				October 1, 2017
	Valuation	- 200 bp1	Funding Rate <sup>1</sup>	+ 200 bp <sup>1</sup>
	7.50%	5.50%	7.50%	9.50%
Total pension liabililty				
Service Cost	\$579,233	\$579,233	\$579,233	\$579,233
Interest	385,416	385,416	385,416	385,416
Benefit changes	0	0	0	0
Difference between expected and actual experience	(148,750)	(148,750)	(148,750)	(148,750)
Changes in assumptions	0	2,241,219	0	(1,426,995)
Benefit payments	(38,480)	(38,480)	(38,480)	(38,480)
Contribution refunds	0	0	0	0
Net change in pension liability	\$777,419	\$3,018,638	\$777,419	(\$649,576)
Total pension liability, beginning of year	4,578,544	\$4,578,544	\$4,578,544	\$4,578,544
Total pension liability, end of year	\$5,355,963	\$7,597,182	\$5,355,963	\$3,928,968
Plan fiduciary net position				
Contributions - Employer	\$223,687	\$223,687	\$223,687	\$223,687
Contributions - State	143,010	143,010	143,010	143,010
Contributions - Member	107,272	107,272	107,272	107,272
Net investment income	923,540	923,540	923,540	923,540
Benefit payments	(38,480)	(38,480)	(38,480)	(38,480)
Contribution refunds	0	0	0	0
Administrative expense	(31,860)	(31,860)	(31,860)	(31,860)
Other	0	0	0	0
Net change in plan fiduciary net position	\$1,327,169	\$1,327,169	\$1,327,169	\$1,327,169
Plan fiduciary net position, beginning of year	6,612,931	\$6,612,931	\$6,612,931	\$6,612,931
Plan fiduciary net position, end of year	\$7,940,100	\$7,940,100	\$7,940,100	\$7,940,100
Net pension liability/(asset)	(\$2,584,137)	(\$342,918)	(\$2,584,137)	(\$4,011,132)
Funded ratio	148.25%	104.51%	148.25%	202.09%
Years that Assets support expected benefit payments	29	23	29	100
Estimated city contribution				
Annual dollar value	\$177,313	\$811,326	\$177,313	\$0
Percentage of payroll	9.69%	44.34%	9.69%	0.00%

<sup>1</sup>Based on valuation assumption with the following changes -interest rate (as noted)

🕞 nyhart

Page 29

October 1, 2017

## Sustainment of Expected Benefit Payments

MortalityValuationInterest7.50%

		<u>Market Value of</u>	<u>Investment</u>	<u>Benefit</u>
Year		<u>Assets</u>	<u>Return</u>	<u>Payments</u>
	1	\$7,940,100	\$594,607	\$24,467
	2	8,510,240	637,399	23,595
	3	9,124,044	683,422	23,945
	4	9,783,521	732,206	42,314
	5	10,473,413	783,925	42,939
	6	11,214,399	838,962	57,524
	7	11,995,837	889,911	265,527
	8	12,620,221	933,672	348,839
	9	13,205,054	977,343	354,038
	10	13,828,359	1,020,671	446,916
	11	14,402,114	1,052,766	743,912
	12	14,710,968	1,074,053	794,906
	13	14,990,115	1,091,517	889,179
	14	15,192,453	1,106,274	900,544
	15	15,398,183	1,118,912	976,368
	16	15,540,727	1,127,889	1,022,914
	17	15,645,702	1,128,980	1,207,102
	18	15,567,580	1,117,468	1,360,622
	19	15,324,426	1,092,657	1,539,155
	20	14,877,928	1,046,495	1,883,366
	21	14,041,057	979,153	2,007,656
2	22	13,012,554	901,341	2,025,971
	23	11,887,924	816,354	2,043,359
	24	10,660,919	723,563	2,064,142
	25	9,320,340	622,436	2,079,982
2	26	7,862,794	511,966	2,111,334
2	27	6,263,426	391,780	2,117,680
	28	4,537,526	262,137	2,123,117
-	29	2,676,546	122,443	2,126,391

		<u>Market Value of</u>	<u>Investment</u>	<u>Benefit</u>
<u>Year</u>		<u>Assets</u>	<u>Return</u>	<u>Payments</u>
	30	\$672,598		\$2,115,788



October 1, 2017

## Sustainment of Expected Benefit Payments

Mortality	FRS Special-Risk Mortality Scale BB Generational
Interest	5.50%

		Market Value of	<u>Investment</u>	<u>Benefit</u>
<u>Year</u>		<u>Assets</u>	<u>Return</u>	<u>Payments</u>
	1	\$7,940,100	\$436,042	\$24,467
	2	8,351,675	458,702	23,595
	3	8,786,782	482,623	23,945
	4	9,245,460	507,352	42,314
	5	9,710,498	532,912	42,939
	6	10,200,471	559,465	57,524
	7	10,702,412	581,428	265,527
	8	11,018,313	596,543	348,839
	9	11,266,017	610,025	354,038
	10	11,522,004	621,585	446,916
	11	11,696,673	623,133	743,912
	12	11,575,894	615,107	794,906
	13	11,396,095	602,660	889,179
	14	11,109,576	586,593	900,544
	15	10,795,625	567,269	976,368
	16	10,386,526	543,505	1,022,914
	17	9,907,117	512,140	1,207,102
	18	9,212,155	469,752	1,360,622
	19	8,321,285	415,910	1,539,155
	20	7,198,040	344,793	1,883,366
	21	5,659,467	256,799	2,007,656
	22	3,908,610	160,005	2,025,971
	23	2,042,644	56,905	2,043,359
	24	56,190		2,064,142



October 1, 2017

#### **Sustainment of Expected Benefit Payments**

Mortality	FRS Special-Risk Mortality Scale BB Generational
Interest	7.50%

	<u>Market Value of</u>	<u>Investment</u>	<u>Benefit</u>
<u>Year</u>	<u>Assets</u>	<u>Return</u>	<u>Payments</u>
1	\$7,940,100	\$594,607	\$24,467
2	8,510,240	637,399	23,595
3	9,124,044	683,422	23,945
4	9,783,521	732,206	42,314
5	10,473,413	783,925	42,939
6	11,214,399	838,962	57,524
7	11,995,837	889,911	265,527
8	12,620,221	933,672	348,839
9	13,205,054	977,343	354,038
10	13,828,359	1,020,671	446,916
11	14,402,114	1,052,766	743,912
12	14,710,968	1,074,053	794,906
13	14,990,115	1,091,517	889,179
14	15,192,453	1,106,274	900,544
15	15,398,183	1,118,912	976,368
16	15,540,727	1,127,889	1,022,914
17	15,645,702	1,128,980	1,207,102
18	15,567,580	1,117,468	1,360,622
19	15,324,426	1,092,657	1,539,155
20	14,877,928	1,046,495	1,883,366
21	14,041,057	979,153	2,007,656
22	13,012,554	901,341	2,025,971
23	11,887,924	816,354	2,043,359
24	10,660,919	723,563	2,064,142
25	9,320,340	622,436	2,079,982
26	7,862,794	511,966	2,111,334
27	6,263,426	391,780	2,117,680
28	4,537,526	262,137	2,123,117
29	2,676,546	122,443	2,126,391

		<u>Market Value of</u>	<u>Investment</u>	<u>Benefit</u>
<u>Year</u>		<u>Assets</u>	<u>Return</u>	<u>Payments</u>
	30	\$672,598		\$2,115,788



October 1, 2017

## Sustainment of Expected Benefit Payments

Mortality	FRS Special-Risk Mortality Scale BB Generational
Interest	9.50%

	<u>Market Value of</u>	<u>Investment</u>	<u>Benefit</u>		<u>Market Value of</u>	<u>Investment</u>	<u>Benefit</u>
Year	Assets	<u>Return</u>	<u>Payments</u>	Year	Assets	<u>Return</u>	<u>Payments</u>
1	\$7,940,100	\$753,174	\$24,467	30	\$31,283,927	\$2,873,753	\$2,115,788
2	8,668,807	822,441	23,595	31	32,041,892	2,945,743	2,116,143
3	9,467,653	898,315	23,945	32	32,871,492	3,024,316	2,121,286
4	10,342,023	980,528	42,314	33	33,774,522	3,109,948	2,124,660
5	11,280,237	1,069,629	42,939	34	34,759,810	3,203,481	2,126,152
6	12,306,927	1,166,488	57,524	35	35,837,139	3,305,850	2,125,656
7	13,415,891	1,262,183	265,527	36	37,017,333	3,418,090	2,123,045
8	14,412,547	1,352,998	348,839	37	38,312,378	3,541,347	2,118,139
9	15,416,706	1,448,152	354,038	38	39,735,586	3,676,894	2,110,758
10	16,510,820	1,547,781	446,916	39	41,301,722	3,826,138	2,100,837
11	17,611,685	1,638,576	743,912	40	43,027,023	3,990,625	2,088,255
12	18,506,349	1,721,202	794,906	41	44,929,393	4,172,064	2,072,881
13	19,432,645	1,804,823	889,179	42	47,028,576	4,372,338	2,054,536
14	20,348,289	1,891,282	900,544	43	49,346,378	4,593,538	2,032,817
15	21,339,027	1,981,882	976,368	44	51,907,099	4,837,993	2,007,256
16	22,344,541	2,075,245	1,022,914	45	54,737,836	5,108,293	1,977,527
17	23,396,872	2,166,666	1,207,102	46	57,868,602	5,407,304	1,943,307
18	24,356,436	2,250,698	1,360,622	47	61,332,599	5,738,202	1,904,143
19	25,246,512	2,326,967	1,539,155	48	65,166,658	6,104,500	1,859,713
20	26,034,324	2,385,830	1,883,366	49	69,411,445	6,510,063	1,809,983
21	26,536,788	2,427,794	2,007,656	50	74,111,525	6,959,108	1,755,322
22	26,956,926	2,466,857	2,025,971	51	79,315,311	7,456,221	1,696,023
23	27,397,812	2,507,934	2,043,359	52	85,075,509	8,006,399	1,632,288
24	27,862,387	2,551,104	2,064,142	53	91,449,620	8,615,086	1,564,505
25	28,349,349	2,596,630	2,079,982	54	98,500,201	9,288,187	1,493,508
26	28,865,997	2,644,256	2,111,334	55	106,294,880	10,032,104	1,419,767
27	29,398,919	2,694,589	2,117,680	56	114,907,217	10,853,838	1,343,042
28	29,975,828	2,749,143	2,123,117	57	124,418,013	11,761,041	1,263,839
29	30,601,854	2,808,464	2,126,391	58	134,915,215	12,762,052	1,182,466

