




# Sustainable Defined Benefit Plans


*Michael Overley, Lead Regional Manager*


2020







Submit your  
questions here

File View Help 

▼ Audio 


 ☐ Computer audio  
☒ Phone call  
☐ No audio


**You are connected**

▼ Questions 

*[Enter a question for presenters]*

Send

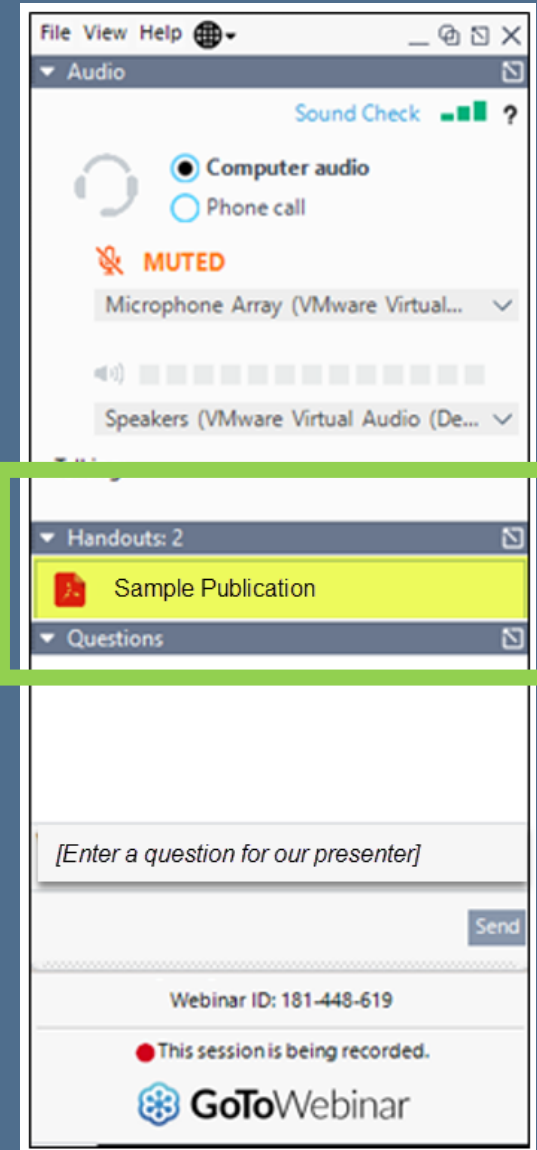
 This session is being recorded.

 GoToWebinar

# Publications

A copy of this presentation and additional publications on this topic are available for you to download

Look here for additional information



# Agenda

---

- Defined Benefit Fundamentals
- How Unfunded Accrued Liability (UAL) Develops
- Amortizing UAL
- Strategies for Addressing UAL



# Defined Benefit Fundamentals

# Defined Benefit Fundamentals

---

- The benefit formula is comprised of three components:



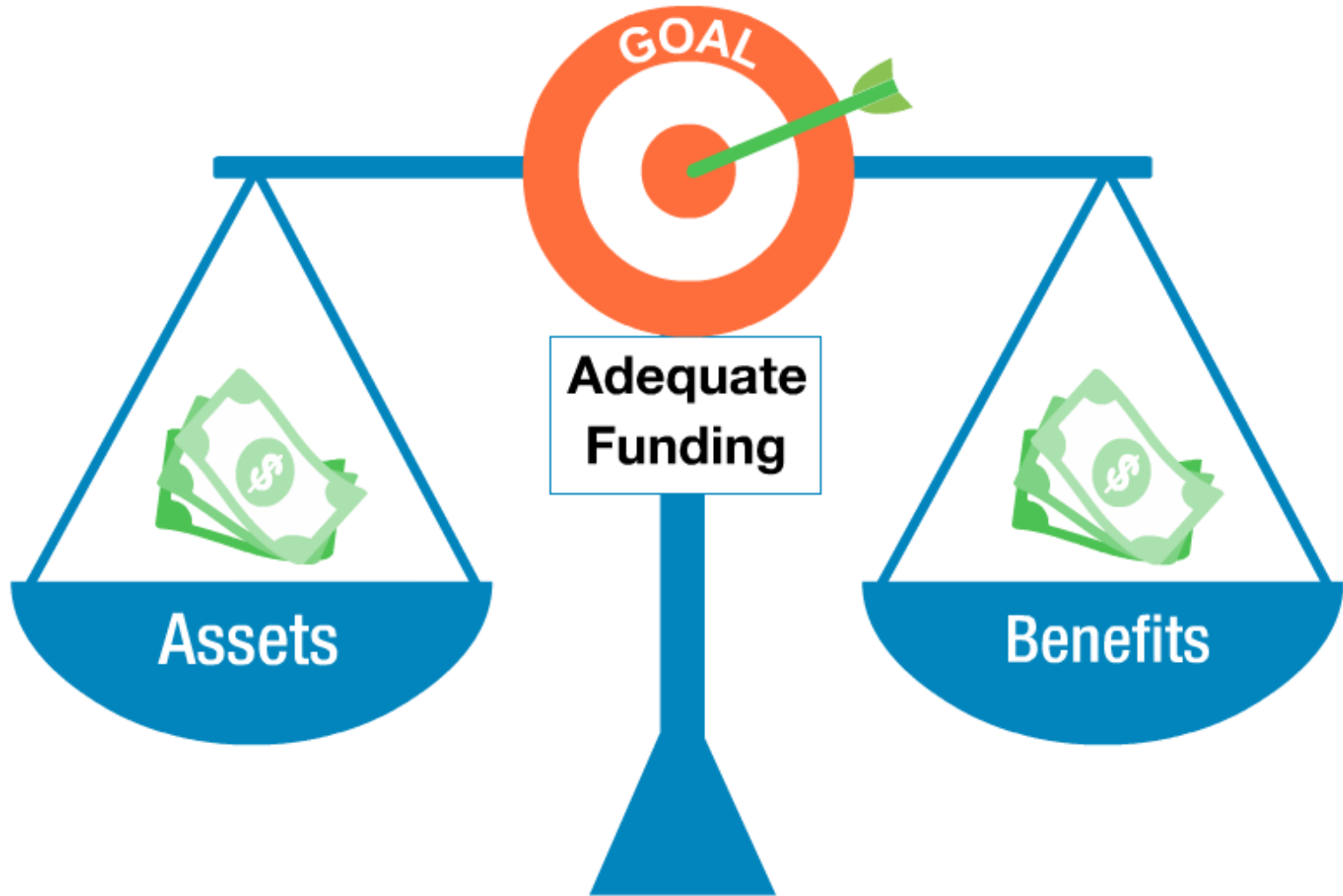
- Plans are pre-funded during the employee's career with contributions typically made by both the employee and employer





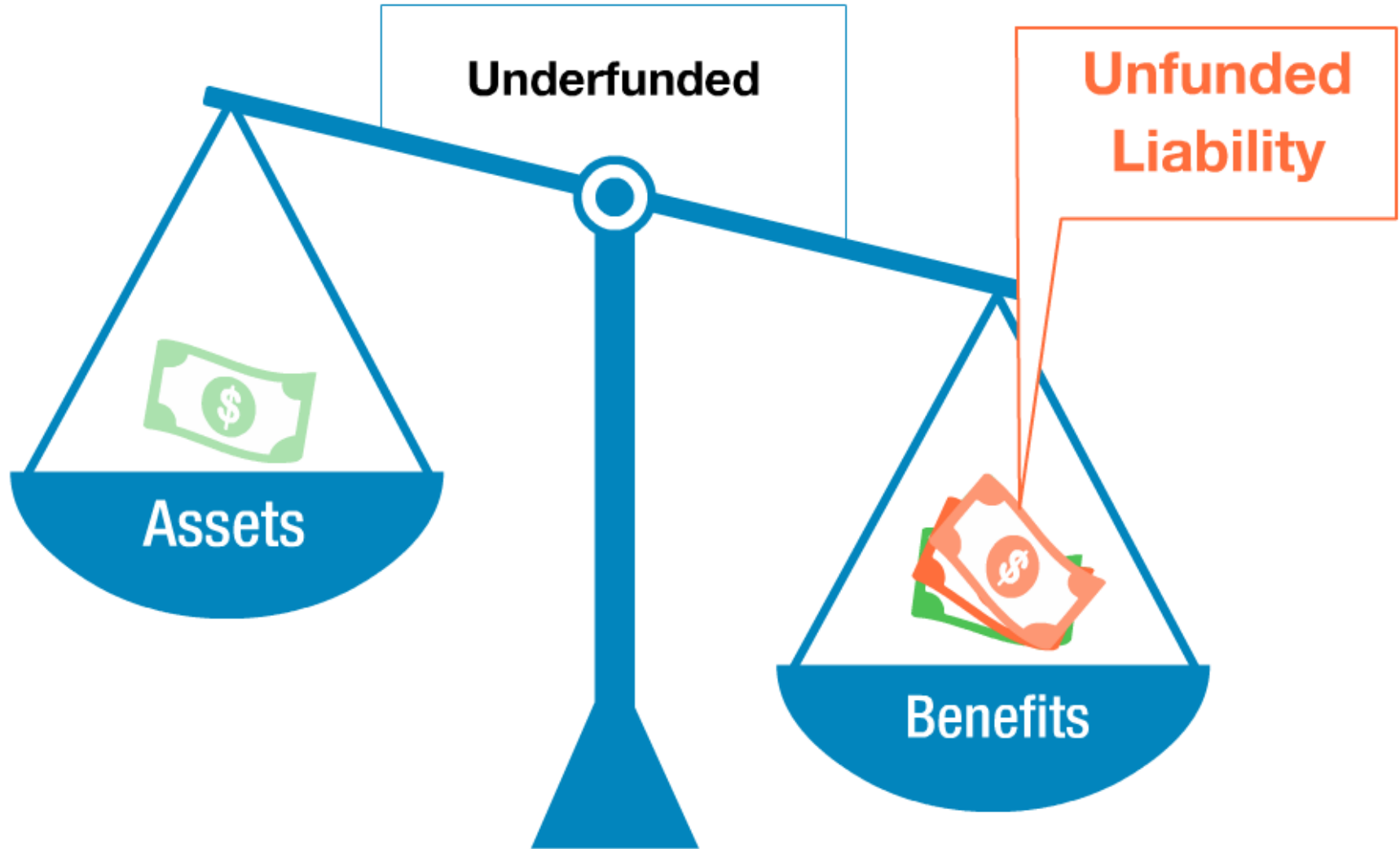
# How Unfunded Accrued Liability (UAL) Develops

# A Fully Funded Plan

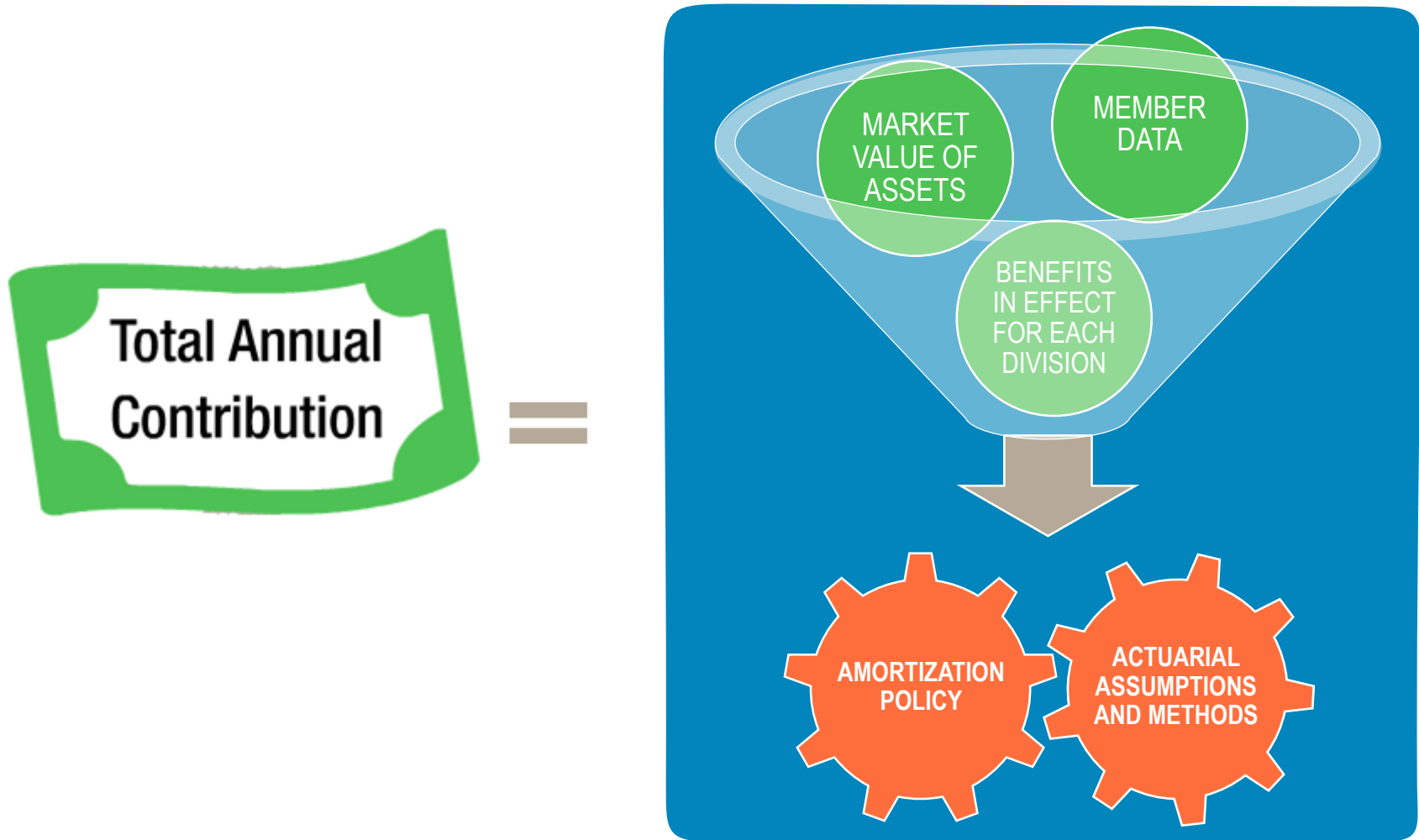




# Unfunded Accrued Liability



# Calculating the Total Annual Contribution



# Total Annual Contribution

---

- The cost of the plan is determined annually and provided in the Annual Actuarial Valuation
- The employer contribution is made of up two parts:



# What is Unfunded Liability?

Unfunded liability is the difference between a plan's estimated pension benefits and assets that have been set aside to pay for them

- The dollar value of the benefits is actuarially determined each year
- Unfunded liability is paid off over a period of years



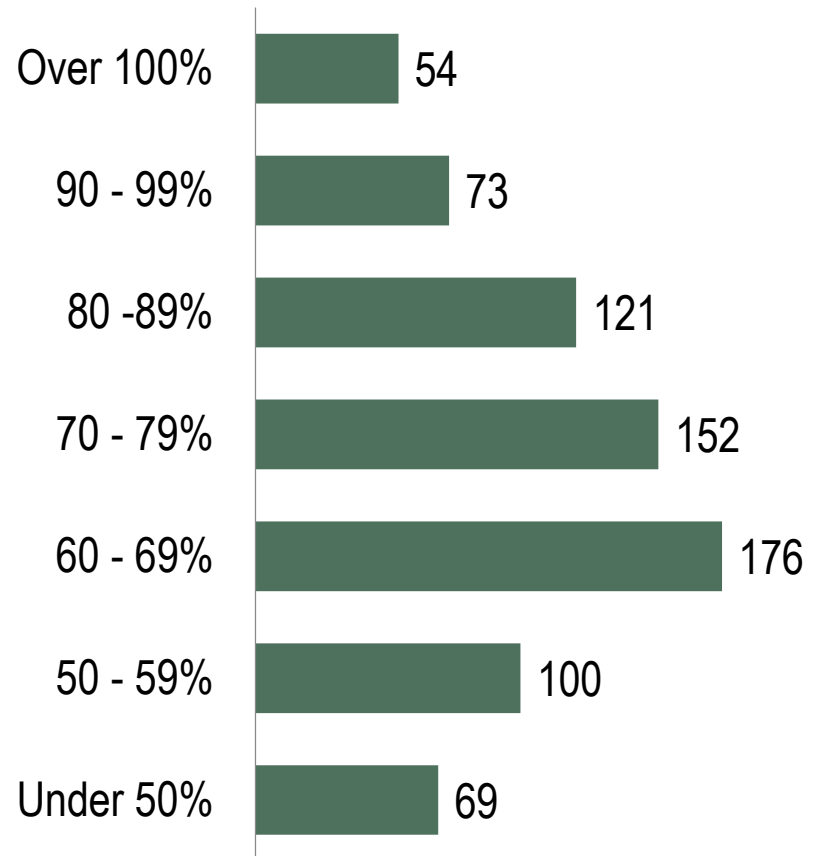
# Why Unfunded Liabilities Develop

---

- Actual experience is different than assumed (liabilities and assets)
  - Market performance
  - Demographic experience
  - Rates of retirement
- Benefit enhancements adopted and not entirely funded
  - Early retirement windows
  - Increased benefit multiplier
  - Cost of Living Adjustment (COLA)
- Higher than projected Final Average Compensation
- Granting prior service for benefits without funding

# Distribution of Funded Percentage

- Understanding a pension plan's funding progress should not be reduced to a single point in time
- Plans within MERS are on a schedule to eliminate legacy unfunded liabilities within 20 years



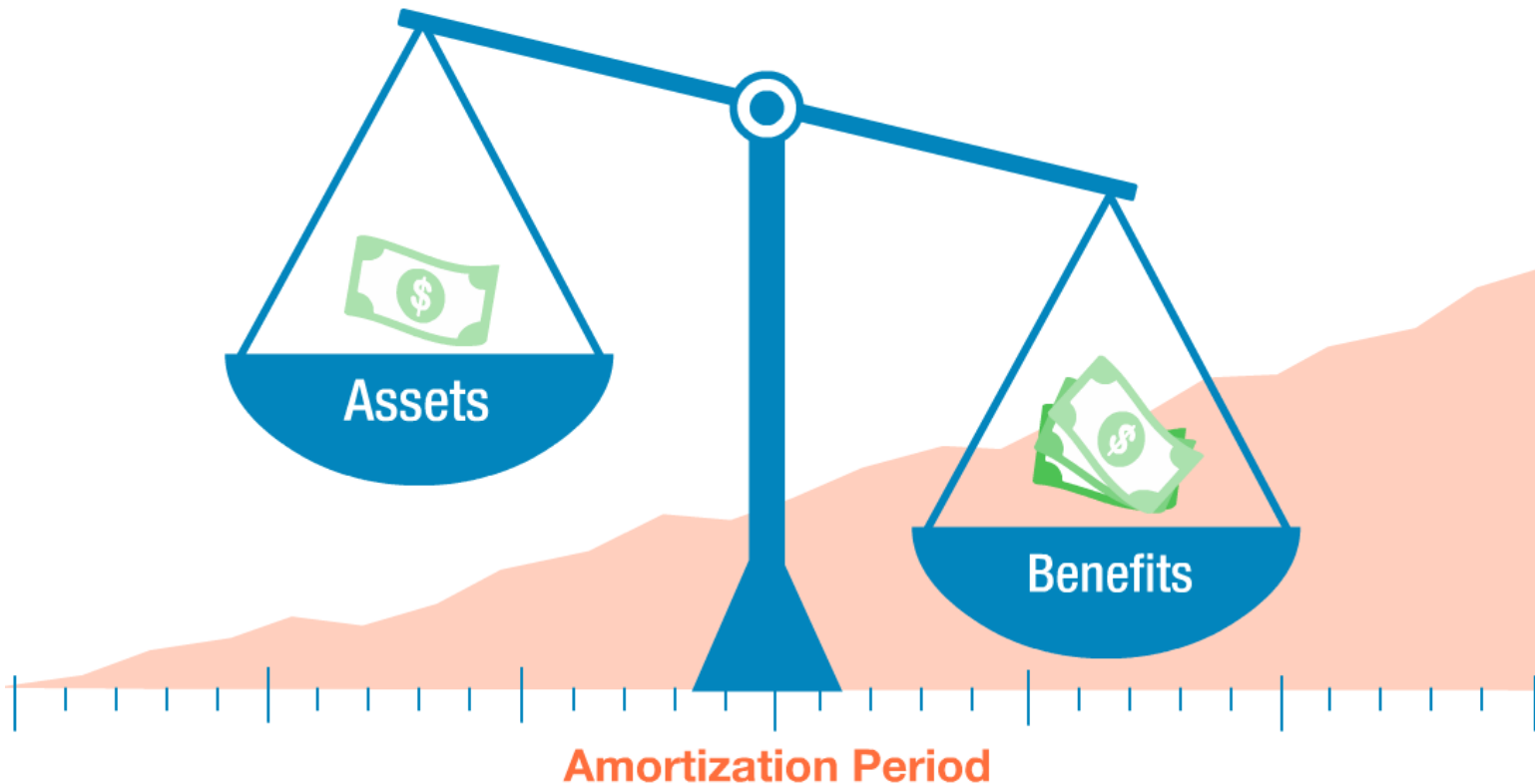
As of 12/31/2019





# Amortizing UAL

# Paying Down Unfunded Liability



Unfunded liability is paid off over a fixed period of time known as the amortization period.

# Fixed Amortization Policy

---

- The amortization policy sets the process for making payments on a plan's unfunded accrued liability
- Historically, public pension plans like MERS, used a rolling amortization period of 30 years
- Since 2005, MERS has been gradually reducing the amortization period to ensure that pension costs of current employees do not shift onto future generations
- The amortization policy doesn't make the benefits cheaper or more expensive; it simply impacts the pattern of contributions

# Amortization Period Extension

---

- Based on feedback from our customers, we recognize that some groups may need additional time
- Employers may request a sustainability analysis to determine if an extension of the amortization schedule for UAL is possible
- Extending the amortization period defers costs into the future, resulting in higher long-term costs



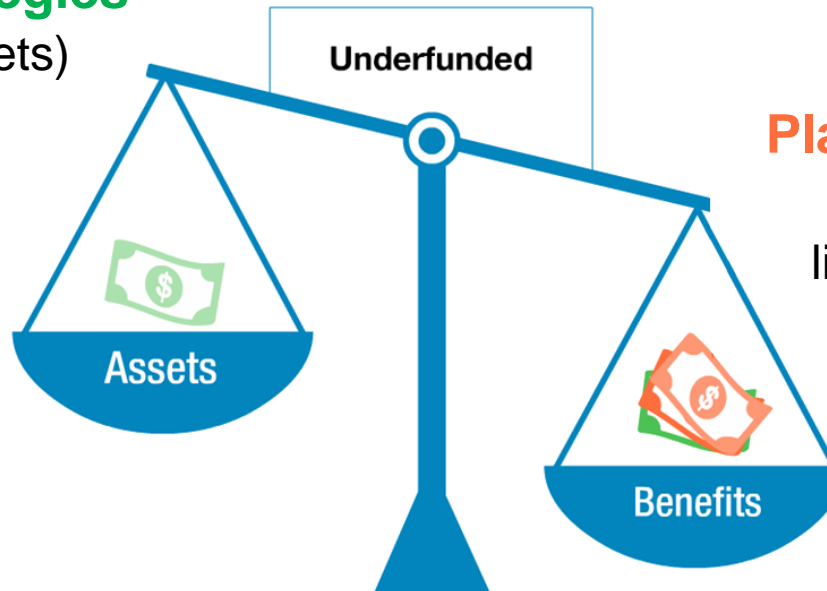
# Strategies for Reducing UAL

# Managing Unfunded Liability

Plans can address unfunded liability two ways:

## Funding Strategies

(Increase assets)



## Plan Design Strategies

(Reduce or eliminate liability moving forward)



# Plan Design Strategies

## Reduce Future Liability for New Hires

- Higher retirement age
- Defined Benefit Plan with lower provisions
- Hybrid Plan
- Defined Contribution Plan

## Reduce Future Liability for Existing Employees

- Lower multiplier going forward
- Eliminate COLA on future service

## Eliminate Accrual of Future Liability

- Plan freeze



# Reduce Future Liability for New Hires

# Higher Normal Retirement Age

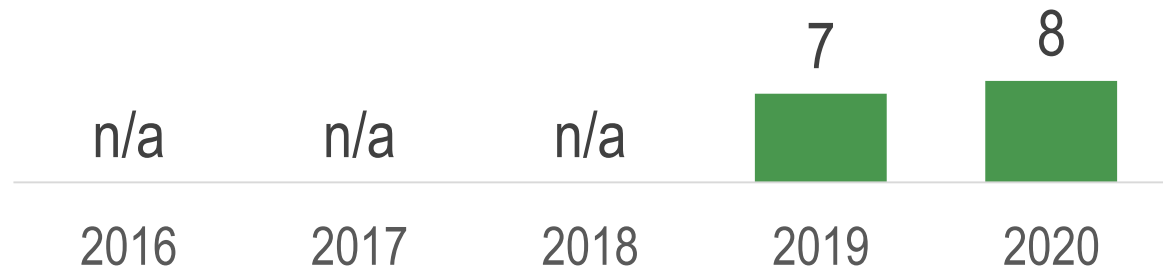
Action

- Higher Normal Retirement Age for participants in newly established divisions

Impact

- Reduces the future liability accrual
- Future benefits will be lower, and therefore less expensive, than the previous benefits offered

Trend



*Divisions that have adopted these strategies as of 6/30/2020.*

# Lower Benefit for New Hires

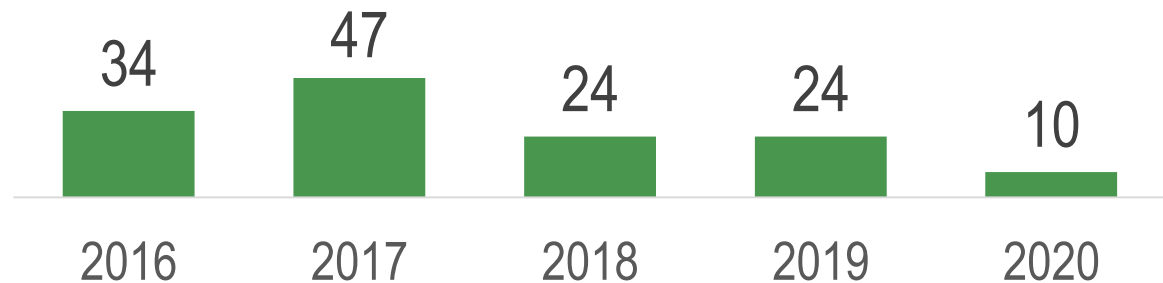
## Action

- Lower Tiered Benefits for New Hires
  - Lower multiplier
  - Removed cost of living adjustments
  - Removed early retirement options
  - Increased vesting period
  - Increased retirement age

## Impact

- Reduces the future liability accrual
- Future benefits will be lower, and therefore less expensive, than the previous benefits offered

## Trend



\* As of 6/30/2020.

# Lower Benefit for New Hires, Cont.

- New hires are covered by a lower tier of either defined benefit or hybrid benefits
- Existing employees are not affected
- Reduces the liability for new hires

Anyone hired **before** 1/1/2020



## Tier I

- 2.5% Benefit Multiplier
- FAC 3
- Vesting of 8 years
- Early Retirement Age 55 with 15 years of service
- COLA

Anyone hired **after** 1/1/2020



## Tier II

- 1.70% Benefit Multiplier
- FAC 5
- Vesting of 10 years
- Early Retirement Age 55 with 25 years of service
- No COLA

# Hybrid Plan for New Hires

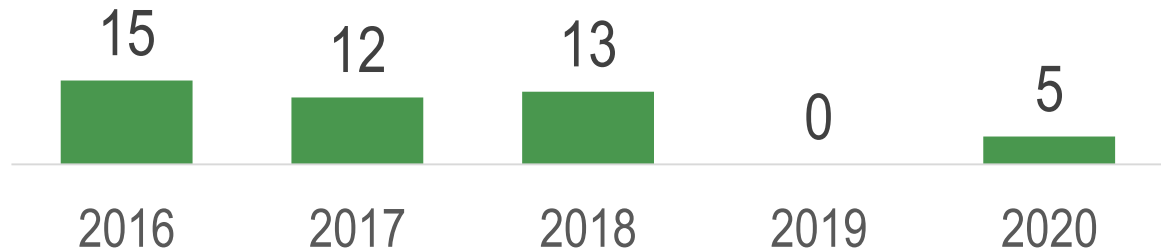
Action

- Hybrid Plan for new hires

Impact

- Reduces future accrual of liabilities
- Future benefits will be lower, and potentially less expensive, than the previous benefits

Trend



*Divisions that have adopted these strategies as of 6/30/2020.*



# Hybrid Plan for New Hires, Cont.

- New hires, rehires and transfers are covered by the Hybrid Plan
  - Active employees may be given a one-time option to convert if municipality meets funding requirements
- Actuarial report is needed to calculate the contributions for the Defined Benefit portion of the Hybrid Plan

## Part 1 – Defined Benefit

Final Average Compensation	×	Service Credit	×	Benefit Multiplier	=	\$ Annual Benefit
----------------------------	---	----------------	---	--------------------	---	-------------------

## Part 2 – Defined Contribution

Employer Contributions	+	Employee Contributions	+	Earnings or Losses in the Market	–	Fees	=	\$ Account Balance
------------------------	---	------------------------	---	----------------------------------	---	------	---	--------------------

\$ Total Retirement Benefit

# Defined Contribution Plan for New Hires

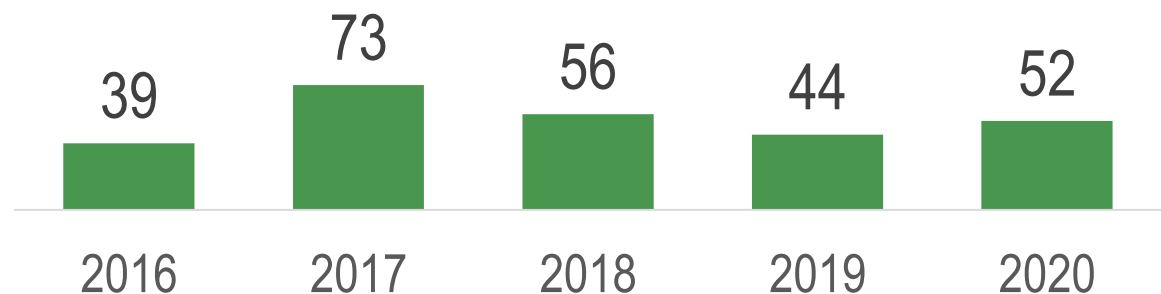
Action

- Defined Contribution Plan for new hires

Impact

- Eliminates future accrual of liabilities for new hires

Trend



*Divisions that have adopted these strategies as of 6/30/2020.*

# Defined Contribution Plan for New Hires, Cont.

Employer Contributions	+	Employee Contributions	+	Earnings or Losses in the Market	-	Fees	=	\$ Account Balance
------------------------	---	------------------------	---	----------------------------------	---	------	---	--------------------

- New hires, rehires and transfers are covered by the Defined Contribution Plan
  - Active employees may be given a one-time option to convert
- A projection study is required
  - Compares long-term cost of current plan with proposed plan
  - Projects employer contributions for next 20 years
- Sustainability analysis determines the required amortization period to ensure closed Defined Benefit Plan is adequately funded

# Comparing Plan Costs

---

- When closing a Defined Benefit Plan, the accrued benefits of the active participants in that plan remain and will continue to accrue
  - Normal Cost payment, plus any payment toward UAL, is required until the last retiree/beneficiary stops drawing a benefit
  - The payment toward UAL will not go away by changing plans
- Implementing Defined Contribution Plan for new hires is not an immediate cost savings
- To compare long-term cost savings, you compare the *Normal Cost* of the Defined Benefit Plan (found on Table 1 of your AAV) to the *proposed employer contribution* of the Defined Contribution Plan
- Once accrued benefits of the past have been fully funded, you will only contribute the Normal Cost

# Reduce Future Liability for Existing Employees



# Bridged Benefit for Existing Employees

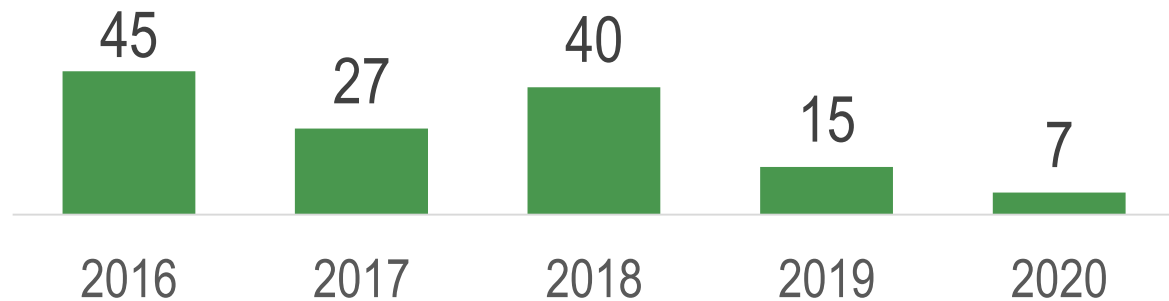
Action

- Bridged benefit for active employees

Impact

- Active employees accrue liability at a lower rate and may reduce existing liability
- New hires receive the reduced multiplier

Trend



*Divisions that have adopted these strategies as of 6/30/2020.*



# Bridged Benefits

- Benefits are offered in parts to existing employees
- Multiplier is lowered on a going-forward basis
- Leaves earned benefits unchanged
- Reduces the liability for new hires and existing employees

Part 1

FAC (may choose frozen FAC)	×	Service Credit	×	Original Benefit Multiplier	=	\$ Original Benefit
-----------------------------	---	----------------	---	-----------------------------	---	---------------------

Part 2

Final Average Compensation	×	Service Credit	×	New Benefit Multiplier	=	\$ New Benefit
----------------------------	---	----------------	---	------------------------	---	----------------

\$ Total Retirement Benefit

# Bridged COLA

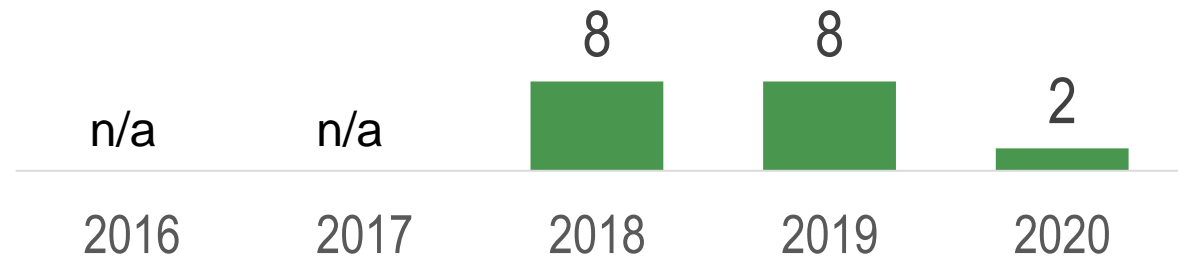
## Action

- Eliminates the COLA on future service credit
- COLA is only applied to portion of benefit earned prior to bridge

## Impact

- Leaves earned benefits unchanged
- Reduces the liability for new hires and existing employees

## Trend



*Divisions that have adopted these strategies as of 6/30/2020.*

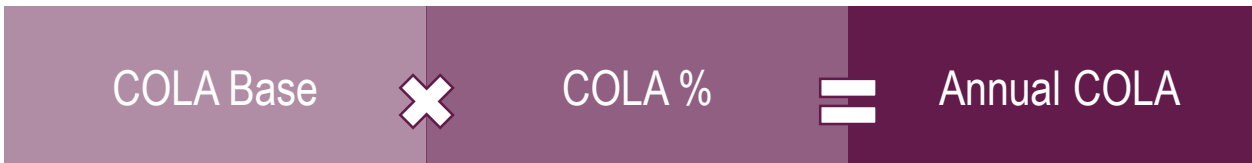
# How a Bridged COLA Works

- Eliminates the COLA on future service credit
- COLA is applied to COLA Base only, which is calculated with frozen FAC
- Leaves earned benefits unchanged
- Reduces the liability for new hires and existing employees

COLA Base is Calculated as of the Bridge Date



Calculating the Annual COLA



# Eliminate Accrual of Future Liability



# Defined Benefit Plan Freeze

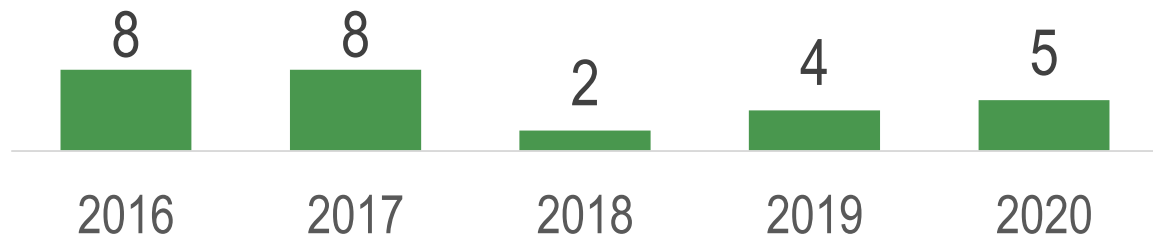
Action

- Defined Benefit Plan freeze

Impact

- ALL employees transition to a new plan type
  - Do not accrue additional service credit
  - FAC is frozen
  - Employees may opt to convert the value of existing service into Defined Contribution Plan
- Eliminates the Normal Cost of the plan
- Does not eliminate UAL – could still increase

Trend



*Divisions that have adopted these strategies as of 6/30/2020.*

# Funding Strategies

---

## Cost Sharing

- Reduces burden on employer

## Voluntary Contributions

- Reduces existing liability

## Bonding

- Available to ***some*** municipalities

# Cost Sharing with Existing Employees

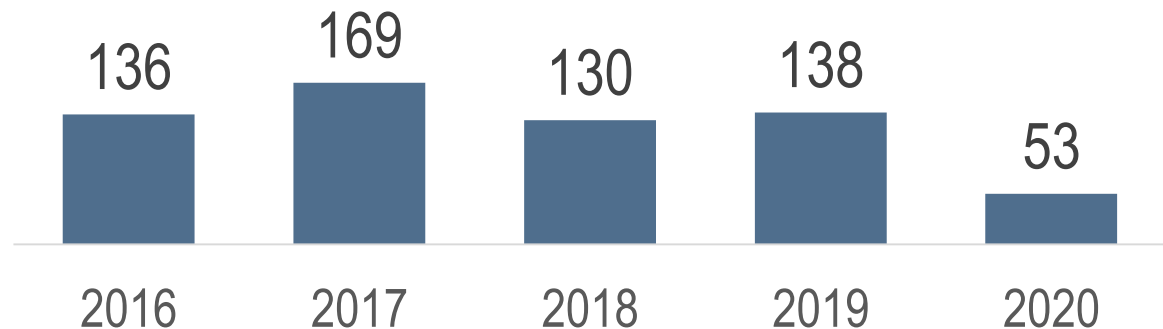
Action

- Employees contribute to help fund the overall cost of the plan

Impact

- Reduces the employer cost, but does *not* affect total cost or the plan's unfunded liability

Trend



*Divisions that have adopted these strategies as of 6/30/2020.*

# Voluntary Contributions

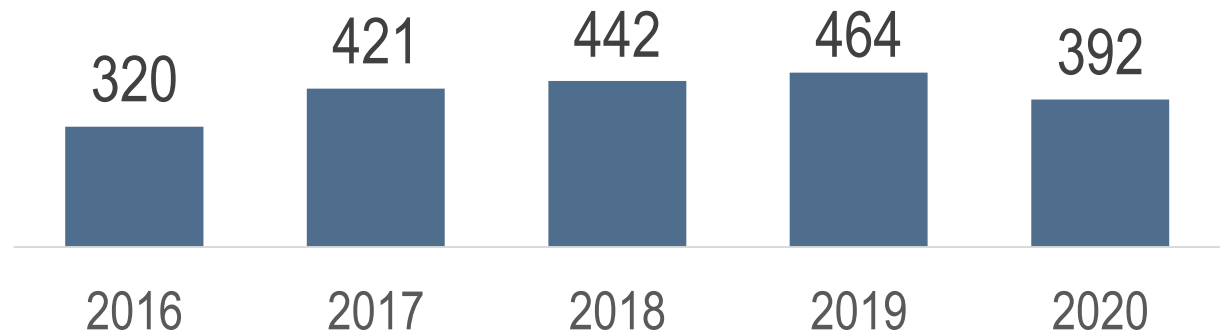
## Action

- Contribute above ARC
- Extra percentage above minimum
- Lump sum payment

## Impact

- Reduces unfunded liability
- Extra dollars are invested and have ability to recognize market returns

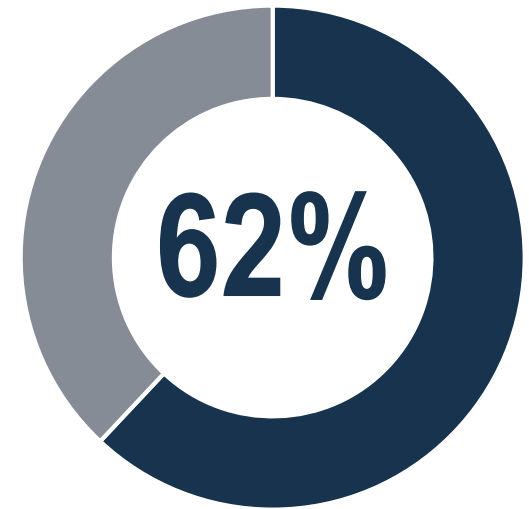
## Trend





# Voluntary Contributions, Cont.

- More than half of customers are making additional, voluntary contributions
- We've recently introduced additional flexibility in how voluntary contributions are applied, including:
  - Allocating additional assets to specific divisions or equally distributed
  - Applying the additional assets to pay down UAL, or to reduce future contributions



Customers Making Additional Contributions in 2019

\*As of 12/31/2019

# Surplus Divisions

*Apply assets directly to UAL by establishing a surplus division*

**Additional Voluntary Contributions to the Plan –**  
\$25,000/year for 15 years increases the funding level while decreasing the ARC

Funded Percentage	ARC	Additional Contributions to Plan	Total Annual Employer Contribution
56%	\$114,000	\$25,000	\$139,000
56%	\$119,000	\$25,000	\$144,000
57%	\$124,000	\$25,000	\$149,000
59%	\$130,000	\$25,000	\$155,000
62%	\$133,000	\$25,000	\$158,000
65%	\$136,000	\$25,000	\$161,000
67%	\$139,000	\$25,000	\$164,000
70%	\$141,000	\$25,000	\$166,000
72%	\$144,000	\$25,000	\$169,000
74%	\$147,000	\$25,000	\$172,000
76%	\$150,000	\$25,000	\$175,000

**Additional Voluntary Contributions to a Surplus Division –**  
\$25,000/year applied directly to UAL for 15 years increases the funding level **without** decreasing the ARC

Funded Percentage	ARC	Additional Contributions to Surplus Division	Total Annual Employer Contribution
56%	\$114,000	\$25,000	\$139,000
56%	\$121,000	\$25,000	\$146,000
57%	\$128,000	\$25,000	\$153,000
59%	\$136,000	\$25,000	\$161,000
62%	\$141,000	\$25,000	\$166,000
65%	\$146,000	\$25,000	\$171,000
68%	\$152,000	\$25,000	\$177,000
71%	\$157,000	\$25,000	\$182,000
74%	\$163,000	\$25,000	\$188,000
76%	\$169,000	\$25,000	\$194,000
79%	\$175,000	\$25,000	\$200,000

Applying assets directly to UAL increases the funding level **without** decreasing the required contributions

87%	\$168,000	\$0	\$168,000
89%	\$174,000	\$0	\$174,000
91%	\$180,000	\$0	\$180,000
93%	\$187,000	\$0	\$187,000
94%	\$194,000	\$0	\$194,000
96%	\$201,000	\$0	\$201,000
98%	\$113,000	\$0	\$113,000
100%	\$117,000	\$0	\$117,000
100%	\$122,000	\$0	\$122,000
100%	\$127,000	\$0	\$127,000

Plan is fully funded in 23 years.

95%	\$210,000	\$0	\$210,000
98%	\$218,000	\$0	\$218,000
102%	\$226,000	\$0	\$226,000
105%	\$234,000	\$0	\$234,000
108%	\$243,000	\$0	\$243,000
111%	\$252,000	\$0	\$252,000
115%	\$261,000	\$0	\$261,000
118%	\$118,000	\$0	\$118,000
122%	\$122,000	\$0	\$122,000
123%	\$127,000	\$0	\$127,000

Plan is fully funded in 18 years.

# Bonding

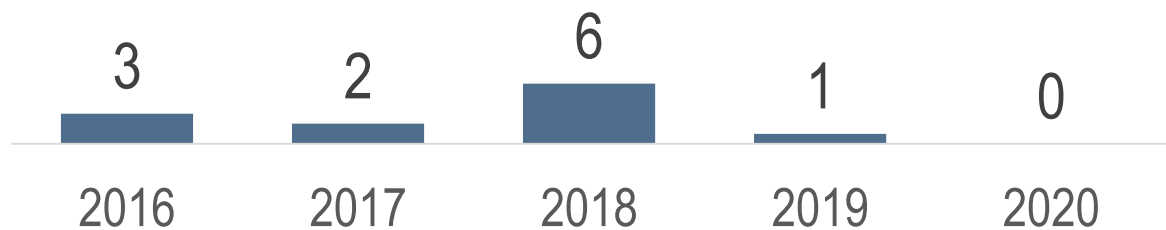
## Action

- Municipalities may bond for all or a portion of their unfunded accrued liabilities

## Impact

- Bond proceeds are deposited and may fully fund the accrued liability
- No guarantee that future unfunded liabilities won't occur

## Trend



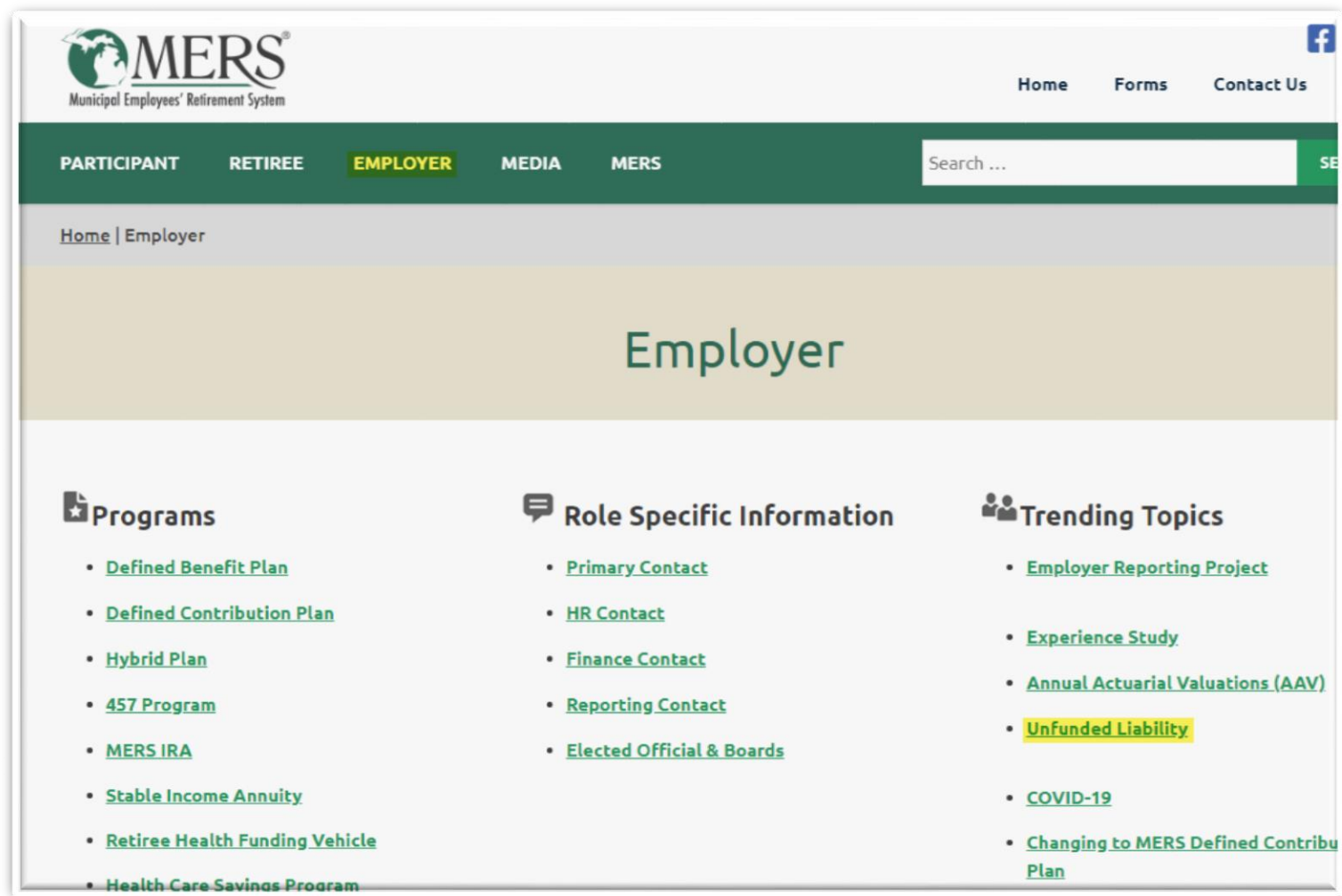
*Municipalities that have adopted these strategies as of 6/30/2020.*

# Bonding Requirements

---

- Revised Municipal Finance Act was amended in 2018:
  - Extend the eligibility period
  - Allow single-A rated municipalities to issue bonds
  - Additional transparency
- Must close plan to new employees
- Bond amount cannot exceed the difference between 95% of the actuarial value of liabilities and 100% of the actuarial or market value of assets

# Resources



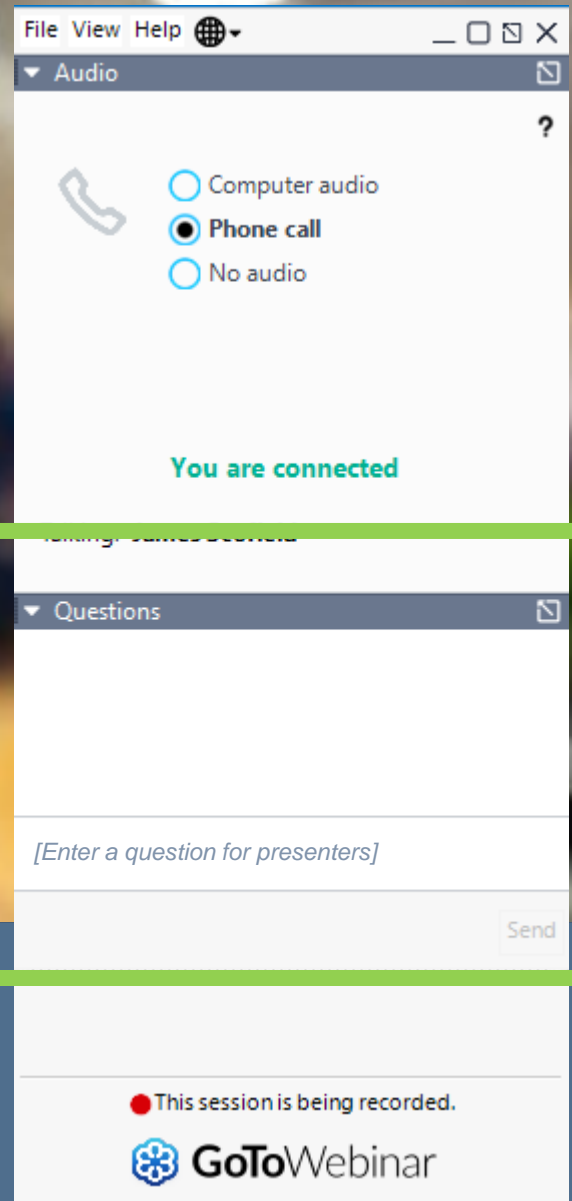
The screenshot displays the MERS (Municipal Employees' Retirement System) website. At the top, the MERS logo is on the left, and navigation links for Home, Forms, and Contact Us are on the right. Below this is a green header bar with links for PARTICIPANT, RETIREE, EMPLOYER (highlighted), MEDIA, and MERS. A search bar is located on the right side of this bar. Below the header, a breadcrumb trail shows 'Home | Employer'. The main content area has a large 'Employer' title. Below the title, there are three columns of links:


- Programs**
  - [Defined Benefit Plan](#)
  - [Defined Contribution Plan](#)
  - [Hybrid Plan](#)
  - [457 Program](#)
  - [MERS IRA](#)
  - [Stable Income Annuity](#)
  - [Retiree Health Funding Vehicle](#)
  - [Health Care Savings Program](#)
- Role Specific Information**
  - [Primary Contact](#)
  - [HR Contact](#)
  - [Finance Contact](#)
  - [Reporting Contact](#)
  - [Elected Official & Boards](#)
- Trending Topics**
  - [Employer Reporting Project](#)
  - [Experience Study](#)
  - [Annual Actuarial Valuations \(AAV\)](#)
  - [Unfunded Liability](#) (highlighted)
  - [COVID-19](#)
  - [Changing to MERS Defined Contribution Plan](#)





Submit your  
questions here

**What questions  
can we answer?**




File View Help 

▼ Audio 


 ☐ Computer audio  
☒ Phone call  
☐ No audio


**You are connected**

▼ Questions 

*[Enter a question for presenters]*

Send

 This session is being recorded.

 GoToWebinar

# Contacting MERS of Michigan

---

## MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM

1134 Municipal Way  
Lansing, MI 48917

800.767.MERS (6377)

[www.mersofmich.com](http://www.mersofmich.com)



*This presentation contains a summary description of MERS benefits, policies or procedures. MERS has made every effort to ensure that the information provided is accurate and up to date. Where the publication conflicts with the relevant Plan Document, the Plan Document controls.*