





SITFO Summit Agenda | October 6 & 7, 2022

Story of SITFO: Modernizing the Trusts, Executing the Vision, and Supporting the Mission

Anchor Location: Grand Summit Hotel, 4000 Canyons Resort Dr, Park City, UT 84098

Webinar Registration: https://us02web.zoom.us/webinar/register/WN_UIN8uHRsS72LomAT0zEbBA

Day 1: Modernizing the Trusts & Executing the Vision (Past & Present)

Time	Event	Presenter(s)	Location
8:00 am	Breakfast	--	White Pine II
8:45 am	Call Meeting to Order, Introductions	--	White Pine I
9:15 am	Story of SITFO <i>Charting past, present, and future of the organization, its resources, and portfolio design</i>	SITFO	White Pine I
10:30 am	Break	--	--
11:00 am	Industry Trends: Evolution of the Allocator <i>Albourne to discuss allocator trends, past, present, and future</i>	Albourne	White Pine I
12:00 pm	Lunch	--	White Pine II
1:00 pm	Investment Beliefs <i>Revisiting, revising, and compiling into an updated document</i>	SITFO	White Pine I
2:15 pm	Investment Policy & Intergenerational Equity <i>Clarifying and confirming return objectives and distribution policy</i>	SITFO / RVK	White Pine I
3:00 pm	Break	--	--
3:30 – 5:30 pm	Networking Activity	SITFO	Lobby
6:30 pm	Friend of the Trusts Award Dinner	Treasurer Oaks Cabin I	

Overnight: Grand Summit Hotel

Meals included: B/L/D

Anchor Location: Grand Summit Hotel, 4000 Canyons Resort Dr, Park City, UT 84098

Webinar Registration: https://us02web.zoom.us/webinar/register/WN_-N-mOS3WQLuRu9JivDCvxQ

Day 2: Supporting the Mission (Future)

Time	Event	Presenter(s)	Location
8:00 am	Breakfast	--	White Pine II
9:00 am	Closed Session <i>Discussion of Sale or Purchase of Identifiable Securities and Investment Funds (Utah Code Section 53D-1-304(6))</i>	Panelists	White Pine I
11:00 am	Break	--	--
11:15 am	Investment Beliefs (<i>action item</i>) <i>Finishing any discussion and finalizing with formal action</i>	SITFO / RVK	White Pine I
12:15 pm	Lunch	--	White Pine II
1:15 pm	Investment Policy & Intergenerational Equity (<i>action item</i>) <i>Finishing any discussion and finalizing with formal action</i>	SITFO / RVK	White Pine I
2:15 pm	Break	--	--
2:30 pm	Closing Remarks	SITFO	White Pine I

Meals included: B/L

October 2022

Investment Beliefs Summarized



School and Institutional
Trust Funds Office

Investment Beliefs Annual Review and Approval

Investment Beliefs Annual Review and Approval

- This review is in the spirit of the requirement in the IPS to “review and approve annually”, balancing against “SITFO’s long-term horizon...not expect significant changes from year to year.”
- The Statement of Investment Beliefs should be well understood by trustees, and especially staff, to stay on course in difficult decision-making environments and to stay consistent in portfolio management
- Evolution of thought is welcome, but frequent and meaningful changes or reversals would be worrisome

Investment Beliefs Annual Review and Approval

Section: Who We Are

- Inserted language to reflect on staff capabilities and expectations, including reference to the statutes regarding compensation

Section: Who We Are, Characteristics

- Inserted language to reflect on updated team size and capabilities with reference to outsourcing vs insourcing

Section: Who We Are, Price and Opportunity Cost Awareness

- Updated language to encourage an understanding of decision-making in times of stress and that inaction must be rationalized and considered an active decision

Investment Beliefs Annual Review and Approval

Section: Who We Are, Governance and Management

- Updated language to acknowledge delegation of manager selection to staff

Section: Who We Are, Performance Measurement

- Inserted language to articulate that competing with peers is not part of the SITFO investment objective, but relevant for secondary considerations

Investment Beliefs Annual Review and Approval

Section: Asset Class Structure and Manager Selection

- Updated language to reflect the increased focus on asset class structure reviews

Section: Asset Class Structure and Manager Selection, Manager Diversification

- Inserted language speaking to the balance between concentration and being overly diversified

Section: Asset Class Structure and Manager Selection, Manager Selection

- Do we need sample criteria / characteristics for manager selection?

Lunch



Intergenerational Equity Analysis

State of Utah, School and Institutional Trust
Fund Office (“SITFO”)

Prepared for the 2022 Summit



Purpose of Sovereign Wealth Funds

Sovereign Wealth Funds are charged with transforming **finite, non-renewable real assets** into **perpetual financial wealth** for its economy and citizens.

SITFO is charged with investing School and Institutional Trust Lands Administration (SITLA) revenues in a manner that supports the distribution policy in perpetuity while **providing for intergenerational equity between current and future beneficiaries**¹.

- SITFO's long-term investment objective is CPI + 5%. The primary return objective is to maintain purchasing power while sustaining the current distribution amount which is a maximum of 4%.

Key Principles of Intergenerational Equity:

1. Strives for egalitarian equity between present and future generations of Utah School Children.
2. Aims to provide a safeguard that citizens of tomorrow have the same opportunities and purchasing power as citizens of today.
3. Achieved by retaining and investing proceeds from non-renewable natural resources as part of a sustainable spending policy.

¹Investment Policy Statement, SITFO, June 2022.

Intergenerational Equity Components



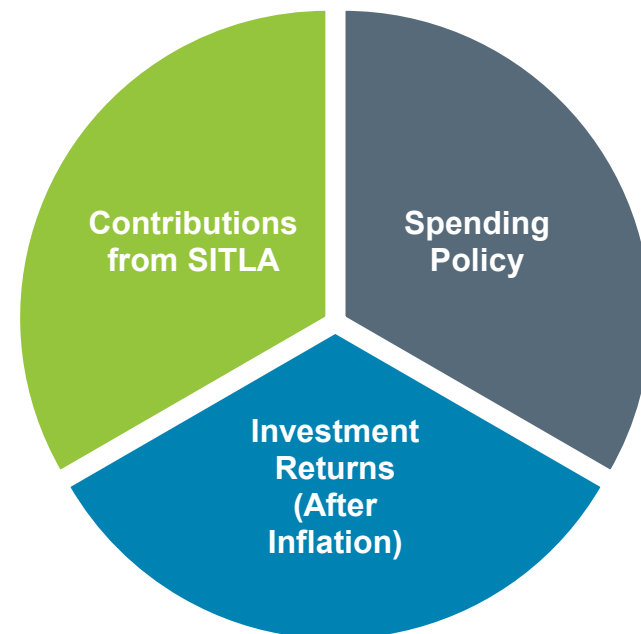
“The trustees of endowed institutions are the guardians of the future against the claims of the present. Their task in managing the endowment is to preserve equity among generations.”

- Professor James Tobin, Yale University (1974)

Intergenerational Equity Components

Each plays an important role in maintaining Intergenerational Equity:

1. Contributions from SITLA
2. Spending Policy
3. Investment Returns (After Inflation)



Intergenerational Equity Study

What is an Intergenerational Equity Study?

1. Enables SITFO to monitor the Fund's ability to achieve its vision over the long-term.
 - The study will be updated when considering significant investment decisions and on a periodic basis to serve as a “dashboard” for monitoring and communicating progress—internally and externally.
2. Uses a holistic approach by assessing the fiscal health of the Fund by incorporating anticipated natural resource revenues and spending policy relative to the prospective future demands on those assets.
3. Ability to dynamically examine the impact of potential changes and amendments impacting the long-term fiscal health of the Fund including:
 - **Investment Decisions** (e.g. asset allocation changes, asset class additions)
 - **Anticipated Future Market Environments** (e.g. declining oil prices, rising inflation)
 - **Constitutional Amendments**
 - **Legislative Action**

Defining the Intergenerational Equity Objective

Maintaining intergenerational equity can only be achieved if it is defined and measured over time.

The Investment Policy Statement provides that the primary return objective is to maintain purchasing power while sustaining the current distribution amount which is a maximum of 4%. *Therefore, we might define maintaining intergenerational equity as preserving the economic value after inflation.*

The definition may also be expanded to account for other relevant factors such as an increase in the future demand of those assets (through population growth for example) and to reflect the depleting/decreasing nature of the real assets that provide contributions.

Research¹ published by the University of Utah estimates the State's population to increase on average by 1.3% until 2060. The population ages 5-17 is projected to increase however compose a smaller share of the population in 2060 than it does now. The school age population is projected to grow from 706,174 in 2020 to 811,572 in 2060, decreasing as a share of the total population from 21.5 percent to 14.9 percent, however still growing approximately 0.5% per year on average. To incorporate the non-renewable nature of certain revenue sources into the model, an additional 0.5% per year growth rate is added to account for anticipated reduction in revenues from finite resources.

This might inform us that in addition to preserving the economic value after inflation, an annual real growth rate of approximately 1.0% is appropriate.

¹<https://gardner.utah.edu/wp-content/uploads/Projections-Brief-Final.pdf>, Jan 2022.

Defining the Intergenerational Equity Objective

Time Horizon:

We have experience modeling and measuring the Intergenerational Equity Objective over various lengths of time. The time horizon should be sufficiently long to ensure it captures and spans at least one generation and provides sufficient time for modeling assumptions to materialize, however not so long that potential inputs may no longer be relevant or estimated with any reasonable degree of confidence. For these reasons, we recommend modeling a time period of 25 years.

Probability of Attaining Intergenerational Equity (“IE”) Objective:

Funds should strive to reach and maintain a 50% probability of attaining the IE Objective in order to provide equitable opportunities across all generations.

Probability	Interpretation
0% - 49%	Value of benefits available to future generations is <i>eroding</i> relative to generations of today
50%	Value of benefits available to future generations is <i>equal</i> relative to generations of today
51% - 100%	Value of benefits available to future generations is <i>greater</i> relative to generations of today

Defining the Intergenerational Equity Objective

Maintaining the Intergenerational Equity (“IE”) Objective is defined as:

1. Maintaining economic value after inflation
2. Achieving annual 1.0% real growth primarily to account for future student enrollment growth and increasing demands on the Fund

Intergenerational Equity Objective for SITFO:

For SITFO, attaining the Intergenerational Equity Objective would mean growing the Fund assets from **\$3.1B** today to approximately **\$3.9B** in Year 25.

Based on the assumed modeling inputs that cover the current strategic asset allocation, distribution policy, expectations for future inflation, as well as the anticipated SITLA contributions, SITFO’s median probability of attaining the Intergenerational Equity Objective in Year 25 is **78.2%**, with a projected median real market value of **\$5.5B**.

Annual distributions are also expected to increase as the Fund assets grows over time. Annual distributions are expected to grow from **\$97.4M** to nearly **\$203.5M** over the 25-year modeling horizon.

SITFO Contribution Assumptions

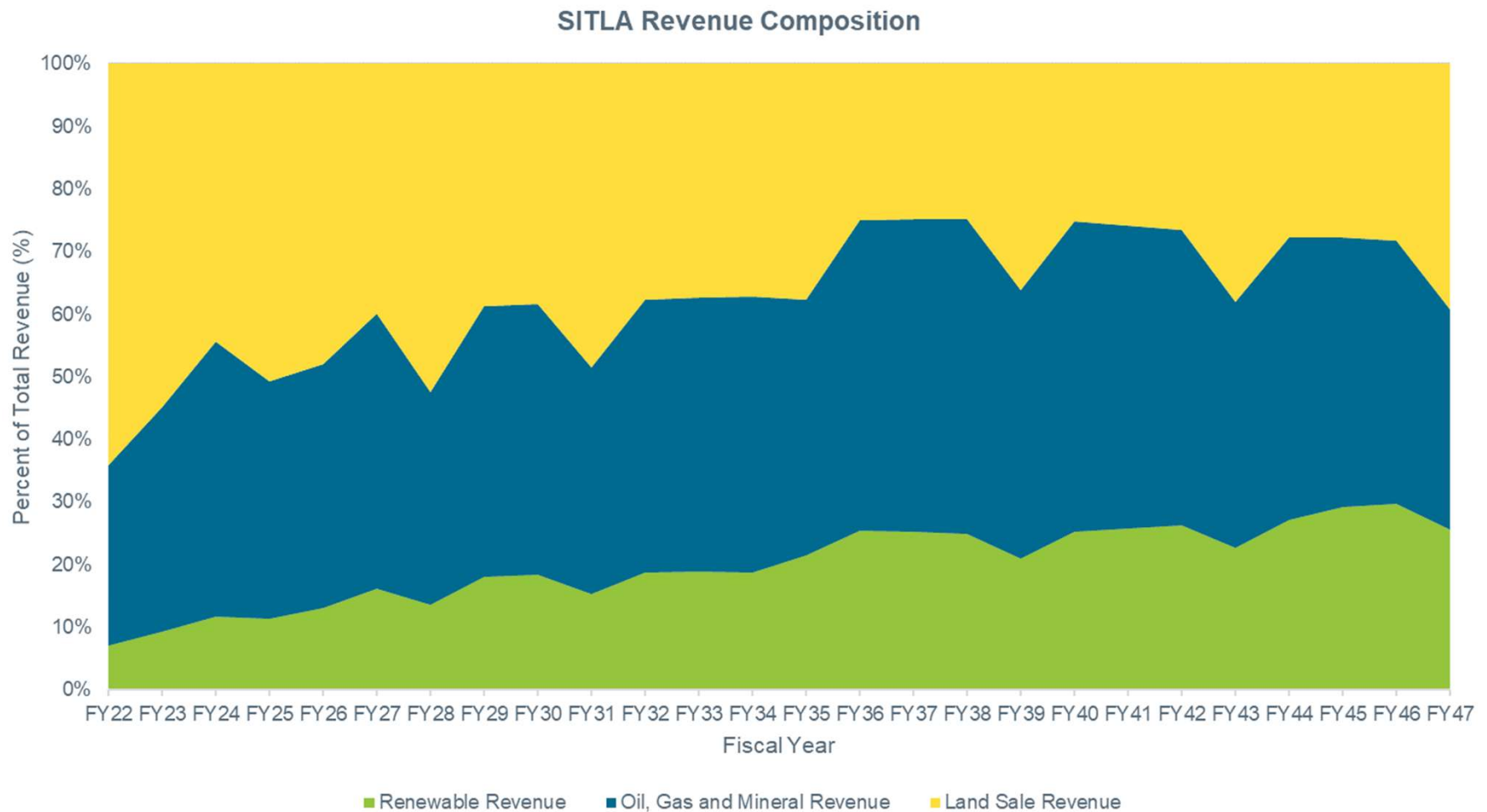
To establish the initial assumptions for Fund contributions, RVK received projections through a collaboration of the Land Trusts Protection and Advocacy Office (LTPAO)—the agency that oversees both SITLA and SITFO—and SITLA. This analysis provided RVK with contribution projections for the full 25-year modeling horizon.

Assumptions for the major components are detailed in the table below:

Revenue / Expense Source	Projection Assumption
Oil & Gas	Initial cumulative 5% growth from FY2022-2027, 100% cumulative increase in oil revenues and 50% cumulative increase in gas revenues between FY2028-2039, 3% annual depreciation after.
Coal	\$1M each year
Development, Other Minerals, Materials Permits, Sales, Easements, Rights of Entry, Agriculture, Commercial, Governmental, Industrial, Residential, Telecommunication, Forestry, and Grazing	Increase by RVK inflation assumption (2.5%) each year.
Total Operating and Stewardship Expenses	Increase by 3% each year.
Capital Expenditures	Increase by RVK inflation assumption (2.5%) each year.
Renewables	Itemized projection by current renewable lease with growth rates ranging between 0.75% and 5%.

SITLA Revenue Projections

SITLA has provided RVK with revenue and expense projections for the next 25 fiscal years. The composition of the revenue projections are detailed in the graph below:



Revenue composition is gross of expenses and represents the percent of each year's annual revenue attributable to the respective classifications.

SITLA Revenue Projections

SITLA has provided RVK with revenue and expense projections for the next 25 fiscal years. The resulting projections are detailed in the table below:

	Nominal Contribution Assumption	Real Contribution Assumption
Year 1	\$149,641,791	\$145,900,746
Year 2	\$103,398,322	\$98,293,029
Year 3	\$77,937,346	\$72,236,959
Year 4	\$98,582,557	\$89,087,863
Year 5	\$96,167,317	\$84,732,609
Year 6	\$83,897,830	\$72,073,966
Year 7	\$117,852,308	\$98,712,102
Year 8	\$91,687,344	\$74,876,635
Year 9	\$95,025,350	\$75,662,558
Year 10	\$123,311,581	\$95,730,433
Year 11	\$101,702,552	\$76,980,836
Year 12	\$105,193,396	\$77,632,552
Year 13	\$108,338,071	\$77,954,484
Year 14	\$123,297,403	\$86,500,486
Year 15	\$101,160,624	\$69,195,959
Year 16	\$104,137,967	\$69,451,710
Year 17	\$107,225,218	\$69,722,894
Year 18	\$135,427,024	\$85,859,512
Year 19	\$109,811,899	\$67,879,260
Year 20	\$108,966,162	\$65,672,563
Year 21	\$108,192,463	\$63,576,108
Year 22	\$132,489,661	\$75,907,299
Year 23	\$106,856,676	\$59,690,858
Year 24	\$109,672,482	\$59,732,192
Year 25	\$109,176,111	\$57,975,301
Total	\$2,709,149,453	\$1,971,038,916

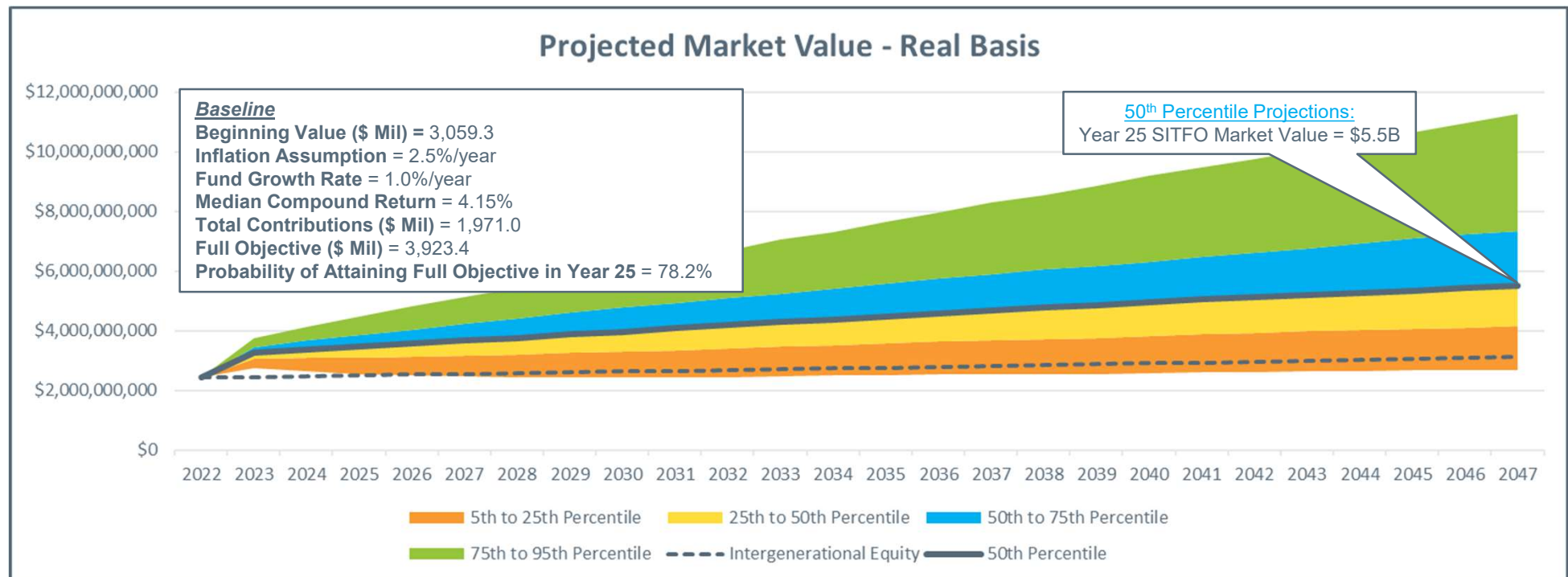
Real contributions are calculated as the present value of nominal contributions utilizing RVK's inflation assumption of 2.50%.

SITFO Intergenerational Model

Key Attributes:

- 1. Annual Spending:** average of the previous years spending adjusted for both inflation and student enrollment growth, and 4% of the previous five-year average market value, not to exceed the calculated 4% average market value.
- 2. IE Objective:** Current SITFO market value, increasing by 1.0% real growth per annum to keep pace with student enrollment growth and increasing demands on the Fund.

Projected Fund Market Value Over Time:



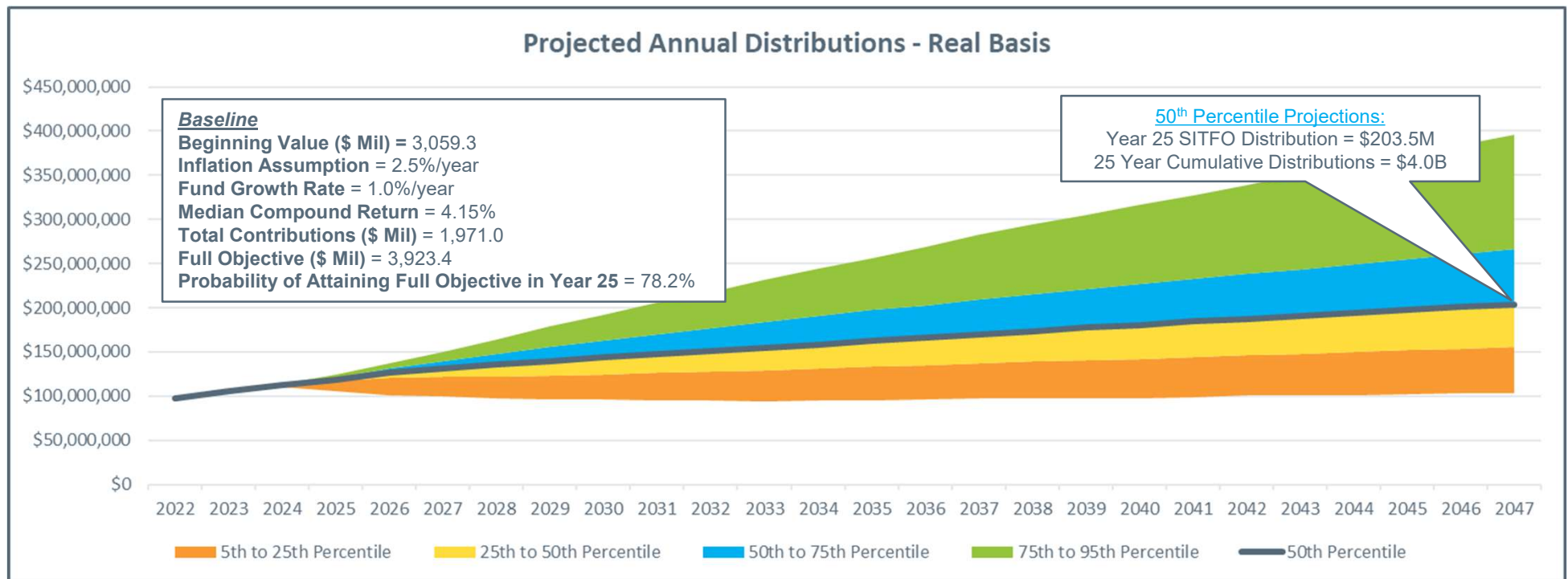
All data shown in real terms (after 2.5% annual inflation). Monte Carlo Simulations assume SITFO is invested at the current Target Allocation. Year 25 IE Objective is established as the current Fund market value grown by 1.0% annual real growth. Median compound return represents the 50th percentile of the Monte Carlo return distribution over 25 years.

SITFO Intergenerational Model

Key Attributes:

- 1. Annual Spending:** average of the previous years spending adjusted for both inflation and student enrollment growth, and 4% of the previous five-year average market value, not to exceed the calculated 4% average market value.
- 2. IE Objective:** Current SITFO market value, increasing by 1.0% real growth per annum to keep pace with student enrollment growth and increasing demands on the Fund.

Projected Fund Annual Distributions Over Time:



All data shown in real terms (after 2.5% annual inflation). Monte Carlo Simulations assume SITFO is invested at the current Target Allocation. Year 25 IE Objective is established as the current Fund market value grown by 1.0% annual real growth. Median compound return represents the 50th percentile of the Monte Carlo return distribution over 25 years.

Cash Flow Assumptions – 4.00% Distribution

Projected Net Additions to SITFO Fund



	Contribution Assumption	Median Distribution	Net Cash Flow	Net Cash Flow (% of Fund)	Median Annual Real Return	Net Addition to Fund
Year 1	\$145,900,746.25	\$105,072,781.84	\$40,827,964.42	1.27%	\$146,134,715.97	\$186,962,680.38
Year 2	\$98,293,029.46	\$112,048,578.50	-\$13,755,549.04	-0.42%	\$149,874,262.41	\$136,118,713.37
Year 3	\$72,236,959.37	\$118,864,981.95	-\$46,628,022.58	-1.38%	\$151,336,979.72	\$104,708,957.14
Year 4	\$89,087,862.72	\$126,379,709.02	-\$37,291,846.30	-1.08%	\$148,607,225.58	\$111,315,379.28
Year 5	\$84,732,609.12	\$131,741,171.20	-\$47,008,562.08	-1.32%	\$161,090,457.33	\$114,081,895.25
Year 6	\$72,073,966.16	\$136,116,561.50	-\$64,042,595.34	-1.77%	\$171,597,049.19	\$107,554,453.85
Year 7	\$98,712,102.28	\$139,771,015.17	-\$41,058,912.88	-1.10%	\$174,640,584.37	\$133,581,671.49
Year 8	\$74,876,635.14	\$143,715,285.32	-\$68,838,650.18	-1.81%	\$181,624,454.80	\$112,785,804.62
Year 9	\$75,662,557.73	\$147,287,727.60	-\$71,625,169.86	-1.85%	\$177,725,362.69	\$106,100,192.83
Year 10	\$95,730,433.17	\$150,639,065.96	-\$54,908,632.78	-1.38%	\$176,867,435.98	\$121,958,803.20
Year 11	\$76,980,836.04	\$154,909,320.35	-\$77,928,484.31	-1.93%	\$189,587,562.76	\$111,659,078.46
Year 12	\$77,632,552.42	\$158,244,342.46	-\$80,611,790.05	-1.96%	\$188,726,525.50	\$108,114,735.45
Year 13	\$77,954,483.92	\$162,105,707.75	-\$84,151,223.83	-2.00%	\$193,842,279.06	\$109,691,055.23
Year 14	\$86,500,486.16	\$165,838,660.87	-\$79,338,174.71	-1.85%	\$206,080,017.80	\$126,741,843.09
Year 15	\$69,195,959.16	\$169,461,865.58	-\$100,265,906.43	-2.30%	\$207,967,772.97	\$107,701,866.55
Year 16	\$69,451,710.41	\$173,017,096.97	-\$103,565,386.56	-2.34%	\$198,191,596.82	\$94,626,210.26
Year 17	\$69,722,893.87	\$177,304,247.15	-\$107,581,353.28	-2.39%	\$193,810,382.96	\$86,229,029.68
Year 18	\$85,859,512.42	\$180,432,580.83	-\$94,573,068.41	-2.06%	\$206,516,262.33	\$111,943,193.92
Year 19	\$67,879,260.01	\$184,655,000.22	-\$116,775,740.21	-2.51%	\$218,932,849.53	\$102,157,109.31
Year 20	\$65,672,563.10	\$187,662,414.39	-\$121,989,851.29	-2.59%	\$220,604,862.41	\$98,615,011.12
Year 21	\$63,576,107.64	\$190,874,404.97	-\$127,298,297.33	-2.66%	\$232,706,688.55	\$105,408,391.22
Year 22	\$75,907,298.52	\$194,491,182.77	-\$118,583,884.26	-2.44%	\$211,858,444.36	\$93,274,560.11
Year 23	\$59,690,858.08	\$197,901,146.30	-\$138,210,288.22	-2.81%	\$231,884,038.33	\$93,673,750.12
Year 24	\$59,732,191.62	\$201,196,468.12	-\$141,464,276.49	-2.84%	\$221,868,311.99	\$80,404,035.50
Year 25	\$57,975,301.21	\$203,481,891.83	-\$145,506,590.62	-2.89%	\$232,833,913.56	\$87,327,322.94

All data shown is in real terms. Average net cash flow as a percentage of the Fund is -1.86%.

Sensitivity Analysis

The table below provides a summary of the various scenario testing conducted that helps to quantify the implications of changes to the various modeling inputs.

	Inflation	Rate of Return	Contributions	Distributions
Baseline (Probability of Attaining Full Objective in Year 25)	2.5%/year (78.2%)	Fund Target Expected Return (real, geo.): 4.15% (78.2%)	\$1.97B over next 25 years (78.2%)	4% of trailing 5-year average market value (78.2%)
Impact of UP move to assumption	3.5%/year (56.1%)	+100 bps to 5.15% (88.9%)	50% increase to each annual projection. \$2.96B over 25 Years (real) (89.5%)	5% of trailing 5-year average market value (62.8%)
Impact of DOWN move to assumption	1.5%/year (91.5%)	-100 bps to 3.15% (61.6%)	50% decrease to each annual projection. \$0.99B over 25 Years (real) (58.9%)	3% of trailing 5-year average market value (88.3%)

The sensitivity analysis demonstrates that while SITFO is currently projected to provide well above intergenerational equity, changes to any—or even just one—of the components impacting the long-term fiscal health of SITFO can have a substantial influence on the ability to provide and maintain intergenerational equity.

Sensitivity Analysis

The table below provides a summary of the various scenario testing conducted that helps to quantify the implications of changes to the various modeling inputs.

	Inflation + Contributions	Rate of Return + Distributions	Year 1 Market Shock	Breakeven
Baseline (Probability of Attaining Full Objective in Year 25)	2.5%/year (78.2%)	Fund Target Expected Return (real, geo.): 4.15%; 4% of trailing 5-year market value (78.2%)	2.75% 50 th percentile real geo return in Year 1 (78.2%)	5.70% of trailing 5-year average market value (50.0%)
Impact of Positive move to assumption	1.5%/year Inflation; 50% increase to annual contribution (97.2%)	+100 bps to 5.15%; 3% of trailing 5-year market value (95.1%)	+30% portfolio return in Year 1 (86.2%)	--
Impact of Negative move to assumption	3.5%/year Inflation; 50% decrease to annual contribution (36.5%)	-100 bps to 3.15%; 5% of trailing 5-year market value (43.8%)	-30% portfolio return in Year 1 (59.3%)	--

The sensitivity analysis demonstrates that while SITFO is currently projected to provide well above intergenerational equity, changes to any—or even just one—of the components impacting the long-term fiscal health of SITFO can have a substantial influence on the ability to provide and maintain intergenerational equity.

Intergenerational Equity Observations

At current levels of expected contributions, distributions, and returns the portfolio is projected to be highly resilient to stresses on the portfolio.

- Sensitivity analysis conducted reflected outcomes that ranged from a low of **36.5%** chance of maintaining intergenerational equity to a high of **97.2%** as compared to the baseline of **78.2%**.
- A key driver for the resiliency is the projected level of net cash flows relative to the projected portfolio balances over the next 25 years, with an average outflow of approximately **1.9%** of Fund assets.
 - As the portfolio grows over time this relationship is anticipated to change with year 25 projected to experience a **2.9%** net outflow.
- As a result of the elevated probability of maintaining intergenerational equity, an increased distribution rate of 4.25% of the trailing 5-year average market value is evaluated on the following pages.

Cash Flow Assumptions – 4.25% Distribution

Projected Net Additions to SITFO Fund



	Contribution Assumption	Median Distribution	Net Cash Flow	Net Cash Flow (% of Fund)	Median Annual Real Return	Net Addition to Fund
Year 1	\$145,900,746.25	\$108,489,216.92	\$37,411,529.33	1.17%	\$146,053,661.05	\$183,465,190.37
Year 2	\$98,293,029.46	\$117,406,307.69	-\$19,113,278.23	-0.58%	\$149,612,412.86	\$130,499,134.63
Year 3	\$72,236,959.37	\$125,396,719.53	-\$53,159,760.16	-1.57%	\$150,770,775.75	\$97,611,015.58
Year 4	\$89,087,862.72	\$133,685,035.24	-\$44,597,172.52	-1.29%	\$147,767,491.92	\$103,170,319.40
Year 5	\$84,732,609.12	\$139,357,859.81	-\$54,625,250.69	-1.54%	\$159,889,120.81	\$105,263,870.12
Year 6	\$72,073,966.16	\$143,876,642.69	-\$71,802,676.53	-1.98%	\$169,811,060.84	\$98,008,384.30
Year 7	\$98,712,102.28	\$147,392,374.34	-\$48,680,272.06	-1.31%	\$172,494,601.24	\$123,814,329.18
Year 8	\$74,876,635.14	\$151,261,151.94	-\$76,384,516.80	-2.01%	\$178,863,581.51	\$102,479,064.71
Year 9	\$75,662,557.73	\$154,770,076.62	-\$79,107,518.89	-2.04%	\$174,891,803.63	\$95,784,284.74
Year 10	\$95,730,433.17	\$157,877,593.81	-\$62,147,160.63	-1.57%	\$173,578,149.70	\$111,430,989.06
Year 11	\$76,980,836.04	\$161,929,423.10	-\$84,948,587.06	-2.10%	\$185,699,558.75	\$100,750,971.70
Year 12	\$77,632,552.42	\$164,952,888.59	-\$87,320,336.17	-2.12%	\$184,459,627.91	\$97,139,291.74
Year 13	\$77,954,483.92	\$168,805,789.84	-\$90,851,305.92	-2.16%	\$189,021,112.26	\$98,169,806.33
Year 14	\$86,500,486.16	\$172,341,057.17	-\$85,840,571.01	-2.00%	\$200,561,575.08	\$114,721,004.07
Year 15	\$69,195,959.16	\$175,716,857.21	-\$106,520,898.06	-2.45%	\$202,141,633.95	\$95,620,735.89
Year 16	\$69,451,710.41	\$179,043,134.08	-\$109,591,423.67	-2.48%	\$192,156,845.52	\$82,565,421.85
Year 17	\$69,722,893.87	\$182,958,027.81	-\$113,235,133.94	-2.52%	\$187,707,936.23	\$74,472,802.29
Year 18	\$85,859,512.42	\$185,883,126.27	-\$100,023,613.85	-2.18%	\$199,530,373.28	\$99,506,759.43
Year 19	\$67,879,260.01	\$190,037,857.05	-\$122,158,597.04	-2.63%	\$211,204,470.34	\$89,045,873.30
Year 20	\$65,672,563.10	\$192,451,803.50	-\$126,779,240.40	-2.69%	\$212,067,894.53	\$85,288,654.13
Year 21	\$63,576,107.64	\$195,450,670.42	-\$131,874,562.78	-2.76%	\$223,919,502.14	\$92,044,939.36
Year 22	\$75,907,298.52	\$198,759,983.93	-\$122,852,685.42	-2.53%	\$203,329,737.55	\$80,477,052.14
Year 23	\$59,690,858.08	\$201,782,600.49	-\$142,091,742.41	-2.89%	\$222,167,682.02	\$80,075,939.60
Year 24	\$59,732,191.62	\$204,703,854.07	-\$144,971,662.44	-2.92%	\$211,938,035.81	\$66,966,373.37
Year 25	\$57,975,301.21	\$206,820,899.66	-\$148,845,598.45	-2.96%	\$222,301,297.90	\$73,455,699.45

All data shown is in real terms. Average net cash flow as a percentage of the Fund is -2.00%.

Sensitivity Analysis – 4.25% Distribution

The table below provides a summary of the various scenario testing conducted that helps to quantify the implications of changes to the various modeling inputs.

	Inflation	Rate of Return	Contributions	Distributions
Baseline (Probability of Attaining Full Objective in Year 25)	2.5%/year (75.3%)	Fund Target Expected Return (real, geo.): 4.15% (75.3%)	\$1.97B over next 25 years (75.3%)	4.25% of trailing 5-year average market value (75.3%)
Impact of UP move to assumption	3.5%/year (51.5%)	+100 bps to 5.15% (86.6%)	50% increase to each annual projection. \$2.96B over 25 Years (real) (87.4%)	5.25% of trailing 5-year average market value (58.4%)
Impact of DOWN move to assumption	1.5%/year (89.8%)	-100 bps to 3.15% (56.9%)	50% decrease to each annual projection. \$0.99B over 25 Years (real) (54.4%)	3.25% of trailing 5-year average market value (86.0%)

The sensitivity analysis demonstrates that while SITFO is currently projected to provide well above intergenerational equity, changes to any—or even just one—of the components impacting the long-term fiscal health of SITFO can have a substantial influence on the ability to provide and maintain intergenerational equity.

Sensitivity Analysis – 4.25% Distribution

The table below provides a summary of the various scenario testing conducted that helps to quantify the implications of changes to the various modeling inputs.

	Inflation + Contributions	Rate of Return + Distributions	Year 1 Market Shock	Breakeven
Baseline (Probability of Attaining Full Objective in Year 25)	2.5%/year (75.3%)	Fund Target Expected Return (real, geo.): 4.15%; 4.25% of trailing 5-year market value (75.3%)	2.75% 50 th percentile real geo return in Year 1 (75.3%)	5.70% of trailing 5-year average market value (50.0%)
Impact of Positive move to assumption	1.5%/year Inflation; 50% increase to annual contribution (96.5%)	+100 bps to 5.15%; 3.25% of trailing 5-year market value (93.9%)	+30% portfolio return in Year 1 (83.9%)	--
Impact of Negative move to assumption	3.5%/year Inflation; 50% decrease to annual contribution (32.1%)	-100 bps to 3.15%; 5.25% of trailing 5-year market value (39.1%)	-30% portfolio return in Year 1 (55.1%)	--

The sensitivity analysis demonstrates that while SITFO is currently projected to provide well above intergenerational equity, changes to any—or even just one—of the components impacting the long-term fiscal health of SITFO can have a substantial influence on the ability to provide and maintain intergenerational equity.

Intergenerational Equity Summary

- “Prediction is difficult, especially about the future.”
- This analysis is a helpful tool to understanding the likely, long-term implications of certain decisions made today. While we should recognize the limitations inherent to projections, this analysis does provide a useful foundation for discussion and to make informed decision.
- The analysis clearly indicates that based on the current assumptions and expectations regarding key components to fiscal health, the value of benefits available to future generations is *greater* relative to the generations of today.
- There are three (3) components that help establish the intergenerational equity of a perpetual entity. Each of these components represents a lever that can be adjusted to impact the forward trajectory of intergenerational equity. Importantly, these levers are not “equal” by various measures and each carry different ramifications that should be carefully assessed and considered.
- The first component—the investment returns derived from SITFO’s asset allocation—is currently estimated to provide an expected, compound return of 4.15%, net of inflation, over the 25-year time horizon. That return expectation is closely aligned with the current distribution policy.

Intergenerational Equity Summary (continued)

- The asset allocation is established with the help of an efficient frontier and is intended to provide attractive risk-adjusted returns under the prevailing capital market conditions. The intergenerational equity assessment indicates that a reduction of investment risk exposure, particularly in a capital environment that does not adequately reward higher risk allocations, is a feasible option that could be considered. This is helpful flexibility in the management of the Funds.
- A second component are the contributions received from SITLA. While anticipated contributions are a meaningfully additive to intergenerational equity, we should recognize that this component or lever can be most difficult to forecast and influence, particularly compared to the investment returns and the distribution policy.
- The analysis also contemplated a modest increase to the long-term distribution rate from 4.00% to 4.25%—the third and final lever. The analysis indicates such an incremental increase could be supported by the anticipated Fund dynamics and further help provide enhanced egalitarian equity between generations.
- Intergenerational equity is a moving target and should therefore be measured and revisited periodically. A major change to any single input could result in overcorrection and therefore causing unnecessary disruption. Smaller, incremental changes will provide an opportunity to adapt and readjust over time, particularly important for decisions that would be unpopular to reverse (i.e., reduction of the distribution rate at a later date).

Appendix



Historical Probability of Intergenerational Equity

Dashboard

	2020	2022	202X	202X	202X
Probability	86.9%	78.2%			
Expected Return*	4.8%	4.2%			
Expected Inflation	2.0%	2.5%	--Placeholder for Future Years--		
Distribution Rate	4.0%	4.0%			
Annual Growth Rate	1.0%	1.0%			
SITLA Contributions*	\$1,645M	\$1,971M			

*Expected Return represents the geometric, real return. SITLA Contributions represent total real contributions over 25 projection horizon.

2022 SITFO Capital Market Assumptions

	SITFO Asset Class	RVK Assumption	Arith. Return Assumption	Risk Assumption	Geo. Return Assumption
Growth	Global Equity	Global Public Equity	6.80	16.40	5.56
	Private Equity	Private Equity (70% Buyout / 30% Venture)	9.00	22.00	6.85
Real Assets	Public Real Assets	Custom Public Real Assets Assumption ¹	6.06	13.08	5.26
	Private Real Estate	Non-Core Real Estate	8.50	20.00	6.70
	Private Real Assets	40% Non-Core Infrastructure / 17.5% Private Energy / 17.5% Agriculture / 25% Custom Private Credit	8.76	12.13	8.09
Income	Credit	High Yield	5.50	10.00	5.03
	Securitized	Custom Securitized Assumption ²	6.75	12.00	6.08
	Emerging Markets Debt	1/3 EMD Hard / 1/3 EMD Local / 1/3 EMD Corp	5.42	9.65	4.98
	ILS	Custom ILS Assumption ³	6.00	11.00	5.43
	Private Debt	Custom Private Credit ⁴	9.00	17.00	7.70
Defensive	GRIPS	50% Short TIPS / 50% Long STRIPS + DRP Return Premium	5.25	15.00	4.00
	Systematic Convexity	Custom Systematic Convexity Assumption ⁵	4.25	9.00	3.86
	Inflation	US Inflation	2.50	2.50	2.47

¹Custom Public Real Assets assumption is constructed as a build-up of the underlying exposures of the S&P Real Assets Index.

²Custom Securitized assumption utilizes a CAPM model based on the EurekaHedge Structured Credit HF Index with a beta reference of Bank Loans.

³Custom ILS assumption incorporates historical asset class yields, and max drawdown data to inform the return and risk assumptions.

⁴Custom Private Credit assumption is constructed utilizing an expected return and risk premium to RVK's standard private credit assumption.

⁵Custom Systematic Convexity assumption utilizes a CAPM model based on the Man Custom Index with a beta reference of Managed Futures.

2020 Trustee Survey Summary Results

The Trustees provided responses and insight regarding their views across several relevant investment-related aspects pertaining to fund management. The below summarizes these responses and the resulting inferences.

1. There is no strong aversion to illiquidity however it should be weighted carefully and in the context of being able to more successfully meet Fund objectives.
2. Volatility should be monitored over sufficiently long time periods and appropriate to meet Fund objectives.
3. Expected Fund losses as measured by maximum drawdown should be mitigated and substantially less severe than experienced in the publicly-traded equity markets.
4. Asset classes should have attractive risk-adjusted return and correlation characteristics with a general openness to most all asset classes. Hedge Funds may be less compelling to some.
5. The distribution policy is a top priority both in terms of construction and reliability of distributions.
6. Current return objective remains generally appropriate and should be sufficient to remain intergenerational equity.

Distribution Policy Design

Desired Outcomes of a Distribution/Spending Policy*

1. Minimize year-to-year variability
2. Maintain growth above the rate of inflation
3. Ensure long-term spending sustainability

Simple Policies	Smoothing Policies	Inflation-Based Policies	Blended Policies
<p>Example: Spending based on only dividend and interest income earned (may also include realized gains).</p> <p>Advantages</p> <ul style="list-style-type: none"> • Simple to administer. • Has allowed for distribution of 3-5% of assets historically. <p>Disadvantages</p> <ul style="list-style-type: none"> • Income levels have varied significantly over time (spiked in 1980s and dropped in the 1990s). • Spending goals are at the mercy of market yields. 	<p>Example: Spending based on set rate (e.g., 5.0%) of an average market value over set period of time.</p> <p>Advantages</p> <ul style="list-style-type: none"> • Widely recognized and simple implementation. • Reduces impact of sudden market value changes. <p>Disadvantages</p> <ul style="list-style-type: none"> • Actual spending can be less predictable and fluctuate • Spending declines can occur at the time they are needed the most 	<p>Example: Spending based on prior year spending plus change in CPI.</p> <p>Advantages</p> <ul style="list-style-type: none"> • Simplicity of calculation • Spending precisely mirrors change in inflation • Spending volatility is low <p>Disadvantages</p> <ul style="list-style-type: none"> • Risk of overspending in certain economic climates (e.g., stagflation) • Risk of overspending during severe market downturns. 	<p>Example: Blends inflation and average market value components.</p> <p>Advantages</p> <ul style="list-style-type: none"> • Seeks to leverage benefits of various approaches • Lower volatility relative to simple, market-based policies • Customization possible depending on unique portfolio needs <p>Disadvantages</p> <ul style="list-style-type: none"> • Complexity of implementation • Difficulty communicating methodology to stakeholders.

*Distribution/Spending Policy is the amount removed annually from the corpus and used for the designated beneficiary purpose.

Detailed SITLA Contribution Projections – FY22-FY34

	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34
Oil & Gas	38,139,245	36,460,199	36,764,022	37,070,377	37,379,284	37,690,766	39,169,209	40,709,352	42,313,963	43,985,943	45,728,335	47,544,328	49,437,267
Helium and Other Gases													
Coal	1,056,842	1,100,000	1,100,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Other Minerals	6,653,912	5,500,000	5,500,000	5,637,500	5,778,438	5,922,898	6,070,971	6,222,745	6,378,314	6,537,772	6,701,216	6,868,746	7,040,465
Materials Permits	1,173,315	1,200,000	1,200,000	1,230,000	1,260,750	1,292,269	1,324,575	1,357,690	1,391,632	1,426,423	1,462,083	1,498,636	1,536,101
Development	69,534,750	60,000,000	35,000,000	35,000,000	35,875,000	36,771,875	37,691,172	38,633,451	39,599,287	40,589,270	41,604,001	42,644,101	43,710,204
Sales	34,843,616	7,500,000	10,000,000	5,000,000	5,000,000	5,125,000	5,253,125	5,384,453	5,519,064	5,657,041	5,798,467	5,943,429	6,092,014
Extra Ordinary Sales/CEs				20,000,000	15,000,000		30,000,000			25,000,000			
Easements	2,142,256	1,200,000	1,200,000	1,230,000	1,260,750	1,292,269	1,324,575	1,357,690	1,391,632	1,426,423	1,462,083	1,498,636	1,536,101
Rights of Entry	263,984	200,000	200,000	205,000	210,125	215,378	220,763	226,282	231,939	237,737	243,681	249,773	256,017
Agriculture	124,704	120,000	120,000	123,000	126,075	129,227	132,458	135,769	139,163	142,642	146,208	149,864	153,610
Commercial	2,226,048	2,400,000	2,400,000	2,460,000	2,521,500	2,584,538	2,649,151	2,715,380	2,783,264	2,852,846	2,924,167	2,997,271	3,072,203
Governmental	669,661	500,000	500,000	512,500	525,313	538,445	551,906	565,704	579,847	594,343	609,201	624,431	640,042
Industrial	2,463,488	2,500,000	2,500,000	2,562,500	2,626,563	2,692,227	2,759,532	2,828,521	2,899,234	2,971,714	3,046,007	3,122,157	3,200,211
Renewable	1,342,264	1,993,022	2,309,221	2,431,192	3,990,228	5,551,929	7,151,678	8,550,932	9,368,925	10,047,599	10,740,000	11,437,643	11,690,698
Renewable Hydrogen	100,000	100,000	100,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
Residential	71,127	75,000	75,000	76,875	78,797	80,767	82,786	84,856	86,977	89,151	91,380	93,665	96,006
Telecommunications	1,167,435	1,250,000	1,250,000	1,281,250	1,313,281	1,346,113	1,379,766	1,414,260	1,449,617	1,485,857	1,523,004	1,561,079	1,600,106
Forestry	23,137	50,000	50,000	51,250	52,531	53,845	55,191	56,570	57,985	59,434	60,920	62,443	64,004
Grazing	1,084,682	1,200,000	1,200,000	1,230,000	1,260,750	1,292,269	1,324,575	1,357,690	1,391,632	1,426,423	1,462,083	1,498,636	1,536,101
Total Revenue (all sections)	163,080,466	123,348,222	101,468,243	118,301,443	116,459,384	104,779,813	139,341,434	113,801,345	117,782,476	146,730,619	125,802,839	129,994,836	133,861,152
Less Development and Sales	(104,378,366)	(67,500,000)	(45,000,000)	(60,000,000)	(55,875,000)	(41,896,875)	(72,944,297)	(44,017,904)	(45,118,352)	(71,246,311)	(47,402,468)	(48,587,530)	(49,802,218)
Net Revenue for Operations	58,702,100	55,848,222	56,468,243	58,301,443	60,584,384	62,882,938	66,397,137	69,783,440	72,664,124	75,484,308	78,400,370	81,407,306	84,058,934
Renewable Revenue	11,578,785	11,488,022	11,804,221	13,363,567	15,165,913	16,977,006	18,832,382	20,493,653	21,580,215	22,534,170	23,508,736	24,495,597	25,045,100
Oil, Gas and Mineral Revenue	47,023,315	44,260,199	44,564,022	44,937,877	45,418,472	45,905,933	47,564,756	49,289,787	51,083,909	52,950,138	54,891,634	56,911,710	59,013,834
Land Sale Revenue	104,378,366	67,500,000	45,000,000	60,000,000	55,875,000	41,896,875	72,944,297	44,017,904	45,118,352	71,246,311	47,402,468	48,587,530	49,802,218
Other Sources													
Gross Revenue	162,980,466	123,248,222	101,368,243	118,301,443	116,459,384	104,779,813	139,341,434	113,801,345	117,782,476	146,730,619	125,802,839	129,994,836	133,861,152
	39,196,088	37,560,199	37,864,022	38,070,377	38,379,284	38,690,766	40,169,209	41,709,352	43,313,963	44,985,943	46,728,335	48,544,328	50,437,267
Oil, Gas and Coal	24.03%	30.45%	37.32%	32.18%	32.96%	36.93%	28.83%	36.65%	36.77%	30.66%	37.14%	37.34%	37.68%
FTEs	68	73	73	73	73	73	73	73	73	73	73	73	73
Operating Expenses	11,988,675	15,699,900	19,170,897	15,246,024	15,703,405	16,174,507	16,659,742	17,159,534	17,674,320	18,204,550	18,750,686	19,313,207	19,892,603
Stewardship	450,000	750,000	772,500	795,675	819,545	844,132	869,456	895,539	922,405	950,078	978,580	1,007,937	1,038,175
Capital	1,000,000	3,500,000	3,587,500	3,677,188	3,769,117	3,863,345	3,959,929	4,058,927	4,160,400	4,264,410	4,371,020	4,480,296	4,592,303
Total Expenses	13,438,675	19,949,900	23,530,897	19,718,886	20,292,067	20,881,983	21,489,126	22,114,000	22,757,126	23,419,038	24,100,287	24,801,440	25,523,082
Net to Fund	149,641,791	103,398,322	77,937,346	98,582,557	96,167,317	83,897,830	117,852,308	91,687,344	95,025,350	123,311,581	101,702,552	105,193,396	108,338,071

Detailed SITLA Contribution Projections – FY35-FY46

	FY35	FY36	FY37	FY38	FY39	FY40	FY41	FY42	FY43	FY44	FY45	FY46
Oil & Gas	51,410,662	53,468,194	55,613,723	57,851,303	60,185,186	58,379,630	56,628,241	54,929,394	53,281,512	51,683,067	50,132,575	48,628,598
Helium and Other Gases												
Coal	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Other Minerals	7,216,477	7,396,889	7,581,811	7,771,356	7,965,640	8,164,781	8,368,900	8,578,123	8,792,576	9,012,390	9,237,700	9,468,643
Materials Permits	1,574,504	1,613,867	1,654,213	1,695,569	1,737,958	1,781,407	1,825,942	1,871,590	1,918,380	1,966,340	2,015,498	2,065,886
Development	25,000,000	25,625,000	26,265,625	26,922,266	27,595,322	28,285,205	28,992,335	29,717,144	30,460,072	31,221,574	32,002,114	32,802,166
Sales	6,244,315	6,400,423	6,560,433	6,724,444	6,892,555	7,064,869	7,241,491	7,422,528	7,608,091	7,798,294	7,993,251	8,193,082
Extra Ordinary Sales/CEs	25,000,000				25,000,000				25,000,000			
Easements	1,574,504	1,613,867	1,654,213	1,695,569	1,737,958	1,781,407	1,825,942	1,871,590	1,918,380	1,966,340	2,015,498	2,065,886
Rights of Entry	262,417	268,978	275,702	282,595	289,660	296,901	304,324	311,932	319,730	327,723	335,916	344,314
Agriculture	157,450	161,387	165,421	169,557	173,796	178,141	182,594	187,159	191,838	196,634	201,550	206,589
Commercial	3,149,008	3,227,733	3,308,427	3,391,137	3,475,916	3,562,813	3,651,884	3,743,181	3,836,760	3,932,679	4,030,996	4,131,771
Governmental	656,043	672,444	689,256	706,487	724,149	742,253	760,809	779,829	799,325	819,308	839,791	860,786
Industrial	3,280,217	3,362,222	3,446,278	3,532,435	3,620,745	3,711,264	3,804,046	3,899,147	3,996,625	4,096,541	4,198,955	4,303,928
Renewable	11,958,995	12,216,785	12,490,234	12,770,913	13,059,051	13,658,734	13,962,509	14,274,483	14,594,922	14,924,101	15,262,307	15,609,839
Renewable Hydrogen	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	11,080,000	11,080,000
Residential	98,406	100,867	103,388	105,973	108,622	111,338	114,121	116,974	119,899	122,896	125,969	129,118
Telecommunications	1,640,108	1,681,111	1,723,139	1,766,217	1,810,373	1,855,632	1,902,023	1,949,573	1,998,313	2,048,271	2,099,477	2,151,964
Forestry	65,604	67,244	68,926	70,649	72,415	74,225	76,081	77,983	79,933	81,931	83,979	86,079
Grazing	1,574,504	1,613,867	1,654,213	1,695,569	1,737,958	1,781,407	1,825,942	1,871,590	1,918,380	1,966,340	2,015,498	2,065,886
Total Revenue (all sections)	149,563,216	128,190,875	131,955,002	135,852,037	164,887,303	140,130,007	140,167,185	140,302,222	165,534,738	140,864,429	144,671,075	145,194,534
Less Development and Sales	(56,244,315)	(32,025,423)	(32,826,058)	(33,646,710)	(59,487,877)	(35,350,074)	(36,233,826)	(37,139,672)	(63,068,164)	(39,019,868)	(39,995,365)	(40,995,249)
Net Revenue for Operations	93,318,901	96,165,453	99,128,944	102,205,327	105,399,425	104,779,932	103,933,358	103,162,550	102,466,574	101,844,561	104,675,710	104,199,285
Renewable Revenue	32,117,258	32,686,504	33,279,197	33,887,100	34,510,642	35,454,115	36,110,275	36,783,443	37,474,105	38,182,764	42,289,937	43,036,160
Oil, Gas and Mineral Revenue	61,201,643	63,478,949	65,849,747	68,318,227	70,888,783	69,325,818	67,823,084	66,379,107	64,992,468	63,661,797	62,385,773	61,163,126
Land Sale Revenue	56,244,315	32,025,423	32,826,058	33,646,710	59,487,877	35,350,074	36,233,826	37,139,672	63,068,164	39,019,868	39,995,365	40,995,249
Other Sources												
Gross Revenue	149,563,216	128,190,875	131,955,002	135,852,037	164,887,303	140,130,007	140,167,185	140,302,222	165,534,738	140,864,429	144,671,075	145,194,534
	52,410,662	54,468,194	56,613,723	58,851,303	61,185,186	59,379,630	57,628,241	55,929,394	54,281,512	52,683,067	51,132,575	49,628,598
Oil, Gas and Coal	35.04%	42.49%	42.90%	43.32%	37.11%	42.37%	41.11%	39.86%	32.79%	37.40%	35.34%	34.18%
FTEs	73	73	73	73	73	73	73	73	73	73	73	73
Operating Expenses	20,489,381	21,104,063	21,737,185	22,389,300	23,060,979	23,752,808	24,465,393	25,199,355	25,955,335	26,733,995	27,536,015	28,362,096
Stewardship	1,069,321	1,101,400	1,134,442	1,168,476	1,203,530	1,239,636	1,276,825	1,315,130	1,354,583	1,395,221	1,437,078	1,480,190
Capital	4,707,111	4,824,789	4,945,408	5,069,044	5,195,770	5,325,664	5,458,806	5,595,276	5,735,158	5,878,536	6,025,500	6,176,137
Total Expenses	26,265,813	27,030,252	27,817,035	28,626,819	29,460,279	30,318,108	31,201,023	32,109,760	33,045,076	34,007,753	34,998,593	36,018,423
Net to Fund	123,297,403	101,160,624	104,137,967	107,225,218	135,427,024	109,811,899	108,966,162	108,192,463	132,489,661	106,856,676	109,672,482	109,176,111

PORTLAND

BOISE

CHICAGO

NEW YORK



October 2022

Investment Policy Statement Summarized



IPS Annual Review and Approval

IPS Annual Review and Approval

- This review is in the spirit of the requirement in the IPS to “review and approve annually”, balancing against “SITFO’s long-term horizon...not expect significant changes from year to year.”
- 2021 significant review and discussion, few revisions
 - Trustee appointment and term schedule
 - Interim benchmark rules adopted
 - Word smithing for clarity
- 2022 revisions thus far are related to reporting
 - Consolidation of public equity, public income, and GRIPS
- The CFA Institute’s checklist was used originally as the template, and we revisit the IPS through that lens

Section: Introduction

Authority and Beneficiaries

- Refers to the source and size of contributions from SITLA vs compounding of the trusts over time. Is this necessary? The phrasing does not impact the IGE work either way. (see page 3)

Purpose and Fiduciary Duty

- Reflects CFA Institute

Section: Duties & Responsibilities

Creation and Membership of the Board

- Reflects statutes

Duties and Responsibilities of:

- Board of trustees, SITFO (staff), consultants
 - Reflects CFA Institute
 - Revised in 2021
- Investment managers, custodian
 - Reflects CFA Institute

Section: Statement of Return and Risk Objectives

Return Objective

- Reflects CFA Institute
- Discuss level further based on intergenerational equity modeling
- Does it need clarification or simplification by adjusting for volatility (compound return)?
 - See IPS suggested edits and comments

Risk Objective

- Add specificity in the Section 3 – Return and Risk? Or reference “Section 6 – Risk Tolerance?”

Section: Distribution Policy

Distribution Policy

- References statues directly

Section: Risk Tolerance Guidelines

Risk Tolerance

- Consolidate with risk objective or fine as is? E.g., “Refer to Section 6...”
- Details volatility, liquidity, benchmarking, ranges, and sizing
- Reflects CFA Institute

Section: Asset Allocation

- Table updated to restore cash at a target of 0%

Level	Asset Class	Min	Target %	Max	Benchmark
2	Growth	38.5%	43.5%	48.5%	Composite of Public and Private, Pro-Rata
3	Public Equity	27.5%	30.5%	33.5%	ACWI IMI
3	Private Equity	10%	13%	16%	Cambridge Private Equity
2	Real Assets	12.5%	17.5%	22.5%	Composite of Public and Private, Pro-Rata
3	Public Real Assets	2.0%	5.0%	8.0%	S&P Real Assets Index
3	Private Real Estate	2.0%	5.0%	8.0%	Cambridge Real Estate Index
3	Private Real Assets	4.5%	7.5%	10.5%	50% Cambridge Private Natural Resources 50% Cambridge Private Infrastructure
2	Income	22%	27%	32%	Composite of Public and Private, Pro-Rata
3	Public Income	14.0%	17.0%	20.0%	U.S. High Yield 1-3 Year Index
3	Private Debt	7.0%	10.0%	13.0%	Cambridge Private Credit Index
2	Defensive	7%	12%	17%	Composite, Pro-Rata
3	GRIPs	2.0%	5.0%	8.0%	50% Bloomberg 20 - 30 Year STRIP 50% Bloomberg US TIPS 0 - 5 Year
3	Systematic Convexity	4.0%	7.0%	10.0%	40% SG Trend Index 40% HFRI Macro 20% EurekaHedge Long Vol
1	Total Portfolio	100%			

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3	Systematic Convexity	4.0%	7.0%	10.0%	40% SG Trend Index 40% HFRI Macro 20% EurekaHedge Long Vol
3	Cash	0.0%	0.0%	3.0%	3Mo U.S. T-Bill
1	Total Portfolio	100%			

Section: Reporting & Communication

Risk Dashboard

- Consolidated into the quarterly “Executive Summary”

Performance Measurement

- Consolidated into the quarterly “Executive Summary”

Asset Class Structure Reporting

- Quarterly and comprehensive

Break

Closing Remarks