My Pension Plan Is Well-Funded—Now What?

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70TH ANNUAL EMPLOYEE BENEFITS CONFERENCE

International Foundation OF EMPLOYEE BENEFIT PLANS

Today’s Discussion

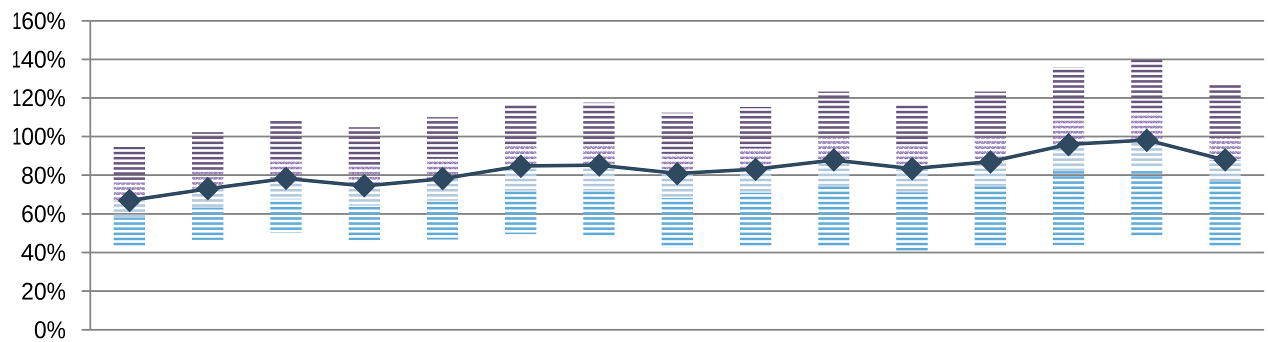
- Why are we here?
- What does it mean to be “well-funded”?
- Revisiting actuarial assumptions
- Risk management (staying well-funded)
- Benefit improvements

Why Are We Here?

Funded Levels Have Improved

Market Value Funded Percentages (Beginning of Year)

Multiemployer Defined Benefit Pension Plans: All Industries



Plan Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Number of Plans	1,179	1,146	1,240	1,239	1,253	1,257	1,268	1,249	1,238	1,233	1,223	1,211	1,192	1,177	1,168
95th Percentile	95%	102%	109%	105%	110%	117%	118%	112%	115%	123%	116%	123%	136%	141%	127%
75th Percentile	76%	82%	88%	85%	89%	96%	96%	91%	94%	99%	95%	99%	109%	112%	99%
◆ 50th Percentile	67%	73%	78%	75%	78%	85%	85%	81%	83%	88%	83%	87%	96%	98%	88%
25th Percentile	58%	63%	68%	64%	67%	72%	72%	68%	71%	75%	71%	75%	82%	84%	77%
5th Percentile	43%	47%	50%	46%	47%	50%	48%	42%	43%	42%	40%	42%	44%	49%	44%

Source: Form 5500 Data

Source: The Multiemployer Retirement Plan Landscape: A 15-Year Look

What Does It Mean to Be "Well-Funded"?

Polling Question

What do YOU think it means?

A. 80% (threshold for green zone)
B. 100% (full funding)
C. 120% (full funding + cushion)
D. It’s more complicated than that

Which Plan Is Better Funded?

	Plan A	Plan B
Funded Percentage	94%	79%
Zone Status	**Green Zone**	**Yellow Zone**

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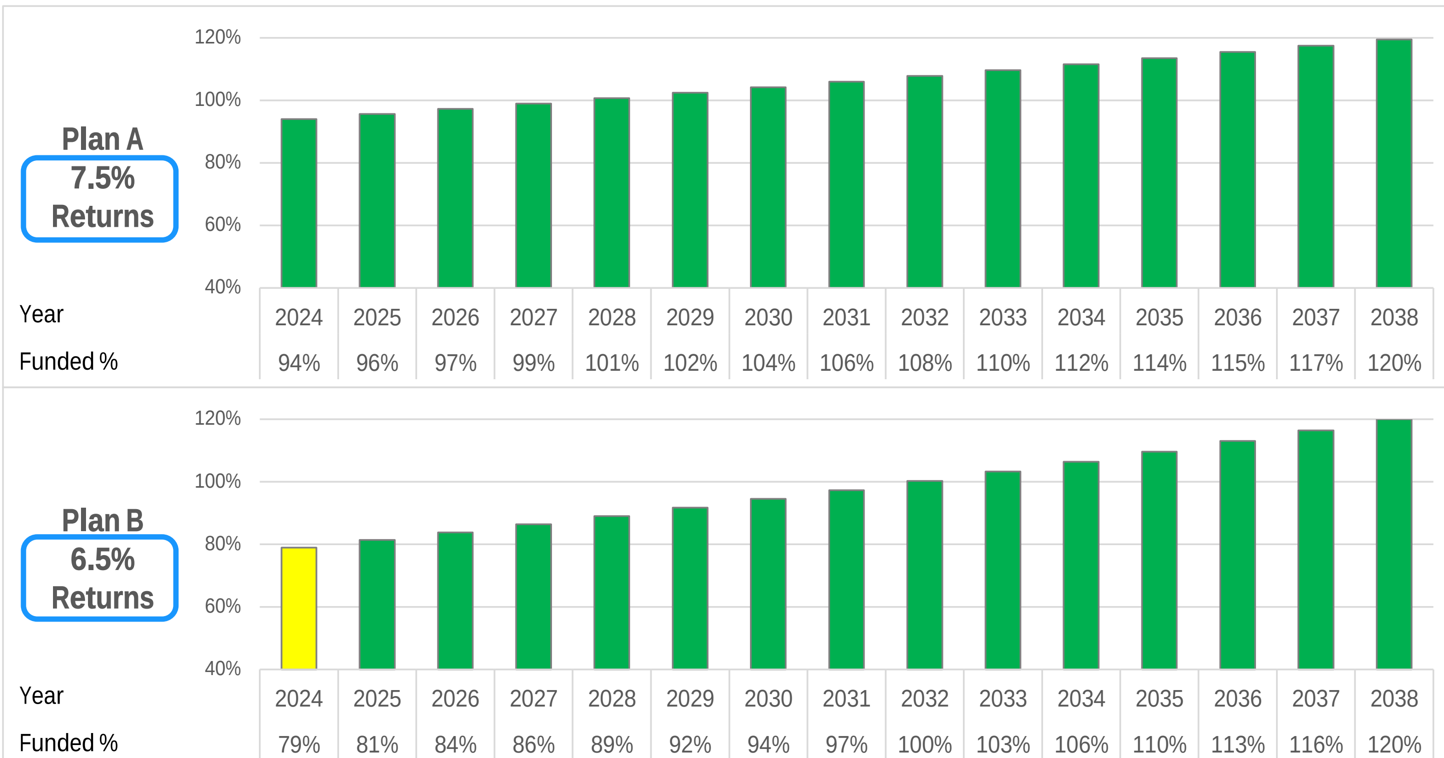
Mortality Tables	RP-2000	PRI-2012
Inactive/Active Ratio	3.0	1.5
Cash Flow	-5.0%	-2.5%

Which Plan Is Better Funded?



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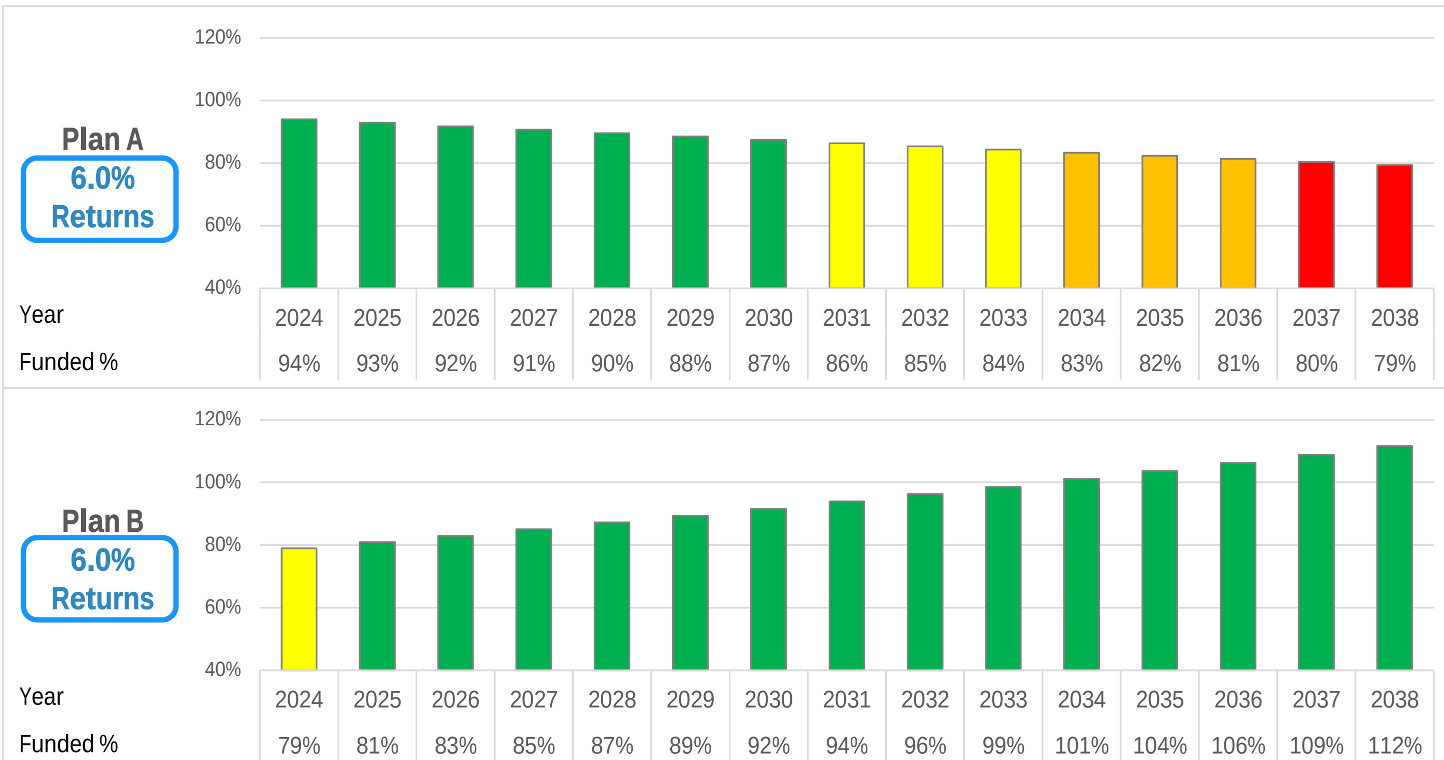


What Does It Mean to Be Well-Funded?

- Goes beyond current funded percentage
- How appropriate are the assumptions?
- How mature is the plan?
- What are the projected funding levels?
- What are the implications of NOT meeting the assumptions?

Revisiting
Actuarial Assumptions

Let's Start With a Simple Question

- What does it mean to be 100% funded?

Digging a Little Deeper...

Assets

- Value on financials
- Volatile!

Liabilities

- Value of promised benefits
- Depends on assumptions!
- Only 100% funded <u>if</u> all assumptions are met

Assumptions Are Actuary's Best Estimate

- Under ERISA Section 304(c)(3)
  - Each actuarial assumption must be reasonable
  - In combination, the assumptions must represent the actuary's best estimate of anticipated experience under the plan

Range of Reasonable Assumptions

- More conservative assumptions
  - Examples: Lower expected returns, longer life expectancy, lower future hours
  - Reduced probability of “bad surprises”
  - Increase in today’s liabilities/costs
- More aggressive assumptions
  - Examples: Higher expected returns, shorter life expectancy, higher future hours
  - Increased probability of “bad surprises”
  - Increase in liabilities/costs down the road if not met

Example: Interest Rate Assumption

Hypothetical Multiemployer Plan

2024 Survey of Capital Market Assumptions

Asset Class	Portfolio Weight	*Average Survey Assumptions* 10-Year Horizon	20-Year Horizon	Standard Deviation
US Equity - Large Cap	20.0%	6.46%	6.96%	16.52%
US Equity - Small/Mid Cap	10.0%	7.07%	7.50%	20.57%
Non-US Equity - Developed	7.5%	7.08%	7.52%	18.06%
Non-US Equity - Emerging	5.0%	7.70%	8.24%	23.61%
US Corporate Bonds - Core	7.5%	4.93%	4.88%	5.90%
US Corporate Bonds - Long Duration	2.5%	5.05%	5.16%	10.98%
US Corporate Bonds - High Yield	5.0%	6.13%	6.36%	9.94%
Non-US Debt - Developed	5.0%	3.66%	3.71%	7.33%
Non-US Debt - Emerging	2.5%	6.17%	6.28%	10.76%
US Treasuries (Cash Equivalents)	5.0%	3.68%	3.43%	1.10%
TIPS (Inflation-Protected)	5.0%	4.38%	4.27%	6.10%
Real Estate	7.5%	6.06%	6.17%	16.61%
Hedge Funds	5.0%	5.90%	6.17%	8.03%
Commodities	2.5%	4.92%	4.95%	17.81%
Infrastructure	2.5%	7.26%	7.36%	16.02%
Private Equity	5.0%	9.09%	9.71%	22.57%
Private Debt	2.5%	8.32%	8.44%	12.00%
Inflation	N/A	2.42%	2.44%	1.86%
TOTAL PORTFOLIO	**100.0%**	*Expected returns are geometric.*		

	10-Year Horizon **Conservative Advisor**	**Survey Average**	**Optimistic Advisor**	*20-Year Horizon* **Conservative Advisor**	**Survey Average**	**Optimistic Advisor**
Expected Returns						
Average Annual Return (Arithmetic)	5.83%	7.29%	8.49%	6.38%	7.56%	8.63%
Annualized Return (Geometric)	5.28%	6.73%	7.98%	5.85%	7.01%	7.99%
Annual Volatility (Standard Deviation)	10.77%	10.98%	10.49%	10.59%	10.87%	11.74%
Range of Expected Annualized Returns						
◆ 75th Percentile	7.57%	9.07%	10.22%	7.45%	8.65%	9.76%
◆ 25th Percentile	2.98%	4.39%	5.75%	4.25%	5.38%	6.22%
Probabilities of Exceeding Certain Returns						
7.50% per Year, Annualized	25.7%	41.2%	55.8%	24.3%	42.1%	57.4%
7.00% per Year, Annualized	30.6%	46.9%	61.7%	31.4%	50.2%	64.7%
6.50% per Year, Annualized	36.0%	52.7%	67.3%	39.2%	58.4%	71.5%

SOURCE: Horizon Actuarial 2024 Survey of Capital Market Assumptions

Considerations

- Arithmetic vs. Geometric returns
  - Important to focus on geometric returns

Year 1

Beginning of Year Assets	100,000,000
Return	-50%
End of Year Assets	50,000,000

Year 2

Beginning of Year Assets	50,000,000
Return	50%
End of Year Assets	75,000,000

Arithmetic Return = 0%

Geometric Return = -13%

Considerations

- Short-term vs. long-term—
  Where should we focus?
  - How mature is the plan?
    - Support ratio (active participants to inactive participants)
    - Cash flow (contributions less benefit payments and expenses)

Other Assumptions

- Remember: Review ALL assumptions
  - Work levels, future contributions, contribution rates
  - Mortality: Current and future improvements
  - Retirement, termination, disability, etc.
- Remember: The Actuary “owns” the assumptions
  - But you can ask questions!
  - Are our assumptions conservative or aggressive?
  - When was the last time you performed an experience study?
  - How did you develop the expected return assumption?

Risk Management
(Staying Well-Funded)

How to Stay Well-Funded

- Consider more conservative assumptions
- Monitor plan maturity measures
- Minimize asset volatility
- Minimize funded percentage volatility
- Maintain funding cushion

Why Plan Maturity Matters

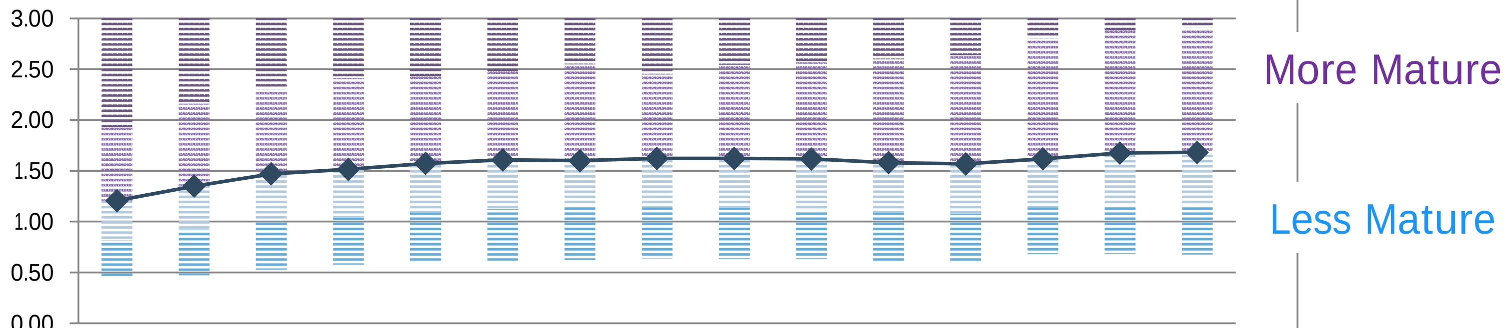
	Plan #1	Plan #2	Plan #3
Assets ($M)		$90	
Liabilities ($M)		$100	
Unfunded Liability ($M)		$10	
15-Year Cost ($M)		$1	
Inactives		900	
Actives	900	600	300
Inactive/Active Ratio	1.0	1.5	3.0
Cost of Unfunded Liability	$0.67/hour	$1.00/hour	$2.00/hour

Less Mature → More Mature

Support Ratio (Inactive to Active Ratio)

Participant Ratios: Inactive to Active (Beginning of Plan Year)

Multiemployer Defined Benefit Pension Plans: All Industries



Plan Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Number of Plans	1,326	1,292	1,295	1,274	1,283	1,275	1,263	1,245	1,227	1,221	1,214	1,202	1,187	1,176	1,164	
95th Percentile	7.00	6.94	7.37	8.90	9.73	9.81	10.85	11.70	10.95	11.43	12.43	12.71	14.70	15.54	16.17	
75th Percentile	1.93	2.16	2.30	2.41	2.43	2.48	2.55	2.45	2.54	2.57	2.60	2.64	2.80	2.88	2.91	Plan #3
◆ 50th Percentile	1.21	1.35	1.47	1.51	1.57	1.61	1.60	1.62	1.62	1.62	1.58	1.57	1.62	1.68	1.68	Plan #2
25th Percentile	0.82	0.92	1.00	1.04	1.09	1.12	1.16	1.15	1.14	1.12	1.09	1.08	1.14	1.17	1.15	Plan #1
5th Percentile	0.45	0.47	0.53	0.58	0.61	0.62	0.62	0.64	0.63	0.63	0.60	0.60	0.68	0.68	0.68	

Source: Form 5500 Data

Source: The Multiemployer Retirement Plan Landscape: A 15-Year Look

Why Plan Maturity Matters

	Plan #1	Plan #2	Plan #3
Liability ($M)		$100	
Assets (January 1) ($M)		$100	
Benefits + Expenses ($M)		$10	
Interest Assumption		7.0%	
Return for Year		-3.0%	
Contributions ($M)	$10	$7.5	$5
Cash Flow (% of assets)	0%	-2.5%	-5.0%
Assets (December 31) ($M)	$97	$94.5	$92
	Less Mature	→	More Mature

Cash Flow (Contributions Less BPs and Expenses)

Net Cash Flow as a Percentage of Assets (Prior Plan Year)

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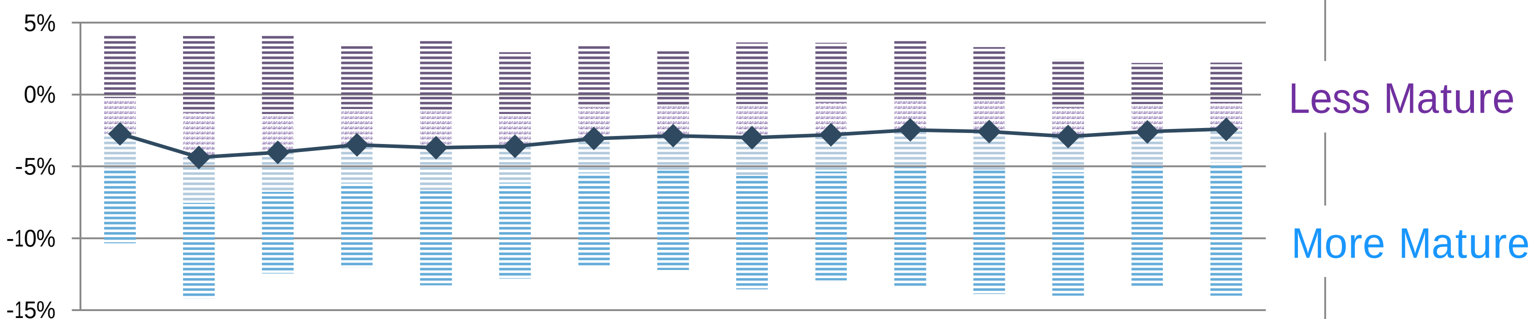

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Number of Plans	1,333	1,214	1,283	1,280	1,291	1,277	1,270	1,248	1,237	1,230	1,224	1,210	1,189	1,173	1,164	
95th Percentile	4.2%	4.1%	4.2%	3.5%	3.9%	2.9%	3.5%	3.1%	3.6%	3.6%	3.7%	3.3%	2.5%	2.2%	2.2%	
75th Percentile	-0.3%	-1.3%	-1.3%	-1.0%	-1.1%	-1.3%	-0.9%	-0.7%	-0.7%	-0.6%	-0.4%	-0.4%	-0.9%	-0.7%	-0.6%	→ Plan #1
◆ 50th Percentile	-2.7%	-4.4%	-4.0%	-3.5%	-3.7%	-3.6%	-3.1%	-2.9%	-3.0%	-2.8%	-2.5%	-2.6%	-2.9%	-2.6%	-2.4%	→ Plan #2
25th Percentile	-5.1%	-7.5%	-6.8%	-6.2%	-6.6%	-6.1%	-5.4%	-5.2%	-5.7%	-5.4%	-5.1%	-5.3%	-5.4%	-5.0%	-4.7%	→ Plan #3
5th Percentile	-10.4%	-14.2%	-12.5%	-12.1%	-13.3%	-12.8%	-12.0%	-12.2%	-13.6%	-12.9%	-13.4%	-13.9%	-14.0%	-13.3%	-14.0%	

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What Should Our Mature Plan Do?

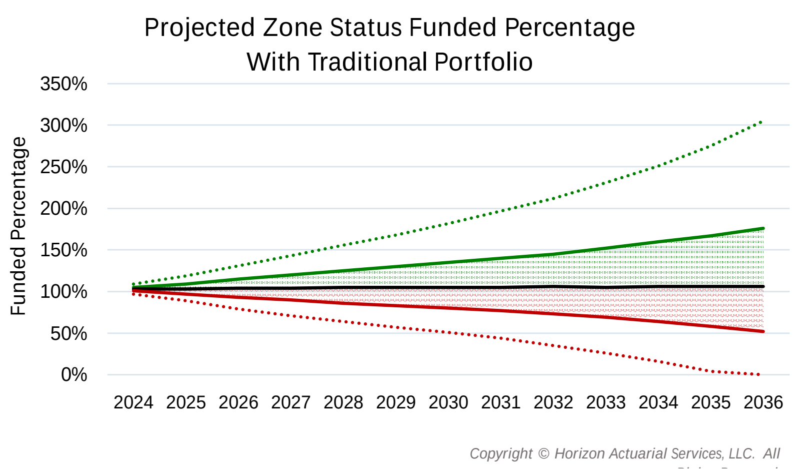
- Maintain a larger funding cushion
- Consider less volatile investment strategy
- Consider options to better align assets and liabilities
- Run stochastic projections
- Consider alternative plan designs (e.g., variable)
- Use additional caution when considering benefit improvements

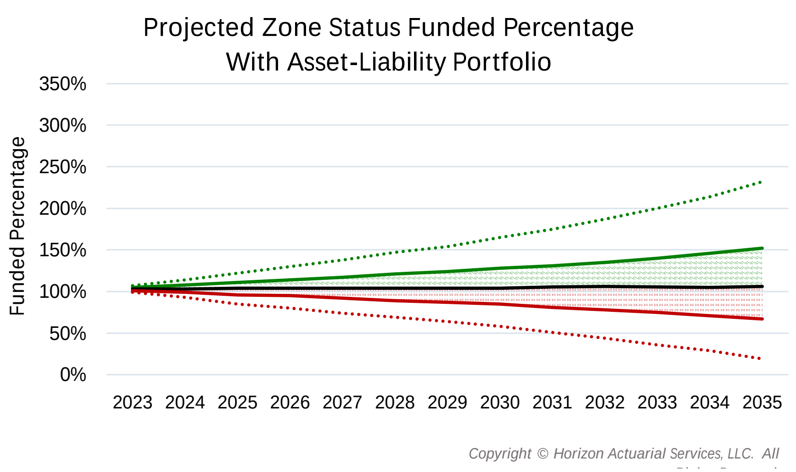
For Less Mature Plans…

- Keep an eye on your maturity measures
- What are they projected to be in 5 or 10 years?
- Changes can happen quickly and unexpectedly

Matching (Some) Assets to Liabilities

- Cash-Flow Matching, Immunization, Liability Driven Investing (LDI), Pension Risk Transfer (PRT)
- Goal is to "Narrow the Cone"
- Cost of risk reduction higher when interest rates are lower





Benefit Improvements

What Benefits to Improve

Benefit accruals	Benefits, rights and features
Past service	Early retirement eligibility
Future service	Early retirement reduction factors
Past + future service	Disability eligibility
13th check	Disability benefit amount
Ad-hoc retiree increase	Late retirement increases
Modify service schedule	Modify service schedule
Contribution rate increase	Optional form of payment factors
Backfill periods of lower accruals	Other ancillary benefits

When to Improve Benefits

- After or in conjunction with:
  1. Reviewing/updating assumptions
  2. Discussing/understanding plan maturity
  3. Reviewing projections (including stress testing, stochastic modeling)
     - Both before and after proposed improvement
  4. Reviewing investment strategy/goals
- After a bad investment year
- At a point where the plan is too well-funded?

Which Plan Should Consider Improvements?

	Plan A	Plan B
Funded Percentage (2024)	94%	79%
Projected Funded Percentage (2038)	120%	120%
Zone Status	Green Zone	Yellow Zone

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	Plan A	Plan B
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Zone Status	**Green Zone**	**Yellow Zone**
Interest Rate Assumption	7.5%	6.5%
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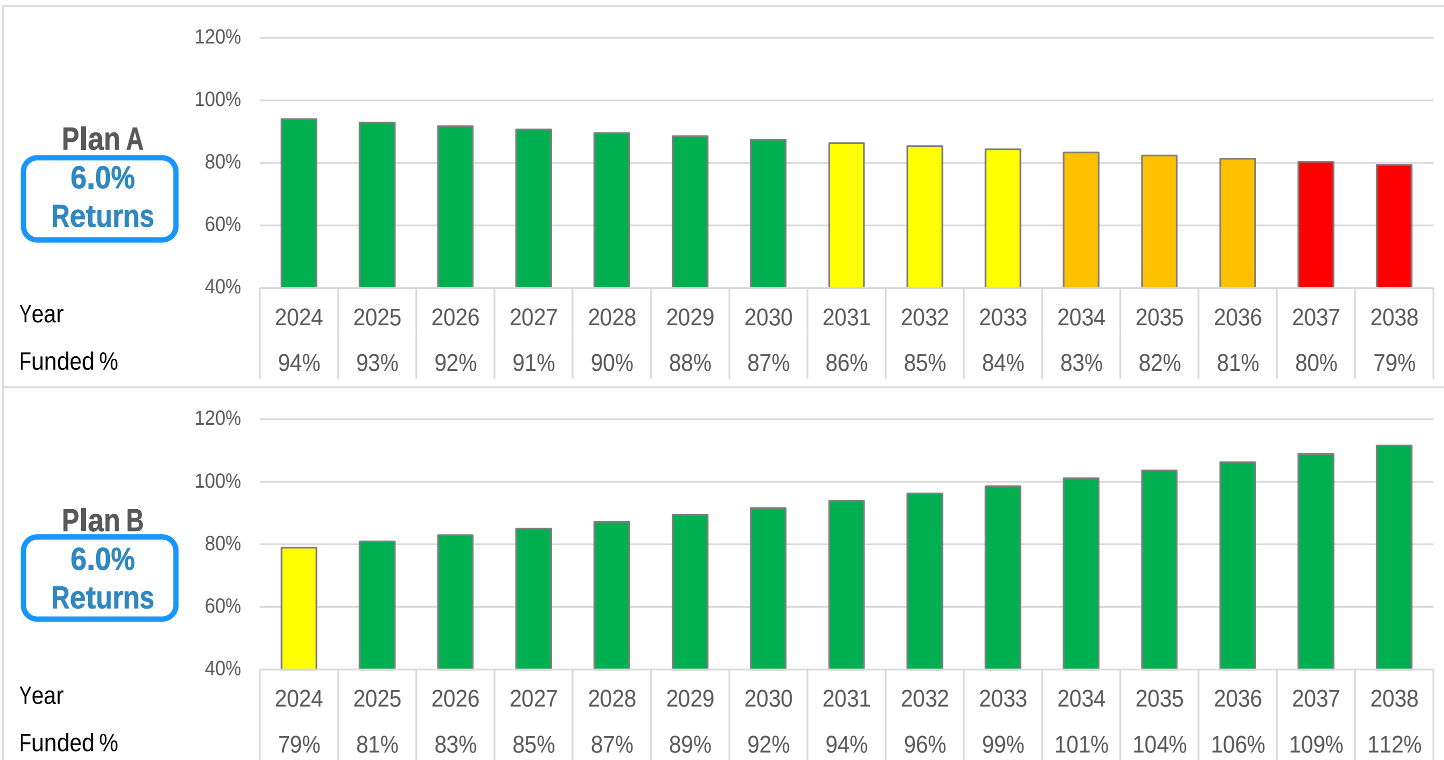

How to Improve Benefits

- Gradually
  - More likely to result in fair and equitable benefits
  - Provides inflation protection
- Thoughtfully
  - Equity and fairness
  - Workforce management (attraction and retention)
  - What do members value?
  - Optics matter!

Key Takeaways

- My plan is well-funded—Now what?
  - Make sure you are actually well-funded
  - Review actuarial assumptions
  - Review plan maturity measures
  - Review projections with stress testing
  - Implement risk reduction measures
  - Improve benefits!!
    - Gradually and thoughtfully

Your Feedback Is Important. Please Scan This QR Code.

Session Evaluation