The Geological Society of America (GSA) and GSA Foundation (GSAF) Investments Committee is charged with investing and monitoring the performance of a diversified portfolio of stocks, bonds and alternative investments that nurture the strategic goals of the Society and the Foundation. GSA and GSAF combine their investable assets into one managed portfolio. All of GSA’s and GSAF’s investments are in commingled funds, selected on the basis of strategy, management style, and long-term records of reward versus risk, in consultation with our investment advisor, Ellwood Associates in Greenwood Village, Colorado (“Ellwood”).

The portfolio’s allocations are illustrated in the graph below. The portfolio emphasizes publicly–traded Equity. An orientation towards equity is appropriate given the portfolio’s long-term return objective. The Investment Committee and Ellwood have worked to refine the allocation over the past year and added exposure to private equity and private credit.

The historical growth in value of the portfolio since 2002 as compared to the portfolio’s benchmark performance level of CPI + 5% is shown in Figure 1, below.

Figure 1. Growth of the GSA/GSAF (combined) Portfolio 31 December 2002 (from Ellwood, June 2018)
Performance of the Investment Portfolio during FY 2018

The market value of GSA/GSAF’s combined investment portfolio, including those funds of the GSA Foundation that are combined with GSA’s investments increased approximately 8.2%, from $47,940,267 on 30 June 2017 to $51,862,940 (compared with the fiscal year end low of $25,557,594 on 30 June 2009). The increase in value was driven by relatively strong market returns, driven by strong returns among US Equity.

Total returns tell a tale of two halves: the first six months of 2018 posted modest returns after a relatively strong second half of 2017. Returns across US equities were most pronounced, as most equity indices posted double digit returns (as evidenced by the two columns towards the left of the chart). Fixed Income performance lagged, as the combination of low fixed income yields and modestly rising rates drove modest return depreciation.

The combined portfolio invests on a diversified basis across various asset classes. The performance in Figure 2 details out several of the asset classes that the portfolio invests in. Corresponding performance for the total combined portfolio is further detailed in Figure 2.1. Though the Investment Committee monitors and evaluates the merits of commodities as a potential investment for the combined investment portfolio, it has elected not to invest portfolio assets in commodities. Thus, the portfolio has no standalone direct investment exposure in commodities.

Figure 2. One year returns (July 2017 through June 2018) of general market asset classes

<table>
<thead>
<tr>
<th>U.S. Large Cap</th>
<th>U.S. Small Cap</th>
<th>International Developed</th>
<th>Emerging Markets</th>
<th>Fixed Income</th>
<th>Hedge Funds</th>
<th>Commodities</th>
</tr>
</thead>
</table>

Rate of Return (%)

- U.S. Large Cap: 14.4%
- U.S. Small Cap: 17.6%
- International Developed: 6.8%
- Emerging Markets: 8.2%
- Fixed Income: 5.1%
- Hedge Funds: 7.3%

- Commodities: -0.4%
Of the portfolio’s 2018 total market value of $51,636,500, GSA’s share amounted to $31,296,876. See Figure 3, below.

GSAF’s share of total investments amounted to $20,339,624. Excluded from this latter figure is the Foundation’s Pooled Income Fund (PIF) which was valued at $45,567, an amount that was largely unchanged from the previous year’s value of $46,536.
The relative annual increase in GSAF’s proportion of the portfolio’s assets in comparison to GSA’s share is because donations and other contributions are chiefly being raised by and placed into the Foundation’s side of the total investments equation. For all practical purposes, this difference in allocation is an exercise in bookkeeping and is not material since GSA and GSAF investment funds (other than Pooled Income Fund) are combined and managed together, and because GSAF and GSA collaboratively work together in support of the Society’s programs for which Council is the visionary and guide.

**Five Year Budget Forecast**
Given current valuations across assets, it is possible that the portfolio’s total rate of return may be below CPI + 5%. During FY2018, the Society’s investment portfolio growth modestly trailed the long-term growth rate of 5% plus CPI, a stated rate that constitutes our portfolio’s benchmark performance level. Given the degree of asset appreciation and corresponding elevated valuations across liquid asset classes, the Investments Committee has focused on considering alternative assets that offer attractive risk–adjusted returns and correlation benefits.

**Current Investment-Asset Classes and Allocations**
The Investment Committee establishes and adjusts strategic allocations within both asset class groups as well as asset classes, and determines lower and upper limits for each asset class in collaboration with the recommendations of our investment consultant, Ellwood. Asset allocation is a key element in portfolio management.

The Investment Committee established new asset allocation ranges during fiscal year 2014, as reflected in Figure 4, below.
Allocations below are expressed as risk allocations. Blue columns represent allocations towards "Long-Term Growth" strategies. Long-Term Growth strategies are strategies that would be reasonably expected to perform well during a stable and growing economic environment. Gray columns represent allocations towards "Rates" strategies, which are comprised of Investment Grade Fixed Income, and would be expected to provide a ballast to performance during difficult economic and capital markets environments. The Current allocation closely mirrors the Policy Index, with the largest difference attributable to a holding in cash.

Figure 4. Targets (strategic allocations) and Ranges for GSA and GSA Foundation Investments, June 2018

The portfolio allocates across several asset classes, as detailed below. Public Equity, Hedge Funds, Credit, Real Estate, Private Equity and Private Credit comprise the bulk of the portfolio’s exposures (and would be classified as “Long–Term Growth” strategies). This allocation mix is believed to be consistent with the portfolio’s perpetual time horizon and return objective.
Figure 5. Asset allocation for the portfolio as of 30 June 2018

Pooled Income Fund

The Investments Committee also oversees the Pooled Income Fund (PIF). PIF is part of the GSA Foundation. Donors that gift substantial monetary contributions to the Foundation can receive quarterly cash payments of the interest income until death, at which time the original donation is assigned to and becomes part of the regular investment portfolio of the Foundation.

The primary investment goal aims to optimize direct income (interest, dividends) relative to capital gains, the latter of which are not distributed to the donors. The market value of GSAF’s PIF investments appreciated by 1.0% this past year. The Pooled Income Fund is structured to generate income with low levels of risk, primarily investing in fixed income. The overall size of the PIF has been steadily decreasing over the years because no new funds are being received and transfers out to the Foundation as distributions to participants are being made.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Market Value</th>
<th>Transfers to Foundation</th>
<th>Distributions to Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$46,058</td>
<td>$</td>
<td>$1,141</td>
</tr>
<tr>
<td>2017</td>
<td>$46,536</td>
<td>$</td>
<td>$1,021</td>
</tr>
<tr>
<td>2016</td>
<td>$46,396</td>
<td>$307,503</td>
<td>$4,463</td>
</tr>
<tr>
<td>2015</td>
<td>$362,518</td>
<td>$</td>
<td>$11,934</td>
</tr>
<tr>
<td>2014</td>
<td>$368,341</td>
<td>$</td>
<td>$9,235</td>
</tr>
<tr>
<td>2013</td>
<td>$359,822</td>
<td>$145,410</td>
<td>$15,100</td>
</tr>
<tr>
<td>2012</td>
<td>$495,707</td>
<td>$143,250</td>
<td>$24,046</td>
</tr>
<tr>
<td>2011</td>
<td>$641,396</td>
<td>$14,905</td>
<td>$23,715</td>
</tr>
<tr>
<td>2010</td>
<td>$620,041</td>
<td>$</td>
<td>$25,037</td>
</tr>
<tr>
<td>2009</td>
<td>$574,650</td>
<td>$</td>
<td>$29,006</td>
</tr>
<tr>
<td>2008</td>
<td>$566,157</td>
<td>$80,252</td>
<td>$23,131</td>
</tr>
</tbody>
</table>
Highlighted Activities of the Investment Committee- FY 2017-18
The past year has been focused on continuing to diversify the portfolio in light of fairly high valuations across most asset classes. The Committee actively reviewed several Alternatives strategies, seeking to earn differentiated sources of returns for the portfolio.

At its June 2018 annual meeting in Denver, the Committee reviewed and discussed:
- overall capital markets, performance and portfolio risks
- investment environment and outlook, global and domestic portfolio risks, including global debt
- valuations and realistic long-term rate of return and return target
- asset allocation and private capital pacing, lock-up and allocations, including private capital cash flow model and policy and target ranges for the investments
- master limited partnerships,
- international fixed income

The Committee continues to review strategies in an effort to enhance the portfolio’s risk / return profile, with an eye towards reducing the portfolio’s risk profile.

Investment Committee Membership and Operation
The Investments Committee consists of members from both the Society and GSA Foundation that have been approved by GSA Council. The Committee meets by phone or in person four or more times a year to review the financial and operational performance of the portfolio, and consider changes recommended by our external Investment Advisor (Ellwood Associates) and Committee Members to the investment portfolio.
The Committee, along with its investment advisor, maintains a vigilant outlook to respond to the dynamic and challenging economic and geo-political landscape. Guiding principles include five to ten-year outlook, preservation of capital, the embracement of and respect for risk, and compliance with investment policies. The portfolio is invested in accordance with a written investment policy approved jointly by the GSA Council and the GSA Foundation Board of Directors.

Members of the Investment Committee for FY 2018-19 are: Richard Berg (GSA Treasurer), Bruce Clark, Carl Fricke (Chair), Eric Henry, Tom Holzer (GSAF Treasurer), Hony Tarrall, Peter Lipman, Michel Manship (GSAF), Steve Farrell, and Thayer Tutt. Vicki McConnell, Jack Hess and Tom Haberthier participate as non-voting members.

**In Conclusion**

All Investment Committee members, GSA and GSAF ex-officos, and our Investment Advisor Paul Schreder (Ellwood) deserve a particular thanks for exceptional service. Besides volunteering their valuable time, and providing insightful commentaries and well-founded independent opinions at quarterly meetings, they are often contacted at other times throughout the year for perspectives and advice.

We believe that the Society’s investments are on a fundamentally sound foundation and are being responsibly managed.

Respectfully submitted,

Carl Fricke, Chairman, GSA’s and GSAF’s Investments Committee, 18 September 2018