# 11th Transatlantic Conference
# INNOVATION IN PLAN DESIGN

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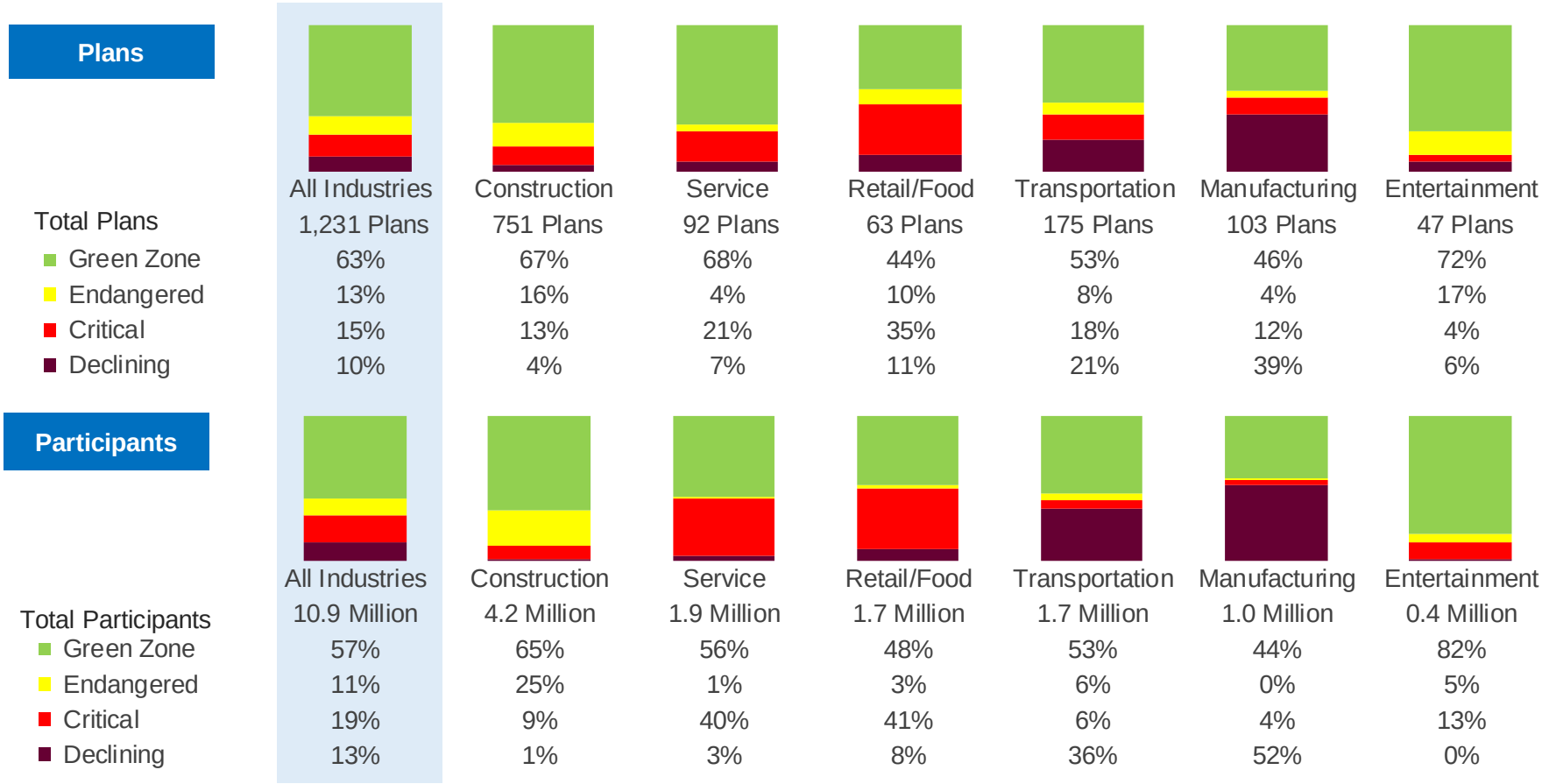
# Discussion Topics

1. **The Multiemployer Pension Plan Universe**
2. Plan Design Considerations
3. Options for Alternative Plan Designs
4. Key Takeaways

# For Perspective
## *Zone Status by Industry*



**Plans**

| | All Industries | Construction | Service | Retail/Food | Transportation | Manufacturing | Entertainment |
|---|---|---|---|---|---|---|---|
| Total Plans | 1,231 Plans | 751 Plans | 92 Plans | 63 Plans | 175 Plans | 103 Plans | 47 Plans |
| Green Zone | 63% | 67% | 68% | 44% | 53% | 46% | 72% |
| Endangered | 13% | 16% | 4% | 10% | 8% | 4% | 17% |
| Critical | 15% | 13% | 21% | 35% | 18% | 12% | 4% |
| Declining | 10% | 4% | 7% | 11% | 21% | 39% | 6% |

**Participants**

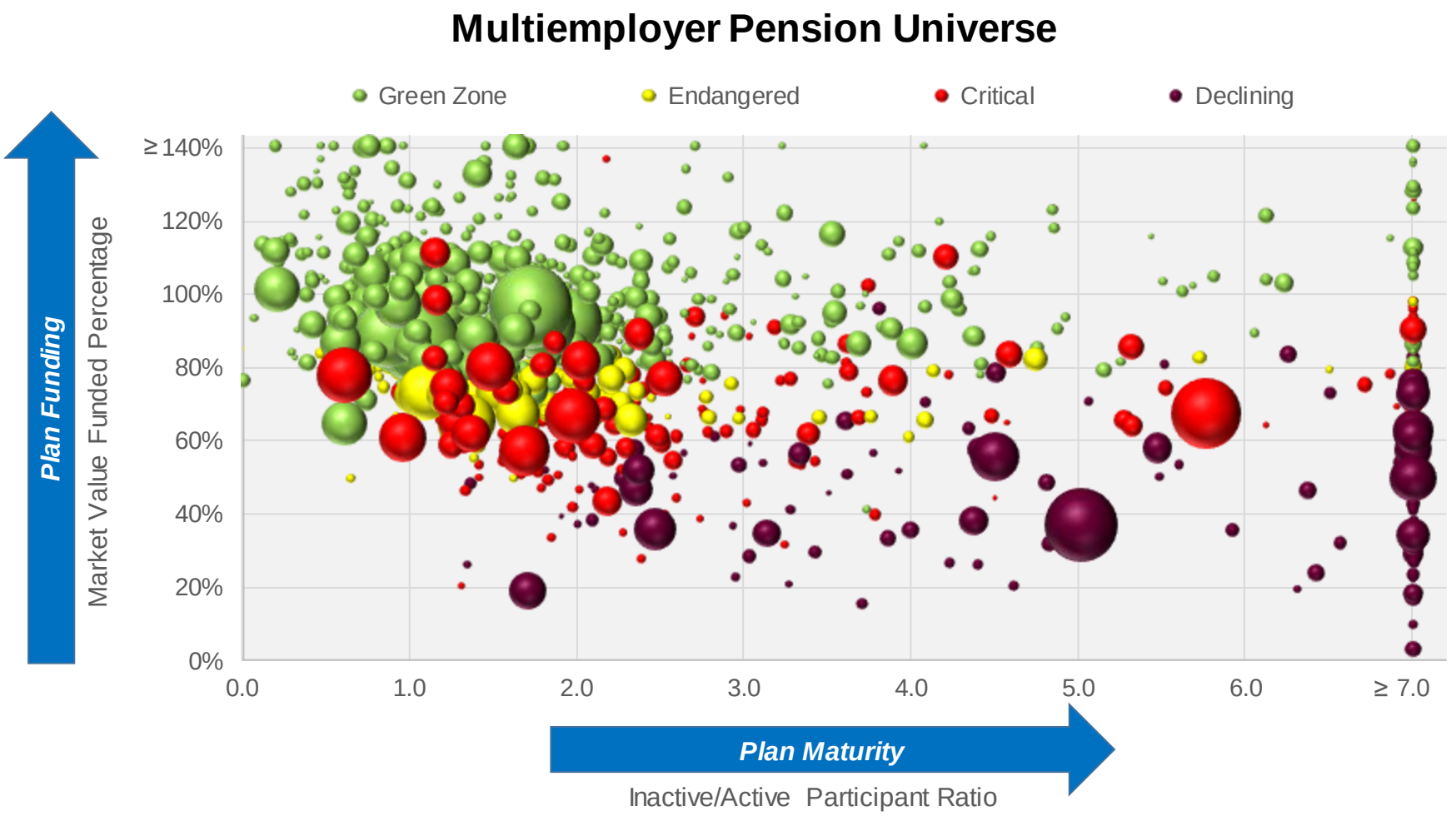
| | All Industries | Construction | Service | Retail/Food | Transportation | Manufacturing | Entertainment |
|---|---|---|---|---|---|---|---|
| Total Participants | 10.9 Million | 4.2 Million | 1.9 Million | 1.7 Million | 1.7 Million | 1.0 Million | 0.4 Million |
| Green Zone | 57% | 65% | 56% | 48% | 53% | 44% | 82% |
| Endangered | 11% | 25% | 1% | 3% | 6% | 0% | 5% |
| Critical | 19% | 9% | 40% | 41% | 6% | 4% | 13% |
| Declining | 13% | 1% | 3% | 8% | 36% | 52% | 0% |

*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 2017. Zone status applies to plan years ending in 2018.*

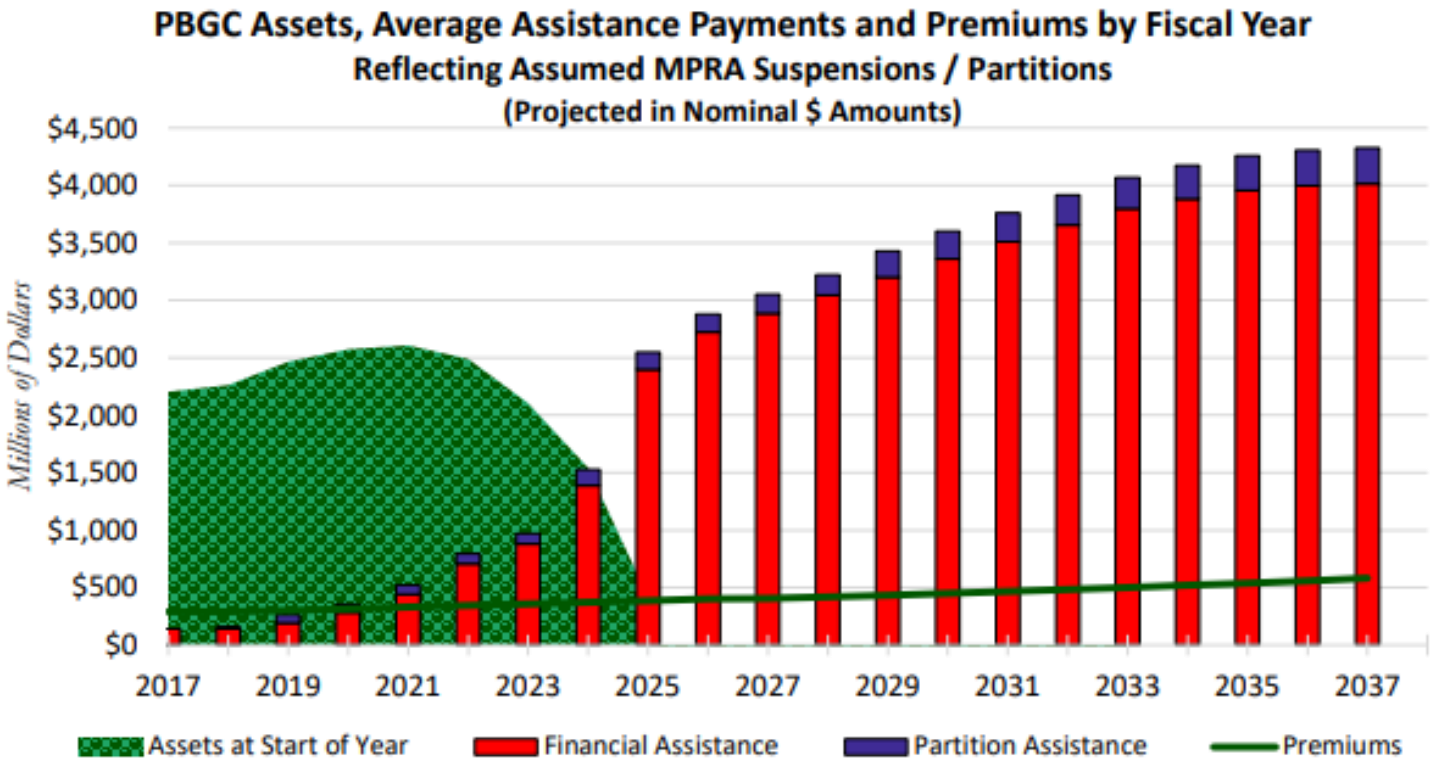
# For Perspective
*Distribution of Plans*




*Plan Count: 1,231 | Total Participants: 10.9 Million*

*Source: Segal Consulting analysis of Form 5500 data for plan years ending in 2017. Zone status applies to plan years ending in 2018. The size of each "bubble" is based on the total number of participants covered by the plan.*

# PBGC Multiemployer Program




## Highlights from PBGC FY2017 Projections Report

- Multiemployer Program projected to become insolvent around FY2025
- Projected average deficit is about $65B (discounted present value)
- Premiums must increase by 6+ times to support the program for the next 20 years
- Greater premium increases needed to extend solvency longer

# Discussion Topics

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# Finding Balance


- Benefit level adequacy
- Stable, lifetime retirement income
- Understandability, perceived value


- Contribution rate sustainability
- Stable, predictable contribution rates


- Are benefits really guaranteed?
- Probability of delivering promised benefits?
- Consequences of underfunding?

# Managing Pension Risk

- Cannot completely eliminate risks
  - But can significantly reduce them
  - Transfer risk from plan to participants
- Many solutions involve “hybrid” plans
  - Hybrid design applies only to future benefits
  - Legacy plan liability remains a major concern
  - In most cases, some (but not all) risk is transferred

# Hybrid Plans
*Overview*

## Combine Elements of DB and DC Plans

- **DB:** traditional defined benefit pension plans
- **DC:** defined contribution savings plans

| Key Advantages | Key Disadvantages |
|---|---|
| • Provide lifetime income | • Legacy liability remains |
| • Reduce volatility in funding, contribution requirements | • Benefit levels may vary, therefore uncertain |
| • Higher probability of delivering promised benefits | • May be more difficult to communicate, understand |

# Hybrid Plans
*Key Questions*

## Is it feasible?

- Is there room in the “budget”?
- Legacy liability must still be funded

## How to fund the legacy liability?

## Reduce investment risk?

- Future service only?
  Legacy liability as well?
- Duration matching?
  Annuity purchase?
- Reduced risk =
  reduced return = higher costs

# One Size Does NOT Fit All

## Discuss options with all Decision Makers

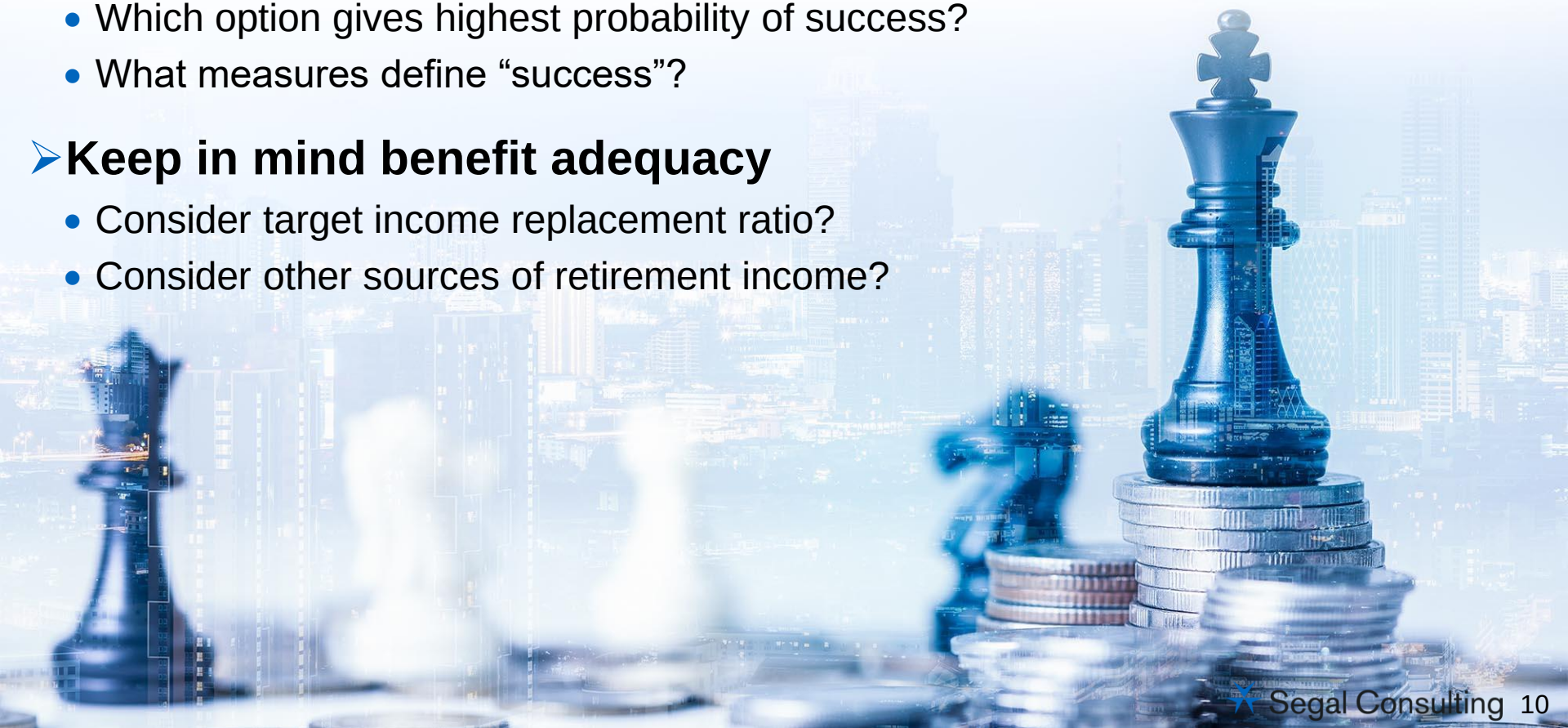
- What legal issues must be addressed?
- What are administrative concerns, complexities?

## Evaluate via stochastic analysis

- Which option gives highest probability of success?
- What measures define “success”?

## Keep in mind benefit adequacy

- Consider target income replacement ratio?
- Consider other sources of retirement income?



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# Plan Design Possibilities

| | |
|---|---|
| **DC Plan** | • Freeze DB Plan; Start DC Plan |
| **Hybrid Plan Options** | • Cash Balance Plan<br>• Variable Accrual Plan<br>• Variable Annuity Plan<br>• Composite Plan* |

* Not yet permissible under law.

# Freeze DB Plan, Start DC Plan

## Freeze legacy DB plan; start new DC plan

- Alternative: increase contributions to existing DC plan

## ERISA requirements remain for legacy DB plan

- Future service counts for vesting in old DB plan
- ERISA/PPA funding standards still apply
- PBGC premiums must still be paid

| Key Advantages | Key Disadvantages |
|---|---|
| • Freeze DB = stop adding to legacy liability<br>• Legacy liability will decline over time as benefits are paid out<br>• DC plan = stable costs and contributions for future service | • Legacy liability remains<br>• Participants bear investment and longevity risk<br>• Participants may not make good investment decisions<br>• Purchasing annuities is very expensive |

# Cash Balance Plan

## Benefit expressed as a hypothetical account

- Account grows with annual principal, interest credits

## Cash balance = technically DB plan

- Higher vesting requirement: 3 years of service
- Must satisfy QPSA, QJSA requirements
- Must pay PBGC premiums

| Key Advantages | Key Disadvantages |
|---|---|
| • Reduces investment risk<br>• Participant principal is protected<br>• Benefits are portable<br>• Benefits are subject to PBGC guarantees | • Legacy liability remains<br>• Risks are not completely eliminated<br>• Retirees exposed to longevity risk<br>• Purchasing annuities is expensive |

# Variable Accrual Plan

## Future benefit accrual rate adjusts each year

- Usually based on asset returns for prior year(s)

## Benefits are fixed once they have been accrued

- Pension is sum of each year's accrual
- Pension remains fixed in retirement

**Variable Accrual Formula**

*Illustrative Example*

| Prior Year Investment Return | Prior Plan Accrual Rate for Year | Variable Accrual Rate for Year |
|---|---|---|
| < 0.0% | $100 | $0 |
| 0.0% to 2.9% | $100 | $30 |
| 3.0% to 5.9% | $100 | $70 |
| 6.0% to 8.9% | $100 | $100 |
| ≥ 9.0% | $100 | $140 |

# Variable Accrual Plan *continued*

| Key Advantages | Key Disadvantages |
|---|---|
| • Reduces risk somewhat<br>• Removes subjectivity from benefit/funding decisions<br>• Benefits are fixed once accrued<br>• Benefits are subject to PBGC guarantees | • Legacy liability remains<br>• Risks are reduced but not eliminated<br>• Benefits are fixed once accrued<br>• Variable accrual much less powerful as plan matures<br>• Accrual rate legal issues? |

# Variable Annuity Plan

## Benefits defined as *units* rather than dollars

- Unit value adjusts each year based on asset returns
- Compare actual asset return vs. hurdle rate

## Variable design questions

- Implement floors or caps on benefit amounts?
- Benefits fixed or variable after retirement?

## Pre-transition benefit remains fixed

**Variable Annuity with 5.0% Hurdle Rate**
*Illustrative Example*

| Year 1 Unit Value | Year 1 Asset Return | Year 2 Unit Value |
|---|---|---|
| $100.00 | 10.0% | $100.00 x (1.10 ÷ 1.05) = $104.76 |
| | 5.0% | $100.00 x (1.05 ÷ 1.05) = $100.00 |
| | 0.0% | $100.00 x (1.00 ÷ 1.05) = $95.24 |

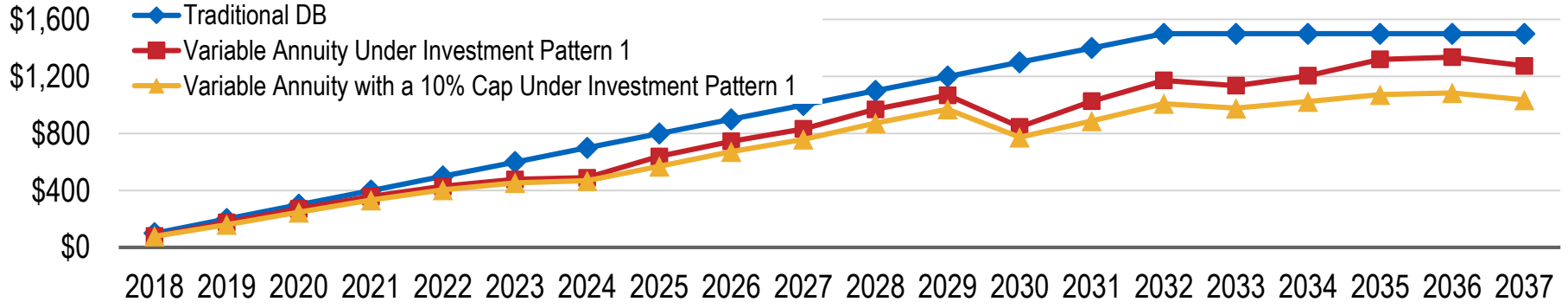
# Variable Annuity Plan *continued*

## Assumed Investment Returns: Median Returns for 1996 – 2015

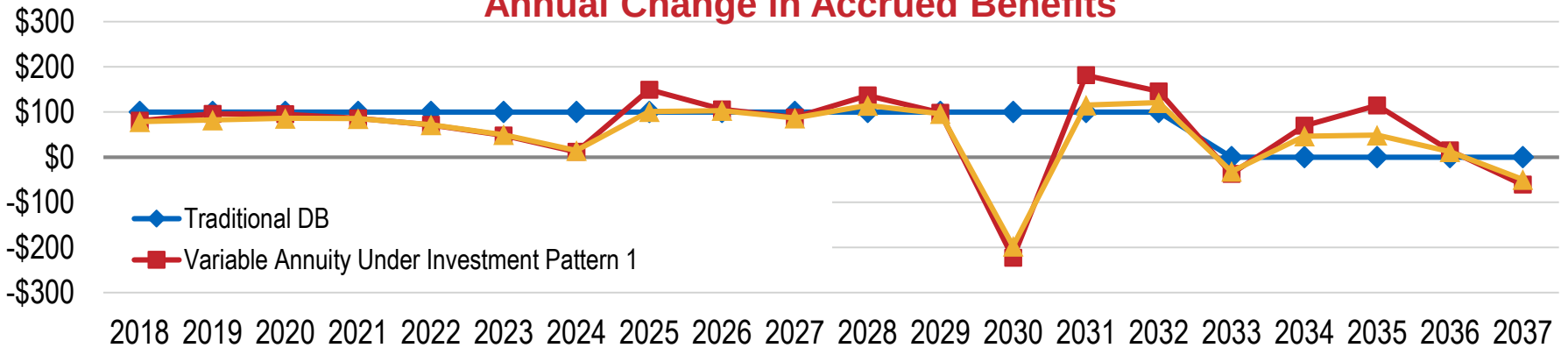
Source: Segal Marco Advisors

| 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.2% | 19.1% | 13.4% | 8.4% | 4.2% | -0.6% | -7.0% | 18.8% | 9.6% | 6.7% | 12.2% | 7.4% | -22.3% | 17.1% | 11.7% | 1.7% | 11.4% | 15.0% | 6.2% | 0.2% |

## Total Accrued Benefits




## Annual Change in Accrued Benefits



# Variable Annuity Plan *continued*

| Key Advantages | Key Disadvantages |
|---|---|
| • Significantly reduces risk to plan sponsor<br>• Removes subjectivity from benefit/funding decisions<br>• Retiree benefits expected to outpace inflation over time<br>• Benefits are subject to PBGC guarantees | • Participant benefits may decline, even after retirement<br>• Adding protections (floors, fixed post-retirement benefit) adds back risk exposure |

# Composite Plan

## Background

- Developed as part of NCCMP “Solutions Not Bailouts” proposals
- Modeled after Canadian plan design

## Key features

- Optional design available to eligible plans
- By definition, neither defined benefit (DB) nor defined contribution (DC)
  - Lifetime income; benefit amount subject to adjustment
  - No unfunded liability, no withdrawal liability
  - No PBGC guarantees, no PBGC premiums
- Legacy plan benefits remain intact, must be funded

| Composite Plan Proposal: A Brief History | Date |
|---|---|
| “Solutions Not Bailouts” report | Feb 2013 |
| “Multiemployer Pension Reform Act” (MPRA) – Passed *without* composite plan proposal | Dec 2014 |
| “Multiemployer Pension Modernization Act” – Draft legislation introduced | Sep 2016 |
| “Give Retirement Options to Workers Act” (GROW Act) | Feb 2018 |

# Composite Plan *continued*

## Restrictions

- Plans in critical status (or projected to be in next 5 years) are ineligible
- 5-year prohibition on employers that withdrew from another multiemployer plan

## Annual certification and realignment program

- Annual certification due 120 days into plan year
- Must adopt "realignment program" if projected funded percentage in 15 years <120%
- Realignment program modifications grouped by "tier:"

| Tier | Realignment Program: Available Corrective Measures |
|---|---|
| I | Increase contributions; reduce future accruals (≥1% of contribution); reduce adjustable benefits |
| II | Reduce accrued benefits not yet in pay status; reduce "non-core" benefits in pay status |
| III | Reduce future accruals (no limit); reduce "core" benefits in pay status |

## Restrictions on amendments increasing benefits

| Effect of Amendment on Increasing Plan Liabilities | ≤3% | >3% |
|---|---|---|
| Current funded percentage, before amendment | ≥110% | ≥110% |
| Current funded percentage, after amendment | ≥100% | ≥140% |
| 15-year projected funded percentage, after amendment | ≥120% | ≥140% |

This is a high-level summary of draft legislation dated February 2, 2018. Provisions are subject to change.

# Composite Plan *continued*

## Legacy funding rules

- Legacy and composite: two components of same plan
- ERISA/PPA rules continue to apply to legacy plan
- **Transition contributions** dedicated to fund legacy liability
  - Initial amount: 25-year amortization based on actuary's assumptions
  - Subsequent gains and losses amortized over 15 years
  - Transition contribution in future years cannot drop below initial rate ("floor")
  - Contributions continue until legacy liability fully funded based on PBGC **assumptions**
- Special rules if legacy plan goes into yellow or red zone
  - Potential anomaly: at least 25% of total contributions must go to composite accruals
- Optional 25-year amortization of unfunded liability in funding standard account

**Because Transition Contributions must continue until the legacy liability is fully funded based on *PBGC assumptions*, the transition period may end up being much longer than 25 years.**

This is a high-level summary of draft legislation dated February 2, 2018. Provisions are subject to change.

# Composite Plan *continued*

| Key Advantages | Key Disadvantages |
|---|---|
| • Similar in many ways to traditional DB design<br>• No PBGC premium on composite plan<br>• No withdrawal liability on composite plan<br>• Clearly defines legacy liability funding requirements | • Clearly defines legacy liability funding requirements<br>• Plan retains some risk; reasonable actions may not meet funding obligations<br>• No PBGC guarantees<br>• Not yet permitted under law |

## Discussion Topics

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# Key Takeaways

- Traditional DB pension model has flaws; as plans mature, exposure to risk increases
- Trustees may wish to consider hybrid plan designs to manage, reduce risk over time
- One size does not fit all; Trustees should find balance between benefits/contributions/risk
- Keep an eye on Capitol Hill