Deloitte.

Retirement Plan for the Employees' Retirement Fund of the City of Dallas - Section 802.1012 Review

Presentation of Results to Board

April 23, 2019

Requirements of Texas Government Code Section 802.1012

- Applies only to a public retirement system with total assets the book value of which, as of the last day of the preceding fiscal year, is at least $100 million.
- Every five years, the actuarial valuations, studies, and reports of a public retirement system most recently prepared for the retirement system… must be audited by an independent actuary

Prior to Commencing Audit	• Agree in writing with the City to maintain the confidentiality of any non-public information provided by the pension funds for the audits • **Meet with manager of the pension funds to discuss appropriate assumptions to use in conducting audits**
No later than 30th Day After Completion	• **Submit draft report to pension funds for discussion and clarification** • **Discuss draft report with pension funds' Boards** • **Request in writing that the pension funds submit any response to accompany the final report within 30 days of receiving draft report**
31st to 60th Day After Submitting Draft Report	• Submit final audit report to the City • At first regularly scheduled open meeting after receiving final report, City Council will: – Include presentation of audit report on the agenda – Present final audit report and any response from the pension funds – Provide printed copies of final audit report and response from pension funds to individuals attending meeting
City's responsibility – No later than 30th day After Receiving Final Report	• Submit a copy of the final report to the pension funds and the State Pension Review Board • Maintain a copy of the final report at main office for public inspection

Source: Texas Pension Review Board, GOVERNMENT CODE Title 8, Subtitle A
http://www.prb.state.tx.us/txpen/wp-content/uploads/2017/09/2017-Government-Code-Title-8-Subtitle-A.pdf

Deloitte's Process

Assess appropriateness of assumptions and methods

Review actuarially determined contributions and projected year of full funding

Confirm that valuation reports meet requirements of ASOPs

Assess completeness and consistency of valuation reports

Review test cases' liabilities to verify interpretation of plan document, disclosed assumptions and methods

Items received from the Fund for Deloitte's Process

System data from ERF

Final valuation data from retained actuary

Plan document

Test cases from the 12/31/2017 valuation

12/31/2017 valuation report

12/31/2014 experience study

Findings and Recommendations

Findings

- It is our opinion that the December 31, 2017 actuarial valuation and the December 31, 2014 experience study for the ERF were performed in compliance with the applicable Actuarial Standards of Practice issued by the Actuarial Standards Board.
- The assumptions used in the December 31, 2017 actuarial valuation were updated as recommended in the experience study, and subsequent changes to certain economic assumptions recommended at December 31, 2016.
- Plan provisions, methods and assumptions disclosed in the December 31, 2017 actuarial valuation report were appropriately valued based on our review of the sample life outputs.

Recommendations

- We have noted recommendations that could provide additional detail and improve the understanding of the actuarial work performed. In addition to clarifications for certain assumptions and plan provisions being valued, we recommend providing sensitivity analysis associated with certain assumptions.

Findings and Recommendations

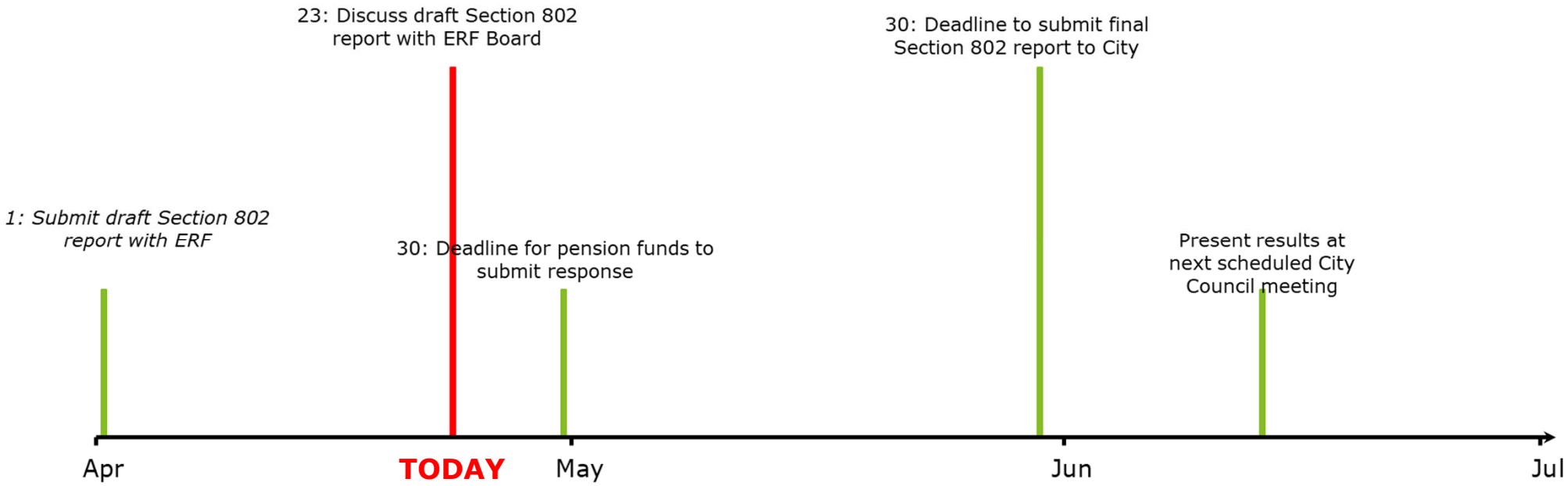
Recommendations (cont.)

- Below are recommendations that we would like to highlight (the full list of recommendations is included in the appendix)

Valuation Report	Recommendation	Purpose
Data	Confirm the consistency between the ERF-provided data and valuation data for the beneficiary date of birth	Enhance accuracy of data
Funding Method	Determine the Actuarially Determined Contribution (ADC) based on funding policy best practices	Provide additional detail between best practice funding policy and statutory contributions
Funding Method	Disclose the history of fully funded year	Provide additional detail on plan funding history
Assumptions	Include a statement that the retirement assumptions, and others as appropriate, are not "best estimates" and include a degree of conservatism	Provide greater understanding of the possibility that different estimates may be considered reasonable
Report Content	Demonstrate the sensitivity of the discount rate assumption by providing key metrics using a discount rate 1% higher and 1% lower than the prescribed rate	Increase understanding of impact of experience deviating from expected
Report Content	Disclose 10-20 years of undiscounted cash flows	Enhance understanding of the plan's financial obligation
Experience Study	**Recommendation**	**Purpose**
Mortality	Consider a more recently-published mortality improvement scale	Align assumption with industry accepted standard
Withdrawal	Add a separate withdrawal assumption for Tier B employees	Align assumption selection with expected behavior based on plan provisions

Timeline and Next Steps

Time Frame	Activities
April 1, 2019	• Deloitte submitted draft Section 802 Report to ERF
April 23, 2019	• Deloitte discusses draft Section 802 Report with ERF Board
April 30, 2019	• Deadline for ERF to submit response (30 days after submitting draft report)
May 1, 2019 – May 30, 2019	• Deloitte to submit final Section 802 Report to the City (60 days after submitting draft report)
After Submission of Final Report	• Present results at next scheduled City Council Meeting



Appendix

Full Summary of Recommendations

Section 802 Review

ERF – Valuation Report

We recommend the following changes be considered.

Area	Recommendations	Purpose
Plan Provisions	Disclose the Tier A early retirement adjustment table found in Section 40(A)-16 of Chapter 40A and the Tier B actuarial equivalence factors mentioned in 40(A)-16(d)	Provide additional detail on plan design
Plan Provisions	Disclose the eligibility requirements for Tier A and Tier B benefits	Provide additional detail on plan design
Plan Provisions	Enhance the summary of death benefit provisions to include the service eligibility tiers and optional forms available in each tier, according to Section 40A-21(d)-(f)	Provide additional detail on plan design
Plan Provisions	Update Tier B's maximum percentage of annual average change disclosed in item (d) from 5% to 3%	Provide additional detail on plan design
Data	Confirm the consistency between the ERF-provided data and valuation data for the beneficiary date of birth	Enhance accuracy of data
Data	Disclose judgmental data adjustments or assumptions made in the data or note that none exist, to address Section 3.4c of ASOP 23	Provide additional detail on data process for compliance with ASOP 23
Funding Method	Determine the ADC based on funding policy best practices	Provide additional detail between best practice funding policy and statutory contributions
Funding Method	Disclose the history of fully funded year	Provide additional detail on plan funding history
Assumptions	Include a statement that the retirement assumptions, and others as appropriate, are not "best estimates" and include a degree of conservatism	Provide greater understanding of the possibility that different estimates may be considered reasonable

Section 802 Review

ERF – Valuation Report

We recommend the following changes be considered.

Area	Recommendations	Purpose
Retirement Assumption	Provide detail on the basis for the selection of the Tier B retirement assumption	Enhance support for assumption selection
Retirement Assumption	Disclose the assumption for retirements from deferred vested status and consider studying the retirement behavior of deferred vested participants	Enhance support for assumption selection
Mortality Assumption	Revise the mortality description for disabled lives and other benefit recipients, as the actuarial report incorrectly states that the "annuitant" tables are used instead of the "combined employee and annuitant" tables	Enhance support for assumption selection
Form of Payment Assumption	Disclose the actuarial equivalence assumption	Enhance support for assumption selection
Report Content	Demonstrate the sensitivity of the discount rate assumption by providing key metrics using a discount rate 1% higher and 1% lower than the prescribed rate	Increase understanding of impact of experience deviating from expected
Report Content	Disclose 10-20 years of undiscounted cash flows	Enhance understanding of the plan's financial obligation
Report Content	Include a description of how closely current actual and target asset allocations align with the target asset allocation used to select the investment return assumption during the experience study	Improve ability to validate appropriateness of asset management policies and investment return assumption

Section 802 Review

ERF – Experience Study

The following are our recommendations and purpose for the recommendations to be considered in the next experience study.

Area	Recommendations	Purpose
Mortality	Validate the overall Actual/Expected (A/E) ratio for healthy female retirees	Support assumption selection
Mortality	Use a mortality improvement scale for each type of mortality decrement	Align assumption with industry accepted standard
Mortality	Review the appropriateness of updating the base mortality table to the Pub-2010 mortality tables	Align assumption to recently released industry accepted standard
Mortality	Consider a more recently-published mortality improvement scale	Align assumption with industry accepted standard
Mortality	Discuss the basis for the selection of the Blue-Collar adjustment, the set back/forward period, and the multiplier adjustment, including a credibility analysis	Support assumption selection
Mortality	Update the healthy retiree mortality table to be a best estimate, targeting an A/E ratio of 100%	Align assumption selection with anticipated experience
Retirement	Provide additional detail on the actual versus expected retirement assumption by age for completeness	Support assumption selection
Retirement	Consider separate assumption for the first year in which someone becomes eligible for Tier B, since the data supported such a separation for Tier A	Align assumption selection with expected behavior based on plan provisions
Withdrawal	Add a separate withdrawal assumption for Tier B employees	Align assumption selection with expected behavior based on plan provisions
Disability	Supplement historical data with industry-standard data for disability incidence for similar job types	Support assumption selection