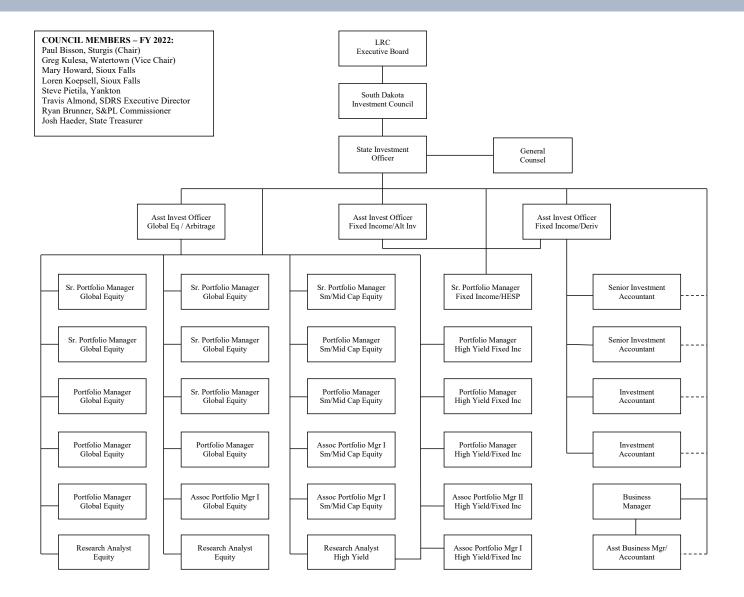


Investment Performance FY 2021 and Budget Request FY 2023

Presented to LRC Executive Board

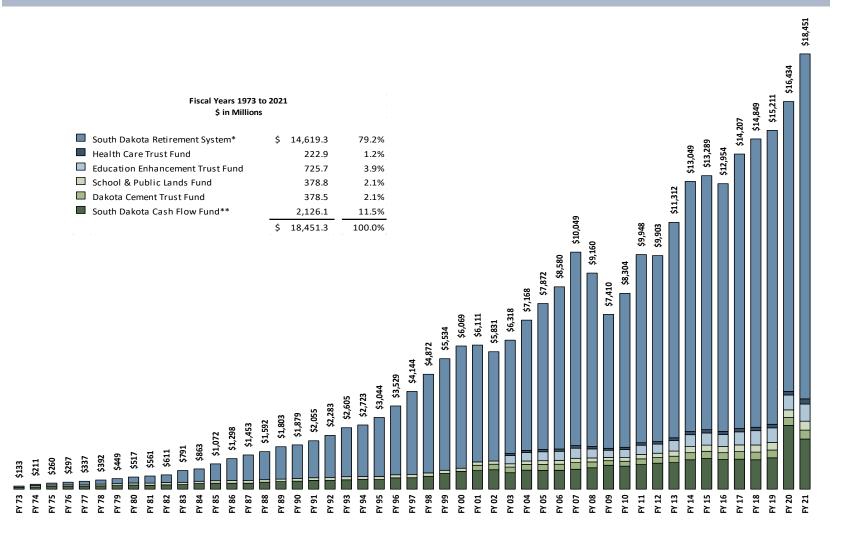
August 31, 2021

Organization Chart



1

Assets



*The South Dakota Cement Plant Retirement Fund (CPRF) was consolidated into the South Dakota Retirement System (SDRS) on April 1, 2014, per SDCL 3-12C-1642. For purposes of this exhibit, CPRF Assets for Fiscal Years 1973 - 2013 are included with SDRS. **Includes Coronavirus Relief Fund

Investment Performance Returns vs. Benchmarks (unaudited)

		<u>FY 2021</u>	5 years Annualized <u>FY 17 - 21</u>	10 years Annualized <u>FY 12 – 21</u>	20 years Annualized <u>FY 02 – 21</u>
•	SDRS Total Fund *	22.03%	9.82%	9.23%	8.11%
•	Capital Market Benchmark	27.97%	11.01%	9.12%	7.40%
	Added Value	-5.94%	-1.19%	0.11%	0.71%
•	State Universe (est)	28.57%	11.46%	9.46%	7.39%
	Added Value **	-6.54%	-1.64%	-0.33%	0.48%

- Beginning FY 2021 SDRS Assets \$12.287 billion
- Ending FY 2021 SDRS Assets \$14.619 billion

Note: *Time-weighted rates of return are net of fees FY 14-21 and gross of fees FY 02-13

** Added Value using time weighted rate of return net of fees for all periods

Investment Performance

Returns vs. Benchmarks (unaudited)

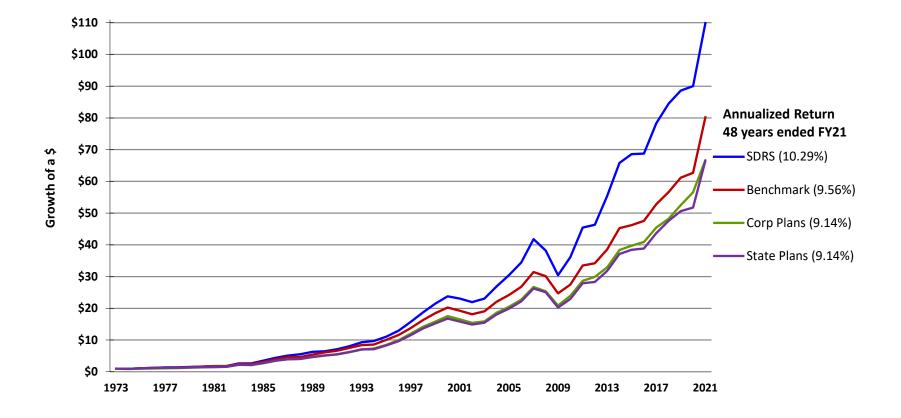
.720 billion
.018 billion
906 billion
.181 billion

• Extra earnings resulting from performance: (not including compounding)

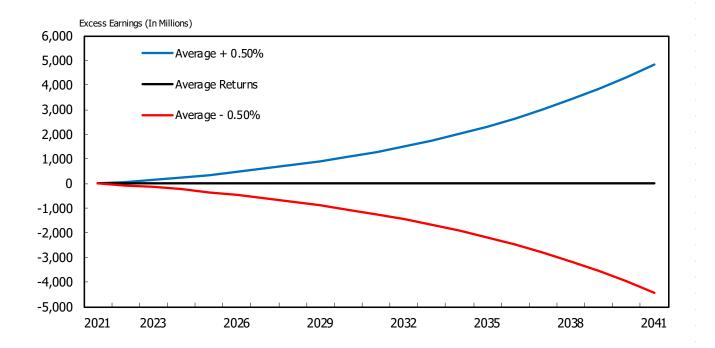
	<u>1 year</u>	<u>5 years</u>	<u>10 years</u>	20 years
\circ vs Capital Markets Benchmark	\$-729 million	\$-846 million	\$-252 million	\$576 million
 vs State Funds 	\$-803 million	\$-1.039 billion	\$-200 million	\$498 million

Superior returns add up over time

Cumulative returns for SDRS, Benchmark, Corporate Plans, and other States

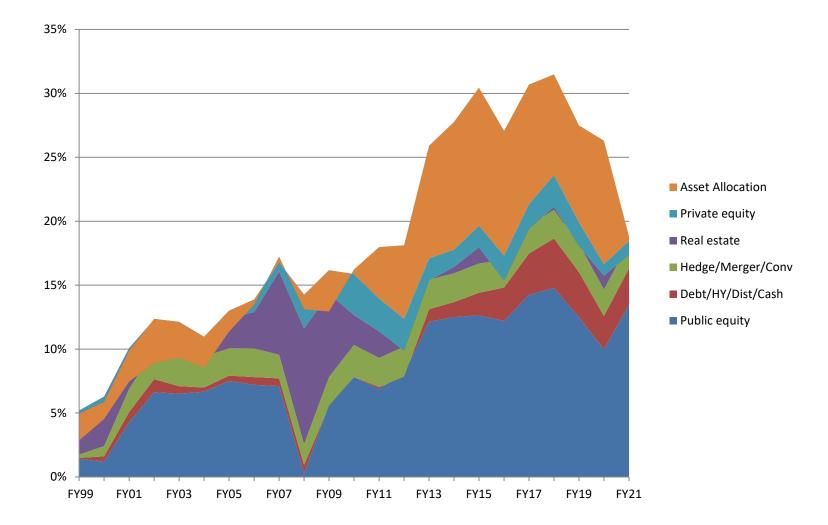


Potential Excess Earnings

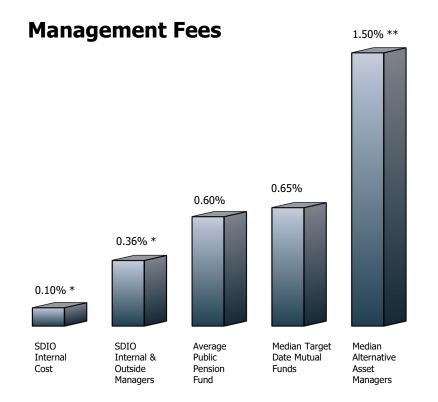


- SDIC 48-year outperformance = .7% annualized vs. benchmark
- Outperformance of .5% next 20 years = extra \$4.8 billion
- Underperformance of .5% = cost to retirement system of \$4.4 billion.

Many pistons contribute Cumulative added value by source FY99 to FY21



Cost Efficiency



Difference between SDIC cost of .36% and average public pension fund cost of .60% is \$44.0 million per year

* SDIC projected expenses for FY 2023 using adjusted assets and expected average performance incentives

** Plus 20% profit participation after preferred return

Compensation Overview

- Long term results have significantly exceeded benchmarks
- Cost efficient due to internal management capabilities
 - Securing team to preserve internal capabilities best chance to remain cost efficient
 - Internal cost .1% with expected average incentives
- Continued success dependent on high caliber team
 - Internally manage most assets using internally generated research
- Future team depends on retention of talent pipeline and trainers
 - Develop internally as cannot compete for top tier experienced talent
- Compensation plan aligned with goal of adding value over long term
 - Motivate superior long-term performance and retain successful staff

Compensation Overview, cont'd

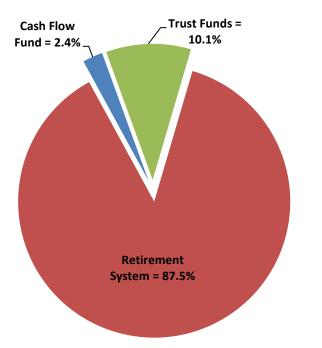
Compensation target

- Council target is 70% of cost-of-living adjusted median industry pay to balance getting a good deal for South Dakota without losing the good deal if we cannot keep our people
- Incorporates performance incentives
- Compensation study updated approximately every three years

Compensation study 2013

- Study showed compensation had fallen to 55%
- Expanded incentive compensation plan as opposed to adjusting base compensation
- Incentives expanded to include longer term and stretch incentives and expected to average 80% (0% to 200%) -- This reached 95% of 70% target
- Incentives aligned with the goal of adding value and only paid if add value
- Compensation study 2016
 - Indicated modest slippage, but not sufficient to request adjustment
- Compensation study 2019
 - Indicated modest further slippage, but not sufficient to request adjustment

Budget Funding Sources



South Dakota Retirement System = 87.5%
Cash Flow Fund = 2.4%
Dakota Cement Trust = 2.4%
Education Enhancement Trust = 4.3%
Health Care Trust = 1.1%
School & Public Lands = 2.3%

Budget funded by assets under management

0% General Fund appropriation

Long-Term Plan Executive Summary Projected LTP Budget

INVESTMENT COUNCIL BUDGET	<u>FY 2023</u>	<u>FY 2028</u>	<u>FY 2033</u>
Personal Services			
Number of Employees	35.00	35.00	35.00
Base Compensation - Total Staff	6,986,311	8,599,469	10,814,175
Student Interns	85,299	95,337	106,556
Investment Council	6,943	7,760	8,673
Flexibility funds-Retirements & Resignations	171,570	191,760	214,326
Investment Incentive Maximum	11,889,443	14,769,504	18,777,060
Benefits	2,770,951	3,134,097	4,040,920
Total Personal Services	21,910,518	26,797,927	33,961,710
Operating Expenses			
Contractual Services	2,450,903	2,723,920	2,958,621
Travel	86,431	96,602	107,970
Office Supplies & Postage	7,000	7,824	8,744
Capital Assets	40,520	54,352	61,441
Total Operating Expenses	2,584,854	2,882,698	3,136,777
Total Investment Council Budget ⁽¹⁾	24,495,372	29,680,625	37,098,487
ASSET SUMMARY ⁽²⁾			
Internal Assets	14,736,258,237	18,148,573,956	22,363,768,079
External Assets	4,653,555,233	5,731,128,618	7,062,242,551
Total Assets	19,389,813,470	23,879,702,574	29,426,010,630
EXPENSE SUMMARY			
Internal Expenses	24,495,372	29,680,625	37,098,487
External Manager Fees	51,189,108	63,042,415	77,684,668
Total Expenses	75,684,479	92,723,040	114,783,155
UNIT COST SUMMARY ⁽³⁾			
Internal Expenses as % of Total Assets	0.098%	0.096%	0.096%
Total Expenses as % of Total Assets	0.364%	0.362%	0.362%

⁽¹⁾ FY 2023 amounts differ from the actual final budget request. To reflect all costs, the LTP includes an assumed salary policy of 2.25% and an additional 1.75% increase for investment positions. The salary policy is is not included in the budget request as any salary policy is added afterward.

⁽²⁾ Projections based on long-term assumed returns applied to 6/30/21 assets. Updated each June 30.

⁽³⁾ Unit Cost Summary uses assumed average investment performance incentives

FY 2021 Budget and Actual

	Expended <u>FY 2021</u>	Received FY 2021	<u>Unexpended</u>
PERSONAL SERVICES			
TOTAL FTEs	34.25	35.00	
BASE COMPENSATION			
Base Compensation - Investment Staff	5,216,937	5,595,504	378,567.69 *
Base Comp - Admin, Acct, Legal, Longevity	446,997	626,820	179,823.14
TOTAL STAFF - FULL TIME	5,663,934	6,222,325	558,390.84
Part-Time - Legal & Interns	55,886	36,942	(18,944.00)
Investment Council	2,175	6,585	4,410.00
Retirement & resignation flexibility funds	0	164,103	164,103.00
Benefits	1,072,660	1,253,445	180,784.61
Total Base Compensation	6,794,656	7,683,400	888,744.45
Investment Performance Incentives			
Maximum Potential Investment Perf Incentive	1,187,866	10,572,221	9,384,355.00
Benefits	127,057	1,258,966	1,131,909.39
Total Investment Performance Incentives	1,314,923	11,831,187	10,516,264.39
Total Personal Services	8,109,578	19,514,587	11,405,008.84
OPERATING EXPENSES			
Contractual Total (see appendix for further details)	1,829,978	2,434,567	604,588.72
Travel	646	86,431	85,785.02
Office Supplies	2,338	7,000	4,662.50
Capital Assets	22,009	40,520	18,511.02
Total Operating Expenses	1,854,971	2,568,518	713,547.26
TOTAL BUDGET	9,964,549	22,083,105	12,118,556.10

*Includes \$56,884 Allianz reimbursement & unused compensation Note: Budget is funded as needed and ended year with a cash balance of \$3,005,991.86 which is credited against FY 2022 authorized budget

FY 2023 Budget Request Summary

	Received FY 2022	Request <u>FY 2023</u>	<u>% change</u>
PERSONAL SERVICES			
TOTAL FTEs	35.00	35.00	
BASE COMPENSATION			
Base Compensation - Investment Staff	5,924,242	6,138,506	3.62%
Base Comp - Admin, Acct, Legal, Longevity	691,805	698,107	0.91%
TOTAL STAFF - FULL TIME	6,616,047	6,836,614	3.33%
Part-Time - Legal & Interns	83,422	83,422	0.00%
Investment Council	6,790	6,790	0.00%
Retirement & resignation flexibility funds	167,795	167,795	0.00%
Benefits	1,286,459	1,309,097	1.76%
Total Base Compensation	8,160,513	8,403,718	2.98%
Investment Performance Incentives			
Maximum Potential Investment Perf Incentive	11,191,009	11,848,483	5.88%
Benefits	1,344,359	1,435,091	6.75%
Total Investment Performance Incentives	12,535,368	13,283,574	5.97%
Total Personal Services	20,695,881	21,687,291	4.79%
OPERATING EXPENSES			
Contractual Total (see next page for further details)	2,372,642	2,450,903	3.30%
Travel	86,431	86,431	0.00%
Office Supplies	7,000	7,000	0.00%
Capital Assets	40,520	40,520	0.00%
Total Operating Expenses	2,506,593	2,584,854	3.12%
TOTAL BUDGET	23,202,473	24,272,146	4.61%
UNIT COST SUMMARY *			
Internal Expenses as % of Total Adjusted Assets	0.097%	0.097%	
Total Expenses as % of Total Adjusted Assets	0.363%	0.363%	

* For FY 22 & 23--unit cost based on total assets adjusted to long-term value, expenses using assumed average investment performance incentives, long-term average of retirement & resignation flexibility funds, and an assumed 2.25% salary policy.

FY 2023 Budget Request Contractual services detail

	Received FY 2022	Request FY 2023	<u>% chng</u>
CONTRACTUAL SERVICES	112022	112020	<u>// cring</u>
Investment Services			
Consulting Services	180,000	180,000	0.00%
Investment Accounting, Performance Benchmarking	160,924	175,451	9.03%
Investment Databases, Newsfeeds & Quote Fees	734,267	762,722	3.88%
Investment Research Services	378,655	419,200	10.71%
Flexibility - From Brokerage to Independent Research	250,000	225,000	-10.00%
Total Investment Services	1,703,846	1,762,373	3.43%
Administrative Expenses			
Office Rent	139,019	153,000	10.06%
Bond/Liability Insurance	8,385	8,385	0.00%
Telephone	18,000	18,000	0.00%
Office Equip Rental/Maintenance/Misc	10,020	10,020	0.00%
Bureau of Info & Telecommunications (BIT)	93,635	93,635	0.00%
State Central Services	13,555	13,555	0.00%
Legislative Audit	60,510	60,510	0.00%
Attorney General's Office - Legal Services	0	0	0.00%
Custodial Fees - Global	287,672	293,425	2.00%
Seminars/Educational Programs	35,000	35,000	0.00%
Business Publications	3,000	3,000	0.00%
Total Administrative Expenses	668,796	688,530	2.95%
TOTAL CONTRACTUAL SERVICES	2,372,642	2,450,903	3.30%

Trust Funds (unaudited)

Health Care Trust (established April 2001)

				1121
Principal as of 6/30/21	\$ 135,631,024	Asset Allocation	Current	Benchmark
Principal as of 6/30/21 adjusted for inflation	\$ 181,814,200	Global & Private Equity	32%	51%
Fair Value (FV) as of 6/30/21	\$ 222,925,449	Real Estate	9%	10%
		Fixed Income-IG	15%	30%
Difference - FV less principal	\$ 87,294,425	Fixed Income-HY	4%	7%
Difference - FV less infl. adj. prin.	\$ 41,111,249	HY RE Debt	6%	0%
		Money Market	34%	<u>2%</u>
Fiscal year to date return	17.28%	Total	100%	100%
Longterm expected mean return	6.16%			
Payout of 4% plus expected inflation of 2.25%	6.25%			
Expected return cushion/shortfall	-0.09%			
		Law allows up to 4% of the	e 16 quarte	er average to
Distribution for FY 22 (July 1, 2021)	5,839,236	be distributed as long as p	rincipal is	not violated
Distribution for FY 21 (July 2, 2020)	5,676,706	as of December 31 each y	/ear.	

Education Enhancement Trust (established April 2001)

Principal as of 6/30/20	\$ 420,763,604	Asset Allocation	Current	FY 21 Benchmark
Principal as of 6/30/20 adjusted for inflation	\$ 593,579,637	Global & Private Equity	33%	51%
Fair Value (FV) as of 6/30/20	\$ 725,699,117	Real Estate	9%	10%
		Fixed Income-IG	9%	22%
Difference - FV less principal	\$ 304,935,513	Fixed Income-tax ex	6%	8%
Difference - FV less infl. adj. prin.	\$ 132,119,480	Fixed Income-HY	4%	7%
		HY RE Debt	6%	0%
Fiscal year to date return	17.85%	Money Market	<u>35%</u>	<u>2%</u>
Longterm expected return (lower due to tax-exempts)	6.11%	Total	100%	100%
Payout of 4% plus expected inflation of 2.25%	6.25%			
Expected return cushion/shortfall	-0.14%			
	00.070.057	Law allows up to 4% of the	•	•
Distribution for FY 22 (July 1, 2021)	23,673,657	be distributed as long as p	•	not violated
Distribution for FY 21 (July 1, 2020)	22,515,470	as of December 31 each y	/ear.	

FY 21

Trust Funds (unaudited)

Dakota Cement Trust (established April 2001)

				FY 21
Principal as of 6/30/20	\$ 238,000,000	Asset Allocation	Current	Benchmark
Principal as of 6/30/20 adjusted for inflation	\$ 364,782,115	Global & Private Equity	31%	51%
Fair Value (FV) as of 6/30/20	\$ 378,520,394	Real Estate	9%	10%
		Fixed Income-IG	15%	30%
Difference - FV less principal	\$ 140,520,394	Fixed Income-HY	4%	7%
Difference - FV less infl. adj. principal	\$ 13,738,279	HY RE Debt	6%	0%
		Money Market	<u>34%</u>	<u>2%</u>
Fiscal year to date return	17.52%	Total	100%	100%
Longterm expected mean return	6.16%			
Payout of 4% plus expected inflation of 2.25%	6.25%			
Expected return cushion/shortfall	-0.09%			
		Constitution allows 4% of	the lesser	of 1) the 16
Distribution for FY 21 (May 2021 to GF)	13,404,156	quarter average balance o	r 2) the cur	rent
Distribution for FY 20 (May 2020 to GF)	13,036,297	December 31 fair value, be the following year.	e distribute	d by June of

School & Public Lands

50	HOUL & FUDIIC Latius						
	Inflation protection mandated by Constitu	utional Amendme	ent -				
	(payout is reduced by inflation if inflation	not offset by real	lized net gains)			FY 21	
				Asset Allocation	Current	<u>Benchmark</u>	
	Fair Value as of 6/30/21		\$ 378,763,803	Global & Private Equity	32%	51%	
				Real Estate	9%	10%	
	Fiscal year to date return		17.56%	Fixed Income-IG	15%	30%	
	Longterm expected mean return		6.16%	Fixed Income-HY	4%	7%	
				HY RE Debt	6%	0%	
	Distribution for FY 21 K-12 (2/10/21)		12,823,388	Money Market	<u>34%</u>	<u>2%</u>	
	Distribution for FY 21 Board of Regent	s (6/8/21)	3,193,107	Total	100%	100%	
		TOTAL	16,016,495				

Investment Performance Incentive – FY 2021 State Investment Officer

Return-linked compensation maximum is 200% on base compensation of \$495,687. Performance Period is the one year, four year and ten year annualized fiscal years payable in FY 2022

I. 60% OF PLAN BASED ON TOTAL FUND RESULTS

A) 30% BASED ON INVESTMENT COUNCIL'S CAPITAL MARKET BENCHMARK (CMB)

Period	Basis Points Outperformance	<u>% Payout</u>	<u>\$ Payout</u>
1 year	- 593.70	0%	\$0
	- 218.51	0%	\$0
4 year 10 year	+10.97	40%	\$0 \$19,827.47
4 yr stretch	- 218.51	0%	\$0
10 yr stretch	+10.97	0%	\$0

B) 30% BASED ON MELLON TOTAL BILLION DOLLAR FUNDS - CORPORATE UNIVERSE (using yearly medians prior to FY 14 and CMB from FY 14 on)

Period	Basis Points Outperformance	<u>% Payout</u>	<u>\$ Payout</u>
1 year	-593.70	0%	\$ 0
4 year	-218.51	0%	\$0
10 year	+13.25	40%	\$ 19,827.47
4 yr stretch	-218.51	0%	\$ 0
10 yr stretch	+13.25	0%	\$0

II. 40% OF PLAN BASED ON AGGREGATE PORTFOLIO MANAGERS' RESULTS

Performance measurement based on the aggregate return-linked compensation of the assistant investment officers and portfolio managers divided by the aggregate potential return-linked compensation for the performance period, based on one year, 4 years, 10 years, 4 years stretch and 10 years stretch.

Maximum	Earned				
Potential	Return-linked				
Compensation	Compensation	<u>% Payout</u>	<u>\$ Payout</u>		
\$9,192,943.65	\$ 1,707,731.96	18.5766%	<u>\$ 73,665.31</u>		
TOTAL F	\$113,320.25				
Percentage of Salary			22.861%*		
*before reduction for support staff incentive					

Appendix

- Investment performance incentives
- Target discount rationale
- FY21 Budget and Actual Contractual Services details

Investment performance incentives Align compensation with goal of adding value

- Encourage superior performance
 - Counters underperformance career risk that can discourage efforts to add value
 - Multiyear timeframes encourage investing for the long term
- Encourage retention of successful staff
 - Team is most attractive to other organizations when winning
 - Shifts compensation higher when people more sought and down when losing
- Incentives paid only for added value
- Important to encourage adding value in good and bad markets
 - Added value in down markets more important than in up markets
 - Encourages adding value by reducing risk when markets expensive

Target discount rationale

- Need top caliber people long term
 - Unsuccessful people or job hoppers always available but no bargain, even if free
 - Compensation is too low to recruit veteran high-performers from elsewhere
 - Must develop team internally by training cream of crop local University graduates
 - Takes 15 to 20 years to fully develop seasoned talent
 - If lose talent pipeline or trainers, will jeopardized handoff to next generation
- Our past history and observation of others suggest 70% target
 - Only way to know for sure how large discounts can work is to risk damaging team
 - 50% discount levels in past led to difficulties
 - 30% discount believed significant relative to other high-end professionals
 - Industry subject to intense performance measurement with significant consequences for winning and losing which intensifies desire for financial security
 - Discounts for top SDIC performers may be much larger as industry pay for top quartile performers can be double the median

FY21 Budget and Actual Contractual services detail

	Expended <u>FY 2021</u>	Received <u>FY 2021</u>	<u>Unexpended</u>
CONTRACTUAL SERVICES			
Investment Services			
Consulting Services	22,285	180,000	157,715
Investment Accounting, Performance Benchmarking	153,515	153,314	(201)
Investment Databases, Newsfeeds & Quote Fees	676,771	734,267	57,496
Investment Research Services	342,902	450,100	107,198
Flexibility - From Brokerage to Independent Research	0	250,000	250,000
Total Investment Services	1,195,473	1,767,681	572,208
Administrative Expenses			
Office Rent	139,019	139,019	0
Bond/Liability Insurance	2,944	8,385	5,441
Telephone	16,007	18,000	1,993
Office Equip Rental/Maintenance/Misc	14,026	10,016	(4,010)
Bureau of Info & Telecommunications (BIT)	90,147	88,044	(2,103)
State Central Services	10,485	13,372	2,887
Legislative Audit	56,308	51,500	(4,808)
Attorney General's Office - Legal Services	0	18,509	18,509
Custodial Fees - Global	282,059	282,041	(18)
Seminars/Educational Programs	22,696	35,000	12,304
Business Publications	815	3,000	2,185
Total Administrative Expenses	634,506	666,886	32,380
TOTAL CONTRACTUAL SERVICES	1,829,979	2,434,567	604,588