#### **Utah Retirement Systems**

# **Required Supplementary Information**

## Schedule of Changes in the Employers' Net Pension Liability

(in	thousands)					
	2024		2023		2022	
\$	473,002	\$	426,083	\$	422,530	
	2,489,600		2,346,798		2,256,737	
	_		_		_	
	970,649		705,556		351,279	
	_		406,158		_	
	(1,874,733)		(1,766,122)		(1,662,640)	
	(2,840)		(3,030)		(3,334)	
	2,055,678		2,115,443		1,364,572	
	37,046,805		34,931,362		33,566,790	
	39,102,483		37,046,805		34,931,362	
	19,439		11,884		15,415	
	1,113,132		1,046,505		969,922	
	2,528,996		2,969,950		(1,833,570)	
	(1,874,733)		(1,766,122)		(1,662,640)	
	(2,840)		(3,030)		(3,334)	
	(11,122)		(10,736)		(10,357)	
	8,416		(6,005)		58,592	
	1,781,288		2,242,446		(2,465,972)	
	34,845,009		32,602,563		35,068,535	
	36,626,297		34,845,009		32,602,563	
\$	2,476,186	\$	2,201,796	\$	2,328,799	
	93.7%		94.1%		93.3%	
\$	3,512,146	\$	3,392,657	\$	3,360,198	
	70.5%		64.9%		69.3%	
	\$	\$ 473,002 2,489,600 — 970,649 — (1,874,733) (2,840) 2,055,678 37,046,805 39,102,483 19,439 1,113,132 2,528,996 (1,874,733) (2,840) (11,122) 8,416 1,781,288 34,845,009 36,626,297 \$ 2,476,186	\$ 473,002 \$ 2,489,600 —— 970,649 —— (1,874,733) —— (2,840) —— 2,055,678 —— 37,046,805 —— 39,102,483 —— (1,874,733) —— (2,840) —— (11,122) —— 8,416 —— 1,781,288 —— 34,845,009 —— 36,626,297 \$ 2,476,186 \$ 93.7%	\$ 473,002 \$ 426,083 2,489,600 2,346,798 — — — — — — — — — — — — — — — — — — —	\$ 473,002 \$ 426,083 \$ 2,489,600 2,346,798 ————————————————————————————————————	\$ 473,002 \$ 426,083 \$ 422,530   2,489,600 2,346,798 2,256,737   — — —   970,649 705,556 351,279   — 406,158 —   (1,874,733) (1,766,122) (1,662,640)   (2,840) (3,030) (3,334)   2,055,678 2,115,443 1,364,572   37,046,805 34,931,362 33,566,790   39,102,483 37,046,805 34,931,362   19,439 11,884 15,415   1,113,132 1,046,505 969,922   2,528,996 2,969,950 (1,833,570)   (1,874,733) (1,766,122) (1,662,640)   (2,840) (3,030) (3,334)   (11,122) (10,736) (10,357)   8,416 (6,005) 58,592   1,781,288 2,242,446 (2,465,972)   34,845,009 32,602,563 35,068,535   36,626,297 34,845,009 32,602,563   \$ 2,476,186 \$ 2,201,796 \$ 2,328,799   93.7% 94.1% 93.3%   \$ 3,512,

						Noncontributory	Retirement System
	2021	2020	2019	2018	2017	2016	2015
	410,799	402,446	404,539	404,391	403,981	407,690	394,798
	2,167,432	2,071,626	1,989,449	1,920,238	1,877,576	1,764,653	1,775,819
	_	_	_	_	_	48,400	_
	404,505	252,553	234,989	32,680	(84,234)	6,408	(188,166)
	386,554	176,384	_	_	642,187	563,741	_
(	1,565,046)	(1,488,627)	(1,396,983)	(1,320,214)	(1,248,037)	(1,184,317)	(1,123,647)
	(1,313)	(2,338)	(3,127)	(2,766)	(4,635)	(4,366)	(2,496)
	1,802,931	1,412,044	1,228,867	1,034,329	1,586,838	1,602,209	856,308
3	1,763,859	30,351,815	29,122,948	28,088,619	26,501,781	24,899,572	24,043,264
3	3,566,790	31,763,859	30,351,815	29,122,948	28,088,619	26,501,781	24,899,572
	16,178	16,385	11,730	14,602	17,285	16,308	17,020
	942,910	912,525	888,078	858,444	854,255	831,631	813,449
	5,201,752	3,430,989	3,499,188	(92,207)	2,987,282	1,783,911	366,748
(	1,565,046)	(1,488,627)	(1,396,983)	(1,320,214)	(1,248,037)	(1,184,317)	(1,123,647)
	(1,313)	(2,338)	(3,127)	(2,766)	(4,635)	(4,366)	(2,496)
	(10,004)	(9,805)	(9,411)	(9,962)	(9,579)	(8,856)	(8,797)
	5,986	(16,980)	(19,611)	13,035	(10,187)	(8,005)	33,648
	4,590,463	2,842,149	2,969,864	(539,068)	2,586,384	1,426,306	95,925
3	0,478,072	27,635,923	24,666,059	25,205,127	22,618,743	21,192,437	21,096,512
3	5,068,535	30,478,072	27,635,923	24,666,059	25,205,127	22,618,743	21,192,437
(	1,501,745)	1,285,787	2,715,892	4,456,889	2,883,492	3,883,038	3,707,135
	104.5%	96.0%	91.1%	84.7%	89.7%	85.3%	85.1%
	3,361,940	3,306,382	3,328,314	3,330,548	3,375,321	3,406,567	3,458,286
	(44.7)%	38.9%	81.6%	133.8%	85.4%	114.0%	107.2%

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### **Schedule of Changes in the Employers' Net Pension Liability** (Continued)

		(in thousands)		
Contributory Retirement System	2024	2023	2022	
Total pension liability				
Service cost	\$ 1,919	2,026	2,433	
Interest	81,424	81,565	82,901	
Benefit changes	_	_	_	
Differences between expected and actual experience	3,115	10,504	(7,940)	
Assumption changes	_	2,786	_	
Benefit payments	(98,107)	(96,216)	(94,365)	
Refunds	(1,505)	(1,952)	(848)	
Net change in total pension liability	(13,154)	(1,287)	(17,819)	
Total pension liability — beginning	1,237,518	1,238,805	1,256,624	
Total pension liability — ending (a)	1,224,364	1,237,518	1,238,805	
Plan fiduciary net position				
Contributions — member	942	1,130	1,240	
Contributions — employer	2,840	3,299	3,675	
Net investment income	85,468	107,716	(70,701)	
Benefit payments	(98,107)	(96,216)	(94,365)	
Refunds	(1,505)	(1,952)	(848)	
Administrative expense	(364)	(374)	(382)	
Net transfers with affiliated systems	(16,789)	(3,136)	(69,481)	
Net change in plan fiduciary net position	(27,515)	10,467	(230,862)	
Plan fiduciary net position — beginning	1,226,842	1,216,375	1,447,237	
Plan fiduciary net position — ending (b)	1,199,327	1,226,842	1,216,375	
Net pension liability/(asset) — ending (a-b)	\$ 25,037	10,676	22,430	
Plan fiduciary net position as a percentage of the total pension liability	98.0%	99.1%	98.2%	
Projected covered payroll	\$ 17,001	18,977	26,521	
Net pension liability/(asset) as a percentage of covered payroll	147.3%	56.3%	84.6%	

					Contributory F	Retirement System
2021	2020	2019	2018	2017	2016	2015
2,786	3,175	3,536	4,044	4,801	5,673	8,672
85,305	85,198	86,205	87,297	90,124	91,894	95,463
_	_	_	_	_	(45,057)	_
(21,487)	(5,463)	(12,817)	(17,249)	(24,990)	(13,801)	(15,289)
10,667	11,312	_	_	22,108	22,909	_
(91,712)	(89,890)	(88,162)	(86,795)	(84,759)	(83,447)	(81,390)
(1,625)	(1,753)	(2,660)	(1,471)	(1,613)	(1,700)	(1,215)
(16,066)	2,579	(13,898)	(14,174)	5,671	(23,529)	6,241
1,272,690	1,270,111	1,284,009	1,298,183	1,292,512	1,316,041	1,309,800
1,256,624	1,272,690	1,270,111	1,284,009	1,298,183	1,292,512	1,316,041
1,445	1,728	1,950	2,455	2,675	3,420	4,771
4,204	4,759	5,433	6,027	7,946	8,188	11,719
220,023	154,367	163,935	(4,513)	155,949	97,693	21,251
(91,712)	(89,890)	(88,162)	(86,795)	(84,761)	(83,447)	(81,390)
(1,625)	(1,753)	(2,660)	(1,471)	(1,613)	(1,700)	(1,215)
(388)	(406)	(408)	(454)	(457)	(446)	(478)
(20,349)	4,542	9,775	(26,286)	(1,177)	(1,895)	(41,558)
111,598	73,347	89,863	(111,037)	78,562	21,813	(86,900)
1,335,639	1,262,292	1,172,429	1,283,466	1,204,904	1,183,091	1,269,991
1,447,237	1,335,639	1,262,292	1,172,429	1,283,466	1,204,904	1,183,091
(190,613)	(62,949)	7,819	111,580	14,717	87,608	132,950
445.007	10105	00.45	04.007	00.057	22.25	00.557
115.2%	104.9%	99.4%	91.3%	98.9%	93.2%	89.9%
26,782	30,748	34,317	39,279	45,177	53,615	82,426
(711.7)%	(204.7)%	22.8%	284.1%	32.6%	163.4%	161.3%

Continued on page 98.

### **Schedule of Changes in the Employers' Net Pension Liability** (Continued)

(III tilousullus)	(in	thousand	s)
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	(in thousands)					
Public Safety Retirement System		2024	2023	2022		
Total pension liability						
Service cost	\$	91,886	79,409	73,905		
Interest		374,360	344,468	331,631		
Benefit changes		_	_	_		
Differences between expected and actual experience		136,817	200,925	26,698		
Assumption changes		_	65,813	_		
Benefit payments		(267,819)	(252,716)	(241,776)		
Refunds		(276)	(128)	(552)		
Net change in total pension liability		334,968	437,771	189,906		
Total pension liability — beginning		5,553,211	5,115,440	4,925,534		
Total pension liability — ending (a)		5,888,179	5,553,211	5,115,440		
Plan fiduciary net position						
Contributions — member		541	568	1,037		
Contributions — employer		196,803	183,723	168,535		
Net investment income		374,508	436,503	(267,352)		
Benefit payments		(267,819)	(252,716)	(241,776)		
Refunds		(276)	(128)	(552)		
Administrative expense		(1,665)	(1,599)	(1,513)		
Net transfers with affiliated systems		3,765	5,041	5,403		
Net change in plan fiduciary net position		305,857	371,392	(336,218)		
Plan fiduciary net position — beginning		5,140,567	4,769,175	5,105,393		
Plan fiduciary net position — ending (b)		5,446,424	5,140,567	4,769,175		
Net pension liability/(asset) — ending (a-b)	\$	441,755	412,644	346,265		
Plan fiduciary net position as a percentage of the total pension liability		92.5%	92.6%	93.2%		
Projected covered payroll	\$	351,253	339,221	313,938		
Net pension liability/(asset) as a percentage of covered payroll		125.8%	121.6%	110.3%		

					Public Safety F	Retirement System
2021	2020	2019	2018	2017	2016	2015
74,554	77,899	78,229	80,296	78,272	78,843	75,352
320,715	305,221	291,647	280,149	269,818	249,722	248,980
_	_	_	_	_	_	_
8,677	72,199	34,291	1,441	(3,041)	9,358	(17,164)
61,108	(6,165)	_	_	118,370	110,373	_
(233,672)	(215,289)	(201,923)	(188,414)	(172,870)	(164,508)	(155,387)
(32)	(96)	(76)	(428)	(226)	(183)	(533)
231,350	233,769	202,168	173,044	290,323	283,605	151,248
4,694,184	4,460,415	4,258,247	4,085,203	3,794,880	3,511,275	3,360,027
4,925,534	4,694,184	4,460,415	4,258,247	4,085,203	3,794,880	3,511,275
1,421	557	856	895	793	830	905
152,524	150,512	150,467	147,101	145,814	147,099	141,024
756,145	496,725	502,657	(13,134)	421,917	249,027	50,654
(233,672)	(215,289)	(201,923)	(188,414)	(172,870)	(164,508)	(155,387)
(32)	(96)	(76)	(428)	(226)	(183)	(533)
(1,466)	(1,442)	(1,376)	(1,450)	(1,382)	(1,260)	(1,233)
7,956	7,364	5,512	6,982	5,926	6,701	4,023
682,876	438,331	456,117	(48,448)	399,972	237,706	39,453
4,422,517	3,984,186	3,528,069	3,576,517	3,176,545	2,938,839	2,899,386
5,105,393	4,422,517	3,984,186	3,528,069	3,576,517	3,176,545	2,938,839
(179,859)	271,667	476,229	730,178	508,686	618,335	572,436
103.7%	94.2%	89.3%	82.9%	87.5%	83.7%	83.7%
325,616	338,919	339,705	348,475	350,782	352,407	355,171
(55.2)%	80.2%	140.2%	209.5%	145.0%	175.5%	161.2%

Continued on page 100.

### **Schedule of Changes in the Employers' Net Pension Liability** (Continued)

Year Ended December 31

(in thousands)

	(in thousanas)					
Firefighters Retirement System		2024	2023	2022		
Total pension liability						
Service cost	\$	32,230	30,523	30,033		
Interest		109,470	103,496	99,323		
Benefit changes		_	800	_		
Differences between expected and actual experience		38,776	28,171	4,788		
Assumption changes		_	942	_		
Benefit payments		(79,594)	(75,341)	(71,019)		
Refunds		(29)	(195)	(370)		
Net change in total pension liability		100,853	88,396	62,755		
Total pension liability — beginning		1,621,800	1,533,404	1,470,649		
Total pension liability — ending (a)		1,722,653	1,621,800	1,533,404		
Plan fiduciary net position						
Contributions — member		20,005	19,696	19,269		
Contributions — employer		4,918	6,074	6,473		
Court fees and fire insurance premium tax		17,095	23,328	22,738		
Net investment income		131,844	154,170	(94,373)		
Benefit payments		(79,594)	(75,341)	(71,019)		
Refunds		(29)	(195)	(370)		
Administrative expense		(485)	(466)	(451)		
Net transfers with affiliated systems		1,518	2,611	3,513		
Net change in plan fiduciary net position		95,272	129,877	(114,220)		
Plan fiduciary net position — beginning		1,815,120	1,685,243	1,799,463		
Plan fiduciary net position — ending (b)		1,910,392	1,815,120	1,685,243		
Net pension liability/(asset) — ending (a-b)	\$	(187,739)	(193,320)	(151,839)		
Plan fiduciary net position as a percentage of the total pension liability		110.9%	111.9%	109.9%		
Projected covered payroll	\$	120,428	116,760	114,702		
Net pension liability/(asset) as a percentage of covered payroll		(155.9)%	(165.6)%	(132.4)%		

					Firefighters F	Retirement System
2021	2020	2019	2018	2017	2016	2015
29,351	29,553	29,281	29,378	28,775	28,652	27,182
95,203	90,343	86,589	82,819	80,386	75,334	75,212
_	_	_	_	_	_	_
5,996	8,829	(437)	937	(9,216)	(5,525)	(8,259)
18,286	6,153	_	_	31,357	25,572	_
(66,508)	(62,842)	(59,847)	(57,440)	(54,793)	(52,102)	(49,671)
(176)	(159)	(255)	(132)	(511)	(466)	(528)
82,152	71,877	55,331	55,562	75,998	71,465	43,936
1,388,497	1,316,620	1,261,289	1,205,727	1,129,729	1,058,264	1,014,328
1,470,649	1,388,497	1,316,620	1,261,289	1,205,727	1,129,729	1,058,264
18,985	18,729	18,701	18,305	18,460	18,729	18,175
7,499	7,490	7,443	7,021	6,715	6,954	6,690
21,136	20,279	41,859	8,747	1,223	10,569	17,218
265,931	173,818	174,141	(4,509)	146,736	87,746	17,934
(66,508)	(62,842)	(59,847)	(57,440)	(54,793)	(52,102)	(49,671)
(176)	(159)	(255)	(132)	(511)	(466)	(528)
(435)	(425)	(405)	(427)	(408)	(374)	(371)
1,837	2,751	2,027	1,917	1,259	1,611	2,573
248,269	159,641	183,664	(26,518)	118,681	72,667	12,020
1,551,194	1,391,553	1,207,889	1,234,407	1,115,726	1,043,059	1,031,039
1,799,463	1,551,194	1,391,553	1,207,889	1,234,407	1,115,726	1,043,059
(328,814)	(162,697)	(74,933)	53,400	(28,680)	14,003	15,205
122.4%	111.7%	105.7%	95.8%	102.4%	98.8%	98.6%
114,635	114,458	113,330	113,587	112,953	112,322	111,133
(286.8)%	(142.1)%	(66.1)%	47.0%	(25.4)%	12.5%	13.7%

Continued on page 102.

### **Schedule of Changes in the Employers' Net Pension Liability** (Continued)

(in thousands)
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	•	,			
Judges Retirement System		2024	2023	2022	
Total pension liability					
Service cost	\$	7,371	6,920	6,667	
Interest		21,139	19,983	19,008	
Benefit changes		_	_	_	
Differences between expected and actual experience		14,100	9,671	6,552	
Assumption changes		_	(289)	_	
Benefit payments		(20,642)	(18,620)	(17,609)	
Refunds		_	_	_	
Net change in total pension liability		21,968	17,665	14,618	
Total pension liability — beginning		315,240	297,575	282,957	
Total pension liability — ending (a)		337,208	315,240	297,575	
Plan fiduciary net position					
Contributions — member		_	_	_	
Contributions — employer		11,323	10,372	9,378	
Court fees and fire insurance premium tax		1,755	1,605	1,335	
Net investment income		20,367	23,938	(14,729)	
Benefit payments		(20,642)	(18,620)	(17,609)	
Refunds		_	_	_	
Administrative expense		(96)	(92)	(88)	
Net transfers with affiliated systems		3,101	1,474	1,990	
Net change in plan fiduciary net position		15,808	18,677	(19,723)	
Plan fiduciary net position — beginning		280,984	262,307	282,030	
Plan fiduciary net position — ending (b)		296,792	280,984	262,307	
Net pension liability/(asset) — ending (a-b)	\$	40,416	34,256	35,268	
Plan fiduciary net position as a percentage of the total pension liability		88.0%	89.1%	88.1%	
Projected covered payroll	\$	24,438	22,225	21,202	
Net pension liability/(asset) as a percentage of covered payroll		165.4%	154.1%	166.3%	

					Judges Re	etirement System
2021	2020	2019	2018	2017	2016	2015
6,309	6,144	6,054	5,682	5,325	5,023	4,794
18,415	17,675	16,649	15,697	14,866	14,064	14,136
_	_	_	_	_	_	_
2,789	548	7,615	7,872	809	1,995	171
2,928	3,431	_	_	13,067	2,885	_
(18,600)	(15,863)	(15,346)	(16,111)	(13,621)	(12,330)	(12,400)
_	_	_	_	_	_	_
11,841	11,935	14,972	13,140	20,446	11,637	6,701
271,116	259,181	244,209	231,069	210,623	198,986	192,285
282,957	271,116	259,181	244,209	231,069	210,623	198,986
_	_	_	_	_	_	
8,949	8,646	8,500	8,091	7,563	7,382	6,555
1,354	1,410	1,536	1,518	1,477	1,470	1,653
41,716	27,391	27,775	(730)	23,435	13,820	2,842
(18,600)	(15,863)	(15,346)	(16,111)	(13,621)	(12,330)	(12,400)
_	_	_	_	_	_	_
(85)	(84)	(81)	(84)	(79)	(71)	(71)
4,563	2,340	2,339	4,403	4,090	1,600	1,334
37,897	23,840	24,723	(2,913)	22,865	11,871	(87)
244,133	220,293	195,570	198,483	175,618	163,747	163,834
282,030	244,133	220,293	195,570	198,483	175,618	163,747
927	26,983	38,888	48,639	32,586	35,005	35,239
00.70/	00.00/	QF 00/	00 10/	QF 00/	02.40/	02.20/
99.7%	90.0%	85.0%	80.1%	85.9%	83.4%	82.3%
20,801	20,071	19,596	18,802	18,661	16,755	15,832
4.3%	134.4%	198.4%	258.7%	174.6%	208.9%	222.6%

Continued on page 104.

### **Schedule of Changes in the Employers' Net Pension Liability** (Continued)

(in	thou	isan	ds)
(111	LITOL	Juli	us,

	(in thousands)					
Utah Governors and Legislators Retirement Plan		2024	2023	2022		
Total pension liability						
Service cost	\$	38	55	52		
Interest		856	868	872		
Benefit changes		_	_	_		
Differences between expected and actual experience		284	(26)	50		
Assumption changes		_	10	_		
Benefit payments		(1,087)	(1,058)	(1,010)		
Refunds		_	_	_		
Net change in total pension liability		91	(151)	(36)		
Total pension liability — beginning		13,015	13,166	13,202		
Total pension liability — ending (a)		13,106	13,015	13,166		
Plan fiduciary net position						
Contributions — member		_	_	_		
Contributions — employer		364	360	422		
Court fees and fire insurance premium tax		_	_	_		
Net investment income		903	1,097	(693)		
Benefit payments		(1,087)	(1,058)	(1,010)		
Refunds		_	_	_		
Administrative expense		(4)	(4)	(4)		
Net transfers with affiliated systems		(11)	15	(18)		
Net change in plan fiduciary net position		165	410	(1,303)		
Plan fiduciary net position — beginning		12,532	12,122	13,425		
Plan fiduciary net position — ending (b)		12,697	12,532	12,122		
Net pension liability/(asset) — ending (a-b)	\$	409	483	1,044		
Plan fiduciary net position as a percentage of the total pension liability		96.9%	96.3%	92.1%		
Projected covered payroll	\$	576	724	564		
Net pension liability/(asset) as a percentage of covered payroll		71.0%	66.7%	185.1%		

Utah Governors and	l Legislators I	Retirement Plan

				• • • • • • • • • • • • • • • • • • • •	2012o.5 aa 22g.5.a.o.5	itetirement iun
2021	2020	2019	2018	2017	2016	2015
46	104	59	65	68	89	99
892	875	883	877	879	851	890
_	_	_	_	_	_	_
(144)	224	(54)	139	182	167	(105)
114	107	_	_	264	241	_
(1,036)	(1,023)	(1,012)	(978)	(973)	(941)	(904)
_	(10)	_	_	_	_	_
(128)	277	(124)	103	420	407	(20)
13,330	13,053	13,177	13,074	12,654	12,247	12,267
13,202	13,330	13,053	13,177	13,074	12,654	12,247
_	_	_	_	_	_	_
361	369	384	392	404	421	421
_	_	_	_	_	_	_
2,042	1,396	1,481	(41)	1,353	849	181
(1,036)	(1,023)	(1,012)	(978)	(973)	(941)	(904)
_	(10)	_	_	_	_	_
(4)	(4)	(4)	(5)	(5)	(4)	(5)
7	(17)	(42)	(51)	89	(12)	(20)
1,370	711	807	(683)	868	313	(327)
12,055	11,344	10,537	11,220	10,352	10,039	10,366
13,425	12,055	11,344	10,537	11,220	10,352	10,039
(223)	1,275	1,709	2,640	1,854	2,302	2,208
101.7%	90.4%	86.9%	80.0%	85.8%	81.8%	82.0%
719	757	639	639	722	799	943
(31.0)%	168.4%	267.4%	413.1%	256.8%	288.1%	234.1%

Continued on page 106.

### **Schedule of Changes in the Employers' Net Pension Liability** (Continued)

/*	. 1				
(in	TI	าดเ	usa	ma	S

2024	2023	2022	
\$ 293,845	235,367	200,266	
137,863	104,661	82,921	
_	_	_	
80,145	32,094	19,941	
_	87,861	_	
(5,037)	(4,005)	(2,602)	
_	(9)	_	
506,816	455,969	300,526	
1,868,189	1,412,220	1,111,694	
2,375,005	1,868,189	1,412,220	
9,154	130	164	
269,844	246,408	217,179	
_	_	_	
129,823	128,147	(65,084)	
(5,037)	(4,005)	(2,602)	
_	(9)	_	
(569)	(451)	(345)	
_	_	1	
403,215	370,220	149,313	
1,673,551	1,303,331	1,154,018	
2,076,766	1,673,551	1,303,331	
\$ 298,239	194,638	108,889	
87.4%	89.6%	92.3%	
\$ 2,875,199	2,459,139	2,099,223	
10.4%	7.9%	5.2 %	
\$	\$ 293,845 137,863 — 80,145 — (5,037) — 506,816 1,868,189 2,375,005 9,154 269,844 — 129,823 (5,037) — (569) — 403,215 1,673,551 2,076,766 \$ 298,239 87.4% \$ 2,875,199	\$ 293,845 235,367 137,863 104,661 — — — 80,145 32,094 — 87,861 (5,037) (4,005) — — (9) 506,816 455,969 1,868,189 1,412,220 2,375,005 1,868,189 9,154 130 269,844 246,408 — — — 129,823 128,147 (5,037) (4,005) — (9) (569) (451) — — — 403,215 370,220 1,673,551 1,303,331 2,076,766 1,673,551 \$ 298,239 194,638 87.4% 89.6% \$ 2,875,199 2,459,139	\$ 293,845 235,367 200,266 137,863 104,661 82,921 — — — — — 80,145 32,094 19,941 — 87,861 — — (5,037) (4,005) (2,602) — — (9) — — 506,816 455,969 300,526 1,868,189 1,412,220 1,111,694 2,375,005 1,868,189 1,412,220 9,154 130 164 269,844 246,408 217,179 — — — — — 129,823 128,147 (65,084) (5,037) (4,005) (2,602) — — (9) — — (569) (451) (345) — — — 1 403,215 370,220 149,313 1,673,551 1,303,331 1,154,018 2,076,766 1,673,551 1,303,331 \$ 298,239 194,638 108,889 87.4% 89.6% 92.3% \$ 2,875,199 2,459,139 2,099,223

Tier 2 Public Employees Contributory Retirement System

						•
2021	2020	2019	2018	2017	2016	2015
167,468	146,284	124,244	104,736	84,388	69,887	51,005
64,608	49,103	36,773	27,109	19,471	12,608	8,370
_	_	_	_	_	_	_
9,348	8,201	6,561	(1,727)	357	(1,917)	(4,982)
25,384	10,603	_	_	5,786	7,867	_
(1,982)	(1,397)	(965)	(692)	(417)	(316)	(333)
_	_	_	_	_	_	
264,826	212,794	166,613	129,426	109,585	88,129	54,060
846,868	634,074	467,461	338,035	228,450	140,321	86,261
1,111,694	846,868	634,074	467,461	338,035	228,450	140,321
57						
168,232	— 138,466	— 119,839	97,680	— 79,175	63,062	— 49,645
100,232	130,400	119,039	97,000	79,175	05,002	——————————————————————————————————————
155,495	84,040	68,228	(1,454)	33,249	14,059	1,963
(1,982)	(1,397)	(965)	(692)	(417)	(316)	(333)
(1,502)	(1,557)	(505)	(0)2)	(417) —	(510)	(555)
(269)	(207)	(152)	(119)	(82)	(51)	(30)
(203) —	(2 <i>0</i> 7)	—	—	—	—	3
321,533	220,902	186,950	95,415	111,925	76,754	51,248
832,485	611,583	424,633	329,218	217,293	140,539	89,291
1,154,018	832,485	611,583	424,633	329,218	217,293	140,539
(42,324)	14,383	22,491	42,828	8,817	11,157	(218)
103.8%	98.3%	96.5%	90.8%	97.4%	95.1%	100.1%
1,810,502	1,609,102	1,380,488	1,171,543	996,965	822,196	637,560
(2.3)%	0.9%	1.6%	3.7%	0.9%	1.4%	— %

Continued on page 108.

### **Schedule of Changes in the Employers' Net Pension Liability** (Continued)

Year Ended December 31

(in thousands)

	(In tr	nousanas)			
Tier 2 Public Safety and Firefighter Contributory Retirement System		2024	2023	2022	
Total pension liability					
Service cost	\$	75,489	54,564	42,714	
Interest		26,258	17,735	13,626	
Benefit changes		_	_	_	
Differences between expected and actual experience		9,446	17,650	(2,131)	
Assumption changes		_	24,251	_	
Benefit payments		(224)	(191)	(42)	
Refunds		(39)	(33)	(4)	
Net change in total pension liability		110,930	113,976	54,163	
Total pension liability — beginning		345,719	231,743	177,580	
Total pension liability — ending (a)		456,649	345,719	231,743	
Plan fiduciary net position					
Contributions — member		16,829	9,589	7,386	
Contributions — employer		61,943	52,392	44,272	
Court fees and fire insurance premium tax		_	_	_	
Net investment income		24,965	22,971	(10,791)	
Benefit payments		(224)	(191)	(42)	
Refunds		(39)	(33)	(4)	
Administrative expense		(104)	(79)	(54)	
Net transfers with affiliated systems		_	_	_	
Net change in plan fiduciary net position		103,370	84,649	40,767	
Plan fiduciary net position — beginning		308,050	223,401	182,634	
Plan fiduciary net position — ending (b)		411,420	308,050	223,401	
Net pension liability/(asset) — ending (a-b)	\$	45,229	37,669	8,342	
Plan fiduciary net position as a percentage of the total pension liability		90.1%	89.1%	96.4%	
Projected covered payroll	\$	421,254	339,569	265,137	
Net pension liability/(asset) as a percentage of covered payroll		10.7%	11.1%	3.1%	

Tier 2 Public Safety and Firefighter Contributory Retirement System

					renginer contributory ner	
2021	2020	2019	2018	2017	2016	2015
35,061	29,998	24,849	13,998	10,763	8,164	5,466
10,200	7,350	4,811	3,199	2,133	1,274	746
_	_	2,537	_	_	_	_
(880)	2,133	1,839	621	(2)	425	220
3,983	(939)	_	_	1,924	803	_
(37)	(76)	(90)	_	(61)	(28)	(30)
_	_	_	_	_	_	_
48,327	38,466	33,946	17,818	14,757	10,638	6,402
129,253	90,787	56,841	39,023	24,266	13,628	7,226
177,580	129,253	90,787	56,841	39,023	24,266	13,628
5,335	2,343	_	55	_	_	_
33,406	25,020	18,197	14,295	11,126	8,488	6,221
_	_	_	_	_	_	_
23,686	11,645	8,958	(180)	3,989	1,591	199
(37)	(76)	(90)	_	(61)	(28)	(30)
_	_	_	_	_	_	_
(40)	(29)	(20)	(14)	(9)	(5)	(3)
						(3)
62,350	38,903	27,045	14,156	15,045	10,046	6,384
120,284	81,381	54,336	40,180	25,135	15,089	8,705
182,634	120,284	81,381	54,336	40,180	25,135	15,089
(5,054)	8,969	9,406	2,505	(1,157)	(869)	(1,461)
102.8%	93.1%	89.6%	95.6%	103.0%	103.6%	110.7%
223,892	188,667	156,778	123,439	98,113	74,834	53,276
(2.3)%	4.8%	6.0%	2.0%	(1.2)%	(1.2)%	(2.7)%

Continued on page 110.

### **Schedule of Changes in the Employers' Net Pension Liability** (Concluded)

Year Ended December 31

(in thousands)

Total All Retirement Systems		(III triousurius)				
		2024	2023	2022		
Total pension liability						
Service cost	\$	975,780	834,947	778,600		
Interest		3,240,970	3,019,574	2,887,019		
Benefit changes		_	800	_		
Differences between expected and actual experience		1,253,332	1,004,545	399,237		
Assumption changes		_	587,532	_		
Benefit payments		(2,347,243)	(2,214,269)	(2,091,063)		
Refunds		(4,689)	(5,347)	(5,108)		
Net change in total pension liability		3,118,150	3,227,782	1,968,685		
Total pension liability — beginning		48,001,497	44,773,715	42,805,030		
Total pension liability — ending (a)		51,119,647	48,001,497	44,773,715		
Plan fiduciary net position						
Contributions — member		66,910	42,997	44,511		
Contributions — employer		1,661,167	1,549,133	1,419,856		
Court fees and fire insurance premium tax		18,850	24,933	24,073		
Net investment income		3,296,874	3,844,492	(2,357,293)		
Benefit payments		(2,347,243)	(2,214,269)	(2,091,063)		
Refunds		(4,689)	(5,347)	(5,108)		
Administrative expense		(14,409)	(13,801)	(13,194)		
Net transfers with affiliated systems		_	_	_		
Net change in plan fiduciary net position		2,677,460	3,228,138	(2,978,218)		
Plan fiduciary net position — beginning		45,302,655	42,074,517	45,052,735		
Plan fiduciary net position — ending (b)		47,980,115	45,302,655	42,074,517		
Net pension liability/(asset) — ending (a-b)	\$	3,139,532	2,698,842	2,699,198		
Plan fiduciary net position as a percentage of the total pension liability		93.9%	94.4%	94.0%		
Projected covered payroll	\$	7,322,295	6,689,272	6,201,485		
Net pension liability/(asset) as a percentage of covered payroll		42.9%	40.3%	43.5%		

Total	ΔΙΙ	Retirement Systems

						•
2021	2020	2019	2018	2017	2016	2015
726,374	695,603	670,791	642,590	616,373	604,021	567,368
2,762,770	2,627,391	2,513,006	2,417,385	2,355,253	2,210,400	2,219,616
_	_	2,537	_	_	3,343	_
408,804	339,224	271,987	24,714	(120,133)	(2,890)	(233,574)
509,024	200,886	_	_	835,063	734,391	_
(1,978,593)	(1,875,007)	(1,764,328)	(1,670,644)	(1,575,533)	(1,497,989)	(1,423,762)
(3,146)	(4,356)	(6,118)	(4,797)	(6,985)	(6,715)	(4,772)
2,425,233	1,983,741	1,687,875	1,409,248	2,104,038	2,044,561	1,124,876
40,379,797	38,396,056	36,708,181	35,298,933	33,194,895	31,150,334	30,025,458
42,805,030	40,379,797	38,396,056	36,708,181	35,298,933	33,194,895	31,150,334
42.421	20.742	22.227	26.212	20.212	20.207	40.071
43,421	39,742	33,237	36,312	39,213	39,287	40,871
1,318,085	1,247,787	1,198,341	1,139,051	1,112,998	1,073,225	1,035,724
22,490	21,689	43,395	10,265	2,700	12,039	18,871
6,666,790	4,380,371	4,446,363	(116,768)	3,773,910	2,248,696	461,772
(1,978,593)	(1,875,007)	(1,764,328)	(1,670,644)	(1,575,533)	(1,497,989)	(1,423,762)
(3,146)	(4,356)	(6,118)	(4,797)	(6,985)	(6,715)	(4,772)
(12,691)	(12,402)	(11,857)	(12,515)	(12,001)	(11,067)	(10,988)
_	_	_	_	_	_	_
6,056,356	3,797,824	3,939,033	(619,096)	3,334,302	1,857,476	117,716
38,996,379	35,198,555	31,259,522	31,878,618	28,544,316	26,686,840	26,569,124
45,052,735	38,996,379	35,198,555	31,259,522	31,878,618	28,544,316	26,686,840
(2,247,705)	1,383,418	3,197,501	5,448,659	3,420,315	4,650,579	4,463,494
105.3%	96.6%	91.7%	85.2%	90.3%	86.0%	85.7%
5,884,887	5,609,104	5,373,167	5,146,312	4,998,694	4,839,495	4,714,627
(38.2)%	24.7%	59.5%	105.9%	68.4%	96.1%	94.7%