Endowment & Similar Funds
Investment Review
As of December 31, 2003

This cover page provides a summary overview of the Pennsylvania State University Endowment and Similar Funds for calendar year 2003. The next page summarizes Endowment-related data that is discussed on the remaining pages.

Executive Overview

Endowment Performance — The Penn State University Endowment investment return (excluding the impact of new gifts and spending) is shown below for 2003 along with 3-, 5-, and 10-year annualized results:

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>3-Years</th>
<th>5-Years</th>
<th>10-Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSU Endowment</td>
<td>16.6%</td>
<td>-0.8%</td>
<td>4.4%</td>
<td>8.6%</td>
</tr>
</tbody>
</table>

Endowment and Similar Funds Market Value — Penn State University’s Endowment and Similar Funds were valued at $1.05 billion as of December 31, 2003, including the Long-Term Investment Pool’s (LTIP) $957.4 million in investment assets.

Review of Investment Markets — In calendar 2003 equities reversed the downward trend that had hung over stock markets for the previous two years, as favorable earnings prospects and low interest rates propelled equities indexes to double-digit gains world-wide. Compared below are the 2002 and 2003 annual index returns for the S&P 500, Nasdaq, MSCI World ex-US, 91-day US Treasury Bills, Lehman Aggregate Bonds, and Real Estate Investment Trusts (REITS):

Investment Diversification and Asset Mix — At year end, 49% of pool assets was invested in domestic and foreign equities, 29% in fixed income/cash, and 22% in alternative investments (real estate, private capital, energy, and hedge funds). This was consistent with Penn State’s Strategic Asset Allocation.

Comparative Fund Performance — Penn State’s Long-Term Investment Pool returned 16.6% for the calendar year ending December 31, 2003 and averaged 8.6% annually for the trailing 10-years. These net-of-fee returns are in line with Penn State’s Strategic Policy Portfolio.

Asset Class/Manager Performance — While the Endowment’s actively-managed portfolios generally performed in line with their benchmarks, there were exceptions as noted on page 7.

Long-Term Investment Pool and Spending — Penn State’s Long-Term Investment Pool has grown markedly over the last 10 years, allowing annual total spending to increase steadily as well.
5-Year Endowment Facts and Figures

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LTIP* (annualized returns)</td>
<td>16.6%</td>
<td>-8.2%</td>
<td>-9.3%</td>
<td>10.2%</td>
<td>14.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Market Values ($ millions)</th>
<th>LTIP*</th>
<th>Similar Funds**</th>
<th>Total Endowment</th>
<th>Gifts &amp; Other Additions ($ mils)</th>
<th>Current Spending ($ mils)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTIP*</td>
<td>957.4</td>
<td>89.9</td>
<td>1,047.3</td>
<td>69.1</td>
<td>52.0</td>
</tr>
<tr>
<td>Similar Funds**</td>
<td>807.9</td>
<td>82.6</td>
<td>890.5</td>
<td>69.5</td>
<td>48.5</td>
</tr>
<tr>
<td>Total Endowment</td>
<td>870.1</td>
<td>87.1</td>
<td>957.2</td>
<td>52.1</td>
<td>46.2</td>
</tr>
<tr>
<td></td>
<td>950.7</td>
<td>74.7</td>
<td>1,025.4</td>
<td>58.5</td>
<td>37.0</td>
</tr>
<tr>
<td></td>
<td>842.0</td>
<td>62.3</td>
<td>904.3</td>
<td>161.5</td>
<td>26.0</td>
</tr>
</tbody>
</table>

* Long-Term Investment Pool (LTIP) — Endowment assets over which Penn State’s Office of Investment Management (OIM) through the Penn State Investment Council (PSIC) has direct investment authority

** Similar Funds — includes donor-restricted and deferred gifts plus funds in transit to LTIP

Penn State Investment Council (PSIC) Quarterly Meetings

The Penn State Investment Council met on December 12, 2003 and approved:

- An additional $4.5 million investment in Oaktree Capital Management, increasing Penn State’s total equity ownership commitment to $14.5 million
- A $10 million investment in Cumberland Benchmarked Partners, a long-biased hedge fund manager located in New York City

Arthur Miltenberger was elected “lead” independent Investment Council member and chair of its nominating committee

The Penn State Investment Council met on September 5, 2003 and approved:

- A $10 million equity ownership investment in Oaktree Capital Management
- Re-classifying fixed income structure as a result of terminating Mellon Capital TAA portfolio

The Penn State Investment Council met on June 20, 2003 and approved:

- Hiring Chartwell Investment Partners as the Endowment’s Small Cap Growth Manager
- Terminating Value and Growth Opportunities portfolios managed by the Commonfund and redeploying assets gradually among current domestic equity managers
- Investing $31 million in recent gifts, and authorizing equity allocation to increase up to 73%
- Committing $5 million to Oaktree Opportunities Fund V, a limited partnership

The Penn State Investment Council met on March 7, 2003 and approved:

- Committing $3 million to Commonfund Natural Resources Fund V, and $5 million to Natural Gas Partners VII
- Terminating Tactical Asset Allocation portfolio managed by Mellon Capital Management and redeploying assets to an S&P 500 equity index fund
- Reaffirming equity allocation not to exceed 70% of Endowment assets
Endowment and Similar Funds Market Value

As of the end of calendar 2003, Endowment and Similar Funds were valued at $1.05 billion, which includes $957.4 million in Long-Term Investment Pool assets. Non-pooled assets — charitable remainder trusts, charitable gift annuities, and other life income funds in addition to some donor restricted funds — accounted for an additional $89.9 million. The annual market values for the University’s Endowment Pool and Similar Funds over the last five years are shown below:

Endowment Market Values
Years Ending December 31
($ millions)

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTIP</td>
<td>842</td>
<td>951</td>
<td>870</td>
<td>808</td>
<td>957</td>
</tr>
<tr>
<td>SF</td>
<td>904</td>
<td>75</td>
<td>957</td>
<td>891</td>
<td>1,047</td>
</tr>
</tbody>
</table>

- The Endowment and Similar Funds’ net value increased by $156.8 million during calendar 2003. As seen in the table on page 2, new gifts added to the Pool over the last 12 months totaled $69.1 million, while program support (from the Endowment) amounted to $52.0 million.

- The Funds’ $143.0 million increase over the five-year period reflects new gifts and re-invested investment earnings, after providing cumulative program support of about $209.7 million.

Consistent annual inflows of new gifts, along with positive long-term investment returns, have resulted in a 15.8% increase in the Endowment’s net value over the last five years.
Review of Investment Markets in Calendar 2003

Calendar 2003 turned out to be a pleasant surprise for investors, as equities markets worldwide posted double-digit gains. After 2.5 years of virtually steady declines, equities prices generally reached bottom in October 2002. Meanwhile, fixed income markets cooled after leading investment markets for the previous couple of years, and registered modest positive returns in 2003. The performance of investment markets that impact Penn State University’s Long-Term Investment Pool is summarized below.

- **U.S. Equities** — The S&P 500 Index surged to a 28.7% gain for the 12 months ending December 31, 2003. After sliding 3.1% in the first quarter, the S&P posted double-digit gains in the second (15.4%) and fourth (12.6%) quarters. The technology-laden Nasdaq performed even more dramatically, climbing 50.0%, its third best year ever. Small-capitalization stocks definitely held an edge as the Russell 2000 Index climbed 47.3% (its best year ever), compared to a 25.3% gain for the large-cap biased Dow Jones Industrial Index in 2003.

- **Foreign Equities** — Aided by a weak US dollar, common stocks outside the United States registered even more dramatic gains in 2003. The Morgan Stanley World Index (MSCI) ex-US climbed 39.4%, while emerging market stocks in less-developed countries jumped 51.6% over the last twelve months.

- **Fixed Income** — Bonds slowed their advance of the last couple of years, as the Lehman Aggregate Bond Index (representing various maturities of US government and corporate bonds) rose 4.1% in 2003. Treasury Inflation Protected Securities (TIPS) performed best among US Government issues, gaining 8.4%. By contrast, high-yield corporate bonds soared 39.9% on the long end and 27.4% for intermediate maturities. Reflecting the low interest rate environment over the past year, 91-day Treasury Bills returned just 1.1% in calendar 2003.

- **Real Estate** — Real estate stocks continued to benefit from low interest rates, as Real Estate Investment Trusts (REITs) rose 37.1% in 2003. Over the last three years, REITs led equities markets, gaining a total of 62.2%.

- **Alternatives** — *Venture Capital* and *Private Equity* markets arrested steep declines that followed the collapse of the “new issues” market in 2000. Because non-marketable benchmarks are reported on a one-quarter lag, the Cambridge Private Equity Index’s return for the 12 months ending September 30, 2003 was 13.1% and the Cambridge Venture Capital Index’s return was -11.1%. Both performances represented marked improvements over those for the previous 12 months of -9.2% and -30.0%, respectively. By comparison, the Russell 2000 Index of small-capitalization stocks returned 36.5% the twelve months ending September 30, 2003 and -9.3% for the year ending September 30, 2002.

**Economic and Market Outlook** — The stock market’s dramatic upturn in 2003 was fueled by better than expected corporate profits earned in a gradually improving domestic economy. In addition, the Federal Reserve’s continued expansionary money policies kept interest rates at their lowest levels in nearly 50 years. These factors have helped the market to retrace roughly one-half of the losses incurred from March 24, 2000 to October 9, 2002. Penn State’s well-diversified endowment portfolio — consisting of bonds, real estate, private capital, and hedge funds in addition to marketable equities — continues to be the appropriate investment approach for long-term growth and sustainable spending.
Investment Diversification and Asset Mix

Asset allocation is the primary determinant of investment performance and risk control. The strategic policy asset mix targets a combination of five major asset categories to maximize return while minimizing volatility. Reflecting the Endowment’s desire to support generous spending and the need to preserve purchasing power, Penn State’s strategic asset mix is shown below, along with Penn State’s actual asset mix for calendar years 2003 and 2002:

- As seen in the rightmost column above, the Strategic Policy Asset Mix indicates a 70% allocation to equity-like investments — including US and non-US common stocks, non-marketable (real estate, venture capital, buyouts, energy, and structured debt) and marketable “alternatives” — in order to take advantage of superior asset growth and purchasing power protection offered by equity investments.

The “marketable alternatives category,” which includes hedge funds, is a recently introduced classification for the Penn State Endowment and is discussed in detail on the bottom of page 7 under Asset Class/Manager Performance. Accordingly, the above allocations have been adjusted to reflect the new asset classifications. The remaining 30% is targeted to fixed income (bonds and money market investments) in order to stabilize returns and to provide current income.

- As of December 31, 2003 (middle column), 44% of pool assets were invested in domestic and international equities. Non-marketable alternative investments amounted to 22% and marketable alternatives represented 4%. Fixed income securities comprised 30% of total assets, of which about 2% was invested in money markets.

- Comparing the middle and left columns above shows movement towards more domestic and international equities over the past 12 months. Alternatives — both marketable and non-marketable — and fixed income investments decreased. This latter shift reflects superior performance of stocks relative to bonds last year, while the former results from an increase in distributions from maturing alternative investments during 2003.

Our commitment to equities remains substantial because of our expectation that equities will outperform other asset classes in the long run. Moreover, the fund’s broad diversification, as embodied in the above asset mix, is designed to buffer the adverse impact of market declines. As always, our philosophy embraces adherence to a prudent, rational long-term strategy.
Long-Term Strategy and Endowment Performance

The Endowment’s investment portfolio is guided by the strategic asset mix, as discussed above. Penn State’s hypothetical Strategic Policy Portfolio serves as a composite benchmark against which the Endowment’s performance is monitored. In the table and graph below, the respective weightings of the four major asset classes are associated with appropriate market benchmarks to generate Strategic Policy Portfolio returns over 1-, 3-, and 5-year horizons:

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Benchmark</th>
<th>Weighting</th>
<th>1 Year</th>
<th>3 Years</th>
<th>5 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Equities</td>
<td>S&amp;P 500</td>
<td>35%</td>
<td>28.7%</td>
<td>-4.0%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Non-U.S. Equities</td>
<td>MSCI World exUS</td>
<td>8</td>
<td>39.4</td>
<td>-2.7</td>
<td>0.5</td>
</tr>
<tr>
<td>Marketable Alternatives</td>
<td>Custom Index</td>
<td>4</td>
<td>26.7</td>
<td>4.9</td>
<td>7.5</td>
</tr>
<tr>
<td>Non-Marketable Alt’s</td>
<td>Custom Index</td>
<td>23</td>
<td>9.9</td>
<td>-4.1</td>
<td>-11.5</td>
</tr>
<tr>
<td>Fixed Income/Cash</td>
<td>Lehman Bonds</td>
<td>30</td>
<td>4.1</td>
<td>7.6</td>
<td>6.6</td>
</tr>
<tr>
<td>Strategic Policy Portfolio (net of fees)</td>
<td>100%</td>
<td></td>
<td>17.8%</td>
<td>-0.1%</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

(It is noted that the static asset allocations used above bias the Strategic Policy Portfolio returns relative to the investment pool whose actual mix has varied over the years, as discussed on the previous page.)

Penn State Endowment (LTIP) vs Policy Portfolio

- Penn State’s Strategic Policy Portfolio returned 17.8% for calendar 2003 versus 16.6% for the Long-Term Investment Pool. The shortfall is due largely to the performance of PSU’s hedge fund portfolio, which generated a positive return but underperformed its benchmark as explained on the next page.

- For the trailing 3- and 5-years, the endowment has returned -1.1% and 4.6%, respectively, versus a corresponding -0.1% and 4.8% for the Strategic Policy Portfolio.

The Strategic Policy Portfolio provides a guidepost to help achieve long-term results that are consistent with the twin objectives of purchasing power preservation, along with stable endowment spending. The Endowment’s performance varies from the static Policy Portfolio as a consequence of several factors, including but not limited to the following: cash flows into and out of the Endowment, tactical shifts in asset mix, and individual manager performance.
Asset Class/Manager Performance

Domestic Equity Managers — As of December 31, 2003, Domestic Equities represented approximately 35% of Endowment assets and were structured in a Core/Satellite configuration. The 22.5% “Core” is indexed to the S&P 500 while the remaining 12.5% is spread among four “Satellite” managers, each assigned to style/size disciplines whose returns in the short-run can vary from the benchmark S&P 500 Index. This was especially so in 2003 when low-quality stocks led the market and impacted the relative performance of active managers, as noted below.

Within large capitalization equities in 2003, the Endowment’s value portfolio, managed by Institutional Capital, gained 30.0% to outperform the S&P 500’s 28.7% return by 1.3 percentage points. The large-cap growth portfolio managed by Siphon Capital earned 21.4% to lag by 7.3 points.

While small-cap stocks outpaced the general market in 2003, the small-cap value (37.5%) and small-cap growth (39.5%) portfolios both underperformed the Russell 2000 Index’s 47.3% return. The former has been managed by Reich & Tang for the last 7.5 years, while the latter was operated as a passive small-cap growth portfolio until mid-year when Chartwell Partners was hired to actively manage this portfolio.

Foreign Equity Managers — (Previously, the Oaktree Capital Emerging Market fund was classified within non-US equities, but now is reviewed within Marketable Alternatives below.) As of December 31, 2003, non-US Equities represented about 9.5% of Endowment assets, with nearly 7% invested in “developed” economies and approximately 2.5% in “emerging markets.” For 2003, the Commonfund’s International Equity portfolio (35.3%) trailed the MSCI World ex-US Index (39.4%) by 4.1 points, while the Commonfund’s Emerging Markets (56.2%) portfolio was ahead of the MSCI Emerging Market Index (51.6%) by 4.6 points.

Fixed Income — The Commonfund’s Multi-Strategy Bond Fund returned 10.4% in 2003, to outpace the Lehman Aggregate Bond Index’s 4.1% return by 6.3 percentage points. PSU’s Treasury Inflation Protected Securities (TIPS) portfolio earned 7.9%, to outpace the Index by 3.8 points. The balance of the fixed income portfolio — including Mellon Standish (2.9%) and CF Intermediate (3.4%) — was invested in shorter-term bonds. As of the end of 2003, the fixed income portfolio overall had an average maturity of 5.2 years, compared with 5.0 years for December 31, 2002, and 7.7 years for December 31, 2001.

Non-Marketable Alternatives — Penn State’s Private Equity and Venture Capital composite portfolios returned 9.6% and -7.2%, respectively, while the Real Estate and Energy sectors gained 18.9% and 14.0%, respectively. Distressed/subordinated debt returned 24.3%. (All of these returns represent September 30, 2003 Net Asset Values [NAVs] and include cash flows through December 31, 2003.)

Marketable Alternatives — This new category for the Endowment includes partnerships that invest in marketable securities (i.e., primarily exchange-traded issues), including hedge funds. Hedge funds (investment approaches not restricted to holding only long positions) endeavor to consistently provide meaningful positive investment returns, irrespective of underlying market trends.

Until very recently, the Endowment’s sole hedge fund has been Oaktree Capital Management (OCM). OCM’s Emerging Market portfolio consists of long and short positions whose objective is to produce positive returns whether emerging market stocks are rising or falling. Accordingly, OCM’s performance (6.6% after all expenses in 2003) often runs counter to emerging market returns. Thus, when the Emerging Market Index rose 51.6% in 2003, OCM lagged. However, OCM outpaced by 19.8 percentage points in 2002 when emerging markets declined 8.0%. Over the last five years, OCM has averaged 21.1% annualized, outpacing the Emerging Market Index by 12.9% per year. A second hedge fund manager, Cumberland Associates LLC, was hired at the end of 2003. Additional hedge funds are anticipated to be added to the Endowment over the next several months.
Endowment Growth and Spending

The chart below illustrates the impact of total investment return, program support, and inflation (as measured by the Higher Education Price Index [HEPI]) on the long-term purchasing power (real growth) of Penn State’s Endowment.

Since December 31, 1984, the total Endowment Pool has returned an average of 10.8% per year, net of gifts and expenses. As seen above, approximately half of the Endowment’s growth has supported ever-increasing program spending. The balance has offset the corrosive effects of inflation and provided a cushion against market fluctuations. Accordingly, the Long-Term Investment Pool has met the twin (and somewhat conflicting) objectives of generating ample current spending, while maintaining real, inflation-adjusted growth for future generations.

The 19.5-year period above includes the prolonged bull market of the 1990s, as well as the steep decline at the turn of the century. To gauge the impact of the stock market sell-off over the previous two years, the table below shows annualized returns for the 10- and 15-year periods ending December 31, 2003:

<table>
<thead>
<tr>
<th></th>
<th>S&amp;P 500</th>
<th>Bond Index</th>
<th>Endowment Pool</th>
<th>HEPI</th>
<th>Net Real Rtn</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-years</td>
<td>11.0%</td>
<td>6.9%</td>
<td>8.6%</td>
<td>3.4%</td>
<td>5.2%</td>
</tr>
<tr>
<td>15-years</td>
<td>12.2%</td>
<td>8.4%</td>
<td>9.4%</td>
<td>3.7%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Difference</td>
<td>-1.2%</td>
<td>-1.3%</td>
<td>-0.8%</td>
<td>-0.3%</td>
<td>-0.5%</td>
</tr>
</tbody>
</table>

Notwithstanding the recent market rally, the bursting of the technology bubble in 2000 eroded the 10- and 15-year average returns for stocks and bonds by 1.2% and 1.3% per year, respectively, as seen in the table above. For the same periods, the net Endowment Pool return declined 0.8% per year. At the same time, inflation (HEPI) decreased 0.3% per year, resulting in a 0.5% reduction in the Endowment’s inflation-adjusted (real) return, from an average of 5.7% over the last 15 years to 5.2% for the most recent 10 years.