits are based upon a defined benefit pension plan where an employer promises future benefit payments based on an agreed-upon formula.

In 1932, the usual retirement age was 65 years with a life expectancy of 66. After 40 years of work, the qualifying pension was about 57% of ending salary. Pensions were funded by contributions from employers, contributions from employees, and money gained from investing those contributions. Over the years, the CalPERS retirement benefit increased when cost of living adjustments were added, life expectancy improved, retirement age lowered, and pension formulae changed. Current life expectancy is 87 years for women and 85 years for men. CalPERS continues to update baseline data used in formulas that impacts established pension contracts, adjusting projected return rates on investments.

In 1992, California voters approved Proposition 162, the Pension Protection Act. It gave CalPERS authority to administer the system to assure prompt delivery of benefits to participants. CalPERS also retained the exclusive authority to determine the amount of an agency's contributions needed to fund its obligations.

In the late 1990s, CalPERS held assets well in excess of its future pension obligations, largely because of a healthy economy and strong stock market. Investment gains typically account for 60% of CalPERS pension funding. Changes in the economic environment have a significant impact on the pension fund. CalPERS analyzes changes over a broad timeframe to determine trends, then adjusts employer contributions accordingly.

The robust market in the 1990s provided impetus for several changes to CalPERS' methodology that would prove damaging in the long term. In 2001, the Governor signed SB400 into law, reducing the age at which many State employees were eligible to retire. More significantly, the legislation provided retroactive increases in the formula used to calculate retirement benefits, and authorized retirement eligibility at earlier ages for many State employees. SB400 also authorized local agencies, including cities and counties, to amend their retirement ages and their benefit formulae. These enhancements were embraced by governmental agencies to attract, reward and retain employees. Many employers, including EDC, took the opportunity to provide enhanced retirement benefits to employees.

Retroactive benefits triggered an immediate increase in funds needed from employers. Previously-calculated contributions were no longer able to balance member accounts that were now underfunded. A higher salary base compounded the immediate impact on debt or liability. This single decision resulted in a debt threshold that continues to grow unabated, despite best intentions.

In 2012, the Legislature took its first significant step to remedy the funding problem. It adopted AB340, the California Public Employees' Pension Reform Act (PEPRA), which took effect in January 2013. The law limited future pension manipulation, such as golden handshakes and retroactive raises, which reined in some excesses but didn't address pension contracts before January 2013. This is due, in part, to the "California Rule" which guarantees government workers the pension formula that was in place the day they were hired, unless the employees have bargained to change their formula in exchange for something of equal value. The current interpretation of the California Rule is facing legal challenges, with a ruling pending from California's Supreme Court.

CalPERS Today

The value of CalPERS assets was hurt by the dot.com bubble bursting in the early 2000s, followed by the recession in 2008. CalPERS suffered a 24% decline in the value of its holdings in 2009 alone. As a result, the robust health of member accounts dwindled and crossed the threshold into indebtedness. The larger the increases various agencies had granted employees, the larger their UAL. EDC had not offered its employees as generous a pension formula as many other counties, so its unfunded liability is not as great.

A gap happens when funds needed to pay benefits exceed the funds available. It is also referred to as an unfunded liability. Simply, it is that part of benefits, a liability, without sufficient funds to pay it. It applies not only to current funding but more importantly, to projected funds and benefits in the future. Projections are made for distinct points in the future. Liabilities are recalculated into a single value called an Unfunded Accrued Liability (UAL), representing the total dollar amount that is due to CalPERS, based on assumptions made at the time of its calculation. Of course, projections can, and do, change, and so does the UAL. It is important to know that it is the responsibility of member agencies to fund those gaps in funding (UALs), not CalPERS.

CalPERS obligations and Unfunded Accrued Liability (UAL) should be of significant concern to all member agencies, including El Dorado County. As of June 30, 2016, 1,295 of the 1,511 public agencies participating in CalPERS had pension plans funded at less than 80% of full funding. EDC's pension plan is currently funded at 64%. Fortunately, the UAL debt is not due immediately and is incorporated into annual payments calculated by CalPERS. The problem is exacerbated by accumulating interest, adding to the continued UAL growth.

CalPERS is required to review and update its actuarial assumptions at least every four years. The actuarial review includes a *look back* period commencing in 1997 to track data and identify trends. The results provide a basis for future projections. In addition to updating the mortality tables and cost of living adjustments, CalPERS actuaries analyze the rate of return on the investment portfolio. CalPERS may employ the best and brightest staff to create and implement an investment strategy to make money for their clients, but they cannot control the outcome. The rate of return on investments from year to year is not immune to a volatile stock market or broader changes in the economy that affect investment growth. The rate of return on investments has a significant impact on the calculation of employer contributions.

On the surface, adjusting assumptions to determine current life expectancy, modifying retirement eligibility factors, incorporating cost of living adjustments, and accounting for the rate of return on investments does not seem significant, much less catastrophic. It is important to understand that every adjustment affects employers since they retain final responsibility for funding the pension plan.

The effects for EDC extend beyond County employees because every dollar EDC must pay to fund retirement is a dollar that otherwise could be spent on County services. In 2016, CalPERS reduced its projected earnings from 7.5% to 7% because of underperforming investments. The staggering effect of this single adjustment resulted in increases passed on to CalPERS employers. For El Dorado County, the increase is millions of dollars over the next few years.

CalPERS notifies member agencies in writing of annual employer contributions for a 3-year period. This allows long-term budget planning and establishes the minimum amount of an employer contribution. The notification includes options for agencies to make accelerated payments to reduce the UAL.

The required employer contribution or payment to CalPERS has two components: normal cost and UAL. Normal cost represents the annual cost of service accrual for active employees during the upcoming fiscal year. It is shown as a percentage of payroll and paid as part of the payroll reporting process. The UAL is the amortized dollar amount needed to fund past service credit earned for members currently receiving benefits, active members, and for members entitled to deferred benefits, as of the valuation date. The UAL portion is calculated into a monthly minimum payment but can be paid in a lump sum at the beginning of the fiscal year, eliminating the ongoing accrual of interest on this segment of the UAL.

EL DORADO COUNTY

CalPERS data through June 2016 reveals that El Dorado County contracts with CalPERS to provide benefits for approximately 4,000 County employees, distributed between 1,900 active personnel and 2,100 retirees.

The EDC Auditor-Controller has frequently shared his concerns with both the Board of Supervisors (BOS) and local media, about the alarming growth rate of the County's unfunded pension obligation. He has cited CalPERS data that indicates that EDC's unfunded liability is $346 million. Discussions with several County Administrators and Supervisors revealed the unanimous opinion that the County CalPERS contribution is one of the most important fiscal issues facing El Dorado County.

As early as 2002, the County was aware of the need to increase contributions to compensate for CalPERS liabilities. A 2002-03 Grand Jury report outlined several shortcomings in El Dorado County's budget for fiscal year 2002-03. Contributions to CalPERS had not been adjusted to reduce the rising pension liabilities. The Grand Jury feels it is important to better understand what, if anything, has changed since the earlier Grand Jury Report.

In 1999 and 2000, like many other California agencies, EDC opted to grant retroactive raises and benefits to a number of their personnel. This decision resulted in EDC having unfunded liability for pensions. CalPERS calculates a percentage of the UAL to be paid annually. As noted above, this amount is added to the normal cost of pension payments and billed to the County as a mandatory minimum payment.

In Fiscal Year 2002-2003, El Dorado County's required contribution to CalPERS was $7,732,954. In 15 years, the contribution has reached over $30 million. The table below shows annual CalPERS payments and a corresponding increase of employer contributions.

Annual EDC CalPERS payments

FISCAL YEAR	REQUIRED EMPLOYER CONTRIBUTION	INCREASE FROM PREVIOUS YEAR	UAL PORTION
2015-16	$25,809,088	N/A	$12,916,158
2016-17	$27,784,630	$1,975,542	$14,607,206
2017-18	$30,533,664	$2,749,034	$17,112,172
2018-19	$35,110,135	$4,576,471	$20,516,816
2019-20*	$40,092,998	$4,982,863	N/A

*Projected

It is important to note that El Dorado County has never defaulted on a CalPERS payment. Historically, EDC has paid the employer contribution monthly. However, because the County is paying only the minimum required UAL payment, the UAL continues to grow, largely due to interest. The pension funding level now stands at 64%, and the UAL has mushroomed to $346 million. The County may no longer be able to absorb the increased costs without impacting the level of services to all residents.

In 2016, CalPERS notified EDC about payment requirements for 2016-17, 2017-18, and 2018-19. In the 2017-18 County budget, funds were set aside to meet this obligation. The UAL portion of EDC's contribution went up significantly during that period, increasing by $1.7 million (13%) in 2016-17, $2.5 million (17%) in 2017-18, and $3.4 million (20%) in 2018-19.

There is a potential to save interest by prepaying the UAL mandatory payment. EDC has not yet taken the pre-payment option.

In February 2018, CalPERS announced a policy change realigning the UAL debt payment schedule from 30 to 20 years. Taking effect in 2019, it revises rates to speed up the rate of debt (UAL) payment. This policy means substantially higher annual payments will start in 2021. It will save EDC money over time, but payment increases will squeeze budgets over the next few years, possibly resulting in draconian reductions in services.

DISCUSSION

To deal with what the Grand Jury sees as a growing sense of concern over the County's pension debt, various strategies might be considered, from those that do nothing beyond meeting CalPERS requirements, to leveraging the UAL and cutting the debt. EDC could reevaluate the method in which payments are made, and either continue making the minimum monthly payments for the employer contribution or pay the UAL at the beginning of the billing cycle, potentially saving hundreds of thousands of dollars in interest annually and paying off the UAL sooner.

EDC could continue to earmark funds in the budget to offset increases in upcoming fiscal years. The County could commit some of any year-end budget surpluses for CalPERS. The funds could be deposited into a pension trust for use restricted to pension-related costs including, but not limited to, paying annual pension increases or paying down the UAL. The County could evaluate the benefits and risks of trust funds managed and invested by a pension investment firm. These ideas are not new, and some have been implemented by EDC on a limited basis.

While, in theory, EDC could buy out of the CalPERS system and establish its own pension plan, the current cost provided by CalPERS would be $1 billion, making this option untenable.

It is evident to the Grand Jury that EDC has no viable option to fix the problem without significant impact to the County's budget, at least in the short-term. However, in our view, El Dorado County should implement and commit to a strategy as soon as possible to maximize its reductions to the UAL, so that the UAL shrinks instead of continuing to grow to the point there is no way to repay it.

The CAO has been active in restoring County fiscal health. We observed that he was abreast of the current CalPERS status and actively involved in the California State Association of Counties (CSAC) and other organizations that share information and strategies. In addition, he is collaborating with departmental heads to identify funds necessary for mandatory pension payments for 2017-18 and 2018-19 and has also supported redirecting the current year-end budget surplus to address CalPERS UAL reduction and consideration of alternate investment strategies.

The Grand Jury is satisfied that the County has implemented several operational changes since the 2002-03 Grand Jury report, including the recent establishment of a Budget Policy that includes direction to set aside additional funding for pension-related costs. The CAO expressed concern regarding the escalating UAL and had clearly devoted significant time and effort to address spiraling costs.

Discussions with Supervisors confirmed their awareness of this issue's importance, and they were unified in implementing solutions. The Grand Jury is concerned that the driving force is the vision and goals of an individual, primarily the CAO. Although the current Board supports the direction recommended by the CAO, the Board is subject to periodic changes due to elections and term limits. It is imperative that goals be formalized to provide a framework for continued restoration of the County's fiscal health.

FINDINGS

F1. The unfunded CalPERS liability for El Dorado County is $346 million as of July 2016.

F2. El Dorado County pays annual CalPERS payments monthly, resulting in interest charges payable to CalPERS.

F3. El Dorado County pays only the minimum amount due to CalPERS; it does not make additional payments to reduce the UAL.

F4. El Dorado County has an established policy to set aside additional funding for post-employment benefits, but not specifically for CalPERS obligations.

F5. Historically, El Dorado County has not provided information to the public about it's CalPERS obligation in a way that clearly illuminates the scope of the pension obligation.

RECOMMENDATIONS

R1. El Dorado County should establish a policy to escalate contributions to reduce the UAL.

R2. El Dorado County should evaluate pre-paying the annual CalPERS contribution by paying the UAL portion annually rather than monthly to lessen interest charged by CalPERS.

R3. El Dorado County should create a dedicated trust to assure that funds set aside in the budget for CalPERS costs are used for that purpose.

R4. El Dorado County should fund the CalPERS trust account to the maximum extent possible.

R5. As part of the yearly budget process, El Dorado County should report the details of its CalPERS obligation in simple and understandable terms prominently on the County's website and in a press release, so that citizens can understand the extent of future CalPERS obligations.

ATTACHMENT

- Glossary

REQUEST FOR RESPONSES

This Grand Jury report is an account of an investigation or review. It contains findings and recommendations and names those who should respond to each finding and each recommendation pertaining to matters under the respondent's control.

Responses are requested in accordance with California Penal Code §933 and §933.05.

- **Response to all recommendations from El Dorado County Chief Administrative Officer.**
- **Response to all recommendations from El Dorado County Board of Supervisors.**

The written response of each named respondent will be reprinted in a publication to the citizens of El Dorado County. Each must include the name of the Grand Jury report along with the name and official title of the respondent.

California Penal Code Section 933.05 mandates specific requirements for responding to grand jury reports. You are advised to review the Penal Code sections and carefully read the pertinent provisions included below before preparing your official response. Each respondent must use the formats below for each separate finding and recommendation identified above.

Please pay attention to required explanations and time frames. Incomplete or inadequate responses are likely to prompt further investigative inquiries by the grand jury and/or the court.

Response to Findings

Finding F# *[Retype the text of the finding as written in the Grand Jury report, # is the finding number in the report.]*

Response: *[Review California Penal Code section 933.05 (a) (1) and (2). Respondents must specify one of three options – a) Respondent agrees with finding, b) Respondent disagrees wholly with finding or c) Respondent disagrees partially with finding. If respondent uses option b or c then the response shall specify the portion of the finding that is disputed and shall include an explanation.]*

IMPORTANT NOTE ABOUT GRAND JURY FINDINGS

Grand Jury Findings are derived from testimony and evidence. All testimony and evidence given to the Grand Jury is confidential by law, and it is the Grand Jury's responsibility to maintain it. California Penal Code §929 provides "… the name of any person, or facts that lead to the identity of any person who provided information to the grand jury, shall not be released." Further, 86 Ops. Cal. Atty. Gen. 101 (2003) prohibits grand jury witnesses from disclosing anything learned during their appearance including testimony given. This is to ensure the anonymity of witnesses and to encourage open and honest testimony.

Response to Recommendations

Response R# *[Retype the text of the recommendation as written in the Grand Jury report, # is the recommendation number in the report.]*

Response: *[Review California Penal Code section 933.05 (b) (1) - (4). Respondents must specify one of four options – a) recommendation has been implemented, b) recommendation has not been implemented but will be implementing noting a timeframe, or c) recommendation requires further analysis or study noting a timeframe not to exceed six months from date Grand Jury Report was issued or d) recommendation will not be implemented because it is not warranted or reasonable, with an explanation.]*

Response Times

The California Penal Code specifies response times.

PUBLIC AGENCIES

The governing body of any public agency (also referring to a department) must respond within 90 days from the release of the report to the public.

ELECTIVE OFFICERS OR AGENCY HEADS

All elected officers or heads of agencies/departments are required to respond within 60 days of the release of the report to the public.

Failure to Respond

Failure to respond as required to a grand jury report is a violation of California Penal Code Section 933.05 and is subject to further action that may include further investigation on the subject matter of the report by the grand jury.

Where to Respond

All responses must be addressed to the Presiding Judge of the El Dorado County Superior Court.

Honorable Suzanne N. Kingsbury
Presiding Judge of the El Dorado County Superior Court
1354 Johnson Blvd, Suite 2
South Lake Tahoe CA 96150

Response via Email to *courtadmin@eldoradocourt.org* is preferred.

The Court requests that you respond electronically with a Word or PDF document file to facilitate economical and timely distribution.

California Penal Code Section 933

933.

(a) Each grand jury shall submit to the presiding judge of the superior court a final report of its findings and recommendations that pertain to county government matters during the fiscal or calendar year. Final reports on any appropriate subject may be submitted to the presiding judge of the superior court at any time during the term of service of a grand jury. A final report may be submitted for comment to responsible officers, agencies, or departments, including the county board of supervisors, when applicable, upon finding of the presiding judge that the report is in compliance with this title. For 45 days after the end of the term, the foreperson and his or her designees shall, upon reasonable notice, be available to clarify the recommendations of the report.

(b) One copy of each final report, together with the responses thereto, found to be in compliance with this title shall be placed on file with the clerk of the court and remain on file in the office of the clerk. The clerk shall immediately forward a true copy of the report and the responses to the State Archivist who shall retain that report and all responses in perpetuity.

(c) No later than 90 days after the grand jury submits a final report on the operations of any public agency subject to its reviewing authority, the governing body of the public agency shall comment to the presiding judge of the superior court on the findings and recommendations pertaining to matters under the control of the governing body, and every elected county officer or agency head for which the grand jury has responsibility pursuant to Section 914.1 shall comment within 60 days to the presiding judge of the superior court, with an information copy sent to the board of supervisors, on the findings and recommendations pertaining to matters under the control of that county officer or agency head and any agency or agencies which that officer or agency head supervises or controls. In any city and county, the mayor shall also comment on the findings and recommendations. All of these comments and reports shall forthwith be submitted to the presiding judge of the superior court who impaneled the grand jury. A copy of all responses to grand jury reports shall be placed on file with the clerk of the public agency and the office of the county clerk, or the mayor when applicable, and shall remain on file in those offices. One copy shall be placed on file with the applicable grand jury final report by, and in the control of the currently impaneled grand jury, where it shall be maintained for a minimum of five years.

(d) As used in this section “agency” includes a department.

California Penal Code Section 933.05

933.05

(a) For purposes of subdivision (b) of Section 933, as to each grand jury finding, the responding person or entity shall indicate one of the following:

(1) The respondent agrees with the finding.

(2) The respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons therefor.

(b) For purposes of subdivision (b) of Section 933, as to each grand jury recommendation, the responding person or entity shall report one of the following actions:

(1) The recommendation has been implemented, with a summary regarding the implemented action.

(2) The recommendation has not yet been implemented, but will be implemented in the future, with a timeframe for implementation.

(3) The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a timeframe for the matter to be prepared for discussion by the officer or head of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This timeframe shall not exceed six months from the date of publication of the grand jury report.

(4) The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation therefor.

(c) However, if a finding or recommendation of the grand jury addresses budgetary or personnel matters of a county agency or department headed by an elected officer, both the agency or department head and the board of supervisors shall respond if requested by the grand jury, but the response of the board of supervisors shall address only those budgetary or personnel matters over which it has some decision-making authority. The response of the elected agency or department head shall address all aspects of the findings or recommendations affecting his or her agency or department.

(d) A grand jury may request a subject person or entity to come before the grand jury for the purpose of reading and discussing the findings of the grand jury report that relates to that person or entity in order to verify the accuracy of the findings prior to their release.

(e) During an investigation, the grand jury shall meet with the subject of that investigation regarding the investigation, unless the court, either on its own determination or upon request of the foreperson of the grand jury, determines that such a meeting would be detrimental.

(f) A grand jury shall provide to the affected agency a copy of the portion of the grand jury report relating to that person or entity two working days prior to its public release and after the approval of the presiding judge. No officer, agency, department, or governing body of a public agency shall disclose any contents of the report prior to the public release of the final report.

Glossary

Actuary: A person professionally trained in the technical and mathematical aspects of insurance, pensions, and related fields. An actuary estimates how much money must be contributed to a pension fund each year in order to support the benefits that will become payable in the future.

Actuarial Assumptions: Assumptions made about certain events that will affect pension costs. Assumptions generally can be broken down into two categories: demographic and economic. Demographic assumptions include such things as mortality, disability, and retirement rates. Economic assumptions include: investment return, salary growth, payroll growth, inflation rates, and health care inflation rates.

Actuarial Valuation: A mathematical analysis of the financial condition of a pension plan which requires making economic and demographic assumptions in order to estimate future liabilities. The assumptions are typically based on a mix of statistical studies and experienced judgment.

Amortization: An accounting term that refers to the process of allocating the cost of an intangible asset over a period of time. It also refers to the repayment of loan principal over time.

Assets: Employer contributions and accumulated earnings on the investment of these contributions to be used to pay retirement benefits to retired employees.

Benefit Formula: The formula used to determine the amount of a benefit that an eligible participant receives upon retirement. Each formula specifies a percentage rate based on the member's age at retirement, and either statute or a collective bargaining agreement specifies which formula will be applicable to an individual member. The retirement benefit calculation typically includes three factors: a percentage rate based on the age at retirement and benefit formula applicable to the member, the member's length of credited service, and the member's highest average compensation for a one-year or three-year period. Typically, retirement formulas are titled in such a way as to describe how a retirement benefit would be calculated, such as "2% at age 55." In this case, the retirement benefit for a member retiring at age 55 would be: 2% (the formula percentage) X years of service X average monthly pay rate for either one or three years.

Defined Benefit (DB) Plan: A traditional pension. A plan designed to provide eligible participants with a specified lifetime benefit at retirement. The benefit is based upon the following three factors: a percentage rate based on the member's age at retirement and benefit formula applicable to the member, the member's length of credited service, and the member's final compensation. Defined benefit plans also typically provide disability and death benefits. The plans are funded by member contributions, employer contributions, and income earned from the investment of accumulated contributions.

Fiscal Year (FY): A term of one year, typically beginning on the 1st day of July extending through the last day of June.

Fully Funded: A specific element of pension cost (for example, past service cost) is said to have been fully funded if the amount of the cost has been paid in full. A retirement plan is fully funded when the funded ratio equals 100% or greater.

Funding Level: The relationship, usually expressed as a percentage, between the actuarial value of a plan's assets and its actuarial liability. The amount of funds in the account.

Liabilities: The obligations of a plan to pay amounts of money either immediately or in the future.

Normal Cost: The present value of future pension benefits earned during the current accounting period.

Unfunded accrued liability (UAL): The amortized dollar amount needed to fund past service credit earned for members currently receiving benefits, active members, and for members entitled to deferred benefits, as of the valuation date.

Valuation Date: The effective date for an actuarial valuation of a pension plan.