

MINUTES

SOUTH DAKOTA INVESTMENT COUNCIL Sioux Falls, South Dakota June 5 & 6, 2019

1) Roll Call

The joint meeting of the South Dakota Investment Council and the SDRS Board of Trustees was called to order at 10 a.m. on June 5, 2019 by Chair Lorin Brass. Council members in attendance were Lorin Brass, Ryan Brunner, Josh Haeder, Loren Koepsell, Greg Kulesa, Jeff Nelson, and Rob Wylie. Paul Bisson was absent.

SDRS Board of Trustees members attending all or part of the meeting included Karl Alberts, James Appl, Penny Brunken, Liza Clark, Matt Clark, Laurie Gustafson, James Johns, Myron Johnson, Louise Loban, Kevin Merrill, K.J. Peterson, Justice Mark Salter, and Eric Stroeder.

Others attending all or part of the meeting included Investment Council Staff members Brett Fligge, Tammy Otten, Jeff Hallem, Sherry Nelson, Renae Randall, Arianna Rehfeldt, Melissa Woidyla, Jarrod Edelen, Jan Zeeck, and Laurie Riss; SDRS staff members Travis Almond, Jane Beer, Jacquee Storm, Doug Fiddler, Dawn Smith, Michelle Mikkelsen, Brittnie Adamson, and Ryan Mikkelsen; Paul Schrader, actuary; Pat Beckham and Larry Langer from Cavanaugh Macdonald Consulting; Kyle Schluttner and Brook VanOsdel from the Bureau of Finance & Management; Ashlee Keyes and Amy Macy from the Department of Legislative Audit; Keith Brainard from the National Association of State Retirement Administrators; Eric Ollila from the South Dakota State Employees Organization; Jon Hunter; and James Attwater.

(Note: For sake of continuity, the following minutes are not necessarily in chronological order. Documents referenced are on file in the Investment Council office, and public access is subject to the provisions of SDCL 1-27.)

2) Public Pension Landscape & Trends

Keith Brainard, Research Director for the National Association of State Retirement Administrators (NASRA), presented information on the public pension landscape and trends. Brainard began his presentation with an overview of total assets, number of participants and retirees, annual contributions, and funding levels for public pensions in the U.S. overall and separately for South Dakota public pensions. He reviewed the change in aggregate public pension and SDRS funding

AGENDA ITEMS:

- 1) Roll Call
- 2) Public Pension Landscape & Trends Presentation-NASRA
- 3) FY 19 SDRS Investment Performance Update
- 4) SDRS Projected Fund Status, Risk Analysis & Differences
- 5) Asset Allocation – SDRS & Trust Funds
- 6) Public Comment
- 7) Minutes (4-18-19)
- 8) Lorin Brass Acknowledgement
- 9) Cash Flow Fund Presentation
- 10) 529 Higher Education Savings Program
- 11) Investment Update – FY 2019
- 12) Iran Divestiture Update
- 13) Total Public Equity Benchmark
- 14) Asset Allocation Discussion
- 15) Investment Incentive Program Changes – FY2020
- 16) Equity Company Valuation Process
- 17) Equity Portfolio Guidelines
- 18) Fiscal Year 2021 Budget Request
- 19) Compensation Committee Update
- 20) Audit Committee Update
- 21) Election of Officers – FY 2020
- 22) New/Old Business
- 23) Future Meeting Date
- 24) Adjournment

levels from FY 2001 to FY 2017, as well as the distribution of public pension funding levels for FY 2017.

Brainard discussed the headwinds facing public pension funds. He reviewed the changes in investment return assumptions from FY 2001 to present and compared the average return assumption to SDRS. He showed the median employee and employer contribution rates for general employees and teachers from FY 2002 to FY 2017 along with the number of active members per annuitant. He reviewed the U.S. Bureau of Labor Statistics on relative changes of private versus state and local government employment, wages and salary costs.

Brainard discussed the tailwinds supporting public pension plans and reviewed many of the pension reform efforts that have taken place in the last decade. He concluded his presentation with a discussion of the challenges that face public pension funding into the future.

3) FY 2019 SDRS Investment Performance Update

Matt Clark provided an investment performance update fiscal year-to-date for SDRS assets.

4) SDRS Projected Fund Status, Risk Analysis & SDRS Differences

Doug Fiddler presented estimated funding status results for June 30, 2019, along with risk analysis and SDRS comparisons. He showed the current and historical inflation rates in comparison to SDRS COLAs for the last several years. He described the automatic adjustments to the COLA that will vary with both inflation and long-term affordability. He discussed the impact of the fiscal year 2019 investment return on the 2020 maximum COLA, the projected future COLA ranges, and the likelihood of additional required corrective actions based on different investment return assumptions.

Fiddler discussed the actuarial standards required to identify and assess future funding risks (ASOP 51) and described various assessment methods. He discussed the SDRS risk assessments relating to investment returns and cash flows, as well as the focus on identifying the economic conditions that would require corrective actions.

Fiddler described structural and operational differences of SDRS to a typical state retirement system. He compared SDRS investment returns, funded status, contribution levels, plan maturity, and cash flows to the median of other sector plans.

5) Asset Allocation

South Dakota Retirement System

Matt Clark discussed the asset allocation process, importance, and application to SDRS. He discussed the recommended benchmark allocation and ranges, expected return and standard deviations, asset category valuation, and the movement of category allocations within ranges based on valuation.

Clark discussed the recommended benchmark level of equity-like and bond-like risk to balance long-term potential returns with drawdown risk in difficult markets. He indicated this was for the benchmark which should represent what could be adhered to through thick and thin. He showed charts of historic returns noting the dominance of equity returns over the very long term and the diversification benefit during market downturns of mixing in some bonds. He discussed the recommended range for equity-like risk and bond-like risk. He said the goal is to enter market downturns with below benchmark risk and increase toward maximum during the downturn to benefit from an eventual rebound. He added that after getting to minimums and maximums, markets will typically move further, which can be very painful. It is essential to be patient for at least another three to five years. Clark discussed a possible lowering of the minimum level of equity-like risk. Doug Fiddler discussed the reduction of absolute downside risk of a lower minimum during a severe decline. Brett Fligge discussed the increase of underperformance risk of a lower minimum when very expensive markets continue to go up.

Clark discussed equity-like and bond-like risk mapping for all asset categories. He discussed specific asset categories to be included in the benchmark which are those that are significant and passively implementable. He discussed other niche or skill-based categories which are not in the benchmark but that have a permitted range. He presented the SDRS capital market benchmark allocations and minimum/maximum ranges for each asset category. The capital markets benchmark allocations for fiscal years 2010 through 2019 were shown. The staff's recommended benchmark for FY 2020 was also shown.

Clark showed SDRS historical levels of equity-like allocation. He reviewed the asset allocation risk/return analysis. The first portion focused on long-term mean expected returns, expected standard deviations, and asset correlations provided by JP Morgan Asset Management as a proxy for conventional expectations. The incremental return and standard deviation impact of each asset class was shown. The analysis was shown again using internal asset category expected returns and internal adjusted risk measures.

Clark discussed additional risk measures and risk control. He reiterated that the focus is on equity-like risk and bond-like risk which includes embedded equity and bond risk for all categories. He said statistical measures of risk, such as standard deviation and correlation, are adjusted to reflect higher real-world frequency and magnitude of adverse outlier events. Behavior of some assets in a crisis can vary depending on whether the crisis is rooted in inflation or deflation concerns. Clark discussed how risk is managed by broad diversification and by reducing amounts invested in expensive assets. Adequate liquidity is maintained to avoid liquidations of depressed assets in a crisis and to allow rebalancing. He stated that participation in the economic system is necessary to get the highest long-term rewards and that short-term ebbs and flows must be endured. He added that strength and determination are important to be able to handle tough markets. Strong funding built up in good markets and a flexible benefit design are very helpful.

Clark then discussed asset category valuation. Equity category valuation is based on estimated future cash flows based on normal earnings and growth rates and a risk impacted discount rate. The model is similar to the model used to value individual companies. He discussed adjustments to fair value based on monetary conditions and corporate earnings strength. He discussed valuation processes for bonds, real estate and high yield.

Clark showed the current and historical valuations of each asset class and historical efficacy of the valuation process. He discussed the plan for adjusting allocations within permitted ranges based on valuation.

There was discussion about the use of valuation of the S&P500 to adjust equity-like risk. It was noted that valuations of non-U.S. markets or small caps can be different than for the S&P500. Clark indicated large cap U.S. stocks represented the largest share of the internal equity universes and that historical data for the S&P500 is more robust. He said smaller and non U.S. stocks are valued one stock at a time through internal equity portfolio management, and those areas can be over-weighted in the equity portfolios when attractively valued. He added that research projects to refine valuation of non U.S. and smaller companies at the index level may help broaden valuation inputs used to set equity-like risk.

Renaee Randall discussed tools used to track valuation on a daily basis including thresholds for increasing or decreasing equity-like risk. She showed a recent example.

Trust Funds

Tammy Otten discussed asset allocation for the four trust funds; Dakota Cement Trust, Healthcare Trust, Education Enhancement Trust, and School and Public Lands. She described the establishment of each fund, the Constitution and laws that direct the investment of the assets, the annual distribution calculation, the current estimated fair value of each fund, and the FY2019/FY2020 distribution amounts.

Otten reviewed the asset allocation analysis which shows the long-term mean expected return and standard deviation for each fund. The analysis used the standard deviations and correlations with fat tail adjustments. The expected return and standard deviation compared to select prior year benchmark allocations were shown.

Staff proposed no changes from FY 2019 to the Dakota Cement Trust, Education Enhancement Trust, Healthcare Trust or School and Public Lands trust funds' capital markets benchmark weights for FY 2020. Staff recommended that the public equity index used by the benchmark be changed to match SDRS. It was recommended that the equity-like risk target for the four trust funds remain at 90% of the equity-like risk for SDRS.

Note – Motions on asset allocation issues are included under item #14.

6) Public Comment

There were no public comments.

The Investment Council recessed at 4:35 p.m. and reconvened at 8 a.m. on June 6, 2019.

7) Minutes – 4/18/19

ROB WYLIE MOVED, SECONDED BY RYAN BRUNNER TO APPROVE THE MINUTES OF THE APRIL 18, 2019 INVESTMENT COUNCIL MEETING. MOTION PASSED UNANIMOUSLY.

8) Lorin Brass Acknowledgement

Lorin Brass will be completing his five years on the Investment Council effective June 30, 2019. Matt Clark thanked Lorin for his contributions to the Council during his term and for his steady leadership as Chair. He reviewed some of the performance results over the last five years. A plaque was presented to Lorin in recognition and appreciation of his outstanding service.

9) Cash Flow Fund

Sherry Nelson provided an overview of the Cash Flow Fund. She noted that the allowed investments are specified in SDCL 4-5-26. The fund is divided into a money market portfolio for daily needs of the state, the 1-year CD program with state financial institutions, an intermediate-term fixed income portfolio, and the larger short-term fixed income portfolio. Asset allocation benchmarks, maturity and duration ranges, and individual position and portfolio limits were reviewed for the short-term and intermediate-term portfolios.

Nelson reviewed SDCL 4-5-30 which outlines the annual payout to the general fund and participating state agencies based on receipted income to the fund. The projected payout for FY 2019 was provided.

Nelson discussed the cash flow fund monthly average balances noting that the balance varies throughout the year. Historically the monthly variation has been within a \$50 million band, but that could change in the future.

10) 529 Higher Education Savings Program

Sherry Nelson reviewed the CollegeAccess 529 Plan summary of accounts, the compliance schedule, and minutes of the quarterly Allianz conference call. She discussed the estimated amount that would be contributed in July to the Dakota Corps Scholarship Program.

11) Investment Update – FY 2019

Tammy Otten reported on the completed investment motions from prior meetings. The estimated fiscal year-to-date return of the SDRS portfolio was provided. Upcoming distributions and contributions for the various funds were discussed.

12) Iran Divestiture - Update

Otten reported that since the last Council meeting, there were no updates to the Florida list used to determine the South Dakota list of Iran scrutinized companies. As a result, staff made no recommended changes to the current South Dakota scrutinized companies' list.

13) Total Public Equity Benchmark

Darci Haug presented the proposed total public equity benchmark. She reviewed the components of the current total equity benchmark and discussed the proposed changes to include small cap and reduce the home country bias. She discussed the proposed benchmark changes that would also be made to the global core and global sectors to reflect the total equity benchmark change.

Haug reviewed the internal process for tracking how the various equity portfolios fit together in comparison to the benchmark. Matt Clark discussed a proxy for international small midcap consisting of additional U.S. small midcap and a shifting of large cap from the US large cap to international large cap. Clark also discussed removing emerging markets from the benchmarks for the internal large cap global equity portfolios as emerging markets would be handled in a separate sleeve. Council discussion continued.

JEFF NELSON MOVED, SECONDED BY LOREN KOEPSSELL, THAT EFFECTIVE JULY 1, 2019, THE BENCHMARK FOR THE EQUITY COMPONENT OF THE SDIC CAPITAL MARKETS BENCHMARK AND THE BENCHMARK FOR THE TOTAL PUBLIC EQUITY COMPOSITE BE CHANGED TO THE MSCI ALL COUNTRY WORLD INDEX IMI, WEIGHTED $\frac{3}{4}$, AND THE MSCI ALL COUNTRY WORLD INDEX IMI U.S. COMPONENT, WEIGHTED $\frac{1}{4}$. MOTION PASSED UNANIMOUSLY.

GREG KULESA MOVED, SECONDED BY ROB WYLIE, THAT EFFECTIVE JULY 1, 2019, THE BENCHMARK FOR THE INDIVIDUAL GLOBAL EQUITY SECTOR PORTFOLIOS AND THE GLOBAL CORE EQUITY PORTFOLIO BE CHANGED TO THE S&P GLOBAL 1200 EX EMERGING MARKETS CUSTOM INDEX. MOTION PASSED UNANIMOUSLY.

14) Asset Allocation Discussion

Council discussion continued regarding asset allocation. An in-depth discussion took place regarding the pros and cons of lowering the equity-like minimum.

JOSH HAEDER MOVED, SECONDED BY RYAN BRUNNER, TO APPROVE THE FISCAL YEAR 2020 CAPITAL MARKETS BENCHMARK, INDEXES, EQUITY-LIKE RISK, AND MAXIMUM/MINIMUM RANGES FOR THE SOUTH DAKOTA RETIREMENT SYSTEM AS PRESENTED WITH A 40% EQUITY-LIKE MINIMUM. MOTION PASSED UNANIMOUSLY.

RYAN BRUNNER MOVED, SECONDED BY GREG KULESA, TO APPROVE THE FISCAL YEAR 2020 CAPITAL MARKETS BENCHMARK, INDEXES, EQUITY-LIKE RISK, AND MAXIMUM/MINIMUM RANGES FOR THE DAKOTA CEMENT TRUST, HEALTH CARE TRUST, EDUCATION ENHANCEMENT TRUST, AND SCHOOL & PUBLIC LANDS AS PRESENTED WITH A 36% EQUITY-LIKE MINIMUM. MOTION PASSED UNANIMOUSLY.

LOREN KOEPSSELL MOVED, SECONDED BY JEFF NELSON, TO APPROVE THAT ASSET ALLOCATION ADJUSTMENTS IN THE RETIREMENT AND TRUST FUNDS MAY BE IMPLEMENTED IN THE CASH AND/OR DERIVATIVES MARKETS. MOTION PASSED UNANIMOUSLY.

15) Investment Incentive Program Changes – FY 2020

Matt Clark stated that the three newest investment team members, Katie Eliason, Taylor Gubbrud, and Peyton Larsen, will be eligible to be included in the investment performance incentive program

effective with FY 2020 performance payable in FY 2021. Clark reviewed the memorandum outlining the calculation details for the plans. He noted that the decision on the areas of assigned portfolio responsibilities may be made over the next year, and the plans will be updated and re-approved prior to the beginning of FY 2021.

JEFF NELSON MOVED, SECONDED BY JOSH HAEDER, TO APPROVE THE INCENTIVE PLAN CHANGES AS DETAILED IN THE MAY 3, 2019 MEMORANDUM ENTITLED, "*INVESTMENT PERFORMANCE INCENTIVE PLAN CHANGES EFFECTIVE FY 2020.*" MOTION PASSED UNANIMOUSLY.

16) Equity Company Valuation Process

Melissa Woidyla and Arianna Rehfeldt, global equity portfolio managers, gave a presentation on the global equity modeling process. Woidyla began the presentation with an overview of the internal global equity area and the modeling process. She then described the company research that goes into the modeling process. She discussed the factors used in determining a risk rating, normalized organic sales growth and normalized earnings.

Rehfeldt reviewed the internal adjustments made to the income statement. She described the normalized invested capital, return on invested capital, normalized earnings growth, and valuation portions of the model.

17) Equity Portfolio Guidelines

Matt Clark stated that the internal equity diversification rules are in the process of being updated. He noted that the changes do not need formal Council approval but are being provided to keep members informed.

Jarroed Edelen presented the current version of the updated equity diversification rules for company, sector, industry, sub-industry, and country. He reviewed the objectives of the diversification rules and provided an overview of the permissible minimum/maximum ranges. He described the different ranges and provided examples at the company, sector, industry, sub-industry and country levels.

Edelen concluded his presentation with a comparison of the sector level and stock level overweights to benchmark weights of the current equity diversification rules compared to the updated rules.

18) Fiscal Year 2021 Budget Request

Matt Clark reviewed the FY 2019 budget received versus actual expenditures estimated through the rest of the fiscal year. He discussed the areas that made up the unexpended budget noting that those funds will offset next year's budget authorization, essentially reverting to the funds under management.

Clark reviewed the budget request for FY 2021 and the unit cost summary. He noted that the personal services budget includes increases for investment positions transitioning over 18 to 20

years from entry level to senior portfolio managers after which time the long-term plan increase is used. He described the salary increase percentages incorporated into the long-term plan for investment positions. The budget that will be submitted to the Executive Board, Governor/BFM and Appropriations will not include salary policy, as general salary policy for the state will be applied at the end of the process. To reflect a total picture of expenditures, the unit cost summary does include an assumed salary policy.

Clark discussed the change implemented a year ago to the annual compensation limit for SDRS contributions. As a result, the matching employer contributions to SDRS were decreased in the benefits section of the budget request.

Clark reviewed the operating portion of the FY 2021 budget request. He outlined the changes proposed in the contractual budget for investment and administrative services. He discussed the research flexibility needed to pay for research services as they continue to become unbundled from trading commissions. No changes were proposed for supplies, travel and capital assets.

ROB WYLIE MOVED, SECONDED BY GREG KULESA, TO APPROVE THE FISCAL YEAR 2021 BUDGET REQUEST AS PRESENTED. MOTION PASSED UNANIMOUSLY.

19) Compensation Committee Update

It was noted that the LRC Executive Board is meeting on June 10, and the Investment Council's recommendation for the State Investment Officer's FY 2020 compensation will be presented at that time.

Clark stated that he will be completing the compensation study update to review with the Compensation Committee later this summer.

20) Audit Committee Update

Jeff Nelson, Chair of the Audit Committee, stated that the Committee met with Legislative Audit and approved the engagement letter for the annual audit. He noted that the FY2019 third quarter AUP was completed and signed off on by the Audit Committee. He added that they discussed areas of focus for the quarterly Agreed Upon Procedures for FY 2020.

21) Election of Officers – FY 2020

RYAN BRUNNER MOVED, SECONDED BY ROB WYLIE TO ELECT LOREN KOEPEL AS CHAIR AND JEFF NELSON AS VICE CHAIR OF THE INVESTMENT COUNCIL FOR FISCAL YEAR 2020. MOTION PASSED UNANIMOUSLY.

22) New/Old Business Agenda Items

Rob Wylie stated that the SDRS quadrennial will be completed before the next Council meeting. He also suggested the Council may want to consider addressing the prohibition against venture capital in the next legislative session.

23) Future Meeting Dates

The next Investment Council meeting will be held in Pierre on August 26, 2019, in conjunction with the LRC Executive Board meeting.

24) Adjournment

Chair Brass declared the meeting adjourned at 12:45 p.m.