

**South Dakota Cement Plant
Retirement Fund**

*Actuarial Valuation Report as of
July 1, 2013*

Buck Consultants
1200 17TH Street, Suite 1200
Denver, Colorado 80202

Table of Contents

Certification Letter	i
Highlights	ii
Summary of Principal Valuation Results	iii
Effects of Changes	iv
Section 1 Funding Results	1
1.1 Comparative Summary of Principal Valuation Results.....	2
1.2 Actuarially Required Contribution	4
1.3 Unfunded Actuarial Accrued Liability	5
1.4 Ten-Year Projections	6
Section 2 Accounting Results	7
2.1 GASB No. 25 Information.....	8
Section 3 Plan Assets	10
3.1 Reconciliation of Market Value of Assets for Two-Year Period	11
3.2 Average Annual Rates of Investment Return	12
Section 4 Basis of Valuation	13
4.1 Plan Participants.....	14
4.2 Actuarial Basis.....	18
4.3 Summary of Plan Provisions	21

Certification Letter

October 25, 2013

Board of Trustees
South Dakota Retirement System
Post Office Box 1098
Pierre, SD 57501-1098

Certification of Actuarial Valuation

We have prepared an actuarial valuation of the South Dakota Cement Plant Retirement Fund as of July 1, 2013, for the plan year ending June 30, 2013. The results of the valuation are set forth in this report, which reflects the provisions of the Plan as amended and effective on July 1, 2006.

The valuation is based on employee and financial data which were provided by Zenith American Solutions and the South Dakota Retirement System respectively, and which are summarized in this report.

All costs, liabilities and other factors under the Fund were determined in accordance with generally accepted actuarial principles and procedures, in accordance with the provisions of current State Statutes and regulations issued thereunder, using an actuarial cost method which we believe is appropriate. In our opinion, the actuarial assumptions are reasonable and represent our best estimate of the anticipated experience under the Fund. This report fully and fairly discloses the actuarial position of the Fund on an ongoing basis.

Both David H. Slshinsky and Douglas J. Fiddler are Enrolled Actuaries, Associates of the Society of Actuaries and Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all applicable Actuarial Standards of Practice and David H. Slshinsky has primary responsibility for the report.

Future actuarial measurements may differ significantly from current measurements presented in this report due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.



David H. Slshinsky, ASA, EA, MAAA
Principal, Consulting Actuary



Douglas J. Fiddler, ASA, EA, MAAA
Director, Retirement Actuary

cc: Mr. Rob Wylie, SDRS

Highlights

This report has been prepared by Buck Consultants for the South Dakota Retirement System Board of Trustees to:

- Present the results of a valuation of the South Dakota Cement Plant Retirement Fund as of July 1, 2013;
- Review experience under the Fund for the year ended June 30, 2013;
- Provide reporting and disclosure information for auditors' reports, governmental agencies and other interested parties.

The key funding results this year are summarized below:

	<u>July 1, 2013</u>	<u>July 1, 2012</u>
Actuarial Accrued Liability	\$ 61,826,531	\$ 61,702,907
Actuarial Value of Assets	<u>54,228,036</u>	<u>47,619,968</u>
Unfunded Actuarial Accrued Liability	\$ 7,598,495	\$ 14,082,939

The actuarial accrued liability is typically the theoretical amount that would have accrued in the fund if an amount equal to the normal cost had been contributed in all prior years before the current valuation date. Since benefits paid from this fund have been frozen, the actuarial accrued liability includes the liability for all benefits to be paid from the Fund. The unfunded actuarial accrued liability decreased by \$6,484,444 over the past year, as shown below.

1. Unfunded Actuarial Accrued Liability (UAAL) as of July 1, 2012	\$ 14,082,939
2. Normal Cost from July 1, 2012 to June 30, 2013	0
3. Decrease due to contributions made	(2,000,000)
4. Interest on UAAL, normal cost, and contributions	<u>950,598</u>
5. Expected UAAL as of July 1, 2013 (1. + 2. + 3. + 4.)	\$ 13,033,537
6. Asset Gain/(Loss)	\$ 5,419,378
7. Liability Gain/(Loss)	<u>15,664</u>
8. Total Actuarial Gain/(Loss) (6. + 7.)	\$ 5,435,042
9. Unfunded Actuarial Accrued Liability as of July 1, 2013 (5. - 8.)	\$ 7,598,495

Summary of Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described in the section titled "Effects of Changes."

	Actuarial Valuation as of		Change Between Years	
	July 1, 2013	July 1, 2012	Amount	Percent
GASB No. 25 Funded Status				
Actuarial Accrued Liability	\$ 61,826,531	\$ 61,702,907	\$ 123,624	0.2%
Actuarial Value of Assets	\$ 54,228,036	\$ 47,619,968	\$ 6,608,068	13.9%
Unfunded Actuarial Accrued Liability/(Surplus)	\$ 7,598,495	\$ 14,082,939	\$ (6,484,444)	-46.0%
Market Value of Assets and Additional Liabilities				
Market Value of Assets	\$ 54,228,036	\$ 47,619,968	\$ 6,608,068	13.9%
Present Value of Projected Plan Benefits	\$ 61,826,531	\$ 61,702,907	\$ 123,624	0.2%
Summary of Data				
Number of Participants in Valuation:				
Active Participants	26	55	(29)	-52.7%
Participants with Deferred Benefits	72	55	17	30.9%
Retired Participants	202	193	9	4.7%
Beneficiaries	30	30	0	0.0%
Disabled Participants	7	7	0	0.0%
Total	337	340	(3)	-0.9%
Active Participant Statistics				
Average Age	48.3	49.0	(0.7)	-1.4%
Average Service	21.0	21.0	0	0.0%

Effects of Changes

Changes in Actuarial Assumptions

There were no changes in actuarial assumptions since the last valuation.

Changes in Plan Provisions

There were no changes in plan provisions since the last valuation.

Changes in Actuarial Methods

There were no changes in actuarial methods since the last valuation.

Section 1: Funding Results

Section 1.1 Comparative summary of principal valuation results.

Section 1.2 Actuarially required contribution.

Section 1.3 Unfunded actuarial accrued liability.

Section 1.4 Ten-year projections.

Comparative Summary of Principal Valuation Results

	Actuarial Valuation as of		Percent Change
	July 1, 2013	July 1, 2012	
A. Summary of Data			
1. Active Members			
a. Number	26	55	-52.7%
b. Average Age	48.3	49.0	-1.4%
c. Average Service	21.0	21.0	0.0%
2. Vested Terminated Members			
a. Number	72	55	30.9%
b. Annual Deferred Benefits	\$ 353,455	\$ 198,410	78.1%
c. Average Annual Deferred Benefit	\$ 4,909	\$ 3,607	36.1%
3. Retired Members			
a. Number	202	193	4.7%
b. Annual Retirement Benefits	\$ 3,676,316	\$ 3,498,787	5.1%
c. Average Annual Retirement Benefit	\$ 18,200	\$ 18,128	0.4%
4. Beneficiaries			
a. Number	30	30	0.0%
b. Annual Retirement Benefits	\$ 226,967	\$ 222,002	2.2%
c. Average Annual Retirement Benefit	\$ 7,566	\$ 7,400	2.2%
5. Disabled Members			
a. Number	7	7	0.0%
b. Annual Retirement Benefits	\$ 80,572	\$ 79,723	1.1%
c. Average Annual Retirement Benefit	\$ 11,510	\$ 11,389	1.1%
6. Total Members Included in Valuation	337	340	-0.9%

Comparative Summary of Principal Valuation Results (continued)

	Actuarial Valuation as of		Percent Change
	July 1, 2013	July 1, 2012	
B. Summary of Assets, Liabilities and Funded Status			
1. Plan Assets on Valuation Date			
a. Actuarial Value	\$ 54,228,036	\$ 47,619,968	13.9%
b. Market Value	\$ 54,228,036	\$ 47,619,968	13.9%
2. Actuarial Accrued Liability (Valuation Basis)	\$ 61,826,531	\$ 61,702,907	0.2%
a. Funded Ratio - Actuarial Value	87.7%	77.2%	13.6%
b. Funded Ratio - Market Value	87.7%	77.2%	13.6%
3. Unfunded Actuarial Accrued Liability (Based on Actuarial Value of Assets)	\$ 7,598,495	\$ 14,082,939	-46.0%
4. Present Value of Projected Benefits	\$ 61,826,531	\$ 61,702,907	0.2%

	Actuarial Valuation as of		
	July 1, 2013	July 1, 2012	Percent Change
	Amount	Amount	
C. Summary of Contribution Requirements			
1. Total Normal Cost Beginning of Year	\$ 0	\$ 0	0.0%
2. Amortization of Unfunded Actuarial Accrued Liability over 20 years from July 1, 2008	\$ 769,226	\$ 1,373,477	-44.0%
3. Total Required Contribution (1. + 2.)	\$ 769,226	\$ 1,373,477	-44.0%

Actuarially Required Contribution

The actuarially required contribution has been determined using the Entry Age Actuarial Cost Method for 2013 and 2012.

	July 1, 2013	July 1, 2012
1. Normal Cost	\$ 0	\$ 0
2. Actuarial Accrued Liability	61,826,531	61,702,907
3. Actuarial Value of Assets	<u>54,228,036</u>	<u>47,619,968</u>
4. Unfunded Actuarial Liability (2. – 3.)	\$ 7,598,495	\$ 14,082,939
5. Amortization of Unfunded Actuarial Accrued Liability over 20 years from July 1, 2008	\$ 769,226	\$ 1,373,477
6. Total Required Contribution (1. + 5.)	\$ 769,226	\$ 1,373,477

Unfunded Actuarial Accrued Liability

The actuarial accrued liability is the present value of projected plan benefits allocated to past service by the actuarial funding method being used. The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of assets.

Development of Actuarial Accrued Liability	July 1, 2013	July 1, 2012
1. Actuarial Accrued Liability		
a. Active Participants		
Retirement Benefits	\$ 2,538,006	\$ 6,596,745
Withdrawal Benefits	150,029	263,453
Death Benefits	27,679	50,648
Total	\$ 2,715,714	\$ 6,910,846
b. Participants with Deferred Benefits	4,059,498	1,829,219
c. Participants Receiving Benefits	54,661,652	52,547,814
d. Expense Load	389,667	415,028
e. Actuarial Accrued Liability (a. + b. + c. + d.)	\$ 61,826,531	\$ 61,702,907
2. Actuarial Value of Assets	54,228,036	47,619,968
3. Unfunded Actuarial Accrued Liability (1.e. – 2., not less than \$0)	\$ 7,598,495	\$ 14,082,939

Ten-Year Projections

Ten-Year Projected Cash Flow (Retirement Benefit Payments)⁽¹⁾

Plan Year Ending	Actives	Retirees ⁽²⁾	Total
06/30/2014	\$ 10,756	\$ 4,023,694	\$ 4,034,450
06/30/2015	53,388	4,125,574	4,178,962
06/30/2016	64,345	4,201,702	4,266,047
06/30/2017	80,018	4,259,845	4,339,863
06/30/2018	104,166	4,333,450	4,437,616
06/30/2019	107,377	4,387,608	4,494,985
06/30/2020	132,825	4,432,212	4,565,037
06/30/2021	161,728	4,470,770	4,632,498
06/30/2022	175,520	4,510,140	4,685,660
06/30/2023	186,802	4,538,134	4,724,936

⁽¹⁾ Assumes all actuarial assumptions are exactly realized.

⁽²⁾ Includes Disabled Members, Beneficiaries and Terminated Vested Members.

Ten-Year Projected Funded Status

Plan Year Ending	Market Value of Assets	Actuarial Accrued Liability ⁽¹⁾	Funded Status
06/30/2014	\$ 55,801,128	\$ 61,777,522	90.3%
06/30/2015	55,196,015	61,575,815	89.6%
06/30/2016	54,460,032	61,270,469	88.9%
06/30/2017	53,598,063	60,868,205	88.1%
06/30/2018	52,576,859	60,337,736	87.1%
06/30/2019	51,432,587	59,717,324	86.1%
06/30/2020	50,143,313	58,987,269	85.0%
06/30/2021	48,701,462	58,142,385	83.8%
06/30/2022	47,111,097	57,189,283	82.4%
06/30/2023	45,376,172	56,134,636	80.8%

⁽¹⁾ Assumes all actuarial assumptions, including assumed future investment returns, are exactly realized. Assumes no future contributions after \$2,000,000 contribution received shortly after the valuation date.

Section 2: Accounting Results

Section 2.1 GASB No. 25 information.

GASB No. 25 Information**Supplementary Schedules**

The GASB has issued a statement; Financial Reporting for Defined Benefit and Note Disclosures for Defined Contribution Plans (GASB Statement No. 25). This standard became effective for periods beginning after June 15, 1996, and requires funding status to be measured based upon the actuarial funding method adopted by the Board of Retirement.

A. Schedule of Funding Progress

The GASB Statement No. 25 liabilities and assets resulting from the last ten actuarial valuations are as follows:

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b-a)/c]
1/1/2000	\$29,377,300	\$27,986,000	\$(1,391,300)	105.0%	\$8,386,700	0.0%
1/1/2001	34,573,000	41,853,900	7,280,900	82.6%	8,696,100	83.7%
3/16/2001*	34,288,100	37,900,700	3,612,600	90.5%	5,578,700	64.8%
7/1/2002	31,244,700	39,708,900	8,464,200	78.7%	5,568,300	152.0%
7/1/2004	37,284,300	43,692,000	6,407,700	85.3%	N/A	N/A
7/1/2006	42,636,000	46,491,600	3,855,600	91.7%	N/A	N/A
7/1/2008	47,269,470	53,350,595	6,081,125	88.6%	N/A	N/A
7/1/2010	39,131,563	54,120,667	14,989,104	72.3%	N/A	N/A
7/1/2012	47,619,968	61,702,907	14,082,939	77.2%	N/A	N/A
7/1/2013	54,228,036	61,826,531	7,598,495	87.7%	N/A	N/A

* Fund participation and benefits were frozen as of March 16, 2001.

B. Schedule of Employer Contributions

The GASB Statement No. 25 required and actual contributions are as follows:

Schedule of Employer Contributions

Fiscal Year Ending June 30,	Annual Required Contribution	Actual Employer Contribution	Percentage Contributed
2009	\$564,175	\$1,035,029	183.5%
2010	Not Calculated	0	N/A
2011	1,458,687	4,048,351	277.5%
2012	Not Calculated	1,000,000	N/A
2013	1,373,477	2,000,000	145.6%
2014	769,226	TBD*	TBD*

* As of the date of this report, \$2 million was contributed during fiscal year ending June 30, 2014.

GASB No. 25 Information (continued)**C. Actuarial Assumptions, Methods, and Additional Information**

1. Valuation date	July 1, 2013
2. Actuarial cost method	Entry Age Normal
3. Amortization method	Level Dollar, Closed
4. Remaining amortization period	15 years
5. Asset valuation method	Assets at Market Value
6. Actuarial assumptions:	
a. Investment rate of return*	6.75% per year

*Includes inflation at 3.25% per year.

GASB has issued Statement No. 67, "Financial Reporting for Pension Plans" that is effective for fiscal years beginning after June 15, 2013 and Statement No. 68, "Accounting and Financial Reporting for Pensions," that is effective for fiscal years beginning after June 15, 2014. These statements are amendments to Statements Nos. 25 and 27.

Statements Nos. 67 and 68 will require that the Net Pension Liability, similar to an Unfunded Actuarial Accrued Liability, be reported by pension plans and allocated to individual employers and included on their balance sheets. Furthermore, year-to-year changes in the Net Pension Liability will be included on the employer's income statements and are expected to vary significantly from one year to the next.

Section 3: Plan Assets

This section presents information regarding plan assets as reported by the plan administrator or trustee. The plan assets represent the portion of total plan liabilities which has been funded as of the valuation date.

Section 3.1 Reconciliation of Market Value of Assets for two-year period.

Section 3.2 Average Annual Rates of Investment Return.

Reconciliation of Market Value of Assets

July 1, 2012 to June 30, 2013

Transactions	June 30, 2013 ⁽¹⁾	June 30, 2012 ⁽¹⁾
Additions		
1. Contributions	\$ 2,000,000	\$ 1,000,000
2. Net Investment Income		
a. Interest and Dividends	\$ 1,169,801	\$ 1,244,344
b. Real Estate Income	132,081	0
c. Security Lending Income	4,776	6,387
d. Realized and Unrealized Appreciation	<u>7,389,119</u>	<u>(211,314)</u>
e. Total (a. + b. + c. + d.)	\$ 8,695,777	\$ 1,039,417
f. Investment Expense	<u>(193,481)</u>	<u>(223,524)</u>
g. Net Investment Income (e. + f.)	\$ 8,502,296	\$ 815,893
3. Total Additions (1. + 2.g.)	\$ 10,502,296	\$ 1,815,893
Deductions		
4. Deductions		
a. Retirement Benefits	\$ 3,831,055	\$ 3,700,028
b. Administrative Expenses	<u>63,173</u>	<u>30,076</u>
5. Total Deductions (4.a. + 4.b.)	\$ 3,894,228	\$ 3,730,104
6. Net Increase/(Decrease) (3. - 5.)	\$ 6,608,068	\$ (1,914,211)
7. Net Assets Held in Trust for Pension Benefits		
a. Beginning of Year	\$ 47,619,968	\$ 49,534,179
b. End of Year	\$ 54,228,036	\$ 47,619,968

⁽¹⁾ These results are based on unaudited assets.

Average Annual Rates of Investment Return

Year Ending June 30	Market Value	
	Annual*	Cumulative*
2007	20.5%	20.5%
2008	(8.9%)	4.8%
2009	(20.6%)	(4.5%)
2010	20.1%	1.2%
2011	25.0%	5.5%
2012	1.7%	4.9%
2013	18.2%	6.7%

*Returns are dollar-weighted, net of investment fees.

Section 4: Basis of Valuation

This section presents and describes the basis of the valuation. The census of participants, actuarial basis and provisions of the Plan are the foundation of the valuation, since these are the present facts on which the projection of benefit payments will depend. The valuation is based on the premise that the current plan terms, including the frozen benefits, as outlined in Section 4.3 will continue in existence.

Section 4.1 Plan participants.

Section 4.2 Actuarial basis.

Section 4.3 Summary of plan provisions.

Plan Participants

A. Participant Data Reconciliation

	Active Members	Inactive Members				Total
		With Deferred Benefits	Retired Members	Beneficiaries	Disabled Members	
As of July 1, 2012	55	55	193	30	7	340
Age Retirements	(6)	(2)	8	0	0	0
Deaths Without Beneficiary	(1)	(2)	(3)	0	0	(6)
Deaths With Beneficiary	(1)	0	0	0	0	(1)
Survivors	0	0	0	1	0	1
Nonvested Terminations	0	0	0	0	0	0
Vested Terminations	(21)	21	0	0	0	0
Disability	0	0	0	0	0	0
Returns	0	0	0	0	0	0
Cashouts	0	0	0	0	0	0
Expiration of Benefits	0	0	0	(1)	0	(1)
Data Corrections	0	0	4	0	0	4
Net Change	(29)	17	9	0	0	(3)
New Entrants During the Year	0	0	0	0	0	0
As of July 1, 2013	26	72	202	30	7	337

Plan Participants (continued)

B. Count of Active Members

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 20	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	2	0	0	0	0	0	0	2
40-44	0	0	0	2	3	0	0	0	0	5
45-49	0	0	1	3	4	1	0	0	0	9
50-54	0	0	1	1	4	3	1	0	0	10
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
Total	0	0	4	6	11	4	1	0	0	26

Plan Participants (continued)

C. Inactive Members - Annual Benefits

Attained Age	Members With Deferred Benefits		Retired Members		Beneficiaries		Disabled Members	
	No.	Benefit	No.	Benefit	No.	Benefit	No.	Benefit
Under 50	16	\$ 52,450	0	\$ 0	2	\$ 22,699	0	\$ 0
50 – 54	22	183,884	0	0	2	30,419	1	7,824
55 – 59	21	81,794	49	830,185	4	19,086	0	0
60 – 64	11	32,147	45	744,567	2	42,285	1	10,273
65 – 69	2	3,180	44	1,031,581	6	31,229	0	0
70 – 74	0	0	19	411,904	2	16,426	4	48,859
75 – 79	0	0	20	370,382	4	22,062	1	13,616
80 – 84	0	0	13	179,133	0	0	0	0
Over 84	0	0	12	108,564	8	42,761	0	0
Total	72	\$ 353,455	202	\$ 3,676,316	30	\$ 226,967	7	\$ 80,572

Plan Participants (continued)

D. Participant Statistics

Inactive Participants as of July 1, 2013	No.	Amount of Annual Benefit
Participants Receiving Benefits		
Retired Members	202	\$ 3,676,316
Beneficiaries	30	226,967
Disabled Members	7	80,572
Total	239	\$ 3,983,855
Participants with Deferred Benefits		
Vested Terminated	71	\$ 344,647
Beneficiaries	1	8,808
Disabled	0	0
Total	72	\$ 353,455

Actuarial Basis

A. Entry Age Actuarial Cost Method

Liabilities and contributions are shown in this report are computed using the Entry Age Actuarial Cost Method. Under this method, the **Normal Cost** is computed as the level percentage of pay which, if paid from the earliest time each Member would have been eligible to join the plan if it then existed (thus, entry age) until his retirement or termination, would accumulate with interest at the rate assumed in the valuation to a fund sufficient to pay all benefits under the plan.

The normal cost for the Fund is determined by summing intermediate results for all Members and determining an average normal cost rate which is then related to the total payroll of Members.

The **Actuarial Accrued Liability** under this method at any point in time is typically the theoretical amount of the fund that would have accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date.) Since benefits paid from this plan have been frozen, the Actuarial Accrued Liability includes the liability for all benefits to be paid from the Fund. The **Unfunded Actuarial Accrued Liability** is the excess of the actuarial accrued liability over the actuarial value of plan assets actually on hand on the valuation date.

Under this method experience gains or losses, i.e., decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

B. Asset Valuation Method

The Actuarial Value of Assets is equal to the Market Value of Assets.

C. Valuation Procedures

No actuarial liability is included for participants who terminated nonvested prior to the valuation date.

All benefits earned under the Fund increase by an annual improvement factor as defined in Section 4.3.

No benefits were projected to be greater than the dollar limitation required by the Internal Revenue Code Sections 404 and 415 for governmental plans.

Actuarial Basis (continued)**D. Actuarial Assumptions**

Interest: 6.75% per annum, compounded annually, net of investment expenses.

Mortality: Mortality improvement is anticipated to continue beyond the valuation date, but improvements are expected to be at a slower rate than in prior periods. There is sufficient margin in the mortality assumption above recent mortality experience to account for future mortality improvement.

The use of the current mortality assumption results in a liability greater than the RP-2000 Combined table, projected with Scale AA to 7 years beyond the valuation date for annuitants and 15 years beyond the valuation date for non-annuitants.

1995 Buck Mortality Table with one-year setback for males. Sample rates are as follows:

Per 100 Participants		
Age	Male	Female
20	0.06	0.02
25	0.07	0.02
30	0.06	0.02
35	0.07	0.04
40	0.09	0.06
45	0.13	0.09
50	0.20	0.14
55	0.31	0.21
60	0.56	0.32
65	1.09	0.66
70	2.00	1.39
75	3.40	2.34
80	5.68	3.79
85	9.16	6.33

Withdrawal:

Per 100 Participants	
Age	Withdrawals
20	6.58
25	5.27
30	4.83
35	4.47
40	3.84
45	3.21
50	1.52
55	0.33
60	0.00

Actuarial Basis (continued)

D. Actuarial Assumptions (continued)

Post-Disability Mortality: Participants who are receiving disability retirement benefits are expected to have a higher mortality risk than other retirees or active plan participants. The disability mortality is based on the 1983 Railroad Board Disabled Mortality Table. Sample rates are as follows:

Per 100 Participants	
Age	Disabled Mortality
20	0.01
25	0.68
30	1.06
35	1.14
40	1.35
45	2.00
50	3.16
55	3.78
60	4.25
65	5.12

Retirement Rates: Employees are assumed to retire upon eligibility to receive a retirement benefit which is age 55 and 3 years of service.

Percent Married: 80% of all participants are assumed to have eligible spouses.

Age Difference: A husband is assumed to be five years older than his wife.

Administrative Expenses: Present value of future expenses included in actuarial liability. Starting July 1, 2008, \$50,000 for 10 years reduced 10% per year for the next 10 years and \$0 afterward.

Assumed Cost-of-Living Adjustment for the Improvement Factor CPI is assumed to be 3.25% per annum and the Improvement Factor will equal the maximum increase permitted under plan terms based on each member's date of retirement.

Summary of Plan Provisions

Plan

South Dakota Cement Plant Retirement Fund.

Effective Date and Plan Year

March 1, 1968, benefits frozen March 16, 2001. The Plan Year is July 1 through June 30.

Administration

The plan is administered by the South Dakota Retirement System.

Type of Plan

Defined benefit pension plan.

Members Included

Any person employed on a permanent, full-time basis, including an officer whose customary employment is for at least 40 hours in a week and 12 months in any calendar year on a continuous basis.

Credited Service

Last period of continuous employment from employment date to retirement (or termination) date. The participant's Credited Service as of the plan freeze date, March 16, 2001, will be used to determine the frozen Normal Retirement Benefit as of that date.

Final Average Earnings

Average of the highest 36 consecutive months of earnings (excluding overtime) during the last 72 months of employment. Monthly earnings for hourly-paid employees calculated by multiplying hourly rate by 4-1/3 weeks per month times 40 hours per week. The participant's Final Average Earnings as of the plan freeze date, March 16, 2001, will be used to determine the frozen Normal Retirement Benefit as of that date.

Normal Retirement Benefit

A member is eligible for a Normal Retirement Benefit after attainment of age 65, with 3 years of credited service.

Pension amount equals the greater of:

- 1.625% of Final Average Earnings times Credited Service
- or
- 2.325% of Final Average Earnings times Credited Service less 80% times Primary Social Security Benefits.

Final Average Earnings, Credited Service, and Primary Social Security Benefits are determined as of the plan freeze date, March 16, 2001.

Summary of Plan Provisions (continued)
Special Early Retirement Benefit

A Member who both attained the age of 55 years and the sum of his age and Credited Service at termination equals 85 or more is eligible for a Special Early Retirement Benefit. The monthly benefit is computed as for normal retirement considering compensation and Credited Service at actual retirement date, payable immediately without reduction for early commencement. Members who terminated prior to July 1, 1999 are not eligible for a Special Early Retirement Benefit.

Regular Early Retirement Benefit

A member who has attained the age of 55 years and completed three years of Credited Service is eligible for a Regular Early Retirement Benefit. Accrued Normal Retirement Benefit reduced by 3% for each year that the employee is younger than the earlier of age 65 or the age at which age plus Credited Service equals 85. Members who terminated prior to July 1, 1999 are eligible for a Regular Early Retirement Benefit after attaining age 62 and completing five years of Credited Service.

Vesting

Age requirement:	None.
Credited Service requirement:	3 years.
Effects of plan freeze:	All participants as of March 16, 2001 are 100% vested as of that date.
Pension amount:	Accrued Normal Retirement Benefit. Benefit payments begin on employee's Normal or Early Retirement data (with 3% per year reduction).

Family Death Benefit

Age requirement:	None.
Credited Service requirement:	3 years.
Benefit amount:	<p>(a) Spouse with care of surviving dependent children: 40% (plus 10% per dependent child up to five) of highest annual earnings in any one of the last three years (as of March 16, 2001), paid in monthly installments.</p> <p>(b) When not eligible under (a), the benefit paid to the spouse at the spouse's age 65 equals 60% of the benefit the employee would have received at Normal Retirement, actuarially reduced to reflect a 60% joint and survivor option.</p>

Additional Survivor Protection

Age requirement:	None.
Credited Service requirement:	None.
Contribution requirement:	None.
Benefit Amount:	When not eligible under Family Death Benefit: 40% of highest annual earnings in last three years (as of March 16, 2001), payable until spouse attains age 65, or death, if earlier.

Summary of Plan Provisions (continued)

Improvement Factor

- (a) Retirement prior to October 1, 1978: Benefits to retirees and beneficiaries increased by 2.00% of the initial benefit amount (not compounded) each year.
- (b) Retirement after September 30, 1978 and before July 1, 1999: Benefits to retirees and beneficiaries increased by 1.43% (compounded) each year.
- (c) Retirement after July 30, 1999: Benefits to retirees and beneficiaries increased by 3.10% (compounded) each year.