



March 21, 2018

Mr. Mike Boerner  
Chairperson, Life Actuarial Task Force  
National Association of Insurance Commissioners

Re: Guaranteed Issue Reserve Comparison Using Different Mortality Bases

Dear Mr. Boerner:

The Guaranteed Issue Subgroup ("GI Subgroup"), a subgroup of the American Academy of Actuaries<sup>1</sup> Life Experience Committee and the Society of Actuaries<sup>2</sup> Preferred Mortality POG (the "Joint Committee") is submitting this response to the Life Actuarial Task Force's (LATF's) request for further analysis and reserve comparison of reserves for GI plans.

As per your request, the reserves and projection year detail are provided, both in aggregate as well as well as for gender and age specific sample cells. Both mean and mid-terminal reserves are provided under the following mortality basis:

- 2017 GI table as proposed (with 2017 CSO loadings)
- 2001 CSO (current reserve basis)
- 2017 CSO (reserve basis effective for issues on or after 1/1/2020)
- 1980 CSO (reserve basis for Preneed insurance)
- 2017 GI Basic Table with flat 35% loading factor
- 2017 GI Basic Table with flat 45% loading factor
- 2017 GI Basic Table with flat 55% loading factor
- 2017 GI Basic Table with flat 75% loading factor

The GI Subgroup looks forward to discussing the comparisons with LATF at the NAIC Winter Meeting on March 23, 2018. If you have need further information, please contact Ian Trepanier, Life Policy Analyst with the American Academy of Actuaries at [trepanier@actuary.org](mailto:trepanier@actuary.org).

Sincerely,

A handwritten signature in black ink that reads "Mary Bahna-Nolan".

Mary Bahna-Nolan, MAAA, FSA, CERA

Chairperson, Academy Life Experience Committee and SOA Preferred Mortality Project Oversight Group ("Joint Committee").

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<sup>1</sup> The American Academy of Actuaries is a 19,000-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

<sup>2</sup> The Society of Actuaries (SOA) is an educational, research and professional organization dedicated to serving the public, its members and its candidates. The SOA's mission is to advance actuarial knowledge and to enhance the ability of actuaries to provide expert advice and relevant solutions for financial, business and societal problems. The SOA's vision is for actuaries to be the leading professionals in the measurement and management of risk.

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group  
Prepared for: NAIC Spring Meeting - March 22, 2018  
Notes

- 1 The following are reserve comparisons using various loaded mortality tables for Guaranteed Issue (GI) business
- 2 These comparisons were developed by the American Academy of Actuaries' Life Experience Committee and Society of Actuaries' Preferred Mortality Project Oversight Group ("Joint" Committee) and presented for discussion at the National Association of Insurance Commissioners' (NAIC's) Spring National Meeting, LATF session on Thursday, March 22, 2018.
- 3 The Joint Committee had previously recommended a valuation table for GI business which was based on the GI basic ultimate tables and the same loading multiples as the 2017 CSO tables.
- 4 The GI Basic tables were developed specifically for GI mortality based on contributions from 11 contributing companies.
- 5 As previously presented to LATF, the 2017 CSO loading factors represents approximately a 17% load on top of the GI Basic Ultimate tables. This load was chosen as it covered nearly 99% of the exposure contributed in the data collection process for the GI table but only 55% of the overall contributing companies' experience. There were three contributing companies with very low exposure to the study (less than 0.3%). To increase the mortality coverage to over 70% of the contributing companies, a much higher load of approximately 57% would have been necessary. The Joint Committee believed this level of load to be excessive.

Approximate Coverage Percent of Contributing Companies	Percentage of the 2017 Basic GI S&U Table to Achieve Coverage Percent	Exposure Covered by Count
55%	17%	98.9%
64%	45%	99.5%
73%	57%	99.8%
82%	118%	99.9%



Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
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Prepared for: NAIC Spring Meeting - March 22, 2018  
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- 6 A model office was utilized. The following are some general characteristics of the model office:
- Mean reserves and mid-terminal reserves assumed monthly mode for all business and an interest rate of 3.5%.
  - Since mean reserves fail to recognize the deferred premium offset, mid-terminal reserves, which include the unearned premium were determined.
  - A blended modal pay assumption using 19% Annual pay and 81% Monthly pay was used to determine a blended mid-terminal reserve.
  - The underlying policies were GI Whole Life plans with graded death benefits in the first 2 years, and typical of current product designs.
  - Age last birthday (ALB) was assumed for all business
  - Male/Female mix: 36.5% / 63.5%
  - All policies were Unismoke
  - Age distribution:

	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84
Male	3.0%	5.0%	5.9%	8.5%	8.2%	3.9%	1.5%	0.4%
Female	4.7%	9.8%	11.1%	14.8%	13.1%	6.5%	2.7%	0.9%
Total	7.7%	14.8%	17.0%	23.3%	21.3%	10.4%	4.2%	1.3%

- All reserves were determined using ultimate mortality forms
- 7 Per LATF's request, the following mortality bases were compared
- 2017 GI table as proposed (with 2017 CSO loadings)
  - 2001 CSO (current reserve basis)
  - 2017 CSO (reserve basis effective for issues on or after 1/1/2020)
  - 1980 CSO (reserve basis for Preneed insurance)
  - 2017 GI Basic Table with flat 35% loading factor
  - 2017 GI Basic Table with flat 45% loading factor
  - 2017 GI Basic Table with flat 55% loading factor
  - 2017 GI Basic Table with flat 75% loading factor

LATF also requested aggregate reserves plus gender specific reserves for ages 45, 55, 65 and 75. The model office uses quinquennial model cell points. Therefore, mid-point ages of the model cells were used instead at 47, 57, 67, and 77.

- 8 Special thanks to Katherine Mullins for developing the model office and preparing the comparisons.

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Mean Reserves

**Aggregate**

Males & Females, all issue ages

**Mean Reserve Balance**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	10,920	720,576	1,117,317	1,288,563	1,443,133	1,580,685	1,701,475	1,804,338	1,888,663	1,952,500	1,995,393	2,019,825	2,025,565	2,011,788	1,980,763
2017 GI with 45% loading	10,145	755,914	1,166,744	1,338,303	1,493,164	1,630,876	1,751,643	1,854,234	1,938,019	2,000,998	2,042,722	2,065,734	2,069,811	2,054,121	2,020,985
2017 GI with 55% loading	10,827	792,008	1,217,666	1,389,087	1,543,854	1,681,372	1,801,809	1,903,865	1,986,871	2,048,789	2,089,166	2,110,618	2,112,922	2,095,225	2,059,916
2017 GI with 75% loading	13,250	863,899	1,319,212	1,489,469	1,643,260	1,779,728	1,898,922	1,999,395	2,080,423	2,139,885	2,177,325	2,195,486	2,194,144	2,172,421	2,132,815
<b>2017 GI with 2017 CSO loading</b>	<b>8,513</b>	<b>653,254</b>	<b>1,019,333</b>	<b>1,186,837</b>	<b>1,338,148</b>	<b>1,473,043</b>	<b>1,591,878</b>	<b>1,693,584</b>	<b>1,777,603</b>	<b>1,842,052</b>	<b>1,886,457</b>	<b>1,913,149</b>	<b>1,921,868</b>	<b>1,911,812</b>	<b>1,885,102</b>
2017 CSO	3,391	425,249	735,505	964,316	1,167,656	1,347,400	1,505,019	1,640,310	1,753,214	1,842,193	1,907,107	1,950,596	1,972,694	1,972,875	1,953,533
2001 CSO	3,016	464,936	787,278	1,009,518	1,206,005	1,378,545	1,528,885	1,657,092	1,763,208	1,845,586	1,904,068	1,941,597	1,958,451	1,954,251	1,931,323
1980 CSO	4,788	571,814	954,087	1,203,774	1,423,638	1,615,762	1,782,017	1,922,393	2,037,130	2,124,750	2,185,286	2,222,014	2,235,201	2,224,461	2,192,744
<b>Initial Proposed GI Table</b>	<b>8,513</b>	<b>653,254</b>	<b>1,019,333</b>	<b>1,186,837</b>	<b>1,338,148</b>	<b>1,473,043</b>	<b>1,591,878</b>	<b>1,693,584</b>	<b>1,777,603</b>	<b>1,842,052</b>	<b>1,886,457</b>	<b>1,913,149</b>	<b>1,921,868</b>	<b>1,911,812</b>	<b>1,885,102</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	35%	71%	77%	85%	90%	94%	96%	98%	99%	100%	101%	101%	102%	102%	102%
2017 CSO Table Ultimate	40%	65%	72%	81%	87%	91%	95%	97%	99%	100%	101%	102%	103%	103%	104%
GI Basic Ult with 35% loading	128%	110%	110%	109%	108%	107%	107%	107%	106%	106%	106%	106%	105%	105%	105%
GI Basic Ult with 45% loading	119%	116%	114%	113%	112%	111%	110%	109%	109%	109%	108%	108%	108%	107%	107%
GI Basic Ult with 55% loading	127%	121%	119%	117%	115%	114%	113%	112%	112%	111%	111%	110%	110%	110%	109%
GI Basic Ult with 75% loading	156%	132%	129%	125%	123%	121%	119%	118%	117%	116%	115%	115%	114%	114%	113%
1980 CSO Table Ultimate	56%	88%	94%	101%	106%	110%	112%	114%	115%	115%	116%	116%	116%	116%	116%
<b>Initial Proposed GI Table</b>	<b>8,513</b>	<b>653,254</b>	<b>1,019,333</b>	<b>1,186,837</b>	<b>1,338,148</b>	<b>1,473,043</b>	<b>1,591,878</b>	<b>1,693,584</b>	<b>1,777,603</b>	<b>1,842,052</b>	<b>1,886,457</b>	<b>1,913,149</b>	<b>1,921,868</b>	<b>1,911,812</b>	<b>1,885,102</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(5,497)	(188,318)	(232,055)	(177,319)	(132,143)	(94,497)	(62,993)	(36,492)	(14,395)	3,534	17,610	28,447	36,583	42,439	46,221
2017 CSO Table Ultimate	(5,122)	(228,005)	(283,828)	(222,522)	(170,492)	(125,642)	(86,859)	(53,274)	(24,389)	141	20,650	37,446	50,826	61,062	68,431
GI Basic Ult with 35% loading	2,406	67,321	97,983	101,726	104,985	107,643	109,597	110,754	111,060	110,447	108,936	106,676	103,697	99,976	95,661
GI Basic Ult with 45% loading	1,632	102,660	147,411	151,466	155,016	157,834	159,765	160,650	160,415	158,946	156,264	152,585	147,943	142,308	135,883
GI Basic Ult with 55% loading	2,314	138,754	198,333	202,250	205,706	208,330	209,931	210,281	209,268	206,737	202,709	197,469	191,053	183,412	174,814
GI Basic Ult with 75% loading	4,736	210,644	299,879	302,632	305,112	306,685	307,044	305,811	302,820	297,833	290,868	282,337	272,276	260,609	247,713
1980 CSO Table Ultimate	(3,726)	(81,440)	(65,246)	16,936	85,491	142,719	190,139	228,809	259,527	282,698	298,829	308,865	313,333	312,649	307,642

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Mean Reserves

**Aggregate**

Males & Females, all issue ages

**Mean Reserve Balance**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	1,934,926	1,876,711	1,808,209	1,730,367	1,644,316	1,551,795	1,454,690	1,354,590	1,253,036	1,151,398	1,050,848	952,541	857,578	766,908	681,227
2017 GI with 45% loading	1,972,903	1,912,357	1,841,488	1,761,259	1,672,816	1,577,929	1,478,510	1,376,169	1,272,467	1,168,788	1,066,314	966,206	869,574	777,370	690,294
2017 GI with 55% loading	2,009,551	1,946,662	1,873,428	1,790,824	1,700,019	1,602,811	1,501,136	1,396,621	1,290,842	1,185,196	1,080,878	979,051	880,830	787,171	698,774
2017 GI with 75% loading	2,077,982	2,010,550	1,932,770	1,845,638	1,750,355	1,648,763	1,542,844	1,434,258	1,324,605	1,215,306	1,107,565	1,002,555	901,402	805,061	714,235
<b>2017 GI with 2017 CSO loading</b>	<b>1,844,025</b>	<b>1,790,867</b>	<b>1,727,609</b>	<b>1,655,162</b>	<b>1,574,592</b>	<b>1,487,567</b>	<b>1,395,894</b>	<b>1,301,093</b>	<b>1,204,668</b>	<b>1,107,936</b>	<b>1,012,049</b>	<b>918,134</b>	<b>827,260</b>	<b>740,368</b>	<b>658,139</b>
2017 CSO	1,917,296	1,866,797	1,804,325	1,731,051	1,648,263	1,557,929	1,462,158	1,362,734	1,261,351	1,159,467	1,058,409	959,474	863,852	772,531	686,192
2001 CSO	1,891,962	1,838,767	1,774,241	1,699,836	1,616,849	1,526,821	1,431,624	1,332,998	1,232,877	1,132,855	1,033,913	937,046	843,318	753,876	669,580
1980 CSO	2,143,074	2,078,473	2,001,612	1,913,827	1,814,771	1,709,629	1,600,970	1,484,025	1,368,844	1,257,899	1,147,590	1,039,406	925,579	823,137	734,086
<b>Initial Proposed GI Table</b>	<b>1,844,025</b>	<b>1,790,867</b>	<b>1,727,609</b>	<b>1,655,162</b>	<b>1,574,592</b>	<b>1,487,567</b>	<b>1,395,894</b>	<b>1,301,093</b>	<b>1,204,668</b>	<b>1,107,936</b>	<b>1,012,049</b>	<b>918,134</b>	<b>827,260</b>	<b>740,368</b>	<b>658,139</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	103%	103%	103%	103%	103%	103%	103%	102%	102%	102%	102%	102%	102%	102%	102%
2017 CSO Table Ultimate	104%	104%	104%	105%	105%	105%	105%	105%	105%	105%	105%	105%	104%	104%	104%
GI Basic Ult with 35% loading	105%	105%	105%	105%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%
GI Basic Ult with 45% loading	107%	107%	107%	106%	106%	106%	106%	106%	106%	105%	105%	105%	105%	105%	105%
GI Basic Ult with 55% loading	109%	109%	108%	108%	108%	108%	108%	107%	107%	107%	107%	107%	106%	106%	106%
GI Basic Ult with 75% loading	113%	112%	112%	112%	111%	111%	111%	110%	110%	110%	109%	109%	109%	109%	109%
1980 CSO Table Ultimate	116%	116%	116%	116%	115%	115%	115%	114%	114%	114%	113%	113%	112%	111%	112%
<b>Initial Proposed GI Table</b>	<b>1,844,025</b>	<b>1,790,867</b>	<b>1,727,609</b>	<b>1,655,162</b>	<b>1,574,592</b>	<b>1,487,567</b>	<b>1,395,894</b>	<b>1,301,093</b>	<b>1,204,668</b>	<b>1,107,936</b>	<b>1,012,049</b>	<b>918,134</b>	<b>827,260</b>	<b>740,368</b>	<b>658,139</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	47,937	47,900	46,632	44,674	42,257	39,254	35,731	31,905	28,209	24,919	21,864	18,912	16,057	13,508	11,441
2017 CSO Table Ultimate	73,271	75,930	76,717	75,890	73,671	70,362	66,264	61,641	56,683	51,531	46,361	41,340	36,592	32,163	28,053
GI Basic Ult with 35% loading	90,902	85,844	80,600	75,206	69,724	64,228	58,797	53,497	48,368	43,462	38,799	34,407	30,318	26,540	23,088
GI Basic Ult with 45% loading	128,878	121,490	113,879	106,097	98,224	90,361	82,616	75,076	67,799	60,852	54,265	48,072	42,313	37,002	32,154
GI Basic Ult with 55% loading	165,526	155,795	145,820	135,662	125,427	115,244	105,242	95,528	86,174	77,260	68,829	60,917	53,570	46,803	40,634
GI Basic Ult with 75% loading	233,958	219,683	205,162	190,476	175,763	161,196	146,950	133,165	119,937	107,370	95,516	84,421	74,141	64,693	56,096
1980 CSO Table Ultimate	299,049	287,606	274,004	258,665	240,179	222,062	205,077	182,932	164,176	149,963	135,541	121,272	98,319	82,769	75,947

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Mean Reserves

**Aggregate**

Males & Females, all issue ages

**Mean Reserve Balance**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	600,973	526,564	458,323	396,346	340,541	290,645	246,399	207,514	173,571	144,093	118,598	96,667	77,938	62,068	48,731
2017 GI with 45% loading	608,778	533,238	463,992	401,130	344,555	293,990	249,168	209,790	175,429	145,598	119,806	97,626	78,692	62,652	49,177
2017 GI with 55% loading	616,068	539,463	469,273	405,583	348,286	297,097	251,738	211,901	177,151	146,991	120,924	98,514	79,388	63,191	49,588
2017 GI with 75% loading	629,344	550,787	478,870	413,663	355,050	302,724	256,387	215,717	180,260	149,505	122,939	100,112	80,641	64,161	50,328
<b>2017 GI with 2017 CSO loading</b>	<b>581,025</b>	<b>509,451</b>	<b>443,734</b>	<b>383,986</b>	<b>330,127</b>	<b>281,927</b>	<b>239,155</b>	<b>201,532</b>	<b>168,666</b>	<b>140,101</b>	<b>115,380</b>	<b>94,100</b>	<b>75,913</b>	<b>60,491</b>	<b>47,518</b>
2017 CSO	605,314	530,352	461,622	399,189	342,915	292,563	247,905	208,654	174,390	144,628	118,897	96,786	77,931	61,980	48,592
2001 CSO	590,761	517,684	450,536	389,451	334,439	285,278	241,714	203,402	169,957	140,964	115,940	94,435	76,063	60,494	47,438
1980 CSO	649,171	569,396	486,712	417,039	361,371	310,029	263,451	215,025	176,673	148,837	123,753	101,521	79,810	62,614	49,945
<b>Initial Proposed GI Table</b>	<b>581,025</b>	<b>509,451</b>	<b>443,734</b>	<b>383,986</b>	<b>330,127</b>	<b>281,927</b>	<b>239,155</b>	<b>201,532</b>	<b>168,666</b>	<b>140,101</b>	<b>115,380</b>	<b>94,100</b>	<b>75,913</b>	<b>60,491</b>	<b>47,518</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	102%	102%	102%	101%	101%	101%	101%	101%	101%	101%	100%	100%	100%	100%	100%
2017 CSO Table Ultimate	104%	104%	104%	104%	104%	104%	104%	104%	103%	103%	103%	103%	103%	102%	102%
GI Basic Ult with 35% loading	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%
GI Basic Ult with 45% loading	105%	105%	105%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	103%
GI Basic Ult with 55% loading	106%	106%	106%	106%	106%	105%	105%	105%	105%	105%	105%	105%	105%	104%	104%
GI Basic Ult with 75% loading	108%	108%	108%	108%	108%	107%	107%	107%	107%	107%	107%	106%	106%	106%	106%
1980 CSO Table Ultimate	112%	112%	110%	109%	109%	110%	110%	107%	105%	106%	107%	108%	105%	104%	105%
<b>Initial Proposed GI Table</b>	<b>581,025</b>	<b>509,451</b>	<b>443,734</b>	<b>383,986</b>	<b>330,127</b>	<b>281,927</b>	<b>239,155</b>	<b>201,532</b>	<b>168,666</b>	<b>140,101</b>	<b>115,380</b>	<b>94,100</b>	<b>75,913</b>	<b>60,491</b>	<b>47,518</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	9,736	8,233	6,802	5,465	4,313	3,351	2,559	1,870	1,290	863	560	335	150	4	(79)
2017 CSO Table Ultimate	24,289	20,901	17,888	15,203	12,788	10,635	8,750	7,122	5,724	4,527	3,518	2,686	2,018	1,489	1,075
GI Basic Ult with 35% loading	19,947	17,113	14,589	12,360	10,415	8,718	7,244	5,981	4,904	3,991	3,218	2,567	2,025	1,578	1,213
GI Basic Ult with 45% loading	27,753	23,787	20,258	17,145	14,428	12,063	10,013	8,258	6,763	5,497	4,426	3,527	2,779	2,162	1,659
GI Basic Ult with 55% loading	35,043	30,012	25,540	21,597	18,159	15,170	12,583	10,369	8,485	6,890	5,544	4,414	3,475	2,701	2,070
GI Basic Ult with 75% loading	48,319	41,336	35,136	29,678	24,923	20,796	17,232	14,185	11,593	9,404	7,559	6,012	4,728	3,670	2,810
1980 CSO Table Ultimate	68,146	59,945	42,978	33,054	31,244	28,102	24,297	13,493	8,007	8,736	8,373	7,422	3,896	2,124	2,428

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Mid-terminal - all monthly

### Aggregate

Males & Females, all issue ages

#### Mid-Terminal Reserve Balance (all monthly)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	598	375,250	799,037	992,256	1,165,482	1,319,826	1,456,005	1,573,424	1,671,706	1,749,193	1,805,599	1,843,174	1,861,689	1,860,489	1,841,701
2017 GI with 45% loading	585	392,808	832,086	1,026,756	1,201,237	1,356,610	1,493,562	1,611,461	1,709,924	1,787,258	1,843,191	1,880,024	1,897,534	1,895,068	1,874,799
2017 GI with 55% loading	618	411,439	866,927	1,062,578	1,237,916	1,393,950	1,531,355	1,649,461	1,747,854	1,824,820	1,880,092	1,916,030	1,932,414	1,928,578	1,906,754
2017 GI with 75% loading	746	449,163	937,011	1,133,689	1,309,909	1,466,563	1,604,256	1,722,225	1,820,026	1,895,890	1,949,563	1,983,510	1,997,511	1,990,891	1,965,977
<b>2017 GI with 2017 CSO loading</b>	<b>465</b>	<b>339,816</b>	<b>730,422</b>	<b>917,854</b>	<b>1,086,078</b>	<b>1,236,196</b>	<b>1,368,980</b>	<b>1,483,880</b>	<b>1,580,550</b>	<b>1,657,372</b>	<b>1,714,029</b>	<b>1,752,637</b>	<b>1,772,942</b>	<b>1,774,294</b>	<b>1,758,686</b>
2017 CSO	344	225,483	551,112	792,539	1,006,690	1,196,223	1,362,845	1,506,686	1,627,813	1,724,850	1,797,740	1,848,991	1,878,638	1,886,237	1,874,105
2001 CSO	166	244,839	584,255	820,486	1,028,946	1,212,317	1,372,615	1,510,268	1,625,458	1,716,717	1,783,983	1,830,051	1,855,202	1,859,149	1,844,135
1980 CSO	574	300,511	703,842	970,797	1,205,464	1,410,990	1,589,578	1,741,660	1,867,649	1,966,285	2,037,714	2,085,031	2,108,506	2,107,863	2,085,948
<b>Initial Proposed GI Table</b>	<b>465</b>	<b>339,816</b>	<b>730,422</b>	<b>917,854</b>	<b>1,086,078</b>	<b>1,236,196</b>	<b>1,368,980</b>	<b>1,483,880</b>	<b>1,580,550</b>	<b>1,657,372</b>	<b>1,714,029</b>	<b>1,752,637</b>	<b>1,772,942</b>	<b>1,774,294</b>	<b>1,758,686</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	36%	72%	80%	89%	95%	98%	100%	102%	103%	104%	104%	104%	105%	105%	105%
2017 CSO Table Ultimate	74%	66%	75%	86%	93%	97%	100%	102%	103%	104%	105%	105%	106%	106%	107%
GI Basic Ult with 35% loading	128%	110%	109%	108%	107%	107%	106%	106%	106%	106%	105%	105%	105%	105%	105%
GI Basic Ult with 45% loading	126%	116%	114%	112%	111%	110%	109%	109%	108%	108%	108%	107%	107%	107%	107%
GI Basic Ult with 55% loading	133%	121%	119%	116%	114%	113%	112%	111%	111%	110%	110%	109%	109%	109%	108%
GI Basic Ult with 75% loading	160%	132%	128%	124%	121%	119%	117%	116%	115%	114%	114%	113%	113%	112%	112%
1980 CSO Table Ultimate	123%	88%	96%	106%	111%	114%	116%	117%	118%	119%	119%	119%	119%	119%	119%
<b>Initial Proposed GI Table</b>	<b>465</b>	<b>339,816</b>	<b>730,422</b>	<b>917,854</b>	<b>1,086,078</b>	<b>1,236,196</b>	<b>1,368,980</b>	<b>1,483,880</b>	<b>1,580,550</b>	<b>1,657,372</b>	<b>1,714,029</b>	<b>1,752,637</b>	<b>1,772,942</b>	<b>1,774,294</b>	<b>1,758,686</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(299)	(94,977)	(146,168)	(97,367)	(57,133)	(23,879)	3,635	26,388	44,908	59,344	69,954	77,414	82,260	84,855	85,449
2017 CSO Table Ultimate	(121)	(114,333)	(179,310)	(125,314)	(79,389)	(39,973)	(6,135)	22,805	47,263	67,477	83,711	96,354	105,696	111,943	115,419
GI Basic Ult with 35% loading	132	35,434	68,614	74,402	79,403	83,630	87,024	89,544	91,156	91,820	91,570	90,536	88,747	86,195	83,016
GI Basic Ult with 45% loading	120	52,992	101,663	108,902	115,158	120,414	124,581	127,581	129,374	129,885	129,163	127,386	124,592	120,774	116,113
GI Basic Ult with 55% loading	153	71,623	136,504	144,724	151,838	157,754	162,374	165,580	167,304	167,447	166,063	163,393	159,472	154,284	148,068
GI Basic Ult with 75% loading	281	109,348	206,589	215,835	223,830	230,367	235,276	238,345	239,476	238,517	235,535	230,873	224,569	216,597	207,291
1980 CSO Table Ultimate	109	(39,304)	(26,580)	52,944	119,385	174,795	220,598	257,780	287,099	308,912	323,685	332,394	335,564	333,569	327,262

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Mid-terminal - all monthly

**Aggregate**

Males & Females, all issue ages

**Mid-Terminal Reserve Balance (a)**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	1,807,640	1,760,657	1,702,785	1,634,993	1,558,428	1,474,819	1,386,027	1,293,640	1,199,203	1,104,093	1,009,503	916,603	826,515	740,209	658,410
2017 GI with 45% loading	1,839,097	1,790,360	1,730,667	1,661,002	1,582,533	1,497,014	1,406,334	1,312,102	1,215,882	1,119,066	1,022,855	928,432	836,924	749,308	666,311
2017 GI with 55% loading	1,869,363	1,818,850	1,757,327	1,685,793	1,605,438	1,518,046	1,425,526	1,329,505	1,231,563	1,133,107	1,035,350	939,477	846,624	757,770	673,645
2017 GI with 75% loading	1,925,279	1,871,328	1,806,305	1,731,231	1,647,331	1,556,429	1,460,482	1,361,147	1,260,030	1,158,560	1,057,965	959,441	864,132	773,024	686,852
<b>2017 GI with 2017 CSO loading</b>	<b>1,728,293</b>	<b>1,685,330</b>	<b>1,631,722</b>	<b>1,568,399</b>	<b>1,496,446</b>	<b>1,417,516</b>	<b>1,333,397</b>	<b>1,245,607</b>	<b>1,155,652</b>	<b>1,064,857</b>	<b>974,391</b>	<b>885,396</b>	<b>798,959</b>	<b>716,039</b>	<b>637,344</b>
2017 CSO	1,844,797	1,800,893	1,744,661	1,677,277	1,600,035	1,514,894	1,423,952	1,328,991	1,231,708	1,133,569	1,035,912	940,046	847,175	758,301	674,124
2001 CSO	1,812,375	1,766,412	1,708,723	1,640,770	1,563,858	1,479,518	1,389,610	1,295,873	1,200,245	1,104,327	1,009,114	915,615	824,906	738,153	656,233
1980 CSO	2,045,687	1,990,029	1,921,622	1,841,805	1,750,244	1,652,109	1,549,956	1,439,018	1,329,342	1,223,421	1,117,667	1,013,589	903,441	804,257	718,086
<b>Initial Proposed GI Table</b>	<b>1,728,293</b>	<b>1,685,330</b>	<b>1,631,722</b>	<b>1,568,399</b>	<b>1,496,446</b>	<b>1,417,516</b>	<b>1,333,397</b>	<b>1,245,607</b>	<b>1,155,652</b>	<b>1,064,857</b>	<b>974,391</b>	<b>885,396</b>	<b>798,959</b>	<b>716,039</b>	<b>637,344</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	105%	105%	105%	105%	105%	104%	104%	104%	104%	104%	104%	103%	103%	103%	103%
2017 CSO Table Ultimate	107%	107%	107%	107%	107%	107%	107%	107%	107%	106%	106%	106%	106%	106%	106%
GI Basic Ult with 35% loading	105%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	103%	103%	103%
GI Basic Ult with 45% loading	106%	106%	106%	106%	106%	106%	105%	105%	105%	105%	105%	105%	105%	105%	105%
GI Basic Ult with 55% loading	108%	108%	108%	107%	107%	107%	107%	107%	107%	106%	106%	106%	106%	106%	106%
GI Basic Ult with 75% loading	111%	111%	111%	110%	110%	110%	110%	109%	109%	109%	108%	108%	108%	108%	108%
1980 CSO Table Ultimate	118%	118%	118%	117%	117%	117%	116%	116%	115%	115%	114%	113%	112%	112%	113%
<b>Initial Proposed GI Table</b>	<b>1,728,293</b>	<b>1,685,330</b>	<b>1,631,722</b>	<b>1,568,399</b>	<b>1,496,446</b>	<b>1,417,516</b>	<b>1,333,397</b>	<b>1,245,607</b>	<b>1,155,652</b>	<b>1,064,857</b>	<b>974,391</b>	<b>885,396</b>	<b>798,959</b>	<b>716,039</b>	<b>637,344</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	84,082	81,081	77,001	72,370	67,412	62,002	56,213	50,266	44,593	39,469	34,724	30,219	25,948	22,114	18,888
2017 CSO Table Ultimate	116,504	115,562	112,939	108,877	103,589	97,378	90,555	83,384	76,056	68,711	61,521	54,650	48,217	42,262	36,780
GI Basic Ult with 35% loading	79,347	75,327	71,064	66,593	61,982	57,302	52,630	48,033	43,551	39,236	35,112	31,207	27,557	24,170	21,066
GI Basic Ult with 45% loading	110,804	105,030	98,945	92,603	86,087	79,498	72,937	66,495	60,230	54,208	48,465	43,036	37,965	33,269	28,966
GI Basic Ult with 55% loading	141,070	133,519	125,605	117,393	108,992	100,529	92,129	83,898	75,911	68,250	60,960	54,081	47,665	41,731	36,301
GI Basic Ult with 75% loading	196,985	185,998	174,583	162,832	150,885	138,913	127,085	115,540	104,377	93,703	83,575	74,044	65,173	56,985	49,508
1980 CSO Table Ultimate	317,393	304,699	289,900	273,405	253,798	234,592	216,559	193,411	173,690	158,564	143,277	128,193	104,482	88,218	80,742

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
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Prepared for: NAIC Spring Meeting - March 22, 2018

Mid-terminal - all monthly

### Aggregate

Males & Females, all issue ages

#### Mid-Terminal Reserve Balance (a)

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	581,586	510,190	444,574	384,867	331,012	282,781	239,947	202,250	169,301	140,652	115,844	94,481	76,219	60,731	47,703
2017 GI with 45% loading	588,401	516,027	449,539	389,063	334,537	285,722	242,384	204,256	170,940	141,979	116,910	95,327	76,883	61,245	48,095
2017 GI with 55% loading	594,717	521,429	454,128	392,936	337,786	288,431	244,626	206,099	172,443	143,196	117,886	96,102	77,491	61,715	48,454
2017 GI with 75% loading	606,075	531,130	462,360	399,875	343,601	293,272	248,630	209,386	175,123	145,363	119,622	97,478	78,569	62,548	49,089
<b>2017 GI with 2017 CSO loading</b>	<b>563,355</b>	<b>494,525</b>	<b>431,198</b>	<b>373,518</b>	<b>321,437</b>	<b>274,755</b>	<b>233,270</b>	<b>196,731</b>	<b>164,772</b>	<b>136,962</b>	<b>112,867</b>	<b>92,106</b>	<b>74,345</b>	<b>59,270</b>	<b>46,580</b>
2017 CSO	595,144	521,835	454,533	393,324	338,092	288,621	244,702	206,067	172,312	142,969	117,581	95,749	77,122	61,355	48,116
2001 CSO	579,501	508,244	442,670	382,936	329,076	280,889	238,143	200,515	167,634	139,107	114,466	93,274	75,156	59,793	46,903
1980 CSO	635,694	558,115	477,329	409,274	354,987	304,812	259,213	211,603	173,919	146,638	122,008	100,148	78,738	61,785	49,313
 <b>Initial Proposed GI Table</b>	 <b>31</b>	 <b>32</b>	 <b>33</b>	 <b>34</b>	 <b>35</b>	 <b>36</b>	 <b>37</b>	 <b>38</b>	 <b>39</b>	 <b>40</b>	 <b>41</b>	 <b>42</b>	 <b>43</b>	 <b>44</b>	 <b>45</b>
<b>% Differential</b>	563,355	494,525	431,198	373,518	321,437	274,755	233,270	196,731	164,772	136,962	112,867	92,106	74,345	59,270	46,580
2001 CSO Table Ultimate	103%	103%	103%	103%	102%	102%	102%	102%	102%	102%	101%	101%	101%	101%	101%
2017 CSO Table Ultimate	106%	106%	105%	105%	105%	105%	105%	105%	105%	104%	104%	104%	104%	104%	103%
GI Basic Ult with 35% loading	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	102%	102%
GI Basic Ult with 45% loading	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	103%	103%	103%	103%
GI Basic Ult with 55% loading	106%	105%	105%	105%	105%	105%	105%	105%	105%	105%	104%	104%	104%	104%	104%
GI Basic Ult with 75% loading	108%	107%	107%	107%	107%	107%	107%	106%	106%	106%	106%	106%	106%	106%	105%
1980 CSO Table Ultimate	113%	113%	111%	110%	110%	111%	111%	108%	106%	107%	108%	109%	106%	104%	106%
 <b>Initial Proposed GI Table</b>	 <b>31</b>	 <b>32</b>	 <b>33</b>	 <b>34</b>	 <b>35</b>	 <b>36</b>	 <b>37</b>	 <b>38</b>	 <b>39</b>	 <b>40</b>	 <b>41</b>	 <b>42</b>	 <b>43</b>	 <b>44</b>	 <b>45</b>
<b>\$ Differential</b>	563,355	494,525	431,198	373,518	321,437	274,755	233,270	196,731	164,772	136,962	112,867	92,106	74,345	59,270	46,580
2001 CSO Table Ultimate	16,146	13,720	11,472	9,417	7,639	6,134	4,873	3,784	2,862	2,145	1,598	1,168	811	523	323
2017 CSO Table Ultimate	31,789	27,310	23,335	19,805	16,655	13,866	11,432	9,336	7,540	6,007	4,713	3,644	2,777	2,085	1,535
GI Basic Ult with 35% loading	18,232	15,666	13,376	11,348	9,575	8,026	6,677	5,519	4,530	3,689	2,977	2,375	1,874	1,460	1,123
GI Basic Ult with 45% loading	25,046	21,503	18,341	15,545	13,100	10,967	9,114	7,525	6,168	5,017	4,042	3,221	2,538	1,975	1,515
GI Basic Ult with 55% loading	31,362	26,904	22,930	19,418	16,349	13,675	11,356	9,368	7,672	6,234	5,019	3,996	3,146	2,445	1,874
GI Basic Ult with 75% loading	42,720	36,606	31,162	26,357	22,164	18,517	15,360	12,655	10,351	8,401	6,755	5,373	4,224	3,278	2,508
1980 CSO Table Ultimate	72,339	63,591	46,131	35,755	33,550	30,057	25,943	14,872	9,147	9,676	9,141	8,043	4,393	2,514	2,732

GGuaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
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Prepared for: NAIC Spring Meeting - March 22, 2018  
Mid-terminal - blended

### Aggregate

Males & Females, all issue ages

#### Blended Mid-Terminal Reserve Balance (19% annual, 81% monthly)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	2,559	440,862	859,510	1,048,554	1,218,235	1,369,389	1,502,644	1,617,298	1,712,928	1,787,821	1,841,660	1,876,737	1,892,825	1,889,236	1,868,123
2017 GI with 45% loading	2,401	461,798	895,671	1,085,950	1,256,703	1,408,721	1,542,597	1,657,588	1,753,262	1,827,868	1,881,102	1,915,309	1,930,267	1,925,288	1,902,574
2017 GI with 55% loading	2,558	483,747	933,567	1,124,614	1,296,044	1,448,560	1,582,741	1,697,797	1,793,267	1,867,374	1,919,816	1,953,002	1,966,711	1,960,241	1,935,854
2017 GI with 75% loading	3,122	527,963	1,009,630	1,201,287	1,373,245	1,526,064	1,660,242	1,774,887	1,869,502	1,942,249	1,992,838	2,023,786	2,034,871	2,025,382	1,997,676
<b>2017 GI with 2017 CSO loading</b>	<b>1,994</b>	<b>399,369</b>	<b>785,316</b>	<b>968,961</b>	<b>1,133,972</b>	<b>1,281,197</b>	<b>1,411,331</b>	<b>1,523,724</b>	<b>1,617,990</b>	<b>1,692,462</b>	<b>1,746,790</b>	<b>1,783,135</b>	<b>1,801,238</b>	<b>1,800,423</b>	<b>1,782,705</b>
2017 CSO	923	263,439	586,147	825,177	1,037,273	1,224,946	1,389,858	1,532,074	1,651,639	1,747,145	1,818,520	1,868,296	1,896,508	1,902,698	1,889,197
2001 CSO	707	286,657	622,829	856,402	1,062,587	1,243,900	1,402,307	1,538,164	1,651,631	1,741,202	1,806,799	1,851,245	1,874,819	1,877,218	1,860,700
1980 CSO	1,375	352,059	751,389	1,015,063	1,246,917	1,449,897	1,626,141	1,775,999	1,899,851	1,996,393	2,065,753	2,111,058	2,132,578	2,130,017	2,106,239
 <b>Initial Proposed GI Table</b>	 <b>1</b>	 <b>2</b>	 <b>3</b>	 <b>4</b>	 <b>5</b>	 <b>6</b>	 <b>7</b>	 <b>8</b>	 <b>9</b>	 <b>10</b>	 <b>11</b>	 <b>12</b>	 <b>13</b>	 <b>14</b>	 <b>15</b>
<b>% Differential</b>	<b>1,994</b>	<b>399,369</b>	<b>785,316</b>	<b>968,961</b>	<b>1,133,972</b>	<b>1,281,197</b>	<b>1,411,331</b>	<b>1,523,724</b>	<b>1,617,990</b>	<b>1,692,462</b>	<b>1,746,790</b>	<b>1,783,135</b>	<b>1,801,238</b>	<b>1,800,423</b>	<b>1,782,705</b>
2001 CSO Table Ultimate	35%	72%	79%	88%	94%	97%	99%	101%	102%	103%	103%	104%	104%	104%	104%
2017 CSO Table Ultimate	46%	66%	75%	85%	91%	96%	98%	101%	102%	103%	104%	105%	105%	106%	106%
GI Basic Ult with 35% loading	128%	110%	109%	108%	107%	107%	106%	106%	106%	106%	105%	105%	105%	105%	105%
GI Basic Ult with 45% loading	120%	116%	114%	112%	111%	110%	109%	109%	108%	108%	108%	107%	107%	107%	107%
GI Basic Ult with 55% loading	128%	121%	119%	116%	114%	113%	112%	111%	111%	110%	110%	110%	109%	109%	109%
GI Basic Ult with 75% loading	157%	132%	129%	124%	121%	119%	118%	116%	116%	115%	114%	113%	113%	112%	112%
1980 CSO Table Ultimate	69%	88%	96%	105%	110%	113%	115%	117%	117%	118%	118%	118%	118%	118%	118%
 <b>Initial Proposed GI Table</b>	 <b>1</b>	 <b>2</b>	 <b>3</b>	 <b>4</b>	 <b>5</b>	 <b>6</b>	 <b>7</b>	 <b>8</b>	 <b>9</b>	 <b>10</b>	 <b>11</b>	 <b>12</b>	 <b>13</b>	 <b>14</b>	 <b>15</b>
<b>\$ Differential</b>	<b>1,994</b>	<b>399,369</b>	<b>785,316</b>	<b>968,961</b>	<b>1,133,972</b>	<b>1,281,197</b>	<b>1,411,331</b>	<b>1,523,724</b>	<b>1,617,990</b>	<b>1,692,462</b>	<b>1,746,790</b>	<b>1,783,135</b>	<b>1,801,238</b>	<b>1,800,423</b>	<b>1,782,705</b>
2001 CSO Table Ultimate	(1,287)	(112,712)	(162,486)	(112,558)	(71,385)	(37,296)	(9,024)	14,441	33,640	48,740	60,009	68,110	73,581	76,796	77,995
2017 CSO Table Ultimate	(1,071)	(135,930)	(199,169)	(143,784)	(96,698)	(56,250)	(21,472)	8,350	33,649	54,683	71,730	85,161	95,270	102,275	106,492
GI Basic Ult with 35% loading	565	41,493	74,194	79,594	84,264	88,192	91,313	93,574	94,938	95,359	94,870	93,603	91,587	88,814	85,418
GI Basic Ult with 45% loading	407	62,429	110,355	116,989	122,731	127,524	131,266	133,864	135,272	135,407	134,312	132,174	129,029	124,865	119,869
GI Basic Ult with 55% loading	564	84,378	148,252	155,654	162,073	167,364	171,410	174,074	175,277	174,912	173,026	169,867	165,473	159,818	153,150
GI Basic Ult with 75% loading	1,127	128,594	224,314	232,327	239,274	244,868	248,912	251,163	251,511	249,787	246,048	240,651	233,633	224,959	214,971
1980 CSO Table Ultimate	(619)	(47,310)	(33,927)	46,102	112,945	168,700	214,811	252,276	281,861	303,931	318,963	327,924	331,340	329,594	323,534

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018  
Mid-terminal - blended

### Aggregate

Males & Females, all issue ages

**Blended Mid-Terminal Reserve B:**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	1,831,824	1,782,707	1,722,816	1,653,114	1,574,747	1,489,444	1,399,073	1,305,221	1,209,431	1,113,081	1,017,358	923,431	832,417	745,282	662,745
2017 GI with 45% loading	1,864,520	1,813,540	1,751,723	1,680,051	1,599,687	1,512,388	1,420,048	1,324,275	1,226,633	1,128,513	1,031,112	935,609	843,127	754,640	670,867
2017 GI with 55% loading	1,895,998	1,843,134	1,779,386	1,705,749	1,623,408	1,534,151	1,439,891	1,342,257	1,242,826	1,143,004	1,044,000	946,996	853,123	763,356	678,420
2017 GI with 75% loading	1,954,292	1,897,780	1,830,334	1,752,969	1,666,905	1,573,973	1,476,131	1,375,038	1,272,299	1,169,342	1,067,389	967,632	871,213	779,111	692,055
<b>2017 GI with 2017 CSO loading</b>	<b>1,750,282</b>	<b>1,705,382</b>	<b>1,649,940</b>	<b>1,584,884</b>	<b>1,511,293</b>	<b>1,430,826</b>	<b>1,345,271</b>	<b>1,256,149</b>	<b>1,164,965</b>	<b>1,073,042</b>	<b>981,546</b>	<b>891,616</b>	<b>804,336</b>	<b>720,661</b>	<b>641,295</b>
2017 CSO	1,858,572	1,813,414	1,755,997	1,687,494	1,609,198	1,523,071	1,431,211	1,335,402	1,237,340	1,138,489	1,040,186	943,737	850,344	761,005	676,417
2001 CSO	1,827,496	1,780,159	1,721,171	1,651,992	1,573,926	1,488,506	1,397,592	1,302,927	1,206,445	1,109,747	1,013,826	919,687	828,405	741,140	658,769
1980 CSO	2,064,190	2,006,834	1,936,820	1,855,489	1,762,504	1,663,038	1,559,648	1,447,569	1,336,848	1,229,972	1,123,353	1,018,495	907,647	807,844	721,126
 <b>Initial Proposed GI Table</b>	 <b>16</b>	 <b>17</b>	 <b>18</b>	 <b>19</b>	 <b>20</b>	 <b>21</b>	 <b>22</b>	 <b>23</b>	 <b>24</b>	 <b>25</b>	 <b>26</b>	 <b>27</b>	 <b>28</b>	 <b>29</b>	 <b>30</b>
<b>% Differential</b>	1,750,282	1,705,382	1,649,940	1,584,884	1,511,293	1,430,826	1,345,271	1,256,149	1,164,965	1,073,042	981,546	891,616	804,336	720,661	641,295
2001 CSO Table Ultimate	104%	104%	104%	104%	104%	104%	104%	104%	104%	103%	103%	103%	103%	103%	103%
2017 CSO Table Ultimate	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	105%
GI Basic Ult with 35% loading	105%	105%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	103%	103%	103%
GI Basic Ult with 45% loading	107%	106%	106%	106%	106%	106%	106%	105%	105%	105%	105%	105%	105%	105%	105%
GI Basic Ult with 55% loading	108%	108%	108%	107%	107%	107%	107%	107%	107%	107%	106%	106%	106%	106%	106%
GI Basic Ult with 75% loading	112%	111%	111%	111%	110%	110%	110%	109%	109%	109%	109%	109%	108%	108%	108%
1980 CSO Table Ultimate	118%	118%	117%	117%	117%	116%	116%	115%	115%	115%	114%	114%	113%	112%	112%
 <b>Initial Proposed GI Table</b>	 <b>16</b>	 <b>17</b>	 <b>18</b>	 <b>19</b>	 <b>20</b>	 <b>21</b>	 <b>22</b>	 <b>23</b>	 <b>24</b>	 <b>25</b>	 <b>26</b>	 <b>27</b>	 <b>28</b>	 <b>29</b>	 <b>30</b>
<b>\$ Differential</b>	1,750,282	1,705,382	1,649,940	1,584,884	1,511,293	1,430,826	1,345,271	1,256,149	1,164,965	1,073,042	981,546	891,616	804,336	720,661	641,295
2001 CSO Table Ultimate	77,214	74,777	71,231	67,108	62,633	57,680	52,321	46,778	41,480	36,705	32,280	28,071	24,068	20,479	17,473
2017 CSO Table Ultimate	108,290	108,032	106,057	102,610	97,905	92,245	85,940	79,253	72,375	65,447	58,641	52,121	46,008	40,343	35,122
GI Basic Ult with 35% loading	81,542	77,325	72,876	68,230	63,453	58,618	53,802	49,071	44,466	40,039	35,813	31,815	28,081	24,621	21,450
GI Basic Ult with 45% loading	114,238	108,157	101,782	95,167	88,393	81,562	74,776	68,125	61,668	55,470	49,567	43,992	38,791	33,978	29,572
GI Basic Ult with 55% loading	145,716	137,752	129,446	120,864	112,115	103,325	94,620	86,108	77,861	69,962	62,455	55,380	48,787	42,695	37,124
GI Basic Ult with 75% loading	204,010	192,398	180,393	168,084	155,612	143,147	130,860	118,889	107,334	96,299	85,844	76,016	66,877	58,450	50,759
1980 CSO Table Ultimate	313,908	301,451	286,880	270,605	251,211	232,212	214,377	191,420	171,882	156,930	141,807	126,878	103,311	87,183	79,831

GGuaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
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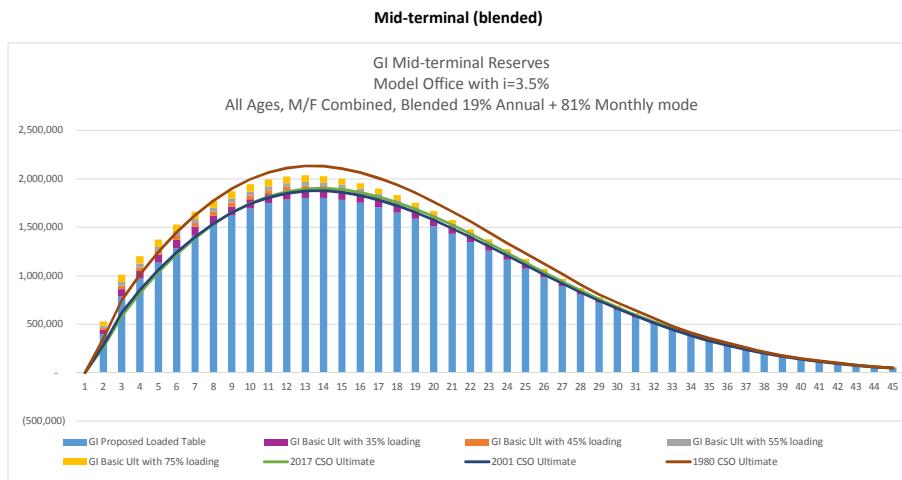
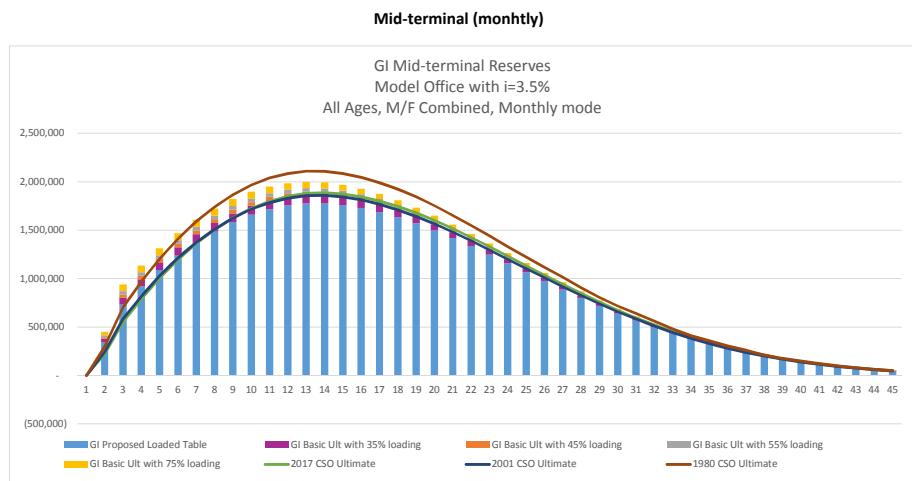
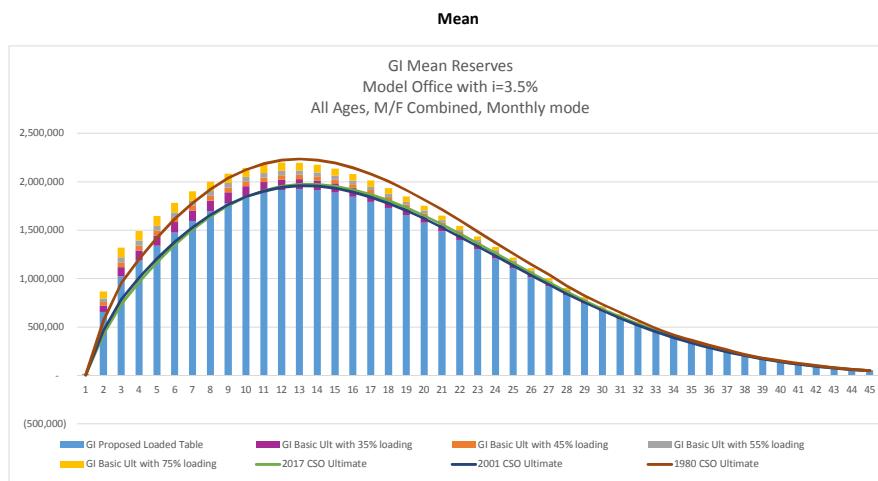
Prepared for: NAIC Spring Meeting - March 22, 2018  
Mid-terminal - blended

### Aggregate

Males & Females, all issue ages

**Blended Mid-Terminal Reserve B:**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	585,270	513,301	447,186	387,048	332,823	284,275	241,173	203,250	170,113	141,305	116,367	94,896	76,546	60,985	47,898
2017 GI with 45% loading	592,273	519,297	452,285	391,356	336,441	287,293	243,673	205,307	171,793	142,666	117,460	95,764	77,227	61,512	48,301
2017 GI with 55% loading	598,774	524,855	457,005	395,339	339,781	290,077	245,977	207,201	173,338	143,917	118,463	96,560	77,851	61,995	48,669
2017 GI with 75% loading	610,496	534,865	465,496	402,495	345,776	295,068	250,104	210,589	176,099	146,150	120,252	97,979	78,963	62,855	49,324
<b>2017 GI with 2017 CSO loading</b>	<b>566,712</b>	<b>497,361</b>	<b>433,580</b>	<b>375,507</b>	<b>323,088</b>	<b>276,118</b>	<b>234,388</b>	<b>197,643</b>	<b>165,512</b>	<b>137,559</b>	<b>113,345</b>	<b>92,485</b>	<b>74,643</b>	<b>59,502</b>	<b>46,758</b>
2017 CSO	597,076	523,453	455,880	394,438	339,009	289,370	245,311	206,558	172,707	143,284	117,831	95,946	77,276	61,474	48,206
2001 CSO	581,640	510,038	444,165	384,174	330,095	281,723	238,822	201,063	168,075	139,460	114,746	93,495	75,328	59,926	47,005
1980 CSO	638,255	560,259	479,112	410,749	356,200	305,803	260,018	212,253	174,442	147,056	122,340	100,409	78,942	61,942	49,433
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>566,712</b>	<b>497,361</b>	<b>433,580</b>	<b>375,507</b>	<b>323,088</b>	<b>276,118</b>	<b>234,388</b>	<b>197,643</b>	<b>165,512</b>	<b>137,559</b>	<b>113,345</b>	<b>92,485</b>	<b>74,643</b>	<b>59,502</b>	<b>46,758</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	103%	103%	102%	102%	102%	102%	102%	102%	102%	101%	101%	101%	101%	101%	101%
2017 CSO Table Ultimate	105%	105%	105%	105%	105%	105%	105%	105%	104%	104%	104%	104%	104%	103%	103%
GI Basic Ult with 35% loading	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	102%	102%
GI Basic Ult with 45% loading	105%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	103%	103%	103%
GI Basic Ult with 55% loading	106%	106%	105%	105%	105%	105%	105%	105%	105%	105%	105%	104%	104%	104%	104%
GI Basic Ult with 75% loading	108%	108%	107%	107%	107%	107%	107%	107%	106%	106%	106%	106%	106%	106%	105%
1980 CSO Table Ultimate	113%	113%	111%	109%	110%	111%	111%	107%	105%	107%	108%	109%	106%	104%	106%
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>566,712</b>	<b>497,361</b>	<b>433,580</b>	<b>375,507</b>	<b>323,088</b>	<b>276,118</b>	<b>234,388</b>	<b>197,643</b>	<b>165,512</b>	<b>137,559</b>	<b>113,345</b>	<b>92,485</b>	<b>74,643</b>	<b>59,502</b>	<b>46,758</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	14,928	12,677	10,585	8,666	7,007	5,605	4,434	3,420	2,563	1,902	1,401	1,010	685	424	246
2017 CSO Table Ultimate	30,364	26,092	22,300	18,931	15,921	13,252	10,923	8,915	7,195	5,726	4,486	3,462	2,633	1,972	1,448
GI Basic Ult with 35% loading	18,558	15,941	13,606	11,541	9,735	8,157	6,785	5,607	4,601	3,747	3,023	2,412	1,903	1,483	1,140
GI Basic Ult with 45% loading	25,561	21,937	18,705	15,849	13,353	11,175	9,285	7,664	6,281	5,108	4,115	3,279	2,584	2,010	1,542
GI Basic Ult with 55% loading	32,062	27,495	23,426	19,832	16,693	13,959	11,589	9,558	7,826	6,359	5,118	4,076	3,208	2,493	1,911
GI Basic Ult with 75% loading	43,784	37,505	31,917	26,988	22,688	18,950	15,716	12,946	10,587	8,591	6,908	5,494	4,320	3,353	2,566
1980 CSO Table Ultimate	71,543	62,898	45,532	35,242	33,112	29,685	25,630	14,610	8,930	9,497	8,995	7,925	4,299	2,440	2,674



Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 47\_Mean

**Male, Age 47**

See cell B75 for Female

**Mean Reserve Balance**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	8,258	588,080	880,731	976,466	1,062,417	1,136,589	1,201,826	1,262,666	1,321,297	1,375,549	1,423,810	1,464,811	1,495,366	1,514,398	1,529,890
2017 GI with 45% loading	8,882	621,487	927,733	1,023,367	1,108,935	1,182,239	1,246,316	1,306,009	1,363,642	1,416,954	1,464,297	1,504,360	1,533,873	1,551,714	1,566,062
2017 GI with 55% loading	9,508	654,669	974,312	1,069,678	1,154,810	1,227,201	1,290,080	1,348,594	1,405,125	1,457,367	1,503,671	1,542,686	1,571,062	1,587,658	1,600,813
2017 GI with 75% loading	10,761	720,365	1,066,374	1,160,864	1,244,781	1,315,039	1,375,190	1,430,988	1,485,078	1,535,061	1,579,217	1,616,054	1,642,073	1,656,101	1,666,810
<b>2017 GI with 2017 CSO loading</b>	<b>7,375</b>	<b>533,194</b>	<b>801,694</b>	<b>894,391</b>	<b>977,996</b>	<b>1,051,669</b>	<b>1,117,306</b>	<b>1,177,970</b>	<b>1,236,327</b>	<b>1,290,430</b>	<b>1,338,451</b>	<b>1,379,599</b>	<b>1,410,913</b>	<b>1,431,126</b>	<b>1,447,863</b>
2017 CSO	662	209,474	369,087	501,345	626,338	744,977	857,183	963,048	1,063,325	1,155,877	1,238,801	1,311,500	1,371,170	1,416,647	1,455,591
2001 CSO	794	246,486	432,954	585,758	729,276	864,253	990,415	1,107,702	1,216,916	1,315,814	1,402,867	1,478,194	1,538,961	1,583,693	1,620,666
1980 CSO	1,353	305,202	525,691	696,167	855,307	1,004,053	1,142,202	1,269,883	1,388,321	1,495,067	1,588,131	1,667,270	1,729,418	1,773,440	1,809,110
<b>Initial Proposed GI Table</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>% Differential</b>	<b>7,375</b>	<b>533,194</b>	<b>801,694</b>	<b>894,391</b>	<b>977,996</b>	<b>1,051,669</b>	<b>1,117,306</b>	<b>1,177,970</b>	<b>1,236,327</b>	<b>1,290,430</b>	<b>1,338,451</b>	<b>1,379,599</b>	<b>1,410,913</b>	<b>1,431,126</b>	<b>1,447,863</b>
2001 CSO Table Ultimate	11%	46%	54%	65%	75%	82%	89%	94%	98%	102%	105%	107%	109%	111%	112%
2017 CSO Table Ultimate	9%	39%	46%	56%	64%	71%	77%	82%	86%	90%	93%	95%	97%	99%	101%
GI Basic Ult with 35% loading	112%	110%	110%	109%	109%	108%	108%	107%	107%	107%	106%	106%	106%	106%	106%
GI Basic Ult with 45% loading	120%	117%	116%	114%	113%	112%	112%	111%	110%	110%	109%	109%	109%	108%	108%
GI Basic Ult with 55% loading	129%	123%	122%	120%	118%	117%	115%	114%	114%	113%	112%	112%	111%	111%	111%
GI Basic Ult with 75% loading	146%	135%	133%	130%	127%	125%	123%	121%	120%	119%	118%	117%	116%	116%	115%
1980 CSO Table Ultimate	18%	57%	66%	78%	87%	95%	102%	108%	112%	116%	119%	121%	123%	124%	125%
<b>Initial Proposed GI Table</b>	<b>7,375</b>	<b>533,194</b>	<b>801,694</b>	<b>894,391</b>	<b>977,996</b>	<b>1,051,669</b>	<b>1,117,306</b>	<b>1,177,970</b>	<b>1,236,327</b>	<b>1,290,430</b>	<b>1,338,451</b>	<b>1,379,599</b>	<b>1,410,913</b>	<b>1,431,126</b>	<b>1,447,863</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(6,580)	(286,708)	(368,740)	(308,633)	(248,720)	(187,416)	(126,891)	(70,268)	(19,411)	25,385	64,416	98,595	128,048	152,567	172,803
2017 CSO Table Ultimate	(6,713)	(323,721)	(432,607)	(393,046)	(351,658)	(306,692)	(260,123)	(214,922)	(173,002)	(134,553)	(99,650)	(68,100)	(39,743)	(14,479)	7,728
GI Basic Ult with 35% loading	884	54,885	79,037	82,075	84,420	84,920	84,520	84,696	84,970	85,119	85,359	85,211	84,453	83,272	82,027
GI Basic Ult with 45% loading	1,508	88,292	126,039	128,976	130,939	130,570	129,009	128,039	127,315	126,524	125,846	124,760	122,960	120,588	118,199
GI Basic Ult with 55% loading	2,133	121,475	172,618	175,287	176,814	175,532	172,774	170,624	168,798	166,937	165,220	163,087	160,149	156,532	152,950
GI Basic Ult with 75% loading	3,386	187,170	264,680	266,472	266,785	263,370	257,884	253,018	248,751	244,631	240,766	236,455	231,160	224,975	218,947
1980 CSO Table Ultimate	(6,022)	(227,992)	(276,003)	(198,225)	(122,690)	(47,616)	24,896	91,913	151,994	204,637	249,680	287,671	318,505	342,314	361,247

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 47\_Mean

**Male, Age 47**

**Mean Reserve Balance**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	1,543,485	1,550,765	1,551,863	1,547,066	1,536,792	1,521,531	1,501,614	1,477,182	1,448,229	1,414,566	1,375,887	1,331,928	1,282,544	1,227,756	1,167,863
2017 GI with 45% loading	1,578,593	1,584,750	1,584,686	1,578,690	1,567,187	1,550,693	1,529,564	1,503,954	1,473,838	1,439,014	1,399,170	1,354,018	1,303,389	1,247,302	1,186,064
2017 GI with 55% loading	1,612,216	1,617,215	1,615,962	1,608,747	1,596,018	1,578,315	1,556,004	1,529,227	1,497,976	1,462,036	1,421,061	1,374,763	1,322,962	1,265,651	1,203,143
2017 GI with 75% loading	1,675,946	1,678,617	1,674,970	1,665,318	1,650,137	1,630,016	1,605,357	1,576,317	1,542,870	1,504,779	1,461,659	1,413,185	1,359,145	1,299,523	1,234,629

<b>2017 GI with 2017 CSO loading</b>	<b>1,462,750</b>	<b>1,471,628</b>	<b>1,474,579</b>	<b>1,471,871</b>	<b>1,463,865</b>	<b>1,450,959</b>	<b>1,433,457</b>	<b>1,411,470</b>	<b>1,384,981</b>	<b>1,353,837</b>	<b>1,317,785</b>	<b>1,276,591</b>	<b>1,230,121</b>	<b>1,178,417</b>	<b>1,121,771</b>
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2017 CSO	1,489,862	1,515,620	1,533,108	1,542,700	1,544,828	1,539,935	1,528,388	1,510,384	1,485,992	1,455,198	1,417,962	1,374,355	1,324,590	1,269,046	1,208,295
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2001 CSO	1,651,730	1,672,681	1,684,062	1,686,553	1,680,961	1,668,036	1,648,362	1,622,339	1,590,125	1,551,578	1,506,524	1,455,216	1,398,115	1,335,636	1,268,240
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1980 CSO	1,838,760	1,857,614	1,865,995	1,864,418	1,853,572	1,834,234	1,807,106	1,772,675	1,731,231	1,682,909	1,627,760	1,565,899	1,497,656	1,423,634	1,344,691
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	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Initial Proposed GI Table	1,462,750	1,471,628	1,474,579	1,471,871	1,463,865	1,450,959	1,433,457	1,411,470	1,384,981	1,353,837	1,317,785	1,276,591	1,230,121	1,178,417	1,121,771

<b>% Differential</b>															
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2001 CSO Table Ultimate	113%	114%	114%	115%	115%	115%	115%	115%	115%	115%	114%	114%	114%	113%	113%
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2017 CSO Table Ultimate	102%	103%	104%	105%	106%	106%	107%	107%	107%	107%	108%	108%	108%	108%	108%
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GI Basic Ult with 35% loading	106%	105%	105%	105%	105%	105%	105%	105%	105%	104%	104%	104%	104%	104%	104%
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GI Basic Ult with 45% loading	108%	108%	107%	107%	107%	107%	107%	107%	106%	106%	106%	106%	106%	106%	106%
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GI Basic Ult with 55% loading	110%	110%	110%	109%	109%	109%	109%	109%	108%	108%	108%	108%	108%	107%	107%
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GI Basic Ult with 75% loading	115%	114%	114%	113%	113%	112%	112%	111%	111%	111%	111%	111%	110%	110%	110%
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1980 CSO Table Ultimate	126%	126%	127%	127%	127%	126%	126%	126%	125%	124%	124%	123%	122%	121%	120%
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<b>Initial Proposed GI Table</b>	<b>1,462,750</b>	<b>1,471,628</b>	<b>1,474,579</b>	<b>1,471,871</b>	<b>1,463,865</b>	<b>1,450,959</b>	<b>1,433,457</b>	<b>1,411,470</b>	<b>1,384,981</b>	<b>1,353,837</b>	<b>1,317,785</b>	<b>1,276,591</b>	<b>1,230,121</b>	<b>1,178,417</b>	<b>1,121,771</b>
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<b>\$ Differential</b>															
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2001 CSO Table Ultimate	188,981	201,054	209,483	214,682	217,096	217,077	214,905	210,869	205,144	197,741	188,739	178,625	167,994	157,219	146,469
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2017 CSO Table Ultimate	27,112	43,992	58,529	70,829	80,963	88,977	94,932	98,913	101,011	101,361	100,177	97,764	94,469	90,629	86,524
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GI Basic Ult with 35% loading	80,735	79,137	77,284	75,195	72,927	70,573	68,157	65,712	63,247	60,729	58,103	55,337	52,423	49,339	46,092
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GI Basic Ult with 45% loading	115,843	113,122	110,107	106,819	103,322	99,734	96,107	92,484	88,856	85,177	81,385	77,426	73,268	68,885	64,293
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GI Basic Ult with 55% loading	149,466	145,587	141,383	136,875	132,153	127,356	122,547	117,757	112,995	108,199	103,276	98,172	92,840	87,234	81,372
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GI Basic Ult with 75% loading	213,196	206,989	200,391	193,446	186,272	179,057	171,901	164,847	157,889	150,942	143,875	136,594	129,024	121,105	112,858
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1980 CSO Table Ultimate	376,010	385,986	391,417	392

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
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Age 47\_Mean

**Male, Age 47**

**Mean Reserve Balance**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	1,103,430	1,035,217	964,135	891,161	817,281	743,451	670,550	599,360	530,551	464,693	402,261	343,657	289,230	239,274	194,155
2017 GI with 45% loading	1,120,247	1,050,624	978,133	903,771	828,542	753,422	679,299	606,967	537,105	470,284	406,980	347,593	292,466	241,886	196,219
2017 GI with 55% loading	1,136,020	1,065,073	991,252	915,577	839,075	762,737	687,466	614,064	543,214	475,493	411,375	351,257	295,477	244,318	198,141
2017 GI with 75% loading	1,165,059	1,091,636	1,015,348	937,243	858,387	779,799	702,407	627,031	554,365	484,991	419,381	357,928	300,960	248,745	201,641
<b>2017 GI with 2017 CSO loading</b>	<b>1,060,708</b>	<b>995,939</b>	<b>928,321</b>	<b>858,781</b>	<b>788,253</b>	<b>717,650</b>	<b>647,811</b>	<b>579,494</b>	<b>513,352</b>	<b>449,946</b>	<b>389,750</b>	<b>333,171</b>	<b>280,564</b>	<b>232,264</b>	<b>188,610</b>
2017 CSO	1,143,041	1,074,045	1,002,108	928,054	852,765	777,105	701,850	627,787	555,691	486,278	420,202	358,069	300,431	247,754	200,409
2001 CSO	1,196,421	1,120,775	1,042,134	961,473	879,848	798,386	718,110	639,862	564,365	492,272	424,171	360,581	301,942	248,631	200,936
1980 CSO	1,261,863	1,176,255	1,088,929	1,000,845	912,885	825,878	740,632	657,974	578,700	503,527	433,047	367,725	307,909	253,834	205,636
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>1,060,708</b>	<b>995,939</b>	<b>928,321</b>	<b>858,781</b>	<b>788,253</b>	<b>717,650</b>	<b>647,811</b>	<b>579,494</b>	<b>513,352</b>	<b>449,946</b>	<b>389,750</b>	<b>333,171</b>	<b>280,564</b>	<b>232,264</b>	<b>188,610</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	113%	113%	112%	112%	112%	111%	111%	110%	110%	109%	109%	108%	108%	107%	107%
2017 CSO Table Ultimate	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	107%	107%	107%	106%
GI Basic Ult with 35% loading	104%	104%	104%	104%	104%	104%	104%	103%	103%	103%	103%	103%	103%	103%	103%
GI Basic Ult with 45% loading	106%	105%	105%	105%	105%	105%	105%	105%	105%	105%	104%	104%	104%	104%	104%
GI Basic Ult with 55% loading	107%	107%	107%	107%	106%	106%	106%	106%	106%	106%	105%	105%	105%	105%	105%
GI Basic Ult with 75% loading	110%	110%	109%	109%	109%	109%	108%	108%	108%	108%	107%	107%	107%	107%	107%
1980 CSO Table Ultimate	119%	118%	117%	117%	116%	115%	114%	114%	113%	112%	111%	110%	110%	109%	109%
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>1,060,708</b>	<b>995,939</b>	<b>928,321</b>	<b>858,781</b>	<b>788,253</b>	<b>717,650</b>	<b>647,811</b>	<b>579,494</b>	<b>513,352</b>	<b>449,946</b>	<b>389,750</b>	<b>333,171</b>	<b>280,564</b>	<b>232,264</b>	<b>188,610</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	135,713	124,837	113,813	102,691	91,594	80,737	70,299	60,368	51,013	42,326	34,421	27,410	21,379	16,367	12,326
2017 CSO Table Ultimate	82,333	78,106	73,787	69,272	64,512	59,456	54,038	48,293	42,339	36,332	30,452	24,899	19,867	15,490	11,798
GI Basic Ult with 35% loading	42,722	39,278	35,814	32,379	29,027	25,802	22,739	19,867	17,199	14,747	12,511	10,487	8,666	7,011	5,544
GI Basic Ult with 45% loading	59,539	54,685	49,812	44,989	40,289	35,772	31,488	27,473	23,753	20,338	17,230	14,422	11,902	9,622	7,608
GI Basic Ult with 55% loading	75,312	69,134	62,931	56,796	50,822	45,088	39,655	34,570	29,862	25,547	21,625	18,086	14,913	12,054	9,531
GI Basic Ult with 75% loading	104,351	95,698	87,026	78,462	70,133	62,150	54,596	47,537	41,013	35,045	29,631	24,757	20,397	16,481	13,031
1980 CSO Table Ultimate	201,155	180,316	160,608	142,064	124,631	108,228	92,821	78,480	65,348	53,581	43,297	34,555	27,346	21,570	17,026

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
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Age 47\_Mean

**Female, Age 47**

**Mean Reserve Balance**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	5,777	600,528	919,047	1,056,672	1,208,690	1,369,779	1,533,885	1,695,284	1,853,886	2,008,509	2,157,250	2,298,258	2,425,317	2,534,412	2,638,068
2017 GI with 45% loading	6,211	630,970	961,228	1,097,986	1,250,480	1,412,888	1,578,681	1,741,719	1,901,896	2,058,063	2,208,377	2,350,943	2,479,326	2,589,347	2,693,833
2017 GI with 55% loading	6,643	661,113	1,002,874	1,138,462	1,291,138	1,454,648	1,621,917	1,786,390	1,947,940	2,105,458	2,257,106	2,400,955	2,530,510	2,641,429	2,746,721
2017 GI with 75% loading	7,515	720,576	1,084,784	1,217,578	1,370,015	1,535,073	1,704,793	1,871,646	2,035,340	2,195,040	2,349,038	2,495,221	2,626,734	2,738,975	2,845,441
<b>2017 GI with 2017 CSO loading</b>	<b>5,094</b>	<b>549,846</b>	<b>846,432</b>	<b>981,433</b>	<b>1,129,135</b>	<b>1,283,811</b>	<b>1,440,783</b>	<b>1,596,205</b>	<b>1,750,017</b>	<b>1,899,825</b>	<b>2,043,452</b>	<b>2,179,633</b>	<b>2,302,494</b>	<b>2,408,451</b>	<b>2,509,302</b>
2017 CSO	409	291,034	523,862	727,735	926,847	1,121,601	1,312,099	1,499,001	1,683,460	1,861,835	2,030,674	2,188,760	2,330,755	2,453,700	2,570,046
2001 CSO	583	322,457	573,842	787,112	993,771	1,193,898	1,387,737	1,575,984	1,759,748	1,935,215	2,098,967	2,250,168	2,383,917	2,497,786	2,604,871
1980 CSO	1,028	374,801	655,372	882,956	1,104,743	1,320,434	1,529,983	1,734,189	1,934,652	2,127,767	2,310,329	2,481,650	2,636,029	2,770,033	2,897,361
<b>Initial Proposed GI Table</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>% Differential</b>	<b>5,094</b>	<b>549,846</b>	<b>846,432</b>	<b>981,433</b>	<b>1,129,135</b>	<b>1,283,811</b>	<b>1,440,783</b>	<b>1,596,205</b>	<b>1,750,017</b>	<b>1,899,825</b>	<b>2,043,452</b>	<b>2,179,633</b>	<b>2,302,494</b>	<b>2,408,451</b>	<b>2,509,302</b>
2001 CSO Table Ultimate	8%	60%	72%	88%	102%	114%	124%	134%	142%	150%	157%	163%	169%	175%	180%
2017 CSO Table Ultimate	6%	55%	65%	81%	95%	107%	117%	127%	136%	144%	152%	159%	165%	171%	178%
GI Basic Ult with 35% loading	78%	113%	115%	118%	124%	130%	137%	144%	150%	156%	161%	167%	172%	177%	182%
GI Basic Ult with 45% loading	84%	118%	120%	123%	128%	134%	141%	148%	154%	159%	165%	170%	176%	181%	186%
GI Basic Ult with 55% loading	90%	124%	125%	127%	132%	138%	145%	152%	158%	163%	169%	174%	179%	185%	190%
GI Basic Ult with 75% loading	102%	135%	135%	136%	140%	146%	153%	159%	165%	170%	176%	181%	186%	191%	197%
1980 CSO Table Ultimate	14%	70%	82%	99%	113%	126%	137%	147%	156%	165%	173%	180%	187%	194%	200%
<b>Initial Proposed GI Table</b>	<b>5,094</b>	<b>549,846</b>	<b>846,432</b>	<b>981,433</b>	<b>1,129,135</b>	<b>1,283,811</b>	<b>1,440,783</b>	<b>1,596,205</b>	<b>1,750,017</b>	<b>1,899,825</b>	<b>2,043,452</b>	<b>2,179,633</b>	<b>2,302,494</b>	<b>2,408,451</b>	<b>2,509,302</b>
<b>\$ Differential</b>	<b>(4,510)</b>	<b>(227,389)</b>	<b>(272,590)</b>	<b>(194,322)</b>	<b>(135,365)</b>	<b>(89,912)</b>	<b>(53,045)</b>	<b>(20,221)</b>	<b>9,731</b>	<b>35,389</b>	<b>55,516</b>	<b>70,534</b>	<b>81,423</b>	<b>89,335</b>	<b>95,568</b>
2001 CSO Table Ultimate	(4,685)	(258,812)	(322,570)	(253,698)	(202,288)	(162,209)	(128,684)	(97,204)	(66,558)	(37,991)	(12,778)	9,126	28,262	45,249	60,744
GI Basic Ult with 35% loading	683	50,681	72,615	75,239	79,555	85,969	93,102	99,078	103,869	108,684	113,799	118,624	122,823	125,961	128,766
GI Basic Ult with 45% loading	1,117	81,123	114,796	116,552	121,344	129,077	137,898	145,514	151,879	158,238	164,925	171,310	176,832	180,896	184,531
GI Basic Ult with 55% loading	1,550	111,267	156,443	157,029	162,002	170,837	181,134	190,185	197,923	205,632	213,654	221,321	228,017	232,978	237,419
GI Basic Ult with 75% loading	2,421	170,730	238,353	236,145	240,879	251,262	264,010	275,441	285,323	295,215	305,586	315,588	324,240	330,524	336,139
1980 CSO Table Ultimate	(4,066)	(175,046)	(191,060)	(98,477)	(24,392)	36,624	89,200	137,983	184,635	227,941	266,877	302,017	333,535	361,582	388,059

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 47\_Mean

**Female, Age 47**

**Mean Reserve Balance**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	2,739,120	2,829,935	2,910,282	2,979,991	3,038,696	3,086,392	3,122,879	3,147,864	3,161,168	3,162,453	3,151,365	3,127,632	3,091,081	3,041,754	2,979,757
2017 GI with 45% loading	2,795,700	2,887,080	2,967,764	3,037,605	3,096,188	3,143,548	3,179,486	3,203,696	3,216,023	3,216,129	3,203,650	3,178,316	3,139,965	3,088,662	3,024,524
2017 GI with 55% loading	2,849,296	2,941,153	3,022,097	3,091,974	3,150,390	3,197,348	3,232,721	3,256,180	3,267,541	3,266,497	3,252,692	3,225,834	3,185,774	3,132,583	3,066,390
2017 GI with 75% loading	2,949,149	3,041,749	3,123,009	3,192,787	3,250,705	3,296,834	3,331,024	3,352,944	3,362,427	3,359,150	3,342,756	3,312,975	3,269,661	3,212,906	3,142,880
<b>2017 GI with 2017 CSO loading</b>	<b>2,607,783</b>	<b>2,696,639</b>	<b>2,775,640</b>	<b>2,844,604</b>	<b>2,903,117</b>	<b>2,951,144</b>	<b>2,988,503</b>	<b>3,014,854</b>	<b>3,030,029</b>	<b>3,033,731</b>	<b>3,025,559</b>	<b>3,005,220</b>	<b>2,972,556</b>	<b>2,927,577</b>	<b>2,870,357</b>
2017 CSO	2,682,783	2,784,651	2,875,425	2,954,886	3,022,551	3,078,279	3,121,883	3,153,078	3,171,829	3,178,040	3,171,516	3,152,098	3,119,669	3,074,205	3,015,614
2001 CSO	2,708,468	2,801,446	2,883,733	2,955,236	3,015,546	3,064,546	3,102,040	3,127,703	3,141,298	3,142,454	3,130,869	3,106,443	3,069,194	3,019,268	2,956,802
1980 CSO	3,020,679	3,131,068	3,227,927	3,311,204	3,380,930	3,437,742	3,482,123	3,513,940	3,532,781	3,537,750	3,527,607	3,501,338	3,458,475	3,399,177	3,323,980

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
<b>Initial Proposed GI Table</b>	<b>2,607,783</b>	<b>2,696,639</b>	<b>2,775,640</b>	<b>2,844,604</b>	<b>2,903,117</b>	<b>2,951,144</b>	<b>2,988,503</b>	<b>3,014,854</b>	<b>3,030,029</b>	<b>3,033,731</b>	<b>3,025,559</b>	<b>3,005,220</b>	<b>2,972,556</b>	<b>2,927,577</b>	<b>2,870,357</b>

	% Differential	185%	190%	196%	201%	206%	211%	216%	222%	227%	232%	238%	243%	250%	256%	264%
2001 CSO Table Ultimate		185%	190%	196%	201%	206%	211%	216%	222%	227%	232%	238%	243%	250%	256%	264%
2017 CSO Table Ultimate		183%	189%	195%	201%	206%	212%	218%	223%	229%	235%	241%	247%	254%	261%	269%
GI Basic Ult with 35% loading		187%	192%	197%	202%	208%	213%	218%	223%	228%	234%	239%	245%	251%	258%	266%
GI Basic Ult with 45% loading		191%	196%	201%	206%	212%	217%	222%	227%	232%	238%	243%	249%	255%	262%	270%
GI Basic Ult with 55% loading		195%	200%	205%	210%	215%	220%	226%	231%	236%	241%	247%	253%	259%	266%	273%
GI Basic Ult with 75% loading		202%	207%	212%	217%	222%	227%	232%	238%	243%	248%	254%	260%	266%	273%	280%
1980 CSO Table Ultimate		207%	213%	219%	225%	231%	237%	243%	249%	255%	261%	268%	274%	281%	288%	296%

	\$ Differential	2,607,783	2,696,639	2,775,640	2,844,604	2,903,117	2,951,144	2,988,503	3,014,854	3,030,029	3,033,731	3,025,559	3,005,220	2,972,556	2,927,577	2,870,357
2001 CSO Table Ultimate		100,685	104,807	108,093	110,632	112,429	113,402	113,537	112,850	111,269	108,723	105,311	101,222	96,638	91,691	86,445
2017 CSO Table Ultimate		75,000	88,012	99,785	110,282	119,434	127,135	133,381	138,224	141,800	144,309	145,958	146,878	147,113	146,628	145,257

GI Basic Ult with 35% loading	131,338	133,296	134,642	135,387	135,579	135,248	134,376	133,010	131,139	128,722	125,806	122,412	118,525	114,177	109,400
GI Basic Ult with 45% loading	187,917	190,441	192,124	193,001	193,071	192,404	190,983	188,843	185,994	182,398	178,092	173,096	167,409	161,085	154,167
GI Basic Ult with 55% loading	241,514	244,514	246,458	247,370	247,273	246,204	244,218	241,327	237,512	232,766	227,134	220,614	213,219	205,006	196,033
GI Basic Ult with 75% loading	341,366	345,110	347,369	348,183	347,588	345,690	342,521	338,091	332,398	325,419	317,197	307,755	297,105	285,329	272,523
1980 CSO Table Ultimate	412,896	434,429	452,287	466,600	477,813	486,598	493,620	499,087	502,751	504,019	502,048	496,118	485,919	471,600	453,623

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 47\_Mean

**Female, Age 47**

**Mean Reserve Balance**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	2,905,397	2,819,206	2,721,583	2,613,234	2,494,751	2,366,534	2,229,303	2,083,856	1,930,963	1,771,710	1,607,639	1,440,274	1,271,858	1,105,517	943,942
2017 GI with 45% loading	2,947,881	2,859,297	2,759,196	2,648,312	2,527,252	2,396,444	2,256,624	2,108,608	1,953,187	1,791,461	1,624,990	1,455,318	1,284,710	1,116,319	952,852
2017 GI with 55% loading	2,987,576	2,896,722	2,794,266	2,680,967	2,557,479	2,424,233	2,281,977	2,131,554	1,973,767	1,809,727	1,641,021	1,469,206	1,296,566	1,126,278	961,063
2017 GI with 75% loading	3,059,991	2,964,877	2,858,037	2,740,277	2,612,289	2,474,543	2,327,820	2,172,989	2,010,876	1,842,628	1,669,862	1,494,162	1,317,848	1,144,138	975,776
<b>2017 GI with 2017 CSO loading</b>	<b>2,801,162</b>	<b>2,720,448</b>	<b>2,628,543</b>	<b>2,526,077</b>	<b>2,413,588</b>	<b>2,291,450</b>	<b>2,160,331</b>	<b>2,020,993</b>	<b>1,874,174</b>	<b>1,720,913</b>	<b>1,562,710</b>	<b>1,401,044</b>	<b>1,238,094</b>	<b>1,076,917</b>	<b>920,185</b>
2017 CSO	2,944,011	2,859,755	2,763,109	2,654,588	2,534,588	2,403,552	2,262,384	2,112,095	1,953,688	1,788,588	1,618,803	1,446,247	1,273,448	1,103,781	940,094
2001 CSO	2,882,103	2,795,641	2,697,783	2,588,783	2,468,490	2,337,405	2,196,965	2,048,452	1,893,216	1,732,576	1,567,631	1,399,886	1,232,110	1,068,357	911,671
1980 CSO	3,233,823	3,129,836	3,012,796	2,883,602	2,742,924	2,591,245	2,429,555	2,259,227	2,081,777	1,899,074	1,713,389	1,526,788	1,341,887	1,162,011	989,812

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>2,801,162</b>	<b>2,720,448</b>	<b>2,628,543</b>	<b>2,526,077</b>	<b>2,413,588</b>	<b>2,291,450</b>	<b>2,160,331</b>	<b>2,020,993</b>	<b>1,874,174</b>	<b>1,720,913</b>	<b>1,562,710</b>	<b>1,401,044</b>	<b>1,238,094</b>	<b>1,076,917</b>	<b>920,185</b>

	% Differential	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2001 CSO Table Ultimate	272%	281%	291%	301%	313%	326%	339%	353%	369%	385%	402%	420%	439%	460%	483%	
2017 CSO Table Ultimate	278%	287%	298%	309%	322%	335%	349%	364%	381%	398%	415%	434%	454%	475%	498%	
GI Basic Ult with 35% loading	274%	283%	293%	304%	316%	330%	344%	360%	376%	394%	412%	432%	453%	476%	500%	
GI Basic Ult with 45% loading	278%	287%	297%	308%	321%	334%	348%	364%	380%	398%	417%	437%	458%	481%	505%	
GI Basic Ult with 55% loading	282%	291%	301%	312%	324%	338%	352%	368%	384%	402%	421%	441%	462%	485%	510%	
GI Basic Ult with 75% loading	288%	298%	308%	319%	331%	345%	359%	375%	392%	410%	428%	448%	470%	493%	517%	
1980 CSO Table Ultimate	305%	314%	325%	336%	348%	361%	375%	390%	406%	422%	440%	458%	478%	500%	525%	

	\$ Differential	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>2,801,162</b>	<b>2,720,448</b>	<b>2,628,543</b>	<b>2,526,077</b>	<b>2,413,588</b>	<b>2,291,450</b>	<b>2,160,331</b>	<b>2,020,993</b>	<b>1,874,174</b>	<b>1,720,913</b>	<b>1,562,710</b>	<b>1,401,044</b>	<b>1,238,094</b>	<b>1,076,917</b>	<b>920,185</b>	
2001 CSO Table Ultimate	80,940	75,193	69,240	62,706	54,902	45,955	36,634	27,460	19,043	11,663	4,921	(1,158)	(5,984)	(8,560)	(8,514)	
2017 CSO Table Ultimate	142,849	139,307	134,565	128,511	121,000	112,102	102,054	91,103	79,515	67,675	56,093	45,203	35,354	26,864	19,909	

	GI Basic Ult with 35% loading	GI Basic Ult with 45% loading	GI Basic Ult with 55% loading	GI Basic Ult with 75% loading	1980 CSO Table Ultimate
104,235	98,757	93,040	87,158	81,163	432,661
146,719	138,848	130,653	122,235	113,664	409,388
186,414	176,274	165,722	154,890	143,891	384,253
258,828	244,429	229,493	214,200	198,701	357,526
299,796	269,224	238,234	207,603	178,161	150,679
269,224	238,234	207,603	178,161	150,679	125,744
238,234	207,603	178,161	150,679	103,793	85,094
207,603	178,161	150,679	103,793	85,094	69,627

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 47\_mid-term blended

**Male, Age 47**

See cell B75 for Female

**Blended Mid-Terminal Reserve Balance (19% annual, 81% monthly)**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	1,927	361,558	676,568	787,698	884,845	968,164	1,041,306	1,109,382	1,174,539	1,235,056	1,289,569	1,336,858	1,373,805	1,399,557	1,421,438
2017 GI with 45% loading	2,073	382,111	711,984	823,886	921,285	1,004,254	1,076,683	1,144,023	1,208,551	1,268,483	1,322,431	1,369,138	1,405,405	1,430,347	1,451,446
2017 GI with 55% loading	2,219	402,539	747,069	859,569	957,162	1,039,732	1,111,406	1,177,973	1,241,766	1,300,980	1,354,241	1,400,253	1,435,741	1,459,816	1,480,081
2017 GI with 75% loading	2,511	443,022	816,410	929,743	1,027,367	1,108,819	1,178,644	1,243,298	1,305,375	1,363,024	1,414,831	1,459,364	1,493,205	1,515,458	1,533,987
<b>2017 GI with 2017 CSO loading</b>	<b>1,721</b>	<b>327,754</b>	<b>616,530</b>	<b>723,190</b>	<b>816,951</b>	<b>898,921</b>	<b>971,728</b>	<b>1,038,956</b>	<b>1,103,233</b>	<b>1,163,019</b>	<b>1,216,711</b>	<b>1,263,563</b>	<b>1,300,674</b>	<b>1,326,983</b>	<b>1,349,516</b>
2017 CSO	155	130,278	297,695	435,352	564,277	686,130	801,118	909,531	1,012,107	1,106,864	1,191,990	1,266,902	1,328,821	1,376,662	1,417,853
2001 CSO	185	153,278	348,930	508,088	656,233	794,993	924,428	1,044,713	1,156,631	1,258,124	1,347,766	1,425,696	1,489,108	1,536,619	1,576,234
1980 CSO	316	189,490	421,383	599,743	764,625	918,064	1,060,273	1,191,671	1,313,462	1,423,427	1,519,702	1,602,069	1,667,496	1,714,966	1,753,912
<b>Initial Proposed GI Table</b>	<b>1,721</b>	<b>327,754</b>	<b>616,530</b>	<b>723,190</b>	<b>816,951</b>	<b>898,921</b>	<b>971,728</b>	<b>1,038,956</b>	<b>1,103,233</b>	<b>1,163,019</b>	<b>1,216,711</b>	<b>1,263,563</b>	<b>1,300,674</b>	<b>1,326,983</b>	<b>1,349,516</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	11%	47%	57%	70%	80%	88%	95%	101%	105%	108%	111%	113%	114%	116%	117%
2017 CSO Table Ultimate	9%	40%	48%	60%	69%	76%	82%	88%	92%	95%	98%	100%	102%	104%	105%
GI Basic Ult with 35% loading	112%	110%	110%	109%	108%	108%	107%	107%	106%	106%	106%	106%	106%	105%	105%
GI Basic Ult with 45% loading	120%	117%	115%	114%	113%	112%	111%	110%	110%	109%	109%	109%	108%	108%	108%
GI Basic Ult with 55% loading	129%	123%	121%	119%	117%	116%	114%	113%	113%	112%	111%	111%	110%	110%	110%
GI Basic Ult with 75% loading	146%	135%	132%	129%	126%	123%	121%	120%	118%	117%	116%	115%	115%	114%	114%
1980 CSO Table Ultimate	18%	58%	68%	83%	94%	102%	109%	115%	119%	122%	125%	127%	128%	129%	130%
<b>Initial Proposed GI Table</b>	<b>1,721</b>	<b>327,754</b>	<b>616,530</b>	<b>723,190</b>	<b>816,951</b>	<b>898,921</b>	<b>971,728</b>	<b>1,038,956</b>	<b>1,103,233</b>	<b>1,163,019</b>	<b>1,216,711</b>	<b>1,263,563</b>	<b>1,300,674</b>	<b>1,326,983</b>	<b>1,349,516</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(1,536)	(174,476)	(267,600)	(215,102)	(160,719)	(103,927)	(47,300)	5,757	53,398	95,106	131,055	162,133	188,433	209,636	226,718
2017 CSO Table Ultimate	(1,566)	(197,476)	(318,836)	(287,839)	(252,675)	(212,790)	(170,610)	(129,425)	(91,126)	(56,154)	(24,721)	3,339	28,147	49,679	68,337
GI Basic Ult with 35% loading	206	33,804	60,038	64,508	67,894	69,244	69,578	70,426	71,307	72,037	72,858	73,295	73,130	72,574	71,922
GI Basic Ult with 45% loading	352	54,356	95,454	100,696	104,334	105,334	104,955	105,067	105,318	105,464	105,720	105,575	104,731	103,364	101,930
GI Basic Ult with 55% loading	498	74,785	130,539	136,379	140,210	140,811	139,678	139,017	138,533	137,961	137,530	136,690	135,067	132,832	130,565
GI Basic Ult with 75% loading	790	115,267	199,879	206,553	210,415	209,898	206,916	204,342	202,142	200,006	198,120	195,801	192,531	188,475	184,471
1980 CSO Table Ultimate	(1,405)	(138,264)	(195,147)	(123,447)	(52,327)	19,144	88,545	152,715	210,229	260,408	302,991	338,506	366,822	387,982	404,396

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 47\_mid-term blended

**Male, Age 47**

**Blended Mid-Terminal Reserve B:**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	1,440,804	1,453,671	1,460,179	1,460,617	1,455,404	1,445,030	1,429,826	1,409,939	1,385,369	1,355,937	1,321,345	1,281,338	1,235,779	1,184,693	1,128,380
2017 GI with 45% loading	1,470,075	1,482,136	1,487,788	1,487,323	1,481,167	1,469,837	1,453,688	1,432,882	1,407,397	1,377,043	1,341,518	1,300,543	1,253,957	1,201,782	1,144,327
2017 GI with 55% loading	1,497,906	1,509,123	1,513,890	1,512,500	1,505,403	1,493,138	1,476,073	1,454,355	1,427,983	1,396,751	1,360,324	1,318,426	1,270,882	1,217,693	1,159,169
2017 GI with 75% loading	1,550,185	1,559,695	1,562,669	1,559,424	1,550,438	1,536,298	1,517,409	1,493,932	1,465,852	1,432,940	1,394,823	1,351,188	1,301,832	1,246,744	1,186,234
<b>2017 GI with 2017 CSO loading</b>	<b>1,369,637</b>	<b>1,383,584</b>	<b>1,391,441</b>	<b>1,393,482</b>	<b>1,390,066</b>	<b>1,381,592</b>	<b>1,368,366</b>	<b>1,350,502</b>	<b>1,327,989</b>	<b>1,300,681</b>	<b>1,268,336</b>	<b>1,230,727</b>	<b>1,187,726</b>	<b>1,139,379</b>	<b>1,085,979</b>
2017 CSO	1,454,152	1,481,874	1,501,263	1,512,694	1,516,597	1,513,419	1,503,524	1,487,111	1,464,254	1,434,939	1,399,131	1,356,903	1,308,472	1,254,216	1,194,710
2001 CSO	1,609,684	1,632,944	1,646,559	1,651,211	1,647,706	1,636,796	1,619,064	1,594,913	1,564,503	1,527,696	1,484,321	1,434,635	1,379,103	1,318,141	1,252,210
1980 CSO	1,786,521	1,808,238	1,819,391	1,820,494	1,812,237	1,795,399	1,770,680	1,738,571	1,699,365	1,653,202	1,600,136	1,540,288	1,473,992	1,401,854	1,324,729
<b>Initial Proposed GI Table</b>	<b>1,369,637</b>	<b>1,383,584</b>	<b>1,391,441</b>	<b>1,393,482</b>	<b>1,390,066</b>	<b>1,381,592</b>	<b>1,368,366</b>	<b>1,350,502</b>	<b>1,327,989</b>	<b>1,300,681</b>	<b>1,268,336</b>	<b>1,230,727</b>	<b>1,187,726</b>	<b>1,139,379</b>	<b>1,085,979</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	118%	118%	118%	118%	119%	118%	118%	118%	118%	117%	117%	117%	116%	116%	115%
2017 CSO Table Ultimate	106%	107%	108%	109%	109%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
GI Basic Ult with 35% loading	105%	105%	105%	105%	105%	105%	104%	104%	104%	104%	104%	104%	104%	104%	104%
GI Basic Ult with 45% loading	107%	107%	107%	107%	107%	106%	106%	106%	106%	106%	106%	106%	106%	105%	105%
GI Basic Ult with 55% loading	109%	109%	109%	109%	108%	108%	108%	108%	108%	107%	107%	107%	107%	107%	107%
GI Basic Ult with 75% loading	113%	113%	112%	112%	112%	111%	111%	111%	110%	110%	110%	110%	110%	109%	109%
1980 CSO Table Ultimate	130%	131%	131%	131%	130%	130%	129%	129%	128%	127%	126%	125%	124%	123%	122%
<b>Initial Proposed GI Table</b>	<b>1,369,637</b>	<b>1,383,584</b>	<b>1,391,441</b>	<b>1,393,482</b>	<b>1,390,066</b>	<b>1,381,592</b>	<b>1,368,366</b>	<b>1,350,502</b>	<b>1,327,989</b>	<b>1,300,681</b>	<b>1,268,336</b>	<b>1,230,727</b>	<b>1,187,726</b>	<b>1,139,379</b>	<b>1,085,979</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	240,047	249,360	255,117	257,729	257,640	255,204	250,698	244,411	236,514	227,014	215,985	203,909	191,378	178,762	166,231
2017 CSO Table Ultimate	84,515	98,291	109,821	119,212	126,531	131,826	135,158	136,609	136,265	134,258	130,795	126,177	120,746	114,837	108,731
GI Basic Ult with 35% loading	71,167	70,088	68,738	67,135	65,338	63,437	61,460	59,437	57,380	55,255	53,009	50,611	48,053	45,314	42,401
GI Basic Ult with 45% loading	100,438	98,552	96,346	93,841	91,101	88,244	85,322	82,380	79,408	76,362	73,183	69,816	66,231	62,403	58,348
GI Basic Ult with 55% loading	128,268	125,539	122,448	119,018	115,337	111,546	107,707	103,853	99,993	96,069	91,988	87,699	83,156	78,314	73,190
GI Basic Ult with 75% loading	180,548	176,111	171,228	165,942	160,371	154,705	149,043	143,431	137,863	132,259	126,488	120,462	114,106	107,365	100,255
1980 CSO Table Ultimate	416,884	424,655	427,949	427,012	422,171	413,806	402,314	388,069	371,376	352,520	331,801	309,561	286,266	262,475	238,750

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 47\_mid-term blended

**Male, Age 47**

**Blended Mid-Terminal Reserve B:**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	1,067,399	1,002,505	934,601	864,652	793,637	722,506	652,129	583,286	516,644	452,774	392,152	335,183	282,221	233,564	189,582
2017 GI with 45% loading	1,082,159	1,016,044	946,911	875,746	803,547	731,278	659,823	589,972	522,401	457,682	396,291	338,633	285,054	235,848	191,383
2017 GI with 55% loading	1,095,890	1,028,638	958,355	886,049	812,738	739,405	666,945	596,156	527,720	462,212	400,111	341,814	287,667	237,954	193,045
2017 GI with 75% loading	1,120,893	1,051,536	979,139	904,742	829,397	754,116	679,817	607,317	537,308	470,370	406,980	347,532	292,361	241,738	196,030
<b>2017 GI with 2017 CSO loading</b>	<b>1,028,047</b>	<b>966,287</b>	<b>901,551</b>	<b>834,754</b>	<b>766,825</b>	<b>698,667</b>	<b>631,117</b>	<b>564,926</b>	<b>500,749</b>	<b>439,145</b>	<b>380,590</b>	<b>325,492</b>	<b>274,213</b>	<b>227,090</b>	<b>184,468</b>
2017 CSO	1,130,655	1,062,811	991,974	918,967	844,668	769,939	695,554	622,298	550,947	482,216	416,760	355,186	298,048	245,814	198,856
2001 CSO	1,181,803	1,107,513	1,030,169	950,740	870,282	789,918	710,667	633,371	558,753	487,465	420,096	357,168	299,121	246,333	199,097
1980 CSO	1,243,655	1,159,731	1,074,016	987,466	900,957	815,315	731,346	649,874	571,695	497,525	427,958	363,461	304,383	250,962	203,338
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>1,028,047</b>	<b>966,287</b>	<b>901,551</b>	<b>834,754</b>	<b>766,825</b>	<b>698,667</b>	<b>631,117</b>	<b>564,926</b>	<b>500,749</b>	<b>439,145</b>	<b>380,590</b>	<b>325,492</b>	<b>274,213</b>	<b>227,090</b>	<b>184,468</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	115%	115%	114%	114%	113%	113%	113%	112%	112%	112%	110%	110%	109%	108%	108%
2017 CSO Table Ultimate	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	109%	109%	108%	108%
GI Basic Ult with 35% loading	104%	104%	104%	104%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%
GI Basic Ult with 45% loading	105%	105%	105%	105%	105%	105%	105%	104%	104%	104%	104%	104%	104%	104%	104%
GI Basic Ult with 55% loading	107%	106%	106%	106%	106%	106%	106%	106%	105%	105%	105%	105%	105%	105%	105%
GI Basic Ult with 75% loading	109%	109%	109%	108%	108%	108%	108%	108%	107%	107%	107%	107%	106%	106%	106%
1980 CSO Table Ultimate	121%	120%	119%	118%	117%	117%	116%	115%	114%	113%	112%	112%	111%	111%	110%
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>1,028,047</b>	<b>966,287</b>	<b>901,551</b>	<b>834,754</b>	<b>766,825</b>	<b>698,667</b>	<b>631,117</b>	<b>564,926</b>	<b>500,749</b>	<b>439,145</b>	<b>380,590</b>	<b>325,492</b>	<b>274,213</b>	<b>227,090</b>	<b>184,468</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	153,756	141,226	128,618	115,986	103,458	91,252	79,550	68,445	58,004	48,320	39,507	31,675	24,908	19,243	14,629
2017 CSO Table Ultimate	102,609	96,523	90,423	84,212	77,844	71,273	64,437	57,372	50,198	43,071	36,170	29,694	23,835	18,724	14,389
GI Basic Ult with 35% loading	39,353	36,218	33,050	29,898	26,813	23,839	21,013	18,360	15,895	13,629	11,562	9,691	8,008	6,474	5,114
GI Basic Ult with 45% loading	54,112	49,756	45,360	40,992	36,722	32,612	28,707	25,046	21,651	18,537	15,702	13,141	10,841	8,758	6,916
GI Basic Ult with 55% loading	67,843	62,351	56,805	51,295	45,913	40,738	35,828	31,229	26,970	23,068	19,521	16,322	13,454	10,864	8,577
GI Basic Ult with 75% loading	92,846	85,248	77,589	69,988	62,572	55,449	48,700	42,390	36,558	31,225	26,390	22,039	18,148	14,648	11,563
1980 CSO Table Ultimate	215,608	193,444	172,466	152,712	134,132	116,648	100,229	84,948	70,946	58,380	47,369	37,969	30,170	23,872	18,870

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 47\_mid-term blended

**Female, Age 47**

**Blended Mid-Terminal Reserve Balance (19% annual, 81% monthly)**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	1,349	371,635	710,539	861,425	1,022,250	1,190,289	1,360,226	1,526,828	1,689,970	1,848,965	2,002,213	2,147,916	2,279,953	2,394,612	2,503,626
2017 GI with 45% loading	1,450	390,454	742,134	892,824	1,054,571	1,224,281	1,396,200	1,564,705	1,729,650	1,890,410	2,045,457	2,192,957	2,326,569	2,442,435	2,552,549
2017 GI with 55% loading	1,551	409,096	773,304	923,489	1,085,859	1,257,019	1,430,705	1,600,905	1,767,450	1,929,779	2,086,386	2,235,403	2,370,436	2,487,478	2,598,666
2017 GI with 75% loading	1,754	445,890	834,567	983,268	1,146,269	1,319,661	1,496,373	1,669,466	1,838,602	2,003,544	2,162,944	2,314,757	2,452,237	2,571,150	2,684,040
<b>2017 GI with 2017 CSO loading</b>	<b>1,189</b>	<b>340,282</b>	<b>655,530</b>	<b>802,674</b>	<b>958,441</b>	<b>1,119,481</b>	<b>1,281,793</b>	<b>1,441,981</b>	<b>1,599,950</b>	<b>1,753,763</b>	<b>1,901,517</b>	<b>2,042,000</b>	<b>2,169,420</b>	<b>2,280,473</b>	<b>2,386,231</b>
2017 CSO	96	181,609	424,162	634,400	837,747	1,035,848	1,229,155	1,418,568	1,605,218	1,785,706	1,956,722	2,117,075	2,261,472	2,387,099	2,506,028
2001 CSO	136	201,102	463,274	683,601	894,955	1,098,791	1,295,744	1,486,771	1,672,962	1,850,768	2,016,930	2,170,639	2,307,047	2,423,885	2,533,828
1980 CSO	240	233,503	526,638	762,435	989,684	1,209,690	1,422,860	1,630,300	1,833,587	2,029,422	2,214,787	2,389,028	2,546,500	2,683,960	2,814,616
<b>Initial Proposed GI Table</b>	<b>1,189</b>	<b>340,282</b>	<b>655,530</b>	<b>802,674</b>	<b>958,441</b>	<b>1,119,481</b>	<b>1,281,793</b>	<b>1,441,981</b>	<b>1,599,950</b>	<b>1,753,763</b>	<b>1,901,517</b>	<b>2,042,000</b>	<b>2,169,420</b>	<b>2,280,473</b>	<b>2,386,231</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	8%	61%	75%	95%	110%	122%	133%	143%	152%	159%	166%	172%	177%	183%	188%
2017 CSO Table Ultimate	6%	55%	69%	88%	103%	115%	126%	137%	146%	154%	161%	168%	174%	180%	186%
GI Basic Ult with 35% loading	78%	113%	115%	119%	125%	132%	140%	147%	153%	159%	165%	170%	175%	180%	186%
GI Basic Ult with 45% loading	84%	119%	120%	123%	129%	136%	144%	151%	157%	163%	168%	174%	179%	184%	189%
GI Basic Ult with 55% loading	90%	125%	125%	128%	133%	140%	147%	154%	160%	166%	171%	177%	182%	187%	193%
GI Basic Ult with 75% loading	102%	136%	135%	136%	140%	147%	154%	161%	167%	172%	178%	183%	189%	194%	199%
1980 CSO Table Ultimate	14%	71%	85%	105%	121%	135%	146%	157%	166%	174%	182%	189%	196%	202%	209%
<b>Initial Proposed GI Table</b>	<b>1,189</b>	<b>340,282</b>	<b>655,530</b>	<b>802,674</b>	<b>958,441</b>	<b>1,119,481</b>	<b>1,281,793</b>	<b>1,441,981</b>	<b>1,599,950</b>	<b>1,753,763</b>	<b>1,901,517</b>	<b>2,042,000</b>	<b>2,169,420</b>	<b>2,280,473</b>	<b>2,386,231</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(1,053)	(139,180)	(192,256)	(119,073)	(63,486)	(20,690)	13,951	44,790	73,012	97,004	115,413	128,640	137,627	143,413	147,597
2017 CSO Table Ultimate	(1,094)	(158,673)	(231,368)	(168,274)	(120,694)	(83,633)	(52,638)	(23,414)	5,268	31,943	55,205	75,075	92,053	106,627	119,798
GI Basic Ult with 35% loading	160	31,353	55,010	58,751	63,809	70,808	78,433	84,847	90,020	95,202	100,696	105,916	110,533	114,139	117,395
GI Basic Ult with 45% loading	261	50,172	86,604	90,151	96,130	104,800	114,407	122,724	129,699	136,646	143,940	150,957	157,149	161,962	166,319
GI Basic Ult with 55% loading	362	68,814	117,775	120,816	127,419	137,538	148,913	158,924	167,500	176,016	184,869	193,403	201,017	207,005	212,435
GI Basic Ult with 75% loading	565	105,608	179,037	180,594	187,828	200,180	214,581	227,485	238,652	249,780	261,427	272,757	282,818	290,677	297,809
1980 CSO Table Ultimate	(949)	(106,778)	(128,892)	(40,239)	31,243	90,209	141,068	188,319	233,637	275,658	313,270	347,028	377,080	403,487	428,385

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 47\_mid-term blended

**Female, Age 47**

**Blended Mid-Terminal Reserve B:**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	2,609,458	2,704,995	2,790,014	2,864,338	2,927,610	2,979,828	3,020,787	3,050,202	3,067,894	3,073,523	3,066,742	3,047,282	3,014,967	2,969,840	2,912,003
2017 GI with 45% loading	2,659,437	2,755,779	2,841,371	2,916,059	2,979,441	3,031,550	3,072,187	3,101,051	3,117,987	3,122,657	3,114,704	3,093,858	3,059,958	3,013,068	2,953,300
2017 GI with 55% loading	2,706,502	2,803,555	2,889,642	2,964,596	3,028,039	3,079,973	3,120,268	3,148,603	3,164,792	3,168,530	3,159,466	3,137,310	3,101,915	3,053,346	2,991,733
2017 GI with 75% loading	2,793,479	2,891,741	2,978,603	3,053,913	3,117,308	3,168,858	3,208,411	3,235,643	3,250,388	3,252,321	3,241,093	3,216,437	3,178,205	3,126,488	3,061,453
<b>2017 GI with 2017 CSO loading</b>	<b>2,489,089</b>	<b>2,582,271</b>	<b>2,665,551</b>	<b>2,738,742</b>	<b>2,801,439</b>	<b>2,853,607</b>	<b>2,895,061</b>	<b>2,925,470</b>	<b>2,944,664</b>	<b>2,952,344</b>	<b>2,948,117</b>	<b>2,931,691</b>	<b>2,902,907</b>	<b>2,861,774</b>	<b>2,808,363</b>
2017 CSO	2,621,071	2,725,216	2,818,243	2,899,928	2,969,794	3,027,700	3,073,456	3,106,782	3,127,642	3,135,940	3,131,483	3,114,114	3,083,714	3,040,260	2,983,658
2001 CSO	2,639,976	2,735,475	2,820,254	2,894,219	2,956,964	3,008,374	3,048,250	3,076,273	3,092,203	3,095,670	3,086,375	3,064,218	3,029,218	2,981,520	2,921,257
1980 CSO	2,940,904	3,054,227	3,153,989	3,240,131	3,312,692	3,372,309	3,419,464	3,454,027	3,475,586	3,483,248	3,475,771	3,452,144	3,411,900	3,355,194	3,282,563
<b>Initial Proposed GI Table</b>	<b>2,489,089</b>	<b>2,582,271</b>	<b>2,665,551</b>	<b>2,738,742</b>	<b>2,801,439</b>	<b>2,853,607</b>	<b>2,895,061</b>	<b>2,925,470</b>	<b>2,944,664</b>	<b>2,952,344</b>	<b>2,948,117</b>	<b>2,931,691</b>	<b>2,902,907</b>	<b>2,861,774</b>	<b>2,808,363</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	193%	198%	203%	208%	213%	218%	223%	228%	233%	238%	243%	249%	255%	262%	269%
2017 CSO Table Ultimate	191%	197%	203%	208%	214%	219%	225%	230%	236%	241%	247%	253%	260%	267%	275%
GI Basic Ult with 35% loading	191%	196%	201%	206%	211%	216%	221%	226%	231%	236%	242%	248%	254%	261%	268%
GI Basic Ult with 45% loading	194%	199%	204%	209%	214%	219%	225%	230%	235%	240%	246%	251%	258%	264%	272%
GI Basic Ult with 55% loading	198%	203%	208%	213%	218%	223%	228%	233%	238%	244%	249%	255%	261%	268%	275%
GI Basic Ult with 75% loading	204%	209%	214%	219%	224%	229%	234%	240%	245%	250%	256%	261%	268%	274%	282%
1980 CSO Table Ultimate	215%	221%	227%	233%	238%	244%	250%	256%	262%	268%	274%	280%	287%	294%	302%
<b>Initial Proposed GI Table</b>	<b>2,489,089</b>	<b>2,582,271</b>	<b>2,665,551</b>	<b>2,738,742</b>	<b>2,801,439</b>	<b>2,853,607</b>	<b>2,895,061</b>	<b>2,925,470</b>	<b>2,944,664</b>	<b>2,952,344</b>	<b>2,948,117</b>	<b>2,931,691</b>	<b>2,902,907</b>	<b>2,861,774</b>	<b>2,808,363</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	150,887	153,204	154,703	155,477	155,526	154,767	153,189	150,803	147,539	143,325	138,258	132,527	126,311	119,746	112,894
2017 CSO Table Ultimate	131,982	142,946	152,692	161,186	168,356	174,093	178,395	181,312	182,979	183,595	183,366	182,423	180,807	178,486	175,296
GI Basic Ult with 35% loading	120,369	122,725	124,463	125,596	126,172	126,222	125,725	124,732	123,230	121,179	118,625	115,590	112,060	108,066	103,640
GI Basic Ult with 45% loading	170,348	173,508	175,819	177,317	178,003	177,943	177,125	175,581	173,323	170,313	166,587	162,167	157,051	151,294	144,938
GI Basic Ult with 55% loading	217,413	221,285	224,090	225,854	226,600	226,366	225,206	223,133	220,129	216,186	211,349	205,619	199,008	191,572	183,370
GI Basic Ult with 75% loading	304,390	309,470	313,052	315,171	315,870	315,251	313,350	310,174	305,724	299,976	292,976	284,746	275,298	264,715	253,091
1980 CSO Table Ultimate	451,815	471,956	488,438	501,389	511,253	518,702	524,402	528,558	530,923	530,903	527,654	520,453	508,993	493,421	474,200

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 47\_mid-term blended

**Female, Age 47**

**Blended Mid-Terminal Reserve B:**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	2,841,761	2,759,638	2,666,031	2,561,640	2,447,046	2,322,648	2,189,159	2,047,370	1,898,043	1,742,255	1,581,535	1,417,394	1,252,058	1,088,621	929,749
2017 GI with 45% loading	2,880,984	2,796,675	2,700,795	2,594,069	2,477,097	2,350,303	2,214,416	2,070,244	1,918,572	1,760,489	1,597,540	1,431,258	1,263,887	1,098,549	937,925
2017 GI with 55% loading	2,917,453	2,831,078	2,733,044	2,624,103	2,504,897	2,375,859	2,237,725	2,091,332	1,937,473	1,777,251	1,612,239	1,443,976	1,274,730	1,107,644	945,409
2017 GI with 75% loading	2,983,505	2,893,274	2,791,254	2,678,245	2,554,926	2,421,767	2,279,539	2,129,102	1,971,273	1,807,190	1,638,452	1,466,627	1,294,016	1,123,799	958,689
<b>2017 GI with 2017 CSO loading</b>	<b>2,742,938</b>	<b>2,665,950</b>	<b>2,577,722</b>	<b>2,478,878</b>	<b>2,369,949</b>	<b>2,251,307</b>	<b>2,123,614</b>	<b>1,987,623</b>	<b>1,844,067</b>	<b>1,693,977</b>	<b>1,538,841</b>	<b>1,380,123</b>	<b>1,219,990</b>	<b>1,061,470</b>	<b>907,210</b>
2017 CSO	2,914,022	2,831,707	2,736,973	2,630,335	2,512,182	2,382,957	2,243,563	2,095,003	1,938,279	1,774,812	1,606,603	1,435,561	1,264,207	1,095,901	933,479
2001 CSO	2,848,738	2,764,429	2,668,693	2,561,782	2,443,540	2,314,467	2,175,996	2,029,405	1,876,040	1,717,217	1,554,027	1,387,968	1,221,802	1,059,564	904,289
1980 CSO	3,194,944	3,093,461	2,978,891	2,852,128	2,713,836	2,564,500	2,405,102	2,237,011	2,061,740	1,881,154	1,697,514	1,512,878	1,329,853	1,151,746	981,193
<b>Initial Proposed GI Table</b>	<b>2,742,938</b>	<b>2,665,950</b>	<b>2,577,722</b>	<b>2,478,878</b>	<b>2,369,949</b>	<b>2,251,307</b>	<b>2,123,614</b>	<b>1,987,623</b>	<b>1,844,067</b>	<b>1,693,977</b>	<b>1,538,841</b>	<b>1,380,123</b>	<b>1,219,990</b>	<b>1,061,470</b>	<b>907,210</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	277%	286%	296%	307%	319%	331%	345%	359%	375%	391%	408%	426%	446%	467%	490%
2017 CSO Table Ultimate	283%	293%	304%	315%	328%	341%	355%	371%	387%	404%	422%	441%	461%	483%	506%
GI Basic Ult with 35% loading	276%	286%	296%	307%	319%	332%	347%	362%	379%	397%	416%	435%	457%	479%	504%
GI Basic Ult with 45% loading	280%	289%	300%	311%	323%	336%	351%	366%	383%	401%	420%	440%	461%	484%	508%
GI Basic Ult with 55% loading	284%	293%	303%	314%	327%	340%	355%	370%	387%	405%	424%	444%	465%	488%	513%
GI Basic Ult with 75% loading	290%	299%	310%	321%	333%	347%	361%	377%	394%	412%	431%	451%	472%	495%	520%
1980 CSO Table Ultimate	311%	320%	330%	342%	354%	367%	381%	396%	412%	428%	446%	465%	485%	507%	532%
<b>Initial Proposed GI Table</b>	<b>2,742,938</b>	<b>2,665,950</b>	<b>2,577,722</b>	<b>2,478,878</b>	<b>2,369,949</b>	<b>2,251,307</b>	<b>2,123,614</b>	<b>1,987,623</b>	<b>1,844,067</b>	<b>1,693,977</b>	<b>1,538,841</b>	<b>1,380,123</b>	<b>1,219,990</b>	<b>1,061,470</b>	<b>907,210</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	105,800	98,479	90,972	82,904	73,591	63,160	52,382	41,782	31,973	23,240	15,186	7,845	1,812	(1,905)	(2,921)
2017 CSO Table Ultimate	171,083	165,757	159,251	151,457	142,233	131,651	119,949	107,380	94,212	80,834	67,763	55,438	44,217	34,431	26,269
GI Basic Ult with 35% loading	98,822	93,688	88,310	82,762	77,097	71,342	65,546	59,747	53,976	48,278	42,695	37,271	32,068	27,151	22,539
GI Basic Ult with 45% loading	138,046	130,726	123,073	115,191	107,148	98,996	90,802	82,621	74,505	66,511	58,700	51,135	43,897	37,079	30,715
GI Basic Ult with 55% loading	174,514	165,129	155,322	145,225	134,949	124,552	114,111	103,709	93,406	83,274	73,398	63,853	54,740	46,174	38,199
GI Basic Ult with 75% loading	240,566	227,325	213,533	199,367	184,977	170,460	155,926	141,479	127,206	113,213	99,611	86,504	74,026	62,329	51,480
1980 CSO Table Ultimate	452,005	427,511	401,169	373,250	343,887	313,193	281,488	249,388	217,674	187,177	158,673	132,755	109,863	90,276	73,983



Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 57\_Mean

**Male, Age 57**

See cell B75 for Female

**Mean Reserve Balance**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	12,035	620,062	917,891	1,001,334	1,081,355	1,156,441	1,225,185	1,285,707	1,337,925	1,380,015	1,411,746	1,435,072	1,449,199	1,451,719	1,442,508
2017 GI with 45% loading	12,950	654,026	964,396	1,045,773	1,124,314	1,198,238	1,265,946	1,325,459	1,376,658	1,417,648	1,448,209	1,470,373	1,483,343	1,484,622	1,474,078
2017 GI with 55% loading	13,870	687,723	1,010,416	1,089,543	1,166,439	1,239,018	1,305,556	1,363,937	1,414,008	1,453,827	1,483,184	1,504,164	1,515,929	1,515,954	1,504,096
2017 GI with 75% loading	15,716	754,352	1,101,253	1,175,501	1,248,770	1,318,426	1,382,383	1,438,265	1,485,873	1,523,152	1,549,915	1,568,374	1,577,670	1,575,152	1,560,656
<b>2017 GI with 2017 CSO loading</b>	<b>10,605</b>	<b>561,446</b>	<b>835,747</b>	<b>919,490</b>	<b>999,257</b>	<b>1,073,998</b>	<b>1,142,551</b>	<b>1,203,171</b>	<b>1,255,814</b>	<b>1,298,729</b>	<b>1,331,607</b>	<b>1,356,274</b>	<b>1,371,942</b>	<b>1,376,313</b>	<b>1,369,301</b>
2017 CSO	1,228	277,085	481,474	637,488	776,577	901,751	1,014,057	1,113,201	1,199,736	1,272,326	1,330,822	1,377,156	1,410,640	1,429,080	1,432,566
2001 CSO	1,956	329,011	561,979	730,296	878,977	1,010,854	1,127,118	1,227,786	1,313,853	1,384,374	1,439,624	1,482,014	1,511,118	1,524,738	1,522,809
1980 CSO	3,216	406,951	678,989	859,934	1,019,776	1,161,738	1,286,833	1,394,482	1,485,369	1,558,077	1,612,836	1,652,459	1,676,568	1,682,934	1,672,021
<b>Initial Proposed GI Table</b>	<b>10,605</b>	<b>561,446</b>	<b>835,747</b>	<b>919,490</b>	<b>999,257</b>	<b>1,073,998</b>	<b>1,142,551</b>	<b>1,203,171</b>	<b>1,255,814</b>	<b>1,298,729</b>	<b>1,331,607</b>	<b>1,356,274</b>	<b>1,371,942</b>	<b>1,376,313</b>	<b>1,369,301</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	18%	59%	67%	79%	88%	94%	99%	102%	105%	107%	108%	109%	110%	111%	111%
2017 CSO Table Ultimate	12%	49%	58%	69%	78%	84%	89%	93%	96%	98%	100%	102%	103%	104%	105%
GI Basic Ult with 35% loading	113%	110%	110%	109%	108%	108%	107%	107%	107%	106%	106%	106%	106%	105%	105%
GI Basic Ult with 45% loading	122%	116%	115%	114%	113%	112%	111%	110%	110%	109%	109%	109%	108%	108%	108%
GI Basic Ult with 55% loading	131%	122%	121%	118%	117%	115%	114%	113%	113%	112%	111%	111%	110%	110%	110%
GI Basic Ult with 75% loading	148%	134%	132%	128%	125%	123%	121%	120%	118%	117%	116%	115%	114%	114%	114%
1980 CSO Table Ultimate	30%	72%	81%	94%	102%	108%	113%	116%	118%	120%	121%	122%	122%	122%	122%
<b>Initial Proposed GI Table</b>	<b>10,605</b>	<b>561,446</b>	<b>835,747</b>	<b>919,490</b>	<b>999,257</b>	<b>1,073,998</b>	<b>1,142,551</b>	<b>1,203,171</b>	<b>1,255,814</b>	<b>1,298,729</b>	<b>1,331,607</b>	<b>1,356,274</b>	<b>1,371,942</b>	<b>1,376,313</b>	<b>1,369,301</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(8,649)	(232,435)	(273,768)	(189,194)	(120,280)	(63,144)	(15,433)	24,615	58,040	85,645	108,017	125,739	139,176	148,425	153,508
2017 CSO Table Ultimate	(9,376)	(284,362)	(354,274)	(282,002)	(222,680)	(172,247)	(128,494)	(89,970)	(56,078)	(26,403)	(785)	20,882	38,698	52,767	63,265
GI Basic Ult with 35% loading	1,431	58,616	82,144	81,844	82,098	82,443	82,634	82,536	82,112	81,286	80,139	78,798	77,258	75,406	73,207
GI Basic Ult with 45% loading	2,345	92,580	128,649	126,283	125,056	124,239	123,395	122,288	120,845	118,919	116,602	114,099	111,401	108,309	104,778
GI Basic Ult with 55% loading	3,265	126,276	174,668	170,053	167,182	165,020	163,005	160,766	158,195	155,098	151,577	147,889	143,987	139,641	134,795
GI Basic Ult with 75% loading	5,111	192,906	265,506	256,011	249,513	244,428	239,832	235,094	230,059	224,423	218,308	212,099	205,728	198,839	191,356
1980 CSO Table Ultimate	(7,389)	(154,496)	(156,759)	(59,556)	20,519	87,740	144,282	191,311	229,556	259,347	281,229	296,185	304,626	306,621	302,720

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 57\_Mean

**Male, Age 57**

**Mean Reserve Balance**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	1,418,855	1,384,011	1,344,193	1,297,110	1,242,098	1,179,234	1,110,417	1,036,961	960,233	881,585	802,299	723,536	646,316	571,500	499,810
2017 GI with 45% loading	1,448,950	1,412,522	1,371,116	1,322,381	1,265,643	1,200,975	1,130,309	1,055,002	976,450	896,031	815,054	734,695	655,988	579,806	506,874
2017 GI with 55% loading	1,477,502	1,439,527	1,396,602	1,346,291	1,287,902	1,221,513	1,149,095	1,072,025	991,733	909,628	827,044	745,174	665,063	587,593	513,489
2017 GI with 75% loading	1,531,199	1,490,202	1,444,305	1,390,948	1,329,400	1,259,728	1,183,983	1,103,595	1,020,042	934,784	849,196	764,505	681,781	601,917	525,646
<b>2017 GI with 2017 CSO loading</b>	<b>1,348,378</b>	<b>1,316,667</b>	<b>1,280,077</b>	<b>1,236,471</b>	<b>1,185,228</b>	<b>1,126,401</b>	<b>1,061,772</b>	<b>992,575</b>	<b>920,101</b>	<b>845,622</b>	<b>770,358</b>	<b>695,418</b>	<b>621,782</b>	<b>550,293</b>	<b>481,657</b>
2017 CSO	1,418,724	1,391,462	1,357,466	1,315,080	1,264,054	1,204,707	1,138,964	1,068,007	993,016	915,232	835,846	755,919	676,522	598,709	523,440
2001 CSO	1,502,661	1,468,745	1,428,512	1,380,209	1,323,365	1,257,958	1,185,726	1,107,915	1,025,949	941,340	855,674	770,372	686,587	605,300	527,391
1980 CSO	1,641,359	1,595,617	1,542,688	1,480,887	1,410,275	1,331,625	1,247,507	1,159,507	1,069,009	977,251	885,378	794,504	705,767	620,269	538,987
<b>Initial Proposed GI Table</b>	<b>1,348,378</b>	<b>1,316,667</b>	<b>1,280,077</b>	<b>1,236,471</b>	<b>1,185,228</b>	<b>1,126,401</b>	<b>1,061,772</b>	<b>992,575</b>	<b>920,101</b>	<b>845,622</b>	<b>770,358</b>	<b>695,418</b>	<b>621,782</b>	<b>550,293</b>	<b>481,657</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	111%	112%	112%	112%	112%	112%	112%	112%	112%	111%	111%	111%	110%	110%	109%
2017 CSO Table Ultimate	105%	106%	106%	106%	107%	107%	107%	108%	108%	108%	109%	109%	109%	109%	109%
GI Basic Ult with 35% loading	105%	105%	105%	105%	105%	105%	105%	104%	104%	104%	104%	104%	104%	104%	104%
GI Basic Ult with 45% loading	107%	107%	107%	107%	107%	107%	106%	106%	106%	106%	106%	106%	106%	105%	105%
GI Basic Ult with 55% loading	110%	109%	109%	109%	109%	108%	108%	108%	108%	107%	107%	107%	107%	107%	107%
GI Basic Ult with 75% loading	114%	113%	113%	112%	112%	112%	111%	111%	111%	110%	110%	110%	109%	109%	109%
1980 CSO Table Ultimate	122%	121%	121%	120%	119%	118%	117%	117%	116%	116%	115%	114%	114%	113%	112%
<b>Initial Proposed GI Table</b>	<b>1,348,378</b>	<b>1,316,667</b>	<b>1,280,077</b>	<b>1,236,471</b>	<b>1,185,228</b>	<b>1,126,401</b>	<b>1,061,772</b>	<b>992,575</b>	<b>920,101</b>	<b>845,622</b>	<b>770,358</b>	<b>695,418</b>	<b>621,782</b>	<b>550,293</b>	<b>481,657</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	154,283	152,078	148,435	143,738	138,137	131,557	123,953	115,340	105,848	95,718	85,316	74,954	64,805	55,008	45,734
2017 CSO Table Ultimate	70,346	74,794	77,390	78,609	78,826	78,306	77,192	75,432	72,916	69,611	65,488	60,501	54,740	48,417	41,783
GI Basic Ult with 35% loading	70,477	67,344	64,116	60,638	56,870	52,833	48,645	44,386	40,133	35,963	31,941	28,119	24,534	21,207	18,153
GI Basic Ult with 45% loading	100,572	95,854	91,039	85,910	80,415	74,574	68,537	62,427	56,350	50,409	44,696	39,277	34,205	29,513	25,217
GI Basic Ult with 55% loading	129,123	122,859	116,525	109,820	102,674	95,112	87,322	79,450	71,633	64,006	56,686	49,756	43,281	37,300	31,832
GI Basic Ult with 75% loading	182,820	173,535	164,228	154,476	144,172	133,327	122,211	111,020	99,941	89,162	78,838	69,088	59,999	51,624	43,989
1980 CSO Table Ultimate	292,980	278,949	262,611	244,416	225,047	205,224	185,735	166,932	148,908	131,629	115,020	99,086	83,985	69,976	57,330

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 57\_Mean

**Male, Age 57**

**Mean Reserve Balance**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	431,840	368,080	308,942	254,768	205,980	162,924	125,731	94,371	68,653	48,328	32,852	21,487	13,502	8,122	4,661
2017 GI with 45% loading	437,782	373,018	312,987	258,020	208,539	164,891	127,204	95,442	69,406	48,842	33,192	21,704	13,635	8,200	4,705
2017 GI with 55% loading	443,344	377,638	316,771	261,063	210,933	166,732	128,582	96,444	70,110	49,322	33,510	21,907	13,760	8,273	4,747
2017 GI with 75% loading	453,553	386,112	323,708	266,640	215,323	170,109	131,111	98,282	71,403	50,204	34,093	22,278	13,988	8,408	4,822
<b>2017 GI with 2017 CSO loading</b>	<b>416,468</b>	<b>355,221</b>	<b>298,341</b>	<b>246,218</b>	<b>199,243</b>	<b>157,727</b>	<b>121,824</b>	<b>91,518</b>	<b>66,632</b>	<b>46,927</b>	<b>31,907</b>	<b>20,875</b>	<b>13,118</b>	<b>7,889</b>	<b>4,527</b>
2017 CSO	451,588	383,947	321,227	264,010	212,740	167,695	128,978	96,514	70,018	49,131	33,276	21,690	13,586	8,148	4,664
2001 CSO	453,648	384,754	321,277	263,689	212,336	167,363	128,746	96,328	69,830	48,949	33,121	21,571	13,502	8,092	4,631
1980 CSO	462,727	392,102	327,555	269,367	217,685	172,525	133,769	101,159	74,315	52,885	36,336	23,968	10,267	3,181	2,085
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>416,468</b>	<b>355,221</b>	<b>298,341</b>	<b>246,218</b>	<b>199,243</b>	<b>157,727</b>	<b>121,824</b>	<b>91,518</b>	<b>66,632</b>	<b>46,927</b>	<b>31,907</b>	<b>20,875</b>	<b>13,118</b>	<b>7,889</b>	<b>4,527</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	109%	108%	108%	107%	107%	106%	106%	105%	105%	104%	104%	103%	103%	103%	102%
2017 CSO Table Ultimate	108%	108%	108%	107%	107%	106%	106%	105%	105%	105%	104%	104%	104%	103%	103%
GI Basic Ult with 35% loading	104%	104%	104%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%
GI Basic Ult with 45% loading	105%	105%	105%	105%	105%	105%	104%	104%	104%	104%	104%	104%	104%	104%	104%
GI Basic Ult with 55% loading	106%	106%	106%	106%	106%	106%	106%	105%	105%	105%	105%	105%	105%	105%	105%
GI Basic Ult with 75% loading	109%	109%	109%	108%	108%	108%	108%	107%	107%	107%	107%	107%	107%	107%	107%
1980 CSO Table Ultimate	111%	110%	110%	109%	109%	109%	110%	111%	112%	113%	114%	115%	78%	40%	46%
<b>Initial Proposed GI Table</b>	<b>416,468</b>	<b>355,221</b>	<b>298,341</b>	<b>246,218</b>	<b>199,243</b>	<b>157,727</b>	<b>121,824</b>	<b>91,518</b>	<b>66,632</b>	<b>46,927</b>	<b>31,907</b>	<b>20,875</b>	<b>13,118</b>	<b>7,889</b>	<b>4,527</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	37,180	29,533	22,936	17,470	13,093	9,636	6,921	4,810	3,198	2,022	1,215	697	383	203	104
2017 CSO Table Ultimate	35,120	28,726	22,885	17,791	13,497	9,968	7,154	4,996	3,386	2,204	1,369	815	468	258	137
GI Basic Ult with 35% loading	15,372	12,858	10,601	8,550	6,737	5,197	3,906	2,853	2,021	1,401	945	612	384	232	134
GI Basic Ult with 45% loading	21,314	17,797	14,646	11,802	9,296	7,164	5,379	3,924	2,774	1,915	1,285	829	517	311	179
GI Basic Ult with 55% loading	26,876	22,417	18,429	14,844	11,690	9,005	6,758	4,926	3,479	2,395	1,603	1,032	642	384	220
GI Basic Ult with 75% loading	37,085	30,891	25,367	20,422	16,080	12,381	9,287	6,764	4,771	3,277	2,186	1,404	870	518	296
1980 CSO Table Ultimate	46,259	36,881	29,213	23,149	18,442	14,797	11,945	9,641	7,684	5,958	4,429	3,093	(2,851)	(4,708)	(2,441)

**Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables**  
 AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 57\_Mean

**Female, Age 57**

**Mean Reserve Balance**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	6,354	668,862	1,066,218	1,271,195	1,467,451	1,655,332	1,834,995	2,004,250	2,162,579	2,305,984	2,432,831	2,545,304	2,641,179	2,715,557	2,767,711
2017 GI with 45% loading	6,831	701,071	1,113,002	1,319,642	1,517,753	1,707,545	1,889,011	2,059,877	2,219,620	2,364,075	2,491,610	2,604,478	2,700,392	2,774,379	2,825,723
2017 GI with 55% loading	7,311	732,833	1,159,052	1,367,168	1,566,965	1,758,401	1,941,425	2,113,674	2,274,577	2,419,895	2,547,916	2,661,037	2,756,906	2,830,416	2,880,891
2017 GI with 75% loading	8,268	795,324	1,249,161	1,459,307	1,661,625	1,855,730	2,041,344	2,215,831	2,378,573	2,525,149	2,653,858	2,767,180	2,862,681	2,935,095	2,983,735
<b>2017 GI with 2017 CSO loading</b>	<b>5,601</b>	<b>612,147</b>	<b>981,594</b>	<b>1,179,648</b>	<b>1,369,092</b>	<b>1,550,514</b>	<b>1,724,166</b>	<b>1,888,048</b>	<b>2,041,676</b>	<b>2,181,213</b>	<b>2,305,073</b>	<b>2,415,338</b>	<b>2,509,814</b>	<b>2,583,845</b>	<b>2,636,755</b>
2017 CSO	957	386,113	690,117	938,656	1,170,711	1,389,733	1,597,260	1,792,225	1,974,423	2,140,211	2,287,921	2,419,596	2,533,080	2,623,846	2,691,393
2001 CSO	1,607	418,743	730,101	967,095	1,188,027	1,396,323	1,593,636	1,778,945	1,952,145	2,109,695	2,249,973	2,374,973	2,482,530	2,567,933	2,630,353
1980 CSO	2,045	489,390	852,245	1,128,644	1,388,154	1,633,265	1,864,552	2,080,145	2,279,999	2,460,645	2,621,242	2,765,074	2,889,932	2,990,139	3,064,082
<b>Initial Proposed GI Table</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	15%	75%	87%	105%	119%	130%	139%	148%	155%	162%	169%	175%	181%	187%	192%
2017 CSO Table Ultimate	9%	69%	83%	102%	117%	129%	140%	149%	157%	165%	172%	178%	185%	191%	197%
GI Basic Ult with 35% loading	60%	119%	128%	138%	147%	154%	161%	167%	172%	178%	183%	188%	193%	197%	202%
GI Basic Ult with 45% loading	64%	125%	133%	144%	152%	159%	165%	171%	177%	182%	187%	192%	197%	202%	206%
GI Basic Ult with 55% loading	69%	131%	139%	149%	157%	164%	170%	176%	181%	186%	191%	196%	201%	206%	210%
GI Basic Ult with 75% loading	78%	142%	149%	159%	166%	173%	179%	184%	189%	194%	199%	204%	209%	213%	218%
1980 CSO Table Ultimate	19%	87%	102%	123%	139%	152%	163%	173%	182%	189%	197%	204%	211%	217%	224%
<b>Initial Proposed GI Table</b>	<b>5,601</b>	<b>612,147</b>	<b>981,594</b>	<b>1,179,648</b>	<b>1,369,092</b>	<b>1,550,514</b>	<b>1,724,166</b>	<b>1,888,048</b>	<b>2,041,676</b>	<b>2,181,213</b>	<b>2,305,073</b>	<b>2,415,338</b>	<b>2,509,814</b>	<b>2,583,845</b>	<b>2,636,755</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(3,994)	(193,404)	(251,492)	(212,553)	(181,064)	(154,191)	(130,530)	(109,103)	(89,531)	(71,518)	(55,100)	(40,365)	(27,284)	(15,912)	(6,401)
2017 CSO Table Ultimate	(4,644)	(226,035)	(291,477)	(240,992)	(198,381)	(160,781)	(126,906)	(95,823)	(67,253)	(41,002)	(17,152)	4,258	23,266	40,000	54,639
GI Basic Ult with 35% loading	753	56,715	84,624	91,547	98,360	104,818	110,829	116,202	120,902	124,771	127,757	129,966	131,365	131,712	130,957
GI Basic Ult with 45% loading	1,230	88,923	131,408	139,994	148,661	157,030	164,845	171,829	177,944	182,862	186,537	189,140	190,578	190,534	188,968
GI Basic Ult with 55% loading	1,710	120,686	177,458	187,520	197,873	207,887	217,259	225,626	232,901	238,682	242,842	245,699	247,092	246,571	244,136
GI Basic Ult with 75% loading	2,667	183,176	267,568	279,659	292,533	305,216	317,178	327,782	336,896	343,936	348,785	351,841	352,867	351,249	346,980
1980 CSO Table Ultimate	(3,556)	(122,757)	(129,348)	(51,004)	19,062	82,750	140,387	192,097	238,322	279,432	316,169	349,736	380,118	406,294	427,328

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 57\_Mean

**Female, Age 57**

**Mean Reserve Balance**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	2,792,080	2,794,869	2,788,380	2,768,228	2,732,302	2,679,420	2,612,040	2,530,926	2,437,104	2,331,481	2,214,758	2,087,930	1,952,054	1,808,151	1,657,533
2017 GI with 45% loading	2,848,756	2,849,821	2,841,492	2,819,313	2,781,145	2,725,802	2,655,817	2,571,987	2,475,375	2,366,909	2,247,324	2,117,636	1,978,923	1,832,232	1,678,892
2017 GI with 55% loading	2,902,591	2,901,960	2,891,834	2,867,665	2,827,292	2,769,564	2,697,064	2,610,611	2,511,303	2,400,122	2,277,814	2,145,405	2,004,009	1,854,683	1,698,772
2017 GI with 75% loading	3,002,705	2,998,713	2,985,056	2,957,038	2,912,468	2,850,176	2,772,879	2,681,472	2,577,118	2,460,846	2,333,451	2,196,004	2,049,643	1,895,458	1,734,835
<b>2017 GI with 2017 CSO loading</b>	<b>2,663,134</b>	<b>2,668,855</b>	<b>2,665,653</b>	<b>2,649,323</b>	<b>2,617,817</b>	<b>2,569,967</b>	<b>2,508,059</b>	<b>2,432,760</b>	<b>2,344,995</b>	<b>2,245,603</b>	<b>2,135,247</b>	<b>2,014,858</b>	<b>1,885,444</b>	<b>1,747,988</b>	<b>1,603,746</b>
2017 CSO	2,730,356	2,747,006	2,753,353	2,745,122	2,719,998	2,676,612	2,617,214	2,542,430	2,453,089	2,349,896	2,233,655	2,105,623	1,967,148	1,819,564	1,664,614
2001 CSO	2,664,444	2,676,413	2,678,173	2,665,750	2,637,176	2,591,362	2,530,631	2,455,715	2,367,095	2,264,793	2,149,674	2,023,637	1,888,337	1,745,496	1,596,700
1980 CSO	3,104,315	3,116,898	3,115,116	3,094,373	3,052,920	2,990,295	2,909,981	2,813,298	2,701,571	2,575,859	2,437,028	2,286,451	2,125,929	1,957,423	1,783,204

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
<b>Initial Proposed GI Table</b>	<b>2,663,134</b>	<b>2,668,855</b>	<b>2,665,653</b>	<b>2,649,323</b>	<b>2,617,817</b>	<b>2,569,967</b>	<b>2,508,059</b>	<b>2,432,760</b>	<b>2,344,995</b>	<b>2,245,603</b>	<b>2,135,247</b>	<b>2,014,858</b>	<b>1,885,444</b>	<b>1,747,988</b>	<b>1,603,746</b>

	% Differential	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2001 CSO Table Ultimate	198%	203%	209%	216%	223%	230%	238%	247%	257%	268%	279%	291%	304%	317%	332%	
2017 CSO Table Ultimate	202%	209%	215%	222%	229%	238%	246%	256%	267%	278%	290%	303%	316%	331%	346%	
GI Basic Ult with 35% loading	207%	212%	218%	224%	231%	238%	246%	255%	265%	276%	287%	300%	314%	329%	344%	
GI Basic Ult with 45% loading	211%	216%	222%	228%	235%	242%	250%	259%	269%	280%	292%	305%	318%	333%	349%	
GI Basic Ult with 55% loading	215%	220%	226%	232%	239%	246%	254%	263%	273%	284%	296%	309%	322%	337%	353%	
GI Basic Ult with 75% loading	223%	228%	233%	239%	246%	253%	261%	270%	280%	291%	303%	316%	330%	344%	360%	
1980 CSO Table Ultimate		230%	237%	243%	250%	258%	265%	274%	283%	294%	305%	316%	329%	342%	356%	370%

	\$ Differential	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
<b>Initial Proposed GI Table</b>	<b>2,663,134</b>	<b>2,668,855</b>	<b>2,665,653</b>	<b>2,649,323</b>	<b>2,617,817</b>	<b>2,569,967</b>	<b>2,508,059</b>	<b>2,432,760</b>	<b>2,344,995</b>	<b>2,245,603</b>	<b>2,135,247</b>	<b>2,014,858</b>	<b>1,885,444</b>	<b>1,747,988</b>	<b>1,603,746</b>	
2001 CSO Table Ultimate	1,310	7,558	12,520	16,427	19,360	21,395	22,572	22,956	22,100	19,190	14,427	8,779	2,893	(2,492)	(7,046)	
2017 CSO Table Ultimate	67,222	78,151	87,700	95,799	102,181	106,646	109,155	109,671	108,094	104,293	98,408	90,765	81,704	71,576	60,868	

GI Basic Ult with 35% loading	128,945	126,014	122,727	118,905	114,486	109,453	103,980	98,166	92,109	85,878	79,511	73,072	66,610	60,163	53,787
GI Basic Ult with 45% loading	185,622	180,966	175,839	169,990	163,329	155,836	147,758	139,228	130,380	121,306	112,077	102,779	93,479	84,244	75,145
GI Basic Ult with 55% loading	239,457	233,105	226,180	218,342	209,475	199,597	189,005	177,851	166,308	154,519	142,567	130,548	118,565	106,695	95,026
GI Basic Ult with 75% loading	339,570	329,859	319,403	307,715	294,652	280,209	264,819	248,713	232,122	215,243	198,204	181,146	164,199	147,471	131,088
1980 CSO Table Ultimate	441,180	448,044	449,463	445,050	435,103	420,329	401,922	380,538	356,576	330,256	301,781	271,593	240,485	209,435	179,458

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 57\_Mean

**Female, Age 57**

**Mean Reserve Balance**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	1,501,934	1,343,056	1,183,248	1,025,650	872,944	727,627	592,435	469,892	362,023	269,957	193,832	133,539	88,152	55,578	33,348
2017 GI with 45% loading	1,520,655	1,359,247	1,197,043	1,037,209	882,447	735,269	598,432	474,472	365,420	272,401	195,530	134,672	88,879	56,024	33,609
2017 GI with 55% loading	1,538,060	1,374,284	1,209,842	1,047,927	891,254	742,348	603,983	478,709	368,559	274,657	197,096	135,718	89,549	56,435	33,850
2017 GI with 75% loading	1,569,587	1,401,487	1,232,969	1,067,272	907,134	755,103	613,979	486,331	374,203	278,710	199,908	137,594	90,750	57,172	34,282
<b>2017 GI with 2017 CSO loading</b>	<b>1,454,401</b>	<b>1,301,600</b>	<b>1,147,624</b>	<b>995,531</b>	<b>847,985</b>	<b>707,412</b>	<b>576,456</b>	<b>457,593</b>	<b>352,823</b>	<b>263,245</b>	<b>189,092</b>	<b>130,326</b>	<b>86,051</b>	<b>54,254</b>	<b>32,552</b>
2017 CSO	1,504,595	1,341,676	1,178,541	1,018,607	864,737	719,291	584,741	463,377	356,860	265,966	190,828	131,394	86,693	54,636	32,775
2001 CSO	1,443,153	1,286,544	1,129,839	977,232	831,793	694,623	566,889	450,385	347,047	258,319	185,008	127,371	84,208	53,228	32,041
1980 CSO	1,605,870	1,427,755	1,251,623	1,080,809	917,928	765,053	624,283	497,445	385,871	290,107	210,091	145,750	69,177	26,180	17,283
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>1,454,401</b>	<b>1,301,600</b>	<b>1,147,624</b>	<b>995,531</b>	<b>847,985</b>	<b>707,412</b>	<b>576,456</b>	<b>457,593</b>	<b>352,823</b>	<b>263,245</b>	<b>189,092</b>	<b>130,326</b>	<b>86,051</b>	<b>54,254</b>	<b>32,552</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	347%	362%	379%	397%	417%	440%	465%	492%	521%	550%	580%	610%	642%	675%	708%
2017 CSO Table Ultimate	361%	378%	395%	414%	434%	456%	480%	506%	536%	567%	598%	629%	661%	693%	724%
GI Basic Ult with 35% loading	361%	378%	397%	417%	438%	461%	486%	513%	543%	575%	607%	640%	672%	704%	737%
GI Basic Ult with 45% loading	365%	383%	401%	421%	443%	466%	491%	518%	548%	580%	613%	645%	678%	710%	742%
GI Basic Ult with 55% loading	369%	387%	406%	426%	447%	471%	496%	523%	553%	585%	618%	650%	683%	715%	748%
GI Basic Ult with 75% loading	377%	395%	413%	433%	455%	479%	504%	531%	562%	594%	627%	659%	692%	725%	757%
1980 CSO Table Ultimate	386%	402%	420%	439%	461%	485%	512%	544%	579%	618%	658%	698%	527%	332%	382%
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>1,454,401</b>	<b>1,301,600</b>	<b>1,147,624</b>	<b>995,531</b>	<b>847,985</b>	<b>707,412</b>	<b>576,456</b>	<b>457,593</b>	<b>352,823</b>	<b>263,245</b>	<b>189,092</b>	<b>130,326</b>	<b>86,051</b>	<b>54,254</b>	<b>32,552</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(11,248)	(15,057)	(17,785)	(18,299)	(16,192)	(12,789)	(9,567)	(7,208)	(5,775)	(4,926)	(4,084)	(2,955)	(1,843)	(1,026)	(510)
2017 CSO Table Ultimate	50,194	40,076	30,917	23,076	16,752	11,879	8,286	5,784	4,037	2,721	1,737	1,068	643	382	223
GI Basic Ult with 35% loading	47,533	41,456	35,625	30,119	24,959	20,215	15,979	12,299	9,200	6,712	4,741	3,213	2,101	1,324	796
GI Basic Ult with 45% loading	66,254	57,647	49,419	41,677	34,462	27,857	21,977	16,879	12,597	9,156	6,438	4,346	2,828	1,770	1,058
GI Basic Ult with 55% loading	83,659	72,684	62,219	52,396	43,269	34,936	27,528	21,116	15,736	11,412	8,004	5,392	3,498	2,181	1,298
GI Basic Ult with 75% loading	115,186	99,887	85,346	71,741	59,149	47,690	37,524	28,739	21,380	15,465	10,816	7,268	4,700	2,918	1,730
1980 CSO Table Ultimate	151,470	126,155	104,000	85,278	69,943	57,641	47,827	39,852	33,048	26,862	20,999	15,424	(16,873)	(28,074)	(15,268)

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 57\_mid-term blended

**Male, Age 57**

See cell B75 for Female

**Blended Mid-Terminal Reserve Balance (19% annual, 81% monthly)**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	2,810	379,277	700,625	802,501	896,962	984,076	1,063,207	1,133,233	1,194,247	1,244,771	1,284,738	1,315,964	1,337,682	1,347,730	1,345,954
2017 GI with 45% loading	3,024	400,050	735,228	836,047	929,817	1,016,427	1,095,091	1,164,628	1,225,104	1,274,989	1,314,236	1,344,733	1,365,709	1,374,927	1,372,226
2017 GI with 55% loading	3,239	420,675	769,454	869,023	961,931	1,047,849	1,125,904	1,194,824	1,254,649	1,303,821	1,342,309	1,372,050	1,392,232	1,400,605	1,396,993
2017 GI with 75% loading	3,670	461,511	837,019	933,681	1,024,508	1,108,788	1,185,374	1,252,811	1,311,113	1,358,646	1,395,421	1,423,486	1,442,011	1,448,646	1,443,191
<b>2017 GI with 2017 CSO loading</b>	<b>2,476</b>	<b>343,400</b>	<b>638,997</b>	<b>739,433</b>	<b>832,278</b>	<b>917,913</b>	<b>995,873</b>	<b>1,065,101</b>	<b>1,125,710</b>	<b>1,176,264</b>	<b>1,216,601</b>	<b>1,248,424</b>	<b>1,270,966</b>	<b>1,282,155</b>	<b>1,281,877</b>
2017 CSO	287	172,063	386,692	550,766	696,174	826,612	943,467	1,046,773	1,137,159	1,213,442	1,275,543	1,325,334	1,362,139	1,383,872	1,390,608
2001 CSO	457	203,936	449,102	627,016	783,218	921,363	1,043,040	1,148,662	1,239,313	1,314,227	1,373,767	1,420,271	1,453,327	1,470,865	1,472,805
1980 CSO	751	251,680	538,865	731,719	900,893	1,050,632	1,182,444	1,296,237	1,392,811	1,470,971	1,531,052	1,575,779	1,604,791	1,616,018	1,609,904
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Initial Proposed GI Table</b>	<b>2,476</b>	<b>343,400</b>	<b>638,997</b>	<b>739,433</b>	<b>832,278</b>	<b>917,913</b>	<b>995,873</b>	<b>1,065,101</b>	<b>1,125,710</b>	<b>1,176,264</b>	<b>1,216,601</b>	<b>1,248,424</b>	<b>1,270,966</b>	<b>1,282,155</b>	<b>1,281,877</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	18%	59%	70%	85%	94%	100%	105%	108%	110%	112%	113%	114%	114%	115%	115%
2017 CSO Table Ultimate	12%	50%	61%	74%	84%	90%	95%	98%	101%	103%	105%	106%	107%	108%	108%
GI Basic Ult with 35% loading	113%	110%	110%	109%	108%	107%	107%	106%	106%	106%	106%	105%	105%	105%	105%
GI Basic Ult with 45% loading	122%	116%	115%	113%	112%	111%	110%	109%	109%	108%	108%	108%	107%	107%	107%
GI Basic Ult with 55% loading	131%	123%	120%	118%	116%	114%	113%	112%	111%	111%	110%	110%	110%	109%	109%
GI Basic Ult with 75% loading	148%	134%	131%	126%	123%	121%	119%	118%	116%	116%	115%	114%	113%	113%	113%
1980 CSO Table Ultimate	30%	73%	84%	99%	108%	114%	119%	122%	124%	125%	126%	126%	126%	126%	126%
<b>Initial Proposed GI Table</b>	<b>2,476</b>	<b>343,400</b>	<b>638,997</b>	<b>739,433</b>	<b>832,278</b>	<b>917,913</b>	<b>995,873</b>	<b>1,065,101</b>	<b>1,125,710</b>	<b>1,176,264</b>	<b>1,216,601</b>	<b>1,248,424</b>	<b>1,270,966</b>	<b>1,282,155</b>	<b>1,281,877</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(2,020)	(139,463)	(189,894)	(112,418)	(49,060)	3,450	47,167	83,561	113,602	137,963	157,166	171,847	182,361	188,710	190,928
2017 CSO Table Ultimate	(2,189)	(171,337)	(252,305)	(188,667)	(136,104)	(91,300)	(52,406)	(18,328)	11,449	37,178	58,942	76,910	91,173	101,717	108,731
GI Basic Ult with 35% loading	334	35,877	61,628	63,068	64,684	66,163	67,334	68,132	68,537	68,507	68,137	67,541	66,716	65,574	64,077
GI Basic Ult with 45% loading	548	56,650	96,231	96,613	97,539	98,515	99,218	99,527	99,394	98,725	97,635	96,309	94,742	92,772	90,349
GI Basic Ult with 55% loading	763	77,275	130,457	129,589	129,654	129,936	130,031	129,724	128,939	127,556	125,708	123,626	121,266	118,450	115,116
GI Basic Ult with 75% loading	1,193	118,111	198,023	194,248	192,230	190,875	189,500	187,710	185,403	182,382	178,820	175,062	171,045	166,491	161,314
1980 CSO Table Ultimate	(1,725)	(91,719)	(100,132)	(7,715)	68,616	132,720	186,571	231,137	267,101	294,706	314,451	327,356	333,824	333,863	328,027

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 57\_mid-term blended

**Male, Age 57**

**Blended Mid-Terminal Reserve B:**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	1,329,719	1,302,245	1,269,196	1,228,517	1,179,602	1,122,605	1,059,367	991,194	919,444	845,462	770,524	695,788	622,274	550,846	482,234
2017 GI with 45% loading	1,354,921	1,326,266	1,292,001	1,250,020	1,199,713	1,141,233	1,076,452	1,006,718	933,417	857,921	781,530	705,419	630,621	558,014	488,328
2017 GI with 55% loading	1,378,624	1,348,822	1,313,405	1,270,196	1,218,569	1,158,686	1,092,456	1,021,246	946,476	869,547	791,786	714,383	638,384	564,673	493,984
2017 GI with 75% loading	1,422,753	1,390,719	1,353,053	1,307,484	1,253,351	1,190,814	1,121,855	1,047,893	970,396	890,815	810,517	730,726	652,511	576,771	504,244
<b>2017 GI with 2017 CSO loading</b>	<b>1,267,672</b>	<b>1,242,636</b>	<b>1,212,176</b>	<b>1,174,370</b>	<b>1,128,648</b>	<b>1,075,134</b>	<b>1,015,557</b>	<b>951,143</b>	<b>883,177</b>	<b>812,923</b>	<b>741,596</b>	<b>670,302</b>	<b>600,021</b>	<b>531,600</b>	<b>465,750</b>
2017 CSO	1,380,008	1,355,965	1,324,925	1,285,333	1,236,966	1,180,175	1,116,861	1,048,203	975,378	899,622	822,123	743,943	666,153	589,807	515,869
2001 CSO	1,456,516	1,426,432	1,389,717	1,344,740	1,291,062	1,228,700	1,159,361	1,084,289	1,004,902	922,709	839,293	756,072	674,203	594,666	518,345
1980 CSO	1,584,029	1,543,041	1,494,478	1,436,805	1,370,121	1,295,249	1,214,723	1,130,122	1,042,827	954,070	864,993	776,706	690,351	607,027	527,722
<b>Initial Proposed GI Table</b>	<b>1,267,672</b>	<b>1,242,636</b>	<b>1,212,176</b>	<b>1,174,370</b>	<b>1,128,648</b>	<b>1,075,134</b>	<b>1,015,557</b>	<b>951,143</b>	<b>883,177</b>	<b>812,923</b>	<b>741,596</b>	<b>670,302</b>	<b>600,021</b>	<b>531,600</b>	<b>465,750</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	115%	115%	115%	115%	114%	114%	114%	114%	114%	114%	113%	113%	112%	112%	111%
2017 CSO Table Ultimate	109%	109%	109%	109%	110%	110%	110%	110%	110%	111%	111%	111%	111%	111%	111%
GI Basic Ult with 35% loading	105%	105%	105%	105%	105%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%
GI Basic Ult with 45% loading	107%	107%	107%	106%	106%	106%	106%	106%	106%	105%	105%	105%	105%	105%	105%
GI Basic Ult with 55% loading	109%	109%	108%	108%	108%	108%	108%	107%	107%	107%	107%	107%	106%	106%	106%
GI Basic Ult with 75% loading	112%	112%	112%	111%	111%	111%	110%	110%	110%	110%	109%	109%	108%	108%	108%
1980 CSO Table Ultimate	125%	124%	123%	122%	121%	120%	120%	119%	118%	117%	117%	116%	115%	114%	113%
<b>Initial Proposed GI Table</b>	<b>1,267,672</b>	<b>1,242,636</b>	<b>1,212,176</b>	<b>1,174,370</b>	<b>1,128,648</b>	<b>1,075,134</b>	<b>1,015,557</b>	<b>951,143</b>	<b>883,177</b>	<b>812,923</b>	<b>741,596</b>	<b>670,302</b>	<b>600,021</b>	<b>531,600</b>	<b>465,750</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	188,844	183,796	177,541	170,370	162,414	153,566	143,804	133,145	121,725	109,785	97,696	85,771	74,181	63,066	52,595
2017 CSO Table Ultimate	112,336	113,329	112,749	110,963	108,317	105,042	101,305	97,060	92,201	86,698	80,527	73,641	66,131	58,207	50,120
GI Basic Ult with 35% loading	62,047	59,609	57,020	54,147	50,954	47,472	43,810	40,050	36,268	32,539	28,928	25,487	22,252	19,247	16,484
GI Basic Ult with 45% loading	87,249	83,630	79,825	75,650	71,065	66,099	60,895	55,575	50,241	44,997	39,934	35,117	30,600	26,415	22,579
GI Basic Ult with 55% loading	110,952	106,186	101,229	95,826	89,921	83,553	76,899	70,103	63,299	56,624	50,190	44,082	38,363	33,073	28,234
GI Basic Ult with 75% loading	155,081	148,083	140,877	133,113	124,703	115,681	106,298	96,750	87,219	77,891	68,921	60,424	52,490	45,171	38,495
1980 CSO Table Ultimate	316,357	300,405	282,302	262,435	241,472	220,116	199,166	178,979	159,650	141,147	123,396	106,405	90,329	75,428	61,972

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 57\_mid-term blended

**Male, Age 57**

**Blended Mid-Terminal Reserve B:**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	417,039	355,761	298,825	246,584	199,473	157,852	121,866	91,502	66,585	46,887	31,880	20,856	13,108	7,886	4,526
2017 GI with 45% loading	422,164	360,019	302,312	249,384	201,672	159,539	123,125	92,414	67,224	47,321	32,167	21,038	13,220	7,951	4,563
2017 GI with 55% loading	426,917	363,966	305,541	251,979	203,710	161,102	124,292	93,258	67,815	47,722	32,431	21,207	13,323	8,012	4,597
2017 GI with 75% loading	435,529	371,110	311,387	256,672	207,397	163,930	126,403	94,786	68,884	48,447	32,909	21,510	13,508	8,120	4,658
<b>2017 GI with 2017 CSO loading</b>	<b>403,072</b>	<b>344,073</b>	<b>289,186</b>	<b>238,812</b>	<b>193,355</b>	<b>153,138</b>	<b>118,327</b>	<b>88,922</b>	<b>64,761</b>	<b>45,623</b>	<b>31,028</b>	<b>20,304</b>	<b>12,762</b>	<b>7,676</b>	<b>4,404</b>
2017 CSO	445,216	378,647	316,876	260,492	209,944	165,517	127,319	95,283	69,131	48,513	32,859	21,420	13,417	8,047	4,606
2001 CSO	446,032	378,418	316,076	259,482	208,992	164,758	126,761	94,855	68,769	48,209	32,623	21,248	13,300	7,971	4,561
1980 CSO	453,242	384,209	321,074	264,125	213,518	169,278	131,296	99,324	72,993	51,964	35,715	23,565	10,016	3,028	1,998
<b>Initial Proposed GI Table</b>	<b>403,072</b>	<b>344,073</b>	<b>289,186</b>	<b>238,812</b>	<b>193,355</b>	<b>153,138</b>	<b>118,327</b>	<b>88,922</b>	<b>64,761</b>	<b>45,623</b>	<b>31,028</b>	<b>20,304</b>	<b>12,762</b>	<b>7,676</b>	<b>4,404</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	111%	110%	109%	109%	108%	108%	107%	107%	106%	106%	105%	105%	104%	104%	104%
2017 CSO Table Ultimate	110%	110%	110%	109%	109%	108%	108%	107%	107%	106%	106%	105%	105%	105%	105%
GI Basic Ult with 35% loading	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%
GI Basic Ult with 45% loading	105%	105%	105%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%
GI Basic Ult with 55% loading	106%	106%	106%	106%	105%	105%	105%	105%	105%	105%	105%	104%	104%	104%	104%
GI Basic Ult with 75% loading	108%	108%	108%	107%	107%	107%	107%	107%	106%	106%	106%	106%	106%	106%	106%
1980 CSO Table Ultimate	112%	112%	111%	111%	110%	111%	111%	112%	113%	114%	115%	116%	78%	39%	45%
<b>Initial Proposed GI Table</b>	<b>403,072</b>	<b>344,073</b>	<b>289,186</b>	<b>238,812</b>	<b>193,355</b>	<b>153,138</b>	<b>118,327</b>	<b>88,922</b>	<b>64,761</b>	<b>45,623</b>	<b>31,028</b>	<b>20,304</b>	<b>12,762</b>	<b>7,676</b>	<b>4,404</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	42,960	34,345	26,890	20,670	15,638	11,620	8,434	5,933	4,008	2,586	1,595	944	538	295	157
2017 CSO Table Ultimate	42,144	34,574	27,691	21,680	16,590	12,380	8,992	6,361	4,370	2,890	1,831	1,115	655	371	202
GI Basic Ult with 35% loading	13,966	11,688	9,640	7,772	6,118	4,714	3,539	2,580	1,824	1,264	852	552	346	210	122
GI Basic Ult with 45% loading	19,092	15,946	13,126	10,572	8,317	6,401	4,798	3,492	2,463	1,698	1,138	734	458	275	158
GI Basic Ult with 55% loading	23,845	19,893	16,356	13,166	10,356	7,964	5,964	4,337	3,054	2,099	1,403	902	561	336	192
GI Basic Ult with 75% loading	32,457	27,037	22,201	17,860	14,042	10,792	8,076	5,864	4,123	2,824	1,881	1,206	746	444	253
1980 CSO Table Ultimate	50,170	40,136	31,888	25,313	20,164	16,140	12,968	10,402	8,232	6,341	4,687	3,261	(2,746)	(4,648)	(2,406)

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 57\_mid-term blended

**Female, Age 47**

**Blended Mid-Terminal Reserve Balance (19% annual, 81% monthly)**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	1,485	414,565	831,866	1,052,356	1,260,519	1,458,246	1,646,248	1,823,117	1,988,493	2,138,790	2,272,576	2,391,859	2,494,447	2,575,754	2,635,013
2017 GI with 45% loading	1,596	434,498	867,339	1,090,240	1,300,830	1,500,942	1,691,149	1,869,996	2,037,125	2,188,803	2,323,611	2,443,616	2,546,565	2,627,815	2,686,605
2017 GI with 55% loading	1,708	454,160	902,240	1,127,354	1,340,195	1,542,418	1,734,578	1,915,168	2,083,792	2,236,660	2,372,281	2,492,863	2,596,086	2,677,186	2,735,444
2017 GI with 75% loading	1,932	492,872	970,438	1,199,029	1,415,502	1,621,312	1,816,839	2,000,376	2,171,494	2,326,263	2,463,219	2,584,635	2,688,115	2,768,764	2,825,850
<b>2017 GI with 2017 CSO loading</b>	<b>1,309</b>	<b>379,429</b>	<b>767,127</b>	<b>979,380</b>	<b>1,179,721</b>	<b>1,370,156</b>	<b>1,551,441</b>	<b>1,722,294</b>	<b>1,882,372</b>	<b>2,028,218</b>	<b>2,158,431</b>	<b>2,274,929</b>	<b>2,375,550</b>	<b>2,455,924</b>	<b>2,515,337</b>
2017 CSO	224	240,987	556,354	813,768	1,052,640	1,277,303	1,489,610	1,688,942	1,875,181	2,044,923	2,196,611	2,332,192	2,449,523	2,544,260	2,615,878
2001 CSO	376	260,903	584,624	831,265	1,059,605	1,274,031	1,476,537	1,666,589	1,844,180	2,006,025	2,150,625	2,279,867	2,391,604	2,481,321	2,548,164
1980 CSO	478	304,900	682,206	969,880	1,238,049	1,490,324	1,727,683	1,948,820	2,153,805	2,339,471	2,505,119	2,653,908	2,783,652	2,888,902	2,968,014
<b>Initial Proposed GI Table</b>	<b>1,309</b>	<b>379,429</b>	<b>767,127</b>	<b>979,380</b>	<b>1,179,721</b>	<b>1,370,156</b>	<b>1,551,441</b>	<b>1,722,294</b>	<b>1,882,372</b>	<b>2,028,218</b>	<b>2,158,431</b>	<b>2,274,929</b>	<b>2,375,550</b>	<b>2,455,924</b>	<b>2,515,337</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	15%	76%	91%	112%	127%	139%	148%	156%	164%	171%	177%	183%	188%	194%	199%
2017 CSO Table Ultimate	9%	70%	87%	110%	126%	139%	150%	159%	167%	174%	181%	187%	193%	198%	204%
GI Basic Ult with 35% loading	60%	121%	130%	142%	151%	159%	165%	171%	177%	182%	187%	192%	196%	201%	206%
GI Basic Ult with 45% loading	64%	127%	136%	147%	156%	164%	170%	176%	181%	186%	191%	196%	200%	205%	210%
GI Basic Ult with 55% loading	69%	132%	141%	152%	161%	168%	174%	180%	185%	190%	195%	200%	204%	209%	213%
GI Basic Ult with 75% loading	78%	144%	152%	162%	170%	177%	182%	188%	193%	198%	202%	207%	212%	216%	220%
1980 CSO Table Ultimate	19%	89%	107%	131%	149%	162%	173%	183%	191%	199%	206%	213%	219%	225%	232%
<b>Initial Proposed GI Table</b>	<b>1,309</b>	<b>379,429</b>	<b>767,127</b>	<b>979,380</b>	<b>1,179,721</b>	<b>1,370,156</b>	<b>1,551,441</b>	<b>1,722,294</b>	<b>1,882,372</b>	<b>2,028,218</b>	<b>2,158,431</b>	<b>2,274,929</b>	<b>2,375,550</b>	<b>2,455,924</b>	<b>2,515,337</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(933)	(118,526)	(182,503)	(148,115)	(120,116)	(96,126)	(74,904)	(55,704)	(38,192)	(22,194)	(7,806)	4,938	16,054	25,398	32,828
2017 CSO Table Ultimate	(1,085)	(138,442)	(210,773)	(165,612)	(127,081)	(92,854)	(61,831)	(33,352)	(7,191)	16,704	38,181	57,262	73,974	88,336	100,541
GI Basic Ult with 35% loading	176	35,135	64,739	72,976	80,798	88,090	94,806	100,824	106,121	110,572	114,146	116,930	118,897	119,830	119,676
GI Basic Ult with 45% loading	287	55,068	100,212	110,860	121,109	130,786	139,708	147,702	154,752	160,584	165,180	168,687	171,015	171,891	171,268
GI Basic Ult with 55% loading	399	74,731	135,113	147,974	160,473	172,262	183,137	192,875	201,419	208,441	213,851	217,934	220,536	221,262	220,108
GI Basic Ult with 75% loading	623	113,442	203,310	219,649	235,781	251,156	265,398	278,083	289,122	298,045	304,789	309,706	312,565	312,841	310,513
1980 CSO Table Ultimate	(831)	(74,529)	(84,922)	(9,500)	58,328	120,168	176,242	226,527	271,433	311,252	346,689	378,979	408,102	432,978	452,678

Guaranteed Issue Reserve Comparitive Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 57\_mid-term blended

**Female, Age 47**

**Blended Mid-Terminal Reserve B:**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	2,666,768	2,677,188	2,677,764	2,664,414	2,635,103	2,588,765	2,527,773	2,452,890	2,365,135	2,265,401	2,154,395	2,033,102	1,902,571	1,763,817	1,618,146
2017 GI with 45% loading	2,717,380	2,726,443	2,725,519	2,710,470	2,679,235	2,630,751	2,567,463	2,490,164	2,399,911	2,297,619	2,184,027	2,060,142	1,927,032	1,785,740	1,637,585
2017 GI with 55% loading	2,765,237	2,772,966	2,770,579	2,753,863	2,720,737	2,670,179	2,604,680	2,525,054	2,432,393	2,327,667	2,211,624	2,085,282	1,949,744	1,806,062	1,655,574
2017 GI with 75% loading	2,853,601	2,858,681	2,853,422	2,833,491	2,796,785	2,742,273	2,672,573	2,588,576	2,491,435	2,382,169	2,261,575	2,130,712	1,990,711	1,842,654	1,687,916
<b>2017 GI with 2017 CSO loading</b>	<b>2,548,478</b>	<b>2,561,183</b>	<b>2,564,448</b>	<b>2,554,345</b>	<b>2,528,893</b>	<b>2,487,033</b>	<b>2,430,973</b>	<b>2,361,375</b>	<b>2,279,163</b>	<b>2,185,161</b>	<b>2,080,036</b>	<b>1,964,712</b>	<b>1,840,189</b>	<b>1,707,444</b>	<b>1,567,728</b>
2017 CSO	2,659,071	2,680,089	2,690,479	2,686,140	2,664,799	2,625,154	2,569,405	2,498,178	2,412,298	2,312,463	2,199,478	2,074,596	1,939,161	1,794,502	1,642,360
2001 CSO	2,586,852	2,603,568	2,609,722	2,601,529	2,577,066	2,535,318	2,478,554	2,407,507	2,322,651	2,224,001	2,112,425	1,989,816	1,857,824	1,718,168	1,572,430
1980 CSO	3,013,620	3,031,752	3,035,105	3,019,305	2,982,655	2,924,782	2,849,103	2,756,938	2,649,607	2,528,163	2,393,470	2,246,898	2,090,242	1,925,457	1,754,812
<b>Initial Proposed GI Table</b>	<b>2,548,478</b>	<b>2,561,183</b>	<b>2,564,448</b>	<b>2,554,345</b>	<b>2,528,893</b>	<b>2,487,033</b>	<b>2,430,973</b>	<b>2,361,375</b>	<b>2,279,163</b>	<b>2,185,161</b>	<b>2,080,036</b>	<b>1,964,712</b>	<b>1,840,189</b>	<b>1,707,444</b>	<b>1,567,728</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	204%	210%	215%	222%	228%	236%	244%	253%	263%	274%	285%	297%	310%	323%	338%
2017 CSO Table Ultimate	210%	216%	222%	229%	236%	244%	253%	263%	273%	284%	297%	310%	323%	338%	353%
GI Basic Ult with 35% loading	210%	215%	221%	227%	233%	241%	249%	258%	268%	279%	291%	303%	317%	332%	347%
GI Basic Ult with 45% loading	214%	219%	225%	231%	237%	245%	253%	262%	272%	283%	295%	307%	321%	336%	352%
GI Basic Ult with 55% loading	218%	223%	229%	234%	241%	248%	256%	265%	275%	286%	298%	311%	325%	340%	355%
GI Basic Ult with 75% loading	225%	230%	235%	241%	248%	255%	263%	272%	282%	293%	305%	318%	332%	347%	362%
1980 CSO Table Ultimate	238%	244%	250%	257%	264%	272%	281%	290%	300%	311%	323%	335%	348%	362%	377%
<b>Initial Proposed GI Table</b>	<b>2,548,478</b>	<b>2,561,183</b>	<b>2,564,448</b>	<b>2,554,345</b>	<b>2,528,893</b>	<b>2,487,033</b>	<b>2,430,973</b>	<b>2,361,375</b>	<b>2,279,163</b>	<b>2,185,161</b>	<b>2,080,036</b>	<b>1,964,712</b>	<b>1,840,189</b>	<b>1,707,444</b>	<b>1,567,728</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	38,374	42,385	45,273	47,184	48,173	48,285	47,582	46,131	43,488	38,840	32,388	25,104	17,635	10,724	4,701
2017 CSO Table Ultimate	110,592	118,906	126,031	131,795	135,906	138,121	138,433	136,802	133,135	127,302	119,441	109,884	98,971	87,058	74,631
GI Basic Ult with 35% loading	118,290	116,005	113,316	110,069	106,210	101,732	96,801	91,515	85,972	80,240	74,359	68,390	62,382	56,373	50,418
GI Basic Ult with 45% loading	168,902	165,259	161,071	156,125	150,342	143,719	136,490	128,789	120,748	112,458	103,991	95,430	86,843	78,295	69,857
GI Basic Ult with 55% loading	216,759	211,783	206,131	199,518	191,845	183,146	173,707	163,678	153,230	142,506	131,587	120,569	109,555	98,618	87,845
GI Basic Ult with 75% loading	305,123	297,497	288,973	279,146	267,892	255,241	241,600	227,200	212,272	197,008	181,538	166,000	150,522	135,209	120,188
1980 CSO Table Ultimate	465,142	470,569	470,657	464,960	453,763	437,749	418,130	395,562	370,445	343,002	313,434	282,186	250,052	218,013	187,083

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

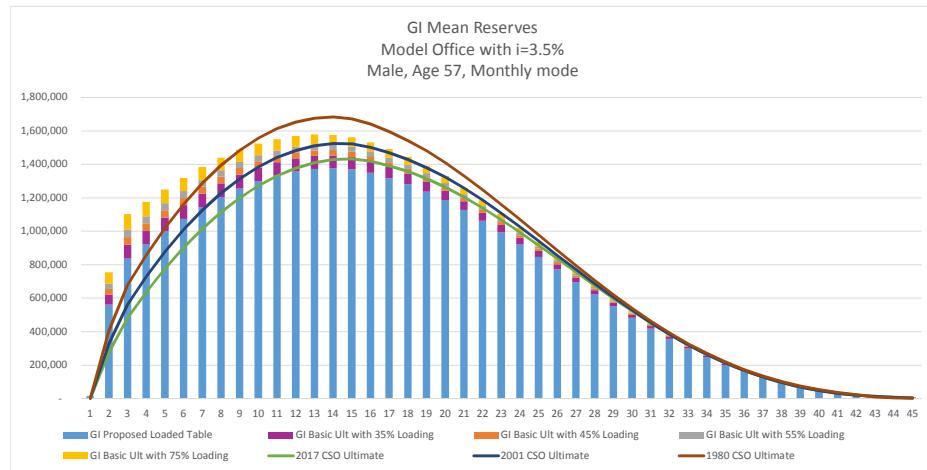
Age 57\_mid-term blended

**Female, Age 47**

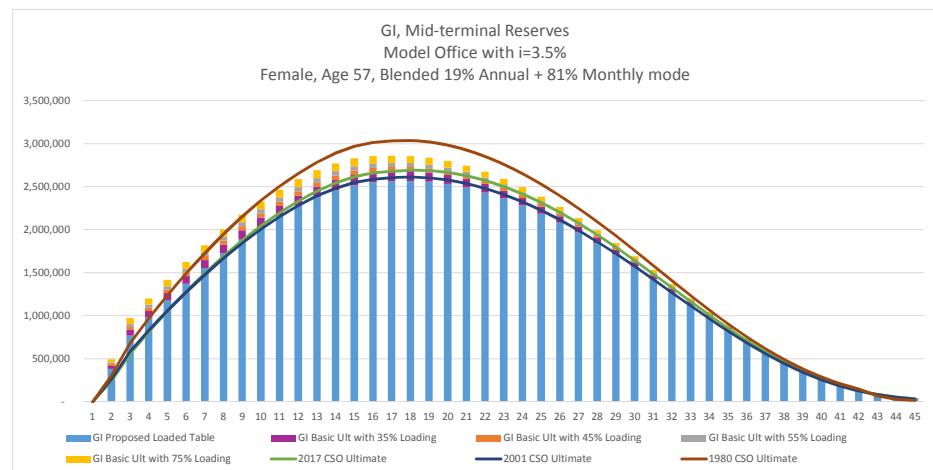
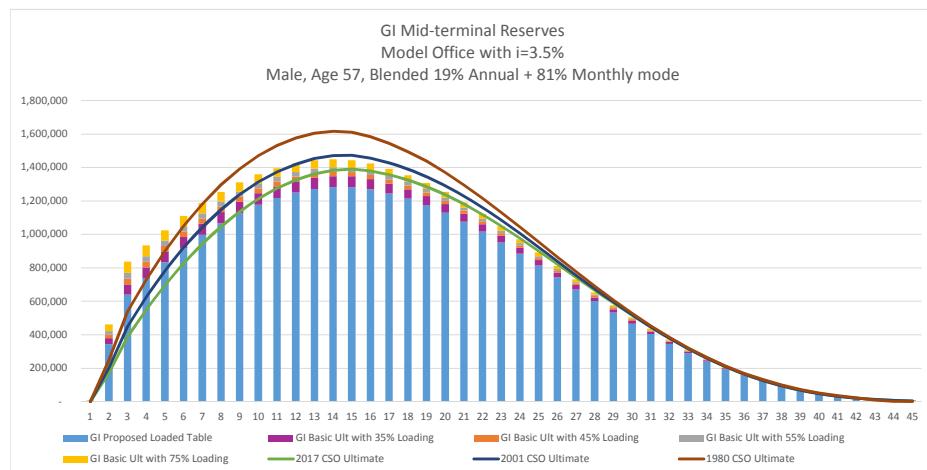
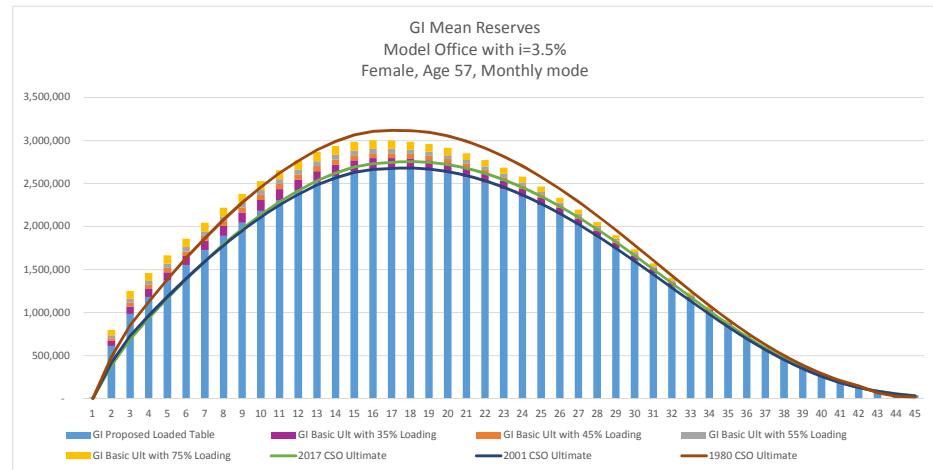
**Blended Mid-Terminal Reserve B:**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	1,467,273	1,312,890	1,157,327	1,003,686	854,625	712,626	580,407	460,478	354,851	264,661	190,058	130,955	86,453	54,509	32,708
2017 GI with 45% loading	1,484,304	1,327,609	1,169,856	1,014,172	863,233	719,535	585,816	464,597	357,897	266,844	191,570	131,961	87,097	54,903	32,937
2017 GI with 55% loading	1,500,043	1,341,195	1,181,407	1,023,833	871,157	725,890	590,787	468,379	360,690	268,844	192,954	132,882	87,684	55,262	33,147
2017 GI with 75% loading	1,528,295	1,365,545	1,202,082	1,041,098	885,301	737,222	599,642	475,108	365,652	272,394	195,407	134,512	88,724	55,898	33,518
<b>2017 GI with 2017 CSO loading</b>	<b>1,422,707</b>	<b>1,274,017</b>	<b>1,123,923</b>	<b>975,450</b>	<b>831,237</b>	<b>693,698</b>	<b>565,461</b>	<b>448,988</b>	<b>346,268</b>	<b>258,404</b>	<b>185,642</b>	<b>127,964</b>	<b>84,498</b>	<b>53,278</b>	<b>31,966</b>
2017 CSO	1,485,021	1,324,648	1,163,915	1,006,220	854,409	710,837	577,967	458,076	352,824	262,986	188,706	129,941	85,739	54,035	32,415
2001 CSO	1,421,802	1,267,968	1,113,881	963,715	820,523	685,398	559,495	444,600	342,642	255,066	182,690	125,785	83,166	52,573	31,649
1980 CSO	1,580,890	1,406,019	1,232,949	1,064,990	904,737	754,254	615,627	490,672	380,714	286,300	207,379	143,894	67,960	25,399	16,816
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>1,422,707</b>	<b>1,274,017</b>	<b>1,123,923</b>	<b>975,450</b>	<b>831,237</b>	<b>693,698</b>	<b>565,461</b>	<b>448,988</b>	<b>346,268</b>	<b>258,404</b>	<b>185,642</b>	<b>127,964</b>	<b>84,498</b>	<b>53,278</b>	<b>31,966</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	353%	369%	385%	404%	424%	448%	473%	500%	529%	559%	589%	619%	652%	685%	719%
2017 CSO Table Ultimate	368%	385%	402%	421%	442%	464%	488%	515%	545%	576%	608%	640%	672%	704%	736%
GI Basic Ult with 35% loading	364%	382%	400%	420%	442%	465%	491%	518%	548%	580%	613%	645%	677%	710%	743%
GI Basic Ult with 45% loading	368%	386%	405%	425%	446%	470%	495%	522%	553%	585%	617%	650%	682%	715%	748%
GI Basic Ult with 55% loading	372%	390%	409%	429%	451%	474%	499%	527%	557%	589%	622%	654%	687%	720%	753%
GI Basic Ult with 75% loading	379%	397%	416%	436%	458%	481%	507%	534%	565%	597%	630%	662%	695%	728%	761%
1980 CSO Table Ultimate	392%	409%	426%	446%	468%	493%	520%	552%	588%	628%	668%	709%	533%	331%	382%
<b>Initial Proposed GI Table</b>	<b>1,422,707</b>	<b>1,274,017</b>	<b>1,123,923</b>	<b>975,450</b>	<b>831,237</b>	<b>693,698</b>	<b>565,461</b>	<b>448,988</b>	<b>346,268</b>	<b>258,404</b>	<b>185,642</b>	<b>127,964</b>	<b>84,498</b>	<b>53,278</b>	<b>31,966</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(904)	(6,050)	(10,042)	(11,735)	(10,715)	(8,301)	(5,966)	(4,388)	(3,626)	(3,338)	(2,952)	(2,179)	(1,333)	(705)	(318)
2017 CSO Table Ultimate	62,314	50,631	39,992	30,770	23,172	17,139	12,506	9,089	6,556	4,582	3,063	1,976	1,241	758	448
GI Basic Ult with 35% loading	44,567	38,872	33,404	28,236	23,388	18,927	14,946	11,490	8,584	6,257	4,416	2,990	1,955	1,232	741
GI Basic Ult with 45% loading	61,598	53,592	45,933	38,721	31,995	25,836	20,355	15,609	11,629	8,441	5,928	3,997	2,598	1,625	971
GI Basic Ult with 55% loading	77,337	67,178	57,484	48,382	39,919	32,191	25,326	19,391	14,422	10,441	7,312	4,917	3,186	1,985	1,181
GI Basic Ult with 75% loading	105,588	91,528	78,159	65,648	54,064	43,524	34,181	26,120	19,384	13,990	9,765	6,547	4,226	2,620	1,551
1980 CSO Table Ultimate	158,184	132,002	109,026	89,539	73,499	60,555	50,166	41,685	34,446	27,896	21,737	15,930	(16,538)	(27,879)	(15,151)

**Male**



**Female**



Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 67\_Mean

**Male, Age 67**

See cell B75 for Female

**Mean Reserve Balance**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	16,640	713,624	1,074,325	1,196,787	1,302,853	1,389,448	1,456,530	1,504,080	1,530,785	1,535,398	1,517,982	1,482,827	1,431,669	1,365,346	1,287,156
2017 GI with 45% loading	17,918	751,636	1,127,057	1,248,214	1,353,163	1,438,610	1,504,406	1,550,447	1,575,347	1,577,826	1,557,936	1,520,080	1,466,073	1,396,776	1,315,576
2017 GI with 55% loading	19,200	789,225	1,179,041	1,298,648	1,402,305	1,486,408	1,550,786	1,595,267	1,618,339	1,618,676	1,596,336	1,555,839	1,499,036	1,426,828	1,342,695
2017 GI with 75% loading	21,784	863,325	1,281,315	1,397,272	1,497,860	1,578,946	1,640,172	1,681,242	1,700,484	1,696,465	1,669,219	1,623,500	1,561,259	1,483,437	1,393,676
<b>2017 GI with 2017 CSO loading</b>	<b>14,497</b>	<b>644,275</b>	<b>976,071</b>	<b>1,097,366</b>	<b>1,202,403</b>	<b>1,288,607</b>	<b>1,356,052</b>	<b>1,404,768</b>	<b>1,433,623</b>	<b>1,441,467</b>	<b>1,428,319</b>	<b>1,398,155</b>	<b>1,352,558</b>	<b>1,292,285</b>	<b>1,220,404</b>
2017 CSO	3,419	392,150	667,230	860,247	1,024,576	1,160,319	1,269,226	1,352,819	1,411,399	1,444,825	1,453,786	1,442,485	1,412,389	1,363,981	1,300,301
2001 CSO	1,095	457,437	758,194	953,283	1,118,403	1,252,974	1,359,403	1,440,110	1,495,480	1,524,952	1,528,490	1,509,913	1,470,806	1,412,152	1,337,695
1980 CSO	4,699	570,251	920,851	1,120,497	1,286,329	1,418,126	1,517,876	1,587,620	1,628,297	1,640,656	1,626,592	1,592,007	1,539,380	1,469,666	1,386,149
<b>Initial Proposed GI Table</b>	<b>14,497</b>	<b>644,275</b>	<b>976,071</b>	<b>1,097,366</b>	<b>1,202,403</b>	<b>1,288,607</b>	<b>1,356,052</b>	<b>1,404,768</b>	<b>1,433,623</b>	<b>1,441,467</b>	<b>1,428,319</b>	<b>1,398,155</b>	<b>1,352,558</b>	<b>1,292,285</b>	<b>1,220,404</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	8%	71%	78%	87%	93%	97%	100%	103%	104%	106%	107%	108%	109%	109%	110%
2017 CSO Table Ultimate	24%	61%	68%	78%	85%	90%	94%	96%	98%	100%	102%	103%	104%	106%	107%
GI Basic Ult with 35% loading	115%	111%	110%	109%	108%	108%	107%	107%	107%	107%	106%	106%	106%	106%	105%
GI Basic Ult with 45% loading	124%	117%	115%	114%	113%	112%	111%	110%	110%	109%	109%	109%	108%	108%	108%
GI Basic Ult with 55% loading	132%	122%	121%	118%	117%	115%	114%	114%	113%	112%	112%	111%	111%	110%	110%
GI Basic Ult with 75% loading	150%	134%	131%	127%	125%	123%	121%	120%	119%	118%	117%	116%	115%	115%	114%
1980 CSO Table Ultimate	32%	89%	94%	102%	107%	110%	112%	113%	114%	114%	114%	114%	114%	114%	114%
<b>Initial Proposed GI Table</b>	<b>14,497</b>	<b>644,275</b>	<b>976,071</b>	<b>1,097,366</b>	<b>1,202,403</b>	<b>1,288,607</b>	<b>1,356,052</b>	<b>1,404,768</b>	<b>1,433,623</b>	<b>1,441,467</b>	<b>1,428,319</b>	<b>1,398,155</b>	<b>1,352,558</b>	<b>1,292,285</b>	<b>1,220,404</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(13,402)	(186,838)	(217,877)	(144,084)	(84,000)	(35,633)	3,351	35,342	61,857	83,486	100,171	111,758	118,248	119,867	117,292
2017 CSO Table Ultimate	(11,078)	(252,125)	(308,841)	(237,119)	(177,828)	(128,287)	(86,826)	(51,949)	(22,224)	3,359	25,466	44,330	59,831	71,696	79,897
GI Basic Ult with 35% loading	2,144	69,349	98,254	99,421	100,450	100,842	100,478	99,311	97,163	93,931	89,662	84,672	79,111	73,061	66,752
GI Basic Ult with 45% loading	3,422	107,361	150,986	150,847	150,759	150,003	148,353	145,679	141,724	136,359	129,617	121,926	113,514	104,491	95,173
GI Basic Ult with 55% loading	4,703	144,950	202,970	201,281	199,901	197,801	194,733	190,498	184,717	177,209	168,016	157,684	146,478	134,544	122,292
GI Basic Ult with 75% loading	7,288	219,050	305,244	299,906	295,456	290,340	284,120	276,474	266,861	254,999	240,899	225,346	208,701	191,153	173,272
1980 CSO Table Ultimate	(9,798)	(74,024)	(55,220)	23,131	83,925	129,519	161,824	182,851	194,675	199,189	198,272	193,852	186,822	177,381	165,745

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 67\_Mean

**Male, Age 67**

**Mean Reserve Balance**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	1,202,029	1,111,922	1,016,769	918,800	819,790	721,877	626,461	534,825	448,132	367,794	295,099	230,866	175,586	129,390	92,255
2017 GI with 45% loading	1,227,519	1,134,593	1,036,731	936,204	834,802	734,684	637,253	543,784	455,428	373,606	299,619	234,290	178,102	131,180	93,491
2017 GI with 55% loading	1,251,792	1,156,151	1,055,686	952,704	849,014	746,797	647,450	552,245	462,318	379,094	303,888	237,523	180,478	132,869	94,656
2017 GI with 75% loading	1,297,328	1,196,500	1,091,088	983,462	875,464	769,301	666,373	567,934	475,086	389,261	311,798	243,513	184,879	135,996	96,811
<b>2017 GI with 2017 CSO loading</b>	<b>1,141,560</b>	<b>1,057,594</b>	<b>968,449</b>	<b>876,260</b>	<b>782,739</b>	<b>689,967</b>	<b>599,327</b>	<b>512,097</b>	<b>429,531</b>	<b>352,935</b>	<b>283,483</b>	<b>222,023</b>	<b>169,045</b>	<b>124,700</b>	<b>88,961</b>
2017 CSO	1,226,141	1,143,226	1,051,640	954,066	852,901	751,032	650,673	553,924	462,658	378,468	302,598	235,905	178,857	131,439	93,402
2001 CSO	1,253,272	1,161,500	1,062,688	959,469	854,139	749,480	647,522	550,092	458,851	375,209	300,118	234,144	177,568	130,404	92,568
1980 CSO	1,293,813	1,194,633	1,088,898	979,665	869,608	761,688	657,880	559,804	468,733	385,634	311,179	245,739	189,355	141,795	102,860
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
<b>Initial Proposed GI Table</b>	<b>1,141,560</b>	<b>1,057,594</b>	<b>968,449</b>	<b>876,260</b>	<b>782,739</b>	<b>689,967</b>	<b>599,327</b>	<b>512,097</b>	<b>429,531</b>	<b>352,935</b>	<b>283,483</b>	<b>222,023</b>	<b>169,045</b>	<b>124,700</b>	<b>88,961</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	110%	110%	110%	109%	109%	109%	108%	107%	107%	106%	106%	105%	105%	105%	104%
2017 CSO Table Ultimate	107%	108%	109%	109%	109%	109%	109%	108%	108%	107%	107%	106%	106%	105%	105%
GI Basic Ult with 35% loading	105%	105%	105%	105%	105%	105%	105%	104%	104%	104%	104%	104%	104%	104%	104%
GI Basic Ult with 45% loading	108%	107%	107%	107%	107%	106%	106%	106%	106%	106%	106%	105%	105%	105%	105%
GI Basic Ult with 55% loading	110%	109%	109%	109%	108%	108%	108%	108%	108%	107%	107%	107%	107%	107%	106%
GI Basic Ult with 75% loading	114%	113%	113%	112%	112%	111%	111%	111%	111%	110%	110%	110%	109%	109%	109%
1980 CSO Table Ultimate	113%	113%	112%	112%	111%	110%	110%	109%	109%	109%	110%	111%	112%	114%	116%
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
<b>Initial Proposed GI Table</b>	<b>1,141,560</b>	<b>1,057,594</b>	<b>968,449</b>	<b>876,260</b>	<b>782,739</b>	<b>689,967</b>	<b>599,327</b>	<b>512,097</b>	<b>429,531</b>	<b>352,935</b>	<b>283,483</b>	<b>222,023</b>	<b>169,045</b>	<b>124,700</b>	<b>88,961</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	111,713	103,906	94,240	83,208	71,399	59,513	48,195	37,995	29,320	22,274	16,635	12,121	8,523	5,705	3,607
2017 CSO Table Ultimate	84,582	85,633	83,191	77,806	70,162	61,065	51,346	41,828	33,127	25,533	19,114	13,882	9,812	6,739	4,441
GI Basic Ult with 35% loading	60,469	54,328	48,321	42,540	37,050	31,910	27,134	22,728	18,601	14,859	11,615	8,843	6,540	4,690	3,294
GI Basic Ult with 45% loading	85,959	77,000	68,282	59,943	52,062	44,717	37,926	31,688	25,897	20,671	16,136	12,267	9,057	6,481	4,530
GI Basic Ult with 55% loading	110,232	98,557	87,237	76,443	66,275	56,830	48,123	40,148	32,787	26,159	20,405	15,500	11,432	8,169	5,695
GI Basic Ult with 75% loading	155,768	138,906	122,639	107,202	92,724	79,334	67,046	55,838	45,555	36,326	28,314	21,490	15,834	11,296	7,850
1980 CSO Table Ultimate	152,254	137,039	120,450	103,405	86,868	71,721	58,553	47,708	39,202	32,699	27,696	23,716	20,309	17,095	13,899

Guaranteed Issue Reserve Comparitive Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 67\_Mean

**Male, Age 67**

**Mean Reserve Balance**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	63,508	42,048	26,736	16,267	9,439	5,209	2,728	1,354	636	283	119	48	19	7	-
2017 GI with 45% loading	64,335	42,582	27,068	16,464	9,551	5,270	2,760	1,369	643	286	121	49	19	7	-
2017 GI with 55% loading	65,115	43,085	27,380	16,650	9,657	5,328	2,789	1,383	650	289	122	49	19	7	-
2017 GI with 75% loading	66,556	44,015	27,957	16,994	9,853	5,434	2,844	1,410	662	294	124	50	19	7	-
<b>2017 GI with 2017 CSO loading</b>	<b>61,256</b>	<b>40,570</b>	<b>25,798</b>	<b>15,691</b>	<b>9,102</b>	<b>5,022</b>	<b>2,630</b>	<b>1,305</b>	<b>614</b>	<b>274</b>	<b>116</b>	<b>47</b>	<b>19</b>	<b>7</b>	<b>-</b>
2017 CSO	64,042	42,244	26,767	16,233	9,393	5,172	2,704	1,341	630	281	119	48	19	7	-
2001 CSO	63,410	41,794	26,463	16,038	9,279	5,112	2,676	1,329	625	279	118	48	19	7	-
1980 CSO	72,000	48,306	17,143	1,932	1,908	1,493	1,017	624	350	182	88	40	17	7	-
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>61,256</b>	<b>40,570</b>	<b>25,798</b>	<b>15,691</b>	<b>9,102</b>	<b>5,022</b>	<b>2,630</b>	<b>1,305</b>	<b>614</b>	<b>274</b>	<b>116</b>	<b>47</b>	<b>19</b>	<b>7</b>	<b>-</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	104%	103%	103%	102%	102%	102%	102%	102%	102%	102%	102%	101%	101%	100%	--
2017 CSO Table Ultimate	105%	104%	104%	103%	103%	103%	103%	103%	103%	103%	102%	102%	101%	99%	--
GI Basic Ult with 35% loading	104%	104%	104%	104%	104%	104%	104%	104%	104%	103%	103%	102%	101%	100%	--
GI Basic Ult with 45% loading	105%	105%	105%	105%	105%	105%	105%	105%	105%	104%	104%	103%	101%	101%	--
GI Basic Ult with 55% loading	106%	106%	106%	106%	106%	106%	106%	106%	106%	105%	105%	104%	102%	101%	--
GI Basic Ult with 75% loading	109%	108%	108%	108%	108%	108%	108%	108%	108%	107%	107%	105%	103%	102%	--
1980 CSO Table Ultimate	118%	119%	66%	12%	21%	30%	39%	48%	57%	66%	76%	85%	93%	98%	--
<b>Initial Proposed GI Table</b>	<b>61,256</b>	<b>40,570</b>	<b>25,798</b>	<b>15,691</b>	<b>9,102</b>	<b>5,022</b>	<b>2,630</b>	<b>1,305</b>	<b>614</b>	<b>274</b>	<b>116</b>	<b>47</b>	<b>19</b>	<b>7</b>	<b>-</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	2,154	1,224	665	347	177	90	46	23	11	5	2	1	0	(0)	-
2017 CSO Table Ultimate	2,786	1,674	970	542	291	150	74	35	16	7	3	1	0	(0)	-
GI Basic Ult with 35% loading	2,252	1,478	939	575	337	187	98	48	22	9	3	1	0	0	-
GI Basic Ult with 45% loading	3,079	2,012	1,270	773	449	248	130	64	29	12	4	1	0	0	-
GI Basic Ult with 55% loading	3,859	2,515	1,583	959	555	306	159	78	36	15	6	2	0	0	-
GI Basic Ult with 75% loading	5,301	3,445	2,160	1,302	751	412	214	105	48	20	8	3	1	0	-
1980 CSO Table Ultimate	10,745	7,736	(8,654)	(13,759)	(7,194)	(3,529)	(1,613)	(682)	(264)	(92)	(28)	(7)	(1)	(0)	-

Guaranteed Issue Reserve Comparitive Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 67\_Mean

**Female, Age 67**

**Mean Reserve Balance**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	9,571	766,495	1,231,618	1,474,423	1,694,946	1,892,178	2,067,443	2,219,751	2,347,230	2,446,926	2,516,969	2,561,819	2,581,230	2,573,136	2,539,532
2017 GI with 45% loading	-	791,606	1,263,093	1,509,944	1,733,982	1,934,126	2,111,729	2,265,798	2,394,455	2,494,710	2,564,689	2,608,992	2,627,414	2,617,887	2,582,466
2017 GI with 55% loading	-	827,785	1,315,769	1,564,329	1,789,817	1,991,045	2,169,320	2,323,621	2,452,008	2,551,442	2,620,101	2,662,710	2,679,072	2,667,121	2,629,027
2017 GI with 75% loading	-	898,194	1,417,614	1,668,887	1,896,611	2,099,347	2,278,438	2,432,761	2,560,288	2,657,917	2,723,781	2,762,900	2,775,172	2,758,518	2,715,241
<b>2017 GI with 2017 CSO loading</b>	<b>8,357</b>	<b>698,794</b>	<b>1,130,355</b>	<b>1,365,379</b>	<b>1,579,219</b>	<b>1,770,959</b>	<b>1,941,849</b>	<b>2,091,022</b>	<b>2,216,690</b>	<b>2,316,009</b>	<b>2,387,152</b>	<b>2,434,224</b>	<b>2,456,871</b>	<b>2,453,022</b>	<b>2,424,502</b>
2017 CSO	2,765	505,939	885,872	1,172,375	1,431,504	1,664,109	1,872,193	2,055,343	2,211,915	2,338,719	2,433,580	2,500,394	2,538,624	2,545,858	2,523,631
2001 CSO	3,700	528,384	908,050	1,177,480	1,420,401	1,637,175	1,829,768	1,997,968	2,140,473	2,254,655	2,338,831	2,397,013	2,428,924	2,431,733	2,405,801
1980 CSO	2,269	645,029	1,107,842	1,437,991	1,736,595	2,002,096	2,234,932	2,433,744	2,596,881	2,721,976	2,808,308	2,862,050	2,883,683	2,871,226	2,827,006
<b>Initial Proposed GI Table</b>	<b>8,357</b>	<b>698,794</b>	<b>1,130,355</b>	<b>1,365,379</b>	<b>1,579,219</b>	<b>1,770,959</b>	<b>1,941,849</b>	<b>2,091,022</b>	<b>2,216,690</b>	<b>2,316,009</b>	<b>2,387,152</b>	<b>2,434,224</b>	<b>2,456,871</b>	<b>2,453,022</b>	<b>2,424,502</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	26%	82%	93%	107%	118%	127%	135%	142%	149%	156%	164%	171%	180%	188%	197%
2017 CSO Table Ultimate	19%	79%	91%	107%	119%	129%	138%	146%	154%	162%	170%	179%	188%	197%	207%
GI Basic Ult with 35% loading	66%	119%	126%	134%	141%	147%	152%	158%	164%	170%	176%	183%	191%	199%	208%
GI Basic Ult with 45% loading	0%	123%	129%	138%	144%	150%	156%	161%	167%	173%	180%	187%	194%	203%	212%
GI Basic Ult with 55% loading	0%	128%	135%	143%	149%	155%	160%	165%	171%	177%	183%	190%	198%	206%	215%
GI Basic Ult with 75% loading	0%	139%	145%	152%	158%	163%	168%	173%	179%	184%	191%	198%	205%	213%	222%
1980 CSO Table Ultimate	16%	100%	114%	131%	144%	155%	165%	173%	181%	189%	197%	205%	213%	222%	232%
<b>Initial Proposed GI Table</b>	<b>8,357</b>	<b>698,794</b>	<b>1,130,355</b>	<b>1,365,379</b>	<b>1,579,219</b>	<b>1,770,959</b>	<b>1,941,849</b>	<b>2,091,022</b>	<b>2,216,690</b>	<b>2,316,009</b>	<b>2,387,152</b>	<b>2,434,224</b>	<b>2,456,871</b>	<b>2,453,022</b>	<b>2,424,502</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(4,657)	(170,410)	(222,305)	(187,899)	(158,818)	(133,784)	(112,081)	(93,054)	(76,217)	(61,354)	(48,321)	(37,211)	(27,947)	(21,289)	(18,702)
2017 CSO Table Ultimate	(5,592)	(192,855)	(244,482)	(193,004)	(147,715)	(106,850)	(69,655)	(35,679)	(4,774)	(22,710)	(46,428)	(66,171)	(81,753)	(92,836)	(99,128)
GI Basic Ult with 35% loading	1,214	67,702	101,263	109,044	115,727	121,219	125,594	128,729	130,540	130,917	129,817	127,595	124,359	120,115	115,030
GI Basic Ult with 45% loading	(8,357)	92,813	132,738	144,566	154,763	163,168	169,880	174,776	177,766	178,701	177,537	174,769	170,543	164,865	157,964
GI Basic Ult with 55% loading	(8,357)	128,992	185,415	198,951	210,598	220,086	227,471	232,599	235,318	235,433	232,949	228,486	222,202	214,099	204,524
GI Basic Ult with 75% loading	(8,357)	199,400	287,259	303,508	317,392	328,388	336,589	341,739	343,599	341,908	336,629	328,676	318,301	305,496	290,739
1980 CSO Table Ultimate	(6,088)	(53,765)	(22,513)	72,613	157,376	231,138	293,083	342,722	380,192	405,966	421,156	427,826	426,812	418,205	402,504

Guaranteed Issue Reserve Comparitive Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 67\_Mean

**Female, Age 67**

**Mean Reserve Balance**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	2,485,895	2,412,707	2,316,529	2,198,884	2,061,294	1,907,359	1,739,506	1,561,161	1,377,000	1,191,331	1,008,446	833,154	670,070	523,179	395,206
2017 GI with 45% loading	2,526,763	2,451,292	2,352,570	2,232,179	2,091,673	1,934,712	1,763,777	1,582,349	1,395,168	1,206,595	1,020,974	843,175	677,864	529,062	399,513
2017 GI with 55% loading	2,570,504	2,492,080	2,390,244	2,266,615	2,122,776	1,962,470	1,788,207	1,603,517	1,413,203	1,221,658	1,033,271	852,964	685,442	534,757	403,663
2017 GI with 75% loading	2,651,300	2,567,282	2,459,569	2,329,863	2,179,820	2,013,297	1,832,875	1,642,175	1,446,097	1,249,106	1,055,663	870,776	699,223	545,103	411,198
<b>2017 GI with 2017 CSO loading</b>	<b>2,376,512</b>	<b>2,309,457</b>	<b>2,220,023</b>	<b>2,109,643</b>	<b>1,979,738</b>	<b>1,833,755</b>	<b>1,674,010</b>	<b>1,503,785</b>	<b>1,327,596</b>	<b>1,149,679</b>	<b>974,160</b>	<b>805,630</b>	<b>648,570</b>	<b>506,862</b>	<b>383,125</b>
2017 CSO	2,477,506	2,408,312	2,313,108	2,193,902	2,052,967	1,894,901	1,723,005	1,541,355	1,355,203	1,169,260	987,662	814,802	654,917	511,354	386,194
2001 CSO	2,356,572	2,286,017	2,191,981	2,077,196	1,943,719	1,794,156	1,630,928	1,458,612	1,283,886	1,111,872	944,361	783,245	631,734	493,596	372,113
1980 CSO	2,757,270	2,662,962	2,541,470	2,396,090	2,230,184	2,049,183	1,856,854	1,657,583	1,456,619	1,258,369	1,066,563	885,002	717,137	565,745	432,523
<b>Initial Proposed GI Table</b>	<b>2,376,512</b>	<b>2,309,457</b>	<b>2,220,023</b>	<b>2,109,643</b>	<b>1,979,738</b>	<b>1,833,755</b>	<b>1,674,010</b>	<b>1,503,785</b>	<b>1,327,596</b>	<b>1,149,679</b>	<b>974,160</b>	<b>805,630</b>	<b>648,570</b>	<b>506,862</b>	<b>383,125</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	206%	216%	226%	237%	248%	260%	272%	285%	299%	315%	333%	353%	374%	396%	418%
2017 CSO Table Ultimate	217%	228%	239%	250%	262%	275%	287%	301%	316%	331%	348%	367%	387%	410%	434%
GI Basic Ult with 35% loading	218%	228%	239%	251%	263%	276%	290%	305%	321%	338%	356%	375%	396%	420%	444%
GI Basic Ult with 45% loading	221%	232%	243%	255%	267%	280%	294%	309%	325%	342%	360%	380%	401%	424%	449%
GI Basic Ult with 55% loading	225%	236%	247%	259%	271%	284%	298%	313%	329%	346%	364%	384%	405%	429%	454%
GI Basic Ult with 75% loading	232%	243%	254%	266%	278%	292%	306%	321%	337%	354%	372%	392%	414%	437%	462%
1980 CSO Table Ultimate	242%	252%	262%	273%	285%	297%	310%	324%	339%	357%	376%	399%	424%	454%	486%
<b>Initial Proposed GI Table</b>	<b>2,376,512</b>	<b>2,309,457</b>	<b>2,220,023</b>	<b>2,109,643</b>	<b>1,979,738</b>	<b>1,833,755</b>	<b>1,674,010</b>	<b>1,503,785</b>	<b>1,327,596</b>	<b>1,149,679</b>	<b>974,160</b>	<b>805,630</b>	<b>648,570</b>	<b>506,862</b>	<b>383,125</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(19,940)	(23,439)	(28,042)	(32,447)	(36,019)	(39,599)	(43,081)	(45,173)	(43,711)	(37,807)	(29,799)	(22,386)	(16,835)	(13,266)	(11,012)
2017 CSO Table Ultimate	100,994	98,855	93,085	84,260	73,229	61,147	48,995	37,570	27,606	19,581	13,502	9,171	6,347	4,492	3,068
GI Basic Ult with 35% loading	109,383	103,250	96,506	89,242	81,556	73,604	65,496	57,376	49,403	41,652	34,286	27,524	21,500	16,317	12,080
GI Basic Ult with 45% loading	150,251	141,836	132,547	122,537	111,935	100,958	89,767	78,564	67,572	56,917	46,814	37,545	29,295	22,200	16,387
GI Basic Ult with 55% loading	193,992	182,623	170,222	156,972	143,038	128,715	114,197	99,732	85,607	71,979	59,111	47,333	36,873	27,895	20,538
GI Basic Ult with 75% loading	274,788	257,825	239,547	220,220	200,082	179,542	158,866	138,390	118,501	99,428	81,503	65,145	50,653	38,241	28,073
1980 CSO Table Ultimate	380,758	353,505	321,448	286,447	250,447	215,429	182,844	153,798	129,023	108,690	92,403	79,372	68,568	58,883	49,398

Guaranteed Issue Reserve Comparitive Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 67\_Mean

**Female, Age 67**

**Mean Reserve Balance**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	287,331	200,339	133,777	85,280	51,718	29,759	16,223	8,367	4,081	1,881	822	342	137	55	-
2017 GI with 45% loading	290,376	202,407	135,124	86,120	52,217	30,041	16,374	8,443	4,117	1,897	829	345	138	55	-
2017 GI with 55% loading	293,297	204,383	136,407	86,917	52,690	30,307	16,516	8,516	4,152	1,913	835	347	139	55	-
2017 GI with 75% loading	298,599	207,968	138,734	88,363	53,546	30,790	16,775	8,647	4,216	1,942	847	352	140	55	-
<b>2017 GI with 2017 CSO loading</b>	<b>278,675</b>	<b>194,391</b>	<b>129,833</b>	<b>82,763</b>	<b>50,184</b>	<b>28,874</b>	<b>15,740</b>	<b>8,120</b>	<b>3,963</b>	<b>1,830</b>	<b>803</b>	<b>337</b>	<b>136</b>	<b>54</b>	<b>-</b>
2017 CSO	280,638	195,604	130,578	83,221	50,466	29,046	15,843	8,180	3,998	1,849	812	340	137	54	-
2001 CSO	269,740	187,974	125,817	80,504	49,042	28,366	15,551	8,069	3,960	1,837	808	339	137	54	-
1980 CSO	318,351	224,177	93,240	22,941	17,383	12,045	7,709	4,582	2,540	1,316	640	294	128	54	-
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>278,675</b>	<b>194,391</b>	<b>129,833</b>	<b>82,763</b>	<b>50,184</b>	<b>28,874</b>	<b>15,740</b>	<b>8,120</b>	<b>3,963</b>	<b>1,830</b>	<b>803</b>	<b>337</b>	<b>136</b>	<b>54</b>	<b>-</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	440%	463%	488%	513%	539%	565%	591%	618%	645%	671%	695%	718%	738%	751%	--
2017 CSO Table Ultimate	458%	482%	506%	530%	554%	578%	602%	627%	651%	675%	698%	719%	738%	751%	--
GI Basic Ult with 35% loading	469%	494%	519%	543%	568%	593%	617%	641%	665%	687%	707%	724%	740%	755%	--
GI Basic Ult with 45% loading	474%	499%	524%	549%	574%	598%	623%	647%	671%	693%	713%	729%	743%	757%	--
GI Basic Ult with 55% loading	479%	504%	529%	554%	579%	603%	628%	652%	676%	698%	718%	734%	747%	759%	--
GI Basic Ult with 75% loading	487%	513%	538%	563%	588%	613%	638%	662%	687%	709%	729%	744%	753%	762%	--
1980 CSO Table Ultimate	520%	553%	361%	146%	191%	240%	293%	351%	414%	480%	551%	622%	691%	741%	--
<b>Initial Proposed GI Table</b>	<b>278,675</b>	<b>194,391</b>	<b>129,833</b>	<b>82,763</b>	<b>50,184</b>	<b>28,874</b>	<b>15,740</b>	<b>8,120</b>	<b>3,963</b>	<b>1,830</b>	<b>803</b>	<b>337</b>	<b>136</b>	<b>54</b>	<b>-</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(8,934)	(6,416)	(4,016)	(2,258)	(1,142)	(508)	(189)	(51)	(3)	7	6	2	1	(0)	-
2017 CSO Table Ultimate	1,964	1,213	744	458	282	172	103	61	35	19	9	3	1	(0)	-
GI Basic Ult with 35% loading	8,657	5,949	3,943	2,517	1,534	885	482	247	118	51	19	6	1	0	-
GI Basic Ult with 45% loading	11,701	8,016	5,290	3,357	2,033	1,167	633	324	154	67	26	8	2	0	-
GI Basic Ult with 55% loading	14,623	9,993	6,574	4,154	2,505	1,433	776	396	189	83	32	10	2	0	-
GI Basic Ult with 75% loading	19,924	13,578	8,901	5,600	3,362	1,916	1,035	528	252	112	45	15	4	1	-
1980 CSO Table Ultimate	39,676	29,786	(36,593)	(59,822)	(32,801)	(16,829)	(8,031)	(3,537)	(1,423)	(514)	(163)	(43)	(8)	(1)	-

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 67\_mid-term blended

**Male, Age 67**

See cell B75 for Female

**Blended Mid-Terminal Reserve Balance (19% annual, 81% monthly)**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2017 GI with 35% loading	3,899	433,992	819,192	961,567	1,084,869	1,187,315	1,269,215	1,330,654	1,370,673	1,388,185	1,383,466	1,360,510	1,321,006	1,265,918	1,198,453	
2017 GI with 45% loading	4,198	457,075	858,305	1,000,436	1,123,540	1,225,684	1,307,089	1,367,760	1,406,683	1,422,750	1,416,235	1,391,229	1,349,497	1,292,036	1,222,133	
2017 GI with 55% loading	4,498	479,922	896,840	1,038,470	1,161,190	1,262,825	1,343,592	1,403,434	1,441,232	1,455,836	1,447,539	1,420,535	1,376,622	1,316,842	1,244,571	
2017 GI with 75% loading	5,104	525,030	972,666	1,112,709	1,234,145	1,334,405	1,413,556	1,471,425	1,506,771	1,518,356	1,506,469	1,475,507	1,427,364	1,363,134	1,286,346	
<b>2017 GI with 2017 CSO loading</b>	<b>3,396</b>	<b>391,842</b>	<b>745,752</b>	<b>885,024</b>	<b>1,005,621</b>	<b>1,106,135</b>	<b>1,186,958</b>	<b>1,248,213</b>	<b>1,289,087</b>	<b>1,308,576</b>	<b>1,306,892</b>	<b>1,287,740</b>	<b>1,252,665</b>	<b>1,202,535</b>	<b>1,140,334</b>	
2017 CSO		801	242,175	530,372	734,082	907,667	1,051,925	1,168,790	1,259,841	1,325,570	1,365,922	1,381,698	1,376,945	1,353,104	1,310,724	1,252,796
2001 CSO		257	279,988	596,268	804,005	980,076	1,124,716	1,240,560	1,330,088	1,393,914	1,431,578	1,443,179	1,432,348	1,400,640	1,349,117	1,281,466
1980 CSO		1,101	348,686	718,678	934,114	1,113,613	1,257,979	1,369,480	1,450,235	1,501,467	1,524,050	1,520,050	1,495,132	1,451,740	1,390,930	1,315,909
<b>Initial Proposed GI Table</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	
<b>% Differential</b>	<b>3,396</b>	<b>391,842</b>	<b>745,752</b>	<b>885,024</b>	<b>1,005,621</b>	<b>1,106,135</b>	<b>1,186,958</b>	<b>1,248,213</b>	<b>1,289,087</b>	<b>1,308,576</b>	<b>1,306,892</b>	<b>1,287,740</b>	<b>1,252,665</b>	<b>1,202,535</b>	<b>1,140,334</b>	
2001 CSO Table Ultimate	8%	71%	80%	91%	97%	102%	105%	107%	108%	109%	110%	111%	112%	112%	112%	
2017 CSO Table Ultimate	24%	62%	71%	83%	90%	95%	98%	101%	103%	104%	106%	107%	108%	109%	110%	
GI Basic Ult with 35% loading	115%	111%	110%	109%	108%	107%	107%	107%	106%	106%	106%	106%	105%	105%	105%	
GI Basic Ult with 45% loading	124%	117%	115%	113%	112%	111%	110%	110%	109%	109%	108%	108%	108%	107%	107%	
GI Basic Ult with 55% loading	132%	122%	120%	117%	115%	114%	113%	112%	112%	111%	111%	110%	110%	110%	109%	
GI Basic Ult with 75% loading	150%	134%	130%	126%	123%	121%	119%	118%	117%	116%	115%	115%	114%	113%	113%	
1980 CSO Table Ultimate	32%	89%	96%	106%	111%	114%	115%	116%	116%	116%	116%	116%	116%	116%	115%	
<b>Initial Proposed GI Table</b>	<b>3,396</b>	<b>391,842</b>	<b>745,752</b>	<b>885,024</b>	<b>1,005,621</b>	<b>1,106,135</b>	<b>1,186,958</b>	<b>1,248,213</b>	<b>1,289,087</b>	<b>1,308,576</b>	<b>1,306,892</b>	<b>1,287,740</b>	<b>1,252,665</b>	<b>1,202,535</b>	<b>1,140,334</b>	
<b>\$ Differential</b>	<b>(3,140)</b>	<b>(111,854)</b>	<b>(149,483)</b>	<b>(81,018)</b>	<b>(25,545)</b>	<b>18,582</b>	<b>53,601</b>	<b>81,875</b>	<b>104,827</b>	<b>123,002</b>	<b>136,287</b>	<b>144,607</b>	<b>147,975</b>	<b>146,583</b>	<b>141,132</b>	
2001 CSO Table Ultimate																
2017 CSO Table Ultimate	<b>(2,595)</b>	<b>(149,667)</b>	<b>(215,380)</b>	<b>(150,942)</b>	<b>(97,954)</b>	<b>(54,210)</b>	<b>(18,168)</b>	<b>11,628</b>	<b>36,483</b>	<b>57,345</b>	<b>74,806</b>	<b>89,205</b>	<b>100,439</b>	<b>108,189</b>	<b>112,462</b>	
GI Basic Ult with 35% loading	502	42,151	73,441	76,543	79,248	81,180	82,257	82,441	81,586	79,609	76,574	72,770	68,341	63,384	58,118	
GI Basic Ult with 45% loading	802	65,233	112,553	115,412	117,919	119,549	120,130	119,547	117,597	114,173	109,343	103,489	96,833	89,502	81,798	
GI Basic Ult with 55% loading	1,102	88,080	151,088	153,446	155,569	156,690	156,633	155,221	152,145	147,259	140,647	132,795	123,958	114,308	104,236	
GI Basic Ult with 75% loading	1,707	133,188	226,914	227,685	228,524	228,270	226,597	223,212	217,684	209,780	199,577	187,767	174,699	160,599	146,011	
1980 CSO Table Ultimate	<b>(2,295)</b>	<b>(43,155)</b>	<b>(27,074)</b>	<b>49,090</b>	<b>107,992</b>	<b>151,845</b>	<b>182,521</b>	<b>202,022</b>	<b>212,380</b>	<b>215,474</b>	<b>213,157</b>	<b>207,392</b>	<b>199,075</b>	<b>188,395</b>	<b>175,575</b>	

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 67\_mid-term blended

**Male, Age 67**

**Blended Mid-Terminal Reserve B:**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	1,123,361	1,042,524	956,072	866,180	774,632	683,528	594,276	508,169	426,388	350,361	281,396	220,337	167,704	123,663	88,229
2017 GI with 45% loading	1,144,646	1,061,486	972,789	880,769	787,230	694,284	603,346	515,703	432,521	355,240	285,183	223,198	169,798	125,147	89,249
2017 GI with 55% loading	1,164,767	1,079,380	988,539	894,491	799,057	704,371	611,843	522,755	438,262	359,807	288,728	225,874	171,757	126,533	90,201
2017 GI with 75% loading	1,202,138	1,112,524	1,017,639	919,785	820,817	722,892	627,422	535,675	448,771	368,162	295,213	230,770	175,338	129,064	91,938
<b>2017 GI with 2017 CSO loading</b>	<b>1,070,550</b>	<b>994,952</b>	<b>913,661</b>	<b>828,764</b>	<b>741,980</b>	<b>655,354</b>	<b>570,277</b>	<b>488,039</b>	<b>409,906</b>	<b>337,201</b>	<b>271,117</b>	<b>212,521</b>	<b>161,932</b>	<b>119,531</b>	<b>85,328</b>
2017 CSO	1,184,019	1,106,075	1,019,152	925,907	828,741	730,518	633,459	539,671	451,033	369,149	295,274	230,278	174,645	128,379	91,251
2001 CSO	1,203,411	1,117,519	1,024,226	926,128	825,531	725,188	627,136	533,211	445,081	364,170	291,442	227,478	172,578	126,779	90,020
1980 CSO	1,231,524	1,139,687	1,040,844	938,007	833,860	731,331	632,403	538,706	451,524	371,836	300,335	237,407	183,118	137,264	99,675
<b>Initial Proposed GI Table</b>	<b>1,070,550</b>	<b>994,952</b>	<b>913,661</b>	<b>828,764</b>	<b>741,980</b>	<b>655,354</b>	<b>570,277</b>	<b>488,039</b>	<b>409,906</b>	<b>337,201</b>	<b>271,117</b>	<b>212,521</b>	<b>161,932</b>	<b>119,531</b>	<b>85,328</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	112%	112%	112%	112%	111%	111%	110%	109%	109%	108%	107%	107%	107%	106%	105%
2017 CSO Table Ultimate	111%	111%	112%	112%	112%	111%	111%	111%	110%	109%	109%	108%	108%	107%	107%
GI Basic Ult with 35% loading	105%	105%	105%	105%	104%	104%	104%	104%	104%	104%	104%	104%	104%	103%	103%
GI Basic Ult with 45% loading	107%	107%	106%	106%	106%	106%	106%	106%	106%	105%	105%	105%	105%	105%	105%
GI Basic Ult with 55% loading	109%	108%	108%	108%	108%	107%	107%	107%	107%	107%	106%	106%	106%	106%	106%
GI Basic Ult with 75% loading	112%	112%	111%	111%	111%	110%	110%	110%	109%	109%	109%	108%	108%	108%	108%
1980 CSO Table Ultimate	115%	115%	114%	113%	112%	112%	111%	110%	110%	110%	111%	112%	113%	115%	117%
<b>Initial Proposed GI Table</b>	<b>1,070,550</b>	<b>994,952</b>	<b>913,661</b>	<b>828,764</b>	<b>741,980</b>	<b>655,354</b>	<b>570,277</b>	<b>488,039</b>	<b>409,906</b>	<b>337,201</b>	<b>271,117</b>	<b>212,521</b>	<b>161,932</b>	<b>119,531</b>	<b>85,328</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	132,861	122,567	110,565	97,365	83,550	69,834	56,859	45,172	35,175	26,969	20,326	14,958	10,646	7,248	4,692
2017 CSO Table Ultimate	113,469	111,123	105,491	97,143	86,761	75,164	63,182	51,632	41,126	31,947	24,157	17,757	12,714	8,848	5,923
GI Basic Ult with 35% loading	52,811	47,572	42,411	37,416	32,652	28,174	23,998	20,131	16,482	13,160	10,280	7,817	5,772	4,132	2,901
GI Basic Ult with 45% loading	74,096	66,533	59,127	52,006	45,249	38,930	33,069	27,664	22,615	18,039	14,067	10,677	7,867	5,616	3,922
GI Basic Ult with 55% loading	94,217	84,428	74,878	65,727	57,077	49,018	41,566	34,717	28,356	22,606	17,612	13,353	9,825	7,001	4,873
GI Basic Ult with 75% loading	131,588	117,572	103,978	91,022	78,837	67,538	57,145	47,637	38,864	30,961	24,096	18,249	13,407	9,533	6,610
1980 CSO Table Ultimate	160,974	144,735	127,183	109,243	91,880	75,977	62,126	50,667	41,617	34,635	29,218	24,886	21,186	17,733	14,348

Guaranteed Issue Reserve Comparitive Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 67\_mid-term blended

**Male, Age 67**

**Blended Mid-Terminal Reserve B:**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	60,772	40,258	25,609	15,586	9,046	4,993	2,615	1,298	610	271	115	46	18	7	-
2017 GI with 45% loading	61,453	40,696	25,880	15,747	9,138	5,043	2,641	1,310	615	274	115	46	18	7	-
2017 GI with 55% loading	62,088	41,104	26,133	15,897	9,223	5,089	2,664	1,322	621	276	116	47	18	7	-
2017 GI with 75% loading	63,245	41,848	26,592	16,169	9,377	5,172	2,707	1,343	630	280	118	47	18	7	-
<b>2017 GI with 2017 CSO loading</b>	<b>58,787</b>	<b>38,955</b>	<b>24,780</b>	<b>15,077</b>	<b>8,747</b>	<b>4,827</b>	<b>2,528</b>	<b>1,255</b>	<b>590</b>	<b>263</b>	<b>112</b>	<b>45</b>	<b>18</b>	<b>7</b>	<b>-</b>
2017 CSO	62,580	41,288	26,165	15,869	9,183	5,057	2,644	1,311	616	275	116	47	18	7	-
2001 CSO	61,679	40,661	25,749	15,608	9,030	4,975	2,605	1,293	609	272	115	47	18	7	-
1980 CSO	69,837	46,891	16,255	1,390	1,595	1,321	927	579	330	173	84	39	17	7	-
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>58,787</b>	<b>38,955</b>	<b>24,780</b>	<b>15,077</b>	<b>8,747</b>	<b>4,827</b>	<b>2,528</b>	<b>1,255</b>	<b>590</b>	<b>263</b>	<b>112</b>	<b>45</b>	<b>18</b>	<b>7</b>	<b>-</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	105%	104%	104%	104%	103%	103%	103%	103%	103%	103%	103%	103%	102%	101%	--
2017 CSO Table Ultimate	106%	106%	106%	105%	105%	105%	105%	104%	104%	104%	104%	104%	103%	101%	--
GI Basic Ult with 35% loading	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	102%	102%	100%	100%	--
GI Basic Ult with 45% loading	105%	104%	104%	104%	104%	104%	104%	104%	104%	104%	103%	102%	101%	100%	--
GI Basic Ult with 55% loading	106%	106%	105%	105%	105%	105%	105%	105%	105%	105%	104%	103%	101%	100%	--
GI Basic Ult with 75% loading	108%	107%	107%	107%	107%	107%	107%	107%	106%	106%	104%	102%	100%	--	
1980 CSO Table Ultimate	119%	120%	66%	9%	18%	27%	37%	46%	56%	66%	75%	85%	93%	98%	--
<b>Initial Proposed GI Table</b>	<b>58,787</b>	<b>38,955</b>	<b>24,780</b>	<b>15,077</b>	<b>8,747</b>	<b>4,827</b>	<b>2,528</b>	<b>1,255</b>	<b>590</b>	<b>263</b>	<b>112</b>	<b>45</b>	<b>18</b>	<b>7</b>	<b>-</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	2,892	1,706	969	531	283	148	76	38	19	8	3	1	0	0	-
2017 CSO Table Ultimate	3,793	2,333	1,385	792	436	230	116	56	26	11	5	2	0	0	-
GI Basic Ult with 35% loading	1,985	1,303	829	509	299	166	87	43	19	8	3	1	0	0	-
GI Basic Ult with 45% loading	2,666	1,741	1,100	670	390	216	113	55	25	10	4	1	0	0	-
GI Basic Ult with 55% loading	3,301	2,150	1,353	820	475	261	136	67	30	13	5	1	0	0	-
GI Basic Ult with 75% loading	4,458	2,893	1,812	1,092	630	345	179	88	40	17	6	2	0	0	-
1980 CSO Table Ultimate	11,050	7,936	(8,525)	(13,687)	(7,153)	(3,506)	(1,601)	(676)	(261)	(90)	(27)	(7)	(1)	(0)	-

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 67\_mid-term blended

**Female, Age 67**

**Blended Mid-Terminal Reserve Balance (19% annual, 81% monthly)**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	2,244	473,361	958,159	1,217,069	1,451,432	1,661,392	1,848,471	2,011,960	2,150,357	2,260,890	2,341,978	2,397,725	2,427,856	2,430,514	2,407,596
2017 GI with 45% loading	(799)	483,343	975,515	1,239,303	1,477,893	1,691,423	1,881,448	2,047,275	2,187,413	2,299,063	2,380,656	2,436,418	2,466,113	2,467,891	2,443,708
2017 GI with 55% loading	(666)	505,611	1,015,216	1,281,475	1,522,172	1,737,387	1,928,645	2,095,233	2,235,618	2,346,962	2,427,758	2,482,342	2,510,486	2,510,349	2,483,999
2017 GI with 75% loading	(558)	548,658	1,091,539	1,362,012	1,606,235	1,824,146	2,017,319	2,184,972	2,325,515	2,436,062	2,515,093	2,567,202	2,592,255	2,588,418	2,557,881
<b>2017 GI with 2017 CSO loading</b>	<b>1,959</b>	<b>431,619</b>	<b>881,110</b>	<b>1,130,814</b>	<b>1,357,269</b>	<b>1,560,612</b>	<b>1,742,271</b>	<b>1,901,637</b>	<b>2,037,257</b>	<b>2,146,455</b>	<b>2,227,666</b>	<b>2,284,671</b>	<b>2,317,090</b>	<b>2,323,041</b>	<b>2,304,262</b>
2017 CSO	648	314,747	707,489	1,004,508	1,272,677	1,513,596	1,729,398	1,919,853	2,083,557	2,217,440	2,319,514	2,393,445	2,438,675	2,452,928	2,437,676
2001 CSO	868	328,078	721,169	1,001,614	1,254,002	1,479,484	1,680,160	1,856,010	2,005,984	2,127,579	2,219,310	2,284,945	2,324,187	2,334,348	2,315,723
1980 CSO	532	399,784	879,033	1,222,669	1,532,864	1,809,028	2,051,760	2,259,938	2,432,220	2,566,390	2,661,971	2,724,836	2,755,443	2,751,985	2,716,708
<b>Initial Proposed GI Table</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>% Differential</b>	<b>1,959</b>	<b>431,619</b>	<b>881,110</b>	<b>1,130,814</b>	<b>1,357,269</b>	<b>1,560,612</b>	<b>1,742,271</b>	<b>1,901,637</b>	<b>2,037,257</b>	<b>2,146,455</b>	<b>2,227,666</b>	<b>2,284,671</b>	<b>2,317,090</b>	<b>2,323,041</b>	<b>2,304,262</b>
2001 CSO Table Ultimate	26%	84%	97%	113%	125%	134%	142%	149%	156%	163%	170%	177%	186%	194%	203%
2017 CSO Table Ultimate	19%	80%	95%	114%	127%	137%	146%	154%	162%	169%	177%	186%	195%	204%	214%
GI Basic Ult with 35% loading	66%	121%	128%	138%	144%	150%	156%	161%	167%	173%	179%	186%	194%	202%	211%
GI Basic Ult with 45% loading	-24%	123%	131%	140%	147%	153%	159%	164%	170%	176%	182%	189%	197%	205%	214%
GI Basic Ult with 55% loading	-20%	129%	136%	145%	151%	157%	162%	168%	173%	179%	186%	193%	200%	209%	218%
GI Basic Ult with 75% loading	-16%	140%	146%	154%	160%	165%	170%	175%	180%	186%	192%	199%	207%	215%	224%
1980 CSO Table Ultimate	16%	102%	118%	138%	152%	164%	173%	181%	189%	196%	204%	212%	220%	229%	238%
<b>Initial Proposed GI Table</b>	<b>1,959</b>	<b>431,619</b>	<b>881,110</b>	<b>1,130,814</b>	<b>1,357,269</b>	<b>1,560,612</b>	<b>1,742,271</b>	<b>1,901,637</b>	<b>2,037,257</b>	<b>2,146,455</b>	<b>2,227,666</b>	<b>2,284,671</b>	<b>2,317,090</b>	<b>2,323,041</b>	<b>2,304,262</b>
<b>\$ Differential</b>	<b>(1,092)</b>	<b>(103,542)</b>	<b>(159,941)</b>	<b>(129,200)</b>	<b>(103,267)</b>	<b>(81,128)</b>	<b>(62,112)</b>	<b>(45,627)</b>	<b>(31,273)</b>	<b>(18,876)</b>	<b>(8,355)</b>	<b>274</b>	<b>7,098</b>	<b>11,307</b>	<b>11,461</b>
2001 CSO Table Ultimate	(1,311)	(116,872)	(173,621)	(126,306)	(84,592)	(47,016)	(12,873)	18,216	46,300	70,985	91,849	108,775	121,586	129,887	133,414
GI Basic Ult with 35% loading	285	41,742	77,049	86,255	94,162	100,780	106,200	110,323	113,100	114,435	114,312	113,054	110,767	107,473	103,334
GI Basic Ult with 45% loading	(2,759)	51,724	94,406	108,488	120,624	130,810	139,177	145,638	150,156	152,608	152,990	151,748	149,023	144,851	139,446
GI Basic Ult with 55% loading	(2,625)	73,992	134,106	150,661	164,902	176,775	186,373	193,596	198,362	200,507	200,092	197,671	193,396	187,309	179,737
GI Basic Ult with 75% loading	(2,517)	117,039	210,429	231,198	248,966	263,533	275,048	283,335	288,258	289,607	287,427	282,532	275,165	265,377	253,619
1980 CSO Table Ultimate	(1,427)	(31,835)	(2,077)	91,855	175,595	248,416	309,489	358,301	394,963	419,935	434,305	440,165	438,353	428,944	412,446

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 67\_mid-term blended

**Female, Age 67**

**Blended Mid-Terminal Reserve B:**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	2,364,362	2,301,175	2,214,902	2,106,983	1,978,945	1,834,271	1,675,349	1,505,558	1,329,483	1,151,360	975,435	806,462	649,000	506,992	383,149
2017 GI with 45% loading	2,398,945	2,333,991	2,245,686	2,135,523	2,005,062	1,857,841	1,696,298	1,523,866	1,345,190	1,164,554	986,252	815,099	655,701	512,036	386,830
2017 GI with 55% loading	2,436,910	2,369,477	2,278,529	2,165,588	2,032,247	1,882,121	1,717,675	1,542,388	1,360,962	1,177,713	996,977	823,616	662,275	516,959	390,406
2017 GI with 75% loading	2,506,344	2,434,250	2,338,349	2,220,239	2,081,587	1,926,107	1,756,337	1,575,839	1,389,406	1,201,416	1,016,275	838,926	674,080	525,787	396,810
<b>2017 GI with 2017 CSO loading</b>	<b>2,265,754</b>	<b>2,207,815</b>	<b>2,127,410</b>	<b>2,025,894</b>	<b>1,904,695</b>	<b>1,767,152</b>	<b>1,615,547</b>	<b>1,453,118</b>	<b>1,284,299</b>	<b>1,113,258</b>	<b>944,082</b>	<b>781,310</b>	<b>629,372</b>	<b>492,114</b>	<b>372,140</b>
2017 CSO	2,398,341	2,335,672	2,246,929	2,134,065	1,999,357	1,847,327	1,681,250	1,505,171	1,324,285	1,143,255	966,188	797,440	641,213	500,828	378,354
2001 CSO	2,273,605	2,209,886	2,122,618	2,014,477	1,887,524	1,744,286	1,587,156	1,420,679	1,251,471	1,084,607	921,846	765,042	617,368	482,560	363,894
1980 CSO	2,655,676	2,569,736	2,456,530	2,319,282	2,161,364	1,988,105	1,803,241	1,611,120	1,416,915	1,224,971	1,038,982	862,702	699,536	552,225	422,454
<b>Initial Proposed GI Table</b>	<b>2,265,754</b>	<b>2,207,815</b>	<b>2,127,410</b>	<b>2,025,894</b>	<b>1,904,695</b>	<b>1,767,152</b>	<b>1,615,547</b>	<b>1,453,118</b>	<b>1,284,299</b>	<b>1,113,258</b>	<b>944,082</b>	<b>781,310</b>	<b>629,372</b>	<b>492,114</b>	<b>372,140</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	212%	222%	232%	243%	254%	266%	278%	291%	305%	322%	340%	360%	381%	404%	426%
2017 CSO Table Ultimate	224%	235%	246%	257%	269%	282%	295%	308%	323%	339%	356%	375%	396%	419%	443%
GI Basic Ult with 35% loading	221%	231%	242%	254%	267%	280%	294%	308%	324%	341%	360%	379%	401%	424%	449%
GI Basic Ult with 45% loading	224%	235%	246%	258%	270%	283%	297%	312%	328%	345%	364%	384%	405%	428%	453%
GI Basic Ult with 55% loading	228%	238%	249%	261%	274%	287%	301%	316%	332%	349%	368%	388%	409%	432%	458%
GI Basic Ult with 75% loading	234%	245%	256%	268%	281%	294%	308%	323%	339%	356%	375%	395%	416%	440%	465%
1980 CSO Table Ultimate	248%	258%	269%	280%	291%	303%	316%	330%	346%	363%	383%	406%	432%	462%	495%
<b>Initial Proposed GI Table</b>	<b>2,265,754</b>	<b>2,207,815</b>	<b>2,127,410</b>	<b>2,025,894</b>	<b>1,904,695</b>	<b>1,767,152</b>	<b>1,615,547</b>	<b>1,453,118</b>	<b>1,284,299</b>	<b>1,113,258</b>	<b>944,082</b>	<b>781,310</b>	<b>629,372</b>	<b>492,114</b>	<b>372,140</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	7,851	2,071	(4,792)	(11,418)	(17,171)	(22,867)	(28,391)	(32,439)	(32,827)	(28,651)	(22,236)	(16,268)	(12,004)	(9,554)	(8,247)
2017 CSO Table Ultimate	132,587	127,857	119,519	108,171	94,661	80,174	65,702	52,053	39,986	29,997	22,106	16,130	11,841	8,713	6,214
GI Basic Ult with 35% loading	98,607	93,360	87,492	81,089	74,250	67,118	59,802	52,439	45,184	38,102	31,353	25,152	19,628	14,878	11,008
GI Basic Ult with 45% loading	133,191	126,176	118,276	109,629	100,366	90,688	80,751	70,748	60,891	51,295	42,170	33,789	26,329	19,922	14,690
GI Basic Ult with 55% loading	171,156	161,662	151,119	139,694	127,552	114,968	102,127	89,269	76,663	64,454	52,895	42,306	32,903	24,845	18,265
GI Basic Ult with 75% loading	240,590	226,435	210,939	194,345	176,891	158,955	140,790	122,721	105,107	88,158	72,193	57,616	44,708	33,673	24,670
1980 CSO Table Ultimate	389,922	361,921	329,120	293,388	256,668	220,952	187,694	158,002	132,616	111,713	94,900	81,392	70,164	60,111	50,314

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
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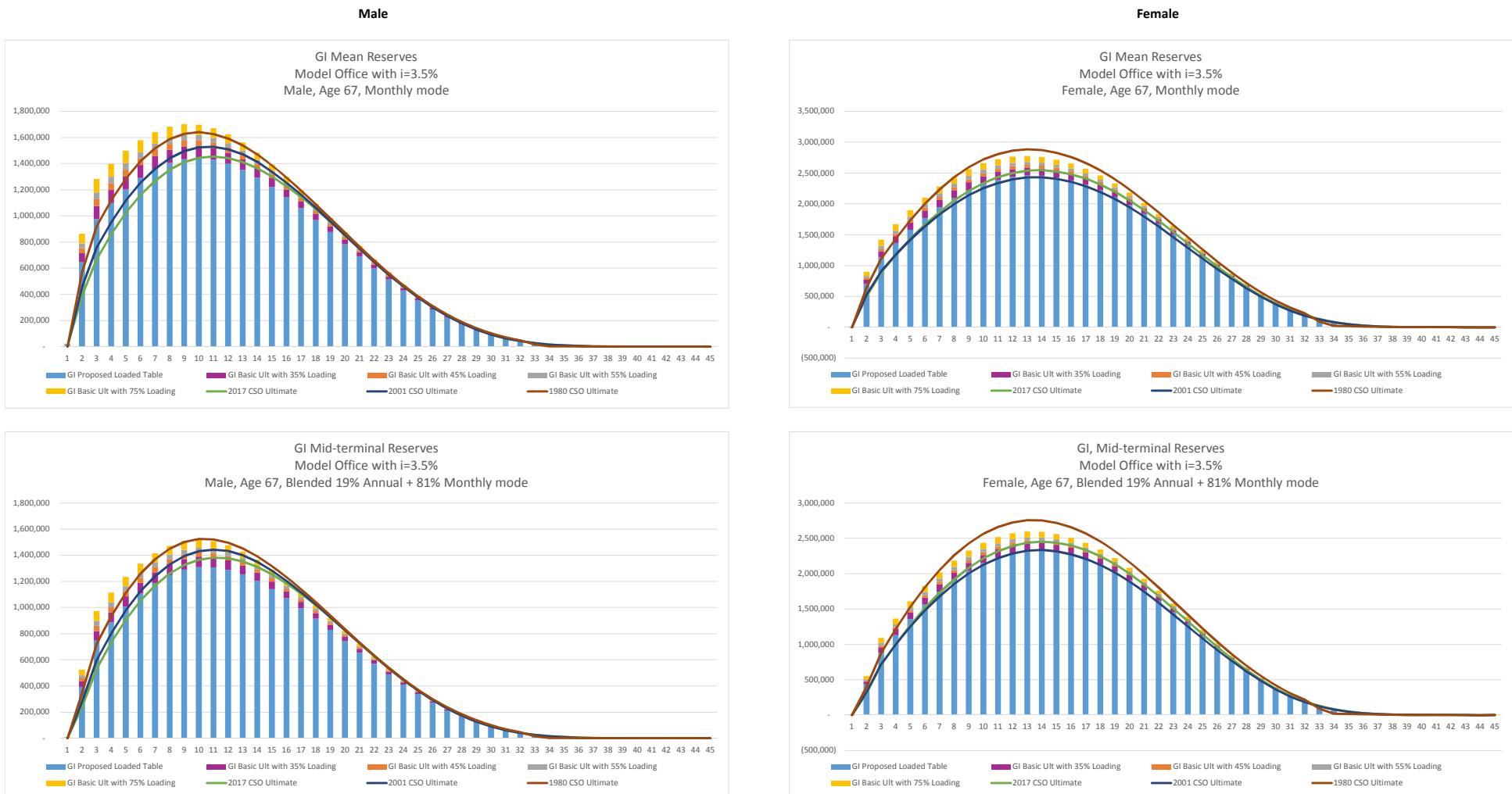
Prepared for: NAIC Spring Meeting - March 22, 2018

Age 67\_mid-term blended

**Female, Age 67**

**Blended Mid-Terminal Reserve B:**

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
2017 GI with 35% loading	278,667	194,358	129,812	82,766	50,198	28,885	15,746	8,121	3,961	1,825	798	332	133	53	-
2017 GI with 45% loading	281,262	196,114	130,953	83,475	50,618	29,122	15,873	8,185	3,991	1,839	803	334	134	53	-
2017 GI with 55% loading	283,771	197,806	132,047	84,152	51,018	29,347	15,993	8,245	4,020	1,852	808	336	134	53	-
2017 GI with 75% loading	288,260	200,829	134,002	85,362	51,732	29,748	16,207	8,354	4,072	1,875	818	339	135	53	-
<b>2017 GI with 2017 CSO loading</b>	<b>270,781</b>	<b>188,941</b>	<b>126,221</b>	<b>80,472</b>	<b>48,799</b>	<b>28,078</b>	<b>15,307</b>	<b>7,896</b>	<b>3,854</b>	<b>1,779</b>	<b>781</b>	<b>327</b>	<b>133</b>	<b>53</b>	<b>-</b>
2017 CSO	275,006	191,715	128,000	81,587	49,478	28,478	15,534	8,021	3,920	1,813	796	333	134	53	-
2001 CSO	263,835	183,897	123,115	78,791	48,006	27,770	15,227	7,901	3,878	1,799	792	332	134	53	-
1980 CSO	311,116	219,183	89,946	20,826	16,105	11,311	7,309	4,376	2,439	1,269	620	285	125	52	-
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
<b>Initial Proposed GI Table</b>	<b>270,781</b>	<b>188,941</b>	<b>126,221</b>	<b>80,472</b>	<b>48,799</b>	<b>28,078</b>	<b>15,307</b>	<b>7,896</b>	<b>3,854</b>	<b>1,779</b>	<b>781</b>	<b>327</b>	<b>133</b>	<b>53</b>	<b>-</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	449%	472%	497%	523%	549%	575%	602%	630%	657%	683%	708%	731%	751%	764%	--
2017 CSO Table Ultimate	468%	492%	517%	541%	566%	590%	614%	639%	664%	689%	712%	733%	752%	764%	--
GI Basic Ult with 35% loading	474%	499%	524%	549%	574%	598%	623%	647%	671%	693%	713%	731%	746%	761%	--
GI Basic Ult with 45% loading	478%	503%	528%	554%	579%	603%	628%	652%	676%	698%	718%	735%	748%	762%	--
GI Basic Ult with 55% loading	483%	508%	533%	558%	583%	608%	633%	657%	681%	703%	723%	739%	751%	762%	--
GI Basic Ult with 75% loading	490%	516%	541%	566%	591%	616%	641%	666%	690%	712%	732%	747%	756%	764%	--
1980 CSO Table Ultimate	529%	563%	363%	138%	184%	234%	289%	349%	413%	482%	554%	628%	699%	750%	--
<b>Initial Proposed GI Table</b>	<b>270,781</b>	<b>188,941</b>	<b>126,221</b>	<b>80,472</b>	<b>48,799</b>	<b>28,078</b>	<b>15,307</b>	<b>7,896</b>	<b>3,854</b>	<b>1,779</b>	<b>781</b>	<b>327</b>	<b>133</b>	<b>53</b>	<b>-</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(6,947)	(5,044)	(3,106)	(1,681)	(793)	(308)	(80)	5	24	20	11	5	2	0	-
2017 CSO Table Ultimate	4,224	2,774	1,779	1,115	679	400	228	125	67	34	15	6	2	0	-
GI Basic Ult with 35% loading	7,886	5,417	3,591	2,294	1,399	807	440	225	107	46	17	5	1	0	-
GI Basic Ult with 45% loading	10,481	7,174	4,732	3,003	1,818	1,044	566	289	137	60	22	7	1	0	-
GI Basic Ult with 55% loading	12,990	8,865	5,826	3,680	2,218	1,269	686	350	166	73	28	8	1	0	-
GI Basic Ult with 75% loading	17,478	11,889	7,781	4,890	2,932	1,670	900	458	219	96	38	12	2	0	-
1980 CSO Table Ultimate	40,335	30,242	(36,275)	(59,646)	(32,694)	(16,767)	(7,997)	(3,520)	(1,414)	(510)	(161)	(42)	(8)	(1)	-



Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
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Prepared for: NAIC Spring Meeting - March 22, 2018

Age 77\_Mean

**Male, Age 77**

See cell B75 for Female

**Mean Reserve Balance**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	28,114	728,979	1,054,192	1,123,039	1,160,997	1,171,796	1,158,665	1,123,701	1,070,135	1,000,615	919,033	828,145	730,685	630,161	530,521
2017 GI with 45% loading	30,321	768,924	1,107,704	1,173,366	1,207,899	1,215,113	1,198,288	1,159,567	1,102,267	1,029,072	943,937	849,644	748,931	645,315	542,806
2017 GI with 55% loading	32,543	808,458	1,160,559	1,222,849	1,253,821	1,257,360	1,236,817	1,194,348	1,133,342	1,056,524	967,915	870,308	766,444	659,853	554,588
2017 GI with 75% loading	37,047	886,387	1,264,578	1,319,727	1,343,311	1,339,323	1,311,234	1,261,257	1,192,907	1,108,975	1,013,590	909,575	799,670	687,393	576,885
<b>2017 GI with 2017 CSO loading</b>	<b>24,174</b>	<b>651,730</b>	<b>948,882</b>	<b>1,021,013</b>	<b>1,063,419</b>	<b>1,079,579</b>	<b>1,072,489</b>	<b>1,044,122</b>	<b>997,516</b>	<b>935,183</b>	<b>860,838</b>	<b>777,155</b>	<b>686,805</b>	<b>593,405</b>	<b>500,555</b>
2017 CSO	9,492	477,786	758,146	905,076	1,009,020	1,074,113	1,103,454	1,099,731	1,067,229	1,010,070	933,914	843,573	743,945	640,523	538,000
2001 CSO	7,704	547,190	842,581	973,889	1,060,190	1,107,729	1,121,722	1,105,559	1,063,499	999,568	919,313	827,252	727,744	625,858	525,914
1980 CSO	2,088	648,967	962,488	1,074,472	1,145,677	1,179,998	1,181,106	1,152,455	1,099,365	1,026,858	941,062	846,506	747,152	647,200	549,912
<b>Initial Proposed GI Table</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>% Differential</b>	<b>24,174</b>	<b>651,730</b>	<b>948,882</b>	<b>1,021,013</b>	<b>1,063,419</b>	<b>1,079,579</b>	<b>1,072,489</b>	<b>1,044,122</b>	<b>997,516</b>	<b>935,183</b>	<b>860,838</b>	<b>777,155</b>	<b>686,805</b>	<b>593,405</b>	<b>500,555</b>
2001 CSO Table Ultimate	32%	84%	89%	95%	100%	103%	105%	106%	107%	107%	107%	106%	106%	105%	105%
2017 CSO Table Ultimate	39%	73%	80%	89%	95%	99%	103%	105%	107%	108%	108%	109%	108%	108%	107%
GI Basic Ult with 35% loading	116%	112%	111%	110%	109%	109%	108%	108%	107%	107%	107%	107%	106%	106%	106%
GI Basic Ult with 45% loading	125%	118%	117%	115%	114%	113%	112%	111%	111%	110%	110%	109%	109%	109%	108%
GI Basic Ult with 55% loading	135%	124%	122%	120%	118%	116%	115%	114%	114%	113%	112%	112%	112%	111%	111%
GI Basic Ult with 75% loading	153%	136%	133%	129%	126%	124%	122%	121%	120%	119%	118%	117%	116%	116%	115%
1980 CSO Table Ultimate	9%	100%	101%	105%	108%	109%	110%	110%	110%	110%	109%	109%	109%	109%	110%
<b>Initial Proposed GI Table</b>	<b>24,174</b>	<b>651,730</b>	<b>948,882</b>	<b>1,021,013</b>	<b>1,063,419</b>	<b>1,079,579</b>	<b>1,072,489</b>	<b>1,044,122</b>	<b>997,516</b>	<b>935,183</b>	<b>860,838</b>	<b>777,155</b>	<b>686,805</b>	<b>593,405</b>	<b>500,555</b>
<b>\$ Differential</b>	<b>(16,471)</b>	<b>(104,540)</b>	<b>(106,301)</b>	<b>(47,123)</b>	<b>(3,229)</b>	<b>28,150</b>	<b>49,233</b>	<b>61,437</b>	<b>65,983</b>	<b>64,385</b>	<b>58,476</b>	<b>50,097</b>	<b>40,939</b>	<b>32,453</b>	<b>25,359</b>
2001 CSO Table Ultimate	(14,682)	(173,944)	(190,737)	(115,936)	(54,399)	(5,466)	30,966	55,610	69,713	74,887	73,076	66,419	57,140	47,118	37,445
GI Basic Ult with 35% loading	3,940	77,249	105,310	102,026	97,578	92,217	86,176	79,580	72,619	65,432	58,195	50,991	43,880	36,756	29,966
GI Basic Ult with 45% loading	6,146	117,194	158,821	152,353	144,480	135,534	125,799	115,445	104,751	93,889	83,099	72,490	62,126	51,910	42,251
GI Basic Ult with 55% loading	8,368	156,728	211,676	201,837	190,403	177,781	164,328	150,227	135,826	121,341	107,078	93,154	79,639	66,448	54,033
GI Basic Ult with 75% loading	12,872	234,657	315,695	298,714	279,892	259,744	238,745	217,135	195,391	173,792	152,752	132,420	112,865	93,988	76,330
1980 CSO Table Ultimate	(22,087)	(2,763)	13,605	53,459	82,258	100,419	108,617	108,334	101,849	91,675	80,225	69,351	60,347	53,794	49,357

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 77\_Mean

**Male, Age 77**

**Mean Reserve Balance**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	435,398	347,784	269,687	202,431	146,957	102,947	69,290	44,741	27,616	16,242	9,078	4,811	2,414	1,146	515
2017 GI with 45% loading	445,108	355,250	275,252	206,447	149,770	104,859	70,542	45,530	28,092	16,517	9,228	4,889	2,453	1,164	523
2017 GI with 55% loading	454,417	362,403	280,582	210,288	152,457	106,684	71,736	46,282	28,546	16,778	9,372	4,964	2,490	1,181	530
2017 GI with 75% loading	472,023	375,928	290,654	217,539	157,524	110,121	73,984	47,696	29,398	17,269	9,642	5,105	2,559	1,214	545
<b>2017 GI with 2017 CSO loading</b>	<b>411,536</b>	<b>329,300</b>	<b>255,789</b>	<b>192,302</b>	<b>139,716</b>	<b>97,907</b>	<b>65,925</b>	<b>42,568</b>	<b>26,263</b>	<b>15,437</b>	<b>8,624</b>	<b>4,570</b>	<b>2,294</b>	<b>1,091</b>	<b>492</b>
2017 CSO	440,212	350,500	271,048	203,006	146,899	102,467	68,693	44,190	27,181	15,938	8,888	4,704	2,360	1,122	506
2001 CSO	431,070	343,954	266,298	199,350	144,080	100,398	67,250	43,231	26,575	15,585	8,702	4,615	2,321	1,106	500
1980 CSO	457,767	372,921	296,493	229,080	171,334	123,414	84,872	30,524	2,290	1,331	737	387	333	315	219
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
<b>Initial Proposed GI Table</b>	<b>411,536</b>	<b>329,300</b>	<b>255,789</b>	<b>192,302</b>	<b>139,716</b>	<b>97,907</b>	<b>65,925</b>	<b>42,568</b>	<b>26,263</b>	<b>15,437</b>	<b>8,624</b>	<b>4,570</b>	<b>2,294</b>	<b>1,091</b>	<b>492</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	105%	104%	104%	104%	103%	103%	102%	102%	101%	101%	101%	101%	101%	101%	102%
2017 CSO Table Ultimate	107%	106%	106%	106%	105%	105%	104%	104%	103%	103%	103%	103%	103%	103%	103%
GI Basic Ult with 35% loading	106%	106%	105%	105%	105%	105%	105%	105%	105%	105%	105%	105%	105%	105%	105%
GI Basic Ult with 45% loading	108%	108%	108%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	106%
GI Basic Ult with 55% loading	110%	110%	110%	109%	109%	109%	109%	109%	109%	109%	109%	109%	109%	108%	108%
GI Basic Ult with 75% loading	115%	114%	114%	113%	113%	112%	112%	112%	112%	112%	112%	112%	112%	111%	111%
1980 CSO Table Ultimate	111%	113%	116%	119%	123%	126%	129%	72%	9%	9%	9%	8%	15%	29%	44%
<b>Initial Proposed GI Table</b>	<b>411,536</b>	<b>329,300</b>	<b>255,789</b>	<b>192,302</b>	<b>139,716</b>	<b>97,907</b>	<b>65,925</b>	<b>42,568</b>	<b>26,263</b>	<b>15,437</b>	<b>8,624</b>	<b>4,570</b>	<b>2,294</b>	<b>1,091</b>	<b>492</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	19,534	14,654	10,509	7,048	4,364	2,491	1,326	662	312	148	77	45	27	16	8
2017 CSO Table Ultimate	28,677	21,200	15,259	10,704	7,183	4,560	2,768	1,622	918	501	263	134	65	31	14
GI Basic Ult with 35% loading	23,862	18,484	13,898	10,129	7,241	5,041	3,365	2,173	1,353	805	453	241	120	55	23
GI Basic Ult with 45% loading	33,572	25,950	19,464	14,145	10,053	6,952	4,617	2,962	1,829	1,079	604	319	159	73	31
GI Basic Ult with 55% loading	42,881	33,103	24,794	17,986	12,741	8,777	5,812	3,714	2,283	1,341	748	394	196	91	38
GI Basic Ult with 75% loading	60,487	46,628	34,865	25,237	17,808	12,215	8,059	5,128	3,136	1,832	1,017	535	265	123	53
1980 CSO Table Ultimate	46,231	43,621	40,705	36,778	31,617	25,507	18,948	(12,045)	(23,973)	(14,107)	(7,888)	(4,183)	(1,961)	(776)	(273)

Guaranteed Issue Reserve Comparitive Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 77\_Mean

**Male, Age 77**

**Mean Reserve Balance**

	31	32	33	34	35
2017 GI with 35% loading	220	89	35	14	-
2017 GI with 45% loading	223	91	36	14	-
2017 GI with 55% loading	226	92	36	14	-
2017 GI with 75% loading	232	94	36	14	-
<b>2017 GI with 2017 CSO loading</b>	<b>212</b>	<b>87</b>	<b>35</b>	<b>14</b>	<b>-</b>
2017 CSO	217	89	35	14	-
2001 CSO	215	88	35	14	-
1980 CSO	127	65	31	14	-

	31	32	33	34	35
<b>Initial Proposed GI Table</b>	<b>212</b>	<b>87</b>	<b>35</b>	<b>14</b>	<b>-</b>

**% Differential**

2001 CSO Table Ultimate	102%	101%	101%	100%	--
2017 CSO Table Ultimate	103%	102%	101%	99%	--
GI Basic Ult with 35% loading	104%	103%	101%	101%	--
GI Basic Ult with 45% loading	105%	104%	102%	101%	--
GI Basic Ult with 55% loading	107%	105%	103%	101%	--
GI Basic Ult with 75% loading	110%	108%	104%	102%	--
1980 CSO Table Ultimate	60%	75%	88%	97%	--

<b>Initial Proposed GI Table</b>	<b>212</b>	<b>87</b>	<b>35</b>	<b>14</b>	<b>-</b>
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**\$ Differential**

2001 CSO Table Ultimate	3	1	0	(0)	-
2017 CSO Table Ultimate	6	2	0	(0)	-
GI Basic Ult with 35% loading	8	2	0	0	-
GI Basic Ult with 45% loading	11	3	1	0	-
GI Basic Ult with 55% loading	14	4	1	0	-
GI Basic Ult with 75% loading	20	7	2	0	-
1980 CSO Table Ultimate	(85)	(22)	(4)	(0)	-

Guaranteed Issue Reserve Comparitive Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 77\_Mean

**Female, Age 77**

**Mean Reserve Balance**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	3,463	781,187	1,214,402	1,411,660	1,571,990	1,698,699	1,792,019	1,847,874	1,866,136	1,846,516	1,791,987	1,704,242	1,586,313	1,444,802	1,285,876
2017 GI with 45% loading	1,594	817,544	1,264,583	1,462,505	1,622,874	1,749,114	1,841,462	1,895,733	1,911,852	1,889,540	1,831,860	1,740,571	1,618,791	1,473,259	1,310,258
2017 GI with 55% loading	-	853,145	1,313,339	1,511,633	1,671,864	1,797,504	1,888,772	1,941,421	1,955,391	1,930,416	1,869,680	1,774,985	1,649,521	1,500,168	1,333,297
2017 GI with 75% loading	23,092	944,805	1,451,321	1,644,312	1,798,793	1,918,385	2,003,256	2,048,845	2,055,151	2,021,953	1,952,613	1,849,031	1,714,529	1,556,224	1,380,655
<b>2017 GI with 2017 CSO loading</b>	<b>5,645</b>	<b>709,224</b>	<b>1,112,075</b>	<b>1,304,584</b>	<b>1,461,849</b>	<b>1,586,994</b>	<b>1,680,187</b>	<b>1,737,594</b>	<b>1,759,040</b>	<b>1,744,183</b>	<b>1,695,793</b>	<b>1,615,422</b>	<b>1,505,895</b>	<b>1,373,472</b>	<b>1,224,128</b>
2017 CSO	13,035	593,116	983,233	1,225,446	1,422,145	1,577,101	1,691,377	1,761,992	1,789,534	1,774,938	1,722,800	1,636,361	1,519,890	1,381,057	1,226,860
2001 CSO	7,976	584,522	956,639	1,172,959	1,346,054	1,479,556	1,576,305	1,634,545	1,656,265	1,642,252	1,593,828	1,512,774	1,404,261	1,278,408	1,142,930
1980 CSO	9,405	769,679	1,239,025	1,489,917	1,689,035	1,840,506	1,945,463	2,001,549	2,011,453	1,977,991	1,907,344	1,803,789	1,672,342	1,521,010	1,356,532

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Initial Proposed GI Table</b>	<b>5,645</b>	<b>709,224</b>	<b>1,112,075</b>	<b>1,304,584</b>	<b>1,461,849</b>	<b>1,586,994</b>	<b>1,680,187</b>	<b>1,737,594</b>	<b>1,759,040</b>	<b>1,744,183</b>	<b>1,695,793</b>	<b>1,615,422</b>	<b>1,505,895</b>	<b>1,373,472</b>	<b>1,224,128</b>

	% Differential	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2001 CSO Table Ultimate	33%	90%	101%	115%	127%	137%	147%	157%	166%	176%	185%	195%	204%	215%	228%	
2017 CSO Table Ultimate	54%	91%	104%	120%	134%	146%	158%	169%	179%	190%	200%	211%	221%	233%	245%	
GI Basic Ult with 35% loading	14%	120%	128%	138%	148%	157%	167%	177%	187%	197%	208%	219%	231%	243%	257%	
GI Basic Ult with 45% loading	7%	125%	133%	143%	153%	162%	172%	182%	192%	202%	213%	224%	236%	248%	262%	
GI Basic Ult with 55% loading	0%	131%	138%	148%	157%	167%	176%	186%	196%	206%	217%	228%	240%	253%	266%	
GI Basic Ult with 75% loading	96%	145%	153%	161%	169%	178%	187%	196%	206%	216%	227%	238%	250%	262%	276%	
1980 CSO Table Ultimate	39%	118%	131%	146%	159%	170%	181%	192%	202%	212%	222%	232%	243%	256%	271%	

	\$ Differential	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Initial Proposed GI Table</b>	<b>5,645</b>	<b>709,224</b>	<b>1,112,075</b>	<b>1,304,584</b>	<b>1,461,849</b>	<b>1,586,994</b>	<b>1,680,187</b>	<b>1,737,594</b>	<b>1,759,040</b>	<b>1,744,183</b>	<b>1,695,793</b>	<b>1,615,422</b>	<b>1,505,895</b>	<b>1,373,472</b>	<b>1,224,128</b>	
2001 CSO Table Ultimate	2,331	(124,702)	(155,436)	(131,625)	(115,795)	(107,437)	(103,882)	(103,048)	(102,775)	(101,930)	(101,965)	(102,648)	(101,634)	(95,063)	(81,198)	
2017 CSO Table Ultimate	7,390	(116,109)	(128,843)	(79,138)	(39,705)	(9,893)	11,190	24,398	30,494	30,755	27,007	20,939	13,995	7,585	2,732	

GI Basic Ult with 35% loading	(2,182)	71,962	102,327	107,076	110,140	111,705	111,832	110,280	107,096	102,333	96,194	88,820	80,418	71,331	61,748
GI Basic Ult with 45% loading	(4,051)	108,320	152,507	157,921	161,025	162,120	161,275	158,140	152,812	145,358	136,066	125,149	112,896	99,787	86,130
GI Basic Ult with 55% loading	(5,645)	143,921	201,264	207,049	210,015	210,510	208,585	203,828	196,351	186,233	173,887	159,563	143,626	126,696	109,169
GI Basic Ult with 75% loading	17,447	235,581	339,246	339,728	336,944	331,391	323,069	311,251	296,111	277,770	256,820	233,609	208,634	182,752	156,527
1980 CSO Table Ultimate	3,760	60,455	126,950	185,333	227,185	253,512	265,276	263,955	252,413	233,808	211,551	188,367	166,447	147,538	132,404

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 77\_Mean

**Female, Age 77**

**Mean Reserve Balance**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	1,115,883	942,889	774,072	615,984	473,713	350,242	248,025	168,016	108,547	66,652	38,801	21,384	11,143	5,488	2,553
2017 GI with 45% loading	1,136,246	959,446	787,149	626,001	481,154	355,578	251,698	170,441	110,077	67,572	39,326	21,669	11,289	5,559	2,585
2017 GI with 55% loading	1,155,479	975,073	799,482	635,440	488,159	360,599	255,152	172,720	111,514	68,437	39,820	21,937	11,427	5,626	2,616
2017 GI with 75% loading	1,194,551	1,006,494	824,048	654,075	501,870	370,345	261,809	177,083	114,251	70,073	40,751	22,440	11,684	5,751	2,673
<b>2017 GI with 2017 CSO loading</b>	<b>1,063,857</b>	<b>900,219</b>	<b>740,069</b>	<b>589,684</b>	<b>453,865</b>	<b>335,751</b>	<b>237,892</b>	<b>161,187</b>	<b>104,118</b>	<b>63,914</b>	<b>37,199</b>	<b>20,501</b>	<b>10,685</b>	<b>5,268</b>	<b>2,457</b>
2017 CSO	1,063,526	898,473	738,326	588,569	453,181	335,256	237,563	161,024	104,083	63,953	37,267	20,569	10,742	5,309	2,484
2001 CSO	999,846	851,922	703,741	561,363	430,809	317,356	224,758	152,939	99,438	61,514	36,107	20,077	10,558	5,249	2,466
1980 CSO	1,184,633	1,011,919	843,700	684,515	537,741	406,000	292,298	108,194	6,971	4,243	3,039	3,219	3,009	2,151	1,319
<b>Initial Proposed GI Table</b>	<b>1,063,857</b>	<b>900,219</b>	<b>740,069</b>	<b>589,684</b>	<b>453,865</b>	<b>335,751</b>	<b>237,892</b>	<b>161,187</b>	<b>104,118</b>	<b>63,914</b>	<b>37,199</b>	<b>20,501</b>	<b>10,685</b>	<b>5,268</b>	<b>2,457</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	243%	259%	275%	292%	308%	324%	341%	359%	379%	398%	419%	439%	460%	481%	501%
2017 CSO Table Ultimate	258%	273%	289%	306%	324%	342%	360%	378%	396%	414%	432%	450%	468%	487%	505%
GI Basic Ult with 35% loading	271%	286%	303%	320%	339%	358%	376%	395%	413%	432%	450%	468%	486%	503%	519%
GI Basic Ult with 45% loading	276%	291%	308%	326%	344%	363%	382%	400%	419%	438%	456%	474%	492%	510%	525%
GI Basic Ult with 55% loading	281%	296%	313%	330%	349%	368%	387%	406%	425%	443%	462%	480%	498%	516%	531%
GI Basic Ult with 75% loading	290%	306%	322%	340%	359%	378%	397%	416%	435%	454%	473%	491%	509%	527%	543%
1980 CSO Table Ultimate	288%	307%	330%	356%	385%	415%	443%	254%	27%	27%	35%	70%	131%	197%	268%
<b>Initial Proposed GI Table</b>	<b>1,063,857</b>	<b>900,219</b>	<b>740,069</b>	<b>589,684</b>	<b>453,865</b>	<b>335,751</b>	<b>237,892</b>	<b>161,187</b>	<b>104,118</b>	<b>63,914</b>	<b>37,199</b>	<b>20,501</b>	<b>10,685</b>	<b>5,268</b>	<b>2,457</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(64,010)	(48,298)	(36,328)	(28,321)	(23,056)	(18,395)	(13,134)	(8,248)	(4,679)	(2,400)	(1,093)	(424)	(127)	(19)	9
2017 CSO Table Ultimate	(331)	(1,746)	(1,743)	(1,116)	(684)	(495)	(329)	(163)	(35)	39	68	69	56	41	27
GI Basic Ult with 35% loading	52,026	42,669	34,003	26,300	19,848	14,491	10,133	6,829	4,429	2,738	1,602	884	458	220	96
GI Basic Ult with 45% loading	72,390	59,227	47,080	36,317	27,289	19,827	13,806	9,254	5,959	3,658	2,127	1,169	604	291	128
GI Basic Ult with 55% loading	91,622	74,854	59,413	45,756	34,295	24,848	17,260	11,533	7,397	4,523	2,621	1,436	741	358	159
GI Basic Ult with 75% loading	130,695	106,274	83,979	64,390	48,005	34,594	23,917	15,896	10,133	6,159	3,552	1,939	999	483	216
1980 CSO Table Ultimate	120,777	111,700	103,632	94,831	83,876	70,249	54,406	(52,993)	(97,147)	(59,670)	(34,160)	(17,282)	(7,677)	(3,117)	(1,138)

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 77\_Mean

**Female, Age 77**

**Mean Reserve Balance**

	31	32	33	34	35
2017 GI with 35% loading	1,126	474	193	79	-
2017 GI with 45% loading	1,139	478	194	79	-
2017 GI with 55% loading	1,152	483	195	79	-
2017 GI with 75% loading	1,177	492	198	80	-
<b>2017 GI with 2017 CSO loading</b>	<b>1,090</b>	<b>463</b>	<b>191</b>	<b>78</b>	<b>-</b>
2017 CSO	1,104	468	192	78	-
2001 CSO	1,099	467	192	78	-
1980 CSO	725	366	172	76	-

	31	32	33	34	35
<b>Initial Proposed GI Table</b>	<b>1,090</b>	<b>463</b>	<b>191</b>	<b>78</b>	<b>-</b>

% Differential	31	32	33	34	35
2001 CSO Table Ultimate	519%	535%	549%	556%	--
2017 CSO Table Ultimate	522%	537%	549%	556%	--

GI Basic Ult with 35% loading	532%	543%	552%	560%	--
GI Basic Ult with 45% loading	538%	548%	555%	562%	--
GI Basic Ult with 55% loading	544%	553%	559%	564%	--
GI Basic Ult with 75% loading	556%	564%	566%	567%	--

1980 CSO Table Ultimate	343%	419%	492%	546%	--
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<b>Initial Proposed GI Table</b>	<b>1,090</b>	<b>463</b>	<b>191</b>	<b>78</b>	<b>-</b>
<b>\$ Differential</b>					

2001 CSO Table Ultimate	9	4	1	(0)	-
2017 CSO Table Ultimate	14	5	1	(0)	-

GI Basic Ult with 35% loading	36	11	2	0	-
GI Basic Ult with 45% loading	49	15	3	1	-
GI Basic Ult with 55% loading	62	20	4	1	-
GI Basic Ult with 75% loading	87	29	7	1	-

1980 CSO Table Ultimate	(365)	(97)	(19)	(2)	-
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Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 77\_mid-term blended

**Male, Age 77**

See cell B75 for Female

**Blended Mid-Terminal Reserve Balance (19% annual, 81% monthly)**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	6,600	432,143	787,672	883,102	945,554	979,179	987,303	972,397	937,618	885,725	820,464	744,592	660,866	572,738	484,116
2017 GI with 45% loading	7,118	455,710	826,480	920,192	980,570	1,011,869	1,017,470	999,914	962,439	907,843	839,929	761,480	675,259	584,724	493,840
2017 GI with 55% loading	7,640	479,067	864,813	956,601	1,014,754	1,043,620	1,046,662	1,026,451	986,292	929,034	858,536	777,590	688,967	596,132	503,093
2017 GI with 75% loading	8,697	525,207	940,292	1,027,786	1,081,172	1,104,956	1,102,727	1,077,156	1,031,665	969,181	893,654	807,908	714,715	617,521	520,419
<b>2017 GI with 2017 CSO loading</b>	<b>5,675</b>	<b>386,490</b>	<b>710,730</b>	<b>806,614</b>	<b>870,908</b>	<b>907,464</b>	<b>919,366</b>	<b>908,923</b>	<b>879,105</b>	<b>832,523</b>	<b>772,762</b>	<b>702,495</b>	<b>624,418</b>	<b>542,096</b>	<b>459,091</b>
2017 CSO	2,228	288,465	588,140	752,031	871,603	951,259	994,160	1,003,234	982,717	936,802	871,057	790,293	699,424	603,908	508,412
2001 CSO	1,809	326,283	644,217	795,314	899,849	964,379	994,193	992,959	964,884	914,072	845,964	765,077	675,790	583,129	491,385
1980 CSO	490	379,132	720,193	856,346	949,822	1,004,895	1,025,327	1,014,912	978,902	922,420	851,461	770,553	683,684	595,001	507,728
<b>Initial Proposed GI Table</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>% Differential</b>	<b>5,675</b>	<b>386,490</b>	<b>710,730</b>	<b>806,614</b>	<b>870,908</b>	<b>907,464</b>	<b>919,366</b>	<b>908,923</b>	<b>879,105</b>	<b>832,523</b>	<b>772,762</b>	<b>702,495</b>	<b>624,418</b>	<b>542,096</b>	<b>459,091</b>
2001 CSO Table Ultimate	32%	84%	91%	99%	103%	106%	108%	109%	110%	110%	109%	109%	108%	108%	107%
2017 CSO Table Ultimate	39%	75%	83%	93%	100%	105%	108%	110%	112%	113%	113%	112%	112%	111%	111%
GI Basic Ult with 35% loading	116%	112%	111%	109%	109%	108%	107%	107%	107%	106%	106%	106%	106%	106%	105%
GI Basic Ult with 45% loading	125%	118%	116%	114%	113%	112%	111%	110%	109%	109%	109%	108%	108%	108%	108%
GI Basic Ult with 55% loading	135%	124%	122%	119%	117%	115%	114%	113%	112%	112%	111%	111%	110%	110%	110%
GI Basic Ult with 75% loading	153%	136%	132%	127%	124%	122%	120%	119%	117%	116%	116%	115%	114%	114%	113%
1980 CSO Table Ultimate	9%	98%	101%	106%	109%	111%	112%	112%	111%	111%	110%	110%	109%	110%	111%
<b>Initial Proposed GI Table</b>	<b>5,675</b>	<b>386,490</b>	<b>710,730</b>	<b>806,614</b>	<b>870,908</b>	<b>907,464</b>	<b>919,366</b>	<b>908,923</b>	<b>879,105</b>	<b>832,523</b>	<b>772,762</b>	<b>702,495</b>	<b>624,418</b>	<b>542,096</b>	<b>459,091</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(3,867)	(60,208)	(66,513)	(11,300)	28,941	56,915	74,826	84,036	85,778	81,549	73,203	62,582	51,372	41,034	32,294
2017 CSO Table Ultimate	(3,447)	(98,025)	(122,589)	(54,583)	695	43,795	74,794	94,311	103,611	104,279	98,295	87,798	75,006	61,813	49,321
GI Basic Ult with 35% loading	925	45,652	76,943	76,488	74,646	71,715	67,936	63,475	58,513	53,202	47,702	42,096	36,447	30,643	25,025
GI Basic Ult with 45% loading	1,443	69,219	115,750	113,578	109,662	104,405	98,104	90,991	83,333	75,319	67,167	58,984	50,840	42,628	34,750
GI Basic Ult with 55% loading	1,965	92,577	154,083	149,987	143,846	136,156	127,295	117,528	107,187	96,511	85,774	75,095	64,548	54,036	44,003
GI Basic Ult with 75% loading	3,022	138,717	229,563	221,172	210,264	197,492	183,361	168,233	152,560	136,657	120,892	105,412	90,296	75,426	61,328
1980 CSO Table Ultimate	(5,185)	(7,358)	9,463	49,732	78,914	97,431	105,961	105,989	99,797	89,896	78,699	68,058	59,266	52,905	48,637

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 77\_mid-term blended

**Male, Age 77**

**Blended Mid-Terminal Reserve B:**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	398,660	319,352	248,249	186,744	135,849	95,345	64,279	41,563	25,683	15,119	8,455	4,483	2,250	1,069	480
2017 GI with 45% loading	406,342	325,249	252,632	189,893	138,049	96,837	65,254	42,176	26,052	15,331	8,572	4,544	2,280	1,082	486
2017 GI with 55% loading	413,649	330,852	256,793	192,879	140,130	98,248	66,175	42,755	26,401	15,531	8,682	4,601	2,308	1,095	492
2017 GI with 75% loading	427,320	341,331	264,568	198,449	144,008	100,871	67,886	43,828	27,046	15,902	8,885	4,707	2,360	1,120	503
<b>2017 GI with 2017 CSO loading</b>	<b>378,709</b>	<b>303,895</b>	<b>236,633</b>	<b>178,285</b>	<b>129,791</b>	<b>91,114</b>	<b>61,447</b>	<b>39,728</b>	<b>24,536</b>	<b>14,433</b>	<b>8,069</b>	<b>4,278</b>	<b>2,148</b>	<b>1,022</b>	<b>461</b>
2017 CSO	416,789	332,373	257,380	193,004	139,817	97,620	65,498	42,164	25,948	15,222	8,491	4,495	2,255	1,073	484
2001 CSO	403,734	322,799	250,347	187,677	135,816	94,742	63,522	40,866	25,136	14,749	8,239	4,371	2,199	1,049	474
1980 CSO	424,371	347,075	277,006	214,820	161,237	116,504	80,318	27,645	532	308	171	90	185	244	187
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
<b>Initial Proposed GI Table</b>	<b>378,709</b>	<b>303,895</b>	<b>236,633</b>	<b>178,285</b>	<b>129,791</b>	<b>91,114</b>	<b>61,447</b>	<b>39,728</b>	<b>24,536</b>	<b>14,433</b>	<b>8,069</b>	<b>4,278</b>	<b>2,148</b>	<b>1,022</b>	<b>461</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	107%	106%	106%	105%	105%	104%	103%	103%	102%	102%	102%	102%	102%	103%	103%
2017 CSO Table Ultimate	110%	109%	109%	108%	108%	107%	107%	106%	106%	105%	105%	105%	105%	105%	105%
GI Basic Ult with 35% loading	105%	105%	105%	105%	105%	105%	105%	105%	105%	105%	105%	105%	105%	105%	104%
GI Basic Ult with 45% loading	107%	107%	107%	107%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	105%
GI Basic Ult with 55% loading	109%	109%	109%	108%	108%	108%	108%	108%	108%	108%	108%	108%	107%	107%	107%
GI Basic Ult with 75% loading	113%	112%	112%	111%	111%	111%	110%	110%	110%	110%	110%	110%	110%	110%	109%
1980 CSO Table Ultimate	112%	114%	117%	120%	124%	128%	131%	70%	2%	2%	2%	9%	24%	41%	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
<b>Initial Proposed GI Table</b>	<b>378,709</b>	<b>303,895</b>	<b>236,633</b>	<b>178,285</b>	<b>129,791</b>	<b>91,114</b>	<b>61,447</b>	<b>39,728</b>	<b>24,536</b>	<b>14,433</b>	<b>8,069</b>	<b>4,278</b>	<b>2,148</b>	<b>1,022</b>	<b>461</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	25,025	18,904	13,713	9,393	6,024	3,628	2,075	1,137	601	316	170	94	51	27	13
2017 CSO Table Ultimate	38,079	28,477	20,747	14,719	10,026	6,506	4,051	2,436	1,413	789	423	217	107	51	23
GI Basic Ult with 35% loading	19,951	15,457	11,616	8,459	6,058	4,231	2,832	1,834	1,147	685	387	206	102	47	19
GI Basic Ult with 45% loading	27,633	21,354	15,998	11,609	8,258	5,723	3,807	2,448	1,517	898	503	266	132	61	25
GI Basic Ult with 55% loading	34,939	26,957	20,160	14,594	10,339	7,134	4,728	3,026	1,865	1,098	613	323	160	74	31
GI Basic Ult with 75% loading	48,611	37,436	27,934	20,165	14,216	9,757	6,439	4,100	2,511	1,469	816	429	212	98	42
1980 CSO Table Ultimate	45,661	43,180	40,372	36,535	31,445	25,390	18,871	(12,083)	(24,004)	(14,125)	(7,898)	(4,188)	(1,964)	(777)	(274)

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
 AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group  
 Prepared for: NAIC Spring Meeting - March 22, 2018  
 Age 77\_mid-term blended

**Male, Age 77**

**Blended Mid-Terminal Reserve B:**

	31	32	33	34	35
2017 GI with 35% loading	205	84	33	13	-
2017 GI with 45% loading	207	84	33	13	-
2017 GI with 55% loading	209	85	33	13	-
2017 GI with 75% loading	214	87	34	13	-
<b>2017 GI with 2017 CSO loading</b>	<b>198</b>	<b>82</b>	<b>33</b>	<b>13</b>	<b>-</b>
2017 CSO	208	85	34	13	-
2001 CSO	204	84	33	13	-
1980 CSO	114	60	29	13	-

	31	32	33	34	35
<b>Initial Proposed GI Table</b>	<b>198</b>	<b>82</b>	<b>33</b>	<b>13</b>	<b>-</b>

**% Differential**

2001 CSO Table Ultimate	103%	102%	102%	101%	--
2017 CSO Table Ultimate	105%	104%	103%	101%	--
GI Basic Ult with 35% loading	103%	102%	101%	100%	--
GI Basic Ult with 45% loading	104%	103%	101%	100%	--
GI Basic Ult with 55% loading	106%	104%	101%	100%	--
GI Basic Ult with 75% loading	108%	106%	102%	100%	--
1980 CSO Table Ultimate	57%	73%	88%	97%	--

	31	32	33	34	35
<b>Initial Proposed GI Table</b>	<b>198</b>	<b>82</b>	<b>33</b>	<b>13</b>	<b>-</b>

**\$ Differential**

2001 CSO Table Ultimate	6	2	1	0	-
2017 CSO Table Ultimate	9	3	1	0	-
GI Basic Ult with 35% loading	6	2	0	(0)	-
GI Basic Ult with 45% loading	9	2	0	0	-
GI Basic Ult with 55% loading	11	3	0	0	-
GI Basic Ult with 75% loading	15	5	1	0	-
1980 CSO Table Ultimate	(85)	(22)	(4)	(0)	-

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group

Prepared for: NAIC Spring Meeting - March 22, 2018

Age 77\_mid-term blended

**Female, Age 77**

**Blended Mid-Terminal Reserve Balance (19% annual, 81% monthly)**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2017 GI with 35% loading	814	469,028	925,412	1,143,179	1,322,756	1,467,667	1,578,184	1,651,164	1,686,413	1,683,807	1,646,081	1,574,875	1,473,179	1,347,318	1,203,215
2017 GI with 45% loading	375	489,593	960,974	1,180,442	1,361,032	1,506,395	1,616,810	1,689,071	1,723,036	1,718,599	1,678,571	1,604,659	1,499,932	1,370,842	1,223,413
2017 GI with 55% loading	(118)	509,550	995,248	1,216,115	1,397,531	1,543,205	1,653,402	1,724,900	1,757,567	1,751,318	1,709,078	1,632,587	1,524,990	1,392,863	1,242,308
2017 GI with 75% loading	5,426	574,053	1,108,104	1,325,451	1,502,790	1,643,999	1,749,292	1,815,218	1,841,698	1,828,706	1,779,322	1,695,382	1,580,159	1,440,440	1,282,476
<b>2017 GI with 2017 CSO loading</b>	<b>1,326</b>	<b>427,450</b>	<b>851,213</b>	<b>1,062,235</b>	<b>1,236,875</b>	<b>1,378,450</b>	<b>1,487,167</b>	<b>1,560,032</b>	<b>1,596,812</b>	<b>1,597,313</b>	<b>1,564,091</b>	<b>1,498,649</b>	<b>1,403,775</b>	<b>1,285,479</b>	<b>1,149,514</b>
2017 CSO	5,057	365,937	772,900	1,030,044	1,240,756	1,408,964	1,535,759	1,618,841	1,658,747	1,656,536	1,616,628	1,542,226	1,437,569	1,310,125	1,166,714
2001 CSO	1,874	357,235	746,210	977,467	1,164,581	1,311,340	1,420,613	1,491,324	1,525,414	1,523,790	1,487,601	1,418,591	1,321,897	1,207,437	1,082,750
1980 CSO	2,210	468,976	960,633	1,231,286	1,448,948	1,617,957	1,739,484	1,812,067	1,838,336	1,821,264	1,766,803	1,679,179	1,563,368	1,427,109	1,276,908
<b>Initial Proposed GI Table</b>	<b>1,326</b>	<b>427,450</b>	<b>851,213</b>	<b>1,062,235</b>	<b>1,236,875</b>	<b>1,378,450</b>	<b>1,487,167</b>	<b>1,560,032</b>	<b>1,596,812</b>	<b>1,597,313</b>	<b>1,564,091</b>	<b>1,498,649</b>	<b>1,403,775</b>	<b>1,285,479</b>	<b>1,149,514</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	33%	92%	105%	121%	134%	145%	155%	164%	174%	183%	193%	202%	212%	223%	236%
2017 CSO Table Ultimate	89%	95%	109%	128%	142%	155%	167%	178%	189%	199%	209%	220%	230%	242%	254%
GI Basic Ult with 35% loading	14%	121%	130%	142%	152%	162%	172%	182%	192%	202%	213%	224%	236%	249%	262%
GI Basic Ult with 45% loading	7%	127%	135%	146%	156%	166%	176%	186%	196%	206%	217%	228%	240%	253%	266%
GI Basic Ult with 55% loading	-2%	132%	140%	151%	160%	170%	180%	190%	200%	210%	221%	232%	244%	257%	271%
GI Basic Ult with 75% loading	96%	149%	156%	164%	173%	181%	190%	200%	209%	220%	230%	241%	253%	266%	279%
1980 CSO Table Ultimate	39%	121%	135%	153%	166%	178%	189%	199%	209%	219%	229%	239%	250%	263%	278%
<b>Initial Proposed GI Table</b>	<b>1,326</b>	<b>427,450</b>	<b>851,213</b>	<b>1,062,235</b>	<b>1,236,875</b>	<b>1,378,450</b>	<b>1,487,167</b>	<b>1,560,032</b>	<b>1,596,812</b>	<b>1,597,313</b>	<b>1,564,091</b>	<b>1,498,649</b>	<b>1,403,775</b>	<b>1,285,479</b>	<b>1,149,514</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	548	(70,216)	(105,003)	(84,768)	(72,294)	(67,110)	(66,554)	(68,708)	(71,399)	(73,523)	(76,490)	(80,059)	(81,879)	(78,041)	(66,765)
2017 CSO Table Ultimate	3,731	(61,513)	(78,313)	(32,191)	3,881	30,514	48,592	58,809	61,935	59,223	52,537	43,577	33,794	24,646	17,199
GI Basic Ult with 35% loading	(513)	41,577	74,199	80,944	85,881	89,217	91,017	91,132	89,601	86,494	81,990	76,226	69,403	61,839	53,700
GI Basic Ult with 45% loading	(952)	62,143	109,761	118,207	124,157	127,945	129,643	129,039	126,224	121,286	114,480	106,009	96,157	85,363	73,898
GI Basic Ult with 55% loading	(1,444)	82,100	144,034	153,880	160,656	164,755	166,235	164,868	160,755	154,005	144,986	133,938	121,215	107,384	92,793
GI Basic Ult with 75% loading	4,100	146,603	256,891	263,216	265,915	265,548	262,125	255,186	244,886	231,393	215,230	196,733	176,384	154,962	132,961
1980 CSO Table Ultimate	884	41,526	109,420	169,051	212,073	239,507	252,316	252,036	241,524	223,951	202,712	180,530	159,593	141,631	127,394

**Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables**  
 AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group  
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 Age 77\_mid-term blended

**Female, Age 77**

**Blended Mid-Terminal Reserve B:**

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2017 GI with 35% loading	1,047,118	886,881	729,540	581,525	447,860	331,531	235,012	159,329	102,998	63,273	36,846	20,311	10,585	5,213	2,425
2017 GI with 45% loading	1,064,001	900,604	740,363	589,798	453,992	335,919	238,026	161,314	104,247	64,022	37,272	20,541	10,702	5,270	2,451
2017 GI with 55% loading	1,079,786	913,422	750,463	597,509	459,701	340,001	240,828	163,157	105,406	64,717	37,668	20,755	10,812	5,323	2,475
2017 GI with 75% loading	1,112,877	939,971	771,154	613,145	471,163	348,119	246,352	166,765	107,660	66,059	38,429	21,165	11,021	5,424	2,521
<b>2017 GI with 2017 CSO loading</b>	<b>1,001,787</b>	<b>849,666</b>	<b>699,873</b>	<b>558,581</b>	<b>430,530</b>	<b>318,862</b>	<b>226,146</b>	<b>153,346</b>	<b>99,109</b>	<b>60,864</b>	<b>35,434</b>	<b>19,532</b>	<b>10,182</b>	<b>5,020</b>	<b>2,342</b>
2017 CSO	1,013,493	857,723	705,926	563,498	434,372	321,643	228,096	154,704	100,046	61,495	35,845	19,788	10,336	5,109	2,391
2001 CSO	949,784	811,148	671,323	536,279	411,990	303,736	215,286	146,616	95,399	59,054	34,684	19,295	10,152	5,049	2,373
1980 CSO	1,118,396	957,969	800,804	651,322	512,839	387,977	279,765	99,865	1,620	985	1,153	2,183	2,470	1,886	1,196
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
<b>Initial Proposed GI Table</b>	<b>1,001,787</b>	<b>849,666</b>	<b>699,873</b>	<b>558,581</b>	<b>430,530</b>	<b>318,862</b>	<b>226,146</b>	<b>153,346</b>	<b>99,109</b>	<b>60,864</b>	<b>35,434</b>	<b>19,532</b>	<b>10,182</b>	<b>5,020</b>	<b>2,342</b>
<b>% Differential</b>															
2001 CSO Table Ultimate	251%	267%	284%	301%	317%	333%	350%	369%	389%	409%	430%	451%	473%	494%	515%
2017 CSO Table Ultimate	268%	282%	298%	316%	335%	353%	371%	389%	408%	426%	444%	463%	481%	500%	518%
GI Basic Ult with 35% loading	276%	292%	308%	326%	345%	364%	382%	401%	420%	438%	457%	475%	493%	510%	526%
GI Basic Ult with 45% loading	281%	296%	313%	331%	350%	369%	387%	406%	425%	444%	462%	480%	498%	516%	531%
GI Basic Ult with 55% loading	285%	301%	317%	335%	354%	373%	392%	411%	430%	448%	467%	485%	503%	521%	537%
GI Basic Ult with 75% loading	294%	309%	326%	344%	363%	382%	401%	420%	439%	458%	476%	495%	513%	531%	547%
1980 CSO Table Ultimate	295%	315%	338%	365%	395%	426%	455%	251%	7%	7%	14%	51%	115%	185%	259%
<b>Initial Proposed GI Table</b>	<b>1,001,787</b>	<b>849,666</b>	<b>699,873</b>	<b>558,581</b>	<b>430,530</b>	<b>318,862</b>	<b>226,146</b>	<b>153,346</b>	<b>99,109</b>	<b>60,864</b>	<b>35,434</b>	<b>19,532</b>	<b>10,182</b>	<b>5,020</b>	<b>2,342</b>
<b>\$ Differential</b>															
2001 CSO Table Ultimate	(52,003)	(38,517)	(28,550)	(22,302)	(18,539)	(15,126)	(10,861)	(6,731)	(3,710)	(1,810)	(751)	(236)	(29)	29	31
2017 CSO Table Ultimate	11,705	8,057	6,052	4,917	3,842	2,781	1,950	1,358	937	631	410	257	154	89	49
GI Basic Ult with 35% loading	45,331	37,216	29,667	22,944	17,330	12,669	8,865	5,983	3,888	2,409	1,411	779	403	193	84
GI Basic Ult with 45% loading	62,214	50,938	40,490	31,217	23,463	17,057	11,880	7,968	5,137	3,158	1,838	1,010	521	250	109
GI Basic Ult with 55% loading	77,999	63,757	50,589	38,928	29,171	21,139	14,681	9,811	6,297	3,853	2,234	1,224	631	303	133
GI Basic Ult with 75% loading	111,090	90,305	71,281	54,564	40,633	29,257	20,205	13,418	8,550	5,195	2,994	1,633	840	404	179
1980 CSO Table Ultimate	116,608	108,304	100,931	92,741	82,309	69,115	53,619	(53,481)	(97,489)	(59,879)	(34,282)	(17,349)	(7,711)	(3,134)	(1,146)

Guaranteed Issue Reserve Comparative Using Different Valuation Mortality Tables  
 AAA's Life Experience Committee and SOA's Preferred Mortality Project Oversight Group  
 Prepared for: NAIC Spring Meeting - March 22, 2018  
 Age 77\_mid-term blended

**Female, Age 77**

**Blended Mid-Terminal Reserve B:**

	31	32	33	34	35
2017 GI with 35% loading	1,070	450	183	75	-
2017 GI with 45% loading	1,080	453	184	75	-
2017 GI with 55% loading	1,090	457	185	75	-
2017 GI with 75% loading	1,109	464	186	75	-
<b>2017 GI with 2017 CSO loading</b>	<b>1,039</b>	<b>442</b>	<b>182</b>	<b>75</b>	<b>-</b>
2017 CSO	1,063	451	185	75	-
2001 CSO	1,058	450	185	75	-
1980 CSO	671	343	163	73	-
	31	32	33	34	35
<b>Initial Proposed GI Table</b>	<b>1,039</b>	<b>442</b>	<b>182</b>	<b>75</b>	<b>-</b>
<b>% Differential</b>					
2001 CSO Table Ultimate	533%	549%	563%	568%	--
2017 CSO Table Ultimate	536%	551%	563%	568%	--
GI Basic Ult with 35% loading	539%	549%	558%	565%	--
GI Basic Ult with 45% loading	544%	554%	560%	566%	--
GI Basic Ult with 55% loading	549%	558%	562%	566%	--
GI Basic Ult with 75% loading	559%	567%	567%	568%	--
1980 CSO Table Ultimate	338%	419%	496%	551%	--
	31	32	33	34	35
<b>Initial Proposed GI Table</b>	<b>1,039</b>	<b>442</b>	<b>182</b>	<b>75</b>	<b>-</b>
<b>\$ Differential</b>					
2001 CSO Table Ultimate	19	8	3	0	-
2017 CSO Table Ultimate	24	9	3	0	-
GI Basic Ult with 35% loading	31	8	1	0	-
GI Basic Ult with 45% loading	41	12	2	0	-
GI Basic Ult with 55% loading	51	15	3	0	-
GI Basic Ult with 75% loading	71	22	4	0	-
1980 CSO Table Ultimate	(368)	(99)	(19)	(2)	-

