

City of Denton Pension Fund Summary

Presented to the City Council

February 14, 2017

Presentation Overview

- Summarize recent news surrounding pension plans and key terms.
- Briefly review history and governance structures associated with the Texas Municipal Retirement System (TMRS) and the Denton Firemen's Relief and Retirement Fund (DFRRF).
- Provide overview of benefit design and funding methodology for each fund.
- Discuss asset allocation, return assumption, and investment performance.
- Discuss other key actuarial assumptions and funding status.
- Provide overall summary of each plan and key management issues to be considered in the future.

Pension Plan News

- Recently, the news media has widely reported funding and management issues with several pension funds (e.g. Dallas, Houston, Chicago, etc.)
- While each plan is different, there are a few common problems with these plans including:
 - Pension systems not receiving sufficient and required contributions.
 - Unsustainable benefit structures.
 - Unrealistic actuarial assumptions (e.g. investment rate of return) and inflexible options for employer.
- Fortunately, the City of Denton operates pension plans which are separate from any of these cities.
- Conservative actuarial assumptions, strong funding policies, and responsible management practices ensure these plans remain sustainable over time.

Pension Plan Key Terms

- Actuarial Value of Assets (AVA)
 - Return on Investment Assumption
- Actuarial Accrued Liability (AAL)
 - Mortality and demographic assumptions
 - Retirement assumptions
 - Cost of Living Adjustments (COLAs)
 - Inflation, benefit levels, etc.
- Unfunded Actuarial Accrued Liability (UAAL)
- Funded Ratio – AVA/AAL

Texas Municipal Retirement System (TMRS)

TMRS Overview

- Created by the Texas legislature in 1947.
- Denton became a contributing member in 1952.
- Governed by a six-member board of directors appointed by the Governor of Texas.
 - Although appointed by the Governor, and approved by the Senate, TMRS is not dependent upon the State, and does not receive any state funding.
 - Advisory Committee provides input to Board on variety of topics.
- Multi-employer plan which provides benefits to over 870 cities across Texas.
 - While management of fund is combined, each city represents a separate plan which is independently determined by the City.
 - Each city decides upon the level of benefits that is appropriate.
- Total assets of TMRS statewide are approximately \$25.0 Billion.

TMRS Overview (Cont'd)

As of December 31, 2015

- Number of employees and retirees covered by TMRS statewide.
 - Active Employees – 106,894
 - Retirees – 56,481
 - Inactive employees entitled but not yet receiving benefits – 50,707
 - Total – 214,082
- Number of employees and retirees in Denton.
 - Active Employees – 1,188
 - Retirees – 498
 - Inactive employees entitled but not yet receiving benefits – 443
 - Total – 2,129

TMRS Benefit Design

- Cities are able to select from a menu of options available in the TMRS statute in order to design a pension benefit appropriate for their community.
 - State law requires employee contributions and cities to pay actuarially determined contributions.
- Hybrid of defined benefit and defined contribution plan.
 - Benefits are based on “cash balance” of plan accumulated at date of retirement.
- All eligible employees are required to participate in TMRS except most Fire personnel.
- For Denton, the following major design benefits have been implemented:
 - Employees contribute 7% of their compensation into the plan (Cities can select 5%, 6%, or 7% of earnings).
 - The City contributes a matching percentage equivalent to 200% of the employees contribution (Cities can select, 100%, 150%, or 200%).
 - Annual cost of living adjustments are provided to retirees at an amount equivalent to 70% of the CPI.
- Most recent significant benefit selections were approved by City Council in early 2000s.
 - Increased employee deposit rate from 6% to 7% (2000) and adopted 5 year vesting (2002).

TMRS Benefit Design (Cont'd)

- Employees vest with the plan after 5 years of service.
- Members can retire at age 60 and above with at least 5 years of service.
- Employees are eligible to retire after 20 years of service regardless of age.
 - Again, the benefits earned are equivalent to the actual account balance of each employee (employee and employer contributions plus interest.)
- TMRS benefit design in Denton is similar or identical to most other major cities (that participate in TMRS) in the DFW region.

Recent History

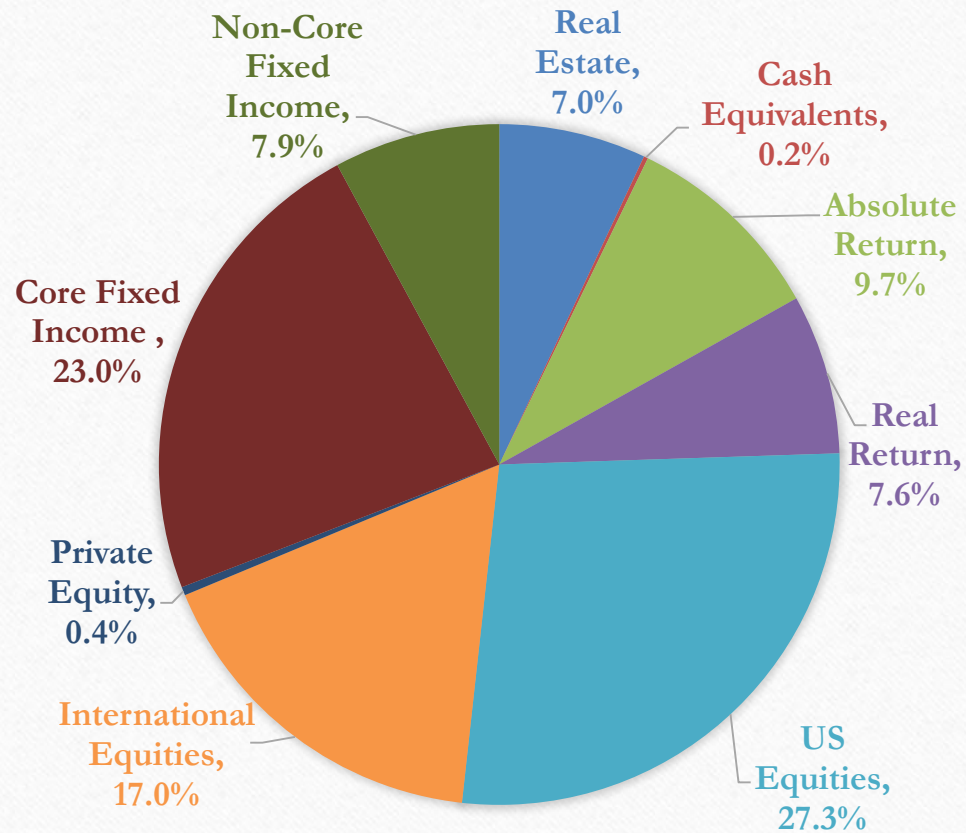
- TMRS has made a series of proactive changes to improve funding over the past decade. Among the changes:
 - In 2008, TMRS changed from Unit Credit to Projected Unit Credit Actuarial Method to properly value liabilities.
 - In 2015, the system synched with GASB changes and began using the Entry Age Normal actuarial method.
 - TMRS also closed the amortization schedule to no more than 30 years, diversified its investment portfolio, and stabilized rates.
- After detailed discussions with the City Council, City decided to “Phase In” to higher contributions over a period of 8 years from 2009 to 2016.
 - Due to better than expected financial performance, City began paying the “Full Rate” in 2012.

Recent History (Cont'd)

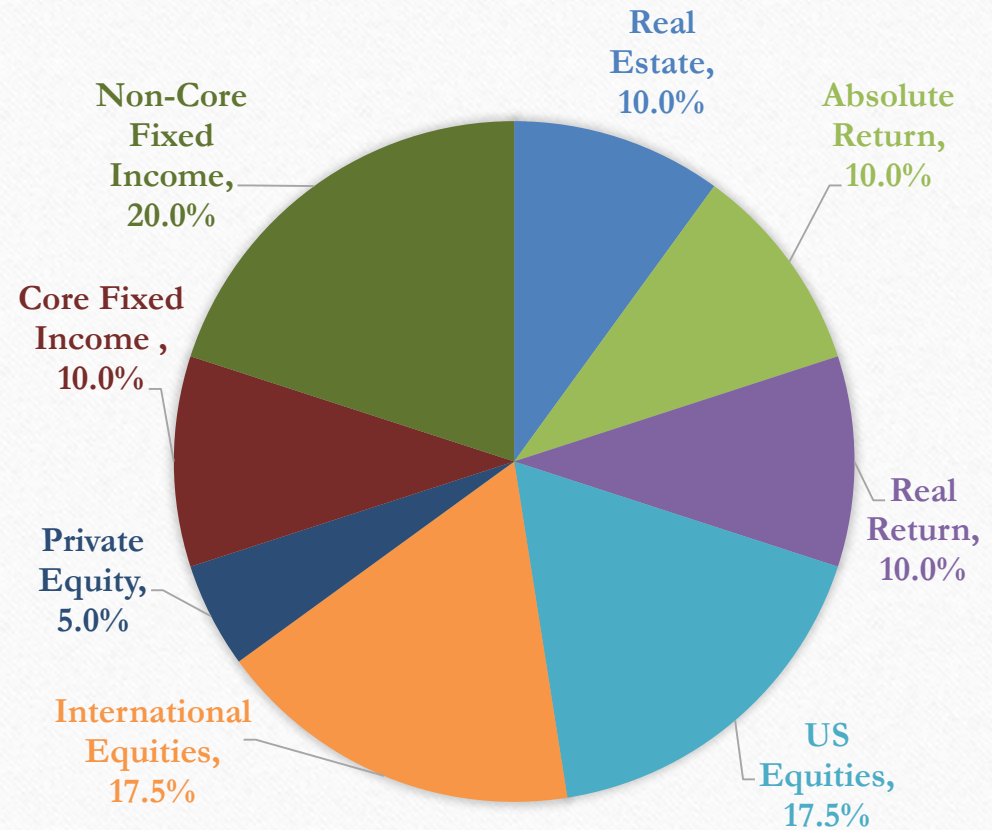
- City contribution rates increased from 13.14% in 2008 to 18.74% in 2013, but contribution rate has fallen recently.
 - 18.48% in 2014; 17.92% in 2015; and 17.41% in 2016
 - 17.48% in 2017, but would have been 16.93% had more conservative assumptions not been adopted.
 - Rate decreases are in part related to personnel growth and performance compared to conservative actuarial assumptions.
- TMRS plan is expected to have gradual decreases in City contribution rate over time.
 - In 2035, the normal cost contribution rate is expected to be approximately 10%.
 - As a result, the policy of tying DFRRF contributions to that of TMRS will need to be reviewed.

TMRS Investment Asset Allocation

Current Asset Allocation – 9/30/2016

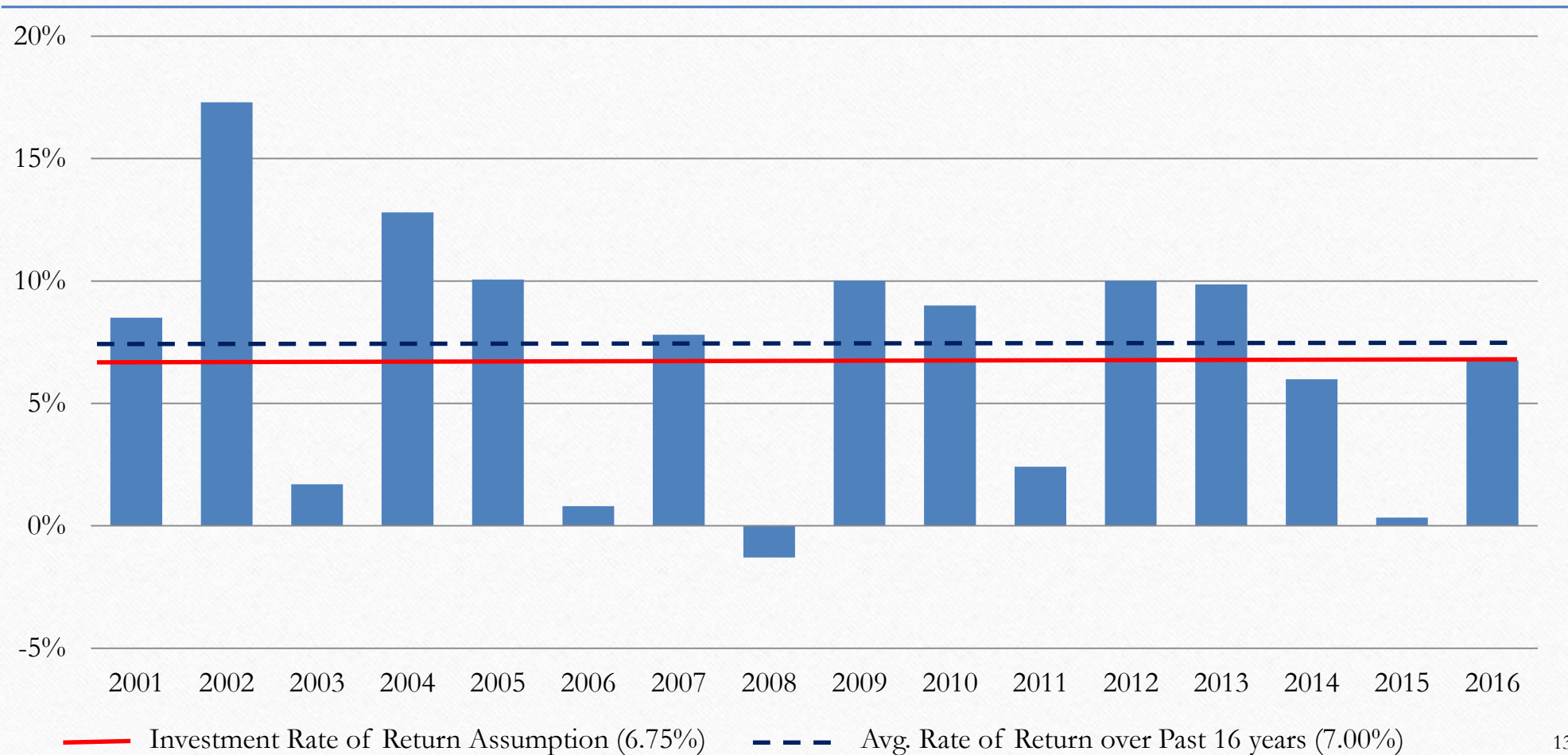


Strategic Asset Allocation



TMRS Investment Rate of Returns

Net of Fees



Key Actuarial Information for TMRS

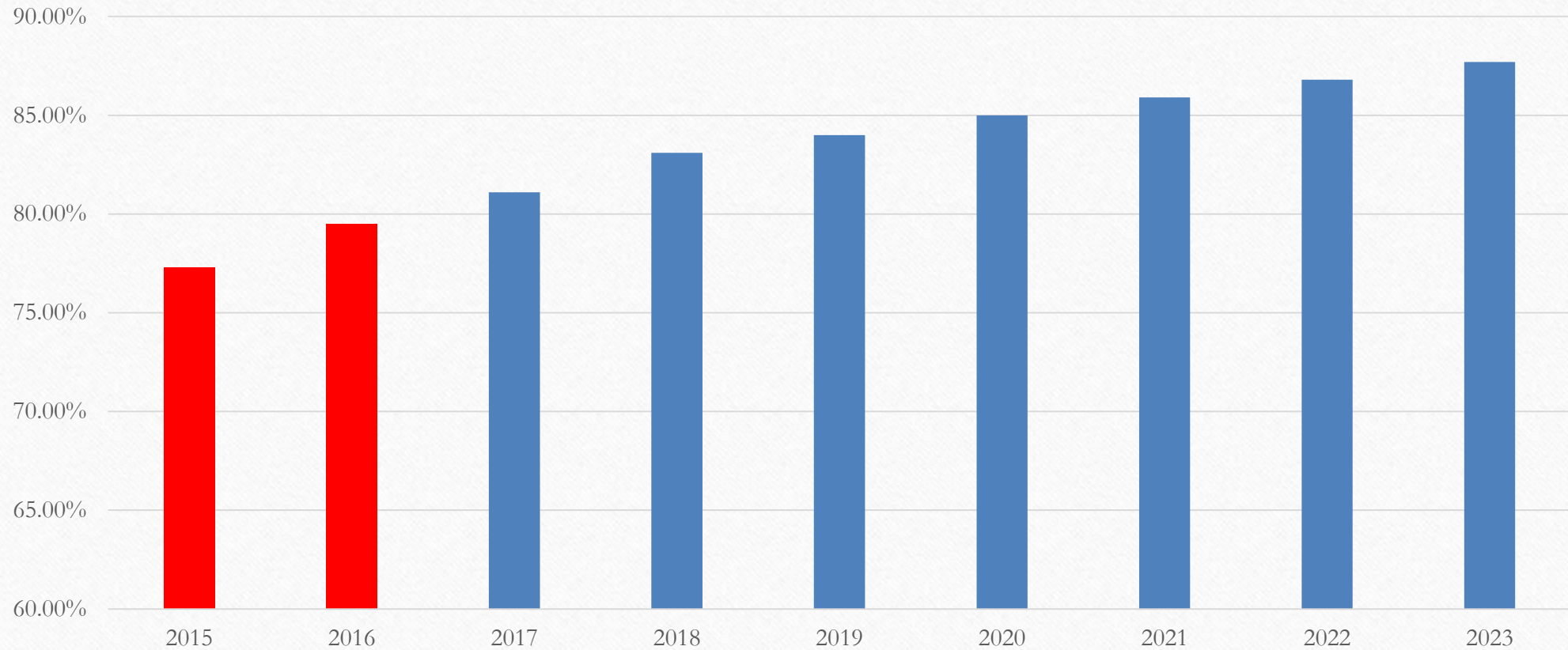
As of December 31, 2015 Actuarial Valuation

- Actuarial Cost Method – Entry Age Normal
- Actuarial Value of Assets - \$331.7 million
- Unfunded Actuarial Accrued Liability - \$77.5 million
- Annual Payroll for TMRS Employees - \$81.5 million
- FY 2015-16 contribution to TMRS from City - \$14.4 million
 - General Fund - \$7.1 million
 - Electric Fund - \$2.6 million
 - Water/Wastewater Funds - \$2.1 million
- Remaining Amortization Period – 19 years
- Funded Ratio – 81.1%

Note: Actuarial information is different from disclosures shown in CAFR due to GASB 68. The NPL figures shown is CAFR will have increased volatility due to differences in the way assets are shown (market versus smoothed basis).

Past and Projected Funding Ratio Over Time

Per Calendar Year



TMRS Management Comments

- TMRS is on the right path to pay off liability by 2034.
- Investment return assumption (6.75%) is among the lowest rates of any large statewide plan across the country.
- Examples of other investment rate assumptions include:
 - CALPERs – 7% (Reducing from 7.5% over three year period)
 - Teacher Retirement System of Texas – 8%
 - Dallas Police and Fire Pension – 7.25% (Assumed 8.5% in 2015)
- With continued growth of the City, contribution rate should drift lower over the next few years.
 - With this change, a new relationship with the DFRRF should be explored.

Denton Firemen's Relief and Retirement Fund (DFRRF)

DFRRF Overview

- DFRRF authorized by the Texas Local Fire Fighters' Retirement Act (TLFFRA).
- DFRRF created by the City of Denton in 1937.
- Governed by a seven member board consisting of three firefighters, the Mayor's appointee, two citizen appointees, and the City's CFO.
 - Board approves plan design, but the City Council approves overall funding as part of the meet and confer/budget process.
- Total assets of the DFRRF Plan is approximately \$75 million.

DFRRF Overview (Cont'd)

As of December 31, 2015 Actuarial Valuation

- Number of employees and retirees in Denton.
 - Active Employees – 176
 - Retirees or beneficiaries – 84
 - Inactive employees entitled but not yet receiving benefits – 2
 - Total – 262

DFRRF Benefit Design

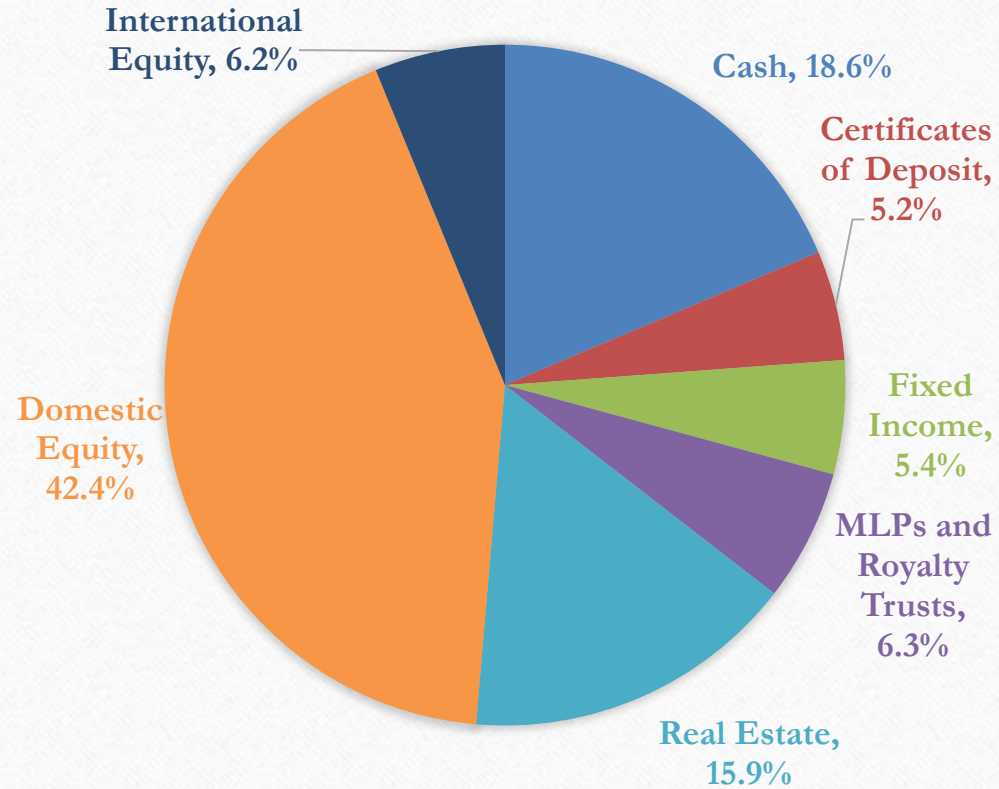
- Defined benefit plan.
- Employees fully vest with the plan after 20 years of service.
 - Partial vesting after 10 years.
- Members can retire at age 50 and above with 20 years of service.
- Benefits are based on formula - 2.59% of highest 36 month average salary for each year of service.
 - Benefit is determined by multiplying 2.59% times years of service (e.g. 20 year employee would be eligible for 51.8% of salary).
- Employees contribute 12.6% of their compensation into the plan.
 - City contributes same rate as what is provided to TMRS.

Recent History

- As mentioned previously, TMRS discovered that the actuarial assumptions being used did not properly value liabilities.
 - Changed Actuarial Method and began phasing into higher contributions.
- In 2010, the City agreed in the meet and confer process to begin paying the same contribution rate to the DFRRF as that provided to TMRS.
 - Rate averaged 11.75% in prior four years.
- These increased contributions have significantly improved the funding levels of the DFRRF.
- Due to the expected reduction in the TMRS rate over time, a new funding policy needs to be considered.
 - Meet and Confer agreement will need to be amended to do so.

Investment Asset Allocation

As of December 31, 2016

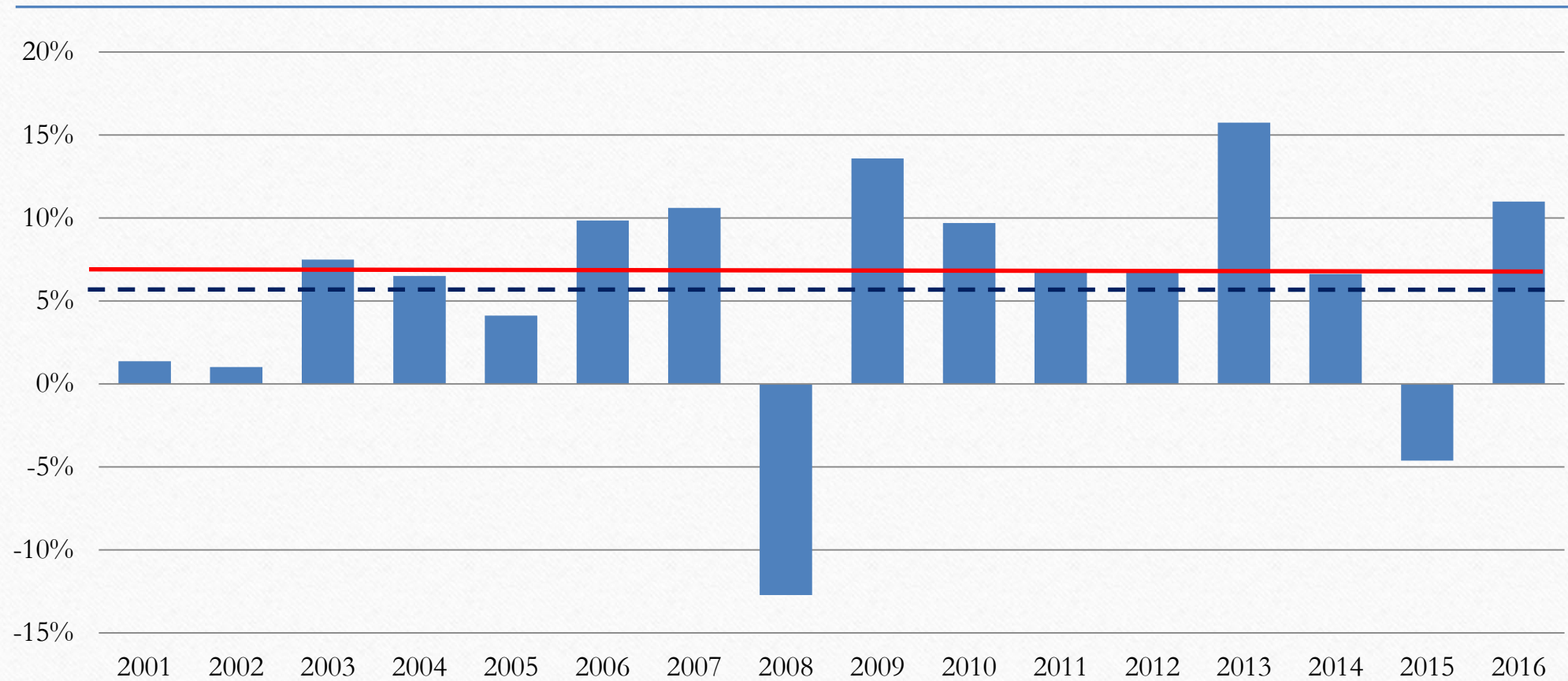


Investment Policy Guidelines

Asset	Target	Range
Domestic Large Cap	40%	25-50%
Domestic Sm. and Mid-Cap	10%	5-15%
International Equity	10%	5-15%
Fixed Income	10%	5-15%
Cash and Equivalents	7%	0-10%
Alternative Investments	8%	5-10%
Real Estate	15%	10-20%

DFRRF Investment Returns

Net of Fees



— Investment Rate of Return Assumption (6.75%)

- - - Avg. Rate of Return over Past 16 years (5.87%)

Key Actuarial Information for DFRRF

As of December 31, 2015 Actuarial Valuation

- Actuarial Cost Method – Entry Age Normal
- Actuarial Value of Assets - \$72.7 million
- Unfunded Actuarial Accrued Liability - \$17.2 million
- Annual Payroll for DFRRF Employees - \$15.0 million
- FY 2015-16 contribution to DFRRF from City - \$2.8 million
- Remaining Amortization Period – 31.6 years
 - Amortization period would have been 21.5 years if rate of return assumption had not been reduced from 7.00% to 6.75%.
 - Assumes average long-term contribution rate of 15.5% from the City; Current contribution rate is 17.48%.
- Funded Ratio – 80.8%

Note: Actuarial information is different from disclosures shown in CAFR due to GASB 68. The NPL figures shown is CAFR will have increased volatility due to differences in the way assets are shown (market versus smoothed basis).

DFRRF Management Comments

- With continued growth of the City, contribution rate to TMRS is expected to drift lower over the next few years.
 - As such, a new funding methodology for the DFRRF should be explored.
 - While the plan is currently financially strong, viability of the plan will weaken over time unless new funding methodology is adopted.
- Staff proposes that a new methodology be tied to specific actuarial criteria for the DFRRF rather than matching to TMRS. Examples of the criteria could include:
 - Amortization of unfunded liability
 - Investment Rate of Return Assumption
 - Funded Ratio, etc.
- Implicit with this arrangement is that the Fund would not increase benefits beyond the current level.

Summary

- Public pensions continue to receive a great deal of media scrutiny, but most plans in Texas are appropriately funded.
- For Denton, both the TMRS and DFRRF plans are well funded and managed responsibly.
 - Going forward, funding ratio for TMRS plan is expected to improve, and financially sustainable funding mechanism is in place.
 - While the DFRRF plan is financially strong, a funding policy which is separate and distinct from the TMRS plan needs to be developed.