

Worklife Expectancy Tables: They Should Not Be Used to Compute Wage Loss in Injury and Death Cases.

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Abstract

Worklife expectancy tables are tools that can be used to estimate macroeconomic needs. That is, worklife tables assist in estimating what needs the government may have in worker's compensation cases. However, worklife does not have a place in the courtroom where economists are attempting to estimate the present value of a future income stream.

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Key Words: Worklife Expectancy, Lost income from death or injury

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Introduction

Many forensic economists use worklife expectancy tables when estimating the present value of future income in death and disability cases. The worklife table is employed to establish the number of years the killed or injured party would have remained in the labor force.

There is some debate as to the appropriate methodology to use in constructing a worklife table.

The Bureau of Labor Statistics (BLS) has been publishing worklife estimates since the 1950's. The 1982 the BLS published the first worklife table using the increment/decrement methodology (Smith, 1986).

Firms now have proprietary methods to compute worklife estimates. In 1996 the Journal of Forensic Economics published Frank Corcione's review of A. M. Gamboa's book "The New Worklife Expectancy Tables: Revised 1995 For Persons with and Without Disability by Gender and Level of Education."

In their article, *Disability and the new Worklife Expectancy Tables from Vocational Econometrics, 1998: A Critical Analysis*, Skoog and Toppino (1999) express concerns about the use of worklife data presented by Vocational Econometrics, Inc. and Vocational Economics, Inc. Their conclusion is the use of the worklife data may lead to an inappropriate lost wage estimate. Gibson and Tierney (2000) in their article, *Disability and Worklife Expectancy Tables: A Response*, refute this conclusion.

James Cieccka and Gary Skoog (2001) present *The Very New Disabled Worklife Tables* which remedy seven problems they claim exist in *The New Worklife Expectancy Tables: Revised 1998 By Gender, Level of Educational Attainment, and Level of Disability*.

Daniel Milimet, Et al., uses an econometric approach to constructing the worklife tables. The article, *Estimating Worklife Expectancy: An Econometric Approach* provides worklife estimates for persons by sex, race and education levels.

But with all the discussion as to which worklife table is correct and how it should be applied, there is still some question as to whether or not the forensic economist is the appropriate person to make the worklife expectancy decision.

The worklife table.

A worklife expectancy table is designed to show how long a person will remain in the work force. There are several ways the table is constructed. The current method used by the Bureau of Labor Statistics is the increment/decrement method.

This method considers the following four possibilities to estimate the number of years a person will remain in the labor force.

1. A person currently active in the labor force remains active.
2. A person currently active in the labor force becomes inactive.
3. A person currently inactive in the labor force remains inactive.
4. A person currently inactive in the labor force becomes active.

A second method is the LPE method. This approach considers the probability of living (L), the probability a person will participate in the labor force (P), and, if participating in the labor force, the probability the person will be employed (E).

It is not the intent to address the construction of worklife tables, or which method is superior, but rather the interpretation of the table. Table 1 presents a worklife table of Caucasian males from age 18 to 70. This particular table was chosen because it presents both a life expectancy and worklife expectancy.

The table states that an 18 year-old Caucasian male has a life expectancy of 56.4 years, to age 74.4 years. Of this time he is expected to spend 38.7 years in the labor force or until age 56.7 years.

Estimating the Present Value of a Future Income Stream.

In order to estimate the present value of a future income stream the following assumptions are made:

1. The injured party is a Caucasian male.
2. The Present Value computation begins on the fortieth birthday.
3. The injured party was employed full time by the same employer for the fifteen years prior to the accident.
4. The annual income is \$25,000, no overtime.
5. No fringe benefits are considered.
6. Retirement with full Social Security benefits occur at age 67.
7. The growth and discount rate are equal.

The formula used to compute the present value of a future income stream is:

$$\text{Present Value of Future Income} = \sum_{t=0}^n [(1+g)^t / (1+d)^t * \$ * L * P * E]$$

The variables represent:

- \$ The salary now or period 0.
- t Time. The injured party is 40 years old, period 0 and 40 years of age are the same. "n" is the number of years it takes to reach age 99.
t + 40 is the current age of the individual.
- g The growth rate of wages.
- d The interest or discount rate.
- L The probability of living at time "t".
- P The probability of participating in the labor force at time "t".
- E The probability of finding employment at time "t".

Based on the assumptions that growth and discount are equal the formula collapses to:

$$\text{Present Value of Future Income} = \sum_{t=0}^n [\$ * L * P * E]$$

Table 2 presents the computation of the present value of the income stream and has the following interpretation:

- Column 1 is the current age of injured party.
- Column 2 is the number of years in the future, 0 being today, 1 being one year in the future, etc.
- Column 3 is the present value of the income stream. Since the growth and discount rates are the same the annual present value of \$25,000 will not change over time.
- Column 4 is the running total, or sum, of annual present values from time "t".
- Column 5 is the probability of living (L) each successive year (Table 93, 2002 Statistical Abstracts of the United States).
- Column 6 is the probability a Caucasian male will participate (P) in the labor force. The probability of participating in the labor force is the average probability from 1987 through 2001 (Jacobs, 2001).

<u>Age</u>	<u>Probability</u>
35-44	94.4%
45-54	90.9
54-64	16.8
65 +	16.8

Column 7 is the probability of finding employment (E). Like the probability of participating in the labor force, the probability of employment is the average from 1987 through 2001 (Jacobs 2001).

<u>Age</u>	<u>Probability</u>
35-44	93.3%

45-54	96.6
54-64	96.5
65 +	97.0

Column 8 is the computation of the present value using the LPE model. It is the present value of the future income stream, Column 3, multiplied by the probability of living, Column 5, multiplied by the probability participating in the labor force, Column 6, multiplied by the probability of finding employment, Column 7.

Column 9 is the sum of annual present values under the LPE model from time 0 to current time.

Assume the plaintiff had planned to work until able to receive full Social Security retirement benefits. Absent the accident and assuming the injury occurred at age 40, the plaintiff would remain in the labor force another 27 years until retirement at age 67 (Social Security Administration). From Table 2 the loss of income to age 67 would be \$675,000. (The loss is \$700,000 through age 67.)

However, according to the worklife table, Table 1, the injured party will remain in the labor force only 20.4 years, exiting the labor force at age 60.4. The loss of income would be \$510,000. The economist has understated the loss to the plaintiff.

Since the LPE model utilizes the probability of exiting the labor force before age of retirement it should also include the probability of remaining in the labor force after the age of normal retirement. If this is done the present value of the future income stream is computed to age 99 and the loss of income is \$520,504.

Using the statistics provided in the worklife table and the LPE model the injured party has no statistical chance of working to age 67 thus receiving the \$675,000.

Considerations:

The lost income is understated because a macro concept, the worklife expectancy, is applied to a micro question, what is the loss of income to an **individual**. Worklife is useful tool for macro planning but not a useful tool in individual cases.

Like the mortality table, the worklife table aggregates data. It represents only what will happen to the work force as a whole and not to the individual. According to the worklife table the first Caucasian male to work to a retirement age of 67 would be 63 year old when exiting the labor force. Stated differently, no Caucasian male under the age of 63 is expected to remain in the labor force until retirement at 67 years of age. This assumption is not reasonable.

Since the injured party spent fifteen years of full time employment prior to the accident it seems reasonable to assume he would continue in the labor force. If the probability of participating in the labor force is change to 100% from age 40 to age 67, while the other probabilities remain unchanged, the present value of the future income would be \$648,842, see Table 2. If the same modification is made for the probability of employment, that is, the probability of being employed between the ages of 40 and 67 is equal to one; the present value of the income steam becomes \$670,581. These modifications are presented in Table 3.

Based on the assumptions made there are five different estimated income levels. They are:

1.	Uninterrupted employment to age 67	\$675,000
2.	Worklife expectancy to age 60.4	\$510,000
3.	Full LPE Probability of living less than one. Probability of participating in the labor force less than 1. Probability of finding employment less that 1.	\$520,504
4.	Modified LPE, or LE with P = 100% until age 67 Probability of living less than 1. Probability of Participating = 100% Probability of finding employment less that 1.	\$648,862
4.	Modified LPE, P and E = 100% until age 67 Probability of living less than 1. Probability of Participating = 100% Probability of Employment = 100%	\$670,581

Conclusions

The five methods of computing the present value of the future income stream range result in five different conclusions. The lowest figure occurs when employing the worklife expectancy table. The highest figure occurs using uninterrupted full time employment to age 67. These figures range from 76% to 99.35% of the present value of uninterrupted employment from age 40 to 67.

The testifying expert does not do justice to the injured party by inserting personal judgment about the probability of living, participating and employment. These probabilities are better left to be decided by the jury.

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<<http://www.ssa.gov/retirechartred.htm>s

<<http://www.econedlink.org/lessons/EM128/images/LifeExp.pdf>.

Table 1
Life and Worklife Expectancy Tables
Caucasian Male

<u>Age</u>	<u>Life Expectancy in Years</u>	<u>Worklife Expectancy in Years</u>	<u>Age + Life Expectancy in Years</u>	<u>Age + Worklife Expectancy in Years</u>
18	56.4	38.7	74.4	56.7
19	55.4	38.1	74.4	57.1
20	54.5	37.4	74.5	57.4
21	53.6	36.7	74.6	57.7
22	52.7	35.9	74.7	57.9
23	51.7	35.1	74.7	58.1
24	50.8	34.3	74.8	58.3
25	49.9	33.5	74.9	58.5
26	48.9	32.7	74.9	58.7
27	48.0	31.8	75.0	58.8
28	47.1	30.9	75.1	58.9
29	46.2	30.1	75.2	59.1
30	45.2	29.2	75.2	59.2
31	44.3	28.3	75.3	59.3
32	43.4	27.5	75.4	59.5
33	42.5	26.6	75.5	59.6
34	41.6	25.7	75.6	59.7
35	40.7	24.8	75.7	59.8
36	39.8	23.9	75.8	59.9
37	38.8	23.1	75.8	60.1
38	37.9	22.2	75.9	60.2
39	37.0	21.3	76.0	60.3
40	36.1	20.4	76.1	60.4
41	35.3	19.6	76.3	60.6
42	34.4	18.7	76.4	60.7
43	33.5	17.9	76.5	60.9
44	32.6	17.1	76.6	61.1
45	31.7	16.3	76.7	61.3
46	30.8	15.5	76.8	61.5
47	29.9	14.7	76.9	61.7
48	29.1	13.9	77.1	61.9
49	28.2	13.1	77.2	62.1
50	27.3	12.3	77.3	62.3
51	26.5	11.6	77.5	62.6
52	25.6	10.8	77.6	62.8
53	24.8	10.1	77.8	63.1
54	24.0	9.4	78.0	63.4

Life and Worklife Expectancy Tables
Caucasian Male
Continued

<u>Age</u>	<u>Life Expectancy in Years</u>	<u>Worklife Expectancy in Years</u>	<u>Age + Life Expectancy in Years</u>	<u>Age + Worklife Expectancy in Years</u>
55	23.2	8.7	78.2	63.7
56	22.4	8.0	78.4	64.0
57	21.6	7.4	78.6	64.4
58	20.8	6.8	78.8	64.8
59	20.0	6.2	79.0	65.2
60	19.3	5.7	79.3	65.7
61	18.5	5.3	79.5	66.3
62	17.8	4.9	79.8	66.9
63	17.1	4.6	80.1	67.6
64	16.4	4.3	80.4	68.3
65	15.7	4.1	80.7	69.1
66	15.1	3.9	81.1	69.9
67	14.4	3.8	81.4	70.8
68	13.8	3.6	81.8	71.6
69	13.2	3.4	82.2	72.4
70	12.6	3.2	82.6	73.2

Table 2.
Present Value.

1	2	3	4	5	6	7	8	9
<u>Age</u>	<u>Period</u>	<u>Present Value</u>	<u>Sum</u>	<u>Prob. Living</u>	<u>Part. Rate</u>	<u>Prob. Emp</u>	<u>Adjusted PV</u>	<u>Sum</u>
40	0	25,000	25,000	0.99767	94.4	96.3	22,674	22,674
41	1	25,000	50,000	0.99518	94.4	96.3	22,617	45,291
42	2	25,000	75,000	0.99249	94.4	96.3	22,556	67,847
43	3	25,000	100,000	0.98959	94.4	96.3	22,490	90,337
44	4	25,000	125,000	0.98645	94.4	96.3	22,419	112,756
45	5	25,000	150,000	0.98305	90.9	96.6	21,580	134,337
46	6	25,000	175,000	0.97935	90.9	96.6	21,499	155,836
47	7	25,000	200,000	0.97535	90.9	96.6	21,411	177,247
48	8	25,000	225,000	0.97106	90.9	96.6	21,317	198,564
49	9	25,000	250,000	0.96647	90.9	96.6	21,216	219,780
50	10	25,000	275,000	0.96155	90.9	96.6	21,108	240,889
51	11	25,000	300,000	0.95631	90.9	96.6	20,993	261,882
52	12	25,000	325,000	0.95068	90.9	96.6	20,870	282,752
53	13	25,000	350,000	0.94457	90.9	96.6	20,735	303,487
54	14	25,000	375,000	0.93790	90.9	96.6	20,589	324,076
55	15	25,000	400,000	0.93058	16.8	96.5	15,289	339,365
56	16	25,000	425,000	0.92254	16.8	96.5	15,157	354,521
57	17	25,000	450,000	0.91375	16.8	96.5	15,012	369,534
58	18	25,000	475,000	0.90422	16.8	96.5	14,856	384,389
59	19	25,000	500,000	0.89394	16.8	96.5	14,687	399,076
60	20	25,000	525,000	0.88285	16.8	96.5	14,504	413,580
61	21	25,000	550,000	0.87084	16.8	96.5	14,307	427,887
62	22	25,000	575,000	0.85780	16.8	96.5	14,093	441,980
63	23	25,000	600,000	0.84371	16.8	96.5	13,861	455,842
64	24	25,000	625,000	0.82847	16.8	96.5	13,611	469,453
65	25	25,000	650,000	0.81209	16.8	97.0	3,308	472,761
66	26	25,000	675,000	0.79451	16.8	97.0	3,237	475,998
67	27	25,000	700,000	0.77568	16.8	97.0	3,160	479,158
68	28	25,000	725,000	0.75555	16.8	97.0	3,078	482,236
69	29	25,000	750,000	0.73407	16.8	97.0	2,991	485,227
70	30	25,000	775,000	0.71123	16.8	97.0	2,898	488,125
71	31	25,000	800,000	0.68721	16.8	97.0	2,800	490,924
72	32	25,000	825,000	0.66203	16.8	97.0	2,697	493,621
73	33	25,000	850,000	0.63571	16.8	97.0	2,590	496,211
74	34	25,000	875,000	0.60828	16.8	97.0	2,478	498,689
75	35	25,000	900,000	0.57980	16.8	97.0	2,362	501,051
76	36	25,000	925,000	0.55015	16.8	97.0	2,241	503,293
77	37	25,000	950,000	0.51944	16.8	97.0	2,116	505,409
78	38	25,000	975,000	0.48777	16.8	97.0	1,987	507,396

<u>Age</u>	<u>Period</u>	<u>Present</u> <u>Value</u>	<u>Sum</u>	<u>Prob.</u> <u>Living</u>	<u>Part.</u> <u>Rate</u>	<u>Prob.</u> <u>Emp</u>	<u>Adjusted</u>	
							<u>PV</u>	<u>Sum</u>
79	39	25,000	1,000,000	0.45530	16.8	97.0	1,855	509,251
80	40	25,000	1,025,000	0.42220	16.8	97.0	1,720	510,971
81	41	25,000	1,050,000	0.38720	16.8	97.0	1,577	512,549
82	42	25,000	1,075,000	0.35062	16.8	97.0	1,428	513,977
83	43	25,000	1,100,000	0.31285	16.8	97.0	1,275	515,252
84	44	25,000	1,125,000	0.27443	16.8	97.0	1,118	516,370
85	45	25,000	1,150,000	0.23601	16.8	97.0	961	517,331
86	46	25,000	1,175,000	0.19834	16.8	97.0	808	518,139
87	47	25,000	1,200,000	0.16225	16.8	97.0	661	518,800
88	48	25,000	1,225,000	0.12859	16.8	97.0	524	519,324
89	49	25,000	1,250,000	0.09818	16.8	97.0	400	519,724
90	50	25,000	1,275,000	0.07170	16.8	97.0	292	520,016
91	51	25,000	1,300,000	0.04966	16.8	97.0	202	520,218
92	52	25,000	1,325,000	0.03226	16.8	97.0	131	520,350
93	53	25,000	1,350,000	0.01937	16.8	97.0	79	520,429
94	54	25,000	1,375,000	0.01055	16.8	97.0	43	520,472
95	55	25,000	1,400,000	0.00507	16.8	97.0	21	520,492
96	56	25,000	1,425,000	0.00207	16.8	97.0	8	520,501
97	57	25,000	1,450,000	0.00067	16.8	97.0	3	520,503
98	58	25,000	1,475,000	0.00016	16.8	97.0	1	520,504
99	59	25,000	1,500,000	0.00002	16.8	97.0	0	520,504

Table 3
 Modified Present Value
 Probability of Participation = 100% to age 67

Age	Period	Present		Prob. Living	Part. Rate	Prob. Emp	Adjusted	
		Value	Sum				PV	Sum
40	0	25,000	25,000	0.99767	100%	0.963	24,019	24,019
41	1	25,000	50,000	0.99518	100%	0.963	23,959	47,978
42	2	25,000	75,000	0.99249	100%	0.963	23,894	71,872
43	3	25,000	100,000	0.98959	100%	0.963	23,824	95,696
44	4	25,000	125,000	0.98645	100%	0.963	23,749	119,445
45	5	25,000	150,000	0.98305	100%	0.966	23,741	143,186
46	6	25,000	175,000	0.97935	100%	0.966	23,651	166,837
47	7	25,000	200,000	0.97535	100%	0.966	23,555	190,392
48	8	25,000	225,000	0.97106	100%	0.966	23,451	213,843
49	9	25,000	250,000	0.96647	100%	0.966	23,340	237,183
50	10	25,000	275,000	0.96155	100%	0.966	23,222	260,405
51	11	25,000	300,000	0.95631	100%	0.966	23,095	283,500
52	12	25,000	325,000	0.95068	100%	0.966	22,959	306,459
53	13	25,000	350,000	0.94457	100%	0.966	22,811	329,270
54	14	25,000	375,000	0.93790	100%	0.966	22,650	351,920
55	15	25,000	400,000	0.93058	100%	0.965	22,450	374,371
56	16	25,000	425,000	0.92254	100%	0.965	22,256	396,627
57	17	25,000	450,000	0.91375	100%	0.965	22,044	418,671
58	18	25,000	475,000	0.90422	100%	0.965	21,814	440,486
59	19	25,000	500,000	0.89394	100%	0.965	21,566	462,052
60	20	25,000	525,000	0.88285	100%	0.965	21,299	483,351
61	21	25,000	550,000	0.87084	100%	0.965	21,009	504,360
62	22	25,000	575,000	0.85780	100%	0.965	20,695	525,054
63	23	25,000	600,000	0.84371	100%	0.965	20,355	545,409
64	24	25,000	625,000	0.82847	100%	0.965	19,987	565,396
65	25	25,000	650,000	0.81209	100%	0.970	19,693	585,089
66	26	25,000	675,000	0.79451	100%	0.970	19,267	604,356
67	27	25,000	700,000	0.77568	0.168	0.970	3,160	607,516
68	28	25,000	725,000	0.75555	0.168	0.970	3,078	610,594
69	29	25,000	750,000	0.73407	0.168	0.970	2,991	613,585
70	30	25,000	775,000	0.71123	0.168	0.970	2,898	616,482
71	31	25,000	800,000	0.68721	0.168	0.970	2,800	619,282
72	32	25,000	825,000	0.66203	0.168	0.970	2,697	621,979
73	33	25,000	850,000	0.63571	0.168	0.970	2,590	624,569
74	34	25,000	875,000	0.60828	0.168	0.970	2,478	627,047
75	35	25,000	900,000	0.57980	0.168	0.970	2,362	629,409
76	36	25,000	925,000	0.55015	0.168	0.970	2,241	631,650
77	37	25,000	950,000	0.51944	0.168	0.970	2,116	633,767
78	38	25,000	975,000	0.48777	0.168	0.970	1,987	635,754
79	39	25,000	1,000,000	0.45530	0.168	0.970	1,855	637,609

Table 3
 Modified Present Value
 Probability of Participation = 100% to age 67
 Continued

<u>Age</u>	<u>Period</u>	<u>Present</u>		<u>Prob.</u> <u>Living</u>	<u>Part.</u> <u>Rate</u>	<u>Prob.</u> <u>Emp</u>	<u>Adjusted</u>	
		<u>Value</u>	<u>Sum</u>				<u>PV</u>	<u>Sum</u>
80	40	25,000	1,025,000	0.42220	0.168	0.970	1,720	639,329
81	41	25,000	1,050,000	0.38720	0.168	0.970	1,577	640,906
82	42	25,000	1,075,000	0.35062	0.168	0.970	1,428	642,335
83	43	25,000	1,100,000	0.31285	0.168	0.970	1,275	643,609
84	44	25,000	1,125,000	0.27443	0.168	0.970	1,118	644,727
85	45	25,000	1,150,000	0.23601	0.168	0.970	961	645,689
86	46	25,000	1,175,000	0.19834	0.168	0.970	808	646,497
87	47	25,000	1,200,000	0.16225	0.168	0.970	661	647,158
88	48	25,000	1,225,000	0.12859	0.168	0.970	524	647,682
89	49	25,000	1,250,000	0.09818	0.168	0.970	400	648,082
90	50	25,000	1,275,000	0.07170	0.168	0.970	292	648,374
91	51	25,000	1,300,000	0.04966	0.168	0.970	202	648,576
92	52	25,000	1,325,000	0.03226	0.168	0.970	131	648,707
93	53	25,000	1,350,000	0.01937	0.168	0.970	79	648,786
94	54	25,000	1,375,000	0.01055	0.168	0.970	43	648,829
95	55	25,000	1,400,000	0.00507	0.168	0.970	21	648,850
96	56	25,000	1,425,000	0.00207	0.168	0.970	8	648,858
97	57	25,000	1,450,000	0.00067	0.168	0.970	3	648,861
98	58	25,000	1,475,000	0.00016	0.168	0.970	1	648,862
99	59	25,000	1,500,000	0.00002	0.168	0.970	0	648,862

Table 4
 Modified Present Value
 Probability of Participation and Employment = 100% to age 67

Age	Period	Present		Prob. Living	Part. Rate	Prob. Emp	Adjusted	
		Value	Sum				PV	Sum
40	0	25,000	25,000	0.99767	100.0	100.0	24,942	24,942
41	1	25,000	50,000	0.99518	100.0	100.0	24,879	49,821
42	2	25,000	75,000	0.99249	100.0	100.0	24,812	74,633
43	3	25,000	100,000	0.98959	100.0	100.0	24,740	99,373
44	4	25,000	125,000	0.98645	100.0	100.0	24,661	124,034
45	5	25,000	150,000	0.98305	100.0	100.0	24,576	148,611
46	6	25,000	175,000	0.97935	100.0	100.0	24,484	173,095
47	7	25,000	200,000	0.97535	100.0	100.0	24,384	197,478
48	8	25,000	225,000	0.97106	100.0	100.0	24,276	221,755
49	9	25,000	250,000	0.96647	100.0	100.0	24,162	245,917
50	10	25,000	275,000	0.96155	100.0	100.0	24,039	269,955
51	11	25,000	300,000	0.95631	100.0	100.0	23,908	293,863
52	12	25,000	325,000	0.95068	100.0	100.0	23,767	317,630
53	13	25,000	350,000	0.94457	100.0	100.0	23,614	341,245
54	14	25,000	375,000	0.93790	100.0	100.0	23,447	364,692
55	15	25,000	400,000	0.93058	100.0	100.0	23,265	387,957
56	16	25,000	425,000	0.92254	100.0	100.0	23,064	411,020
57	17	25,000	450,000	0.91375	100.0	100.0	22,844	433,864
58	18	25,000	475,000	0.90422	100.0	100.0	22,606	456,470
59	19	25,000	500,000	0.89394	100.0	100.0	22,349	478,818
60	20	25,000	525,000	0.88285	100.0	100.0	22,071	500,889
61	21	25,000	550,000	0.87084	100.0	100.0	21,771	522,660
62	22	25,000	575,000	0.85780	100.0	100.0	21,445	544,105
63	23	25,000	600,000	0.84371	100.0	100.0	21,093	565,198
64	24	25,000	625,000	0.82847	100.0	100.0	20,712	585,910
65	25	25,000	650,000	0.81209	100.0	100.0	20,302	606,212
66	26	25,000	675,000	0.79451	100.0	100.0	19,863	626,075
67	27	25,000	700,000	0.77568	16.8	97.0	3,160	629,235
68	28	25,000	725,000	0.75555	16.8	97.0	3,078	632,313
69	29	25,000	750,000	0.73407	16.8	97.0	2,991	635,304
70	30	25,000	775,000	0.71123	16.8	97.0	2,898	638,201
71	31	25,000	800,000	0.68721	16.8	97.0	2,800	641,001
72	32	25,000	825,000	0.66203	16.8	97.0	2,697	643,698
73	33	25,000	850,000	0.63571	16.8	97.0	2,590	646,288
74	34	25,000	875,000	0.60828	16.8	97.0	2,478	648,766
75	35	25,000	900,000	0.57980	16.8	97.0	2,362	651,128
76	36	25,000	925,000	0.55015	16.8	97.0	2,241	653,370
77	37	25,000	950,000	0.51944	16.8	97.0	2,116	655,486
78	38	25,000	975,000	0.48777	16.8	97.0	1,987	657,473
79	39	25,000	1,000,000	0.45530	16.8	97.0	1,855	659,328

Table 3
Modified Present Value
Continued

<u>Age</u>	<u>Period</u>	<u>Present</u> <u>Value</u>	<u>Sum</u>	<u>Prob.</u> <u>Living</u>	<u>Part.</u> <u>Rate</u>	<u>Prob.</u> <u>Emp</u>	<u>Adjusted</u>	
							<u>PV</u>	<u>Sum</u>
80	40	25,000	1,025,000	0.42220	16.8	97.0	1,720	661,048
81	41	25,000	1,050,000	0.38720	16.8	97.0	1,577	662,625
82	42	25,000	1,075,000	0.35062	16.8	97.0	1,428	664,054
83	43	25,000	1,100,000	0.31285	16.8	97.0	1,275	665,328
84	44	25,000	1,125,000	0.27443	16.8	97.0	1,118	666,446
85	45	25,000	1,150,000	0.23601	16.8	97.0	961	667,408
86	46	25,000	1,175,000	0.19834	16.8	97.0	808	668,216
87	47	25,000	1,200,000	0.16225	16.8	97.0	661	668,877
88	48	25,000	1,225,000	0.12859	16.8	97.0	524	669,401
89	49	25,000	1,250,000	0.09818	16.8	97.0	400	669,801
90	50	25,000	1,275,000	0.07170	16.8	97.0	292	670,093
91	51	25,000	1,300,000	0.04966	16.8	97.0	202	670,295
92	52	25,000	1,325,000	0.03226	16.8	97.0	131	670,427
93	53	25,000	1,350,000	0.01937	16.8	97.0	79	670,506
94	54	25,000	1,375,000	0.01055	16.8	97.0	43	670,549
95	55	25,000	1,400,000	0.00507	16.8	97.0	21	670,569
96	56	25,000	1,425,000	0.00207	16.8	97.0	8	670,578
97	57	25,000	1,450,000	0.00067	16.8	97.0	3	670,580
98	58	25,000	1,475,000	0.00016	16.8	97.0	1	670,581
99	59	25,000	1,500,000	0.00002	16.8	97.0	0	670,581