

Presentation to the North Dakota Government Finance Committee

April 23, 2014



Steve McElhaney, FSA

Fiona Liston, FSA



Topics

- About Cheiron
- Our Relevant Experience
- Proposed Staffing
- What Distinguishes Us



About Cheiron

- Independent national firm formed in 2002 spinoff from Milliman over concerns on liability limitations
- 100% employee owned firm dedicated solely to providing actuarial services to jointly-trusted pension and health funds
- One of the nation's largest firms that has business concentrated on public sector pension funds
- National reputation for innovative interactive projection capabilities
- Significant experience in projects dealing with public sector pension reform



Public Sector Experience

Statewide Plans:

- Arkansas
- Arizona Local Government Trust
- CalPERS
- CalSTRS
- Connecticut
- Delaware
- Florida
- Illinois
- Idaho
- Kansas
- Louisiana
- Maine
- Maine Municipals
- Maryland
- Montana
- New Jersey
- New York State Teachers
- Oregon
- Pennsylvania
- Rhode Island
- Utah
- Vermont Municipals
- Washington State Investment Board
- Washington
- West Virginia

Federal:

- US Army
- US Court of Appeals
- US Department of Defense
- US House of Representatives
- US Tax Court
- US Department of the Treasury

Local Government Plans:

- Alexandria, VA
- Allentown, PA
- Annapolis, MD
- Arlington County, VA
- Baltimore, MD
- Chesterfield County Schools, VA
- Chattanooga, TN
- Cochise, AZ
- District of Columbia
- Fairfax County, VA
- Falls Church, VA
- Fresno County, CA
- Greater Richmond Transit Co, VA
- Hampton, VA
- Kansas City, MO
- Knoxville Utilities Board, TN
- Long Island Power Authority, NY
- Los Angeles, CA
- Maryland Transit Admin
- Metropolitan Washington Council of Governments

Local Government Plans (continued):

- Miami, FL
- Milwaukee County, WI
- Multnomah County, OR
- Nassau County Health Care, NY
- Newport News, VA
- Norfolk, VA
- Pennsville Township, NJ
- Peoria, IL
- Philadelphia, PA
- Phoenix, AZ
- Roanoke, VA
- Saint Louis, MO
- San Diego, CA
- San Francisco, CA
- San Jose, CA
- San Luis Obispo, CA
- Santa Barbara, CA
- Springfield Area Transit Co, MA
- Westchester Medical Center, NY
- Wichita, KS
- Wilmington, DE
- Vienna, VA



Experience in Reviews of Public Retirement System Pension Reforms

- Florida: Analysis of proposed DB/DC choice
- Maine: Analysis and development of proposed pension plan reform
- Montana: Special legislative studies and projections
- Illinois: Annual review of five state-wide retirement systems' implementation of pension funding reform
- Maryland: Actuarial analysis of all proposed legislation affecting the state retirement system
- Utah: Projections to legislature regarding various proposed changes to the state retirement system
- Analysis of recent DB plan closures in San Diego and San Jose (initiated by taxpayer ballot measures)



Proposed Staffing

Role		Experience
Co-Lead Actuary	Steve McElhaney, FSA, FCA, EA, MAAA	37 years
Co-Lead Actuary	Gene Kalwarski, FSA, FCA, EA, MAAA	38 years
Back-Up Actuary	Fiona Liston, FSA, EA, MAAA	31 years
Project Manager	Elizabeth Wiley, FSA, FCA, EA, MAAA	9 years
Special Resource	Ken Kent, FSA, FCA, EA, MAAA	38 years
Special Resource	Bill Hallmark, ASA, FCA, EA, MAAA	28 years



What Distinguishes Us?

- Complete independence from factors that could compromise our objectivity
- Consulting to large jointly trustee pension plans represents nearly 90% of our business
- Specialized experience dealing with state legislative bodies and regulators including federal agencies and Congress on pension plan reform initiatives
- Our capabilities in utilizing interactive projection models is unparalleled in our industry



Case Study - Maine

- Cheiron consultants have been actuaries to MainePERS since 1986
- In 2011 The Maine State legislature passed a bill requiring a major study to look into the closing the DB plan to new hires by 2015
- MainePERS along with Cheiron were assigned the task to develop the potential replacement plan for new hires
- After months of analysis, a three prong replacement plan was designed
 - New hires would be eligible for Social Security
 - A defined contribution plan with limited employer match
 - An adjustable pension plan (defined benefit)

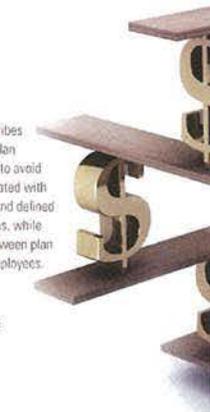


Cheiron Innovation: The APP

The Adjustable Pension Plan: A Balanced Approach

The author describes a new pension plan design intended to avoid problems associated with defined benefit and defined contribution plans, while sharing risks between plan sponsors and employees.

by | Richard Hudson



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RETHINKING RETIREMENT A New Life for Pension Plans



Bucking the 401(k) trend, a union moves to a new type of defined-benefit plan in which employers and employees share the risk.

By Eleanor Laise, March 23, 2014

Don't ring the death knell for defined-benefit pension just yet. A new effort is under way to rehabilitate these plans.

For workers struggling to manage their 401(k)s, employers' decades-long shift away from traditional, professionally managed pensions seems relentless—and potentially disastrous. But now, one plan administrator is bucking the trend, bidding away from 401(k) that wasn't working for participants and adopting a new type of defined-benefit plan designed to reduce risks for both employers and workers.

At the start of this year, roughly 4,500 Boston-area hospitality workers belonging to the Unite Here Local union became participants in a new defined-benefit pension plan. This "Adjustable Pension Plan," designed by actuarial firm Cheiron, divides investment risk between employers and employees. Workers opt

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Hybrid DB/DC plan getting play

BY PAULAVEN GLADYCH
January 24, 2014 • Reprints



The New York Times is among those seeking approaches to retirement planning for its employees.

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NCCMP report argues for "fundamental restructuring" of multiemployer plans

BY HAZEL BRADFORD | FEBRUARY 18, 2013 12:31 PM | UPDATED 1:53 PM

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PBGC reports lead to calls for multiemployer pension reform

CVS to leave New England fund, makes new funding deal

Appellate court: Company can withdraw from multiemployer pension fund

The U.S. multiemployer needs fundamental private sector, issued Tuesday by Multiemployer Plan

The report is the culmination of a yearlong effort by labor and employer organizations, multiemployer plan officials and large employers to figure out how to reinvent the multiemployer system. "If such plans are to continue their mission for the foreseeable future," according to the report.

No specific actions were detailed in the report. The proposals "represented the combined effort of over 40 organizations from disparate industries to solve the problems. They will protect participants and allow plans to attract new employers without relying on financial assistance from the government," Josh Shapiro, NCCMP deputy executive director for research and education, said in an interview.

Mr. Shapiro stressed the private sector is in a better position than the federal government to come up with workable fixes for most plans and specific remediation measures for troubled plans. The group is also calling for plan design innovations to stem employer withdrawals and to attract new employers.

According to reports sent to Congress Jan. 29 by the Pension Benefit Guaranty Corp., multiemployer plans had a 48% aggregate funding ratio with 21% of roughly 1,500 plans facing significant and immediate funding problems. That is ominous for the PBGC multiemployer pension insurance program, which has a 35% probability of being insolvent by 2022, and a 50% chance of insolvency by 2032, according to the PBGC reports.

"Solutions not Bailouts: A Comprehensive Plan from Business and Labor to Safeguard Multiemployer Retirement Security, Protect Participants and Spur Economic Growth" is available from the group's website.

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The Adjustable Pension Plan

The Adjustable Pension Plan[®]
Richard Hudson, FSA, FCA, EA, Principal Consulting Actuary
Cheiron

The Adjustable Pension Plan (APP) is designed to mitigate the various risks that have caused many pension plans to shutdown over the past decades. Americans need a secure way to provide lifetime income during retirement and the current defined contribution plans will not provide a safe level income stream throughout the retirement years. This plan creates a partnership with the employers and employees by sharing the investment risk of the pension plan and moving towards a lower risk investment pool.

The basic plan design provides a flat dollar or career average pay formula for the participants. This benefit is developed after determining what level of contributions are available to fund the plan. This information is used to determine the cost of the plan and develop the ultimate benefit level that can be sustained by the employer's contribution level. The costs are developed using very conservative assumptions to provide more certainty that the benefits promised can be delivered. This benefit is the floor benefit and will provide a minimum level of benefit to the

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Adjustable pension plan design begins to gain converts

Benefits can shrink or grow depending on performance

BY KEVIN OLSEN | APRIL 28, 2013

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The people behind the creation of the adjustable pension plan

Hedge funds could be answer to DC volatility problem

Consumers Union to create new adjustable pension plan

No need for new DC plan

Health retirement plan proposal is hot

Updated with correction

A new pension plan design that allows employers to drastically reduce their risk while still providing lifetime income to participants is gaining support as an alternative to moving employees into a defined contribution plan.

The adjustable pension plan was conceived by executives at Cheiron Inc., originally for multiemployer plans and adapted for single-employer plans by Richard Hudson, principal consulting actuary at Cheiron in New York. Its key difference from a traditional DB plan is that the benefit received each year is adjusted from an original multiplier based on the previous year's investment performance.

The plan design shares the investment risk between employees and employers while providing more retirement income security than a typical defined contribution plan.

Earlier this month, Consumers Union, Yonkers, N.Y., reached a collective bargaining agreement with the Newspaper Guild of New York to create an adjustable pension plan that will replace the standard DB plan for guild members. The existing plan had about \$20 million in assets as of Dec. 31, 2012, according to the company's most recent Form 990 filing. That plan will be frozen on May 31, and contributions to the adjustable plan will start June 1.





Case Study - Florida

- In the late 1990's Florida successfully introduced a defined contribution option in the Florida Retirement System (FRS) for existing members and new hires
- Gene Kalwarski was the actuary to the FRS and pointed out a costly flaw in the new plan design
 - Members were allowed to make an initial election (DB or DC) and then allowed to retroactively reverse that election any time in their careers
 - Allowing such an option results in significantly higher costs due to anti-selection
 - Final legislation reduced the unlimited option to one time and added safeguards for those who transferred prior service
- Steve McElhaney was retained by the Florida State Board of Administration to assist in implementation of the choice option



Case Study - Montana

- Montana PERS was in similar situation as North Dakota PERS with statutory contribution rates significantly lower than actuarially determined rates
- The Legislature proposed a number of changes for which we provided actuarial costs and long-term projections including:
 - Reduction of cost-of-living percentages for retirees (adopted but being challenged in court)
 - Increases in employer and member contribution rates (adopted)
 - Closing DB plan with new members going to DC (not adopted)
 - Separating State and non-State employees (not adopted)



What Distinguishes US?

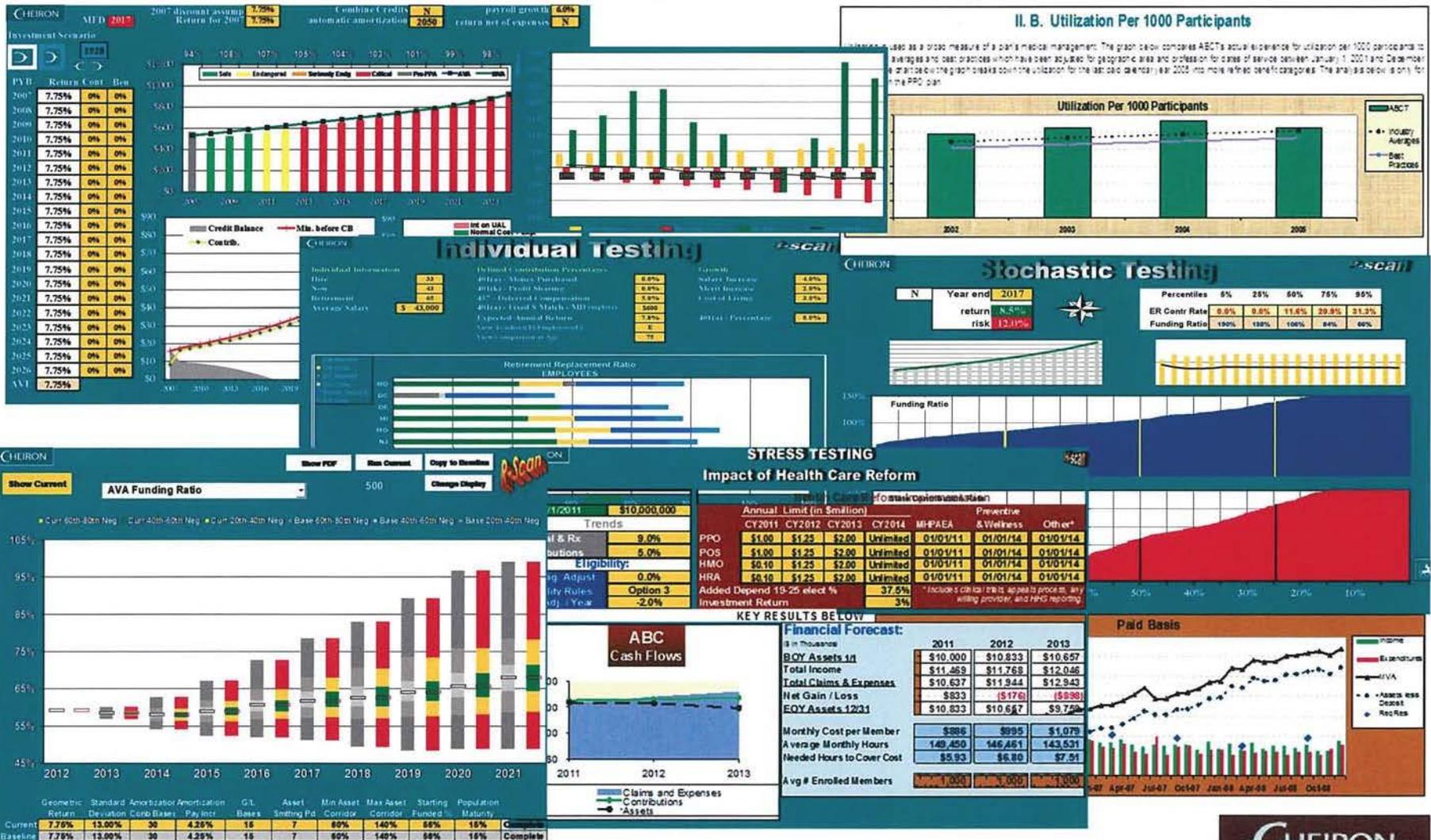
Tables of numbers are important, and you'll still get them from us...

Valuation Year	Funded Status	Employee Rate	Employer Rate	Additional State Cont.	Total Contrib	Amort Period	ARC	Shortfall	Contributions For FY
2012	67%	7.01%	7.13%	0.00%	14.14%	DNA	20.67%	6.53%	2013
2013	78%	7.90%	8.13%	2.96%	18.99%	15.2	16.02%	-2.97%	2014
2014	80%	6.90%	6.86%	2.93%	16.69%	20.5	15.43%	-1.26%	2015
2015	80%	6.90%	6.86%	2.86%	16.62%	21.0	15.43%	-1.19%	2016
2016	81%	6.90%	6.86%	2.79%	16.55%	19.9	15.20%	-1.35%	2017
2017	82%	6.90%	6.86%	2.71%	16.47%	18.9	14.96%	-1.51%	2018
2018	83%	6.90%	6.86%	2.83%	16.59%	17.0	14.71%	-1.89%	2019
2019	84%	6.90%	6.86%	2.75%	16.51%	16.0	14.44%	-2.07%	2020
2020	84%	6.90%	6.86%	2.66%	16.42%	14.9	14.16%	-2.26%	2021
2021	85%	6.90%	6.86%	2.58%	16.34%	13.9	13.88%	-2.46%	2022
2022	86%	6.90%	6.86%	2.51%	16.27%	12.8	13.60%	-2.67%	2023
2023	87%	6.90%	6.86%	2.43%	16.19%	11.7	13.31%	-2.88%	2024
2024	88%	6.90%	6.86%	2.36%	16.12%	10.6	13.02%	-3.10%	2025
2025	89%	6.90%	6.86%	2.29%	16.05%	9.5	12.72%	-3.33%	2026
2026	90%	6.90%	6.86%	2.22%	15.98%	8.3	12.42%	-3.56%	2027
2027	92%	6.90%	6.86%	2.15%	15.91%	7.2	12.12%	-3.80%	2028
2028	93%	6.90%	6.86%	2.09%	15.85%	6.1	11.81%	-4.04%	2029
2029	94%	6.90%	6.86%	2.03%	15.79%	5.0	11.49%	-4.29%	2030
2030	95%	6.90%	6.86%	1.97%	15.73%	3.9	11.18%	-4.55%	2031
2031	97%	6.90%	6.86%	1.91%	15.67%	2.8	10.85%	-4.82%	2032
2032	98%	6.90%	6.86%	1.86%	15.62%	1.7	10.52%	-5.09%	2033
2033	99%	6.90%	6.86%	1.80%	15.56%	0.6	10.19%	-5.38%	2034
2034	101%	6.90%	6.86%	1.75%	15.51%	N/A	9.85%	-5.67%	2035
2035	102%	6.90%	6.86%	1.70%	15.46%	N/A	9.50%	-5.97%	2036
2036	103%	6.90%	6.86%	1.65%	15.41%	N/A	9.14%	-6.28%	2037
2037	105%	6.90%	6.86%	1.60%	15.36%	N/A	8.77%	-6.60%	2038
2038	106%	6.90%	6.86%	1.56%	15.32%	N/A	8.39%	-6.93%	2039
2039	108%	6.90%	6.86%	1.51%	15.27%	N/A	8.01%	-7.27%	2040
2040	109%	6.90%	6.86%	1.47%	15.23%	N/A	7.61%	-7.62%	2041
2041	111%	6.90%	6.86%	1.43%	15.19%	N/A	7.21%	-7.98%	2042



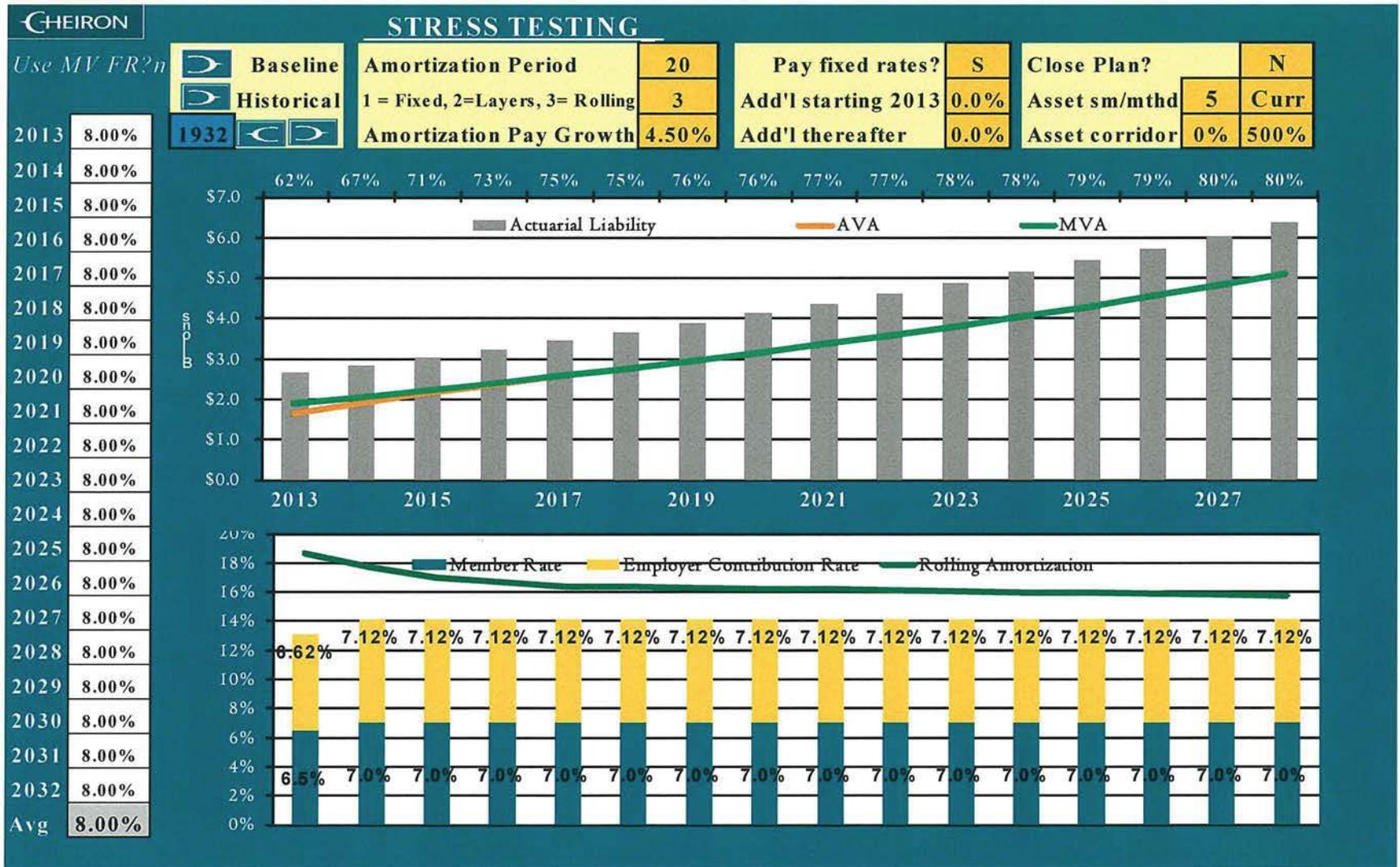
The Cheiron Advantage

but you'll get so much more, to enlighten and inform you about your options





Demonstration P-scan





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