



The elements of success



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Town of Fairfield Pension Plans

Review of Draft July 1, 2017 Actuarial Valuation Results

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Presentation Overview

- Review of Gains/Losses Since Prior Valuation
- Data Summaries – July 1, 2017 & July 1, 2016
- Draft July 1, 2017 Pension Results
- 5-Year Projections
- Sensitivity Analysis – Alternative Investment Return Assumptions
- Questions & Answers

Review of Plan Assets Since Prior Valuation



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Town Plan

Summary of Fund Activity		
	Market Value	Actuarial Value
1. Beginning value of assets July 1, 2016		
Trust assets	\$178,995,000	\$193,339,867
2. Contributions		
Town contributions during year	3,761,000	3,761,000
Employee contributions during year	1,494,000	1,494,000
Total for plan year	5,255,000	5,255,000
3. Disbursements		
Benefit payments during year	10,679,000	10,679,000
Administrative expenses during year	194,000	194,000
Total for plan year	10,873,000	10,873,000
4. Net investment return		
Interest and dividends	1,386,000	N/A
Realized and unrealized gain / (loss)	16,849,000	N/A
Expected return	N/A	12,413,001
Recognized gain / (loss)	N/A	(2,940,634)
Required adjustment due to corridor	N/A	0
Reversal of prior year required adjustment	N/A	0
Investment-related expenses	(385,000)	N/A
Total for plan year	17,850,000	9,472,367
5. Ending value of assets July 1, 2017		
Trust assets: (1) + (2) - (3) + (4)	191,227,000	197,194,234
6. Approximate rate of return	10.1%	5.0%

Police & Fire Plan

Summary of Fund Activity		
	Market Value	Actuarial Value
1. Beginning value of assets July 1, 2016		
Trust assets	\$166,404,000	\$179,778,396
2. Contributions		
Town contributions during year	3,355,000	3,355,000
Employee contributions during year	741,000	741,000
Total for plan year	4,096,000	4,096,000
3. Disbursements		
Benefit payments during year	10,349,000	10,349,000
Administrative expenses during year	175,000	175,000
Total for plan year	10,524,000	10,524,000
4. Net investment return		
Interest and dividends	1,279,000	N/A
Realized and unrealized gain / (loss)	15,547,000	N/A
Expected return	N/A	11,489,863
Recognized gain / (loss)	N/A	(2,759,743)
Required adjustment due to corridor	N/A	0
Reversal of prior year required adjustment	N/A	0
Investment-related expenses	(356,000)	N/A
Total for plan year	16,470,000	8,730,120
5. Ending value of assets July 1, 2017		
Trust assets: (1) + (2) - (3) + (4)	176,446,000	182,080,516
6. Approximate rate of return	10.1%	4.9%

Review of Gains & Losses Assets Since Prior Valuation



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Town Plan

Police & Fire Plan

Recognition of Gain / Loss in Actuarial Value

Recognition of Gain / Loss in Actuarial Value

Year	(a) Gain / (loss)	(b) Total recognized as of 7/1/2016	(c) Recognized in current year: 20% of (a)	(d) Total recognized as of 7/1/2017: (b) + (c)	(e) Not recognized as of 7/1/2017: (a) - (d)
2012-2013	0	0	0	0	0
2013-2014	0	0	0	0	0
2014-2015	(8,836,356)	(3,534,542)	(1,767,271)	(5,301,813)	(3,534,543)
2015-2016	(11,303,816)	(2,260,763)	(2,260,763)	(4,521,526)	(6,782,290)
2016-2017	5,436,999	0	1,087,400	1,087,400	4,349,599
Total			(2,940,634)		(5,967,234)

Year	(a) Gain / (loss)	(b) Total recognized as of 7/1/2016	(c) Recognized in current year: 20% of (a)	(d) Total recognized as of 7/1/2017: (b) + (c)	(e) Not recognized as of 7/1/2017: (a) - (d)
2012-2013	0	0	0	0	0
2013-2014	0	0	0	0	0
2014-2015	(8,243,414)	(3,297,366)	(1,648,683)	(4,946,049)	(3,297,365)
2015-2016	(10,535,435)	(2,107,087)	(2,107,087)	(4,214,174)	(6,321,261)
2016-2017	4,980,137	0	996,027	996,027	3,984,110
Total			(2,759,743)		(5,634,516)

- Both plans had fiscal year market value returns of **10.1%** (more than 7.0% expected).
- Asset smoothing (recall reset three years ago so only 3 years of g/l) actuarial return was approximately **5.0%**, 2.0% less than expected or about a \$7.6 million loss on an actuarial basis.
- The combined Actuarial Value of Assets are currently \$11.6 million higher than the Market Value of Assets so contribution will trend up over time if no offsetting losses by about **\$1.2 million**.
- Actuarial asset losses were accompanied by liability losses. Liability losses for the Town plan were small about \$275k. Gains from COLA were offset by losses relative less than expected employee turnover.
- Similar to the Town Plan, actuarial asset losses were accompanied by liability losses for the P&F plan. Liability losses were also relatively small at about \$550k, COLA and salary gains were offset by less than expected retiree mortality.

Data Summary – July 1, 2017



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	Police/Fire	Town
Counts		
Active	200	565
Terminated Vesteds	6	50
Due a Return of Contributions	0	24
Retirees & Beneficiaries	164	434
Disabled Pensioners	<u>47</u>	<u>10</u>
Total	417	1,083
Average Age		
Actives	44.6	53.6
Retirees & Beneficiaries	71.4	75.0
Disabled Pensioners	70.6	68.4
Total Plan Salary	\$16,396,000	\$29,655,000
Total Annual Benefits		
Retirees & Beneficiaries	\$8,483,000	\$10,674,000
Disabled Pensioners	\$1,915,000	\$340,000

Data Summary – July 1, 2016 (prior valuation)



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	Police/Fire	Town
Counts		
Active	202	613
Terminated Vesteds	6	49
Due a Return of Contributions	0	24
Retirees & Beneficiaries	163	429
Disabled Pensioners	<u>47</u>	<u>12</u>
Total	418	1,127
Average Age		
Actives	44.1	52.6
Retirees & Beneficiaries	71.0	75.4
Disabled Pensioners	70.4	67.0
Total Plan Salary	\$16,319,000	\$30,790,000
Total Annual Benefits		
Retirees & Beneficiaries	\$8,321,000	\$10,081,000
Disabled Pensioners	\$1,893,000	\$369,000

Comments

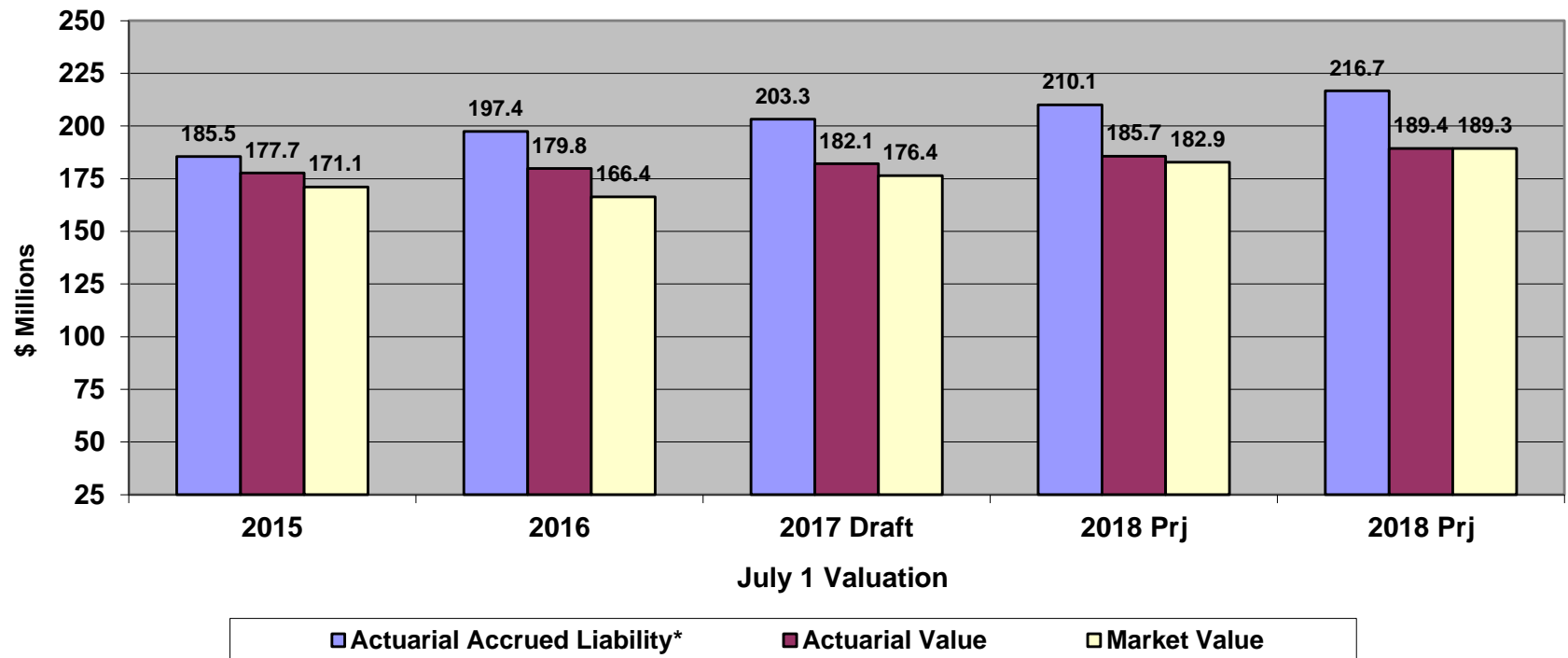
- Increase in contributions from \$9.09 million to \$9.70 million due primarily to assets losses from 2014-2016 and some relatively small liability losses during 2016-2017
- 25 year amortization base fixed as of the 2016 Valuation. 2016 UAL expected to be paid off at end of period. Future contributions expected to be equal to the normal cost if all assumptions are exactly realized.
- Based on current unrecognized losses (\$11.6 million) future contributions will trend up by \$1.2 million barring any future asset gains (relative to the 7.0% assumption).
- If current period of low inflation persists then there should continue to be salary scale and COLA gains in the near term.
- Town plan normal cost will continue to trend down since the plan is closed to new entrants.

Contribution Summary

(\$ millions)

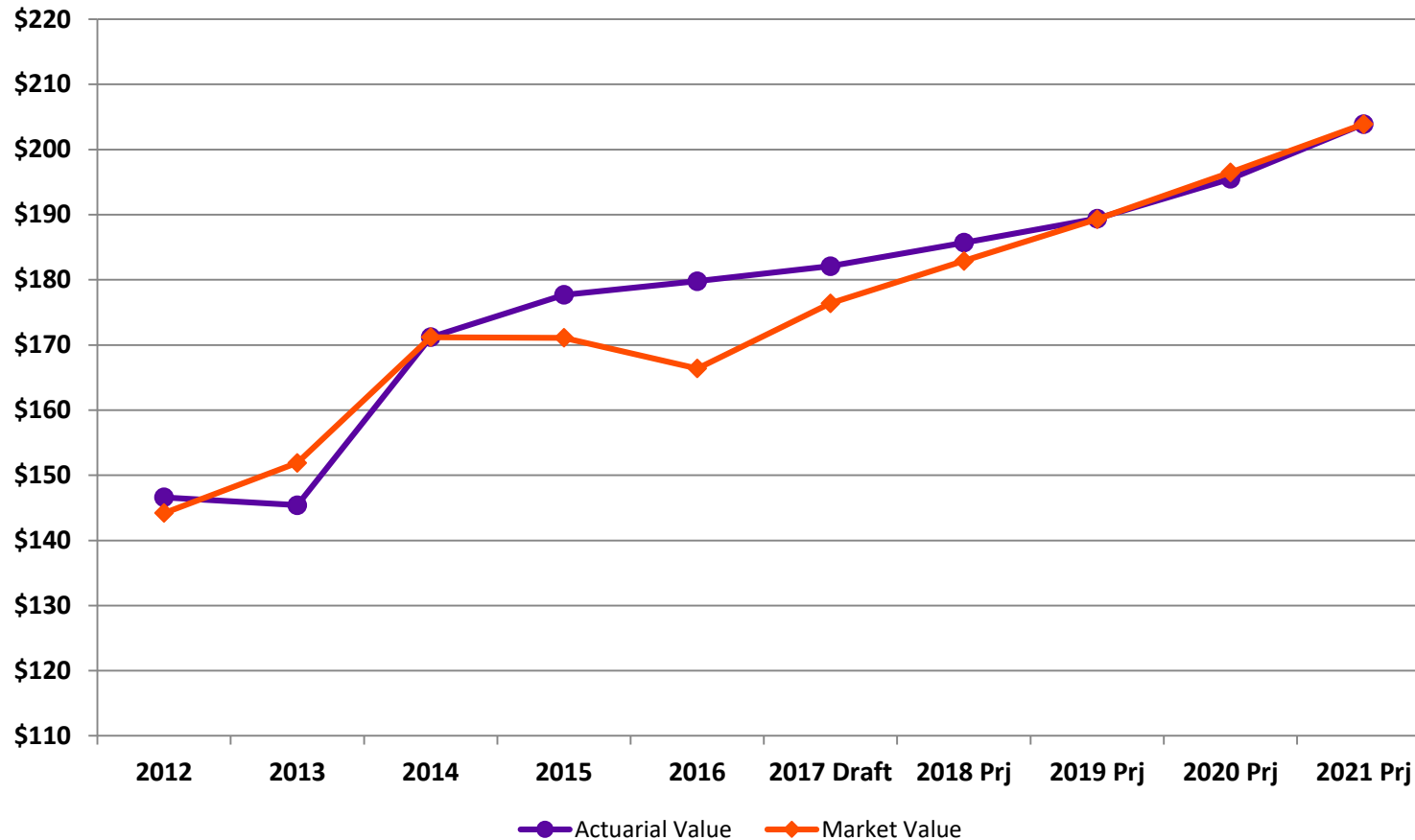
	Fiscal Year 2018/2019	Fiscal Year 2017/2018
Police/Fire		
(1) Town Normal Cost	\$2.75	\$2.70
(2) Amort. of Unfunded Accrued Liability (UAL)	1.73	1.41
(3) Interest to year end & NC roll-forward	<u>0.18</u>	<u>0.17</u>
(4) Total	\$ 4.66	\$4.28
Town		
(1) Town Normal Cost	\$2.39	\$2.45
(2) Amort. of Unfunded Accrued Liability (UAL)	2.56	2.28
(3) Interest to year end	<u>0.09</u>	<u>0.08</u>
(4) Total	\$ 5.04	\$ 4.81
Total Contribution – Police/Fire & Town	\$ 9.70	\$9.09

Actuarial Liability* vs. Plan Assets *Police and Fireman's Plan*



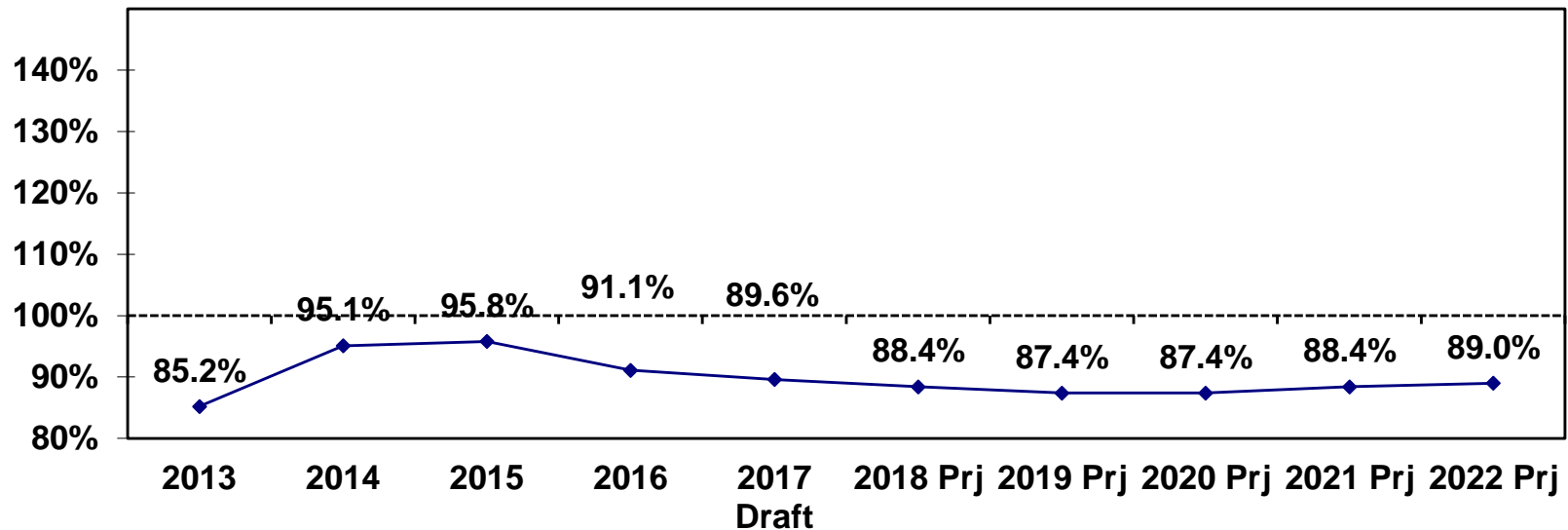
*7.5% Investment Return Assumption for 2015, 7.0% thereafter

Actuarial Assets vs. Market Assets *Police and Fireman's Plan*



Funded Status *Police and Fireman's Plan*

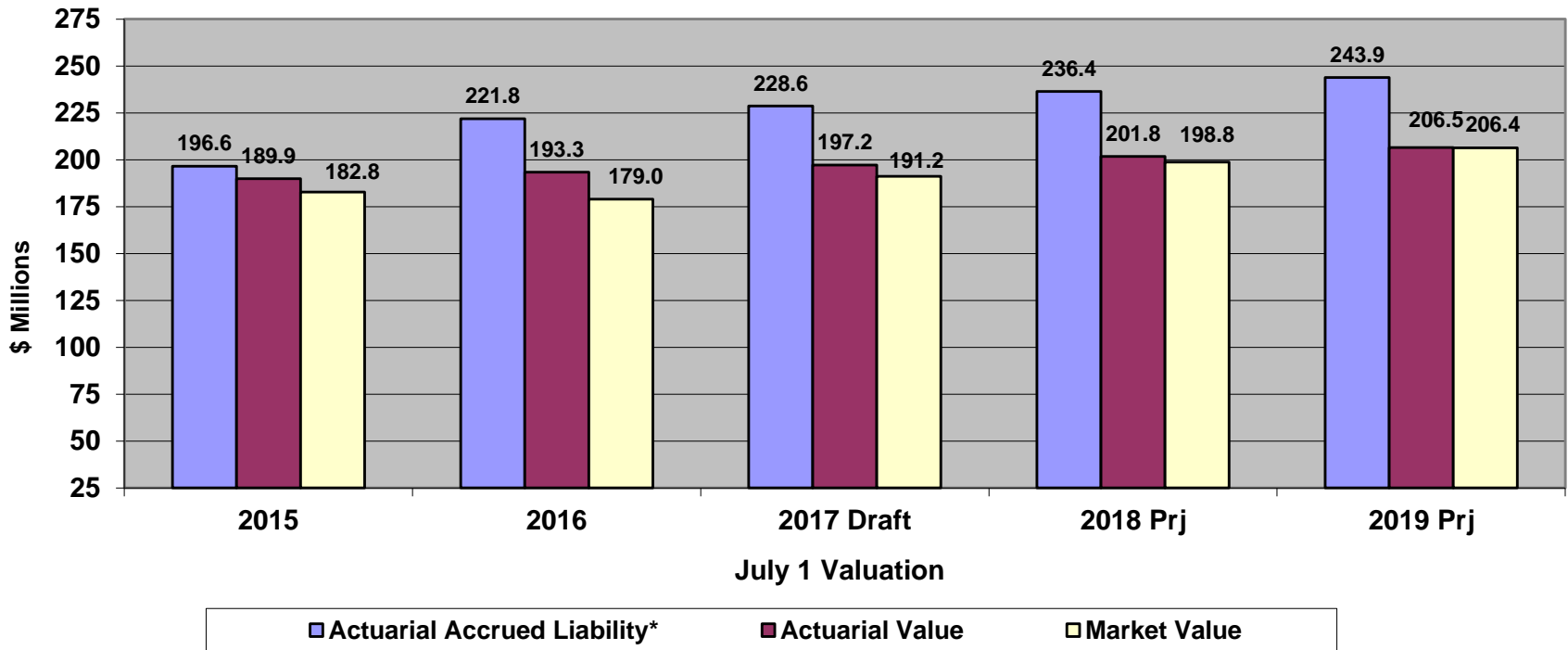
Funded Ratio*
(Actuarial Value of Assets/Actuarial Accrued Liability*)



July 1 Valuation

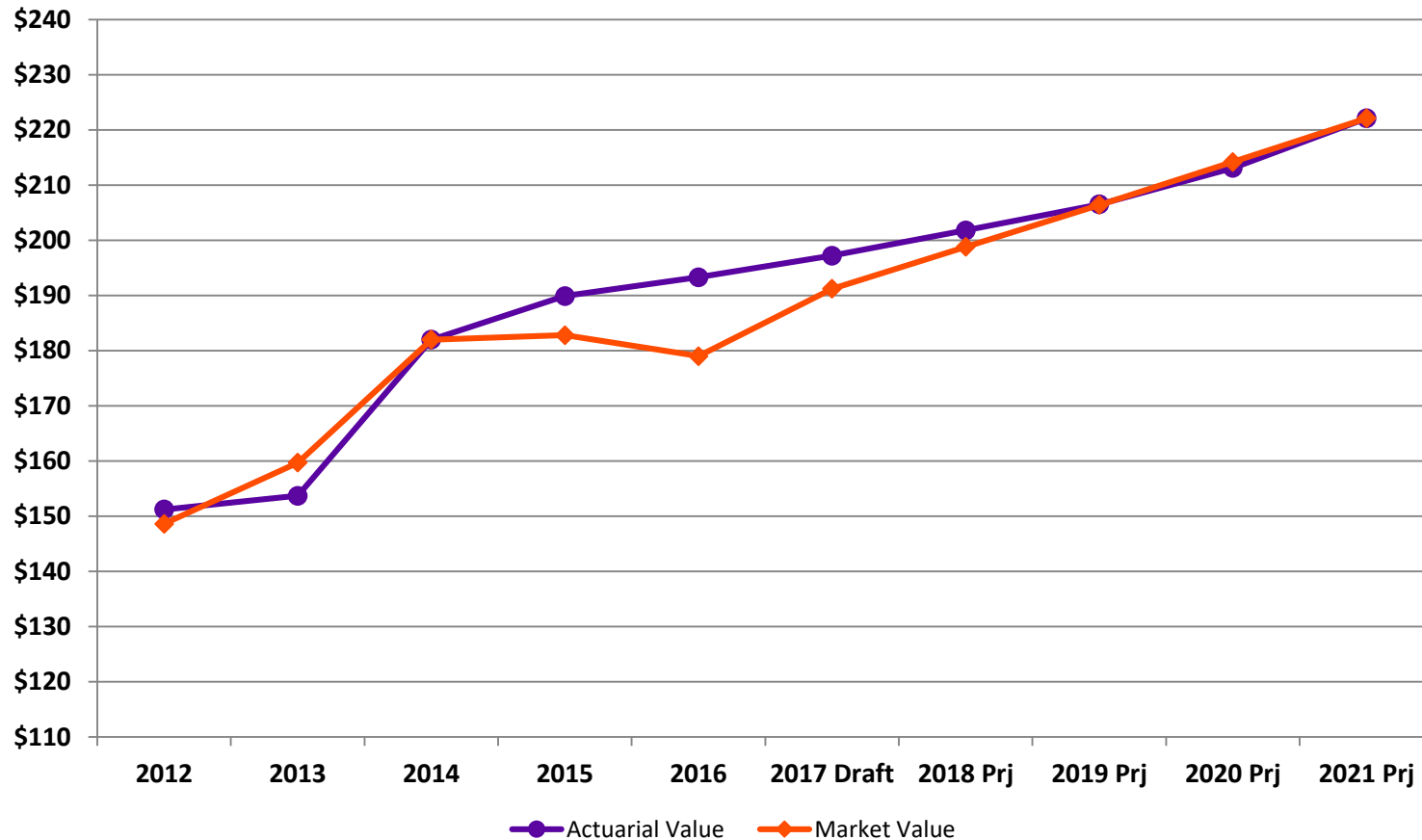
*7.5% Investment Return Assumption for 2013-2015; 7.0% thereafter.

Actuarial Liability* vs. Plan Assets *Town Employees' System*



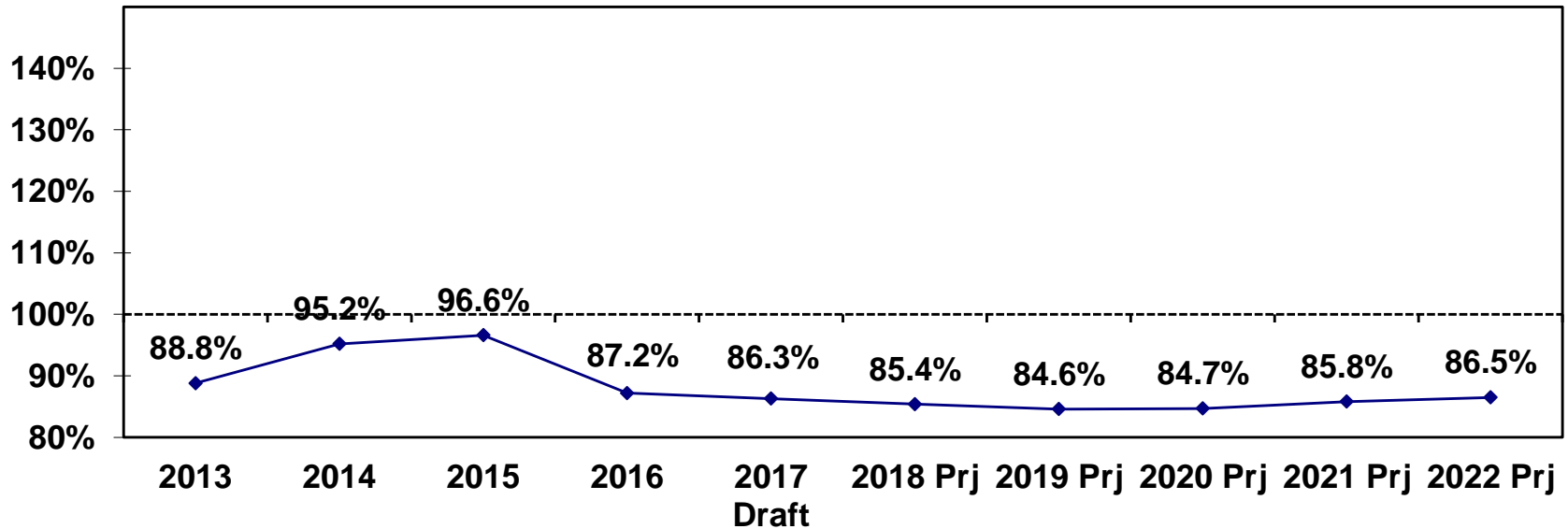
*7.5% Investment Return Assumption for 2015, 7.0% thereafter

Actuarial Assets vs. Market Assets *Town Employees' System*



Funded Status *Town Employees' System*

Funded Ratio*
(Actuarial Value of Assets/Actuarial Accrued Liability*)



July 1 Valuation

*7.5% Investment Return Assumption for 2013-2015; 7.0% thereafter.

Updated Projections (7/1/2017 Results) (\$ millions)

	<i>Fiscal Year</i>						
	2017/ 2018 Actual	2018/ 2019 DRAFT	2019/ 2020 Projected	2020/ 2021 Projected	2021/ 2022 Projected	2022/ 2023 Projected	2023/ 2024 Projected
Valuation Date	7/1/2016	7/1/2017	7/1/2018	7/1/2019	7/1/2020	7/1/2021	7/1/2022
Contribution							
Police/Fire Plan	\$4.28	\$4.66	\$5.06	\$5.46	\$5.71	\$5.76	\$5.89
Town Plan	<u>4.81</u>	<u>5.04</u>	<u>5.28</u>	<u>5.50</u>	<u>5.56</u>	<u>5.40</u>	<u>5.31</u>
Total	\$9.09	\$9.70	\$10.34	\$10.96	\$11.27	\$11.16	\$11.20

Projected results for July 1, 2018 and later years are based on the draft July 1, 2017 valuation results projected assuming no future plan changes and that all actuarial assumptions are exactly realized. This includes assumptions regarding retirement age, salary increases, cost of living, and investment return. The Town is further assumed to contribute the ADEC (Actuarially Determined Employer Contribution) for all years. Town net normal cost is assumed to decrease during the five year projection period due to shrinking covered group; P&F net normal costs are assumed to grow at 3.75% per year.

Prior Year Projections (February/March 2017 Presentations) (\$ millions)

	<i>Fiscal Year</i>						
	2016/ 2017 Actual	2017/ 2018 DRAFT	2018/ 2019 Projected	2019/ 2020 Projected	2020/ 2021 Projected	2021/ 2022 Projected	2022/ 2023 Projected
Valuation Date	7/1/2015	7/1/2016	7/1/2017	7/1/2018	7/1/2019	7/1/2020	7/1/2021
Contribution							
Police/Fire Plan	\$3.36	\$4.28	\$4.86	\$5.39	\$5.92	\$6.28	\$6.44
Town Plan	<u>3.76</u>	<u>4.81</u>	<u>5.21</u>	<u>5.56</u>	<u>5.90</u>	<u>6.07</u>	<u>6.02</u>
Total	\$7.12	\$9.09	\$10.07	\$10.95	\$11.82	\$12.35	\$12.46

Projected results for July 1, 2017 and later years are based on the draft July 1, 2016 valuation results projected assuming no future plan changes and that all actuarial assumptions are exactly realized. This includes assumptions regarding retirement age, salary increases, cost of living, and investment return. The Town is further assumed to contribute the ADEC (Actuarially Determined Employer Contribution) for all years. Town net normal cost is assumed to decrease during the five year projection period due to shrinking covered group; P&F net normal costs are assumed to grow at 3.75% per year.

Comments

- Prior year projections assumed a 7.0% return for 2016-2017 and the actual return was +10.1%.
- Projections assume all assumptions will be exactly realized and current unrecognized losses will be recognized without offsetting gains.
- Normal costs for the P&F plan are assumed to grow by 3.75% per year and reduce at the expected rate for the Town plan.
- Assuming assumptions are realized contributions are expect to level off at about \$11.2 million as increase in P&F normal cost are offset by Town reductions.
- Need to add projected cost of the defined contribution (DC) for Town employees to get a complete picture of the trends in retirement benefit costs.

Sensitivity Analysis



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Investment Return Scenarios (\$ millions)

	Fiscal Year					
	2018/ 2019 DRAFT	2019/ 2020 Projected	2020/ 2021 Projected	2021/ 2022 Projected	2022/ 2023 Projected	2023/ 2024 Projected
Valuation Date	7/1/2017	7/1/2018	7/1/2019	7/1/2020	7/1/2021	7/1/2022
Contribution – 7.0%						
Police/Fire Plan	\$4.66	\$5.06	\$5.46	\$5.71	\$5.76	\$5.89
Town Plan	5.04	5.28	5.50	5.56	5.4	5.31
Total	\$9.70	\$10.34	\$10.96	\$11.27	\$11.16	\$11.20
Contribution – 6.5%						
Police/Fire Plan	\$6.11	\$6.64	\$7.06	\$7.32	\$7.40	\$7.55
Town Plan	6.46	6.88	7.20	7.34	7.27	7.28
Total	\$12.57	\$13.52	\$14.26	\$14.66	\$14.67	\$14.83
Contribution – 6.0%						
Police/Fire Plan	\$7.66	\$8.31	\$8.75	\$9.04	\$9.14	\$9.32
Town Plan	7.96	8.48	8.79	8.93	8.86	8.88
Total	\$15.62	\$16.79	\$17.54	\$17.97	\$18.00	\$18.20

Projected results are based on assets and liabilities from the July 1, 2017 Draft Valuation projected assuming no plan changes in future years & that all actuarial assumptions are exactly realized with the exception of the investment return assumption which is assumed to be either 6.0%, 6.5%, or 7.0% as indicated for both calculating liabilities and projecting assets. Any deviations in actual experience from that assumed will result in future contributions different than the amounts shown here. Town net normal cost is assumed to decrease during the five year projection period due to shrinking covered group.

Questions & Answers



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