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March 8, 2024

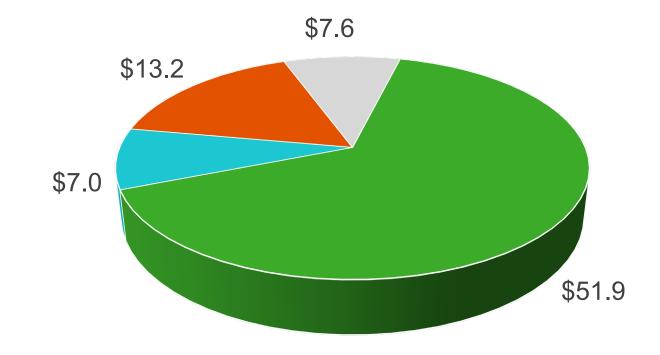


SFA Program Update

Total SFA Amounts (\$Billions)



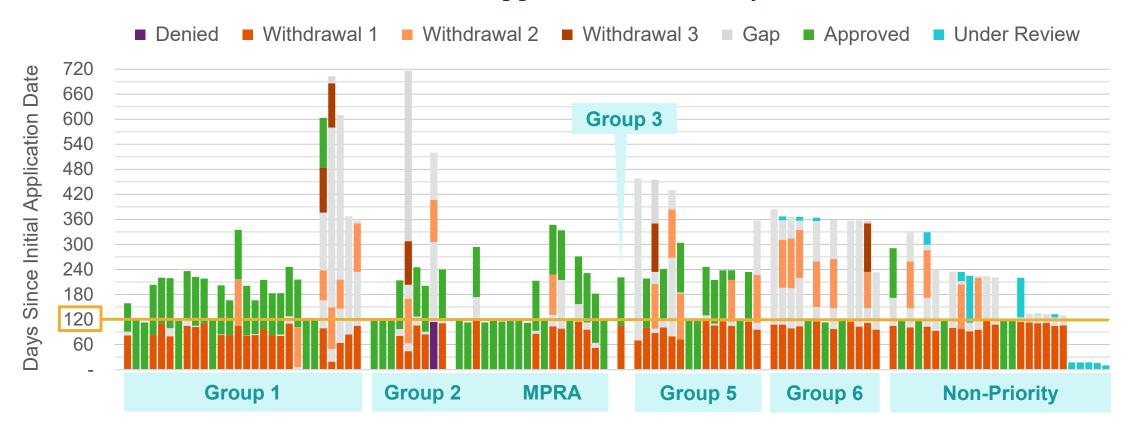
- Under Review (15)
- Withdrawn or Denied (25)
- Future Applications (83)



Status as of March 1, 2024

How Long is PBGC Taking to Review?

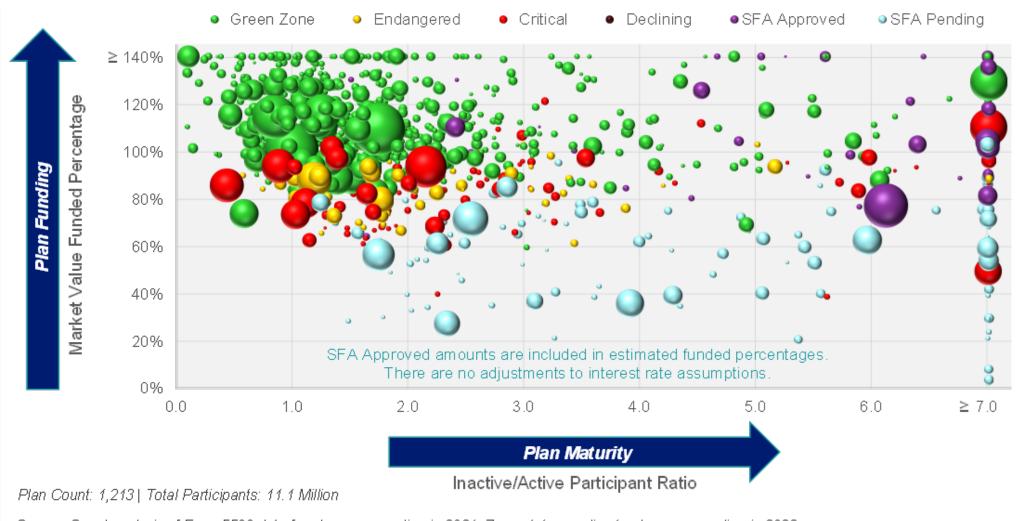
Duration of SFA Application Reviews by PBGC



Segal analysis of PBGC SFA application data

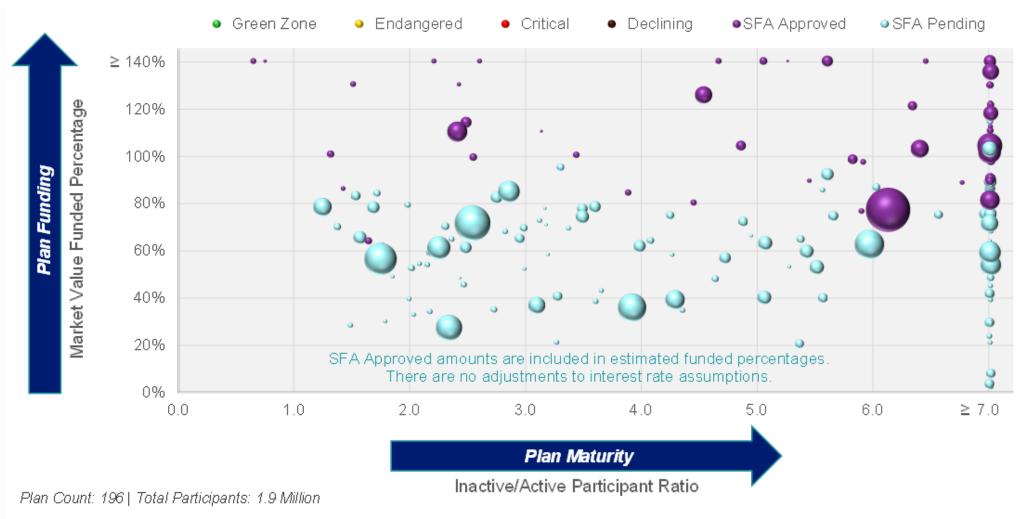
Status as of March 1, 2024

Multiemployer Pension Universe



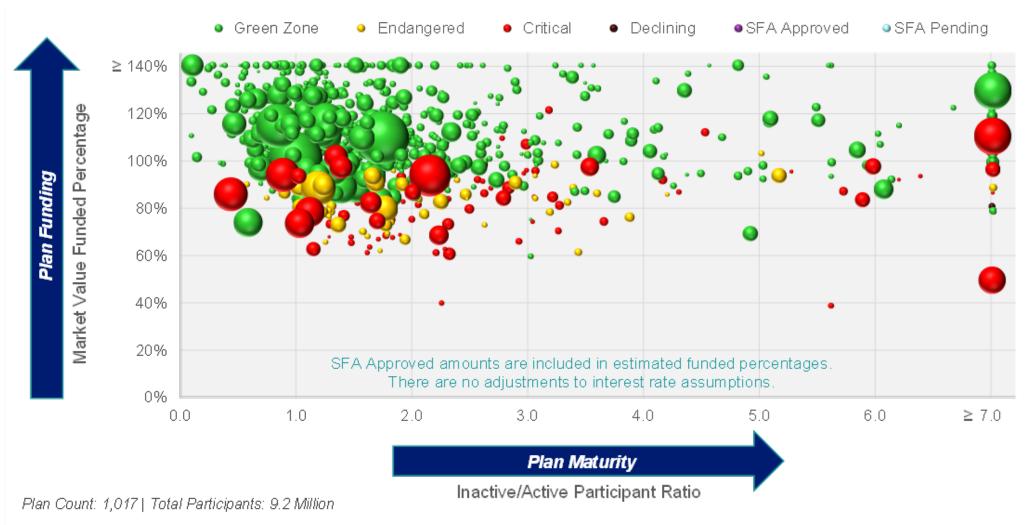
Source: Segal analysis of Form 5500 data for plan years ending in 2021. Zone status applies to plan years ending in 2022. The size of each "bubble" is based on the total number of participants covered by the plan. Insolvent plans are excluded.

SFA Plans



Source: Segal analysis of Form 5500 data for plan years ending in 2021. Zone status applies to plan years ending in 2022. The size of each "bubble" is based on the total number of participants covered by the plan. Insolvent plans are excluded.

Non-SFA Plans

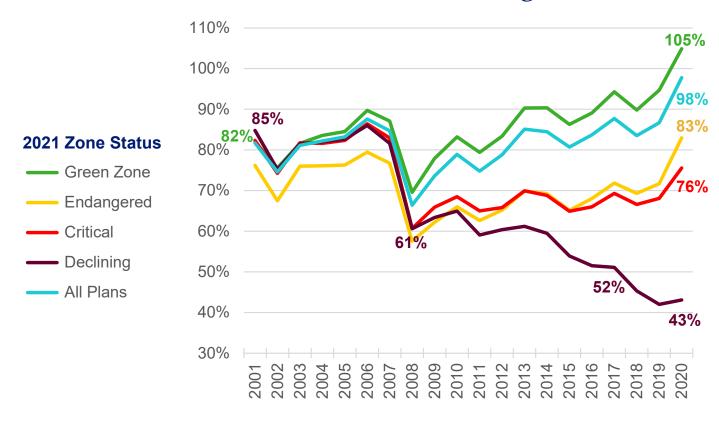


Source: Segal analysis of Form 5500 data for plan years ending in 2021. Zone status applies to plan years ending in 2022. The size of each "bubble" is based on the total number of participants covered by the plan. Insolvent plans are excluded.



Leading up to the American Rescue Plan

Historical Funded Percentages



Study of Form 5500 data by Segal. Graph shows median funded percentages based on market value of assets at plan year end. Plans are grouped by 2021 zone status.

Observations

- In 2001, not much dispersion in median funded percentages
- Over last 20 years, funding for plans in critical and declining status deteriorated rapidly
- In 2001, plans currently in critical and declining status had a slightly higher median funded percentage than plans currently in the green zone

Investment Returns

Observations

Very little difference in historical investment returns by zone status

Annualized Investment Returns

2021 Zone Status	2001-2015	2001-2020
Green Zone	4.8%	5.9%
Endangered	4.6%	5.7%
Critical	5.5%	5.6%
Declining	4.6%	5.6%
All Plans	4.7%	5.8%

Study of Form 5500 data by Segal. Exhibit shows cumulative net investment returns for calendar year plans. Plans are grouped by 2021 zone status.

Historical Investment Returns



Study of Form 5500 data by Segal. Graph shows calendar year net investment returns. Plans are grouped by 2021 zone status.

Contribution Rate Increases

Observations

- Most multiemployer plans significantly increased contribution rates in years following 2001
- Over the last 20 years, plans in critical and declining status increased their contribution rates by over 300% on average
- Most plans also reduced benefit levels (harder to measure impact with publicly available data)

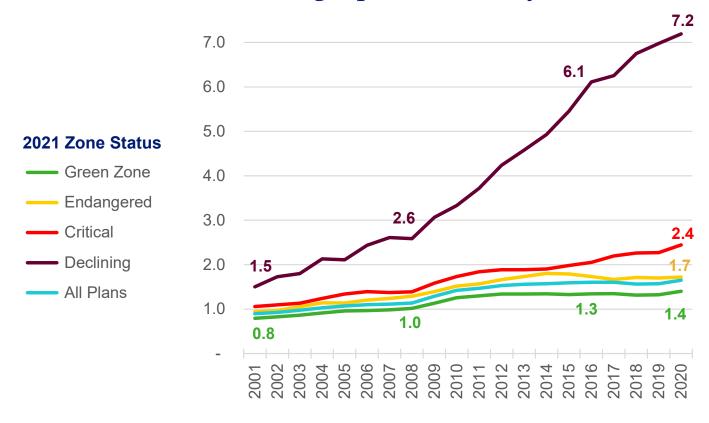
Cumulative Increase in Contribution Rates

2021 Zone Status	2001-2009	2009-2020	2001-2020
Green Zone	+63%	+68%	+175%
Endangered	+73%	+77%	+207%
Critical	+67%	+117%	+261%
Declining	+78%	+126%	+302%
All Plans	+64%	+80%	+196%

Study of Form 5500 data by Segal. Exhibit shows cumulative increases in average contribution rates for active participants. Plans are grouped by 2021 zone status.

Importance of Plan Maturity

Historical Demographic Maturity Ratio



Study of Form 5500 data by Segal. Graph shows median ratios of non-active participants to active participants at plan year end. Plans are grouped by 2021 zone status.

Observations

- Here, maturity is expressed as ratio of non-active participants to active participants
- Plans currently in critical and declining status were more mature than average in 2001 and highly mature now
- Note higher maturity levels in 2020 for non-declining plans, compared with 2001

Cash Flow Matching

Cash Flow Matching Example

Plan facts

- Received special financial assistance (SFA) in 2023
- Needs annual investment returns of 4.5% to remain solvent (disregarding volatility)
- Highly demographically mature
- Annual negative cash flows are about 7% of assets

Cash flow matching strategy

- Construct portfolio of bonds with coupon and maturity payments that match cash outflows for next 5 years
- No interest rate risk to portfolio, minimal default risk
- Strategically extend cash flow match when certain funding targets are met (aim to keep term at about 5 years)

SFA Plan: No Volatility

Assumed investment returns

Total plan assets: annualized returns of 4.5% each year

Solvency Projection

Asset values and liabilities shown at end of plan year



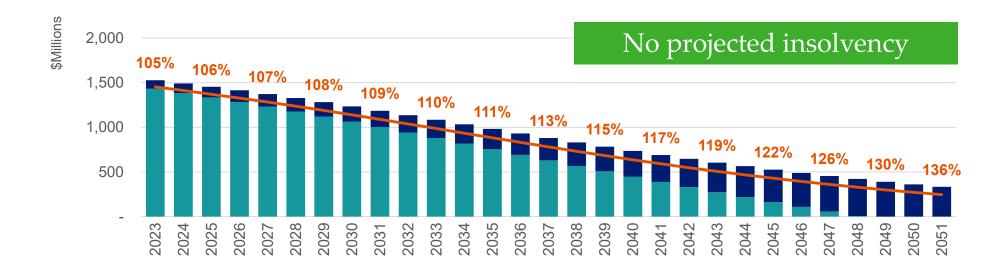
Other SFA Assets

N Reallocation from Legacy

N Reallocation from SFA

Cashflow Match

— Actuarial Liability (4.50%)



SFA Plan: Historical Volatility

Assumed investment returns

Total plan assets: annualized returns of 4.7%, volatility of 10%





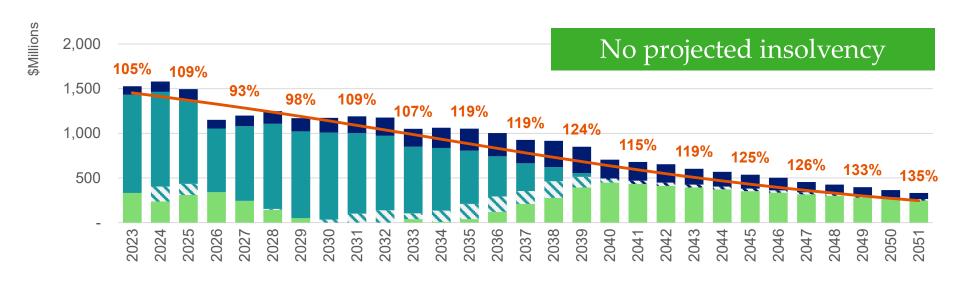
Note: the pattern of volatile investment returns on total plan assets is based on plan's actual returns from 2007 through 2020

SFA Plan: Cash Flow Matching

Assumed investment returns

- Cash flow match: 5.0% in 2023, 4.5% in 2024, 3.5% in 2025 and beyond
- Other plan assets: annualized returns of 4.7%, volatility of 10%





Note: the pattern of volatile investment returns on other plan assets is based on plan's actual returns from 2007 through 2020

Lessons Learned

Important to monitor plan maturity.

Are plan demographics stable, or is maturity projected to increase in the future?

What corrective actions could still be taken?

If there is a continued downturn, is there room for further adjustments to benefits or increases to contribution rates?

Take advantage of higher interest rates.

Explore opportunities to reduce investment volatility, including cash flow matching strategies. Coordinate actuary and investment advisor.