



# Endowments/LTIF

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*Vice Chancellor and Chief Financial Officer*

August 10, 2017



# Endowment Funds



The lifeblood of any university is the generous financial support from its donor community. Endowment funds, by design, are unique gifts given by donors that are invested over the long term with the purpose of producing earnings that will support the strategic goals of the institution and fulfill the philanthropic goals of individual donors.

Endowment funds benefit both current and future generations and represent the institution's promise to donors to use the income and investment gains generated by their gifts to support an aspect of the university's mission into perpetuity as specified by the donor.

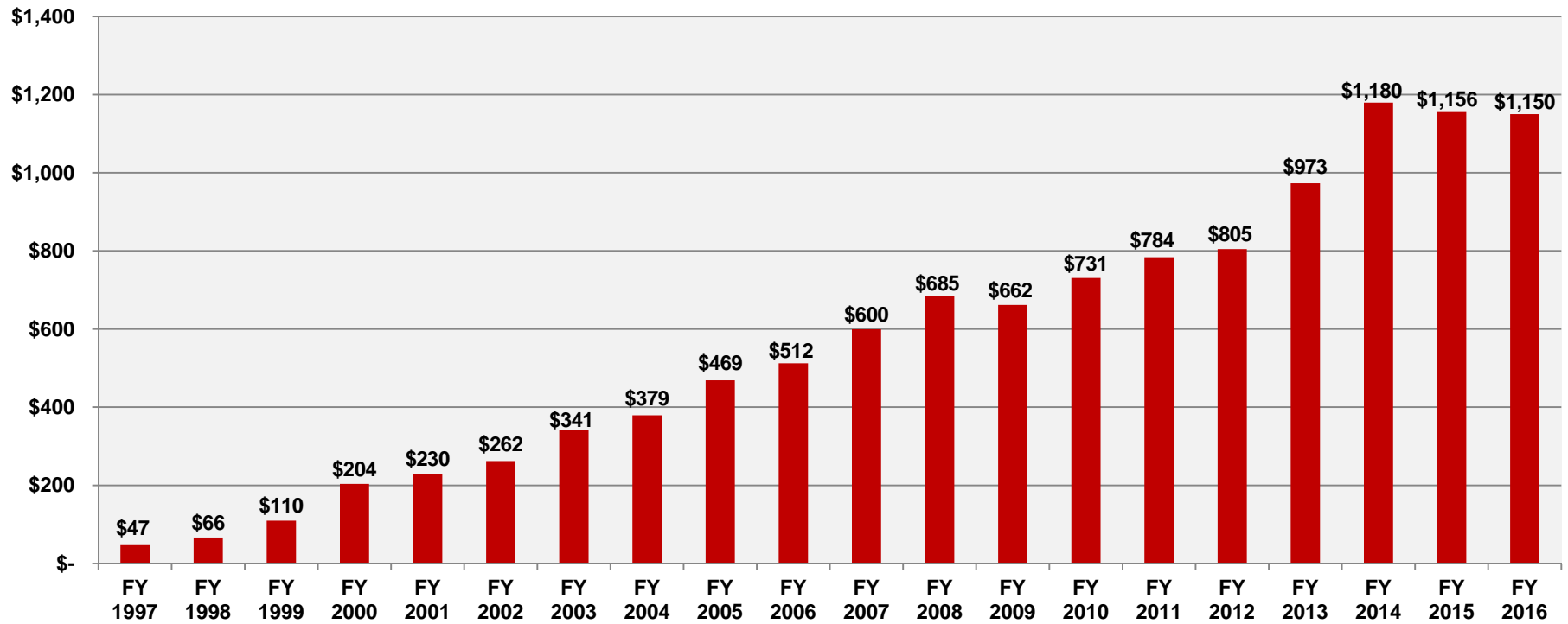
Uniform state laws provide fundamental rules for the investment and expenditures of endowment funds. The rules support two general principles:

1. Assets would be invested prudently in diversified investments that sought growth as well as income, with low volatility over time with stable funding, and
2. Appreciation of assets could prudently be spent for the purposes of the endowment.

# Endowment Fund Balance

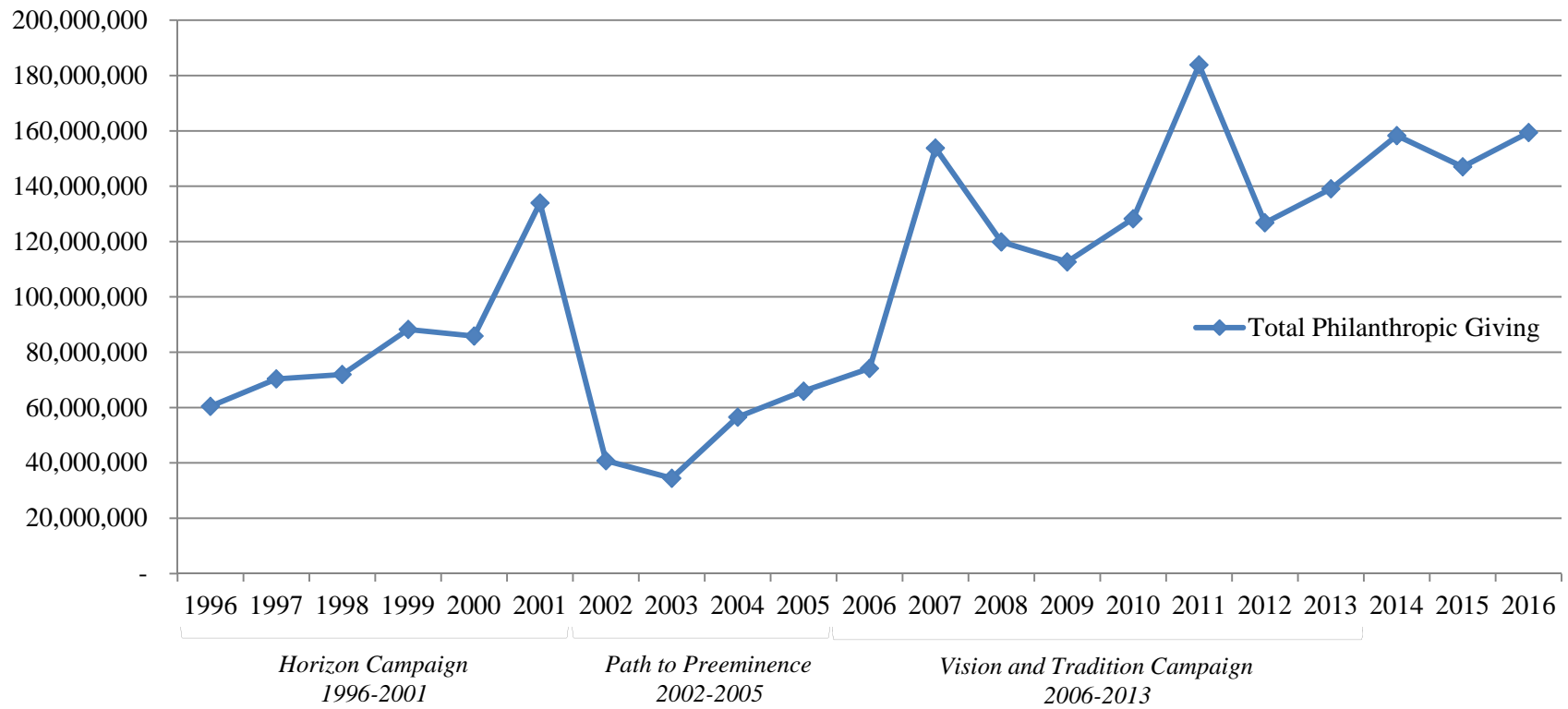


*FY 1997-FY 2016 in Millions*



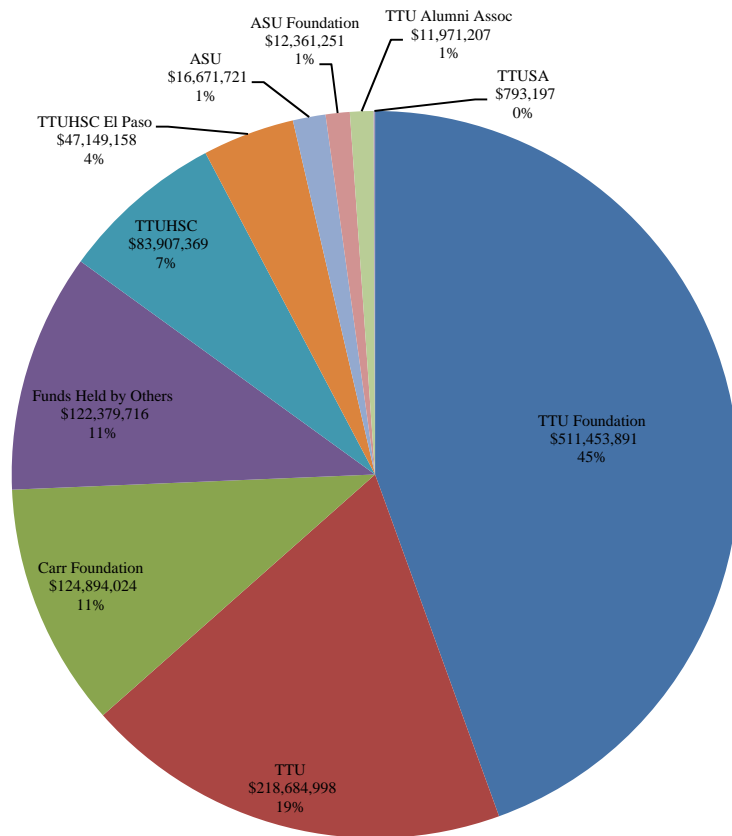


# Philanthropic Giving Totals



# Endowments by Institution

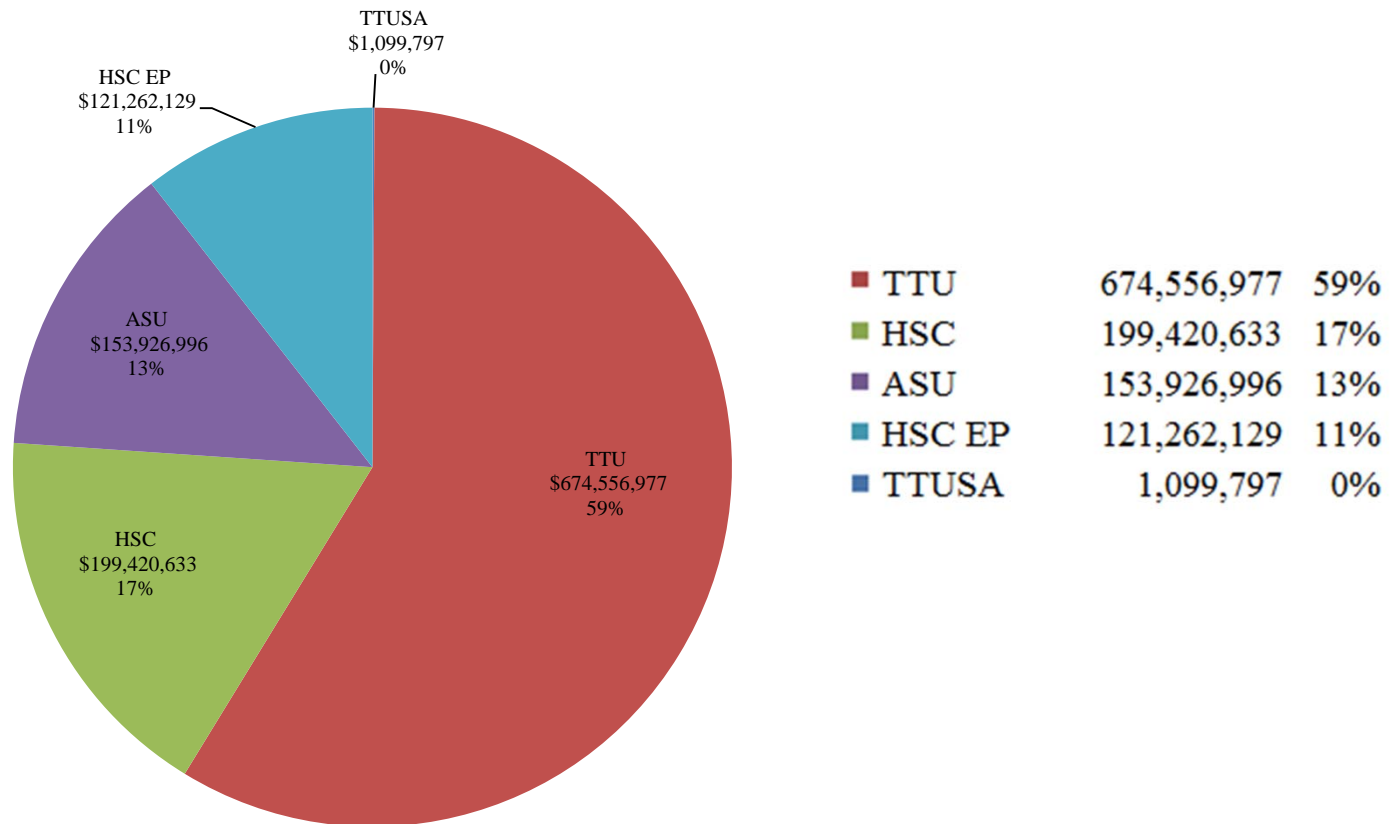
## As of August 31, 2016



■ TTU Foundation	511,453,891	45%
■ TTU	218,684,998	19%
■ Carr Foundation	124,894,024	11%
■ Funds Held by Others	122,379,716	11%
■ TTUHSC	83,907,369	7%
■ TTUHSC El Paso	47,149,158	4%
■ ASU	16,671,721	1%
■ ASU Foundation	12,361,251	1%
■ TTU Alumni Assoc	11,971,207	1%
■ TTUSA	793,197	0%

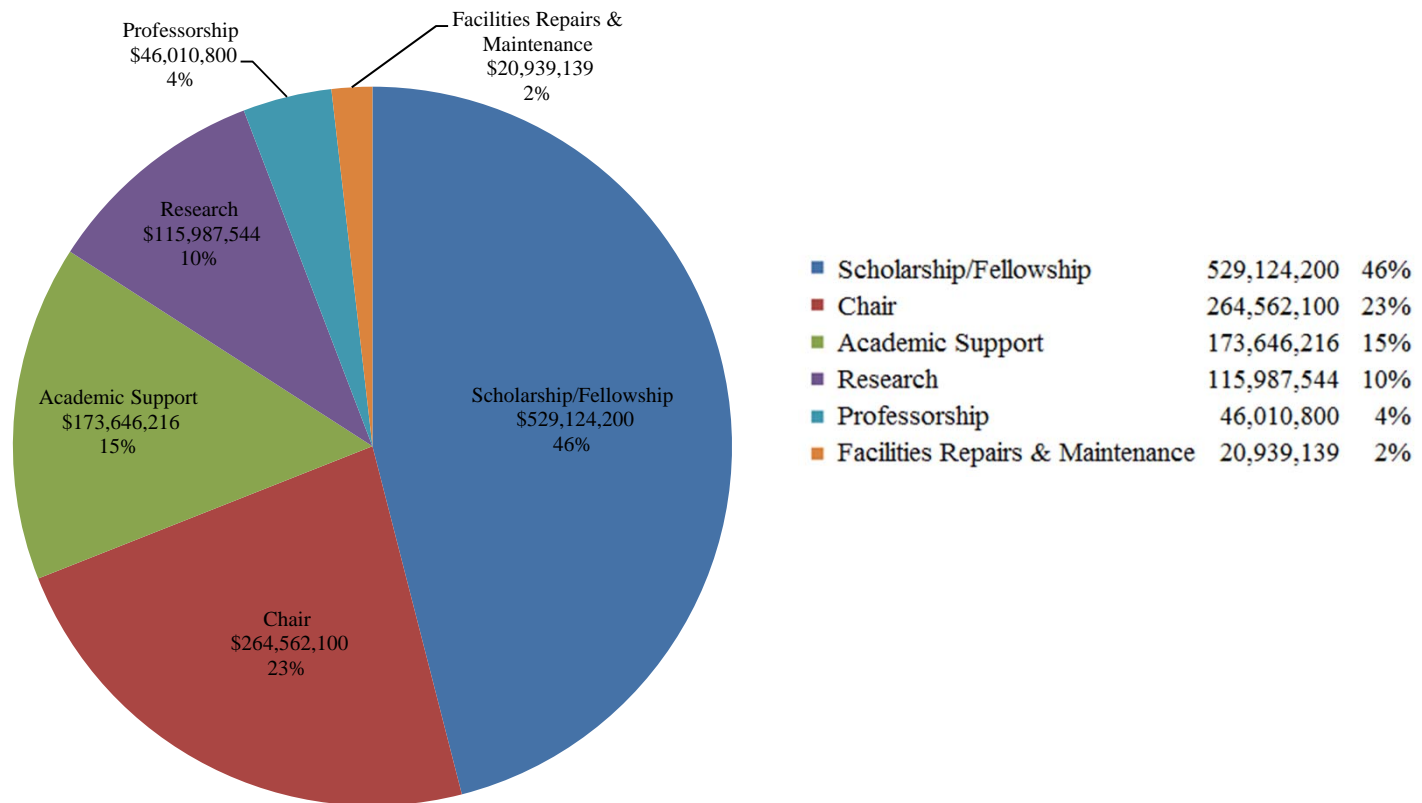
# Endowments by Component

As of August 31, 2016



# Endowments by Category

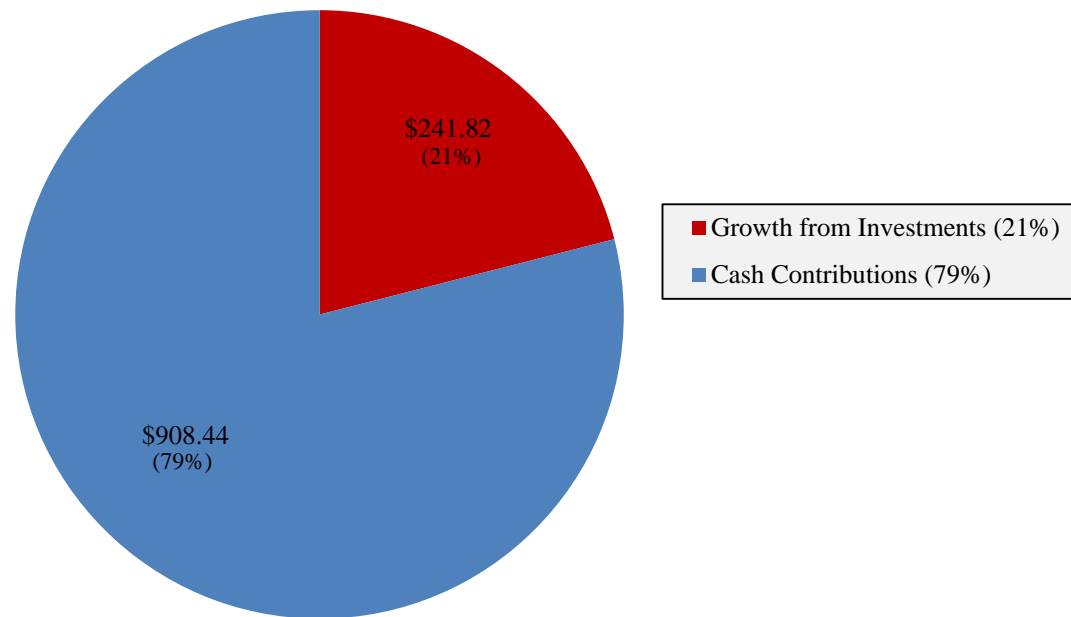
As of August 31, 2016



# How Did We Get Here?



## Historical Perspective of Endowment Composition FY 1997-FY 2016 in Millions





# Endowment Investments Rate of Return Calculations



In the financial industry there are three measures of return that are frequently used; Simple Rate of Return (SRR), Internal Rate of Return (IRR) and Time Weighted Return (TWR).

The SRR is the easiest return to calculate and understand. It is simply the percentage change in market value. The SRR is most commonly used to calculate the performance of a benchmark or index where there are no cash flows that affect the underlying performance. A SRR, although easy to calculate for a benchmark, cannot accurately measure the return of an individual's investment portfolio and is not a valid method for the TTUS Endowment Funds.

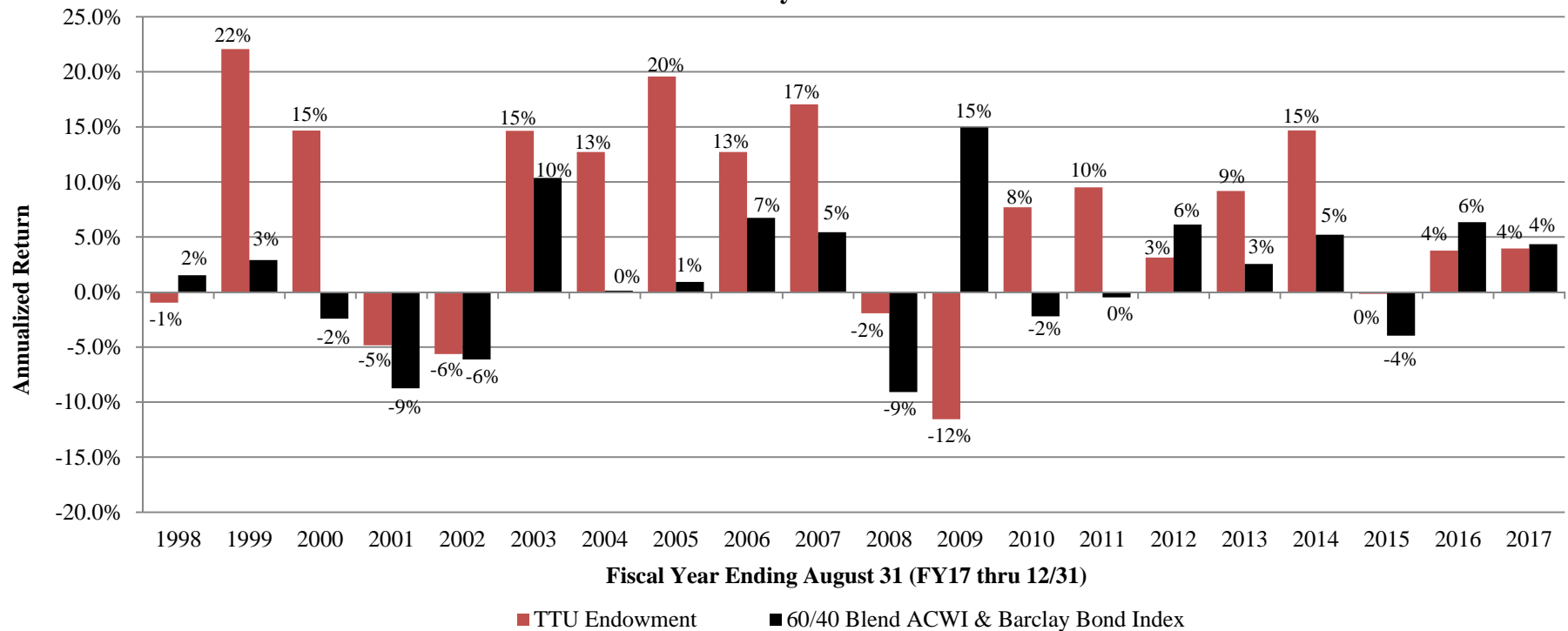
The IRR includes the effects from all cash inflows and outflows. Because cash flows are factored into the calculation, greater weighting is given to those time periods when more money is invested in the portfolio. According to this definition, the IRR of a portfolio can be significantly affected by both the size and timing of any cash contributions or withdrawals. This is typically the rate communicated in our year-end report due to the timing for the Annual Financial Reporting requirements. However, it is not an effective measurement tool for analyzing the long term performance of the portfolio's underlying assets or comparing investment managers.

The TWR captures the true investment performance by eliminating all the effects of capital additions and withdrawals from the portfolio. Simply stated, the TWR is the return on the very first dollar invested into the portfolio. The method used to calculate the TWR is derived by dividing up the performance period into shorter sub-intervals, such as one month. Each sub-interval can be further divided into intervals based on the date of any cash inflows or outflows. Then, the IRR is calculated for each of these sub-intervals. Finally, the individual IRRs are then linked together with equal weighting (not dollar weighted) to derive at the portfolio's overall TWR. This is the benchmark measurement for NACUBO reporting. To calculate the TWR, all investments statements must be analyzed and therefore is reported 90+ days after the completion of the Annual Financial Reports.

# Time Weighted Investment Returns



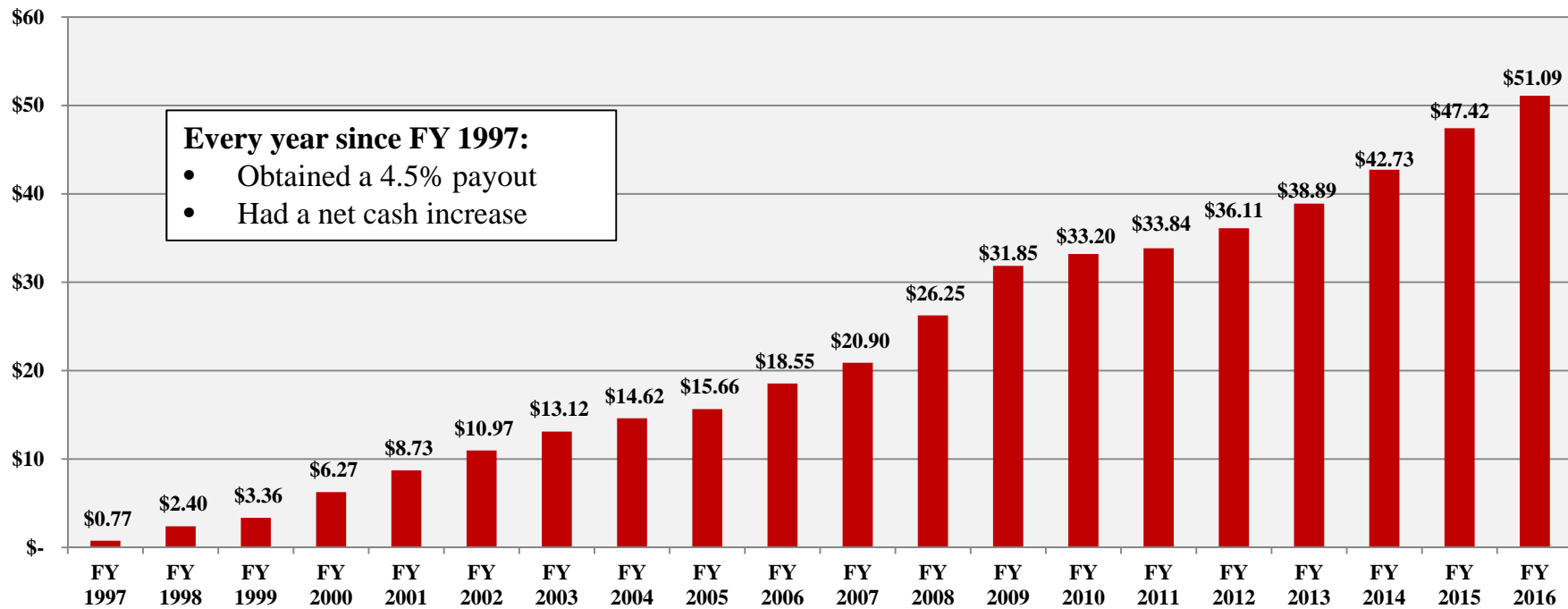
**Texas Tech University System  
Endowment Returns by Fiscal Year - Last 10 Years**



# Funds Directly Provided to Component Institutions



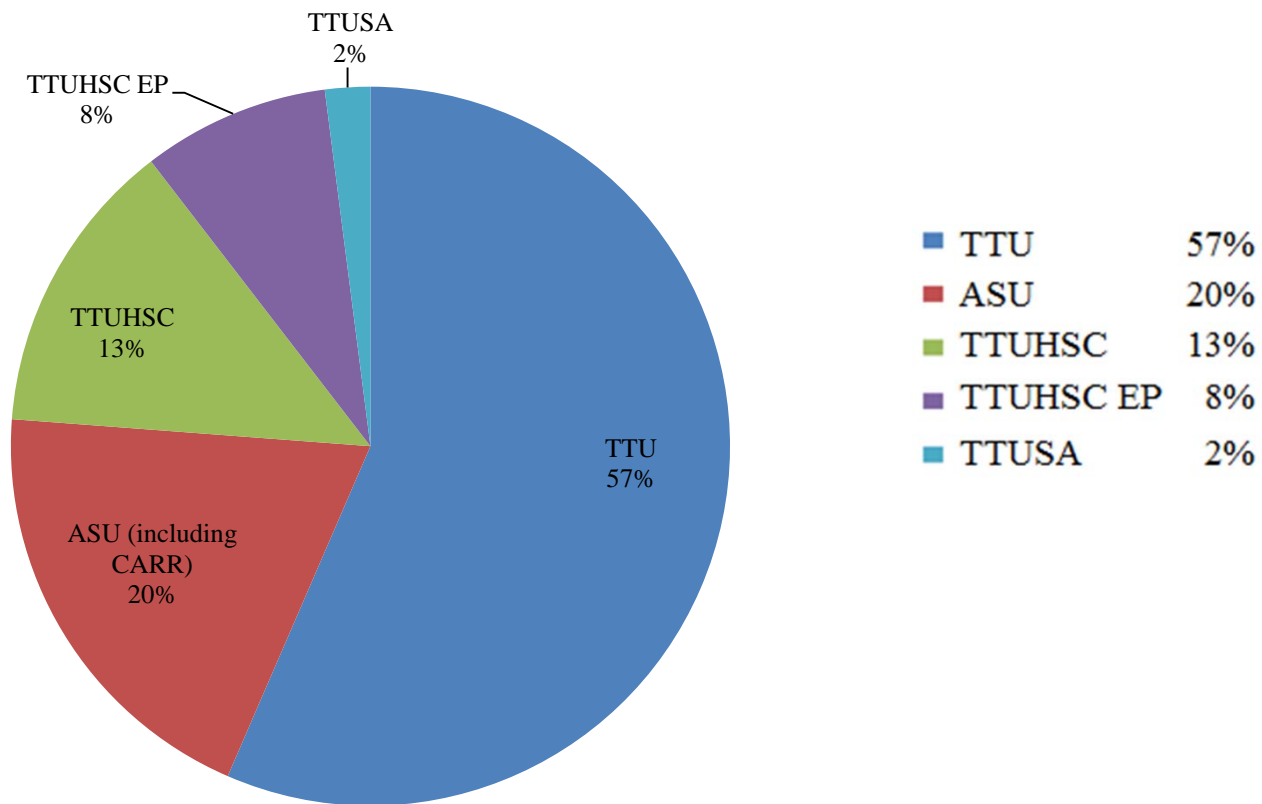
*FY 1997-FY 2016 in Millions*



\*CARR Payout is 6%

\*Note: \$456.73 million paid to institutions from FY97-FY16

# FY 2016 Distribution by Component





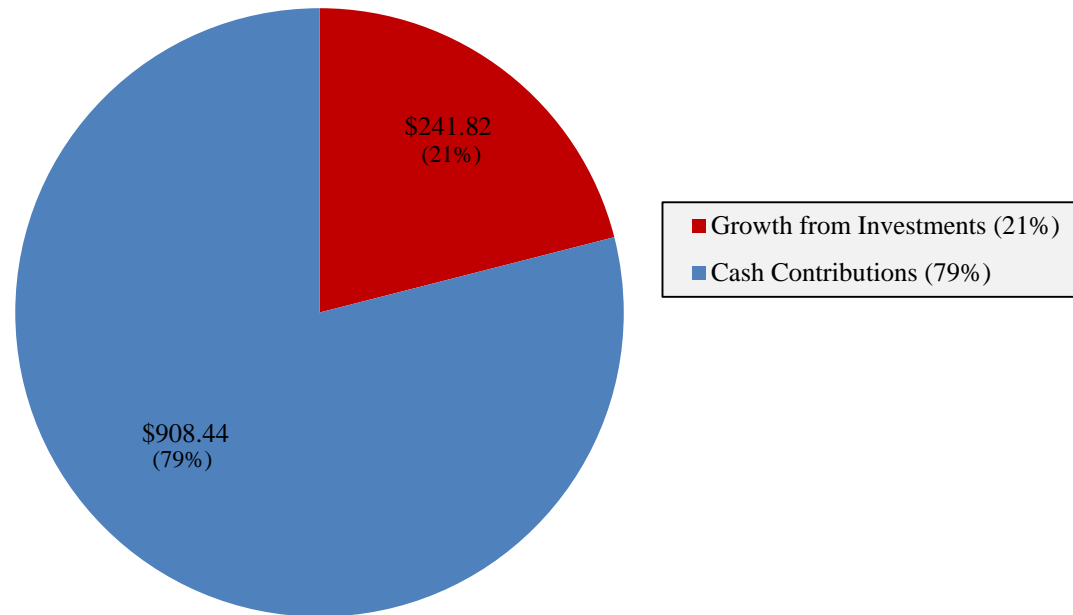
# Investment Strategy



# How Did We Get Here?



## Historical Perspective of Endowment Composition FY 1997-FY 2016 in Millions



## Determining the Value of a Share



Though distinct in purpose and restriction, endowed funds are commingled in the LTIF and tracked with unit accounting much like a large mutual fund. Endowed gifts are exchanged for units that represent a claim on a portion of the entire LTIF.

The value of a share is determined by dividing the total current market value of the assets in the University Endowment Fund by the number of shares outstanding.

*Example:*

If the LTIF was worth \$1B on a given date and there were 200,000 total shares, each share would be worth \$5,000. Note: This value is determined monthly and will increase or decrease in direct relation to investment performance and expenses. New shares are issued monthly when gifts to new or existing endowed funds are received from Institutional Advancement.

# Endowment/LTIF Governance Oversight



For Approval of:	CIO	IAC	TTUS Board
<b>Investment Policy Ranges/Targets:</b>	Recommend	Recommend	Approve
<b>Tactical Allocation Ranges/Targets:</b>	Recommend	Approve	Review
<b>Asset Class Structures:</b>	Recommend	Approve	---
<b>Manager Selection &amp; Redemption:</b>	Approve	Review	---



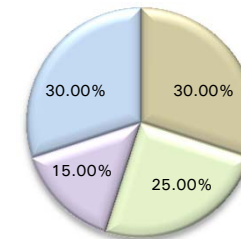
# Asset Allocation & Performance

As of May 31, 2017



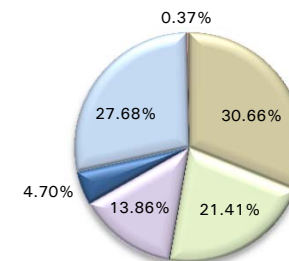
Asset Class	Total \$ Allocation	Total % Allocation	Target % Allocation	Target Range
Equity	343,684,920	30.66%	30%	30% - 40%
Debt	240,012,553	21.41%	25%	20% - 30%
Diversifying Assets	155,398,353	13.86%	15%	5% - 15%
Cash & Alpha Pool	52,733,000	4.70%	0%	0% - 10%
Private Investments	310,295,274	27.68%	30%	10% - 55%
Liquidating	4,197,280	0.37%	0%	
Portfolio Hedge	14,664,463	1.31%	0%	
<b>Total</b>	<b>1,120,985,843</b>	<b>100%</b>	<b>100%</b>	

## Target Allocation



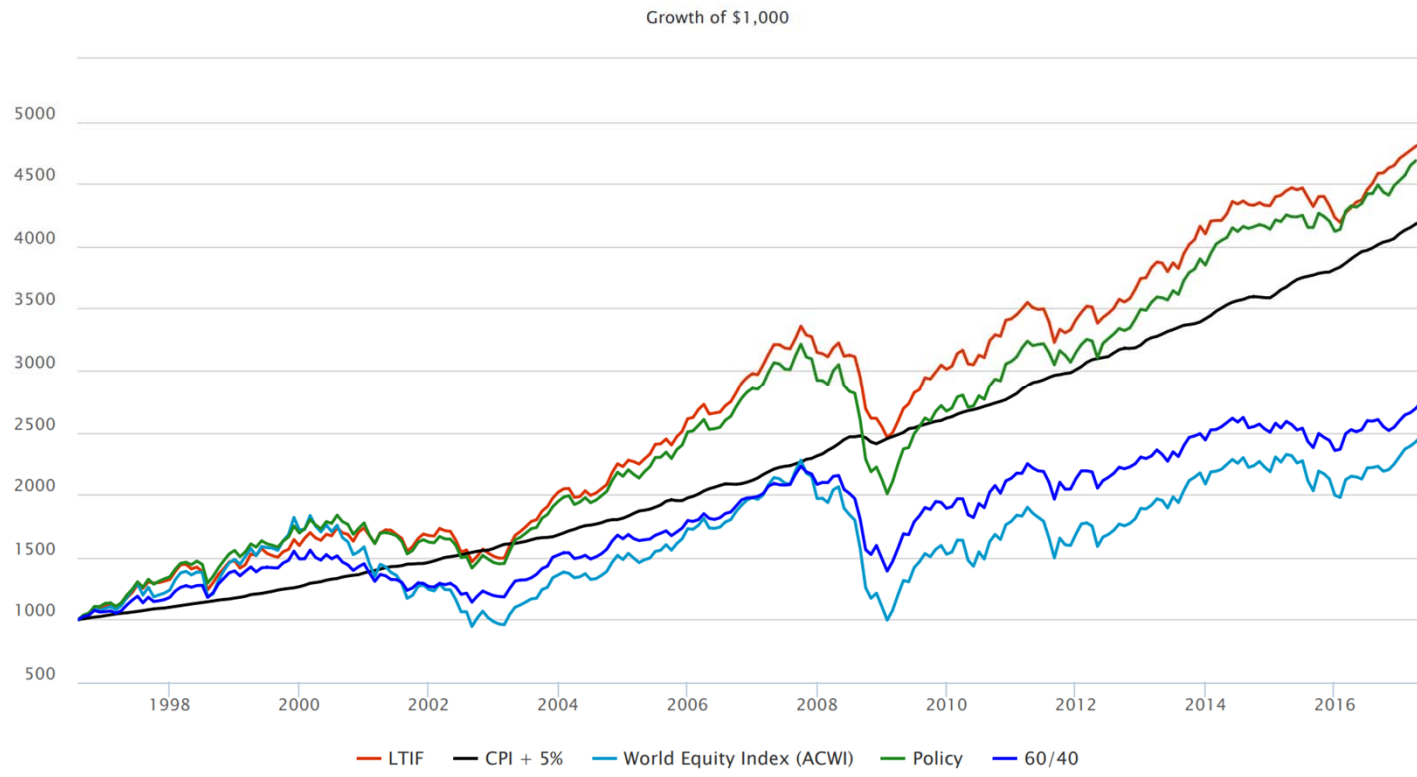
Fund	MTD Perf.	3 Mo. Perf.	Calendar YTD	Fiscal YTD	Nacubo YTD	1 Year Perf.	3 Year Perf.	5 Year Perf.
<b>TOTAL LTIF</b>	<b>0.43%</b>	<b>1.74%</b>	<b>4.54%</b>	<b>8.88%</b>	<b>12.46%</b>	<b>12.71%</b>	<b>4.92%</b>	<b>7.80%</b>
Policy Index	1.02%	3.61%	5.99%	7.54%	9.50%	10.22%	5.38%	8.96%
<b>Portfolio Hedge</b>	<b>0.01%</b>	<b>-0.10%</b>	<b>-0.06%</b>	<b>-0.15%</b>	<b>-0.33%</b>	<b>-0.23%</b>	<b>n/a</b>	<b>n/a</b>
Equity	1.34%	4.81%	11.17%	13.82%	21.08%	18.24%	6.13%	11.49%
Debt	-0.25%	0.26%	5.26%	11.80%	16.28%	17.88%	8.18%	8.24%
Diversifying Assets	-0.21%	1.07%	0.22%	1.96%	3.36%	2.39%	-2.11%	-1.49%
Cash & Alpha Pool	0.31%	0.76%	0.76%	2.95%	4.66%	4.71%	2.49%	4.31%
Private Investments	0.39%	0.96%	1.58%	8.78%	10.28%	13.81%	5.54%	7.84%
<b>Alpha</b>	<b>-0.59%</b>	<b>-1.88%</b>	<b>-1.45%</b>	<b>1.34%</b>	<b>2.96%</b>	<b>2.50%</b>	<b>-0.46%</b>	<b>-1.16%</b>

## Actual Allocation



# Growth of a Dollar

September 1996 to May 2017



# Performance vs Peers



TTUS NACUBO Percentile Ranking - All E&F				
	1 Year	3 Year	5 Year	10 Year
2016	43.8% ↑	59.6% ↑	72.1% ↑	54.9%
2015	52.3% ↑	68.4% ↑	90.6%	32.6%
2014	66.0% ↑	80.8% ↑	89.2%	18.6% ↑
2013	68.6%	96.8%	84.5%	28.5%

TTUS NACUBO Percentile Ranking - 750M-1.5B				
	1 Year	3 Year	5 Year	10 Year
2016	50.8% ↑	74.6%	88.1% ↑	66.0%
2015	63.1% ↑	74.6% ↑	92.3% ↑	42.9%
2014	68.8% ↑	84.1% ↑	93.7%	29.3% ↑
2013	77.4%	100.0%	76.9%	45.1%

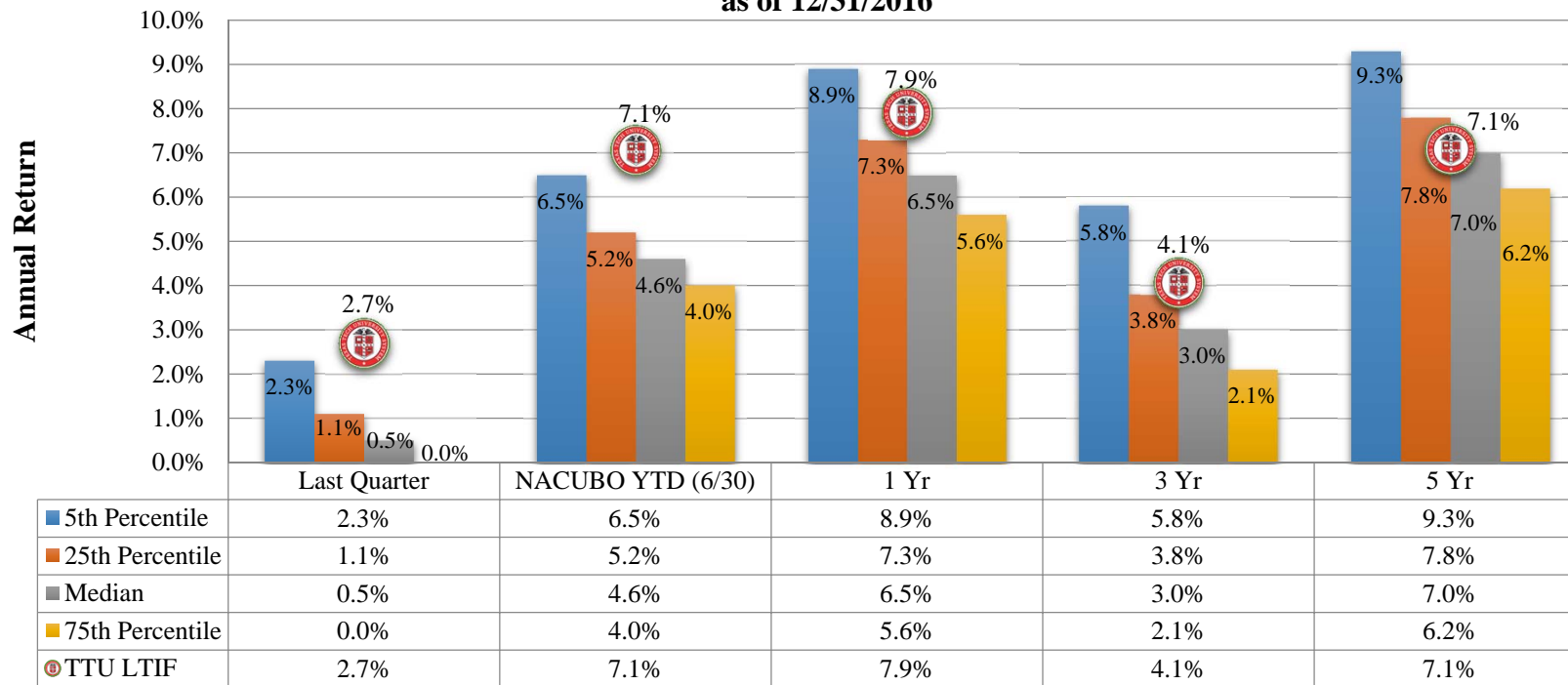
↑ IMPROVED RANKING

- 3-year rankings have improved from bottom to third quartile
- We have achieved consistent improvement in our *one-year performance rankings*, improving by 8.5% and 12.3% over the last year in the “All E&F” and “\$750m-\$1.5B” peer universe

# Performance vs Peers



## Endowment Study Range of Returns as of 12/31/2016



Source: Cambridge Report as of 12/31/16 (47 reporting institutions)



Questions?

