



*South Dakota Department of Labor  
Job Service, Unemployment Division,  
and Office of Administrative Services  
Retirement Plan*

Actuarial Valuation  
July 1, 2005

June 2006

**SOUTH DAKOTA DEPARTMENT OF LABOR  
JOB SERVICE, UNEMPLOYMENT DIVISION,  
AND  
OFFICE OF ADMINISTRATIVE SERVICES  
RETIREMENT PLAN**

**ACTUARIAL VALUATION CERTIFICATION**

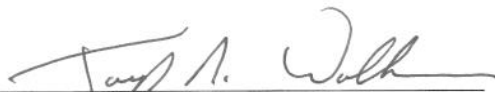
In this report, we present the results of the actuarial valuation of the South Dakota Department of Labor Job Service, Unemployment Division, and Office of Administrative Services Retirement Plan as of July 1, 2005. The employee and financial information used in this valuation was provided by Principal Life Insurance Company, Des Moines, Iowa. We assumed this information was accurate.

We certify that this report is complete and accurate and presents fairly the actuarial position of the plan in accordance with generally accepted actuarial principles. In our opinion, the assumptions used in preparing the liabilities and costs are reasonably related to the experience of the plan and to reasonable expectations. Together they represent our best estimate of anticipated experience under the plan.

DELOITTE CONSULTING LLP



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\*Meets the qualification standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

## REPORT HIGHLIGHTS

	<u>7/1/2004 Valuation</u>	<u>7/1/2005 Valuation</u>	<b>For Details Please See:</b>
<b>Section I.            Participant Data</b>			Page 1
A. Active Participants	73	70	
B. Retirees and Beneficiaries	201	200	
C. Vested Terminated Participants	<u>  8</u>	<u>  7</u>	
D. Total Participants	282	277	
E. Payroll	\$ 2,717,190	\$ 2,697,784	
<b>Section II.            Asset Information</b>			Page 4
A. Fair Market Value of Assets	\$ 62,476,783	\$ 66,064,845	
<b>Section III.            Contribution Requirements</b>			Page 6
A. Present Value of Employer Future Cost	\$           0	\$           0	
B. Recommended Contribution for Plan Year	0	0	
C. Unfunded Actuarial Liability	\$(13,880,316)	\$(16,180,218)	
<b>Section IV.            Present Value of                           Accumulated Benefits</b>			Page 8
A. Present Value of Vested Benefits	\$ 45,609,937	\$ 47,666,965	
B. Present Value of Nonvested Benefits	0	0	
C. Total Present Value of Accumulated Benefits	\$ 45,609,937	\$ 47,666,965	

**REPORT HIGHLIGHTS**

**For Details  
Please See:**

<b>Section V.</b>	<b>Governmental Accounting Standards Board Statements Nos. 25 and 27 Disclosures</b>	Page 9
A.	GASB No. 25 Schedule of Funding Progress	
B.	GASB Nos. 25 and 27 Schedule of Employer Contributions	

**APPENDIX**

Exhibit 1.	Summary of the Principal Provisions of the Plan	Page 12
Exhibit 2.	Statement of Actuarial Assumptions	Page 16
Exhibit 3.	Statement of Actuarial Funding Method	Page 18

## COMMENTS

### Background

The plan was frozen to new participants effective July 1, 1980.

Effective March 1, 1987, the South Dakota Department of Labor Job Service, Unemployment Division, and Office of Administrative Services Retirement Plan was separated into two plans. One plan (this plan) covered all active participants and vested terminations as of January 1, 1987, while the other covered all participants retired as of January 1, 1987. Effective April 1, 1987, the retired life plan was terminated. Annuities were purchased to cover the monthly benefit amounts for participants in the retired life plan.

This actuarial valuation report shows the liabilities and assets as of July 1, 2005 for the “active life” plan. This plan covers all participants who had not retired as of January 1, 1987, plus any cost-of-living increases granted after January 1, 1987 to pre-1987 retirees.

### Funded Status of Plan

As of July 1, 2005, the present value of projected benefits is less than the sum of the actuarial value of assets and the present value of future employee contributions. Thus, no future employer contributions are expected to be required, based on the actuarial assumptions outlined in Exhibit 2 of the Appendix.

Table 8 shows that the plan is overfunded as of July 1, 2005 by \$16.2 million, based on the actuarial assumptions and methods outlined in Exhibits 2 and 3 of the Appendix (as of July 1, 2004, the plan was overfunded by \$13.9 million). The primary reasons for this increase in the overfunded amount are asset performance more favorable than expected (actual 9.8% vs. 7.5% expected) and lower than expected salary increases (actual 3.1% vs. 5.5% expected).

### Governmental Accounting Standards Board (GASB) Requirements

GASB Statement No. 25, which is effective for financial reporting periods beginning after June 15, 1996, requires governmental defined benefit plans to disclose supplementary information in the form of two schedules, the Schedule of Funding Progress and the Schedule of Employer Contributions. These schedules are provided on pages 9 and 10 of this report.

GASB Statement No. 27, which is effective for financial reporting periods beginning after June 15, 1997, establishes standards of accounting and financial reporting for pension expenditures/expense and related pension liabilities, pension assets, note disclosures, and required supplementary information in the financial reports of state and local governmental employers. The development of the plan’s annual pension expense for the July 1, 2005 to June 30, 2006 plan year is also discussed on page 10 of this report.

## **I. PARTICIPANT DATA**

Employees of the South Dakota Department of Labor Job Services Division, Unemployment Division, and Office of Administrative Services Division who were hired before July 1, 1980 are eligible to participate in the plan. Table 1 displays various data concerning the participant group.

**Table 1**  
**Comparison of Plan Participant Information**

	<b><u>7/1/2004</u></b>	<b><u>7/1/2005</u></b>
Active participants	73	70
Vested terminated participants	8	7
Retired participants and beneficiaries*	201	200
Data for active participants:		
Total payroll	\$2,717,190	\$2,697,784
Average salary	\$37,222	\$38,540
Average age	54.49	55.56
Average past service	28.41	29.41
Average future service	2.58	1.94
Average expected retirement age	57.07	57.50
Data for retired participants and beneficiaries in "new" plan:		
Average monthly benefit including COLAs	\$1,325	\$1,376
Average age	65.68	66.64
Data for retired participants and beneficiaries in "old" plan:		
Average monthly COLA benefit only	\$495	\$520
Average age	77.79	78.20

\* A total of 78 (82 as of 7/1/04) of the retired participants and beneficiaries receive monthly payments from annuities purchased when the retired life plan was terminated in 1987. Only cost-of-living adjustments granted after January 1, 1987 are included as liabilities of this plan.

Table 2 reconciles the number of plan participants as of July 1, 2005 with the number of participants as of the previous valuation date.

**Table 2**  
**Reconciliation of Participants**

	<b><u>Actives</u></b>	<b><u>Vested Terminations</u></b>	<b><u>Retirees</u></b>	<b><u>Beneficiaries</u></b>
Participants as of July 1, 2004	73	8	178	23
Retired	(3)	(1)	4	
Deaths with beneficiary			(1)	1
Deaths without beneficiary			(3)	(1)
Payments ceased				(1)
New vested beneficiary	—	—	—	—
Participants as of July 1, 2005	70	7	178	22

Table 3 displays the distribution of active participants by age and service. Table 4 displays the distribution of annual earnings of active participants by age groups.

**Table 3**

**Service Groups by Age Groups**

<b><u>Age Group</u></b>	<b><u>0-24</u></b>	<b><u>25-29</u></b>	<b><u>30+</u></b>	<b><u>Total</u></b>
20-24				0
25-29				0
30-34				0
35-39				0
40-44				0
45-49		10		10
50-54		20	3	23
55-59		16	12	28
60-64		3	6	9
65 +	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	0	49	21	70

**Table 4**

**Annual Earnings by Age Groups**

<b><u>Age Group</u></b>	<b><u>Number of Participants</u></b>	<b><u>Total Annual Earnings</u></b>	<b><u>Average Annual Earnings</u></b>
45-49	10	\$ 364,433	\$ 36,443
50-54	23	896,123	38,962
55-59	28	1,120,300	40,011
60-64	9	316,928	35,214
65 +	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	70	\$ 2,697,784	\$ 38,540



## II. ASSET INFORMATION

Table 5 shows the fair market value of assets as of June 30, 2005, as reported by Principal Life Insurance Company.

Table 5

### Value of Assets as of June 30, 2005

(a)	Real Estate Account	\$ 4,062,860
(b)	Real Estate Investment Trust Account	1,405,680
(c)	Bond and Mortgage Account	18,445,065
(d)	Preferred Securities Account	1,318,672
(e)	International Emerging Markets Account	665,948
(f)	Inflation Protection Account	1,315,701
(g)	High Yield Account	1,321,532
(h)	Large Company Value Account	927,988
(i)	Large Company Growth Account	1,589,482
(j)	Partners International Account	2,955,365
(k)	International II Account	2,962,859
(l)	Small-Cap Growth I Account	952,607
(m)	Small-Cap Growth II Account	948,440
(n)	Large-Cap Growth I Account	4,727,761
(o)	Large-Cap Growth Account	2,815,942
(p)	Large-Cap Blend I Account	10,755,311
(q)	Large-Cap Value I Account	3,175,196
(r)	Large-Cap Value Account	4,099,891
(s)	Small-Cap Value Account	804,286
(t)	Small-Cap Value I Account	<u>814,259</u>
(u)	Total Value of Assets as of June 30, 2005	<u>\$ 66,064,845</u>

Table 6 is a summary of the transactions of the funds from July 1, 2004 through June 30, 2005.

**Table 6**  
**Summary of Transactions for the Year Ended June 30, 2005**

(a)	Total Value of Assets as of July 1, 2004		\$ 62,476,783
(b)	Income		
	(i) Employee contributions	\$ 98,518	
	(ii) Investment income	<u>5,969,925</u>	
	(iii) Total income	\$ 6,068,443	
(c)	Disbursements		
	(i) Payments	\$ 2,446,170	
	(ii) Expenses	<u>34,211</u>	
	(iii) Total disbursements	\$ 2,480,381	
(d)	Total Value of Assets as of June 30, 2005		\$ 66,064,845

The rate of return (loss) on plan assets from July 1, 2004 through June 30, 2005 as calculated by Principal Financial Group was approximately 9.75%.

### **III. CONTRIBUTION REQUIREMENTS**

The present value of projected benefits represents the expected cost of all benefits to be paid from the plan, based on the actuarial assumptions used in the valuation. As of July 1, 2005, the present value of projected benefits is less than the sum of the actuarial value of assets and the present value of future employee contributions. Thus, no future employer contributions are expected to be required, based on the actuarial assumptions outlined in Exhibit 2 of the Appendix.

Table 7 shows the determination of the future employer obligation at the current valuation date.

**Table 7**

**Plan Costs as of July 1, 2005**

(a)	Present Value of Projected Benefits	
	(i) Active participants	\$ 23,497,845
	(ii) Retirees and beneficiaries	26,568,628
	(iii) Vested terminations	<u>373,997</u>
	Total	\$ 50,440,470
(b)	Actuarial Value of Assets	66,064,845
(c)	Present Value of Total Future Cost: (a) - (b), not less than \$0	0
(d)	Present Value of Future Employee Contributions	250,990
(e)	Present Value of Employer Future Cost: (c) - (d), not less than \$0	\$ 0

The recommended employer contribution is the employer normal cost, plus a 25-year amortization payment toward the unfunded actuarial liability if an unfunded liability is expected as of the end of the plan year. Table 8 develops this contribution for the July 1, 2005 to June 30, 2006 plan year. The normal cost and unfunded actuarial liability are determined based on the entry age actuarial cost method, which provides for level annual costs as a percentage of payroll. This method is described in detail in Exhibit 3 of the Appendix.

**Table 8**  
**Recommended Contribution**  
**For Plan Year Ending June 30, 2006**

I.	Recommended employer contribution, before test of unfunded liability		
	(a) Total normal cost	\$	192,377
	(b) Expected employee contributions		83,403
	(c) Employer normal cost (a) – (b)		108,974
	(d) 25-year amortization payment toward unfunded actuarial liability		N/A*
	(e) Interest to June 30, 2006 on (c) + (d)		<u>8,173</u>
	(f) Recommended employer contribution, before test of unfunded liability: (c) + (d) + (e), but not less than \$0	\$	117,147
II.	Test of unfunded liability		
	(g) Unfunded actuarial liability		
	(i) Actuarial liability as of July 1, 2005	\$	49,884,627
	(ii) Actuarial value of assets as of July 1, 2005		<u>66,064,845</u>
	(iii) Unfunded actuarial liability: (i) - (ii)	\$	(16,180,218)
	(h) Interest to June 30, 2006 on (c) + (g)		(1,205,343)
	(i) Expected unfunded liability as of June 30, 2006: (c) + (g) + (h), but not less than \$0		0
III.	Recommended employer contribution: lesser of (f) and (i)	\$	0

\* Not applicable since there is no unfunded actuarial liability.

#### **IV. PRESENT VALUE OF ACCUMULATED BENEFITS**

The actuarially computed value of accumulated benefits as of July 1, 2005 is \$47,666,965. All participants of the plan are fully vested. When the fair market value of assets of \$66,064,845 is deducted, the unfunded vested liability is \$0. Table 9 shows the present value of vested and accumulated benefits as of July 1, 2005.

**Table 9**

**Present Value of Accumulated Benefits**  
**as of July 1, 2005**

	<b><u>Number of Vested Participants</u></b>	<b><u>Actuarial Present Value</u></b>
Retirees and Beneficiaries*	200	\$ 26,568,628
Terminated Participants with Vested Benefits	7	373,997
Active Participants	<u>70</u>	<u>20,724,340</u>
Total Present Value of Vested Benefits	277	\$ 47,666,965
Accumulated Nonvested Benefits		<u>0</u>
Total Present Value of Accumulated Benefits		<u>\$ 47,666,965</u>

The present values in Table 9 were computed using the actuarial assumptions set forth in Exhibit 2, except that no future salary increases are assumed.

\* A total of 78 of the retired participants receive monthly benefits from annuities purchased when the retired life plan was terminated in 1987. Only cost-of-living increases granted after January 1, 1987 are included for these participants as liabilities of this plan.

**V. GOVERNMENTAL ACCOUNTING STANDARDS BOARD**  
**STATEMENTS NOS. 25 and 27 DISCLOSURES**

The Governmental Accounting Standards Board (GASB) has issued Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*. This Statement superseded GASB Statement No. 5, *Disclosure of Pension Information by Public Employee Retirement Systems and Local Governmental Employers*. GASB No. 25 is effective for financial reporting periods beginning after June 15, 1996, and GASB No. 27, *Accounting for Pensions by State and Local Governmental Employers*, is effective for periods beginning after June 15, 1997. GASB No. 25 requirements include disclosure of supplementary information in the form of two schedules, the Schedule of Funding Progress and the Schedule of Employer Contributions.

GASB No. 27 establishes certain boundaries, or parameters, for determining whether the amounts measured in accordance with the plan's funding policy are acceptable for financial reporting or whether different measures are required.

The plan's funding policy is to contribute the recommended employer contribution defined as the employer's normal cost plus a 25-year amortization of the unfunded accrued liability if an unfunded liability is expected as of the end of the plan year. We believe the plan's funding policy is determined within the parameters set forth by the Statement.

The GASB No. 27 annual pension expense is defined as the Annual Required Contribution (ARC) plus one year's interest on the Net Pension Obligation (NPO) offset by an adjustment to the ARC. The ARC, as noted above, may be defined as the recommended annual employer contribution as developed in Table 8 of this report. The NPO is defined as the cumulative difference, including interest, for the years prior to the transition date (July 1, 1997) between (a) the employer's required contributions in accordance with the plan's actuarially determined funding requirements and (b) the contributions made by the employer in relation to the required contributions. The GASB No. 27 annual pension expense for this plan is \$0 for the July 1, 2005 to June 30, 2006 plan year.

**GASB No. 25 Schedule of Funding Progress**

Actuarial Valuation Date	Actuarial Value of Assets (a)	Entry Age Normal Actuarial Accrued Liability (AAL) (b)	Unfunded Actuarial Accrued Liability (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a)/c)
July 1, 1992	\$ 30,191,655	\$ 28,885,459	\$ (1,306,196)	104.5%	\$ 4,001,617	(32.6)%
July 1, 1993	33,542,349	31,304,725	(2,237,624)	107.1	4,096,931	(54.6)
July 1, 1994	34,812,137	33,827,786	(984,351)	102.9	4,123,470	(23.9)
July 1, 1995	38,396,853	35,960,087	(2,436,766)	106.8	3,989,811	(61.1)
July 1, 1996	42,842,926	37,817,765	(5,025,161)	113.3	3,482,709	(144.3)
July 1, 1997	48,934,863	39,746,449	(9,188,414)	123.1	3,513,334	(261.5)
July 1, 1998	54,376,531	41,296,646	(13,079,885)	131.7	3,386,017	(386.3)
July 1, 1999	57,210,946	42,559,280	(14,651,666)	134.4	3,264,009	(448.9)
July 1, 2000	59,369,863	44,456,018	(14,913,845)	133.5	3,035,791	(491.3)
July 1, 2001	56,174,491	45,540,493	(10,633,998)	123.4	2,948,124	(360.7)
July 1, 2002	57,913,590	46,442,075	(11,471,515)	124.7	2,956,917	(388.0)
July 1, 2003	56,632,993	47,385,514	(9,247,479)	119.5	2,758,316	(335.3)
July 1, 2004	62,476,783	48,596,467	(13,880,316)	128.6	2,717,190	(510.8)
July 1, 2005	66,064,845	49,884,627	(16,180,218)	132.4	2,697,784	(599.8)

**GASB Nos. 25 and 27 Schedule of Employer Contributions**

<b><u>Year Ended</u></b>	<b><u>Required Contribution</u></b>	<b><u>Employer Contribution</u></b>	<b><u>Percentage Contributed</u></b>
June 30, 1989	\$ 0	\$ 0	100.0%
June 30, 1990	0	0	100.0
June 30, 1991	0	0	100.0
June 30, 1992	0	0	100.0
June 30, 1993	0	0	100.0
June 30, 1994	0	0	100.0
June 30, 1995	0	0	100.0
June 30, 1996	0	0	100.0
June 30, 1997	0	0	100.0
June 30, 1998	0	0	100.0
June 30, 1999	0	0	100.0
June 30, 2000	0	0	100.0
June 30, 2001	0	0	100.0
June 30, 2002	0	0	100.0
June 30, 2003	0	0	100.0
June 30, 2004	0	0	100.0
June 30, 2005	0	0	100.0
June 30, 2006	0	0	100.0

## **APPENDIX**



**Exhibit 1**

**SUMMARY OF THE PRINCIPAL PROVISIONS OF THE PLAN**

**1. Effective Date**

March 1, 1987. Last amended effective July 1, 1999 and August 21, 1999.

**2. Covered Employees**

Full-time employees of the South Dakota Department of Labor, Job Service, Unemployment Division, and Office of Administrative Services hired before July 1, 1980 who had not retired before January 1, 1987. Cost of living increases granted after January 1, 1987 for retirees as of January 1, 1987 are also paid from this plan.

**3. Credited Service**

The number of years and months of service before August 1, 1961, plus the number of years of plan participation after August 1, 1961.

**4. Average Compensation**

Average of monthly compensation for the five consecutive years which produce the highest average.

**5. Participant's Accumulation**

Participants contribute 5% of annual compensation until normal retirement eligibility toward their retirement benefits. Interest is credited on contributions at the rate of 4% annually.

**6. Normal Retirement Benefit**

Eligibility:           Earliest of the following:

- a) attained age 65, or
- b) attained age 62 and completed 10 years of service, or
- c) attained age 60 and completed 20 years of service, or
- d) attained age 55 and completed 30 years of service.

Form:                   Monthly annuity guaranteed for 10 years and life thereafter; married plan members automatically receive their benefits under an actuarially equivalent survivorship annuity. Optional forms may be elected in advance of retirement.

**Exhibit 1 (continued)**

- Benefit: For all participants retiring after June 30, 1999: 2.0% of the five-year average monthly compensation times years of service.
- For all participants retiring on or before June 30, 1999 the benefit is the sum of a, b, and c, but not less than d:
- a) 1.5% of three-year average monthly compensation times credited service, not to exceed five years;
  - b) 1.75% of three-year average monthly compensation times credited service in excess of five years, but not to exceed 10 years;
  - c) 2.0% of three-year average monthly compensation times credited service in excess of 10 years.
  - d) If a participant on July 1, 1978, 2.0% of the five-year average monthly compensation times years of service.

**7. Accrued Benefit**

The accrued benefit at any date is the normal retirement pension earned through that date.

**8. Early Retirement Benefit**

- Eligibility: Within 10-year period before normal retirement age.
- Form: Same as normal retirement benefit.
- Benefit: Accrued benefit on early retirement date reduced 2.0% each year that the retirement date precedes normal retirement date.

**9. Late Retirement Benefit**

- Form: Same as normal retirement benefit.
- Benefit: Accrued benefit as of the date of retirement.

**10. Termination Benefit**

- Eligibility: Less than five years of service.
- Form: Lump sum.
- Benefit: Return of employee contributions with interest.
- Eligibility: Five or more years of service.
- Form: Same as normal retirement benefit with income deferred until normal retirement date.

**Exhibit 1 (continued)**

- Benefit: Equal to the sum of:
- a) The amount of retirement annuity which could be provided at normal retirement date by the participant's accumulation, and
  - b) The excess of the accrued benefit as of the date of termination over a) above.

**11. Disability Benefit**

- Form: A deferred annuity payable at the normal retirement date.
- Benefit: Accrued benefit assuming the participant remained until retirement at monthly compensation as of date of disablement.

**12. Death Benefit**

- Form: Lump sum payment.
- Benefit: Participant's accumulation of contributions with interest at date of death.

**13. Spouse Death Benefit**

- Eligibility: Must have been married at least one year.
- Form: Monthly income payable until the earlier of the death of the spouse or the remarriage of the spouse if before age 60.
- Benefit: For members hired before age 47, the greater of:
- a) 55% of the accrued benefit (using the average compensation for the five consecutive years which produces the highest average) on the date of death, or
  - b) 22% of average compensation on date of death.
- For members hired after age 47:
- 55% of the amount which would have been paid had the member survived and remained employed to age 60, assuming his monthly compensation did not change.

**14. Dependent Child Death Benefit**

- Eligibility: Participant has a dependent child that has not attained age 19 (age 24 for a child who is attending school on a full-time basis).
- Form: Temporary monthly income until the youngest dependent child attains age 22.

**Exhibit 1 (continued)**

Benefit: For dependent children of a participant who has a spouse on the date of his death, the least of:

- a) 60% of average compensation on date of death divided by number of dependent children, or
- b) \$75, or
- c) \$225 divided by number of children.

For dependent children of a participant who does not have a spouse on the date of death, the least of:

- a) 75% of average compensation on date of death divided by number of dependent children, or
- b) \$90, or
- c) \$270 divided by the number of dependent children.

**15. Additional Death Benefit**

Eligibility: Participant with 10 years of service as of July 1, 1976, no spouse or dependent children.

Form: Monthly income to beneficiary payable for 10 years.

Benefit: Accrued benefit on July 1, 1976.

**16. Cost of Living**

Effective November 1, 1990 as amended July 1, 1999, adjustments are granted to retirees and beneficiaries each July 1 in the amount of the lesser of a or b, but not less than c:

- a) 4.5%
- b) The annual percentage change in the CPI-W, determined by dividing the CPI-W for the latest April preceding the July 1 adjustment date by the CPI-W for April of the prior year.
- c) 3.1%

**Exhibit 2**

**STATEMENT OF ACTUARIAL ASSUMPTIONS**

**Investment Return:** 7.5% per annum.

**Mortality:** 1983 Group Annuity Mortality Table for Males and Females.

**Termination:** Table 7 from the Actuary's Pension Handbook. Sample rates are as follows:

<u>Age</u>	<b>Percentage of Participants Expected to Terminate in One Year</b>
25	9.67%
30	9.30
35	8.71
40	7.75
45	6.35
50	4.23
55	1.55
60	0.15

**Retirement:** Rates of retirement are summarized below:

<u>Age</u>	<b>Percentage of Participants Expected to Retire in One Year</b>	<u>Age</u>	<b>Percentage of Participants Expected to Retire in One Year</b>
45	5.0%	55	2.5%
46	5.0	56	2.5
47	5.0	57	2.5
48	2.5	58	2.5
49	2.5	59	2.5
50	5.0	60	2.5
51	2.5	61	2.5
52	5.0	62	40.0
53	2.5	63	20.0
54	2.5	64	20.0
		65	100.0

**Salary Scale:** 5.5% per annum.

**Disability:** None.

**Expenses:** None – investment return assumption is net of expenses.

**Exhibit 2 (continued)**

**Spouse Death**

**Benefits:**

Males are assumed to be three years older than their female spouses.

**Dependent Death**

**Benefits:**

Dependent status for those children currently receiving benefits is assumed to cease at the later of age 22 and 1 year after the valuation date. Eighty percent of participants are assumed to have dependent children. All participants with dependent children are assumed to be survived by a spouse. Dependent status period for children is assumed to be three years from date of participant death.

**Cost of Living:**

Assumed to average 3.5% per annum in future years.

**Assets:**

Market value.

### **Exhibit 3**

#### **STATEMENT OF ACTUARIAL FUNDING METHOD**

The actuarial cost method used in this valuation is the entry age normal method.

This method is one of the family of projected benefit cost methods. An estimate of the projected monthly benefit payable at retirement is required initially to determine costs and liabilities under this method.

The normal cost contribution is determined as a level percent of each participant's pay from entry date to retirement date, so the accumulated contributions at retirement will equal the liability for the projected benefit. The total normal cost is equal to the sum of the individual participant costs.

The present value of future benefits is equal to the value of the projected benefit payable at retirement, discounted back to the participant's current age. Discounts include such items as interest and mortality. The present value of future normal cost contributions is equal to the discounted value of the normal costs payable from the member's current age to retirement age.

The difference between the present value of future benefits and the present value of future normal cost contributions represents the actuarial liability at the participant's current age.

When assets and the present value of future employee contributions are subtracted from the actuarial liability, the remainder represents the unfunded actuarial liability.

The annual contribution is determined by adding the employer normal cost for the plan year to an amortization payment toward the unfunded actuarial liability. If assets are projected to exceed the actuarial liability as of the end of the plan year for which the valuation is performed, no employer contribution is recommended.