

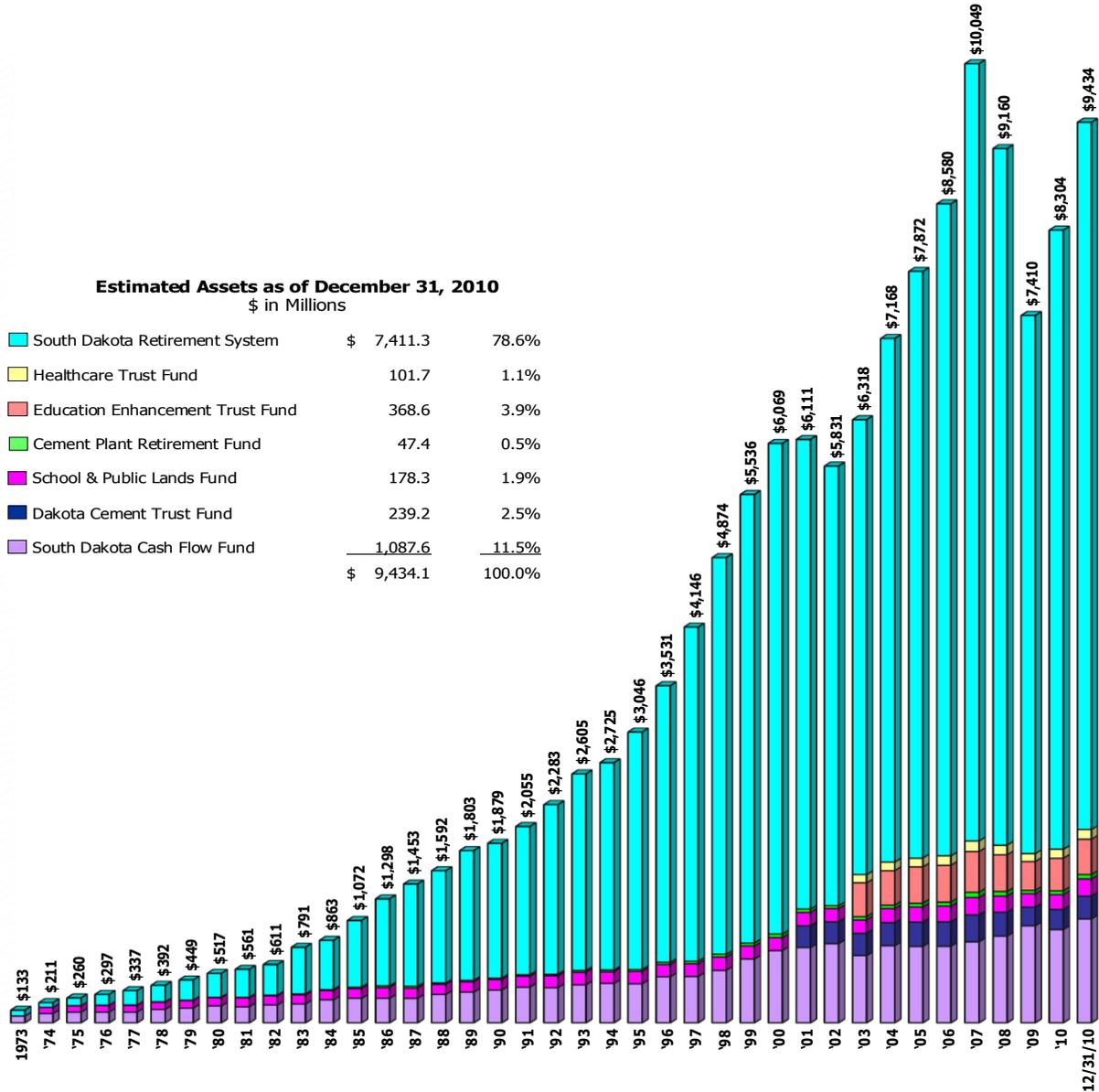
# South Dakota Investment Council

January 2011

# Overview

- **Goal is to add value over the long term**
  - Versus market indexes and other pension plans
- **Focus is on long term investment value**
  - Present value of future cash flows
- **Risk managed through diversification and reducing overvalued investments**
  - Exposure to long term success of the economic system is necessary to earn decent returns
- **Primarily internally managed**
  - Lower cost and better returns from commitment of investment team to long term approach
- **Investment team recruited and trained to apply long term methodology**
  - Top students from local Universities trained internally for many years to apply our approach
- **Total Compensation target is 70% of private sector after adj. for cost of living**
  - 2/3 in base salary form, 1/3 as return-linked incentive at assumed 50% average payout

# South Dakota Investment Council Assets Managed Fiscal Years 1973 to 2010 and Fiscal Year 2011 through 12/31/10 (Estimated)



# Topics

- **Goal**
  - What is our goal in managing South Dakota assets?
  - How have we done?
- **Investment Process**
  - Why do we focus on long term value?
  - Why do we manage most assets internally when others outsource?
  - How do we value assets?
  - How do we control risk?
- **Council**
  - What is their role?
  - Why is it important the Legislature select respected Investment Council members?
- **Investment Team**
  - Who are the people and what do they all do?
  - How do we recruit and train the investment team?
  - What happens if Investment Officer incapacitated?
  - Why do we link compensation to investment return added value?
  - How do we determine compensation levels?
- **Partners**
  - Why do we use some external managers?
  - How do we select external managers?
  - Why have we continued to have a relationship with Steve Myers?
- **Our approach sounds like the “hard road” – is it worth it?**

# Investment Goal

- Goal is to add value over the long term beyond what could be earned by market indexes and other retirement plans.
- Achieving the goal helps SDRS pay benefits. However, even significant added value cannot fully make up for markets that fall far short of actuarial assumptions. The actuarial assumed return should be based on forward looking long term return drivers, not extrapolation of past returns.
- Roughly one-third of retirement system assets (and thus benefits) has been generated by past outperformance.
- This helps the 70,000+ members of SDRS retire with financial dignity and helps keep taxes low for all South Dakotans.

# Thirty-seven years so far

- Added value versus Benchmark
  - 37 years +.8%
  - 10 years +1.2%
  
- Added value versus Peer Group
  - 37 years +1.4%
  - 10 years +1.3%

# Focus on Long Term Value

- We believe the only reliable way to add value is to buy when prices are below long term value and sell when prices exceed long term value. To do this we need:
  - Reasonable measure of long term value.
  - Discipline to wait long periods of time for opportunities to appear.
  - Fortitude to hang on to cheap assets as they become cheaper before performing.
  - Required hard work, patience, and pain threshold discourages competition.
- Most investors focus on short term market movements.
  - This usually disappoints – too many fishing in the immediate gratification pond. There are always a few who are lucky or quicker than the rest for a while and others who bend the rules, but few, if any, are able to build sustainable advantages.
- We believe we have advantages to bolster our staying power.
  - Long term value measures - something solid to stay focused on in tough times.
  - Decades of experience in difficult periods - understand the need for patience.
  - Track record of success in those difficult periods - confidence to stay the course.
  - Continuous preparation for tough times - when tough times come, we are ready.

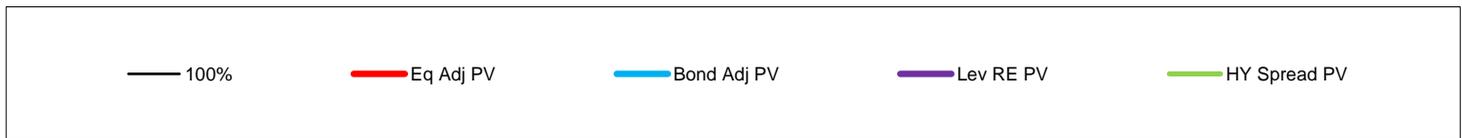
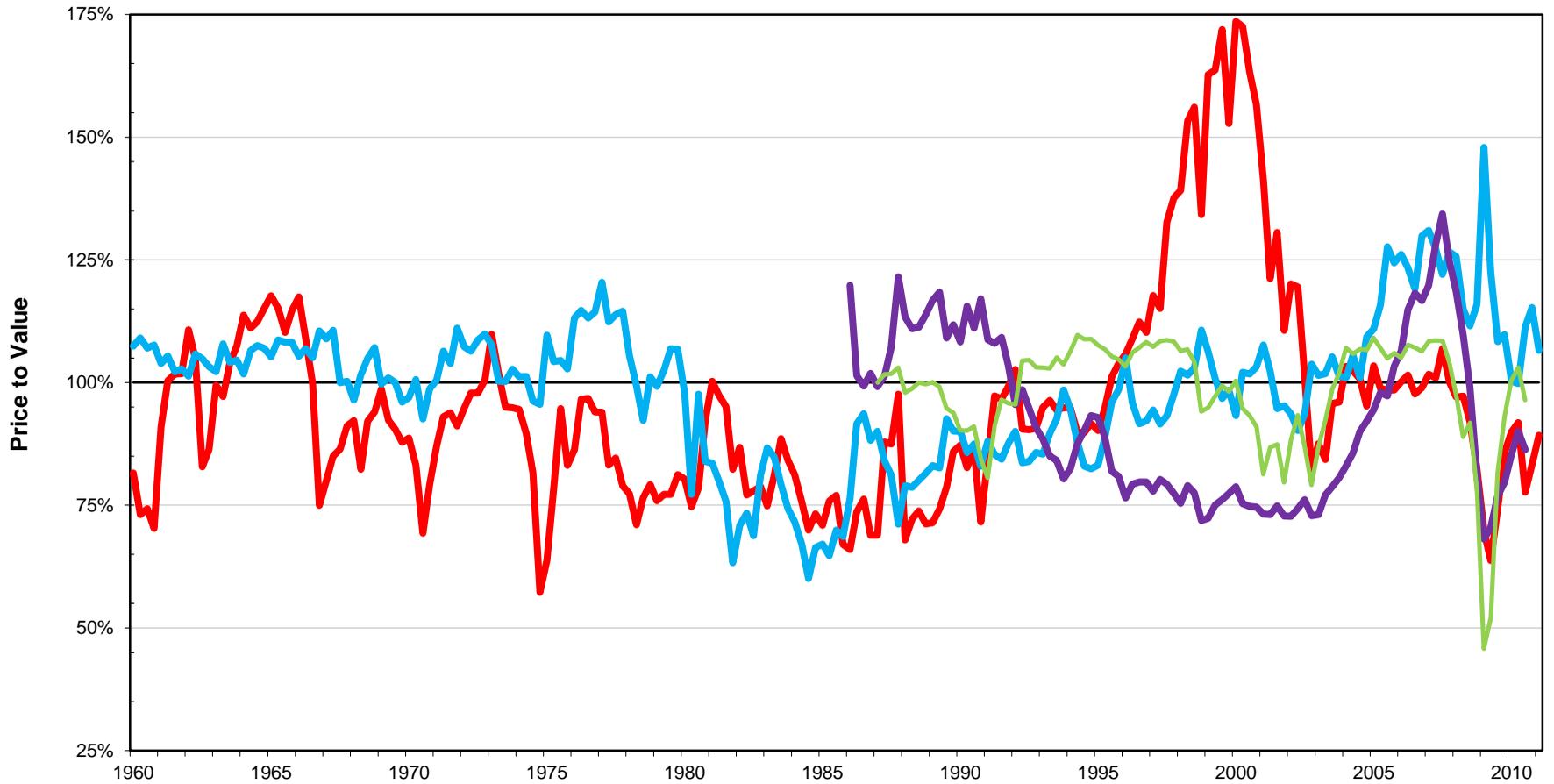
# Benefits of Internal Management

- The cost of managing assets internally is lower than external active managers.
  - Savings come from compensation discount, lack of marketing cost, cheaper facilities and other frugalities, and no need to make a profit or pay corporate income taxes.
  - Cost efficiency study indicates we are among the lowest cost funds for our size and type of assets.
  - Index funds are also low in cost but preclude any opportunity to add value above indexes.
- We believe managing assets internally can increase returns.
  - Supported by our history over 37 years.
  - Key reason is greater influence over internal staff to focus on long term value.
  - Our experience suggests most investors want short term results. External managers recognize they will not be allowed a long timeframe for investment decisions to prove out.
  - External managers act short term, even if futile, because they are paid well to make the attempt.
  - Long term focus goes against the grain. Takes consistent effort to retain focus on long term.
- Internal management is a lot more work than hiring outside managers.
  - Internal research capability – requires higher skilled expensive people.
  - Handle own communication about investment process – difficult in tough times.
  - Criticism about staff compensation - must explain would cost more to outsource.
- Asset categories managed internally.
  - Global Equity (domestic 1974, international 1992, merged in 2004), Fixed Income (since 1973), High Yield Debt (since 1977), Merger Arbitrage (since 1990), Convertible Arbitrage (since 1993), Asset Allocation Shift (since 1986), Distressed Corporate Debt (since 2009)

# Asset Valuation Process

- Valuation frameworks focus on long term value
  - Based on present value of future cash flows concept
    - Simple notion: Invest cash today => Get more back later
  - Inputs must reflect underlying economic reality
    - Accounting conventions may need adjustment
- Key is disciplined implementation and patience

# Price to Value



# Global Equity Management

- Why global
  - Global perspective needed to understand competitive environment
  - Valuation should be compared across industries and countries
  - Arbitrage opportunity as other investors shift to global approach
  - Broader opportunity set enhances diversification and potential returns
- Challenges
  - Discount rate (hurdle rate of return) must take into account differing levels of risk and inflation around the world as well as company specific risk
  - Must look through variations in accounting treatment to get at underlying economics of businesses
  - Must understand impact of currency on corporate profitability
  - Must transact and account for holdings in multiple currencies

# Equity Valuation Process Overview

- Fundamental background research
  - Company and industry competition dynamics
  - Management quality, earnings quality, smart investor interest
- Estimate normal earnings
  - Line by line income statement normalization
  - Adjust accounting treatment of options, pensions, R&D, goodwill, and write-offs
- Return on invested capital
  - Measure return earned on existing investment in the business
  - Starting point for estimating return on incremental (growth) investment
- Estimate normal growth
  - Reinvestment in the business, acquisitions, stock repurchases, industry potential
- Calculate normalized dividend stream
  - Normalized earnings, pay-out ratio, and growth rate
- Calculate discounted value of normalized dividend stream
  - Discount rate based on risk rating
  - Probability weight alternate scenarios such as being acquired or going bankrupt
- Compare price to discounted value to get **Price/Value**

# Income Statement

54866110

LOWE'S COMPANIES, INC.

Current Stock Price: 21.44 (USD)

Show Scenario Hide Scenario

	FY: #N/A					08/25/09	Date:	09/10/09	08/25/09
						Risk Rating:		2	
						Normal Organic Sales Growth:		6.20%	
						Year	Consensus	100.0%	Consensus
						y08	MS	Scenario 1	MS
	Local	Y04	Y05	Y06	Y07	Y08	Y09	2009	0
<b>Revenue</b>	36,464	43,243	46,927	48,283	48,230	46,617	48,250	48,250	47,882
(-) Cost of Goods Sold	(24,224)	(28,453)	(30,729)	(31,556)	(31,729)				
(-) Cost of Goods Sold %	66.4%	65.8%	65.5%	65.4%	65.8%	0.0%			0.0%
(-) Reported Depreciation on PP&E Amount Used	(859)	(980)	(1,162)	(1,366)	(1,539)		0		
(-) Amort. Of Intangibles	0	0	0	0	0		0		
<b>Gross Op Profit</b>	11,381	13,810	15,036	15,361	14,962	14,695		0	14,972
Gross Margin	31.2%	31.9%	32.0%	31.8%	31.0%	31.5%			31.3%
(-) Other SG&A	(6,945)	(8,344)	(9,011)	(9,868)	(10,387)				
Other SG&A % of sales	19.0%	19.3%	19.2%	20.4%	21.5%	0.0%			0.0%
(-) R&D Expenditure	0	0	0	0	0	0	0	0	0
(-) Advertising Expenditure	(740)	(812)	(873)	(788)	(789)		(772)	(772)	0
<b>Operating Profit</b>	3,696	4,654	5,152	4,705	3,786	3,165	4,343	4,343	3,517
Operating Margin	10.1%	10.8%	11.0%	9.7%	7.8%	6.8%	9.0%	9.0%	7.3%
(+) Non-Operating Income or Loss (-)	16	45	52	45	40		30	30	
(+/-) Pre-Tax Extraordinary Item	0	0	0	0	0		0	0	
(-) Interest Expense	(192)	(203)	(206)	(239)	(320)	(310)	(364)	(364)	(295)
EBT	3,520	4,496	4,998	4,511	3,506	2,855	4,009		3,222
(-) Income Tax	(1,353)	(1,731)	(1,893)	(1,702)	(1,311)	(1,069)	(1,495)	(1,495)	(1,208)
<b>EB XO &amp; Disc</b>	2,167	2,765	3,105	2,809	2,195	1,786	2,514	2,514	2,014
(+) Discontinued Operations	0	0	0	0	0		0		
(+) After-tax Extraordinary Items and Other Adjustments	0	0	0	0	0		0	0	
<b>Net Income</b>	2,167	2,765	3,105	2,809	2,195	1,786	2,514	2,514	2,014
Net Profit Margin	5.9%	6.4%	6.6%	5.8%	4.6%	3.8%	5.2%		4.2%
Diluted Shares Out. - Weighted Average	1617	1607	1566	1510	1472	1,470	1,470	1,470	1,448
EPS Before XO (FD)	1.34	1.72	1.98	1.86	1.49	1.21	1.71		1.39
EPS	1.39	1.78	2.02	1.90	1.51	1.21	1.71		1.39
Fully Diluted EPS	1.34	1.72	1.98	1.86	1.49	1.21	1.71		1.39
SD Per Share Adjustments									
Tax Rate for Adjustments (Before Time Discounts)	37.9%	37.9%	37.6%	37.5%	37.3%		37.3%		
(+/-) SD Depreciation Adjustment	0.00	0.00	0.00	0.00	0.00		0.00		
(+/-) SD Goodwill EPS Adjustment	0.00	0.00	0.00	0.00	0.00		0.00		
(+/-) SD R&D Amortization EPS Adjustment	0.00	0.00	0.00	0.00	0.00		0.00		
(+/-) SD Ad Amortization EPS Adjustment	0.04	0.04	0.04	(0.02)	(0.02)		0.03		
(+/-) SD Pensions EPS Adjustment	0.00	0.00	0.00	0.00	0.00		0.00		
(+/-) SD Land Appreciation Income Adjustment	0.06	0.06	0.00	0.08	0.10		0.11		
<b>SD Adj. Diluted EPS</b>	1.43	1.83	2.03	1.92	1.57	1.21	1.85		1.39
Normalized Dividends							0.36		

## Invested Capital and Growth Investment

LOWE'S COMPANIES, INC.

Millions of USD

	Y04	Y05	Y06	Y07	Y08	SD Adj Invested Capital for Norm Yr Earnings	
SD Inv Capital- **Yr End** (Bal Sheet)	Year End						
<b>Tangible Assets</b>							0%
<a href="#">SD Adjusted Cash</a>	813	876	796	530	661	661	
<a href="#">Working Capital Asset (AR + INV)</a>	5,859	6,653	7,144	7,611	8,209	7,733	
Additional Current Assets	194	259	374	545	381	381	
PP&E - Net (Excl Land Book Value)	9,714	11,460	14,164	15,795	16,578	16,578	
SD Market Val. In excess of Book Value of PP&E	916	1,137	1,345	1,600	2,043	3% PP&E Infl Rate	
Calculated Used Asset Life (Years)	4.8	5.2	5.3	5.5	5.7		
<a href="#">SD PP&amp;E - Net (Excl Land Book Value)</a>	10,630	12,597	15,509	17,395	18,621	18,913	
Land - Book Value	4,197	4,894	4,807	5,566	6,144		
SD Mkt Val. in excess of Book Value of Land (Tax Adj)	623	759	767	924	1,106		
SD Land Value	4,820	5,653	5,574	6,490	7,250	7,250	
SD Capitalized Operating Leases	2,526	3,250	3,368	3,698	4,206	4,206	
SD Capitalized Pre-Tax Extraordinary Items	0	0	0	0	0	0	
SD Capitalized After-Tax Extraordinary Items	0	0	0	0	0	0	
<a href="#">Long-Term Investments</a>	146	294	165	509	253	253	
Other Assets	178	203	317	313	460	460	
Net Pension Assets	0	0	0	0	0	0	
Less Minority interest	0	0	0	0	0	0	
Manual Adj for Write-Ups/Downs to Assets - flows to income for hist.						0	
Manual Adj to Tangible Assets for Incorrect Data						0	
<b>Total Tangible Assets</b>	<b>25,167</b>	<b>29,785</b>	<b>33,247</b>	<b>37,091</b>	<b>40,041</b>	<b>39,857</b>	
<b>Intangible Assets</b>							
Intangible Assets Including Goodwill	0	0	0	0	0	0	
(-) Goodwill	0	0	0	0	0	0	100%
Intangibles - Less Goodwill	0	0	0	0	0	0	
SD Capitalized Inv in R&D -Year (Inflation Adj.)	0	0	0	0	0	0	
SD Capitalized Inv in Adv. 2-Year	1,081	1,182	1,279	1,225	1,183	1,069	
SD Capitalized Inv in Labor and Training Costs	0	0	0	0	0	0	
<b>Tot Intang Assets Minus Goodwill</b>	<b>1,081</b>	<b>1,182</b>	<b>1,279</b>	<b>1,225</b>	<b>1,183</b>	<b>1,069</b>	
<b>Tot Assets from Increm Capital Intensity Diff</b>						<b>0</b>	
<b>SD Capital Employed (End of Year)</b>	<b>26,248</b>	<b>30,967</b>	<b>34,526</b>	<b>38,315</b>	<b>41,224</b>	<b>40,926</b>	

<b>Incr. Change in SD Inv Capital (Cash Flow)</b>						<b>(-) Negative is a Use of Cash</b>	
<b>Growth Capex (Beyond Maint Capex) Click for ?s</b>							
Gross PP&E	15,073	18,010	21,419	25,104	28,836	31,477	Economic Depr
Accumulated Depreciation	3,254	4,099	5,065	6,133	7,475	8,755	100%
Economic Net PP&E - Beg. of Year	11,819	13,911	16,354	18,971	21,361	22,722	
(-) Land - Book Value - Beg. Of Year	3,635	4,197	4,894	4,807	5,566	6,144	
(+) Cumulative Inflation on PP&E	916	1,137	1,345	1,600	2,043	2,335	
Net PP&E (Less BV of Land)	9,100	10,851	12,805	15,764	17,838	18,913	
<b>Company Net PP&amp;E as a % of Sales</b>	25.0%	25.1%	27.3%	32.6%	37.0%	39.2%	
<b>Incremental Net PP&amp;E as a % of Incr. Sales</b>						39.2%	
Net PP&E Investment (Less Land Investment)	(1,530)	(1,746)	(2,704)	(1,631)	(783)	(1,173)	
Land Investment	(562)	(697)	87	(759)	(578)	(450)	
<b>Change In PP&amp;E = Growth Capex - Total</b>	<b>(2,092)</b>	<b>(2,443)</b>	<b>(2,617)</b>	<b>(2,390)</b>	<b>(1,361)</b>	<b>(1,622)</b>	

## Return on Equity

LOWE'S COMPANIES, INC.

Millions of USD

SD Historical ROA	Y04	Y05	Y06	Y07	Y08	Y09 Norm.	Incremental Return and Investment	Input
SD All Equity Financed Income	2,534	3,153	3,446	3,210	2,646	<b>3,110</b>		
SD Beginning of Year Net Capital Employed	23,247	26,248	30,967	34,526	38,315	<b>40,926</b>		
SD Return on Adj. Capital Employed	10.9%	12.0%	11.1%	9.3%	6.9%	<b>7.6%</b>		
Use all(1) / Partial(.50) / Don't Use (0 or "") for Avg.	1	1	1	1	1			
SD Rolling Average Return on Capital Employed From Y08 to Y90	<b>10.0%</b>	<b>9.8%</b>	<b>9.1%</b>	<b>8.1%</b>	<b>6.9%</b>			
Incremental Income (all Equity)								
Incremental Asset								
SD Return on Adj. Capital Employed - Incremental							<b>8.0%</b>	<b>8.0%</b>
<b>SD Free Liabilities - Free Gov't and Cust. Financing</b>								
Accounts Payable (current liability)	2,212	2,695	2,832	3,524	3,713	3,871		
Other Liabilities (current liability)	1,576	1,398	1,835	1,748	1,750	1,784		
Accrued Expenses (current liability)	335	386	424	425	467	434		
Taxes Payable (current liability)	0	0	0	0	0	0		
Unearned Revenue (current liability)	0	539	709	731	717	674		
Deferred Revenue (Non-current liability)	0	0	0	0	0	0		
Liab. - Other (Unspecified) (Non-current liability)	63	159	277	443	774	910		
Deferred taxes (Non-current liability)	594	736	735	735	670	660		
Plug for Incremental being Diferent than total Company								
<b>Total Free Liabilities</b>	4,780	5,913	6,812	7,606	8,091	<b>8,333</b>		
SD Free Liabilities/SD Beg. Net Capital Employed	20.6%	22.5%	22.0%	22.0%	21.1%	20.4%		
SD Free Levered ROA	13.7%	15.5%	14.3%	11.9%	8.8%	9.5%		
						Incr. % Free Liab.:	<b>20.4%</b>	
SD Free Levered ROA - Incremental							<b>10.0%</b>	
<b>SD Historical ROE</b>								
SD Beg. Liabilities / SD Beg. Net Capital Employed	26.2%	23.7%	21.9%	22.6%	27.1%	25.1%		
Beg. Liabilities/Beg. Asset - Non SD Adjusted	20.0%	17.5%	14.3%	16.0%	21.6%	18.5%		
SD ROE - Company	18.7%	20.8%	18.3%	15.1%	11.6%	12.2%		
Interest Coverage (EBIT/All Interest Expense)	11.7	14.3	12.7	10.2	7.8	8.1	8.1	
								<b>OR</b>
SD Beg. Liabilities / SD Beg. Net Capital Employed - Incremental						Incr. % DEBT:	<b>26.4%</b>	
SD ROE - Incremental							<b>13.2%</b>	

# DDM

LOWE'S COMPANIES, INC. (low)

=user input

**\*\* Make sure Normal EPS and Dividend are Annualized \*\***

54866110	Manual	Modeled	Used
Date of Normals	10-Sep-09	10-Sep-09	
Price (USD)		21.44	21.44
Normal EPS	1.84	1.85	1.84
Risk Rating		2	2
Dividend	0.36	0.36	0.36
Extra value D		-0.67	-0.67
<b>Price/Value</b>	<b>0.70</b>	Value	30.82

**"X" to see Price/Value**

	x
<b>Prospects of being Acquired or Bankruptcy</b>	
Estimated Takeover Price	
Est. Probability of Takeover	
Est. Probability of Bankruptcy	2.1%

	Phase A	Phase B	Phase C
Discount Rate	7.98%	8.10%	8.35%
Div Payout	19.4%	31.0%	60.0%
EPS Growth	8.3%	7.0%	4.2%
Years of growth	5	10	
Phase C Organic Reinvest Return	10.50%		

Shs o/s	1,470.0
0	
<u>Percent of current normal year's buyback completed</u>	
	50%
<u>Discount/Premium on Stock Buybacks</u>	
Consensus FY1	1.20
Consensus FY2	1.34
Consensus LTG %	11.4%
Past 4Q Core Shares	1,194,821
Sector Shares	465,400

	Month	Year	FY End	01	FY0	Dividend
Calendar Yr.	12	2009	Normal Earnings		1.85	0.36
Fiscal Yr. for Normals	01	2010	Normal Growth		8.3%	Annualized
			Risk Rating		2	
			Annualized		1.841	0.36

<b>Co. Value Summary</b>	
Ph. A	2.20
Ph. B	5.57
Ph. C	22.94
Acq's	0.77
Sub-total	31.48
Takeout Value	-
Excess Cash	-
PV of Int Rate Adv.	-
Bankruptcy VD	(0.67)
Total Value D	(0.67)
<b>Total Value</b>	<b>30.82</b>

Reinvestment Uses of Net Income	Phase A Allo	Phase A Ret	Ph A Allo	Ph A Ret	Ph A	Default	Default	Override	Override	Ph B Allo	Ph B	Ph B	Phase C	Ph C
	Override	Override	Incr.-Avg.	Incr.-Avg.	Grwth-Avg.	Ph B Allo	Ph B Ret	Ph B Allo	Ph B Ret	used	Ret used	Growth	Alloc	Return
Organic Segment A			49.3%	13.2%	6.49%	46.1%	12.3%			46.1%	12.3%	5.5%		10.50%
Organic Segment B			0.0%	0.0%	0.0%	0.0%	3.5%			0.0%	3.5%	0.0%		10.50%
Organic Segment C			0.0%	0.0%	0.0%	0.0%	3.5%			0.0%	3.5%	0.0%		10.50%
Organic Segment D			0.0%	0.0%	0.0%	0.0%	3.5%			0.0%	3.5%	0.0%		10.50%
Future Organic Segment E						0.0%	10.7%			0.0%	10.7%	0.0%		10.50%
Organic Total			49.3%		6.5%	46.1%				46.1%		5.5%	40.0%	10.50%
Acquisitions (+) [see below also]	5.0%	8.00%	5.0%	8.0%	0.4%	3.4%	8.1%			3.4%	8.1%	0.4%		
Liability reduce (+) or increase (-)			0.0%	0.0%	0.0%							0.0%		
Cash build-up (+) or drawdown (-)			0.0%	0.0%	0.0%							0.0%		3.3%
Buying Back Stock (+)			26.2%		1.4%	19.6%				19.6%		1.2%		
Dividends			19.4%			31.0%				31.0%			60.0%	
		*must=100%	100.0%		8.3%	100.0%			must=100%	100.0%		7.0%	100.0%	

<b>Discount Table</b>		
Risk	Discount	Bankruptcy
Rating	Rate	Probability
1	7.64%	1.47%
2	7.98%	2.12%
3	8.35%	3.29%
4	8.76%	5.18%
5	9.22%	10.75%
6	9.83%	16.74%
7	10.53%	23.99%
8	11.30%	31.92%
9	12.07%	47.16%

# Risk Control

- Important to recognize exposure to the long term success of the economic system is necessary to earn the returns needed to be able to pay desired benefits.
  - If we minimize economic system risk, we would expect to earn only half as much long term.
  - We accept this risk to get the higher returns because we have faith in our economic system even if there may be periodic bumps in the road and sustainable success may be less going forward.
  - We believe this is consistent with the way South Dakotans approach life - hardy folks who endure burdens for a chance at a better life.
  - We have the strength to handle volatility and hold on to depressed investments on the darkest day--strong funding helps--thus the constant urging to build large cushions in strong markets.
  - In very difficult circumstances that exceed our reserves, the next necessary step is to reduce growth of benefits. In extreme circumstances benefits may need to be adjusted.
- Risk is managed through diversification and by reducing amounts invested in assets believed to be overvalued.
  - Assets are broadly diversified among global equity, private equity, real estate, investment grade bonds, high yield/distressed debt, merger arbitrage, convertible arbitrage, and tips/commodities.
  - Statistical measures of risk, such as standard deviation and correlation, are adjusted upward to reflect higher real world frequency and magnitude of adverse outlier events.
  - Focal point is amount of equity-like risk in the portfolio. This is the amount invested in equities plus other asset categories to the degree impacted by equity downturns. Done separately for inflation and deflation based downturns as assets can respond differently in each type downturn.

# South Dakota Retirement System

## Asset Allocation Policy and Benchmark

<b>POLICY</b>	<u>Domestic Equity</u>	<u>International Equity</u>	<u>Global Equity</u>	<u>Merger Arbitrage</u>	<u>Convertible Arbitrage</u>	<u>Fixed Income/TIPS</u>	<u>High Yield/ Distressed</u>	<u>Real Estate</u>	<u>Private Equity</u>	<u>Commodities</u>	<u>Cash</u>
Maximum*			80%	10%	5%	50%	15%	15%	12%	5%	55%
Normal			57%	4%	3%	18%	6%	5%	5%	1%	1%
Minimum*			30%	0%	0%	13%	0%	2%	0%	0%	0%

Index	<i>Russell 1000</i>	<i>MSCI All Country World ex US Index</i>	<i>MSCI All Country Work component (1/3) plus U.S.</i>	<i>Merger Benchmark</i>	<i>Convertible Benchmark</i>	<i>Citigroup BIG</i>	<i>Citigroup High Yield</i>	<i>NCREIF Property plus 1.25%</i>	<i>S&amp;P500 plus 1.75%</i>	<i>Commodities Index</i>	<i>3 month Tsy bill</i>
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### CAPITAL MARKET

<b>2011 Benchmark</b>			<b>57%</b>	<b>2%</b>	<b>3%</b>	<b>18%</b>	<b>6%</b>	<b>7%</b>	<b>5%</b>	<b>1%</b>	<b>1%</b>
2010 Benchmark			57%	2%	3%	18%	6%	7%	5%	1%	1%
2009 Benchmark			57%	4%	3%	18%	6%	5%	5%	1%	1%
2008 Benchmark			57%	4%	3%	18%	6%	5%	5%	1%	1%
2007 Benchmark			57%	4%	3%	18%	6%	5%	5%	1%	1%
2006 Benchmark			57%	4%	3%	18%	6%	6%	4%	1%	1%
2005 Benchmark			57%	2%	3%	19%	7%	6%	4%	1%	1%
2004 Benchmark	40%	16%		2%	4%	19%	6%	7%	4%	1%	1%
2003 Benchmark	40%	16%		4%	3%	19%	6%	7%	3%	1%	1%
2002 Benchmark	40%	16%		6%	3%	23%		8%	3%		1%

\*1/2% buffer for market drift (example: FI minimum of 13% can drift to 12.5%)

This Report contains proprietary and confidential research of the South Dakota Investment Council

**CONVENTIONAL**

(JP Morgan returns, std. dev. and correlations)

**SDRS ASSET ALLOCATION ANALYSIS (June 2010)**

	Expected Standard		Correlation Matrix										
	Return	Deviation*	US Eq	Intl	Merger	Bonds	Cash	HY	Comd	RE	Priv Eq	Conv	Tips
Domestic (US) Equity	7.5%	16%	100%										
International Equity	7.8%	18%	87%	100%									
Merger Arbitrage	6.5%	7%	53%	68%	100%								
US Bonds - Investment Grade	4.5%	4%	-3%	7%	17%	100%							
Cash	3.5%	1%	-2%	-7%	8%	6%	100%						
High Yield Bonds	7.5%	11%	64%	68%	70%	21%	-16%	100%					
Commodity Index	7.0%	17%	29%	45%	59%	8%	0%	34%	100%				
Real Estate	9.3%	13%	29%	29%	21%	6%	-1%	30%	11%	100%			
Private Equity	8.5%	25%	72%	73%	63%	-3%	-7%	64%	25%	25%	100%		
Convertible Arbitrage	6.5%	6%	30%	20%	20%	60%	50%	50%	-5%	0%	20%	100%	
Inflation protected Tsy(Tips)	5.0%	7%	5%	14%	34%	78%	1%	30%	33%	9%	4%	30%	100%

\* Standard deviation is a measure of volatility. There is a 66% chance of being within plus or minus 1 standard deviation, a 95% chance of being within 2 standard deviations.

	U.S. Equity	Intl Equity	Merger Arb	Bonds	Cash	High Yield	Comm-odity	Real Estate	Private Equity	Convert Arb	Tips	Mean Expected Return	1 year Standard Deviation	5 year Standard Deviation	10 year Standard Deviation	20 year Standard Deviation
Simple 60:40	60%	0%	0%	40%	0%	0%	0%	0%	0%	0%	0%	6.30%	9.8%	4.4%	3.1%	2.2%
Conservative 50:50	50%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	6.00%	8.3%	3.7%	2.6%	1.9%
Aggressive 100% Eq	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7.50%	16.3%	7.3%	5.1%	3.6%
add International	48%	12%	0%	39%	1%	0%	0%	0%	0%	0%	0%	6.32%	9.8%	4.4%	3.1%	2.2%
add Arbitrage	48%	12%	4%	35%	1%	0%	0%	0%	0%	0%	0%	6.40%	10.0%	4.5%	3.2%	2.2%
add High Yield	46%	14%	4%	29%	1%	6%	0%	0%	0%	0%	0%	6.59%	10.4%	4.7%	3.3%	2.3%
add Real Estate	45%	15%	4%	24%	1%	6%	0%	5%	0%	0%	0%	6.83%	10.6%	4.8%	3.4%	2.4%
add Private Equity	40%	15%	4%	24%	1%	6%	0%	5%	5%	0%	0%	6.88%	10.8%	4.8%	3.4%	2.4%
add Convertible	40%	15%	4%	21%	1%	6%	0%	5%	5%	3%	0%	6.94%	10.9%	4.9%	3.4%	2.4%
add Commodity 1%	40%	15%	4%	20%	1%	6%	1%	5%	5%	3%	0%	6.96%	10.9%	4.9%	3.5%	2.4%
add Tips	38%	16%	4%	16%	1%	6%	5%	5%	5%	3%	1%	7.04%	11.1%	4.9%	3.5%	2.5%
Benchmark(11proposed)	38%	19%	2%	18%	1%	6%	1%	7%	5%	3%	0%	7.09%	11.3%	5.1%	3.6%	2.5%
SDRS current alloc	41%	16%	1%	13%	0%	8%	0%	9%	10%	3%	0%	7.37%	12.5%	5.6%	3.9%	2.8%
Mellon Bil \$ plan	36%	16%	1%	32%	3%	2%	0%	6%	4%	1%	0%	6.60%	9.8%	4.4%	3.1%	2.2%
State universe	36%	16%	2%	25%	1%	2%	1%	5%	7%	1%	5%	6.76%	10.4%	4.7%	3.3%	2.3%

Return Ranges	Mean	1 Year Horizon			5 Year Horizon			10 Year Horizon			20 Year Horizon		
		Exp Ret	up 1sd	dn 1 sd	dn 2 sd	up 1sd	dn 1 sd	dn 2 sd	up 1sd	dn 1 sd	dn 2 sd	up 1sd	dn 1 sd
Benchmark(11proposed)	7.09%	18.4%	-4.2%	-15.5%	12.1%	2.0%	-3.0%	10.7%	3.5%	-0.1%	9.6%	4.6%	2.0%

Proprietary and Confidential

# INFLATION CRISIS

(SDIC expected returns with fat tail std. dev. and inflation crisis correlations)

# SDRS ASSET ALLOCATION ANALYSIS (June 2010)

	Expected Standard		Correlation Matrix										
	Return	Deviation*	US Eq	Intl	Merger	Bonds	Cash	HY	Comd	RE	Priv Eq	Conv	Tips
Domestic (US) Equity	8.2%	22%	100%										
International Equity	8.2%	23%	90%	100%									
Merger Arbitrage	6.9%	13%	33%	33%	100%								
Bonds - Investment Grade	4.9%	8%	46%	40%	-8%	100%							
Cash	3.9%	1%	-50%	-59%	-13%	-19%	100%						
High Yield Bonds	7.5%	12%	55%	47%	14%	20%	-28%	100%					
Commodity Index	5.4%	18%	-117%	-100%	0%	-39%	0%	-15%	100%				
Real Estate	8.5%	24%	30%	26%	8%	11%	-15%	17%	-27%	100%			
Private Equity	10.0%	29%	70%	60%	18%	26%	-35%	39%	-63%	21%	100%		
Convertible Arbitrage	6.5%	5%	30%	20%	20%	60%	50%	50%	-5%	0%	20%	100%	
Inflation protected Tsy(Tips)	5.0%	5%	-55%	-47%	-14%	-20%	28%	-30%	50%	-17%	-39%	-17%	100%

\* Standard deviation is a measure of volatility. There is a 66% chance of being within plus or minus 1 standard deviation, a 95% chance of being within 2 standard deviations.

	U.S. Equity	Intl Equity	Merger Arb	Bonds	Cash	High Yield	Comm -odity	Real Estate	Private Equity	Convert Arb	Tips	Mean	1 year	5 year	10 year	20 year
												Expected Return	Standard Deviation	Standard Deviation	Standard Deviation	Standard Deviation
Simple 60:40	60%	0%	0%	40%	0%	0%	0%	0%	0%	0%	0%	6.88%	14.9%	6.7%	4.7%	3.3%
Conservative 50:50	50%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	6.55%	13.3%	6.0%	4.2%	3.0%
Aggressive 100% Eq	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8.20%	22.0%	9.8%	7.0%	4.9%
add International EQ	48%	16%	0%	35%	1%	0%	0%	0%	0%	0%	0%	7.00%	15.4%	6.9%	4.9%	3.5%
add Arbitrage	48%	16%	4%	31%	1%	0%	0%	0%	0%	0%	0%	7.08%	15.4%	6.9%	4.9%	3.4%
add High Yield	46%	16%	4%	27%	1%	6%	0%	0%	0%	0%	0%	7.17%	15.2%	6.8%	4.8%	3.4%
add Real Estate	45%	16%	4%	23%	1%	6%	0%	5%	0%	0%	0%	7.32%	15.2%	6.8%	4.8%	3.4%
add Private Equity	40%	16%	4%	23%	1%	6%	0%	5%	5%	0%	0%	7.41%	15.1%	6.8%	4.8%	3.4%
add Convertible	40%	16%	4%	20%	1%	6%	0%	5%	5%	3%	0%	7.46%	15.0%	6.7%	4.8%	3.4%
add Commodity 1%	40%	16%	4%	19%	1%	6%	1%	5%	5%	3%	0%	7.46%	14.8%	6.6%	4.7%	3.3%
add Tips	38%	16%	3%	17%	1%	6%	5%	5%	5%	3%	1%	7.40%	13.5%	6.0%	4.3%	3.0%
Benchmark(11proposed)	38%	19%	2%	18%	1%	6%	1%	7%	5%	3%	0%	7.53%	15.1%	6.7%	4.8%	3.4%
SDRS current alloc	41%	16%	1%	13%	0%	8%	0%	9%	10%	3%	0%	7.88%	16.4%	7.3%	5.2%	3.7%
Mellon Bil \$ plan	36%	16%	1%	32%	3%	2%	0%	6%	4%	1%	0%	7.08%	14.1%	6.3%	4.5%	3.2%
State universe	36%	16%	2%	25%	1%	2%	1%	5%	7%	1%	5%	7.24%	14.2%	6.4%	4.5%	3.2%

Return Ranges	Mean	1 Year Horizon			5 Year Horizon			10 Year Horizon			20 Year Horizon		
		Exp Ret	up 1sd	dn 1 sd	dn 2 sd	up 1sd	dn 1 sd	dn 2 sd	up 1sd	dn 1 sd	dn 2 sd	up 1sd	dn 1 sd
Benchmark(11proposed)	7.53%	22.6%	-7.5%	-22.6%	14.3%	0.8%	-6.0%	12.3%	2.8%	-2.0%	10.9%	4.2%	0.8%

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# SEVERE ECONOMIC DOWNTURN

# SDRS ASSET ALLOCATION ANALYSIS (June 2010)

(SDIC expected return with fat tail std. dev. and severe downturn correlations)

	Expected Standard		Correlation Matrix										
	Return	Deviation*	US Eq	Intl	Merger	Bonds	Cash	HY	Comd	RE	Priv Eq	Conv	Tips
Domestic (US) Equity	8.2%	22%	100%										
International Equity	8.2%	23%	120%	100%									
Merger Arbitrage	6.9%	13%	59%	49%	100%								
US Bonds - Investment Grade	4.9%	8%	-43%	-36%	-138%	100%							
Cash	3.9%	1%	50%	55%	23%	-25%	100%						
High Yield Bonds	7.5%	12%	101%	84%	58%	-42%	-12%	100%					
Commodity Index	5.4%	18%	67%	67%	1%	-156%	0%	66%	100%				
Real Estate	8.5%	24%	47%	39%	80%	-110%	15%	46%	70%	100%			
Private Equity	10.0%	29%	76%	83%	35%	-37%	38%	46%	26%	-22%	100%		
Convertible Arbitrage	6.5%	5%	35%	38%	16%	-17%	18%	21%	12%	-10%	27%	100%	
Inflation protected Tsy(Tips)	5.0%	5%	10%	11%	5%	-5%	5%	6%	3%	-3%	8%	4%	100%

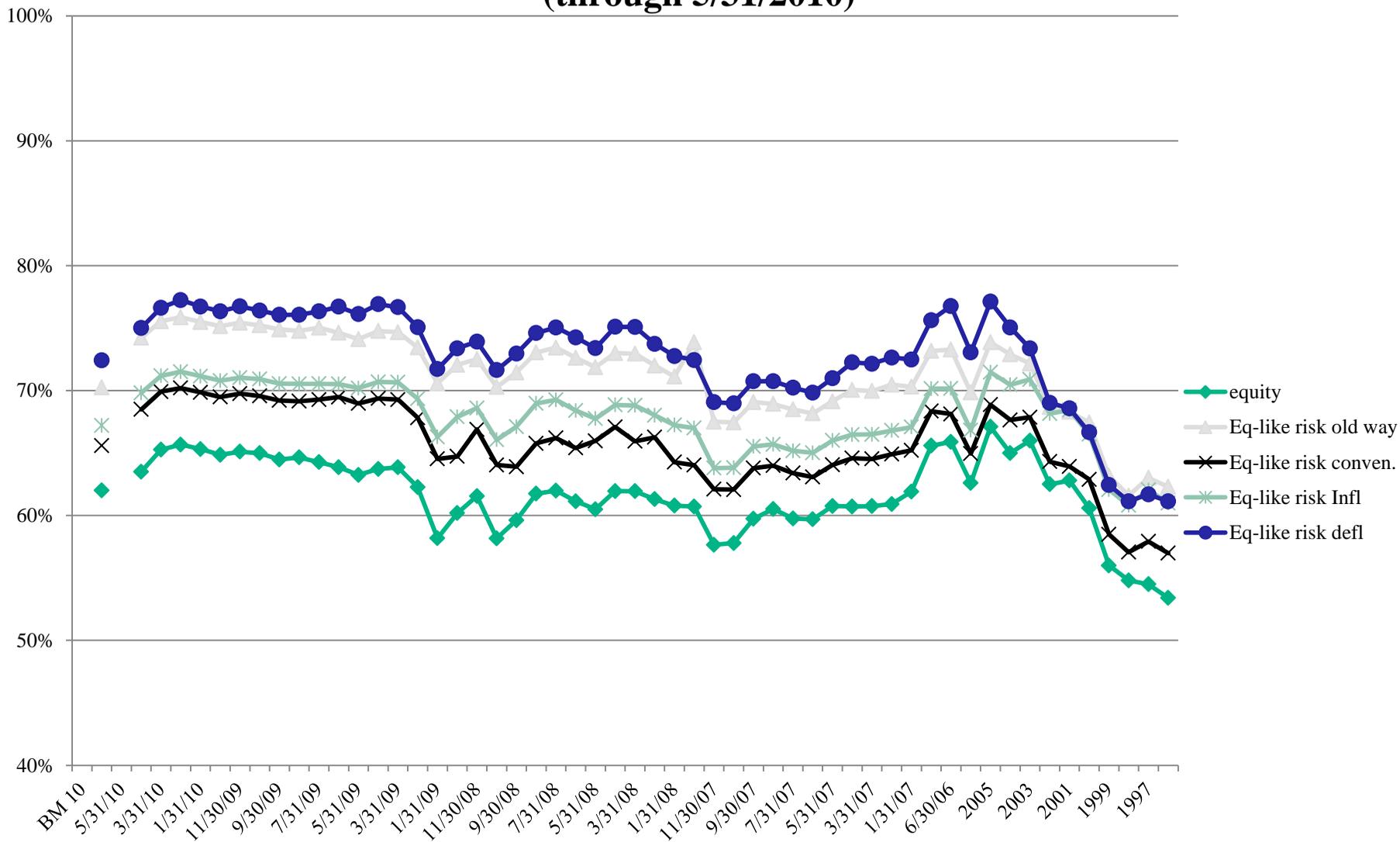
\* Standard deviation is a measure of volatility. There is a 66% chance of being within plus or minus 1 standard deviation, a 95% chance of being within 2 standard deviations.

	U.S. Equity	Intl Equity	Merger Arb	Bonds	Cash	High Yield	Commodity	Real Estate	Private Equity	Convert Arb	Tips	Mean	1 year	5 year	10 year	20 year
												Expected Return	Standard Deviation	Standard Deviation	Standard Deviation	Standard Deviation
Simple 60:40	60%	0%	0%	40%	0%	0%	0%	0%	0%	0%	0%	6.88%	12.2%	5.4%	3.8%	2.7%
Conservative 50:50	50%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	6.55%	10.0%	4.5%	3.1%	2.2%
Aggressive 100% Eq	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8.20%	22.0%	9.8%	7.0%	4.9%
add International	48%	16%	0%	35%	1%	0%	0%	0%	0%	0%	0%	7.00%	13.9%	6.2%	4.4%	3.1%
add Arbitrage	48%	16%	4%	31%	1%	0%	0%	0%	0%	0%	0%	7.08%	14.2%	6.3%	4.5%	3.2%
add High Yield	46%	16%	4%	27%	1%	6%	0%	0%	0%	0%	0%	7.17%	14.5%	6.5%	4.6%	3.2%
add Real Estate'	45%	16%	4%	23%	1%	6%	0%	5%	0%	0%	0%	7.32%	14.8%	6.6%	4.7%	3.3%
add Private Equity	40%	16%	4%	23%	1%	6%	0%	5%	5%	0%	0%	7.41%	14.7%	6.6%	4.7%	3.3%
add Convertible	40%	16%	4%	20%	1%	6%	0%	5%	5%	3%	0%	7.46%	14.9%	6.6%	4.7%	3.3%
add Commodity 1%	40%	16%	4%	19%	1%	6%	1%	5%	5%	3%	0%	7.46%	15.0%	6.7%	4.7%	3.4%
add Tips	38%	16%	3%	17%	1%	6%	5%	5%	5%	3%	1%	7.40%	14.9%	6.7%	4.7%	3.3%
Benchmark(11proposed)	38%	19%	2%	18%	1%	6%	1%	7%	5%	3%	0%	7.53%	15.4%	6.9%	4.9%	3.4%
SDRS current alloc	41%	16%	1%	13%	0%	8%	0%	9%	10%	3%	0%	7.88%	16.8%	7.5%	5.3%	3.8%
Mellon Bil \$ plan	36%	16%	1%	32%	3%	2%	0%	6%	4%	1%	0%	7.08%	12.8%	5.7%	4.0%	2.9%
State universe	36%	16%	2%	25%	1%	2%	1%	5%	7%	1%	5%	7.24%	13.7%	6.1%	4.3%	3.1%

Return Ranges	Mean	1 Year Horizon			5 Year Horizon			10 Year Horizon			20 Year Horizon		
		Exp Ret	up 1sd	dn 1 sd	dn 2 sd	up 1sd	dn 1 sd	dn 2 sd	up 1sd	dn 1 sd	dn 2 sd	up 1sd	dn 1 sd
Benchmark(11proposed)	7.53%	22.9%	-7.8%	-23.2%	14.4%	0.7%	-6.2%	12.4%	2.7%	-2.2%	11.0%	4.1%	0.7%

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# Equity-Like Risk past 13yrs (through 5/31/2010)



# SOUTH DAKOTA RETIREMENT SYSTEM

## Total Portfolio Performance Attribution

	<u>FY 2010</u>	<u>FY 2009</u>	<u>FY 2008</u>	<u>FY 2007</u>	<u>FY 2006</u>	<u>FY 2005</u>	<u>FY 2004</u>	<u>FY 2003</u>	<u>FY 2002</u>	<u>FY 2001</u>	<u>FY 2000</u>	<u>FY 1999</u>	<u>TOTAL</u>	
													<u>Cummulative</u>	<u>Annualized</u>
Actual SDRS Return	18.73%	-20.36%	-8.65%	21.39%	13.11%	13.34%	16.60%	4.95%	-4.88%	-2.88%	10.79%	14.56%	76.71%	5.63%
Capital Markets Return	11.12%	-18.00%	-4.20%	17.57%	10.74%	9.60%	15.54%	5.39%	-5.83%	-5.15%	9.67%	13.27%	59.72%	4.43%
Difference	<b>7.61%</b>	<b>-2.36%</b>	<b>-4.45%</b>	<b>3.82%</b>	<b>2.37%</b>	<b>3.74%</b>	<b>1.06%</b>	<b>-0.44%</b>	<b>0.96%</b>	<b>2.27%</b>	<b>1.12%</b>	<b>1.29%</b>	<b>16.99%</b>	<b>1.37%</b>
<b>Portfolio Aphas</b>														
Global Equity *	2.06%	5.64%	-6.15%	-0.07%	-0.28%	0.82%	-0.43%	0.04%	1.95%	2.87%	-0.08%	0.76%	7.12%	0.56%
Domestic Equity							-0.66%	-0.28%	-0.14%	0.04%	0.82%	-1.24%	-1.46%	-0.24%
International Equity							0.23%	0.31%	2.09%	2.83%	-0.90%	2.00%	6.56%	1.08%
Fixed Income/HY	-0.03%	0.26%	0.10%	-0.04%	-0.05%	0.27%	-0.13%	0.23%	-0.58%	-0.28%	-0.05%	-0.14%	-0.45%	-0.04%
Distressed	0.65%	-1.11%	0.07%	0.06%	0.10%	0.05%	0.13%	0.10%					0.05%	0.00%
Merger Arbitrage	0.19%	-0.08%	-0.29%	-0.05%	0.05%	-0.09%	0.03%	0.05%	-0.14%	-0.05%	0.58%	0.41%	0.61%	0.05%
Convertible Arbitrage	-0.07%	0.24%	0.05%	-0.04%	0.22%	-0.18%	-0.10%	0.03%	0.05%	0.02%	0.14%	0.13%	0.49%	0.04%
Real Estate	2.13%	-7.01%	-1.03%	3.00%	0.86%	2.09%	0.48%	0.00%	0.10%	0.49%	0.60%	0.99%	2.70%	0.19%
Private Equity	1.24%	-1.77%	1.78%	-0.05%	0.64%	0.66%	0.28%	-0.16%	0.15%	-0.21%	-0.04%	-0.28%	2.24%	0.18%
Tips/Commodities	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.01%	0.00%	0.00%	0.00%
Cash	0.00%	0.01%	0.04%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.02%	0.01%	0.00%	0.10%	0.01%
Total Portfolio Alpha Diff.	<b>6.17%</b> <sup>F</sup>	<b>-3.83%</b>	<b>-5.43%</b>	<b>2.81%</b>	<b>1.56%</b>	<b>3.61%</b>	<b>0.26%</b>	<b>0.29%</b>	<b>1.52%</b>	<b>2.86%</b>	<b>1.16%</b>	<b>1.87%</b>	<b>12.86%</b>	<b>1.03%</b>
<b>Asset Allocation</b>														
Global Equity*	-0.38%	2.22%	0.80%	-0.14%	0.70%	0.32%	0.89%	-0.74%	-0.16%	-0.15%	0.06%	-0.96%	2.46%	0.20%
Domestic Equity							0.32%	-0.16%	-0.08%	-0.21%	-0.02%	-0.75%	-0.90%	-0.15%
International Equity							0.57%	-0.58%	-0.08%	0.06%	0.08%	-0.21%	-0.16%	-0.03%
Fixed Income/HY	-0.40%	-0.19%	-0.25%	-0.66%	0.00%	-0.28%	-0.06%	-0.10%	0.03%	0.03%	0.02%	0.09%	-1.76%	-0.15%
Distressed	0.62%	0.68%	-0.08%	0.02%	0.00%	-0.01%	0.10%	0.18%					1.51%	0.13%
Merger Arbitrage	-0.01%	-0.21%	0.06%	-0.05%	-0.01%	0.10%	-0.01%	-0.11%	-0.11%	-0.02%	0.09%	0.04%	-0.24%	-0.02%
Convertible Arbitrage	-0.04%	0.12%	-0.04%	-0.03%	0.01%	-0.01%	-0.01%	0.00%	0.00%	-0.03%	-0.01%	-0.01%	-0.05%	0.00%
Real Estate	-0.15%	-1.14%	0.83%	0.53%	-0.03%	-0.11%	-0.16%	-0.02%	-0.13%	-0.15%	-0.11%	0.24%	-0.40%	-0.03%
Private Equity	0.79%	-1.59%	-0.40%	0.28%	0.06%	0.13%	0.01%	0.17%	-0.02%	-0.16%	0.12%	-0.17%	-0.78%	-0.07%
Tips/Commodities	0.04%	0.79%	-0.60%	0.13%	-0.16%	-0.24%	-0.24%	-0.22%					-0.49%	-0.04%
Cash		0.00%	0.18%	0.25%	0.07%	-0.01%	0.01%	0.02%	0.04%	0.00%	-0.03%	0.16%	0.69%	0.06%
Total asset allocation diff.	<b>0.48%</b>	<b>0.68%</b>	<b>0.49%</b>	<b>0.35%</b>	<b>0.64%</b>	<b>-0.10%</b>	<b>0.53%</b>	<b>-0.82%</b>	<b>-0.35%</b>	<b>-0.46%</b>	<b>0.14%</b>	<b>-0.61%</b>	<b>0.96%</b>	<b>0.08%</b>
Other	0.96%	0.79%	0.48%	0.66%	0.17%	0.23%	0.27%	0.10%	-0.21%	-0.13%	-0.18%	0.03%	3.17%	0.26%
Total Difference	<b>7.61%</b>	<b>-2.36%</b>	<b>-4.45%</b>	<b>3.82%</b>	<b>2.37%</b>	<b>3.74%</b>	<b>1.06%</b>	<b>-0.44%</b>	<b>0.96%</b>	<b>2.27%</b>	<b>1.12%</b>	<b>1.29%</b>	<b>16.98%</b>	<b>1.37%</b>

\*Weighted composite of domestic and international for years prior to FY 2005

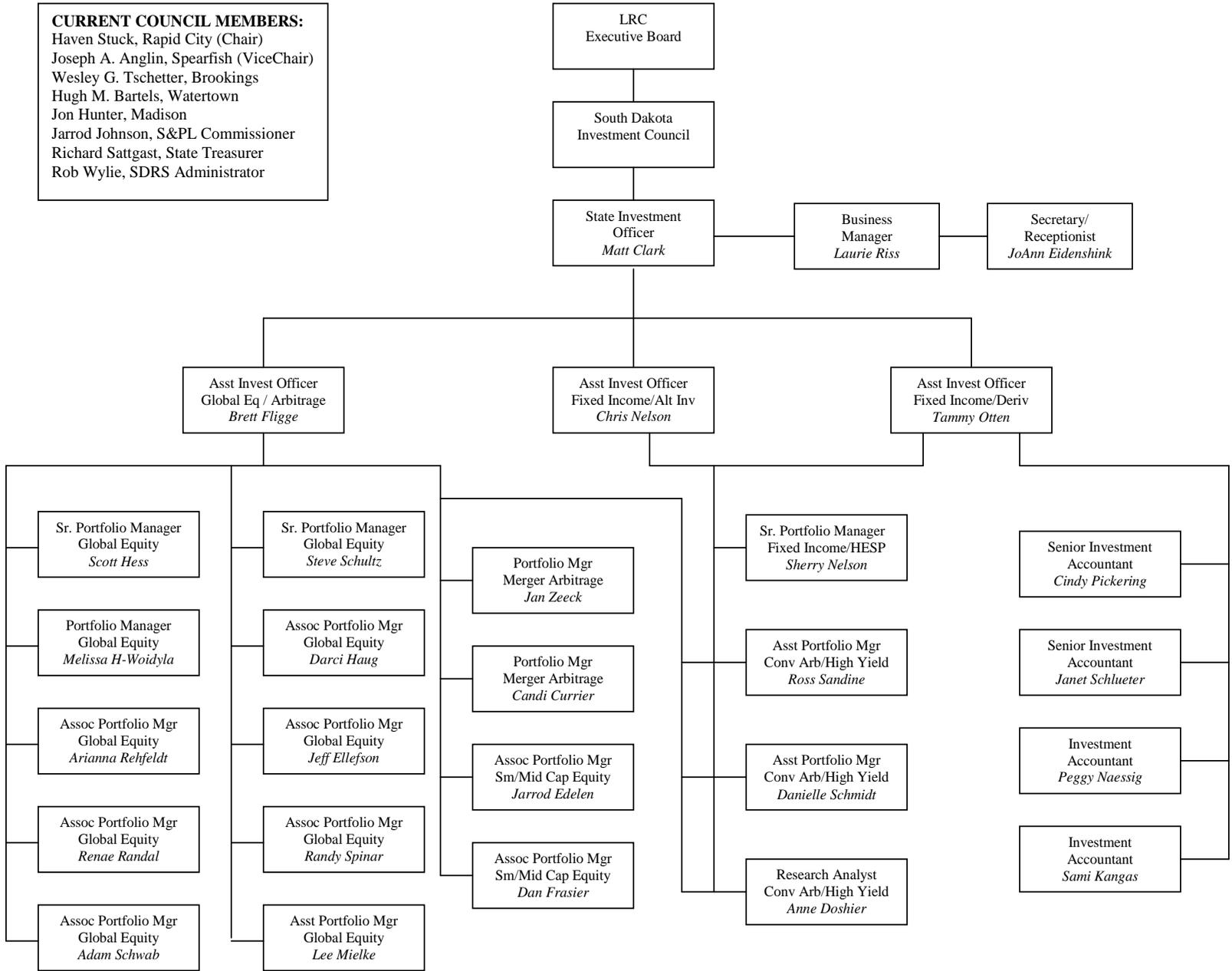
# Council Role

- Select State Investment Officer
- Maintain a bottom-line oriented non-political environment
- Establish investment policy
  - Benchmarks and asset allocation
  - Oversight of investment methodology
  - Oversight of external partners
- Monitor compliance
  - Audit committee
  - Performance attribution
  - Conflict of Interest Policy - Code of Ethics and Personal Investing Guidelines
- Approve annual budget and long term plan (then goes to Executive Board, BFM, Appropriations)
  - Compensation committee
  - Approve compensation framework
  - Recommend Investment Officer compensation to Executive Board

# Importance of Council Selection

- It is not enough that the investment team have patience and discipline.
- The Investment Council must also have patience and discipline in order for the investment team to be able to hang on during tough periods.
- Selection of Council members that believe in a long term approach and have the discipline to persevere during tough times is essential.
- The South Dakota Legislature and Governor, who together provide ultimate policy oversight, must also have patience if we are to succeed.
- This patience depends on faith in the concept of a long term strategy and confidence in the capability of the investment team and Council oversight.
- Selection of Council members whose credibility inspires confidence in the Council's oversight of the investment team and budget is essential.

**CURRENT COUNCIL MEMBERS:**  
 Haven Stuck, Rapid City (Chair)  
 Joseph A. Anglin, Spearfish (ViceChair)  
 Wesley G. Tschetter, Brookings  
 Hugh M. Bartels, Watertown  
 Jon Hunter, Madison  
 Jarrod Johnson, S&PL Commissioner  
 Richard Sattgast, State Treasurer  
 Rob Wylie, SDRS Administrator



Jan. 2011

# Recruitment and Training

- Hire the best raw talent available
  - Ethical, smart, hard working, team oriented, passion for investments, desire for long term opportunity
- Train to apply “our” long term value investment process
  - Usually starts with summer internship “boot camp”
- Motivate to work hard with hustle attitude and confidence
  - Determination and an expectation of winning can be contagious
- Instill teamwork philosophy
  - Well functioning teams superior to individuals
- Improve
  - Discuss mistakes – depersonalize to minimize defensiveness
- Get them to want to stay long term
  - Fair compensation, quality teammates, support when underperforming

# Investment Officer Succession Plan

- Emergency incapacity of Investment Officer
  - Decision making authority immediately delegated to asset allocation committee (Brett [Chair], Tammy, Chris) – will maintain contact with Council chair.
  - Council chair will convene emergency meeting to name an acting investment officer from members of the asset allocation committee.
- Upon notice of retirement or incapacitation, Chair will report initiation of succession plan to Executive Board and Governor
- Retain executive search firm and commence national search of external & internal candidates

# Compensation is linked to Investment Performance Added Value

- The primary goal of the compensation plan is to motivate superior investment performance and retain value added investment staff for the long term.
- There is a strong aversion by most investment managers to underperforming their benchmarks.
  - Punishment for underperformance (termination risk) discourages attempts to add value.
  - Linking compensation to performance encourages efforts to add value to counter risk of punishment.
- Longer term focused incentives can help encourage investing for the long term.
  - Investors focus more on longer term opportunities if results stay in their incentive several years.
  - Long term incentives guard against short term risk taking problems which have sunk many firms.
- We believe our investment team is most attractive to competitors when outperforming.
  - Total compensation should be higher when people are more sought after and less when they are not.
  - Our plan has up to half of potential compensation dependent on adding value.
- Important that incentives encourage adding value in difficult markets, not just up markets.
  - Investment team attempts to vary exposures within allowed minimum/maximum range in relation to perceived opportunity. Even if at the minimum exposure, we will lose some money in difficult markets.
  - Added value in down markets may be even more important than in up markets.
  - Skewing incentives to reward added value only when markets go up would discourage attempting to add value by reducing risk when markets are thought to be expensive.

# Compensation based on a 30% discount from cost of living adjusted private sector

- Deloitte compensation study presented to Council in April 06 (Updated April 2010). Their objective was to develop investment industry compensation benchmark comparisons for the SDIC investment positions.
- Council developed new target compensation levels balancing the desire to get a good deal for South Dakota (quality results and low cost) with the risk of losing the good deal if we cannot keep our people.
- Focus is on base salary plus average expected incentive. Incentive payouts are expected to average 50% of base salary over time if SDIC historical level of superior performance versus benchmarks is achieved.
- Benchmark compensation is the 50th percentile total cash compensation for the best position match.
  - Adjusted for difference in cost of living (-7% from national average for senior positions)
- SDIC target compensation is 70% of adjusted benchmark (30% discount on top of cost of living adjustments). 30% discount balances getting good deal with risk of losing the good deal if we cannot keep our people.
  - Some discount can be rationalized
    - Stability of long term oriented organization
    - Management's investment in training and development
    - Historic success and methodologies may increase perceived likelihood of future success
    - Sioux Falls location may be a positive (modest for most versus Minneapolis, etc)
  - Discounts must be viewed as reasonable or risk losing people
    - Too many investment firms with nice people and pleasant locations to push too far (e.g. Minneapolis)
    - Believe our people are attractive to others due to reputation and success especially after attaining significant experience

## FY 2010 Performance

### Compensation & Return-Linked Incentive Methodology Review

- FY2010 SDRS investment return was 18.73%
  - Large pension fund peer universe median return was 14.49%
  - Investment Council's capital market index benchmark return was 11.12%
  - Added value of 7.61% versus capital market benchmark is largest in Council history
  - Average added value over the Council's 37 year history is .81%
  - Council long term return continues to rank 1st for its full history
- In dollar terms the 18.73% return is \$1.05 billion for SDRS
- Outperformance of 7.6% is \$429 million dollars of added value
- Added value (1&4 yr periods) results in a 61.56% payout for return-linked portion of compensation for the Investment Officer
  - The payout is roughly 1/20<sup>th</sup> of 1% of the added value
- Compensation based on private sector pay for comparable positions after adjusting for cost of living difference and a further 30% haircut to balance the desire to get a good deal for South Dakota (through quality results and low cost) with risk of losing the good deal if we cannot keep our people.
  - Retaining value added staff long term is helpful to the Council sticking with its long term investment strategies during difficult periods
  - Internal staff development model and the ten to twenty year timeframe for staff to become fully experienced increases need to retain staff long term
- Council believes portion of compensation should be linked to added value to motivate performance and to retain staff when performance is superior
  - Investment team more attractive to competitors when outperforming, thus pay higher when adding value and lower when not adding value
  - Incentives focused primarily on multi-year timeframes to encourage investing long term with some on the one year to always have something at stake
  - Important to encourage adding value in difficult markets, not just up markets
  - Total Compensation includes base salary portion for two-thirds and return-linked portion for the other third consisting of an assumed average payout of 50% of base
  - Payout can range in any year from 0% to 100% depending on size of outperformance versus benchmarks
  - To average a 50% payout requires added value consistent with the long term track record

# Use of External Managers

- Investment categories the Investment Office does not manage internally
  - Real Estate - requires specialized real estate management expertise
  - Private Equity – requires hands on business management expertise
  - Distressed residential mortgages – requires house and servicer level databases
- Educational relationships in areas with an internal capability
  - Global Equity – to interact with firms on our internal “smart investor” list
  - Distressed corporate debt – interaction + diversify while enhancing internal capabilities
  - Research and ideas from outside firms can supplement our own research efforts
  - Interaction with leading firms helps identify best practices to aid our improvement

# Selection of External Managers

- Identify investment firms with long term track record of success
  - Receive marketing materials or contact periodically from most major firms
  - Ask peers and other relationships for recommendations
  - Note press articles featuring firms with long term success
  - Review databases of historical manager returns
- Introductory meeting helps us learn about their people and process
  - Managers often seek to meet with us when traveling through our area. If we become serious about a relationship, we visit them to meet more of their team.
- Investment team driven approach to prevent manager hiring scandals
  - Problems elsewhere tend to involve individual board members pressuring or overriding staff to hire or retain managers who provide them campaign fundraising help.
  - Team approach helps discourage any problems and filtering for only long term successful managers tends to eliminate those who might market too aggressively.
  - We have not had any of these problems in South Dakota. The ethics of the individuals on the Council are important, and the process provides additional safeguards.

# Blackstone Real Estate Group

## Opportunistic strategy to exploit changing market conditions

### Mid 1990's: Distressed Investing

- Distress following a significant downturn in the commercial real estate sector
- Focus on undercapitalized and distressed assets, portfolios and loans
- Examples: DeBartolo Corp., Interstone Partners, Worldwide Plaza, Davidson Hotels

### Late 90's-2000: Premium Assets / Intl.

- Stabilizing market conditions but generally out of favor asset class during late 90's
- Acquisition of high-quality, well located institutional assets and expanding internationally
- Examples: Swissotel Portfolio, Descartes Tower, Savoy Group, Aon Center

### Post 9/11: Contrarian Hotel Investing

- Significant hotel distress as fundamentals decline dramatically in the wake of 9/11
- Contrarian focus on acquiring hotel companies as cash flows were depressed
- Examples: Homestead, Extended Stay Hotels, Prime Hospitality, Boca Resorts, La Quinta

### 2003-2007: Public-to- Private

- Improving fundamentals and significant competition for single asset transactions
- Focus on large scale public-to-private transactions where there was less competition
- Examples: La Quinta, Carr America, Trizec, Equity Office Properties, Center Parcs, Hilton Hotels

### 2008 - Current: Return to Distressed Investing

- Significant distress following the credit-crisis and declining operating fundamentals
- Patience in waiting for true distressed opportunities – near term focus on debt

# Blackstone Real Estate Group

Blackstone's public-to-private strategy highlights an example of how we are able to exploit market inefficiencies

## Size & Complexity Limit Competition

- Unique skill set to understand complex structure, tax, liability, personnel, and financing issues

## Wholesale to Retail Discounts

- Opportunity to sell components in pieces to maximize the value of the whole

## Overhead Savings

- Ability to eliminate public company costs, consolidate operations and outsource functions

## Financing Improvements

- Conversion of high cost corporate unsecured debt to securitized debt

## Hidden Assets

- Opportunity to realize value in assets that may not be recognized in larger public corporations

## Improved Operations

- Opportunity to improve operating margins, reduce costs, maximize revenue, and re-measure space

# Relationship with Steve Myers

## former State Investment Officer

- Original focus at time relationship began
  - Desire by Executive Board and SDIC to continue involvement by Mr. Myers who led South Dakota to the best performance in the nation during his 33 years as state investment officer.
  - Sounding board for Investment Officer-especially for areas where the two of them worked together for over 20 years. Will take a few years for other staff to step into that role.
  - Maintaining, benefiting from, and monitoring external relationships he played key role developing. Ongoing involvement would help minimize disruption to relationships while helping our staff develop their own long-term relationships.
  - Helping to mentor staff – the Investment Officer has also mentored staff for many years – however, we are thin at the top in terms of number of experienced senior staff compared to the volume of younger and intermediate investment staff.
- Revised focus of consulting relationship
  - Scope and expense both reduced 50%.
  - Help maintain, benefit from, and monitor strategic external relationships with emphasis on helping complete transition to other investment council staff.
  - Serve as sounding board for Investment Officer, especially if markets decline sharply again.
  - Executive Board agreed to support for a couple of additional years. The Investment Officer and Mr. Myers were initially encouraged by Executive Board leadership to enter into the relationship and neither wants the issue to be a distraction. This would conclude on June 30, 2011, unless support for further continuation was very strong.

# Our approach may be the “hard road” – but it is worth it

- It can seem like we do things the hard way. A lot more internal research is required and one’s patience, discipline, and faith in the future are frequently tested.
- The bottom line is the “hard road” is necessary to achieve our goal. If we take the route most others take, we will likely get the same disappointing outcome.
- For almost forty years the Legislature and Executive branch have recognized their opportunity to nurture a prudent successful investment approach. Future success depends on this continuing.
- On tough days, when one may wonder if it is all worth it, I remind myself how much our retired teachers or patrolmen appreciate having that extra one-third portion of their retirement benefit.
- We know there are no guarantees of any outcome. In the face of the uncertainty, we are at peace knowing we gave our best trying to deliver exceptional value and from trying to be well funded.