

Fall Summit

EDUCATE | ENGAGE | ELEVATE / 2020

NIA's Virtual Fall Summit

November 3–6, 2020



NIA | National Insulation
Association®

Union Contractors Agenda

1. Multiemployer Defined Benefit Plan Overview
2. Understanding Plan Status
 - Risks
 - Legislative Updates
3. Withdrawal Liability
4. Assumptions
5. Funding Concepts

What do you want to hear about?

- ✓ Get out your phone
- ✓ Open a browser
- ✓ Go to www.menti.com
- ✓ Enter code 96 62 97 2

Retirement Income Sources



Traditional explanation:
Three-legged stool



Americans Are Not Saving for Retirement

- **31%** of nonretired Americans reported having **no retirement savings or pension**
 - Alarming, among those ages 55 to 64, the number is 19%
- Almost **half** of adults were **not actively thinking about** financial planning for retirement
 - 24% had given only a little thought to financial planning for their retirement
 - 25% had done no planning at all
- The Great Recession pushed back the planned date of retirement for **two-fifths** of those ages 45 and over, who had not yet retired

Retirement Designs—Big Picture



Defined Benefit (DB) plans specify what benefits are paid out of the plan.



Defined Contribution (DC) plans specify what contributions are made into the plan.



Hybrid plans are plans that either incorporate features of both DB and DC plans, or look like one type but are actually a different type.

Defined Benefit (DB) vs. Defined Contribution (DC)

Design Attributes of Traditional DB and DC Plans

Traditional DB



Benefit defined, irrespective of investment experience

- Reliable and predictable benefit
- Reward career employees
- Employer bears investment risk
- May provide early, disability retirement benefits
- Spousal annuity protection

Traditional DC



Contribution defined, but not ultimate outcome

- No investment risk for employer
- Employee bears investment risk
- No longevity risk for employer
- Simpler to administer
- Predictable employer contributions
- Limited ability to provide an annuity
- “Participation risk” for the employee
- Portability (“leakage risk”)

Defined Benefit Plans

Purpose: Provide lifetime retirement income

- Trustees determine level of retirement benefit and ancillary benefits, such as disability benefits and death benefits
- Funded through contributions:
 - Actuary annually determines annual cost of the Plan using set of assumptions selected by actuary
 - Contributions, plus investment return, accumulate to pay for benefits and administrative expenses

Multiemployer Defined Benefit Plans

- Two or more employers contribute to same pension plan
 - Under one or more Collective Bargaining Agreements (CBA)
- Employers contribute at fixed rates, set in CBA
 - Contributions not readily adjustable
- Operated through a trust overseen by joint labor-management Board of Trustees
- In bargaining, pension contributions are explicit trade-off for wages or other benefits

History—Legal

1976

Employee Retirement Income Security Act (ERISA) is first landmark pension legislation — signed into law on Labor Day 1974 by Gerald Ford

- **Reason:** collapse of companies like Studebaker and consequent loss of pension benefits
- ERISA mandated funding rules, tax deduction rules, plan design rules and set up Pension Benefit Guaranty Corporation (PBGC)

1980

Multiemployer Pension Plan Amendments Act (MPPAA) introduces concept of withdrawal liability

2006

Pension Protection Act (PPA) strengthens plan funding requirements starting in 2008:

- **Reason:** Notable large bankruptcies resulted in shifting corporate plan liabilities to PBGC
- Worker, Retiree and Employee Recovery Act of 2008 (WRERA):
 - Introduced short-term funding relief after 2008 financial crisis
- Pension Relief Act of 2010 (PRA):
 - Additional temporary funding relief related to 2008 and 2009 investment losses
- Financial Accounting Standard Board (FASB) revised disclosure requirements for employers contributing to Multiemployer Plans

2014

Multiemployer Pension Reform Act of 2014 (MPRA)

- **Reason:** Clarify PPA, provide more tools for struggling plans more security for PBGC
- Permit plans to reduce accrued benefits, known as benefit suspensions
- Increase PBGC premiums

Plan Status

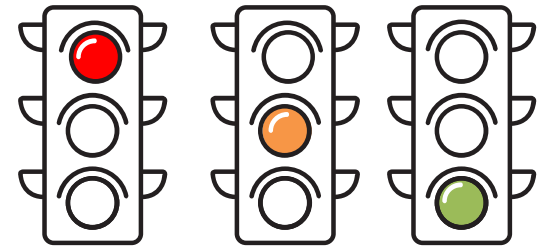
Law requires annual actuarial certification of Plan's position

Critical Status: Rehabilitation Plan required—adjust future and/or some past benefits/increase contributions

- *Critical and Declining Status* introduced under MPRA

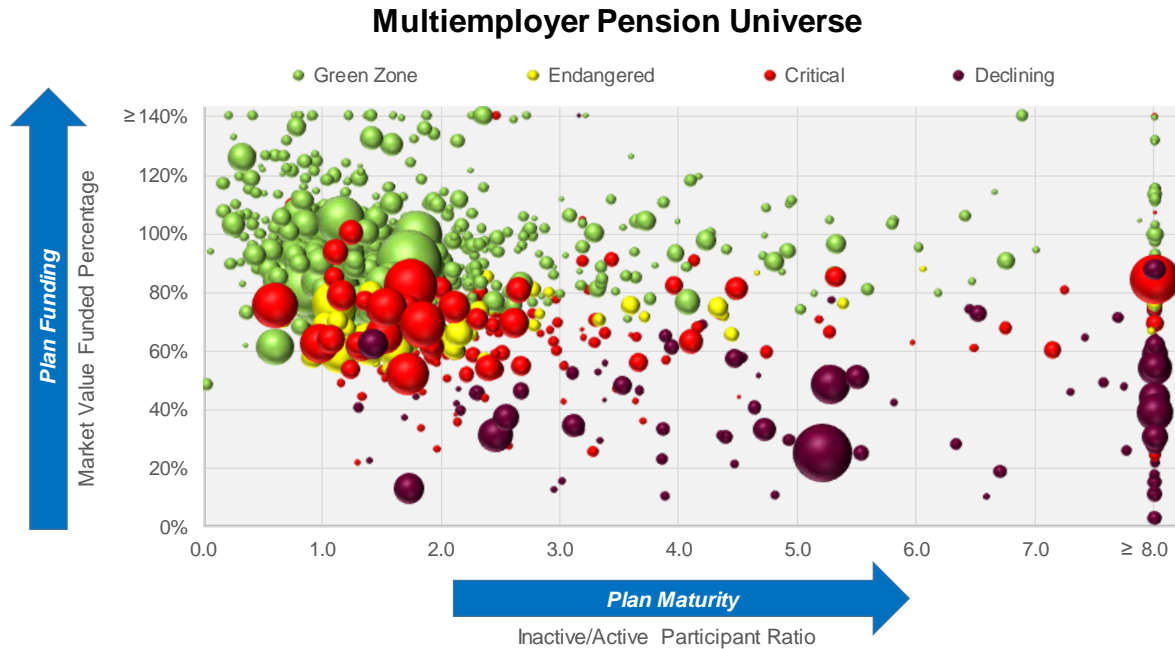
Endangered Status: Funding Improvement Plan required—adjust future benefits/increase contributions

Neither Endangered nor Critical:
No action required



Multiemployer Universe

Funding vs. Maturity

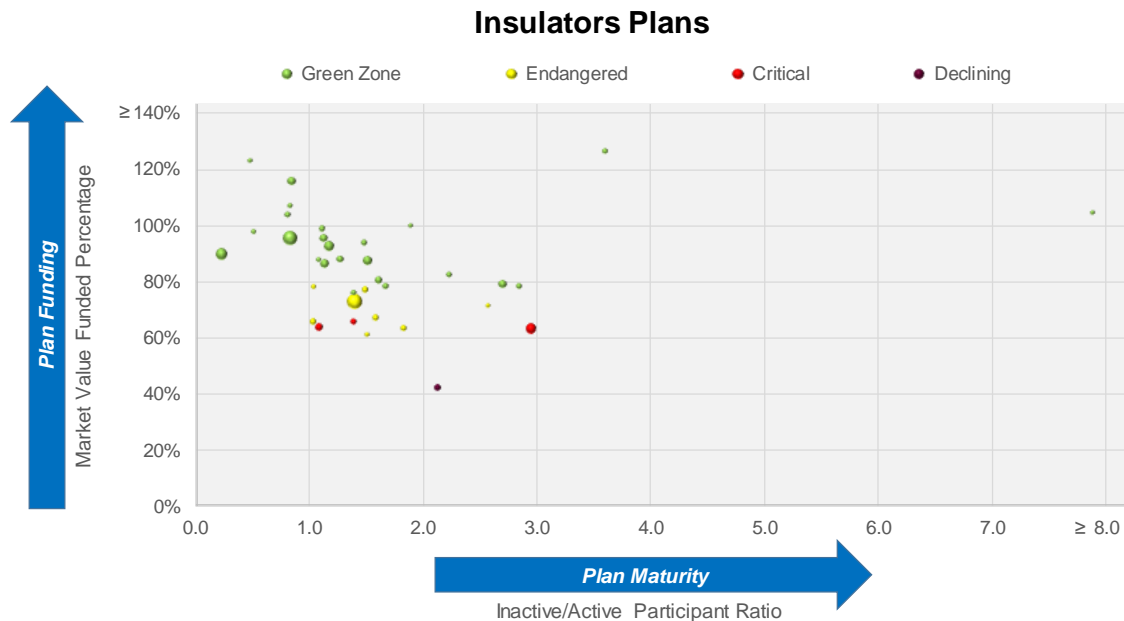


Plan Count: 1,220 | Total Participants: 10.8 Million

Source: Segal Consulting analysis of Form 5500 data for plan years ending in 2018. Zone status applies to plan years ending in 2019. The size of each "bubble" is based on the total number of participants covered by the plan.

Multiemployer Universe

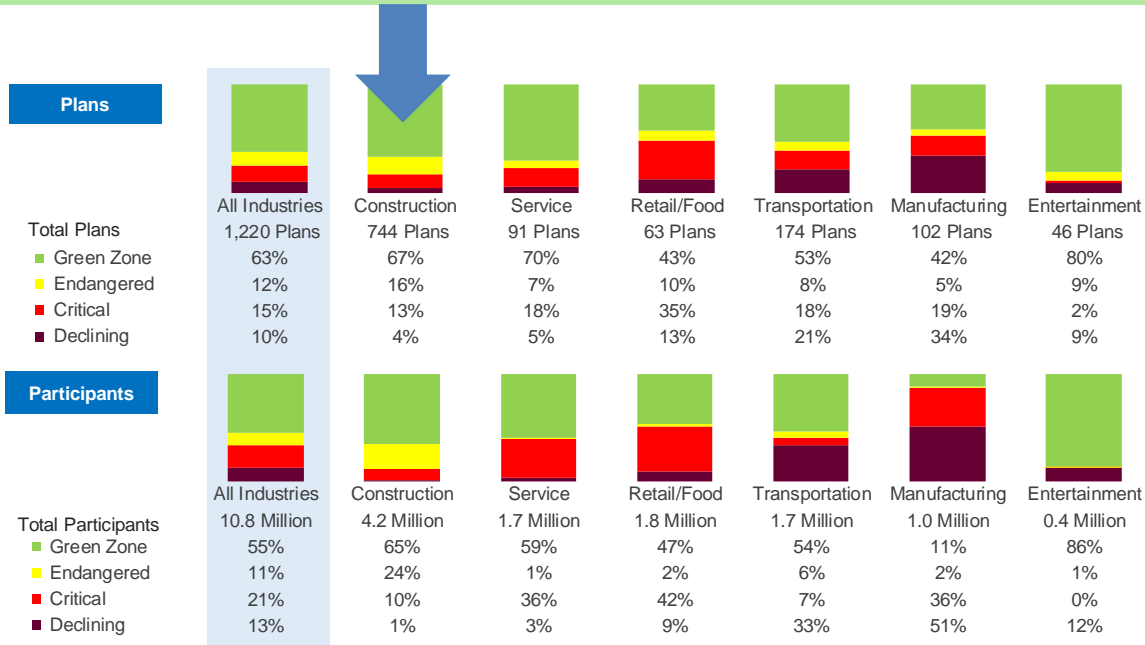
Funding vs. Maturity—Insulators Plans



Plan Count: 36 | Total Participants: 31,000

Source: Segal Consulting analysis of Form 5500 data for plan years ending in 2018. Zone status applies to plan years ending in 2019. The size of each "bubble" is based on the total number of participants covered by the plan.

Zone Status Industry Comparison



Percentages may not add to 100% due to rounding.

For simplicity, certain industries and trades are grouped as follows:

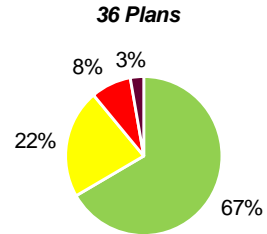
- Transportation includes trucking and freight, warehouse workers, bakery drivers, and maritime
- Manufacturing includes bakery workers, printing, energy, mining, and agriculture
- Service includes hospitality, healthcare, education, and communications

Source: Segal Consulting analysis of Form 5500 data for plan years ending in 2018.

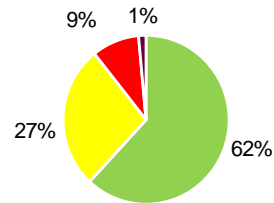
Zone status applies to plan years ending in 2019.

Zone Status Plans and Participants

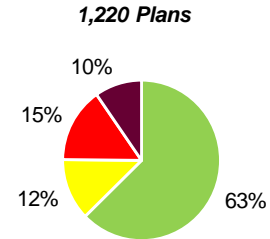
**Insulators Plans
by Zone Status**



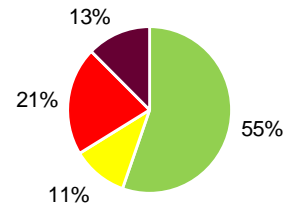
31,000 Participants



**Multiemployer Universe
by Zone Status**



10.8 Million Participants



■ Green Zone
 ■ Endangered
 ■ Critical
 ■ Declining

Source: Segal Consulting analysis of Form 5500 data for plan years ending in 2018. Zone status applies to plan years ending in 2019.

Multiemployer Defined Benefit Plans

History

- Early 2000s saw poor investment performance:
 - Many plans suffered negative returns compared to expected returns
 - Many plans made changes in provisions to lower benefits or increase contribution rates
- By 2008, funding had rebounded for many plans (especially in building trades)
 - Market crash of 2008 and resulting recession created funding issues again
- Impact of 2020 Global Pandemic raises uncertainty about investments and future work levels

The Hard Road Already Traveled

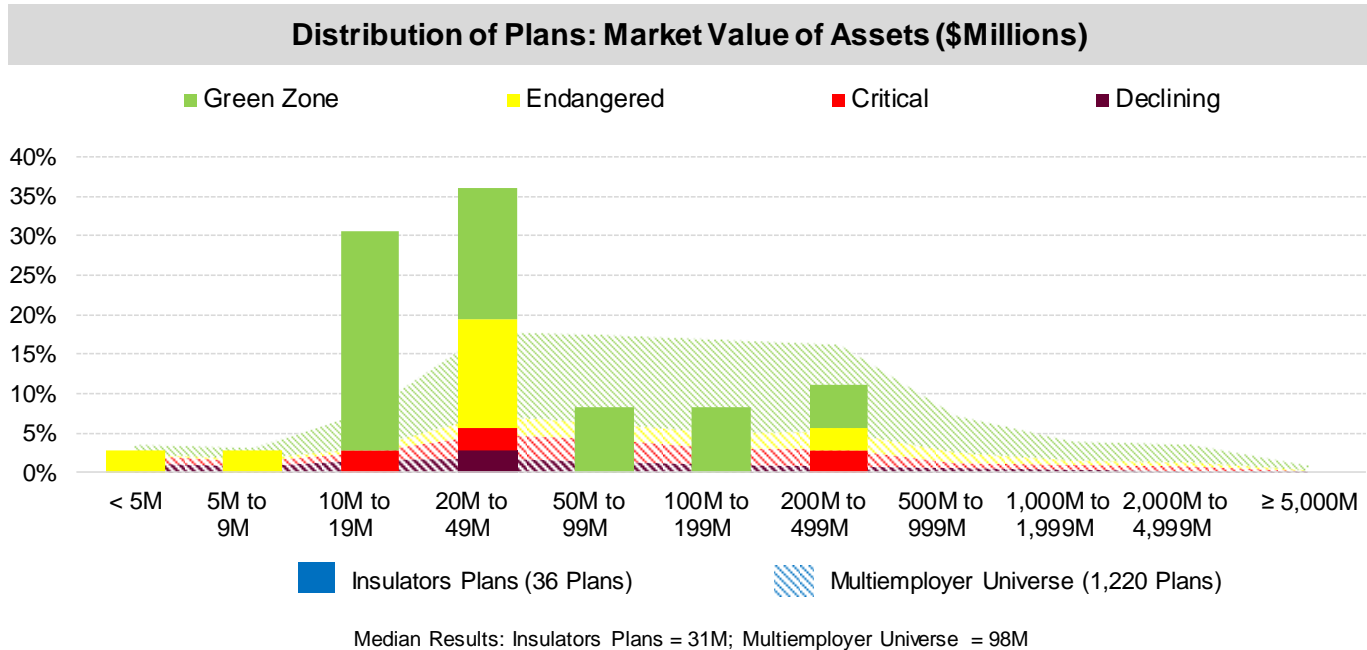
Median Results for Multiemployer Pension Plans

Zone Status for 2019	Plan Count	<i>Funded Percentage</i>		<i>Maturity Ratio</i>		Contribution Rates 2008 to 2018
		2007	2018	2007	2018	
All Plans	1,222	88%	84%	1.1	1.6	x 1.8
Green Zone	766	92%	92%	1.0	1.4	x 1.7
Endangered	152	78%	72%	1.2	1.6	x 2.1
Critical	186	86%	67%	1.4	2.3	x 2.1
Declining	118	83%	45%	2.6	7.3	x 1.9

Source: Segal analysis of Form 5500 data for plan years ending in 2018
 Zone status does not take into account changes after January 1, 2019
 Funded percentages and maturity ratios areas of the end of the plan year

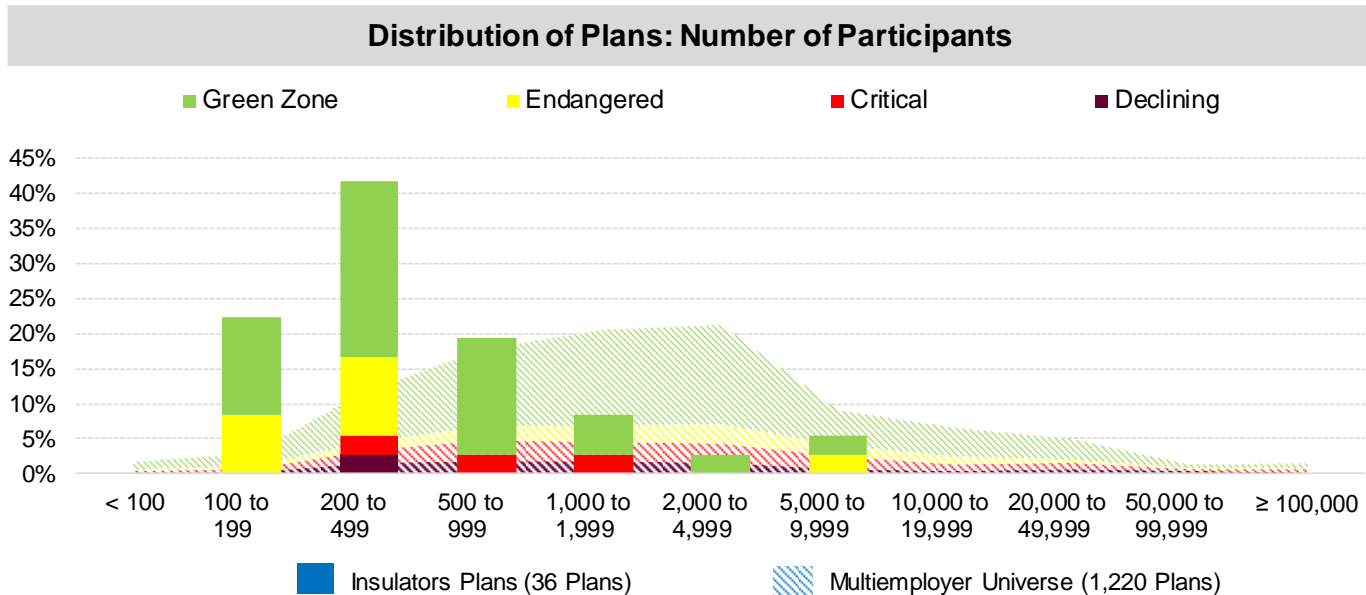
Multiemployer Universe

Market Value of Assets



Source: Segal Consulting analysis of Form 5500 data for plan years ending in 2018. Zone status applies to plan years ending in 2019.

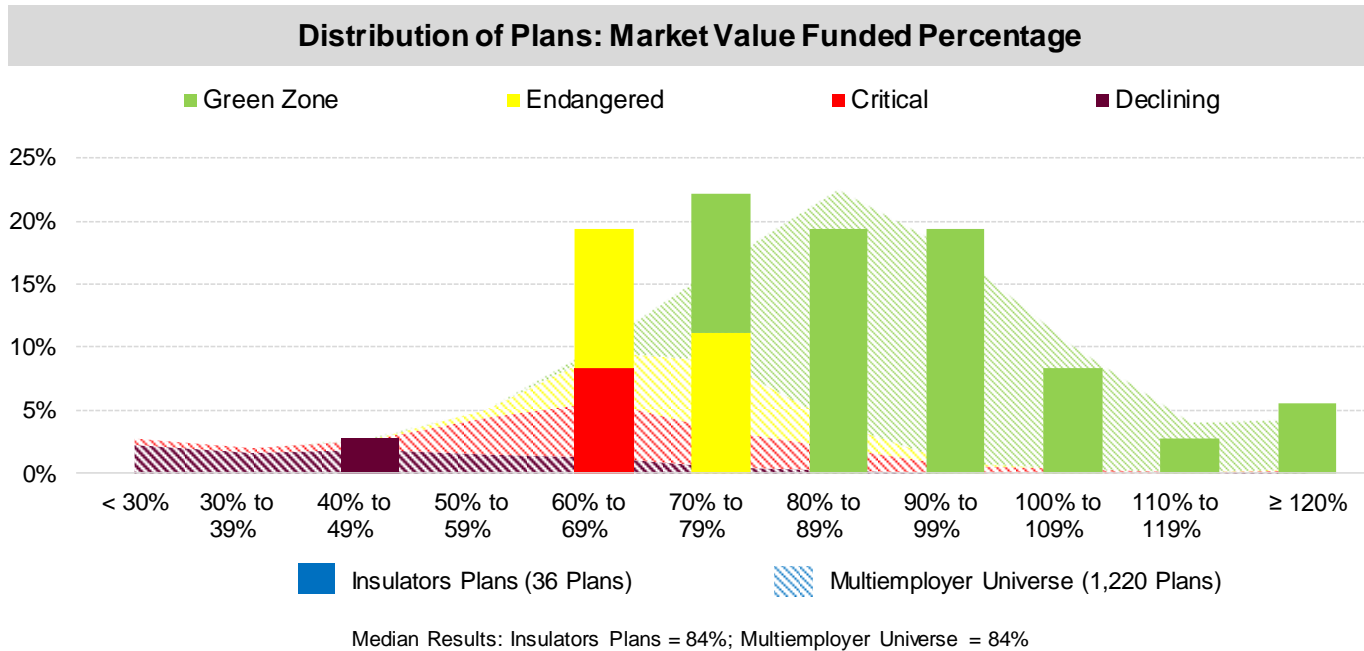
Multiemployer Universe Plan Participants



Median Results: Insulators Plans = 347; Multiemployer Universe = 1,679

Source: Segal Consulting analysis of Form 5500 data for plan years ending in 2018. Zone status applies to plan years ending in 2019.

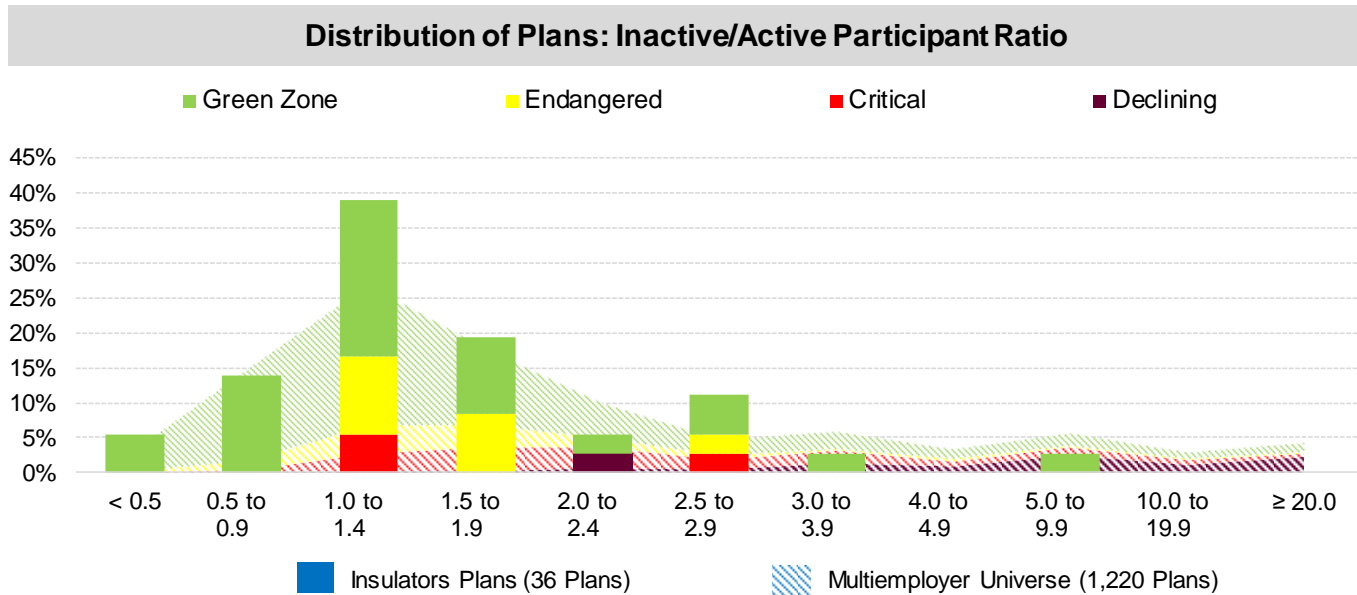
Multiemployer Universe Funded Percentage



Source: Segal Consulting analysis of Form 5500 data for plan years ending in 2018. Zone status applies to plan years ending in 2019.

Multiemployer Universe

Maturity



Note: Percentile ranks are reversed for this metric; the less mature the plan, the higher the percentile rank.

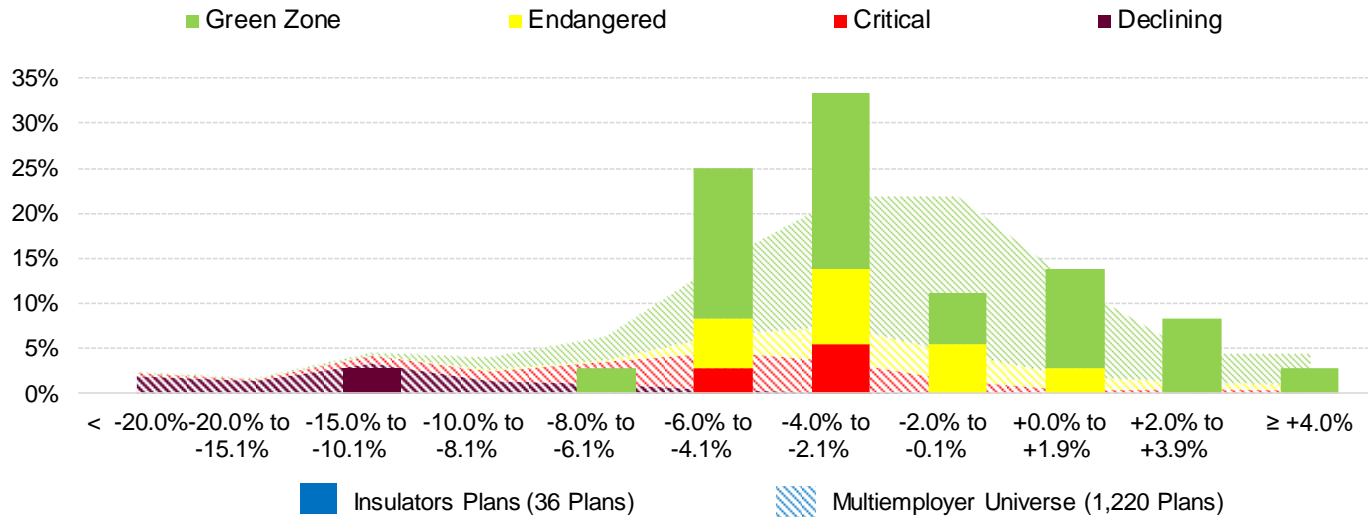
Median Results: Insulators Plans = 1.38; Multiemployer Universe = 1.62

Source: Segal Consulting analysis of Form 5500 data for plan years ending in 2018. Zone status applies to plan years ending in 2019.

Multiemployer Universe

Net Cash Flow

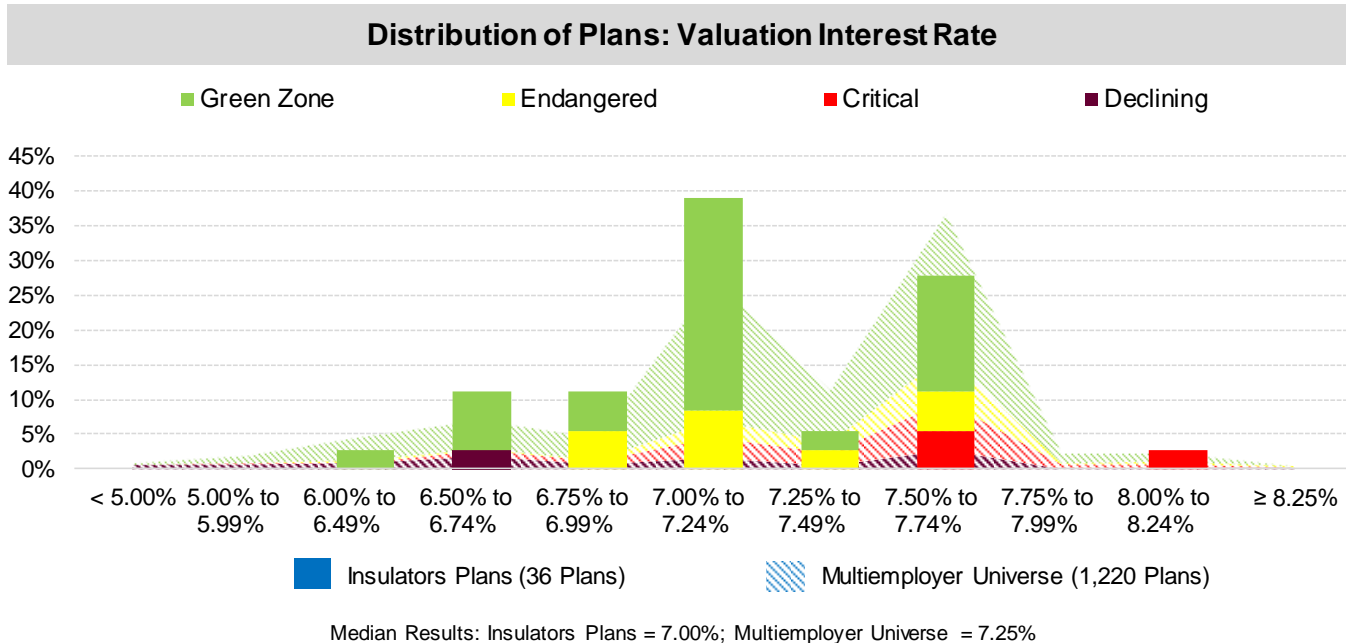
Distribution of Plans: Net Cash Flow as % of Assets ("Burn Rate")



Median Results: Insulators Plans = -2.6%; Multiemployer Universe = -2.7%

Source: Segal Consulting analysis of Form 5500 data for plan years ending in 2018. Zone status applies to plan years ending in 2019.

Multiemployer Universe Interest Rates



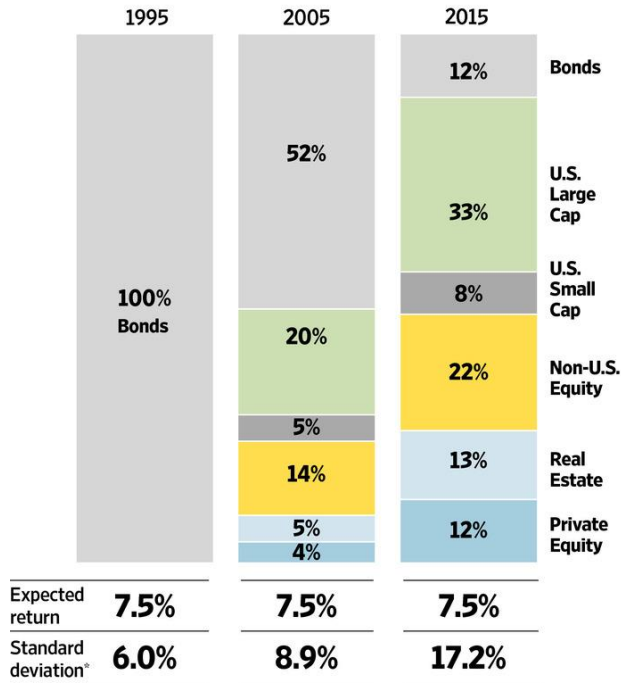
Source: Segal Consulting analysis of Form 5500 data for plan years ending in 2018. Zone status applies to plan years ending in 2019.

Interest Rate Assumptions

Rolling the Dice

Investors grappling with lower interest rates have to take bigger risks if they want to equal returns of two decades ago.

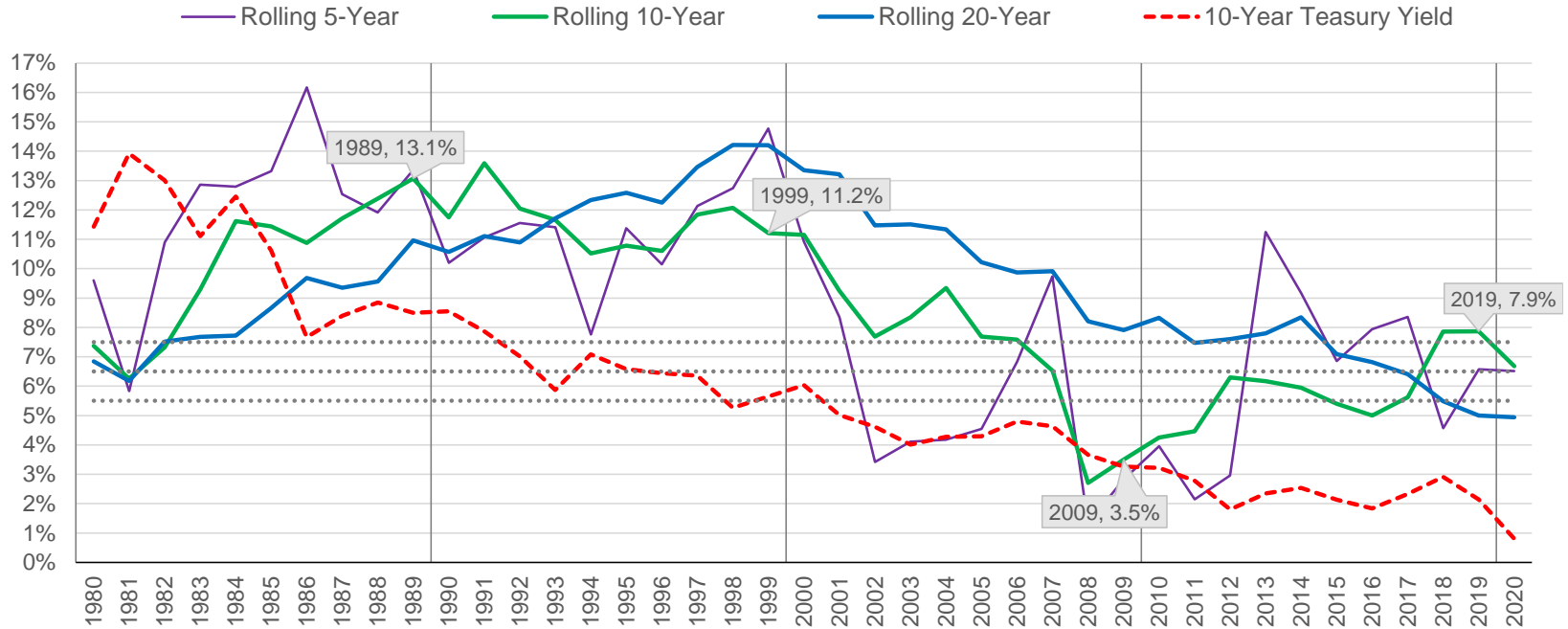
Estimates of what investors needed to earn 7.5%



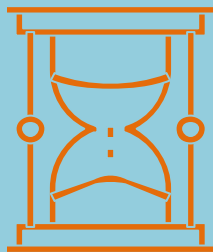
*Likely amount by which returns could vary
Source: Callan Associates

Historical Investment Returns

Average Investment Returns for Multiemployer Pension Plans



Focus on Two Risks



Longevity Risk

The uncertainty of when a Participant will die and the possibility that the Participant will outlive retirement income.

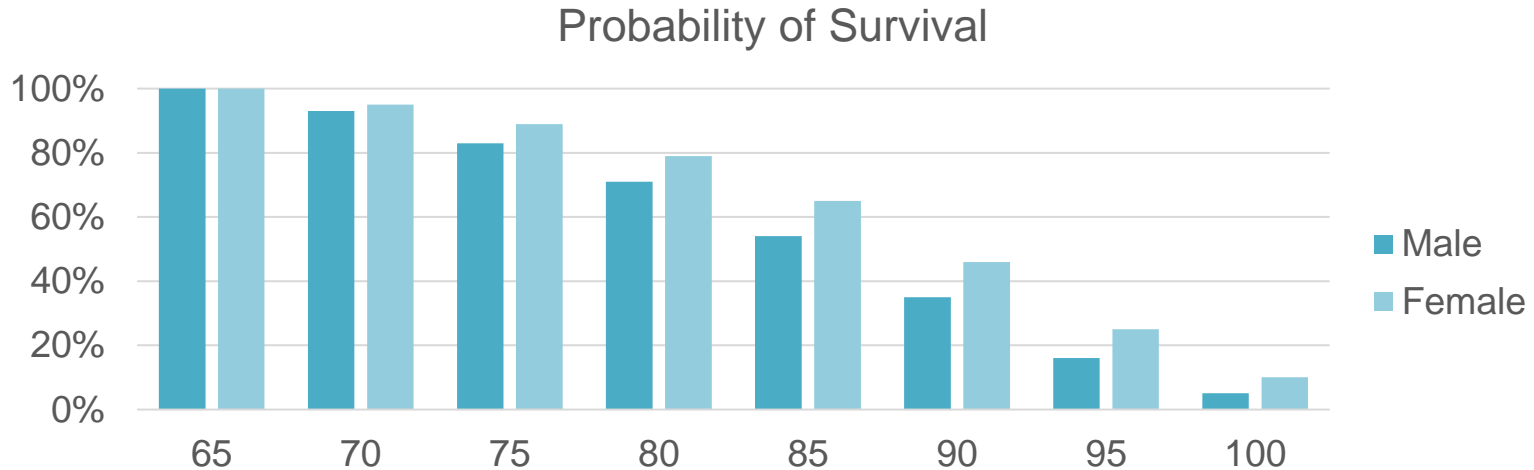


Investment Risk

The volatility of the financial markets creates the possibility of either the need for an increase in contributions from the Contributors or the reduction in benefits for the Participants.

Longevity Risk

- Despite media reports, retirees are living longer than ever.
- The Society of Actuaries and the American Academy of Actuaries have developed the Longevity Illustrator, a tool demonstrating the probability of living many years in retirement.
- Show below are the probabilities for a couple both age 65 in average health.



Defined Benefit Plans—Risks

Risks and Objectives

Employer contributions, member wage/benefit package and the administrative burden of the plan are impacted by economic and noneconomic driven risks, and influenced by plan objectives.

Economic Risks

- **Investment:** Contributions (Contributors) and/or Benefits (Participants) are directly affected by investment gains and losses.
- **Past Benefit Change:** Potential for change in plan benefits attributable to past service.
- **Future Benefit Change:** Potential for change in future accruals.
- **Contribution:** Employer contribution or reallocation of wage/benefit package to pension plan participant can change for any reason.
- **Longevity:** Retiree outlives benefits provided by plan.

Defined Benefit Plans—Risks

Economic Risks

- **Pre-Retirement Inflation:** Increases in the cost-of-living prior to retirement impact contributions (Contributors) or benefits (Participants).
- **Post-Retirement Inflation:** Increases in the cost-of-living after retirement impact contributions (Contributors) or benefits (Participants).
- **Withdrawal Liability:** After an employer withdraws from the plan, there may be additional payments required by the withdrawing employer and additional contributions needed from the remaining Contributors.
- **Interest Rate:** Risk of low interest rates affecting actuarial assumptions, withdrawal liability or participant's ability to annuitize lump sum benefits.
- **Declining Active Population and Work Level:** Risk that pool, over which costs are spread, will shrink or fewer hours will be worked impacting contributions (Contributors) or benefits (Participants).

Defined Benefit Plans—Risks

Noneconomic Driven Risks

Regulatory: Change in federal laws or IRS/DOL/PBGC regulations have an impact on contributions or administrative burden (Contributors) or plan benefits (Participants).

Accounting: Regulatory body (FASB/SEC) rule changes or rating company (Moody's/S&P) practices could impose requirements that affect contributions or administrative burden (Contributors) or benefits (Participants).

Involvement: Not taking an active role in monitoring the plan could result in higher costs and/or lower benefits.

Recent Legislative Activity

	Timing	Key Points
Butch Lewis Act	<ul style="list-style-type: none">• First introduced in 2017• Last reintroduced in 2019	<ul style="list-style-type: none">• Would enable distressed plans to remain solvent by providing them with federally backed loans• PBGC would provide financial assistance if loan is insufficient to enable solvency
Joint Select Committee	<ul style="list-style-type: none">• Formed in Feb. 2018• Released reform proposals in Nov. 2018• Committee dissolved in Dec. 2018	<ul style="list-style-type: none">• Would expand PBGC partition authority, based on “orphan” participants• Significant restrictions and conditions on plans taking relief, including benefit reductions• Increases to PBGC guarantees and premiums• Significant reforms to ongoing funding rules
Grassley-Alexander Proposal	<ul style="list-style-type: none">• Published in Nov. 2019• Senate Finance and HELP Committees	<ul style="list-style-type: none">• Built upon Joint Select Committee proposals• Expanded PBGC partitions no longer based on “orphan” participants
HEROES Act	<ul style="list-style-type: none">• Passed House in May 2020	<ul style="list-style-type: none">• Would enable distressed plans to remain solvent with expanded PBGC partition authority• Increase PBGC guarantees, but not premiums• No reforms to existing funding rules

Multiemployer Pension Proposals

Additional details on the Grassley-Alexander proposal and HEROES Act are provided on the following slide.

Comparison of Legislative Proposals

Summary of selected provisions; not comprehensive

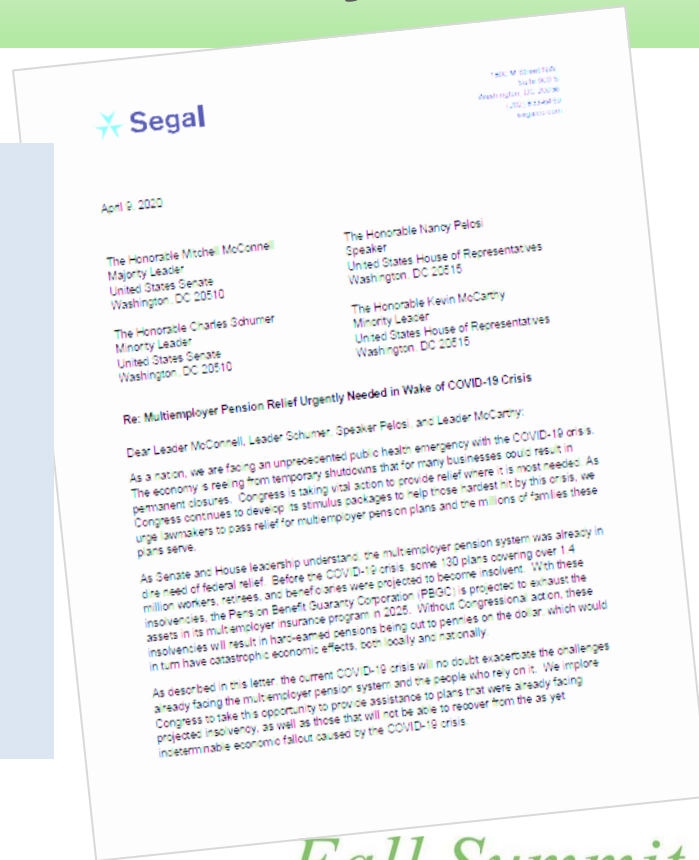
	HEROES Act	Grassley-Alexander Proposal
Introduced	May 2020	November 2019
Assistance method	PBGC Partition	PBGC Partition
Eligibility for special PBGC partition	Either: <ul style="list-style-type: none"> • Critical and declining status, <i>or</i> • Critical status, current liability < 40% funded, active/inactive ratio < 2/3 	Either: <ul style="list-style-type: none"> • Critical and declining status, <i>or</i> • Critical status, current liability < 40% funded, active/inactive ratio < 2/5, not projected to emerge in 30 years
Eligibility window	Open through 2024	Based on status at date of enactment
Pre-condition of partition	None	<ul style="list-style-type: none"> • Exhaust all reasonable measures • Reduce benefits by 10% • Additional retiree “tax” of 10%
Funding targets for PBGC partition	Avoid projected insolvency <i>and</i> achieve 80% funding in 30 years	Avoid projected insolvency
PBGC guarantees	Maximum annual accrual rate: 100% x first \$15.00 + 75% x next \$70.00	Maximum annual accrual rate: \$56.00 (flat)
PBGC premiums	No increases	Increase by up to \$330 per participant (caps based on benefit levels unclear)
Funding relief/reform	Temporary relief measures similar to WRERA 2008 and PRA 2010	Reforms to zone status rules, limits on actuarial interest assumption

Note: Chairmen Grassley and Alexander have been working on modifications to their 2019 proposal, but the details have not been published.

Impact on Multiemployer Solvency Crisis

Segal Letter to Congressional Leadership, April 9, 2020

“Using publicly available information, we have modeled the potential impact of the COVID-19 crisis on the existing multiemployer solvency crisis. Our analysis considered both investment losses and reductions in contribution income. Depending on the severity and duration of the COVID-19 crisis, we estimate that as many as 180 additional plans could face projected insolvency in the next 20 years. That would bring the total number of plans in critical and declining status to over 300, covering over 2.5 million workers, retirees, and beneficiaries.”



Multiemployer Pension Plan Amendments Act of 1980 (MPPAA)

Introduced the concept of Withdrawal Liability

- Employer leaving a multiemployer pension plan assessed share of plan's unfunded vested benefits
- Only an obligation once employer withdraws

What is a withdrawal?

- Employer ceases to have an obligation to contribute
- Employer permanently ceases operations covered by plan

Construction Industry Rules

Withdrawal occurs only if employer continues (or within five years resumes) same type of work in area covered by plan, without again agreeing to contribute

Multiemployer Pension Plan Amendments Act of 1980 (MPPAA)

Allocates Unfunded Vested Benefit (UVB) Liability

- Present value of vested benefits only
- Compared to value of assets

Core Principle: UVBs are allocated in proportion to a withdrawn employer's participation in the plan

Allocation Methods

Presumptive Method

- Each year's change in UVB creates a "pool" of liability
 - Pools can be positive or negative
- Each pool is allocated among employers that contributed during year pool was created
 - Pools allocated based on contribution history over 5 years
- Pools written down 5% per year from inception
 - Maximum of 20 pools can apply
- **Only method available to construction industry plans**

Others

- One Pool
- Direct Attribution

Presumptive Method—Example

Develop the pools of liability for each year

		Pools (\$ Millions)			
12/31:	Plan Wide UVB for W/L	2016	2017	2018	2019
2016	\$100.0	\$100.0	\$95.0	\$90.0	\$85.0
2017	\$90.0	N/A	-\$5.0	-\$4.75	-\$4.5
2018	\$120.0	N/A	N/A	\$25.25	\$24.99
2019	\$90.0	N/A	N/A	N/A	-\$15.49
Total		\$100	\$90	\$120	\$90

Presumptive Method—Example

Allocate Liability Pools

Presumptive Method					
	5-Year Contributions (\$ Millions)		Percentage	For a 2020 Withdrawal (\$ Millions)	
	Plan	Employer		Pools	Allocated Amount
2016	\$65.1	\$0.7	1.08%	\$85.0	\$0.91
2017	\$63.6	\$0.6	0.94%	-\$4.5	-\$0.04
2018	\$63.0	\$0.5	0.79%	\$24.99	\$0.20
2019	\$62.0	\$0.4	0.65%	-\$15.49	-\$0.10
					\$0.97

DeMinimis Deductible

- Withdrawal liability is waived if employer's UVB allocation is less than the lower of:
 - 0.75% of plan's UVB, or
 - \$50,000
- If the allocation is between \$50,000 – \$150,000, withdrawal liability is reduced
- Plan may increase these amounts to \$100,000 and \$250,000, respectively

DeMinimis Amount

Subtract from Allocated Amount of UVB Amount

Allocated Amount	DeMinimis Amount
<\$50,000	Allocated Amount
\$50,001 – \$100,000	\$50,000
\$100,001 – \$150,000	\$50,000 minus excess over \$100,000
>\$150,000	\$0

Example:

- Allocated Amount = \$120,000
- DeMinimis = \$50,000 - \$20,000 = \$30,000
- Withdrawal Liability = \$120,000 - \$30,000 = \$90,000

New Rules

Critical Status Plans (PPA '06)

- Benefit reductions disregarded for purposes of determining withdrawal liability
- Surcharges disregarded in determining allocation of UVBs (except if using attributable method)
- PBGC simplified method in Technical Update 10-3
 - Essentially, add the employer's share of unamortized (over 15 years) balance of benefit reductions back into calculation

MPRA provides that contribution increases required to meet terms of a Funding Improvement Plan or a Rehabilitation Plan that go into effect after December 31, 2014 are disregarded in:

- Allocating the UVB and
- Highest contribution rate for the payment schedule

Payment Amount

Uses highest contribution rate, and highest 3-consecutive year contribution base units in last 10 years

Example:

Year:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Hours:	31,200	35,360	39,520	37,939	36,421	34,964	33,565	32,222	30,933	29,696
Rate:	\$1.00	\$1.05	\$1.10	\$1.10	\$1.15	\$1.20	\$1.25	\$1.25	\$1.35	\$1.40

- Highest 3-consecutive year average (2012–2014) = 37,960
- Highest contribution rate = \$1.40
- Annual payment amount = 37,960 x \$1.40 = \$53,144
- NOT a function of Allocated Amount
- 20-year cap on payments

Assumptions and Methodology

- MPPAA stipulates that PBGC may promulgate regulations regarding the determination of UVB
 - 40 years later-no regulations
- “Actuary’s best estimate” applies
 - “Funding assumptions” and “Segal Blend” commonly used assumptions
 - “Segal Blend” recognizes that Withdrawal Liability is a settlement of the withdrawing employer’s obligation
 - All risks are transferred from the withdrawing employer to continuing employers
 - Uses a blend of PBGC interest factors and long-term valuation discount rate compared to market value of assets

Important Principle: Liability Never Escapes

Deductibles, uncollectible withdrawal liability, amounts forgiven due to 20-year payment cap remain as unfunded and must be reallocated to remaining employers

Each of the liability allocation formulas includes a formal reallocation process



Partial Withdrawal

Decline in an employer's contribution base units (e.g., hours worked) that persists over a sustained period of time

- An 8-year period must elapse
- Sharp declines usually either become complete withdrawals, or recover, before a partial withdrawal occurs
- Special Construction Industry Rule
- Partial withdrawal if employer contributing only for “an insubstantial portion” of its continuing work in the area

Actuarial Assumptions

Demographic Assumptions

When benefits will be payable:

- Retirement
- Turnover
- Disability
- Mortality

Amount of benefits

- Annual accruals
- Payment forms

Economic Assumptions

How assets grow:

- Investment return
- Average contribution hours

Multiemployer Plan—Funding Concepts

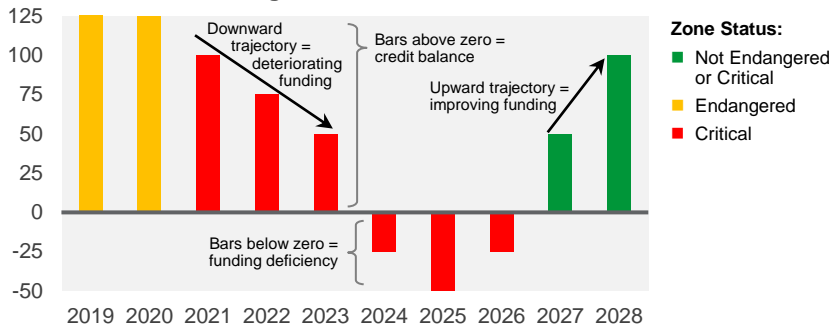
Funding Measures—What, How, and Why?

Metric	What It Measures	How It's Used	Why It's Important
Funding Standard Account Credit balance—a positive Funding Standard Account Funding deficiency—a negative Funding Standard Account	Whether plan is making sufficient contributions over time to satisfy ERISA funding rules	Zone status trigger; Possible excise tax trigger	Maintaining positive credit balance is a legal requirement (unless in Red Zone and following Rehab Plan)
Funded Percentage Assets and liabilities can be measured in various ways “PPA” Funded Percentage uses actuarial (smoothed) value of assets and actuarial accrued liabilities as of the same date	The extent to which assets are covering benefit liabilities	Zone status trigger; measure level of plan surplus/deficit	Plan assets must cover all liabilities as they come due (over the long term) to pay benefits
Scheduled Cost Scheduled Cost margin—excess of annual contributions over scheduled cost Scheduled Cost deficit—shortfall of annual contributions compared to scheduled cost	Schedule for payment of unfunded liability plus ongoing annual costs (including expenses) based on Trustee policy and in advance of required timing	Trustee tool to judge current contribution sufficiency and affordability of plan changes	Measure of whether plan can pay off unfunded liabilities and afford benefit levels in long term
Solvency Projection	Whether market value of assets is sufficient to make promised benefit payments in each future year	Critical and Declining zone status trigger; monitor risk of insolvency	Securing promised benefits; provides an early indicator of insolvency risk
Withdrawal Liability	Portion of unfunded liability that withdrawing employers must fund after exit	How much withdrawal liability will employers pay after withdrawing—amount and duration of payments	Important to employers; helps protect underfunded plans; can be a disincentive to new employers

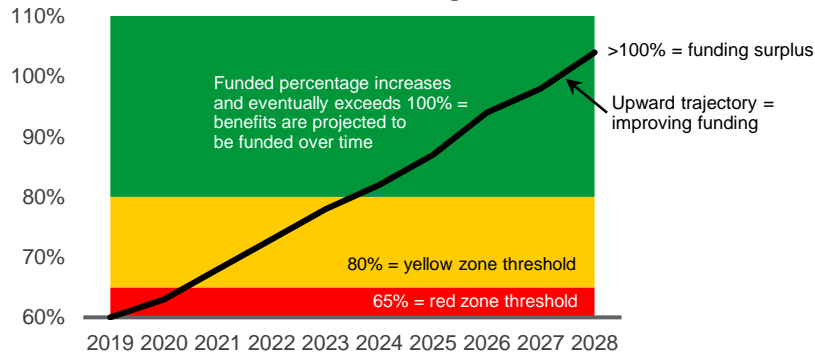
Multiemployer Plan—Funding Concepts

Funding Measures—Reading the Visuals

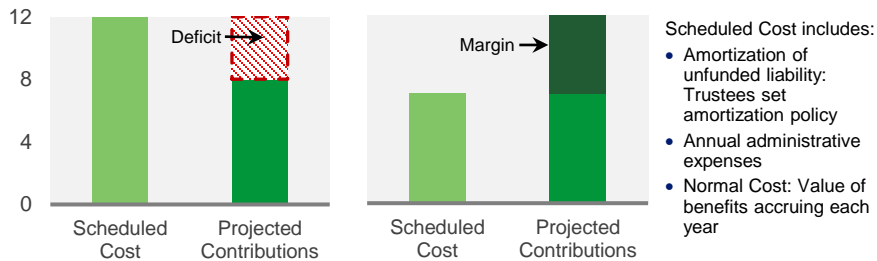
Funding Standard Account



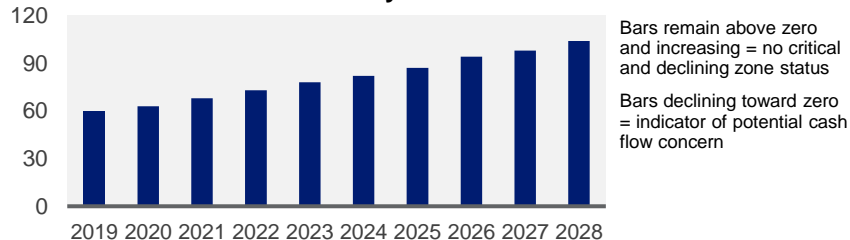
Funded Percentage



Scheduled Cost



Solvency



Multiemployer Plan—Funding Concepts

Overview of Zone Status Rules

Green	Endangered (Yellow)	Critical (Red)	Critical and Declining
<ul style="list-style-type: none">• PPA Funded Percentage $\geq 80\%$• Positive Credit Balance projected for at least 8 years	<ul style="list-style-type: none">• Not in Critical status, and• PPA Funded Percentage $< 80\%$ <p>or</p> <ul style="list-style-type: none">• Funding deficiency projected in 7 years	<p>Multi-pronged tests; primary triggers are:</p> <ul style="list-style-type: none">• Funding Deficiency in 4–5 years, and/or• PPA Funded Percentage $< 65\%$	<ul style="list-style-type: none">• In Critical Status and• Projected to be insolvent in 15–20 years