



Spending Policy Practices

2015

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Spending Policy Practices

2015

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Introduction	1
Participants and Spending Rule Types Defined	2
Market Value–Based Policies	5
Constant Growth Policies	12
Hybrid Policies	15
Looking Back and Looking Ahead	19
Support of Operations	21
Participants	23
Figures	
1. Profile of Participating Institutions	2
2. Spending Policy Types	3
3. Spending Policy Types: 2009 Versus 2014	4
4. Endowment Spending and Market Value Under Various Spending Rates	5
5. Characteristics of Market Value–Based Spending Policies	6
6. Changes in Target Spending for Market Value–Based Spending Policies	9
7. Endowment Spending and Market Value Under Various Smoothing Periods	10
8. Annual Spending Volatility for Various Quarterly Smoothing Periods	11
9. Endowment Spending and Market Value Under Various Constant Growth Scenarios	13
10. Characteristics of Constant Growth Spending Policies	14
11. Endowment Spending and Market Value Under Various Hybrid Scenarios	15
12. Characteristics of Hybrid Spending Policies	16
13. Mean Annual Effective Spending Rate	19
14. Future Changes to Spending Policies	20
15. Long-Term Investment Portfolio Support of Operations by Institution Type	21
16. Long-Term Investment Portfolio Support of Operations by Spending Rule Type	22

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Spending Policy Practices

Setting an appropriate spending policy is an important part of effective endowment management, as an institution's spending policy serves as a bridge that links the long-term investment portfolio (LTIP) and the enterprise. Most endowed institutions rely on annual distributions from the endowment as a source of supplemental operating revenue. These distributions are based on the institution's endowment spending policy, which should be designed to balance the needs of current and future generations of stakeholders, with the goals of providing appropriate levels of support to operations and preserving, or even growing, endowment purchasing power.

The data and analysis in this report cover a variety of spending topics including spending rule types, the endowment's support of operations, and effective spending rates. This year's report also introduces the Cambridge Associates Endowment Spending Model. The model applies investment returns and spending guidelines to answer the question: If certain spending rules start in a given year and are adhered to, how would an endowment grow and be distributed according to the type of rule used? We use the model in this report to compare the effects of various spending guidelines on historical spending and endowment growth.

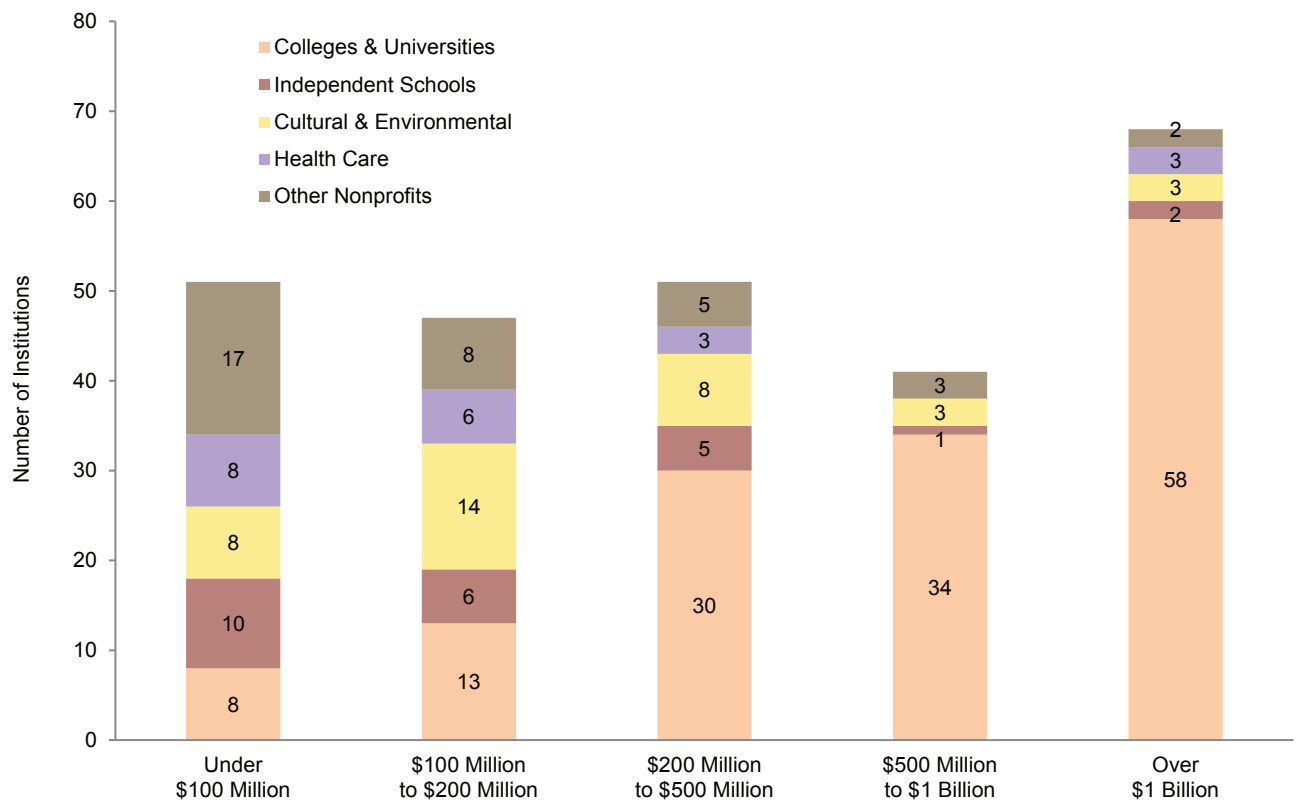
Participants and Spending Rule Types Defined

For 2014, Cambridge Associates collected spending policy data on 258 of our nonprofit clients, including 143 colleges and universities; 36 cultural and environmental institutions; 24 independent schools; 20 health care organizations; and 35 other nonprofit institution types. Foundations were excluded from the survey group as their spending is influenced by certain government-mandated spending requirements. A list of participants can be found at the back of this report. Figure 1 shows the distribution of these participants across various asset size bands.

Institutions in this study use three primary spending rule types. **Market value–based** rules link the spending amount directly to the endowment’s market value. **Constant growth** rules increase spending each year by a growth measure. **Hybrid** policies combine the elements of both market value–based and constant growth rule types.

Figure 2 shows the prevalence of the spending rule types across participating institutions. The most frequently used rule type is a market value–based policy, cited by 75% of institutions. Market value–based rules are most common among the smallest portfolios, with 88% of institutions with assets under \$100 million using this rule

Figure 1. Profile of Participating Institutions

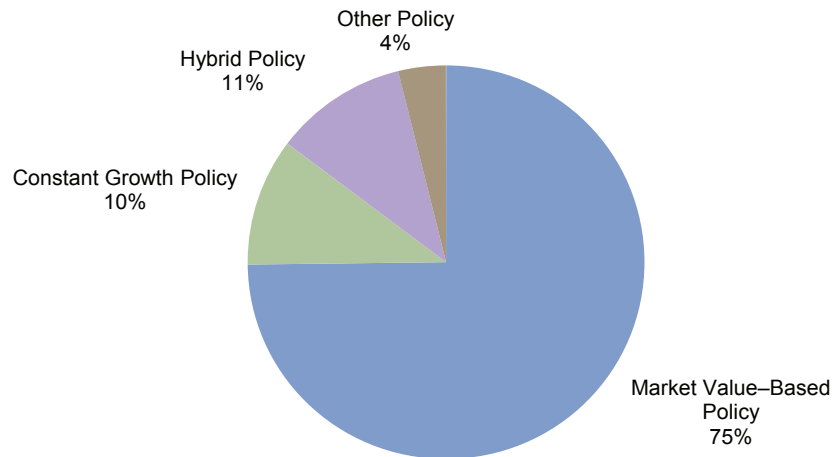


Source: Spending policy data as reported to Cambridge Associates LLC.



Figure 2. Spending Policy Types
2014

All Institutions (n = 258)



By Asset Size

	Market Value-Based	Constant Growth	Hybrid	Other
Under \$100 Million	88%	4%	4%	4%
<i>n</i>	45	2	2	2
\$100 Million to \$200 Million	83%	6%	4%	6%
<i>n</i>	39	3	2	3
\$200 Million to \$500 Million	78%	10%	10%	2%
<i>n</i>	40	5	5	1
\$500 Million to \$1 Billion	73%	15%	12%	—
<i>n</i>	30	6	5	—
Over \$1 Billion	57%	16%	21%	6%
<i>n</i>	39	11	14	4

By Institution Type

	Market Value-Based	Constant Growth	Hybrid	Other
Colleges & Universities	70%	15%	12%	3%
<i>n</i>	100	22	17	4
Independent Schools	71%	—	21%	8%
<i>n</i>	17	—	5	2
Cultural & Environmental	75%	6%	14%	6%
<i>n</i>	27	2	5	2
Health Care	90%	5%	5%	—
<i>n</i>	18	1	1	—
Other Nonprofits	89%	6%	—	6%
<i>n</i>	31	2	—	2

Source: Spending policy data as reported to Cambridge Associates LLC.

Notes: Market value-based spending policies base spending on a prespecified percentage of a moving average of market values. Constant growth policies increase prior year's spending by a measure of inflation and/or a prespecified percentage. Hybrid policies are those that incorporate a weighted average of a constant growth rule and a percentage of market value rule. Other policies are those that cannot be classified as market value-based, constant growth, or hybrid policies.

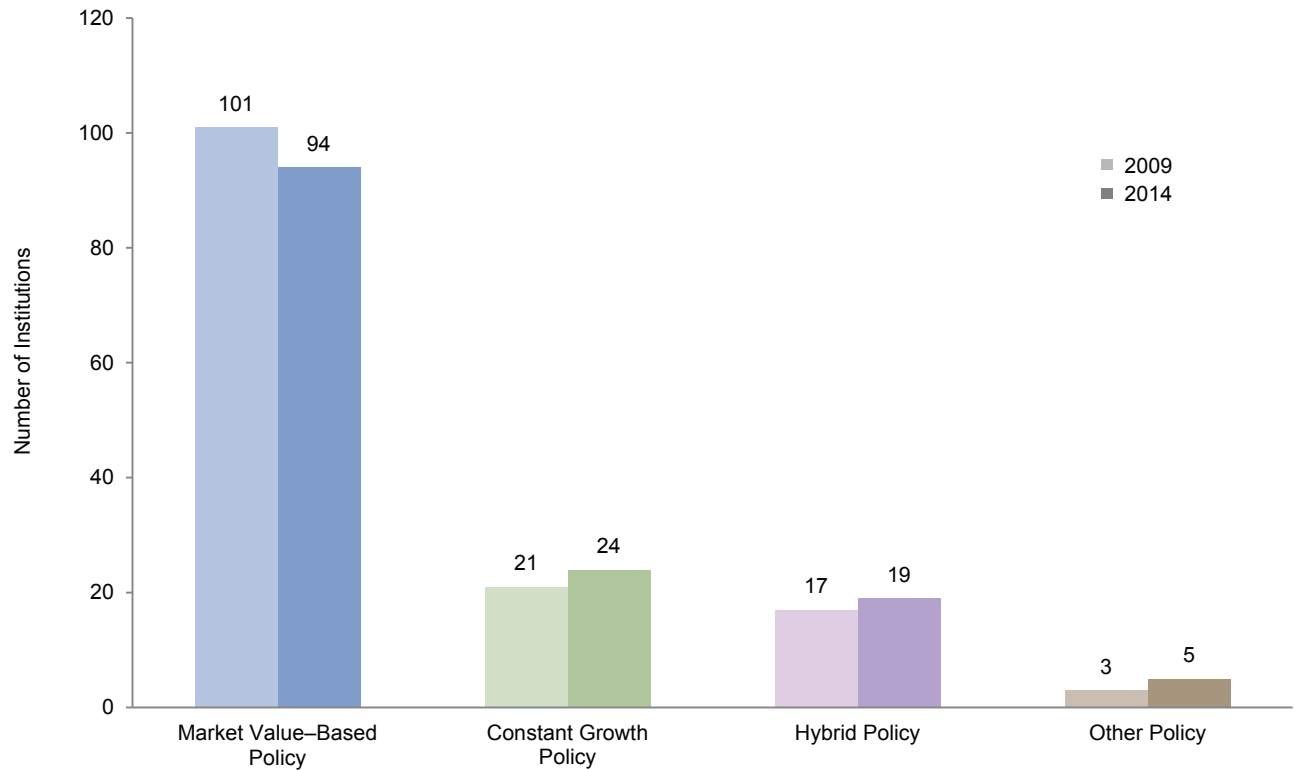
type. In comparison, 57% of institutions with assets over \$1 billion use a market value–based rule. Hybrid and constant growth rules were cited by 11% and 10% of participants, respectively. Both rule types were more likely to be used by larger portfolios than smaller portfolios. Among the institutions with assets over \$1 billion, 21% used a hybrid policy and 16% used a constant growth policy.

Figure 3 shows the distribution of rule types for the 142 institutions that provided spending policy data in 2009 and 2014. The market value–based rule continues to be the most common, although some institutions have moved away from this rule type.

Compared to 2009, seven fewer institutions used a market value–based policy in 2014, three more institutions used a constant growth policy, and two more institutions used a hybrid policy.

The remaining sections of this report provide detailed analysis of the characteristics of each of the three spending rules employed by the participants, examine what historical effective spending rates have looked like, review how institutions are changing their spending policies in the year ahead, and examine differences across institutions in the endowment’s support of operations.

Figure 3. Spending Policy Types: 2009 Versus 2014



Source: Spending policy data as reported to Cambridge Associates LLC.

Notes: Bar graph represents the 142 institutions that provided a spending policy in both 2009 and 2014.



Market Value–Based Policies

A market value–based rule dictates spending a percentage of a moving average of endowment market values. This rule type emphasizes purchasing power preservation by linking the spending distribution amount directly to the endowment’s market value. The primary levers of this rule type are the target spending rate and the smoothing period used to calculate the average market value. Some institutions also use a cap and floor to contain changes in the annual spending distribution during volatile market periods. Figure 5 summarizes the characteristics of market value–based spending policies for institutions in this report.

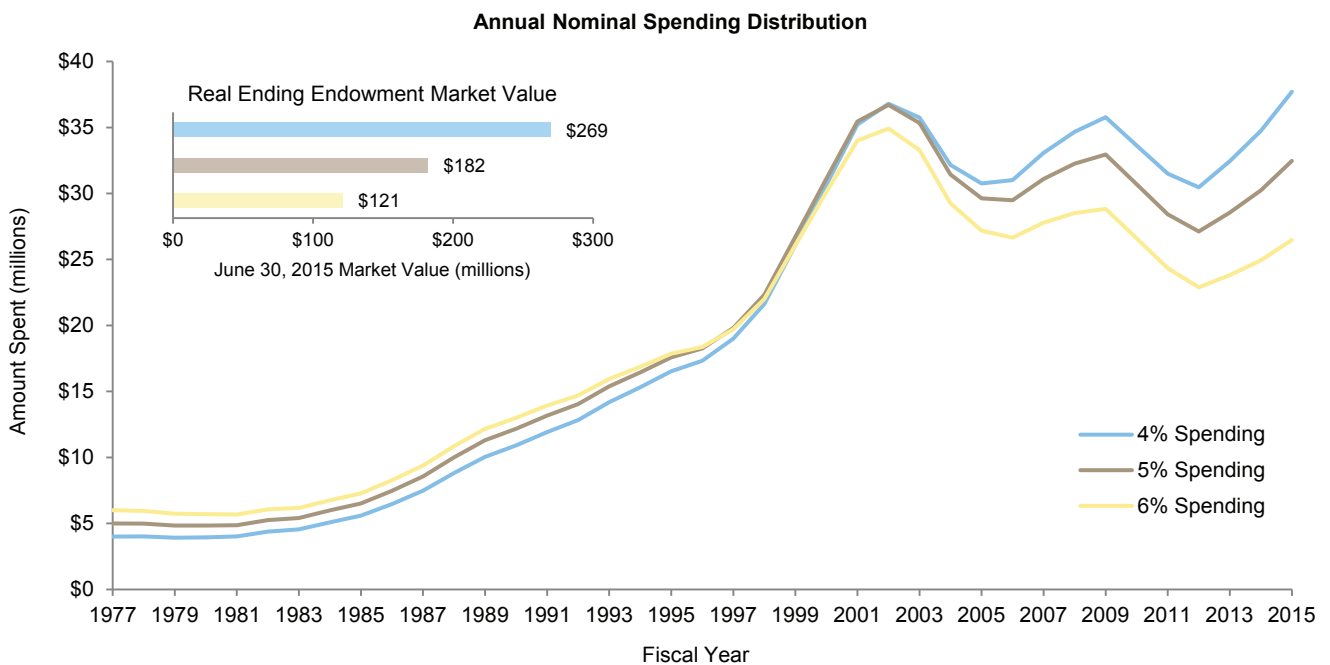
Target Spending Rate. The target spending rate helps determine the propor-

tion of the endowment that is distributed on an annual basis. Institutions incorporate long-term investment return expectations and inflation into the selection of the appropriate target spending rate. To preserve the purchasing power of an endowment,¹ the spending rate would align with long-term real investment return expectations. The purchasing power of an endowment will increase if the spending rate is lower than the long-term real return.

The target spending rate not only impacts the amount withdrawn from the portfolio in the present, but also future portfolio growth, and, in turn, future spending. Figure 4 considers the impact of three different target spending rates applied to a

¹ In this instance, we use the term “endowment” to refer to a single fund with no future inflows. An LTIP, which is a collection of multiple endowments and other long-term funds, can use inflows to increase purchasing power even if the spending rate is equal to the pool’s long-term real return.

Figure 4. Endowment Spending and Market Value Under Various Spending Rates

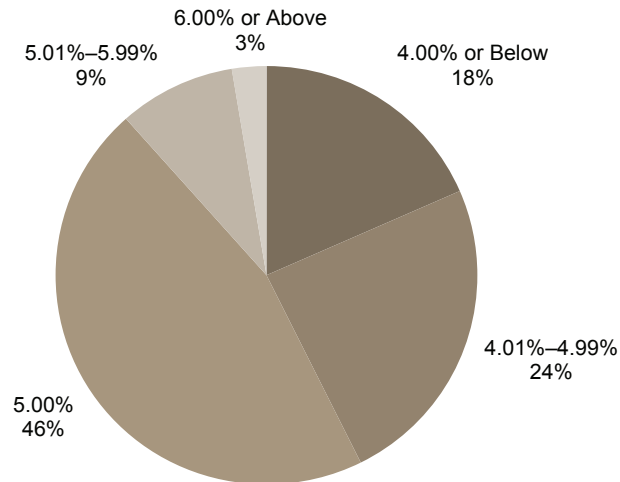


Source: Cambridge Associates Endowment Spending Model.

Notes: All scenarios assume a starting endowment market value of \$100 million on June 30, 1976. Spending rates are applied to a trailing 12-quarter average endowment market value.

Figure 5. Characteristics of Market Value–Based Spending Policies
2014

Target Spending Rates Used in Spending Calculation: All Institutions (*n* = 190)



By Asset Size

	4.00% or Less	4.01%–4.99%	5.00%	5.01%–5.99%	6.00% and Above
Under \$100 Million	23%	11%	61%	5%	—
<i>n</i>	10	5	27	2	—
\$100 Million to \$200 Million	21%	26%	45%	5%	3%
<i>n</i>	8	10	17	2	1
\$200 Million to \$500 Million	15%	30%	38%	13%	5%
<i>n</i>	6	12	15	5	2
\$500 Million to \$1 Billion	20%	23%	40%	13%	3%
<i>n</i>	6	7	12	4	1
Over \$1 Billion	13%	32%	42%	11%	3%
<i>n</i>	5	12	16	4	1

By Institution Type

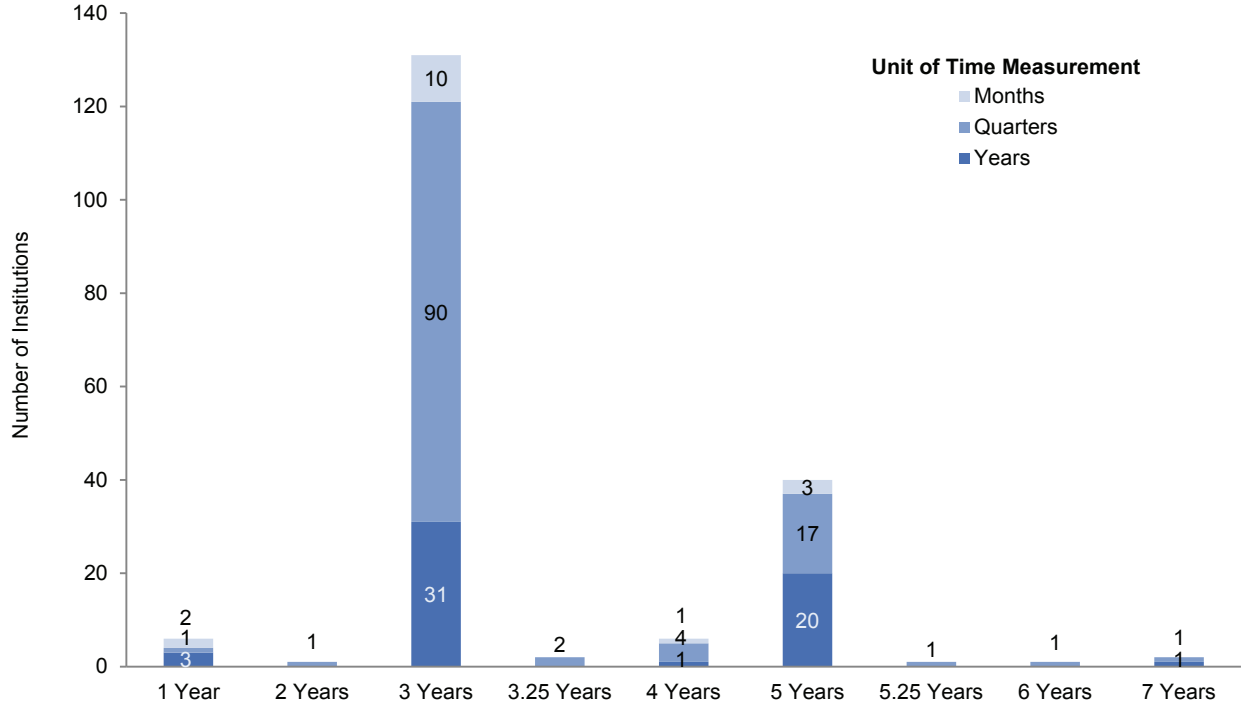
	4.00% or Less	4.01%–4.99%	5.00%	5.01%–5.99%	6.00% and Above
Colleges & Universities	14%	31%	38%	13%	3%
<i>n</i>	14	31	38	13	3
Independent School	35%	24%	41%	—	—
<i>n</i>	6	4	7	—	—
Cultural & Environmental	11%	7%	63%	11%	7%
<i>n</i>	3	2	17	3	2
Health Care	39%	17%	44%	—	—
<i>n</i>	7	3	8	—	—
Other Nonprofits	17%	21%	59%	3%	—
<i>n</i>	5	6	17	1	—

Source: Spending policy data as reported to Cambridge Associates LLC.

Notes: Market value–based spending policies base spending on a prespecified percentage of a moving average of market values. Graph reflects data for the 190 institutions that provided detailed data on their target spending rate. If a range was provided, the target spending rate was calculated using the midpoint of the range.

Figure 5 (continued). Characteristics of Market Value–Based Spending Policies
2014

Length of Smoothing Period and Unit of Time Measurement Used in Spending Calculation (n = 190)



Collars, Caps, and Floors

Collars

- 90%–110% of prior year's payout (n = 1)
- 100%–110% of prior year's payout (n = 1)
- 100%–106% of prior year's payout per unit; not permitted to exceed 7.0% of the 48-month average market value (n = 1)

Floors Only

- 100% of payout from 2005–06 (n = 1)
- 100% of prior year's payout (n = 1)

Caps Only

- 110% of prior year's payout (n = 1)
- 105% of prior year's payout (n = 1)
- 103% of prior year's payout (n = 1)
- 3% of endowment's beginning market value (n = 1)
- 5.3% of endowment's current market value (n = 1)
- Cap tied to historical gift value of endowment (n = 1)

Source: Spending policy data as reported to Cambridge Associates LLC.

Notes: Market value–based spending policies base spending on a prespecified percentage of a moving average of market values. Unit of time measurement indicates whether spending is calculated using monthly, quarterly, or yearly market values. Graph reflects data for the 190 organizations using a market value–based spending policy that provided the unit of time measurement in their spending calculation.

trailing 12-quarter average market value.² The highest spending rate (6%) initially leads to the largest distribution from the portfolio, but ultimately limits future growth in the value of the endowment. A lower spending rate actually leads to a larger endowment market value and higher annual spending in the longer run. This shift occurred after 20 years when the distribution from the middle spending rate (5%) surpassed the distribution yielded by the highest rate (6%). Just a few years later in 2002, the lowest spending rate (4%) began yielding the highest annual spending distribution. In other words, a higher spending rate provided more benefit to an earlier generation than a lower rate, but a lower spending rate ultimately provided more benefit to later generations and resulted in a larger portfolio—thus expanding the role of the endowment.

In 2014, the majority (84%) of participating institutions that cited a market value–based rule used a pre-specified target rate while the remaining institutions allowed some discretion by setting a pre-specified percentage range within which the target spending rate may fall. For the purposes of comparing target spending rates, we assume the midpoint for institutions that specified a discretionary range. Of institutions with a market value–based policy, 46% used a target spending rate of 5%, while a nearly equal proportion of institutions (42%) used a target rate below

5%. Only 12% of institutions applied a rate that exceeded 5% (Figure 5).

Nearly two-thirds of institutions (65%) reporting data since 2009 have made no change to their target spending rate. Of the remaining institutions, 22% indicated a decrease in their rate when comparing 2009 and 2014 (Figure 6). The decreases ranged from 0.08 ppt to 1.35 ppts. For the 13% of institutions that raised their target spending rate over the five-year period, increases ranged from 0.08 ppt to 1.0 ppt.

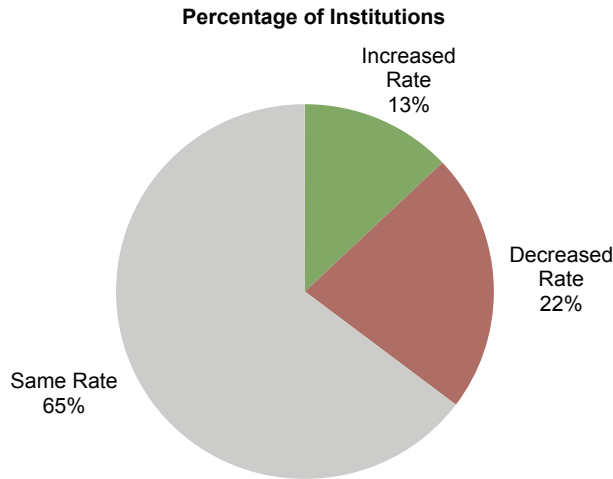
Smoothing Period. The spending distribution under a market value–based rule is determined by applying the target spending rate to an average endowment market value. Markets can be volatile and it's during times of significant market volatility that stewards of spending rely most on smoothing techniques to capture that variation in endowment market values.

A smoothing period provides the basis for which the average endowment market value is calculated. The use of a smoothing period captures the endowment's market value over several points in time, helping to reduce the year-to-year volatility in spending distributions. Smoothing periods for participants in this report range from one to seven years and the time interval (i.e., monthly, quarterly, or annual market values) can vary (Figure 5). The most common measurement period was 12 quarters (47% of those with a market value–based policy). According to our spending model, the distinction between annual and quarterly measurement intervals does not result in significantly different spending amounts over the span of many years, although the

² All scenarios studied in this report evaluate an endowment with a starting market value of \$100 million in 1976. The endowment is treated as a single fund with no future inflows. For each rule examined, spending is calculated at the beginning of each financial year (July 1) and taken out of the endowment once a year (on October 1). Returns are applied on a quarterly basis and are based on a portfolio composed of 70% S&P 500 Index and 30% Barclays Aggregate Bond Index and rebalanced annually.

Figure 6. Changes in Target Spending Rates for Market Value–Based Spending Policies
2014 Versus 2009 and 2013

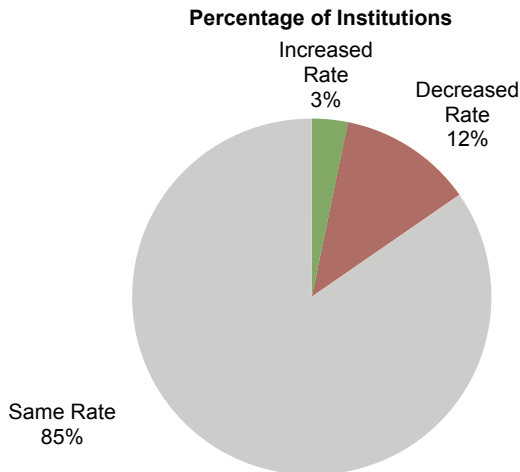
2014 Compared to 2009 (n = 85)



Target Rate Changes in Percentage Points (ppt)

Rate Changes	n
Rate Decreases	
1.35 ppt	1
1.00 ppt	4
0.75 ppt	1
0.70 ppt	1
0.50 ppt	6
0.38 ppt	1
0.30 ppt	2
0.10 ppt or less	3
Rate Increases	
1.00 ppt	3
0.96 ppt	1
0.50 ppt	4
0.25 ppt	1
0.15 ppt	1
0.08 ppt	1
No Change	55

2014 Compared to 2013 (n = 124)



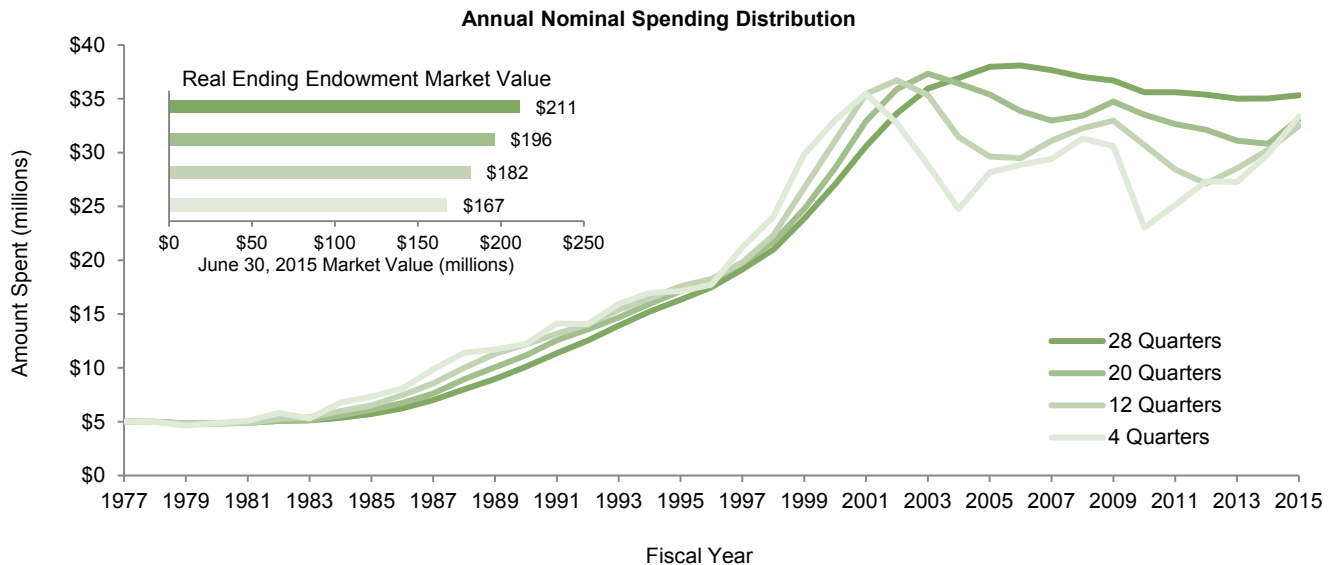
Target Rate Changes in Percentage Points (ppt)

Rate Changes	n
Rate Decreases	
1.00 ppt	1
0.75 ppt	1
0.50 ppt	2
0.40 ppt	1
0.25 ppt	4
0.15 ppt	1
0.10 ppt or less	5
Rate Increases	
1.60 ppt	1
0.50 ppt	1
0.25 ppt	1
0.13 ppt	1
No Change	105

Source: Spending policy data as reported to Cambridge Associates LLC.

Notes: Market value–based spending policies base spending on a prespecified percentage of a moving average of market values. Graphs reflect data for the institutions using a market value–based spending policy that provided the target rate used in their spending calculation for fiscal year 2009 or 2013. If a range was provided, the target spending rate was calculated using the midpoint of the range.

Figure 7. Endowment Spending and Market Value Under Various Smoothing Periods



Source: Cambridge Associates Endowment Spending Model.

Notes: All scenarios assume a starting endowment market value of \$100 million on June 30, 1976. A spending rate of 5% is used for each of the smoothing periods.

quarterly approach consistently produced a higher endowment value. Rules based on 12 trailing quarters also had a slightly lower standard deviation in the annual percentage change in spending dollars compared to rules based on three years (7.3 vs 7.7).

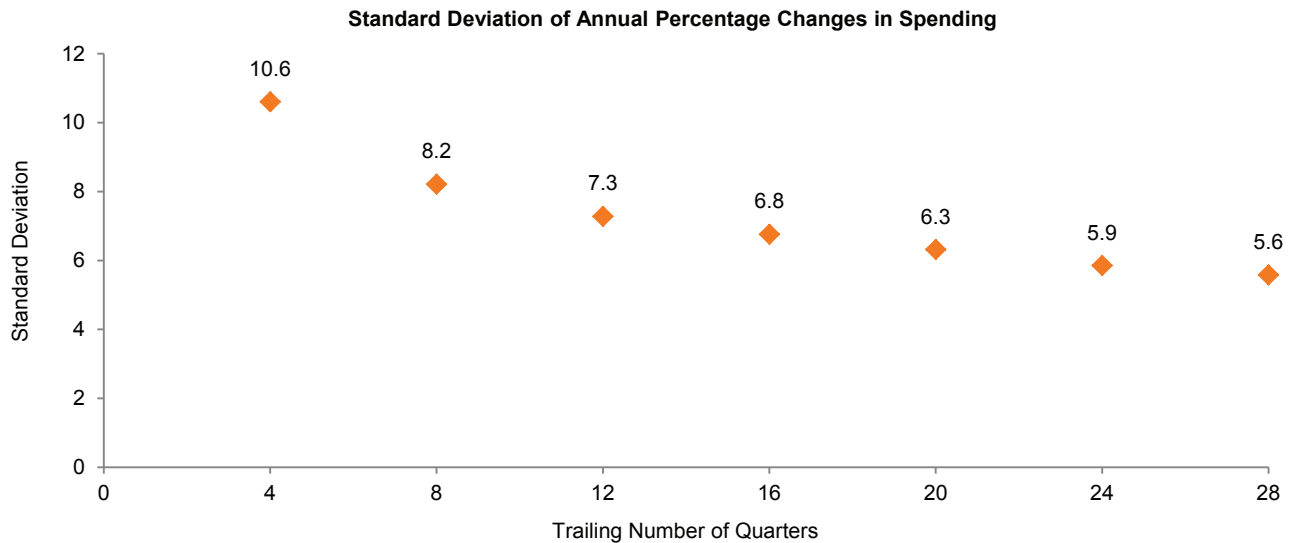
Figure 7 compares the impact of various smoothing periods on annual spending distributions and endowment growth. This example uses a 5% spending rate and produces outcomes for smoothing periods ranging from four quarters to 28 quarters. Since endowment market values generally increase in the long run, extending the trailing period further into the past initially leads to a lower average endowment value and lower spending distributions. Yet, over time, the same dynamic observed in the spending rate comparison appears. The rules with lower spending during initial years resulted in greater endowment

growth, eventually leading to the highest spending amounts in later years.

In this example, annual spending for the 28-quarter smoothing period yielded the smallest spending increases during the sustained bull market of the 1990s. This smoothing period also resulted in the least amount of fluctuation in distributions over the last 15 years, a period that included two significant stock market declines. Because longer trailing periods smooth an average market value over a longer timeframe, less emphasis is placed on any one period in the spending calculation, reducing the year-to-year spending volatility (Figure 8).

Cap and Floor. The introduction of a spending floor and/or cap can also serve as a smoothing mechanism for spending dollars by limiting the change in spending during particularly volatile periods. A floor prevents spending from falling below a

Figure 8. Annual Spending Volatility for Various Quarterly Smoothing Periods



Source: Cambridge Associates Endowment Spending Model.

Note: The standard deviation is based on the percentage changes in annual spending from 1977 to 2015.

certain level, usually the previous year’s spending dollar amount. While a floor can relieve budgetary pressures during market downturns for institutions with concerns about spending cuts, it erodes more value from the endowment and can make purchasing power preservation more challenging over the long run. A cap limits spending increases when endowment growth is particularly strong by setting a maximum annual growth rate that cannot be exceeded. When paired together, a cap and floor (known as a collar) can assist institutions in pursuit of intergenerational equity by maintaining a level of spending during challenging economic environments and saving a greater portion of investment gains from periods with exceptional endowment growth.

In practice, only eight institutions that use a market value rule employ a cap and/or floor

based on a prior year’s spending distribution. Another two institutions use a cap that is linked to the endowment’s market value on a specific date while one institution links its cap to the historical gift value of the endowment. For the 30 institutions that choose a target spending rate within a discretionary range, the range has some elements of a collar in that it allows institutions to raise the rate of spending in down markets and lower the rate of spending when endowment growth rates are high.

Constant Growth Policies

A constant growth spending policy increases the prior year's spending amount by a measure of inflation and/or a pre-specified percentage. Institutions tend to use this rule type when the endowment is a significant source of operating revenue and volatility in annual spending distributions is less tolerable. More predictable spending is derived from constant growth rules with a fixed annual increase in spending rather than those linked to inflation, which is not a constant number and not known in advance. Of the 27 institutions that use this rule type, 13 use a pre-specified percentage growth rate; ten use an inflation-index growth rate; and four use an inflation-index growth rate plus a pre-specified percentage (Figure 10).

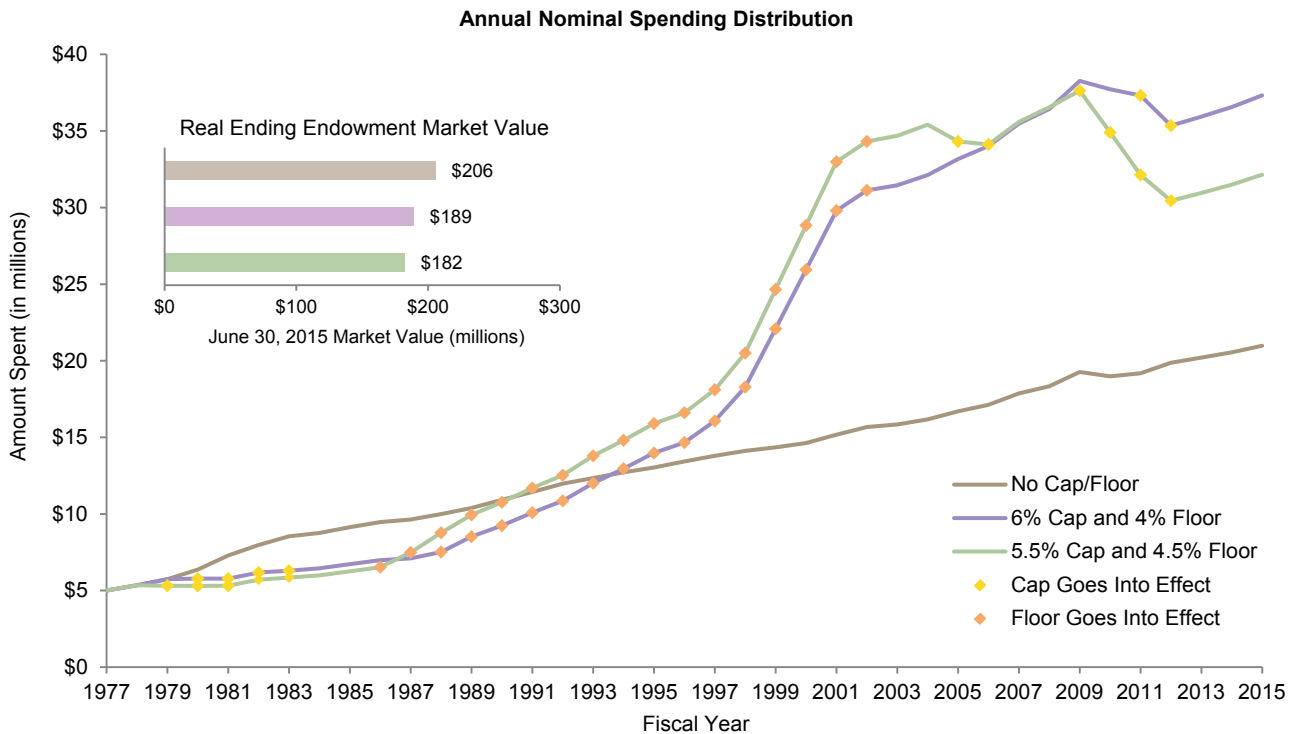
While the strict application of a constant growth rule produces predictable spending, this rule type has some notable shortcomings. Increasing spending during prolonged periods of asset declines quickly eats away at an already dwindling portfolio value and may permanently impair the endowment. Conversely, a constant growth rule can be perceived as significantly under-spending after periods of substantial endowment growth. These shortcomings can be pronounced when compared to institutions with market value–based rules.

In practice, institutions mitigate these concerns by imposing a spending cap and floor based on a percentage of the endowment's market value, or a moving average of market values (Figure 10). Spending collars essentially transform the constant

growth rule to a market value–based rule in times of significant endowment growth or contraction to avoid a complete disconnect between spending and the endowment market value. When the constant growth rate falls behind endowment growth by a certain amount, the floor is triggered and the spending distribution is raised to a new level determined by the floor. The cap works in the opposite manner by resetting spending to a lower level than was what calculated from the growth measure. Spending caps are typically triggered during periods where the endowment's market value has significantly declined.

Figure 9 compares three constant growth rules where spending is linked to the growth rate of the Consumer Price Index. The purple line uses a spending collar with floor of 4% of the endowment's trailing 12-quarter average market value and cap of 6%. The green line employs a collar with a narrower range of 4.5% to 5.5%, while the brown line uses no collar. The rule without a collar provided the highest spending distributions in the early years, which was a period of high inflation and weak investment performance. For the two rules with a collar, the spending cap in these initial years limited the growth in annual distributions to a rate that was less than inflation. As the inflation rate lowered in the mid-1980s, investment performance surged and continued to flourish through the bull market of the 1990s. In most years of this middle period, the spending floor was triggered for the two rules with a collar and spending increased at a rate that far exceeded inflation.

Figure 9. Endowment Spending and Market Value Under Various Constant Growth (CPI-Linked) Scenarios



Source: Cambridge Associates Endowment Spending Model.
 Notes: All scenarios assume a starting endowment market value of \$100 million on June 30, 1976. The Consumer Price Index is the measure used to determine the annual change in spending. Annual spending levels are reset to the cap or floor where applicable. The cap and floor are based on a 12-quarter trailing market value average.

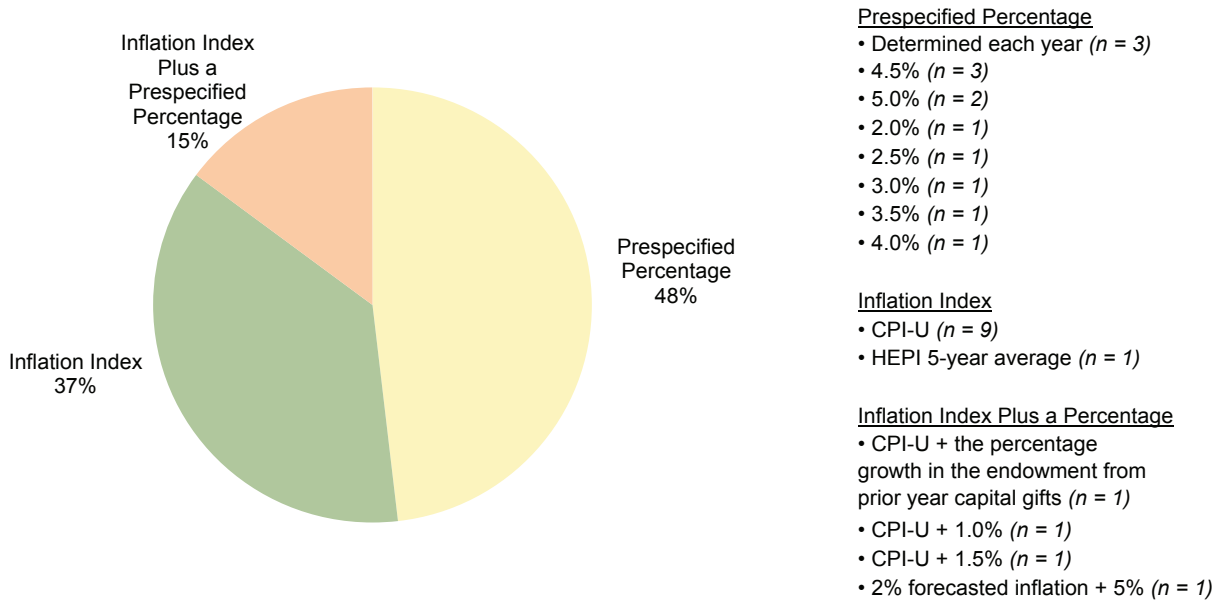
As investment performance turned negative during the early 2000s, endowment market values declined. This triggered the spending cap for the rule with the narrower collar in 2005–06 and reset the spending distribution to a lower level. The rule with the wider spending collar did not go over the spending cap, and distributions continued to grow during this particular market cycle. After the market downturn that resulted from the 2008–09 financial crisis, both rules with a collar surpassed the spending cap and annual distributions were adjusted downward.

The rule without a collar increased spending at a steadier rate over time compared to the other rules. However, it

also produced the lowest total distributions over the full period because the long-term rate of inflation was considerably lower than long-term investment performance. The value of the portfolio under this rule eroded substantially during the initial part of the period because of the rapid growth in spending during the high-inflation years. Thus, despite spending far less over the full period, this rule resulted in an ending endowment value that was only slightly higher than the value produced by the two rules with a collar.

Figure 10. Characteristics of Constant Growth Spending Policies
2014

Growth Rates Used in Spending Policy Calculation (n = 27)



Collars, Caps, and Floors

- 4.5%–5.5% of 12-quarter avg MV (n = 3)
- 3.0%–4.5% of beginning MV (n = 1)
- 3.0%–5.0%: time period not specified (n = 1)
- 3.0%–5.0% of beginning MV (n = 1)
- 3.2%–4.7% of 12-quarter avg MV (n = 1)
- 3.5%–5%: time period not specified (n = 1)
- 3.75%–4.75% of beginning MV (n = 1)
- 4.0%–5.0% of 12-quarter avg MV (n = 1)
- 4.0%–5.3% of 12-quarter avg MV (n = 1)
- 4.0%–5.5% of 12-quarter avg MV (n = 1)
- 4.0%–5.75%: time period not specified (n = 1)
- 4.0%–6.0% of 3-year avg MV (n = 1)
- 4.0%–6.0% of beginning MV (n = 1)
- 4.0%–6.5% of 3-year avg MV (n = 1)
- 4.0%–7.0% of beginning MV (n = 1)
- 4.25%–6.25% of 12-quarter avg MV (n = 1)
- 4.5%–5.5% of 20-quarter avg MV (n = 1)
- 4.5%–5.5% of 3-year avg MV (n = 1)
- 4.5%–6.5% of 4-quarter avg MV (n = 1)
- 4.5% of 8-quarter avg MV to 5.5% of 4-quarter avg MV (n = 1)
- Cap only: 6% of prior year end MV (n = 1)

Source: Spending policy data as reported to Cambridge Associates LLC.

Note: Constant growth policies increase prior year's spending by a measure of inflation and/or a prespecified percentage.

Hybrid Policies

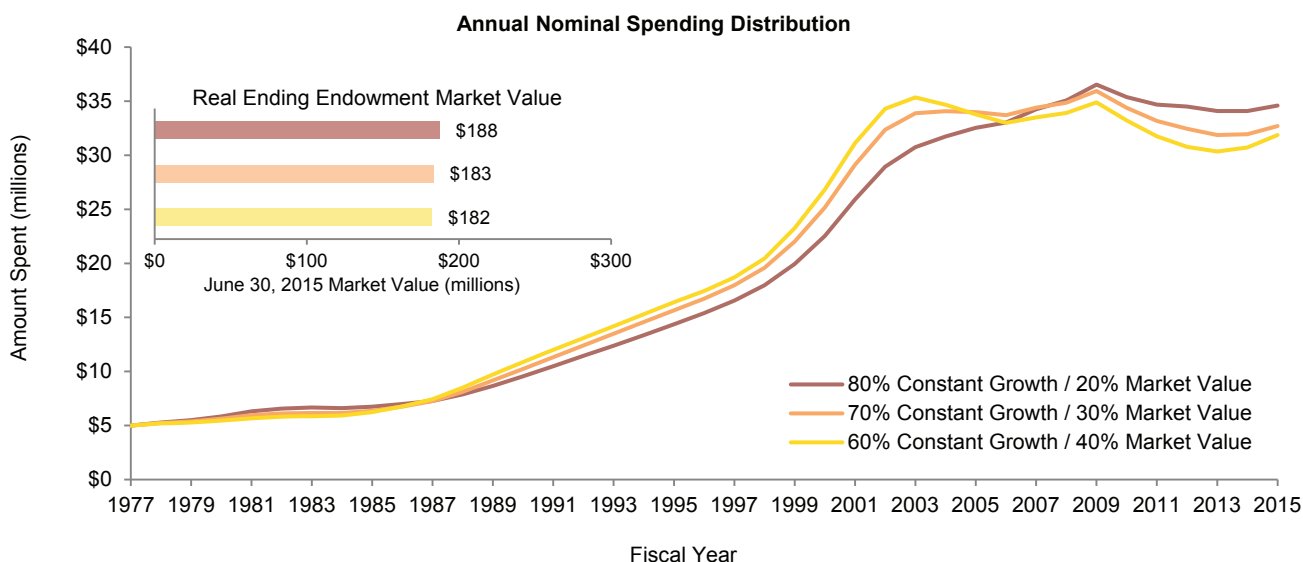
A hybrid spending policy blends the more predictable spending element of a constant growth policy with the asset preservation principle of a market value–based policy and allows an institution to set the appropriate mix that best meets its needs. The rule is expressed as a weighted average of a constant growth rule and a percentage-of-market-value (or average market value over a period of time) rule.

The most significant decision with the hybrid rule is to determine the weighting of the market value and constant growth components. The larger the weighting to the market value component, the more impact that a change in the endowment’s market value will have on the annual

spending distribution. Most institutions apply the larger weighting to the constant growth component, emphasizing more predictable spending. A majority (54%) of respondents assign a 70% weighting to the constant growth portion and a 30% weighting to the market value–based portion (Figure 12). Among institutions in this study, the constant growth component is most frequently linked to an inflation index. For the market value component, nearly half of participants used a 5% spending rate. Inputs to the calculation of both the constant growth and market value–based components are shown in Figure 12.

Figure 11 compares three hybrid rules that place separate weightings on the constant growth and market value components. In

Figure 11. Endowment Spending and Market Value Under Various Hybrid Scenarios

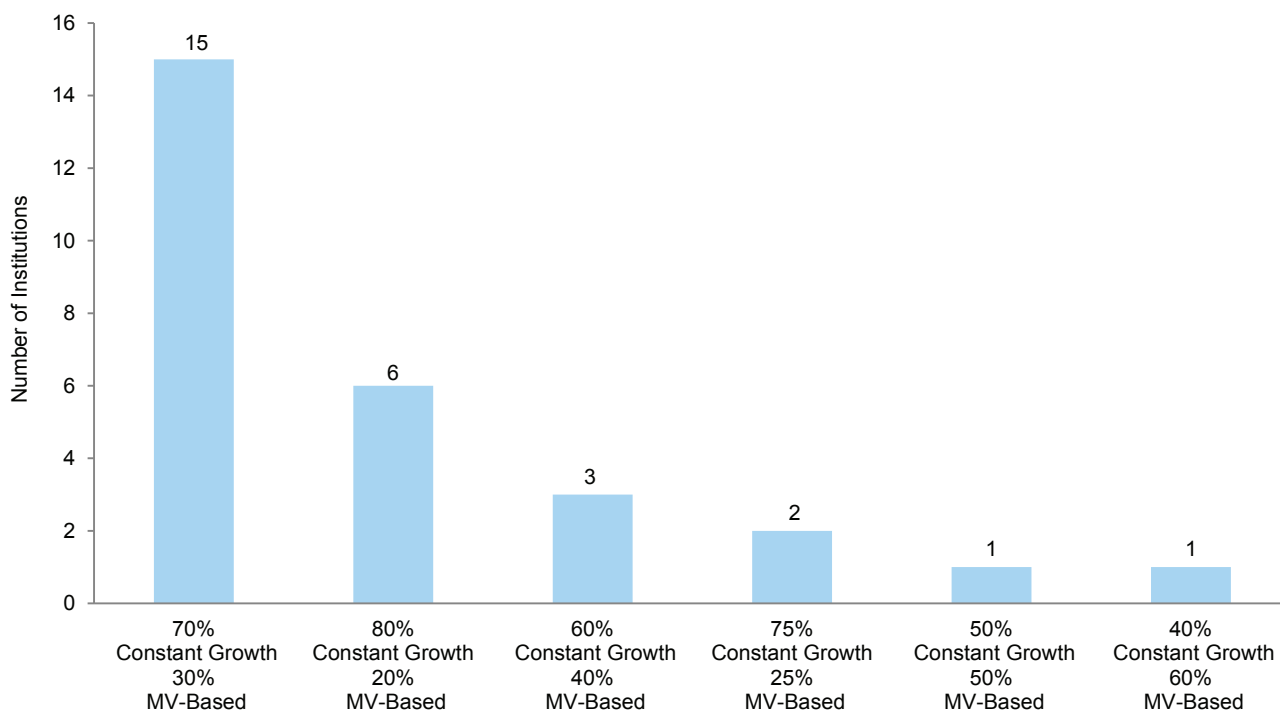


Source: Cambridge Associates Endowment Spending Model.

Notes: All scenarios assume a starting endowment market value of \$100 million on June 30, 1976. The constant growth component uses the Consumer Price Index as the growth measure and the market value component applies a 5% spending rate to a trailing 12-quarter market value average.

Figure 12. Characteristics of Hybrid Spending Policies
2014

Weightings of Constant Growth and Market Value–Based Components ($n = 28$)



Collars, Caps, and Floors

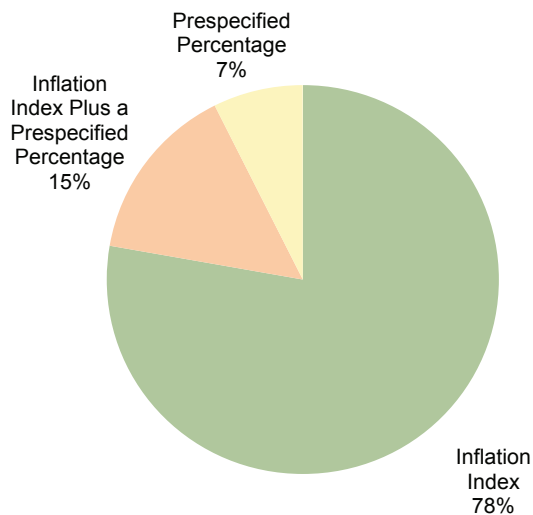
- 3.0%–6.0% of prior year-end market value ($n = 1$)
- 3.75%–5.75% of prior two year's market value ($n = 1$)
- 4.0%–5.5% of three-year average market value ($n = 1$)
- 4.0%–6.0% of 12-quarter average market value ($n = 1$)
- 4.0%–6.0% of current market value ($n = 1$)
- 4.5%–6.0% of prior two year's market value ($n = 1$)
- 4.75%–5.75% of 12/31 market value ($n = 1$)
- Cap only: 5% of five-year average market value ($n = 1$)

Source: Spending policy data as reported to Cambridge Associates LLC.

Notes: Hybrid policies essentially have the effect of spending a prespecified percentage of an exponentially weighted average market value (MV). The rule is expressed as a weighted average of a constant growth policy and a percentage of market value policy. Of the 28 institutions that use a hybrid spending policy, 20 do not use a collar, cap, or floor to contain year-to-year spending.

Figure 12 (continued). Characteristics of Hybrid Spending Policies 2014

Growth Measures Used in Constant Growth Component (n = 27)



Inflation Index

- CPI-U (n = 11)
- Higher Education Price Index (n = 7)
- Unspecified Inflation Index (n = 1)
- 60% ECI/40% CPI-U (n = 1)
- CPI-U: Elementary and High School Tuitions and Fees (n = 1)

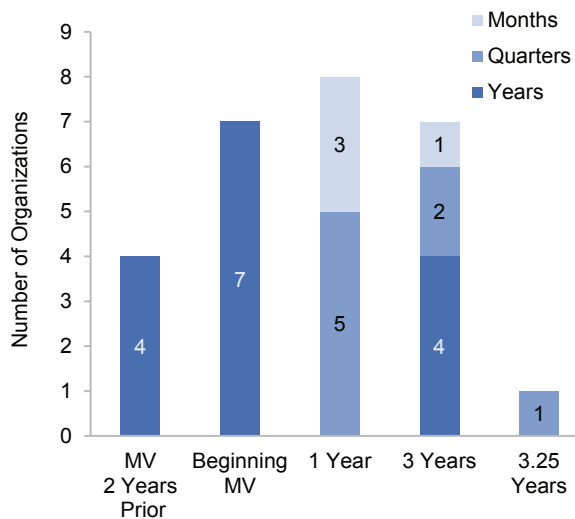
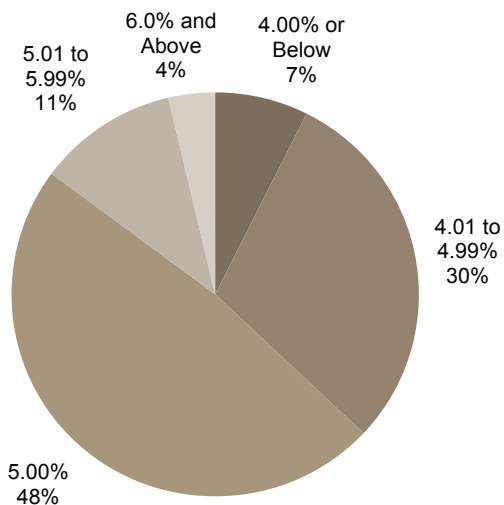
Inflation Index Plus a Percentage

- CPI-U + 1.5% (n = 2)
- CPI-U + 1.0% (n = 1)
- 13-quarter avg CPI-U +1% (n = 1)

Prespecified Percentage

- 3.0% (n = 1)
- 2.0% (n = 1)

Target Rates, Smoothing Periods, and Units of Time Measurement Used in Market Value–Based Component (n = 27)



Source: Spending policy data as reported to Cambridge Associates LLC.

Notes: A hybrid rule is expressed as a weighted average of a constant growth policy and a percentage of market value policy. One institution that uses a hybrid policy did not provide details for mechanics of their rule.

each rule, the constant growth component is based on the Consumer Price Index and the market value component applies a 5% spending rate to a trailing 12-quarter market value average.

The 60/40 rule, which was most heavily weighted toward the market value component, yielded the highest spending during the bull market of the 1990s. Yet spending from this rule fell below the level of the other two rules after the stock market downturn of the early 2000s and has continued to yield the lowest annual spending since. Over this nearly 40-year period, the 80/20 rule provided the highest ending endowment market value. With the greatest weighting to the constant growth component, this rule also provided the highest and most stable spending distributions from the 2008–09 financial crisis through the end of the period.

Looking Back and Looking Ahead

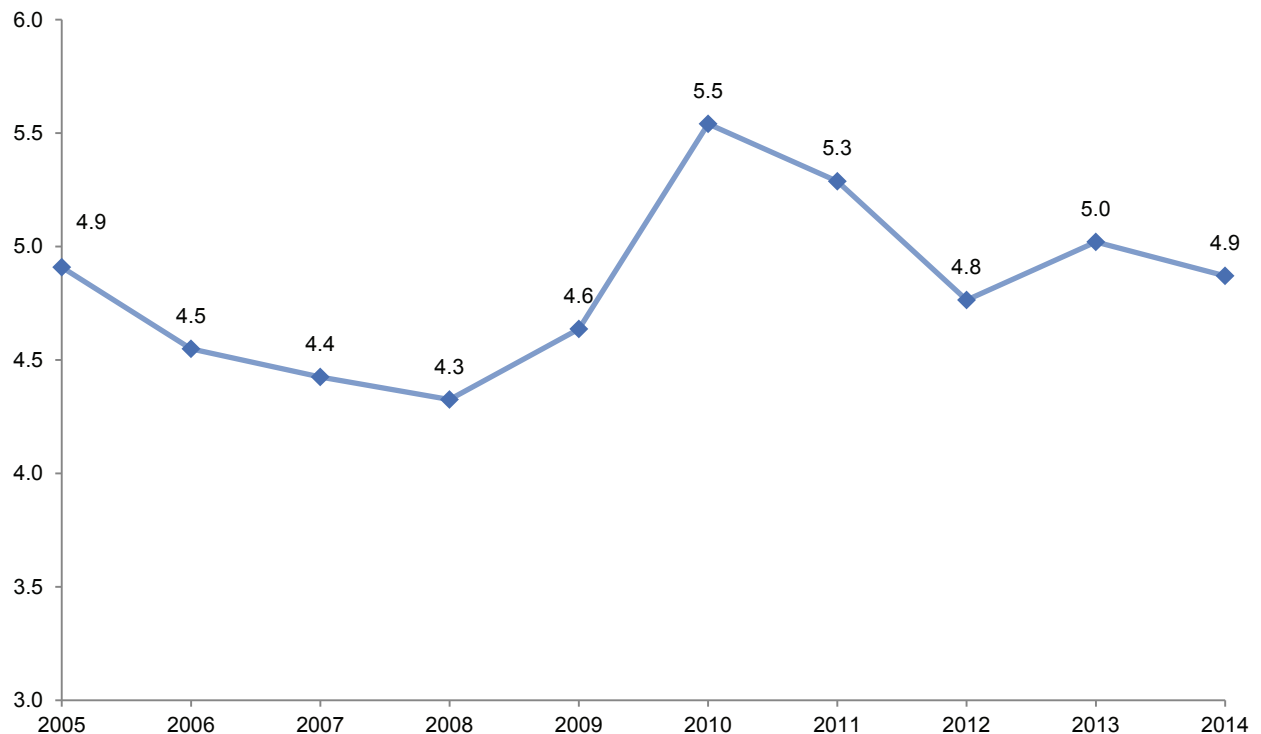
At what rate have institutions actually spent their endowment funds? The effective spending rate can help answer this question. The effective spending rate is calculated as the total annual spending distribution as a percentage of the beginning market value of the LTIP. For the 110 institutions that provided effective spending rates over the trailing ten-year period, rates averaged 4.9% in 2014. As Figure 13 shows, the effective spending rate has varied little since 2012 but is significantly lower than the rate of 5.5% in 2010.

How will policies change in the year to come? A total of eight institutions have made spending policy changes that will be implemented in 2015 or beyond. Most of the changes will result a lower effective spending rate from the endowment over time.

Four institutions, one of which uses a hybrid policy, are lowering the market value–based target rate; two institutions will adjust the constant growth levers downward.

Another six institutions are still in the process of considering policy changes that have yet to be approved (Figure 14).

Figure 13. Mean Annual Effective Spending Rate
2005–14 • Percent (%)



Source: Spending policy data as reported to Cambridge Associates LLC.

Note: Data represent the average of 110 institutions that provided effective spending rates for each year from 2005 to 2014.

Figure 14. Future Changes to Spending Policies
2015 and Beyond

Approved Changes Awaiting Implementation

Market Value–Based Rule Target Rate

- Lowering target rate from 4.75% to 4.5% by fiscal year 2017 on a linear basis
- Lowering target rate from 4.25% to 4.0% in fiscal year 2015
- Lowering target rate from 5.2% to 5.0% by 2016

Market Value–Based Rule Smoothing Periods

- Lowering smoothing period from 24 quarters to 12 quarters

Constant Growth Rule

- Lowering prespecified growth rate from 3.5% to 3.0%
- Lowering collar from 3.2%–4.7% to 3.0%–4.5%

Hybrid Rule

- Increasing constant growth weighting from 70% to 80%
- Lowering target rate of market value–based component

Future Changes Being Considered

General

- "The college is reviewing all the inputs/forecasts used in the calculation including inflation (HEPI) and the rate applied to the floor and ceiling."
- "The school is currently discussing spending parameters and possibly the use of a range as spending parameters."

Market Value–Based

- "Considering lowering the 4% spending rate."
- "Considering lowering the 5% spending rate."

Constant Growth Mechanics

- "Considering increasing the smoothing period for the cap and floor from 12 quarters to 20 quarters."

Spending Rule Type

- "Researching the use of a Hybrid methodology."

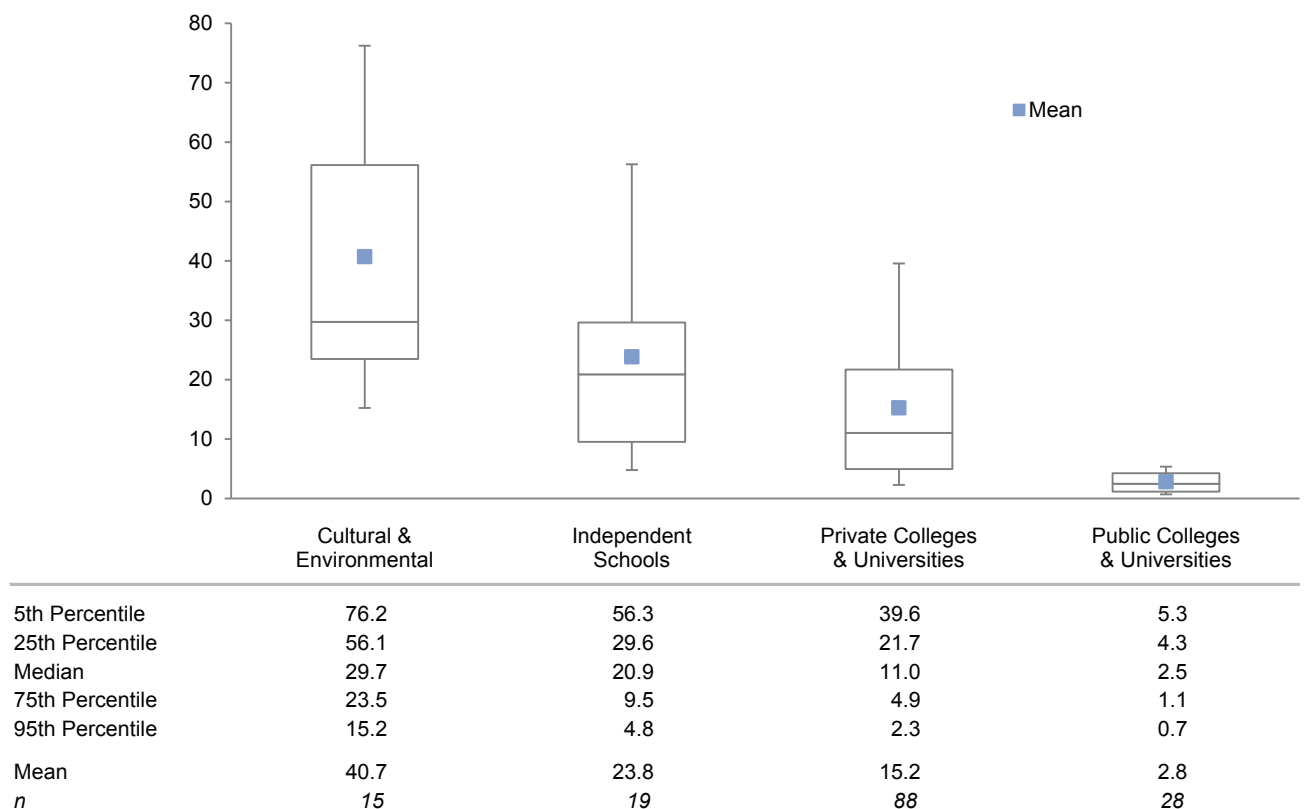
Source: Spending policy data as reported to Cambridge Associates LLC.

Support of Operations

Few nonprofit institutions generate enough revenues from their core operations to break even on their annual operating budgets, causing many to rely on their endowment to provide additional financial support. The level of endowment support varies considerably among the institutions in this study. Endowment distributions supported 1% or less of the operating budget for some institutions, while for others they are the single largest source of revenue.

Public universities, which receive financial support from state appropriations, generally rely less on endowment to fund the operating budget compared to private colleges and universities and other nonprofits. For the 28 public universities that provided data, median support from the LTIP as a percentage of operating expenses was 2.5% in 2014. Median support for private colleges and university institutions was 11.0% (Figure 15). Among cultural and environmental institutions and independent schools, reliance on the LTIP is higher, as median support of the operating budget was 29.7% and 20.9%, respectively.

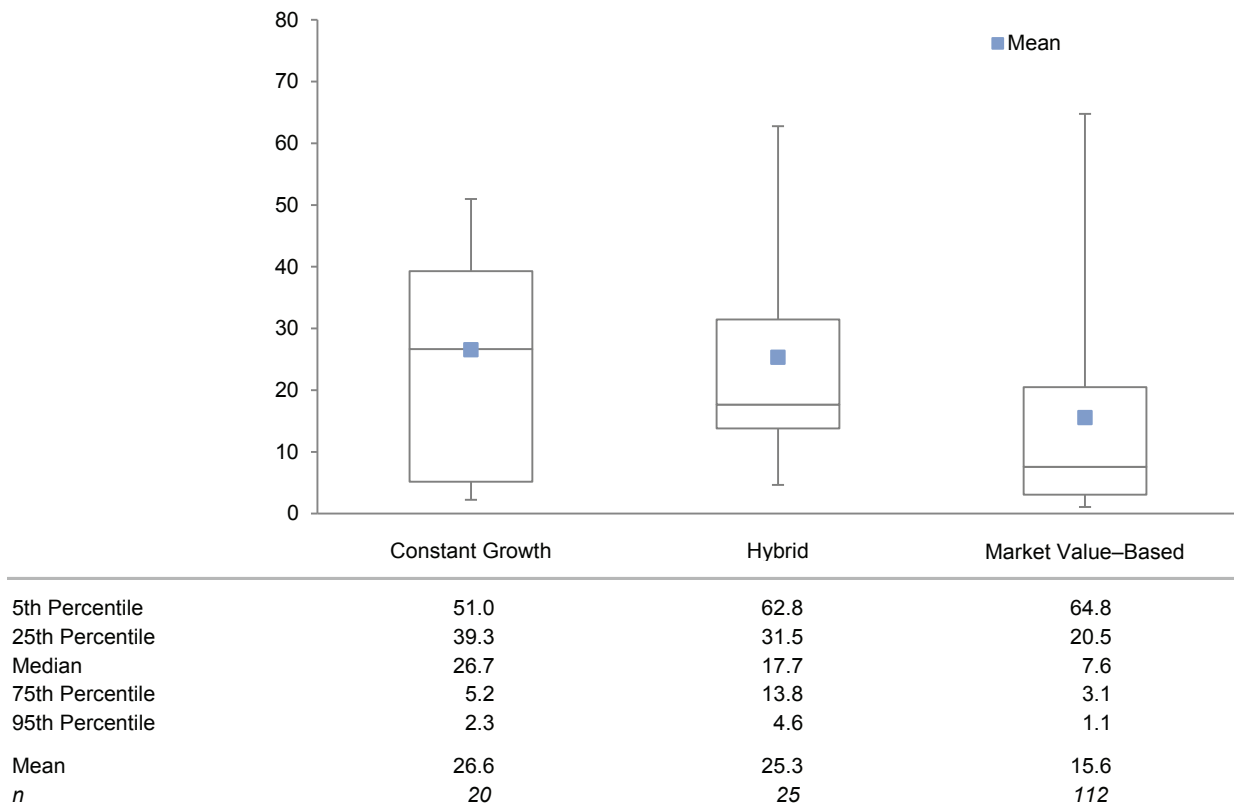
Figure 15. Long-Term Investment Portfolio (LTIP) Support of Operations by Institution Type
2014 • Percent (%)



Source: Spending policy data as reported to Cambridge Associates LLC.

Notes: LTIP support of operations is the proportion of the operating budget that is funded from LTIP payout. For the three health care institutions and eight other nonprofits that provided data, LTIP support of operations averaged 44.8% and 48.1%, respectively.

Figure 16. Long-Term Investment Portfolio (LTIP) Support of Operations by Spending Rule Type
2014 • Percent (%)



Source: Spending policy data as reported to Cambridge Associates LLC.

Note: LTIP support of operations is the proportion of the operating budget that is funded from LTIP payout. For the three health care institutions and eight other nonprofits that provided data, LTIP support of operations averaged 44.8% and 48.1%, respectively.

The more predictable stream of spending dollars presumably makes the constant growth and hybrid rules appealing to institutions with higher endowment reliance. Median endowment reliance was 26.7% for institutions using a constant growth policy, the highest among the three main rule types (Figure 16). Institutions using hybrid policies, which also contain a constant growth component, had the second highest median endowment reliance (17.7%). For institutions using a market value-based policy, median endowment reliance was just 7.6%. ■

Colleges and Universities

University of Alaska Foundation Cons. Endowment
 Allegheny College
 American University
 Amherst College
 Baylor University
 Bentley University
 Berkeley Endowment Management Company
 Bethune-Cookman University
 Boston College
 Bowdoin College
 Brandeis University
 Brown University
 Bryant University
 Bryn Mawr College
 University of California
 California Institute of Technology
 Carleton College
 Carnegie Mellon University
 Case Western Reserve University
 Chapman University
 The University of Chicago
 The City University of New York
 Claremont McKenna College
 Clarkson University
 Clemson University Foundation
 Colby College
 Colgate University
 Columbia University
 Connecticut College
 Cornell University
 Dartmouth College
 Davidson College
 University of Delaware
 Duke University
 Emerson College
 Emory & Henry College
 Emory University
 Florida International University Foundation, Inc.
 Florida State University Foundation Inc.
 University of Florida Investment Corporation
 Georgetown University
 Georgia Tech Foundation Inc.
 Gettysburg College
 Goucher College
 Grand Valley State University
 Hampton University
 Harvard Management Company, Inc.
 Harvey Mudd College
 Haverford College
 University of Hawaii Foundation
 College of the Holy Cross
 Hope College
 Houston Baptist University
 University of Houston System
 University of Illinois Foundation
 Indiana University Foundation
 Iowa State University Foundation
 Johns Hopkins University
 Kalamazoo College
 Kansas State University Foundation
 KU Endowment
 Lafayette College
 Lebanese American University
 Lehigh University
 Lewis and Clark College
 University of Louisville
 Lycoming College
 Macalester College
 University of Maine Foundation
 Maryland Institute College of Art
 MIT Investment Management Company
 University of Miami
 University of Michigan
 Michigan State University
 Mount Holyoke College
 University of Nebraska Foundation
 Nevada System of Higher Education
 New York University
 Northeastern University
 Northwestern University
 Norwich University
 University of Notre Dame
 Oberlin College
 Occidental College
 Ohio State University
 Ohio Wesleyan University
 University of Oklahoma Foundation
 Oklahoma State University Foundation
 Oregon Health and Science University Foundation
 University of Oregon Foundation
 University of Pennsylvania
 Pennsylvania State University
 Pepperdine University
 University of Pittsburgh
 Pomona College
 Princeton University
 The Principia Corporation
 Providence College
 Purdue Research Foundation
 Randolph-Macon College
 Rensselaer Polytechnic Institute
 University of Rhode Island Foundation
 Rice University
 University of Rochester
 The Rockefeller University
 Roger Williams University
 College of Saint Benedict
 University of San Diego
 Santa Clara University
 Scripps College
 Seattle University
 Siena College

Colleges and Universities (continued)

Simmons College
 University of Southern California
 Spelman College
 Stanford University
 St. Lawrence University
 University of St. Thomas
 Swarthmore College
 Temple University
 The University of Texas Investment Management Co.
 University of Toronto Asset Management Corporation
 Trinity University
 The UCLA Foundation
 UNC Management Company, Inc.
 UNCG Endowment Partners, LP
 Vanderbilt University
 The University of Vermont
 Villanova University
 University of Virginia
 Virginia Tech Foundation
 University of Washington
 Washington College
 Washington and Jefferson College
 Washington University in St. Louis
 Wellesley College
 Wesleyan University
 Western New England University
 Wheelock College
 College of William & Mary Foundation
 Williams College
 Yale University
 Yeshiva University

Cultural and Environmental

Atlanta Historical Society
 The Vivian Beaumont Theater, Inc.
 Boston Athenaeum
 Boston Symphony Orchestra Inc.
 The Brookings Institution
 California Academy of Sciences
 Chemical Heritage Foundation
 Conner Prairie Foundation
 Cypress Lawn Endowment Care Trust
 The Edison Institute
 Isabella Stewart Gardner Museum
 George Washington's Mount Vernon
 Hagley Museum and Library
 Honolulu Museum of Art
 Indianapolis Museum of Art Inc.
 Kennedy Center for the Performing Arts
 Linda Hall Library Trusts
 Longwood Gardens, Inc.
 Mashantucket Pequot Tribal Nation Endowment Trust
 Minnesota Orchestral Association
 Museum of Fine Arts, Boston
 Museum of Fine Arts, Houston
 Museum of Science, Boston
 National Gallery of Art
 New York Philharmonic
 The New York Public Library
 New York Public Radio
 Philadelphia Museum of Art
 Ravinia Festival Association
 Scenic Hudson Land Trust Inc.
 The School of American Ballet
 Seattle Art Museum
 Smithsonian Institution
 The Trustees of Reservations
 White House Historical Association - Endowment Trust
 The Henry Francis duPont Winterthur Museum, Inc.

Health Care

American Association for Cancer Research
 Baystate Health, Inc.
 The Boston Home Inc.
 Cape Cod Healthcare System
 Children's HealthCare of Atlanta, Inc.
 Children's Hospital Los Angeles
 The Children's Institute
 Hawaii Pacific Health
 High Point Regional Health System
 Howard Hughes Medical Institute
 Huntington Medical Research Institutes
 Massachusetts Eye and Ear Infirmary
 Mayo Clinic
 Medical Society of South Carolina
 Northwest Hospital
 Saint Francis Foundation
 Shore Health System
 Spastic Children's Endowment Foundation
 Texas Biomedical Research Institute
 Tufts Medical Center

Independent Schools

Auditory Learning Foundation
Brunswick School
Buckingham Browne & Nichols School
The Colburn School
Episcopal School of Dallas
Hockaday School
The Hotchkiss School
Kamehameha Schools
Lakeside School
The Lawrenceville School
The Loomis Institute
The Madeira School
Park Tudor Trust
Phillips Exeter Academy
The Pingry School
Punahou School
The Roxbury Latin School
Salisbury School
Shady Hill School
St. Paul's School
The Webb Schools
Western Reserve Academy
The Winsor School
Xaverian Brothers High School

Other Nonprofits

American College of Surgeons
American Friends Service Committee
American Geophysical Union
American Jewish Committee
American Jewish Joint Distribution Committee
American Red Cross
Animal Rescue League of Boston
Archdiocese of Chicago
Armenian Church Endowment Fund
Armenian General Benevolent Union
Baptist Foundation of Texas
Billy Graham Evangelistic Association
Catholic Church Extension Society

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