



**Actuarial Valuation of the
State of Alaska Long Term Care Program
as of 6/30/2009**

PREPARED BY:

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July 30, 2010



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Mr. Aaron Jurgaitis
Consultant, Health and Productivity
Buck Consultants, an ACS company
1200 17th Street, Suite 1200
Denver, CO 80202

RE: VALUATION OF THE STATE OF ALASKA LONG TERM CARE PROGRAM

Dear Aaron:

This report provides actuarial values and projections of the State of Alaska Long Term Care Program as of June 30, 2009.

Section I outlines the scope and qualifications associated with the analysis. Results are summarized in Section II. Key actuarial assumptions are provided in Section III. Results of sensitivity testing are provided in Section IV.

Appendix A summarizes methodology, models and actuarial assumptions employed in the analysis. Appendix B provides results of our analysis of historical persistency and claims. Appendix C provides detailed projection results.

We are available to answer any questions regarding the assumptions and methods used to develop these projections. Please contact us with any questions.

Sincerely,

A handwritten signature in black ink that reads "Peggy Hauser".

Peggy L. Hauser, FSA
Senior Vice President
Actuarial Services

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SECTION I

Introduction and Qualifications

Univita was retained by Buck Consultants to perform an actuarial analysis of the State of Alaska's long term care (LTC) program. Specifically, our assignment was to develop a projection of future cash flows and to evaluate the adequacy of current assets and premium levels based on those cash flows.

Univita is frequently engaged to prepare actuarial projections of LTC insurance products. The approach followed in this situation is consistent with methods we have generally employed in previous engagements.

This report has been prepared for the internal use of Buck Consultants and the State of Alaska. This report may not be distributed, disclosed, copied, or otherwise furnished to any other party without Univita's prior consent. Any distribution of this report must be in its entirety.

The validity of these cash flow projections depends on how well future experience conforms to our assumptions. Assumptions for future morbidity, persistency, expenses, investment return, and other actuarial factors are based upon our evaluation of recent experience and anticipated future trends for this block of business. The assumptions are selected to be best estimate assumptions with no margin for conservatism. Actual experience may be more or less favorable than the assumptions underlying the amounts provided in this report. To the extent actual experience is different from the assumptions underlying this report, so will actual results differ from the results in this report.

Valuation Approach

We have generated expected future cash flows for the current inforce block and compared the present value of those future net cash flows to current assets. We have not generated liabilities and reserves consistent with statutory reporting requirements as this self-funded plan is not subject to such requirements.

Data Reliance

We relied on data and information supplied by State of Alaska personnel. In addition, since Univita administers the claims for these policies, we also relied on data and information supplied by Univita data services personnel. We have not audited or independently verified the information furnished to us. Although we have no reason to suspect the integrity of the underlying data, to the extent that the data is materially flawed, the results of our analysis may be materially impacted. The principal materials relied upon that were provided by State of Alaska and Univita personnel include:

1. Census listing of all policies ever issued as of 3/19/10 (LTCCensus2010Data v03192010-no names.zip).
2. Census of State of Alaska members (2009 AK Census.mdb).
3. Data extracts from Univita administrative system.
4. Financial statements.
5. Plan descriptions.
6. Premium and claim summaries (LTC-PremiumsClaimsPaid 1999 – July 2009.xls).

SECTION II

Summary of Results

Valuation Summary

Table 1 summarizes the results of our analysis of the State of Alaska LTC Program as of June 30, 2009. Results presented include the present value of future cash flows for the current inforce. The net cash flow is compared to current total assets to evaluate the adequacy of current assets and premiums. Present values are based on sixty five years of projected cash flows.

Table 1	
State of Alaska	
Long Term Care Program	
Summary of Actuarial Values as of June 30, 2009	
<i>(in thousands of dollars)</i>	
<u>Present Value of future:</u>	@5%
Collected premiums	\$209,494,425
Paid claims	351,571,252
Administrative expenses	10,246,253
Net Cash Flow	\$(152,323,080)
<u>Comparison to Total Assets</u>	
Total Assets	\$155,621,380
Surplus(Deficit)	3,298,300
As a % of future premiums	1.6%

Our analysis indicates that if experience conforms to our best estimate assumptions, the current assets and rate structure are sufficient to fund future claims and expenses for the next 65 years.

Summaries of assumptions and experience analyses are provided in Appendices A and B, respectively. Detailed yearly cash flows and projected asset balances are provided in Appendix C.

SECTION III

Summary of Key Assumptions

The Appendices describe the assumptions underlying the results illustrated in this report. The basis of the major assumptions is discussed below.

1. Expected claim costs were developed from Univita's expected LTC incidence rates and continuance tables, adjusted for State of Alaska's experience relative to Univita's expected costs. Actual experience is summarized in Appendix B.
2. Lapse rates vary by duration as developed from historical experience through December 2009.
3. Ultimate mortality rates are assumed equal to 85% of the 1994 Group Annuitant Mortality table. This mortality level is consistent with mortality rates observed on other LTC insurance blocks of business.
4. Expenses are based on TPA fee invoices and State of Alaska Health Fund financial statements.
5. Future investment earnings rates are based on input from Buck Consultants.
6. No rate increases or adjustments to the premium rate schedules are assumed in the projections.

Actual experience may differ from that assumed in the projections. To the extent actual experience is different from the assumptions underlying this report, so will actual results differ from the projected results shown here. Sensitivity of results to changes in assumptions is provided in Section IV, Sensitivity Testing Results.

SECTION IV

Sensitivity Testing Results

We analyzed the sensitivity of asset adequacy levels to changes in assumptions with respect to morbidity, voluntary lapses, mortality, and investment earnings. Table 2 illustrates the impact of changes to the base assumptions on asset adequacy levels.

Results are highly sensitive to the assumptions underlying the calculations. While these tests indicate outcomes under each of these scenarios, they do not indicate the likelihood of each scenario. Thus, this testing does not indicate the probability that projected values will be realized.

Each of these tests is independent. We have not tested the impact of multiple assumptions deviating from expectations.

Table 2 State of Alaska Long Term Care Program Sensitivity Testing Asset Adequacy (Deficiency) Results Surplus (Deficit) = Current Assets plus the Present Value of Net Cash Flows (in thousands of dollars and as a % of future premiums)		
Scenario	Surplus (Deficit)	As a % of Future Premium
Base case scenario	\$3,298,300	1.6%
Increase in morbidity of 10%, all years	(31,908,906)	(15.2%)
Decrease in morbidity of 10%, all years	38,505,572	18.4%
Voluntary lapse = 200% of best estimate	43,997,719	22.9%
Voluntary lapse = 50% of best estimate	(21,540,766)	(9.8%)
Mortality = 100% of 1994 GAM	34,792,833	17.2%
Mortality = 70% of 1994 GAM	(37,753,981)	(17.3%)
Investment earnings = 4.0%	(57,734,918)	(25.0%)
Investment earnings = 4.5%	(24,901,878)	(11.3%)
Investment earnings = 5.5%	27,564,917	13.8%
Investment earnings = 6.0%	48,484,000	25.3%

Long Term Care Model and Assumptions

Model

The State of Alaska LTC program includes four plan offerings: Bronze, Silver, Gold and Platinum. Table 3 describes benefits included in each plan.

Table 3				
State of Alaska Long Term Care Program				
Benefit Summary by Plan Option				
Benefit	Bronze	Silver	Gold	Platinum
Lifetime Maximum	\$200,000 (HH is limited to \$50,000)	\$400,000	\$300,000	\$300,000
Inflation Protection	None	None	5% Simple until attained age 85	5% Compound until attained age 85
Elimination Period	90 Day	90 Day		
Benefit Trigger	2 of 5 ADLs	2 of 6 ADLs or cognitively impaired		
Nursing Home Daily Benefit	\$125 in-state \$75 out-of-state	\$200		
Assisted Living Facility Daily Benefit	If approved	\$150 (75% of NH)		
Home Health Care Daily Benefit	\$75 in-state \$40 out-of-state	\$125 (62.5% of NH)		
Hospice Daily Benefit	Not covered	\$125 (62.5% of NH)		
Respite Benefit	Not covered	Up to \$200 daily Up to 14 days per calendar year		

The cash flow results are based on a seriatim projection of 21,264 inforce lives as of 12/31/09. Current projections do not include any new issues.

Distributions of Business – The following tables outline the distributions of business for the existing in-force business as of 12/31/2009:

Table 4a: Distribution of Inforce by Issue Age		
Issue Age Group	Lives	Distribution
<40	271	1.3%
40-44	941	4.4%
45-49	3,066	14.4%
50-54	6,215	29.2%
55-59	7,168	33.7%
60-64	2,646	12.4%
65-69	715	3.4%
70+	242	1.1%
Total	21,264	100.0%
Average	54.5	

Table 4b: Distribution of Inforce by Current Attained Age		
Attained Age Group	Lives	Distribution
<50	400	1.9%
50-54	1,291	6.1%
55-59	3,890	18.3%
60-64	5,490	25.8%
65-69	4,701	22.1%
70-74	2,845	13.4%
75-79	1,556	7.3%
80+	1,091	5.1%
Total	21,264	100.0%
Average	65.3	

Table 4c: Distribution of Inforce by Benefit Option		
Benefit Option	Lives	Distribution
Bronze	8,750	41.1%
Silver	7,336	34.5%
Gold	3,724	17.5%
Platinum	1,454	6.8%
Total	21,264	100.0%

Table 4d: Distribution of Inforce by Marital Status		
Coverage Type	Number of Lives	Distribution
Single	6,211	29.2%
Married Person, however spouse is not covered	3,887	18.3%
Married Couples, where both persons are covered	11,166	52.5%
Total	21,264	100.0%

Table 4e: Distribution of Inforce by Gender		
Gender	Lives	Distribution
Male	9,694	45.6%
Female	11,570	54.4%
Total	21,264	100.0%

Table 4f: Distribution of Inforce by Calendar Year of Issue		
Issue Year	Lives	Distribution
<1990	2,316	10.9%
1990-1994	2,799	13.2%
1995-1999	6,173	29.0%
2000-2004	5,255	24.7%
2005	882	4.1%
2006	875	4.1%
2007	1,028	4.8%
2008	1,018	4.8%
2009	918	4.3%
Total	21,264	100.0%

Assumptions

Morbidity – Claim costs were developed from Univita’s expected LTC incidence rates and continuance tables. The claim costs vary by plan option (e.g., Bronze, Silver), gender and attained age.

Expected claim costs were adjusted to recognize State of Alaska program experience relative to Univita’s expected costs. The analysis of program claim experience is documented in Appendix B. Based on that analysis we adjusted Univita expected claim costs by a factor of 0.85 in the cash flow projections.

The attained age claim costs are adjusted to reflect automatic inflation protection. Specifically, the maximum daily benefits increase by 5% of the initial daily benefit each year for the Gold plans. The maximum daily benefits increase by 5% on a compound basis for the Platinum plans.

Claim payment distributions - Claim costs by incurral year are allocated to payment years using the following factors:

Table 5: Claim Payment Distribution Assumptions				
Claim Duration (in years)	Plan Option			
	Bronze	Silver	Gold	Platinum
1	0.110	0.065	0.060	0.052
2	0.521	0.301	0.299	0.273
3	0.281	0.200	0.208	0.199
4	0.088	0.140	0.152	0.153
5	0.000	0.100	0.111	0.117
6	0.000	0.070	0.061	0.068
7	0.000	0.041	0.036	0.042
8	0.000	0.028	0.024	0.029
9	0.000	0.015	0.020	0.026
10	0.000	0.012	0.015	0.021
11	0.000	0.009	0.013	0.019
12	0.000	0.007	0.001	0.002
13	0.000	0.006	0.000	0.000
14	0.000	0.004	0.000	0.000
15	0.000	0.002	0.000	0.000

Lapses – Univita studied the policy termination experience of the State of Alaska LTC Program. Appendix B provides the results of the termination study.

Table 6: Voluntary Lapse Assumptions	
Policy Duration	Lapse Assumption
1	2.6%
2	1.5%
3	1.3%
4	1.1%
5+	1.0%

Mortality – 85% of the 1994 Group Annuity Mortality table. This mortality assumption is based on experience we have observed in other blocks of LTC insurance.

Net Investment Earnings – 5.0% earned on total assets. Present values are also calculated assuming a 5% discount rate.

Expenses –

- Claims administration and care management: \$0.75 per member per month in 2010 inflating at 3% each calendar year
- Percentage of premium: 3.5% all years

Sensitivity Tests

Table 7: Sensitivity Tests		
Variance	Increase	Decrease
Morbidity	10% all years	10% all years
Voluntary lapse	200% of best estimate	50% of best estimate
Mortality	100% of 1994 GAM	70% of 1994 GAM
Discount rate	50 bps 100 bps	50 bps 100 bps

**State of Alaska LTC Program
Experience Analysis**

Persistency Experience

Census data provided insight into policyholder lapse behavior. We did not receive complete termination reason codes for all terminations. As a result, we studied total policy terminations. We then assumed mortality would be equal to 85% of the 1994 Group Annuitant Mortality table and subtracted expected mortality from the total policy termination rates to derive experience lapse rates.

Table 8 provides the resulting policy termination experience.

Table 8: Persistency Experience					
Policy Year	Exposure	Policy Terminations	Total Termination Rate	Assumed Mortality*	Voluntary Lapse Rate
1	26,119	751	2.9%	0.3%	2.6%
2	24,590	441	1.8%	0.3%	1.5%
3	23,166	356	1.5%	0.3%	1.2%
4	21,835	316	1.4%	0.4%	1.0%
5	20,657	275	1.3%	0.4%	0.9%
6	19,462	282	1.4%	0.4%	1.0%
7	18,278	241	1.3%	0.5%	0.8%
8	17,025	214	1.3%	0.7%	0.6%
9	15,812	237	1.5%	0.7%	0.8%
10	14,540	258	1.8%	0.8%	1.0%
11	12,562	254	2.0%	0.8%	1.2%
12	10,875	200	1.8%	0.9%	0.9%
13	9,192	183	2.0%	1.1%	0.9%
14	7,648	173	2.3%	1.3%	1.0%
15	6,632	180	2.7%	1.3%	1.4%

*Based on 85% of 1994 Group Annuitant Mortality

Claim Experience

As of December 31, 2009, the block has experienced 468 requests for claim of which 344 were approved for benefits. The following sections describe our analysis of actual experience.

Claim Termination Analysis - We studied the block's claim termination experience by comparing actual claim termination rates to claim termination rates that Univita would

**State of Alaska LTC Program
Experience Analysis**

typically use to price an LTC product. The following table provides results of our claim termination study of this block of business. 344 claims contributed exposure to the claim termination study (we only included claims with approved episodes of benefit).

Table 9 State of Alaska LTC Program Experience Claim Termination Study as of 12/31/2009					
Claim Duration (months)	# of Exposure Months	# of Claim Terms	Univita Expected	Act / Exp	Credibility Weighted Adj'ment
1	335	15	29.4	0.51	0.94
2-3	618	21	49.3	0.43	0.92
4-6	839	22	48.6	0.45	0.92
7-12	1,401	39	48.7	0.80	0.96
13-24	1,989	42	48.5	0.87	0.97
25-48	2,189	22	48.2	0.46	0.92
48+	1,227	32	25.6	1.25	1.04
Total	8,598	193	298.3	0.65	0.95

For the most part claims are terminating at a slower rate than Univita's pricing assumptions would expect. We have not fully recognized the lower termination rates due to the credibility of the data. The final column in the table above indicates the adjustments we applied to Univita's claim termination rates to generate disabled life reserves and claim costs for the State of Alaska's LTC program.

Claim Reserve and Incurred Claim Analysis - The following table summarizes paid claims and claim reserve estimates as of 12/31/2009. The table includes incurral periods from 1998 through the end of fiscal year 2009. Actual incurred claim estimates are compared to expected incurred claims which were derived by applying expected claim costs to program exposures.

**State of Alaska LTC Program
Experience Analysis**

Table 10 State of Alaska LTC Program Experience Claim Reserve and Incurred Claim Estimates as of 12/31/2009 Claim Values are Undiscounted and in Thousands						
Incurral Year	Claim Counts	Paid Claims	Disabled Life Reserve	Actual Incurred Claim*	Expected Incurred Claim	Actual/Expected
1998	1	\$200	\$0	\$200	\$1,313	0.15
1999	3	324	0	324	1,494	0.22
2000	5	803	38	841	2,010	0.42
2001	5	848	71	919	2,528	0.36
2002	7	1,029	89	1,118	2,929	0.38
2003	16	2,497	103	2,600	3,360	0.77
2004	26	2,981	822	3,802	3,853	0.99
2005	35	3,147	1,138	4,285	4,420	0.97
2006	45	2,513	1,401	3,914	4,980	0.79
2007	53	2,327	1,788	4,115	5,642	0.73
2008	48	1,706	3,305	5,010	6,323	0.79
Q1-2 2009	27	387	2,299	2,686	3,403	0.79
Total	271	\$18,763	\$11,052	\$29,815	\$42,256	0.71

* Incurred Claims are equal to the sum of the Paid Claims plus Disabled Life Reserve; all values are summarized by date of incurral.

Table 10 shows that the block's historical experience has been somewhat lower than Univita's morbidity assumptions (using adjusted claim termination rates). Based on this incurred claim analysis we have adjusted Univita expected claim costs by a factor of 0.85 in our projections to recognize program experience.

State of Alaska Long Term Care Program Summary of Yearly Cash Flows and Projected Asset Balances

Totals - Present Values	209,494,425	351,571,252	10,246,253	(152,323,080)
As a % of Premiums	100.0%	167.8%	4.9%	-72.7%

Asset Adequacy (Deficiency)	3,298,300
As a % of Premiums	1.6%

Investment earnings rate/discount rate = 5.0%

Fiscal Year	Lives	Collected Premium	Paid Claims	Expenses	Net Cash Flow	Investment Earnings	Total Assets
2009	21,187						155,621,380
2010	21,009	18,562,657	5,406,956	843,400	12,312,301	8,085,122	176,018,803
2011	20,500	18,211,812	6,052,454	832,883	11,326,475	9,080,648	196,425,927
2012	19,982	17,752,137	6,737,166	817,689	10,197,282	10,073,119	216,696,328
2013	19,452	17,284,840	7,470,316	801,995	9,012,529	11,057,381	236,766,238
2014	18,908	16,807,141	8,258,624	785,670	7,762,847	12,030,016	256,559,101
2015	18,350	16,317,840	9,107,779	768,638	6,441,423	12,987,026	275,987,550
2016	17,779	15,816,949	10,025,680	750,880	5,040,389	13,923,850	294,951,790
2017	17,195	15,305,058	11,019,417	732,397	3,553,244	14,835,337	313,340,371
2018	16,599	14,783,355	12,094,139	713,217	1,975,999	15,715,816	331,032,186
2019	15,992	14,252,807	13,256,186	693,360	303,261	16,559,098	347,894,545
2020	15,376	13,714,516	14,507,779	672,851	-1,466,114	17,358,521	363,786,953
2021	14,750	13,169,652	15,853,183	651,719	-3,335,250	18,106,983	378,558,686
2022	14,118	12,619,014	17,295,535	629,980	-5,306,501	18,796,890	392,049,075
2023	13,478	12,063,455	18,835,976	607,654	-7,380,175	19,420,200	404,089,100
2024	12,834	11,503,888	20,470,174	584,765	-9,551,051	19,968,591	414,506,640
2025	12,186	10,941,305	22,194,571	561,343	-11,814,609	20,433,569	423,125,600
2026	11,536	10,376,826	23,997,040	537,423	-14,157,637	20,806,656	429,774,619
2027	10,886	9,811,747	25,851,552	513,056	-16,552,861	21,079,957	434,301,715
2028	10,238	9,247,515	27,736,668	488,297	-18,977,450	21,246,436	436,570,701
2029	9,593	8,685,702	29,625,835	463,216	-21,403,349	21,299,978	436,467,330
2030	8,955	8,128,013	31,484,292	437,885	-23,794,164	21,235,768	433,908,934
2031	8,325	7,576,290	33,275,270	412,394	-26,111,374	21,050,624	428,848,184
2032	7,707	7,032,526	34,950,871	386,841	-28,305,186	20,743,410	421,286,408
2033	7,101	6,498,803	36,453,387	361,335	-30,315,919	20,315,666	411,286,156
2034	6,512	5,977,241	37,735,135	335,991	-32,093,885	19,771,747	398,964,018
2035	5,942	5,469,954	38,755,167	310,930	-33,596,143	19,118,542	384,486,416
2036	5,392	4,979,044	39,482,653	286,278	-34,789,887	18,365,182	368,061,711
2037	4,865	4,506,599	39,877,099	262,163	-35,632,663	17,523,134	349,952,182
2038	4,364	4,054,633	39,919,965	238,716	-36,104,048	16,606,017	330,454,151
2039	3,891	3,625,019	39,594,797	216,067	-36,185,845	15,629,095	309,897,402
2040	3,446	3,219,428	38,905,765	194,336	-35,880,673	14,608,794	288,625,523
2041	3,031	2,839,272	37,863,227	173,639	-35,197,594	13,562,069	266,989,998
2042	2,648	2,485,692	36,492,798	154,075	-34,161,181	12,505,887	245,334,704
2043	2,296	2,159,518	34,825,153	135,733	-32,801,368	11,456,703	223,990,038
2044	1,976	1,861,236	32,897,273	118,682	-31,154,719	10,430,134	203,265,453
2045	1,687	1,590,953	30,762,701	102,974	-29,274,722	9,440,331	183,431,062
2046	1,429	1,348,381	28,473,595	88,638	-27,213,852	8,499,505	164,716,715
2047	1,201	1,132,843	26,085,229	75,681	-25,028,067	7,617,766	147,306,414
2048	1,001	943,294	23,648,253	64,084	-22,769,043	6,803,037	131,340,408
2049	827	778,364	21,212,340	53,812	-20,487,788	6,061,073	116,913,693
2050	678	636,412	18,829,140	44,807	-18,237,535	5,395,307	104,071,466
2051	551	515,587	16,541,719	36,996	-16,063,128	4,806,893	92,815,231
2052	444	413,899	14,383,239	30,291	-13,999,631	4,295,040	83,110,639
2053	355	329,282	12,380,396	24,599	-12,075,713	3,857,321	74,892,248
2054	282	259,667	10,548,994	19,816	-10,309,143	3,490,027	68,073,132
2055	222	203,034	8,902,200	15,839	-8,715,005	3,188,439	62,546,566
2056	173	157,470	7,442,990	12,566	-7,298,086	2,947,102	58,195,581
2057	134	121,202	6,168,107	9,900	-6,056,805	2,760,206	54,898,982
2058	103	92,632	5,069,723	7,748	-4,984,839	2,621,848	52,535,991
2059	79	70,348	4,135,698	6,027	-4,071,377	2,526,257	50,990,871
2060	60	53,129	3,350,213	4,663	-3,301,747	2,468,007	50,157,131
2061	46	39,935	2,697,540	3,589	-2,661,194	2,442,138	49,938,075
2062	34	29,901	2,158,944	2,751	-2,131,794	2,444,259	50,250,540
2063	26	22,317	1,718,965	2,100	-1,698,748	2,470,576	51,022,368
2064	19	16,614	1,362,970	1,599	-1,347,955	2,517,831	52,192,243
2065	14	12,343	1,076,618	1,213	-1,065,488	2,583,300	53,710,055