Long-Term Financial Stability Sub-committee

Recommendation to the Board of Trustees

August 11, 2016

Agenda

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Terminology

Terminology

- Tier 1
  - those members hired prior to January 1, 2007
- Tier 2
  - those members hired on or after January 1, 2007 and before March 1, 2011
- Tier 3
  - those members hired after February 28, 2011

- Old Plan
- Plan A

Timeline Highlights

Timeline Highlights

- July 2015
  - Buck Consulting (Buck) presented information that the Plan was projected to be insolvent in the year 2065 with the previously adopted 8.5% rate of return assumption considering the reduction in the value of the assets in 2013 and 2014.
  - The Board then revised the rate of return assumption to 7.25%, which was considered to be much more realistic. This accelerated the projection of the depletion of the fund from 2065 to 2040.
  - Chairman Friar appointed a Sub-committee to develop potential solutions for the Board to the funding issues.
- September & October 2015
  - Member Meetings – State of the Pension System
- December 2015 – Dallas City Council Briefing

Timeline Highlights

- July 2015 to January 2016
  - The Sub-committee worked with Buck to review potential plan changes.
- January 2016, the Board voted to terminate the engagement with Buck
- February 2016, the Board hired Segal Consulting for actuarial services
- February 2016 – Present
  - Segal completed the following work:
    - Built the DPFP plan provisions into their system
    - Replicated the January 1, 2015 Buck valuation results
    - Completed a 5-year Experience Study and recommended assumption modifications
    - Completed the January 1, 2016 actuarial valuation report
    - Completed GASB 67 reporting
    - Provided significant analytical results for Sub-committee evaluation

Framing the Current Reality

- Financial Position
- Past and Current Challenges
- Membership and Statistics
- Prior Plan Amendments

Current Financial Positon

(based on 12/31/15 financial statements, January 1, 2016 actuarial valuation)

- Net Assets of $2.7 billion
  - The market value of assets declined $0.4 billion from the prior year primarily due to decreases in the value of real estate and private equity. Investments returned -12.6% in 2015.
- The actuarial value of assets declined from $3.7 billion last year to $2.7 billion this year.
  - The decline is due to the market value change plus the actuarial “reset” to bring the actuarial value into alignment with the market value of assets
- Funded level is 45.1%
- Funding period is infinite for the 2nd consecutive year
- To fund the Plan in a 40-year period a total annual contribution rate of 72.72% is required
  - Since the total contributions being made by the City and members is currently 37.61%, there is a shortfall of 35.11% of pay.

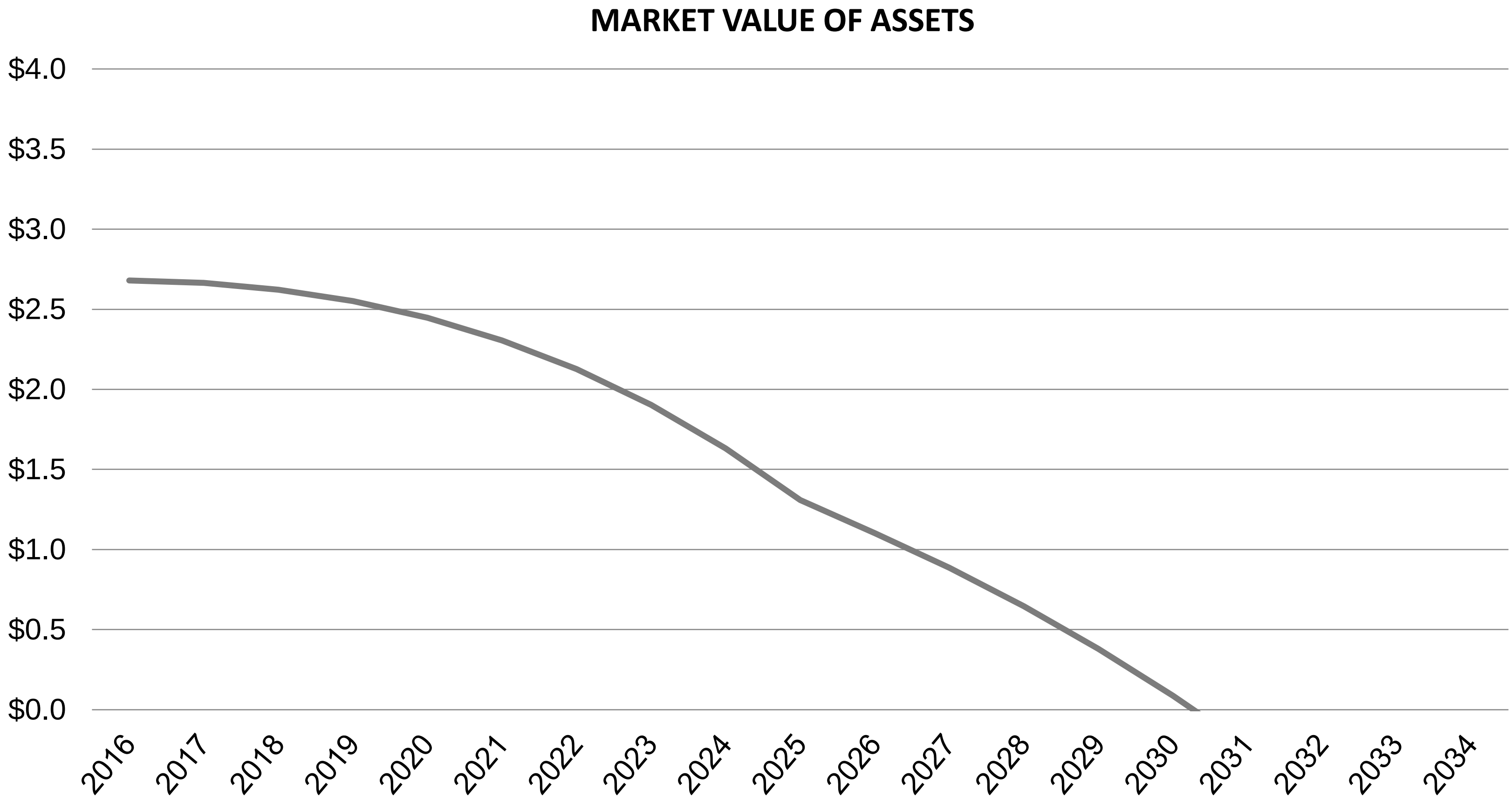
Current Financial Positon
(based on January 1, 2016 actuarial valuation)

- Projected insolvency date moved forward 10 years from the 1/1/2015 valuation but is the same date that we have been projecting and communicating since October 2015.

- If all assumptions are met, and no changes are made to the Plan's benefit provisions nor to member or City contribution rates, **the Combined Pension Plan is projected to run out of assets in 15 years (during 2030)**.

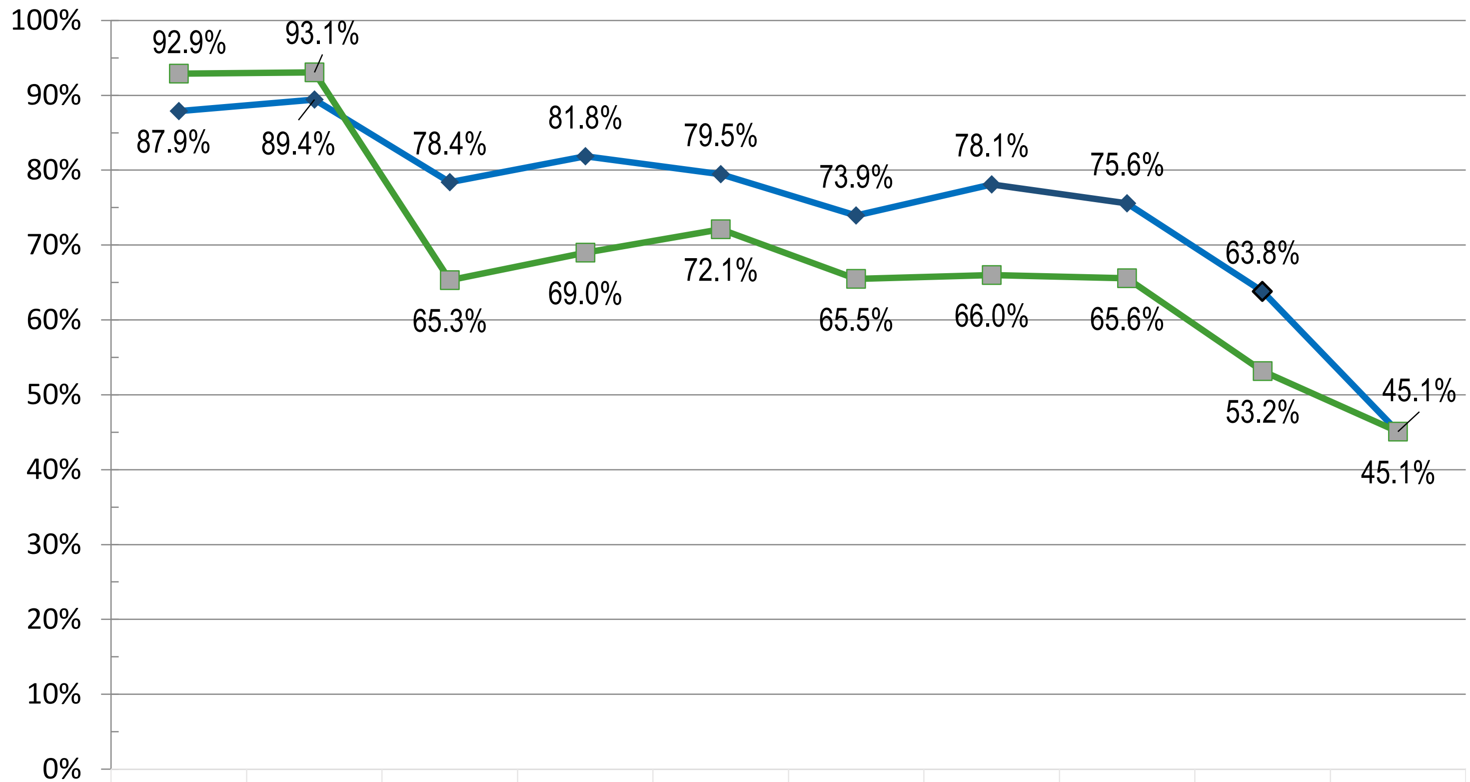
- **Over 97%** of the Plan liability is associated with current annuitants and active members in Tier 1.

Solvency Projection – January 1, 2016 Actuarial Valuation



The projection above anticipates that all current actuarial assumptions are met in the future, including 7.25% net investment returns and 10-year payouts of DROP balances. Insolvency is expected between January 1, 2030 and January 1, 2031.

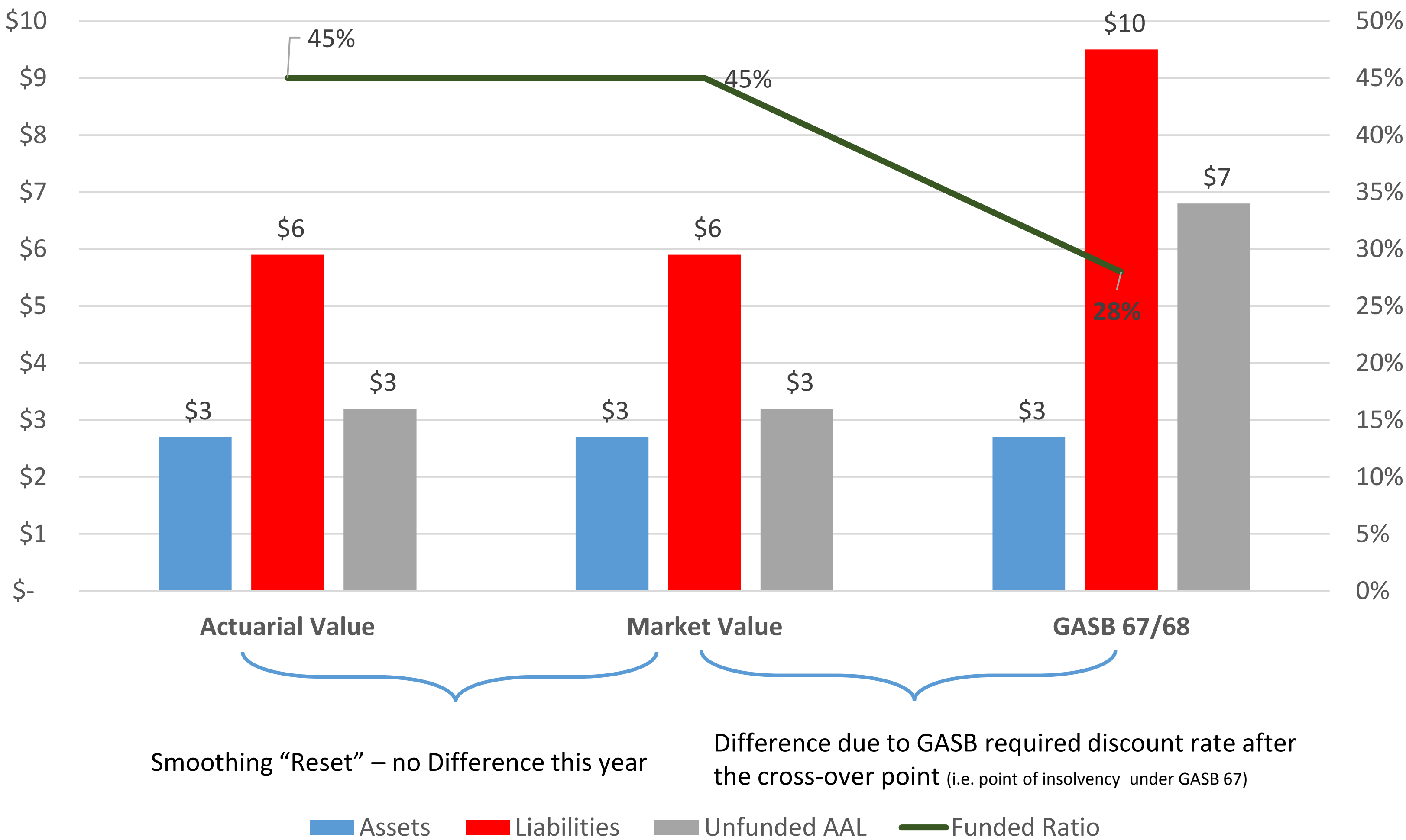
Funding Level – Combined Plan (1-1-16 Actuarial Valuation)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Actuarial Value	87.9%	89.4%	78.4%	81.8%	79.5%	73.9%	78.1%	75.6%	63.8%	45.1%
Market Value	92.9%	93.1%	65.3%	69.0%	72.1%	65.5%	66.0%	65.6%	53.2%	45.1%

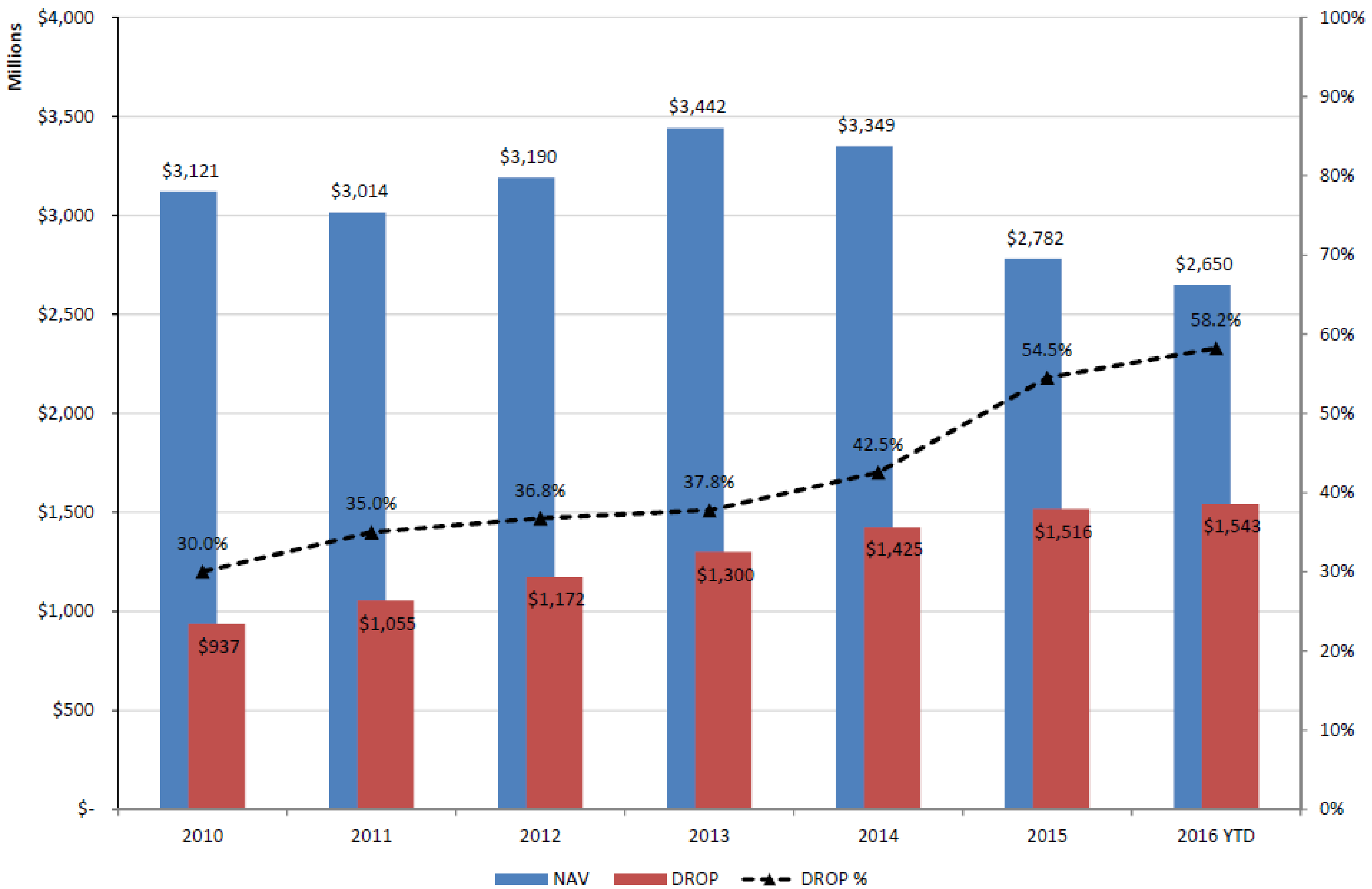
Note: smoothing period changed from five to ten years in 2012 and the actuarial value of assets was reset to the market value in 2016 (i.e. impact of smoothing was eliminated for 1/1/2016).

Assets, Liabilities & Funding Level – Current Year (1-1-16 Actuarial Valuation)



DROP Balance as a % of Total Net Assets

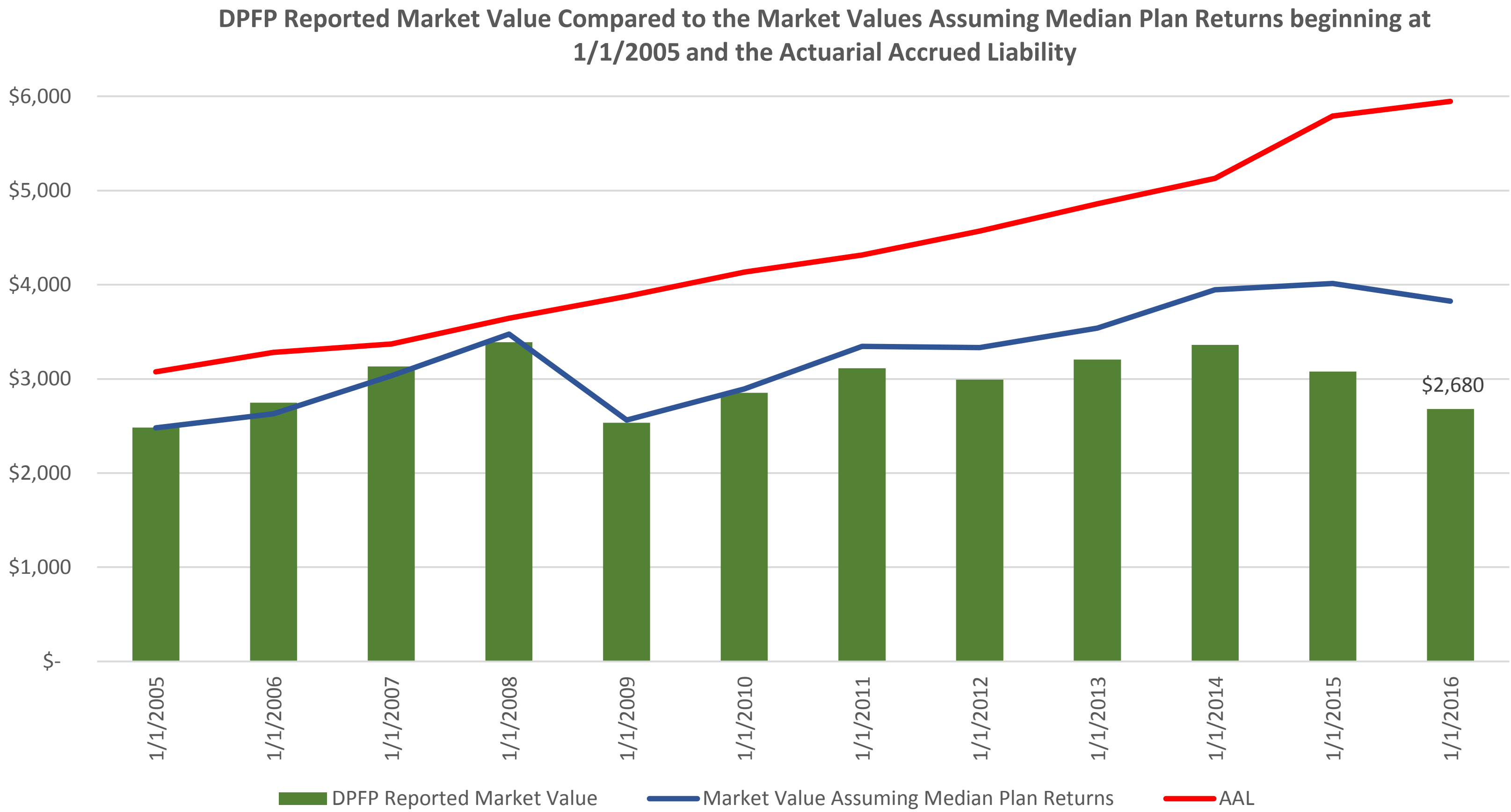
(In Millions) (As of June 2016)



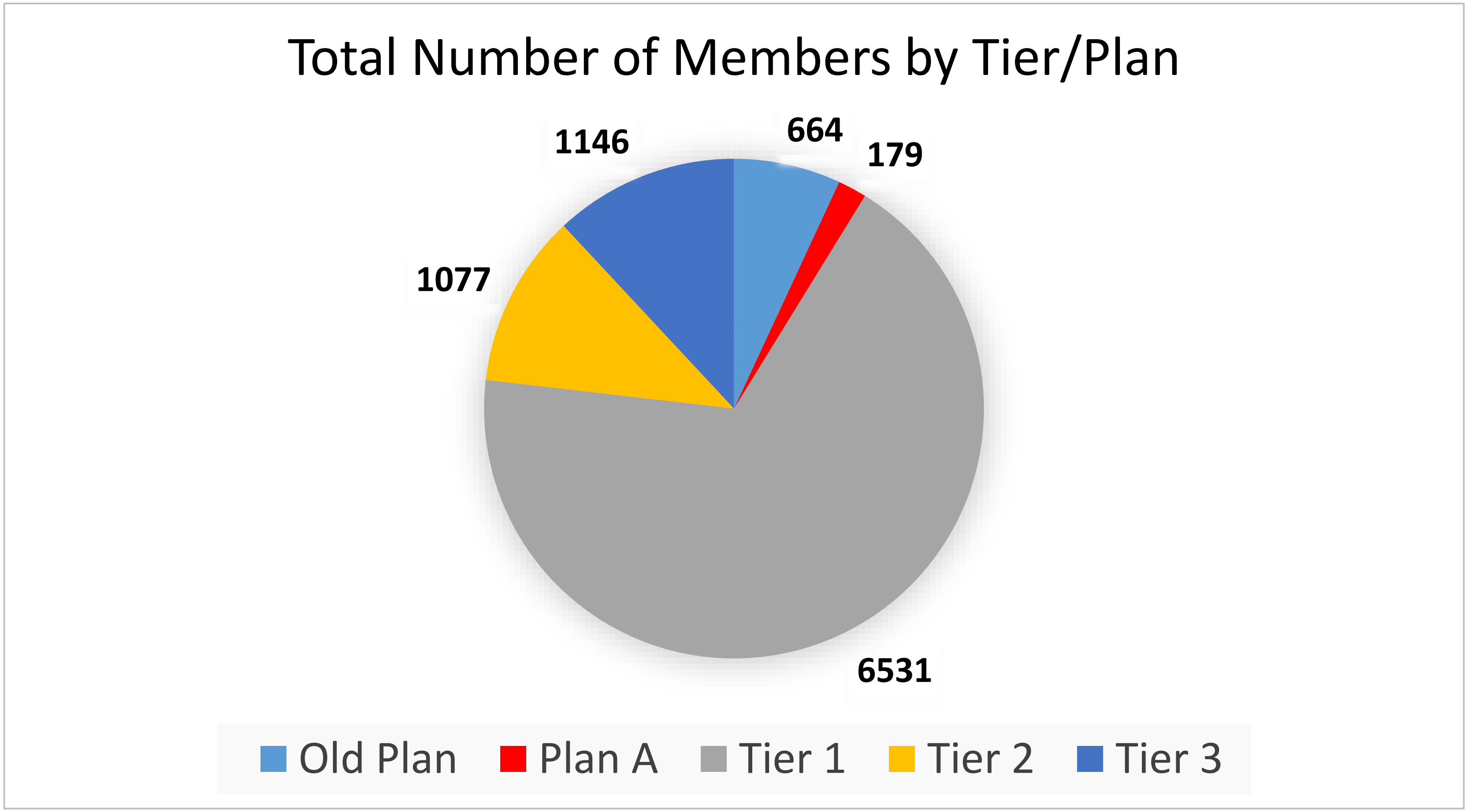
Many Past and Current Challenges

- Mature plan – fewer active members in relation to retirees
- Payroll growth less than expectations due to reduced hiring and lower raises
- Fixed City and employee contribution rates
- Net non-investment cash outflow
- DROP program provisions have contributed to increased accrued liabilities, resulted in a material loss to the Plan and have created a liquidity challenge
- Previous actuarial smoothing, overstated real estate asset values and high rate of return assumption masked the actual funding level, delaying necessary plan amendments
- Past plan amendments in 2011 and 2014 made were based on flawed information
- Significant write downs in real estate assets in 2013-2015
- Lost decade of investment returns
- Low expected future capital market assumptions
- Time is necessary to transition the portfolio to the target allocation adopted by the Board in March 2016.

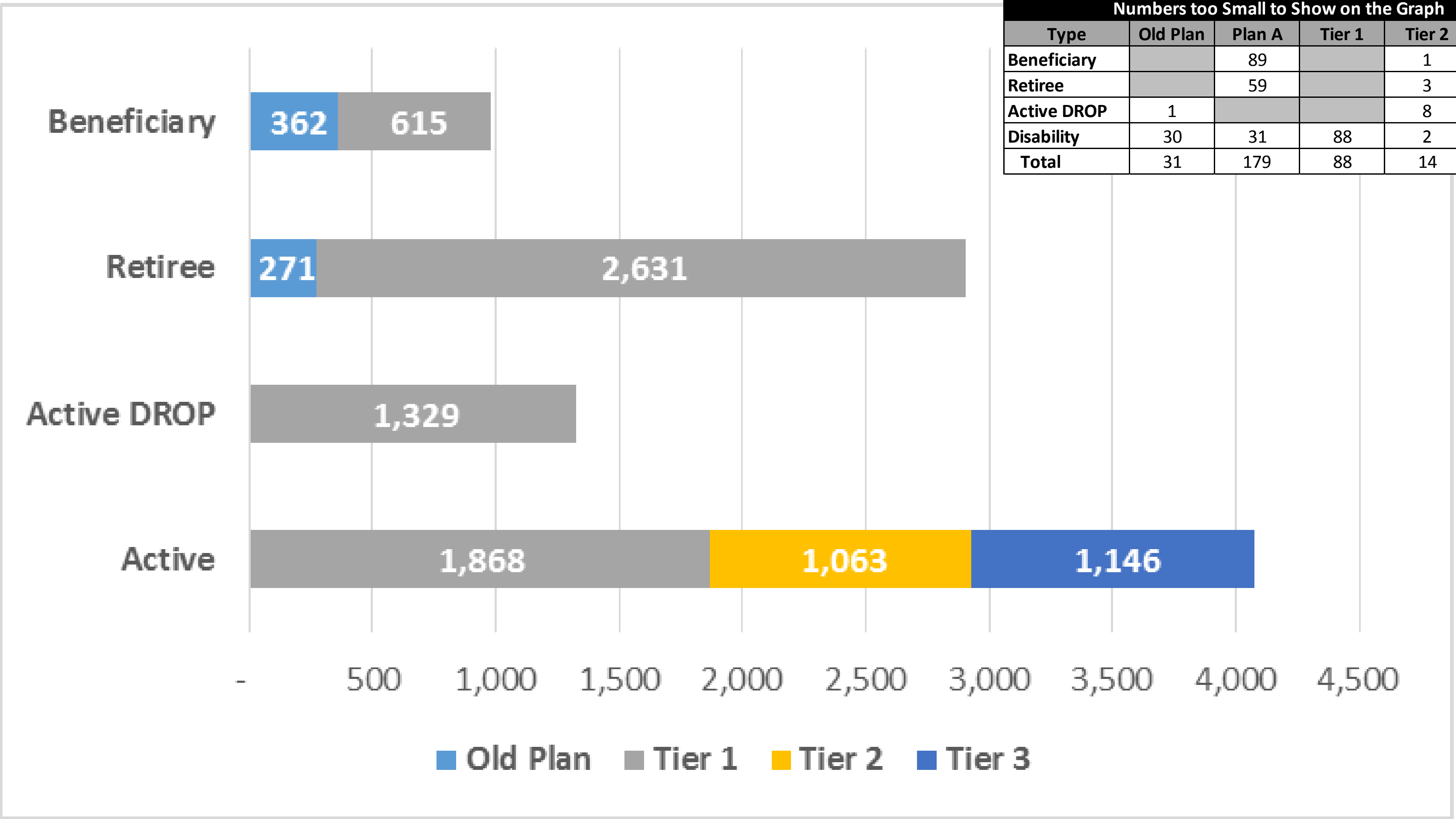
DPFP Reported Market Values Compared to Market Values Assuming NEPC Median Plan Returns beginning at 1/1/2005 and Accrued Actuarial Liabilities



Total Members by Tier/Plan

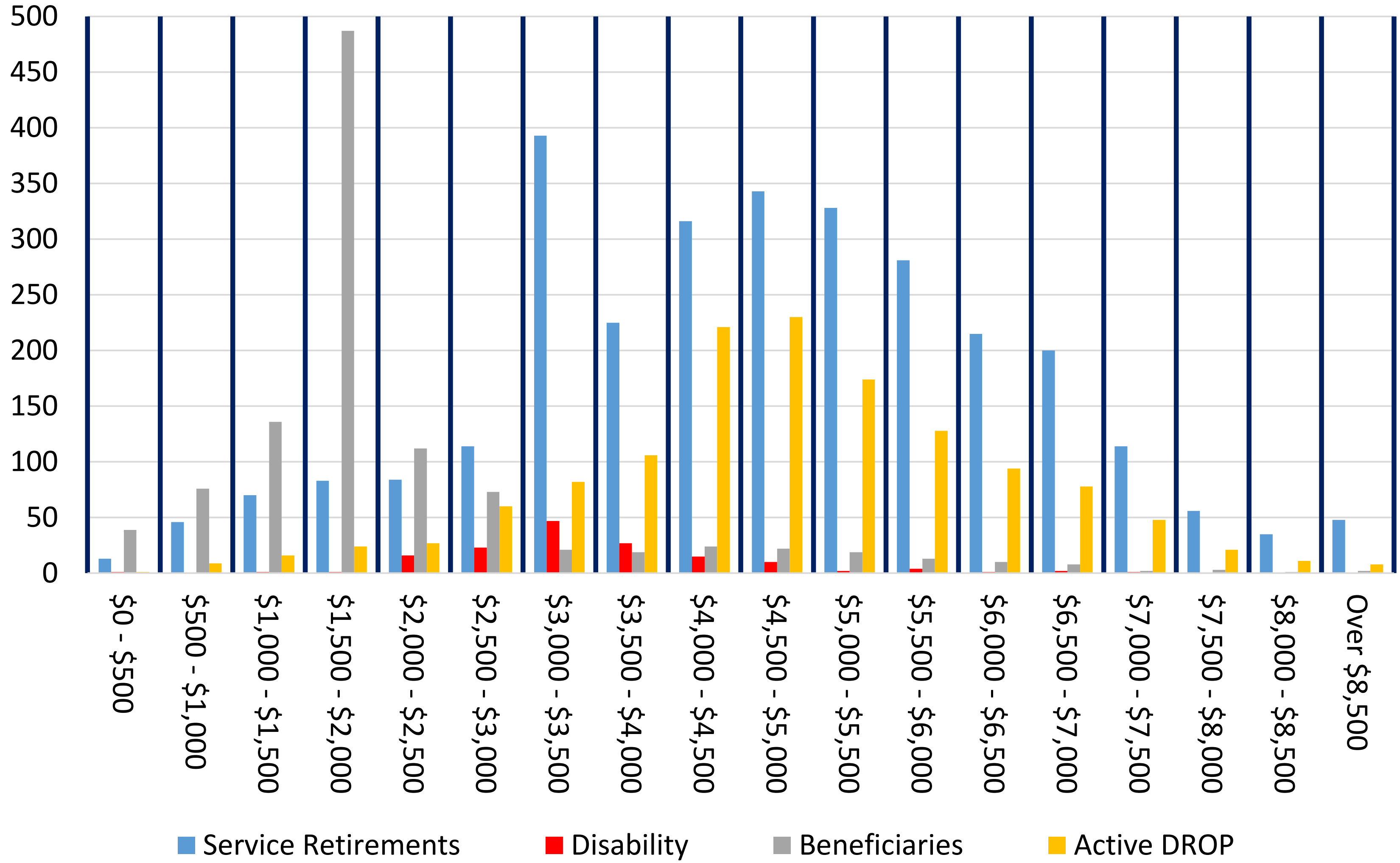


Total Members by Status and Tier

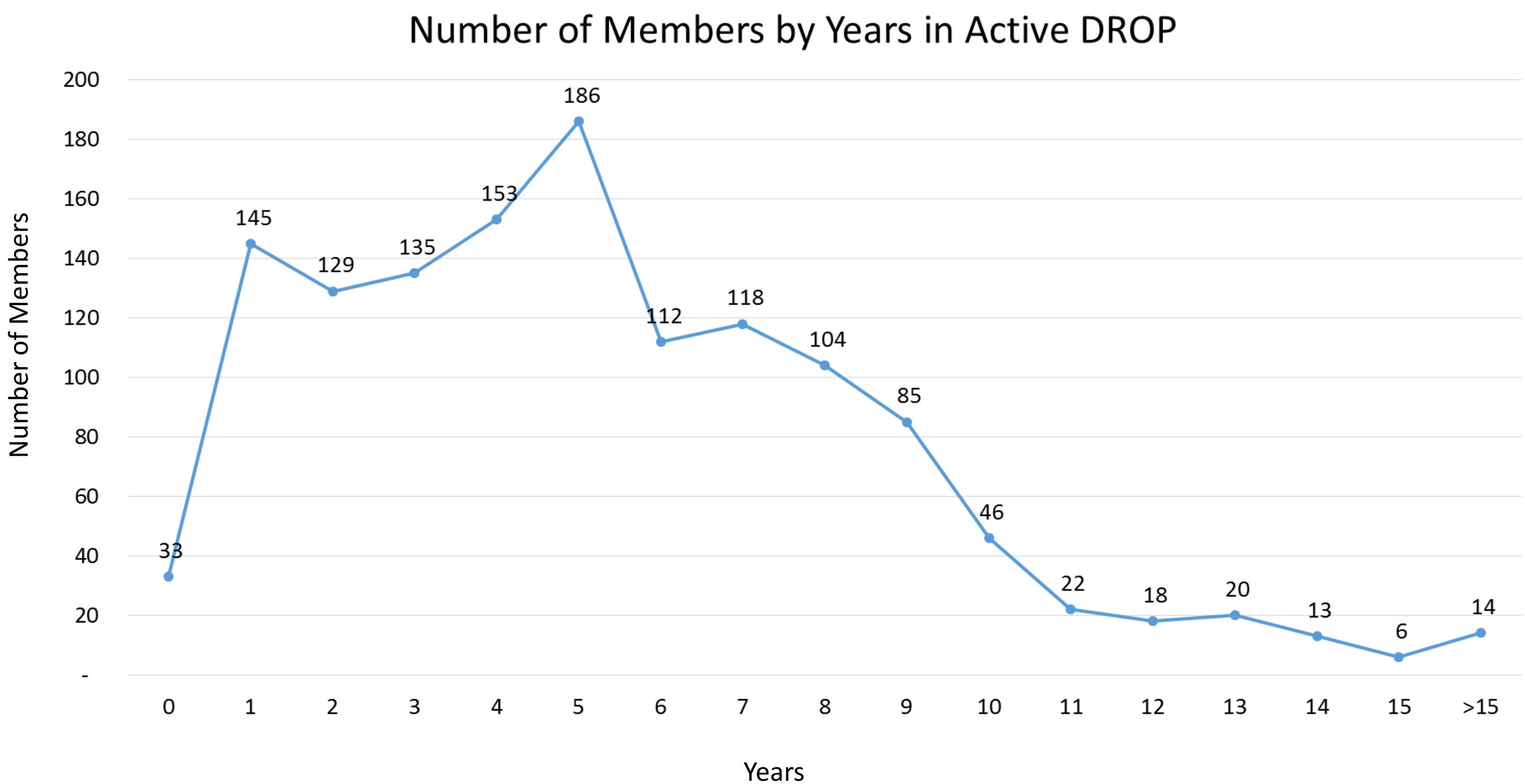


Numbers too Small to Show on the Graph					
Type	**Old Plan**	**Plan A**	**Tier 1**	**Tier 2**	**Total**
Beneficiary		89		1	90
Retiree		59		3	62
Active DROP	1			8	9
Disability	30	31	88	2	151
Total	31	179	88	14	312

Monthly Benefit Range



Number of Members by Years in Active DROP



Prior Plan Amendments Which Reduced Costs

- 2006:
  - New members have an ad hoc Annual Adjustment (COLA) rather than an automatic COLA. The COLA changes, other Plan Amendment changes and a change in the Salary assumption resulted in an actuarial gain of approximately <u>$78 million</u>.

- 2011:
  - New members hired after 2-28-2011, have a reduced multiplier (2%-20 years, 2.5% next 5, 3% over 25 years), longer vesting period (10-years), longer period included in the average pay calculation (60 months), retirement eligibility extended (minimum 55-years of age and 20 years of service), reduced disability and survivor benefits.
  - DROP provisions amended to require contributions of 8.5% from zero while in active DROP.
    - The actuarial gain in 2011 from these changes was approximately <u>$50 million</u>.

Prior Plan Amendments Which Reduced Costs

- 2014:
  - Changed the interest rate credited to DROP accounts and reduced the active DROP contribution rate to 4%
  - Actuarially, the gain in 2014 from the changes was approximately <u>$185 million</u>.
    - The DROP interest rate amendment is currently being litigated.

These Plan Amendments were approved by the membership in good faith based on what was understood at the time. At the time, it was thought the amendments were sufficient to ensure the long-term health of the Plan.

Long-Term Financial Stability Sub-committee

Long-term Financial Stability Sub-Committee

- The Sub-committee is a subset of the Board – two each police, fire and Council Trustees.
- City staff has participated in the Sub-committee. The following attended at least one Sub-committee meeting: the City Manager, the Chief Financial Officer, the Human Resources Director, two members of the City Attorney's office, the Controller and Councilmember Kleinman.
- The Mayor appointed Councilmember Kleinman to lead the City's delegation attending the Sub-committee meetings upon his resignation as a Trustee.
- We felt it was important for the City to be involved with the process because we want them to understand the problems DPFP is facing, understand we were looking at all options, receive honest communication information and to provide input on how potential solutions may impact the Police and Fire Departments ability to hire and retain employees and provide services to the Dallas community.
- In addition, although technically we do not fall into the Pension Review Board's Funding Soundness Restoration Plan requirements at this time, we are working proactively with the City to develop a solution.

Members of the Sub-committee

- Brian Hass, Chair of the Sub-committee
  - Fire, Active, Not in DROP, Age: 45, Tier 1, Years of Service: 22.92
- Joe Schutz, Deputy Vice Chairman of the Board
  - Police, Active, Not in DROP, Age: 37, Tier 2, Years of Service 6.83
- Clint Conway
  - Fire, Active, Not in DROP, Age: 44, Tier 1, Years of Service 19.83
- Tho Ho
  - Police, Active, Not in DROP, Age: 41, Tier 1, Years of Service 14.50
- Philip Kingston
  - City Council
- Erik Wilson, replaced Lee Kleinman
  - City Council

Sub-committee Work

- The Sub-committee began by gaining an in-depth understanding of:
  - DPFP benefit provisions and contributions compared to other Texas plans including the City of Dallas municipal employee plan
  - Demographic information of DPFP members
  - The technical nature of various features of the Plan
  - The cost of various features of the Plan
  - Actuarial concepts
  - Miscellaneous items such as Pension Obligation Bond concepts
  - Legal constraints

- These activities informed the feature and scenario analysis done with the actuary

Fundamentals

- After very thoughtful consideration and analysis the Sub-committee is providing a recommendation for consideration by the full Board for Plan amendments.
- The solutions to the underfunding should be shared between the members and the City. Both the Pension System and the City bear the responsibility to solve the problem.
- The Sub-committee is proposing modifications to the Plan that will still provide a reasonable pension for members while doing what it believes is at least the Pension System's share, if not more.
- Passage of a proposal by the members will be essential to addressing legislative issues in 2017 and beyond. A failure of an amendment will negatively affect the Pension System's ability to deliver an effective message at the legislature.
- Making most of the proposal conditional on the City "bridging the gap" is a responsible way to obligate the members, yet assure them that they are not "wasting their money" on an insolvent system.

Long-Term Financial Stability Sub-committee Considerations

Solution Considerations

- Financial impact to the Plan and the members
  - The financial impact to the Plan is evaluated by the resulting change in the Required Annual Contribution percentage and the insolvency date projection. See slide 9 for additional information on the Required Annual Contribution.
  - Proposed Plan changes must be viewed in a combination analysis performed by the actuary. Simply adding the expected impact of proposed changes does not produce accurate results for a scenario with more than one modification.
- Timeliness of the impact
  - Unlike in prior Plan amendments, the modification of benefits for a new tier of employees (to be hired in the future) does not impact the insolvency date. All benefit payments for a new tier would be paid after the projected date of insolvency. Therefore, this would not have a timely enough impact to solve the funding gap creating a new tier.
- Defensible
- Practical
- Long-term sustainability

Current Liability & Possible Considerations

- Retirees – 50.4% of the total liability in the Plan is related to current retirees
    - 35.3% for retiree future benefit payments
    - 15.1% retiree DROP accounts
  - The base benefit payment is set so the only changes that could have a significant impact for retirees is the COLA, DROP interest rate and DROP payout options.

- Active DROP – 26.7% of the total liability in the Plan is related to active members in DROP
    - 16.4% for active DROP future benefit payments
    - 10.3% active DROP accounts
  - The base benefit payment is set so the only changes that could have a significant impact for the active DROP is the COLA, DROP interest rate, DROP terms, contribution rate and the benefit supplement.

Current Liability & Possible Considerations (continued)

- Beneficiaries - 4.9% of the total liability in the Plan is related to beneficiaries including monthly payments and DROP accounts
  - The base benefit payment is set so the only possible considerations are the COLA and the DROP interest rate

- Disabilities & Inactive Vested – 1.6% of the total liability is for the future monthly payments
  - The base benefit payment is set so the only possible consideration is the COLA

- Active members Not in DROP – 16.4% of the total liability is for the future benefits of active members not in DROP
  - Tier 1 – 14.7% for future benefit payments
  - Tier 2 – 1.4% for future benefit payments
  - Tier 3 – 0.3% for future benefit payments
    - The base benefit has not been set so there are many potential considerations, however, the liability for Tier 2 and 3 is only a minor part of the total liability, so any material impact would need to include Tier 1 members.

Contribution Considerations – Member Survey Takeaways

- The survey indicated some willingness of active members including active DROP, Tier 1, Tier 2 and Tier 3 members to increase the member contribution percentage to help with the solvency of DPFP. As would be expected the level of support decreased as the percentage increased.

	Active DROP	Tier 1	Tier 2	Tier 3
No Increase	38%	22%	38%	39%
Increase Combined Percentages	57%	75%	60%	58%
No Response	5%	3%	2%	3%
	100%	100%	100%	100%

- Willingness of Tier 3 members to pay a higher contribution rate in order to have a higher multiplier for future service.
  - Yes 63% - 90 votes, No 35% - 49 votes, No answer 2% - 3 votes
- Should the contribution rate be the same for all active members or different reflecting differences in benefits.

	Active DROP	Tier 1	Tier 2	Tier 3
Same	71%	76%	69%	57%
Different	26%	23%	30%	42%
No Response	3%	1%	1%	1%
	100%	100%	100%	100%

Contribution Considerations – Member Survey Takeaways

- An active member in DROP should pay the following contribution rate:

	Active DROP	Tier 1	Tier 2	Tier 3
0%	28%	5%	2%	2%
The Current 4% Active DROP Contribution Rate	43%	25%	18%	17%
8.50%	9%	10%	9%	8%
The Same Contribution Rate as an Active Member not in DROP	18%	55%	67%	64%
No Response	2%	5%	4%	9%
	100%	100%	100%	100%

- Would it be acceptable for an active member in DROP to pay the same contribution rate as an active member not in DROP, if the contributions (after joining DROP) were refunded to the member upon retirement?

	Active DROP	Tier 1	Tier 2	Tier 3
Yes	69%	75%	70%	63%
No	27%	20%	25%	27%
No Response	4%	5%	5%	10%
	100%	100%	100%	100%

Contribution Considerations

- The Sub-committee considered:
  - Various contribution rates for active members not in DROP
  - Various contribution rates for active members in DROP
  - Various scenarios with none, part or all of the contributions received prospectively from active members in DROP returned to the member
  - Timing of phasing in increases in contribution rates
  - The impact of increasing both the multiplier and the contribution rate for Tier 3 members.

City Contributions

- The Statute allows the current City Contribution rate to increase from the current 27.5% to 28.5% with an increase in member contributions from 8.5% to 9.0%.
- Scenarios were run including both the 27.5% and 28.5% City contribution rate.
- The City has included the 28.5% in their 2017 budget proposal, this increase amounts to approximately $4 million annually.
- Increases above 28.5% require legislative approval.

DROP Considerations – Survey Takeaways

- The survey had 14 questions related to DROP, including matters only relevant while in active service, matters relevant only after retirement and matters relevant to both.
- The themes of the responses were generally consistent across all groups:
  - The ability to earn a higher interest rate is most important
  - Weekly liquidity is less important and there is a willingness to agree to less liquidity for a higher interest rate
  - The structure of the less liquid features may impact the attractiveness of the option
  - The ability to keep the accounts with DPFP is important
  - More members voted no verses yes on the concept of paying transaction fees
  - Retirees and active DROP members do not like the concept of paying a management fee, while Tier 1 members were more favorable to the concept

DROP Structure Modification Goals

- Goals for the modification of the DROP Structure
  - Maintain a DROP program for DPFP active members.
  - Credit an interest rate that is reasonable for the member and the Plan given the market environment.
  - Create a correlation between the interest rate credited and the liquidity of or access to the balance. It is typical in nearly every other investment and bank product to earn a higher interest rate with a longer term commitment of funds.
  - Provide choices for members
  - Provide predictability of DROP withdrawals
  - Do not allow the current triggers in the Plan to go into effect which would cause the interest rate fall to zero in 2018.
  - Modify provisions to create behavior that is consistent with a typical active DROP program.
  - Create a financially positive impact on the Plan

DROP Structure

- *Significant* time was spent on the structural features of DROP
- After many meetings discussing various DROP topics Sub-committee member developed their individual proposed DROP structure. The actuary (Buck) evaluated each proposed structure for potential savings or cost to the Plan
- Segal was also presented the Sub-committee members' DROP proposals so they could understand the thinking of various committee members regarding DROP.
- The Sub-committee combined the various features from individual Sub-committee member's suggested changes and information from the member survey results to develop the recommended structure of DROP

DROP Considerations

- Limits
  - Limits on participation:
    - Time allowed to participate in active DROP
    - Time allowed to continue to defer and keep a balance in the DROP Plan after retirement
  - Dollar limitations:
    - Maximum DROP balance
    - Limit the number of years interest is credited while in active DROP
    - Limit the years of benefit payments allowed to be deferred while in active DROP
    - Limit on the speed (minimum and maximum) of DROP account depletion after retirement

DROP Considerations (continued)

- Interest credited
  - Accounts
    - Active DROP interest rate
    - Interest rate after retirement
  - Rate Considerations
    - Rate floats based on market rates, with a cap and floor (minimum and maximum)
    - Rate is tied to the earnings of the Plan for a stated year or time period
    - Rate reflects the liquidity of the DROP balance
    - Frequency of interest credit
  - Member options

- Distribution Considerations
  - Offering an annuity option for balance distribution
  - Required Annual Distribution provisions established in 2014
  - Minimum and maximum dollar distributions
  - Frequency and timing of distributions

DROP Considerations (continued)

- Contributions
  - Level of active DROP contributions
  - Treatment of the active DROP contributions
    - Remain in the Plan or
    - Refund all or a portion of future contributions made while in active DROP and the terms of any refund
  - Service credit earned
- COLA
  - COLA credited while in active DROP
  - See COLA slides for more detail on COLA considerations
- Management and/or Transaction Fees on balances after retirement
- Treatment of existing balances verses future deferrals
- Back DROP considerations
- Spouse and non-spouse beneficiary provisions

Annual Adjustment (COLA) Considerations

- Annual Adjustment (COLA)
  - Compounding/Non-compounding
  - Percentage Specific/Tied to an Index
  - Ad hoc/Automatic
  - COLA in active DROP and/or Retirement
  - Timing based on Age and/or Years from Retirement Date
  - Balance Eligible for the COLA
  - Modification of the COLA
  - Elimination of the COLA

Other Considerations and Changes Not Considered

- Considered
  - Joint and Survivor Features
  - Benefit Supplement Features
  - Multiplier Factors
  - Computation Pay Calculations

- Changes Not Considered
  - Disability Features
  - Components of Pay in Computation Pay
  - Eligibility and Vesting
  - Minimum Benefits
  - Years of Service Calculation (full years plus partial year)
  - New Tier for Future Employees

Other Member Survey Takeaways

- Term limits
  - Term limits for Trustees was supported by more than 75% of each group.

- Non-spouse Beneficiary
  - None of the groups were interested in having the ability to name someone other than a spouse as a beneficiary for a reduced member benefit to make the election.

Long-Term Financial Stability Sub-committee Recommendations

Recommendation Implementation

- It is recommended that the Ballot items be structured in a way that some items are implemented at the effective date of a successful election of the members while other items would be conditional on the City “bridging the gap“ through appropriate legislative approvals or otherwise.
- Recommendation of conditional verses unconditional provided later in the presentation.

Annual Adjustment – COLA Recommendation

- Current: 4% simple COLA based on the base benefit
- Recommendation:
  - Compounded COLA
  - Annual percentage based on CPI with a cap of 2%
  - Applied to a maximum base pay of $31,668 for 2016
    - $31,668 is the 2016 maximum Social Security benefit
    - The maximum base will be adjusted annually based on the change in the Social Security maximum benefit percentage increase, capped at 2.5% per year
  - COLA begins at the earlier of age 62 or 3 years after service retirement

Benefit Supplement Recommendation

- Current: 3% or a minimum of $75 based on the monthly benefit of the member at the time they turn 55 with at least 20 years of service.
- Recommendation: Greater of 1% or $75, but no greater than the current supplement, with new supplement amount applied to the base benefit (not the monthly benefit at the time a member turns 55).

Contributions & Refund of DROP Contributions Recommendation

- Current: 8.5% contributions for active members not in DROP, 4% contribution for active members in DROP
- Recommendation: Contributions for all tiers, including members in DROP, increase ultimately to 12% as follows:
  - Increase to 9%, effective 10/1/2016
  - Increase to 12% with legislative approval – phased in at 10.5% effective 10/1/2017 and 12% effective 10/1/2018
  - Future employee contributions for active DROP members are refunded after a member retires, over a 10-year period. The contributions do not earn interest at any time.

Multiplier Recommendation

- Current: Tier 3 - 2% for up to 20-years of service, 2.5% for the next 5 years, and 3% thereafter
- Recommendation: Tier 3 - 3% multiplier for all service retroactively to the hire date and prospectively to retirement
  - This benefit increase acknowledges the increased contribution recommendation and the lower benefit for Tier 3
  - Actuarially the value of the increased multiplier is greater for the Tier 3 member than the increased contribution they will be paying. The benefit to the Plan is increasing the cash flow in the period before insolvency.
- No change for Tiers 1 & 2

Computation Pay Recommendation

- Current: The Average Computation Pay used in the benefits calculation for Tiers 1 & 2 is based on the average of the highest 36 months of Computation Pay
- Recommendation: Change the Average Computation Pay to include the highest 60 consecutive months of Computation Pay on a prospectively basis
  - This will be a bifurcated calculation prospectively.
- No change to Tier 3

Active DROP Recommendation

- Current: Interest is currently 7%, will reduce to 6% at 10/1/2016, 5% at 10/1/2017 and based on the triggers in place it will reduce to 0% at 10/1/2018. No limits on DROP.
- Recommendation:
  - Interest: 3% interest is earned for the first 7 years in DROP. Interest ceases to be credited to the account after 7 years.
  - Payments Deferred into the DROP account: payments may be deferred into the DROP account for 10 years as an active member. Allow a six-month transition period before payments cease for existing active DROP members with 10 years in active DROP at the time of the Plan amendment.
- Contributions: see slide 50 for recommendation on contributions while in active DROP.

DROP after Retirement Recommendation

- Current: Interest is currently 7%, will reduce to 6% at 10/1/2016, 5% at 10/1/2017 and based on the triggers in place it will reduce to 0% at 10/1/2018
- Recommendation: Modify the interest rate to reflect the liquidity terms selected by the member.
  - Access to the DROP balance on a weekly basis will earn an interest rate reflecting the liquidity: 1% over the yield of the 91 day Treasury Bill rate. Capped at 1.5%. Currently this rate would be 1.0305%.
  - Balance paid in a 10-year annuity would earn 1% above the yield of the 10-year Treasury Bond capped at 3%. Currently the rate would be 2.53%.
  - Balance paid in a 20-year annuity would earn would earn 2% above the yield of the 10-year Treasury Bond capped at 4%. Currently the rate would be 3.53%.
- The member can select a combination of options for their existing balance. Additional annuity options can be selected in minimum increments, to be determined.
- Going forward, the Board will consider the reasonableness of the rate caps given past, current and expected future market conditions with the advice of the DPFP Investment Consultant and the Actuary. The analysis will be completed as part of the 5-year Actuarial Experience Study. Upon each of these 5-year reviews, the Board will determine whether or not to call for a Plan Amendment to adjust future rate caps.
- Implementation details are in the process of being defined.

Other Recommendations

- Increase the Death Benefit while in active service for Tier 3 members to be an equal percentage as the other Tiers.
- Term Limits – the survey indicated strong interest from all member categories for term limits for trustees. The Sub-committee does not have a specific recommendation on this issue but believes the entire Board should consider the matter of term limits.
- Eligible Back Pay Definition – addresses the issue of back pay, the treatment of eligible back pay in the calculation of average computation pay, responsibility for collection of member and city contributions and interest.
- Allow an undo opportunity for prior DROP elections on the same terms as previous amendments requiring an all or nothing election, giving up the entire DROP account and repaying all unpaid or underpaid contributions.

Recommendation Implementation

- It is recommended that the Ballot items be structured in a way that some items are implemented at the effective date of a successful election of the members while other items would be conditional on the City “bridging the gap“ through appropriate legislative approvals or otherwise.

- Unconditional Ballot Items:
  - DROP Related: interest rate, time limitations on payments going into the DROP and interest accrual, refund of contributions
  - Member Contribution Increase to 9%
- Conditional Ballot Items:
  - All Benefit Changes including the COLA changes
  - Member Contribution Increase over 9%

Segal Presentation