

Chapter Ret 4

ACTUARIAL TABLES

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Ret 4.01 Tables and procedures. The tables and procedures contained in this Chapter, submitted by the actuary, are approved for use in making actuarial computations.

Ret 4.011 Employe life annuity. The following basic table, herein termed "Table E-Life-Employe Life Annuity", shall be used to compute the annuity authorized by section 66.906 (2), Wis. Stats., and shall determine the monthly annuity provided by each \$1,000 of available accumulated credits as provided below:

Table E-LIFE  
EMPLOYE LIFE ANNUITY

Age at Retirement	Employer Credit Factors		Employe Credit Factors	
	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment
55	\$ 5.742	\$ .0139	\$ 5.518	\$ .0120
56	5.888	.0146	5.646	.0128
57	6.044	.0156	5.784	.0138
58	6.210	.0166	5.923	.0144
59	6.387	.0177	6.082	.0154
60	6.577	.0190	6.246	.0164
61	6.780	.0203	6.422	.0176
62	7.000	.0220	6.608	.0186
63	7.234	.0234	6.806	.0198
64	7.487	.0253	7.016	.0210
65	7.758	.0271	7.238	.0222
66	8.048	.0290	7.476	.0238
67	8.357	.0309	7.732	.0256
68	8.685	.0328	8.005	.0273
69	9.036	.0351	8.292	.0287
70	9.413	.0377	8.596	.0304
71	9.820	.0407	8.924	.0328
72	10.256	.0436	9.280	.0356
73	10.725	.0469	9.665	.0385
74	11.228	.0503	10.068	.0403
75	11.767	.0539	10.489	.0421
76	12.346	.0579	10.942	.0453
77	12.970	.0624	11.426	.0484
78	13.636	.0666	11.948	.0522
79	14.342	.0706	12.512	.0564
80	15.085	.0743	13.085	.0573
81	15.861	.0776	13.656	.0571
82	16.669	.0808	14.248	.0592
83	17.510	.0841	14.872	.0624
84	18.386	.0876	15.534	.0662
85	19.300	.0914	16.241	.0707

The actuarial basis for Table E-Life is the 1951 Group Annuity mortality table (males) rated down one-half year of age with interest at  $3\frac{1}{2}\%$  per annum. Values at ages not given in Table E-Life shall be computed on the same actuarial basis. The yearly adjustment provides an additional rate-down of .1 year of age for each year of time.

(1) The amount of monthly annuity provided by prior service credits and municipality credits shall be computed by application of the employer credit factors.

(2) The amount of monthly annuity provided by normal credits and additional credits shall be computed by application of the employe credit factors.

(3) An annuity commencing in 1958 shall be computed by application of the respective basic factors. In the case of an annuity commencing after 1958 the respective basic factors shall be reduced by the amount of the yearly adjustment multiplied by the difference between the year of commencement and 1958.

(4) If the accumulated normal and additional credits shall exceed 60% of all accumulated credits available to provide the annuity, the employe credit factor after being adjusted pursuant to (3) shall be reduced by a percentage equal to (i) plus (ii) as follows:

(i) .01% for each year by which the age of the participant exceeds 43 years; plus

(ii) .005% for each full year by which the age of the participant exceeds 65 years

multiplied by the difference between (iii) one-hundred times the ratio accumulated additional and normal credits shall bear to total available credits, and (iv) 50.

**History:** 1-2-56; am. Register, November, 1957, No. 23, eff. 12-31-57.

Ret 4.012 Employee 180 payment annuity. The following basic table, herein termed "Table E-180—Employee 180 Month Certain", shall be used to compute the annuity authorized by section 66.906 (3) (a) to (e) inclusive, Wis. Stats., and shall determine the monthly annuity provided by each \$1,000 of available accumulated credits:

**Table E-180**  
**EMPLOYEE 180 MONTH CERTAIN**

Age at Retirement	Employer Credit Factors		Employee Credit Factors	
	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment
55	\$ 5.122	\$ .0088	\$ 5.330	\$ .0091
56	5.199	.0077	5.423	.0093
57	5.266	.0067	5.518	.0095
58	5.332	.0066	5.614	.0096
59	5.398	.0066	5.711	.0097
60	5.466	.0068	5.809	.0098
61	5.532	.0066	5.907	.0098
62	5.596	.0064	6.005	.0098
63	5.659	.0063	6.102	.0097
64	5.720	.0061	6.196	.0094
65	5.776	.0056	6.288	.0092
66	5.830	.0054	6.378	.0090
67	5.878	.0048	6.462	.0084
68	5.921	.0043	6.542	.0080
69	5.959	.0038	6.616	.0074
70	5.990	.0031	6.684	.0068
71	6.030	.0040	6.746	.0062
72	6.081	.0051	6.802	.0056
73	6.126	.0045	6.852	.0050
74	6.166	.0040	6.897	.0045
75	6.201	.0035	6.936	.0039
76	6.231	.0030	6.970	.0034
77	6.257	.0026	6.999	.0029
78	6.279	.0022	7.023	.0024
79	6.297	.0018	7.044	.0021
80	6.312	.0015	7.060	.0016
81	6.324	.0012	7.074	.0014
82	6.334	.0010	7.086	.0012
83	6.342	.0008	7.095	.0009
84	6.349	.0007	7.102	.0007
85	6.354	.0005	7.108	.0006

Table E-180 may be extended as required to other ages on the same actuarial basis as the values published herein.

Subsections (1), (2) and (3) under Ret 4.011 shall be applicable to Table E-180.

**History:** 1-2-56; am. Register, November, 1957, No. 23, eff. 12-31-57.

Ret 4.013 Employee 120 payment annuity. The following basic table, herein termed "Table E-120—Employee 120 Month Certain", shall be used to compute the annuity authorized by section 66.906 (3) (f), Wis. Stats., and shall determine the monthly annuity provided by each \$1,000 of available accumulated credits:

**Table E-120**  
**EMPLOYEE 120 MONTH CERTAIN**

Age at Retirement	Employer Credits		Employee Credits	
	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment
55	\$5.398	\$.0115	\$5.553	\$.0118
56	5.503	.0105	5.674	.0121
57	5.602	.0099	5.801	.0127
58	5.704	.0102	5.934	.0133
59	5.812	.0108	6.072	.0138
60	5.924	.0112	6.215	.0143
61	6.039	.0115	6.364	.0149
62	6.158	.0119	6.519	.0155
63	6.282	.0124	6.679	.0160
64	6.408	.0126	6.844	.0165
65	6.536	.0128	7.012	.0168
66	6.666	.0130	7.183	.0171
67	6.796	.0130	7.356	.0173
68	6.926	.0130	7.530	.0174
69	7.054	.0128	7.704	.0174
70	7.180	.0126	7.878	.0174
71	7.319	.0139	8.049	.0171
72	7.471	.0152	8.216	.0167
73	7.618	.0147	8.378	.0162
74	7.759	.0141	8.534	.0156
75	7.892	.0133	8.680	.0146
76	8.018	.0126	8.818	.0138
77	8.135	.0117	8.946	.0128
78	8.242	.0107	9.064	.0118
79	8.340	.0098	9.171	.0107
80	8.428	.0088	9.268	.0097
81	8.506	.0078	9.355	.0087
82	8.576	.0070	9.432	.0077
83	8.638	.0062	9.500	.0068
84	8.692	.0054	9.560	.0060
85	8.740	.0048	9.612	.0052

Table E-120 may be extended as required to other ages on the same actuarial basis as the values published herein.

Subsections (1), (2) and (3) under Ret 4.011 shall be applicable to Table E-120.

**History:** 1-2-56; am. Register, November, 1957, No. 23, eff. 12-31-57.

Ret 4.014 Employee joint annuity. The following basic table, herein termed "Table E-Joint—Joint Survivorship", shall be used to compute the annuity authorized by section 66.906 (3a), Wis. Stats., and shall determine the monthly annuity provided by each \$1,000 of available accumulated credits:

**Table E-JOINT  
JOINT SURVIVORSHIP**

Difference in Age of Beneficiary	Age of Employee									
	55		56		57		58		59	
	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment
15 less -----	\$4.162	\$.0045	\$4.210	\$.0048	\$4.261	\$.0051	\$4.317	\$.0056	\$4.376	\$.0059
14 -----	4.196	.0047	4.246	.0050	4.299	.0053	4.358	.0059	4.420	.0062
13 -----	4.231	.0049	4.283	.0052	4.339	.0056	4.400	.0061	4.466	.0066
12 -----	4.267	.0051	4.322	.0055	4.380	.0058	4.444	.0064	4.512	.0068
11 -----	4.305	.0053	4.361	.0056	4.423	.0062	4.489	.0066	4.560	.0071
10 -----	4.344	.0055	4.403	.0059	4.467	.0064	4.536	.0069	4.610	.0074
9 -----	4.385	.0057	4.446	.0061	4.513	.0067	4.585	.0072	4.661	.0076
8 -----	4.428	.0059	4.492	.0064	4.561	.0069	4.635	.0074	4.715	.0080
7 -----	4.471	.0062	4.538	.0067	4.610	.0072	4.687	.0077	4.769	.0082
6 -----	4.515	.0065	4.585	.0070	4.659	.0074	4.738	.0079	4.824	.0086
5 -----	4.558	.0068	4.630	.0072	4.707	.0077	4.789	.0082	4.877	.0088
4 -----	4.600	.0070	4.674	.0074	4.754	.0080	4.839	.0085	4.929	.0090
3 -----	4.641	.0072	4.718	.0077	4.800	.0082	4.888	.0088	4.981	.0093
2 -----	4.683	.0074	4.762	.0079	4.846	.0084	4.936	.0090	5.032	.0096
1 -----	4.724	.0076	4.805	.0081	4.892	.0087	4.985	.0093	5.083	.0098
0 -----	4.765	.0079	4.849	.0084	4.938	.0089	5.034	.0096	5.135	.0101
1 more -----	4.807	.0081	4.893	.0086	4.985	.0092	5.083	.0098	5.187	.0104
2 -----	4.849	.0083	4.937	.0088	5.031	.0094	5.133	.0102	5.240	.0107
3 -----	4.890	.0085	4.982	.0092	5.078	.0096	5.182	.0104	5.293	.0111
4 -----	4.932	.0087	5.025	.0093	5.125	.0100	5.231	.0106	5.345	.0114
5 -----	4.972	.0090	5.068	.0096	5.170	.0102	5.279	.0109	5.396	.0117
6 -----	5.011	.0093	5.110	.0099	5.215	.0105	5.326	.0111	5.446	.0120
7 -----	5.050	.0095	5.151	.0101	5.258	.0107	5.373	.0115	5.496	.0123
8 -----	5.088	.0098	5.192	.0104	5.302	.0110	5.419	.0117	5.545	.0126
9 -----	5.125	.0101	5.232	.0107	5.344	.0112	5.465	.0121	5.593	.0128
10 -----	5.162	.0105	5.271	.0109	5.386	.0115	5.510	.0124	5.641	.0131

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**Table E-JOINT**  
**JOINT SURVIVORSHIP (Continued)**

Difference in Age of Beneficiary	Age of Employee									
	60		61		62		63		64	
	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment
15 less-----	\$4.441	\$.0065	\$4.510	\$.0069	\$4.583	\$.0073	\$4.662	\$.0079	\$4.745	\$.0083
14-----	4.488	.0068	4.560	.0072	4.636	.0076	4.718	.0082	4.804	.0086
13-----	4.536	.0070	4.611	.0075	4.690	.0079	4.775	.0085	4.865	.0090
12-----	4.586	.0074	4.664	.0078	4.746	.0082	4.834	.0088	4.927	.0093
11-----	4.637	.0077	4.717	.0080	4.803	.0086	4.895	.0092	4.991	.0096
10-----	4.689	.0079	4.773	.0084	4.862	.0089	4.957	.0095	5.057	.0100
9-----	4.743	.0082	4.830	.0087	4.923	.0093	5.021	.0098	5.125	.0104
8-----	4.799	.0084	4.890	.0091	4.985	.0095	5.087	.0102	5.194	.0107
7-----	4.857	.0088	4.950	.0093	5.049	.0099	5.155	.0106	5.265	.0110
6-----	4.914	.0090	5.011	.0097	5.113	.0102	5.222	.0109	5.337	.0115
5-----	4.970	.0093	5.070	.0100	5.176	.0106	5.289	.0113	5.407	.0118
4-----	5.025	.0096	5.128	.0103	5.238	.0110	5.354	.0116	5.476	.0122
3-----	5.080	.0099	5.186	.0106	5.298	.0112	5.419	.0121	5.545	.0126
2-----	5.134	.0102	5.243	.0109	5.359	.0116	5.483	.0124	5.614	.0131
1-----	5.188	.0105	5.301	.0113	5.420	.0119	5.548	.0128	5.683	.0135
0-----	5.243	.0108	5.359	.0116	5.482	.0123	5.614	.0132	5.754	.0140
1 more-----	5.299	.0112	5.418	.0119	5.545	.0127	5.681	.0136	5.827	.0146
2-----	5.355	.0115	5.478	.0123	5.610	.0132	5.750	.0140	5.901	.0151
3-----	5.411	.0118	5.538	.0127	5.674	.0136	5.820	.0146	5.975	.0155
4-----	5.466	.0121	5.598	.0132	5.738	.0140	5.888	.0150	6.049	.0161
5-----	5.521	.0125	5.656	.0135	5.800	.0144	5.954	.0154	6.120	.0166
6-----	5.575	.0129	5.713	.0138	5.861	.0148	6.019	.0158	6.189	.0170
7-----	5.628	.0132	5.769	.0141	5.920	.0151	6.082	.0162	6.256	.0174
8-----	5.680	.0135	5.824	.0144	5.978	.0154	6.143	.0165	6.322	.0179
9-----	5.731	.0138	5.879	.0148	6.035	.0156	6.204	.0169	6.386	.0182
10-----	5.782	.0141	5.932	.0150	6.091	.0159	6.263	.0172	6.449	.0186

**Table E-JOINT  
JOINT SURVIVORSHIP (Continued)**

Difference in Age of Beneficiary	Age of Employee									
	65		66		67		68		69	
	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment
15 less-----	\$4.833	\$.0088	\$4.924	\$.0091	\$5.018	\$.0094	\$5.115	\$.0097	\$5.217	\$.0102
14-----	4.895	.0091	4.990	.0095	5.087	.0097	5.188	.0101	5.294	.0106
13-----	4.959	.0094	5.058	.0099	5.159	.0101	5.263	.0104	5.373	.0110
12-----	5.025	.0098	5.127	.0102	5.232	.0105	5.341	.0109	5.456	.0115
11-----	5.093	.0102	5.199	.0106	5.307	.0108	5.421	.0114	5.540	.0119
10-----	5.162	.0105	5.272	.0110	5.385	.0113	5.503	.0118	5.628	.0125
9-----	5.233	.0108	5.348	.0115	5.465	.0117	5.588	.0123	5.719	.0131
8-----	5.307	.0113	5.426	.0119	5.548	.0122	5.676	.0128	5.812	.0136
7-----	5.383	.0118	5.505	.0122	5.633	.0123	5.766	.0133	5.908	.0142
6-----	5.458	.0121	5.585	.0127	5.719	.0134	5.858	.0139	6.006	.0148
5-----	5.533	.0126	5.665	.0132	5.803	.0138	5.949	.0146	6.104	.0155
4-----	5.607	.0131	5.744	.0137	5.888	.0144	6.040	.0152	6.203	.0163
3-----	5.680	.0135	5.823	.0143	5.973	.0150	6.132	.0159	6.303	.0171
2-----	5.754	.0140	5.902	.0148	6.059	.0157	6.225	.0166	6.405	.0180
1-----	5.828	.0145	5.983	.0155	6.145	.0162	6.319	.0174	6.507	.0188
0-----	5.904	.0150	6.064	.0160	6.233	.0169	6.414	.0181	6.610	.0196
1 more-----	5.982	.0155	6.148	.0166	6.323	.0175	6.511	.0188	6.714	.0203
2-----	6.061	.0160	6.233	.0172	6.415	.0182	6.610	.0195	6.821	.0211
3-----	6.142	.0167	6.320	.0178	6.508	.0188	6.710	.0202	6.928	.0218
4-----	6.221	.0172	6.405	.0184	6.600	.0195	6.808	.0208	7.032	.0224
5-----	6.297	.0177	6.487	.0190	6.688	.0201	6.903	.0215	7.133	.0230
6-----	6.371	.0182	6.567	.0196	6.774	.0207	6.994	.0220	7.231	.0237
7-----	6.444	.0188	6.644	.0200	6.857	.0213	7.083	.0226	7.325	.0242
8-----	6.514	.0192	6.720	.0206	6.938	.0218	7.170	.0232	7.417	.0247
9-----	6.583	.0197	6.795	.0212	7.018	.0223	7.254	.0236	7.507	.0253
10-----	6.651	.0202	6.867	.0216	7.095	.0228	7.336	.0241	7.594	.0258

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**Table E-JOINT  
JOINT SURVIVORSHIP (Continued)**

Difference in Age of Beneficiary	Age of Employee									
	70		71		72		73		74	
	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment
15 less-----	\$5.325	\$.0108	\$5.455	\$.0130	\$5.592	\$.0137	\$5.738	\$.0146	\$5.893	\$.0155
14-----	5.406	.0112	5.541	.0135	5.684	.0143	5.836	.0152	5.998	.0162
13-----	5.490	.0117	5.630	.0140	5.780	.0150	5.939	.0159	6.108	.0169
12-----	5.577	.0121	5.723	.0146	5.879	.0156	6.046	.0167	6.223	.0177
11-----	5.668	.0128	5.819	.0151	5.984	.0165	6.158	.0174	6.344	.0186
10-----	5.761	.0133	5.920	.0159	6.092	.0172	6.275	.0183	6.470	.0195
9-----	5.858	.0139	6.025	.0167	6.205	.0180	6.398	.0193	6.602	.0204
8-----	5.958	.0146	6.134	.0176	6.323	.0189	6.526	.0203	6.742	.0216
7-----	6.062	.0154	6.246	.0184	6.445	.0199	6.659	.0214	6.885	.0226
6-----	6.167	.0161	6.361	.0194	6.569	.0208	6.798	.0224	7.031	.0238
5-----	6.273	.0169	6.476	.0203	6.694	.0218	6.928	.0234	7.176	.0248
4-----	6.380	.0177	6.593	.0213	6.820	.0227	7.063	.0243	7.321	.0258
3-----	6.490	.0187	6.711	.0221	6.948	.0237	7.200	.0252	7.468	.0268
2-----	6.601	.0196	6.832	.0231	7.077	.0245	7.338	.0261	7.616	.0278
1-----	6.712	.0205	6.952	.0240	7.207	.0255	7.477	.0270	7.764	.0287
0-----	6.823	.0213	7.072	.0249	7.336	.0264	7.615	.0279	7.913	.0298
1 more-----	6.935	.0221	7.192	.0257	7.465	.0273	7.755	.0290	8.064	.0309
2-----	7.048	.0227	7.314	.0266	7.596	.0282	7.896	.0300	8.217	.0321
3-----	7.162	.0234	7.435	.0273	7.726	.0291	8.037	.0311	8.370	.0333
4-----	7.273	.0241	7.554	.0281	7.854	.0300	8.175	.0321	8.519	.0344
5-----	7.380	.0247	7.669	.0289	7.977	.0308	8.308	.0331	8.662	.0354
6-----	7.484	.0253	7.780	.0296	8.097	.0317	8.436	.0339	8.799	.0363
7-----	7.585	.0260	7.889	.0304	8.213	.0324	8.560	.0347	8.931	.0371
8-----	7.684	.0267	7.994	.0310	8.326	.0332	8.651	.0355	9.059	.0378
9-----	7.780	.0273	8.096	.0316	8.436	.0340	8.798	.0362	9.182	.0384
10-----	7.873	.0279	8.196	.0323	8.543	.0347	8.911	.0368	9.301	.0390



**Table E-JOINT**  
**JOINT SURVIVORSHIP (Continued)**

Difference in Age of Beneficiary	Age of Employee									
	75		76		77		78		79	
	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment
15 less-----	\$6.057	\$.0164	\$6.229	\$.0172	\$6.411	\$.0182	\$6.604	\$.0193	\$6.806	\$.0202
14-----	6.170	.0172	6.350	.0180	6.543	.0193	6.747	.0204	6.962	.0215
13-----	6.288	.0180	6.478	.0190	6.681	.0203	6.897	.0216	7.125	.0228
12-----	6.412	.0189	6.612	.0200	6.826	.0214	7.054	.0228	7.294	.0240
11-----	6.542	.0198	6.752	.0210	6.978	.0226	7.218	.0240	7.471	.0253
10-----	6.678	.0208	6.899	.0221	7.137	.0238	7.389	.0252	7.656	.0267
9-----	6.821	.0219	7.054	.0233	7.304	.0250	7.568	.0264	7.849	.0281
8-----	6.971	.0229	7.217	.0246	7.479	.0262	7.757	.0278	8.051	.0294
7-----	7.127	.0242	7.385	.0258	7.660	.0275	7.951	.0291	8.259	.0308
6-----	7.284	.0253	7.555	.0271	7.843	.0288	8.148	.0305	8.470	.0322
5-----	7.441	.0265	7.725	.0284	8.026	.0301	8.345	.0319	8.681	.0336
4-----	7.598	.0277	7.894	.0296	8.209	.0315	8.542	.0333	8.893	.0351
3-----	7.756	.0288	8.065	.0309	8.394	.0329	8.742	.0348	9.109	.0367
2-----	7.915	.0299	8.237	.0322	8.580	.0343	8.944	.0364	9.326	.0382
1-----	8.075	.0311	8.410	.0335	8.767	.0357	9.145	.0378	9.544	.0399
0-----	8.235	.0322	8.582	.0347	8.953	.0371	9.346	.0393	9.760	.0414
1 more-----	8.397	.0333	8.757	.0360	9.142	.0385	9.549	.0407	9.979	.0430
2-----	8.563	.0346	8.985	.0372	9.334	.0399	9.756	.0422	10.201	.0445
3-----	8.728	.0358	9.114	.0386	9.525	.0411	9.961	.0436	10.422	.0461
4-----	8.888	.0369	9.285	.0397	9.709	.0424	10.159	.0450	10.634	.0475
5-----	9.041	.0379	9.448	.0407	9.883	.0435	10.345	.0462	10.832	.0487
6-----	9.187	.0388	9.603	.0416	10.047	.0444	10.520	.0473	11.018	.0498
7-----	9.327	.0396	9.750	.0423	10.203	.0453	10.685	.0482	11.193	.0508
8-----	9.461	.0402	9.891	.0430	10.351	.0460	10.840	.0489	11.357	.0517
9-----	9.590	.0408	10.026	.0436	10.492	.0466	10.987	.0495	11.512	.0525
10-----	9.714	.0413	10.154	.0440	10.625	.0471	11.126	.0501	11.657	.0531

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**Table E-JOINT**  
**JOINT SURVIVORSHIP (Continued)**

Difference in Age of Beneficiary	Age of Employee					
	80		81		82	
	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment
15 less	\$7.018	\$.0212	\$7.240	\$.0222	\$7.473	\$.0233
14	7.187	.0225	7.422	.0235	7.668	.0246
13	7.363	.0238	7.612	.0249	7.870	.0258
12	7.547	.0253	7.809	.0262	8.082	.0273
11	7.737	.0266	8.014	.0277	8.301	.0287
10	7.936	.0280	8.227	.0291	8.530	.0303
9	8.143	.0294	8.449	.0306	8.768	.0319
8	8.359	.0308	8.681	.0322	9.017	.0336
7	8.582	.0323	8.919	.0337	9.273	.0354
6	8.807	.0337	9.162	.0355	9.534	.0372
5	9.034	.0353	9.405	.0371	9.796	.0391
4	9.263	.0370	9.651	.0388	10.062	.0411
3	9.495	.0386	9.903	.0408	10.334	.0431
2	9.730	.0404	10.156	.0426	10.609	.0453
1	9.964	.0420	10.409	.0445	10.882	.0473
0	10.197	.0437	10.659	.0462	11.150	.0491
1 more	10.432	.0453	10.910	.0478	11.416	.0506
2	10.670	.0469	11.163	.0493	11.684	.0521
3	10.906	.0484	11.414	.0508	11.948	.0534
4	11.133	.0499	11.654	.0521	12.201	.0547
5	11.344	.0512	11.878	.0534	12.437	.0559
6	11.541	.0523	12.087	.0546	12.658	.0571
7	11.727	.0534	12.284	.0557	12.866	.0582
8	11.900	.0543	12.468	.0568	13.061	.0593
9	12.062	.0550	12.640	.0578	13.244	.0604
10	12.214	.0557	12.800	.0586	13.414	.0614

Table E-Joint may be extended as required to other ages on the same actuarial basis as the values shown herein.

**History:** 1-2-56; am. Register, November, 1957, No. 23, eff. 12-31-57.  
23, eff. 12-31-57.

**Ret 4.015 Employee integrated annuity.** The optional integrated annuity authorized by section 66.906 (3b), Wis. Stats., shall be computed as follows:

(1) For purposes of determining benefits under the optional integrated annuity, the estimated primary social security benefit is to be determined as follows:

(a) *Taxable wages.* Determine the total wages (maximum of \$3,600 in any calendar year prior to 1955 and \$4,200 in any year after 1954) paid by all employing municipalities, upon which social security old age benefit taxes have been paid in each calendar year from January 1, 1951 to the first day of the year in which the employe attains age 65, or age 62 if a woman, provided that if the applicant shall offer the board official information from the Social Security Administration that his taxable wages for any such year exceed the amount as otherwise determined, the larger amount shall be accepted for the purposes of this rule.

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(b) *Taxable period.* Compute the number of months (any fraction of a month to be considered a month) elapsing from January 1, 1951 to the first day of the year in which the employe attains age 65, or age 62 if a woman. If the result is less than 18 months, use 18 months.

(c) *Drop-out period.* Eliminate a period of calendar years in the taxable period not to exceed 5 years, when taxable earnings are lowest. Notwithstanding the above, the taxable wages and the number of months in any year shall not be eliminated in making the calculation if such elimination would result in dividing by a period less than 18 months.

(d) *Average monthly wage.* Divide (a) the sum of the taxable wages in the taxable period, by (b) the number of months in the taxable period, after excluding the taxable wages and the months in the drop-out period to ascertain the average monthly wage. If (b) is less than 18, it should be taken as 18. Eliminate cents from the result.

(e) *Monthly primary social security benefit.* Ascertain the benefit as determined from the table of retirement benefits issued by the U. S. Bureau of Old Age and Survivors Insurance on the basis of the average monthly wage.

(2) Determine the actuarial equivalent factor to be used for the employe from Table E-Integrated interpolating for the exact age on the first date the annuity is to begin.

Table E-INTEGRATED

## Employe Actuarial Equivalent Factors

Exact Age at Retirement	Actuarial Equivalent Factor
55 -----	45.20%
56 -----	48.46
57 -----	52.05
58 -----	56.01
59 -----	60.39
60 -----	65.27
61 -----	70.70
62 -----	76.77
63 -----	83.60
64 -----	91.29
65 -----	100.00

**History:** 1-2-56; am. (1) (a), (b), (c), and (2), Register, November, 1957, No. 23, eff. 12-31-57.

**Ret 4.021 Disability annuity.** For the purpose of computing disability annuities authorized by section 66.907 (2), Wis. Stats., the factors in section Ret 4.011, Table E-Life, shall be used.

**Ret 4.022 Disability annuity OASI offset.** Disability annuities granted under Chapter 262 of the Laws of 1955 (to participants who actually worked after 6/25/55 but not after 9/30/57) will be reduced pursuant thereto effective as follows:

(1) For annuitants who were age 50 or over on 7/1/57, the reduction is effective as of 7/1/57 unless the annuitant has submitted

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evidence that he does not qualify for disability benefits or for old-age benefits as a retired worker under OASI.

(2) For annuitants who attain age 50 after 7/1/57, the reduction will be effective as of the first day of the month in which age 50 is attained, in the same manner as under (1).

(3) The Fund will forward an Evidence of Eligibility form to the annuitant which he must sign giving his consent to release of the requested information by OASI to the Fund.

(4) Periodically, but not less than once a year, a recheck will be made of the eligibility of all annuitants aged 50 or over and previously ineligible for OASI payments. If the annuitant fails to sign and return the Evidence of Eligibility form within 30 days, the annuity will be reduced immediately.

(5) If evidence of ineligibility is received after an annuity is so reduced, the amount of the reduction for all prior months of ineligibility will be added to the next annuity payment after receipt of such evidence.

**History:** Cr. Register, November, 1957, No. 23, eff. 12-31-57.

Ret 4.031 Beneficiary life annuity. The following basic table, herein termed "Table B-Life—Beneficiary Annuity", shall be used to compute the annuity authorized by section 66.909, Wis. Stats., and shall determine the monthly annuity provided by each \$1,000 of available accumulated credits:

**Table B-LIFE  
BENEFICIARY ANNUITY**

Age of Beneficiary	Employer Credits		Employee Credits	
	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment
10	\$3.238	\$.0010	\$3.228	\$.0012
11	3.250	.0012	3.242	.0014
12	3.264	.0014	3.255	.0013
13	3.278	.0014	3.268	.0013
14	3.292	.0014	3.284	.0016
15	3.308	.0016	3.299	.0015
16	3.324	.0016	3.315	.0016
17	3.341	.0017	3.331	.0016
18	3.358	.0017	3.348	.0017
19	3.376	.0018	3.366	.0018
20	3.396	.0020	3.385	.0019
21	3.416	.0020	3.404	.0019
22	3.437	.0021	3.425	.0021
23	3.459	.0022	3.447	.0022
24	3.482	.0023	3.470	.0023
25	3.506	.0024	3.492	.0022
26	3.531	.0025	3.517	.0025
27	3.557	.0026	3.543	.0026
28	3.584	.0027	3.570	.0027
29	3.614	.0030	3.598	.0028
30	3.644	.0030	3.626	.0023
31	3.676	.0032	3.658	.0032
32	3.709	.0033	3.690	.0032
33	3.744	.0035	3.723	.0033
34	3.780	.0036	3.758	.0035
35	3.819	.0039	3.796	.0033
36	3.860	.0041	3.835	.0039
37	3.903	.0043	3.876	.0041
38	3.948	.0045	3.919	.0043
39	3.995	.0047	3.964	.0045
40	4.045	.0050	4.011	.0047
41	4.098	.0053	4.061	.0050
42	4.154	.0056	4.114	.0053
43	4.212	.0058	4.168	.0054
44	4.275	.0063	4.226	.0058

**Table B-LIFE**  
**BENEFICIARY ANNUITY (Continued)**

Age of Beneficiary	Employer Credits		Employee Credits	
	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment
45	\$4.340	\$.0065	\$4.286	\$.0060
46	4.410	.0070	4.350	.0064
47	4.484	.0074	4.415	.0065
48	4.562	.0078	4.484	.0069
49	4.643	.0081	4.557	.0073
50	4.730	.0087	4.634	.0077
51	4.820	.0090	4.712	.0078
52	4.916	.0096	4.796	.0084
53	5.016	.0100	4.884	.0088
54	5.121	.0105	4.976	.0092
55	5.232	.0111	5.073	.0097
56	5.349	.0117	5.176	.0103
57	5.472	.0123	5.284	.0108
58	5.603	.0131	5.398	.0114
59	5.742	.0139	5.518	.0120
60	5.888	.0146	5.646	.0128
61	6.044	.0156	5.784	.0138
62	6.210	.0166	5.928	.0144
63	6.387	.0177	6.082	.0154
64	6.577	.0190	6.246	.0164
65	6.780	.0203	6.422	.0176
66	7.000	.0220	6.608	.0186
67	7.234	.0234	6.806	.0198
68	7.487	.0253	7.016	.0210
69	7.758	.0271	7.238	.0222
70	8.048	.0290	7.476	.0238
71	8.357	.0309	7.732	.0256
72	8.685	.0328	8.005	.0273
73	9.036	.0351	8.292	.0287
74	9.413	.0377	8.596	.0304
75	9.820	.0407	8.924	.0328
76	10.256	.0436	9.280	.0356
77	10.725	.0469	9.665	.0385
78	11.228	.0503	10.068	.0403
79	11.767	.0539	10.489	.0421
80	12.346	.0579	10.942	.0453
81	12.970	.0624	11.426	.0484
82	13.636	.0666	11.948	.0522
83	14.342	.0706	12.512	.0564
84	15.085	.0743	13.085	.0573
85	15.861	.0776	13.656	.0571

The actuarial basis for Table B-Life is the 1951 Group Annuity mortality table rated down 4½ years of age with interest at 3½% per annum. Values at ages not given in Table B-Life shall be computed on the same actuarial basis. The yearly adjustment provides an additional rate-down of .1 year of age for each year of time.

Subsections (1), (2) and (3) under Ret 4.011 shall be applicable to Table B-Life; (4) is applicable substituting beneficiary ages 47 and 69 for part. ages 43 and 65.

**History:** 1-2-56; am. Register, November, 1957, No. 23, eff. 12-31-57.

Ret 4.032 Beneficiary 180 payment annuity. The following basic table, herein termed "Table B-180—Beneficiary 180 Month Certain", shall be used to compute the annuity authorized by section 66.909 (1) (c), Wis. Stats., and shall determine the monthly annuity provided by each \$1,000 of available accumulated credits:

**Table B-180**  
**BENEFICIARY 180 MONTH CERTAIN**

Age of Beneficiary	Employer Credits		Employee Credits	
	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment
15	\$3.174	\$.0015	\$3.302	\$.0015
16	3.189	.0015	3.318	.0016
17	3.205	.0016	3.335	.0017
18	3.222	.0017	3.352	.0017
19	3.239	.0017	3.370	.0018
20	3.257	.0018	3.390	.0020
21	3.276	.0019	3.409	.0019
22	3.296	.0020	3.430	.0021
23	3.316	.0020	3.451	.0021
24	3.338	.0022	3.474	.0023
25	3.360	.0022	3.497	.0023
26	3.384	.0024	3.522	.0025
27	3.408	.0024	3.547	.0025
28	3.434	.0026	3.574	.0027
29	3.461	.0027	3.602	.0028
30	3.490	.0029	3.631	.0029
31	3.519	.0029	3.662	.0031
32	3.550	.0031	3.694	.0032
33	3.582	.0032	3.728	.0034
34	3.616	.0034	3.763	.0035
35	3.651	.0035	3.800	.0037
36	3.688	.0037	3.838	.0038
37	3.727	.0039	3.878	.0040
38	3.768	.0041	3.920	.0042
39	3.810	.0042	3.964	.0044
40	3.854	.0044	4.010	.0046
41	3.900	.0046	4.059	.0049
42	3.949	.0049	4.110	.0051
43	4.000	.0051	4.162	.0052
44	4.052	.0052	4.217	.0055
45	4.107	.0055	4.274	.0057
46	4.164	.0057	4.334	.0060
47	4.224	.0060	4.396	.0062
48	4.286	.0062	4.460	.0064
49	4.350	.0064	4.526	.0066

**Table B-180**  
**BENEFICIARY 180 MONTH CERTAIN (Continued)**

Age of Beneficiary	Employer Credits		Employee Credits	
	Basic Factor	Yearly Adjustment	Basic Factor	Yearly Adjustment
50	\$4.416	\$.0066	\$4.596	\$.0070
51	4.485	.0069	4.668	.0072
52	4.556	.0071	4.742	.0074
53	4.630	.0074	4.818	.0076
54	4.706	.0076	4.898	.0080
55	4.785	.0079	4.980	.0082
56	4.866	.0081	5.064	.0084
57	4.949	.0083	5.150	.0086
58	5.034	.0085	5.239	.0089
59	5.122	.0088	5.330	.0091
60	5.199	.0077	5.423	.0093
61	5.266	.0067	5.518	.0095
62	5.332	.0066	5.614	.0096
63	5.398	.0066	5.711	.0097
64	5.466	.0068	5.809	.0098
65	5.532	.0066	5.907	.0098
66	5.596	.0064	6.005	.0098
67	5.659	.0063	6.102	.0097
68	5.720	.0061	6.196	.0094
69	5.776	.0056	6.288	.0092
70	5.830	.0054	6.378	.0090
71	5.878	.0048	6.462	.0084
72	5.921	.0043	6.542	.0080
73	5.958	.0037	6.616	.0074
74	5.990	.0032	6.684	.0068
75	6.030	.0040	6.746	.0062
76	6.081	.0051	6.802	.0056
77	6.126	.0045	6.852	.0050
78	6.166	.0040	6.897	.0045
79	6.201	.0035	6.936	.0039
80	6.231	.0030	6.970	.0034
81	6.257	.0026	6.998	.0028
82	6.279	.0022	7.023	.0025
83	6.297	.0018	7.044	.0021
84	6.312	.0015	7.060	.0016
85	6.324	.0012	7.074	.0014

Table B-180 may be extended as required to other ages on the same actuarial basis as the values published herein.

Subsections (1), (2) and (3) under Ret 4.011 shall be applicable to Table B-180.

**History:** 1-2-56; am. Register, November, 1957, No. 23, eff. 12-31-57.

**Ret 4.033 Widow integrated annuity.** The optional integrated annuity authorized by section 66.909 (1) (cc), Wis. Stats., shall be computed as follows:

(1) For purposes of determining benefits under the optional integrated annuity for widow beneficiaries, the survivor's benefit of the widow shall be deemed to be 75% of the husband's estimated primary social security amount to be determined as follows:

(a) *Taxable wages.* Determine the total wages (maximum of \$3,600 in any calendar year prior to 1955 and \$4,200 in any year

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after 1954) paid by all employing municipalities, upon which social security old age benefit taxes have been paid in each calendar year from January 1, 1951 to the first day of the year in which the husband died, provided that if the applicant shall offer the board official information from the social security administration that her husband's taxable wages for any such year exceed the amount as otherwise determined, the larger amount shall be accepted for the purposes of this rule.

(b) *Taxable period.* Compute the number of months (any fraction of a month to be considered a month) elapsing from January 1, 1951 to the first day of the year in which the husband died. If result is less than 18 months, use 18 months.

(c) *Drop-out period.* Eliminate a period of calendar years in the taxable period not to exceed 5 years, when taxable earnings are lowest. Notwithstanding the above, the taxable wages and the number of months in any year shall not be eliminated in making the calculation if such elimination would result in leaving a period less than 18 months.

(d) *Average monthly wage.* Divide (a) the sum of the taxable wages in the taxable period, by (b) the number of months in the taxable period, after excluding the taxable wages and the months in the drop-out period to ascertain the average monthly wage. If (b) is less than 18, it should be taken as 18. Eliminate cents from the result.

(e) *Monthly primary social security amount.* Ascertain the primary amount from the table of retirement benefits issued by the U. S. Bureau of Old Age and Survivors Insurance on the basis of the average monthly wage.

(2) Determine the actuarial equivalent factor to be used for the widow from table W-Integrated interpolating for the exact age on the first date the annuity is to begin.

**Table W-INTEGRATED**  
**Widow Actuarial Equivalent Factors**

Exact Age When Annuity Starts	Actuarial Equivalent Factor	Exact Age When Annuity Starts	Actuarial Equivalent Factor
31	18.61%	47	39.86%
32	19.44	48	42.04
33	20.32	49	44.34
34	21.25	50	46.90
35	22.23	51	49.61
36	23.27	52	52.53
37	24.36	53	55.68
38	25.52	54	59.09
39	26.75	55	62.79
40	28.05	56	66.81
41	29.44	57	71.17
42	30.91	58	75.94
43	32.47	59	81.15
44	34.14	60	86.85
45	35.92	61	93.11
46	37.83	62	100.00

(3) Multiply the estimated survivor's benefit at age 62 by the actuarial equivalent factor.

(4) Determine the ordinary beneficiary annuity under section 66.909 (3), Wis. Stats.

(5) Determine the sum of the results obtained in items 3 and 4.

(6) If the amount in item 5 exceeds the estimated social security benefit at age 62, item 1, by at least \$10.00, the amount in item 5 is payable monthly during life and terminating with the payment due in the month in which the beneficiary attains age 62, and the amount payable during life thereafter will equal the amount payable prior to age 62 reduced by the estimated social security benefit, item 1.

(7) If the amount in item 5 does not exceed the estimated social security benefit at age 62, item 1, by at least \$10.00, the amount payable prior to age 62 will be determined as follows:

(a) Subtract \$10.00 from the ordinary beneficiary annuity, item 4.

(b) Subtract the actuarial equivalent factor, item 2, from 100%.

(c) Divide the amount obtained in (a) by the amount obtained in (b) and add \$10.00 to the result.

(d) The result in paragraph (c) is payable monthly during life and terminating with the payment due in the month in which the beneficiary attains age 62 and the amount payable for life thereafter will be \$10.00 a month.

**History:** Cr. Register, November, 1957, No. 23, eff. 12-31-57.

**Ret 4.11 Prescribed interest.** The prescribed rate of interest shall be 3½% per annum compounded annually.

**History:** 1-2-56; am. Register, November, 1957, No. 23, eff. 12-31-57.

**Ret 4.21 Survival rates.** The survival rates shall be as follows:

### Survival Rates

Assumed probability that participant will ultimately be granted a retirement annuity, a disability annuity, or that a death benefit will become payable on his account under section 66.908 (2) (aa), Wis. Stats.

Age	Survival Rate	Age	Survival Rate
15	.274	45	.988
16	.295	46	.991
17	.318	47	.994
18	.343	48	.996
19	.370	49	.998
20	.399	50	1.000
21	.430	51	1.000
22	.462	52	1.000
23	.495	53	1.000
24	.530	54	1.000
25	.565	55	1.000
26	.600	56	1.000
27	.635	57	1.000
28	.669	58	1.000
29	.702	59	1.000
30	.734	60	1.000
31	.764	61	1.000
32	.793	62	1.000
33	.821	63	1.000
34	.847	64	1.000
35	.871	65	1.000
36	.893	66	1.000
37	.912	67	1.000
38	.930	68	1.000
39	.944	69	1.000
40	.957	70	1.000
41	.966	71	1.000
42	.974	72	1.000
43	.980	73	1.000
44	.984	74	1.000

**Ret 4.31 Disability premiums.** Pursuant to section 66.912 (3) (a), Wis. Stats., the disability benefit premiums shall be as follows:

#### *Municipality Contribution Rates—Disability Benefits*

The percentage is determined for each municipality as follows:

- (1) Determine the prior calendar year earnings of all active employees under age 65.
- (2) Determine the prior calendar year earnings of all active employees.
- (3) Divide item (1) by item (2).
- (4) Multiply the result in item (3) by 0.20%. The result is the percentage municipality rate for disability for the succeeding year.

**History:** 1-2-56; am. Register, November, 1957, No. 23, eff. 12-31-57.

Register, November, 1957, No. 23.

**Ret 4.32 Disability reserve.** The amount credited to the reserve for annuities granted upon the granting of a disability annuity to a participating employe whose designated beneficiary would qualify to receive a death benefit under section 66.908 (2) (e), Wis. Stats., shall include a provision for such death benefit computed upon the basis of the 1951 group annuity mortality table (male) rated back 5 years in the case of the beneficiary and rated back an additional 1/10 year multiplied by the difference between the year the annuity begins and 1958, in the ages of both the employe and the beneficiary; with interest at 3½% per year.

**History:** 1-2-56; am. Register, November, 1957, No. 23, eff. 12-31-57.