

PERS COST PROJECTIONS USING JULY 2019 ACTUARIAL REPORTS

SUMMARY (0% salary escalation)

Current Discount Rate - 7.00%									
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Miscellaneous		3,873,171	4,332,511	4,475,261	4,742,171	4,944,171	4,698,171	4,853,171	4,770,171
Safety - Tier 1		1,422,992	1,707,859	1,911,377	2,141,247	2,331,247	2,449,247	2,568,247	2,634,247
Safety - Tier 2		2,075,769	2,323,044	2,584,011	2,776,199	2,937,199	3,035,199	3,134,199	3,179,199
Safety - Tier 3 Police		270,670	271,412	290,790	292,468	295,468	284,168	285,868	286,068
Safety - Tier 3 Fire		100,888	107,518	115,731	116,823	117,923	114,623	115,523	115,623
Safety - Police PEPRA		190,236	243,955	248,117	250,299	252,599	254,499	256,499	256,499
Safety - Fire PEPRA		133,903	235,535	239,256	241,038	242,838	244,538	245,838	246,138
Projected Annual Total		\$ 7,047,796	\$ 8,067,631	\$ 9,221,835	\$ 9,864,542	\$ 10,560,245	\$ 11,121,445	\$ 11,080,445	\$ 11,487,945
<i>Annual Rate Increase</i>		<i>1,019,835</i>	<i>1,154,204</i>	<i>642,708</i>	<i>695,703</i>	<i>561,200</i>	<i>(41,000)</i>	<i>337,900</i>	<i>407,500</i>
<i>General Fund</i>	\$	<i>5,683,398</i>	<i>830,452</i>	<i>935,944</i>	<i>521,172</i>	<i>455,077</i>	<i>(33,247)</i>	<i>274,003</i>	<i>330,442</i>
<i>Other</i>	\$	<i>1,364,398</i>	<i>189,383</i>	<i>218,260</i>	<i>121,536</i>	<i>106,123</i>	<i>(7,753)</i>	<i>63,897</i>	<i>77,058</i>

For Miscellaneous Plans (0% salary escalation)

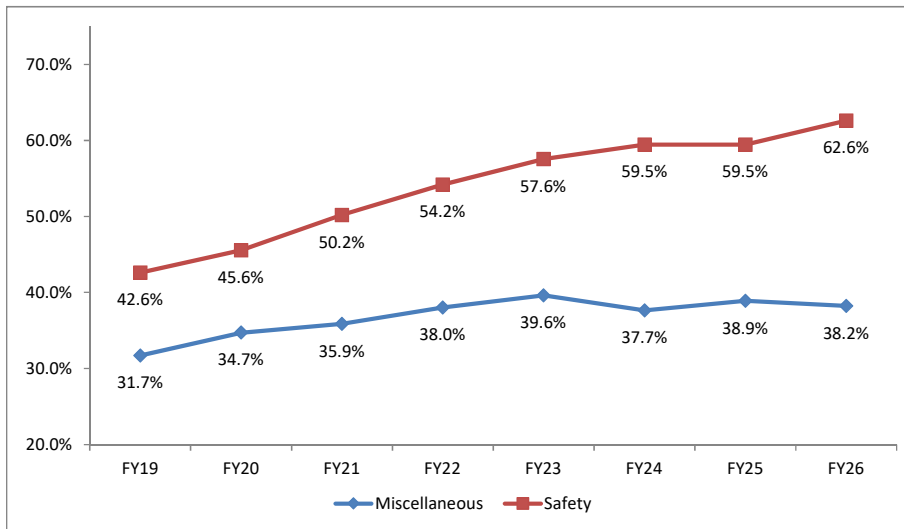
Current Discount Rate - 7.00%									Source
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	
NC Rate	10.792%	11.421%	11.999%	12.000%	12.000%	12.000%	12.000%	12.000%	from Page 5 of 6/30/18 Valuation Report
EPMC Rate (8%)	1.50%	1.55%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	
EPMC Rate (7%)	1.25%	1.29%	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%	
NC	\$ 1,317,775	\$ 1,424,392	\$ 1,496,479	\$ 1,496,603	\$ 1,496,603	\$ 1,496,603	\$ 1,496,603	\$ 1,496,603	
UAL	\$ 2,479,328	\$ 2,828,711	\$ 2,903,218	\$ 3,170,000	\$ 3,372,000	\$ 3,126,000	\$ 3,281,000	\$ 3,198,000	from Page 5 of 6/30/18 Valuation Report
EPMC	\$ 75,981	\$ 79,408	\$ 75,564	\$ 75,568	\$ 75,568	\$ 75,568	\$ 75,568	\$ 75,568	
TOTAL	\$ 3,873,171	\$ 4,332,511	\$ 4,475,261	\$ 4,742,171	\$ 4,944,171	\$ 4,698,171	\$ 4,853,171	\$ 4,770,171	
EPMC Payroll (8%)	\$ 4,558,321	\$ 4,606,217	\$ 4,304,627	\$ 4,304,627	\$ 4,304,627	\$ 4,304,627	\$ 4,304,627	\$ 4,304,627	
EPMC Payroll (7%)	\$ 598,458	\$ 608,176	\$ 503,311	\$ 503,311	\$ 503,311	\$ 503,311	\$ 503,311	\$ 503,311	
Projected Payroll	\$ 12,210,666	\$ 12,471,694	\$ 12,471,694	\$ 12,471,694	\$ 12,471,694	\$ 12,471,694	\$ 12,471,694	\$ 12,471,694	from Page 4 of 6/30/18 Valuation Report or updated agency estimate
Current "Rate"	31.7%	34.7%	35.9%	38.0%	39.6%	37.7%	38.9%	38.2%	

For Safety Plans - Summary of All Tiers (0% salary escalation)

Current Discount Rate - 7.00%										Source
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26		
NC Rate	20.843%	21.093%	22.247%	22.247%	22.247%	22.247%	22.247%	22.247%	22.247%	Average from Page 5 of 6/30/18 Valuation Report
EPMC Rate	2.69%	2.71%	2.81%	2.81%	2.81%	2.81%	2.81%	2.81%	2.81%	
NC	\$ 2,051,004	\$ 2,263,821	\$ 2,387,744	\$ 2,387,744	\$ 2,387,744	\$ 2,387,744	\$ 2,387,744	\$ 2,387,744	\$ 2,387,744	
UAL	\$ 2,002,968	\$ 2,480,501	\$ 2,848,008	\$ 3,276,800	\$ 3,636,000	\$ 3,841,000	\$ 3,841,000	\$ 4,176,500		from Page 5 of 6/30/18 Valuation Report
EPMC	\$ 140,487	\$ 145,001	\$ 153,530	\$ 153,530	\$ 153,530	\$ 153,530	\$ 153,530	\$ 153,530	\$ 153,530	
TOTAL	\$ 4,194,459	\$ 4,889,323	\$ 5,389,282	\$ 5,818,074	\$ 6,177,274	\$ 6,382,274	\$ 6,382,274	\$ 6,717,774		
EPMC Payroll	\$ 4,876,466	\$ 4,875,163	\$ 4,920,692	\$ 4,920,692	\$ 4,920,692	\$ 4,920,692	\$ 4,920,692	\$ 4,920,692	\$ 4,920,692	
Projected Payroll	\$ 9,840,086	\$ 10,732,698	\$ 10,732,698	\$ 10,732,698	\$ 10,732,698	\$ 10,732,698	\$ 10,732,698	\$ 10,732,698	\$ 10,732,698	from Page 4 of 6/30/18 Valuation Report or updated agency estimate
Current "Rate"	42.6%	45.6%	50.2%	54.2%	57.6%	59.5%	59.5%	59.5%	62.6%	

\$ - \$ - <-- Check Figure Should Be Zero

	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26
Miscellaneous	31.7%	34.7%	35.9%	38.0%	39.6%	37.7%	38.9%	38.2%
Safety	42.6%	45.6%	50.2%	54.2%	57.6%	59.5%	59.5%	62.6%



For Safety Plans - Tier 1 (0% salary escalation)

Current Discount Rate - 7.00%										Source
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26		
NC Rate	24.531%	25.612%	27.257%	27.3%	27.3%	27.3%	27.3%	27.3%	27.3%	from Page 5 of 6/30/18 Valuation Report
EPMC Rate	3.02%	3.12%	3.26%	3.26%	3.26%	3.26%	3.26%	3.26%	3.26%	
NC	\$ 145,837	\$ 153,005	\$ 162,832	\$ 162,832	\$ 162,832	\$ 162,832	\$ 162,832	\$ 162,832	\$ 162,832	
UAL	\$ 1,268,454	\$ 1,545,867	\$ 1,739,130	\$ 1,969,000	\$ 2,159,000	\$ 2,277,000	\$ 2,396,000	\$ 2,462,000	\$ 2,462,000	from Page 5 of 6/30/18 Valuation Report
EPMC	\$ 8,701	\$ 8,987	\$ 9,414	\$ 9,414	\$ 9,414	\$ 9,414	\$ 9,414	\$ 9,414	\$ 9,414	
TOTAL	\$ 1,422,992	\$ 1,707,859	\$ 1,911,377	\$ 2,141,247	\$ 2,331,247	\$ 2,449,247	\$ 2,568,247	\$ 2,634,247	\$ 2,634,247	
EPMC Payroll	\$ 288,330	\$ 288,512	\$ 288,511	\$ 288,511	\$ 288,511	\$ 288,511	\$ 288,511	\$ 288,511	\$ 288,511	
Projected Payroll	\$ 594,499	\$ 597,396	\$ 597,396	\$ 597,396	\$ 597,396	\$ 597,396	\$ 597,396	\$ 597,396	\$ 597,396	from Page 4 of 6/30/18 Valuation Report or updated agency estimate
Current "Rate"	239.4%	285.9%	320.0%	358.4%	390.2%	410.0%	429.9%	441.0%		

For Safety Plans - Tier 2 (0% salary escalation)

Current Discount Rate - 7.00%										Source
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26		
NC Rate	23.391%	24.392%	26.020%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	from Page 5 of 6/30/18 Valuation Report
EPMC Rate	2.92%	3.01%	3.15%	3.15%	3.15%	3.15%	3.15%	3.15%	3.15%	
NC	\$ 1,255,492	\$ 1,300,737	\$ 1,387,552	\$ 1,387,552	\$ 1,387,552	\$ 1,387,552	\$ 1,387,552	\$ 1,387,552	\$ 1,387,552	
UAL	\$ 717,865	\$ 915,312	\$ 1,082,812	\$ 1,275,000	\$ 1,436,000	\$ 1,534,000	\$ 1,633,000	\$ 1,678,000	\$ 1,678,000	from Page 5 of 6/30/18 Valuation Report
EPMC	\$ 102,412	\$ 106,996	\$ 113,647	\$ 113,647	\$ 113,647	\$ 113,647	\$ 113,647	\$ 113,647	\$ 113,647	
TOTAL	\$ 2,075,769	\$ 2,323,044	\$ 2,584,011	\$ 2,776,199	\$ 2,937,199	\$ 3,035,199	\$ 3,134,199	\$ 3,179,199	\$ 3,179,199	
EPMC Payroll	\$ 3,513,063	\$ 3,560,253	\$ 3,605,783	\$ 3,605,783	\$ 3,605,783	\$ 3,605,783	\$ 3,605,783	\$ 3,605,783	\$ 3,605,783	
Projected Payroll	\$ 5,367,414	\$ 5,332,636	\$ 5,332,636	\$ 5,332,636	\$ 5,332,636	\$ 5,332,636	\$ 5,332,636	\$ 5,332,636	\$ 5,332,636	from Page 4 of 6/30/18 Valuation Report or updated agency estimate
Current "Rate"	38.7%	43.6%	48.5%	52.1%	55.1%	56.9%	58.8%	59.6%		

For Safety Plans - Police Tier 3 (0% salary escalation)

Current Discount Rate - 7.00%										Source
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26		
NC Rate	21.358%	22.413%	23.983%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	from Page 5 of 6/30/18 Valuation Report
EPMC Rate	2.73%	2.83%	2.97%	2.97%	2.97%	2.97%	2.97%	2.97%	2.97%	
NC	\$ 229,614	\$ 230,000	\$ 246,000	\$ 246,000	\$ 246,000	\$ 246,000	\$ 246,000	\$ 246,000	\$ 246,000	
UAL	\$ 11,683	\$ 12,394	\$ 14,322	\$ 16,000	\$ 19,000	\$ 7,700	\$ 9,400	\$ 9,600	\$ 9,600	from Page 5 of 6/30/18 Valuation Report
EPMC	\$ 29,373	\$ 29,018	\$ 30,468	\$ 30,468	\$ 30,468	\$ 30,468	\$ 30,468	\$ 30,468	\$ 30,468	
TOTAL	\$ 270,670	\$ 271,412	\$ 290,790	\$ 292,468	\$ 295,468	\$ 284,168	\$ 285,868	\$ 286,068	\$ 286,068	
Projected Payroll	\$ 1,075,073	\$ 1,026,398	\$ 1,026,398	\$ 1,026,398	\$ 1,026,398	\$ 1,026,398	\$ 1,026,398	\$ 1,026,398	\$ 1,026,398	from Page 4 of 6/30/18 Valuation Report or updated agency estimate
Current "Rate"	25.2%	26.4%	28.3%	28.5%	28.8%	27.7%	27.9%	27.9%	27.9%	

For Safety Plans - Fire Tier 3 (0% salary escalation)

Current Discount Rate - 7.00%										Source
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26		
NC Rate	21.358%	22.413%	23.983%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	from Page 5 of 6/30/18 Valuation Report
EPMC Rate	2.73%	2.83%	2.97%	2.97%	2.97%	2.97%	2.97%	2.97%	2.97%	
NC	\$ 96,969	\$ 103,288	\$ 110,523	\$ 110,523	\$ 110,523	\$ 110,523	\$ 110,523	\$ 110,523	\$ 110,523	
UAL	\$ 3,919	\$ 4,230	\$ 5,208	\$ 6,300	\$ 7,400	\$ 4,100	\$ 5,000	\$ 5,100	\$ 5,100	from Page 5 of 6/30/18 Valuation Report
EPMC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
TOTAL	\$ 100,888	\$ 107,518	\$ 115,731	\$ 116,823	\$ 117,923	\$ 114,623	\$ 115,523	\$ 115,623	\$ 115,623	
EPMC Payroll	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Projected Payroll	\$ 454,019	\$ 460,838	\$ 460,838	\$ 460,838	\$ 460,838	\$ 460,838	\$ 460,838	\$ 460,838	\$ 460,838	from Page 4 of 6/30/18 Valuation Report or updated agency estimate
Current "Rate"	22.2%	23.3%	25.1%	25.4%	25.6%	24.9%	25.1%	25.1%	25.1%	

For Safety Plans - Police PEPRA (0% salary escalation)

Current Discount Rate - 7.00%										Source
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26		
NC Rate	13.754%	14.381%	14.503%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	from Page 5 of 6/30/18 Valuation Report
NC	\$ 189,679	\$ 242,442	\$ 244,499	\$ 244,499	\$ 244,499	\$ 244,499	\$ 244,499	\$ 244,499	\$ 244,499	
UAL	\$ 557	\$ 1,513	\$ 3,618	\$ 5,800	\$ 8,100	\$ 10,000	\$ 12,000	\$ 12,000	\$ 12,000	from Page 5 of 6/30/18 Valuation Report
TOTAL	\$ 190,236	\$ 243,955	\$ 248,117	\$ 250,299	\$ 252,599	\$ 254,499	\$ 256,499	\$ 256,499	\$ 256,499	
Projected Payroll	\$ 1,379,084	\$ 1,685,848	\$ 1,685,848	\$ 1,685,848	\$ 1,685,848	\$ 1,685,848	\$ 1,685,848	\$ 1,685,848	\$ 1,685,848	from Page 4 of 6/30/18 Valuation Report or updated agency estimate
Current "Rate"	13.8%	14.5%	14.7%	14.8%	15.0%	15.1%	15.2%	15.2%	15.2%	

For Safety Plans - Fire PEPRA (0% salary escalation)

Current Discount Rate - 7.00%										Source
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26		
NC Rate	13.754%	14.381%	14.503%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	from Page 5 of 6/30/18 Valuation Report
NC	\$ 133,413	\$ 234,350	\$ 236,338	\$ 236,338	\$ 236,338	\$ 236,338	\$ 236,338	\$ 236,338	\$ 236,338	
UAL	\$ 490	\$ 1,185	\$ 2,918	\$ 4,700	\$ 6,500	\$ 8,200	\$ 9,500	\$ 9,800		from Page 5 of 6/30/18 Valuation Report
TOTAL	\$ 133,903	\$ 235,535	\$ 239,256	\$ 241,038	\$ 242,838	\$ 244,538	\$ 245,838	\$ 246,138		
Projected Payroll	\$ 969,997	\$ 1,629,582	\$ 1,629,582	\$ 1,629,582	\$ 1,629,582	\$ 1,629,582	\$ 1,629,582	\$ 1,629,582	\$ 1,629,582	from Page 4 of 6/30/18 Valuation Report or updated agency estimate
Current "Rate"	13.8%	14.5%	14.7%	14.8%	14.9%	15.0%	15.1%	15.1%		