Account 354 Curve Fitting

[1] Age (Years)	[2] Exposures (Dollars)	[3] Observed Life Table (OLT)	[4] Company R4-75	[5] Cities R4-79	[6] Company SSD	[7] Garrett SSD
0.0	39,548,413	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	45,430,877	100.00%	100.00%	100.00%	0.0000	0.0000
1.5	45,371,974	100.00%	100.00%	100.00%	0.0000	0.0000
2.5	37,873,919	99.99%	100.00%	100.00%	0.0000	0.0000
3.5	36,198,439	99.99%	99.99%	100.00%	0.0000	0.0000
4.5	35,891,323	99.96%	99.99%	99.99%	0.0000	0.0000
5.5	29,108,490	99.93%	99.99%	99.99%	0.0000	0.0000
6.5	28,360,127	99.91%	99.99%	99.99%	0.0000	0.0000
7.5	28,062,946	99.88%	99.98%	99.98%	0.0000	0.0000
8.5	28,170,325	99.87%	99.98%	99.98%	0.0000	0.0000
9.5	28,169,103	99.87%	99.97%	99.98%	0.0000	0.0000
10.5	28,168,495	99.87%	99.97%	99.97%	0.0000	0.0000
11.5	28,168,495	99.87%	99.96%	99.96%	0.0000	0.0000
12.5	28,244,895	99.87%	99.95%	99.96%	0.0000	0.0000
13.5	28,147,226	99.85%	99.94%	99.95%	0.0000	0.0000
14.5	28,056,147	99.83%	99.93%	99.94%	0.0000	0.0000
15.5	27,806,886	99.43%	99.91%	99.92%	0.0000	0.0000
16.5	27,640,007	99.30%	99.90%	99.91%	0.0000	0.0000
17.5	27,514,949	99.29%	99.88%	99.89%	0.0000	0.0000
18.5	26,860,958	99.29%	99.86%	99.88%	0.0000	0.0000
19.5	26,283,275	99.29%	99.83%	99.86%	0.0000	0.0000
20.5	26,017,302	99.29%	99.80%	99.83%	0.0000	0.0000
21.5	26,009,753	99.29%	99.77%	99.80%	0.0000	0.0000
22.5	26,216,627	99.26%	99.73%	99.77%	0.0000	0.0000
23.5	25,236,833	99.26%	99.69%	99.74%	0.0000	0.0000
24.5	25,214,791	99.25%	99.64%	99.70%	0.0000	0.0000
25.5	25,166,179	99.24%	99.58%	99.65%	0.0000	0.0000
26.5	25,109,562	99.22%	99.52%	99.60%	0.0000	0.0000
27.5	25,107,961	99.22%	99.44%	99.54%	0.0000	0.0000
28.5	25,106,712	99.22%	99.36%	99.48%	0.0000	0.0000
29.5	25,103,838	99.21%	99.27%	99.40%	0.0000	0.0000
30.5	25,098,091	99.20%	99.17%	99.32%	0.0000	0.0000
31.5	25,073,671	99.12%	99.06%	99.23%	0.0000	0.0000
32.5	24,724,271	98.98%	98.93%	99.13%	0.0000	0.0000
33.5	24,688,608	98.98%	98.78%	99.02%	0.0000	0.0000
34.5	24,652,726	98.84%	98.63%	98.89%	0.0000	0.0000
35.5	24,540,562	98.82%	98.45%	98.75%	0.0000	0.0000
36.5	24,441,345	98.81%	98.26%	98.60%	0.0000	0.0000
37.5	23,886,377	98.77%	98.04%	98.43%	0.0001	0.0000
38.5	22,594,032	98.77%	97.80%	98.24%	0.0001	0.0000
39.5	19,187,464	98.77%	97.54%	98.04%	0.0002	0.0001
40.5	11,977,112	98.77%	97.26%	97.82%	0.0002	0.0001
41.5	11,899,589	98.30%	96.94%	97.57%	0.0002	0.0001
42.5	11,883,342	98.16%	96.60%	97.30%	0.0002	0.0001
43.5	11,825,115	98.16%	96.22%	97.01%	0.0004	0.0001
44.5	10,790,071	98.16%	95.81%	96.69%	0.0006	0.0002
45.5	10,766,446	98.14%	95.37%	96.34%	0.0008	0.0003
46.5	10,766,446	98.14%	94.89%	95.96%	0.0011	0.0005

Account 354 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	**Exposures (Dollars)**	**Observed Life Table (OLT)**	**Company R4-75**	**Cities R4-79**	**Company SSD**	**Garrett SSD**
47.5	9,654,510	98.06%	94.36%	95.55%	0.0014	0.0006
48.5	9,587,002	98.06%	93.80%	95.11%	0.0018	0.0009
49.5	7,435,376	98.06%	93.19%	94.63%	0.0024	0.0012
50.5	3,663,982	98.06%	92.53%	94.12%	0.0031	0.0016
51.5	3,656,306	98.06%	91.83%	93.56%	0.0039	0.0020
52.5	1,649,608	98.00%	91.08%	92.97%	0.0048	0.0025
53.5	619,995	98.00%	90.26%	92.33%	0.0060	0.0032
54.5	604,945	98.00%	89.40%	91.65%	0.0074	0.0040
55.5	604,085	98.00%	88.49%	90.92%	0.0091	0.0050
56.5	592,875	97.96%	87.50%	90.15%	0.0109	0.0061
57.5	589,953	97.48%	86.47%	89.32%	0.0121	0.0067
58.5	533,874	97.48%	85.37%	88.45%	0.0147	0.0082
59.5	533,874	97.48%	84.21%	87.52%	0.0176	0.0099
60.5	533,774	97.46%	82.98%	86.53%	0.0210	0.0119
61.5	492,266	97.46%	81.70%	85.50%	0.0249	0.0143
62.5	492,266	97.46%	80.34%	84.40%	0.0293	0.0170
63.5	492,266	97.46%	78.92%	83.25%	0.0344	0.0202
64.5	443,571	97.46%	77.43%	82.04%	0.0401	0.0238
65.5	443,157	97.37%	75.85%	80.78%	0.0463	0.0275
66.5	443,157	97.37%	74.18%	79.45%	0.0538	0.0321
67.5	321,800	97.37%	72.42%	78.06%	0.0622	0.0373
68.5			70.54%	76.60%		
Sum of Squared Differences				[8]	0.4111	0.2379
Up to 1% of Beginning Exposures				[9]	0.3489	0.2006

[1] Age in years using half-year convention
[2] Dollars exposed to retirement at the beginning of each age interval
[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.
[4] The Company's selected Iowa curve to be fitted to the OLT.
[5] My selected Iowa curve to be fitted to the OLT.
[6] = ([4] - [3])^2. This is the squared difference between each point on the Company's curve and the observed survivor curve.
[7] = ([5] - [3])^2. This is the squared difference between each point on my curve and the observed survivor curve.
[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

Account 355 Curve Fitting

[1] Age (Years)	[2] Exposures (Dollars)	[3] Observed Life Table (OLT)	[4] Company R1.5-70	[5] Cities R1-77	[6] Company SSD	[7] Garrett SSD
0.0	665,406,631	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	561,875,474	99.96%	99.87%	99.83%	0.0000	0.0000
1.5	394,602,853	99.95%	99.62%	99.49%	0.0000	0.0000
2.5	327,248,154	99.78%	99.35%	99.15%	0.0000	0.0000
3.5	315,717,345	99.69%	99.08%	98.80%	0.0000	0.0001
4.5	304,725,941	99.46%	98.80%	98.44%	0.0000	0.0001
5.5	262,739,881	99.23%	98.52%	98.08%	0.0001	0.0001
6.5	247,296,519	98.53%	98.22%	97.71%	0.0000	0.0001
7.5	223,529,239	97.93%	97.92%	97.33%	0.0000	0.0000
8.5	207,019,860	97.20%	97.61%	96.95%	0.0000	0.0000
9.5	202,620,147	97.01%	97.30%	96.56%	0.0000	0.0000
10.5	189,406,488	96.71%	96.97%	96.17%	0.0000	0.0000
11.5	180,312,453	96.51%	96.63%	95.77%	0.0000	0.0001
12.5	173,908,877	96.11%	96.29%	95.36%	0.0000	0.0001
13.5	161,830,107	95.38%	95.94%	94.95%	0.0000	0.0000
14.5	155,961,660	94.21%	95.58%	94.53%	0.0002	0.0000
15.5	164,629,860	93.22%	95.21%	94.11%	0.0004	0.0001
16.5	102,339,751	92.81%	94.83%	93.68%	0.0004	0.0001
17.5	90,052,609	92.24%	94.44%	93.24%	0.0005	0.0001
18.5	83,580,334	91.72%	94.05%	92.80%	0.0005	0.0001
19.5	78,992,588	91.26%	93.64%	92.35%	0.0006	0.0001
20.5	73,551,669	89.92%	93.22%	91.90%	0.0011	0.0004
21.5	70,511,619	89.59%	92.80%	91.44%	0.0010	0.0003
22.5	69,438,441	89.31%	92.36%	90.97%	0.0009	0.0003
23.5	63,793,316	89.12%	91.91%	90.50%	0.0008	0.0002
24.5	60,982,187	88.98%	91.45%	90.03%	0.0006	0.0001
25.5	57,453,644	88.85%	90.98%	89.55%	0.0005	0.0000
26.5	56,330,803	88.58%	90.50%	89.06%	0.0004	0.0000
27.5	55,494,698	88.41%	90.01%	88.56%	0.0003	0.0000
28.5	53,610,006	88.26%	89.50%	88.06%	0.0002	0.0000
29.5	52,649,597	87.91%	88.99%	87.55%	0.0001	0.0000
30.5	51,627,422	87.66%	88.45%	87.04%	0.0001	0.0000
31.5	50,297,514	87.00%	87.91%	86.52%	0.0001	0.0000
32.5	49,741,462	86.79%	87.35%	85.99%	0.0000	0.0001
33.5	48,556,849	86.26%	86.78%	85.46%	0.0000	0.0001
34.5	48,168,250	85.95%	86.19%	84.91%	0.0000	0.0001
35.5	43,818,459	85.48%	85.59%	84.36%	0.0000	0.0001
36.5	43,223,715	85.18%	84.98%	83.81%	0.0000	0.0002
37.5	41,341,485	84.87%	84.34%	83.24%	0.0000	0.0003
38.5	38,844,872	84.53%	83.70%	82.67%	0.0001	0.0003
39.5	27,468,017	83.39%	83.03%	82.08%	0.0000	0.0002
40.5	23,779,977	82.89%	82.35%	81.49%	0.0000	0.0002
41.5	21,179,949	82.44%	81.65%	80.89%	0.0001	0.0002
42.5	20,793,416	81.69%	80.93%	80.28%	0.0001	0.0002
43.5	20,420,522	81.25%	80.20%	79.66%	0.0001	0.0003
44.5	19,818,771	80.61%	79.44%	79.03%	0.0001	0.0002
45.5	17,334,536	80.29%	78.67%	78.39%	0.0003	0.0004
46.5	17,187,875	80.04%	77.88%	77.74%	0.0005	0.0005
47.5	16,651,081	79.11%	77.07%	77.08%	0.0004	0.0004
48.5	16,036,923	78.07%	76.24%	76.41%	0.0003	0.0003
49.5	14,618,615	76.88%	75.39%	75.73%	0.0002	0.0001
50.5	13,302,553	76.51%	74.51%	75.04%	0.0004	0.0002
51.5	10,794,399	75.80%	73.62%	74.34%	0.0005	0.0002
52.5	8,402,391	72.90%	72.71%	73.63%	0.0000	0.0001
53.5	7,367,111	71.86%	71.78%	72.91%	0.0000	0.0001
54.5	6,866,610	71.25%	70.82%	72.17%	0.0000	0.0001
55.5	6,427,792	70.44%	69.85%	71.43%	0.0000	0.0001
56.5	5,961,634	69.40%	68.85%	70.68%	0.0000	0.0002
57.5	5,330,565	67.15%	67.84%	69.91%	0.0000	0.0008
58.5	4,856,419	66.46%	66.80%	69.13%	0.0000	0.0007
59.5	4,654,451	66.05%	65.74%	68.34%	0.0000	0.0005

Account 355 Curve Fitting

[1] Age (Years)	[2] Exposures (Dollars)	[3] Observed Life Table (OLT)	[4] Company R1.5-70	[5] Cities R1-77	[6] Company SSD	[7] Garrett SSD
60.5	3,971,716	63.69%	64.66%	67.54%	0.0001	0.0015
61.5	3,709,844	61.59%	63.56%	66.74%	0.0004	0.0026
62.5	3,539,322	61.25%	62.44%	65.91%	0.0001	0.0022
63.5	3,414,193	60.30%	61.31%	65.08%	0.0001	0.0023
64.5	3,299,793	59.86%	60.15%	64.24%	0.0000	0.0019
65.5	3,260,309	59.38%	58.97%	63.39%	0.0000	0.0016
66.5	3,202,614	58.89%	57.78%	62.53%	0.0001	0.0013
67.5	1,083,388	58.37%	56.56%	61.65%	0.0003	0.0011
68.5	867,686	58.10%	55.33%	60.77%	0.0008	0.0007
69.5	723,733	57.48%	54.09%	59.88%	0.0012	0.0006
70.5	706,622	56.12%	52.83%	58.97%	0.0011	0.0008
71.5	686,662	54.58%	51.55%	58.06%	0.0009	0.0012
72.5	660,047	53.77%	50.27%	57.14%	0.0012	0.0011
73.5	551,874	52.12%	48.97%	56.21%	0.0010	0.0017
74.5	519,254	49.07%	47.66%	55.28%	0.0002	0.0039
75.5	140,711	47.69%	46.34%	54.33%	0.0002	0.0044
76.5	137,175	46.72%	45.02%	53.38%	0.0003	0.0044
77.5	134,864	46.20%	43.69%	52.41%	0.0006	0.0039
78.5	123,237	42.48%	42.35%	51.45%	0.0000	0.0080
79.5	109,777	42.40%	41.01%	50.47%	0.0002	0.0065
80.5	101,964	41.01%	39.67%	49.49%	0.0002	0.0072
81.5	92,371	37.27%	38.34%	48.50%	0.0001	0.0126
82.5	90,610	36.88%	37.00%	47.51%	0.0000	0.0113
83.5	89,031	36.88%	35.67%	46.51%	0.0001	0.0093
84.5	79,866	33.39%	34.35%	45.51%	0.0001	0.0147
85.5	79,358	33.18%	33.03%	44.51%	0.0000	0.0128
86.5	79,080	33.07%	31.72%	43.50%	0.0002	0.0109
87.5	78,855	32.97%	30.43%	42.48%	0.0006	0.0091
88.5	77,635	32.46%	29.15%	41.47%	0.0011	0.0081
89.5	75,713	31.66%	27.89%	40.45%	0.0014	0.0077
90.5	73,726	30.83%	26.64%	39.44%	0.0018	0.0074
91.5	72,337	30.25%	25.42%	38.42%	0.0023	0.0067
92.5	19,281	29.29%	24.21%	37.40%	0.0026	0.0066
93.5	9,954	28.09%	23.03%	36.38%	0.0026	0.0069
94.5	8,985	25.35%	21.87%	35.37%	0.0012	0.0100
95.5	8,446	25.35%	20.74%	34.35%	0.0021	0.0081
96.5			19.63%	33.34%		
Sum of Squared Differences				[8]	0.0374	0.2108
Up to 1% of Beginning Exposures				[9]	0.0119	0.0075

[1] Age in years using half-year convention
[2] Dollars exposed to retirement at the beginning of each age interval
[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.
[4] The Company's selected Iowa curve to be fitted to the OLT.
[5] My selected Iowa curve to be fitted to the OLT.
[6] = ([4] - [3])^2. This is the squared difference between each point on the Company's curve and the observed survivor curve.
[7] = ([5] - [3])^2. This is the squared difference between each point on my curve and the observed survivor curve.
[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

Account 362 Curve Fitting

[1] Age (Years)	[2] Exposures (Dollars)	[3] Observed Life Table (OLT)	[4] Company R1-65	[5] Cities R0.5-70	[6] Company SSD	[7] Garrett SSD
0.0	382,761,250	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	403,840,944	99.48%	99.80%	99.73%	0.0000	0.0000
1.5	383,459,940	99.39%	99.40%	99.19%	0.0000	0.0000
2.5	267,149,997	99.18%	98.99%	98.64%	0.0000	0.0000
3.5	257,820,833	98.91%	98.57%	98.09%	0.0000	0.0001
4.5	243,567,004	98.87%	98.14%	97.53%	0.0001	0.0002
5.5	222,260,995	98.29%	97.70%	96.97%	0.0000	0.0002
6.5	202,824,782	97.83%	97.26%	96.41%	0.0000	0.0002
7.5	192,306,127	97.62%	96.80%	95.84%	0.0001	0.0003
8.5	182,222,338	97.24%	96.34%	95.27%	0.0001	0.0004
9.5	172,946,257	96.53%	95.87%	94.70%	0.0000	0.0003
10.5	167,297,730	96.11%	95.39%	94.12%	0.0001	0.0004
11.5	159,238,596	95.41%	94.90%	93.54%	0.0000	0.0003
12.5	155,355,664	94.69%	94.40%	92.96%	0.0000	0.0003
13.5	152,034,609	94.29%	93.90%	92.37%	0.0000	0.0004
14.5	149,177,489	93.57%	93.38%	91.78%	0.0000	0.0003
15.5	142,704,224	92.80%	92.86%	91.18%	0.0000	0.0003
16.5	132,107,833	92.11%	92.33%	90.58%	0.0000	0.0002
17.5	127,955,592	91.35%	91.79%	89.98%	0.0000	0.0002
18.5	117,272,189	90.82%	91.25%	89.38%	0.0000	0.0002
19.5	103,666,941	89.98%	90.69%	88.77%	0.0001	0.0001
20.5	90,997,978	89.23%	90.13%	88.15%	0.0001	0.0001
21.5	86,964,356	88.33%	89.56%	87.54%	0.0002	0.0001
22.5	82,045,888	87.34%	88.98%	86.92%	0.0003	0.0000
23.5	78,247,731	86.47%	88.39%	86.29%	0.0004	0.0000
24.5	75,066,640	85.89%	87.80%	85.67%	0.0004	0.0000
25.5	70,061,510	84.68%	87.19%	85.04%	0.0006	0.0000
26.5	66,557,669	84.00%	86.58%	84.40%	0.0007	0.0000
27.5	65,363,388	83.56%	85.95%	83.76%	0.0006	0.0000
28.5	62,848,618	82.84%	85.32%	83.12%	0.0006	0.0000
29.5	59,924,393	82.12%	84.67%	82.47%	0.0007	0.0000
30.5	57,474,438	81.18%	84.01%	81.82%	0.0008	0.0000
31.5	55,362,979	79.28%	83.35%	81.17%	0.0017	0.0004
32.5	53,742,013	78.20%	82.67%	80.51%	0.0020	0.0005
33.5	52,551,030	77.77%	81.97%	79.84%	0.0018	0.0004
34.5	52,228,806	77.43%	81.27%	79.17%	0.0015	0.0003
35.5	51,903,674	76.84%	80.55%	78.49%	0.0014	0.0003
36.5	49,983,889	76.00%	79.82%	77.81%	0.0015	0.0003
37.5	47,701,163	74.90%	79.08%	77.13%	0.0017	0.0005
38.5	45,699,955	74.43%	78.32%	76.44%	0.0015	0.0004
39.5	41,372,556	74.05%	77.55%	75.74%	0.0012	0.0003
40.5	34,781,042	73.14%	76.76%	75.03%	0.0013	0.0004
41.5	29,382,060	71.84%	75.96%	74.33%	0.0017	0.0006
42.5	27,312,337	71.56%	75.15%	73.61%	0.0013	0.0004
43.5	26,090,480	71.07%	74.32%	72.89%	0.0011	0.0003
44.5	25,389,539	70.31%	73.48%	72.16%	0.0010	0.0003
45.5	24,328,436	69.79%	72.62%	71.43%	0.0008	0.0003
46.5	23,026,410	69.50%	71.74%	70.69%	0.0005	0.0001
47.5	21,686,934	69.28%	70.85%	69.94%	0.0002	0.0000
48.5	19,864,683	68.76%	69.94%	69.19%	0.0001	0.0000
49.5	18,413,261	68.33%	69.02%	68.43%	0.0000	0.0000
50.5	16,707,072	67.97%	68.09%	67.66%	0.0000	0.0000
51.5	15,979,887	67.20%	67.13%	66.89%	0.0000	0.0000
52.5	15,160,792	66.35%	66.17%	66.11%	0.0000	0.0000
53.5	14,684,522	65.32%	65.19%	65.32%	0.0000	0.0000
54.5	13,432,153	64.80%	64.19%	64.53%	0.0000	0.0000
55.5	11,606,904	64.04%	63.18%	63.73%	0.0001	0.0000
56.5	10,961,750	62.83%	62.15%	62.92%	0.0000	0.0000
57.5	10,397,041	62.70%	61.11%	62.11%	0.0003	0.0000

Account 362 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	**Exposures (Dollars)**	**Observed Life Table (OLT)**	**Company R1-65**	**Cities R0.5-70**	**Company SSD**	**Garrett SSD**
58.5	10,062,446	61.33%	60.06%	61.29%	0.0002	0.0000
59.5	10,003,878	61.01%	58.99%	60.47%	0.0004	0.0000
60.5	9,517,660	60.05%	57.91%	59.63%	0.0005	0.0000
61.5	9,210,656	59.50%	56.81%	58.80%	0.0007	0.0000
62.5	8,325,624	58.90%	55.71%	57.95%	0.0010	0.0001
63.5	7,399,699	58.36%	54.59%	57.10%	0.0014	0.0002
64.5	6,302,222	57.34%	53.46%	56.25%	0.0015	0.0001
65.5	5,499,262	57.21%	52.33%	55.39%	0.0024	0.0003
66.5	5,373,642	56.87%	51.18%	54.52%	0.0032	0.0006
67.5	4,422,404	56.56%	50.02%	53.65%	0.0043	0.0008
68.5	4,211,200	56.24%	48.85%	52.77%	0.0055	0.0012
69.5	3,663,341	56.05%	47.68%	51.89%	0.0070	0.0017
70.5	3,420,126	55.75%	46.50%	51.00%	0.0086	0.0023
71.5	2,798,894	54.96%	45.31%	50.11%	0.0093	0.0023
72.5	2,673,420	54.42%	44.12%	49.22%	0.0106	0.0027
73.5	2,144,950	54.21%	42.92%	48.32%	0.0127	0.0035
74.5	2,045,137	54.16%	41.72%	47.42%	0.0155	0.0045
75.5	1,866,927	53.69%	40.52%	46.52%	0.0174	0.0051
76.5	1,804,601	53.69%	39.31%	45.61%	0.0207	0.0065
77.5	1,573,717	52.55%	38.10%	44.70%	0.0209	0.0062
78.5	613,572	52.55%	36.90%	43.79%	0.0245	0.0077
79.5	613,572	52.55%	35.70%	42.87%	0.0284	0.0094
80.5	587,127	52.47%	34.49%	41.96%	0.0323	0.0110
81.5	575,693	52.47%	33.30%	41.04%	0.0368	0.0131
82.5	552,233	52.47%	32.10%	40.13%	0.0415	0.0152
83.5	109,121	52.47%	30.91%	39.21%	0.0465	0.0176
84.5	104,615	52.47%	29.73%	38.29%	0.0517	0.0201
85.5	56,139	52.47%	28.56%	37.38%	0.0572	0.0228
86.5	53,391	52.47%	27.40%	36.46%	0.0629	0.0256
87.5	53,391	52.47%	26.24%	35.55%	0.0688	0.0286
88.5	53,391	52.47%	25.10%	34.64%	0.0749	0.0318
89.5	50,450	52.47%	23.97%	33.73%	0.0812	0.0351
90.5	42,403	52.47%	22.86%	32.82%	0.0877	0.0386
91.5	29,247	52.47%	21.76%	31.92%	0.0943	0.0422
92.5	21,637	52.47%	20.68%	31.02%	0.1011	0.0460
93.5			19.61%	30.12%		
Sum of Squared Differences				[8]	1.0617	0.4140
Up to 1% of Beginning Exposures				[9]	0.0495	0.0142

[1] Age in years using half-year convention
[2] Dollars exposed to retirement at the beginning of each age interval
[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.
[4] The Company's selected Iowa curve to be fitted to the OLT.
[5] My selected Iowa curve to be fitted to the OLT.
[6] = ([4] - [3])^2. This is the squared difference between each point on the Company's curve and the observed survivor curve.
[7] = ([5] - [3])^2. This is the squared difference between each point on my curve and the observed survivor curve.
[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

Account 364 Curve Fitting

[1] Age (Years)	[2] Exposures (Dollars)	[3] Observed Life Table (OLT)	[4] Company R1-45	[5] Cities R1-47	[6] Company SSD	[7] Garrett SSD
0.0	470,372,171	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	439,663,733	99.01%	99.71%	99.73%	0.0000	0.0001
1.5	373,925,458	97.72%	99.13%	99.16%	0.0002	0.0002
2.5	360,469,373	96.57%	98.52%	98.59%	0.0004	0.0004
3.5	344,914,011	95.75%	97.90%	97.99%	0.0005	0.0005
4.5	319,310,642	95.15%	97.26%	97.38%	0.0004	0.0005
5.5	304,432,276	94.75%	96.60%	96.75%	0.0003	0.0004
6.5	294,702,691	94.23%	95.92%	96.11%	0.0003	0.0004
7.5	276,592,443	93.44%	95.22%	95.45%	0.0003	0.0004
8.5	265,211,492	92.74%	94.51%	94.77%	0.0003	0.0004
9.5	254,965,480	91.70%	93.78%	94.08%	0.0004	0.0006
10.5	248,707,385	90.37%	93.04%	93.37%	0.0007	0.0009
11.5	240,181,718	89.78%	92.27%	92.65%	0.0006	0.0008
12.5	225,585,344	89.34%	91.49%	91.91%	0.0005	0.0007
13.5	217,897,159	88.86%	90.69%	91.15%	0.0003	0.0005
14.5	209,792,981	88.18%	89.88%	90.38%	0.0003	0.0005
15.5	197,017,805	87.58%	89.05%	89.60%	0.0002	0.0004
16.5	191,182,721	86.95%	88.20%	88.79%	0.0002	0.0003
17.5	183,356,288	86.23%	87.33%	87.98%	0.0001	0.0003
18.5	177,389,433	85.36%	86.44%	87.14%	0.0001	0.0003
19.5	171,632,194	84.56%	85.53%	86.29%	0.0001	0.0003
20.5	165,772,256	83.83%	84.60%	85.41%	0.0001	0.0003
21.5	159,079,487	82.90%	83.64%	84.52%	0.0001	0.0003
22.5	151,015,924	82.05%	82.67%	83.60%	0.0000	0.0002
23.5	146,311,633	81.23%	81.66%	82.67%	0.0000	0.0002
24.5	140,462,286	80.28%	80.63%	81.71%	0.0000	0.0002
25.5	127,435,042	78.92%	79.58%	80.72%	0.0000	0.0003
26.5	117,619,758	77.34%	78.49%	79.71%	0.0001	0.0006
27.5	109,625,659	76.33%	77.38%	78.68%	0.0001	0.0006
28.5	102,446,086	75.42%	76.23%	77.62%	0.0001	0.0005
29.5	96,434,150	74.27%	75.06%	76.53%	0.0001	0.0005
30.5	90,364,705	73.08%	73.85%	75.41%	0.0001	0.0005
31.5	85,268,609	71.98%	72.62%	74.27%	0.0000	0.0005
32.5	80,795,600	70.85%	71.35%	73.09%	0.0000	0.0005
33.5	76,007,940	69.44%	70.05%	71.89%	0.0000	0.0006
34.5	71,379,431	68.12%	68.71%	70.66%	0.0000	0.0006
35.5	65,074,307	66.92%	67.35%	69.40%	0.0000	0.0006
36.5	58,509,119	66.01%	65.95%	68.11%	0.0000	0.0004
37.5	51,576,044	65.02%	64.52%	66.79%	0.0000	0.0003
38.5	43,990,835	63.93%	63.06%	65.44%	0.0001	0.0002
39.5	37,032,780	63.01%	61.57%	64.06%	0.0002	0.0001
40.5	32,952,683	61.92%	60.06%	62.65%	0.0003	0.0001
41.5	29,542,412	60.59%	58.51%	61.22%	0.0004	0.0000
42.5	26,818,762	59.20%	56.94%	59.76%	0.0005	0.0000
43.5	24,000,778	57.94%	55.34%	58.28%	0.0007	0.0000
44.5	21,314,132	56.81%	53.72%	56.77%	0.0010	0.0000
45.5	18,962,887	55.54%	52.07%	55.24%	0.0012	0.0000
46.5	17,340,957	54.15%	50.41%	53.68%	0.0014	0.0000
47.5	15,130,976	52.43%	48.72%	52.11%	0.0014	0.0000
48.5	13,558,870	50.62%	47.02%	50.51%	0.0013	0.0000
49.5	12,059,990	48.90%	45.31%	48.90%	0.0013	0.0000
50.5	10,483,078	47.23%	43.59%	47.28%	0.0013	0.0000
51.5	9,226,955	45.32%	41.85%	45.64%	0.0012	0.0000
52.5	7,917,063	43.55%	40.11%	43.99%	0.0012	0.0000
53.5	6,928,148	41.88%	38.37%	42.33%	0.0012	0.0000
54.5	5,943,995	40.37%	36.63%	40.67%	0.0014	0.0000
55.5	5,145,893	38.38%	34.89%	39.00%	0.0012	0.0000

Account 364 Curve Fitting

[1] Age (Years)	[2] Exposures (Dollars)	[3] Observed Life Table (OLT)	[4] Company R1-45	[5] Cities R1-47	[6] Company SSD	[7] Garrett SSD
56.5	4,475,453	36.58%	33.16%	37.34%	0.0012	0.0001
57.5	3,892,961	35.24%	31.44%	35.67%	0.0014	0.0000
58.5	3,301,767	33.53%	29.73%	34.01%	0.0014	0.0000
59.5	2,791,952	31.70%	28.04%	32.36%	0.0013	0.0000
60.5	2,358,029	29.99%	26.37%	30.71%	0.0013	0.0001
61.5	2,107,829	29.09%	24.73%	29.08%	0.0019	0.0000
62.5	1,897,945	28.27%	23.11%	27.47%	0.0027	0.0001
63.5	1,641,108	27.48%	21.52%	25.88%	0.0036	0.0003
64.5	1,454,488	25.96%	19.97%	24.31%	0.0036	0.0003
65.5	1,217,260	24.50%	18.45%	22.77%	0.0037	0.0003
66.5	1,035,654	22.03%	16.98%	21.25%	0.0025	0.0001
67.5	893,222	19.88%	15.56%	19.77%	0.0019	0.0000
68.5	709,128	18.18%	14.18%	18.33%	0.0016	0.0000
69.5	486,159	15.64%	12.86%	16.92%	0.0008	0.0002
70.5	375,238	14.09%	11.59%	15.56%	0.0006	0.0002
71.5	276,086	12.28%	10.38%	14.24%	0.0004	0.0004
72.5	161,790	10.69%	9.24%	12.97%	0.0002	0.0005
73.5	82,571	9.22%	8.15%	11.75%	0.0001	0.0006
74.5	25,947	8.31%	7.14%	10.58%	0.0001	0.0005
75.5	17,537	6.94%	6.19%	9.48%	0.0001	0.0006
76.5	12,462	5.01%	5.32%	8.42%	0.0000	0.0012
77.5	8,993	3.63%	4.51%	7.43%	0.0001	0.0014
78.5	6,436	2.68%	3.78%	6.51%	0.0001	0.0015
79.5	4,950	2.08%	3.13%	5.64%	0.0001	0.0013
80.5	3,975	1.83%	2.54%	4.85%	0.0001	0.0009
81.5	3,357	1.59%	2.03%	4.12%	0.0000	0.0006
82.5	3,232	1.53%	1.58%	3.45%	0.0000	0.0004
83.5	3,014	1.43%	1.20%	2.86%	0.0000	0.0002
84.5	2,715	1.28%	0.88%	2.32%	0.0000	0.0001
85.5	2,526	1.20%	0.61%	1.86%	0.0000	0.0000
86.5	2,340	1.11%	0.39%	1.45%	0.0001	0.0000
87.5	1,691	0.80%	0.22%	1.11%	0.0000	0.0000
88.5	384	0.18%	0.09%	0.81%	0.0000	0.0000
89.5			0.02%	0.56%		
Sum of Squared Differences				[8]	0.0554	0.0292
Up to 1% of Beginning Exposures				[9]	0.0245	0.0173

[1] Age in years using half-year convention

[2] Dollars exposed to retirement at the beginning of each age interval

[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.

[4] The Company's selected Iowa curve to be fitted to the OLT.

[5] My selected Iowa curve to be fitted to the OLT.

[6] = ([4] - [3])^2. This is the squared difference between each point on the Company's curve and the observed survivor curve.

[7] = ([5] - [3])^2. This is the squared difference between each point on my curve and the observed survivor curve.

[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

Account 366 Curve Fitting

[1] Age (Years)	[2] Exposures (Dollars)	[3] Observed Life Table (OLT)	[4] Company R3-50	[5] Cities R2-60	[6] Company SSD	[7] Garrett SSD
0.0	61,207,441	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	53,368,732	99.86%	99.98%	99.92%	0.0000	0.0000
1.5	43,505,077	99.56%	99.95%	99.76%	0.0000	0.0000
2.5	16,212,438	99.44%	99.91%	99.58%	0.0000	0.0000
3.5	13,846,001	99.13%	99.86%	99.40%	0.0001	0.0000
4.5	23,464,391	98.52%	99.80%	99.20%	0.0002	0.0000
5.5	21,335,577	98.12%	99.74%	99.00%	0.0003	0.0001
6.5	21,194,896	97.38%	99.66%	98.78%	0.0005	0.0002
7.5	25,830,073	96.57%	99.57%	98.56%	0.0009	0.0004
8.5	24,219,974	96.03%	99.48%	98.32%	0.0012	0.0005
9.5	23,772,553	95.61%	99.36%	98.06%	0.0014	0.0006
10.5	24,157,002	95.07%	99.23%	97.80%	0.0017	0.0007
11.5	25,442,699	94.65%	99.09%	97.52%	0.0020	0.0008
12.5	26,156,618	94.42%	98.92%	97.22%	0.0020	0.0008
13.5	26,376,714	94.10%	98.74%	96.92%	0.0021	0.0008
14.5	24,914,213	93.74%	98.53%	96.59%	0.0023	0.0008
15.5	23,961,215	93.18%	98.30%	96.25%	0.0026	0.0009
16.5	22,364,700	92.36%	98.04%	95.90%	0.0032	0.0013
17.5	20,232,853	91.63%	97.75%	95.52%	0.0037	0.0015
18.5	19,350,767	90.97%	97.43%	95.13%	0.0042	0.0017
19.5	18,633,214	90.46%	97.08%	94.72%	0.0044	0.0018
20.5	18,246,840	90.09%	96.70%	94.29%	0.0044	0.0018
21.5	18,051,064	89.80%	96.28%	93.84%	0.0042	0.0016
22.5	18,861,705	89.00%	95.81%	93.37%	0.0046	0.0019
23.5	19,715,356	88.76%	95.31%	92.88%	0.0043	0.0017
24.5	19,892,344	88.33%	94.76%	92.37%	0.0041	0.0016
25.5	18,793,970	87.89%	94.16%	91.84%	0.0039	0.0016
26.5	16,575,118	87.52%	93.51%	91.28%	0.0036	0.0014
27.5	14,494,066	87.04%	92.81%	90.69%	0.0033	0.0013
28.5	12,267,411	86.83%	92.05%	90.09%	0.0027	0.0011
29.5	11,519,327	86.62%	91.23%	89.45%	0.0021	0.0008
30.5	10,726,241	86.42%	90.35%	88.79%	0.0015	0.0006
31.5	9,542,552	86.20%	89.40%	88.10%	0.0010	0.0004
32.5	9,131,500	85.69%	88.38%	87.39%	0.0007	0.0003
33.5	8,671,702	85.49%	87.29%	86.64%	0.0003	0.0001
34.5	8,404,885	85.28%	86.11%	85.87%	0.0001	0.0000
35.5	7,709,906	85.01%	84.85%	85.06%	0.0000	0.0000
36.5	5,882,535	84.74%	83.51%	84.22%	0.0002	0.0000
37.5	4,312,452	84.44%	82.07%	83.35%	0.0006	0.0001
38.5	3,140,786	84.07%	80.53%	82.45%	0.0013	0.0003
39.5	2,190,852	83.67%	78.89%	81.51%	0.0023	0.0005
40.5	1,837,488	83.20%	77.14%	80.54%	0.0037	0.0007
41.5	1,687,113	82.49%	75.28%	79.53%	0.0052	0.0009
42.5	1,623,797	80.47%	73.30%	78.48%	0.0051	0.0004
43.5	1,502,931	78.66%	71.21%	77.40%	0.0055	0.0002
44.5	1,368,703	75.64%	69.00%	76.28%	0.0044	0.0000
45.5	823,050	70.72%	66.66%	75.12%	0.0016	0.0019
46.5	663,162	58.47%	64.21%	73.92%	0.0033	0.0239
47.5	508,341	50.92%	61.64%	72.69%	0.0115	0.0474
48.5	430,272	42.83%	58.95%	71.41%	0.0260	0.0817
49.5	300,501	34.84%	56.17%	70.10%	0.0455	0.1243
50.5	236,517	27.19%	53.29%	68.74%	0.0681	0.1727
51.5	179,649	21.37%	50.34%	67.35%	0.0839	0.2114
52.5	154,419	19.01%	47.32%	65.92%	0.0801	0.2200
53.5	147,550	15.73%	44.25%	64.45%	0.0814	0.2373
54.5	142,871	13.81%	41.16%	62.94%	0.0748	0.2414
55.5	150,945	12.83%	38.07%	61.39%	0.0637	0.2359
56.5	160,149	12.14%	35.00%	59.81%	0.0523	0.2273

Account 366 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	**Exposures (Dollars)**	**Observed Life Table (OLT)**	**Company R3-50**	**Cities R2-60**	**Company SSD**	**Garrett SSD**
57.5	168,712	11.56%	31.98%	58.20%	0.0417	0.2175
58.5	176,722	11.08%	29.03%	56.55%	0.0322	0.2068
59.5	183,964	10.68%	26.17%	54.87%	0.0240	0.1953
60.5	190,235	10.35%	23.42%	53.17%	0.0171	0.1833
61.5	186,050	10.06%	20.81%	51.43%	0.0116	0.1712
62.5	182,032	9.79%	18.35%	49.68%	0.0073	0.1591
63.5	177,817	9.52%	16.05%	47.90%	0.0043	0.1473
64.5	154,558	8.24%	13.92%	46.11%	0.0032	0.1434
65.5	131,999	7.02%	11.97%	44.30%	0.0025	0.1390
66.5	109,659	5.81%	10.20%	42.49%	0.0019	0.1345
67.5	87,638	4.63%	8.60%	40.66%	0.0016	0.1298
68.5	65,283	3.44%	7.17%	38.84%	0.0014	0.1253
69.5	42,485	2.23%	5.91%	37.02%	0.0014	0.1210
70.5	19,523	1.02%	4.80%	35.21%	0.0014	0.1169
71.5	5,142	0.26%	3.83%	33.41%	0.0013	0.1099
72.5	4,056	0.20%	3.01%	31.62%	0.0008	0.0987
73.5	3,148	0.15%	2.31%	29.86%	0.0005	0.0883
74.5	2,426	0.12%	1.72%	28.12%	0.0003	0.0784
75.5	1,883	0.09%	1.24%	26.42%	0.0001	0.0693
76.5	1,497	0.07%	0.86%	24.75%	0.0001	0.0609
77.5	1,235	0.05%	0.56%	23.12%	0.0000	0.0532
78.5	1,039	0.04%	0.34%	21.53%	0.0000	0.0462
79.5	872	0.03%	0.19%	20.00%	0.0000	0.0399
80.5	720	0.03%	0.09%	18.51%	0.0000	0.0341
81.5	589	0.02%	0.04%	17.07%	0.0000	0.0291
82.5	477	0.02%	0.01%	15.70%	0.0000	0.0246
83.5	385	0.02%	0.00%	14.38%	0.0000	0.0206
84.5	309	0.01%	0.00%	13.12%	0.0000	0.0172
85.5	240	0.01%	0.00%	11.93%	0.0000	0.0142
86.5	176	0.01%	0.00%	10.80%	0.0000	0.0116
87.5	114	0.01%	0.00%	9.73%	0.0000	0.0094
88.5	63	0.00%	0.00%	8.72%	0.0000	0.0076
89.5	24	0.00%	0.00%	7.78%	0.0000	0.0061
90.5			0.00%	6.90%		
Sum of Squared Differences				[8]	0.8489	4.8675
Up to 1% of Beginning Exposures				[9]	0.1070	0.0581

[1] Age in years using half-year convention
[2] Dollars exposed to retirement at the beginning of each age interval
[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.
[4] The Company's selected Iowa curve to be fitted to the OLT.
[5] My selected Iowa curve to be fitted to the OLT.
[6] = ([4] - [3])^2. This is the squared difference between each point on the Company's curve and the observed survivor curve.
[7] = ([5] - [3])^2. This is the squared difference between each point on my curve and the observed survivor curve.
[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

Account 367 Curve Fitting

[1] Age (Years)	[2] Exposures (Dollars)	[3] Observed Life Table (OLT)	[4] Company R2.5-40	[5] Cities R2-46	[6] Company SSD	[7] Garrett SSD
0.0	193,953,356	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	185,989,138	99.88%	99.93%	99.90%	0.0000	0.0000
1.5	167,915,687	99.57%	99.78%	99.68%	0.0000	0.0000
2.5	150,009,675	98.79%	99.61%	99.44%	0.0001	0.0000
3.5	141,566,545	97.85%	99.43%	99.19%	0.0003	0.0002
4.5	142,944,501	97.06%	99.23%	98.92%	0.0005	0.0003
5.5	137,152,746	96.01%	99.00%	98.63%	0.0009	0.0007
6.5	129,096,259	94.87%	98.76%	98.32%	0.0015	0.0012
7.5	140,012,442	94.44%	98.48%	97.99%	0.0016	0.0013
8.5	136,219,933	93.85%	98.18%	97.64%	0.0019	0.0014
9.5	132,312,035	93.23%	97.85%	97.26%	0.0021	0.0016
10.5	129,258,873	92.74%	97.49%	96.85%	0.0023	0.0017
11.5	124,381,165	92.18%	97.09%	96.42%	0.0024	0.0018
12.5	117,260,109	91.60%	96.65%	95.97%	0.0025	0.0019
13.5	111,306,364	90.78%	96.17%	95.48%	0.0029	0.0022
14.5	105,029,311	90.09%	95.64%	94.96%	0.0031	0.0024
15.5	101,989,383	89.39%	95.07%	94.42%	0.0032	0.0025
16.5	98,535,552	88.51%	94.44%	93.83%	0.0035	0.0028
17.5	94,479,744	87.71%	93.76%	93.22%	0.0037	0.0030
18.5	90,602,396	86.76%	93.02%	92.56%	0.0039	0.0034
19.5	87,344,204	86.10%	92.22%	91.87%	0.0037	0.0033
20.5	80,591,215	85.43%	91.35%	91.14%	0.0035	0.0033
21.5	76,827,472	84.75%	90.41%	90.37%	0.0032	0.0032
22.5	70,332,526	83.98%	89.40%	89.55%	0.0029	0.0031
23.5	67,641,158	83.16%	88.30%	88.69%	0.0026	0.0031
24.5	63,606,865	82.13%	87.12%	87.78%	0.0025	0.0032
25.5	57,775,370	81.11%	85.85%	86.82%	0.0022	0.0033
26.5	50,938,731	80.16%	84.49%	85.82%	0.0019	0.0032
27.5	45,045,138	79.15%	83.02%	84.76%	0.0015	0.0031
28.5	40,499,531	78.45%	81.45%	83.64%	0.0009	0.0027
29.5	37,456,416	77.85%	79.77%	82.47%	0.0004	0.0021
30.5	33,292,099	77.17%	77.97%	81.24%	0.0001	0.0017
31.5	29,992,222	76.51%	76.05%	79.95%	0.0000	0.0012
32.5	27,922,619	75.84%	74.00%	78.60%	0.0003	0.0008
33.5	26,267,987	74.85%	71.82%	77.18%	0.0009	0.0005
34.5	25,043,749	73.38%	69.50%	75.71%	0.0015	0.0005
35.5	22,651,768	71.42%	67.05%	74.16%	0.0019	0.0008
36.5	19,137,869	71.06%	64.46%	72.55%	0.0044	0.0002
37.5	14,934,009	70.73%	61.73%	70.87%	0.0081	0.0000
38.5	12,246,957	70.40%	58.88%	69.13%	0.0133	0.0002
39.5	9,020,597	69.97%	55.91%	67.32%	0.0198	0.0007
40.5	7,934,879	69.52%	52.83%	65.44%	0.0279	0.0017
41.5	6,549,229	63.23%	49.66%	63.50%	0.0184	0.0000
42.5	5,597,663	59.25%	46.43%	61.50%	0.0164	0.0005
43.5	3,941,046	50.43%	43.15%	59.43%	0.0053	0.0081
44.5	2,867,572	47.13%	39.86%	57.31%	0.0053	0.0104
45.5	1,879,141	40.72%	36.58%	55.13%	0.0017	0.0208
46.5	1,477,922	32.08%	33.35%	52.91%	0.0002	0.0434
47.5	1,252,372	29.40%	30.19%	50.64%	0.0001	0.0451
48.5	868,074	25.89%	27.14%	48.33%	0.0002	0.0504
49.5	690,202	22.02%	24.21%	45.99%	0.0005	0.0575
50.5	520,253	18.21%	21.45%	43.63%	0.0010	0.0646
51.5	406,670	14.25%	18.85%	41.26%	0.0021	0.0729
52.5	317,597	11.14%	16.44%	38.88%	0.0028	0.0770

Account 367 Curve Fitting

[1] Age (Years)	[2] Exposures (Dollars)	[3] Observed Life Table (OLT)	[4] Company R2.5-40	[5] Cities R2-46	[6] Company SSD	[7] Garrett SSD
53.5	265,063	9.30%	14.23%	36.51%	0.0024	0.0740
54.5	225,272	7.91%	12.21%	34.15%	0.0018	0.0688
55.5	201,812	7.09%	10.38%	31.82%	0.0011	0.0611
56.5	183,815	6.45%	8.75%	29.52%	0.0005	0.0532
57.5	169,413	5.95%	7.29%	27.27%	0.0002	0.0454
58.5	151,060	5.31%	6.01%	25.07%	0.0000	0.0391
59.5	140,914	4.95%	4.90%	22.95%	0.0000	0.0324
60.5	120,865	4.25%	3.94%	20.89%	0.0000	0.0277
61.5	72,267	2.54%	3.12%	18.92%	0.0000	0.0268
62.5	57,865	2.03%	2.44%	17.04%	0.0000	0.0225
63.5	45,129	1.59%	1.87%	15.26%	0.0000	0.0187
64.5	33,392	1.17%	1.41%	13.58%	0.0000	0.0154
65.5	26,137	0.92%	1.04%	12.01%	0.0000	0.0123
66.5	19,623	0.69%	0.74%	10.54%	0.0000	0.0097
67.5	14,604	0.51%	0.51%	9.17%	0.0000	0.0075
68.5	9,818	0.35%	0.33%	7.92%	0.0000	0.0057
69.5	5,512	0.19%	0.19%	6.77%	0.0000	0.0043
70.5	2,187	0.08%	0.10%	5.73%	0.0000	0.0032
71.5	1	0.00%	0.04%	4.78%	0.0000	0.0023
72.5	1	0.00%	0.01%	3.94%	0.0000	0.0016
73.5	1	0.00%	0.00%	3.19%	0.0000	0.0010
74.5	1	0.00%	0.00%	2.53%	0.0000	0.0006
75.5	1	0.00%	0.00%	1.95%	0.0000	0.0004
76.5	1	0.00%	0.00%	1.47%	0.0000	0.0002
77.5	1	0.00%	0.00%	1.06%	0.0000	0.0001
78.5	1	0.00%	0.00%	0.73%	0.0000	0.0001
79.5	1	0.00%	0.00%	0.47%	0.0000	0.0000
80.5	1	0.00%	0.00%	0.28%	0.0000	0.0000
81.5	1	0.00%	0.00%	0.15%	0.0000	0.0000
82.5	1	0.00%	0.00%	0.06%	0.0000	0.0000
83.5			0.00%	0.02%		
Sum of Squared Differences				[8]	0.2000	1.0551
Up to 1% of Beginning Exposures				[9]	0.1853	0.0892

[1] Age in years using half-year convention
[2] Dollars exposed to retirement at the beginning of each age interval
[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.
[4] The Company's selected Iowa curve to be fitted to the OLT.
[5] My selected Iowa curve to be fitted to the OLT.
[6] = ([4] - [3])^2. This is the squared difference between each point on the Company's curve and the observed survivor curve.
[7] = ([5] - [3])^2. This is the squared difference between each point on my curve and the observed survivor curve.
[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

ETI

Electric Division

353.00 Station Equipment

Original Cost Of Utility Plant In Service

And Development Of Composite Remaining Life as of December 31, 2021

Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 70 *Survivor Curve: R1*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1931	6,992.00	70.00	99.88	16.70	1,668.43
1935	1,051.00	70.00	15.01	18.32	275.02
1938	1,015,250.40	70.00	14,503.31	19.57	283,843.18
1941	48,538.23	70.00	693.39	20.86	14,466.37
1943	1,725,092.03	70.00	24,643.72	21.75	535,924.46
1944	513,439.92	70.00	7,334.72	22.20	162,795.81
1945	65,478.35	70.00	935.39	22.65	21,185.26
1947	230,793.28	70.00	3,296.99	23.57	77,705.84
1948	52,313.27	70.00	747.32	24.04	17,962.24
1949	3,143.76	70.00	44.91	24.51	1,100.60
1950	197,803.69	70.00	2,825.71	24.98	70,597.46
1951	49,638.73	70.00	709.11	25.46	18,057.33
1952	1,436,552.23	70.00	20,521.80	25.95	532,568.86
1954	1,689,249.85	70.00	24,131.70	26.94	650,063.46
1955	630,578.95	70.00	9,008.10	27.44	247,169.44
1956	1,972,967.77	70.00	28,184.73	27.94	787,577.69
1957	1,828,061.37	70.00	26,114.68	28.45	743,091.32
1958	788,045.11	70.00	11,257.58	28.97	326,129.61
1959	1,295,307.60	70.00	18,504.05	29.49	545,704.25
1960	1,496,859.24	70.00	21,383.31	30.02	641,842.06
1961	129,945.55	70.00	1,856.33	30.55	56,705.51
1962	1,638,155.54	70.00	23,401.79	31.08	727,379.31
1963	223,706.85	70.00	3,195.75	31.62	101,055.33
1964	598,051.19	70.00	8,543.43	32.17	274,828.23
1965	504,880.46	70.00	7,212.45	32.72	235,977.21
1966	822,112.81	70.00	11,744.25	33.27	390,783.01
1967	1,200,134.65	70.00	17,144.46	33.83	580,069.39

ETI
Electric Division
353.00 Station Equipment

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 70 *Survivor Curve: R1*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1968	1,835,710.85	70.00	26,223.96	34.40	902,109.37
1969	352,394.80	70.00	5,034.12	34.97	176,043.34
1970	1,570,847.62	70.00	22,440.27	35.54	797,620.82
1971	7,424,854.22	70.00	106,067.39	36.13	3,831,723.00
1972	5,143,622.57	70.00	73,478.97	36.71	2,697,363.64
1973	1,370,286.21	70.00	19,575.16	37.30	730,149.34
1974	722,682.67	70.00	10,323.85	37.89	391,205.83
1975	946,182.42	70.00	13,516.64	38.49	520,295.53
1976	2,848,107.96	70.00	40,686.51	39.10	1,590,679.67
1977	892,760.87	70.00	12,753.49	39.70	506,351.52
1978	1,473,079.29	70.00	21,043.60	40.32	848,405.77
1979	6,292,347.18	70.00	89,889.02	40.93	3,679,385.62
1980	2,926,333.55	70.00	41,803.99	41.55	1,737,142.08
1981	13,350,980.14	70.00	190,724.77	42.18	8,044,592.23
1982	11,643,465.97	70.00	166,332.16	42.81	7,120,505.32
1983	6,986,853.76	70.00	99,810.36	43.44	4,335,942.74
1984	9,880,074.39	70.00	141,141.32	44.08	6,221,229.84
1985	6,771,180.44	70.00	96,729.37	44.72	4,325,736.00
1986	19,307,335.54	70.00	275,814.00	45.36	12,511,970.11
1987	521,292.09	70.00	7,446.89	46.01	342,651.24
1988	438,072.81	70.00	6,258.07	46.66	292,023.83
1989	1,033,219.71	70.00	14,760.01	47.32	698,426.79
1990	776,360.60	70.00	11,090.66	47.98	532,090.13
1991	1,987,413.09	70.00	28,391.09	48.64	1,380,844.95
1992	3,344,330.17	70.00	47,775.26	49.30	2,355,384.02
1993	3,289,296.62	70.00	46,989.09	49.97	2,347,920.74
1994	1,353,850.31	70.00	19,340.36	50.64	979,344.51

ETI
Electric Division
353.00 Station Equipment

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 70 *Survivor Curve: R1*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1995	3,058,424.99	70.00	43,690.98	51.31	2,241,730.64
1996	7,156,104.34	70.00	102,228.18	51.98	5,314,182.43
1997	1,698,388.64	70.00	24,262.25	52.66	1,277,648.21
1998	2,607,512.88	70.00	37,249.50	53.34	1,986,821.68
1999	5,188,316.15	70.00	74,117.44	54.02	4,003,834.41
2000	4,586,415.27	70.00	65,519.01	54.70	3,584,080.64
2001	20,378,880.22	70.00	291,121.49	55.39	16,124,901.82
2002	28,252,970.96	70.00	403,606.43	56.08	22,632,650.05
2003	35,445,808.92	70.00	506,359.37	56.77	28,744,065.90
2004	6,312,039.95	70.00	90,170.34	57.46	5,180,987.06
2005	23,939,755.50	70.00	341,990.20	58.15	19,887,182.48
2006	23,890,522.22	70.00	341,286.88	58.85	20,084,294.38
2007	6,307,473.36	70.00	90,105.10	59.55	5,365,508.07
2008	11,625,711.68	70.00	166,078.53	60.25	10,006,136.53
2009	6,471,268.98	70.00	92,445.00	60.95	5,634,816.60
2010	16,251,686.69	70.00	232,162.67	61.66	14,315,263.50
2011	29,168,283.31	70.00	416,682.08	62.37	25,988,368.87
2012	18,144,602.83	70.00	259,203.83	63.08	16,350,948.99
2013	28,290,682.22	70.00	404,145.15	63.80	25,783,467.83
2014	14,228,324.00	70.00	203,258.02	64.52	13,113,217.04
2015	21,470,128.77	70.00	306,710.47	65.24	20,008,863.86
2016	124,532,813.20	70.00	1,779,007.40	65.96	117,344,641.41
2017	63,374,168.45	70.00	905,328.58	66.69	60,375,065.85
2018	32,501,289.44	70.00	464,295.58	67.42	31,302,232.54
2019	61,356,873.24	70.00	876,510.60	68.15	59,735,711.00
2020	160,904,682.90	70.00	2,298,595.96	68.89	158,349,487.72
2021	85,153,927.63	70.00	1,216,462.26	69.63	84,701,516.56

ETI

Electric Division

353.00 Station Equipment

Original Cost Of Utility Plant In Service

And Development Of Composite Remaining Life as of December 31, 2021

Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 70 *Survivor Curve:* R1

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
Total	976,944,136.42	70.00	13,956,087.56	61.43	857,381,290.74

Composite Average Remaining Life ... 61.43 *Years*

ETI

Electric Division

354.00 Towers and Fixtures

Original Cost Of Utility Plant In Service

And Development Of Composite Remaining Life as of December 31, 2021

Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 79 *Survivor Curve: R4*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1953	321,800.00	79.00	4,073.38	17.54	71,431.04
1954	121,357.43	79.00	1,536.16	18.20	27,961.29
1957	48,694.84	79.00	616.38	20.24	12,477.72
1963	56,079.19	79.00	709.86	24.57	17,443.73
1967	13,000.00	79.00	164.56	27.65	4,549.47
1968	1,029,613.26	79.00	13,032.96	28.44	370,630.10
1969	1,886,983.46	79.00	23,885.65	29.24	698,470.70
1970	7,676.49	79.00	97.17	30.05	2,920.24
1971	3,771,394.06	79.00	47,738.74	30.87	1,473,807.19
1972	2,151,626.06	79.00	27,235.53	31.70	863,375.61
1973	54,966.74	79.00	695.78	32.54	22,641.51
1974	1,102,656.44	79.00	13,957.55	33.39	466,014.17
1976	21,682.65	79.00	274.46	35.11	9,634.98
1977	138,082.07	79.00	1,747.86	35.98	62,887.37
1980	5,911.79	79.00	74.83	38.64	2,891.39
1981	7,201,847.01	79.00	91,161.80	39.54	3,604,765.85
1982	3,352,184.26	79.00	42,432.33	40.45	1,716,395.46
1983	219,815.07	79.00	2,782.44	41.36	115,092.97
1984	136,394.18	79.00	1,726.49	42.29	73,006.78
1985	2,493.75	79.00	31.57	43.21	1,364.05
1986	29,743.42	79.00	376.50	44.14	16,620.11
1988	34,978.00	79.00	442.76	46.02	20,377.66
1989	146,258.16	79.00	1,851.35	46.97	86,960.79
1990	3,944.67	79.00	49.93	47.92	2,392.87
1991	3,074.79	79.00	38.92	48.88	1,902.37
1992	1,372.91	79.00	17.38	49.84	866.11
1993	1,248.35	79.00	15.80	50.80	802.75

ETI

Electric Division

354.00 Towers and Fixtures

Original Cost Of Utility Plant In Service

And Development Of Composite Remaining Life as of December 31, 2021

Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 79 *Survivor Curve: R4*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1994	1,601.83	79.00	20.28	51.77	1,049.64
1995	51,743.49	79.00	654.98	52.74	34,541.18
1996	44,632.29	79.00	564.96	53.71	30,344.12
1997	19,659.36	79.00	248.85	54.69	13,608.44
1998	562,905.74	79.00	7,125.33	55.66	396,614.71
1999	3,159.01	79.00	39.99	56.64	2,265.00
2000	7,549.09	79.00	95.56	57.63	5,506.50
2001	263,535.92	79.00	3,335.87	58.61	195,512.05
2002	577,682.66	79.00	7,312.37	59.59	435,778.00
2003	653,449.95	79.00	8,271.44	60.58	501,103.22
2004	114,900.31	79.00	1,454.42	61.57	89,550.22
2005	169,775.66	79.00	2,149.04	62.56	134,446.07
2006	136,585.79	79.00	1,728.92	63.55	109,876.42
2007	85,914.79	79.00	1,087.52	64.54	70,193.61
2008	94,041.17	79.00	1,190.38	65.54	78,015.29
2012	557.22	79.00	7.05	69.52	490.34
2013	226,199.21	79.00	2,863.26	70.52	201,902.90
2014	70,910.78	79.00	897.60	71.51	64,189.27
2015	647,148.07	79.00	8,191.67	72.51	593,977.35
2016	5,889,160.15	79.00	74,545.66	73.51	5,479,683.76
2019	87,719.18	79.00	1,110.36	76.50	84,945.97
2020	58,902.45	79.00	745.59	77.50	57,785.04
2021	106,081.24	79.00	1,342.79	78.50	105,410.34
Total	31,738,694.41	79.00	401,752.02	45.89	18,434,473.75

Composite Average Remaining Life ... 45.89 Years

ETI
Electric Division
355.00 Poles and Fixtures

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 77 Survivor Curve: R1

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1925	4,946.02	77.00	64.23	19.60	1,258.73
1926	539.19	77.00	7.00	20.00	140.08
1928	8,536.65	77.00	110.86	20.83	2,309.61
1929	50,761.49	77.00	659.23	21.25	14,010.38
1937	740.00	77.00	9.61	24.75	237.89
1938	476.69	77.00	6.19	25.21	156.07
1940	277.97	77.00	3.61	26.13	94.34
1941	616.22	77.00	8.00	26.60	212.89
1943	782.21	77.00	10.16	27.55	279.90
1945	692.34	77.00	8.99	28.52	256.45
1946	363,878.53	77.00	4,725.61	29.01	137,100.16
1947	365.78	77.00	4.75	29.51	140.17
1948	87,865.78	77.00	1,141.09	30.01	34,240.46
1949	16,520.09	77.00	214.54	30.51	6,545.78
1952	134,648.71	77.00	1,748.65	32.05	56,042.54
1953	210,840.94	77.00	2,738.14	32.57	89,182.70
1954	2,089,066.82	77.00	27,130.25	33.10	897,909.35
1955	30,002.20	77.00	389.63	33.63	13,102.65
1956	13,083.21	77.00	169.91	34.16	5,804.67
1957	86,540.81	77.00	1,123.89	34.70	39,002.13
1958	57,660.72	77.00	748.83	35.25	26,394.95
1959	116,029.76	77.00	1,506.85	35.80	53,941.26
1960	100,428.23	77.00	1,304.24	36.35	47,409.67
1961	308,652.53	77.00	4,008.40	36.91	147,941.25
1962	170,528.28	77.00	2,214.61	37.47	82,985.69
1963	389,114.61	77.00	5,053.35	38.04	192,222.12
1964	401,617.34	77.00	5,215.72	38.61	201,375.96

ETI
Electric Division
355.00 Poles and Fixtures

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 77 *Survivor Curve: R1*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1965	376,704.89	77.00	4,892.18	39.19	191,708.39
1966	360,291.55	77.00	4,679.03	39.77	186,069.84
1967	427,527.21	77.00	5,552.20	40.35	224,036.55
1968	866,022.61	77.00	11,246.84	40.94	460,456.81
1969	1,804,112.62	77.00	23,429.61	41.53	973,129.30
1970	2,351,104.04	77.00	30,533.27	42.13	1,286,405.63
1971	1,250,127.38	77.00	16,235.13	42.73	693,763.75
1972	1,037,404.81	77.00	13,472.55	43.34	583,895.02
1973	356,204.88	77.00	4,625.95	43.95	203,307.02
1974	335,119.42	77.00	4,352.12	44.56	193,941.46
1975	65,019.65	77.00	844.40	45.18	38,151.13
1976	2,315,197.06	77.00	30,066.95	45.80	1,377,158.75
1977	426,885.41	77.00	5,543.87	46.43	257,391.00
1978	256,751.89	77.00	3,334.38	47.06	156,909.86
1979	103,934.52	77.00	1,349.77	47.69	64,371.97
1980	2,468,692.24	77.00	32,060.36	48.33	1,549,376.88
1981	3,481,698.07	77.00	45,216.04	48.97	2,214,049.25
1982	10,797,512.82	77.00	140,224.90	49.61	6,956,623.46
1983	1,688,689.08	77.00	21,930.63	50.26	1,102,158.77
1984	1,353,497.86	77.00	17,577.58	50.91	894,796.98
1985	418,263.83	77.00	5,431.90	51.56	280,064.44
1986	3,390,601.20	77.00	44,032.98	52.21	2,299,164.42
1987	253,644.50	77.00	3,294.02	52.87	174,163.55
1988	807,862.70	77.00	10,491.53	53.53	561,644.01
1989	371,396.93	77.00	4,823.25	54.20	261,411.32
1990	1,074,882.76	77.00	13,959.26	54.86	765,863.85
1991	869,745.80	77.00	11,295.20	55.53	627,249.75

ETI

Electric Division

355.00 Poles and Fixtures

Original Cost Of Utility Plant In Service

And Development Of Composite Remaining Life as of December 31, 2021

Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 77 *Survivor Curve: R1*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1992	724,058.09	77.00	9,403.18	56.20	528,502.14
1993	1,761,977.75	77.00	22,882.41	56.88	1,301,500.79
1994	760,605.96	77.00	9,877.82	57.55	568,497.47
1995	938,577.05	77.00	12,189.09	58.23	709,787.56
1996	3,388,063.59	77.00	44,000.03	58.91	2,592,083.54
1997	2,009,081.29	77.00	26,091.49	59.59	1,554,852.19
1998	5,239,319.83	77.00	68,041.88	60.28	4,101,252.69
1999	791,241.95	77.00	10,275.68	60.96	626,426.49
2000	2,600,324.40	77.00	33,769.84	61.65	2,081,884.94
2001	4,138,649.96	77.00	53,747.73	62.34	3,350,538.23
2002	4,196,275.60	77.00	54,496.10	63.03	3,434,920.23
2003	5,876,357.36	77.00	76,314.95	63.72	4,863,086.81
2004	11,564,888.99	77.00	150,190.64	64.42	9,675,158.51
2005	61,565,151.80	77.00	799,532.95	65.12	52,063,839.82
2007	3,891,521.12	77.00	50,538.32	66.52	3,361,807.35
2008	10,673,989.56	77.00	138,620.73	67.22	9,318,674.29
2009	5,451,522.88	77.00	70,797.72	67.93	4,809,477.98
2010	8,706,814.76	77.00	113,073.47	68.64	7,761,609.83
2011	13,914,808.64	77.00	180,708.53	69.35	12,532,860.13
2012	3,936,956.63	77.00	51,128.38	70.07	3,582,561.49
2013	13,900,546.12	77.00	180,523.30	70.79	12,778,758.14
2014	12,388,907.24	77.00	160,891.99	71.51	11,504,930.10
2015	12,731,739.17	77.00	165,344.27	72.23	11,942,985.57
2016	42,241,278.06	77.00	548,578.10	72.96	40,022,478.26
2017	14,727,813.20	77.00	191,266.84	73.69	14,093,518.88
2018	13,058,939.99	77.00	169,593.55	74.42	12,620,494.64
2019	52,002,945.18	77.00	675,350.70	75.15	50,753,891.86

ETI
Electric Division
355.00 Poles and Fixtures

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 77 *Survivor Curve: R1*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
2020	167,569,214.60	77.00	2,176,184.17	75.89	165,148,837.00
2021	115,093,861.80	77.00	1,494,698.42	76.63	114,537,622.59
Total	639,799,541.42	77.00	8,308,934.53	70.87	588,850,400.53

Composite Average Remaining Life ... 70.87 Years

ETI
Electric Division
362.00 Station Equipment

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 70 *Survivor Curve: R0.5*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1928	21,637.00	70.00	309.10	19.79	6,117.36
1929	7,609.69	70.00	108.71	20.20	2,196.41
1930	13,156.32	70.00	187.94	20.62	3,875.64
1931	8,047.17	70.00	114.96	21.04	2,418.64
1932	2,941.00	70.00	42.01	21.46	901.63
1935	2,748.00	70.00	39.26	22.74	892.61
1936	48,476.12	70.00	692.51	23.17	16,044.35
1937	4,506.00	70.00	64.37	23.60	1,519.29
1938	443,111.93	70.00	6,330.07	24.04	152,166.27
1939	16,467.90	70.00	235.25	24.48	5,758.47
1940	8,012.00	70.00	114.46	24.92	2,852.22
1941	25,615.81	70.00	365.93	25.36	9,281.91
1943	960,144.68	70.00	13,716.14	26.26	360,239.84
1944	192,540.06	70.00	2,750.53	26.72	73,488.18
1945	62,324.90	70.00	890.34	27.18	24,195.16
1946	160,148.32	70.00	2,287.80	27.64	63,223.85
1947	98,030.65	70.00	1,400.42	28.10	39,350.05
1948	518,197.56	70.00	7,402.71	28.57	211,460.61
1949	97,933.22	70.00	1,399.02	29.03	40,620.39
1950	572,607.74	70.00	8,179.98	29.51	241,376.97
1951	241,920.86	70.00	3,455.96	29.98	103,624.37
1952	533,217.81	70.00	7,617.28	30.46	232,054.33
1953	186,185.70	70.00	2,659.75	30.95	82,310.98
1954	328,021.27	70.00	4,685.95	31.43	147,294.74
1955	91,797.09	70.00	1,311.37	31.92	41,862.26
1956	736,263.90	70.00	10,517.89	32.41	340,937.23
1957	967,938.59	70.00	13,827.48	32.91	455,085.67

ETI

Electric Division

362.00 Station Equipment

Original Cost Of Utility Plant In Service

And Development Of Composite Remaining Life as of December 31, 2021

Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 70 *Survivor Curve: R0.5*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1958	813,121.65	70.00	11,615.84	33.41	388,094.19
1959	789,475.66	70.00	11,278.05	33.91	382,483.85
1960	220,789.58	70.00	3,154.09	34.42	108,563.04
1961	331,380.73	70.00	4,733.94	34.93	165,354.24
1962	210,873.96	70.00	3,012.44	35.44	106,766.88
1963	107,754.15	70.00	1,539.32	35.96	55,350.03
1964	560,812.79	70.00	8,011.49	36.48	292,237.47
1965	242,972.70	70.00	3,470.98	37.00	128,424.00
1966	1,672,394.67	70.00	23,890.98	37.53	896,520.52
1967	1,030,231.50	70.00	14,717.36	38.05	560,053.65
1968	281,842.58	70.00	4,026.26	38.59	155,358.41
1969	619,059.26	70.00	8,843.57	39.12	345,970.09
1970	538,847.22	70.00	7,697.70	39.66	305,280.20
1971	1,646,602.86	70.00	23,522.53	40.20	945,617.05
1972	1,325,078.71	70.00	18,929.40	40.74	771,261.38
1973	1,652,737.67	70.00	23,610.17	41.29	974,903.35
1974	1,267,026.52	70.00	18,100.10	41.84	757,329.59
1975	917,018.41	70.00	13,100.06	42.39	555,367.33
1976	984,319.32	70.00	14,061.49	42.95	603,932.90
1977	367,955.28	70.00	5,256.42	43.51	228,690.98
1978	1,204,850.63	70.00	17,211.88	44.07	758,499.50
1979	1,891,463.20	70.00	27,020.48	44.63	1,205,955.62
1980	4,466,171.38	70.00	63,801.46	45.20	2,883,659.22
1981	5,934,037.54	70.00	84,770.65	45.77	3,879,541.89
1982	4,201,100.07	70.00	60,014.78	46.34	2,780,840.21
1983	1,668,762.15	70.00	23,839.09	46.91	1,118,252.06
1984	1,685,847.79	70.00	24,083.17	47.48	1,143,531.57

ETI
Electric Division
362.00 Station Equipment

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 70 *Survivor Curve: R0.5*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1985	1,619,029.85	70.00	23,128.64	48.06	1,111,564.04
1986	322,270.99	70.00	4,603.80	48.64	223,921.92
1987	214,273.35	70.00	3,061.00	49.22	150,661.39
1988	925,187.85	70.00	13,216.76	49.80	658,219.75
1989	967,598.31	70.00	13,822.62	50.39	696,471.99
1990	974,775.74	70.00	13,925.15	50.97	709,793.64
1991	1,875,549.93	70.00	26,793.15	51.56	1,381,428.13
1992	2,980,199.46	70.00	42,573.62	52.15	2,220,144.01
1993	2,213,206.86	70.00	31,616.75	52.74	1,667,411.39
1994	1,202,063.25	70.00	17,172.06	53.33	915,787.64
1995	3,414,640.94	70.00	48,779.83	53.92	2,630,332.67
1996	4,062,280.75	70.00	58,031.68	54.52	3,163,691.61
1997	2,682,865.29	70.00	38,326.05	55.11	2,112,201.61
1998	3,130,225.87	70.00	44,716.82	55.71	2,491,037.01
1999	4,346,906.60	70.00	62,097.70	56.30	3,496,364.32
2000	3,585,925.84	70.00	51,226.71	56.90	2,914,890.51
2001	7,747,889.47	70.00	110,682.41	57.50	6,364,324.88
2002	13,391,902.90	70.00	191,309.92	58.10	11,115,135.03
2003	10,658,182.39	70.00	152,257.38	58.70	8,937,635.33
2004	4,088,566.16	70.00	58,407.18	59.30	3,463,667.25
2005	9,958,338.72	70.00	142,259.77	59.90	8,521,937.71
2006	5,918,881.83	70.00	84,554.14	60.51	5,116,184.36
2007	1,777,252.10	70.00	25,388.92	61.11	1,551,563.45
2008	3,155,748.03	70.00	45,081.41	61.72	2,782,312.33
2009	1,679,969.96	70.00	23,999.20	62.32	1,495,718.29
2010	5,052,287.24	70.00	72,174.41	62.93	4,542,036.36
2011	6,483,562.92	70.00	92,620.89	63.54	5,885,115.40

ETI
Electric Division
362.00 Station Equipment

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 70 *Survivor Curve:* R0.5

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
2012	7,516,865.21	70.00	107,382.12	64.15	6,888,473.05
2013	4,026,075.04	70.00	57,514.46	64.76	3,724,662.38
2014	11,893,172.95	70.00	169,899.83	65.37	11,106,718.55
2015	17,860,402.41	70.00	255,144.64	65.99	16,835,894.71
2016	21,288,501.58	70.00	304,116.72	66.60	20,254,121.71
2017	16,248,966.68	70.00	232,124.48	67.22	15,602,406.02
2018	11,578,329.17	70.00	165,402.13	67.83	11,219,614.59
2019	36,121,559.37	70.00	516,014.25	68.45	35,321,190.46
2020	22,121,759.50	70.00	316,020.22	69.07	21,827,456.65
2021	28,555,327.45	70.00	407,926.90	69.69	28,428,463.40
Total	324,622,671.23	70.00	4,637,394.57	60.96	282,687,542.20

Composite Average Remaining Life ... 60.96 *Years*

ETI
Electric Division
364.00 Poles, Towers, and Fixtures

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 47 *Survivor Curve: R1*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1946	3,966.86	47.00	84.40	5.99	505.96
1947	48,226.42	47.00	1,026.07	6.31	6,479.26
1948	56,917.36	47.00	1,210.98	6.64	8,035.12
1949	78,112.09	47.00	1,661.92	6.96	11,574.64
1950	50,304.00	47.00	1,070.27	7.30	7,811.86
1951	61,870.75	47.00	1,316.37	7.64	10,054.79
1952	123,215.99	47.00	2,621.56	7.98	20,927.04
1953	105,849.46	47.00	2,252.07	8.33	18,764.72
1954	39,866.03	47.00	848.19	8.69	7,368.25
1955	56,572.64	47.00	1,203.65	9.05	10,887.62
1956	149,770.67	47.00	3,186.54	9.41	29,988.42
1957	91,269.66	47.00	1,941.86	9.78	18,995.19
1958	195,683.26	47.00	4,163.38	10.16	42,293.70
1959	138,401.17	47.00	2,944.64	10.54	31,038.68
1960	156,444.68	47.00	3,328.54	10.93	36,376.69
1961	250,589.44	47.00	5,331.57	11.32	60,367.12
1962	296,186.83	47.00	6,301.71	11.72	73,870.87
1963	357,582.81	47.00	7,607.97	12.13	92,268.16
1964	357,412.83	47.00	7,604.36	12.54	95,357.38
1965	376,008.55	47.00	8,000.00	12.96	103,664.82
1966	482,423.85	47.00	10,264.11	13.38	137,361.53
1967	687,644.11	47.00	14,630.40	13.81	202,100.69
1968	632,539.54	47.00	13,457.99	14.25	191,794.09
1969	917,574.40	47.00	19,522.42	14.70	286,892.02
1970	787,523.94	47.00	16,755.45	15.15	253,785.12
1971	1,112,216.14	47.00	23,663.64	15.60	369,261.74
1972	996,871.68	47.00	21,209.56	16.07	340,824.11

ETI

Electric Division

364.00 Poles, Towers, and Fixtures

Original Cost Of Utility Plant In Service

And Development Of Composite Remaining Life as of December 31, 2021

Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 47 *Survivor Curve: R1*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1973	971,382.27	47.00	20,667.24	16.54	341,859.14
1974	1,577,791.39	47.00	33,569.27	17.02	571,346.22
1975	1,088,028.84	47.00	23,149.03	17.51	405,243.44
1976	1,785,391.69	47.00	37,986.20	18.00	683,712.89
1977	2,125,366.89	47.00	45,219.55	18.50	836,533.27
1978	2,147,779.89	47.00	45,696.42	19.01	868,554.51
1979	1,889,266.38	47.00	40,196.25	19.52	784,755.90
1980	2,552,918.24	47.00	54,316.19	20.05	1,088,809.05
1981	3,230,493.36	47.00	68,732.35	20.58	1,414,223.31
1982	6,154,280.63	47.00	130,939.19	21.11	2,764,553.11
1983	6,515,179.03	47.00	138,617.71	21.66	3,002,200.81
1984	5,852,894.96	47.00	124,526.88	22.21	2,765,791.64
1985	5,512,105.13	47.00	117,276.19	22.77	2,670,381.82
1986	4,787,456.05	47.00	101,858.47	23.34	2,377,068.58
1987	3,004,680.28	47.00	63,927.93	23.91	1,528,674.89
1988	2,998,633.52	47.00	63,799.28	24.49	1,562,705.46
1989	2,916,893.05	47.00	62,060.16	25.08	1,556,641.85
1990	3,528,110.36	47.00	75,064.49	25.68	1,927,539.99
1991	4,327,667.72	47.00	92,075.96	26.28	2,419,843.63
1992	4,149,171.52	47.00	88,278.26	26.89	2,373,812.99
1993	5,600,162.94	47.00	119,149.72	27.51	3,277,310.23
1994	6,024,129.09	47.00	128,170.07	28.13	3,605,145.85
1995	6,648,274.89	47.00	141,449.47	28.76	4,067,694.30
1996	9,909,286.98	47.00	210,831.15	29.39	6,196,635.48
1997	3,452,532.35	47.00	73,456.48	30.03	2,205,997.04
1998	2,664,059.92	47.00	56,680.85	30.68	1,738,777.84
1999	6,111,537.90	47.00	130,029.79	31.33	4,073,451.36

ETI
Electric Division
364.00 Poles, Towers, and Fixtures

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 47 *Survivor Curve: R1*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
2000	4,539,435.66	47.00	96,581.56	31.98	3,088,907.84
2001	4,133,313.67	47.00	87,940.86	32.64	2,870,590.65
2002	3,884,719.99	47.00	82,651.76	33.31	2,752,912.05
2003	3,911,952.03	47.00	83,231.15	33.98	2,827,846.96
2004	6,070,662.51	47.00	129,160.12	34.65	4,475,151.76
2005	4,204,417.67	47.00	89,453.68	35.32	3,159,855.40
2006	11,197,230.30	47.00	238,233.58	36.00	8,577,157.90
2007	6,334,263.04	47.00	134,768.52	36.69	4,944,061.64
2008	6,428,120.06	47.00	136,765.43	37.37	5,111,083.25
2009	13,403,126.45	47.00	285,166.48	38.06	10,853,407.37
2010	6,987,718.79	47.00	148,671.52	38.75	5,761,416.82
2011	7,824,238.62	47.00	166,469.42	39.45	6,566,935.67
2012	7,313,757.05	47.00	155,608.35	40.15	6,247,295.19
2013	9,479,181.09	47.00	201,680.16	40.85	8,238,755.08
2014	10,919,366.01	47.00	232,321.71	41.56	9,654,723.96
2015	8,500,668.48	47.00	180,861.22	42.27	7,644,752.28
2016	13,704,421.38	47.00	291,576.87	42.98	12,533,106.29
2017	12,392,963.99	47.00	263,674.15	43.70	11,523,488.69
2018	12,644,096.48	47.00	269,017.27	44.43	11,952,047.98
2019	18,361,763.45	47.00	390,667.02	45.16	17,641,556.92
2020	59,175,150.52	47.00	1,259,017.42	45.89	57,777,896.96
2021	29,884,022.60	47.00	635,815.96	46.63	29,648,020.48
Total	377,431,110.27	47.00	8,030,268.41	36.54	293,428,885.32

Composite Average Remaining Life ... 36.54 Years

ETI

Electric Division

366.00 Underground Conduit

Original Cost Of Utility Plant In Service

And Development Of Composite Remaining Life as of December 31, 2021

Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 60 *Survivor Curve:* R2

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1967	5,576.81	60.00	92.95	19.37	1,799.92
1969	6,831.90	60.00	113.86	20.45	2,328.07
1970	7,857.44	60.00	130.96	21.00	2,750.04
1972	51,849.36	60.00	864.15	22.14	19,129.21
1974	72,149.64	60.00	1,202.49	23.31	28,035.11
1975	20,677.01	60.00	344.62	23.92	8,241.92
1976	460,369.73	60.00	7,672.81	24.53	188,184.73
1977	80,420.98	60.00	1,340.35	25.15	33,705.56
1978	88,450.68	60.00	1,474.17	25.77	37,995.01
1979	26,761.54	60.00	446.02	26.41	11,780.70
1980	139,557.44	60.00	2,325.95	27.06	62,939.52
1981	346,151.22	60.00	5,769.17	27.71	159,890.79
1982	940,489.00	60.00	15,674.78	28.38	444,800.86
1983	1,158,822.44	60.00	19,313.66	29.05	561,042.52
1984	1,555,908.82	60.00	25,931.75	29.73	770,863.82
1985	1,810,988.42	60.00	30,183.06	30.42	918,031.12
1986	721,983.23	60.00	12,033.02	31.11	374,366.22
1987	296,864.01	60.00	4,947.72	31.81	157,411.52
1988	483,118.54	60.00	8,051.96	32.52	261,888.58
1989	453,254.61	60.00	7,554.22	33.24	251,131.42
1990	1,208,647.65	60.00	20,144.08	33.97	684,249.59
1991	1,235,351.61	60.00	20,589.14	34.70	714,482.23
1992	798,362.83	60.00	13,306.01	35.44	471,600.53
1993	2,279,105.27	60.00	37,984.99	36.19	1,374,677.44
1994	2,011,404.97	60.00	33,523.33	36.94	1,238,461.70
1995	2,276,633.81	60.00	37,943.80	37.70	1,430,663.13
1996	1,346,430.09	60.00	22,440.44	38.47	863,302.41

ETI
Electric Division
366.00 Underground Conduit

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 60 *Survivor Curve: R2*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1997	678,903.77	60.00	11,315.03	39.25	444,070.58
1998	266,421.32	60.00	4,440.34	40.03	177,735.25
1999	603,335.44	60.00	10,055.57	40.81	410,414.26
2000	1,982,086.01	60.00	33,034.68	41.61	1,374,483.96
2001	1,034,258.51	60.00	17,237.60	42.41	731,002.28
2002	906,979.27	60.00	15,116.28	43.21	653,200.40
2003	1,220,322.62	60.00	20,338.66	44.02	895,394.92
2004	2,412,497.13	60.00	40,208.18	44.84	1,803,029.95
2005	2,595,015.42	60.00	43,250.15	45.66	1,974,991.92
2006	2,049,805.97	60.00	34,163.35	46.49	1,588,401.07
2007	2,154,983.53	60.00	35,916.30	47.33	1,699,898.56
2008	1,975,552.16	60.00	32,925.79	48.17	1,585,981.21
2009	1,210,737.35	60.00	20,178.90	49.01	989,063.51
2010	864,855.96	60.00	14,414.23	49.87	718,780.46
2011	746,670.08	60.00	12,444.47	50.72	631,211.47
2012	721,668.26	60.00	12,027.77	51.58	620,426.97
2013	1,522,063.41	60.00	25,367.66	52.45	1,330,520.49
2014	734,068.69	60.00	12,234.45	53.32	652,334.86
2015	1,310,016.33	60.00	21,833.55	54.20	1,183,293.97
2016	2,722,290.58	60.00	45,371.40	55.08	2,498,926.92
2017	2,927,873.15	60.00	48,797.76	55.96	2,730,844.59
2018	3,826,586.90	60.00	63,776.29	56.85	3,625,794.33
2019	6,832,384.00	60.00	113,872.78	57.75	6,575,729.51
2020	10,105,167.79	60.00	168,419.04	58.64	9,876,739.21
2021	8,419,431.93	60.00	140,323.51	59.55	8,355,856.34

ETI

Electric Division

366.00 Underground Conduit

Original Cost Of Utility Plant In Service

And Development Of Composite Remaining Life as of December 31, 2021

Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 60 *Survivor Curve:* R2

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
Total	79,707,994.63	60.00	1,328,463.23	48.33	64,201,880.65

Composite Average Remaining Life ... 48.33 Years

ETI
Electric Division
367.00 Underground Conductors and Devices

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 46 *Survivor Curve: R2*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1967	81.71	46.00	1.78	9.14	16.23
1968	87.18	46.00	1.90	9.52	18.04
1969	378.68	46.00	8.23	9.91	81.54
1970	263.05	46.00	5.72	10.31	58.93
1971	50,699.76	46.00	1,102.16	10.72	11,812.78
1972	47,931.87	46.00	1,041.99	11.14	11,609.96
1973	234,440.87	46.00	5,096.52	11.58	59,015.36
1974	101,907.77	46.00	2,215.38	12.03	26,649.27
1975	1,922.91	46.00	41.80	12.49	522.18
1976	597,998.18	46.00	12,999.91	12.97	168,569.23
1977	813,981.09	46.00	17,695.17	13.46	238,090.60
1978	822,149.94	46.00	17,872.75	13.96	249,435.08
1979	537,397.29	46.00	11,682.50	14.47	169,067.11
1980	674,395.05	46.00	14,660.70	15.00	219,896.15
1981	1,025,917.03	46.00	22,302.45	15.54	346,556.40
1982	3,147,565.71	46.00	68,425.05	16.09	1,101,059.38
1983	2,612,223.41	46.00	56,787.22	16.66	945,875.19
1984	4,109,920.42	46.00	89,345.72	17.23	1,539,768.50
1985	3,386,891.36	46.00	73,627.76	17.83	1,312,455.33
1986	1,702,911.65	46.00	37,019.66	18.43	682,181.71
1987	693,976.23	46.00	15,086.38	19.04	287,264.83
1988	1,253,905.51	46.00	27,258.70	19.67	536,089.15
1989	1,775,364.10	46.00	38,594.71	20.30	783,606.76
1990	2,977,551.74	46.00	64,729.11	20.95	1,356,280.31
1991	3,788,263.37	46.00	82,353.20	21.61	1,779,864.51
1992	2,692,103.89	46.00	58,523.75	22.28	1,304,067.09
1993	4,104,698.65	46.00	89,232.20	22.96	2,049,069.69

ETI
Electric Division
367.00 Underground Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 46 *Survivor Curve:* R2

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
1994	5,189,014.24	46.00	112,804.18	23.65	2,668,303.27
1995	6,103,126.78	46.00	132,676.10	24.36	3,231,372.92
1996	4,930,539.66	46.00	107,185.19	25.07	2,686,923.56
1997	3,070,471.31	46.00	66,749.09	25.79	1,721,401.49
1998	1,876,091.60	46.00	40,784.43	26.52	1,081,590.67
1999	5,667,337.99	46.00	123,202.47	27.26	3,358,442.52
2000	3,017,929.86	46.00	65,606.89	28.01	1,837,548.91
2001	6,005,249.19	46.00	130,548.34	28.77	3,755,395.68
2002	2,497,195.23	46.00	54,286.62	29.53	1,603,330.67
2003	2,784,381.53	46.00	60,529.78	30.31	1,834,660.96
2004	3,081,716.68	46.00	66,993.56	31.09	2,083,092.34
2005	2,358,237.74	46.00	51,265.82	31.89	1,634,660.86
2006	2,110,142.96	46.00	45,872.48	32.69	1,499,390.28
2007	5,323,501.29	46.00	115,727.80	33.49	3,876,186.58
2008	4,783,170.08	46.00	103,981.52	34.31	3,567,724.31
2009	6,263,365.67	46.00	136,159.54	35.13	4,783,914.58
2010	4,017,504.79	46.00	87,336.69	35.97	3,141,104.27
2011	2,356,926.85	46.00	51,237.32	36.80	1,885,712.05
2012	2,963,247.27	46.00	64,418.14	37.65	2,425,249.51
2013	2,870,990.65	46.00	62,412.57	38.50	2,402,978.00
2014	3,125,173.76	46.00	67,938.27	39.36	2,674,078.67
2015	6,402,995.66	46.00	139,194.96	40.23	5,599,236.54
2016	4,194,168.45	46.00	91,177.19	41.10	3,747,168.05
2017	7,382,454.53	46.00	160,487.46	41.98	6,736,562.95
2018	8,421,389.98	46.00	183,072.92	42.86	7,846,440.48
2019	14,009,823.74	46.00	304,560.09	43.75	13,324,639.88
2020	19,212,666.82	46.00	417,664.89	44.65	18,647,168.26

ETI

Electric Division

367.00 Underground Conductors and Devices

Original Cost Of Utility Plant In Service

And Development Of Composite Remaining Life as of December 31, 2021

Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 46 *Survivor Curve: R2*

Year (1)	Original Cost (2)	Avg. Service Life (3)	Avg. Annual Accrual (4)	Avg. Remaining Life (5)	Future Annual Accruals (6)
2021	13,769,622.09	46.00	299,338.33	45.55	13,634,124.44
Total	190,943,364.82	46.00	4,150,925.02	33.36	138,467,384.01

Composite Average Remaining Life ... 33.36 Years