

Alaska State SB 88 Actuarial Analysis



Actuarial Estimates

May 2023

Presented by

Gene Kalwarski, FSA, EA, MAAA, FCA

Michael Moehle, FSA, EA, MAAA, FCA



About Cheiron

Our Experience

Actuarial Cost Results

Stress Testing Projections

Biographies

About Cheiron



Formed in 2002



- *Highest percentage of fully credentialed actuaries in the industry*
- *National reputation for being proactive, responsive, and innovative*
- *Often called on to assist in the most politically charged/challenging environments*

Cheiron 2023

Our consultants have decades of experience advising several of the nation's largest public pension plans



Our Public Sector Experience



Statewide Plans: - Pension

- CalPERS
- CalSTRS
- Connecticut
- Delaware
- Florida
- Illinois
- Idaho
- Kansas
- Louisiana
- Maine
- Maryland
- Michigan Municipal ERS
- Montana
- New Mexico PERA
- New Jersey
- New York State Teachers
- Ohio State Teachers
- Oregon
- Pennsylvania
- Rhode Island
- Texas ERS & TRS
- Utah
- Vermont Municipals
- Washington State Investment Board
- Washington
- West Virginia

Local Government Plans:

- Alexandria (VA)
- Arlington County (VA)
- Baltimore (MD)
- City of Annapolis (MD)
- Chattanooga (TN)
- Detroit (MI)
- District of Columbia
- Fairfax County (VA)
- Fresno County (CA)
- Hampton (VA)
- Jackson County (MO)
- Kansas City (MO)
- Los Angeles (CA)
- Marin County (CA)
- Merced County (CA)
- Miami (FL)
- Milwaukee County (WI)
- Newport News (VA)
- Norfolk (VA)
- Philadelphia (PA)
- Phoenix (AZ)
- Saint Louis (MO)
- San Diego (CA)
- San Francisco (CA)
- San José (CA)
- Wichita (KS)
- Wilmington (DE)

Health OPEN:

- Arkansas
- Alexandria (VA)
- Annapolis (MD)
- Delaware
- Richmond (VA)
- Hampton (VA)
- Knoxville Utilities Board (TN)
- Maine Municipal Employees Health Trust
- Maine Public Employees Health and Life Plans
- Multnomah County (OR)
- Norfolk (VA)
- Newport News (VA)
- Oakland (CA)
- Pennsville Township (NJ)
- Philadelphia (PA)
- San Francisco (CA)
- San José (CA)
- Springfield Area Transit Co. (MA)
- US Army Community & Family Support Center
- Vienna (VA)
- Wilmington (DE)
- Westchester Medical Center (NY)



- Step 1
 - Run initial valuation to determine purchase liability assuming all DCR service converts to DB service
 - Compare DCR balance to purchase liability
 - If DCR balance exceeds purchase liability, all DCR service converts to DB service
 - If DCR balance is less than purchase liability, only a proportionate amount of DCR service converts to DB service
- Step 2
 - Rerun valuation using only the purchased service from Step 1 which converts to DB service

Key Valuation Results

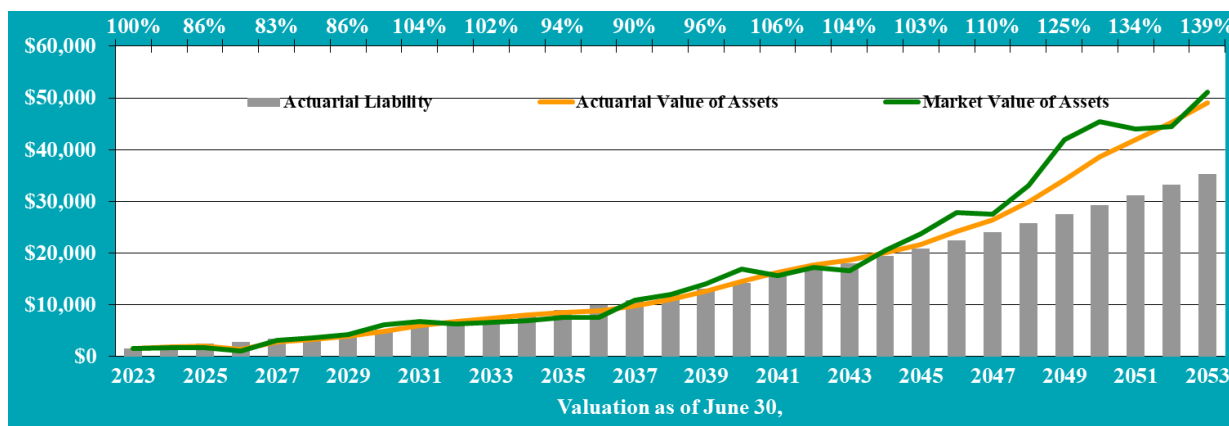


Summary of Valuation Results Based on June 30, 2021 Census Data

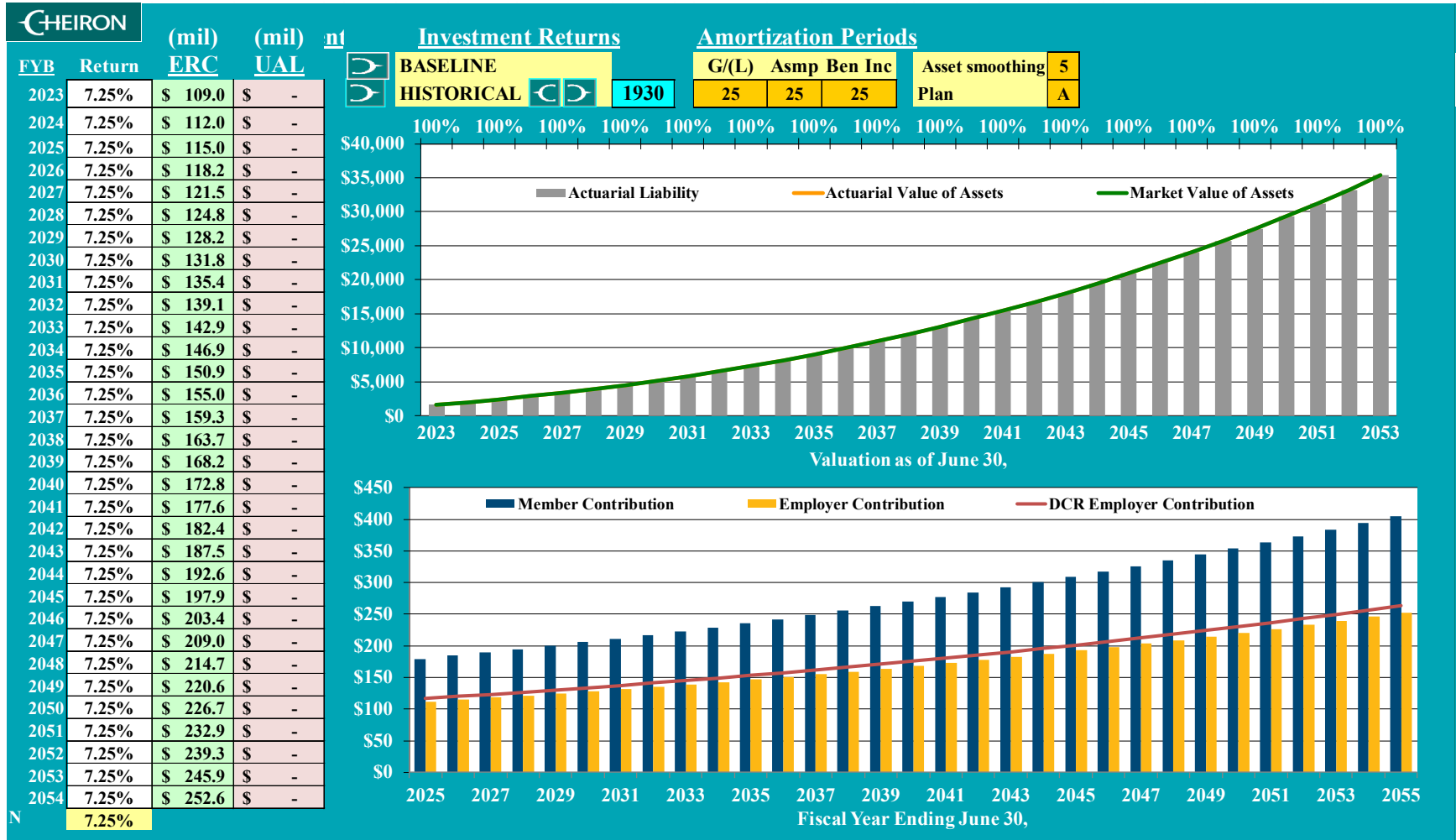
	TRS	PERS Other	PERS Safety	Total
Number of active members	5,521	21,579	2,349	29,449
Average age	41.9	41.8	36.4	41.4
Average service	6.9	5.1	5.8	5.5
Payroll	\$ 430,480,266	\$ 1,385,420,665	\$ 225,286,891	\$ 2,041,187,822
DCR Account Balance	\$ 568,339,295	\$ 1,243,179,810	\$ 228,314,522	\$ 2,039,833,628
Present value of future benefits	\$ 940,062,734	\$ 2,328,538,096	\$ 699,136,353	\$ 3,967,737,183
Actuarial liability	\$ 443,442,779	\$ 968,104,748	\$ 207,581,213	\$ 1,619,128,740
Total normal cost	\$ 56,375,163	\$ 176,972,598	\$ 35,209,942	\$ 268,557,703
DB normal cost rate	13.10%	12.77%	15.63%	13.17%
<u>Estimated FY 2024 Costs</u>				
(1) DB Gross Normal Cost Rate	13.10%	12.77%	15.63%	13.17%
(2) Assumed SB 88 Employee Rate	8.00%	8.00%	8.00%	8.00%
(3) SB 88 Employer Rate (1) - (2)	5.10%	4.77%	7.63%	5.17%
(4) DCR Employer Rate	<u>7.00%</u>	<u>5.00%</u>	<u>5.00%</u>	<u>5.42%</u>
Change in Employer Rate (3) - (4)	-1.90%	-0.23%	2.63%	-0.26%
Change in FY24 Employer Cost	\$ (8,653,904)	\$ (3,306,722)	\$ 6,252,871	\$ (5,521,910)



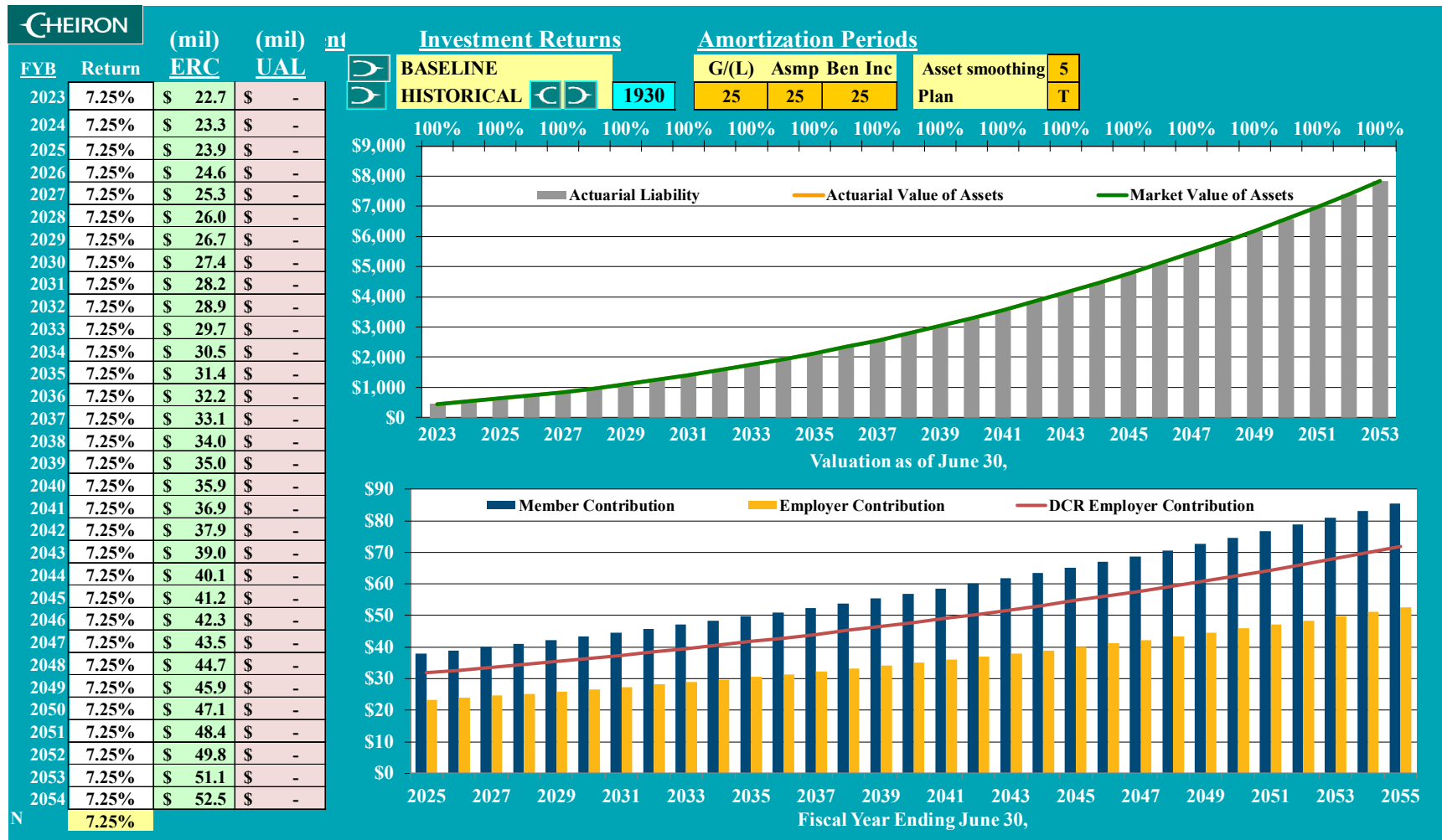
Stress Testing Projections



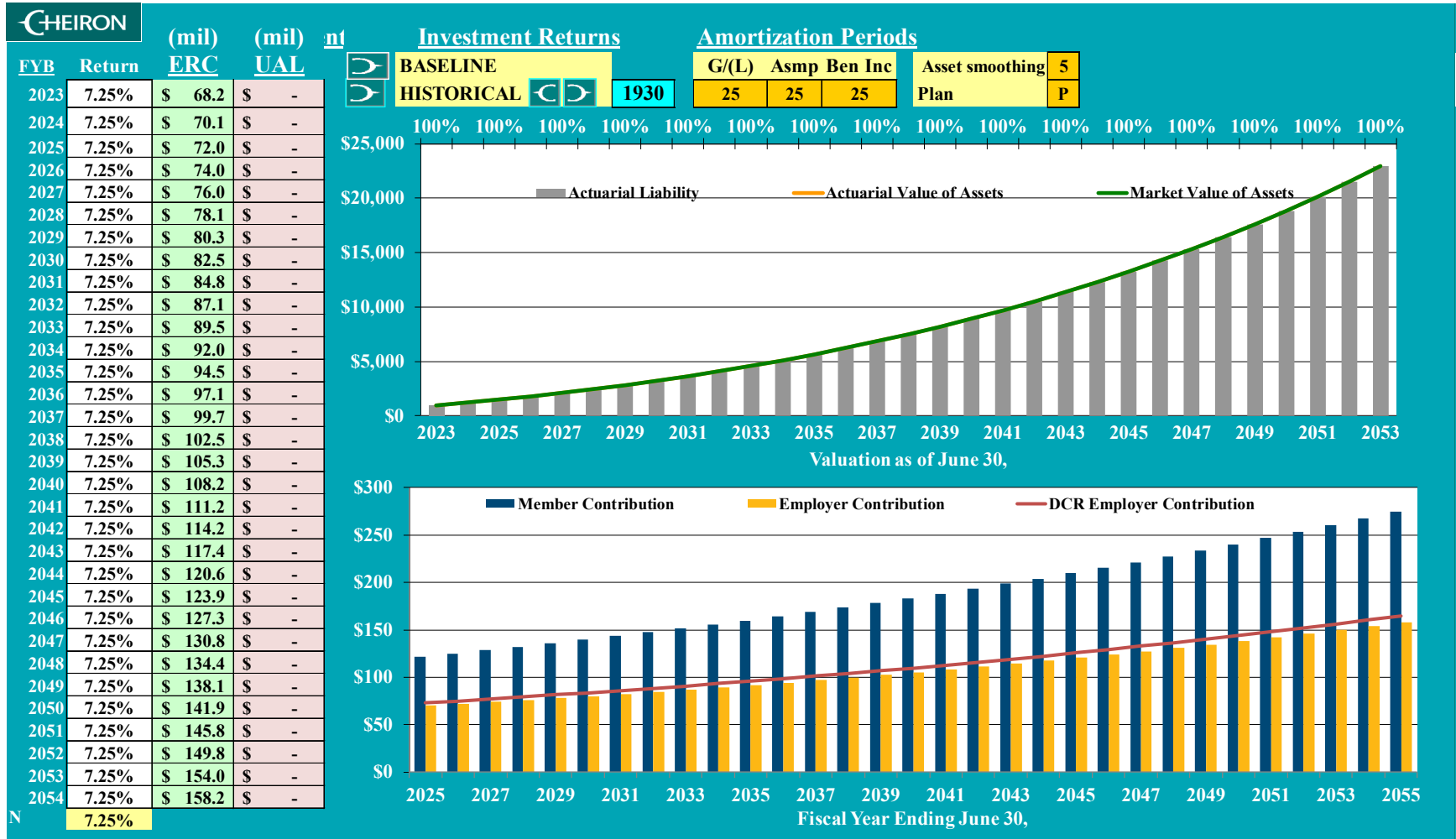
Baseline Combined



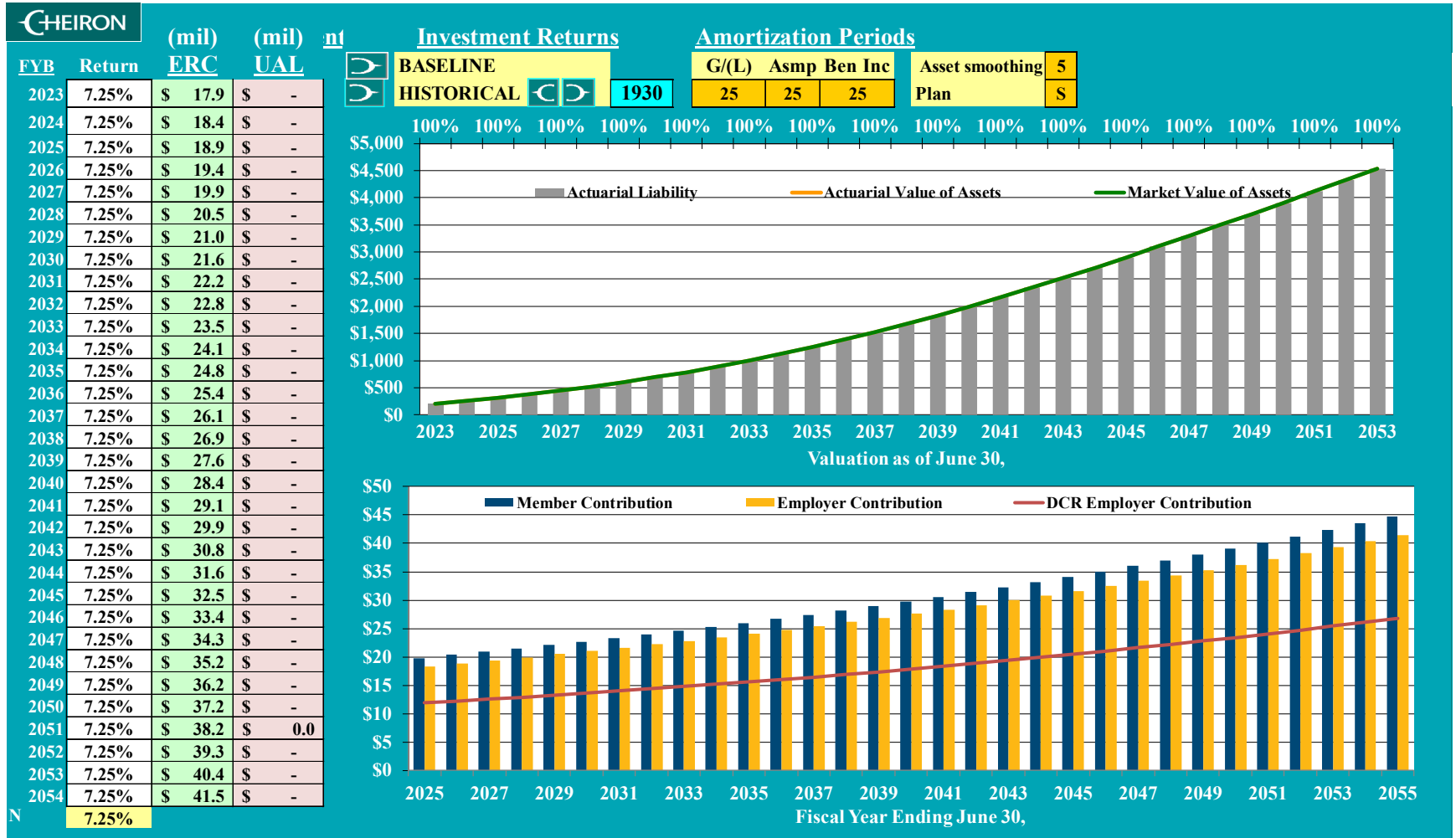
Baseline TRS



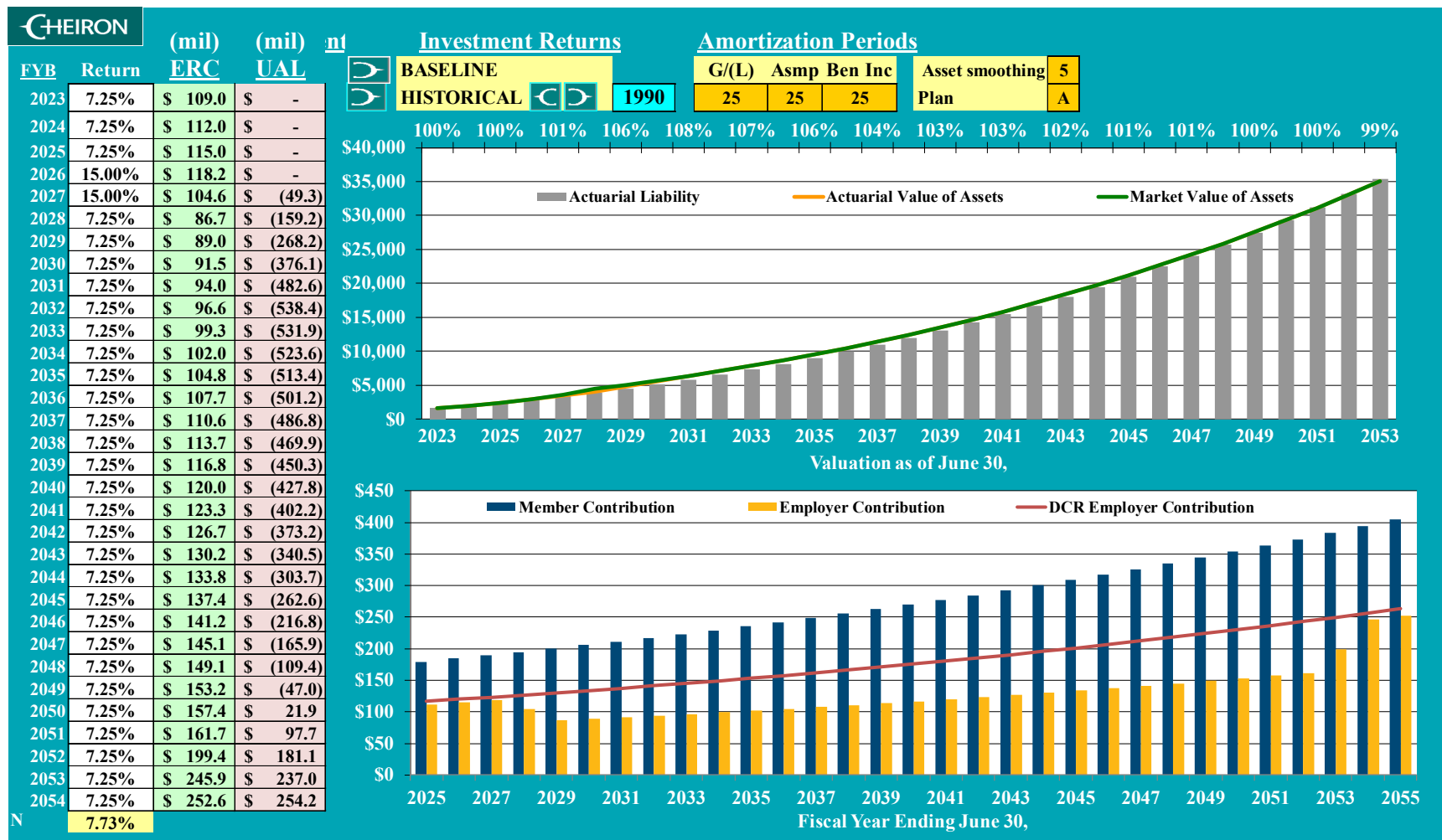
Baseline PERS - Other



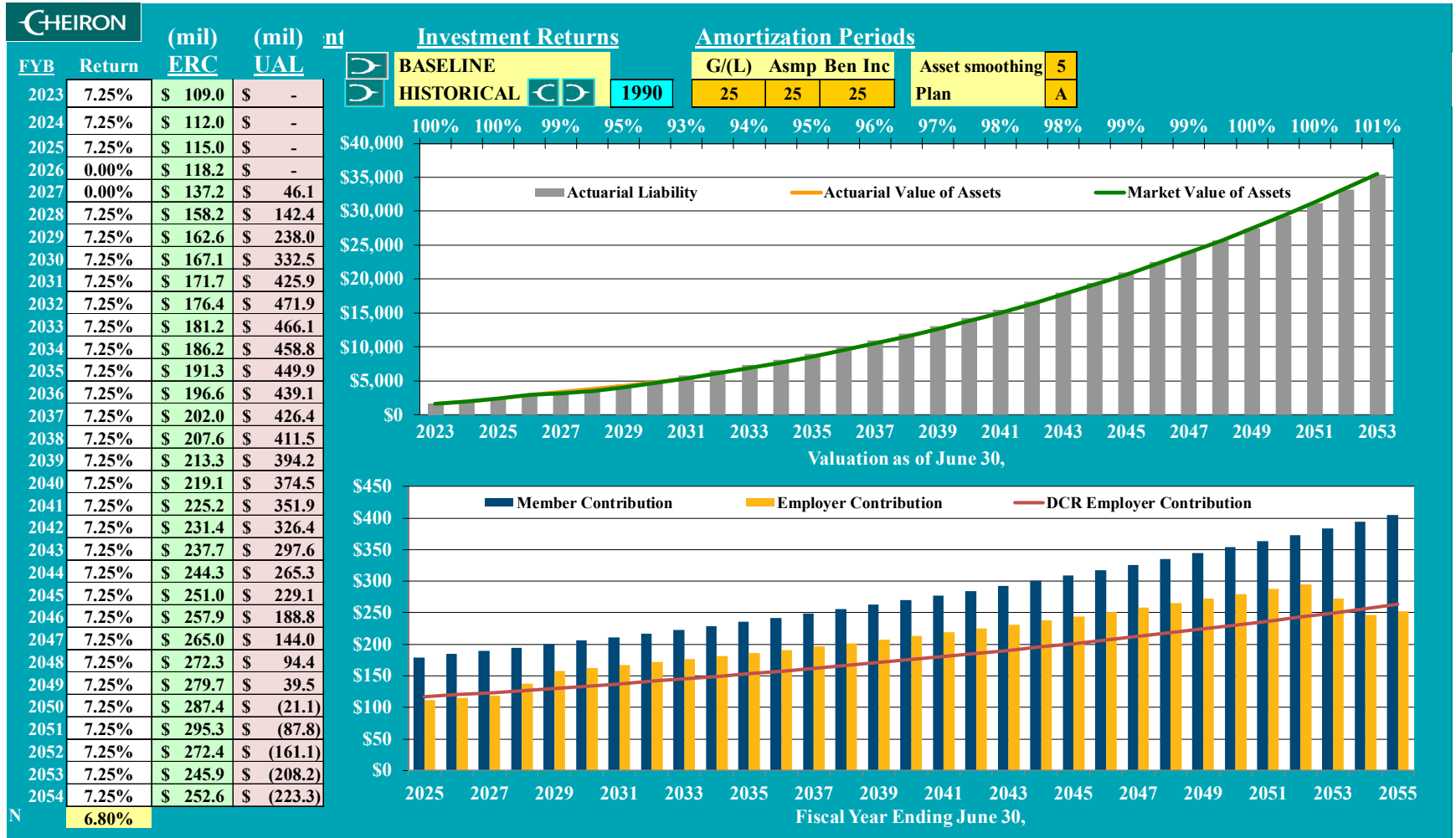
Baseline PERS - Safety



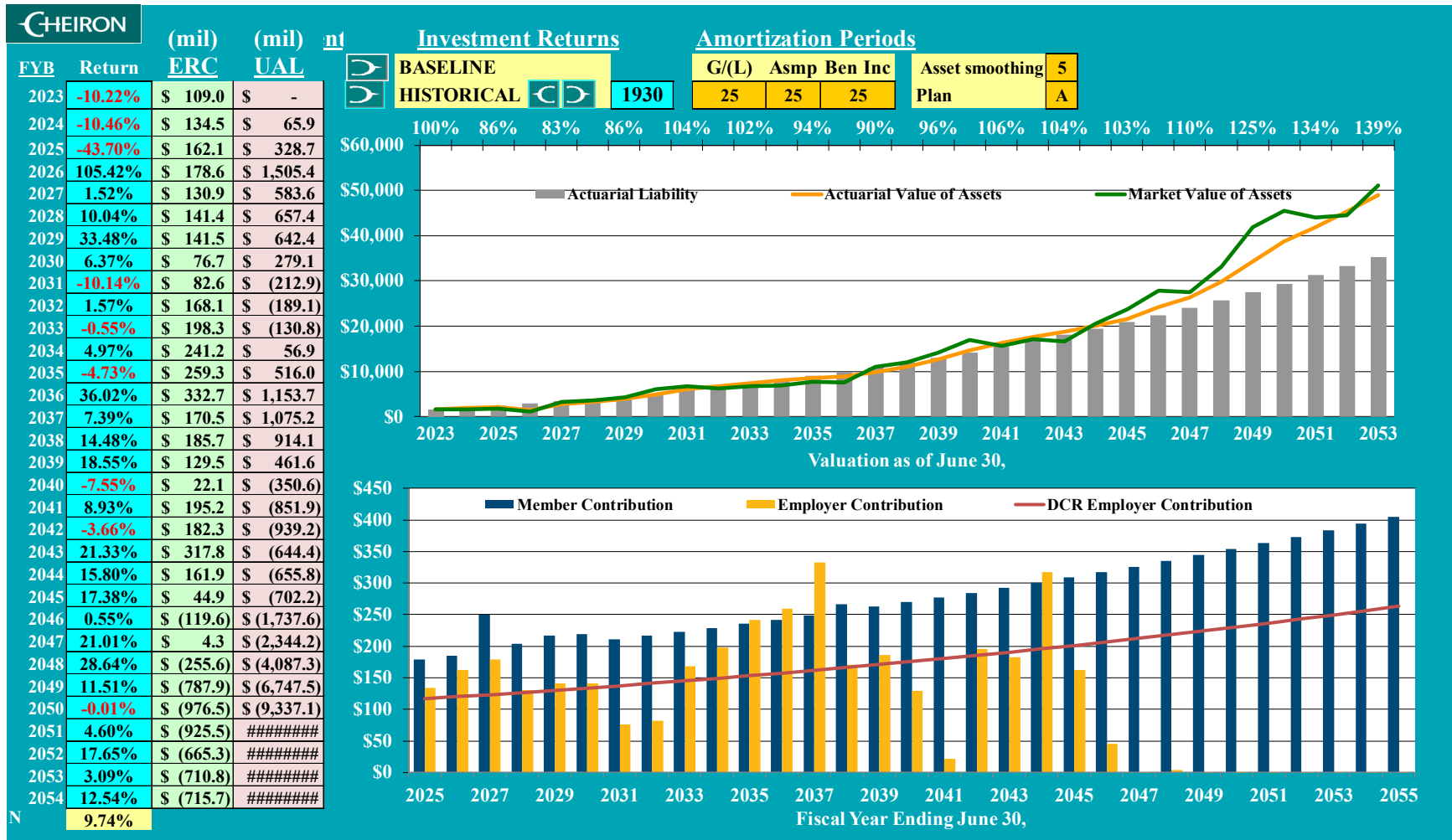
Combined – Two Strong Investment Returns



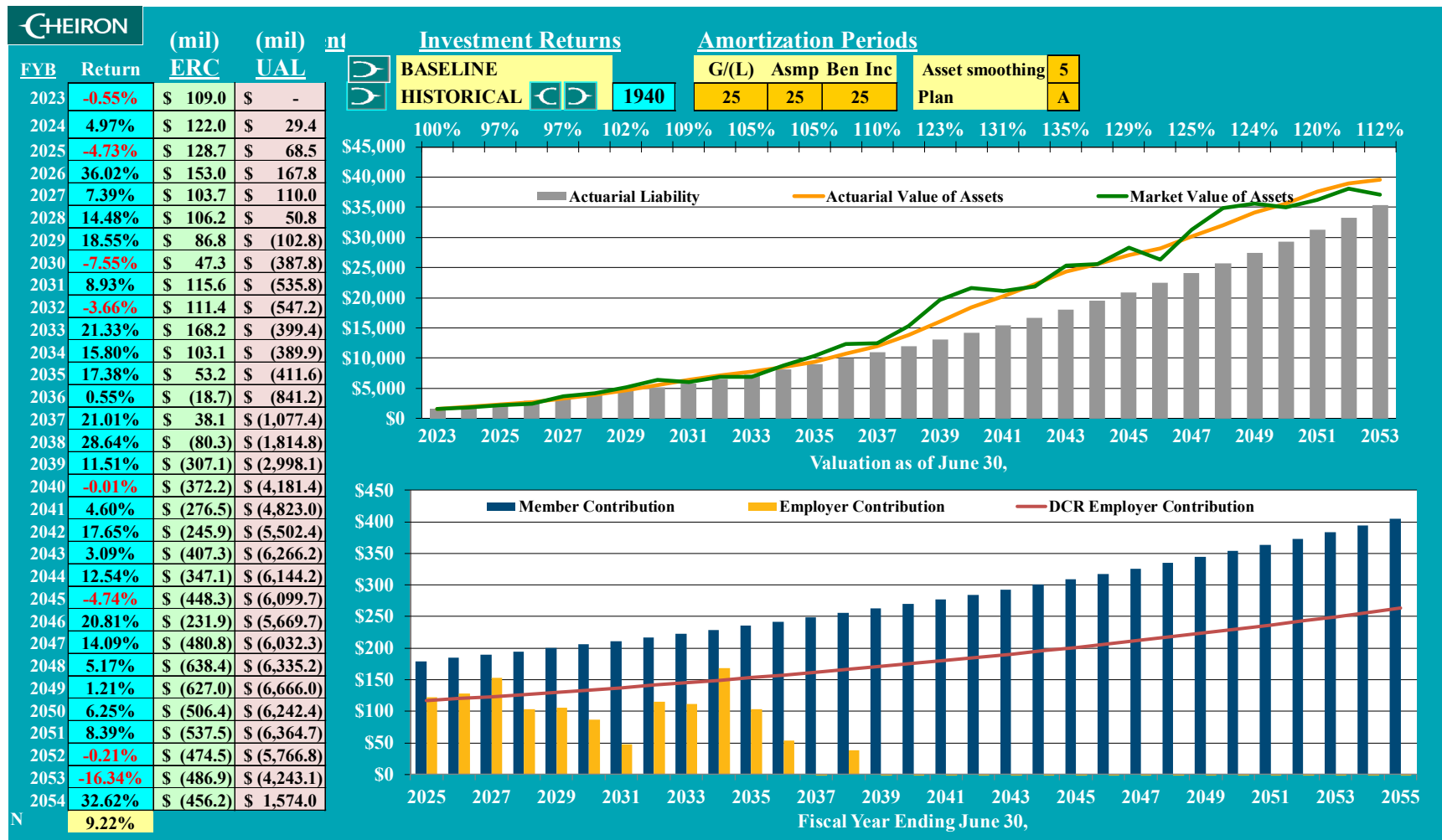
Combined – Two Poor Investment Returns



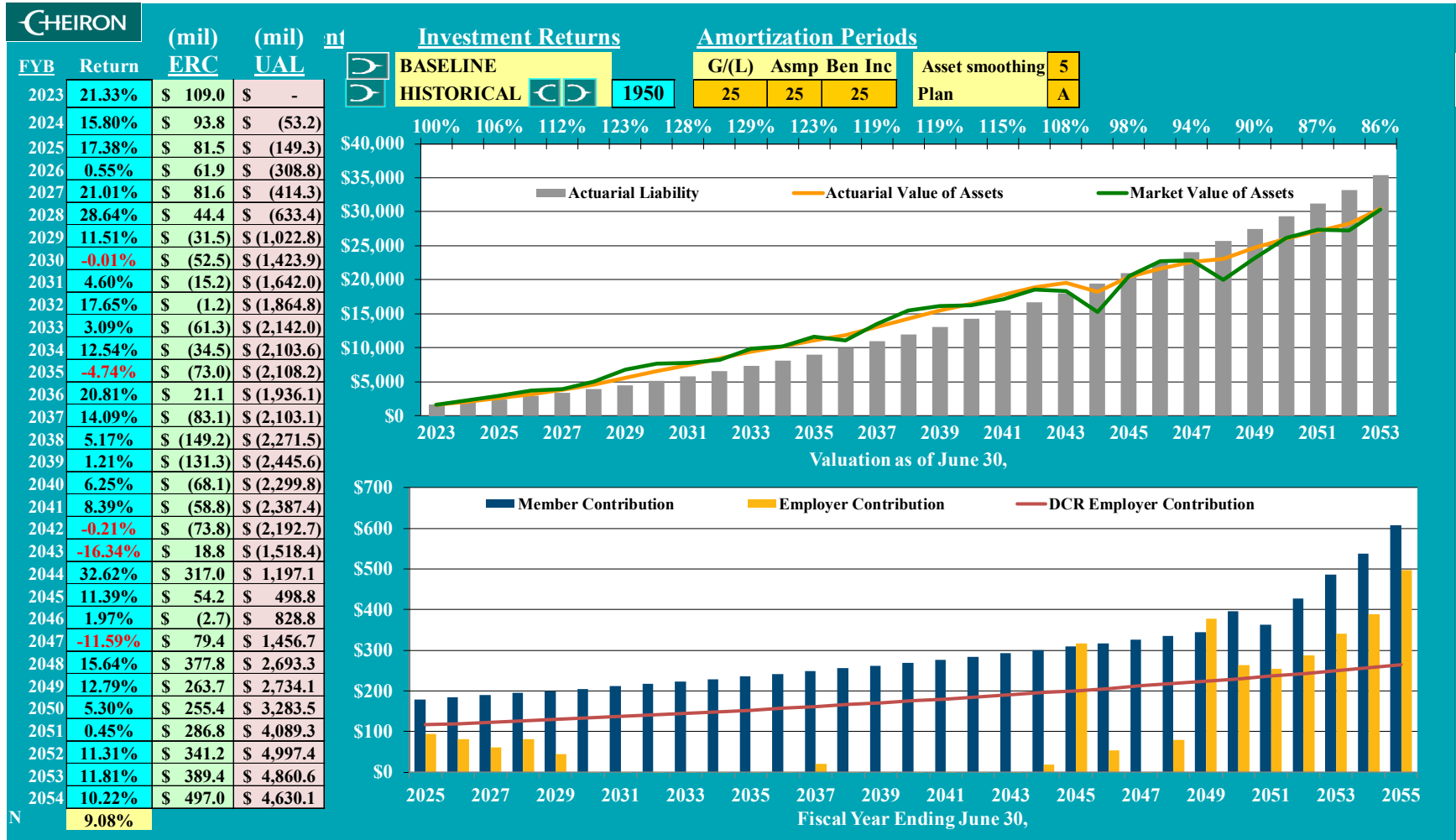
Combined 1930-1960 Returns



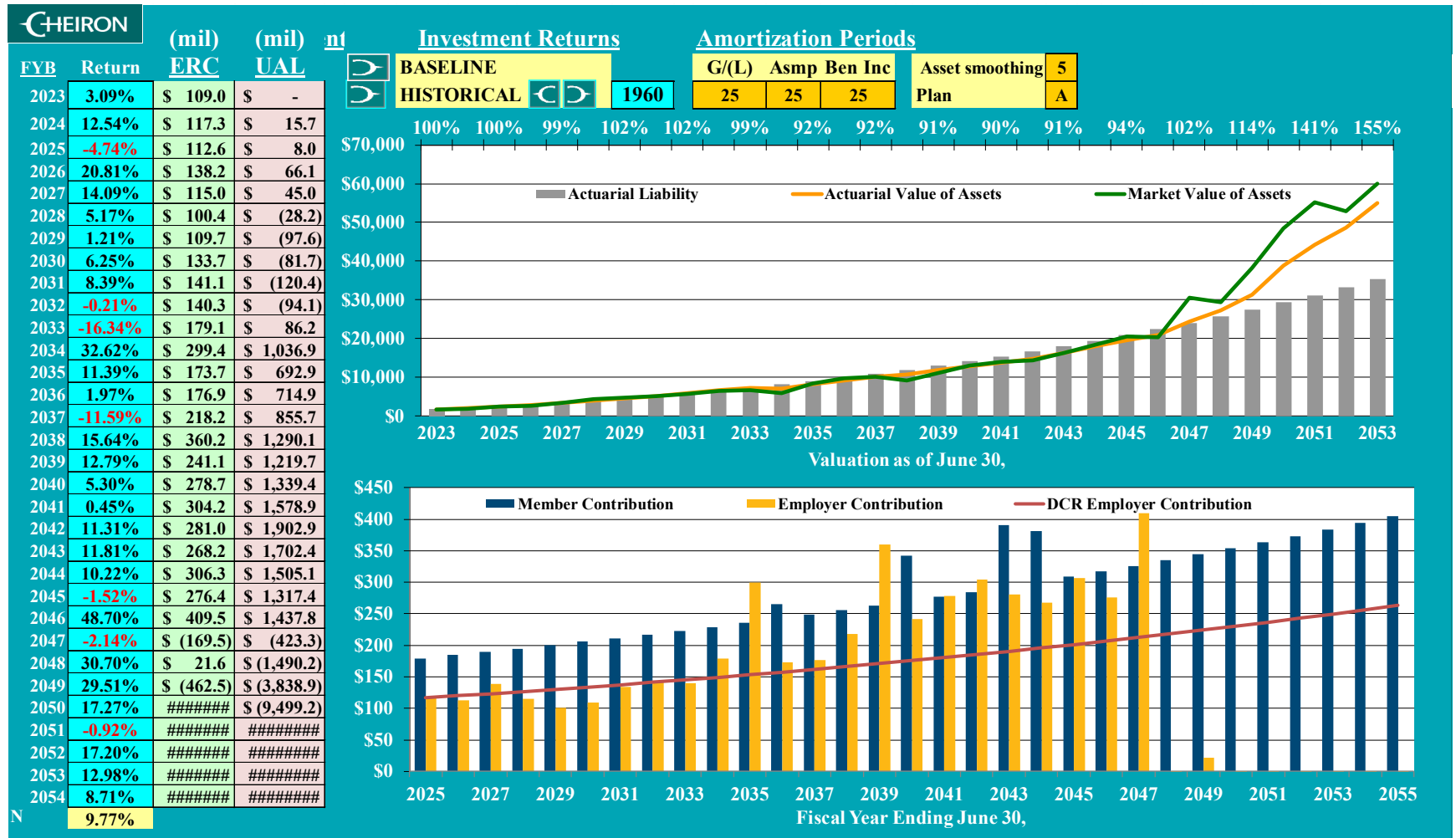
Combined 1940-1970 Returns



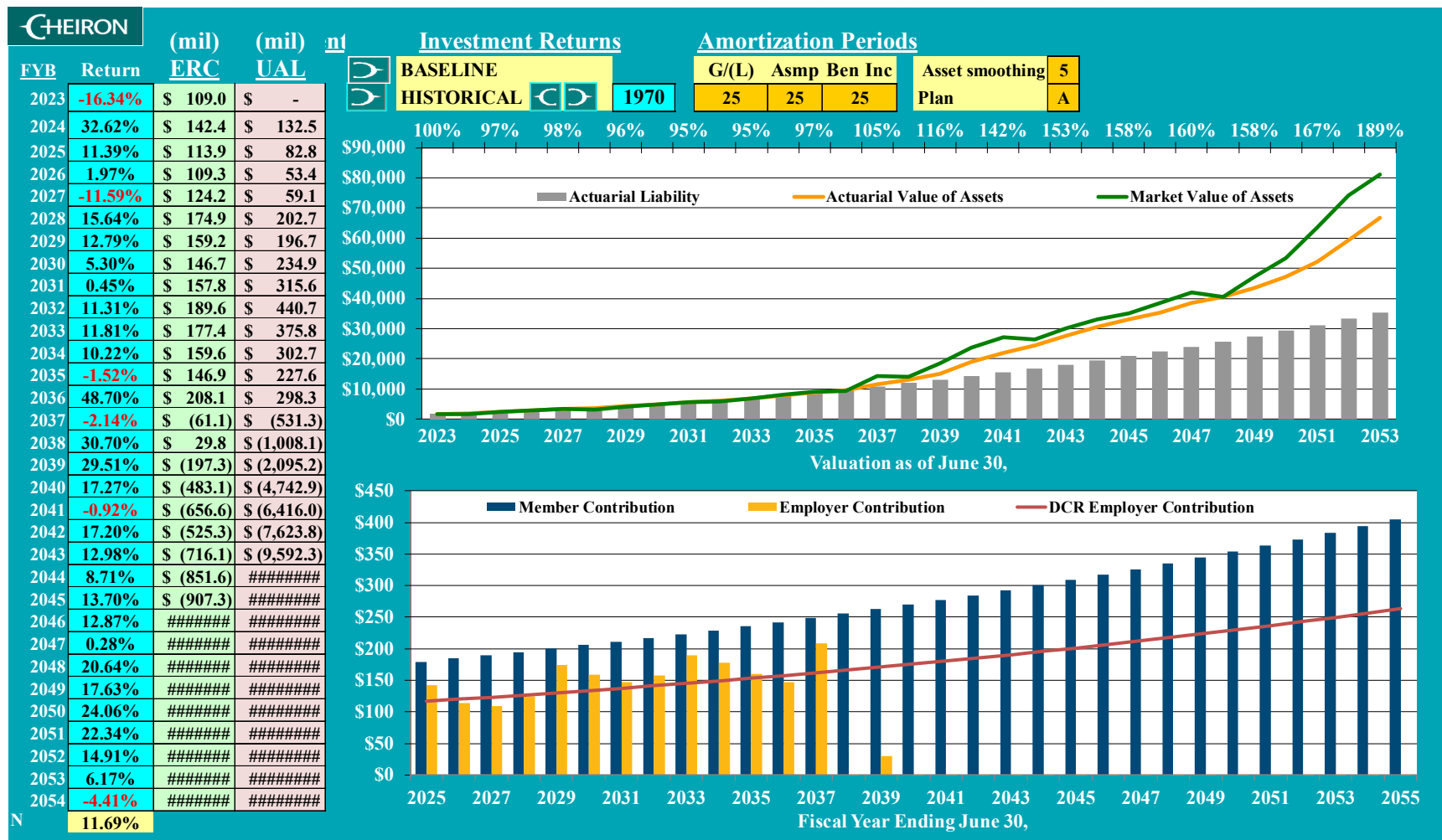
Combined 1950-1980 Returns



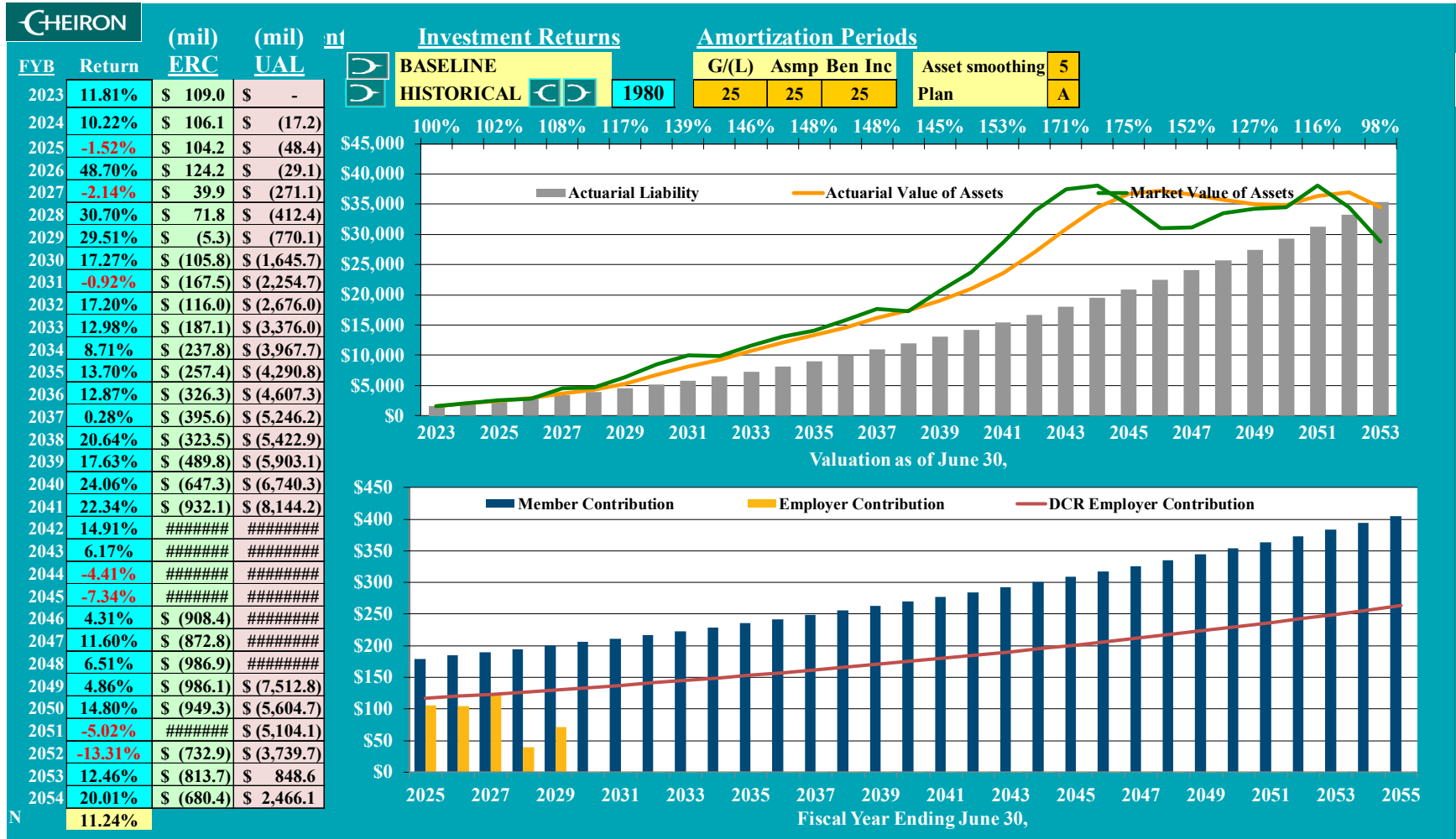
Combined 1960-1990 Returns



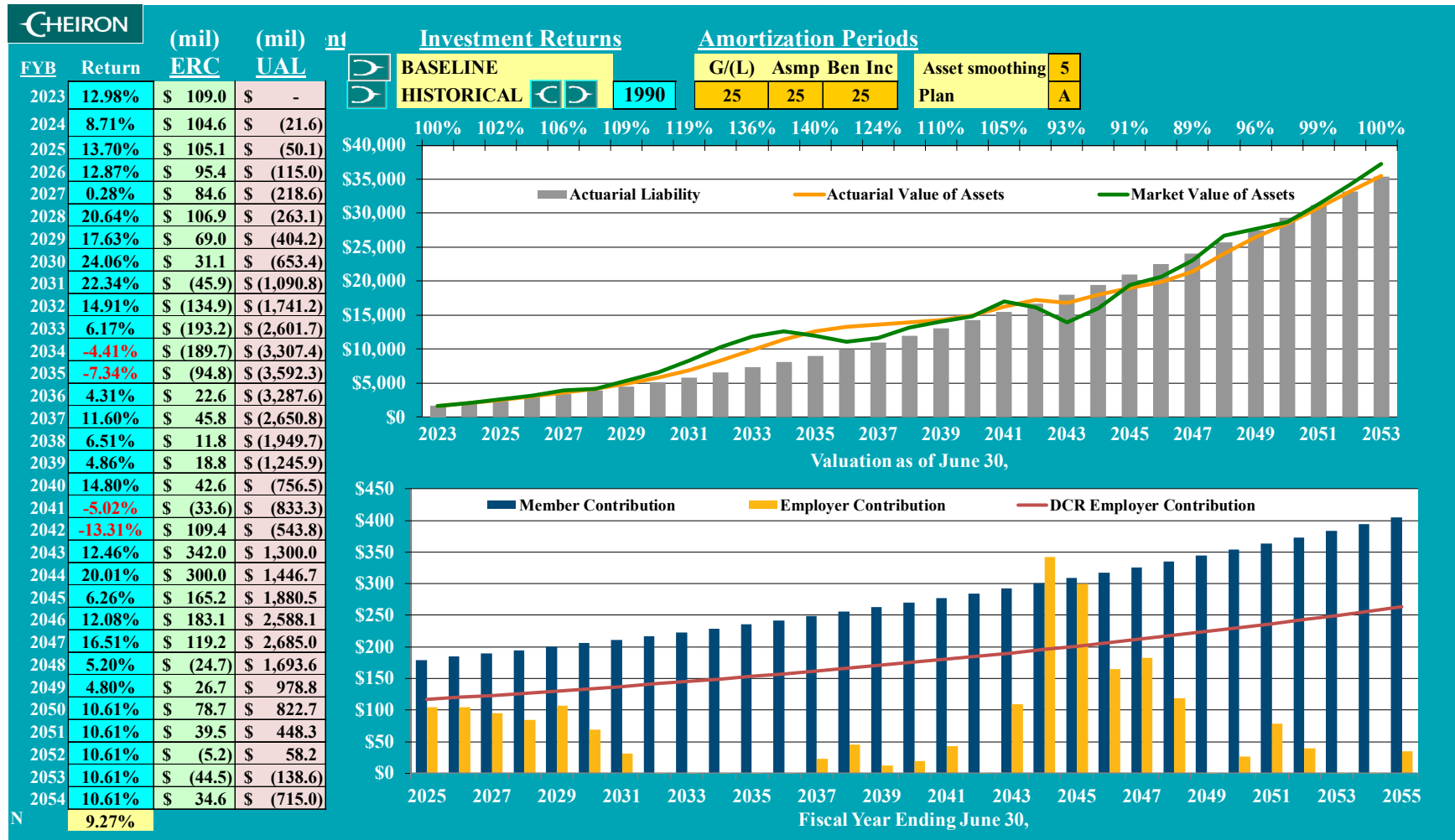
Combined 1970-2000 Returns



Combined 1980-2010 Returns



Combined 1990-2020 Returns



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Gene Kalwarski, FSA, EA, MAAA, FCA
Chief Executive Officer / Principal Consulting Actuary

Gene Kalwarski is CEO and co-founder of Cheiron Inc., and one of the most well regarded pension actuaries in the nation.

For more than four decades he has advised many of the nation's largest public pension funds. He is often hired as an expert to help financially troubled funds. He popularized the use of interactive projection modeling, and was one of the first actuaries to encourage plans to conduct stress testing to manage risk. He also designed Cheiron's proprietary interactive pension projection tool, *P-Scan*.

He has testified many times before Congress, and regularly addresses state legislatures and Boards of Trustees on behalf of state pension funds.



His roster of clients include the New York State Teachers' Retirement System, the State Teachers Retirement System of Ohio, the Maine Public Employees Retirement System, the San Diego City Employees' Retirement System, the San José Police and Fire Department Retirement Plan, the San Francisco City and County Employees' Retirement System, the Delaware Public Employees Retirement System, the Maryland State Retirement and Pension System, the Florida Retirement System, the Kansas Public Employees Retirement System, the Vermont Municipal Employees' Retirement System, the District of Columbia, and the State Actuary for the State of Illinois, reporting to the Office of Auditor General.

He is often quoted in the press and has written commentaries about pension plans in publications such as *Pensions & Investments*, *The Hill*, and *Forbes*.

Before co-founding Cheiron, he worked for more than two decades at Milliman Inc., where he set up the firm's Washington office and served on its board of directors.

He is a Fellow in the Society of Actuaries, an Enrolled Actuary under ERISA, a Member of the American Academy of Actuaries, and a Fellow of the Conference of Consulting Actuaries. He graduated with a Bachelor of Science in Mathematics from St. Bonaventure University.



Michael Moehle, FSA, EA, MAAA, FCA **Public Pension Oversight**

Michael Moehle has nearly four decades of experience as an actuarial consultant working with California and other Western public sector and corporate pension funds.

He performs internal audits and reviews of all public sector and multiemployer pension work at Cheiron. In that role he conducts independent validations of liability and asset valuation results. He also reviews valuation assumptions and methods for compliance with applicable actuarial and GASB standards along with written evaluations of compliance with Cheiron's internal quality control guidelines.

He previously worked at the City of San Jose Retirement Services in California as the retirement investment officer and in-house actuary and consultant. Before joining the City of San José, he was a principal and senior consultant with a large national benefits consulting firm in California, where he served as consultant with several California 1937 Act County Retirement Systems and multiple statewide public employees retirement systems in Nevada, North Dakota, Minnesota and Washington, where he provided funding valuations and GASB 25, 27, 43 and 45 valuations and disclosures, as well as analysis and consulting regarding plan changes and plan alternatives.

He joined Cheiron in July 2011.



Required Disclosures



The purpose of this presentation is to show the actuarial valuation estimates of Senate Bill 88 (SB 88). This presentation is for the use of the Alaska State Senate.

In preparing this presentation, we relied on information (some oral and some written) supplied by Buck and other information available on the Senate's website. This information includes, but is not limited to, the plan provisions and employee data. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality.

The actuarial assumptions and methods are the same as those used by Buck for the Actuarial Valuation Reports as of June 30, 2021, including revised assumptions recommended by Buck in July 2022. The results of this presentation are dependent upon future experience conforming to these assumptions. To the extent that future experience deviates from the actuarial assumptions, the true cost of the SB 88 benefits could vary from our results.

The census data used for this analysis was provided by Buck as of June 30, 2021.

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

This presentation and its contents were prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this presentation. This presentation does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This presentation was prepared solely for the Alaska State Senate for the purposes described herein. Other users of this presentation are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

Gene Kalwarski, FSA, EA, MAAA, FCA
Principal Consulting Actuary

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Public Pension Oversight