

South Dakota Investment Council

OVERVIEW

May 2022

Investment Council overview

■ Assets

- What assets does the Investment Council manage?

■ Goal

- What is the goal and how have we done?

■ Investment Process

- Why do we focus on long-term value?
- Why do we manage most assets internally?
- How do we value assets?
- How do we control risk?

■ Investment Council and Oversight

- What is the role of the Council, Legislature and Executive branch?

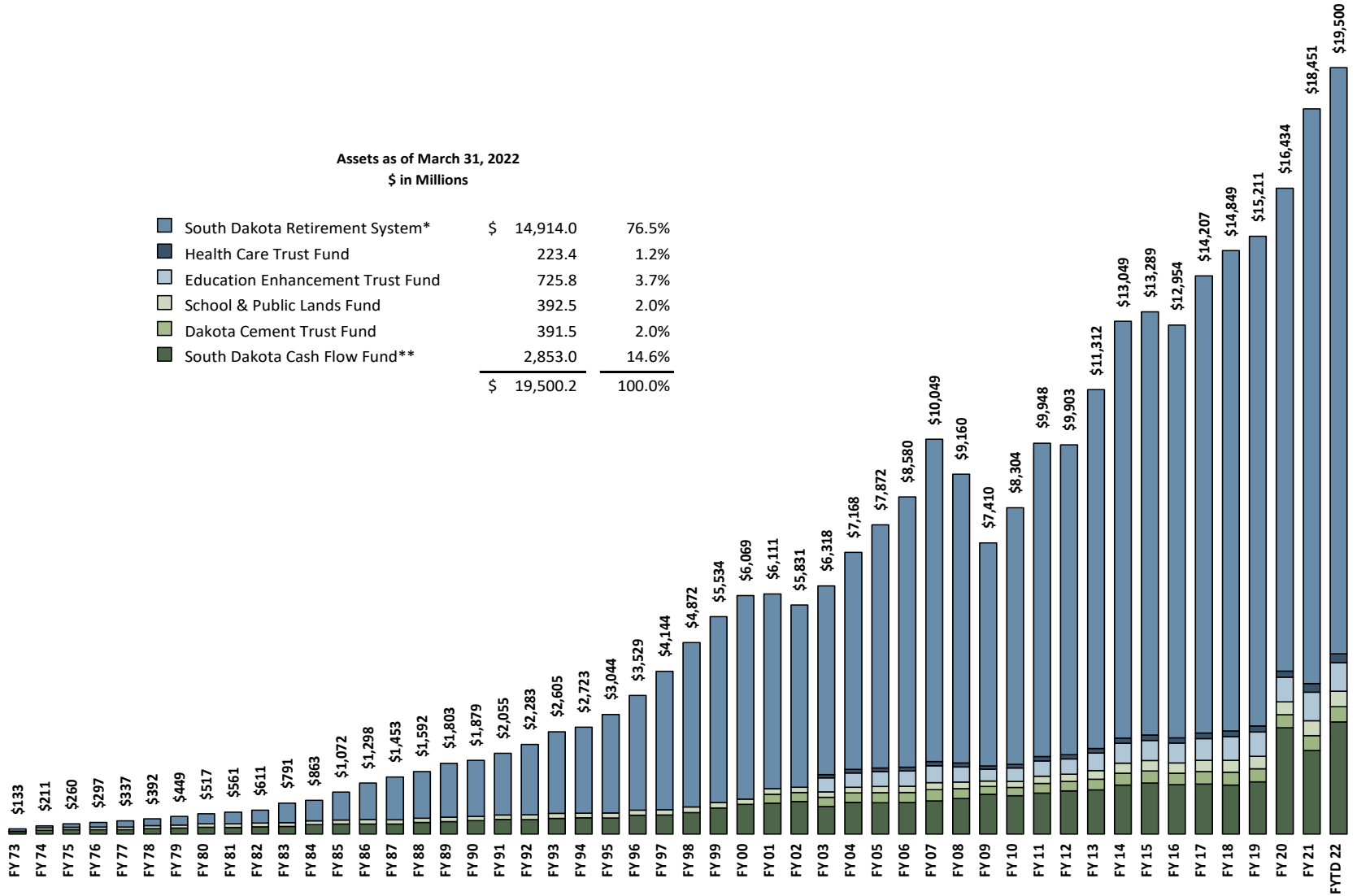
■ Investment Team

- Who are the people and what do they do?
- How do we recruit and train the investment team?
- Why do we link compensation to investment return added value?

Assets

Assets as of March 31, 2022
\$ in Millions

South Dakota Retirement System*	\$ 14,914.0	76.5%
Health Care Trust Fund	223.4	1.2%
Education Enhancement Trust Fund	725.8	3.7%
School & Public Lands Fund	392.5	2.0%
Dakota Cement Trust Fund	391.5	2.0%
South Dakota Cash Flow Fund**	2,853.0	14.6%
	<u>\$ 19,500.2</u>	<u>100.0%</u>

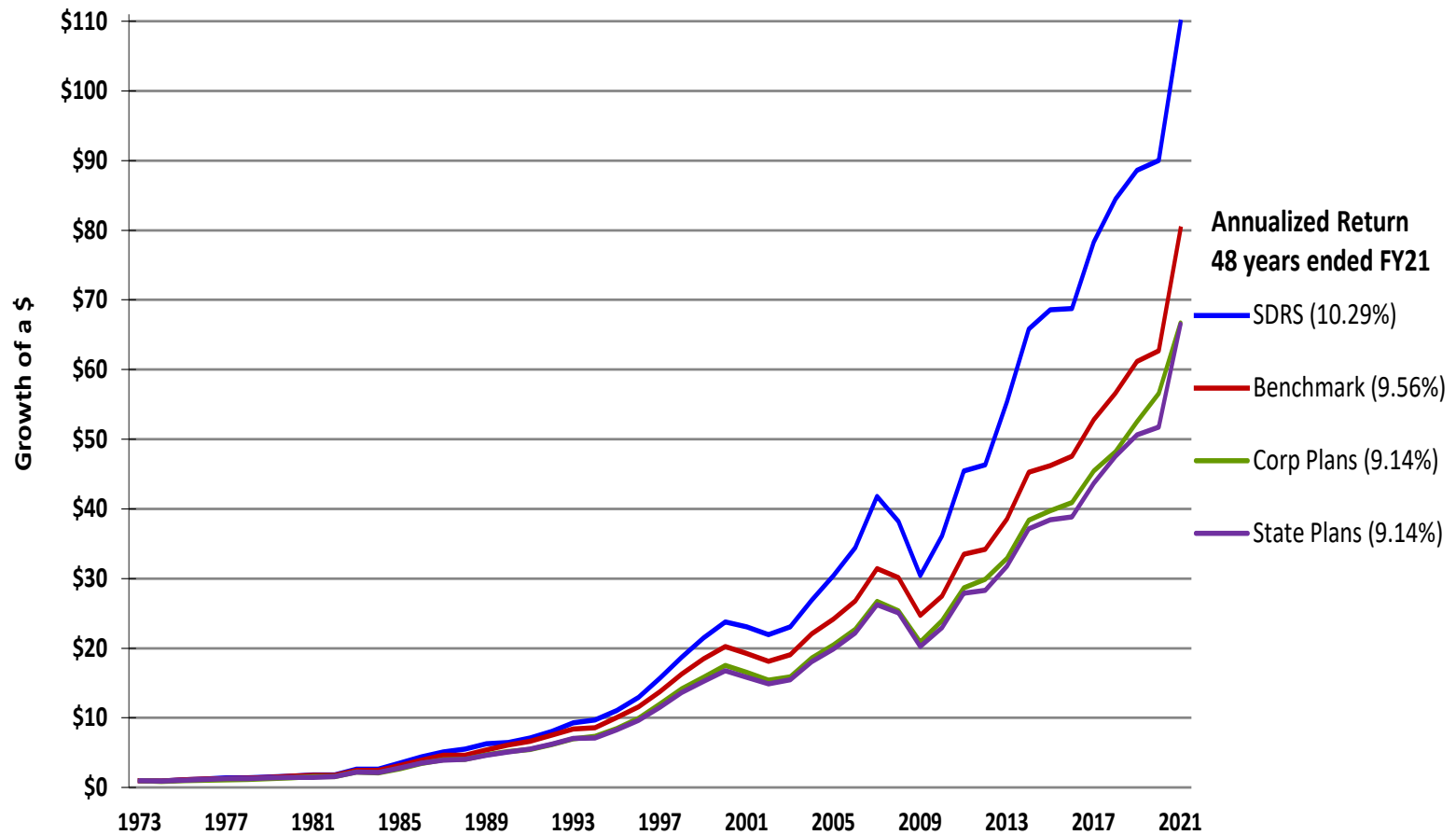


Goal

- Goal is to add value over the long term versus market indexes and peers
 - Helps the 94,000 SDRS members retire with financial dignity
 - Helps keep taxes low for all South Dakotans

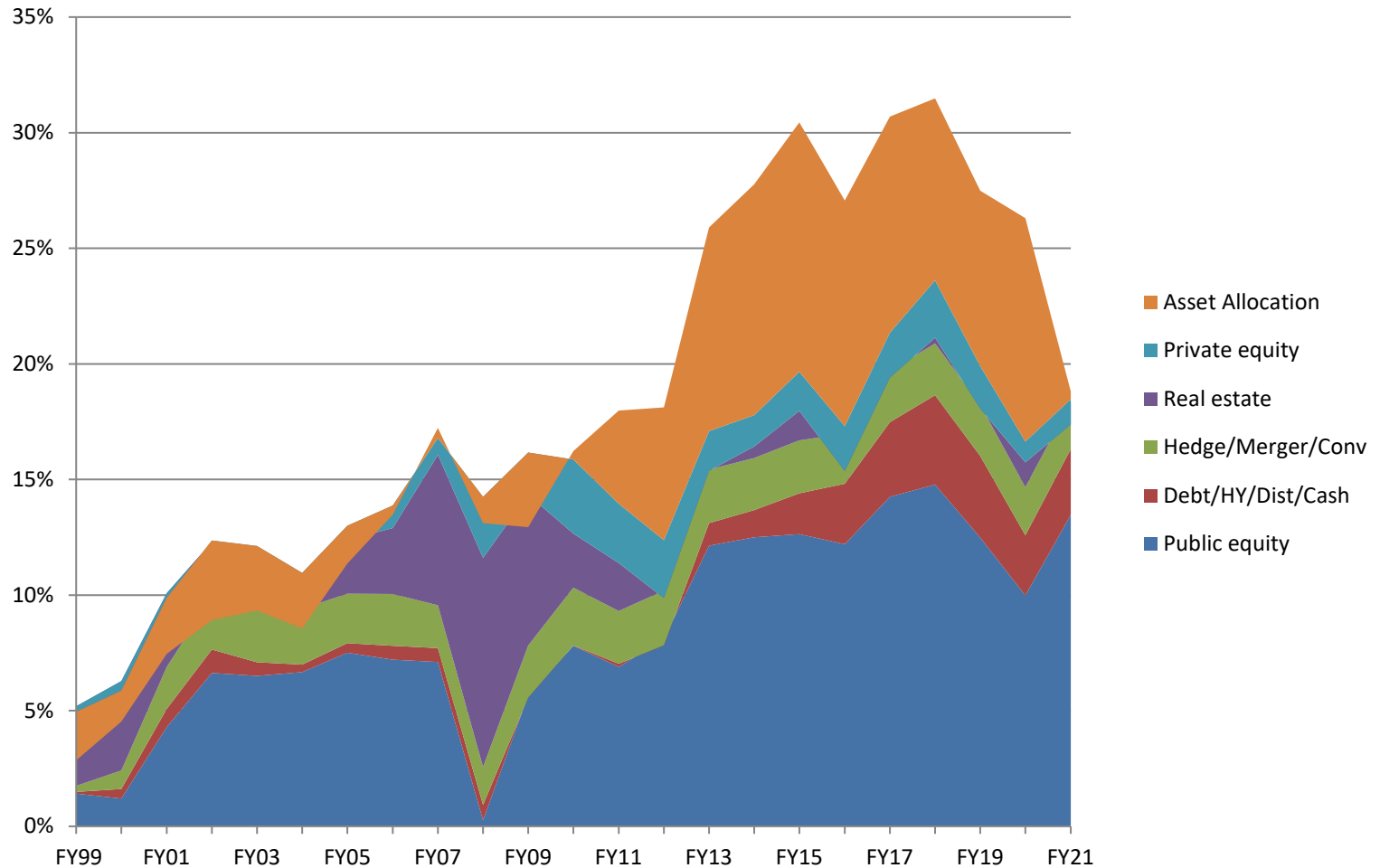
Superior returns add up over time

cumulative returns for SDRS, Benchmark, Corporate plans, and other States



Many pistons contribute

cumulative added value by source FY99 to FY21



Focus on long-term value

- Believe only reliable way to add value is to buy when cheap, sell when expensive
 - Need reasonable measure of cheapness/expensiveness versus long-term value
 - Need discipline to wait long periods of time for opportunities to appear
 - Need fortitude to hang on as cheap assets get even cheaper before turning around
 - The need for hard work, patience, and pain threshold discourages the competition
- Most investors would rather focus on short-term market movements
 - Too many fishing in the immediate gratification pond for short-term investing to work. Some may be luckier or quicker than the rest for awhile and others may bend the rules, but few, if any, are able to build sustainable advantages
- 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 difficult periods – confidence to stay the course
 - Continuous preparation – ready when tough times come

Long-term value measures

- Believe long-term value is the present value of future cash flows
 - Simple notion: Invest cash today → Get more back later
- Research focus is on estimation of probability weighted cash flows
 - Stocks: normal earnings, return on invested capital, normal growth rate
 - Debt: probability of bankruptcy from cash flow volatility modeling process
 - Inputs must reflect underlying economic reality
- Risk assessment drives rate used to discount cash flows to present value
 - Focus on risk in severe adverse markets

Internal management

- 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
- SDIC's long-term history suggests managing assets internally can increase returns
 - Key reason is greater influence over internal staff to focus on long-term value
 - Our experience suggests most investors lack patience. Most managers recognize they will not be allowed a long timeframe for investment decisions to prove out, thus chase short-term results
 - Increased conviction comes from doing your own work
- Difficulty is that internal management is a lot more work than hiring outside managers
 - Requires internal research capability – requires expensive higher skilled people
 - Must build and maintain support for investment process – difficult in tough markets
 - Staff compensation attracts criticism – must periodically explain outsourcing would cost far more
- Asset categories managed internally
 - Global Equity (domestic since 1974, international since 1992, merged in 2004)
 - Fixed Income (since 1973)
 - High Yield Debt (since 1977), Distressed Corporate Debt (since 2009)
 - Asset Allocation Shift (since 1986)
 - Merger Arbitrage (since 1990) & Convertible Arbitrage (since 1993)

Equity valuation process overview

- Fundamental background research
 - Company and industry competition dynamics
 - Management quality, earnings quality, smart investor interest
- Normal earnings
 - Line-by-line income statement normalization
 - Adjust accounting treatment of options, pensions, R&D, goodwill, and write-offs
- Invested capital
 - Measure return earned on existing investment in the business
 - Starting point for estimating return on incremental (growth) investment
- Normal growth
 - Assess reinvestment in the business, acquisitions, and share buybacks
- Normalized dividend stream
 - Assess sustainable dividend payout levels
- Present value of normalized dividend stream
 - Rate used to discount based on risk rating
 - Probability weight alternate scenarios, such as being acquired or going bankrupt
- Stock attractiveness based on price compared to present value

Global scope of 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

Risk management

- Risk measurement
 - Focus is on equity-like risk (includes embedded equity of other categories) and bond-like risk
 - Easy to relate equity-like risk to historical returns of stock/bond/cash allocations
 - Statistical measures of risk, such as standard deviation and correlation, are also calculated but are adjusted to reflect higher real-world frequency and magnitude of adverse outlier events
 - Behavior of some assets can vary depending on inflation or deflation rooted market crisis
- Risk control
 - Risk managed by broad diversification and reducing amounts invested in expensive assets
 - Adequate liquidity maintained to avoid liquidations of depressed assets and allow rebalancing
- Need to participate in economic system
 - Participation in free enterprise economic system provides highest long-term rewards
 - To get the long-term rewards, must endure the short-term ebbs and flows
 - Faith in the long term despite periodic bumps in the road and potentially rockier future
- Strength and determination to handle tough markets
 - Strong funding and benefit design helpful to managing downside volatility
 - In very difficult circumstances, benefits may require further adjustments to maintain funding

Investment Council role

- Select State Investment Officer
- Maintain a bottom-line oriented non-political environment
- Establish investment policy
 - Benchmarks and asset allocation guidelines
 - Oversight of investment methodology
 - Oversight of external partners
- Monitor compliance
 - Audit committee
 - Conflict of Interest Policy
- Approve annual budget and long-term plan (then goes to Executive Board, Governor, Appropriations)
 - Compensation committee approves compensation framework
 - Recommend Investment Officer compensation to Executive Board of the Legislative Research Council

Business-like environment

- Majority of Council members appointed by Executive Board of LRC
 - Traditionally appoint respected business leaders from across South Dakota
- Focus on maximum risk-adjusted return
 - Prohibition against social investing considerations (exception for Iran and Sudan)
- Long-term business plan
 - Legislature directed establishment of Plan in 1988 to create stable environment for internal management and to alleviate turnover problems
- Investment Council funded from assets under management
 - Funding shifted from general fund to managed assets in 1988

Investment team 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 are superior to individuals
- Improve
 - Discuss mistakes but must depersonalize to minimize defensiveness
- Get them to want to stay long term
 - Fair compensation, quality teammates, support when underperforming

Investment performance incentives

Aligns 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 after 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

Summary

■ Goal

- Council has exceeded goal of adding value versus market indexes and peers

■ Investment Process

- Focus on long-term value based on present value of future cash flows
- Most assets managed internally to save cost and add value
- Risk managed by diversification, avoiding expensive assets, and measuring risk in severe environments

■ Investment Council and Oversight

- Council role is to approve investment policies and create a business-like environment

■ Investment Team

- Recruit top area students and train internally to apply long-term processes
- Compensation linked to investment return added value to encourage winning and keep winners

■ SDIC approach may be the “hard way” but worth it

- Requires internal research capability – patience, discipline, and faith in the future are frequently tested
- Hard road necessary to achieve our goal – if take same route as others, will get their outcome
- Success depends on continuation of historic cultivation of Council capabilities by Legislature and Executive branch