

# Required Supplementary Information

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

Year Ended December 31

*(in thousands)*

	Noncontributory System			
	2016	2015	2014	2013
<b>Total pension liability</b>				
Service cost	\$ 407,690	394,798	407,992	441,320
Interest	1,764,653	1,775,819	1,699,693	1,646,213
Benefit changes	48,400	—	—	23,123
Difference between actual and expected experience	6,408	(188,166)	(204,823)	(208,501)
Assumption changes	563,741	—	(157,921)	—
Benefit payments	(1,184,317)	(1,123,647)	(1,043,798)	(974,684)
Refunds	(4,366)	(2,496)	(2,204)	(2,454)
<b>Net change in total pension liability</b>	<b>1,602,209</b>	<b>856,308</b>	<b>698,939</b>	<b>925,017</b>
<b>Total pension liability — beginning</b>	<b>24,899,572</b>	<b>24,043,264</b>	<b>23,344,325</b>	<b>22,419,308</b>
<b>Total pension liability — ending (a)</b>	<b>26,501,781</b>	<b>24,899,572</b>	<b>24,043,264</b>	<b>23,344,325</b>
<b>Plan fiduciary net position</b>				
Contributions — member	16,308	17,020	13,587	14,208
Contributions — employer	831,631	813,449	772,420	710,933
Court fees and fire insurance tax	—	—	—	—
Net investment income	1,783,911	366,748	1,419,053	2,588,981
Benefit payments	(1,184,317)	(1,123,647)	(1,043,798)	(974,684)
Refunds	(4,366)	(2,496)	(2,204)	(2,454)
Administrative expense	(8,856)	(8,797)	(8,828)	(8,329)
Net transfers with affiliated systems	(8,005)	33,648	30,467	(42,277)
<b>Net change in plan fiduciary net position</b>	<b>1,426,306</b>	<b>95,925</b>	<b>1,180,697</b>	<b>2,286,378</b>
<b>Plan fiduciary net position — beginning</b>	<b>21,192,437</b>	<b>21,096,512</b>	<b>19,915,815</b>	<b>17,629,437</b>
<b>Plan fiduciary net position — ending (b)</b>	<b>22,618,743</b>	<b>21,192,437</b>	<b>21,096,512</b>	<b>19,915,815</b>
<b>Net pension liability/(asset) — ending (a-b)</b>	<b>\$ 3,883,038</b>	<b>3,707,135</b>	<b>2,946,752</b>	<b>3,428,510</b>
<b>Plan fiduciary net position as a percentage of the total pension liability</b>	<b>85.3%</b>	<b>85.1%</b>	<b>87.7%</b>	<b>85.3%</b>
<b>Projected covered employee payroll</b>	<b>\$ 3,406,567</b>	<b>3,458,286</b>	<b>3,570,912</b>	<b>3,705,771</b>
<b>Net pension liability/(asset) as a percentage of covered employee payroll</b>	<b>114.0%</b>	<b>107.2%</b>	<b>82.5%</b>	<b>92.5%</b>

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Contributory System				Public Safety System				Firefighters System			
2016	2015	2014	2013	2016	2015	2014	2013	2016	2015	2014	2013
5,673	8,672	9,580	10,997	78,843	75,352	76,681	81,736	28,652	27,182	27,266	29,577
91,894	95,463	93,819	93,750	249,722	248,980	236,803	229,965	75,334	75,212	71,490	70,259
(45,057)	—	—	721	—	—	—	—	—	—	—	—
(13,801)	(15,289)	(22,839)	(20,520)	9,358	(17,164)	(25,225)	(29,228)	(5,525)	(8,259)	(15,077)	(13,083)
22,909	—	(4,233)	—	110,373	—	(52,410)	—	25,572	—	(20,372)	—
(83,447)	(81,390)	(77,015)	(74,158)	(164,508)	(155,387)	(144,763)	(137,486)	(52,102)	(49,671)	(47,710)	(44,747)
(1,700)	(1,215)	(2,433)	(1,922)	(183)	(533)	(199)	(467)	(466)	(528)	(293)	(106)
(23,529)	6,241	(3,121)	8,868	283,605	151,248	90,887	144,520	71,465	43,936	15,304	41,900
1,316,041	1,309,800	1,312,921	1,304,053	3,511,275	3,360,027	3,269,140	3,124,620	1,058,264	1,014,328	999,024	957,124
1,292,512	1,316,041	1,309,800	1,312,921	3,794,880	3,511,275	3,360,027	3,269,140	1,129,729	1,058,264	1,014,328	999,024
3,420	4,771	5,461	6,376	830	905	835	1,258	18,729	18,175	18,300	18,325
8,188	11,719	12,954	12,874	147,099	141,024	135,588	128,744	6,954	6,690	5,514	3,494
—	—	—	—	—	—	—	—	10,569	17,218	14,154	11,285
97,693	21,251	87,577	169,510	249,027	50,654	194,222	350,563	87,746	17,934	69,070	125,685
(83,447)	(81,390)	(77,015)	(74,158)	(164,508)	(155,387)	(144,763)	(137,486)	(52,102)	(49,671)	(47,710)	(44,747)
(1,700)	(1,215)	(2,433)	(1,922)	(183)	(533)	(199)	(467)	(466)	(528)	(293)	(106)
(446)	(478)	(494)	(480)	(1,260)	(1,233)	(1,227)	(1,161)	(374)	(371)	(370)	(355)
(1,895)	(41,558)	(38,004)	33,094	6,701	4,023	2,746	4,676	1,611	2,573	3,713	1,302
21,813	(86,900)	(11,954)	145,294	237,706	39,453	187,202	346,127	72,667	12,020	62,378	114,883
1,183,091	1,269,991	1,281,945	1,136,651	2,938,839	2,899,386	2,712,184	2,366,057	1,043,059	1,031,039	968,661	853,778
1,204,904	1,183,091	1,269,991	1,281,945	3,176,545	2,938,839	2,899,386	2,712,184	1,115,726	1,043,059	1,031,039	968,661
87,608	132,950	39,809	30,976	618,335	572,436	460,641	556,956	14,003	15,205	(16,711)	30,363
93.2%	89.9%	97.0%	97.6%	83.7%	83.7%	86.3%	83.0%	98.8%	98.6%	101.6%	97.0%
53,615	82,426	90,623	98,023	352,407	355,171	360,750	365,998	112,322	111,133	111,305	110,741
163.4%	161.3%	43.9%	31.6%	175.5%	161.2%	127.7%	152.2%	12.5%	13.7%	(15.0)%	27.4%

Continued on page 90.

## Utah Retirement Systems

Schedules of Changes in the Employers'  
Net Pension Liability (Concluded)

Year Ended December 31

(in thousands)

	Judges System				Utah Governors and Legislators Plan			
	2016	2015	2014	2013	2016	2015	2014	2013
Total pension liability								
Service cost	\$ 5,023	4,794	4,895	4,537	89	99	106	100
Interest	14,064	14,136	13,641	12,924	851	890	884	860
Benefit changes	—	—	—	—	—	—	—	—
Difference between actual and expected experience	1,995	171	2,602	(569)	167	(105)	307	(233)
Assumption changes	2,885	—	(130)	—	241	—	—	—
Benefit payments	(12,330)	(12,400)	(11,361)	(10,189)	(941)	(904)	(909)	(892)
Refunds	—	—	—	—	—	—	—	—
Net change in total pension liability	11,637	6,701	9,647	6,703	407	(20)	388	(165)
Total pension liability — beginning	198,986	192,285	182,638	175,935	12,247	12,267	11,879	12,044
Total pension liability — ending (a)	210,623	198,986	192,285	182,638	12,654	12,247	12,267	11,879
Plan fiduciary net position								
Contributions — member	—	—	317	—	—	—	—	—
Contributions — employer	7,382	6,555	5,627	4,990	421	421	411	252
Court fees and fire insurance tax	1,470	1,653	1,486	1,498	—	—	—	—
Net investment income	13,820	2,842	11,068	20,130	849	181	717	1,346
Benefit payments	(12,330)	(12,400)	(11,361)	(10,189)	(941)	(904)	(909)	(892)
Refunds	—	—	—	—	—	—	—	—
Administrative expense	(71)	(71)	(71)	(66)	(4)	(5)	(5)	(4)
Net transfers with affiliated systems	1,600	1,334	1,092	3,186	(12)	(20)	(14)	19
Net change in plan fiduciary net position	11,871	(87)	8,158	19,549	313	(327)	200	721
Plan fiduciary net position — beginning	163,747	163,834	155,676	136,127	10,039	10,366	10,166	9,445
Plan fiduciary net position — ending (b)	175,618	163,747	163,834	155,676	10,352	10,039	10,366	10,166
Net pension liability/(asset) — ending (a-b)	\$ 35,005	35,239	28,451	26,962	2,302	2,208	1,901	1,713
Plan fiduciary net position as a percentage of the total pension liability	83.4%	82.3%	85.2%	85.2%	81.8%	82.0%	84.5%	85.6%
Projected covered employee payroll	\$ 16,755	15,832	16,072	15,195	799	943	928	390
Net pension liability/(asset) as a percentage of covered employee payroll	208.9%	222.6%	177.0%	177.4%	288.1%	234.1%	204.8%	439.2%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Tier 2 Public Employees System				Tier 2 Public Safety and Firefighter System				Total			
2016	2015	2014	2013	2016	2015	2014	2013	2016	2015	2014	2013
69,887	51,005	39,283	29,318	8,164	5,466	3,579	2,151	604,021	567,368	569,382	599,736
12,608	8,370	4,648	2,351	1,274	746	379	159	2,210,400	2,219,616	2,121,357	2,056,481
—	—	—	(119)	—	—	—	(7)	3,343	—	—	23,718
(1,917)	(4,982)	(4,577)	(4,459)	425	220	50	106	(2,890)	(233,574)	(269,582)	(276,487)
7,867	—	(1,385)	—	803	—	(127)	—	734,391	—	(236,578)	—
(316)	(333)	—	—	(28)	(30)	—	—	(1,497,989)	(1,423,762)	(1,325,556)	(1,242,156)
—	—	—	—	—	—	—	—	(6,715)	(4,772)	(5,129)	(4,949)
88,129	54,060	37,969	27,091	10,638	6,402	3,881	2,409	2,044,561	1,124,876	853,894	1,156,343
140,321	86,261	48,292	21,201	13,628	7,226	3,345	936	31,150,334	30,025,458	29,171,564	28,015,221
228,450	140,321	86,261	48,292	24,266	13,628	7,226	3,345	33,194,895	31,150,334	30,025,458	29,171,564
—	—	—	—	—	—	—	—	39,287	40,871	38,500	40,167
63,062	49,645	37,299	25,743	8,488	6,221	4,365	2,451	1,073,225	1,035,724	974,178	889,481
—	—	—	—	—	—	—	—	12,039	18,871	15,640	12,783
14,059	1,963	4,320	4,017	1,591	199	404	316	2,248,696	461,772	1,786,431	3,260,548
(316)	(333)	—	—	(28)	(30)	—	—	(1,497,989)	(1,423,762)	(1,325,556)	(1,242,156)
—	—	—	—	—	—	—	—	(6,715)	(4,772)	(5,129)	(4,949)
(51)	(30)	(16)	(6)	(5)	(3)	(1)	—	(11,067)	(10,988)	(11,012)	(10,401)
—	3	(2)	3	—	(3)	2	(3)	—	—	—	—
76,754	51,248	41,601	29,757	10,046	6,384	4,770	2,764	1,857,476	117,716	1,473,052	2,945,473
140,539	89,291	47,690	17,933	15,089	8,705	3,935	1,171	26,686,840	26,569,124	25,096,072	22,150,599
217,293	140,539	89,291	47,690	25,135	15,089	8,705	3,935	28,544,316	26,686,840	26,569,124	25,096,072
11,157	(218)	(3,030)	602	(869)	(1,461)	(1,479)	(590)	4,650,579	4,463,494	3,456,334	4,075,492
95.1%	100.2%	103.5%	98.8%	103.6%	110.7%	120.5%	117.6%	86.0%	85.7%	88.5%	86.0%
822,196	637,560	492,882	353,227	74,834	53,276	35,019	20,215	4,839,495	4,714,627	4,678,491	4,669,560
1.4%	(0.0)%	(0.6)%	0.2%	(1.2)%	(2.7)%	(4.2)%	(2.9)%	96.1%	94.7%	73.9%	87.3%