# North Dakota Teachers Fund for Retirement Actuarial Valuation as of July 1, 2025

October 30, 2025

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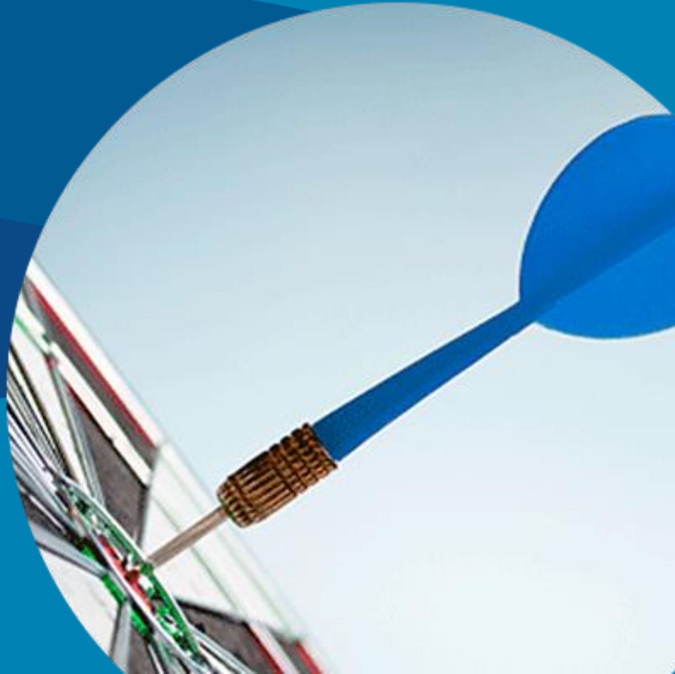

# Today

- FY 2025 Experience and Key July 1, 2025 Results
- Looking Forward – Plan Outlook

# Stability of Recent Results

- Projected year of full funding
  - 2043 in 2024 Valuation
  - 2042 in 2025 Valuation
  - On track to meet Retirement Board Funding Objectives
- New assumptions and methods adopted by the Board in April 2025, first effective with this valuation
  - 7.15% return assumption
  - Small adjustments to the salary increase and demographic assumptions
  - Increased liability by $44 million and increased ADC by 0.11%

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# Key Factors in FY 2025 Experience

- **Asset experience**
  - Fair value return 11.2%
  - Actuarial (smoothed) value return 8.4%
  - Compares to 7.25% assumption
  - Biggest impact item
  - Positively impacts funded ratio, UAAL, ADC, funding period
    - Basically everything
  - Net cash flow
    - FY 2024: -2.1%
    - FY 2025: -2.0%

# Key Factors in FY 2025 Experience

- **Salary experience**
  - increased less than expected
    - both individual salary and total payroll
  - Impacts different key metrics differently
- **Active membership growth**
  - Counts increased from 11,945 to 12,012

# Key Census Information

| | July 1, 2025 | July 1, 2024 |
|---|---|---|
| a. Actives | | |
| i. Total Active Count | 12,012 | 11,945 |
| ii. Total Annual Compensation | $ 849,841,395 | $ 831,008,910 |
| iii. Average Projected Compensation | 70,749 | 69,570 |
| iv. Average Age | 41.6 | 41.3 |
| v. Average Service | 11.6 | 11.3 |
| b. Terminated Members Still Entitled to Benefits | 4,262 | 4,025 |
| c. Retirees and Beneficiaries | | |
| i. Total Annuitant Count | 9,664 | 9,693 |
| ii. Total Monthly Benefits | $ 22,630,622 | $ 22,405,149 |
| iii. Average Monthly Benefit | 2,342 | 2,311 |
| d. Total Members Included in Valuation | 25,938 | 25,663 |

# Key Results – Static
# $ in billions

- Improvement slightly more than expected

| | 7/1/2025 | 7/1/2024 |
|---|---|---|
| Actuarial Accrued Liability | $ 4.93 | $ 4.76 |
| Actuarial Value of Assets (AVA) | 3.62 | 3.41 |
| Unfunded Liability (AVA-basis) | 1.31 | 1.35 |
| Funded Ratio (AVA-basis) | 73.4% | 71.6% |
| Actuarial Accrued Liability | $ 4.93 | $ 4.76 |
| Fair Value of Assets (FVA) | 3.65 | 3.35 |
| Unfunded Liability (FVA-basis) | 1.28 | 1.41 |
| Funded Ratio (FVA-basis) | 74.1% | 70.4% |

# Key Results – Forward Looking
# % of pay

- Payroll/population growth means we're still on track for funding objectives

| | 7/1/2025 | 7/1/2024 |
|---|---|---|
| Actuarially Determined Contribution (ADC) | 23.85% | 24.21% |
| Employee Contribution Rate | 11.75% | 11.75% |
| Net Employer ADC | 12.10% | 12.46% |
| Actual Employer Contribution Rate | 12.75% | 12.75% |
| Contribution Shortfall/(Surplus) | -0.65% | -0.29% |
| Funding Period | 17 years | 19 years |

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# LOOKING FORWARD

# If All Goes As Planned
# Long-term slightly improved from last year

**Deterministic Projection of the Unfunded Liability**
**$ in Millions**

| As of July 1, (a) | Payroll For Next FY (b) | Contribution as % of Payroll (c) | Normal Cost and Admin as % of Payroll (d) | Net Amortization [c - d] * b (e) | UAAL BOY (f) | Interest (g) | Net Principal Contribution e - g (h) | Funding Period (i) |
|---|---|---|---|---|---|---|---|---|
| 2025 | $895 | 24.50% | 12.53% | $107 | $1,309 | $90 | $17 | 17 |
| 2026 | 924 | 24.50% | 12.53% | 111 | 1,292 | 88 | 22 | 16 |
| 2027 | 954 | 24.50% | 12.53% | 114 | 1,270 | 87 | 27 | 15 |
| 2028 | 985 | 24.50% | 12.53% | 118 | 1,242 | 85 | 33 | 14 |
| 2029 | 1,017 | 24.50% | 12.52% | 122 | 1,209 | 82 | 40 | 13 |
| 2030 | 1,050 | 24.50% | 12.52% | 126 | 1,170 | 79 | 47 | 12 |
| 2031 | 1,084 | 24.50% | 12.52% | 130 | 1,123 | 76 | 54 | 11 |
| 2032 | 1,119 | 24.50% | 12.53% | 134 | 1,069 | 72 | 62 | 10 |
| 2033 | 1,156 | 24.50% | 12.53% | 138 | 1,007 | 67 | 71 | 9 |
| 2034 | 1,193 | 24.50% | 12.53% | 143 | 935 | 62 | 81 | 8 |
| 2035 | 1,232 | 24.50% | 12.52% | 148 | 854 | 56 | 92 | 7 |
| 2036 | 1,272 | 24.50% | 12.52% | 152 | 763 | 49 | 103 | 6 |
| 2037 | 1,313 | 24.50% | 12.52% | 157 | 660 | 42 | 116 | 5 |
| 2038 | 1,356 | 24.50% | 12.52% | 162 | 544 | 33 | 129 | 4 |
| 2039 | 1,400 | 24.50% | 12.52% | 168 | 415 | 24 | 144 | 3 |
| 2040 | 1,445 | 24.50% | 12.52% | 173 | 271 | 13 | 160 | 2 |
| 2041 | 1,492 | 24.50% | 12.52% | 179 | 111 | 2 | 177 | 1 |
| 2042 | 1,541 | 15.50% | 12.52% | 46 | (66) | (6) | 52 | - |
| 2043 | 1,591 | 15.50% | 12.52% | 47 | (119) | (10) | 58 | - |
| 2044 | 1,643 | 15.50% | 12.51% | 49 | (176) | (14) | 63 | - |

Assumes Actuarial Value of Assets earns 7.15% and all assumptions are met

# Short Term Sensitivity Analysis

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FY 2026 Return | 24% | 16% | 7.15% | 0% | -7.15 | -16% | -24% |
| Employer ADC | 11.00% | 11.50% | 12.05% | 12.50% | 12.94% | 13.50% | 14.00% |

- There is an expectation that with a 0% return in FY 2026, the ADC would continue to be less than the current statutory contribution rate of 12.75%
  - Returns less than 0% may lead to an ADC in excess of 12.75%

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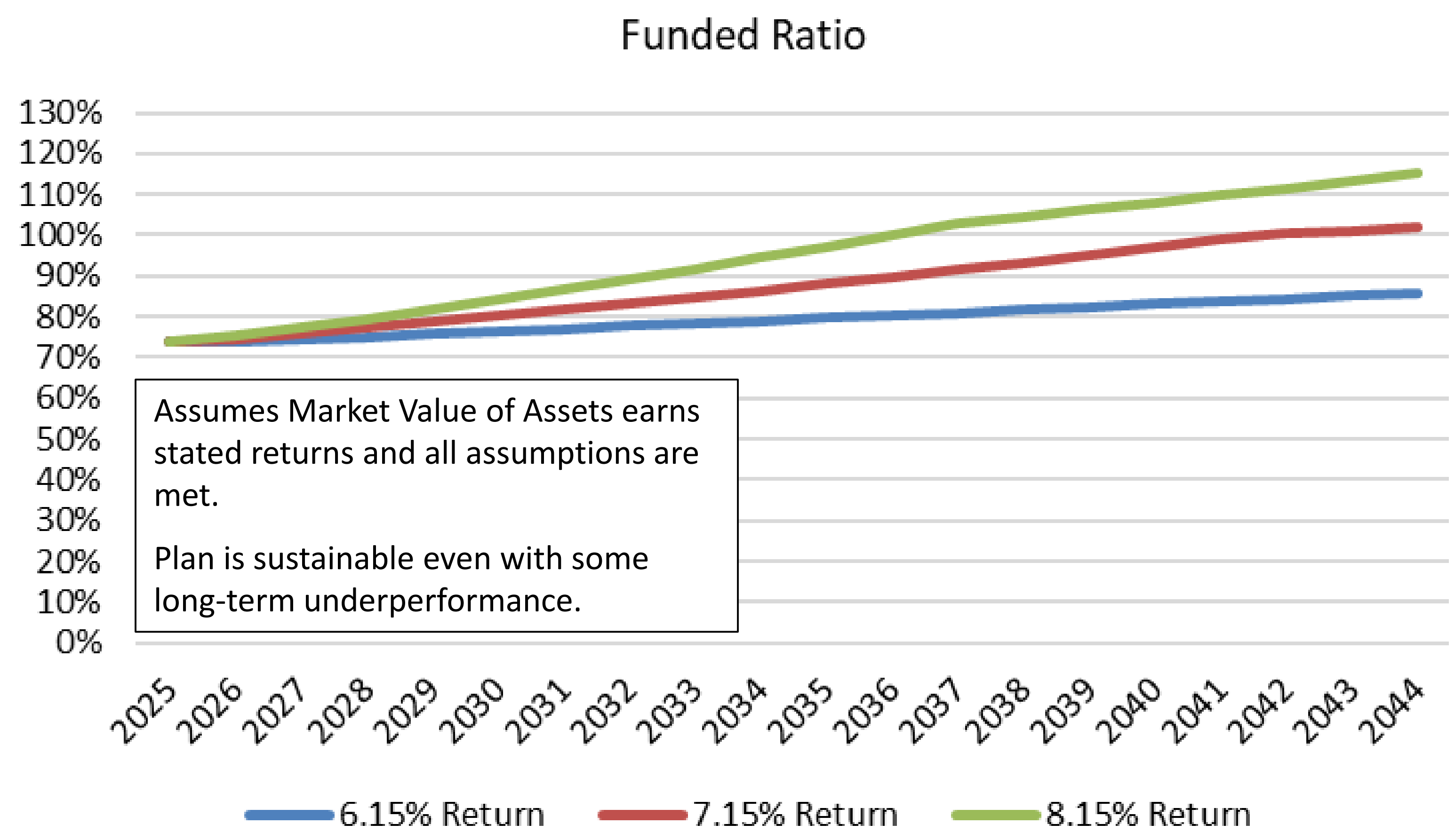
# Long Term Projections



# Summary

- TFFR statutory contributions still meeting Board funding policy objectives
  - Full funding expected in 17 years
- Slim contribution margins, but recent stability and improvement is encouraging
- In addition to the usual (investment return), will be keeping close eye on active population (counts and payroll growth) to make sure reliance on future payroll remains reasonable

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# Disclaimers

- This presentation is intended to be used in conjunction with the actuarial valuation report issued on October 20, 2025. This presentation should not be relied on for any purpose other than the purpose described in the valuation report.
- This presentation shall not be construed to provide tax advice, legal advice or investment advice.