Item Name: Review of Tobacco Restrictions

Program: Total Fund

Item Type: Action

Recommendation
This item identifies several options related to the CalPERS tobacco investment restrictions for consideration and action by the Investment Committee (Committee):

1. Remove all of the tobacco investment restrictions; or

2. Broaden the restrictions through one or both of the following:
   a. Extending the divestment requirement to the externally managed portfolios of publicly traded assets for the Public Employees' Retirement Fund (PERF); and/or
   b. Extending all the restrictions to the externally managed Affiliate Fund portfolios currently invested in institutional commingled index funds; or

3. Affirm the existing hybrid approach in which internally managed portfolios remain divested, external managers for the PERF continue to have discretion to include tobacco-related securities as “out of benchmark” investments, and the Affiliate Fund portfolios continue to invest in institutional commingled index funds.

Staff recommends Option 1, that the investment restrictions on tobacco-related securities be removed. We base this recommendation primarily on the following:

- CalPERS’ past experience with divestment in terms of its impact on investment performance;
- CalPERS’ current circumstances as a mature, cash-flow negative pension plan with increasing demands on investment returns to fund benefits; and
- The inherent difficulty in reconciling divestment – as a form of active investment decision making that is both static and highly public – with our Investment Beliefs, our Portfolio Priorities, or our duties as fiduciaries.

Executive Summary
At the direction of the Committee at its April 2016 committee meeting, staff has conducted a comprehensive review and analysis of the existing tobacco restrictions, and presents this item to the Committee for consideration and action.
Divestment, as an active investment decision, represents a form of active risk taking that must be considered, first and foremost, within the context of the CalPERS Board of Administration’s fiduciary duty. As a mature, cash-flow negative system, CalPERS is obligated to seek out and implement the portfolio construction methods that best serve our mission – the sustainable delivery of promised benefits. In efficient markets, however, limiting the opportunity set for investments has generally been shown to have a detrimental effect on performance, and CalPERS’ experience with its tobacco investment restrictions over the past 15 years has been no exception to the general rule.

On the other hand, while tobacco securities continue to exhibit many attractive qualities, there are also many reasons, as an investor, to be cautious. And while the broader social implications of the tobacco industry may not be directly relevant to an analysis of our duties as portfolio managers, they can and should be factored into the analysis in terms of the likely continued sustainability of this industry.

This item will seek to address the following topics:

- Background information on the CalPERS mission, the Board’s fiduciary duty, current divestment policy, and current implementation of the tobacco restrictions
- CalPERS’ experience to date with the tobacco investment restrictions
- External investment analysis of the tobacco industry
- Broader considerations related to tobacco
- Insights into how other funds address divestment issues
- Stakeholder engagement and feedback

Additional information is provided in a series of attachments:

1. Perspectives on potential investment risks and outlooks for the tobacco industry from Allianz Global Investors, Fidelity Investments, and MSCI (Attachment 1)
2. Updated information on CalPERS tobacco divestment experience from Wilshire Associates (Attachment 2)
3. A presentation and letter from Professor Stanton Glantz, Director of the University of California San Francisco Center for Tobacco Control Research and Education, along with several articles providing insights into the impacts and outlook of the tobacco industry (Attachment 3)
4. A summary of the results from a collaborative survey between Wilshire Associates and CalPERS focusing on how other funds address divestment-related issues (Attachment 4)
5. Opinion letters from the Board’s general pension consultants, Wilshire Associates and Pension Consulting Alliance (Attachments 5 and 6, respectively)
6. The Total Fund Statement of Investment Policy containing the current divestment section and CalPERS Investment Beliefs (Attachment 7)
7. Formal position papers and reports received from stakeholders and members of the public (Attachment 8)
Strategic Plan
This item supports the CalPERS Strategic Plan’s goal to improve long-term pension benefit sustainability. A periodic review of the existing CalPERS divestments, including tobacco, supports the key objective of delivering our target risk-adjusted investment returns.

Investment Beliefs
Management of a public pension fund’s investments often requires the balancing of multiple, sometimes conflicting priorities. The CalPERS Investment Beliefs are a guide to staff in managing through such situations. They provide context for CalPERS’ actions, reflect CalPERS’ values, and acknowledge CalPERS’ responsibility to sustain its ability to pay benefits for generations. This item reflects several key Investment Beliefs and sub-beliefs, as explained below.

*Investment Belief 1 – Liabilities must influence the asset structure.*
Sub-belief: Ensuring the ability to pay promised benefits by maintaining an adequate funding status is the primary measure of success for CalPERS.

Sub-belief: CalPERS has a large and growing cash requirement and inflation-sensitive liabilities; assets that generate cash and hedge inflation should be an important part of the CalPERS investment strategy.

In the context of the CalPERS tobacco investment restrictions:

- Reviewing CalPERS investment decisions and portfolio construction, including active investment decisions such as divestment, is vital to supporting CalPERS primary success measure, our ability to pay promised benefits.

- When defining our investment opportunity set, CalPERS must consider factors beyond historical volatility or level of returns. Portfolio construction decisions should reflect our Portfolio Priorities to:
  - Protect the funded ratio
  - Stabilize employer contribution rates
  - Achieve the long-term required rate of return

*Investment Belief 2 – A long investment time horizon is a responsibility and an advantage.*
Sub-belief: A long time horizon requires that CalPERS consider the impact of its actions on future generations of members and tax payers, encourage investee companies and external managers to consider the long-term impact of their actions, favor investment strategies that create long-term, sustainable value...

In the context of the CalPERS tobacco investment restrictions:

- Tobacco use is linked to numerous serious health conditions. According to the Surgeon General, there are no “safe levels” of exposure to tobacco smoke. The tobacco industry continues to face significant pressures calling into question the long-term sustainability of the industry.

- CalPERS is uniquely situated to employ investment strategies that extend far beyond the horizon of an individual investor. At CalPERS’ scale, and over extended time periods, even moderate over- or under-performance can result in material economic impacts.
Investment Belief 3 – CalPERS investment decisions may reflect wider stakeholder views, provided they are consistent with its fiduciary duty to members and beneficiaries.

Sub-belief: CalPERS primary stakeholders are members/beneficiaries, employers, and California taxpayers as these stakeholders bear the economic consequences of CalPERS investment decisions.

Sub-belief: As a public agency, CalPERS has many stakeholders who express opinions on investment strategy or ask CalPERS to engage on an issue. CalPERS preferred means of responding to issues raised by stakeholders is engagement.

In the context of the CalPERS tobacco investment restrictions:
- Divestment is increasingly a feature of the investment landscape for many asset owners and investors and of keen interest to many of our various stakeholders and constituencies.
- CalPERS believes that engagement is the first call to action and the most constructive form of communicating concerns with companies. While CalPERS has been progressive in fighting for corporate board diversity, climate risk reporting, and shareholder rights, corporate engagement with tobacco companies premised upon the drastic reduction or elimination of tobacco use is not seen as a particularly viable option.

Investment Belief 4 – Long-term value creation requires effective management of three forms of capital: financial, physical and human.

Sub-belief: Strong governance, along with effective management of environmental and human capital factors, increases the likelihood that companies will perform over the long-term and manage risk effectively.

In the context of the CalPERS tobacco investment restrictions:
- There are many risks facing the tobacco industry that may inhibit profitability and value creation over the long term, including supply chain and labor standards risk, water stress, and land use.

Investment Belief 7 – CalPERS will take risk only where we have a strong belief we will be rewarded for it.

Sub-belief: CalPERS will use index tracking strategies where we lack conviction or demonstrable evidence that we can add value through active management.

Sub-belief: CalPERS should measure its investment performance relative to a reference portfolio of public, passively managed assets to ensure that active risk is being compensated at the Total Fund level over the long term.

In the context of the CalPERS tobacco investment restrictions:
- CalPERS Global Equity Program uses a combination of market-based strategies and systematic and fundamental strategies to enhance risk-adjusted returns (adding “alpha”) to construct a portfolio that is aligned with our targeted risk and return profile.
- The role of CalPERS’ external managers is to add value through active investment management, acting with high conviction, primarily on the basis of finding the best risk-adjusted returns given their investment processes.
• Divestment is an active “point in time” investment decision, and as such must be reevaluated over time as market conditions evolve and valuations change. Periodic review of active investment outcomes through disciplined processes supports accountability and provides an opportunity for corrective action if warranted.

**Investment Belief 8 – Costs matter and need to be effectively managed.**

Sub-belief: CalPERS will balance risk, return and cost when choosing and evaluating investment managers and investment strategies.

Sub-belief: Transparency of the total costs to manage the CalPERS portfolio is required of CalPERS business partners and of CalPERS itself.

In the context of the CalPERS tobacco investment restrictions:

• Valuations are an important consideration in the investment decision-making process. Valuations change over time, and “buying high” limits opportunities for future gains.

• Tobacco-related securities are trading at all-time highs on forward price-to-earnings multiples, and the premium relative to the market has rarely been higher. Like any other industry, tobacco has times when it is attractive as an investment. At the tactical level, investment professionals should use discretion, and consider valuation levels, when evaluating investment opportunities.

• While investment performance related to capital appreciation may fluctuate over time, the one-time costs associated with a divestment action are “gone for good.” Approximately $1,400,000 in transaction costs were incurred by the CalPERS PERF as a result of the 2000 divestment action. Potential reestablishment of tobacco exposures, or further divestment by external managers, would impose additional trading costs.

• Periodic review of the impacts of one-time trading costs, and of ongoing “foregone opportunity” costs associated with the tobacco restrictions, is consistent with our Investment Beliefs and supports the CalPERS Board members in fulfilling their fiduciary duty.

• Maintaining the externally managed Affiliate Fund portfolios in institutional commingled index funds is cost-advantaged compared to the establishment of separate accounts.

**Investment Belief 9 – Risk is multi-faceted and not fully captured through measures such as volatility or tracking error.**

Sub-belief: As a long-term investor, CalPERS must consider risk factors … that emerge slowly over long time periods, but that could have a material impact on company or portfolio returns.

In the context of the CalPERS tobacco investment restrictions:

• All investments entail accepting a level of risk. A key function of the CalPERS Investment Office is to manage investment risks effectively, and to maximize the amount of return gained for every unit of risk taken.

• The amount of litigation facing the tobacco industry at the time of the CalPERS divestment was unprecedented. The Master Settlement Agreement of 1998 remains one of the largest civil litigation settlements in U.S. history. While the industry has survived, pressures continue and the future is uncertain.
A complete set of the CalPERS Investment Beliefs is included within Attachment 7.

**Background**

Background information on the CalPERS mission, the specific provisions of the California Constitution on fiduciary duty, and current CalPERS divestment policy, as well as the implementation and current state of the CalPERS tobacco restrictions, are outlined in this section.

**Our Mission**

The CalPERS mission is to provide responsible and efficient stewardship of the System to deliver promised benefits while promoting wellness and retirement security for members and beneficiaries.

**California Constitution**

The California Constitution addresses the Board’s fiduciary duty in several sections, including:

“*The retirement board of a public pensions or retirement system shall have the sole and exclusive fiduciary responsibility over the assets of the public pension or retirement system. The retirement board shall also have sole and exclusive responsibility to administer the system in a manner that will assure prompt delivery of benefits and related services to the participants and their beneficiaries. The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system.*” (CA Const. §17(a).)

“The members of the retirement board of a public pension or retirement system shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. A retirement board’s duty to its participants and their beneficiaries shall take precedence over any other duty.” (CA Const. §17(b).)

“The members of the retirement board of a public pension or retirement system shall discharge their duties with respect to the system with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.” (CA Const. §17(c).)

“The members of the retirement board of a public pension or retirement system shall diversify the investments of the system so as to minimize risk of loss and to maximize the rate of return, unless under the circumstances it is clearly not prudent to do so.” (CA Const. §17(d).)

**Fiduciary Duty**

The essence of a fiduciary relationship is the confidence, reliance, and trust that one group in a position of vulnerability reposes in another for aid, advice, or protection. It is the highest standard of care, and sets a very high bar, requiring, where CalPERS is concerned, that staff and the Board maintain a laser-like focus on striking the right balance between risk and return.
It is also important to note that our role as administrators of the health insurance program is distinct from our role as fiduciaries for the retirement portfolios. The Board and staff have been entrusted with funds from the State of California, public agencies, and their employees for the sole purpose of providing promised retirement benefits to our members. This primary mission is what guides our investment strategy at all times.

**CalPERS Divestment Policy**

Divestment as a catalyst for social change and an investment strategy has been a controversial topic within the public pension industry for decades. As a California state agency, CalPERS is sensitive to public policy issues, and recognizes that our primary duty and obligation is to our members. Current CalPERS divestment policy, accordingly, acknowledges the following:

- CalPERS Board members and staff have fiduciary duties of loyalty and prudence pursuant to the California Constitution (as outlined above) and California Government Code Section 20151.

- While CalPERS wants companies in which it invests to meet high corporate governance, ethical, and social conduct standards, an investment in a company does not signify that CalPERS approves of the company’s policies, products, or actions.

- Divestment almost invariably harms investment performance by compromising investment strategies and increasing transaction costs.

- There is considerable evidence that divesting is an ineffective strategy for achieving social or political goals. This is because the usual consequence is often a mere transfer of ownership of divested assets from one investor to another.

- Investors that divest lose their ability as shareowners to influence a company to act responsibly.

As part of the Policy Revision Project, initiated in 2014, staff proposed revisions to the divestment section of the Total Fund Policy through a series of agenda items from February to April of 2016. Staff’s initial proposal in February 2016 included revisions to:

- Request up-front reimbursement of transaction costs when divestment is pursuant to legislative mandates.

- Incorporate “stop loss” provisions similar to Florida’s Iran/Sudan divestment law, establishing a dollar-based threshold that would trigger automatic reinvestment.

- Add an annual review requirement for divestment activities, to be conducted by the Board’s Investment Consultants.

- Incorporate a review process for any new or potential policy-level divestment mandates, in consideration of the Board members’ fiduciary duties.

Following feedback from the Committee and the Board’s investment consultants, staff returned in March with an updated proposal that:

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1 See § VII of the Total Fund Investment Policy, a complete copy of which is included as Attachment 7 to this memorandum.
• Simplified the proposed divestment loss thresholds and formula for determining when the cumulative loss would trigger automatic reinvestment; and

• Added notification to the Committee prior to reinvestment activities, allowing for an exception process at the Committee’s discretion.

Following additional discussion, the Committee decided in April 2016 to adopt the revised Total Fund Policy as proposed, with the exception of the divestment section, which would remain as previously approved in 2015, and directed staff to undertake a separate review and analysis of the CalPERS tobacco restrictions. Further review of the divestment policy was deferred pending the review of the tobacco restrictions. Staff plans to return to the Committee with any requested revisions to the divestment policy in early 2017 as part of the annual update of the Total Fund Policy.

Establishment of Tobacco Restrictions and Current State of Holdings
In the late 1990s there was widespread opinion that the tobacco industry was on the verge of collapse due to an ongoing barrage of litigation and regulatory actions. In a review of the industry presented to the Committee on June 19, 2000, it was noted that:

• Tobacco stock prices had declined over 45% in the prior two years.

• The *Engle v. the Tobacco Industry* suit had the potential for huge punitive damages, possibly keeping tobacco stock prices depressed.

• A survey of CalPERS external domestic equity managers revealed that, despite a favorable Wall Street outlook, most of the managers were not investing in the industry because of the uncertainty associated with litigation.

In October 2000 the Committee recommended and approved divestment of tobacco-related securities and adoption of tobacco-free benchmarks for the CalPERS passive international and domestic equity portfolios and the CalPERS internal fixed income portfolios with respect to primary tobacco companies. External active managers were not required to divest from tobacco-related securities, though they were, however, required to adopt tobacco-free benchmarks. In February 2002 staff reported to the Committee on the completion of the tobacco divestment activities and implementation of tobacco-free benchmarks.

As of June 30, 2016, the PERF held approximately $547,000,000 in tobacco-related securities through its external managers. These securities are primarily common stock holdings as part of the Global Equity Program, with some fixed income securities exposure within the Opportunistic Program. There are no tobacco-related exposures within the Real Assets, Private Equity, Global Fixed Income, or Inflation Assets programs. External managers, operating based on their expertise and conviction, are expected to add value through active investment management, and this includes making “out of benchmark” investments such as tobacco.

The Affiliate Funds consist of defined benefit programs (such as the Judges’ Retirement System and Legislators’ Retirement System), defined contribution programs (such as the Supplemental Income Plans), and other programs (such as the Health Care Fund, Long Term Care Fund, and California Employers’ Retiree Benefits Trust). It should be noted that some portions of the Affiliate Funds are managed internally, and some are managed externally. Portfolios managed
externally for the Affiliate Funds are currently invested in institutional commingled index funds. These funds hold undivided positions on behalf of all fund participants and CalPERS cannot direct specific investment actions in these funds.

Analysis
The Committee has requested that this review include a wide range of viewpoints. To that end, staff has solicited input from a variety of external sources whose views and insights are reflected in the following analysis from staff, and whose written materials are included as attachments to this item. Staff’s analysis is organized under the following subheadings:

1. Recent Risk Mitigation Initiatives
2. Implications of Divestment for CalPERS Portfolio Construction
3. CalPERS’ Experience – Tobacco Restrictions
4. Investment Considerations – Tobacco Performance and Characteristics
5. Investment Considerations – Industry Pressures and Challenges
6. Social Considerations
7. Divestment Issues and Other Investment Funds
8. Stakeholder Outreach and Feedback
9. Summary – Options and Recommendation

In terms of social considerations, staff has the following preliminary observations. First, staff does not interpret its fiduciary duties to permit prioritizing social goals over investment considerations. And, while the social cost of tobacco is undeniable, there is room for debate in terms of the effectiveness of divestment as a tool for driving social change. For example, it would not appear that the CalPERS tobacco divestment has had any discernible impact on the industry’s market capitalization, access to capital markets, or financial performance. Nor have we seen a convincing case for the effect of divestment on tobacco consumption rates, which in the U.S. appear to have been in a relatively steady decline since the 1960s. As discussed in more detail below, however, while perhaps not directly relevant, these greater societal impacts may be important factors in assessing the ultimate sustainability of the industry.

1. Recent Risk Mitigation Initiatives
In recent years the CalPERS Board of Administration and staff have collaborated on several initiatives to strengthen the System and support the sustainability of the PERF. These include:

- Adopting the Funding Risk Mitigation Policy as a means of gradually reducing the level of equity risk in the portfolio;

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2 We do however note the argument of anti-smoking advocates that tobacco divestment decisions by institutional investors such as CalPERS contribute to the “denormalization” of the tobacco industry over the long term. Professor Stanton Glantz, Director of the University of California, San Francisco Center for Tobacco Control Research and Education, for example, argues that the denormalization of the tobacco industry has been an important factor in discouraging commencement of smoking among youth.
• Exploring ways to enhance our Asset Liability Management and benchmark selection processes;

• Reducing complexity and focusing on repeatable, predictable, and scalable portfolio practices; and

• Defining our “Portfolio Priorities,” which are the goals and objectives that are specific to CalPERS and should influence our portfolio construction, as:
  1. Protecting the funded ratio;
  2. Stabilizing employer contributions rates; and
  3. Achieving the long-term required rate of return.

Many of these efforts are focused on adding options and clarity for the Committee and staff as we consider how best to meet the challenges facing CalPERS.

2. Implications of Divestment for CalPERS Portfolio Construction

As the largest public defined-benefit pension fund in the U.S., CalPERS is, of necessity, a market investor, in the sense that prudent investment of approximately $300,000,000,000 requires exposure to a broad range of market segments having the depth and capacity to be material to the PERF.

To understand the impact divestment has on portfolio management, it is useful to consider first the portfolio construction methods staff employs, or, in other words, how we invest. Consistent with Investment Belief 7 (that we take risk only where we will be rewarded for it), CalPERS uses a mix of investment strategies to diversify sources of risk and alpha while minimizing costs. For example, in Global Equity the internal portfolios are by and large systematic investment strategies that are intended to provide broad market exposure or exposure to a specific style factor at a very low cost. The external strategies offer a combination of systematic, quantitatively driven strategies and fundamental, “bottom-up” stock-picking strategies. These strategies seek to provide alpha through either stock selection or active tilts towards particular market segments. Given that the external portfolios are largely “fundamentals driven,” they carry a corresponding expectation of greater manager reliance on research and judgment. And these active judgments, based as they are on current market conditions and relative valuations, require constant reevaluation as market conditions dictate.

A divestment mandate, on the other hand, represents a relatively static investment decision that unfolds comparatively slowly on a timetable of its own, and well in view of the rest of the investing public. The elements normally required for a successful “active bet” against our benchmarks are therefore lacking. Rather than support the portfolio manager’s need for nimbleness and stealth vis-à-vis the rest of the market, divestment does the opposite by both telegraphing our intent and tying the hands of investment staff, thereby severely hampering staff’s ability to re-evaluate and reinvest as market conditions warrant. In these important respects divestment runs counter to both our active and our passive management strategies.

As discussed in the September 2016 Finance & Administration Committee meeting, the funded status of the System is estimated to be less than 70%. Like many defined benefit pension plans, CalPERS continues to mature, and as benefit outflows for the System increase, the path of
returns matters more than ever. Staff’s view is that maintaining a static exclusion, such as the tobacco investment restrictions, impairs the System’s ability to maximize risk-adjusted returns, by taking options and choices “off of the table” when investment staff are seeking the best possible portfolio construction to reflect CalPERS’ risk and return goals.

CalPERS experience to date, moreover, has shown that divestment tends to harm investment performance and increase the System’s transaction costs. As discussed below, the tobacco restrictions have yet to prove an exception to that general rule.

3. CalPERS’ Experience – Tobacco Restrictions
The CalPERS tobacco restrictions were decided in October 2000 and implemented by January, 2002. As noted above, at the time of the Committee’s divestment decision there was much speculation that the tobacco industry was about to collapse under the weight of the ongoing barrage of litigation and regulatory actions. The Board’s decision at the time was firmly grounded in its concern over the ongoing financial risk posed to the fund. And several other institutions – including state and county pension funds – were known to have implemented divestment or tobacco restrictions, creating the appearance of a gathering momentum in this direction.

Most other institutional investors, however, were slow to follow suit, and the industry did not collapse. Those investors who continued to invest in tobacco have in fact seen over 900% in cumulative returns over the past 15 years, making the tobacco industry the second highest performing industry over that time period and significantly outperforming the broad market.

In October 2015, Wilshire Associates presented a review of CalPERS divestments affecting the Global Equity Program. As of December 31, 2014, the potential impacts related to the CalPERS tobacco divestment, including foregone performance and transaction costs, were estimated to exceed $3,000,000,000. Wilshire Associates has updated its analysis as of June 30, 2016, and the new estimate indicates that the amount of foregone performance has continued to grow. Additional information is available in Attachment 2.

4. Investment Considerations – Tobacco Performance and Characteristics
The investment environment for tobacco is complex, and as with all investments, historical performance is no guarantee of future results. Focusing on risk and return, tobacco-related securities present several positive characteristics, including strong performance, high dividend yield, drawdown protection, and consistent cash flows. There are no ready replacements for tobacco-related securities that offer the same fundamental characteristics and performance. Table 1 below provides illustrative metrics comparing the tobacco industry to a broad global equities market index using data from December 31, 2002 through June 30, 2016.
Table 1: MSCI AC World Tobacco vs. MSCI AC World

<table>
<thead>
<tr>
<th>Metric</th>
<th>MSCI AC World Tobacco (tobacco only, rounded)</th>
<th>MSCI AC World (broad market, rounded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term Average Fundamentals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend Yield</td>
<td>4.3%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Net Profit Margin</td>
<td>16.2%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Gross Profit Margin</td>
<td>42.2%</td>
<td>27.2%</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>52.0%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Free Cash Flow Margin</td>
<td>14.1%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Performance &amp; Risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative Return</td>
<td>914.5%</td>
<td>162.4%</td>
</tr>
<tr>
<td>Annualized Return</td>
<td>18.6%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>17.2%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Sharpe Ratio</td>
<td>1.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Down Capture</td>
<td>64%</td>
<td>100%</td>
</tr>
<tr>
<td>Beta (vs. broad market)</td>
<td>0.65</td>
<td>1.0</td>
</tr>
</tbody>
</table>

A number less than 100% means that asset returns don’t fall as much as the broad market in market downturns.

A number less than 1 indicates the asset is less volatile that the broad market.

Tobacco-related securities valuations, as measured by price-to-earnings, are currently higher than the broad market. Like any other industry, these valuation levels vary over time.

When evaluating the standard deviation of returns, tobacco-related securities appear more volatile than the broad equity market. However, when the efficiency, or the return-per-unit of risk such as the Sharpe ratio, is reviewed, the risk is well compensated for the time period noted above.

Staff conducted a review of analysis from several major investment banks. Overall the analysis indicated that the tobacco industry outlook is favorable, and that tobacco tends to be a solid performer and diversifier, exhibiting defensive characteristics in economic downturns. Historically these stocks have performed well in market downturns. Table 2 below provides illustrative examples of tobacco performance versus the broad market in three sample bull/bear markets.

Table 2: Market Environments – Annualized Returns

<table>
<thead>
<tr>
<th>Example Market (Period)</th>
<th>MSCI AC World Tobacco Annualized Returns</th>
<th>MSCI AC World Annualized Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bull Market (10/2002-10/2007)</td>
<td>21.7%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Bear Market (10/2007-3/2009)</td>
<td>-16.9%</td>
<td>-32.7%</td>
</tr>
<tr>
<td>Bull Market (3/2009-6/2016)</td>
<td>21.4%</td>
<td>13.3%</td>
</tr>
</tbody>
</table>
5. Investment Considerations – Industry Pressures and Challenges

While tobacco-related securities exhibit many attractive qualities, there are also many reasons to be cautious. As a long-term investor, CalPERS considers risk factors that, while emerging slowly over long time periods, could have a material impact on company or portfolio returns. Attachment 1 provides an overview of risks and pressures facing the tobacco industry prepared by Allianz Global Investors and Fidelity Investments at the request of CalPERS staff. Attachment 1 also includes an overview of the tobacco sector prepared by MSCI as of December 2015 focusing on different risk metrics relating to the tobacco industry.

The analysis by Allianz, Fidelity, and MSCI indicates that overall, while the positive dynamics of the industry may lead to continued strong performance in the short term, increasing long-term pressures may significantly strain the industry.

Factors that could make investment in the tobacco industry unattractive from an investment risk and return perspective include:

- A structural decline in tobacco sales volume in developed, and some emerging, markets as a function of declining participation and consumption per individual.
- The fact that price increases for tobacco products, which have helped maintain profitability despite slowing sales volumes, are expected to grow more challenging over time.
- Demographic challenges in terms of a younger generation around the world that seems less interested in smoking.
- The fact that tobacco securities are currently trading at all-time highs, with forward price-to-earnings multiples of 19.7x, and a premium relative to the market of 20%.
- Potential negative impacts to industry margins and cash flows due to development and marketing costs for alternative “next generation products.”
- Increasing regulation around the world, including increasing
  - Taxation – Governments around the world have imposed significant taxes on the tobacco industry, putting pressure on prices, which in turn affects demand. For example, California’s Proposition 56, which passed on the November 8, 2016 ballot, added an additional $2.00-per-pack tax for cigarettes, with an equivalent increase on other tobacco products and electronic cigarettes (e-cigarettes). The proposition also classified e-cigarettes as “other tobacco products” under state law, making them subject to the same taxes as conventional tobacco products.
  - Additive bans and reformulation risk – It is unknown what regulation might be created that could hinder the burgeoning e-cigarette market.
  - Pressures on marketing – Europe has taken the lead on plain packaging, which makes it harder for companies to differentiate their products, create brand loyalty, and sell premium brands.
o General smoking restrictions – Most countries in the world now have national or some local level “smoke free” legislation.

o Litigation – While litigation is down from where it was, especially in the U.S., there are still cases where tobacco companies have to pay significant sums. As recently as 2015, a Quebec court ordered a number of tobacco companies to pay the equivalent of $12,500,000,000 to product consumers. If this case survives on appeal, this may cause other countries to follow suit.

o Disclosure requirements – There are increasing requirements to identify and take action on poor labor practices in the supply chain.

6. Social Considerations
As noted by Allianz in Attachment 1, the regulatory pressures, litigation risk, and volume declines facing the tobacco industry are largely attributable to the negative societal implications of tobacco, with the primary negative externality being the health implications of using the product and the related costs across society. For example, as of 2014 the Centers for Disease Control and Prevention (CDC) estimate the total economic cost of smoking is more than $300,000,000,000 each year, including nearly $170,000,000,000 in direct medical care for adults and over $150,000,000,000 in lost productivity. The World Health Organization estimates that, worldwide, tobacco use causes nearly 6,000,000 deaths per year, with current trends indicating an increase to more than 8,000,000 deaths annually by 2030.

Professor Stanton Glantz, Director of the University of California, San Francisco Center for Tobacco Control Research and Education, cites a number of social issues as important risk factors signaling an impending decline in the investment performance of this industry sector, namely:

- The tobacco industry is in long term decline.
- Proposition 56 is estimated to result in $250,000,000 fewer cigarette sales every year.
- The tobacco industry undermines the health and infrastructure of California and will continue to face regulatory pressures.
- Tobacco companies are not committed to transparency, accountability, or ethical standards.

A letter and supporting articles from Professor Glantz are included as Attachment 3.

7. Divestment Issues and Other Investment Funds
CalPERS partnered with Wilshire Associates to conduct a confidential survey of various asset owners on the subject of divestment considerations in the investment process. Approximately 30 funds participated in the survey, of which approximately 50% indicated that they had divested, or had actively considered divestment. The survey sought to gain insights into how funds address divestment issues, including how divestment actions are initiated, considered, and tracked over time.

Additional information on the survey results specific to tobacco divestment is included in Attachment 4.
8. Stakeholder Outreach and Feedback
CalPERS conducted stakeholder outreach including discussion and education, and solicited a broad spectrum of viewpoints. Staff engaged with key stakeholder groups including member and employer associations, individual members and employers, public health organizations, and California Legislature committee consultants.

On October 18, 2016, CalPERS hosted a live webinar featuring Chief Operating Investment Officer Wylie Tollette who presented information on historical CalPERS actions related to tobacco divestment, general investment considerations, some of the broader implications of divestment, and public policy considerations related to tobacco. Over 460 individuals from a variety of stakeholder organizations were invited to participate in the webinar and were encouraged to provide their comments on the future of the CalPERS tobacco restrictions. The webinar was recorded and posted to the CalPERS website. As of November 30, 2016, approximately 300 individuals have viewed the live or recorded webinar.

Invitations were sent stakeholders representing:
- 28 member and beneficiary associations
- 5 public health organizations
- 89 participating employer organizations
- 32 private sector organizations

Additionally, CalPERS promoted the webinar through the CalPERS News database of over 17,000 subscribers, and sent out messages to over 27,500 followers through CalPERS social media channels.

Letters opposing CalPERS investment in tobacco or supporting CalPERS’ current divestment policy came from the following organizations (provided in Attachment 8):
- Action on Smoking and Health
- California Faculty Association
- American Lung Association in California
- American Heart Association
- American Cancer Society Cancer Action Network
- Tobacco Education and Research Oversight Committee (TEROC)
- Americans for Nonsmokers’ Rights
- Truth Initiative
- Corporate Accountability International
- Senator Richard Pan
- SEIU Local 1000
- Tobacco Free Portfolios
CalPERS received another 156 comments from individuals including active and retired members who strongly opposed reinvestment or supported our currently policy on divestment. CalPERS received two emails supporting reinvestment in tobacco-related securities. CalPERS also received a report from Cenkos Securities examining the issues of ethics and tobacco from multiple perspectives (provided in Attachment 8).

9. Summary – Options and Recommendation
This item outlines several alternatives for the Committee’s consideration, as follows:

1. Remove all of the tobacco investment restrictions; or

2. Broaden the restrictions through one or both of the following:
   a. Extending the divestment requirement to the externally managed portfolios of publicly traded assets for the PERF; and/or
   b. Extending all the restrictions to the externally managed Affiliate Fund portfolios currently invested in institutional commingled index funds; or

3. Affirm the existing hybrid approach in which internally managed portfolios remain divested, external managers for the PERF continue to have discretion to include tobacco-related securities as “out of benchmark” investments, and the Affiliate Fund portfolios continue to invest in institutional commingled index funds.

Staff recommends Option 1, removal of all restrictions on tobacco-related securities. The historical performance and characteristics of tobacco-related securities since 2002 are supportive of the CalPERS Portfolio Priorities; however, market conditions going forward are difficult to predict, and the only guarantee is that the past is not completely predictive of the future. As noted by Fidelity Investments in Attachment 1, it is possible that once interest rates start to increase, the “defensive, cash-flow generating, high-dividend yielding” characteristics of the tobacco industry “will become less attractive” as investors pursue higher growth prospects. Staff believes that although tobacco valuations may be extended at present, restoring tobacco securities to the investable universe, with the time and method of reinvestment subject to staff’s discretion, supports achievement of the System’s investment objectives.

Additional information on potential next steps and impacts are outlined in the sections below. Each potential action poses a variety of potential benefits and risks that are further explored in the Benefits and Risks section of this item.

Potential Next Steps & Impacts - Option 1 (Remove Tobacco Restrictions)
Should Option 1 be selected, staff would develop a transition plan to reinstate tobacco-related securities exposures in a manner designed to minimize costs and market impacts. Staff estimates that re-establishment of tobacco-related exposures could cost approximately $11,000,000 in commissions, taxes, and potential price spread impacts. Should the Committee select this option, staff recommends that discretion be provided to staff to reinvest in such a way as to minimize market impacts and costs.
As of June 30, 2016, Table 3 below outlines the weight of tobacco-related securities in the regional FTSE indices, along with the potential exposure for the PERF should the Committee choose to reinvest.

Table 3: Potential PERF Exposures

<table>
<thead>
<tr>
<th>FTSE Index</th>
<th>Tobacco Industry Weight</th>
<th>Est. Potential Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTSE All World, All Cap U.S.</td>
<td>1.58%</td>
<td>$803,000,000</td>
</tr>
<tr>
<td>FSKE All World All Cap – Developed International (ex U.S.)</td>
<td>1.57%</td>
<td>$495,000,000</td>
</tr>
<tr>
<td>FTSE All World All Cap – Emerging Markets</td>
<td>0.43%</td>
<td>$13,000,000</td>
</tr>
</tbody>
</table>

Potential Next Steps & Impacts - Option 2 (Broaden Restrictions)

a. *Extend the divestment requirement to the externally managed portfolios of publicly traded assets for the PERF*

Based on the PERF external public equity manager holdings, staff estimates that extending the divestment to the external portfolios could result in approximately $2,800,000 in trade costs. Should the Committee select this option, staff recommends that discretion be provided to the managers to divest in such a way as to minimize market impacts and costs.

b. *Extend all the restrictions to the externally managed Affiliate Fund portfolios currently invested in institutional commingled index funds*

In addition to trade costs, extending the tobacco restrictions to the externally managed Affiliate Fund portfolios will require the establishment of a separate account structure and transition of those funds to the new account structure. The establishment and transition to a new separate account structure will result in additional operational costs, and require a material investment of staff and vendor resources. In addition to the one-time costs associated with this option, on an ongoing basis, a separate account structure is expected to be more costly to the System.

Should the Committee select this option staff would undertake the development of a transition plan addressing the investment, operational, solicitation and contracting, and participant outreach requirements.

Potential Next Steps & Impacts - Option 3 (Affirm Existing Approach with No Change)

Staff does not anticipate any additional tobacco-specific activities will need to be undertaken if the Committee determines to affirm the existing tobacco restrictions with no change. Internally managed passive equity and debt portfolios will continue to exclude tobacco-related securities, and tobacco-free benchmarks will remain in place. For the PERF, Wilshire Associates estimates that the existing tobacco restrictions may result in approximately $329,600,000 to $504,000,000 in ongoing "performance at risk" compared to the unconstrained Global Equity benchmark.
Budget and Fiscal Impacts
Legal opinion costs related to this review are estimated not to exceed $25,000. Ancillary travel costs are also anticipated for presenters at the December 19, 2016 Committee meeting.

Potential transaction costs associated with each of the options posed for the Committee’s consideration, as discussed in the previous sections, are summarized in Table 4 below.

Table 4 – Proposed Options and Potential Costs Summary

<table>
<thead>
<tr>
<th>#</th>
<th>Option</th>
<th>Potential Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Remove all of the tobacco investment restrictions</td>
<td>Approximately $11 million in transaction costs</td>
</tr>
<tr>
<td>2</td>
<td>Broaden Restrictions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Extend the divestment requirement to the externally managed portfolios of publicly traded assets for the PERF</td>
<td>Approximately $2.8 million in transaction costs</td>
</tr>
<tr>
<td></td>
<td>b. Extend all the restrictions to the externally managed Affiliate Fund portfolios currently invested in institutional commingled index funds</td>
<td>Due to the complexity of this option, a cost estimate will require a detailed analysis and development of potential project scope with affected vendors and entities.</td>
</tr>
<tr>
<td>3</td>
<td>Affirm Existing Hybrid Approach with No Change</td>
<td>$0</td>
</tr>
</tbody>
</table>

Benefits and Risks
Potential risks and benefits associated with each of the options are outlined below.

Option 1 – Remove Tobacco Restrictions
Should CalPERS remove the tobacco restrictions, staff anticipates the following benefits could be realized:

- CalPERS will have a portion of the investment universe restored to its opportunity set, which is expected to facilitate CalPERS achievement of our investment objectives compared to a constrained opportunity set over the long term.

- If the tobacco industry continues to outperform the broader market, the PERF would realize additional returns through access to that portion of the global investment opportunity set.

Should CalPERS remove the current tobacco restrictions, staff anticipates several risks may arise:

- If the tobacco industry begins to underperform the broader market, the PERF could experience reduced returns compared to having the value of the tobacco exposure invested across the remaining benchmark universe.

- CalPERS could incur reputational risk and be seen as undermining efforts to denormalize tobacco use in California.
Option 2 – Broaden the Restrictions (through one or both of the following):

a. *Extending the divestment requirement to the externally managed portfolios of publicly traded assets for the Public Employees’ Retirement Fund (PERF);* and/or

b. *Extending all the restrictions to the externally managed Affiliate Fund portfolios currently invested in institutional commingled index funds.*

As previously noted, tobacco-related public equity and fixed income securities are held by external active managers on behalf of the PERF. Those exposures have been additive to CalPERS performance. Should the Committee direct the current restrictions be broadened, the following benefits might occur:

- CalPERS may avoid public criticism from anti-smoking advocates associated with the presence of any tobacco-related security exposure.

- Should the tobacco industry begin to underperform the broader market, the PERF and Affiliate Funds could experience enhanced returns by not having an exposure to the underperforming assets through the external managers.

Should the current restrictions be broadened, staff anticipates the following risks:

- If tobacco stocks continue to outperform the broader market, CalPERS may miss out on additional potential performance and/or diversification benefits from having tobacco-related exposures in the external portfolios.

- CalPERS may be seen as essentially “doubling down” on an active decision to exclude tobacco securities at a time when the decision has yet to evidence added value to the PERF risk and return profile.

- Expansion of the restrictions to the Affiliate Funds will reduce the investment opportunity set for the Affiliate Funds, which is expected to have a negative impact on performance over the long term.

- Additionally, due to the nature of the current Affiliate Fund account structure, such an expansion would require material resource allocation as well as increase operational complexity and risk, and increase costs on an ongoing basis.

Option 3 – Affirm Existing Hybrid Approach with No Change

Potential benefits associated with affirming the existing hybrid approach, in which internally managed passive portfolios remain tobacco free, and PERF external active managers can make “out-of-benchmark” investments, could include:

- As previously noted, if the tobacco industry begins to underperform the broader market, CalPERS could experience enhanced returns by not having exposure to the underperforming assets through the internally managed funds.

- PERF external managers could continue to apply their expertise and utilize tobacco exposures as active “out-of-benchmark” investments at their discretion, to generate active returns, while monitoring the ongoing risks in the industry and being poised to quickly sell out of their tobacco positions as circumstances warrant.
• CalPERS will continue to take advantage of the cost-savings offered through use of institutional commingled index funds for the externally managed Affiliate Fund portfolios. The publicly traded asset portfolios managed internally on behalf of the Affiliate Funds will continue to exclude tobacco securities.

Should the current status quo be maintained, staff anticipates the following risks will remain unchanged, or arise:

• CalPERS could be criticized for keeping the tobacco restrictions in place with respect to the internal portfolios in light of the evidence that, to date, these restrictions have harmed performance of the PERF.

• CalPERS may be criticized for continuing to allow its external managers the discretion to invest in tobacco-related securities.

Attachments
Attachment 1 – External Investment Perspectives: Tobacco Industry
Attachment 2 – Wilshire Associates Review of CalPERS Tobacco Restrictions
Attachment 3 – Materials from Professor Glantz, UCSF Center for Tobacco Control Research & Education
Attachment 4 – Wilshire/CalPERS Survey Results – Tobacco Divestment
Attachment 5 – Board Investment Consultant Opinion Letter – Wilshire Associates
Attachment 6 – Board Investment Consultant Opinion Letter – Pension Consulting Alliance
Attachment 7 – CalPERS Total Fund Statement of Investment Policy
Attachment 8 – Stakeholder Feedback – Formal Position Papers and Reports

Katherine H. Crocker
Investment Director
Investment Compliance and Operational Risk

Wylie Tollette
Chief Operating Investment Officer

Theodore Eliopoulos
Chief Investment Officer