DERP: Understanding a Defined Benefit Plan and the Contribution Rate

October, 2019
What is a Defined Benefit (DB) plan?
- A guaranteed lifetime pension benefit
  - For you, and your beneficiary if desired
  - Amount determined by a calculation of Years of Service X Average Monthly Salary X Multiplier*
- No Investment Risk for the employee
  - No risk of your retirement benefit being reduced as a result of investment performance, ability to save, or lack of investment knowledge
- No Longevity Risk for employee
  - You can not outlive your benefit

* Multiplier (2% or 1.5%) determined by one's date of hire
Defined Benefit vs. Defined Contribution

**Defined Benefit Plan**
- Retirement income is guaranteed for life
- Pension amount is based on earnings and years of service
- Contributions are made by employer and employee
- Investment professionals are responsible for investing contributions
- If there’s a shortfall, contributions increase to fill the gap
- Provides additional benefits (per next slide for DERP)

**Defined Contribution Plan**
- Funds are depleted as spent
- Amount available at retirement depends on investment performance and timing of retirement
- Contributions are made by employee, sometimes also by employer
- Employee is responsible for investing contributions
- Shortfalls are not filled; member’s balance can reach zero during retirement years
- Provides no other benefits
Other DERP Benefits

- Health benefits
  - Two forms of subsidy:
    - Access to group plans for medical, dental, and vision - at lower than market rates for age group
    - Direct subsidy for premiums throughout retirement

- Disability benefits
  - On and off-the-job
  - Immediate eligibility for on-the-job disability

- Death benefits
  - Immediate eligibility
What does “Funded Status” Mean?

- Funded status is a calculation which compares the fund’s total assets to the fund’s total liabilities for all current and future retirees. It is calculated, by the actuary, to answer: What percentage of the projected future assets needed to meet the future liabilities is on hand today?

- Funded status does not impact what any current or future retiree is owed or will be paid

- DERP’s current Funded Status is 62.2%
  - Market downturns impact Funded Status, along with changes to actuarial methods and assumptions
DERP-Specific Reasons for Lowered Funded Status:

- Slow amortization of investment losses
- Prudent actions to lower our Assumed Rate of Return
- Prudent actions to recognize longer life-expectancy
How Are Contribution Rates Determined?

- Annually DERP’s independent actuary calculates the total percentage-of-pay Required Contribution.

- Total Contribution includes two components:
  - The cost for the current year of service earned by employees for all related benefits (not just monthly pension benefits).
  - A payment to reduce the unfunded liability.

- Total Contribution for 2019 is 21.5%.

- Total Contribution increasing to 25% for 2020.
Why a Contribution Increase for 2020?

- The increased contribution rates are primarily the result of DERP’s new actuary recommending, and the Retirement Board adopting, prevailing, more conservative methods to assess the pension plan’s funded status.
  - Most impactful change was lowering the amortization of the unfunded liability from 30 years to 20 years.

- Not a result of investment earnings.
  - 2018 investment returns in the top 25% of peer funds nationally.
  - Returns through 3rd Quarter 2019 are estimated to be 8.9%.
  - Long-term returns (over the last 30+ years) are 8.5%.

- Formal request to the City (Mayor and DoF) regarding the TOTAL contribution required.
Funded Status and Contribution Rate Projections

- The total contribution rate is expected to increase to 25% in 2020, with gradual increases until 2023 as the deferred asset losses are recognized (over four years) which increases the total payment rate.
- If assumptions are met, cost anticipated to remain stable around 27% of payroll until the existing UAL is paid for after 20 years.
City’s Process for Determining DERP Contribution Split

- The City and County of Denver’s financial health and sustainability is a priority
- DERP’s financial health and solvency impacts the City’s overall financial health
- The City and County of Denver has always met its full required contribution
- No policy exists when determining the employee/employer split, but in many of the most recent years the City has absorbed at least half of the increase
- Revenue projections for the City and the impact to employees are both considered when determining the split that is built into the City’s budget
- The City and County of Denver must have a balanced budget on January 1 and City Council must pass the budget by the end of November
Questions and Answers

- DERP Funded Status and Contribution Rate FAQ is a great resource

- For additional questions, please contact DERP Membership Services
  - mbrsvs@derp.org
  - (303) 839-5419
Appendix

Investment performance as of 6/30/19, annualized, net of all fees:

<table>
<thead>
<tr>
<th></th>
<th>1 Year</th>
<th>3 Years</th>
<th>5 Years</th>
<th>7 Years</th>
<th>10 Years</th>
<th>Since 1986</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fund Return</td>
<td>4.6%</td>
<td>8.9%</td>
<td>4.9%</td>
<td>8.1%</td>
<td>8.9%</td>
<td>8.5%</td>
</tr>
</tbody>
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• We expect returns to be highly variable. There will be good years and bad years, but over an appropriately long time frame, our average return will be (and has been) quite good.

• The portfolio lost 2.4% in 2018, but year to date, through the first three quarters of 2019, our return is an estimated 8.9%.