MEETING AGENDA

Meeting: Finance Committee
Date: April 20, 2022
Time: 8:30 AM
Location: online via webinar and teleconference
Teleconference: (844) 740-1264 / Meeting Number: 2450 843 6708 # / Attendee Number: #
Trustees: Brent Fisher (Chair), Verné Boerner, Rhonda Boyles, Chris Cooke, Kevin Fimon, Anita Halterman, John Sturgeon

Wednesday, April 20, 2022

8:30 Call Meeting to Order (Brent Fisher, Chair)
Roll Call / Announcements Approve Agenda / Ethics Disclosure
Approve Minutes
• January 5, 2022

8:35 Staff Report Items
CEO Finance Report
FY22 Financial Dashboard
• Carol Howarth, CFO/Kat Roch, Controller
Hand-out

9:15 Asset Allocation & Spending Study Overview
• Steve Center, Fund Sponsor Consulting, Callan LLC
• Julia Moriarty, Capital Markets Research, Callan LLC

10:15 Break

10:30 Asset Allocation & Spending Study Overview (continues)
• Steve Center, Fund Sponsor Consulting, Callan LLC
• Julia Moriarty, Capital Markets Research, Callan LLC

11:30 Commercial Real Estate Market Update
Commercial Real Estate Market Update
• David MacDonald, Senior Real Estate Asset Manager, TLO
• Marisol Miller, Real Estate Asset Manager, TLO

12:00 Lunch
Wednesday, April 20, 2022 (continued)

12:45 Approvals
Commercial Real Estate
- FY23 Real Estate and Program-Related Real Estate Facility Budgets 87
  - David MacDonald, Senior Real Estate Asset Manager
  - Marisol Miller, Real Estate Asset Manager, TLO
- FY23 Third Party Real Estate Advisor budget 92
  - Carol Howarth, CFO
Trust Authority
- DOR Budget Reserve Asset Allocation 93
  - Carol Howarth, CFO
- TADA Transfer Limit 95
  - Carol Howarth, CFO

2:15 Adjourn
Future Meeting Dates
Full Board of Trustee / Program & Planning / Resource Management / Audit & Risk / Finance
(Updated – April 2022)

- Audit & Risk Committee: April 20, 2022 (Wed)
- Finance Committee: April 20, 2022 (Wed)
- Resource Mgt Committee: April 20, 2022 (Wed)
- Program & Planning Committee: April 21, 2022 (Thu)
- Full Board of Trustee: May 25-26, 2022 (Wed, Thu) – Kenai

- Audit & Risk Committee: July 26, 2022 (Tue)
- Finance Committee: July 26, 2022 (Tue)
- Resource Mgt Committee: July 26, 2022 (Tue)
- Program & Planning Committee: July 27-28, 2022 (Wed, Thu)
- Full Board of Trustee: August 24-25, 2022 (Wed, Thu) – Anchorage

- Audit & Risk Committee: October 19, 2022 (Wed)
- Finance Committee: October 19, 2022 (Wed)
- Resource Mgt Committee: October 19, 2022 (Wed)
- Program & Planning Committee: October 20, 2022 (Thu)
- Full Board of Trustee: November 16-17, 2022 (Wed, Thu) – Anchorage

- Audit & Risk Committee: January 5, 2023 (Thu)
- Finance Committee: January 5, 2023 (Thu)
- Resource Mgt Committee: January 5, 2023 (Thu)
- Program & Planning Committee: January 6, 2023 (Fri)
- Full Board of Trustee: January 25-26, 2023 (Wed, Thu) – Juneau
Future Meeting Dates
Statutory Advisory Boards
(Updated – March 2022)

Alaska Mental Health Board / Advisory Board on Alcoholism and Drug Abuse
AMHB:  http://dhss.alaska.gov/amhb/Pages/default.aspx
ABADA: http://dhss.alaska.gov/abada/Pages/default.aspx
Executive Director: Bev Schoonover, (907) 465-5114, bev.schoonover@alaska.gov

- Executive Committee – monthly via teleconference (Second Tuesday of the Month)
- Spring Meeting: May 18-20, 2022 / Sitka & via Zoom.

Governor’s Council on Disabilities and Special Education
GCDSE: http://dhss.alaska.gov/gcdse/Pages/default.aspx
Executive Director: Myranda Walso, (907)269-8990, myranda.walso@alaska.gov

- Spring Meeting: June 1-2, 2022 / Anchorage & via Webinar

Alaska Commission on Aging
ACOA: http://dhss.alaska.gov/acoa/Pages/default.aspx
Acting Executive Director: Lesley Thompson, (907) 465-4793, lesley.thompson@alaska.gov

- Spring Meeting: May 2022 / TBD - Fairbanks
Trustees Present:
Anita Halterman, Chair
Chris Cooke
Brent Fisher
Verne’ Boerner
Kevin Fimon
Rhonda Boyles
John Sturgeon

Trust Staff Present:
Mike Abbott
Steve Williams
Carol Howarth
Miri Smith-Coolidge
Kelda Barstad
Luke Lind
Michael Baldwin
Katie Baldwin-Johnson
Jimael Johnson
Valette Keller
Allison Biastock
Kat Roch
Allison Biastock
Eric Boyer
Carrie Predeger

Trust Land Office staff present:
Jusdi Warner
Sarah Morrison
David MacDonald
Marisol Miller
Hollie Chalup
Jeff Green
Chandler Long

Also participating:
Beverly Schoonover; Stephanie Hopkins; Brenda Moore; Josephine Stern.
CALL TO ORDER
CHAIR HALTERMAN called the meeting to order and began with a roll call. She stated that Trustee Boyles was excused, and that there was a quorum. She asked for any announcements. There being none, she moved to the agenda.

APPROVAL OF AGENDA
MOTION: A motion to approve the agenda was made by TRUSTEE STURGEON; seconded by TRUSTEE COOKE.

After the roll-vote, the MOTION was APPROVED. (Trustee Fisher, yes; Trustee Boerner, yes; Trustee Fimon, yes; Trustee Sturgeon, yes; Trustee Cooke, yes; Chair Halterman, yes.)

CHAIR HALTERMAN asked for any ethics disclosures. There being none, she moved to the approval of minutes.

APPROVAL OF MINUTES
CHAIR HALTERMAN moved to the minutes from October, 2021.

MOTION: A motion to approve the minutes from October, 2021, was made by TRUSTEE COOKE; seconded by TRUSTEE STURGEON.

After the roll-call vote, the MOTION was APPROVED. (Trustee Boerner, yes; Trustee Cooke, yes; Trustee Fimon, yes; Trustee Fisher, yes; Trustee Sturgeon, yes; Chair Halterman.)

CEO FINANCE REPORT
MR. ABBOTT stated that this Finance Committee meeting is the beginning of the focus on the projects that flowed from the second Legislative Audit that was finalized over the summer. He continued that the auditor identified several concerns, and commitments were made to address some of those issues. He added that the five recommendations from the audit were: to consider liquidating the commercial real estate and transferring those funds to the Permanent Fund for management; to develop written procedures to insure that the annual withdrawals were correctly calculated; to develop written policies to insure that the income reserves were correctly determined; to develop written policies to address the inflation-proofing opportunities; and to have a written process in place to determine if and when there was excess Trust income to be transferred to the General Fund.

CHAIR HALTERMAN recognized Ms. Howarth.

MS. HOWARTH stated that the financial dashboard is through November because of the timing of when the financial reports from the asset managers arrive. She asked Kat Roch to cover the operations.

MS. ROCH began with a brief overview of the dashboard, starting with the agency budgets for...
both the Trust Authority and the Trust Land Office. She stated that it was expected that the budget would stay on plan. She talked about the capital projects and noted that the beneficiary facilities have no current project for the allocation of $3.6 million.

MS. HOWARTH stated that there are two sources of income that will fund in the future: the Trust Land Office; and then the investment activities. She continued that the Trust Land Office expectations would be to meet plan, and because of the U.S. Forest Service Land Exchange delay, they will probably be under plan in timber. She added that forecasting going forward would be difficult because of the economic uncertainty. The largest share of revenue through the year was from the Permanent Fund managed assets. The other sources of revenue include the commercial real estate and the Department of Revenue’s investments in the budget reserves. She continued her presentation, explaining and answering questions as she went along.

TRUSTEE FIMON asked if the refinancing savings were incorporated in the annual budget.

MR. MacDONALD responded that the financing was anticipated coming through, and we initially looked at the portfolio-wide interest-only scenario. The types of loan terms that would be had were still very fluid and were very conservative on the projections in light of the uncertainty. He added that it had minimal impact because it was just kicking in. He continued that there are two assets with leasing to be done, and we anticipate some very significant tenant improvement expenses and leasing commissions coming up while those go back to full occupancy. The overall outlook is very positive.

MS. HOWARTH moved to the reserves and payout in detail. She stated that they were on track and are strong in terms of the financial position.

TRUSTEE COOKE asked about the total reserve category and how the need to take from the reserves is determined.

MS. HOWARTH replied that the reserves are added to through earnings. She explained that the reserves category was solely the earnings from the balances at the Permanent Fund Corporation and the State of Alaska Treasury Division. She then moved to the upcoming asset allocation study. She explained that past asset allocation studies looked at the mix of the investments. The simple way to think of it is the stocks, bonds and international versus domestic equity. That mix is evaluated and then stress-tested what altering some of the mixes would do to the expected returns in the future. She continued that by stress-testing, we can figure out the optimal mix of the different investment classes to generate the return needed. She added that Callan was contracted to do this study, and will be providing a summary in March. They will also layer in a couple of other elements. She talked about the need to improve lands to be able to generate additional income, like the decision at Icy Cape. She also talked about inflation-proofing and then moved to the timeline for the review process.

CHAIR HALTERMAN called for a break.

(Break.)

CHAIR HALTERMAN called the meeting back to order and asked Ms. Howarth to continue.
MS. HOWARTH stated that recommendations from Callan will be looked for before taking any additional action. She explained that the reasoning for that is being below the 400 percent target; and it would not be prudent to do such a transfer. She continued to the history and the review of how trustees had looked at inflation-proofing actions in the past, as well as the mechanics.

MS. ROCH shared a chart that showed that even though the Trust ended FY21 with a nearly $70 million gap between the principal amount and the inflation-adjusted balance, the Trust remained financially strong through this. She explained the Permanent Fund’s statutory requirement of maintaining the unrealized gains and losses within the principal account. She added that this new method of accounting for the total principal embeds a layer of inflation protection without doing the inflation-adjustment transfer.

TRUSTEE BOYLES joined the meeting.

MS. HOWARTH continued the presentation and explained that Callan advises a wide array of funds.

A discussion ensued.

MS. HOWARTH continued that one of the outcomes of the Legislative Audit was the recommendation to formalize policy and procedures for declaring whether there are excess funds that could be transferred to the State of Alaska’s General Fund. She explained that there is an Alaska statute that guides the transfer of any funds in excess of what is necessary to implement the comp plan to the unrestricted General Fund. There is also a statute that articulates the use of Trust income. Anyone reviewing that statute sees the enormity of the need when looking at the list of objectives outlined to support the beneficiaries. She stated that there are also nine goals of the comp plan that lists the needs of the beneficiaries, which is revised every five years. There is potential for misunderstanding what is related to the financial capacity to support it. Folks may see nearly $900 million in resources which is there to spend, but the Trust is budget-limited. There is a budget set based on a 4.25 percent payout that is considered something that will support beneficiaries equitably over the long term. She added that it was important to make sure that the stakeholders, the Executive and Legislative branches, and the general public had the ability to understand how the funds are used, and that a surplus of funds is not available for General Fund use.

CHAIR HALTERMAN commented that, unfortunately, this was an area for continual education, because of the turnover in the Legislature. She stated that it was imperative that the policies and procedures clearly address these issues, and she appreciated the work that goes into these discussions and thanked Ms. Howarth. She recognized Steve Williams.

MR. WILLIAMS talked about how they will proceed with trying to assess a formulaic approach to determining no surplus and stated that the comp plan is a key piece. This had not been done previously by the Trust, and it is aspirational. He, Ms. Howarth and others will work on assessing the best approach to a very high-level plan that then goes into strategies, goals and objectives. We will look at the plan holistically, and that information will translate into services connected to numbers of beneficiaries that then has a cost determination. He continued that they will try to come up with the best way to approach it, with the information that can be gathered.
CHAIR HALTERMAN thanked Mr. Williams for the clarity which helped solidify an understanding of what is trying to be accomplished. She recognized Ms. Howarth.

MS. HOWARTH closed with a timeline. The hope is to annually, in October, after financials had been completed and audited, to make the comparison of the resource relative to the needs and give the information to make the no-surplus declaration. The thought was to have the first round done for this October, and we will be thinking further about how to get this structured and then get to work.

CHAIR HALTERMAN thanked Ms. Howarth.

TRUSTEE COOKE thanked Ms. Howarth for the presentation and organizing it all. He asked if additional information on the financial dashboard, including the year-end numbers, will be available for the board meeting at the end of the month.

MS. HOWARTH replied that her objective was to get an update that will be done the first half of the year.

CHAIR HALTERMAN asked for any other questions. There being none, she asked for a motion.

MOTION: A motion to adjourn the meeting of the Finance Committee was made by TRUSTEE COOKE; seconded by TRUSTEE STURGEON.

After the roll-call vote, the MOTION was APPROVED. (Trustee Boerner, yes; Trustee Boyles, yes; Trustee Fisher, yes; Trustee Fimon, yes; Trustee Sturgeon, yes; Trustee Cooke, yes; Chair Halterman, yes.)

(Finance Committee adjourned at 11:35 a.m.)
The following *Alaska Mental Health Trust Authority Asset Allocation and Spending Study (April 20, 2022)* from Callan LLC (Callan) is an analysis of the Trust’s liquid and real assets’ expected investment returns, and high-level recommendations for the Trust’s mix of investments (asset allocation) expected to sustain the Trust’s 4.25% POMV spending level over the long term.

The focus of Callan’s recommendations is on assets under decision-making authority of the board of trustees.

**Methodology**

Callan’s work was framed by guidelines established in the Trust’s Asset Management Policy Statement, revised 2019 (AMPS), on investments objectives, investment horizon and risk tolerance for Trust assets. Using its financial modeling of Alaska Permanent Fund Corporation (APFC), it integrated the Trust’s historical spending and earnings, the investment options provided to the Trust by the State of Alaska Department of Revenue (DOR), and Trust Land Office revenue forecasts. Modeling probable performances (poor to excellent), Callan then analyzed the mixes of investments that could be expected to generate the highest returns with the lowest level of uncertainty over 10-, 20- and 40-year time horizons. Core to this analysis was maintaining beneficiary support—given expected inflation and population changes—now and into the future.

**Callan’s Recommendations**

The following recommendations are consistent with current practices:

1. Maintain 4.25% POMV payout based on Trust principal and budget reserves managed at the APFC and State of Alaska Department of Revenue (DOR).
   - Other assets should not be incorporated into the POMV payout.

2. Maintain the target budget reserve balance equal to 400% of the current year POMV payout.
   - Maintain 50:50 split between DOR and APFC budget reserves.
   - The 200% DOR balance should be maintained when budget reserves are below the 400% target.
Recommendations consistent with current practices, continued:

3. Continue consultation with the Trust’s 3rd party real estate advisor and, in accordance with the AMPS, consider the opportunistic sale of commercial real estate assets.
   • Harvest Capital Partners will present its annual hold/sell analysis at the July Finance Committee meeting.

The following recommended changes from Callan are supported by staff:

1. Increase DOR budget reserve allocation to 60% - 70% equities and add the Fidelity tactical bond option to the DOR-managed fixed income allocation.
   • DOR has evaluated Callan’s recommendation for FY23 asset allocation. DOR recommends 69% equity, 30% Core US Fixed Income (with up to 7% tactical fixed income), and 1% cash equivalents, each with a +/- target range for sub-asset allocations. Callan is in support of DOR’s recommendations.

The following recommendations from Callan require additional consideration:

1. Implementing range-based rebalancing of Trust funds managed by DOR.
   • Because DOR internally manages investment flows with other state funds that are also rebalanced on a quarterly basis, DOR is not in the position at this time to change from quarterly- to range-based rebalancing.

2. Determining whether proceeds from the sale of CRE assets are deposited at the APFC.
   • When considering a CRE asset sale, staff recommend evaluating reinvestment proceeds in APFC budget reserves against permanent transfers to principal, program-related capital investments, and land improvement options.

Inflation Proofing

Since inception, Trustees have made discretionary, irrevocable transfers of budget reserves to the Trust’s corpus for “inflation proofing.” Callan was asked to review the Trust’s practices for protecting future purchasing power. Callan recommends maintaining an asset allocation that keeps pace with spending and inflation. Since establishment, the Trust has consistently followed its spending policies, which were established to keep pace with inflation.

Budget Reserves

Callan provided perspective on APFC-managed reserves. The APFC’s statutory net income (SNI) calculation determines the earnings that can be transferred from principal to budget reserves. Callan’s study used this SNI methodology in its asset allocation analysis. However, it noted that the Trust may benefit from moving to a simplified POMV spending policy.

Conclusion

This study supports Trustee responsibilities as set forth in the Trust’s Charters and the Trust’s Asset Management Policy Statement. It is recommended that a similar allocation and spending study be conducted on a regular 3-year basis.
Topics for Discussion

Executive summary

Background

Callan’s capital market expectations

Current situation and assumptions

Analysis: Spend rate, reserve level, asset allocation, rebalancing, and land integration

Conclusions and recommendations
Executive Summary

The Alaska Mental Health Trust Authority (the Trust) has approximately $0.9 billion in assets at June 30, 2021 (starting point for the analysis) with assets segregated into four main buckets managed by four different entities:

- Alaska Permanent Fund Corporation (APFC)
- Department of Revenue (DOR)
- General Fund and Other Non-Segregated Funds (GeFONSI)
- Trust Land Office (TLO)

The current structure of the Trust is complicated with multiple portfolios managed by different entities, an intricate flow of funds between the various accounts and accounting items within the funds, and a complex spending policy.

The goal of this study is to analyze the Trust's investment program from a number of different angles with particular focus on the asset allocation and spending policies.

Recommendations are made with respect to inflation proofing, the spend rate, reserve policy, DOR asset allocation, rebalancing policy, and the incorporation of lands into the asset allocation and spending framework.
Background
Goal of the Study

Focus is on the Trust’s Investment Program

The goal of this study is to analyze the Alaska Mental Health Trust Authority’s investment program from a number of different angles with particular focus on the asset allocation and spending policies.

The spending and investment policies are two of the three key components of a fund (along with the contribution policy).

Well-engineered spending and investment policies consider:

- A fund’s goals and objectives
- All appropriate asset classes for inclusion
- Time horizon, liquidity needs, asset class limitations, implementation challenges, administrative and legal burdens, size or capacity constraints, etc.
- Rebalancing discipline and more

The appropriate spending and investment policies should strike a balance between preservation/growth in the corpus and sustainable, stable distributions that result in intergenerational equity for beneficiaries.

The appropriate policies will vary by each fund’s unique circumstances, preferences, and priorities:

- No “one-size-fits-all” solution exists

The asset-spending study helps the Trust quantify the impact that different policies might have on relevant metrics.
Three Key Policies

The best investment and spending policies are determined in the context of the interaction of the three key policies that govern a fund.

**Investment Policy**
- How will the assets supporting the mission be invested?
- What risk and return objectives?
- How to manage cash flows?

**Contribution Policy**
- What is the source of contributions?
- What level of contributions can be expected?

**Spending Policy**
- What type of spending policy?
- What level of spending?
“Equation of Balance”

Required to ensure intergenerational equity and preserve the real spending power of the corpus

- Overspending today benefits current residents at the expense of future residents
- Underspending today benefits future residents at the expense of current residents

Intergenerational equity ensures that current and future beneficiaries of the AMHTA benefit from the Trust to the same degree

Investment returns and price inflation are based on Callan forecasts

Contributions, spending, and expenses are based on AMHTA data/forecasts while population inflation is derived from the Alaska Department of Labor and Workforce Development
Callan’s Capital Market Expectations
Callan Capital Market Process and Philosophy

Underlying beliefs guide the development of the projections

- An initial bias toward long-run averages
- An awareness of risk premiums
- A presumption that markets ultimately clear and are rational

Reflect our belief that long-term equilibrium relationships between the capital markets and lasting trends in global economic growth are key drivers to setting capital market expectations

Long-term compensated risk premiums represent “beta”—exposure to each broad market, whether traditional or “exotic,” with limited dependence on successful realization of alpha

The projection process is built around several key building blocks

- Advanced modeling at the individual asset class level (e.g., a detailed bond model, an equity model)
- Pathways for both interest rates and inflation
- A cohesive economic outlook
- A framework that encompasses Callan’s beliefs about the long-term operation and efficiencies of the capital markets
The Focus is on Broad Asset Classes

Breakdowns between investment styles within asset classes (growth vs. value, large cap vs. small cap) are best addressed in a manager structure analysis.

Primary asset classes and important sub-asset classes include:

- U.S. Stocks
- U.S. Bonds
- Non-U.S. Stocks
- Non-U.S. Bonds
- Real Assets
- Private Equity/Debt
- Hedge Funds
- Cash
# 2022 Callan Capital Market Assumptions

## Risk and return

### Summary of Callan’s Long-Term Capital Market Assumptions (2022 - 2031)

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Index</th>
<th>Projected Return*</th>
<th>Projected Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad U.S. Equity</td>
<td>Russell 3000</td>
<td>6.60%</td>
<td>17.95%</td>
</tr>
<tr>
<td>Large Cap U.S. Equity</td>
<td>S&amp;P 500</td>
<td>6.50%</td>
<td>17.70%</td>
</tr>
<tr>
<td>Small/Mid Cap U.S. Equity</td>
<td>Russell 2500</td>
<td>6.70%</td>
<td>21.30%</td>
</tr>
<tr>
<td>Global ex-U.S. Equity</td>
<td>MSCI ACWI ex USA</td>
<td>6.80%</td>
<td>20.70%</td>
</tr>
<tr>
<td>Developed ex-U.S. Equity</td>
<td>MSCI World ex USA</td>
<td>6.50%</td>
<td>19.90%</td>
</tr>
<tr>
<td>Emerging Market Equity</td>
<td>MSCI Emerging Markets</td>
<td>6.90%</td>
<td>25.15%</td>
</tr>
<tr>
<td><strong>Fixed Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short Duration Govt/Credit</td>
<td>Bloomberg Barclays 1-3 Yr G/C</td>
<td>1.50%</td>
<td>2.00%</td>
</tr>
<tr>
<td>Core U.S. Fixed</td>
<td>Bloomberg Barclays Aggregate</td>
<td>1.75%</td>
<td>3.75%</td>
</tr>
<tr>
<td>Long Government/Credit</td>
<td>Bloomberg Barclays Long G/C</td>
<td>1.80%</td>
<td>10.40%</td>
</tr>
<tr>
<td>TIPS</td>
<td>Bloomberg Barclays TIPS</td>
<td>1.25%</td>
<td>5.05%</td>
</tr>
<tr>
<td>High Yield</td>
<td>Bloomberg Barclays High Yield</td>
<td>3.90%</td>
<td>10.75%</td>
</tr>
<tr>
<td>Global ex-U.S. Fixed</td>
<td>Bloomberg Barclays Gbl Agg xUSD</td>
<td>0.80%</td>
<td>9.20%</td>
</tr>
<tr>
<td>Emerging Market Sovereign Debt</td>
<td>EMBI Global Diversified</td>
<td>3.60%</td>
<td>9.50%</td>
</tr>
<tr>
<td><strong>Alternatives</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Real Estate</td>
<td>NCREIF ODCE</td>
<td>5.75%</td>
<td>14.20%</td>
</tr>
<tr>
<td>Private Infrastructure</td>
<td>MSCI Gbl Infra/FTSE Dev Core 50/50</td>
<td>6.10%</td>
<td>15.45%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>Cambridge Private Equity</td>
<td>8.00%</td>
<td>27.60%</td>
</tr>
<tr>
<td>Private Credit</td>
<td>N/A</td>
<td>5.50%</td>
<td>14.60%</td>
</tr>
<tr>
<td>Hedge Funds</td>
<td>Callan Hedge FoF Database</td>
<td>4.10%</td>
<td>8.20%</td>
</tr>
<tr>
<td>Commodities</td>
<td>Bloomberg Commodity</td>
<td>2.50%</td>
<td>18.00%</td>
</tr>
<tr>
<td><strong>Cash Equivalents</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90-Day T-Bill</td>
<td></td>
<td>1.20%</td>
<td>0.90%</td>
</tr>
<tr>
<td><strong>Inflation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPI-U</td>
<td></td>
<td>2.25%</td>
<td>1.60%</td>
</tr>
</tbody>
</table>

*Geometric returns are derived from arithmetic returns and the associated risk (standard deviation)

- Most capital market expectations represent passive exposure (beta only); however, return expectations for private market investments reflect active management premiums
- Return expectations are net of fees
## 2022 Callan Capital Market Assumptions

### Correlation

#### Summary of Callan's Long-Term Capital Market Assumptions (2022 - 2031)

<table>
<thead>
<tr>
<th>Correlation Matrix</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Broad U.S. Equity</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Large Cap U.S. Equity</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Small/Mid Cap U.S. Equity</td>
<td>0.93</td>
<td>0.90</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Global ex-US Equity</td>
<td>0.82</td>
<td>0.81</td>
<td>0.80</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Developed ex-U.S. Equity</td>
<td>0.78</td>
<td>0.77</td>
<td>0.77</td>
<td>0.98</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Emerging Market Equity</td>
<td>0.80</td>
<td>0.79</td>
<td>0.76</td>
<td>0.93</td>
<td>0.84</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Short Duration G/C</td>
<td>-0.06</td>
<td>-0.06</td>
<td>-0.08</td>
<td>-0.08</td>
<td>-0.06</td>
<td>-0.10</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Core U.S. Fixed</td>
<td>-0.10</td>
<td>-0.10</td>
<td>-0.12</td>
<td>-0.12</td>
<td>-0.11</td>
<td>-0.14</td>
<td>0.78</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Long Government/Credit</td>
<td>0.09</td>
<td>0.09</td>
<td>0.07</td>
<td>0.09</td>
<td>0.09</td>
<td>0.07</td>
<td>0.71</td>
<td>0.88</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 TIPS</td>
<td>-0.08</td>
<td>-0.08</td>
<td>-0.08</td>
<td>-0.09</td>
<td>-0.09</td>
<td>-0.10</td>
<td>0.56</td>
<td>0.70</td>
<td>0.57</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 High Yield</td>
<td>0.72</td>
<td>0.71</td>
<td>0.68</td>
<td>0.71</td>
<td>0.69</td>
<td>0.69</td>
<td>-0.01</td>
<td>0.00</td>
<td>0.20</td>
<td>0.06</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Global ex-U.S. Fixed</td>
<td>0.01</td>
<td>0.01</td>
<td>0.00</td>
<td>0.06</td>
<td>0.05</td>
<td>0.08</td>
<td>0.48</td>
<td>0.50</td>
<td>0.50</td>
<td>0.45</td>
<td>0.12</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 EM Sovereign Debt</td>
<td>0.56</td>
<td>0.56</td>
<td>0.54</td>
<td>0.59</td>
<td>0.55</td>
<td>0.61</td>
<td>0.08</td>
<td>0.14</td>
<td>0.24</td>
<td>0.18</td>
<td>0.60</td>
<td>0.15</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Core Real Estate</td>
<td>0.64</td>
<td>0.64</td>
<td>0.60</td>
<td>0.61</td>
<td>0.60</td>
<td>0.56</td>
<td>-0.01</td>
<td>-0.04</td>
<td>0.10</td>
<td>-0.02</td>
<td>0.53</td>
<td>-0.02</td>
<td>0.33</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Private Infrastructure</td>
<td>0.65</td>
<td>0.65</td>
<td>0.60</td>
<td>0.62</td>
<td>0.61</td>
<td>0.58</td>
<td>0.00</td>
<td>0.01</td>
<td>0.15</td>
<td>-0.02</td>
<td>0.50</td>
<td>0.03</td>
<td>0.35</td>
<td>0.76</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Private Equity</td>
<td>0.77</td>
<td>0.77</td>
<td>0.73</td>
<td>0.76</td>
<td>0.73</td>
<td>0.72</td>
<td>-0.10</td>
<td>-0.19</td>
<td>-0.01</td>
<td>-0.14</td>
<td>0.59</td>
<td>0.06</td>
<td>0.40</td>
<td>0.50</td>
<td>0.62</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Private Credit</td>
<td>0.68</td>
<td>0.68</td>
<td>0.65</td>
<td>0.67</td>
<td>0.65</td>
<td>0.64</td>
<td>0.00</td>
<td>-0.06</td>
<td>0.12</td>
<td>-0.09</td>
<td>0.63</td>
<td>0.06</td>
<td>0.48</td>
<td>0.47</td>
<td>0.52</td>
<td>0.65</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Hedge Funds</td>
<td>0.79</td>
<td>0.79</td>
<td>0.74</td>
<td>0.74</td>
<td>0.75</td>
<td>0.74</td>
<td>0.10</td>
<td>0.13</td>
<td>0.27</td>
<td>0.09</td>
<td>0.64</td>
<td>0.05</td>
<td>0.53</td>
<td>0.45</td>
<td>0.47</td>
<td>0.57</td>
<td>0.61</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 Commodities</td>
<td>0.28</td>
<td>0.28</td>
<td>0.27</td>
<td>0.28</td>
<td>0.27</td>
<td>0.27</td>
<td>-0.10</td>
<td>-0.10</td>
<td>-0.04</td>
<td>0.10</td>
<td>0.15</td>
<td>0.15</td>
<td>0.19</td>
<td>0.21</td>
<td>0.18</td>
<td>0.23</td>
<td>0.17</td>
<td>0.23</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Cash Equivalents</td>
<td>-0.06</td>
<td>-0.06</td>
<td>-0.08</td>
<td>-0.10</td>
<td>-0.10</td>
<td>0.30</td>
<td>0.15</td>
<td>0.01</td>
<td>0.12</td>
<td>-0.11</td>
<td>0.00</td>
<td>-0.07</td>
<td>0.00</td>
<td>-0.06</td>
<td>-0.04</td>
<td>-0.02</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 Inflation</td>
<td>-0.01</td>
<td>-0.02</td>
<td>0.02</td>
<td>0.01</td>
<td>0.00</td>
<td>0.03</td>
<td>-0.21</td>
<td>-0.25</td>
<td>-0.26</td>
<td>0.08</td>
<td>0.05</td>
<td>-0.10</td>
<td>0.00</td>
<td>0.10</td>
<td>0.06</td>
<td>0.06</td>
<td>0.15</td>
<td>0.29</td>
<td>0.05</td>
<td>0.05</td>
<td></td>
</tr>
</tbody>
</table>

- Relationships between asset classes are as important as standard deviation
- To determine portfolio mixes, Callan employs mean-variance optimization
- Return, standard deviation, and correlation determine the composition of efficient asset mixes
Our return projections have been steadily declining over time.
Declining bond yields are the reason behind declining capital market return expectations.

The chart above illustrates the secular decline in yields since 1988.
7% Expected Returns Over Past 30 Years

In 1992, our expectations for cash and broad U.S. fixed income were 6.2% and 7.9%, respectively. Return-seeking assets were not required to earn a 7% projected return.

15 years later, an investor would have needed over half of the portfolio in public equities to achieve a 7% projected return, with approximately 3x the portfolio volatility of 1992.

Today an investor is required to include 96% in return-seeking assets (including 30% in private market investments) to earn a 7% projected return at over 5x the volatility compared to 1992.
### 2022 Capital Market Assumptions Comparison

#### Callan versus Other Organizations

<table>
<thead>
<tr>
<th>2022 Capital Market Return Assumptions</th>
<th>Callan</th>
<th>Aon</th>
<th>AQR</th>
<th>BlackRock</th>
<th>JP Morgan</th>
<th>Northern Trust</th>
<th>Robeco</th>
<th>SSGA</th>
<th>Voya</th>
<th>GMO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad US Equity</td>
<td>6.60%</td>
<td>5.80%</td>
<td>6.20%</td>
<td>6.45%</td>
<td>4.23%</td>
<td>5.25%</td>
<td>5.58%</td>
<td>4.80%</td>
<td>-7.45%</td>
<td></td>
</tr>
<tr>
<td>Large Cap US Equity</td>
<td>6.50%</td>
<td></td>
<td></td>
<td>6.70%</td>
<td>4.10%</td>
<td>4.30%</td>
<td>5.40%</td>
<td>4.80%</td>
<td>-7.50%</td>
<td></td>
</tr>
<tr>
<td>Small/Mid Cap US Equity</td>
<td>6.70%</td>
<td></td>
<td></td>
<td>6.20%</td>
<td>4.35%</td>
<td>5.75%</td>
<td>4.95%</td>
<td>4.95%</td>
<td>-7.40%</td>
<td></td>
</tr>
<tr>
<td>Global ex-US Equity</td>
<td>6.80%</td>
<td>6.75%</td>
<td>7.65%</td>
<td>8.60%</td>
<td>6.80%</td>
<td>5.21%</td>
<td>5.06%</td>
<td>5.80%</td>
<td>3.36%</td>
<td>0.18%</td>
</tr>
<tr>
<td>Developed ex-US Equity</td>
<td>6.50%</td>
<td></td>
<td></td>
<td>6.30%</td>
<td>6.90%</td>
<td>4.95%</td>
<td>5.25%</td>
<td>5.20%</td>
<td>3.40%</td>
<td>-2.60%</td>
</tr>
<tr>
<td>Emerging Market Equity</td>
<td>6.90%</td>
<td>6.90%</td>
<td>7.90%</td>
<td>8.70%</td>
<td>6.90%</td>
<td>5.30%</td>
<td>5.00%</td>
<td>7.00%</td>
<td>3.70%</td>
<td>1.10%</td>
</tr>
<tr>
<td><strong>Fixed Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short Duration Gov't/Credit</td>
<td>1.50%</td>
<td></td>
<td></td>
<td>2.10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core US Fixed</td>
<td>1.75%</td>
<td>1.75%</td>
<td>2.22%</td>
<td>1.60%</td>
<td>2.60%</td>
<td>2.40%</td>
<td>1.00%</td>
<td>0.90%</td>
<td>1.30%</td>
<td>-3.50%</td>
</tr>
<tr>
<td>Long Duration Gov't/Credit</td>
<td>1.80%</td>
<td></td>
<td>0.65%</td>
<td>2.30%</td>
<td>1.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIPS</td>
<td>1.25%</td>
<td>1.30%</td>
<td></td>
<td>2.70%</td>
<td>2.10%</td>
<td>2.20%</td>
<td>0.10%</td>
<td>1.00%</td>
<td>-3.50%</td>
<td></td>
</tr>
<tr>
<td>High Yield</td>
<td>3.90%</td>
<td>3.30%</td>
<td>2.90%</td>
<td>3.40%</td>
<td>3.90%</td>
<td>3.50%</td>
<td>2.75%</td>
<td>2.90%</td>
<td>2.90%</td>
<td></td>
</tr>
<tr>
<td>Global ex-US Fixed</td>
<td>0.80%</td>
<td></td>
<td></td>
<td>2.00%</td>
<td>1.30%</td>
<td>2.40%</td>
<td>0.75%</td>
<td>-0.20%</td>
<td>0.00%</td>
<td>-4.40%</td>
</tr>
<tr>
<td>Emerg Mkt Sovereign Debt</td>
<td>3.60%</td>
<td>3.90%</td>
<td>4.00%</td>
<td>3.90%</td>
<td>5.20%</td>
<td>4.75%</td>
<td>4.80%</td>
<td>4.00%</td>
<td>-1.40%</td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Real Estate</td>
<td>5.75%</td>
<td>4.70%</td>
<td>5.20%</td>
<td>6.40%</td>
<td>5.80%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Equity</td>
<td>8.00%</td>
<td>8.20%</td>
<td>8.30%</td>
<td>18.70%</td>
<td>8.10%</td>
<td>7.60%</td>
<td>7.00%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Credit</td>
<td>5.50%</td>
<td></td>
<td></td>
<td>9.40%</td>
<td>6.90%</td>
<td>6.00%</td>
<td>4.60%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedge Funds</td>
<td>4.10%</td>
<td>3.20%</td>
<td></td>
<td>5.30%</td>
<td>3.60%</td>
<td>2.90%</td>
<td>4.90%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commodities</td>
<td>2.50%</td>
<td></td>
<td>4.00%</td>
<td></td>
<td>2.60%</td>
<td>7.00%</td>
<td>3.90%</td>
<td>1.60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash Equivalents</td>
<td>1.20%</td>
<td>1.00%</td>
<td>1.20%</td>
<td>1.30%</td>
<td>0.30%</td>
<td>1.00%</td>
<td>1.50%</td>
<td>1.50%</td>
<td>-1.00%</td>
<td></td>
</tr>
<tr>
<td>Inflation</td>
<td>2.25%</td>
<td>2.20%</td>
<td>2.60%</td>
<td>3.20%</td>
<td>2.30%</td>
<td>2.00%</td>
<td>2.25%</td>
<td>2.00%</td>
<td>2.47%</td>
<td>2.20%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Projection Period</th>
<th>10 Years</th>
<th>10 Years</th>
<th>5-10 Years</th>
<th>10 Years</th>
<th>10-15 Years</th>
<th>5 Years</th>
<th>5 Years</th>
<th>10+ Years</th>
<th>10 Years</th>
<th>7 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td>6.80%</td>
<td>5.69%</td>
<td>5.61%</td>
<td>4.23%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>6.70%</td>
<td>5.10%</td>
<td>5.30%</td>
<td>4.10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>6.70%</td>
<td>5.75%</td>
<td>5.59%</td>
<td>4.35%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>8.60%</td>
<td>6.75%</td>
<td>6.26%</td>
<td>3.63%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Excludes GMO

Shading denotes Callan is (the or one of the) high/low
Actual Returns versus Callan Projections

Projection Years 1989-2012

Historical Comparison: Actual Returns vs. Callan Capital Markets Projections
Portfolio (60% Equity, 30% Fixed, 10% Real Estate)

Our projections are generally within one standard deviation of the actual return experienced.

The glaring exceptions are the 10-year periods ended in 2008 and 2009 which contained not one but two major collapses in the equity market: the Dot-Com Bubble in 2001-02 and the Global Financial Crisis in 2008.
Current Situation and Assumptions
AMHTA Model Overview

**APFC Principal**
- Unrealized G/L Split Proportionally
- Inflation Proofing* (Excess over Target)

**APFC Reserve**
- Realized Earnings
- Income + RCG - RCL
- Excess over Target

**DOR Reserve**
- DOR Payout
- 4.25% of 4-Yr Avg MV

**TLO**
- TLO Spendable Income
- Excess over Target

**Operating Account (GeFONSI)**
- APFC Payout
- 4.25% of 4-Yr Avg MV
- DOR Payout
- 4.25% of 4-Yr Avg MV

**Spending**
- 4.25% of 4-Yr Average APFC and DOR MVs plus 4-Yr Averages of TLO Spendable Income, GeFONSI Interest, and Lapsed Funds

*Money in excess of 400% budget reserve target may be invested in land or PRIs*
Inflation Proofing and Reserve Accounting

Inflation Proofing

Under the current inflation-proofing structure which utilizes the APFC mechanics, the corpus of the Trust is compared to an inflation-adjusted principal target in order to determine whether the Trust is maintaining purchasing power over time.

- The corpus of the Trust grows by TLO principal cash flows and any necessary inflation-proofing deposits.
- The inflation-adjusted principal target amount grows by TLO principal cash flows and is adjusted for inflation.

The Trust could simplify the current inflation-proofing mechanism by instead focusing on identifying a long-term asset allocation target with an expected return that keeps pace with spending and inflation.

Reserve Accounting

Under the current structure a statutory net income (SNI) figure, which is also used at the APFC, is calculated to determine the amount of funds that can be transferred from principal to budget reserves.

While our model employs SNI, the Trust may benefit from moving to a simplified “percent of market value” spending policy.

Recommendation: As an inflation-proofing mechanism, adopt a long-term asset allocation target with an expected return that exceeds spending and inflation.
Policy Allocations

The asset allocation policies for the three main investment accounts are shown to the right, along with their 10-year expected return and risk:

- APFC assets account for 87% of total assets as of June 30, 2021
- APFC's policy allocation is expected to generate a higher return than the other policy allocations, albeit with greater risk

Two key items should be noted about the expected returns:

- Callan’s public market return projections do not incorporate active management premiums
  - Active management premiums accrue if and when investment firms outperform their passive benchmarks net of fees
- Callan’s 10-year projections are below longer-term expectations due to the current economic environment and the forecast for the next several years
Spending and Reserve Policies

The **spending policy** contains five elements:

- 4.25% of the 4-year average APFC fiscal year-end market value
- 4.25% of the 4-year average DOR BR fiscal year-end market value
- 4-year average of spendable income generated by the TLO
- 4-year average of interest generated in the GeFONSI account
- 4-year average of lapsed funds (unspent funds from prior funding authorizations)

The Trust employs a **reserve policy** to ensure funds are available for spending with a reasonable degree of certainty:

- The targeted reserve level equals 400% of current year spending
- Reserve assets are split equally between the APFC and the DOR
Contributions: TLO Principal and Spendable Income

### Principal Projection

<table>
<thead>
<tr>
<th>Year</th>
<th>Timber</th>
<th>Minerals &amp; Energy</th>
<th>Surface</th>
<th>PRI</th>
<th>CRE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>$2,337,500</td>
<td>$1,839,000</td>
<td>$2,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$6,176,500</td>
</tr>
<tr>
<td>2023</td>
<td>$2,613,750</td>
<td>$1,904,000</td>
<td>$2,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$6,517,750</td>
</tr>
<tr>
<td>2024</td>
<td>$2,550,000</td>
<td>$1,904,000</td>
<td>$2,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$6,454,000</td>
</tr>
<tr>
<td>2025</td>
<td>$2,550,000</td>
<td>$1,904,000</td>
<td>$2,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$6,454,000</td>
</tr>
<tr>
<td>2026</td>
<td>$2,550,000</td>
<td>$1,904,000</td>
<td>$2,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$6,454,000</td>
</tr>
<tr>
<td>2027</td>
<td>$2,550,000</td>
<td>$1,904,000</td>
<td>$2,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$6,454,000</td>
</tr>
<tr>
<td>2028</td>
<td>$2,550,000</td>
<td>$1,904,000</td>
<td>$2,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$6,454,000</td>
</tr>
<tr>
<td>2029</td>
<td>$2,550,000</td>
<td>$1,904,000</td>
<td>$2,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$6,454,000</td>
</tr>
<tr>
<td>2030</td>
<td>$2,550,000</td>
<td>$1,904,000</td>
<td>$2,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$6,454,000</td>
</tr>
<tr>
<td>2031</td>
<td>$2,550,000</td>
<td>$1,904,000</td>
<td>$2,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$6,454,000</td>
</tr>
<tr>
<td>2032</td>
<td>$2,550,000</td>
<td>$1,904,000</td>
<td>$2,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$6,454,000</td>
</tr>
<tr>
<td>Beyond</td>
<td>Flat</td>
<td>Flat</td>
<td>Flat</td>
<td>Flat</td>
<td>Flat</td>
<td>Flat</td>
</tr>
</tbody>
</table>

In addition to this base-case projection, a poor TLO outcome was constructed and modeled:

- Principal inflows are assumed to remain constant beyond the TLO projection
- Assumes no sales of commercial real estate (“CRE”) properties
- Spendable income projections for Timber and Minerals & Energy are assumed to remain constant beyond the TLO projection while Surface, program-related investments (“PRI”), and CRE rise by inflation, ½ inflation, and 2.5% per year, respectively

### Spendable Income

<table>
<thead>
<tr>
<th>Year</th>
<th>Timber</th>
<th>Minerals &amp; Energy</th>
<th>Surface</th>
<th>PRI</th>
<th>CRE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>$412,500</td>
<td>$759,700</td>
<td>$1,682,361</td>
<td>$327,044</td>
<td>$1,202,455</td>
<td>$4,384,061</td>
</tr>
<tr>
<td>2023</td>
<td>$461,250</td>
<td>$759,700</td>
<td>$1,860,142</td>
<td>$322,776</td>
<td>$359,803</td>
<td>$3,763,670</td>
</tr>
<tr>
<td>2024</td>
<td>$450,000</td>
<td>$759,700</td>
<td>$1,901,995</td>
<td>$322,776</td>
<td>$2,498,008</td>
<td>$5,932,479</td>
</tr>
<tr>
<td>2025</td>
<td>$450,000</td>
<td>$759,700</td>
<td>$1,944,790</td>
<td>$322,776</td>
<td>$2,831,357</td>
<td>$6,308,623</td>
</tr>
<tr>
<td>2026</td>
<td>$450,000</td>
<td>$759,700</td>
<td>$1,988,548</td>
<td>$322,776</td>
<td>$3,044,895</td>
<td>$6,565,918</td>
</tr>
<tr>
<td>2027</td>
<td>$450,000</td>
<td>$759,700</td>
<td>$2,033,290</td>
<td>$322,776</td>
<td>$3,121,017</td>
<td>$6,686,783</td>
</tr>
<tr>
<td>2028</td>
<td>$450,000</td>
<td>$759,700</td>
<td>$2,079,039</td>
<td>$322,776</td>
<td>$3,199,043</td>
<td>$6,810,558</td>
</tr>
<tr>
<td>2029</td>
<td>$450,000</td>
<td>$759,700</td>
<td>$2,125,818</td>
<td>$326,407</td>
<td>$3,279,019</td>
<td>$6,940,943</td>
</tr>
<tr>
<td>2030</td>
<td>$450,000</td>
<td>$759,700</td>
<td>$2,173,649</td>
<td>$330,079</td>
<td>$3,360,994</td>
<td>$7,074,622</td>
</tr>
<tr>
<td>2031</td>
<td>$450,000</td>
<td>$759,700</td>
<td>$2,222,556</td>
<td>$333,792</td>
<td>$3,445,019</td>
<td>$7,211,067</td>
</tr>
<tr>
<td>2032</td>
<td>$450,000</td>
<td>$759,700</td>
<td>$2,272,563</td>
<td>$337,547</td>
<td>$3,531,144</td>
<td>$7,350,955</td>
</tr>
<tr>
<td>Beyond</td>
<td>Flat</td>
<td>Flat</td>
<td>+Inflation</td>
<td>+1/2 Inflation</td>
<td>+2.5%</td>
<td>~+Inflation</td>
</tr>
</tbody>
</table>

Source: Trust Land Office; Gray shading represents Callan projection.
Population Projection

### Population Change

<table>
<thead>
<tr>
<th>Year</th>
<th>Low</th>
<th>Middle</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>-0.29%</td>
<td>0.61%</td>
<td>1.71%</td>
</tr>
<tr>
<td>2023</td>
<td>-0.33%</td>
<td>0.59%</td>
<td>1.70%</td>
</tr>
<tr>
<td>2024</td>
<td>-0.36%</td>
<td>0.56%</td>
<td>1.68%</td>
</tr>
<tr>
<td>2025</td>
<td>-0.39%</td>
<td>0.54%</td>
<td>1.67%</td>
</tr>
<tr>
<td>2026</td>
<td>-0.43%</td>
<td>0.52%</td>
<td>1.66%</td>
</tr>
<tr>
<td>2027</td>
<td>-0.46%</td>
<td>0.50%</td>
<td>1.64%</td>
</tr>
<tr>
<td>2028</td>
<td>-0.48%</td>
<td>0.48%</td>
<td>1.63%</td>
</tr>
<tr>
<td>2029</td>
<td>-0.51%</td>
<td>0.47%</td>
<td>1.62%</td>
</tr>
<tr>
<td>2030</td>
<td>-0.53%</td>
<td>0.45%</td>
<td>1.62%</td>
</tr>
<tr>
<td>2031</td>
<td>-0.55%</td>
<td>0.43%</td>
<td>1.61%</td>
</tr>
<tr>
<td>2032</td>
<td>-0.58%</td>
<td>0.42%</td>
<td>1.60%</td>
</tr>
<tr>
<td>2033</td>
<td>-0.60%</td>
<td>0.41%</td>
<td>1.59%</td>
</tr>
<tr>
<td>2034</td>
<td>-0.62%</td>
<td>0.40%</td>
<td>1.58%</td>
</tr>
<tr>
<td>2035</td>
<td>-0.64%</td>
<td>0.38%</td>
<td>1.58%</td>
</tr>
<tr>
<td>2036</td>
<td>-0.65%</td>
<td>0.37%</td>
<td>1.57%</td>
</tr>
<tr>
<td>2037</td>
<td>-0.67%</td>
<td>0.36%</td>
<td>1.57%</td>
</tr>
<tr>
<td>2038</td>
<td>-0.69%</td>
<td>0.35%</td>
<td>1.56%</td>
</tr>
<tr>
<td>2039</td>
<td>-0.71%</td>
<td>0.34%</td>
<td>1.55%</td>
</tr>
<tr>
<td>2040</td>
<td>-0.73%</td>
<td>0.33%</td>
<td>1.55%</td>
</tr>
<tr>
<td>2041</td>
<td>-0.75%</td>
<td>0.32%</td>
<td>1.54%</td>
</tr>
</tbody>
</table>

### Population Change

<table>
<thead>
<tr>
<th>Year</th>
<th>Low</th>
<th>Middle</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>2042</td>
<td>-0.76%</td>
<td>0.31%</td>
<td>1.54%</td>
</tr>
<tr>
<td>2043</td>
<td>-0.78%</td>
<td>0.30%</td>
<td>1.54%</td>
</tr>
<tr>
<td>2044</td>
<td>-0.79%</td>
<td>0.30%</td>
<td>1.54%</td>
</tr>
<tr>
<td>2045</td>
<td>-0.81%</td>
<td>0.29%</td>
<td>1.54%</td>
</tr>
<tr>
<td>2046</td>
<td>-0.82%</td>
<td>0.28%</td>
<td>1.53%</td>
</tr>
<tr>
<td>2047</td>
<td>-0.82%</td>
<td>0.28%</td>
<td>1.52%</td>
</tr>
<tr>
<td>2048</td>
<td>-0.83%</td>
<td>0.27%</td>
<td>1.52%</td>
</tr>
<tr>
<td>2049</td>
<td>-0.83%</td>
<td>0.27%</td>
<td>1.51%</td>
</tr>
<tr>
<td>2050</td>
<td>-0.84%</td>
<td>0.26%</td>
<td>1.51%</td>
</tr>
<tr>
<td>2051</td>
<td>-0.84%</td>
<td>0.26%</td>
<td>1.50%</td>
</tr>
<tr>
<td>2052</td>
<td>-0.85%</td>
<td>0.25%</td>
<td>1.50%</td>
</tr>
<tr>
<td>2053</td>
<td>-0.85%</td>
<td>0.25%</td>
<td>1.49%</td>
</tr>
<tr>
<td>2054</td>
<td>-0.86%</td>
<td>0.24%</td>
<td>1.49%</td>
</tr>
<tr>
<td>2055</td>
<td>-0.86%</td>
<td>0.24%</td>
<td>1.48%</td>
</tr>
<tr>
<td>2056</td>
<td>-0.87%</td>
<td>0.23%</td>
<td>1.48%</td>
</tr>
<tr>
<td>2057</td>
<td>-0.87%</td>
<td>0.23%</td>
<td>1.47%</td>
</tr>
<tr>
<td>2058</td>
<td>-0.88%</td>
<td>0.22%</td>
<td>1.47%</td>
</tr>
<tr>
<td>2059</td>
<td>-0.88%</td>
<td>0.22%</td>
<td>1.46%</td>
</tr>
<tr>
<td>2060</td>
<td>-0.89%</td>
<td>0.21%</td>
<td>1.46%</td>
</tr>
<tr>
<td>2061</td>
<td>-0.89%</td>
<td>0.21%</td>
<td>1.45%</td>
</tr>
</tbody>
</table>

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section
Note: Gray shading represents Callan projection

Population inflation, in addition to price inflation, is required in order to determine whether the Trust is meeting the goal of intergenerational equity

Population growth rates were obtained from the Alaska Department of Labor and Workforce Development
Projected Returns

10 Years through June 30, 2031

Formulating expectations of returns and the likelihood of their occurrence - median returns reflect performance in average markets while 95th percentile returns show the performance at the worst 5% of outcomes.

While the APFC portfolio is expected (median outcome) to generate the greatest return over the next 10 years it does so with greater volatility or risk.

The GeFONSI portfolio which is 85% cash has a very narrow range of projected outcomes.
How to Read a “Floating Bar Chart”

Example: APFC Projected Returns

<table>
<thead>
<tr>
<th>Percentile</th>
<th>95th</th>
<th>75th</th>
<th>50th</th>
<th>25th</th>
<th>5th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return</td>
<td>-0.9%</td>
<td>3.3%</td>
<td>6.2%</td>
<td>9.2%</td>
<td>13.6%</td>
</tr>
</tbody>
</table>

APFC Returns

Median ("Expected Outcome")

Better than Expected Outcomes

Worse than Expected Outcomes
Current Situation

Observations

The Trust has approximately $900 million in assets at June 30, 2021 (starting point for the analysis)

Assets are segregated into four main buckets (APFC, DOR, GeFONSI, and TLO) managed by four different entities

The spending policy contains five elements – 4.25% of the 4-year average market values at the APFC and DOR and four-year averages of spendable income generated by the TLO, interest generated in the GeFONSI account, and lapsed funds

Contributions come in the form of principal and spendable income from TLO-managed assets

The current structure of the Trust is complicated with multiple portfolios managed by different entities, an intricate flow of funds between the various accounts and accounting items within the funds, and a complex spending policy
Spend Rate
Callan Asset-Spending Modeling Process

**Asset Modeling**
- Define Capital Market Assumptions
- Create Asset Mix Alternatives

**Spending Modeling**
- Define Spending Assumptions
- Build Spending Model Alternatives

- Simulate Financial Conditions
- Define Risk Tolerance
- Select Appropriate Asset Allocation & Spending Policies
The above chart shows the projected value of the Trust over time under the current 4.25% spend rate. The Trust is expected (median or 50th percentile) to more than triple over the next four decades. Even in a worse-case outcome (defined as the 95th percentile or a 1-in-20 event), the Trust is projected to have grown in 40 years time. Note that the values above are shown in future dollars and are not adjusted for the impact of inflation.
Impact of Inflation (Price and Population)

Trust Market Values at June 30, 2031 (10 Year Projection)

Nominal values are shown in future dollars while real values are adjusted for inflation

- The real market value illustrates the purchasing power of the trust in today’s dollars
- Real values allow for an apples-to-apples comparison over time – how has the purchasing power of the Trust changed relative to today

Real values adjusted for both price and population inflation illustrate the purchasing power of the Trust across generations of Alaskans
Trust Growth: Adjusted for Price and Population Inflation

Real Market Values in 10, 20 and 40 Years – 4.25% Spend Rate

The above chart shows the projected value of the Trust over time after adjusting for price and population inflation. The purchasing power of the Trust is expected (median or 50th percentile) to grow in the coming decades under the current 4.25% spend rate.

In a worse-case outcome (95th percentile), the Trust is projected to be less than half the starting value ($814 million) in 10 years and less than one-third in 40 years.
Annual spending rises steadily over the next 40 years in the median outcome, growing from approximately $33 million in FY21 to over $116 million in FY61.

After adjusting for inflation, annual spending rises to $48 million by FY61.

When adjusting for both price and population inflation, annual spending rises modestly over the projection period, reaching $42 million in FY61.
The chart above examines annual real (inflation-adjusted) spending under the current 4.25% spend rate assuming a poor TLO outcome (detailed on page 23)

Even under this lower inflow scenario, spending is projected to rise over time when adjusting for both price and population inflation

Given the rise in inflation-adjusted spending, only higher spend rates need be examined
Spending: Poor TLO Outcome

Annual Spending – 4.50% Spend Rate

While a 4.5% spend rate results in rising real spending over time under the base-case TLO projection (not shown), real spending declines under a poor TLO outcome.

Given this decline, it is reasonable to maintain the current 4.25% spend rate.

Intergenerational spending declines
**Spend Rate**

**Observations and Recommendation**

The current 4.25% spend rate is expected to result in rising real (inflation adjusted) market values and spending levels over time.

Even under a poor TLO contribution scenario, a 4.25% spend rate is expected to result in modestly higher spending over the 40-year projection period after adjusting for price and population inflation.

Given the above, only higher spend rates were examined.

A 4.50% spend rate was unable to maintain real spending over the projection period.

**Recommendation:** Maintain current 4.25% spend rate.
Reserve Level
Reserve Level

Probability of Spending Assurance

Focusing on the ten and twenty-year time horizons, the top table indicates reserve policies between 400-500% of spending are sufficient to ensure spending is met with a greater than 90% probability.

Lower reserve levels generate greater ending asset values and greater spending in the expected and better-case outcomes.

Higher reserve levels protect spending in poor investment outcomes.

The bottom table shows very little difference in the probability of spending assurance depending on where the reserves are maintained.

The numbers do, however, suggest that keeping three-quarters of the reserves at the DOR marginally improves funding assurance.

Higher APFC reserve levels results in greater asset and spending values except in worse-case scenarios.
Reserve Level

Observations and Recommendation

Reserve policies between 400-500% of spending are sufficient to ensure spending is met with a greater than 90% probability over the 10 and 20 year projections periods.

While there is very little difference in the probability of spending assurance depending on where the reserves are maintained, the numbers do suggest that keeping three-quarters of the reserves at the DOR marginally improves funding assurance.

Higher APFC reserve levels results in greater asset and spending values except in worse-case scenarios.

**Recommendation:** Maintain the current reserve policy which provides a high probability of funding assurance while balancing the higher expected returns generated at the APFC with the marginally higher funding assurance and higher ending asset and spending values provided by the DOR in worse-case scenarios.
DOR Budget Reserve

Impact of Adding Fidelity Tactical Bond Strategy to Fixed Income Portfolio

The pie charts below illustrate the expected impact of allocating 20% of fixed income (8.8% of the total portfolio) to Fidelity’s Tactical Bond strategy

- The Fidelity product was modeled using a combination of core, high yield, global ex-us, EMD, and private credit

The addition of Fidelity raises the expected return for the total portfolio by approximately 10 basis points with a 30 basis point increase in risk

The resulting impact on assets and spending are shown on the following pages
The Fidelity Tactical Bond strategy provides diversified exposure to the fixed income market, investing across sectors including investment grade corporates, securitized, international credit, high yield, and emerging markets debt.

The strategy seeks to outperform the Bloomberg Aggregate Index while targeting 3-6% volatility over a full market cycle.

The team has demonstrated success in generating alpha primarily through security selection and sector rotation.

The team has been relatively stable and Fidelity has been thoughtful about succession by adding PMs in 2016 and telegraphing leadership changes within the fixed income division.

The strategy has been consistent in implementing a top-down/bottom-up driven approach and has generated excess returns within the targeted volatility range.

Callan maintains a positive opinion of Fidelity and the Tactical Bond strategy, and would recommend the strategy as a suitable opportunistic fixed income allocation.
## Trust Growth

Real Market Values in 10, 20, and 40 Years – Without and With Fidelity Tactical Bond Strategy

<table>
<thead>
<tr>
<th>Percentile</th>
<th>10 Yrs: No Fid</th>
<th>10 Yrs: Fid</th>
<th>20 Yrs: No Fid</th>
<th>20 Yrs: Fid</th>
<th>40 Yrs: No Fid</th>
<th>40 Yrs: Fid</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th Percentile</td>
<td>$1,696.0</td>
<td>$1,706.6</td>
<td>$2,680.8</td>
<td>$2,717.4</td>
<td>$4,115.1</td>
<td>$4,161.1</td>
</tr>
<tr>
<td>25th Percentile</td>
<td>$1,114.7</td>
<td>$1,117.0</td>
<td>$1,361.6</td>
<td>$1,374.9</td>
<td>$1,844.8</td>
<td>$1,867.7</td>
</tr>
<tr>
<td>50th Percentile</td>
<td>$817.3</td>
<td>$819.7</td>
<td>$858.6</td>
<td>$863.3</td>
<td>$925.3</td>
<td>$932.9</td>
</tr>
<tr>
<td>75th Percentile</td>
<td>$583.6</td>
<td>$583.8</td>
<td>$544.6</td>
<td>$546.4</td>
<td>$498.9</td>
<td>$503.8</td>
</tr>
<tr>
<td>95th Percentile</td>
<td>$378.0</td>
<td>$376.1</td>
<td>$306.7</td>
<td>$306.2</td>
<td>$234.5</td>
<td>$233.8</td>
</tr>
</tbody>
</table>

Over all time horizons, the addition of Fidelity results in greater market values except in worse-case (95th percentile) outcomes.
Spending

Cumulative Real Spending in 10, 20, and 40 Years – Without and With Fidelity Tactical Bond Strategy

Over the ten and twenty-year horizons, the addition of Fidelity results in modestly higher spending except in worse-case scenarios.

Extending the projection period out 40 years results in greater spending across the board with the addition of Fidelity.
Three asset allocation policies are examined alongside the current DOR budget reserve allocation shown to the right.

Given the results on the prior pages, all policies contain an allocation to Fidelity equal to 20% of fixed income.
Not surprisingly, greater equity allocations result in greater ending asset values except in worse-case outcomes over the next 10 years.
Spending patterns largely follow those of ending asset values, with more aggressive (greater equity allocations) investment policies generating greater spending except in worse-case outcomes over the next 10, 20, and 40 years.
Ultimate Real Purchasing Power (URPP) was created in an attempt to balance the competing objectives of maintaining or increasing real spending while maintaining or growing the real value of the Trust.

Compare change in worse-case outcome (risk) to change in median-case outcome (reward) - a move is justified if the increased reward exceeds the increased risk.

URPP indicates a move to 60% or 70% equity is justified over all time horizons.

Note that there is a 1% decline in the probability of spending assurance when moving from 50% to 70% equity.
Asset Allocation

Observations and Recommendations

The Trust has no control over the asset allocation at APFC or GeFONSI, thus the analysis focused solely on the budget reserve account at the DOR

Fidelity Tactical Bond

Allocating 20% of the fixed income portfolio to Fidelity’s Tactical Bond strategy results in greater asset and spending levels in the expected and better-case outcomes but hurts the Trust in most worse-case scenarios

Focusing on the ultimate real purchasing power of the Trust indicates a 20% allocation to Fidelity within the fixed income portfolio pays off in terms of reward (greater expected URPP) outweighing risk (lower worse-case URPP) over all periods

Equity Exposure

Greater equity allocations result in greater asset and spending values except in worse-case outcomes over the next 10, 20, and 40 years

Focusing on the ultimate real purchasing power of the Fund suggests a move to 60% or 70% equity in the DOR budget reserve account is justified over all periods

Recommendation: Consider a move to 70% equity and the introduction of Fidelity into the bond portfolio
Rebalancing
Rebalancing Process and View

Strategic investment policy articulates a target asset mix relative to return goals and tolerance for risk

Rebalancing enforces the strategic asset allocation by avoiding policy drift

- Policy drift generates tracking error relative to the strategic target, potentially changing the risk posture of a fund
- Rebalancing realigns the portfolio back to target after allocations drift due to relative performance
  - Imposes buy low/sell high discipline in market cycles, eliminates subjective judgment and market timing calls

Number of methods to address rebalancing

- Buy-and-hold
- Calendar (quarterly, annually)
- Target with tolerance range or band
- Tactical

Callan favors rebalancing with a range around the asset class target

- Based on experience, forward-looking research and industry best practice
- Monitor on regular performance cycle, trigger when threshold breached

In practice, cash flow planning accomplishes much of the rebalancing needs, at least during normal markets

- Adjusting overweight/underweight asset classes and strategies through spending, expenses, and contributions
- Effective rebalancing before thresholds are reached
Rebalancing Ranges

The optimal rebalancing range around an asset class depends on:

- The size of the target asset class allocation
- Asset class risk
- Transaction costs
- Liquidity

The tighter the rebalancing range, the more frequent the required rebalancing and the greater the transaction cost.

- High volatility assets like equity require wider ranges
- Illiquid assets like private equity and real estate require special consideration, typically wide ranges to acknowledge limits to rebalancing in shorter term
- Wide ranges reduce transaction costs but increase tracking error

Practical considerations refine rebalancing policy:

- Monitor ranges for source and frequency of rebalancing triggers
Rebalancing Analysis

Quarterly versus Range-Based Rebalancing

The analysis which follows compares quarterly and range-based rebalancing

- Quarterly rebalancing moves the portfolio back to target at quarter-end
- The range-based methodology employs ranges around each asset class target and only rebalances when a range has been breached
  - For example, a 35% target allocation to US Equity with a rebalancing range of +/-5% would trigger rebalancing when US Equity is above 40% or below 30%

Rebalancing ranges shown to the right are employed in the range-based approach and were taken from the APFC’s 2021 Annual Report

DOR and GeFONSI currently employ quarterly rebalancing

The impact on assets and spending are tracked over time

Note that transaction costs, which impact separate accounts to a far greater degree than mutual funds or pooled vehicles, were not factored into the analysis which follows
Range-based rebalancing results in greater ending market values over time versus quarterly rebalancing.
Spending

Cumulative Real Spending in 10, 20, and 40 Years – Quarterly vs Range-Based Rebalancing

Spending is equal to or higher under a range-based rebalancing methodology in expected and better-case outcomes relative to quarterly rebalancing.

Quarterly rebalancing results in greater spending in poor investment outcomes over the 10 and 20 year periods and greater spending in the worse-case scenario over the 40-year projection period.
Risk Reward Analysis

Ultimate Real Purchasing Power

Compare change in worse-case outcome (risk) to change in median-case outcome (reward)

The next 10 years favors quarterly rebalancing from an URPP perspective

Extending the time horizon to 20 or 40 years favors a range-based approach

Note that there is a 3-4% decline in the probability of spending assurance with a move to range-based rebalancing
Rebalancing

Observations and Recommendation

Rebalancing enforces the strategic asset allocation by avoiding policy drift

- Quarterly rebalancing is a calendar based approach that theoretically ignores market moves intra-quarter
- A range-based approach triggers rebalancing when a threshold has been breached, which in turn requires monitoring to determine if and when a breach occurs
- Rebalancing realigns the portfolio back to target after allocations drift due to relative performance
  - Imposes buy low/sell high discipline in market cycles, eliminates subjective judgment and market timing calls

Regardless of the rebalancing methodology adopted by the Trust, careful cash flow planning can accomplish much of the rebalancing needs during normal markets

The analysis indicates there is a disadvantage in moving to a range-based approach over a 10 year time horizon from an ultimate real purchasing power perspective though longer projection periods clearly support the range-based rebalancing methodology

It should be noted that there is a modest decline in the probability of spending assurance (actual spending = 100% of formula amount) with a move to range-based rebalancing

**Recommendation:** Consider moving to a range-based rebalancing policy

If such a policy were to be adopted, further consideration can be given to the exact ranges to be applied to the DOR budget reserve portfolio
Land Integration
The Trust’s non-liquid assets consist of one million acres, buildings and improvements, and seven commercial real estate properties which are managed by the TLO within the Alaska Department of Natural Resources.

1 Million Acres – Consists of timber, surface, and sub-surface investments carried at book value of $1 per acre (not actively appraised)

Buildings & Improvements – Program-related investments that are valued at approximately $20 million (not actively appraised)

Commercial Real Estate – Seven commercial office/industrial properties valued at approximately $101 million (includes ~$35 million debt) located in Alaska, Texas, Utah, and Washington, with Harvest contracted by the trust as the independent real estate adviser (with external appraisals conducted every three years)
Land Integration

Should the TLO-managed holdings be integrated into the asset allocation and spending framework?

1 Million Acres

The geographic disbursement and lack of active appraisals argues against including the acreage in the asset allocation and spending policies beyond its current involvement.

Buildings & Improvements

The lack of active appraisals and the “sticky” nature of the program-related investments argues against including the buildings and improvements in the asset allocation and spending policies beyond its current involvement.

Commercial Real Estate (CRE)

The strongest argument for inclusion is found within the commercial real estate portfolio.

Including CRE in the asset allocation would theoretically lower total portfolio volatility thereby allowing for greater risk taking with the liquid financial assets.

While the CRE portfolio may exhibit a low volatility due to the nature of appraisal smoothing, is the portfolio truly less risky? We would argue it is not given the limited number of properties and the lack of diversification across property type and geography.

- Most institutional core open-end real estate funds hold between 100-200 properties diversified across property type and geography.

The less diversified nature of the CRE portfolio and the difficulty with actively rebalancing argues against its inclusion in the asset allocation and spending policies beyond its current involvement.

Given the lack of a strong argument for adding to the TLO-managed CRE portfolio, due to the large real estate portfolio managed at APFC, we examine the impact of the potential sale of the seven properties in the following pages.
Selling the commercial real estate portfolio, which would generate approximately $66 million in net revenue, and depositing the funds into APFC principal results in greater ending asset values across the board except in the 40-year worse-case outcome.
Selling the commercial real estate portfolio and depositing the funds into APFC principal results in greater spending across the board except in the 40-year worse-case outcome.
Land Integration

Observations and Recommendations

Do not integrate lands into the asset allocation and spending framework

The geographic disbursement and lack of active appraisals argues against including the acreage beyond its current involvement.

The lack of active appraisals and the “sticky” nature of the program-related investments argues against including the buildings and improvements beyond its current involvement.

The less diversified nature of the CRE portfolio and the difficulty with actively rebalancing argues against its inclusion beyond its current involvement.

Consider selling the commercial real estate portfolio

Callan recommends the Trust continues to work with Harvest to monitor the market dynamics around the seven distinct properties in accordance with the Asset Management Policy Statement (“AMPS”).

Selling the commercial real estate portfolio and depositing the funds into APFC principal results in greater asset and spending levels across the board except in the 40-year worse-case outcome.

Purely from a risk-reward perspective, opportunistic selling of some or all of the CRE portfolio is supported.

Recommendation 1: Do not incorporate lands into the asset allocation and spending framework beyond their current involvement.

Recommendation 2: Pending continuing evaluation and discussion with Harvest, and in accordance with the AMPS, consider the opportunistic sale of some or all of the commercial real estate portfolio with the proceeds deposited at the APFC.
Observations and Recommendations
Observations and Recommendations

The goal of this study is to analyze the Alaska Mental Health Trust Authority's investment program from a number of different angles with particular focus on the asset allocation and spending policies.

The current structure of the Trust is complicated with multiple portfolios managed by different entities, an intricate flow of funds between the various accounts and accounting items within the funds, and a complex spending policy.

**Recommendations:**
- As an inflation-proofing mechanism, adopt a long-term asset allocation target with an expected return that exceeds spending and inflation.
- Maintain the current 4.25% spend rate.
- Maintain the current reserve policy.
- Consider a move to 70% equity and the introduction of Fidelity into the bond portfolio.
- Consider moving to a range-based rebalancing policy.
- Do not incorporate lands into the asset allocation and spending framework beyond their current involvement.
- Pending continuing evaluation and discussion with Harvest, and in accordance with the AMPS, consider the opportunistic sale of some or all of the commercial real estate portfolio with the proceeds deposited at the APFC.
Disclosures

Information contained herein is the confidential and proprietary information of Callan and should not be used other than by the intended recipient for its intended purpose or disseminated to any other person without Callan’s permission.

This report was prepared by Callan for use by a specific client and should not be used by anyone other than the intended recipient for its intended purpose. The content of this report is based on the particular needs of such client and may not be applicable to the specific facts and circumstances of any other individual or entity.

Certain information herein has been compiled by Callan and is based on information provided by a variety of sources believed to be reliable for which Callan has not necessarily verified the accuracy or completeness of or updated.

This content is for informational purposes only and should not be construed as legal or tax advice on any matter. Any decision you make on the basis of this content is your sole responsibility. You should consult with legal and tax advisers before applying any of this information to your particular situation.

This content may consist of statements of opinion, which are made as of the date they are expressed and are not statements of fact.

Reference to or inclusion in this report of any product, service or entity should not be construed as a recommendation, approval, affiliation or endorsement of such product, service or entity by Callan.
Commercial Real Estate Market Update

April 20, 2022
Where We Are: Financial Markets Are Richly Valued

S&P Composite Index: Regression to Trend
Real (inflation-adjusted) Price since 1871 with an Exponential Regression Variance measured below

This log-scale chart illustrates regression to the trend across over 14-plus decades of market history. The latest monthly average of daily closes is 161% above trend.
And Not Just Expensive But At Historic Highs

S&P Composite Index: Regression to Trend
With Standard Deviations Highlighted

The detrended regression through the S&P Composite is the black line. The standard deviations (SD) are shown in red. The percentages are for index peaks and troughs with the latest variance highlighted in yellow.

advisorperspectives.com
March 2022
As of February
# Current Portfolio Status

<table>
<thead>
<tr>
<th>Project</th>
<th>Street Address</th>
<th>City &amp; State</th>
<th>Year Built</th>
<th>Rentable Sq. Feet</th>
<th>Vacant Sq. Feet</th>
<th>Occupied Sq. Feet</th>
<th>Occupancy Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cordova</td>
<td>2600 Cordova Street</td>
<td>Anchorage, AK</td>
<td>1985</td>
<td>28,217</td>
<td>-</td>
<td>28,217</td>
<td>100%</td>
</tr>
<tr>
<td>Commercial Drive</td>
<td>2618 Commercial Drive</td>
<td>Anchorage, AK</td>
<td>1972</td>
<td>15,120</td>
<td>-</td>
<td>15,120</td>
<td>100%</td>
</tr>
<tr>
<td>Washington Parks</td>
<td>1111 Israel Road</td>
<td>Tumwater, WA</td>
<td>2008</td>
<td>52,510</td>
<td>-</td>
<td>52,510</td>
<td>100%</td>
</tr>
<tr>
<td>Rulon White</td>
<td>1973 N. Rulon White Blvd.</td>
<td>Ogden, UT</td>
<td>1996</td>
<td>100,000</td>
<td>-</td>
<td>100,000</td>
<td>100%</td>
</tr>
<tr>
<td>Promontory Point</td>
<td>2420 &amp; 2500 Ridgepoint Dr.</td>
<td>Austin, TX</td>
<td>1983</td>
<td>97,102</td>
<td>-</td>
<td>97,102</td>
<td>100%</td>
</tr>
<tr>
<td>Amber Oaks</td>
<td>9601 Amberglen Blvd.</td>
<td>Austin, TX</td>
<td>2001</td>
<td>102,939</td>
<td>7,610</td>
<td>95,329</td>
<td>93%</td>
</tr>
<tr>
<td>North Park</td>
<td>17319 San Pedro Avenue</td>
<td>San Antonio, TX</td>
<td>2006</td>
<td>86,401</td>
<td>41,253</td>
<td>45,148</td>
<td>52%</td>
</tr>
<tr>
<td><strong>Portfolio Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>482,289</td>
<td>48,863</td>
<td>433,426</td>
<td>90%</td>
</tr>
</tbody>
</table>

**Overall Portfolio Occupancy As of April 2021:** 83%
Commercial Real Estate: National Office Market

Net Absorption, Net Deliveries & Vacancy

- Net Absorption
- Net Deliveries
- Vacancy

Forecast

© 2022 CoStar Realty Information Inc.
Federal Reserve: Secular Sea Change?

30-Year Fixed Rate Mortgage Average in the United States

Shaded areas indicate U.S. recessions.

Source: Freddie Mac

fred.stlouisfed.org
Outlook: Best to Act Defensively
Introduction:
Each year the TLO presents the budget for managing the commercial and program related real estate properties. These are based on the TLO’s projections for occupancy and the related capital and operating expenses for each property in FY23. If approved, this budget allows the TLO to manage these properties within the constraints of the approved budget but with flexibility to manage cash flows and obligations to maintain the facilities in good working order, attractive to tenants, and for appropriate revenue production. In each property throughout the year, cash reserves and distributions are determined based on projected needs. In addition to this budget approval, the board has previously approved additional funding from the Central Facility Fund for specific operating or capital improvements that could not be covered by property cash flows.

Proposed RMC Motion:

Proposed Motion One: “The Finance Committee recommends that the Alaska Mental Health Trust Authority board of trustees approve the incremental building expenditures, totaling $12,291,087 budgeted for the fiscal year 2023 to be paid by the property manager from rents, cash reserve, other income collected from the properties and the Central Facility Fund.”

Proposed Motion Two: “The Finance Committee recommends that the Trust Authority board of trustees approve funding and instruct the CFO to transfer up to $31,311 to the third-party property manager, as requested by the TLO, for operating expenses and capital expenses to the Non-Investment/Program Related Real Estate and REMP Real Estate properties from the Central Facility Fund for the fiscal year 2023, which appropriation shall not lapse.”
Two Texas properties, Amber Oaks and North Park, have had significant vacancies. The proposed budget anticipates the use of building reserves, accumulated for each property in prior years for this type of situation, to augment the revenues for those two buildings. Additionally, Amber Oaks also requires funds from the Central Facility Fund to balance its revenues and expenses. Amber Oaks has completed several new deals which bring the building occupancy up to 93%. However, many of the associated expenses to include Tenant Improvement Allowances and commissions will be paid/realized in Fiscal year 2023. Amber Oaks specifically is expected to see 100% occupancy this fiscal year. North Park is expected to have new tenants which will result in an increase in leased space in FY23. Depending on the amount of space leased, timing, and terms, the revenues may be greater for North Park and Amber Oaks than the projections in the proposed budget. The proposed budget includes operating and capital expenses for those properties that include significant one-time expenses associated with recruiting new tenants as required by local market conditions. If revenues exceed expectations and/or expenses are less than expected, then the use of building reserves and CFF funds will be reduced.

**General Background:** We have established a system to adequately plan, manage, audit and report activity in the real estate portfolio. Asset Managers oversee and direct professional management services, the property information is accounted for by:

1) matching income to expenses;
2) comprehensive reporting and budgeting for each property; and
3) capital expense forecasting.

Anticipated gross receipts and cash reserves from Commercial Real Estate property rents for FY23 is $12.89 million. This projection accounts for known revenue sources with current occupancy levels, expected expiration of leases, and conservative filling of vacancies. The gross receipts can be affected by timing of obtaining new tenants and the negotiated lease rental amounts. Gross receipts are income before expense or debt service.

**Consistency with the Resource Management Strategy:** The proposal is consistent with the “Resource Management Strategy for Trust Land” (RMS), which was adopted March 2021 in consultation with the Trust and provides for maximization of return on investment and provides for long term income generation at prudent levels of risk.
FY23 Real Estate Budget from rent and other property income (Proposed Motion One)

Transaction/Resource: Budgets are presented to seek approval from the board of trustees for the expenditures necessary to service the properties. The proposed property expenditures are funded by tenant rents, cash reserves, other income collected from the properties and the Central Facility Fund.

Property Description/Acreage/MH Parcel(s): Commercial Real Estate and Non-Investment Program Related Properties are as follows:

<table>
<thead>
<tr>
<th>Commercial Real Estate Properties</th>
<th>Non-Investment-Program Related Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>1111 Israel Road; Tumwater, WA</td>
<td>3745 Community Park Loop Road; Anchorage, AK</td>
</tr>
<tr>
<td>1973 North Rulon; Ogden, UT</td>
<td>650 Yonker Court; Fairbanks, AK</td>
</tr>
<tr>
<td>2600 Cordova Street; Anchorage, AK</td>
<td>2330 Nichols Street; Anchorage, AK</td>
</tr>
<tr>
<td>2618 Commercial Drive; Anchorage AK</td>
<td>1300 Moore Street; Fairbanks, AK</td>
</tr>
<tr>
<td>2420 &amp; 2500 Ridgepoint Drive; Austin, TX</td>
<td>1423 Peger Road; Fairbanks, AK</td>
</tr>
<tr>
<td>17319 San Pedro Avenue; San Antonio, TX</td>
<td>9601 Amberglen Blvd; Austin, TX</td>
</tr>
</tbody>
</table>

Anticipated Distributable Income to the Trust for FY23 is $1.6 million.

Trust Land Office Recommendation: The TLO recommends that it is in the Trust’s best interest to approve the incremental building expenditures for FY23 to be funded by tenant rents, cash reserves, other income collected from the properties, and the Central Facility Fund.

Applicable Authority: AS 37.14.009(a), AS 38.05.801, 20 AAC 40.710-720 and 11 AAC 99.

Trust Authority Approval: The motions presented in this briefing document fulfill the approval requirements that are applicable to the transaction.

General Background: There are times that the Central Facility Fund (CFF) will be used so as not to create an uncomfortable level of cash flow compression or that there are insufficient rents to pay for facility obligations. This is typically realized in facilities that are used for program related purposes or operations use where no rent is collected. The Trust Land Office (TLO) uses comprehensive reporting and budgeting for each property with industry recognized capital expense forecasting. Although this Motion 2 approves use of the CFF, the TLO will attempt to use the rent receipts first when possible.

Consistency with the Resource Management Strategy: The proposal is consistent with the “Resource Management Strategy for Trust Land” (RMS), which was adopted March 2021 in consultation with the Trust and provides for assuring that the real estate needs of mental health programs sponsored by the Alaska Mental Health Trust Authority are met as appropriate. In addition, 11 AAC 99.020(c)(3) cites protection and enhancement of the long-term productivity of Trust land.
FY23 Commercial Real Estate and Non-Investment/Program-Related Real Estate Facility Funding Budget (Trust Funded) (Proposed Motion Two)

Trust Land Office Recommendation: The TLO recommends that it is in the Trust’s best interest to approve the incremental building expenditures for FY23.

Applicable Authority: AS 37.14.009(a), AS 38.05.801, 20 AAC 40.710-720 and 11 AAC 99.

Trust Authority Approval: The motions presented in this briefing document fulfill the approval requirements that are applicable to the transaction.

Exhibit(s):

Exhibit 1 - Property Budget Summary
## FY23 Real Estate Budget Summary

### Commercial Real Estate - Rent Funded

<table>
<thead>
<tr>
<th>Name</th>
<th>City, State</th>
<th>FY23 Gross Receipts &amp; Cash Reserve</th>
<th>FY22 Approved Gross Receipts &amp; Cash Reserve</th>
<th>Operating Expense</th>
<th>Capital Improvements</th>
<th>Debt Service</th>
<th>FY23 Total</th>
<th>FY22 Approved Expenditure</th>
<th>FY23 Approved Expenditure</th>
<th>Distributable Income to the Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks, 1111 Isreal Road</td>
<td>Turnersville, NJ</td>
<td>$1,061,845</td>
<td>$1,061,037</td>
<td>$529,579</td>
<td>$87,000</td>
<td>$802,619</td>
<td>$1,480,138</td>
<td>$1,464,040</td>
<td>$1,327,647</td>
<td>$48,377</td>
</tr>
<tr>
<td>ME-1973 North Fulton White Blvd</td>
<td>Oviedo, FL</td>
<td>$2,073,902</td>
<td>$2,053,867</td>
<td>$845,310</td>
<td>$295,270</td>
<td>$416,137</td>
<td>$1,959,827</td>
<td>$1,582,752</td>
<td>$1,304,930</td>
<td>$24,957</td>
</tr>
<tr>
<td>Commercial-169 Commercial Drive</td>
<td>Anchorage, AK</td>
<td>$241,734</td>
<td>$566,928</td>
<td>$14,999</td>
<td>$60,000</td>
<td>63,905</td>
<td>$138,634</td>
<td>$126,187</td>
<td>$119,845</td>
<td>$16,381</td>
</tr>
<tr>
<td>Cordova-2460 Cordova Resort</td>
<td>Anchorage, AK</td>
<td>$309,989</td>
<td>$622,288</td>
<td>$269,950</td>
<td>$226,600</td>
<td>$1,177,000</td>
<td>$1,177,000</td>
<td>$919,332</td>
<td>$919,332</td>
<td>$162,662</td>
</tr>
<tr>
<td>Promontory Palisades 2120 &amp; 2100 Ridgepoint Drive</td>
<td>Austin, TX</td>
<td>$2,051,492</td>
<td>$1,679,826</td>
<td>$399,247</td>
<td>$326,119</td>
<td>$1,129,465</td>
<td>$1,547,846</td>
<td>$1,547,846</td>
<td>$1,547,846</td>
<td>$12,600</td>
</tr>
<tr>
<td>North Park-17315 San Pedro Avenue**</td>
<td>San Antonio, TX</td>
<td>$1,858,800</td>
<td>$1,858,701</td>
<td>$67,411</td>
<td>$826,956</td>
<td>$405,777</td>
<td>$1,350,580</td>
<td>$1,350,580</td>
<td>$1,350,580</td>
<td>0</td>
</tr>
<tr>
<td>Amber Oasis-9601 Amberlain Blvd**</td>
<td>Austin, TX</td>
<td>$4,519,016</td>
<td>$4,517,279</td>
<td>$146,970</td>
<td>$2,388,126</td>
<td>$941,717</td>
<td>$4,796,367</td>
<td>$4,513,279</td>
<td>$4,513,279</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td>$12,989,091</td>
<td>$12,244,618</td>
<td>$4,725,016</td>
<td>$8,361,642</td>
<td>$3,674,648</td>
<td>$11,911,343</td>
<td>$11,842,537</td>
<td>$11,842,537</td>
<td>$1,260,000</td>
</tr>
</tbody>
</table>

**Cash Reserves are prior year income reserved in anticipation of future need.**

### Non-Investment/Program Related Real Estate - Rent Funded

<table>
<thead>
<tr>
<th>Name</th>
<th>City, State</th>
<th>Gross Receipts</th>
<th>FY22 Approved Gross Receipts</th>
<th>Operating Expense</th>
<th>Capital Improvements</th>
<th>Debt Service</th>
<th>FY23 Total</th>
<th>FY22 Approved Expenditure</th>
<th>FY23 Approved Expenditure</th>
<th>Distributable Income to the Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAS-3745 Community Park Loop Road**</td>
<td>Anchorage, AK</td>
<td>$204,284</td>
<td>$204,284</td>
<td>$204,284</td>
<td>-</td>
<td>-</td>
<td>$204,284</td>
<td>$204,284</td>
<td>$204,284</td>
<td>$204,284</td>
</tr>
<tr>
<td>Desert-550 Yonker Court</td>
<td>Fairbanks, AK</td>
<td>$106,817</td>
<td>$106,817</td>
<td>8,412</td>
<td>-</td>
<td>-</td>
<td>$115,229</td>
<td>$115,229</td>
<td>$115,229</td>
<td>$89,405</td>
</tr>
<tr>
<td>Assets-2360 Nichols Street</td>
<td>Anchorage, AK</td>
<td>$66,683</td>
<td>$66,683</td>
<td>$10,000</td>
<td>-</td>
<td>-</td>
<td>$76,683</td>
<td>$76,683</td>
<td>$76,683</td>
<td>$9,683</td>
</tr>
<tr>
<td>Feathercreek Center-1423Pager Road</td>
<td>Fairbanks, AK</td>
<td>$165,000</td>
<td>$165,000</td>
<td>$17,544</td>
<td>-</td>
<td>-</td>
<td>$182,544</td>
<td>$182,544</td>
<td>$182,544</td>
<td>$128,466</td>
</tr>
<tr>
<td>Denver-1300 Moore Street</td>
<td>Fairbanks, AK</td>
<td>$53,500</td>
<td>$53,500</td>
<td>34,500</td>
<td>-</td>
<td>-</td>
<td>$88,000</td>
<td>$88,000</td>
<td>$88,000</td>
<td>$57,183</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td>$715,454</td>
<td>$749,498</td>
<td>$375,744</td>
<td>-</td>
<td>-</td>
<td>$1,121,202</td>
<td>$1,121,202</td>
<td>$1,121,202</td>
<td>$540,712</td>
</tr>
</tbody>
</table>

**Motions 1 Subtotal** $12,291,057 $12,756,034

**Non-Investment/Commercial Real Estate - From Central Facility Fund**

<table>
<thead>
<tr>
<th>Name</th>
<th>City, State</th>
<th>Gross Receipts</th>
<th>FY22 Approved Gross Receipts</th>
<th>Operating 1</th>
<th>Capital Improvements</th>
<th>Debt Service</th>
<th>FY23 Total</th>
<th>FY22 Approved Expenditure</th>
<th>FY23 Approved Expenditure</th>
<th>Distributable Income to the Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amber Oasis-9601 Amberlain Blvd**</td>
<td>Austin, TX</td>
<td>$4,523,016</td>
<td>$4,521,279</td>
<td>$1,446,970</td>
<td>$2,388,126</td>
<td>$941,717</td>
<td>$4,796,367</td>
<td>$4,521,279</td>
<td>$4,521,279</td>
<td>$24,203</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td>$5,024,380</td>
<td>$5,022,553</td>
<td>$1,766,356</td>
<td>$2,308,126</td>
<td>$941,717</td>
<td>$5,403,693</td>
<td>$5,403,693</td>
<td>$5,403,693</td>
<td>$24,203</td>
</tr>
</tbody>
</table>

**Motions 2 Subtotal** $31,311

## Notes

1. **Capital Improvements**
   - Parks: Parking lot/Maintenance/Powder/Parting Exterior/MAC Repairs/Engineering Parking lot
   - IRD: HVAC RTU replacement/West Parking lot overlay/UFD replacement/Dilution Tank removal
   - Cordova: WAI box project part 3/bathroom update/corridor refresh
   - North Park: Outdoor tenant amenity area/Commissions and Tenant Improvements for new tenants
   - Amber Oaks: HVAC Replacement/Landscaping and Tenant Improvements and Commissions
   - Commercial: Lease renewal improvements/Reserve funds
   - TAB: Engineering for building RTU & boiler
   - Front Point: Rear injection reserve / Capital funds

2. **Debt Service** includes Principal and Interest
   - This includes refinanced properties (Commercial Oty, Fulton & North Park)

3. **Operating**
   - Due to cash compression there will be shortfalls in cashflows we will need to use up to $5,000 for building operations of the Trust Authority building and $16,309 for Amber Oasis Capital needs

**For North Park $544.1K of cash reserves is added to Gross Receipts**

**For Amber Oasis $512.5K of cash reserves is added to Gross Receipts**
REQUESTED MOTION:

The Finance Committee recommends the full board of trustees approve authorize spending $265,000 from the Central Facility Fund for FY2023 independent third-party real estate advisory services.

Background

Per the Asset Management Policy Statement, revised 2019 (AMPS), regarding Non-Liquid Asset Managers, a third-party real estate advisor monitors the real estate investment assets managed by the Trust Land Office (TLO). This advisor “assists with the oversight and monitoring of real estate investment assets acquired by the Trust for income generating purposes. The advisor is managed by the CFO and provides an annual report to the trustees on the status of these real estate assets.”

In FY2020, Harvest Capital Partners LLC (Harvest) was awarded a fixed-price contract with three 1-year renewals. This budget approval for $265,000 continues the advisory services through FY2023.

The source of this contract is the Central Facility Fund (CFF). There are sufficient funds to cover this contract. The source of the CFF funding is distributed earnings from the properties accumulated over time.
REQUESTED MOTION:

The Finance Committee recommends the full board of trustees approve the following asset allocation for budget reserves managed by the State of Alaska Department of Revenue effective July 1, 2022:

<table>
<thead>
<tr>
<th>Asset Allocation</th>
<th>Target Holding</th>
<th>Target Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad U.S. Equity</td>
<td>43%</td>
<td>± 5%</td>
</tr>
<tr>
<td>International Equity</td>
<td>26%</td>
<td>± 5%</td>
</tr>
<tr>
<td>Core U.S. Fixed Income</td>
<td>30%</td>
<td>± 5%</td>
</tr>
<tr>
<td>Cash Equivalents</td>
<td>1%</td>
<td>-1% / +2%</td>
</tr>
</tbody>
</table>

The Alaska Mental Health Trust Budget Reserve Fund (Fund 3321) is under the fiduciary control of the Trust and managed by the Department of Revenue’s Treasury Division (DOR). The Trust’s Asset Management Policy Statement, revised 2019 (AMPS), establishes the asset allocation policy for the fund’s risk tolerance, investment objective, and time horizon. With this guidance, the actual asset allocation and management policy for budget reserves is delegated to DOR. Nonetheless, DOR appreciates the approval by the trustees of DOR’s Alaska Mental Health Trust Investment Policy Statement (IPS). Changes to asset allocation are generally implemented at the start of a fiscal year.

DOR offers the Trust several options appropriate for budget reserve investments. Callan LLC’s recommendation increases equity holdings up to 70% and incorporates Fidelity Tactical Bond within the fixed income allocation. Callan and DOR have evaluated the asset allocation for FY23, with DOR providing the following IPS investment summary. Staff recommend approval of this change to be effective July 1, 2022.

<table>
<thead>
<tr>
<th>Investment Topic</th>
<th>Proposed Policy Effective July 1, 2023</th>
<th>Existing DOR Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Allocation</td>
<td>Asset Allocation Holding Range</td>
<td>Asset Allocation Holding</td>
</tr>
<tr>
<td>Broad U.S. Equity</td>
<td>43% ± 5%</td>
<td>Broad U.S. Equity 33%</td>
</tr>
<tr>
<td>International Equity</td>
<td>26% ± 5%</td>
<td>International Equity 23%</td>
</tr>
<tr>
<td>Core U.S. Fixed Income*</td>
<td>30% ± 5%</td>
<td>Core U.S. Fixed Income 44%</td>
</tr>
<tr>
<td>Cash Equivalents</td>
<td>1% -1% / +2%</td>
<td></td>
</tr>
<tr>
<td>*may include up to 7% in tactical fixed income</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The table below shows additional changes in DOR’s Investment Policy Statement from the current policy.

<table>
<thead>
<tr>
<th>Investment Topic</th>
<th>Proposed Policy Effective July 1, 2023</th>
<th>Existing DOR Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rebalancing</td>
<td>Quarterly or more frequently within bands</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Expected Return – Long-term</td>
<td>5.60%</td>
<td>5.00%</td>
</tr>
<tr>
<td>Risk – Standard Deviation*</td>
<td>12.42%</td>
<td>10.13%</td>
</tr>
<tr>
<td>Probability of Loss – 1 year</td>
<td>32%</td>
<td>29%</td>
</tr>
<tr>
<td>10% Probability of Annual Loss (10% cVaR*)</td>
<td>-16%</td>
<td>-12%</td>
</tr>
</tbody>
</table>

* The standard deviation measures the amount of change that could be anticipated, positive or negative, from the expected 5.60% return, here a roughly 68% chance that the return will be between -6.82% and 17.8%. The cVaR measures the worst expected 10% of annual returns, here -16%.

There is no changes in investment objectives, which are:

- preserve and enhance the purchasing power of the Trust's cash principal and the income generating capacity of the Trust's non-liquid asset portfolio;
- achieve a real rate of return (above inflation) of five percent (5%) over a full market cycle with reasonable and prudent levels of risk; and
- provide a steady, reliable payout stream to ensure funding of program spending goals while maintaining sufficient liquidity in all market environments.

Additionally, there are no changes in Risk Tolerance (moderate), Policy Risk/Loss Range (>10%), Time Horizon (medium term, 5-7 years)

No revisions in the AMPS are required with these changes.
REQUESTED MOTION:

Finance Committee recommends the full board of trustees authorize the Chief Financial Officer to periodically transfer Trust Authority Development Account funds to the Mental Health Trust principal account managed by the Alaska Permanent Fund Corporation, maintaining a minimum balance of $699,279 until the USFS Land Exchange is permanently closed. Thereafter the balance may reach zero. This authorization does not lapse.

Background
The Trust Authority Development Account (TADA) is a Trust cash fund managed within the State of Alaska Department of Revenue that receives principal income earned from Trust’s lands under management of the Trust Land Office (TLO). These funds are transferred, with annual authorization from the board of trustees to the Trust’s principal account managed by the Alaska Permanent Fund Corporation (APFC).

In the past, the board of trustees has approved investment of principal income in land development projects. In 2019, the board of trustees approved a revision to the Asset Management Policy Statement (AMPS) whereby only spendable income is to be used to develop Trust lands. As of the beginning of FY2022 three legacy projects, approved prior to 2019, were funded in total or in part by principal income and subsequently maintained: Icy Cape 2017, Icy Cape 2018 and the USFS Land Exchange. Outstanding budgeted funds of $1,009,000 were reserved within TADA fund.

Icy Cape 2017 and Icy Cape 2018 projects have since been completed, and $309,271 of unspent funds are available for transfer to APFC for management. Of the $3,085,000 of TADA funds approved for the USFS Land Exchange, $2,385,271 has been expended. The remaining $699,729 must be retained in the TADA fund until the final invoice has been received and final payment to the US Forest Service made. The USFS Land Exchange is expected to be closed when the US Forest Service completes its reconciliation, anticipated at the end of the federal fiscal year.

Upon notification from the TLO that the final payment to the US Forest Service has been made, any remaining balance will be transferred to the APFC for management. At that time, the TADA account will serve solely as a holding account for future TLO principal revenue to be transferred to APFC for management in accordance with the current AMPS.

It is staff’s recommendation that the Chief Financial Officer be authorized to periodically transfer balances above $699,279 to APFC for management, and after the finalization of the USFS Land Exchange, be given ongoing authority to transfer all principal revenue to the APFC-managed principal account.

The regular transfer of these funds to the APFC-managed principal account in compliance with AS 37.14.031 (b) and 20 AAC 40.600.