

MANAGING PENSION AND OPEB LIABILITIES



Rick Roeder, Chief Actuary, GovInvest
Dan Matusiewicz, Finance Director, Newport Beach
Kathryn Downs, Finance Director, Carson
Ted Price, CEO, GovInvest



Presentation to CSMFO Annual Conference
March 3rd, 2016
8:30 A.M.

OPEB OVERVIEW

Rick Roeder, Chief Actuary, GovInvest

PLAN DESIGN

- More varied than pension plans
- Recession, rising pension costs triggered many benefit cutbacks in past decade
- Multi-tier plans
- Dollar Reimbursement Caps (Often, frozen)
- Some stop at Medicare age, 65
- One-party vs. Two-party
- Percent of premium

DIFFERENCES FROM PENSION PLANS

- Fewer benefit types in Medical OPEB
- In OPEB, usually must retire directly from employer to receive benefit
- There are some opt-outs in OPEBs
- Some OPEBS may not be vested
- More discretion in funding (or not funding)
- More complicated benefit stream

PLAN FUNDING ISSUES

- GASB requires balance sheet recognition of liabilities -- Net OPEB Obligation – “NOO”
- NOO exists when less than the Actuarially Required Contribution (“ARC”) has been funded at some point
- Huge incentive to fund ARC
- If ARC funded each year, higher discount rate potentially available with less liabilities

PLAN FUNDING ISSUES -2-

- If pay-as-you-go, a lower discount rate must be used (based on some mix of 20-year municipal bond and long-term cash earnings on general fund)
- Discount rate range depends, in large part, on degree of funding. Can range from 3.5% to 7.25%
- Selection of amortization period, method

RETIREE MEDICAL JARGON

- “Medical Trend” -- Assumed Inflation in Medical Premiums. Usually greater in near term than long term.
- Right now, USA spends 17% of GNP on medical-related services.
- A practical limit on how much USA can spend on medical services (Of course, I have been saying this for 25 years!!)

RETIREE MEDICAL JARGON

-2-

- IMPLICIT SUBSIDY
- Impacts Pre-age 65 retirants when they pay same premium as actives
- Such retirants typically use more services than younger actives
- As of 4/1/15, applies to “community rated” plan

RETIREE MEDICAL JARGON

-3-

- COMMUNITY RATED PLAN
- Rates are set based upon a large pool of members
- Rates for a group are not medically underwritten
- Rates are independent of age, gender

EXAMPLE OF IMPLICIT RATE SUBSIDY

- Rates per Age Group (each 25% of total)

• <u>Age</u>	<u>Rate</u>
• 30	\$400
• 40	600
• 50	800
• 60	<u>1,000</u>

Average \$700

Charged to all members of pool

Subsidy for Age 60 Retirants: = \$300 (\$1,000 - \$700)

STRATEGIC METHODS TO AMORTIZE YOUR PENSION LIABILITY

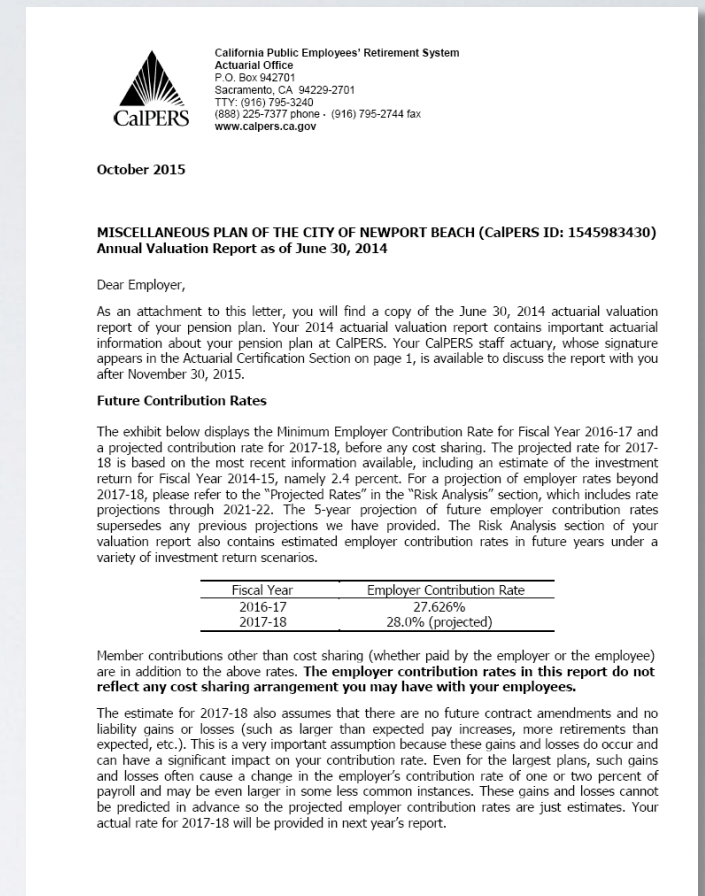
Dan Matusiewicz, Finance Director, Newport Beach

READ YOUR ACTUARIAL VALUATION MORE THAN YOUR NEW CONTRIBUTION RATES!!!!

- Changes since the Prior Valuation
- Potential Changes to Future Year Valuations
- Schedule of Amortization Bases
- Compare minimum required contributions to
alternative amortization schedules
- Understand your volatility ratios
- Monitor your funded status and consider a pension funding policy

<http://www.gfoa.org/sustainable-funding-practices-defined-benefit-pension-plans>

- Analyze impact of projected rates and sensitivity analysis
- Have a chuckle at your Hypothetical Termination Liability☺ -
 - Know it just in case a Board Member asks!



UNDERSTAND YOUR OPTIONS (TODAY)

- Prepayment of annual contribution
- Lump sum discretionary payments
- Fresh Start (re-amortized all of your UAL bases)
- Partial Fresh Start



KNOW YOUR ACTUARY AND CALL THEM REGULARLY

- They can guide you through your options
- They can provide scenario analysis
- They are a wealth of information
- Attend the Annual CalPERS Education Forum – Access to ALL levels of PERS Staff, Executives and Board Members



CALPERS ACTUARY BY COUNTY

Actuary: Phone Number:	Nancy Campbell (916) 795-0575	Bill Karch (916) 795-2856	Fritzie Archuleta (916) 795-1262	Kerry Worgan (916) 795-0003	Randall Dziubek (916) 795-1354	Cheuk Kiu (Jet) Au (916) 795-2187
County Name:	SAN DIEGO	VENTURA	ALAMEDA	ORANGE	LOS ANGELES	EL DORADO
			CONTRA COSTA	SAN BERNARDINO	MONO	SIERRA
						SOLANO

Actuary: Phone Number:	David Clement (916) 795-2472	May Shuang Yu (916) 795-4143	Barbara Ware (916) 795-3426	Stuart Bennett (916) 795-2692	Kelly Sturm (916) 795-0400	Shelly Chu (916) 795-0647
County Name:	SANTA CLARA	LASSEN	LOS ANGELES	BUTTE	AMADOR	COLUSA
	SANTA CRUZ	MODOC	MARIN	KERN	PLACER	FRESNO
	STANISLAUS	SACRAMENTO	MONTEREY	KINGS	SAN BENITO	MERCED
		SISKIYOU	SAN LUIS OBISPO	SAN BERNARDINO	SAN JOAQUIN	PLUMAS
				SANTA BARBARA	YOLO	TUOLUMNE

Actuary: Phone Number:	Todd Tauzer (916) 795-9623	Julian Robinson (916) 795-4164	Jordan Fassler (916) 795-1018	Jean Fannjiang (916) 795-2475
County Name:	HUMBOLDT	IMPERIAL	ALPINE	GLENN
	RIVERSIDE	LOS ANGELES	CALAVERAS	INYO
	SUTTER	NAPA	DEL NORTE	LOS ANGELES
	TRINITY	SAN FRANCISCO	LAKE	NEVADA
	YUBA	SAN MATEO	MADERA	SHASTA
		TULARE	MARIPOSA	SONOMA
				MENDOCINO
				TEHAMA



UNDERSTAND YOUR UNFUNDED LIABILITY AND HOW EACH BASE IS BEING AMORTIZED

- Avoid the 30 year amortization periods
- Avoid the 5Yr Ramp Up/Down Schedule in favor of the level % of pay option
- Identify most efficient payment schedules
- Determine what your agency can afford



BUILD A CASE TO ACCELERATE YOUR REPAYMENT SCHEDULE

- “Schedule of Amortization bases” is key
- Need to be able to replicate amortization schedules
- Compare Present Value (PV) cash flow options
- Prepare a present value analysis of your optional cash flow schedules



AMORTIZATION BASES

CALPERS ACTUARIAL VALUATION - June 30, 2014

Schedule of Amortization Bases

There is a two-year lag between the Valuation Date and the Contribution Fiscal Year.

- The assets, liabilities and funded status of the plan are measured as of the valuation date; June 30, 2014.
- The employer contribution rate determined by the valuation is for the fiscal year beginning two years after the valuation date; Fiscal Year 2016-17.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and due to the need to provide public agencies with their employer contribution rates well in advance of the start of the fiscal year.

The Unfunded Liability is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The Unfunded Liability is rolled forward each year by subtracting the expected Payment on the Unfunded Liability for the fiscal year and adjusting for interest. The Expected Payment on the Unfunded Liability for a fiscal year is equal to the Expected Employer Contribution for the fiscal year minus the Expected Normal Cost for the year. The Employer Contribution Rate for the first fiscal year is determined by the actuarial valuation two years ago and the rate for the second year is from the actuarial valuation one year ago. The Normal Cost Rate for each of the two fiscal years is assumed to be the same as the rate determined by the current valuation. All expected dollar amounts are determined by multiplying the rate by the expected payroll for the applicable fiscal year, based on payroll as of the valuation date.

Reason for Base	Date Established	Amortization Period	Balance 6/30/14	Expected Payment 2014-15	Balance 6/30/15	Expected Payment 2015-16	Amounts for Fiscal 2016-17		
							Balance 6/30/16	Scheduled Payment for 2016-17	Payment as Percentage of Payroll
FS 30-YEAR AMORTIZATION	06/30/08	24	\$(4,760,389)	\$(307,896)	\$(4,798,185)	\$(317,133)	\$(4,829,238)	\$(326,647)	(0.737%)
ASSUMPTION CHANGE	06/30/09	15	\$10,557,847	\$886,978	\$10,430,047	\$913,587	\$10,265,074	\$940,995	2.122%
SPECIAL (GAIN)/LOSS	06/30/09	25	\$11,727,208	\$743,250	\$11,836,131	\$765,547	\$11,930,105	\$788,514	1.778%
SPECIAL (GAIN)/LOSS	06/30/10	26	\$(1,985,365)	\$(123,450)	\$(2,006,272)	\$(127,154)	\$(2,024,906)	\$(130,969)	(0.295%)
ASSUMPTION CHANGE	06/30/11	17	\$11,462,630	\$894,394	\$11,395,000	\$921,226	\$11,294,477	\$948,863	2.140%
SPECIAL (GAIN)/LOSS	06/30/11	27	\$(5,269,530)	\$(321,832)	\$(5,331,062)	\$(331,487)	\$(5,387,199)	\$(341,431)	(0.770%)
PAYMENT (GAIN)/LOSS	06/30/12	28	\$1,857,636	\$111,552	\$1,881,299	\$114,899	\$1,903,267	\$118,346	0.267%
(GAIN)/LOSS	06/30/12	28	\$70,991,591	\$4,263,082	\$71,895,902	\$4,390,975	\$72,735,435	\$4,522,704	10.199%
(GAIN)/LOSS	06/30/13	29	\$61,329,437	\$(281,811)	\$66,221,333	\$931,405	\$70,222,231	\$1,918,695	4.327%
ASSUMPTION CHANGE	06/30/14	20	\$33,710,124	\$(689,286)	\$36,953,050	\$(709,964)	\$40,460,635	\$770,682	1.738%
(GAIN)/LOSS	06/30/14	30	\$(58,432,251)	\$(322,812)	\$(62,479,971)	\$(406,772)	\$(66,744,219)	\$(938,760)	(2.117%)
TOTAL			\$131,188,938	\$4,852,169	\$135,997,272	\$6,145,129	\$139,825,662	\$8,270,992	18.651%

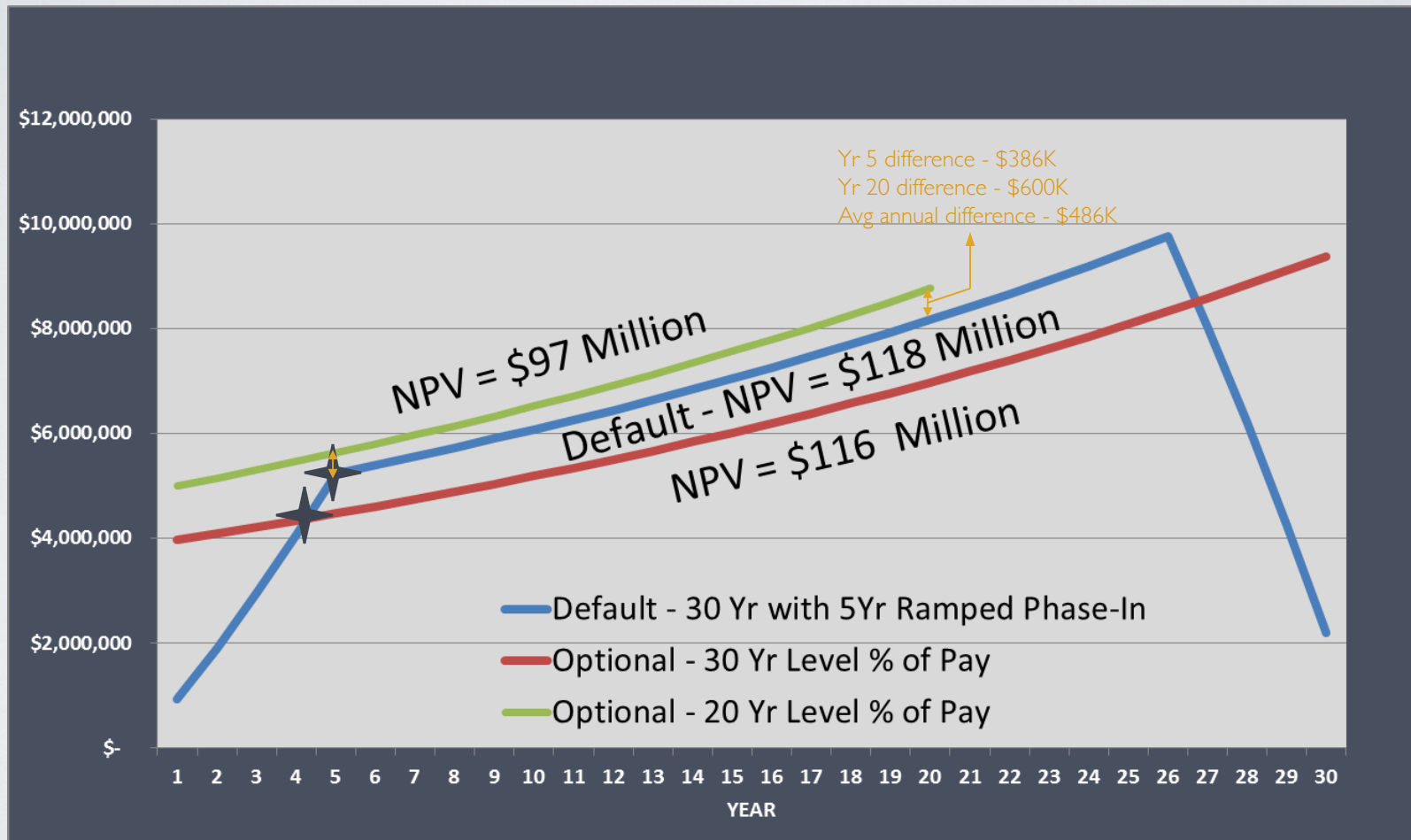


Default - 30 Yr, 5 Yr Ramps				Optional - 30 Yr, Level % of Pay			20 Yr, with 5 Yr. Ramps				Optional 20Yr, Level % of pay		
	Balance	Period	Payment	Balance	Period	Payment	Balance	Period	Payment		Period	Payment	
1	66,221,333	30	\$ 931,405	\$ 66,221,333	30	\$ 3,976,626	\$ 66,221,333	20	\$ 1,261,363	\$ 66,221,333	20	\$ 5,000,070	
2	70,222,231	29	\$ 1,918,695	\$ 67,064,879	29	\$ 4,095,925	\$ 69,880,124	19	\$ 2,598,408	\$ 66,003,750	19	\$ 5,150,072	
3		28		\$ 67,848,000	28	\$ 4,218,803	\$ 72,427,046	18	\$ 4,014,541		1 Yr		
4	\$ 75,938,481	27	\$ 4,071,087	\$ 68,562,453	27	\$ 4,345,367	\$ 73,696,710	17	\$ 5,513,303			5,463,711	
5	\$ 77,412,874	26	\$ 5,241,529	\$ 69,199,265	26	\$ 4,475,728	\$ 73,507,649	16	\$ 7,098,377	\$ 64,248,263	16	5,627,623	
6	\$ 77,784,311	25	\$ 5,398,770	\$ 69,748,676	25	\$ 4,609,999	\$ 71,660,969	15	\$ 7,311,328	\$ 63,232,039	15	5,796,451	
7		24		\$ 70,200,078	24	\$ 4,748,299		14	\$ 7,530,668				
8	\$ 78,106,622	23	\$ 5,727,556	\$ 70,541,942	23	\$ 4,890,748	\$ 66,856,150	13	\$ 7,756,588	\$ 60,421,709	13	\$ 6,149,456	
9	\$ 78,026,163	22	\$ 5,899,382	\$ 70,761,752	22	\$ 5,037,471	\$ 63,828,160	12	\$ 7,989,286	\$ 58,577,446	12	\$ 6,333,939	
10	\$ 77,761,515	21	\$ 6,076,364	\$ 70,845,922	21	\$ 5,188,595	\$ 60,331,810	8 Yrs	\$ 8,228,965	\$ 56,403,586	11	\$ 6,523,957	
11	\$ 77,293,521	20	\$ 6,258,655	\$ 70,779,717	20	\$ 5,344,253		10	\$ 8,475,834	\$ 53,869,672	10	\$ 6,719,676	
12	\$ 76,601,424	19	\$ 6,446,414	\$ 70,547,156	19	\$ 5,504,580	\$ 51,761,147	9	\$ 8,730,109	\$ 50,942,789	9	\$ 6,921,266	
13	\$ 75,662,746	18	\$ 6,639,807	\$ 70,130,923	18	\$ 5,669,718	\$ 46,591,664	8	\$ 8,992,012	\$ 47,587,377	8	\$ 7,128,904	
14	\$ 74,453,154	17	\$ 6,839,001	\$ 69,512,253	17	\$ 5,839,809	\$ 40,762,923	7	\$ 9,261,772	\$ 43,765,024	7	\$ 7,342,771	
15	\$ 72,946,313	16	\$ 7,044,171	\$ 68,670,829	16	\$ 6,015,004	\$ 34,217,332	6	\$ 9,539,625	\$ 39,434,254	6	\$ 7,563,055	
16	\$ 71,113,735	15	\$ 7,255,496		15	\$ 6,195,454	\$ 26,892,738	5	\$ 9,825,814	\$ 34,550,281	5	\$ 7,789,946	
17		14	\$ 7,473,161	\$ 66,229,919	14	\$ 6,381,317	\$ 18,722,072	4	\$ 8,096,471	\$ 29,064,764	4	\$ 8,023,645	
18	\$ 66,345,614	13	\$ 7,697,356	\$ 64,580,872	13	\$ 6,572,757	\$ 11,731,628	3	\$ 6,254,524	\$ 22,925,529	3	\$ 8,264,354	
19	\$ 63,340,747	12	\$ 7,928,276	\$ 62,609,658	17 Yrs	\$ 6,769,940	\$ 6,126,672	2	\$ 4,294,773	\$ 16,076,279	2	\$ 8,512,285	
20	\$ 59,871,090	18 Yrs	\$ 8,166,125		11	\$ 6,973,038	\$ 2,133,257	1	\$ 2,211,808	\$ 8,456,276	1	\$ 8,767,653	
21		10	\$ 8,411,108	\$ 57,577,822	10	\$ 7,182,229	\$ (0)	-	\$ -	\$ -			
22	\$ 51,365,877	9	\$ 8,663,442	\$ 54,449,465	9	\$ 7,397,696							
23	\$ 46,235,870	8	\$ 8,923,345	\$ 50,863,081	8	\$ 7,619,627							
24	\$ 40,451,639	7	\$ 9,191,045	\$ 46,777,615	7	\$ 7,848,215							
25	\$ 33,956,034	6	\$ 9,466,777	\$ 42,148,733	6	\$ 8,083,662							
26	\$ 26,687,373	5	\$ 9,750,780	\$ 36,928,569	5	\$ 8,326,172							
27	\$ 18,579,103	4	\$ 8,034,643	\$ 31,065,454	4	\$ 8,575,957							
28	\$ 11,642,040	3	\$ 6,206,761	\$ 24,503,621	3	\$ 8,833,236							
29	\$ 6,079,886	2	\$ 4,261,976	\$ 17,182,899	2	\$ 9,098,233							
30	\$ 2,116,967	1	\$ 2,194,918	\$ 9,038,368	1	\$ 9,371,180							
	\$ -			\$ -									
			\$190,643,158	Sum of Payments		\$189,189,635				\$134,985,569	Sum of Payments		\$134,353,756
			\$117,556,017	NPV @ 3%		\$115,824,058				\$97,969,960	NPV @ 3%		\$97,088,739

20 Yr. vs 30 Yr.
Saves \$20M

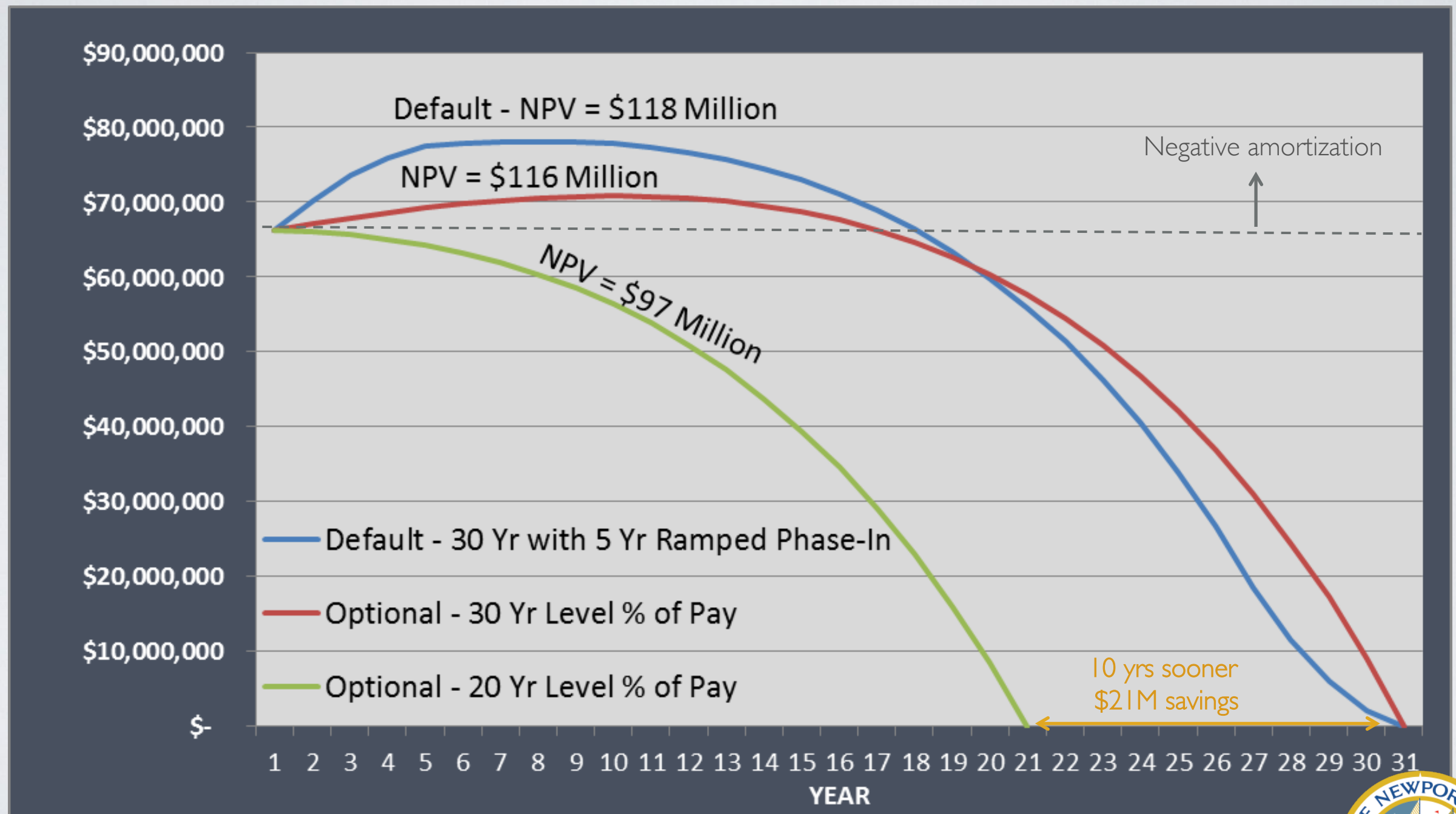
ANNUAL PAYMENT COMPARISON

DEFAULT VS 30 YR LEVEL % OF PAY VS 20 YR LEVEL % OF PAY



ANNUAL BALANCE COMPARISON

DEFAULT VS 30 YR LEVEL % OF PAY VS 20 YR LEVEL % OF PAY



MANAGE YOUR AMORTIZATION BASES

Schedule of Amortization Bases

Reason for Base	Date Established	Amort. Period	Balance 06/30/14	Amounts for Fiscal 2016-17		Amort Schedule	Recommendations
				Payment for 2016-17	Payment as % of Payroll		
FS 30-YEAR AMORTIZATION	06/30/08	24	(\$4,760,389)	(\$326,647)	-0.737%	Level % of Pay	OK
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SPECIAL (GAIN)/LOSS	06/30/09	25	\$11,727,208	\$788,514	1.778%	Level % of Pay	A30 Take Action
SPECIAL (GAIN)/LOSS	06/30/10	26	(\$1,985,365)	(\$130,969)	-0.295%	Level % of Pay	OK - Credit
ASSUMPTION CHANGE	06/30/11	17	\$11,462,630	\$948,863	2.140%	Level % of Pay	OK
SPECIAL (GAIN)/LOSS	06/30/11	27	(\$5,269,530)	(\$341,431)	-0.770%	Level % of Pay	OK - Credit
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ASSUMPTION CHANGE	06/30/14	20	\$33,710,124	\$770,682	1.738%	5 Yr. Ramp	AR Take Action
(GAIN)/LOSS	06/30/14	30	(\$58,432,251)	(\$938,760)	-2.117%	5 Yr. Ramp	OK - Credit
TOTAL			\$131,188,938	\$8,270,992	18.651%		

Recommendation Notes:

- (1) **AR** - Avoid the 5YR Ramp Amortization Schedules to avoid negative amortization.
- (2) **A30** - Avoid 30 Year Amortization Schedules. Target < 22 Years to avoid negative amortization.
- (3) Partial Fresh Start can be achieved by combining any two amortization bases.
- (4) I generally recommend leaving credit balances in place as a rainy day fund; you can combine credits with other bases when/if you need rate-relief down the road.
- (5) GFOA Recommendation: "Never exceed 25 years, but ideally fall between 15-20 year range"

<http://www.gfoa.org/sites/default/files/GFOABPCoreElementsofPensionFundingPolicy.pdf>



CAN'T AFFORD TO PAY MORE INTO PERS?

CONSIDER:

Combine Negative Amortization Bases with selected credit bases –
Consult your actuary!

Reducing Workforce – Why this action does little to reduce the current unfunded liability, don't discount the immediate impact of salary savings

Employee Contributions – Newport has collectively bargained from \$0 employee contributions to nearly \$8.5 Million annually.

Paying more toward your unfunded liability today saves money tomorrow – There is a high cost of deferring



KNOW WHAT IS COMING DOWN THE ROAD

- Imminent Experience Losses
 - 6/30/2015 Investment Return of 2.4% results in 5.1% Experience loss
 - 6/30/16 Investment Returns on track for negative investment returns
- Evaluate the prospect of further unfavorable returns - Sensitivity Analysis
- Evaluate impact of a lower Discount Rate - Flexible Glide Path
- Pending Legislation

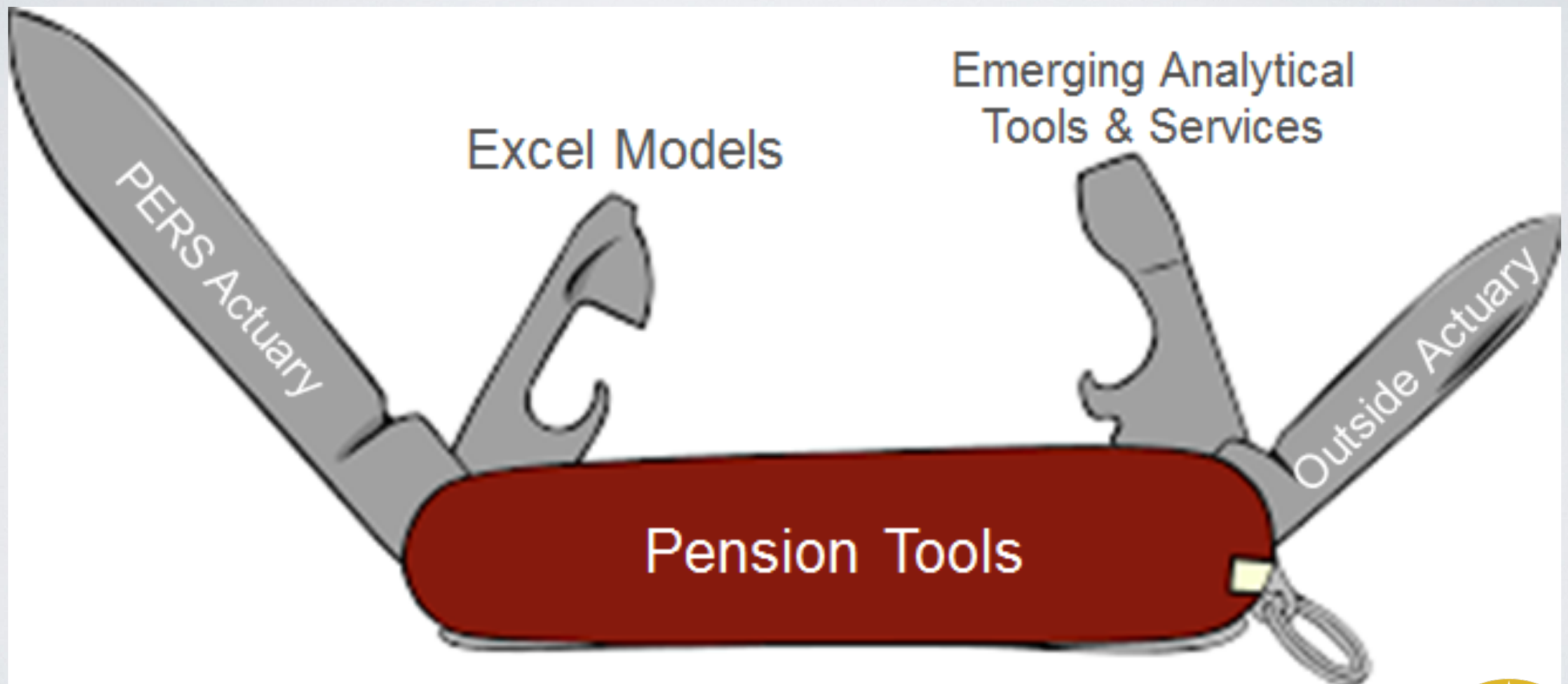


ANALYSIS CONSIDERATIONS

- Discount Rate Assumption
- Investment Return Assumption
- Prepayment Analysis
- Fresh Start Analysis
- Visual Communication elected officials can understand
- Member, Tier or Group specific scenario analysis tools
- And more.....



CONSIDER TOOLS AT YOUR DISPOSAL



LET'S TALK ABOUT IT

Ted Price, CEO, GovInvest

MISSION



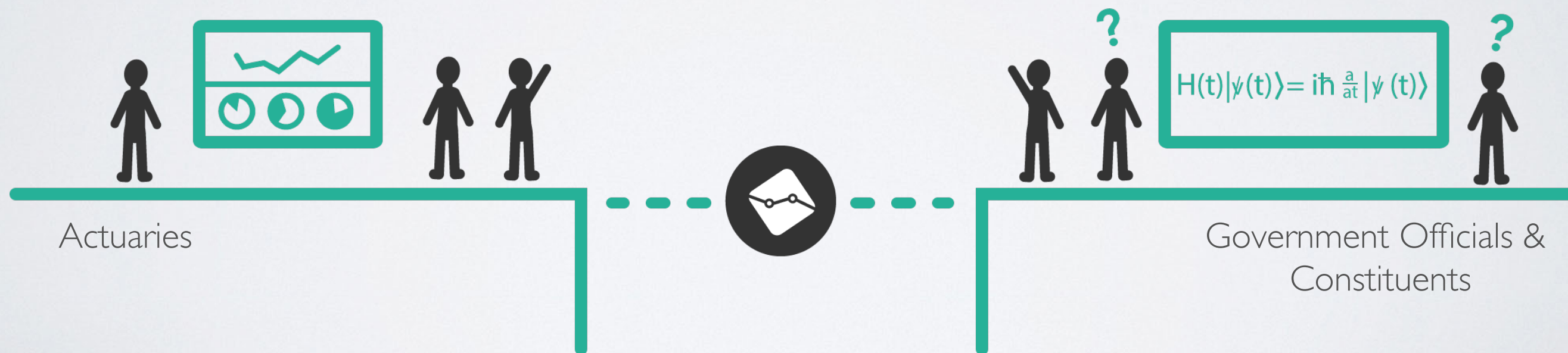
Providing your agency with access to tools to better understand and manage your pensions and OPEBs:

- Real-time information
- Instant analysis
- Transparency and communication
- Funding solutions

PROBLEM

Actuarial reports are very complicated and static.

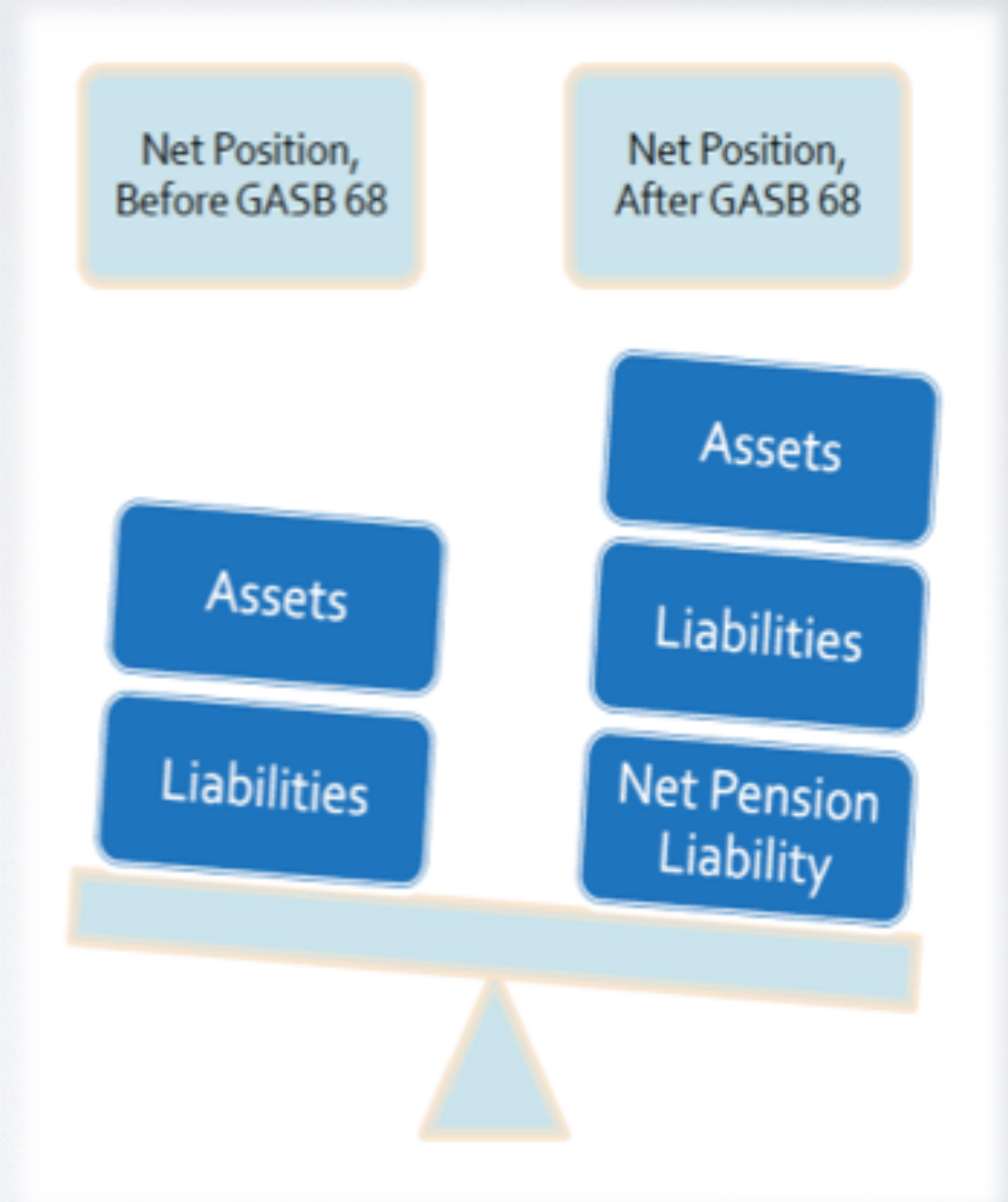
- 100-page PDFs of financial tables
 - \$Billions in unfunded liabilities
 - No clear solutions
- No ability to accurately analyze/understand assumptions



WHY NOW

Instatement of GASB 68 & 75

- Agencies are required to increase pension & OPEB transparency
- Must be more responsible for actuarial assumptions
- Pension and OPEB now real liabilities on financials
- Questions from council, staff, and public
- CalPERS lowering discount rate



WHAT'S A FINANCE OFFICER TO DO?

- Be aware of issues and prepared to present liability information to Board/Council
 - Identify & explain net position
 - Explain assumptions and reasonable alternatives
 - Discuss funding strategies (prepayment, amortization)
- Educate and notify stakeholders of new regulations and the results
 - Valuation reports / transparency & bargaining tools
- In the spirit of GASB and new regulations, agencies are encouraged to find ways to increase transparency – stay on top of these important issues

PAYING DOWN YOUR UNFUNDED LIABILITY

- Make a Plan
- Pension Obligation Bonds
- Borrow from General Fund
 - Pay GF back like a loan
 - Payments come from all funds
- Shorter Amortization Period
- Lump Sum Payments

Case Study: Huntington Beach, CA

- Combination of Additional Payments & Shorter Amortization Periods
- Resulted in \$70.3M of Savings

<http://www.csmfo.org/training/webinars/audio-archives/>

OUR SOLUTION

Software platform for:

- Transparent, interactive view of pension & OPEB liabilities
- Real-time information, analysis, and compliance



We produce your GASB
45/75 and GASB 68 reports
Automated, cost-saving
compliance



Go Above & Beyond with
Visualization & Analysis
Stress-test assumptions and
scenarios
Identify and manage problems



Identify, Compare & Connect
Agencies to Funding Solutions
Saving you money
Making responsible decisions

TOTAL LIABILITY CALCULATOR

How can you communicate all that complicated actuarial information?

- Presentations
- Saves money normally paid to an actuary
- Complex, valuable analysis made easy
- Empowers you to do clear, easy actuarial analysis
- Cost-saving
- Transparency
- Bargaining with Labor Groups

Product Snapshot



GOVINVEST TEAM

Leadership



Ted
Price
CEO



Jasmine
Nachtigall
President



Rick Roeder
Chief Actuary

Advisors



Glenn
Hubbard
Chairman of Economic Advisors



Andrew Sidamon-Eristoff
Treasurer of New Jersey
2010 - 2015

The Rancho Palos Verdes Experience

Pension Civic Engagement

CSMFO Conference, March 3, 2016

Kathryn Downs, Finance Director, City of Carson
Formerly from Rancho Palos Verdes

The Challenge

- Rancho Palos Verdes participates in a CalPERS risk pool
- January 2012 City Council assigned a citizens committee to study pension unfunded liability
 - Identify City's share of risk pool's unfunded liability (was not available at the time, and had to be estimated)
 - Offer alternatives to address the unfunded liability
- Education of citizen committee
- Obtaining information from CalPERS was difficult

Unfunded Liability in millions

	2010*	2011	2012	2013	2014
Accrued Liability	\$26.5	\$25.6	\$28.1	\$30.4	\$32.8
Market Value of Assets	\$16.9	\$19.5	\$20.2	\$23.1	\$26.1
Unfunded Liability	\$9.6	\$6.0	\$7.9	\$7.2	\$6.7

**2010 Estimated*

Note: no side-fund liability

	2010	2011	2012	2013	2014
CalPERS Return	11.1%	20.7%	1.0%	12.5%	18.4%

The Results

- Ongoing study over 3 ½ years
 - 13 meetings + 4 Citizen Committee reports to City Council
- Final recommendation
 - Do not pay down unfunded liability
 - Accrued liability includes assumptions
 - Market value of assets subject to fluctuating returns
 - Consider 115 trust to offset unfunded liability
 - Can be used for any type of future contribution
 - Reluctance to send additional money to CalPERS
- CalPERS information has greatly improved since 2010
- The assignment would have been easier with the latest tools