

**Worklife Expectancies of Railroad Workers
Based on the Twenty-Seventh Actuarial Valuation**

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Preface

The Bureau of the Actuary of the U.S. Railroad Retirement Board released *The Twenty-Seventh Actuarial Valuation* in September, 2018. This valuation meets three legal requirements. (1) The Railroad Retirement Board must estimate liabilities at least every three years under Section 15(g) of the Railroad Retirement Act of 1974. (2) Each year the Railroad Retirement Board must submit, to the President and Congress, five-year projections of revenues and payments from the Railroad Retirement Account under Section 22 of the 1974 Act. (3) A report on the actuarial status of the railroad retirement system must be submitted to Congress each year under the Railroad Retirement Solvency Act of 1983. The Railroad Retirement Board endorses *The Twenty-Seventh Actuarial Valuation* as a fair picture of the financial condition of the railroad retirement system.

The statement of the independent Actuarial Advisory Committee indicates that it was consulted in the planning and the execution stages of the preparation of *The Twenty-Seventh Actuarial Valuation*, and it was consulted on the structure, scope, content, and actuarial assumptions and methodology. As does the Railroad Retirement Board, The Actuarial Advisory Committee believes *The Twenty-Seventh Actuarial Valuation* to be a fair picture of the financial condition of the railroad retirement system. This includes the valuation of future contributions, investment income from the assets of the system, future expenses, and benefit payouts to participants. The latter particularly is affected by mortality experience of railroad workers (Table S-4 in *The Twenty-Seventh Actuarial Valuation*), age retirements (Table S-11), disability retirements (Table S-12), and other withdrawals (Table S-13). The information in these tables provides the fundamental data set for the worklife expectancies and standard deviations calculated in this monograph.

I. Introduction

This monograph describes years of activity in railroad work by utilizing data from the *Twenty-Seventh Actuarial Valuation* (2018), specifically Table-4 (mortality rates), Table S-11 (age retirement probabilities), Table S-12 (disability retirement probabilities), and Table S-13 (final withdrawal probabilities). The main tabular results in Section III show the average number of years of railroad activity (*i.e.*, worklife expectancy) and the standard deviation of years devoted to railroad work for each exact (integer) age from 17 to 75 and for exact years of service. Competing risks, or the multiple decrement model, and the Markov/Increment-Decrement model provide the theoretical basis for these results. The competing risks model contains four decrements¹ – mortality, age retirement, disability retirement, and other final withdrawals taken from Tables S-4, S-11, S-12, and S-13, all reprinted here in Appendix A. The Markov process model results utilize economy wide transition probabilities (adjusted for the mortality experience of railroad workers from Table S-4) and Table S-11.

The familiar concept of life expectancy measures the average number of additional years of life for people in a particular group. Worklife expectancy is analogous to life expectancy but worklife refers to the average number of additional years in labor market activity. The concept refers to time spent in the labor force; and, in this case, the average, or mean, amount of time spent in railroad activity. Regarding life expectancy, we note that although everyone in a particular group possesses the same life expectancy, not everyone in that group will live the same number of years. In other words, variation around life expectancy occurs. Similarly, variation occurs around the mean years devoted to railroad work; and we report this variation in the standard deviation columns of our worklife tables.

Section II explains the competing risks/multiple decrement and the Markov/Increment-Decrement models in some detail (Skoog and Ciecka, 2007). This section is proffered in the spirit of completeness and to enable anyone with an understanding of the underlying mathematics and probability theory to replicate our results. However, one could skip Section II but still productively use the tables in this monograph. Section III contains our main results, presented in tabular form. The extended table in this section contains worklife expectancies and standard deviations at exact ages and years of service based on the four decrement competing risks model and the Markov model. Section IV contains concluding remarks.

II. Competing Risks and Markov Process Models

We use the following notation in our competing risks/multiple decrement formulation:

¹ In Appendix B we provide another set of worklife expectancies and standard deviations based on competing risk theory but utilizing only three decrements – mortality, age retirement, and disability retirement. These results are reminiscent of earlier worklife expectancies prepared for the Association of American Railroads. However, Appendix B worklife expectancies are based on the *Twenty-Seventh Actuarial Valuation* and therefore supersede previous calculations of this type.

x denotes exact age, $x = 17, \dots, 75$;
 ω denotes the youngest age for which the probability of being active in the railroad industry is zero, $\omega = 95$;
 s denotes years of railroad service, $s = 0, \dots, x - 17$;
 $q_x^{(1)}$ denotes the mortality rate of railroad employees between age x and $x + 1$;
 $q_{x,s}^{(2)}$ denotes the probability of a railroad age retirement between x and $x + 1$ given s years of service;
 $q_{x,s}^{(3)}$ denotes the probability of a railroad disability retirement between x and $x + 1$ given s years of service;
 $q_{x,s}^{(4)}$ denotes the probability of withdrawal from railroad work (for reasons other than death, age retirement, or disability retirement) between x and $x + 1$ given s years of service;
 $q_x^{(1)} = q_x^{(1)} [1 - .5(q_{x,s}^{(2)} + q_{x,s}^{(3)} + q_{x,s}^{(4)})]$, $q_x^{(1)}$ denotes mortality probability, where $q_x^{(1)}$ measures the net rate of mortality; this formula transforms $q_x^{(1)}$ into $q_x^{(1)}$;
 $WLE_{x,s}^{CR}$ denotes competing risks railroad worklife expectancy for an individual at age x with s years of railroad service under the assumption of mortality, age retirement, disability retirement, and withdrawal as competing risks.

As the notation suggests, in *The Twenty-Seventh Actuarial Valuation* the mortality rate $q_x^{(1)}$ is invariant to years of service; age retirement probability $q_{x,s}^{(2)}$ is zero prior to age 60 and it depends upon both x and s at age 60 and beyond; disability retirement probability $q_{x,s}^{(3)}$ depends on both age and years of service; and the withdrawal probability $q_{x,s}^{(4)}$ is a function of both age and years of service. Age and disability retirements and withdrawals are reported as probabilities; but mortality is given as a net rate in *The Twenty-Seventh Actuarial Valuation*, requiring a conversion to a probability.

Consider a person who is in the railroad industry at age x and has s years of service. Then the probability of that individual remaining in the railroad industry at age $x + 1$ is

$$(1) \quad {}_1P_{x,s} = 1 - (q_x^{(1)} + q_{x,s}^{(2)} + q_{x,s}^{(3)} + q_{x,s}^{(4)}).$$

The probability of continuing as a railroad worker is defined recursively by

$$(2) \quad {}_{i+1}P_{x,s} = {}_iP_{x,s} [1 - (q_{x+i,s+i}^{(1)} + q_{x+i,s+i}^{(2)} + q_{x+i,s+i}^{(3)} + q_{x+i,s+i}^{(4)})]$$

where $i = 1, \dots, \omega - x - 1$ and ${}_{\omega-x}P_{x,s} = 0$. The worklife expectancy in railroad service at exact age x for an individual with s years of railroad service is

$$(3) \quad WLE_{x,s}^{CR} = .5(1 + {}_1P_{x,s}) + .5({}_1P_{x,s} + {}_2P_{x,s}) + \dots + .5({}_{\omega-x-1}P_{x,s} + {}_{\omega-x}P_{x,s})$$

$$= .5 + \sum_{i=1}^{\omega-x-1} i P_{x,s}$$

where each term on the right hand side of (3) reflects the usual averaging of beginning and ending period probabilities (*i.e.*, assuming mid-period transitions) typically used in expectancy calculations, such as average years of life calculations (Bowers, 1987 and Jordan, 1991). The extended table in Section III below contains railroad worklife expectancies computed with formulae (1) – (3).

Formulae (1) and (2) induce probability mass functions (pmfs) on years of railroad activity. Here we think of additional years of railroad work $YA_{x,s}^{CR}$ as a random variable with pmf $p_{YA}^{CR}(x, s, y)$, which denotes the probability that a railroad worker age x with s service years will accumulate y additional years of railroad service. This pmf at age x and s service years consists of the boundary condition and a main recursion in (4).

$$(4) \quad \text{Boundary Condition: } p_{YA}^{CR}(x, s, .5) = 1 - {}_1P_{x,s}$$

$$\text{Main Recursion: } p_{YA}^{CR}(x, s, y) = {}_{y-.5}P_{x,s} - {}_{y+.5}P_{x,s} \quad y = 1.5, 2.5, \dots, \omega - x - .5$$

Of course, $E(YA_{x,s}^{CR}) = WLE_{x,s}^{CR}$ as previously calculated in (3).² The pmfs defined in (4) capture entire probability distributions of time spent in railroad activity and therefore one can compute any parameter of interest, such as the standard deviations reported in the Section III and computed as

$$(5) \quad SD(YA_{x,s}^{CR}) = \sqrt{\sum_{y=.5}^{\omega-x-.5} (y - WLE_{x,s}^{CR})^2 p_{YA}^{CR}(x, s, y)}$$

If withdrawals $q_{x,s}^{(4)}$ were excluded from formulae (1) – (3), then worklife expectancies and standard deviations depend only on three competing risks: $q_x^{(1)}$, $q_{x,s}^{(2)}$, and $q_{x,s}^{(3)}$. These expectancies appear in the Appendix B. The worklife expectancies computed in this manner resemble those previously prepared for the Association of American Railroads, and they are substantially larger than worklives based on the four decrements presented in the extended table in Section III.

² Since $E(YA_{x,s}^{CR}) = .5(1 - {}_1P_{x,s}) + 1.5({}_1P_{x,s} - {}_2P_{x,s}) + 2.5({}_2P_{x,s} - {}_3P_{x,s}) + \dots + (\omega - x - .5)({}_{\omega-x-1}P_{x,s} - {}_{\omega-x}P_{x,s})$, we have after collecting terms,

$$E(YA_{x,s}^{CR}) = .5 + {}_1P_{x,s} + {}_2P_{x,s} + {}_3P_{x,s} + \dots + {}_{\omega-x-1}P_{x,s} = WLE_{x,s}^{CR}$$

The Markov/Increment-Decrement (ID) model produces the last two columns in the extended table in Section III. In (6), $Y_{x,s}^{ID}$ denotes the random variable measuring additional time spent in railroad activity. Transitions from a (active) and i (inactive) occur at the midpoint of any year using economy-wide transition probabilities until a worker qualifies for railroad age retirement; at that point railroad transition probabilities from Table S-10 govern transitions to inactivity (See Skoog and Ciecka, 1998, 2001a, 2001b, 2002, and 2004 for background on the Markov model in this context).³ The boundary conditions and recursions in (6) define pmfs for beginning age $BA = 17$ to age 110 where everyone is assumed to be dead at truncation age $TA = 111$.

Boundary Conditions:

$$p_{YA}^{ID}(x, a, 0) = 0$$

$$p_{YA}^{ID}(x, a, .5) = {}^a p_x^d + {}^a p_x^i p_{YA}^{ID}(x+1, i, 0)$$

$$p_{YA}^{ID}(x, i, 0) = {}^i p_x^d + {}^i p_x^i p_{YA}^{ID}(x+1, i, 0), \text{ for } x = BA, \dots, TA - 1$$

(6)

Main Recursions:

$$p_{YA}^{ID}(x, a, y) = {}^a p_x^a p_{YA}^{ID}(x+1, a, y-1) + {}^a p_x^i p_{YA}^{ID}(x+1, i, y-.5),$$

$$y = 1.5, 2.5, 3.5, \dots, TA - x - .5$$

$$p_{YA}^{ID}(x, i, y) = {}^i p_x^a p_{YA}^{ID}(x+1, a, y-.5) + {}^i p_x^i p_{YA}^{ID}(x+1, i, y),$$

$$y = 1, 2, 3, \dots, TA - x - .5 \text{ and for } x = BA, \dots, TA - 1$$

Worklife expectancies and standard deviations are computed in the usual manner specified in (7) and (8).

³ The Markov calculations also utilize data from the *Twenty-Seventh Actuarial Valuation* for mortality probabilities and retirement probabilities. Transition probabilities for all males in the US population prior to age 60 are from Skoog, Ciecka, and Krueger (2019). Transition probabilities are scaled to the mortality experience of railroad workers, and we set active-to-inactive transition probabilities equal to retirement probabilities (adjusted for mortality) of railroad workers for ages 60 and above if they have sufficient service credits to retire within railroad pension rules. Active-to-active transition probabilities are thereby also determined. For example, consider a 45 year old with 16 years of service. In 15 years, at age 60, such a person will have accumulated approximately an additional 13 years of service (using the Skoog (2002) decomposition method), on average; reaching a total service accumulation of 29 years but insufficient for railroad retirement at age 60. This person would be eligible for railroad retirement in approximately one year; and, at that point, Table S-11, “30 & Over” probabilities are used. However, a 45-year-old with 10 years of service will have accumulated service of approximately 23 years at age 60; and, at age 62, would still not have less than 30 years of service. This person would qualify for railroad retirement at age 62, but we then use the “5-29” years of service column probabilities in Table S-11, noting that this person will never accumulate 30 years of service since worklife expectancy for such a person is only 17.03 years. We assume inactive-to-active transition probabilities are zero once a person qualifies retirement; this can occur at age 60 at the earliest. However, it may occur later as indicated in the above examples. In the case of a 45 year old with 10 service years, early retirement occurs at age 62 and active-to-active and inactive-to active transition probabilities are the economy wide probabilities for ages 60 and 61; inactive-to active probabilities are zero for age 62 and beyond and active-to-inactive probabilities are taken from Table S-11.

$$(7) \quad WLE_{x,s}^{ID} = E(YA_{x,s}^{ID}) = \sum_{y=5}^{TA-x-.5} y p_{YA}^{ID}(x, a, y)$$

$$(8) \quad SD(YA_{x,s}^{ID}) = \sqrt{\sum_{y=5}^{TA-x-.5} (y - WLE_{x,s}^{ID})^2 p_{YA}^{ID}(x, s, y)} .$$

III. Worklife Expectancies and Standard Deviations from Competing Risks Model Using Four Decrements from Tables S-4, S-11, S-12, and S-13 and Markov Model Using Tables S-4 and S-11

This section contains worklife expectancies (WLE) and standard deviations (SD) computed with the formulae in Section II. Table entries are at exact ages and years of service. For example, a railroad worker age 26.0 with 3.0 years of service has a worklife expectancy of 24.92 years, with a standard deviation of 12.78 years based on the four competing risks of mortality, age retirement, disability, and other final withdrawals. Formulae (1) – (5) generate these results using four decrements. The Markov/Increment-Decrement (ID) worklife and standard deviation are 30.20 and 6.43, respectively. Formulae (6) – (8) yield these values. The competing risks and Markov worklife expectancies often differ significantly, especially at young ages and little service when the Markov expectancy can be almost double the competing risks expectancy.⁴ What accounts for this? The most important factors are disability retirements and other final withdrawals from railroad work which are incorporated into the competing risks expectancy calculations; these departures from railroad activity are viewed as final and irreversible like death and age retirements. In the Markov model, death and age retirement are final as well; but other transitions to inactivity are based on economy-wide probabilities (neither the disability probabilities in Table S-12 nor the final withdrawal probabilities from railroad work in Table S-13) and transitions from inactivity back to activity also occur prior to qualifying for railroad age retirement.

⁴ Worklife expectancies differ less at older ages and large amounts of service. Competing risks expectancies at older ages can exceed Markov expectancies, especially when service years are small. Standard deviations from the competing risks model exceed Markov standard deviations at younger ages; the former are more than double the latter until approximately age 30. Markov standard deviations are slightly bigger than competing risks standard deviation after approximately age 50.

Worklife Expectancies and Standard Deviations with Competing Risks Using Four Decrements from Tables S-4, S-11, S-12, and S-13 and Markov Model

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
17	0	22.59	18.75	37.07	7.52
18	0	22.27	18.31	36.38	7.40
18	1	25.18	17.79	36.38	7.40
19	0	21.98	17.89	35.71	7.27
19	1	24.80	17.34	35.71	7.27
19	2	26.78	16.71	35.71	7.27
20	0	21.72	17.45	35.00	7.14
20	1	24.47	16.88	35.00	7.14
20	2	26.37	16.24	35.00	7.14
20	3	27.48	15.80	35.00	7.14
21	0	21.47	17.00	34.25	7.02
21	1	24.16	16.40	34.25	7.02
21	2	26.00	15.75	34.25	7.02
21	3	27.04	15.32	34.25	7.02
21	4	27.81	14.98	34.25	7.02
22	0	21.27	16.54	33.48	6.89
22	1	23.87	15.90	33.48	6.89
22	2	25.66	15.24	33.48	6.89
22	3	26.65	14.81	33.48	6.89
22	4	27.35	14.49	33.48	6.89
22	5	27.98	14.18	33.48	6.89
23	0	21.16	16.04	32.69	6.77
23	1	23.64	15.38	32.69	6.77
23	2	25.34	14.70	32.69	6.77
23	3	26.29	14.27	32.69	6.77
23	4	26.94	13.96	32.69	6.77
23	5	27.50	13.67	32.69	6.77
23	6	28.03	13.36	32.69	6.77
24	0	21.56	15.39	31.88	6.65
24	1	23.51	14.79	31.88	6.65
24	2	25.08	14.12	31.88	6.65
24	3	25.95	13.70	31.88	6.65
24	4	26.56	13.40	31.88	6.65
24	5	27.06	13.12	31.88	6.65
24	6	27.53	12.84	31.88	6.65
24	7	27.98	12.56	31.88	6.65

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
25	0	21.67	14.77	31.05	6.54
25	1	23.46	14.15	31.05	6.54
25	2	24.72	13.58	31.05	6.54
25	3	25.51	13.19	31.05	6.54
25	4	26.06	12.90	31.05	6.54
25	5	26.54	12.64	31.05	6.54
25	6	26.98	12.37	31.05	6.54
25	7	27.38	12.11	31.05	6.54
25	8	27.77	11.83	31.05	6.54
26	0	21.21	14.34	31.15	6.86
26	1	22.96	13.72	30.20	6.43
26	2	24.17	13.16	30.20	6.43
26	3	24.92	12.78	30.20	6.43
26	4	25.44	12.50	30.20	6.43
26	5	25.89	12.24	30.20	6.43
26	6	26.32	11.99	30.20	6.43
26	7	26.72	11.72	30.20	6.43
26	8	27.07	11.46	30.20	6.43
26	9	27.41	11.20	30.20	6.43
27	0	20.77	13.90	31.06	7.08
27	1	22.45	13.29	30.30	6.75
27	2	23.64	12.73	29.35	6.32
27	3	24.34	12.36	29.35	6.32
27	4	24.83	12.10	29.35	6.32
27	5	25.25	11.85	29.35	6.32
27	6	25.65	11.60	29.35	6.32
27	7	26.03	11.34	29.35	6.32
27	8	26.39	11.08	29.35	6.32
27	9	26.69	10.84	29.35	6.32
27	10	26.99	10.60	29.35	6.32
28	0	20.32	13.47	30.21	6.98
28	1	21.96	12.85	29.45	6.64
28	2	23.09	12.30	28.49	6.21
28	3	23.77	11.94	28.49	6.21
28	4	24.23	11.68	28.49	6.21
28	5	24.62	11.46	28.49	6.21
28	6	24.99	11.22	28.49	6.21
28	7	25.35	10.97	28.49	6.21

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
28	8	25.69	10.72	28.49	6.21
28	9	25.99	10.47	28.49	6.21
28	10	26.25	10.25	28.49	6.21
28	11	26.50	10.03	28.49	6.21
29	0	19.88	13.02	29.83	7.13
29	1	21.47	12.41	29.35	6.88
29	2	22.56	11.86	28.59	6.54
29	3	23.20	11.51	27.63	6.10
29	4	23.64	11.26	27.63	6.10
29	5	24.00	11.05	27.63	6.10
29	6	24.33	10.83	27.63	6.10
29	7	24.67	10.60	27.63	6.10
29	8	24.98	10.36	27.63	6.10
29	9	25.28	10.12	27.63	6.10
29	10	25.54	9.89	27.63	6.10
29	11	25.75	9.70	27.63	6.10
29	12	25.95	9.52	27.63	6.10
30	0	19.44	12.58	29.35	7.26
30	1	20.98	11.96	28.97	7.03
30	2	22.03	11.42	28.48	6.78
30	3	22.65	11.07	27.72	6.44
30	4	23.04	10.84	26.77	5.99
30	5	23.39	10.63	26.77	5.99
30	6	23.70	10.43	26.77	5.99
30	7	23.99	10.22	26.77	5.99
30	8	24.28	10.00	26.77	5.99
30	9	24.56	9.77	26.77	5.99
30	10	24.81	9.55	26.77	5.99
30	11	25.02	9.35	26.77	5.99
30	12	25.18	9.19	26.77	5.99
30	13	25.33	9.05	26.77	5.99
31	0	19.66	12.75	28.85	7.42
31	1	20.49	11.50	28.48	7.17
31	2	21.50	10.96	28.09	6.94
31	3	22.09	10.62	27.61	6.68
31	4	22.47	10.40	26.85	6.34
31	5	22.78	10.21	25.89	5.89
31	6	23.08	10.02	25.89	5.89

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
31	7	23.34	9.82	25.89	5.89
31	8	23.59	9.62	25.89	5.89
31	9	23.84	9.42	25.89	5.89
31	10	24.07	9.21	25.89	5.89
31	11	24.28	9.02	25.89	5.89
31	12	24.45	8.85	25.89	5.89
31	13	24.56	8.74	25.89	5.89
31	14	24.67	8.64	25.89	5.89
32	0	19.84	12.82	28.23	7.52
32	1	20.74	11.67	27.98	7.33
32	2	20.98	10.50	27.61	7.08
32	3	21.54	10.17	27.22	6.84
32	4	21.90	9.95	26.74	6.58
32	5	22.19	9.77	25.97	6.24
32	6	22.44	9.60	25.01	5.79
32	7	22.70	9.41	25.01	5.79
32	8	22.92	9.24	25.01	5.79
32	9	23.14	9.05	25.01	5.79
32	10	23.34	8.87	25.01	5.79
32	11	23.53	8.69	25.01	5.79
32	12	23.69	8.53	25.01	5.79
32	13	23.81	8.41	25.01	5.79
32	14	23.88	8.33	25.01	5.79
32	15	23.97	8.25	25.01	5.79
33	0	19.73	12.64	27.32	7.39
33	1	20.93	11.73	27.35	7.43
33	2	21.25	10.67	27.10	7.24
33	3	20.99	9.70	26.73	6.98
33	4	21.32	9.49	26.34	6.75
33	5	21.59	9.32	25.86	6.49
33	6	21.83	9.16	25.09	6.14
33	7	22.05	9.00	24.13	5.69
33	8	22.27	8.83	24.13	5.69
33	9	22.45	8.67	24.13	5.69
33	10	22.62	8.51	24.13	5.69
33	11	22.79	8.36	24.13	5.69
33	12	22.92	8.21	24.13	5.69
33	13	23.04	8.10	24.13	5.69

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
33	14	23.13	8.01	24.13	5.69
33	15	23.18	7.96	24.13	5.69
33	16	23.26	7.88	24.13	5.69
34	0	19.39	12.47	26.21	7.42
34	1	20.81	11.52	26.44	7.30
34	2	21.46	10.70	26.48	7.34
34	3	21.27	9.86	26.23	7.14
34	4	20.76	9.02	25.86	6.89
34	5	21.00	8.86	25.47	6.65
34	6	21.22	8.71	24.98	6.39
34	7	21.43	8.55	24.22	6.04
34	8	21.60	8.41	23.26	5.58
34	9	21.78	8.27	23.26	5.58
34	10	21.92	8.14	23.26	5.58
34	11	22.05	8.01	23.26	5.58
34	12	22.17	7.90	23.26	5.58
34	13	22.27	7.79	23.26	5.58
34	14	22.35	7.71	23.26	5.58
34	15	22.42	7.64	23.26	5.58
34	16	22.46	7.60	23.26	5.58
34	17	22.53	7.53	23.26	5.58
35	0	18.70	12.42	25.63	7.27
35	1	20.46	11.36	25.34	7.33
35	2	21.25	10.54	25.57	7.21
35	3	21.40	9.95	25.61	7.24
35	4	20.99	9.23	25.36	7.05
35	5	20.37	8.44	24.99	6.79
35	6	20.56	8.30	24.60	6.55
35	7	20.76	8.15	24.11	6.29
35	8	20.92	8.02	23.34	5.94
35	9	21.07	7.89	22.38	5.48
35	10	21.21	7.78	22.38	5.48
35	11	21.32	7.67	22.38	5.48
35	12	21.42	7.57	22.38	5.48
35	13	21.51	7.48	22.38	5.48
35	14	21.57	7.41	22.38	5.48
35	15	21.63	7.35	22.38	5.48
35	16	21.67	7.30	22.38	5.48

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
35	17	21.71	7.26	22.38	5.48
35	18	21.76	7.21	22.38	5.48
36	0	18.33	12.17	24.76	7.18
36	1	20.10	11.20	24.47	7.23
36	2	20.90	10.39	24.71	7.12
36	3	21.11	9.86	24.74	7.15
36	4	21.03	9.40	24.49	6.95
36	5	20.54	8.71	24.12	6.69
36	6	19.86	7.93	23.73	6.45
36	7	20.03	7.80	23.24	6.19
36	8	20.20	7.67	22.48	5.83
36	9	20.33	7.55	21.52	5.36
36	10	20.45	7.45	21.52	5.36
36	11	20.56	7.35	21.52	5.36
36	12	20.65	7.26	21.52	5.36
36	13	20.73	7.18	21.52	5.36
36	14	20.80	7.11	21.52	5.36
36	15	20.84	7.06	21.52	5.36
36	16	20.88	7.02	21.52	5.36
36	17	20.91	6.98	21.52	5.36
36	18	20.94	6.95	21.52	5.36
36	19	20.97	6.93	21.52	5.36
37	0	17.75	11.71	23.92	7.11
37	1	19.68	10.98	23.90	7.08
37	2	20.52	10.25	23.61	7.14
37	3	20.74	9.72	23.84	7.02
37	4	20.73	9.32	23.88	7.05
37	5	20.58	8.90	23.63	6.85
37	6	20.03	8.22	23.26	6.59
37	7	19.31	7.45	22.87	6.35
37	8	19.45	7.33	22.38	6.08
37	9	19.59	7.21	21.61	5.72
37	10	19.70	7.12	20.65	5.25
37	11	19.79	7.04	20.65	5.25
37	12	19.88	6.96	20.65	5.25
37	13	19.95	6.88	20.65	5.25
37	14	20.01	6.82	20.65	5.25
37	15	20.06	6.77	20.65	5.25

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
37	16	20.08	6.74	20.65	5.25
37	17	20.11	6.71	20.65	5.25
37	18	20.14	6.69	20.65	5.25
37	19	20.15	6.68	20.65	5.25
37	20	20.18	6.65	20.65	5.25
38	0	17.23	11.33	23.13	7.15
38	1	19.03	10.54	23.06	7.02
38	2	20.07	10.04	23.04	6.98
38	3	20.35	9.60	22.74	7.04
38	4	20.35	9.19	22.98	6.92
38	5	20.28	8.82	23.02	6.96
38	6	20.09	8.41	22.77	6.75
38	7	19.49	7.75	22.39	6.49
38	8	18.72	6.98	22.00	6.24
38	9	18.84	6.88	21.51	5.97
38	10	18.95	6.79	20.74	5.61
38	11	19.03	6.72	19.78	5.13
38	12	19.10	6.65	19.78	5.13
38	13	19.18	6.59	19.78	5.13
38	14	19.23	6.53	19.78	5.13
38	15	19.27	6.49	19.78	5.13
38	16	19.29	6.46	19.78	5.13
38	17	19.30	6.45	19.78	5.13
38	18	19.33	6.43	19.78	5.13
38	19	19.33	6.43	19.78	5.13
38	20	19.35	6.41	19.78	5.13
38	21	19.40	6.35	19.78	5.13
39	0	16.71	10.97	22.27	7.06
39	1	18.45	10.18	22.27	7.06
39	2	19.37	9.62	22.20	6.92
39	3	19.88	9.41	22.17	6.89
39	4	19.95	9.09	21.88	6.95
39	5	19.89	8.71	22.12	6.82
39	6	19.78	8.35	22.15	6.86
39	7	19.55	7.95	21.90	6.65
39	8	18.91	7.30	21.53	6.39
39	9	18.09	6.55	21.13	6.14
39	10	18.18	6.47	20.65	5.87

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
39	11	18.27	6.39	19.88	5.50
39	12	18.33	6.34	18.91	5.02
39	13	18.39	6.29	18.91	5.02
39	14	18.44	6.25	18.91	5.02
39	15	18.47	6.21	18.91	5.02
39	16	18.49	6.19	18.91	5.02
39	17	18.51	6.17	18.91	5.02
39	18	18.51	6.17	18.91	5.02
39	19	18.52	6.17	18.91	5.02
39	20	18.53	6.16	18.91	5.02
39	21	18.57	6.12	18.91	5.02
39	22	18.61	6.07	18.91	5.02
40	0	16.19	10.60	21.41	6.96
40	1	17.86	9.85	21.41	6.96
40	2	18.75	9.29	21.41	6.96
40	3	19.16	9.00	21.33	6.82
40	4	19.48	8.91	21.31	6.79
40	5	19.48	8.61	21.02	6.85
40	6	19.38	8.25	21.26	6.72
40	7	19.23	7.90	21.29	6.76
40	8	18.97	7.51	21.04	6.55
40	9	18.29	6.88	20.66	6.28
40	10	17.43	6.14	20.27	6.03
40	11	17.49	6.08	19.78	5.76
40	12	17.56	6.02	19.01	5.39
40	13	17.61	5.99	18.04	4.90
40	14	17.64	5.96	18.04	4.90
40	15	17.68	5.93	18.04	4.90
40	16	17.69	5.92	18.04	4.90
40	17	17.71	5.91	18.04	4.90
40	18	17.72	5.90	18.04	4.90
40	19	17.70	5.92	18.04	4.90
40	20	17.71	5.91	18.04	4.90
40	21	17.74	5.87	18.04	4.90
40	22	17.77	5.84	18.04	4.90
40	23	17.80	5.80	18.04	4.90
41	0	15.63	10.24	20.55	6.86
41	1	17.27	9.51	20.55	6.86

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
41	2	18.13	8.98	20.55	6.86
41	3	18.52	8.68	20.55	6.86
41	4	18.73	8.52	20.48	6.72
41	5	19.00	8.45	20.45	6.69
41	6	18.96	8.17	20.16	6.75
41	7	18.84	7.81	20.40	6.62
41	8	18.65	7.47	20.43	6.66
41	9	18.35	7.10	20.18	6.45
41	10	17.63	6.48	19.81	6.18
41	11	16.72	5.76	19.41	5.92
41	12	16.77	5.72	18.92	5.64
41	13	16.83	5.68	18.15	5.27
41	14	16.85	5.66	17.18	4.77
41	15	16.87	5.66	17.18	4.77
41	16	16.89	5.65	17.18	4.77
41	17	16.90	5.65	17.18	4.77
41	18	16.90	5.65	17.18	4.77
41	19	16.89	5.66	17.18	4.77
41	20	16.89	5.67	17.18	4.77
41	21	16.92	5.63	17.18	4.77
41	22	16.95	5.60	17.18	4.77
41	23	16.97	5.58	17.18	4.77
41	24	16.99	5.55	17.18	4.77
42	0	15.09	9.88	19.70	6.76
42	1	16.65	9.19	19.70	6.76
42	2	17.49	8.67	19.70	6.76
42	3	17.87	8.39	19.70	6.76
42	4	18.08	8.21	19.70	6.76
42	5	18.23	8.07	19.62	6.61
42	6	18.47	8.01	19.60	6.58
42	7	18.41	7.74	19.31	6.65
42	8	18.25	7.39	19.54	6.51
42	9	18.03	7.07	19.58	6.55
42	10	17.70	6.72	19.33	6.34
42	11	16.93	6.12	18.95	6.07
42	12	16.00	5.41	18.56	5.81
42	13	16.03	5.39	18.07	5.53
42	14	16.06	5.36	17.29	5.15

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
42	15	16.08	5.37	16.32	4.65
42	16	16.08	5.38	16.32	4.65
42	17	16.09	5.39	16.32	4.65
42	18	16.09	5.39	16.32	4.65
42	19	16.08	5.42	16.32	4.65
42	20	16.08	5.41	16.32	4.65
42	21	16.10	5.39	16.32	4.65
42	22	16.12	5.36	16.32	4.65
42	23	16.14	5.34	16.32	4.65
42	24	16.15	5.33	16.32	4.65
42	25	16.17	5.30	16.32	4.65
43	0	14.52	9.53	18.85	6.65
43	1	16.04	8.86	18.85	6.65
43	2	16.83	8.38	18.85	6.65
43	3	17.22	8.11	18.85	6.65
43	4	17.41	7.93	18.85	6.65
43	5	17.57	7.77	18.78	6.51
43	6	17.69	7.64	18.75	6.47
43	7	17.91	7.60	18.46	6.54
43	8	17.81	7.34	18.70	6.40
43	9	17.62	7.00	18.73	6.44
43	10	17.37	6.70	18.48	6.23
43	11	17.00	6.37	18.10	5.95
43	12	16.21	5.78	17.71	5.69
43	13	15.24	5.09	17.22	5.40
43	14	15.26	5.08	16.44	5.02
43	15	15.28	5.08	15.47	4.51
43	16	15.28	5.10	15.47	4.51
43	17	15.27	5.13	15.47	4.51
43	18	15.28	5.14	15.47	4.51
43	19	15.26	5.17	15.47	4.51
43	20	15.26	5.17	15.47	4.51
43	21	15.29	5.14	15.47	4.51
43	22	15.30	5.13	15.47	4.51
43	23	15.32	5.10	15.47	4.51
43	24	15.32	5.09	15.47	4.51
43	25	15.33	5.09	15.47	4.51
43	26	15.34	5.06	15.47	4.51

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
44	0	13.82	9.20	18.01	6.54
44	1	15.39	8.56	18.01	6.54
44	2	16.18	8.09	18.01	6.54
44	3	16.53	7.83	18.01	6.54
44	4	16.74	7.67	18.01	6.54
44	5	16.89	7.51	18.01	6.54
44	6	17.01	7.36	17.94	6.39
44	7	17.11	7.24	17.92	6.36
44	8	17.31	7.21	17.62	6.42
44	9	17.18	6.96	17.86	6.29
44	10	16.96	6.64	17.90	6.33
44	11	16.68	6.35	17.64	6.11
44	12	16.29	6.04	17.26	5.83
44	13	15.46	5.47	16.87	5.56
44	14	14.47	4.79	16.38	5.28
44	15	14.47	4.81	15.60	4.89
44	16	14.47	4.82	14.62	4.37
44	17	14.46	4.85	14.62	4.37
44	18	14.45	4.89	14.62	4.37
44	19	14.44	4.93	14.62	4.37
44	20	14.44	4.94	14.62	4.37
44	21	14.47	4.90	14.62	4.37
44	22	14.49	4.87	14.62	4.37
44	23	14.49	4.87	14.62	4.37
44	24	14.50	4.86	14.62	4.37
44	25	14.50	4.86	14.62	4.37
44	26	14.50	4.85	14.62	4.37
44	27	14.51	4.84	14.62	4.37
45	0	12.97	8.92	17.18	6.42
45	1	14.69	8.26	17.18	6.42
45	2	15.52	7.80	17.18	6.42
45	3	15.88	7.54	17.18	6.42
45	4	16.06	7.39	17.18	6.42
45	5	16.22	7.24	17.18	6.42
45	6	16.34	7.10	17.18	6.42
45	7	16.43	6.97	17.11	6.27
45	8	16.51	6.86	17.09	6.24
45	9	16.67	6.85	16.80	6.30

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
45	10	16.53	6.60	17.03	6.17
45	11	16.26	6.30	17.07	6.20
45	12	15.96	6.04	16.81	5.99
45	13	15.55	5.74	16.43	5.70
45	14	14.69	5.19	16.04	5.43
45	15	13.67	4.52	15.54	5.14
45	16	13.66	4.55	14.76	4.75
45	17	13.65	4.58	13.78	4.22
45	18	13.63	4.63	13.78	4.22
45	19	13.61	4.68	13.78	4.22
45	20	13.62	4.69	13.78	4.22
45	21	13.65	4.66	13.78	4.22
45	22	13.67	4.63	13.78	4.22
45	23	13.68	4.62	13.78	4.22
45	24	13.68	4.62	13.78	4.22
45	25	13.69	4.61	13.78	4.22
45	26	13.69	4.61	13.78	4.22
45	27	13.69	4.60	13.78	4.22
45	28	13.68	4.61	13.78	4.22
46	0	12.41	8.52	16.36	6.30
46	1	14.08	7.91	16.36	6.30
46	2	14.87	7.48	16.36	6.30
46	3	15.23	7.25	16.36	6.30
46	4	15.42	7.09	16.36	6.30
46	5	15.55	6.96	16.36	6.30
46	6	15.67	6.83	16.36	6.30
46	7	15.76	6.70	16.36	6.30
46	8	15.82	6.58	16.29	6.15
46	9	15.87	6.50	16.26	6.11
46	10	16.01	6.50	15.97	6.18
46	11	15.84	6.28	16.21	6.04
46	12	15.55	6.00	16.24	6.08
46	13	15.22	5.74	15.99	5.86
46	14	14.78	5.46	15.61	5.57
46	15	13.90	4.93	15.21	5.30
46	16	12.85	4.27	14.71	5.00
46	17	12.84	4.31	13.93	4.60
46	18	12.82	4.36	12.95	4.07

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
46	19	12.79	4.42	12.95	4.07
46	20	12.80	4.44	12.95	4.07
46	21	12.85	4.41	12.95	4.07
46	22	12.87	4.38	12.95	4.07
46	23	12.87	4.37	12.95	4.07
46	24	12.88	4.37	12.95	4.07
46	25	12.88	4.36	12.95	4.07
46	26	12.88	4.36	12.95	4.07
46	27	12.88	4.35	12.95	4.07
46	28	12.88	4.36	12.95	4.07
46	29	12.87	4.37	12.95	4.07
47	0	11.84	8.13	15.54	6.18
47	1	13.43	7.55	15.54	6.18
47	2	14.21	7.16	15.54	6.18
47	3	14.55	6.95	15.54	6.18
47	4	14.76	6.82	15.54	6.18
47	5	14.90	6.68	15.54	6.18
47	6	14.99	6.56	15.54	6.18
47	7	15.08	6.45	15.54	6.18
47	8	15.14	6.33	15.54	6.18
47	9	15.17	6.23	15.47	6.02
47	10	15.19	6.16	15.44	5.99
47	11	15.31	6.19	15.15	6.05
47	12	15.12	5.98	15.39	5.91
47	13	14.80	5.71	15.42	5.95
47	14	14.46	5.47	15.17	5.73
47	15	14.00	5.21	14.78	5.43
47	16	13.10	4.69	14.38	5.16
47	17	12.03	4.04	13.89	4.86
47	18	12.00	4.10	13.10	4.46
47	19	11.97	4.17	12.11	3.91
47	20	11.98	4.18	12.11	3.91
47	21	12.03	4.16	12.11	3.91
47	22	12.06	4.13	12.11	3.91
47	23	12.07	4.12	12.11	3.91
47	24	12.07	4.11	12.11	3.91
47	25	12.07	4.11	12.11	3.91
47	26	12.07	4.11	12.11	3.91

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
47	27	12.08	4.10	12.11	3.91
47	28	12.07	4.11	12.11	3.91
47	29	12.06	4.12	12.11	3.91
47	30	12.06	4.13	12.11	3.91
48	0	11.26	7.73	14.73	6.05
48	1	12.77	7.20	14.73	6.05
48	2	13.51	6.84	14.73	6.05
48	3	13.87	6.66	14.73	6.05
48	4	14.06	6.54	14.73	6.05
48	5	14.22	6.42	14.73	6.05
48	6	14.32	6.29	14.73	6.05
48	7	14.39	6.19	14.73	6.05
48	8	14.45	6.09	14.73	6.05
48	9	14.48	5.99	14.73	6.05
48	10	14.49	5.91	14.66	5.89
48	11	14.49	5.85	14.63	5.85
48	12	14.59	5.90	14.34	5.92
48	13	14.37	5.71	14.57	5.78
48	14	14.04	5.45	14.61	5.82
48	15	13.67	5.23	14.35	5.59
48	16	13.20	4.98	13.97	5.30
48	17	12.28	4.47	13.57	5.02
48	18	11.18	3.84	13.07	4.71
48	19	11.15	3.91	12.27	4.31
48	20	11.16	3.93	11.28	3.75
48	21	11.20	3.91	11.28	3.75
48	22	11.24	3.88	11.28	3.75
48	23	11.26	3.87	11.28	3.75
48	24	11.27	3.86	11.28	3.75
48	25	11.27	3.86	11.28	3.75
48	26	11.27	3.85	11.28	3.75
48	27	11.27	3.85	11.28	3.75
48	28	11.27	3.85	11.28	3.75
48	29	11.26	3.86	11.28	3.75
48	30	11.25	3.87	11.28	3.75
48	31	11.25	3.87	11.28	3.75
49	0	10.66	7.33	13.93	5.91
49	1	12.11	6.85	13.93	5.91

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
49	2	12.81	6.52	13.93	5.91
49	3	13.15	6.36	13.93	5.91
49	4	13.36	6.26	13.93	5.91
49	5	13.51	6.15	13.93	5.91
49	6	13.63	6.05	13.93	5.91
49	7	13.71	5.93	13.93	5.91
49	8	13.75	5.85	13.93	5.91
49	9	13.79	5.76	13.93	5.91
49	10	13.79	5.68	13.86	5.75
49	11	13.78	5.61	13.83	5.71
49	12	13.76	5.58	13.55	5.78
49	13	13.84	5.64	13.78	5.64
49	14	13.61	5.46	13.82	5.68
49	15	13.26	5.22	13.55	5.45
49	16	12.88	5.00	13.17	5.15
49	17	12.39	4.76	12.76	4.86
49	18	11.45	4.27	12.26	4.56
49	19	10.33	3.66	11.46	4.14
49	20	10.33	3.68	10.47	3.58
49	21	10.38	3.66	10.47	3.58
49	22	10.42	3.63	10.47	3.58
49	23	10.45	3.62	10.47	3.58
49	24	10.46	3.61	10.47	3.58
49	25	10.47	3.60	10.47	3.58
49	26	10.47	3.60	10.47	3.58
49	27	10.47	3.60	10.47	3.58
49	28	10.47	3.60	10.47	3.58
49	29	10.46	3.61	10.47	3.58
49	30	10.45	3.62	10.47	3.58
49	31	10.45	3.62	10.47	3.58
49	32	10.45	3.62	10.47	3.58
50	0	10.05	6.94	13.15	5.77
50	1	11.41	6.51	13.15	5.77
50	2	12.10	6.21	13.15	5.77
50	3	12.42	6.07	13.15	5.77
50	4	12.62	5.98	13.15	5.77
50	5	12.79	5.89	13.15	5.77
50	6	12.91	5.80	13.15	5.77

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
50	7	13.01	5.71	13.15	5.77
50	8	13.06	5.60	13.15	5.77
50	9	13.07	5.53	13.15	5.77
50	10	13.09	5.46	13.15	5.77
50	11	13.08	5.39	13.08	5.60
50	12	13.04	5.34	13.05	5.56
50	13	13.01	5.32	12.77	5.63
50	14	13.08	5.40	13.00	5.49
50	15	12.83	5.23	13.04	5.53
50	16	12.46	5.00	12.77	5.29
50	17	12.07	4.79	12.38	4.99
50	18	11.57	4.57	11.97	4.70
50	19	10.60	4.10	11.47	4.39
50	20	9.51	3.44	10.67	3.97
50	21	9.55	3.41	9.66	3.39
50	22	9.59	3.39	9.66	3.39
50	23	9.62	3.38	9.66	3.39
50	24	9.65	3.36	9.66	3.39
50	25	9.67	3.35	9.66	3.39
50	26	9.67	3.35	9.66	3.39
50	27	9.67	3.34	9.66	3.39
50	28	9.67	3.35	9.66	3.39
50	29	9.66	3.36	9.66	3.39
50	30	9.65	3.36	9.66	3.39
50	31	9.65	3.36	9.66	3.39
50	32	9.65	3.36	9.66	3.39
50	33	9.65	3.36	9.66	3.39
51	0	9.43	6.56	12.38	5.62
51	1	10.71	6.18	12.38	5.62
51	2	11.35	5.91	12.38	5.62
51	3	11.68	5.79	12.38	5.62
51	4	11.88	5.71	12.38	5.62
51	5	12.04	5.64	12.38	5.62
51	6	12.18	5.56	12.38	5.62
51	7	12.27	5.48	12.38	5.62
51	8	12.35	5.39	12.38	5.62
51	9	12.38	5.30	12.38	5.62
51	10	12.37	5.25	12.38	5.62

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
51	11	12.37	5.19	12.38	5.62
51	12	12.34	5.14	12.31	5.45
51	13	12.29	5.10	12.28	5.41
51	14	12.24	5.09	12.01	5.47
51	15	12.30	5.18	12.22	5.33
51	16	12.04	5.02	12.26	5.37
51	17	11.66	4.79	12.00	5.13
51	18	11.25	4.61	11.60	4.82
51	19	10.73	4.40	11.19	4.53
51	20	9.80	3.89	10.68	4.22
51	21	8.72	3.18	9.87	3.79
51	22	8.77	3.15	8.86	3.21
51	23	8.80	3.14	8.86	3.21
51	24	8.82	3.13	8.86	3.21
51	25	8.85	3.11	8.86	3.21
51	26	8.86	3.10	8.86	3.21
51	27	8.87	3.10	8.86	3.21
51	28	8.86	3.10	8.86	3.21
51	29	8.85	3.11	8.86	3.21
51	30	8.85	3.11	8.86	3.21
51	31	8.85	3.11	8.86	3.21
51	32	8.85	3.11	8.86	3.21
51	33	8.85	3.11	8.86	3.21
51	34	8.85	3.11	8.86	3.21
52	0	8.78	6.19	11.62	5.47
52	1	9.99	5.86	11.62	5.47
52	2	10.60	5.63	11.62	5.47
52	3	10.91	5.52	11.62	5.47
52	4	11.11	5.45	11.62	5.47
52	5	11.28	5.39	11.62	5.47
52	6	11.41	5.32	11.62	5.47
52	7	11.53	5.25	11.62	5.47
52	8	11.61	5.18	11.62	5.47
52	9	11.66	5.11	11.62	5.47
52	10	11.67	5.02	11.62	5.47
52	11	11.64	4.98	11.62	5.47
52	12	11.62	4.94	11.62	5.47
52	13	11.58	4.90	11.54	5.29

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
52	14	11.52	4.87	11.51	5.25
52	15	11.45	4.88	11.25	5.31
52	16	11.51	4.98	11.46	5.17
52	17	11.24	4.83	11.50	5.21
52	18	10.84	4.62	11.23	4.97
52	19	10.42	4.44	10.83	4.66
52	20	9.94	4.19	10.41	4.36
52	21	9.04	3.63	9.89	4.05
52	22	7.93	2.93	9.08	3.62
52	23	7.97	2.91	8.05	3.02
52	24	7.99	2.90	8.05	3.02
52	25	8.02	2.89	8.05	3.02
52	26	8.04	2.88	8.05	3.02
52	27	8.06	2.86	8.05	3.02
52	28	8.05	2.86	8.05	3.02
52	29	8.05	2.87	8.05	3.02
52	30	8.04	2.88	8.05	3.02
52	31	8.04	2.88	8.05	3.02
52	32	8.04	2.88	8.05	3.02
52	33	8.04	2.88	8.05	3.02
52	34	8.04	2.88	8.05	3.02
52	35	8.04	2.88	8.05	3.02
53	0	8.14	5.83	10.86	5.32
53	1	9.24	5.57	10.86	5.32
53	2	9.82	5.37	10.86	5.32
53	3	10.12	5.27	10.86	5.32
53	4	10.33	5.22	10.86	5.32
53	5	10.50	5.16	10.86	5.32
53	6	10.64	5.10	10.86	5.32
53	7	10.75	5.04	10.86	5.32
53	8	10.85	4.97	10.86	5.32
53	9	10.91	4.91	10.86	5.32
53	10	10.95	4.84	10.86	5.32
53	11	10.94	4.77	10.86	5.32
53	12	10.89	4.75	10.86	5.32
53	13	10.86	4.71	10.86	5.32
53	14	10.80	4.69	10.78	5.13
53	15	10.73	4.67	10.75	5.09

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
53	16	10.66	4.69	10.49	5.15
53	17	10.71	4.80	10.69	5.01
53	18	10.42	4.66	10.73	5.05
53	19	10.01	4.46	10.46	4.81
53	20	9.64	4.23	10.06	4.49
53	21	9.21	3.93	9.63	4.20
53	22	8.27	3.39	9.11	3.88
53	23	7.12	2.71	8.29	3.45
53	24	7.16	2.69	7.25	2.84
53	25	7.18	2.68	7.25	2.84
53	26	7.20	2.67	7.25	2.84
53	27	7.22	2.65	7.25	2.84
53	28	7.24	2.64	7.25	2.84
53	29	7.23	2.65	7.25	2.84
53	30	7.23	2.65	7.25	2.84
53	31	7.23	2.65	7.25	2.84
53	32	7.23	2.65	7.25	2.84
53	33	7.23	2.65	7.25	2.84
53	34	7.23	2.65	7.25	2.84
53	35	7.23	2.65	7.25	2.84
53	36	7.23	2.65	7.25	2.84
54	0	7.56	5.47	10.11	5.16
54	1	8.50	5.28	10.11	5.16
54	2	9.02	5.14	10.11	5.16
54	3	9.32	5.05	10.11	5.16
54	4	9.52	5.00	10.11	5.16
54	5	9.69	4.95	10.11	5.16
54	6	9.84	4.89	10.11	5.16
54	7	9.97	4.84	10.11	5.16
54	8	10.07	4.78	10.11	5.16
54	9	10.15	4.72	10.11	5.16
54	10	10.19	4.67	10.11	5.16
54	11	10.21	4.61	10.11	5.16
54	12	10.19	4.55	10.11	5.16
54	13	10.13	4.54	10.11	5.16
54	14	10.09	4.51	10.11	5.16
54	15	10.01	4.49	10.03	4.97
54	16	9.93	4.49	10.01	4.93

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
54	17	9.86	4.51	9.75	4.98
54	18	9.90	4.63	9.95	4.85
54	19	9.60	4.50	9.99	4.89
54	20	9.24	4.25	9.71	4.64
54	21	8.91	3.99	9.30	4.32
54	22	8.46	3.69	8.87	4.02
54	23	7.49	3.18	8.34	3.70
54	24	6.31	2.51	7.50	3.27
54	25	6.33	2.50	6.44	2.67
54	26	6.36	2.48	6.44	2.67
54	27	6.38	2.47	6.44	2.67
54	28	6.40	2.45	6.44	2.67
54	29	6.41	2.44	6.44	2.67
54	30	6.41	2.45	6.44	2.67
54	31	6.41	2.45	6.44	2.67
54	32	6.41	2.45	6.44	2.67
54	33	6.41	2.45	6.44	2.67
54	34	6.41	2.45	6.44	2.67
54	35	6.41	2.45	6.44	2.67
54	36	6.41	2.45	6.44	2.67
54	37	6.41	2.45	6.44	2.67
55	0	7.00	5.12	9.39	5.00
55	1	7.87	4.97	9.39	5.00
55	2	8.31	4.86	9.39	5.00
55	3	8.57	4.80	9.39	5.00
55	4	8.77	4.76	9.39	5.00
55	5	8.93	4.72	9.39	5.00
55	6	9.07	4.67	9.39	5.00
55	7	9.20	4.63	9.39	5.00
55	8	9.30	4.58	9.39	5.00
55	9	9.38	4.53	9.39	5.00
55	10	9.43	4.48	9.39	5.00
55	11	9.46	4.43	9.39	5.00
55	12	9.47	4.38	9.39	5.00
55	13	9.43	4.33	9.39	5.00
55	14	9.36	4.33	9.39	5.00
55	15	9.31	4.32	9.31	4.80
55	16	9.23	4.31	9.29	4.76

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
55	17	9.14	4.31	9.05	4.80
55	18	9.06	4.34	9.22	4.67
55	19	9.09	4.48	9.26	4.71
55	20	8.85	4.30	8.98	4.46
55	21	8.53	4.01	8.56	4.14
55	22	8.19	3.74	8.13	3.84
55	23	7.72	3.46	7.58	3.52
55	24	6.71	2.97	6.73	3.10
55	25	5.48	2.33	5.65	2.49
55	26	5.50	2.32	5.65	2.49
55	27	5.52	2.31	5.65	2.49
55	28	5.54	2.30	5.65	2.49
55	29	5.55	2.29	5.65	2.49
55	30	5.56	2.29	5.65	2.49
55	31	5.56	2.29	5.65	2.49
55	32	5.56	2.29	5.65	2.49
55	33	5.56	2.29	5.65	2.49
55	34	5.56	2.29	5.65	2.49
55	35	5.56	2.29	5.65	2.49
55	36	5.56	2.29	5.65	2.49
55	37	5.56	2.29	5.65	2.49
55	38	5.56	2.29	5.65	2.49
56	0	6.48	4.77	8.70	4.82
56	1	7.27	4.65	8.70	4.82
56	2	7.67	4.57	8.70	4.82
56	3	7.90	4.53	8.70	4.82
56	4	8.08	4.50	8.70	4.82
56	5	8.22	4.47	8.70	4.82
56	6	8.35	4.43	8.70	4.82
56	7	8.46	4.40	8.70	4.82
56	8	8.55	4.37	8.70	4.82
56	9	8.63	4.33	8.70	4.82
56	10	8.68	4.29	8.70	4.82
56	11	8.72	4.26	8.70	4.82
56	12	8.73	4.22	8.70	4.82
56	13	8.72	4.17	8.70	4.82
56	14	8.67	4.13	8.70	4.82
56	15	8.59	4.15	8.70	4.82

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
56	16	8.53	4.13	8.62	4.62
56	17	8.44	4.13	8.59	4.57
56	18	8.35	4.15	8.37	4.61
56	19	8.26	4.19	8.53	4.48
56	20	8.35	4.28	8.57	4.53
56	21	8.16	4.06	8.28	4.28
56	22	7.83	3.76	7.85	3.95
56	23	7.48	3.49	7.40	3.65
56	24	6.98	3.23	6.84	3.34
56	25	5.92	2.78	5.97	2.92
56	26	4.64	2.19	4.86	2.33
56	27	4.66	2.18	4.86	2.33
56	28	4.67	2.17	4.86	2.33
56	29	4.68	2.17	4.86	2.33
56	30	4.69	2.17	4.86	2.33
56	31	4.69	2.17	4.86	2.33
56	32	4.69	2.17	4.86	2.33
56	33	4.69	2.17	4.86	2.33
56	34	4.69	2.17	4.86	2.33
56	35	4.69	2.17	4.86	2.33
56	36	4.69	2.17	4.86	2.33
56	37	4.69	2.17	4.86	2.33
56	38	4.69	2.17	4.86	2.33
56	39	4.69	2.17	4.86	2.33
57	0	5.95	4.44	8.03	4.65
57	1	6.67	4.35	8.03	4.65
57	2	7.02	4.29	8.03	4.65
57	3	7.23	4.26	8.03	4.65
57	4	7.38	4.25	8.03	4.65
57	5	7.51	4.23	8.03	4.65
57	6	7.62	4.21	8.03	4.65
57	7	7.72	4.19	8.03	4.65
57	8	7.80	4.17	8.03	4.65
57	9	7.87	4.14	8.03	4.65
57	10	7.92	4.12	8.03	4.65
57	11	7.96	4.09	8.03	4.65
57	12	7.98	4.06	8.03	4.65
57	13	7.98	4.02	8.03	4.65

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
57	14	7.96	3.99	8.03	4.65
57	15	7.89	3.96	8.03	4.65
57	16	7.81	3.98	8.03	4.65
57	17	7.74	3.97	7.94	4.44
57	18	7.65	3.98	7.91	4.39
57	19	7.55	4.00	7.71	4.41
57	20	7.51	4.01	7.85	4.30
57	21	7.67	4.06	7.89	4.34
57	22	7.47	3.83	7.59	4.09
57	23	7.13	3.53	7.15	3.76
57	24	6.75	3.27	6.68	3.47
57	25	6.22	3.03	6.10	3.17
57	26	5.11	2.64	5.21	2.76
57	27	3.78	2.09	4.06	2.19
57	28	3.79	2.08	4.06	2.19
57	29	3.80	2.08	4.06	2.19
57	30	3.80	2.08	4.06	2.19
57	31	3.80	2.08	4.06	2.19
57	32	3.80	2.08	4.06	2.19
57	33	3.80	2.08	4.06	2.19
57	34	3.80	2.08	4.06	2.19
57	35	3.80	2.08	4.06	2.19
57	36	3.80	2.08	4.06	2.19
57	37	3.80	2.08	4.06	2.19
57	38	3.80	2.08	4.06	2.19
57	39	3.80	2.08	4.06	2.19
57	40	3.80	2.08	4.06	2.19
58	0	5.67	4.23	7.39	4.49
58	1	6.05	4.07	7.37	4.48
58	2	6.36	4.04	7.37	4.48
58	3	6.55	4.03	7.37	4.48
58	4	6.68	4.02	7.37	4.48
58	5	6.79	4.02	7.37	4.48
58	6	6.89	4.01	7.37	4.48
58	7	6.98	3.99	7.37	4.48
58	8	7.05	3.98	7.37	4.48
58	9	7.11	3.97	7.37	4.48
58	10	7.16	3.95	7.37	4.48

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
58	11	7.19	3.94	7.37	4.48
58	12	7.21	3.91	7.37	4.48
58	13	7.23	3.89	7.37	4.48
58	14	7.21	3.86	7.37	4.48
58	15	7.19	3.83	7.37	4.48
58	16	7.11	3.80	7.37	4.48
58	17	7.02	3.83	7.37	4.48
58	18	6.95	3.83	7.28	4.25
58	19	6.85	3.85	7.25	4.20
58	20	6.80	3.84	7.08	4.20
58	21	6.82	3.81	7.18	4.11
58	22	6.98	3.86	7.23	4.15
58	23	6.77	3.62	6.92	3.90
58	24	6.41	3.32	6.45	3.58
58	25	6.00	3.08	5.97	3.29
58	26	5.43	2.88	5.37	3.00
58	27	4.27	2.54	4.44	2.62
58	28	2.89	2.03	3.25	2.08
58	29	2.89	2.03	3.25	2.08
58	30	2.90	2.03	3.25	2.08
58	31	2.90	2.03	3.25	2.08
58	32	2.90	2.03	3.25	2.08
58	33	2.90	2.03	3.25	2.08
58	34	2.90	2.03	3.25	2.08
58	35	2.90	2.03	3.25	2.08
58	36	2.90	2.03	3.25	2.08
58	37	2.90	2.03	3.25	2.08
58	38	2.90	2.03	3.25	2.08
58	39	2.90	2.03	3.25	2.08
58	40	2.90	2.03	3.25	2.08
58	41	2.90	2.03	3.25	2.08
59	0	5.36	4.03	6.69	4.27
59	1	5.73	3.88	6.74	4.33
59	2	5.70	3.81	6.74	4.31
59	3	5.86	3.81	6.74	4.31
59	4	5.97	3.82	6.74	4.31
59	5	6.07	3.83	6.74	4.31
59	6	6.16	3.83	6.74	4.31

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
59	7	6.23	3.83	6.74	4.31
59	8	6.29	3.82	6.74	4.31
59	9	6.34	3.82	6.74	4.31
59	10	6.38	3.81	6.74	4.31
59	11	6.42	3.80	6.74	4.31
59	12	6.44	3.79	6.74	4.31
59	13	6.45	3.77	6.74	4.31
59	14	6.46	3.75	6.74	4.31
59	15	6.44	3.72	6.74	4.31
59	16	6.40	3.69	6.74	4.31
59	17	6.33	3.67	6.74	4.31
59	18	6.23	3.71	6.74	4.31
59	19	6.15	3.72	6.64	4.07
59	20	6.10	3.71	6.61	4.02
59	21	6.10	3.66	6.48	4.00
59	22	6.12	3.63	6.54	3.92
59	23	6.29	3.67	6.59	3.96
59	24	6.07	3.43	6.26	3.71
59	25	5.67	3.15	5.78	3.40
59	26	5.22	2.94	5.27	3.13
59	27	4.61	2.77	4.64	2.86
59	28	3.41	2.48	3.67	2.52
59	29	1.97	2.02	2.42	2.03
59	30	1.97	2.02	2.42	2.03
59	31	1.97	2.02	2.42	2.03
59	32	1.97	2.02	2.42	2.03
59	33	1.97	2.02	2.42	2.03
59	34	1.97	2.02	2.42	2.03
59	35	1.97	2.02	2.42	2.03
59	36	1.97	2.02	2.42	2.03
59	37	1.97	2.02	2.42	2.03
59	38	1.97	2.02	2.42	2.03
59	39	1.97	2.02	2.42	2.03
59	40	1.97	2.02	2.42	2.03
59	41	1.97	2.02	2.42	2.03
59	42	1.97	2.02	2.42	2.03
60	0	5.01	3.82	6.00	4.10
60	1	5.40	3.70	6.06	4.12

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
60	2	5.38	3.63	6.13	4.17
60	3	5.17	3.63	6.15	4.14
60	4	5.26	3.65	6.15	4.14
60	5	5.35	3.66	6.15	4.14
60	6	5.42	3.67	6.15	4.14
60	7	5.48	3.68	6.15	4.14
60	8	5.54	3.68	6.15	4.14
60	9	5.58	3.68	6.15	4.14
60	10	5.62	3.68	6.15	4.14
60	11	5.64	3.68	6.15	4.14
60	12	5.67	3.68	6.15	4.14
60	13	5.68	3.67	6.15	4.14
60	14	5.69	3.65	6.15	4.14
60	15	5.68	3.63	6.15	4.14
60	16	5.66	3.60	6.15	4.14
60	17	5.62	3.58	6.15	4.14
60	18	5.54	3.56	6.15	4.14
60	19	5.43	3.61	6.15	4.14
60	20	5.39	3.60	6.05	3.88
60	21	5.40	3.56	6.01	3.82
60	22	5.40	3.52	5.94	3.78
60	23	5.42	3.48	5.94	3.72
60	24	5.59	3.51	5.99	3.77
60	25	5.33	3.28	5.64	3.52
60	26	4.89	3.03	5.13	3.22
60	27	4.41	2.84	4.59	2.97
60	28	3.78	2.69	3.92	2.75
60	29	2.52	2.46	2.90	2.46
60	30	1.79	2.22	1.57	2.03
60	31	1.79	2.22	1.57	2.03
60	32	1.79	2.22	1.57	2.03
60	33	1.79	2.22	1.57	2.03
60	34	1.79	2.22	1.57	2.03
60	35	1.79	2.22	1.57	2.03
60	36	1.79	2.22	1.57	2.03
60	37	1.79	2.22	1.57	2.03
60	38	1.79	2.22	1.57	2.03
60	39	1.79	2.22	1.57	2.03

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
60	40	1.79	2.22	1.57	2.03
60	41	1.79	2.22	1.57	2.03
60	42	1.79	2.22	1.57	2.03
60	43	1.79	2.22	1.57	2.03
61	0	4.84	3.75	5.45	3.91
61	1	5.02	3.52	5.37	3.89
61	2	5.04	3.46	5.49	3.97
61	3	4.85	3.45	5.59	4.01
61	4	4.55	3.51	5.66	4.01
61	5	4.62	3.53	5.66	4.01
61	6	4.69	3.55	5.66	4.01
61	7	4.74	3.56	5.66	4.01
61	8	4.78	3.57	5.66	4.01
61	9	4.82	3.58	5.66	4.01
61	10	4.85	3.58	5.66	4.01
61	11	4.88	3.58	5.66	4.01
61	12	4.90	3.58	5.66	4.01
61	13	4.91	3.58	5.66	4.01
61	14	4.92	3.57	5.66	4.01
61	15	4.92	3.56	5.66	4.01
61	16	4.91	3.54	5.66	4.01
61	17	4.88	3.51	5.66	4.01
61	18	4.84	3.49	5.66	4.01
61	19	4.75	3.47	5.66	4.01
61	20	4.71	3.51	5.66	4.01
61	21	4.71	3.48	5.52	3.67
61	22	4.71	3.44	5.49	3.61
61	23	4.72	3.39	5.51	3.75
61	24	4.73	3.35	5.41	3.51
61	25	4.86	3.40	5.46	3.55
61	26	4.56	3.18	5.08	3.32
61	27	4.08	2.94	4.51	3.02
61	28	3.58	2.78	3.94	2.84
61	29	2.92	2.66	3.21	2.66
61	30	2.27	2.53	2.12	2.45
61	31	2.27	2.53	2.12	2.45
61	32	2.27	2.53	2.12	2.45
61	33	2.27	2.53	2.12	2.45

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
61	34	2.27	2.53	2.12	2.45
61	35	2.27	2.53	2.12	2.45
61	36	2.27	2.53	2.12	2.45
61	37	2.27	2.53	2.12	2.45
61	38	2.27	2.53	2.12	2.45
61	39	2.27	2.53	2.12	2.45
61	40	2.27	2.53	2.12	2.45
61	41	2.27	2.53	2.12	2.45
61	42	2.27	2.53	2.12	2.45
61	43	2.27	2.53	2.12	2.45
61	44	2.27	2.53	2.12	2.45
62	0	5.08	3.95	5.33	4.05
62	1	4.84	3.47	4.91	3.77
62	2	4.63	3.31	4.84	3.76
62	3	4.50	3.29	5.00	3.83
62	4	4.23	3.34	5.13	3.84
62	5	4.09	3.38	5.25	3.82
62	6	4.15	3.40	5.25	3.82
62	7	4.20	3.42	5.25	3.82
62	8	4.24	3.43	5.25	3.82
62	9	4.27	3.44	5.25	3.82
62	10	4.30	3.45	5.25	3.82
62	11	4.32	3.45	5.25	3.82
62	12	4.33	3.46	5.25	3.82
62	13	4.35	3.45	5.25	3.82
62	14	4.36	3.45	5.25	3.82
62	15	4.36	3.44	5.25	3.82
62	16	4.35	3.42	5.25	3.82
62	17	4.34	3.41	5.25	3.82
62	18	4.31	3.38	5.25	3.82
62	19	4.26	3.36	5.25	3.82
62	20	4.21	3.34	5.25	3.82
62	21	4.24	3.36	5.25	3.82
62	22	4.24	3.33	4.59	3.55
62	23	4.24	3.28	5.05	3.38
62	24	4.24	3.23	5.00	3.31
62	25	4.24	3.19	4.96	3.26
62	26	4.32	3.24	5.02	3.31

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
62	27	3.97	3.04	4.60	3.10
62	28	3.44	2.84	3.98	2.88
62	29	2.88	2.72	3.33	2.73
62	30	2.54	2.66	2.52	2.64
62	31	2.54	2.66	2.52	2.64
62	32	2.54	2.66	2.52	2.64
62	33	2.54	2.66	2.52	2.64
62	34	2.54	2.66	2.52	2.64
62	35	2.54	2.66	2.52	2.64
62	36	2.54	2.66	2.52	2.64
62	37	2.54	2.66	2.52	2.64
62	38	2.54	2.66	2.52	2.64
62	39	2.54	2.66	2.52	2.64
62	40	2.54	2.66	2.52	2.64
62	41	2.54	2.66	2.52	2.64
62	42	2.54	2.66	2.52	2.64
62	43	2.54	2.66	2.52	2.64
62	44	2.54	2.66	2.52	2.64
62	45	2.54	2.66	2.52	2.64
63	0	5.25	4.03	5.13	4.08
63	1	5.15	3.65	4.87	3.92
63	2	4.45	3.28	4.42	3.66
63	3	4.07	3.18	4.36	3.65
63	4	3.87	3.20	4.56	3.68
63	5	3.74	3.23	4.61	3.32
63	6	3.79	3.26	4.61	3.32
63	7	3.83	3.28	4.61	3.32
63	8	3.87	3.30	4.61	3.32
63	9	3.90	3.31	4.61	3.32
63	10	3.92	3.32	4.61	3.32
63	11	3.94	3.32	4.61	3.32
63	12	3.96	3.33	4.61	3.32
63	13	3.97	3.33	4.61	3.32
63	14	3.98	3.33	4.61	3.32
63	15	3.98	3.32	4.61	3.32
63	16	3.99	3.31	4.61	3.32
63	17	3.98	3.29	4.61	3.32
63	18	3.96	3.27	4.61	3.32

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
63	19	3.92	3.25	4.61	3.32
63	20	3.89	3.23	4.61	3.32
63	21	3.88	3.20	4.61	3.32
63	22	3.91	3.22	4.61	3.32
63	23	3.91	3.18	4.58	3.26
63	24	3.91	3.13	4.53	3.19
63	25	3.89	3.06	4.48	3.12
63	26	3.86	3.02	4.43	3.07
63	27	3.95	3.07	4.50	3.12
63	28	3.54	2.91	4.03	2.94
63	29	2.92	2.79	3.35	2.78
63	30	2.62	2.73	2.63	2.71
63	31	2.62	2.73	2.63	2.71
63	32	2.62	2.73	2.63	2.71
63	33	2.62	2.73	2.63	2.71
63	34	2.62	2.73	2.63	2.71
63	35	2.62	2.73	2.63	2.71
63	36	2.62	2.73	2.63	2.71
63	37	2.62	2.73	2.63	2.71
63	38	2.62	2.73	2.63	2.71
63	39	2.62	2.73	2.63	2.71
63	40	2.62	2.73	2.63	2.71
63	41	2.62	2.73	2.63	2.71
63	42	2.62	2.73	2.63	2.71
63	43	2.62	2.73	2.63	2.71
63	44	2.62	2.73	2.63	2.71
63	45	2.62	2.73	2.63	2.71
63	46	2.62	2.73	2.63	2.71
64	0	5.41	4.07	5.03	4.18
64	1	5.34	3.71	4.73	3.97
64	2	4.78	3.44	4.46	3.82
64	3	3.85	3.18	3.98	3.58
64	4	3.39	3.13	3.93	3.57
64	5	3.29	3.15	4.20	3.58
64	6	3.34	3.18	4.20	3.58
64	7	3.38	3.20	4.20	3.58
64	8	3.41	3.22	4.20	3.58
64	9	3.43	3.24	4.20	3.58

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
64	10	3.45	3.25	4.20	3.58
64	11	3.47	3.26	4.20	3.58
64	12	3.49	3.26	4.20	3.58
64	13	3.50	3.26	4.20	3.58
64	14	3.50	3.26	4.20	3.58
64	15	3.51	3.26	4.20	3.58
64	16	3.51	3.25	4.20	3.58
64	17	3.51	3.24	4.20	3.58
64	18	3.50	3.22	4.20	3.58
64	19	3.48	3.20	4.20	3.58
64	20	3.46	3.18	4.20	3.58
64	21	3.45	3.15	4.20	3.58
64	22	3.44	3.12	4.20	3.58
64	23	3.47	3.14	4.20	3.58
64	24	3.47	3.09	4.01	3.13
64	25	3.45	3.03	3.96	3.06
64	26	3.41	2.96	3.90	2.98
64	27	3.37	2.92	3.85	2.94
64	28	3.46	2.97	3.92	2.98
64	29	2.99	2.86	3.41	2.85
64	30	2.65	2.80	2.65	2.76
64	31	2.65	2.80	2.65	2.76
64	32	2.65	2.80	2.65	2.76
64	33	2.65	2.80	2.65	2.76
64	34	2.65	2.80	2.65	2.76
64	35	2.65	2.80	2.65	2.76
64	36	2.65	2.80	2.65	2.76
64	37	2.65	2.80	2.65	2.76
64	38	2.65	2.80	2.65	2.76
64	39	2.65	2.80	2.65	2.76
64	40	2.65	2.80	2.65	2.76
64	41	2.65	2.80	2.65	2.76
64	42	2.65	2.80	2.65	2.76
64	43	2.65	2.80	2.65	2.76
64	44	2.65	2.80	2.65	2.76
64	45	2.65	2.80	2.65	2.76
64	46	2.65	2.80	2.65	2.76
64	47	2.65	2.80	2.65	2.76

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
65	0	5.56	4.09	4.80	4.09
65	1	5.48	3.72	4.60	3.98
65	2	4.96	3.49	4.39	3.87
65	3	4.19	3.32	4.10	3.74
65	4	3.12	3.15	3.57	3.55
65	5	2.89	3.13	3.50	3.47
65	6	2.93	3.16	3.50	3.47
65	7	2.97	3.19	3.50	3.47
65	8	3.00	3.21	3.50	3.47
65	9	3.02	3.23	3.50	3.47
65	10	3.04	3.24	3.50	3.47
65	11	3.06	3.25	3.50	3.47
65	12	3.07	3.26	3.50	3.47
65	13	3.08	3.26	3.50	3.47
65	14	3.09	3.26	3.50	3.47
65	15	3.09	3.26	3.50	3.47
65	16	3.10	3.26	3.50	3.47
65	17	3.10	3.25	3.50	3.47
65	18	3.10	3.24	3.50	3.47
65	19	3.08	3.21	3.50	3.47
65	20	3.07	3.19	3.50	3.47
65	21	3.06	3.16	3.50	3.47
65	22	3.05	3.13	3.50	3.47
65	23	3.04	3.09	3.50	3.47
65	24	3.07	3.11	3.50	3.47
65	25	3.06	3.06	3.34	3.07
65	26	3.01	2.99	3.29	3.00
65	27	2.95	2.92	3.22	2.93
65	28	2.90	2.89	3.16	2.88
65	29	3.01	2.92	3.24	2.92
65	30	2.75	2.87	2.68	2.83
65	31	2.75	2.87	2.68	2.83
65	32	2.75	2.87	2.68	2.83
65	33	2.75	2.87	2.68	2.83
65	34	2.75	2.87	2.68	2.83
65	35	2.75	2.87	2.68	2.83
65	36	2.75	2.87	2.68	2.83
65	37	2.75	2.87	2.68	2.83

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
65	38	2.75	2.87	2.68	2.83
65	39	2.75	2.87	2.68	2.83
65	40	2.75	2.87	2.68	2.83
65	41	2.75	2.87	2.68	2.83
65	42	2.75	2.87	2.68	2.83
65	43	2.75	2.87	2.68	2.83
65	44	2.75	2.87	2.68	2.83
65	45	2.75	2.87	2.68	2.83
65	46	2.75	2.87	2.68	2.83
65	47	2.75	2.87	2.68	2.83
65	48	2.75	2.87	2.68	2.83
66	0	5.70	4.11	4.61	4.01
66	1	5.60	3.74	4.53	4.00
66	2	5.06	3.51	4.33	3.90
66	3	4.34	3.37	4.11	3.81
66	4	3.45	3.29	3.80	3.71
66	5	2.91	3.21	3.14	3.50
66	6	2.95	3.25	3.14	3.50
66	7	2.99	3.27	3.14	3.50
66	8	3.02	3.29	3.14	3.50
66	9	3.04	3.31	3.14	3.50
66	10	3.06	3.33	3.14	3.50
66	11	3.08	3.34	3.14	3.50
66	12	3.09	3.34	3.14	3.50
66	13	3.10	3.35	3.14	3.50
66	14	3.11	3.35	3.14	3.50
66	15	3.11	3.35	3.14	3.50
66	16	3.12	3.34	3.14	3.50
66	17	3.12	3.33	3.14	3.50
66	18	3.12	3.32	3.14	3.50
66	19	3.12	3.31	3.14	3.50
66	20	3.10	3.28	3.14	3.50
66	21	3.10	3.26	3.14	3.50
66	22	3.09	3.22	3.14	3.50
66	23	3.07	3.18	3.14	3.50
66	24	3.05	3.14	3.14	3.50
66	25	3.08	3.15	3.14	3.50
66	26	3.03	3.08	2.94	3.06

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
66	27	2.97	3.01	2.88	2.99
66	28	2.87	2.94	2.80	2.91
66	29	2.80	2.92	2.73	2.87
66	30	2.85	2.93	2.83	2.89
66	31	2.85	2.93	2.83	2.89
66	32	2.85	2.93	2.83	2.89
66	33	2.85	2.93	2.83	2.89
66	34	2.85	2.93	2.83	2.89
66	35	2.85	2.93	2.83	2.89
66	36	2.85	2.93	2.83	2.89
66	37	2.85	2.93	2.83	2.89
66	38	2.85	2.93	2.83	2.89
66	39	2.85	2.93	2.83	2.89
66	40	2.85	2.93	2.83	2.89
66	41	2.85	2.93	2.83	2.89
66	42	2.85	2.93	2.83	2.89
66	43	2.85	2.93	2.83	2.89
66	44	2.85	2.93	2.83	2.89
66	45	2.85	2.93	2.83	2.89
66	46	2.85	2.93	2.83	2.89
66	47	2.85	2.93	2.83	2.89
66	48	2.85	2.93	2.83	2.89
66	49	2.85	2.93	2.83	2.89
67	0	5.81	4.13	4.46	3.92
67	1	5.69	3.75	4.40	3.92
67	2	5.13	3.53	4.34	3.91
67	3	4.39	3.40	4.13	3.83
67	4	3.56	3.34	3.90	3.76
67	5	3.12	3.30	3.48	3.63
67	6	3.16	3.33	3.48	3.63
67	7	3.20	3.36	3.48	3.63
67	8	3.23	3.38	3.48	3.63
67	9	3.26	3.40	3.48	3.63
67	10	3.28	3.41	3.48	3.63
67	11	3.30	3.42	3.48	3.63
67	12	3.31	3.43	3.48	3.63
67	13	3.32	3.43	3.48	3.63
67	14	3.33	3.43	3.48	3.63

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
67	15	3.34	3.43	3.48	3.63
67	16	3.34	3.43	3.48	3.63
67	17	3.34	3.42	3.48	3.63
67	18	3.34	3.41	3.48	3.63
67	19	3.34	3.39	3.48	3.63
67	20	3.34	3.37	3.48	3.63
67	21	3.33	3.34	3.48	3.63
67	22	3.32	3.31	3.48	3.63
67	23	3.30	3.26	3.48	3.63
67	24	3.28	3.21	3.48	3.63
67	25	3.25	3.16	3.48	3.63
67	26	3.26	3.17	3.48	3.63
67	27	3.19	3.09	3.14	3.06
67	28	3.09	3.03	2.83	2.95
67	29	2.94	2.98	2.76	2.91
67	30	2.90	2.97	2.86	2.93
67	31	2.90	2.97	2.86	2.93
67	32	2.90	2.97	2.86	2.93
67	33	2.90	2.97	2.86	2.93
67	34	2.90	2.97	2.86	2.93
67	35	2.90	2.97	2.86	2.93
67	36	2.90	2.97	2.86	2.93
67	37	2.90	2.97	2.86	2.93
67	38	2.90	2.97	2.86	2.93
67	39	2.90	2.97	2.86	2.93
67	40	2.90	2.97	2.86	2.93
67	41	2.90	2.97	2.86	2.93
67	42	2.90	2.97	2.86	2.93
67	43	2.90	2.97	2.86	2.93
67	44	2.90	2.97	2.86	2.93
67	45	2.90	2.97	2.86	2.93
67	46	2.90	2.97	2.86	2.93
67	47	2.90	2.97	2.86	2.93
67	48	2.90	2.97	2.86	2.93
67	49	2.90	2.97	2.86	2.93
67	50	2.90	2.97	2.86	2.93
68	0	5.75	4.06	4.32	3.82
68	1	5.80	3.75	4.27	3.83

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
68	2	5.22	3.54	4.23	3.84
68	3	4.46	3.43	4.19	3.84
68	4	3.61	3.37	3.98	3.78
68	5	3.20	3.34	3.74	3.76
68	6	3.24	3.37	3.74	3.76
68	7	3.28	3.40	3.74	3.76
68	8	3.32	3.42	3.74	3.76
68	9	3.34	3.43	3.74	3.76
68	10	3.37	3.45	3.74	3.76
68	11	3.38	3.46	3.74	3.76
68	12	3.40	3.46	3.74	3.76
68	13	3.41	3.47	3.74	3.76
68	14	3.42	3.47	3.74	3.76
68	15	3.42	3.47	3.74	3.76
68	16	3.43	3.46	3.74	3.76
68	17	3.43	3.46	3.74	3.76
68	18	3.43	3.45	3.74	3.76
68	19	3.43	3.43	3.74	3.76
68	20	3.42	3.41	3.74	3.76
68	21	3.42	3.38	3.74	3.76
68	22	3.40	3.35	3.74	3.76
68	23	3.39	3.30	3.74	3.76
68	24	3.36	3.25	3.74	3.76
68	25	3.33	3.20	3.74	3.76
68	26	3.28	3.13	3.74	3.76
68	27	3.30	3.14	3.74	3.76
68	28	3.19	3.07	3.21	3.07
68	29	3.04	3.03	3.08	3.01
68	30	2.96	3.01	2.90	2.98
68	31	2.96	3.01	2.90	2.98
68	32	2.96	3.01	2.90	2.98
68	33	2.96	3.01	2.90	2.98
68	34	2.96	3.01	2.90	2.98
68	35	2.96	3.01	2.90	2.98
68	36	2.96	3.01	2.90	2.98
68	37	2.96	3.01	2.90	2.98
68	38	2.96	3.01	2.90	2.98
68	39	2.96	3.01	2.90	2.98

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
68	40	2.96	3.01	2.90	2.98
68	41	2.96	3.01	2.90	2.98
68	42	2.96	3.01	2.90	2.98
68	43	2.96	3.01	2.90	2.98
68	44	2.96	3.01	2.90	2.98
68	45	2.96	3.01	2.90	2.98
68	46	2.96	3.01	2.90	2.98
68	47	2.96	3.01	2.90	2.98
68	48	2.96	3.01	2.90	2.98
68	49	2.96	3.01	2.90	2.98
68	50	2.96	3.01	2.90	2.98
68	51	2.96	3.01	2.90	2.98
69	0	5.69	3.98	4.17	3.71
69	1	5.74	3.67	4.14	3.73
69	2	5.34	3.52	4.11	3.75
69	3	4.55	3.43	4.09	3.77
69	4	3.68	3.39	4.08	3.77
69	5	3.26	3.36	3.86	3.76
69	6	3.31	3.39	3.86	3.76
69	7	3.35	3.42	3.86	3.76
69	8	3.38	3.44	3.86	3.76
69	9	3.41	3.46	3.86	3.76
69	10	3.43	3.47	3.86	3.76
69	11	3.45	3.48	3.86	3.76
69	12	3.46	3.49	3.86	3.76
69	13	3.48	3.49	3.86	3.76
69	14	3.48	3.49	3.86	3.76
69	15	3.49	3.49	3.86	3.76
69	16	3.49	3.49	3.86	3.76
69	17	3.50	3.48	3.86	3.76
69	18	3.50	3.47	3.86	3.76
69	19	3.50	3.46	3.86	3.76
69	20	3.49	3.43	3.86	3.76
69	21	3.48	3.41	3.86	3.76
69	22	3.47	3.37	3.86	3.76
69	23	3.46	3.33	3.86	3.76
69	24	3.43	3.28	3.86	3.76
69	25	3.40	3.22	3.86	3.76

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
69	26	3.34	3.16	3.86	3.76
69	27	3.27	3.09	3.86	3.76
69	28	3.28	3.10	3.86	3.76
69	29	3.13	3.06	3.15	3.05
69	30	3.04	3.04	2.97	3.02
69	31	3.04	3.04	2.97	3.02
69	32	3.04	3.04	2.97	3.02
69	33	3.04	3.04	2.97	3.02
69	34	3.04	3.04	2.97	3.02
69	35	3.04	3.04	2.97	3.02
69	36	3.04	3.04	2.97	3.02
69	37	3.04	3.04	2.97	3.02
69	38	3.04	3.04	2.97	3.02
69	39	3.04	3.04	2.97	3.02
69	40	3.04	3.04	2.97	3.02
69	41	3.04	3.04	2.97	3.02
69	42	3.04	3.04	2.97	3.02
69	43	3.04	3.04	2.97	3.02
69	44	3.04	3.04	2.97	3.02
69	45	3.04	3.04	2.97	3.02
69	46	3.04	3.04	2.97	3.02
69	47	3.04	3.04	2.97	3.02
69	48	3.04	3.04	2.97	3.02
69	49	3.04	3.04	2.97	3.02
69	50	3.04	3.04	2.97	3.02
69	51	3.04	3.04	2.97	3.02
69	52	3.04	3.04	2.97	3.02
70	0	5.61	3.89	4.17	3.71
70	1	5.67	3.59	4.14	3.73
70	2	5.28	3.44	4.11	3.75
70	3	4.68	3.39	4.09	3.77
70	4	3.78	3.38	4.08	3.77
70	5	3.35	3.37	3.91	3.72
70	6	3.40	3.40	3.91	3.72
70	7	3.44	3.42	3.91	3.72
70	8	3.47	3.44	3.91	3.72
70	9	3.50	3.46	3.91	3.72
70	10	3.52	3.47	3.91	3.72

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
70	11	3.54	3.48	3.91	3.72
70	12	3.56	3.49	3.91	3.72
70	13	3.57	3.49	3.91	3.72
70	14	3.58	3.49	3.91	3.72
70	15	3.58	3.49	3.91	3.72
70	16	3.59	3.49	3.91	3.72
70	17	3.59	3.48	3.91	3.72
70	18	3.59	3.47	3.91	3.72
70	19	3.59	3.46	3.91	3.72
70	20	3.59	3.44	3.91	3.72
70	21	3.58	3.41	3.91	3.72
70	22	3.57	3.38	3.91	3.72
70	23	3.55	3.34	3.91	3.72
70	24	3.53	3.29	3.91	3.72
70	25	3.49	3.23	3.91	3.72
70	26	3.44	3.17	3.91	3.72
70	27	3.36	3.10	3.91	3.72
70	28	3.26	3.05	3.91	3.72
70	29	3.26	3.05	3.91	3.72
70	30	3.17	3.04	3.32	3.06
70	31	3.17	3.04	3.32	3.06
70	32	3.17	3.04	3.32	3.06
70	33	3.17	3.04	3.32	3.06
70	34	3.17	3.04	3.32	3.06
70	35	3.17	3.04	3.32	3.06
70	36	3.17	3.04	3.32	3.06
70	37	3.17	3.04	3.32	3.06
70	38	3.17	3.04	3.32	3.06
70	39	3.17	3.04	3.32	3.06
70	40	3.17	3.04	3.32	3.06
70	41	3.17	3.04	3.32	3.06
70	42	3.17	3.04	3.32	3.06
70	43	3.17	3.04	3.32	3.06
70	44	3.17	3.04	3.32	3.06
70	45	3.17	3.04	3.32	3.06
70	46	3.17	3.04	3.32	3.06
70	47	3.17	3.04	3.32	3.06
70	48	3.17	3.04	3.32	3.06

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
70	49	3.17	3.04	3.32	3.06
70	50	3.17	3.04	3.32	3.06
70	51	3.17	3.04	3.32	3.06
70	52	3.17	3.04	3.32	3.06
70	53	3.17	3.04	3.32	3.06
71	0	5.51	3.81	3.85	3.49
71	1	5.58	3.50	3.85	3.53
71	2	5.20	3.35	3.86	3.57
71	3	4.62	3.31	3.87	3.60
71	4	3.92	3.33	3.91	3.62
71	5	3.48	3.34	3.22	3.01
71	6	3.52	3.36	3.22	3.01
71	7	3.57	3.38	3.22	3.01
71	8	3.60	3.40	3.22	3.01
71	9	3.63	3.42	3.22	3.01
71	10	3.66	3.43	3.22	3.01
71	11	3.67	3.44	3.22	3.01
71	12	3.69	3.45	3.22	3.01
71	13	3.70	3.45	3.22	3.01
71	14	3.71	3.45	3.22	3.01
71	15	3.72	3.45	3.22	3.01
71	16	3.72	3.45	3.22	3.01
71	17	3.73	3.45	3.22	3.01
71	18	3.73	3.44	3.22	3.01
71	19	3.73	3.42	3.22	3.01
71	20	3.72	3.40	3.22	3.01
71	21	3.71	3.38	3.22	3.01
71	22	3.70	3.34	3.22	3.01
71	23	3.69	3.30	3.22	3.01
71	24	3.66	3.25	3.22	3.01
71	25	3.62	3.20	3.22	3.01
71	26	3.57	3.13	3.22	3.01
71	27	3.49	3.07	3.22	3.01
71	28	3.38	3.02	3.22	3.01
71	29	3.23	2.99	3.22	3.01
71	30	3.23	2.99	3.22	3.01
71	31	3.23	2.99	3.22	3.01
71	32	3.23	2.99	3.22	3.01

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
71	33	3.23	2.99	3.22	3.01
71	34	3.23	2.99	3.22	3.01
71	35	3.23	2.99	3.22	3.01
71	36	3.23	2.99	3.22	3.01
71	37	3.23	2.99	3.22	3.01
71	38	3.23	2.99	3.22	3.01
71	39	3.23	2.99	3.22	3.01
71	40	3.23	2.99	3.22	3.01
71	41	3.23	2.99	3.22	3.01
71	42	3.23	2.99	3.22	3.01
71	43	3.23	2.99	3.22	3.01
71	44	3.23	2.99	3.22	3.01
71	45	3.23	2.99	3.22	3.01
71	46	3.23	2.99	3.22	3.01
71	47	3.23	2.99	3.22	3.01
71	48	3.23	2.99	3.22	3.01
71	49	3.23	2.99	3.22	3.01
71	50	3.23	2.99	3.22	3.01
71	51	3.23	2.99	3.22	3.01
71	52	3.23	2.99	3.22	3.01
71	53	3.23	2.99	3.22	3.01
71	54	3.23	2.99	3.22	3.01
72	0	5.39	3.72	3.69	3.37
72	1	5.46	3.42	3.70	3.42
72	2	5.10	3.26	3.72	3.47
72	3	4.54	3.22	3.76	3.51
72	4	3.86	3.25	3.82	3.54
72	5	3.52	3.26	3.18	2.95
72	6	3.57	3.29	3.18	2.95
72	7	3.61	3.31	3.18	2.95
72	8	3.64	3.32	3.18	2.95
72	9	3.67	3.34	3.18	2.95
72	10	3.70	3.35	3.18	2.95
72	11	3.71	3.36	3.18	2.95
72	12	3.73	3.37	3.18	2.95
72	13	3.74	3.37	3.18	2.95
72	14	3.75	3.37	3.18	2.95
72	15	3.76	3.37	3.18	2.95

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
72	16	3.76	3.37	3.18	2.95
72	17	3.77	3.37	3.18	2.95
72	18	3.77	3.36	3.18	2.95
72	19	3.77	3.35	3.18	2.95
72	20	3.76	3.33	3.18	2.95
72	21	3.76	3.30	3.18	2.95
72	22	3.75	3.27	3.18	2.95
72	23	3.73	3.23	3.18	2.95
72	24	3.71	3.18	3.18	2.95
72	25	3.67	3.13	3.18	2.95
72	26	3.61	3.07	3.18	2.95
72	27	3.53	3.01	3.18	2.95
72	28	3.42	2.95	3.18	2.95
72	29	3.27	2.93	3.18	2.95
72	30	3.19	2.92	3.18	2.95
72	31	3.19	2.92	3.18	2.95
72	32	3.19	2.92	3.18	2.95
72	33	3.19	2.92	3.18	2.95
72	34	3.19	2.92	3.18	2.95
72	35	3.19	2.92	3.18	2.95
72	36	3.19	2.92	3.18	2.95
72	37	3.19	2.92	3.18	2.95
72	38	3.19	2.92	3.18	2.95
72	39	3.19	2.92	3.18	2.95
72	40	3.19	2.92	3.18	2.95
72	41	3.19	2.92	3.18	2.95
72	42	3.19	2.92	3.18	2.95
72	43	3.19	2.92	3.18	2.95
72	44	3.19	2.92	3.18	2.95
72	45	3.19	2.92	3.18	2.95
72	46	3.19	2.92	3.18	2.95
72	47	3.19	2.92	3.18	2.95
72	48	3.19	2.92	3.18	2.95
72	49	3.19	2.92	3.18	2.95
72	50	3.19	2.92	3.18	2.95
72	51	3.19	2.92	3.18	2.95
72	52	3.19	2.92	3.18	2.95
72	53	3.19	2.92	3.18	2.95

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
72	54	3.19	2.92	3.18	2.95
72	55	3.19	2.92	3.18	2.95
73	0	5.25	3.63	3.53	3.25
73	1	5.33	3.34	3.55	3.31
73	2	4.98	3.18	3.58	3.37
73	3	4.44	3.13	3.64	3.42
73	4	3.78	3.15	3.72	3.45
73	5	3.44	3.17	3.13	2.89
73	6	3.49	3.19	3.13	2.89
73	7	3.53	3.21	3.13	2.89
73	8	3.56	3.23	3.13	2.89
73	9	3.59	3.24	3.13	2.89
73	10	3.61	3.26	3.13	2.89
73	11	3.63	3.27	3.13	2.89
73	12	3.65	3.27	3.13	2.89
73	13	3.66	3.28	3.13	2.89
73	14	3.67	3.28	3.13	2.89
73	15	3.67	3.28	3.13	2.89
73	16	3.68	3.28	3.13	2.89
73	17	3.68	3.28	3.13	2.89
73	18	3.69	3.27	3.13	2.89
73	19	3.68	3.26	3.13	2.89
73	20	3.68	3.24	3.13	2.89
73	21	3.68	3.22	3.13	2.89
73	22	3.67	3.19	3.13	2.89
73	23	3.65	3.15	3.13	2.89
73	24	3.63	3.11	3.13	2.89
73	25	3.59	3.05	3.13	2.89
73	26	3.54	2.99	3.13	2.89
73	27	3.47	2.93	3.13	2.89
73	28	3.36	2.88	3.13	2.89
73	29	3.21	2.86	3.13	2.89
73	30	3.13	2.85	3.13	2.89
73	31	3.13	2.85	3.13	2.89
73	32	3.13	2.85	3.13	2.89
73	33	3.13	2.85	3.13	2.89
73	34	3.13	2.85	3.13	2.89
73	35	3.13	2.85	3.13	2.89

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
73	36	3.13	2.85	3.13	2.89
73	37	3.13	2.85	3.13	2.89
73	38	3.13	2.85	3.13	2.89
73	39	3.13	2.85	3.13	2.89
73	40	3.13	2.85	3.13	2.89
73	41	3.13	2.85	3.13	2.89
73	42	3.13	2.85	3.13	2.89
73	43	3.13	2.85	3.13	2.89
73	44	3.13	2.85	3.13	2.89
73	45	3.13	2.85	3.13	2.89
73	46	3.13	2.85	3.13	2.89
73	47	3.13	2.85	3.13	2.89
73	48	3.13	2.85	3.13	2.89
73	49	3.13	2.85	3.13	2.89
73	50	3.13	2.85	3.13	2.89
73	51	3.13	2.85	3.13	2.89
73	52	3.13	2.85	3.13	2.89
73	53	3.13	2.85	3.13	2.89
73	54	3.13	2.85	3.13	2.89
73	55	3.13	2.85	3.13	2.89
73	56	3.13	2.85	3.13	2.89
74	0	5.09	3.56	3.37	3.13
74	1	5.17	3.27	3.40	3.20
74	2	4.84	3.10	3.44	3.26
74	3	4.32	3.04	3.51	3.32
74	4	3.68	3.06	3.60	3.36
74	5	3.35	3.08	3.07	2.83
74	6	3.39	3.10	3.07	2.83
74	7	3.43	3.12	3.07	2.83
74	8	3.46	3.14	3.07	2.83
74	9	3.49	3.15	3.07	2.83
74	10	3.51	3.16	3.07	2.83
74	11	3.53	3.17	3.07	2.83
74	12	3.55	3.18	3.07	2.83
74	13	3.56	3.18	3.07	2.83
74	14	3.57	3.19	3.07	2.83
74	15	3.57	3.19	3.07	2.83
74	16	3.58	3.19	3.07	2.83

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
74	17	3.58	3.19	3.07	2.83
74	18	3.58	3.18	3.07	2.83
74	19	3.58	3.17	3.07	2.83
74	20	3.58	3.16	3.07	2.83
74	21	3.58	3.14	3.07	2.83
74	22	3.57	3.11	3.07	2.83
74	23	3.56	3.08	3.07	2.83
74	24	3.53	3.03	3.07	2.83
74	25	3.50	2.98	3.07	2.83
74	26	3.45	2.92	3.07	2.83
74	27	3.38	2.86	3.07	2.83
74	28	3.28	2.81	3.07	2.83
74	29	3.13	2.78	3.07	2.83
74	30	3.05	2.78	3.07	2.83
74	31	3.05	2.78	3.07	2.83
74	32	3.05	2.78	3.07	2.83
74	33	3.05	2.78	3.07	2.83
74	34	3.05	2.78	3.07	2.83
74	35	3.05	2.78	3.07	2.83
74	36	3.05	2.78	3.07	2.83
74	37	3.05	2.78	3.07	2.83
74	38	3.05	2.78	3.07	2.83
74	39	3.05	2.78	3.07	2.83
74	40	3.05	2.78	3.07	2.83
74	41	3.05	2.78	3.07	2.83
74	42	3.05	2.78	3.07	2.83
74	43	3.05	2.78	3.07	2.83
74	44	3.05	2.78	3.07	2.83
74	45	3.05	2.78	3.07	2.83
74	46	3.05	2.78	3.07	2.83
74	47	3.05	2.78	3.07	2.83
74	48	3.05	2.78	3.07	2.83
74	49	3.05	2.78	3.07	2.83
74	50	3.05	2.78	3.07	2.83
74	51	3.05	2.78	3.07	2.83
74	52	3.05	2.78	3.07	2.83
74	53	3.05	2.78	3.07	2.83
74	54	3.05	2.78	3.07	2.83

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
74	55	3.05	2.78	3.07	2.83
74	56	3.05	2.78	3.07	2.83
74	57	3.05	2.78	3.07	2.83
75	0	4.89	3.50	3.21	3.02
75	1	4.98	3.22	3.24	3.09
75	2	4.67	3.05	3.29	3.16
75	3	4.17	2.97	3.37	3.23
75	4	3.55	2.98	3.48	3.28
75	5	3.23	2.99	3.00	2.77
75	6	3.27	3.01	3.00	2.77
75	7	3.31	3.03	3.00	2.77
75	8	3.34	3.05	3.00	2.77
75	9	3.37	3.06	3.00	2.77
75	10	3.39	3.07	3.00	2.77
75	11	3.41	3.08	3.00	2.77
75	12	3.42	3.09	3.00	2.77
75	13	3.43	3.09	3.00	2.77
75	14	3.44	3.10	3.00	2.77
75	15	3.44	3.10	3.00	2.77
75	16	3.45	3.10	3.00	2.77
75	17	3.45	3.10	3.00	2.77
75	18	3.46	3.10	3.00	2.77
75	19	3.46	3.09	3.00	2.77
75	20	3.45	3.08	3.00	2.77
75	21	3.45	3.06	3.00	2.77
75	22	3.44	3.04	3.00	2.77
75	23	3.43	3.00	3.00	2.77
75	24	3.41	2.96	3.00	2.77
75	25	3.38	2.91	3.00	2.77
75	26	3.34	2.85	3.00	2.77
75	27	3.27	2.79	3.00	2.77
75	28	3.17	2.74	3.00	2.77
75	29	3.03	2.72	3.00	2.77
75	30	2.95	2.71	3.00	2.77
75	31	2.95	2.71	3.00	2.77
75	32	2.95	2.71	3.00	2.77
75	33	2.95	2.71	3.00	2.77
75	34	2.95	2.71	3.00	2.77

Age	Years of Service	<u>Competing Risks</u>		<u>Markov Model</u>	
		WLE	Standard Deviation	WLE	Standard Deviation
75	35	2.95	2.71	3.00	2.77
75	36	2.95	2.71	3.00	2.77
75	37	2.95	2.71	3.00	2.77
75	38	2.95	2.71	3.00	2.77
75	39	2.95	2.71	3.00	2.77
75	40	2.95	2.71	3.00	2.77
75	41	2.95	2.71	3.00	2.77
75	42	2.95	2.71	3.00	2.77
75	43	2.95	2.71	3.00	2.77
75	44	2.95	2.71	3.00	2.77
75	45	2.95	2.71	3.00	2.77
75	46	2.95	2.71	3.00	2.77
75	47	2.95	2.71	3.00	2.77
75	48	2.95	2.71	3.00	2.77
75	49	2.95	2.71	3.00	2.77
75	50	2.95	2.71	3.00	2.77
75	51	2.95	2.71	3.00	2.77
75	52	2.95	2.71	3.00	2.77
75	53	2.95	2.71	3.00	2.77
75	54	2.95	2.71	3.00	2.77
75	55	2.95	2.71	3.00	2.77
75	56	2.95	2.71	3.00	2.77
75	57	2.95	2.71	3.00	2.77
75	58	2.95	2.71	3.00	2.77

Notes: WLE denotes Worklife Expectancy
SD denotes Standard Deviation

IV. Conclusion

The tables contained in this monograph are timely and provide historical perspective. The worklife expectancies and standard deviations reported utilize the *Twenty-Seventh Actuarial Valuation* which contains the most recently available data, published in September, 2018. Historical perspective may be achieved by comparing the four decrement competing risks model with the *Worklife Expectancies of Railroad Workers Based on the 23rd Actuarial Valuation* (Skoog and Ciecka, 2007) and *Worklife Expectancies of Railroad Workers Based on the 25th Actuarial Valuation* (Skoog and Ciecka, 2014). The Markov model worklife expectancies and standard deviations are derived after fully integrating economy-wide transition probabilities with age/service related retirement transition probabilities of railroad workers.

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Appendix A

Tables S-4, S-11, S-12, and S-13

Twenty-Seventh Actuarial Valuation of Assets and Liabilities Under the Railroad Retirement Acts as of December 31, 2016 with Technical Supplement, US Railroad Retirement Board, Bureau of the Actuary, Chicago, Illinois, September, 2018.

Table S-4. RRB Active Service Mortality Table^a

Age ^b	$1000q_{x-.5}$	Age ^b	$1000q_{x-.5}$
17	0.73	47	1.64
18	0.73	48	1.74
19	0.73	49	1.85
20	0.73	50	1.97
21	0.73	51	2.10
22	0.73	52	2.23
23	0.73	53	2.39
24	0.73	54	2.55
25	0.73	55	2.73
26	0.73	56	2.92
27	0.73	57	3.13
28	0.73	58	3.35
29	0.73	59	3.60
30	0.73	60	3.86
31	0.76	61	4.15
32	0.79	62	4.46
33	0.82	63	4.79
34	0.85	64	5.16
35	0.89	65	5.55
36	0.92	66	5.98
37	0.97	67	6.44
38	1.01	68	6.95
39	1.06	69	7.49
40	1.12	70	8.08
41	1.17	71	8.72
42	1.24	72	9.41
43	1.30	73	10.16
44	1.38	74	10.97
45	1.46	75	11.85
46	1.54		

^a Deaths in active service are those of employees who last worked in the railroad industry in the year in which death occurred or in the preceding calendar year. The exposures correspond to this definition.

^b Age attained in the calendar year of exposure.

Table S-11. Calendar year rates^a of immediate age^b retirement (per 1000 exposed)

Age ^c	<u>Years of Service</u>	
	5-29	30&Over
60	0	590
61	0	460
62	90	350
63	90	320
64	80	320
65	170	340
66	330	300
67	270	300
68	250	300
69	250	300
70	250	300
71	250	250
72	200	250
73	200	250
74	200	250
75 & over	200	250

^a Technically probabilities.

^b Immediate retirements are defined as those for which the calendar year of retirement is the same as, or the year following, the calendar year of last Employment in the railroad industry.

^c The age interval is from $x - .5$ to $x + .5$, except as indicated below:

<u>Age</u>	<u>Years of service</u>	<u>Interval for</u>	
		<u>Exposure</u>	<u>Retirements</u>
60	30 or more	59.5-60.5	60-60.5
62	5-29	61.5-62.5	62-62.5

Table S-12. Rates^a of immediate^b disability retirement and eligibility for disability freeze^c
Calendar year rates per 1,000 exposed

Age ^d	10-19 years of service	20-24 years of service	25-29 years of service	30 or more years of service
Under 35	1.2	3.5	3.5	3.5
35	1.3	3.7	3.7	3.7
36	1.3	3.8	3.8	3.8
37	1.3	4.0	4.0	4.0
38	1.4	4.2	4.2	4.2
39	1.5	4.5	4.5	4.5
40	1.6	4.8	4.8	4.8
41	1.7	5.2	5.2	5.2
42	1.8	5.6	5.6	5.6
43	2.0	6.2	6.2	6.2
44	2.1	6.8	6.8	6.8
45	2.4	7.6	7.6	7.6
46	2.6	8.5	8.5	8.5
47	2.9	9.6	9.6	9.6
48	3.3	10.8	10.8	10.8
49	3.8	12.2	12.1	12.1
50	4.3	13.7	13.5	13.5
51	4.9	15.2	14.8	14.8
52	5.7	16.8	16.2	16.2
53	6.6	18.5	17.5	17.5
54	7.7	20.4	18.8	18.8
55	9.0	22.4	20.2	20.2
56	10.6	24.7	21.7	21.7
57	12.5	27.4	23.4	23.4
58	14.8	30.6	25.4	25.4
59	17.5	34.5	27.9	27.9
60	23.9	39.3	31.1	14.4
61	29.1	56.5	35.4	10.3
62	32.2	51.7	44.4	7.0
63	33.8	45.4	38.0	4.6
64	25.7	36.9	29.6	2.9
65	20.7	25.7	18.3	2.0
66	5.2	10.8	3.4	1.9

^a Technically probabilities.

^b Immediate retirements are defined as those for which the calendar year of railroad retirement is the same as, or the year following, the calendar year of last employment in the railroad industry.

^c Qualified under Social Security definition of disability.

^d Age attained in calendar year of exposure.

Table S-13 Calendar year rates^a of final withdrawal

Service Years ^b	<u>Attained Age^c</u>				
	Under25	25-34	35-44	45-54	55&over
0	0.158	0.11	0.146	0.188	0.198
1	0.119	0.082	0.084	0.095	0.103
2	0.069	0.053	0.046	0.05	0.066
3	0.049	0.037	0.029	0.032	0.05
4	0.041	0.031	0.025	0.028	0.042
5	0.037	0.028	0.023	0.025	0.037
6	0.033	0.026	0.021	0.023	0.033
7	0.03	0.024	0.02	0.021	0.028
8	0.027	0.022	0.018	0.019	0.025
9	0.024	0.02	0.017	0.017	0.022
10	0.022	0.018	0.015	0.016	0.019
11		0.016	0.014	0.014	0.017
12		0.014	0.013	0.013	0.016
13		0.012	0.012	0.012	0.014
14		0.011	0.011	0.011	0.013
15		0.01	0.01	0.01	0.012
16		0.01	0.009	0.01	0.012
17		0.009	0.009	0.009	0.011
18		0.009	0.008	0.008	0.011
19		0.008	0.007	0.008	0.01
20		0.008	0.006	0.007	0.010
21			0.006	0.007	0.01
22			0.005	0.006	0.01
23			0.005	0.005	0.009
24			0.004	0.005	0.009
25			0.004	0.005	0.008
26			0.004	0.005	0.007
27			0.003	0.005	0.006
28			0.003	0.004	0.004
29			0.002	0.004	0.003
30			0.005	0.005	0.01

^a Technically probabilities.

^b Rounded up to nearest whole year.

^c Age attained in calendar year of exposure.

Appendix B

Worklife Expectancies and Standard Deviations with Competing Risks Assuming Only Three Decrements – Mortality (S-4), Age Retirement (S-11), and Disability Retirement (S-12)

Age	Service	Standard	
	Years	WLE	Deviation
17	0	39.99	8.33
18	0	39.12	8.09
18	1	39.06	8.15
19	0	38.25	7.86
19	1	38.19	7.92
19	2	38.14	7.98
20	0	37.38	7.63
20	1	37.32	7.69
20	2	37.27	7.75
20	3	37.21	7.81
21	0	36.51	7.41
21	1	36.45	7.47
21	2	36.39	7.53
21	3	36.34	7.59
21	4	36.28	7.65
22	0	35.64	7.18
22	1	35.58	7.24
22	2	35.52	7.30
22	3	35.46	7.37
22	4	35.41	7.43
22	5	35.35	7.50
23	0	34.77	6.97
23	1	34.70	7.02
23	2	34.65	7.08
23	3	34.59	7.15
23	4	34.53	7.21
23	5	34.48	7.28
23	6	34.42	7.34
24	0	33.90	6.75
24	1	33.83	6.81
24	2	33.77	6.87
24	3	33.71	6.93
24	4	33.65	6.99
24	5	33.60	7.06

Age	Service Years	WLE	Standard Deviation
24	6	33.54	7.13
24	7	33.49	7.20
25	0	33.03	6.53
25	1	32.96	6.59
25	2	32.90	6.65
25	3	32.84	6.72
25	4	32.78	6.78
25	5	32.72	6.85
25	6	32.66	6.91
25	7	32.61	6.98
25	8	32.55	7.06
26	0	32.16	6.32
26	1	32.09	6.38
26	2	32.02	6.44
26	3	31.96	6.51
26	4	31.90	6.57
26	5	31.84	6.64
26	6	31.78	6.70
26	7	31.72	6.78
26	8	31.67	6.85
26	9	31.61	6.92
27	0	31.29	6.11
27	1	31.22	6.17
27	2	31.15	6.23
27	3	31.09	6.30
27	4	31.02	6.36
27	5	30.96	6.43
27	6	30.90	6.50
27	7	30.84	6.57
27	8	30.78	6.64
27	9	30.73	6.71
27	10	30.67	6.79
28	0	30.43	5.90
28	1	30.35	5.96
28	2	30.28	6.03
28	3	30.21	6.09
28	4	30.14	6.16
28	5	30.08	6.23
28	6	30.02	6.29

Age	Service Years	WLE	Standard Deviation
28	7	29.96	6.37
28	8	29.90	6.44
28	9	29.84	6.51
28	10	29.79	6.59
28	11	29.73	6.67
29	0	29.56	5.70
29	1	29.49	5.76
29	2	29.41	5.82
29	3	29.34	5.89
29	4	29.27	5.96
29	5	29.20	6.02
29	6	29.14	6.09
29	7	29.07	6.17
29	8	29.01	6.24
29	9	28.96	6.31
29	10	28.90	6.39
29	11	28.84	6.47
29	12	28.79	6.55
30	0	28.69	5.51
30	1	28.62	5.56
30	2	28.54	5.62
30	3	28.47	5.69
30	4	28.39	5.76
30	5	28.32	5.82
30	6	28.26	5.90
30	7	28.19	5.97
30	8	28.13	6.04
30	9	28.07	6.12
30	10	28.01	6.19
30	11	27.95	6.27
30	12	27.90	6.35
30	13	27.84	6.44
31	0	28.94	5.92
31	1	27.75	5.37
31	2	27.67	5.43
31	3	27.60	5.49
31	4	27.52	5.56
31	5	27.45	5.63
31	6	27.38	5.70

Age	Service Years	WLE	Standard Deviation
31	7	27.31	5.77
31	8	27.25	5.85
31	9	27.18	5.92
31	10	27.12	6.00
31	11	27.06	6.08
31	12	27.01	6.16
31	13	26.95	6.24
31	14	26.89	6.33
32	0	29.03	6.22
32	1	27.99	5.79
32	2	26.80	5.24
32	3	26.73	5.30
32	4	26.65	5.36
32	5	26.57	5.43
32	6	26.50	5.50
32	7	26.43	5.58
32	8	26.36	5.65
32	9	26.30	5.73
32	10	26.24	5.81
32	11	26.18	5.89
32	12	26.12	5.97
32	13	26.06	6.05
32	14	26.00	6.14
32	15	25.95	6.22
33	0	28.66	6.30
33	1	28.09	6.10
33	2	27.05	5.66
33	3	25.86	5.11
33	4	25.78	5.17
33	5	25.70	5.24
33	6	25.63	5.31
33	7	25.55	5.39
33	8	25.48	5.46
33	9	25.42	5.54
33	10	25.35	5.62
33	11	25.29	5.70
33	12	25.23	5.78
33	13	25.17	5.86
33	14	25.11	5.95

Age	Service Years	WLE	Standard Deviation
33	15	25.05	6.04
33	16	25.00	6.13
34	0	28.19	6.36
34	1	27.72	6.18
34	2	27.14	5.97
34	3	26.10	5.54
34	4	24.91	4.98
34	5	24.83	5.05
34	6	24.75	5.12
34	7	24.68	5.19
34	8	24.60	5.27
34	9	24.53	5.35
34	10	24.47	5.43
34	11	24.40	5.51
34	12	24.34	5.59
34	13	24.28	5.68
34	14	24.22	5.76
34	15	24.16	5.85
34	16	24.10	5.94
34	17	24.05	6.03
35	0	27.70	6.44
35	1	27.25	6.24
35	2	26.78	6.06
35	3	26.20	5.85
35	4	25.16	5.41
35	5	23.96	4.86
35	6	23.88	4.93
35	7	23.81	5.00
35	8	23.73	5.08
35	9	23.66	5.16
35	10	23.59	5.24
35	11	23.52	5.32
35	12	23.45	5.41
35	13	23.39	5.49
35	14	23.33	5.58
35	15	23.27	5.66
35	16	23.21	5.75
35	17	23.15	5.84
35	18	23.10	5.94

Age	Service Years	WLE	Standard Deviation
36	0	27.08	6.47
36	1	26.76	6.32
36	2	26.31	6.12
36	3	25.84	5.94
36	4	25.25	5.73
36	5	24.21	5.29
36	6	23.01	4.74
36	7	22.93	4.81
36	8	22.86	4.88
36	9	22.78	4.96
36	10	22.71	5.05
36	11	22.64	5.13
36	12	22.57	5.22
36	13	22.50	5.30
36	14	22.44	5.39
36	15	22.38	5.48
36	16	22.32	5.57
36	17	22.26	5.66
36	18	22.20	5.75
36	19	22.15	5.85
37	0	26.13	6.26
37	1	26.14	6.35
37	2	25.82	6.20
37	3	25.36	6.00
37	4	24.89	5.82
37	5	24.31	5.62
37	6	23.26	5.18
37	7	22.06	4.62
37	8	21.98	4.69
37	9	21.91	4.77
37	10	21.83	4.86
37	11	21.76	4.94
37	12	21.69	5.03
37	13	21.62	5.12
37	14	21.55	5.21
37	15	21.49	5.29
37	16	21.43	5.39
37	17	21.37	5.48
37	18	21.31	5.57

Age	Service Years	WLE	Standard Deviation
37	19	21.25	5.67
37	20	21.22	5.71
38	0	25.30	6.14
38	1	25.19	6.14
38	2	25.20	6.23
38	3	24.87	6.09
38	4	24.42	5.88
38	5	23.95	5.71
38	6	23.37	5.51
38	7	22.32	5.07
38	8	21.11	4.50
38	9	21.03	4.58
38	10	20.96	4.66
38	11	20.88	4.75
38	12	20.81	4.84
38	13	20.74	4.93
38	14	20.67	5.02
38	15	20.60	5.11
38	16	20.54	5.20
38	17	20.48	5.30
38	18	20.42	5.39
38	19	20.36	5.49
38	20	20.33	5.53
38	21	20.33	5.53
39	0	24.48	6.04
39	1	24.36	6.02
39	2	24.25	6.02
39	3	24.26	6.12
39	4	23.94	5.97
39	5	23.48	5.77
39	6	23.01	5.59
39	7	22.42	5.39
39	8	21.37	4.95
39	9	20.16	4.39
39	10	20.09	4.47
39	11	20.01	4.56
39	12	19.93	4.65
39	13	19.86	4.74
39	14	19.79	4.83

Age	Service Years	WLE	Standard Deviation
39	15	19.72	4.92
39	16	19.65	5.02
39	17	19.59	5.11
39	18	19.53	5.21
39	19	19.47	5.30
39	20	19.44	5.35
39	21	19.44	5.35
39	22	19.44	5.35
40	0	23.65	5.94
40	1	23.54	5.92
40	2	23.43	5.90
40	3	23.32	5.91
40	4	23.33	6.00
40	5	23.00	5.86
40	6	22.54	5.65
40	7	22.07	5.48
40	8	21.48	5.28
40	9	20.43	4.84
40	10	19.22	4.28
40	11	19.14	4.36
40	12	19.06	4.45
40	13	18.98	4.54
40	14	18.91	4.64
40	15	18.84	4.73
40	16	18.77	4.83
40	17	18.70	4.93
40	18	18.64	5.02
40	19	18.58	5.12
40	20	18.55	5.17
40	21	18.55	5.17
40	22	18.55	5.17
40	23	18.55	5.17
41	0	22.79	5.85
41	1	22.71	5.82
41	2	22.60	5.80
41	3	22.49	5.78
41	4	22.38	5.79
41	5	22.39	5.89
41	6	22.06	5.74

Age	Service Years	WLE	Standard Deviation
41	7	21.60	5.54
41	8	21.13	5.37
41	9	20.54	5.17
41	10	19.48	4.73
41	11	18.27	4.17
41	12	18.19	4.26
41	13	18.11	4.35
41	14	18.03	4.44
41	15	17.96	4.54
41	16	17.89	4.64
41	17	17.82	4.74
41	18	17.75	4.84
41	19	17.69	4.94
41	20	17.66	4.99
41	21	17.66	4.99
41	22	17.66	4.99
41	23	17.66	4.99
41	24	17.66	4.99
42	0	21.96	5.73
42	1	21.86	5.73
42	2	21.78	5.70
42	3	21.67	5.68
42	4	21.55	5.67
42	5	21.45	5.68
42	6	21.46	5.77
42	7	21.12	5.63
42	8	20.67	5.43
42	9	20.19	5.26
42	10	19.60	5.06
42	11	18.54	4.63
42	12	17.32	4.06
42	13	17.24	4.15
42	14	17.16	4.25
42	15	17.09	4.35
42	16	17.01	4.45
42	17	16.94	4.55
42	18	16.87	4.65
42	19	16.80	4.75
42	20	16.77	4.80

Age	Service Years	WLE	Standard Deviation
42	21	16.77	4.80
42	22	16.77	4.80
42	23	16.77	4.80
42	24	16.77	4.80
42	25	16.77	4.80
43	0	21.12	5.66
43	1	21.03	5.61
43	2	20.93	5.61
43	3	20.84	5.59
43	4	20.74	5.57
43	5	20.62	5.55
43	6	20.51	5.56
43	7	20.52	5.66
43	8	20.19	5.52
43	9	19.73	5.31
43	10	19.25	5.15
43	11	18.66	4.95
43	12	17.60	4.52
43	13	16.37	3.95
43	14	16.30	4.05
43	15	16.22	4.15
43	16	16.14	4.25
43	17	16.06	4.35
43	18	15.99	4.46
43	19	15.92	4.56
43	20	15.89	4.61
43	21	15.89	4.61
43	22	15.89	4.61
43	23	15.89	4.61
43	24	15.89	4.61
43	25	15.89	4.61
43	26	15.89	4.61
44	0	20.23	5.57
44	1	20.19	5.54
44	2	20.10	5.49
44	3	20.00	5.49
44	4	19.91	5.47
44	5	19.81	5.45
44	6	19.69	5.43

Age	Service Years	WLE	Standard Deviation
44	7	19.58	5.45
44	8	19.59	5.55
44	9	19.26	5.40
44	10	18.80	5.20
44	11	18.32	5.04
44	12	17.72	4.85
44	13	16.65	4.42
44	14	15.43	3.85
44	15	15.35	3.95
44	16	15.27	4.05
44	17	15.19	4.16
44	18	15.12	4.27
44	19	15.05	4.37
44	20	15.01	4.42
44	21	15.01	4.42
44	22	15.01	4.42
44	23	15.01	4.42
44	24	15.01	4.42
44	25	15.01	4.42
44	26	15.01	4.42
44	27	15.01	4.42
45	0	19.34	5.48
45	1	19.30	5.45
45	2	19.26	5.42
45	3	19.17	5.37
45	4	19.07	5.37
45	5	18.98	5.35
45	6	18.88	5.33
45	7	18.76	5.32
45	8	18.65	5.33
45	9	18.66	5.44
45	10	18.33	5.29
45	11	17.86	5.09
45	12	17.38	4.93
45	13	16.78	4.74
45	14	15.71	4.31
45	15	14.48	3.75
45	16	14.40	3.85
45	17	14.32	3.96

Age	Service Years	WLE	Standard Deviation
45	18	14.25	4.07
45	19	14.17	4.18
45	20	14.14	4.23
45	21	14.14	4.23
45	22	14.14	4.23
45	23	14.14	4.23
45	24	14.14	4.23
45	25	14.14	4.23
45	26	14.14	4.23
45	27	14.14	4.23
45	28	14.14	4.23
46	0	18.43	5.38
46	1	18.41	5.36
46	2	18.38	5.33
46	3	18.33	5.29
46	4	18.25	5.25
46	5	18.14	5.25
46	6	18.06	5.23
46	7	17.95	5.21
46	8	17.83	5.20
46	9	17.72	5.22
46	10	17.73	5.32
46	11	17.40	5.18
46	12	16.93	4.98
46	13	16.45	4.82
46	14	15.85	4.64
46	15	14.77	4.21
46	16	13.54	3.65
46	17	13.46	3.76
46	18	13.38	3.87
46	19	13.30	3.98
46	20	13.27	4.04
46	21	13.27	4.03
46	22	13.27	4.03
46	23	13.27	4.03
46	24	13.27	4.03
46	25	13.27	4.03
46	26	13.27	4.03
46	27	13.27	4.03

Age	Service Years	WLE	Standard Deviation
46	28	13.27	4.03
46	29	13.27	4.03
47	0	17.52	5.28
47	1	17.50	5.26
47	2	17.49	5.24
47	3	17.46	5.21
47	4	17.41	5.17
47	5	17.32	5.13
47	6	17.22	5.13
47	7	17.13	5.11
47	8	17.03	5.09
47	9	16.91	5.08
47	10	16.80	5.10
47	11	16.81	5.21
47	12	16.47	5.07
47	13	16.00	4.87
47	14	15.52	4.71
47	15	14.92	4.53
47	16	13.84	4.12
47	17	12.60	3.56
47	18	12.52	3.67
47	19	12.44	3.78
47	20	12.40	3.84
47	21	12.40	3.83
47	22	12.40	3.83
47	23	12.41	3.83
47	24	12.41	3.83
47	25	12.41	3.83
47	26	12.41	3.83
47	27	12.41	3.83
47	28	12.41	3.83
47	29	12.41	3.83
47	30	12.41	3.83
48	0	16.60	5.17
48	1	16.60	5.16
48	2	16.59	5.14
48	3	16.57	5.11
48	4	16.54	5.08
48	5	16.49	5.05

Age	Service Years	WLE	Standard Deviation
48	6	16.40	5.01
48	7	16.30	5.01
48	8	16.21	4.99
48	9	16.11	4.98
48	10	15.99	4.97
48	11	15.88	4.99
48	12	15.89	5.10
48	13	15.55	4.96
48	14	15.08	4.77
48	15	14.59	4.61
48	16	13.99	4.43
48	17	12.90	4.02
48	18	11.65	3.46
48	19	11.57	3.58
48	20	11.54	3.63
48	21	11.54	3.63
48	22	11.54	3.62
48	23	11.55	3.62
48	24	11.55	3.62
48	25	11.55	3.62
48	26	11.55	3.62
48	27	11.55	3.62
48	28	11.55	3.62
48	29	11.55	3.62
48	30	11.55	3.62
48	31	11.55	3.62
49	0	15.69	5.05
49	1	15.69	5.04
49	2	15.69	5.03
49	3	15.67	5.01
49	4	15.66	4.99
49	5	15.62	4.96
49	6	15.58	4.93
49	7	15.49	4.89
49	8	15.38	4.89
49	9	15.30	4.87
49	10	15.19	4.86
49	11	15.07	4.85
49	12	14.96	4.87

Age	Service Years	WLE	Standard Deviation
49	13	14.97	4.99
49	14	14.63	4.85
49	15	14.16	4.66
49	16	13.67	4.50
49	17	13.06	4.33
49	18	11.97	3.93
49	19	10.71	3.38
49	20	10.68	3.43
49	21	10.69	3.42
49	22	10.69	3.42
49	23	10.69	3.41
49	24	10.70	3.41
49	25	10.70	3.41
49	26	10.70	3.41
49	27	10.70	3.41
49	28	10.70	3.41
49	29	10.70	3.41
49	30	10.70	3.41
49	31	10.70	3.41
49	32	10.70	3.41
50	0	14.79	4.93
50	1	14.78	4.93
50	2	14.78	4.92
50	3	14.78	4.91
50	4	14.76	4.89
50	5	14.75	4.87
50	6	14.71	4.83
50	7	14.67	4.80
50	8	14.58	4.76
50	9	14.47	4.77
50	10	14.39	4.75
50	11	14.28	4.73
50	12	14.16	4.73
50	13	14.05	4.75
50	14	14.06	4.87
50	15	13.71	4.74
50	16	13.24	4.55
50	17	12.75	4.40
50	18	12.13	4.24

Age	Service Years	WLE	Standard Deviation
50	19	11.04	3.84
50	20	9.82	3.22
50	21	9.83	3.21
50	22	9.84	3.21
50	23	9.84	3.20
50	24	9.85	3.20
50	25	9.85	3.20
50	26	9.85	3.20
50	27	9.85	3.20
50	28	9.85	3.20
50	29	9.85	3.20
50	30	9.85	3.20
50	31	9.85	3.20
50	32	9.85	3.20
50	33	9.85	3.20
51	0	13.88	4.81
51	1	13.88	4.81
51	2	13.88	4.80
51	3	13.88	4.79
51	4	13.87	4.78
51	5	13.86	4.76
51	6	13.84	4.74
51	7	13.81	4.71
51	8	13.76	4.67
51	9	13.67	4.63
51	10	13.57	4.64
51	11	13.48	4.62
51	12	13.37	4.61
51	13	13.25	4.61
51	14	13.14	4.64
51	15	13.15	4.76
51	16	12.80	4.63
51	17	12.32	4.44
51	18	11.83	4.30
51	19	11.21	4.14
51	20	10.16	3.68
51	21	8.98	3.01
51	22	8.99	3.00
51	23	8.99	3.00

Age	Service Years	WLE	Standard Deviation
51	24	9.00	2.99
51	25	9.00	2.99
51	26	9.00	2.99
51	27	9.00	2.99
51	28	9.00	2.99
51	29	9.00	2.99
51	30	9.00	2.99
51	31	9.00	2.99
51	32	9.00	2.99
51	33	9.00	2.99
51	34	9.00	2.99
52	0	12.98	4.69
52	1	12.98	4.69
52	2	12.98	4.68
52	3	12.98	4.68
52	4	12.98	4.67
52	5	12.97	4.66
52	6	12.96	4.64
52	7	12.94	4.61
52	8	12.91	4.58
52	9	12.86	4.55
52	10	12.77	4.51
52	11	12.66	4.52
52	12	12.58	4.50
52	13	12.47	4.49
52	14	12.34	4.49
52	15	12.23	4.52
52	16	12.24	4.65
52	17	11.89	4.52
52	18	11.41	4.34
52	19	10.91	4.20
52	20	10.35	3.98
52	21	9.34	3.47
52	22	8.13	2.81
52	23	8.14	2.80
52	24	8.15	2.79
52	25	8.15	2.79
52	26	8.15	2.79
52	27	8.15	2.79

Age	Service Years	WLE	Standard Deviation
52	28	8.15	2.79
52	29	8.15	2.79
52	30	8.15	2.79
52	31	8.15	2.79
52	32	8.15	2.79
52	33	8.15	2.79
52	34	8.15	2.79
52	35	8.15	2.79
53	0	12.09	4.57
53	1	12.09	4.57
53	2	12.09	4.56
53	3	12.09	4.56
53	4	12.09	4.55
53	5	12.08	4.54
53	6	12.08	4.53
53	7	12.06	4.51
53	8	12.05	4.49
53	9	12.01	4.45
53	10	11.97	4.42
53	11	11.88	4.38
53	12	11.77	4.40
53	13	11.68	4.38
53	14	11.57	4.37
53	15	11.45	4.38
53	16	11.33	4.41
53	17	11.34	4.54
53	18	10.99	4.42
53	19	10.51	4.24
53	20	10.06	4.04
53	21	9.55	3.76
53	22	8.52	3.27
53	23	7.29	2.61
53	24	7.30	2.60
53	25	7.30	2.60
53	26	7.30	2.60
53	27	7.30	2.60
53	28	7.30	2.60
53	29	7.30	2.60
53	30	7.30	2.60

Age	Service Years	WLE	Standard Deviation
53	31	7.30	2.60
53	32	7.30	2.60
53	33	7.30	2.60
53	34	7.30	2.60
53	35	7.30	2.60
53	36	7.30	2.60
54	0	11.20	4.45
54	1	11.20	4.45
54	2	11.20	4.44
54	3	11.20	4.44
54	4	11.20	4.43
54	5	11.20	4.43
54	6	11.19	4.42
54	7	11.19	4.41
54	8	11.18	4.39
54	9	11.16	4.36
54	10	11.13	4.33
54	11	11.08	4.29
54	12	10.99	4.26
54	13	10.88	4.27
54	14	10.79	4.26
54	15	10.67	4.26
54	16	10.55	4.26
54	17	10.43	4.30
54	18	10.45	4.44
54	19	10.09	4.31
54	20	9.66	4.07
54	21	9.28	3.82
54	22	8.75	3.55
54	23	7.70	3.07
54	24	6.44	2.44
54	25	6.45	2.43
54	26	6.45	2.43
54	27	6.45	2.43
54	28	6.45	2.43
54	29	6.45	2.43
54	30	6.45	2.43
54	31	6.45	2.43
54	32	6.45	2.43

Age	Service Years	WLE	Standard Deviation
54	33	6.45	2.43
54	34	6.45	2.43
54	35	6.45	2.43
54	36	6.45	2.43
54	37	6.45	2.43
55	0	10.32	4.33
55	1	10.32	4.33
55	2	10.32	4.33
55	3	10.32	4.32
55	4	10.32	4.32
55	5	10.32	4.31
55	6	10.32	4.31
55	7	10.31	4.30
55	8	10.31	4.29
55	9	10.29	4.26
55	10	10.28	4.24
55	11	10.24	4.20
55	12	10.20	4.17
55	13	10.10	4.13
55	14	9.99	4.16
55	15	9.90	4.14
55	16	9.79	4.14
55	17	9.66	4.15
55	18	9.54	4.19
55	19	9.56	4.34
55	20	9.26	4.15
55	21	8.89	3.86
55	22	8.49	3.60
55	23	7.95	3.34
55	24	6.87	2.89
55	25	5.58	2.29
55	26	5.58	2.29
55	27	5.58	2.29
55	28	5.58	2.29
55	29	5.58	2.29
55	30	5.58	2.29
55	31	5.58	2.29
55	32	5.58	2.29
55	33	5.58	2.29

Age	Service Years	WLE	Standard Deviation
55	34	5.58	2.29
55	35	5.58	2.29
55	36	5.58	2.29
55	37	5.58	2.29
55	38	5.58	2.29
56	0	9.45	4.21
56	1	9.45	4.21
56	2	9.45	4.21
56	3	9.45	4.21
56	4	9.44	4.20
56	5	9.44	4.20
56	6	9.44	4.19
56	7	9.44	4.19
56	8	9.44	4.18
56	9	9.43	4.17
56	10	9.42	4.14
56	11	9.40	4.12
56	12	9.37	4.08
56	13	9.32	4.05
56	14	9.23	4.01
56	15	9.11	4.04
56	16	9.02	4.03
56	17	8.90	4.03
56	18	8.78	4.05
56	19	8.66	4.09
56	20	8.73	4.18
56	21	8.50	3.95
56	22	8.12	3.65
56	23	7.71	3.40
56	24	7.16	3.15
56	25	6.03	2.74
56	26	4.70	2.17
56	27	4.70	2.17
56	28	4.70	2.17
56	29	4.70	2.17
56	30	4.70	2.17
56	31	4.70	2.17
56	32	4.70	2.17
56	33	4.70	2.17

Age	Service Years	WLE	Standard Deviation
56	34	4.70	2.17
56	35	4.70	2.17
56	36	4.70	2.17
56	37	4.70	2.17
56	38	4.70	2.17
56	39	4.70	2.17
57	0	8.58	4.10
57	1	8.58	4.10
57	2	8.58	4.10
57	3	8.58	4.10
57	4	8.58	4.09
57	5	8.58	4.09
57	6	8.58	4.09
57	7	8.57	4.08
57	8	8.57	4.07
57	9	8.57	4.06
57	10	8.57	4.05
57	11	8.55	4.03
57	12	8.53	4.00
57	13	8.50	3.97
57	14	8.45	3.93
57	15	8.35	3.90
57	16	8.24	3.93
57	17	8.15	3.92
57	18	8.03	3.93
57	19	7.90	3.95
57	20	7.84	3.95
57	21	7.98	3.99
57	22	7.74	3.75
57	23	7.34	3.46
57	24	6.92	3.21
57	25	6.34	2.99
57	26	5.18	2.62
57	27	3.81	2.09
57	28	3.81	2.09
57	29	3.81	2.09
57	30	3.81	2.09
57	31	3.81	2.09
57	32	3.81	2.09

Age	Service Years	WLE	Standard Deviation
57	33	3.81	2.09
57	34	3.81	2.09
57	35	3.81	2.09
57	36	3.81	2.09
57	37	3.81	2.09
57	38	3.81	2.09
57	39	3.81	2.09
57	40	3.81	2.09
58	0	8.12	3.98
58	1	7.72	4.00
58	2	7.72	3.99
58	3	7.72	3.99
58	4	7.72	3.99
58	5	7.72	3.99
58	6	7.71	3.99
58	7	7.71	3.98
58	8	7.71	3.97
58	9	7.71	3.97
58	10	7.71	3.96
58	11	7.70	3.95
58	12	7.69	3.92
58	13	7.67	3.89
58	14	7.63	3.86
58	15	7.58	3.82
58	16	7.49	3.79
58	17	7.37	3.83
58	18	7.28	3.82
58	19	7.16	3.84
58	20	7.09	3.82
58	21	7.08	3.78
58	22	7.23	3.81
58	23	6.98	3.57
58	24	6.57	3.28
58	25	6.12	3.05
58	26	5.51	2.86
58	27	4.31	2.54
58	28	2.91	2.04
58	29	2.91	2.04
58	30	2.91	2.04

Age	Service Years	WLE	Standard Deviation
58	31	2.91	2.04
58	32	2.91	2.04
58	33	2.91	2.04
58	34	2.91	2.04
58	35	2.91	2.04
58	36	2.91	2.04
58	37	2.91	2.04
58	38	2.91	2.04
58	39	2.91	2.04
58	40	2.91	2.04
58	41	2.91	2.04
59	0	7.63	3.88
59	1	7.27	3.87
59	2	6.86	3.90
59	3	6.86	3.90
59	4	6.86	3.90
59	5	6.86	3.90
59	6	6.86	3.89
59	7	6.86	3.89
59	8	6.86	3.89
59	9	6.86	3.88
59	10	6.85	3.87
59	11	6.85	3.86
59	12	6.85	3.85
59	13	6.83	3.82
59	14	6.81	3.80
59	15	6.78	3.76
59	16	6.73	3.73
59	17	6.63	3.70
59	18	6.51	3.74
59	19	6.41	3.74
59	20	6.35	3.72
59	21	6.33	3.66
59	22	6.33	3.62
59	23	6.48	3.65
59	24	6.22	3.41
59	25	5.78	3.13
59	26	5.29	2.93
59	27	4.66	2.77

Age	Service Years	WLE	Standard Deviation
59	28	3.43	2.49
59	29	1.98	2.03
59	30	1.98	2.03
59	31	1.98	2.03
59	32	1.98	2.03
59	33	1.98	2.03
59	34	1.98	2.03
59	35	1.98	2.03
59	36	1.98	2.03
59	37	1.98	2.03
59	38	1.98	2.03
59	39	1.98	2.03
59	40	1.98	2.03
59	41	1.98	2.03
59	42	1.98	2.03
60	0	7.08	3.79
60	1	6.81	3.76
60	2	6.44	3.76
60	3	6.02	3.82
60	4	6.02	3.82
60	5	6.02	3.81
60	6	6.02	3.81
60	7	6.02	3.81
60	8	6.02	3.81
60	9	6.01	3.80
60	10	6.01	3.79
60	11	6.01	3.79
60	12	6.01	3.78
60	13	6.00	3.76
60	14	5.99	3.74
60	15	5.97	3.71
60	16	5.93	3.67
60	17	5.88	3.64
60	18	5.78	3.61
60	19	5.66	3.66
60	20	5.60	3.64
60	21	5.59	3.59
60	22	5.58	3.53
60	23	5.57	3.49

Age	Service Years	WLE	Standard Deviation
60	24	5.73	3.51
60	25	5.43	3.28
60	26	4.96	3.03
60	27	4.45	2.84
60	28	3.80	2.70
60	29	2.53	2.47
60	30	1.79	2.23
60	31	1.79	2.23
60	32	1.79	2.23
60	33	1.79	2.23
60	34	1.79	2.23
60	35	1.79	2.23
60	36	1.79	2.23
60	37	1.79	2.23
60	38	1.79	2.23
60	39	1.79	2.23
60	40	1.79	2.23
60	41	1.79	2.23
60	42	1.79	2.23
60	43	1.79	2.23
61	0	6.83	3.79
61	1	6.29	3.66
61	2	6.00	3.64
61	3	5.62	3.67
61	4	5.19	3.75
61	5	5.19	3.74
61	6	5.19	3.74
61	7	5.19	3.74
61	8	5.19	3.74
61	9	5.19	3.73
61	10	5.19	3.73
61	11	5.19	3.72
61	12	5.18	3.71
61	13	5.18	3.70
61	14	5.18	3.69
61	15	5.16	3.66
61	16	5.14	3.64
61	17	5.10	3.60
61	18	5.05	3.57

Age	Service Years	WLE	Standard Deviation
61	19	4.94	3.54
61	20	4.89	3.57
61	21	4.88	3.53
61	22	4.87	3.48
61	23	4.85	3.42
61	24	4.85	3.37
61	25	4.96	3.41
61	26	4.62	3.19
61	27	4.13	2.95
61	28	3.61	2.79
61	29	2.93	2.67
61	30	2.28	2.54
61	31	2.28	2.54
61	32	2.28	2.54
61	33	2.28	2.54
61	34	2.28	2.54
61	35	2.28	2.54
61	36	2.28	2.54
61	37	2.28	2.54
61	38	2.28	2.54
61	39	2.28	2.54
61	40	2.28	2.54
61	41	2.28	2.54
61	42	2.28	2.54
61	43	2.28	2.54
61	44	2.28	2.54
62	0	7.21	3.95
62	1	6.05	3.66
62	2	5.50	3.56
62	3	5.20	3.55
62	4	4.81	3.60
62	5	4.59	3.63
62	6	4.59	3.63
62	7	4.59	3.62
62	8	4.59	3.62
62	9	4.59	3.62
62	10	4.58	3.61
62	11	4.58	3.61
62	12	4.58	3.60

Age	Service Years	WLE	Standard Deviation
62	13	4.58	3.59
62	14	4.58	3.58
62	15	4.57	3.57
62	16	4.55	3.54
62	17	4.53	3.51
62	18	4.49	3.47
62	19	4.43	3.44
62	20	4.37	3.41
62	21	4.39	3.42
62	22	4.38	3.38
62	23	4.36	3.32
62	24	4.34	3.25
62	25	4.32	3.20
62	26	4.38	3.25
62	27	4.02	3.05
62	28	3.47	2.85
62	29	2.89	2.74
62	30	2.55	2.67
62	31	2.55	2.67
62	32	2.55	2.67
62	33	2.55	2.67
62	34	2.55	2.67
62	35	2.55	2.67
62	36	2.55	2.67
62	37	2.55	2.67
62	38	2.55	2.67
62	39	2.55	2.67
62	40	2.55	2.67
62	41	2.55	2.67
62	42	2.55	2.67
62	43	2.55	2.67
62	44	2.55	2.67
62	45	2.55	2.67
63	0	7.48	3.97
63	1	6.47	3.80
63	2	5.27	3.56
63	3	4.69	3.48
63	4	4.38	3.49
63	5	4.18	3.50

Age	Service Years	WLE	Standard Deviation
63	6	4.18	3.50
63	7	4.18	3.50
63	8	4.18	3.50
63	9	4.18	3.50
63	10	4.18	3.49
63	11	4.18	3.49
63	12	4.18	3.48
63	13	4.18	3.48
63	14	4.17	3.46
63	15	4.17	3.45
63	16	4.17	3.43
63	17	4.15	3.40
63	18	4.12	3.37
63	19	4.07	3.34
63	20	4.03	3.31
63	21	4.02	3.26
63	22	4.03	3.28
63	23	4.02	3.22
63	24	4.01	3.16
63	25	3.97	3.08
63	26	3.92	3.04
63	27	3.99	3.08
63	28	3.57	2.92
63	29	2.93	2.80
63	30	2.63	2.74
63	31	2.63	2.74
63	32	2.63	2.74
63	33	2.63	2.74
63	34	2.63	2.74
63	35	2.63	2.74
63	36	2.63	2.74
63	37	2.63	2.74
63	38	2.63	2.74
63	39	2.63	2.74
63	40	2.63	2.74
63	41	2.63	2.74
63	42	2.63	2.74
63	43	2.63	2.74
63	44	2.63	2.74

Age	Service Years	WLE	Standard Deviation
63	45	2.63	2.74
63	46	2.63	2.74
64	0	7.70	3.92
64	1	6.73	3.81
64	2	5.69	3.69
64	3	4.44	3.51
64	4	3.84	3.45
64	5	3.69	3.44
64	6	3.69	3.44
64	7	3.69	3.44
64	8	3.69	3.44
64	9	3.68	3.44
64	10	3.68	3.44
64	11	3.68	3.43
64	12	3.68	3.43
64	13	3.68	3.42
64	14	3.68	3.41
64	15	3.68	3.40
64	16	3.67	3.38
64	17	3.67	3.36
64	18	3.64	3.33
64	19	3.62	3.30
64	20	3.58	3.27
64	21	3.57	3.23
64	22	3.55	3.18
64	23	3.57	3.19
64	24	3.56	3.13
64	25	3.52	3.06
64	26	3.46	2.99
64	27	3.41	2.94
64	28	3.49	2.98
64	29	3.00	2.87
64	30	2.66	2.81
64	31	2.66	2.81
64	32	2.66	2.81
64	33	2.66	2.81
64	34	2.66	2.81
64	35	2.66	2.81
64	36	2.66	2.81

Age	Service Years	WLE	Standard Deviation
64	37	2.66	2.81
64	38	2.66	2.81
64	39	2.66	2.81
64	40	2.66	2.81
64	41	2.66	2.81
64	42	2.66	2.81
64	43	2.66	2.81
64	44	2.66	2.81
64	45	2.66	2.81
64	46	2.66	2.81
64	47	2.66	2.81
65	0	7.92	3.85
65	1	6.91	3.78
65	2	5.91	3.71
65	3	4.84	3.63
65	4	3.56	3.49
65	5	3.25	3.44
65	6	3.25	3.44
65	7	3.25	3.44
65	8	3.25	3.44
65	9	3.25	3.44
65	10	3.25	3.44
65	11	3.25	3.43
65	12	3.25	3.43
65	13	3.25	3.42
65	14	3.25	3.41
65	15	3.25	3.40
65	16	3.24	3.39
65	17	3.24	3.37
65	18	3.23	3.35
65	19	3.20	3.32
65	20	3.18	3.29
65	21	3.17	3.25
65	22	3.15	3.20
65	23	3.13	3.15
65	24	3.15	3.16
65	25	3.12	3.09
65	26	3.06	3.02
65	27	2.99	2.94

Age	Service Years	WLE	Standard Deviation
65	28	2.93	2.90
65	29	3.02	2.93
65	30	2.77	2.88
65	31	2.77	2.88
65	32	2.77	2.88
65	33	2.77	2.88
65	34	2.77	2.88
65	35	2.77	2.88
65	36	2.77	2.88
65	37	2.77	2.88
65	38	2.77	2.88
65	39	2.77	2.88
65	40	2.77	2.88
65	41	2.77	2.88
65	42	2.77	2.88
65	43	2.77	2.88
65	44	2.77	2.88
65	45	2.77	2.88
65	46	2.77	2.88
65	47	2.77	2.88
65	48	2.77	2.88
66	0	8.12	3.77
66	1	7.07	3.75
66	2	6.04	3.71
66	3	5.02	3.67
66	4	3.93	3.62
66	5	3.28	3.53
66	6	3.28	3.53
66	7	3.28	3.53
66	8	3.28	3.53
66	9	3.28	3.53
66	10	3.28	3.52
66	11	3.28	3.52
66	12	3.28	3.52
66	13	3.28	3.51
66	14	3.27	3.50
66	15	3.27	3.49
66	16	3.27	3.48
66	17	3.26	3.46

Age	Service Years	WLE	Standard Deviation
66	18	3.26	3.44
66	19	3.25	3.41
66	20	3.22	3.38
66	21	3.21	3.34
66	22	3.19	3.29
66	23	3.16	3.24
66	24	3.13	3.18
66	25	3.14	3.19
66	26	3.08	3.11
66	27	3.00	3.03
66	28	2.90	2.96
66	29	2.81	2.93
66	30	2.86	2.94
66	31	2.86	2.94
66	32	2.86	2.94
66	33	2.86	2.94
66	34	2.86	2.94
66	35	2.86	2.94
66	36	2.86	2.94
66	37	2.86	2.94
66	38	2.86	2.94
66	39	2.86	2.94
66	40	2.86	2.94
66	41	2.86	2.94
66	42	2.86	2.94
66	43	2.86	2.94
66	44	2.86	2.94
66	45	2.86	2.94
66	46	2.86	2.94
66	47	2.86	2.94
66	48	2.86	2.94
66	49	2.86	2.94
67	0	8.28	3.70
67	1	7.19	3.72
67	2	6.13	3.71
67	3	5.09	3.69
67	4	4.06	3.66
67	5	3.51	3.61
67	6	3.51	3.61

Age	Service Years	WLE	Standard Deviation
67	7	3.51	3.61
67	8	3.51	3.61
67	9	3.51	3.61
67	10	3.51	3.60
67	11	3.51	3.60
67	12	3.51	3.60
67	13	3.51	3.59
67	14	3.51	3.58
67	15	3.51	3.57
67	16	3.50	3.56
67	17	3.50	3.54
67	18	3.49	3.52
67	19	3.48	3.49
67	20	3.47	3.46
67	21	3.45	3.42
67	22	3.43	3.37
67	23	3.40	3.32
67	24	3.36	3.26
67	25	3.31	3.19
67	26	3.31	3.19
67	27	3.22	3.11
67	28	3.11	3.04
67	29	2.96	2.99
67	30	2.91	2.98
67	31	2.91	2.98
67	32	2.91	2.98
67	33	2.91	2.98
67	34	2.91	2.98
67	35	2.91	2.98
67	36	2.91	2.98
67	37	2.91	2.98
67	38	2.91	2.98
67	39	2.91	2.98
67	40	2.91	2.98
67	41	2.91	2.98
67	42	2.91	2.98
67	43	2.91	2.98
67	44	2.91	2.98
67	45	2.91	2.98

Age	Service Years	WLE	Standard Deviation
67	46	2.91	2.98
67	47	2.91	2.98
67	48	2.91	2.98
67	49	2.91	2.98
67	50	2.91	2.98
68	0	8.18	3.61
68	1	7.33	3.66
68	2	6.23	3.69
68	3	5.17	3.70
68	4	4.12	3.68
68	5	3.61	3.64
68	6	3.61	3.64
68	7	3.61	3.64
68	8	3.61	3.64
68	9	3.60	3.64
68	10	3.60	3.64
68	11	3.60	3.64
68	12	3.60	3.63
68	13	3.60	3.63
68	14	3.60	3.62
68	15	3.60	3.61
68	16	3.59	3.60
68	17	3.59	3.58
68	18	3.58	3.56
68	19	3.57	3.53
68	20	3.56	3.50
68	21	3.54	3.46
68	22	3.52	3.41
68	23	3.49	3.36
68	24	3.45	3.30
68	25	3.40	3.23
68	26	3.33	3.16
68	27	3.33	3.16
68	28	3.21	3.09
68	29	3.05	3.04
68	30	2.97	3.03
68	31	2.97	3.03
68	32	2.97	3.03
68	33	2.97	3.03

Age	Service Years	WLE	Standard Deviation
68	34	2.97	3.03
68	35	2.97	3.03
68	36	2.97	3.03
68	37	2.97	3.03
68	38	2.97	3.03
68	39	2.97	3.03
68	40	2.97	3.03
68	41	2.97	3.03
68	42	2.97	3.03
68	43	2.97	3.03
68	44	2.97	3.03
68	45	2.97	3.03
68	46	2.97	3.03
68	47	2.97	3.03
68	48	2.97	3.03
68	49	2.97	3.03
68	50	2.97	3.03
68	51	2.97	3.03
69	0	8.07	3.52
69	1	7.24	3.56
69	2	6.38	3.62
69	3	5.27	3.67
69	4	4.20	3.69
69	5	3.68	3.65
69	6	3.68	3.65
69	7	3.68	3.65
69	8	3.68	3.65
69	9	3.68	3.65
69	10	3.67	3.65
69	11	3.67	3.65
69	12	3.67	3.65
69	13	3.67	3.64
69	14	3.67	3.64
69	15	3.67	3.63
69	16	3.66	3.62
69	17	3.66	3.60
69	18	3.65	3.58
69	19	3.64	3.56
69	20	3.63	3.52

Age	Service Years	WLE	Standard Deviation
69	21	3.61	3.49
69	22	3.59	3.44
69	23	3.56	3.38
69	24	3.52	3.32
69	25	3.47	3.25
69	26	3.40	3.18
69	27	3.31	3.11
69	28	3.31	3.11
69	29	3.15	3.07
69	30	3.06	3.05
69	31	3.06	3.05
69	32	3.06	3.05
69	33	3.06	3.05
69	34	3.06	3.05
69	35	3.06	3.05
69	36	3.06	3.05
69	37	3.06	3.05
69	38	3.06	3.05
69	39	3.06	3.05
69	40	3.06	3.05
69	41	3.06	3.05
69	42	3.06	3.05
69	43	3.06	3.05
69	44	3.06	3.05
69	45	3.06	3.05
69	46	3.06	3.05
69	47	3.06	3.05
69	48	3.06	3.05
69	49	3.06	3.05
69	50	3.06	3.05
69	51	3.06	3.05
69	52	3.06	3.05
70	0	7.93	3.43
70	1	7.13	3.47
70	2	6.29	3.53
70	3	5.42	3.60
70	4	4.31	3.66
70	5	3.77	3.64
70	6	3.77	3.64

Age	Service Years	WLE	Standard Deviation
70	7	3.77	3.65
70	8	3.77	3.65
70	9	3.77	3.65
70	10	3.77	3.65
70	11	3.77	3.64
70	12	3.77	3.64
70	13	3.77	3.64
70	14	3.77	3.63
70	15	3.77	3.63
70	16	3.76	3.61
70	17	3.76	3.60
70	18	3.75	3.58
70	19	3.74	3.56
70	20	3.73	3.53
70	21	3.71	3.49
70	22	3.69	3.44
70	23	3.66	3.39
70	24	3.62	3.33
70	25	3.56	3.26
70	26	3.49	3.19
70	27	3.40	3.12
70	28	3.28	3.06
70	29	3.28	3.06
70	30	3.19	3.05
70	31	3.19	3.05
70	32	3.19	3.05
70	33	3.19	3.05
70	34	3.19	3.05
70	35	3.19	3.05
70	36	3.19	3.05
70	37	3.19	3.05
70	38	3.19	3.05
70	39	3.19	3.05
70	40	3.19	3.05
70	41	3.19	3.05
70	42	3.19	3.05
70	43	3.19	3.05
70	44	3.19	3.05
70	45	3.19	3.05

Age	Service Years	WLE	Standard Deviation
70	46	3.19	3.05
70	47	3.19	3.05
70	48	3.19	3.05
70	49	3.19	3.05
70	50	3.19	3.05
70	51	3.19	3.05
70	52	3.19	3.05
70	53	3.19	3.05
71	0	7.77	3.35
71	1	6.99	3.37
71	2	6.18	3.43
71	3	5.34	3.50
71	4	4.47	3.59
71	5	3.91	3.59
71	6	3.91	3.59
71	7	3.91	3.59
71	8	3.91	3.59
71	9	3.91	3.59
71	10	3.91	3.59
71	11	3.91	3.59
71	12	3.91	3.59
71	13	3.90	3.59
71	14	3.90	3.58
71	15	3.90	3.58
71	16	3.90	3.57
71	17	3.89	3.55
71	18	3.89	3.54
71	19	3.88	3.51
71	20	3.87	3.48
71	21	3.85	3.45
71	22	3.82	3.40
71	23	3.79	3.35
71	24	3.75	3.29
71	25	3.70	3.22
71	26	3.62	3.15
71	27	3.53	3.09
71	28	3.40	3.03
71	29	3.24	3.00
71	30	3.24	3.00

Age	Service Years	WLE	Standard Deviation
71	31	3.24	3.00
71	32	3.24	3.00
71	33	3.24	3.00
71	34	3.24	3.00
71	35	3.24	3.00
71	36	3.24	3.00
71	37	3.24	3.00
71	38	3.24	3.00
71	39	3.24	3.00
71	40	3.24	3.00
71	41	3.24	3.00
71	42	3.24	3.00
71	43	3.24	3.00
71	44	3.24	3.00
71	45	3.24	3.00
71	46	3.24	3.00
71	47	3.24	3.00
71	48	3.24	3.00
71	49	3.24	3.00
71	50	3.24	3.00
71	51	3.24	3.00
71	52	3.24	3.00
71	53	3.24	3.00
71	54	3.24	3.00
72	0	7.58	3.28
72	1	6.83	3.29
72	2	6.05	3.33
72	3	5.23	3.40
72	4	4.38	3.49
72	5	3.94	3.50
72	6	3.94	3.50
72	7	3.94	3.50
72	8	3.94	3.50
72	9	3.94	3.50
72	10	3.94	3.50
72	11	3.94	3.50
72	12	3.94	3.50
72	13	3.94	3.50
72	14	3.94	3.50

Age	Service Years	WLE	Standard Deviation
72	15	3.94	3.49
72	16	3.94	3.48
72	17	3.93	3.47
72	18	3.93	3.45
72	19	3.92	3.43
72	20	3.91	3.40
72	21	3.89	3.37
72	22	3.87	3.33
72	23	3.84	3.28
72	24	3.80	3.22
72	25	3.74	3.15
72	26	3.67	3.08
72	27	3.57	3.02
72	28	3.45	2.97
72	29	3.29	2.94
72	30	3.20	2.93
72	31	3.20	2.93
72	32	3.20	2.93
72	33	3.20	2.93
72	34	3.20	2.93
72	35	3.20	2.93
72	36	3.20	2.93
72	37	3.20	2.93
72	38	3.20	2.93
72	39	3.20	2.93
72	40	3.20	2.93
72	41	3.20	2.93
72	42	3.20	2.93
72	43	3.20	2.93
72	44	3.20	2.93
72	45	3.20	2.93
72	46	3.20	2.93
72	47	3.20	2.93
72	48	3.20	2.93
72	49	3.20	2.93
72	50	3.20	2.93
72	51	3.20	2.93
72	52	3.20	2.93
72	53	3.20	2.93

Age	Service Years	WLE	Standard Deviation
72	54	3.20	2.93
72	55	3.20	2.93
73	0	7.36	3.24
73	1	6.65	3.22
73	2	5.90	3.24
73	3	5.11	3.30
73	4	4.28	3.38
73	5	3.85	3.40
73	6	3.85	3.40
73	7	3.85	3.40
73	8	3.85	3.40
73	9	3.85	3.40
73	10	3.85	3.40
73	11	3.85	3.40
73	12	3.85	3.40
73	13	3.85	3.40
73	14	3.85	3.40
73	15	3.85	3.40
73	16	3.85	3.39
73	17	3.84	3.38
73	18	3.84	3.36
73	19	3.83	3.34
73	20	3.82	3.32
73	21	3.80	3.28
73	22	3.78	3.24
73	23	3.76	3.20
73	24	3.72	3.14
73	25	3.67	3.08
73	26	3.60	3.01
73	27	3.50	2.94
73	28	3.38	2.89
73	29	3.23	2.87
73	30	3.14	2.86
73	31	3.14	2.86
73	32	3.14	2.86
73	33	3.14	2.86
73	34	3.14	2.86
73	35	3.14	2.86
73	36	3.14	2.86

Age	Service Years	WLE	Standard Deviation
73	37	3.14	2.86
73	38	3.14	2.86
73	39	3.14	2.86
73	40	3.14	2.86
73	41	3.14	2.86
73	42	3.14	2.86
73	43	3.14	2.86
73	44	3.14	2.86
73	45	3.14	2.86
73	46	3.14	2.86
73	47	3.14	2.86
73	48	3.14	2.86
73	49	3.14	2.86
73	50	3.14	2.86
73	51	3.14	2.86
73	52	3.14	2.86
73	53	3.14	2.86
73	54	3.14	2.86
73	55	3.14	2.86
73	56	3.14	2.86
74	0	7.11	3.23
74	1	6.43	3.18
74	2	5.72	3.18
74	3	4.95	3.21
74	4	4.16	3.28
74	5	3.74	3.30
74	6	3.74	3.30
74	7	3.74	3.30
74	8	3.74	3.30
74	9	3.74	3.30
74	10	3.74	3.30
74	11	3.74	3.30
74	12	3.74	3.30
74	13	3.74	3.30
74	14	3.74	3.30
74	15	3.74	3.30
74	16	3.74	3.29
74	17	3.73	3.28
74	18	3.73	3.27

Age	Service Years	WLE	Standard Deviation
74	19	3.72	3.25
74	20	3.71	3.23
74	21	3.70	3.20
74	22	3.68	3.16
74	23	3.65	3.12
74	24	3.62	3.06
74	25	3.57	3.00
74	26	3.50	2.94
74	27	3.42	2.87
74	28	3.30	2.82
74	29	3.15	2.79
74	30	3.06	2.79
74	31	3.06	2.79
74	32	3.06	2.79
74	33	3.06	2.79
74	34	3.06	2.79
74	35	3.06	2.79
74	36	3.06	2.79
74	37	3.06	2.79
74	38	3.06	2.79
74	39	3.06	2.79
74	40	3.06	2.79
74	41	3.06	2.79
74	42	3.06	2.79
74	43	3.06	2.79
74	44	3.06	2.79
74	45	3.06	2.79
74	46	3.06	2.79
74	47	3.06	2.79
74	48	3.06	2.79
74	49	3.06	2.79
74	50	3.06	2.79
74	51	3.06	2.79
74	52	3.06	2.79
74	53	3.06	2.79
74	54	3.06	2.79
74	55	3.06	2.79
74	56	3.06	2.79
74	57	3.06	2.79

Age	Service Years	WLE	Standard Deviation
75	0	6.81	3.25
75	1	6.18	3.17
75	2	5.50	3.13
75	3	4.78	3.15
75	4	4.01	3.20
75	5	3.60	3.20
75	6	3.60	3.20
75	7	3.60	3.20
75	8	3.60	3.20
75	9	3.60	3.20
75	10	3.60	3.20
75	11	3.60	3.20
75	12	3.60	3.21
75	13	3.60	3.21
75	14	3.60	3.21
75	15	3.60	3.21
75	16	3.60	3.20
75	17	3.60	3.20
75	18	3.59	3.19
75	19	3.59	3.17
75	20	3.58	3.15
75	21	3.57	3.12
75	22	3.55	3.09
75	23	3.53	3.04
75	24	3.49	2.99
75	25	3.45	2.93
75	26	3.39	2.87
75	27	3.30	2.81
75	28	3.19	2.75
75	29	3.05	2.73
75	30	2.96	2.72
75	31	2.96	2.72
75	32	2.96	2.72
75	33	2.96	2.72
75	34	2.96	2.72
75	35	2.96	2.72
75	36	2.96	2.72
75	37	2.96	2.72
75	38	2.96	2.72

Age	Service Years	WLE	Standard Deviation
75	39	2.96	2.72
75	40	2.96	2.72
75	41	2.96	2.72
75	42	2.96	2.72
75	43	2.96	2.72
75	44	2.96	2.72
75	45	2.96	2.72
75	46	2.96	2.72
75	47	2.96	2.72
75	48	2.96	2.72
75	49	2.96	2.72
75	50	2.96	2.72
75	51	2.96	2.72
75	52	2.96	2.72
75	53	2.96	2.72
75	54	2.96	2.72
75	55	2.96	2.72
75	56	2.96	2.72
75	57	2.96	2.72
75	58	2.96	2.72