

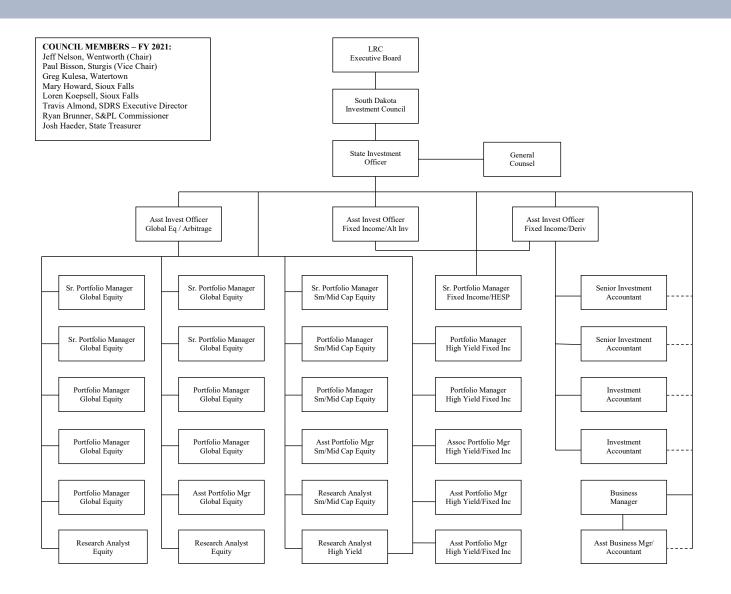
Investment Performance FY 2020 and Budget Request FY 2022

Presented to

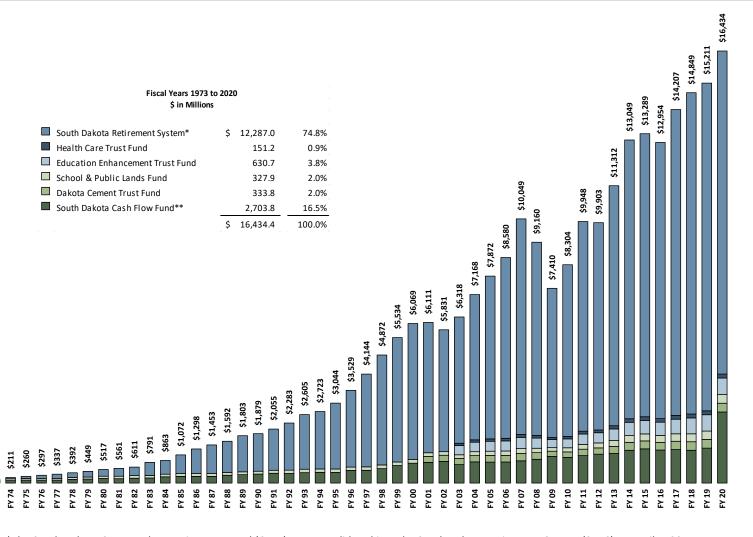
LRC Executive Board

August 31, 2020

Organization Chart



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 2020</u>	5 years Annualized FY 16 - 20	10 years Annualized FY 11 – 20	20 years Annualized FY 01 – 20
•	SDRS Total Fund	1.59%	5.59%	9.41%	6.63%
•	Capital Market Benchmark Added Value	2.52% -0.93%	6.27%	8.60% .81%	5.81% 0.82%
•	State Universe (est) Added Value	2.15% -0.56%	5.76% -0.17%	8.45% 0.96%	5.76% 0.88%
•	Beginning FY 2020 SDRS Assets	\$:	12.460 billion		
•	Ending FY 2020 SDRS Assets	\$:	12.287 billion		

Note: All time-weighted rates of return are net of fees

Investment Performance Returns vs. Benchmarks (unaudited)

Total SDRS dollars earned Fiscal Year 2020
 \$ 242 million

Total SDRS dollars earned last 5 years \$ 3.354 billion

Total SDRS dollars earned last 10 years \$ 8.839 billion

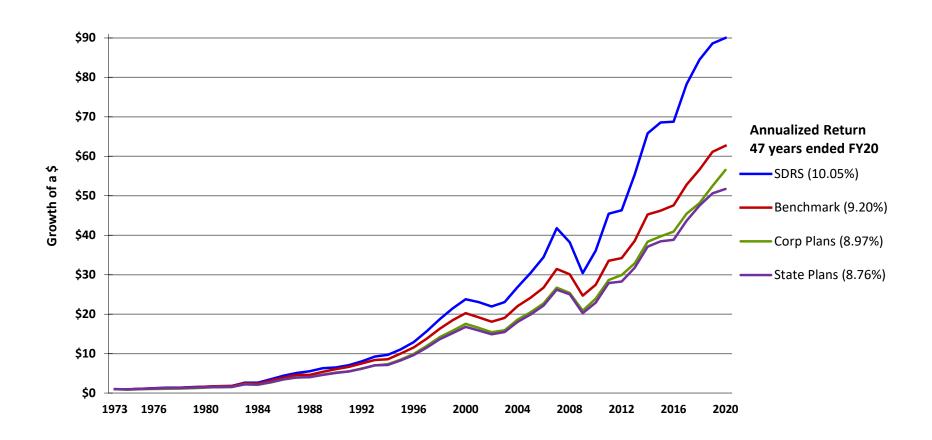
Total SDRS dollars earned last 20 years \$11.315 billion

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

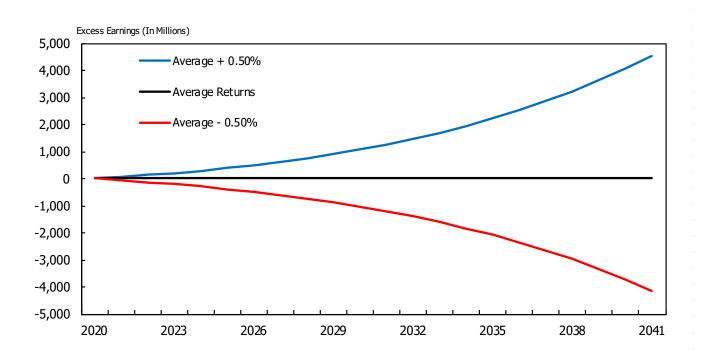
		<u>1 year</u>	<u>5 years</u>	<u>10 years</u>	20 years
0	vs Capital Markets Benchmark	\$-117 million	\$-396 million	\$722 million	\$1.423 billion
0	vs State Funds	\$-228 million	\$-303 million	\$823 million	\$1.440 billion

Superior returns add up over time

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



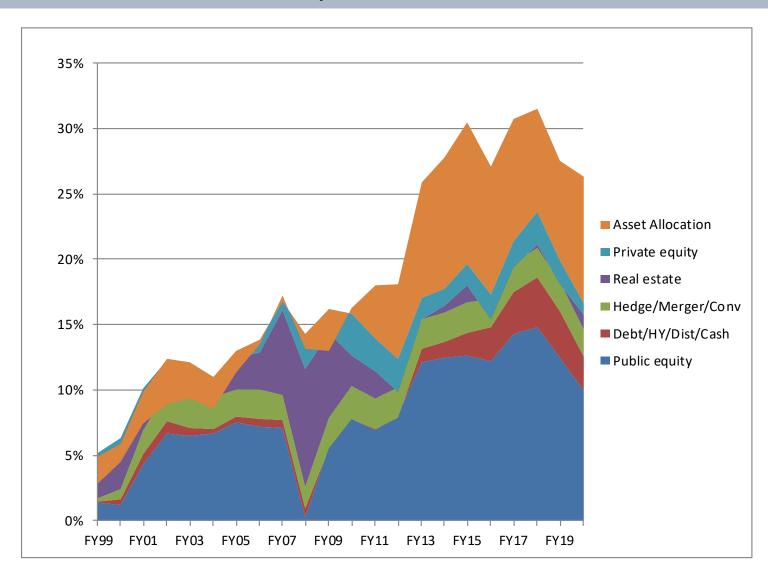
Potential Excess Earnings



- SDIC 47-year outperformance = .8% annualized vs. benchmark
- Outperformance of .5% next 20 years = extra \$4.6 billion
- Underperformance of .5% = cost to retirement system of \$4.1 billion.

Many pistons contribute

Cumulative added value by source FY99 to FY20



Cost Efficiency



Difference between SDIC cost of .35% and benchmark cost of .67% is \$49 million per year

^{*} SDIC projected expenses for FY 2022 using adjusted assets and expected average performance incentives

^{**} Plus 20% profit participation after preferred return

Compensation Overview

- Long term results have significantly exceeded benchmarks
 - Added over 25% beyond benchmark to SDRS assets in the past 22 years
- 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

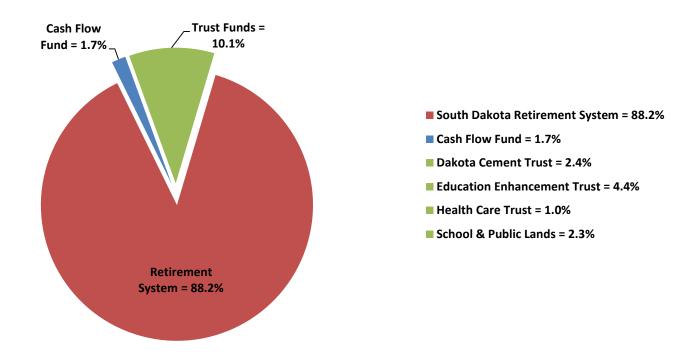
Compensation study 2016

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



Budget funded by assets under management

0% General Fund appropriation

Note: S&PL share of SDIC expenses paid from earnings of Cash Flow Fund $\,$

Long-Term Plan Executive Summary Projected LTP Budget

INVESTMENT COUNCIL BUDGET	FY 2022	FY 2027	FY 2032
Personal Services			
Number of Employees	35.00	35.00	35.00
Base Compensation - Total Staff	6,608,925	8,226,687	10,355,102
Student Interns	25,970	29,027	32,442
Investment Council	6,734	7,527	8,412
Flexibility funds-Retirements & Resignations	167,795	187,541	209,610
Investment Incentive Maximum	11,191,004	14,156,360	17,954,980
Benefits	2,650,344	3,029,174	3,898,920
Total Personal Services	20,650,774	25,636,316	32,459,467
Operating Expenses			
Contractual Services	2,361,205	2,640,203	2,868,061
Travel	86,431	96,602	107,970
Office Supplies & Postage	7,000	7,824	8,744
Capital Assets	40,520	53,770	60,770
Total Operating Expenses	2,495,156	2,798,398	3,045,545
Total Investment Council Budget (1)	25,507,895	28,434,714	35,505,012
ASSET SUMMARY (2)			
Internal Assets	12,606,845,194	15,536,415,263	19,157,407,741
External Assets	3,981,109,009	4,906,236,399	6,049,707,708
Total Assets	16,587,954,203	20,442,651,662	25,207,115,448
EXPENSE SUMMARY			
Internal Expenses	23,145,929	28,434,714	35,505,012
External Manager Fees	43,792,199	53,968,600	66,546,785
Total Expenses	66,938,128	82,403,314	102,051,797
UNIT COST SUMMARY (3)			
Internal Expenses as % of Total Assets	0.101%	0.100%	0.100%
Total Expenses as % of Total Assets	0.349%	0.348%	0.348%

⁽¹⁾ FY 2022 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 6/30/20 assets. Updated each June 30.

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

FY 2020 Budget and Actual

	Expended FY 2020	Received FY 2020	<u>Unexpended</u>
PERSONAL SERVICES			
TOTAL FTEs	34.25	35.25	
BASE COMPENSATION			
Base Compensation - Investment Staff	5,059,709	5,286,108	226,399.83 *
Base Comp - Accountants, Atty, Admin, Longevity	496,269	616,758	120,488.90
TOTAL STAFF - FULL TIME	5,555,978	5,902,866	346,888.73
P/T Staff Attorney & Interns	39,910	64,859	24,949.24
Investment Council	2,700	6,457	3,757.00
Retirement & resignation flexibility funds	27,548	160,885	133,337.40
Benefits	1,113,061	1,253,776	140,714.87
Total Base Compensation	6,739,197	7,388,843	649,647.24
Investment Performance Incentives			
Maximum Potential Investment Perf Incentive	1,925,262	9,954,947	8,029,685.00
Benefits	189,544	1,373,782	1,184,238.42
Total Investment Performance Incentives	2,114,806	11,328,728	9,213,923.42
Total Personal Services	8,854,002	18,717,571	9,863,570.66
OPERATING EXPENSES			
Contractual Total (see appendix for further details)	1,721,055	2,121,205	400,150.25
Travel	31,269	86,431	55,161.98
Office Supplies & Postage	2,895	7,000	4,104.53
Capital Assets	40,725	40,520	(205.24)
Total Operating Expenses	1,795,944	2,255,156	459,211.52
TOTAL BUDGET	10,649,947	20,972,727	10,322,782.18

^{*} Includes \$57,241.14 Allianz reimbursement & unusued compensation

Note: Budget is funded as needed and ended year with a cash balance of
\$2,395,671.01 which is credited against FY 2021 authorized budget

FY 2022 Budget Request

Summary

	Received FY 2021	Request FY 2022	% change
PERSONAL SERVICES			
TOTAL FTEs	35.00	35.00	
BASE COMPENSATION			
Base Compensation - Investment Staff	5,595,504	5,840,393	4.38%
Base Comp - Accts, Atty, Admin, Longevity	638,364	628,821	-1.49%
TOTAL STAFF - FULL TIME	6,233,868	6,469,215	3.78%
P/T Staff Attorney & Interns	25,399	25,399	0.00%
Investment Council	6,585	6,585	0.00%
Retirement & resignation flexibility funds	164,103	164,103	0.00%
Benefits	1,253,445	1,286,361	2.63%
Total Base Compensation	7,683,400	7,951,663	3.49%
Investment Performance Incentives			
Maximum Potential Investment Perf Incentive	10,572,221	11,191,008	5.85%
Benefits	1,258,966	1,344,359	6.78%
Total Investment Performance Incentives	11,831,187	12,535,367	5.95%
Total Personal Services	19,514,587	20,487,030	4.98%
OPERATING EXPENSES			
Contractual Total (see next page for further details)	2,423,688	2,361,205	-2.58%
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	2,557,639	2,495,156	-2.44%
TOTAL BUDGET	22,072,226	22,982,186	4.12%
UNIT COST SUMMARY *			
Internal Expenses as % of Total Adjusted Assets	0.100%	0.101%	
Total Expenses as % of Total Adjusted Assets	0.347%	0.349%	

^{*} For FY 21 & 22--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 2022 Budget Request

Contractual services detail

	Received	Request	
	FY 2021	FY 2022	<u>% chng</u>
CONTRACTUAL SERVICES			
Investment Services			
Consulting Services	180,000	180,000	0.00%
Investment Accounting, Performance Benchmarking	153,314	160,924	4.96%
Investment Databases, Newsfeeds & Quote Fees	734,267	734,267	0.00%
Investment Research Services	450,100	378,655	-15.87%
Flexibility - From Brokerage to Independent Research	250,000	250,000	0.00%
Total Investment Services (see next page for further details)	1,767,681	1,703,846	-3.61%
Administrative Expenses			
Office Rent	139,019	139,019	0.00%
Bond/Liability Insurance	8,385	8,385	0.00%
Telephone	18,000	18,000	0.00%
Office Equip Rental/Maintenance/Misc	10,016	10,016	0.00%
Bureau of Info & Telecommunications (BIT)	77,165	82,385	6.76%
State Central Services	13,372	13,372	0.00%
Legislative Audit	51,500	60,510	17.50%
Attorney General's Office - Legal Services	18,509	0	-100.00%
Custodial Fees - Global	282,041	287,672	2.00%
Seminars/Educational Programs	35,000	35,000	0.00%
Business Publications	3,000	3,000	0.00%
Total Administrative Expenses	656,007	657,359	0.21%
TOTAL CONTRACTUAL SERVICES	2,423,688	2,361,205	-2.58%

Trust Funds (unaudited)

Health Care Trust (established April 2001)				FY 20
Principal as of 6/30/20	\$ 85,631,024	Asset Allocation	Current	<u>Benchmark</u>
Principal as of 6/30/20 adjusted for inflation	\$ 121,593,395	Global & Private Equity	29%	51%
Fair Value (FV) as of 6/30/20	\$ 151,165,694	Real Estate	9%	10%
, ,		Fixed Income-IG	17%	30%
Difference - FV less principal	\$ 65,534,670	Fixed Income-HY	4%	7%
Difference - FV less infl. adj. prin.	\$ 29,572,299	HY RE Debt	6%	0%
, i		Money Market	<u>35%</u>	<u>2%</u>
Fiscal year to date return	4.43%	Total	100%	100%
Longterm expected mean return	6.06%			
Payout of 4% plus expected inflation of 2.25%	6.25%			
Expected return cushion/shortfall	-0.19%			
		Law allows up to 4% of the	e 16 quarte	r average to
Distribution for FY 21 (July 1, 2020)	5,676,706	be distributed as long as p	rincipal is ı	not violated
Distribution for FY 20 (July 2, 2019)	5,520,073	as of December 31 each y	ear.	
, ,		•		
Education Enhancement Trust (established April 2001)				E) / 00
Principal as of 6/30/20	\$ 410,923,760	Asset Allocation	Current	FY 20 Benchmark
Principal as of 6/30/20 adjusted for inflation	\$ 553,607,481	Global & Private Equity	30%	51%
Fair Value (FV) as of 6/30/20	\$ 630,712,226	Real Estate	8%	10%
1 all value (1 v) as of 0/30/20	Ψ 030,7 12,220	Fixed Income-IG	10%	22%
Difference - FV less principal	\$ 219,788,466	Fixed Income-tax ex	7%	8%
Difference - FV less infl. adj. prin.	\$ 77,104,745	Fixed Income-HY	4%	7%
Billiciones - 1 v leas IIII. auj. piiri.	Ψ 11,104,143	HY RE Debt	6%	0%
Fiscal year to date return	3.67%	Money Market	<u>35%</u>	2%
Longterm expected return (lower due to tax-exempts)	6.00%	Total	100%	100%
Payout of 4% plus expected inflation of 2.25%	6.25%	lotai	10070	10070
Expected return cushion/shortfall	-0.25%			
Expedica retarri custilori/strortiali	-0.2570	Law allows up to 4% of the	16 guarte	r average to
Distribution for FY 21 (July 1, 2020)	22,515,469	be distributed as long as p	•	-
Distribution for FY 20 (July 2, 2019)	21,334,593	as of December 31 each y	•	Holatou
5.54.154.1611 101 1 1 20 (buly 2, 2010)	21,00-1,000	ac of Boothibor of Caon y	oui.	1

Trust Funds (unaudited)

Dakota Cement Trust (established April 2001)

Principal as of 6/30/20	\$ 238,000,000	Asset Allocation	Current	Benchmark
Principal as of 6/30/20 adjusted for inflation	\$ 346,249,615	Global & Private Equity	31%	51%
Fair Value (FV) as of 6/30/20	\$ 333,808,943	Real Estate	9%	10%
		Fixed Income-IG	18%	30%
Difference - FV less principal	\$ 95,808,943	Fixed Income-HY	4%	7%
Difference - FV less infl. adj. principal	\$ (12,440,672)	HY RE Debt	6%	0%
		Money Market	<u>33%</u>	<u>2%</u>
Fiscal year to date return	4.53%	Total	100%	100%
Longterm expected mean return	6.06%			
Payout of 4% plus expected inflation of 2.25%	6.25%			
Expected return cushion/shortfall	-0.19%			
		Constitution allows 4% of	the lesser	of 1) the 16
Distribution for EV 20 (May 2020 to CE)	42 004 500	au conton au conona halanaa a	σ Ω\ tha a	at

Distribution for FY 20 (May 2020 to GF) 13,004,590 Distribution for FY 19 (June 2019 to GF) 12,682,857

quarter average balance or 2) the current December 31 fair value, be distributed by June of the following year.

FY 20

FY 20

School & Public Lands

Inflation protection mandated by Constitutional Amendment -(payout is reduced by inflation if inflation not offset by realized net gains)

, ,	,	Asset Allocation	Current	Benchmark
Fair Value as of 6/30/20	\$ 327,870,736	Global & Private Equity	31%	51%
		Real Estate	8%	10%
Fiscal year to date return	5.55%	Fixed Income-IG	18%	30%
Longterm expected mean return	6.06%	Fixed Income-HY	4%	7%
		HY RE Debt	6%	0%
Distribution for FY 20 K-12 (2/4/20)	12,694,914	Money Market	<u>32%</u>	<u>2%</u>
Distribution for FY 20 Board of Regents (6/9/20)	3,426,067	Total	100%	100%
TOTAL	16,120,981			

Investment Performance Incentive – FY 2020 State Investment Officer

Return-linked compensation maximum is 200% on base compensation of \$485,968. Performance Period is the one year, four year and ten year annualized fiscal years payable in FY 2021

I. 60% OF PLAN BASED ON TOTAL FUND RESULTS

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

Period	Basis Points Outperformance	% Payout	\$ Payout
1 year	- 93.13	0%	\$ 0
4 year	- 17.79	0%	\$ 0
10 year	+96.09	100%	\$ 48,596.75
4 yr stretch	- 17.79	0%	\$ 0
10 yr stretch	+96.09	20%	\$ 4,859.69

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

<u>Period</u>	Basis Points Outperformance	% Payout	<u>\$ Payout</u>
1 year	-93.13	0%	\$ 0
4 year	-17.79	0%	\$ 0
10 year	+119.72	100%	\$ 48,596.75
4 yr stretch	-17.79	0%	\$ 0
10 yr stretch	+119.72	60%	\$ 14,579.07

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	% Payout	\$ Payout
\$8,777,299.70	\$ 1,025,807.24	11.6872%	<u>\$ 45,436.77</u>

Appendix

- Investment performance incentives
- Target discount rationale
- FY20 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

FY20 Budget and Actual

Contractual services detail

	Expended	Received	
	<u>FY 2020</u>	FY 2020	<u>Unexpended</u>
CONTRACTUAL SERVICES			
Investment Services			
Consulting Services	16,675	130,000	113,324.70
Accounting, Benchmarking, Risk Systems	146,706	137,977	(8,728.64)
Investment Databases, Newsfeeds, Quote Fees	643,560	710,436	66,875.69
Investment Research Services	291,850	394,025	102,175.00
Flexibility - From Brokerage to Independent Research	<u> </u>	100,000	100,000.00
Total Investment Services	1,098,791	1,472,438	373,646.75
Administrative Expenses			
Office Rent	139,019	139,019	0.20
Bond/Liability Insurance	8,279	8,385	105.61
Telephone	17,055	18,000	944.84
Office Equip Rental/Maintenance/Misc	4,266	10,017	5,751.05
Bureau of Info & Telecommunications (BIT)	78,462	76,971	(1,491.28)
State Central Services	11,487	13,346	1,858.68
Legislative Audit	54,885	51,500	(3,384.55)
Attorney General's Office - Legal Services	-	18,509	18,509.00
Custodial Fees - Global	276,520	276,520	(0.16)
Seminars/Educational Programs	30,978	33,500	2,521.96
Business Publications	1,312	3,000	1,688.15
Total Administrative Expenses	622,264	648,767	26,503.50
TOTAL CONTRACTUAL SERVICES	1,721,055	2,121,205	400,150.25