

Nebraska Investment Council Capital Market Assumptions

September 2021

Capital Market Assumptions

- What are they?
 - Aon's asset class return, volatility and correlation assumptions
 - Long-term; based on 10-year and 30-year projection periods
 - Forward looking assumptions
 - Best estimate assumptions (50/50 better or worse)
 - Market returns; i.e., no manager alpha (other than hedge funds and private equity which are entirely actively managed)
 - Global geographic coverage
 - Updated quarterly

Current Assumptions (10-Year): Expected Returns and Volatility (as of June 30, 2021)

| Asset Class | Expected Nominal Return | Expected Risk (Volatility) |
|--------------------------------------|-------------------------|----------------------------|
| U.S. Equity | 5.9% | 17.4% |
| Global Equity (Developed & Emerging) | 6.5 | 18.5 |
| International Equity (Developed) | 6.7 | 20.0 |
| Emerging Markets Equity | 6.9 | 27.0 |
| TIPS | 1.3 | 3.5 |
| Core Fixed Income (Market Duration) | 1.9 | 4.0 |
| High Yield Bonds | 3.3 | 12.0 |
| Bank Loans | 4.2 | 7.0 |
| Non-US Developed Bonds (Unhedged) | 1.2 | 10.0 |
| Emerging Market Bonds (USD) | 3.9 | 13.0 |
| Hedge Funds (FoF) | 3.2 | 9.0 |
| Real Estate (Total Market) | 6.1 | 17.4 |
| Private Equity | 8.2 | 25.0 |
| U.S. Inflation (CPI) | 2.2 | -- |

Current Assumptions (30-Year): Expected Returns and Volatility (as of June 30, 2021)

| Asset Class | Expected Nominal Return | Expected Risk (Volatility) |
|--------------------------------------|-------------------------|----------------------------|
| U.S. Equity | 6.4% | 17.9% |
| Global Equity (Developed & Emerging) | 7.0 | 19.0 |
| International Equity (Developed) | 7.0 | 20.5 |
| Emerging Markets Equity | 7.5 | 27.5 |
| TIPS | 1.8 | 3.5 |
| Core Fixed Income (Market Duration) | 2.5 | 4.5 |
| High Yield Bonds | 4.5 | 13.0 |
| Bank Loans | 5.0 | 7.5 |
| Non-US Developed Bonds (Unhedged) | 1.8 | 10.5 |
| Emerging Market Bonds (USD) | 4.3 | 14.5 |
| Hedge Funds (FoF) | 3.6 | 10.5 |
| Real Estate (Total Market) | 6.0 | 17.9 |
| Private Equity | 8.7 | 25.5 |
| U.S. Inflation (CPI) | 2.1 | -- |

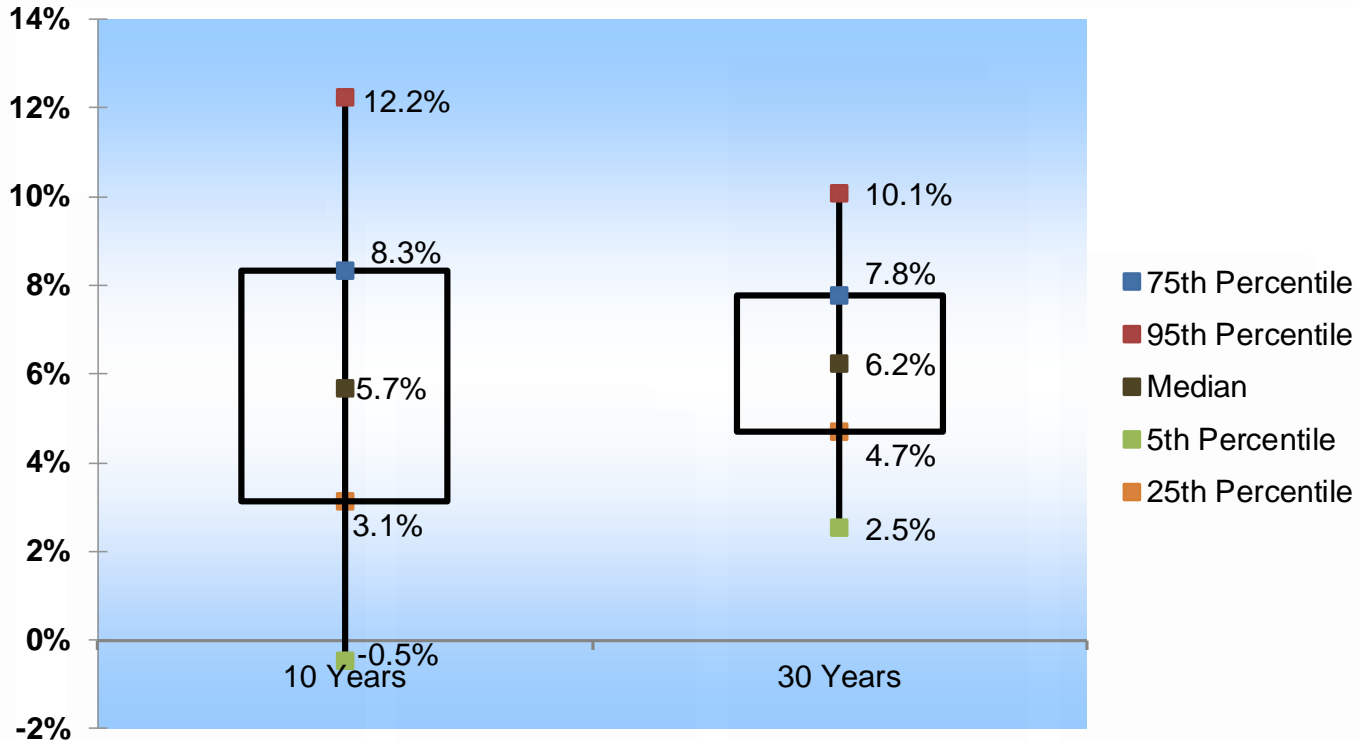
DB Plans -- Projected Returns

| | Long-Term Policy Allocation | Annualized Return (10 Year Forecast) | Standard Deviation (10 Year Forecast) | Annualized Return (30 Year Forecast) | Standard Deviation (30 Year Forecast) |
|-------------------|-----------------------------|--------------------------------------|---------------------------------------|--------------------------------------|---------------------------------------|
| U.S. Equity | 27.0% | 5.9% | 17.4% | 6.4% | 17.9% |
| Non-U.S. Equity | 11.5 | 7.0 | 20.6 | 7.4 | 21.0 |
| Global Equity | 19.0 | 6.5 | 18.5 | 7.0 | 19.0 |
| Fixed Income* | 30.0 | 2.5 | 4.2 | 3.2 | 4.6 |
| Private Equity | 5.0 | 8.2 | 25.0 | 8.7 | 25.5 |
| Real Estate | 7.5 | 6.1 | 17.4 | 6.0 | 17.9 |
| Total Fund | 100.0% | 5.7% | 12.3% | 6.2% | 12.7% |

- Current assumed rate for the Nebraska DB Plans and CBB Plans = 7.3%
 - Assumed rate will step down as follows in the coming years:
 - 2022 = 7.2%
 - 2023 = 7.1%
 - 2024 = 7.0%
- Current assumed rate for OSERS = 7.5%

*Modeled as 20% core bonds, 1.5% international bonds, 3.5% high yield bonds, and 5% bank loans

DB Plan -- Projected Returns (cont'd)



- Based on our capital market assumptions and the defined benefit plans' asset allocation targets, the NPERS defined benefit / cash balance benefit plans have a roughly 1 in 3 chance of meeting or exceeding the assumed rate of return of 7.3% over the next 10-to-30 years
- OSERS' chances of meeting or exceeding its assumed rate of 7.5% are slightly lower

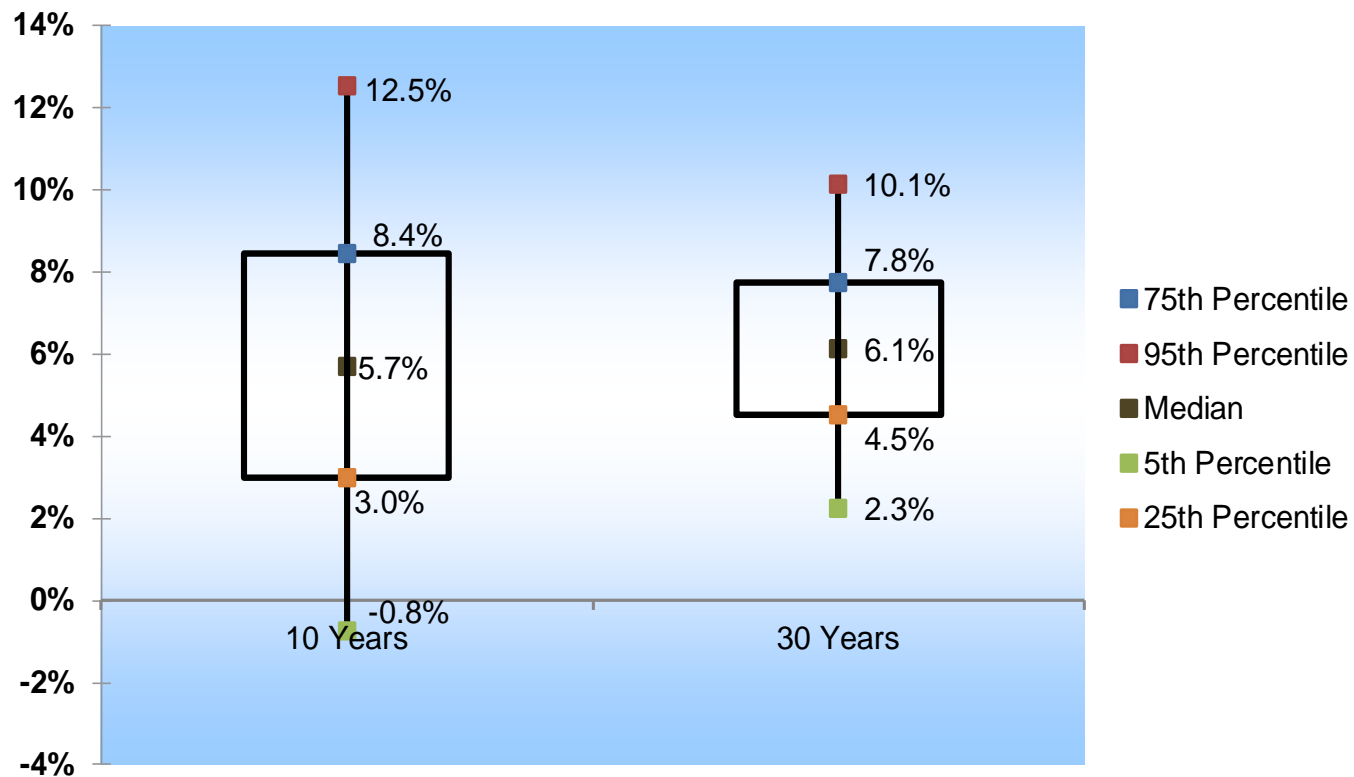
Health Care Endowment -- Projected Returns

| | Long-Term Policy Allocation | Annualized Return (10 Year Forecast) | Standard Deviation (10 Year Forecast) | Annualized Return (30 Year Forecast) | Standard Deviation (30 Year Forecast) |
|-------------------|-----------------------------|--------------------------------------|---------------------------------------|--------------------------------------|---------------------------------------|
| U.S. Equity | 30.5% | 5.9% | 17.4% | 6.4% | 17.9% |
| Non-U.S. Equity | 13.0 | 7.0 | 20.6 | 7.4 | 21.0 |
| Global Equity | 21.5 | 6.5 | 18.5 | 7.0 | 19.0 |
| Fixed Income* | 25.0 | 1.7 | 2.8 | 2.2 | 3.4 |
| Private Equity | 5.0 | 8.2 | 25.0 | 8.7 | 25.5 |
| Real Estate | 5.0 | 6.1 | 17.4 | 6.0 | 17.9 |
| Total Fund | 100.0% | 5.7% | 12.9% | 6.1% | 13.3% |

- The table above presents our median return and volatility forecasts for the Health Care Endowment over 10- and 30-year periods

*Modeled as 22.5% Intermediate G/C Bonds, 2.5% Cash

Health Care Endowment -- Projected Returns (cont'd)



- The chart above presents a forecasted distribution of outcomes for the Health Care Endowment over 10- and 30-year periods

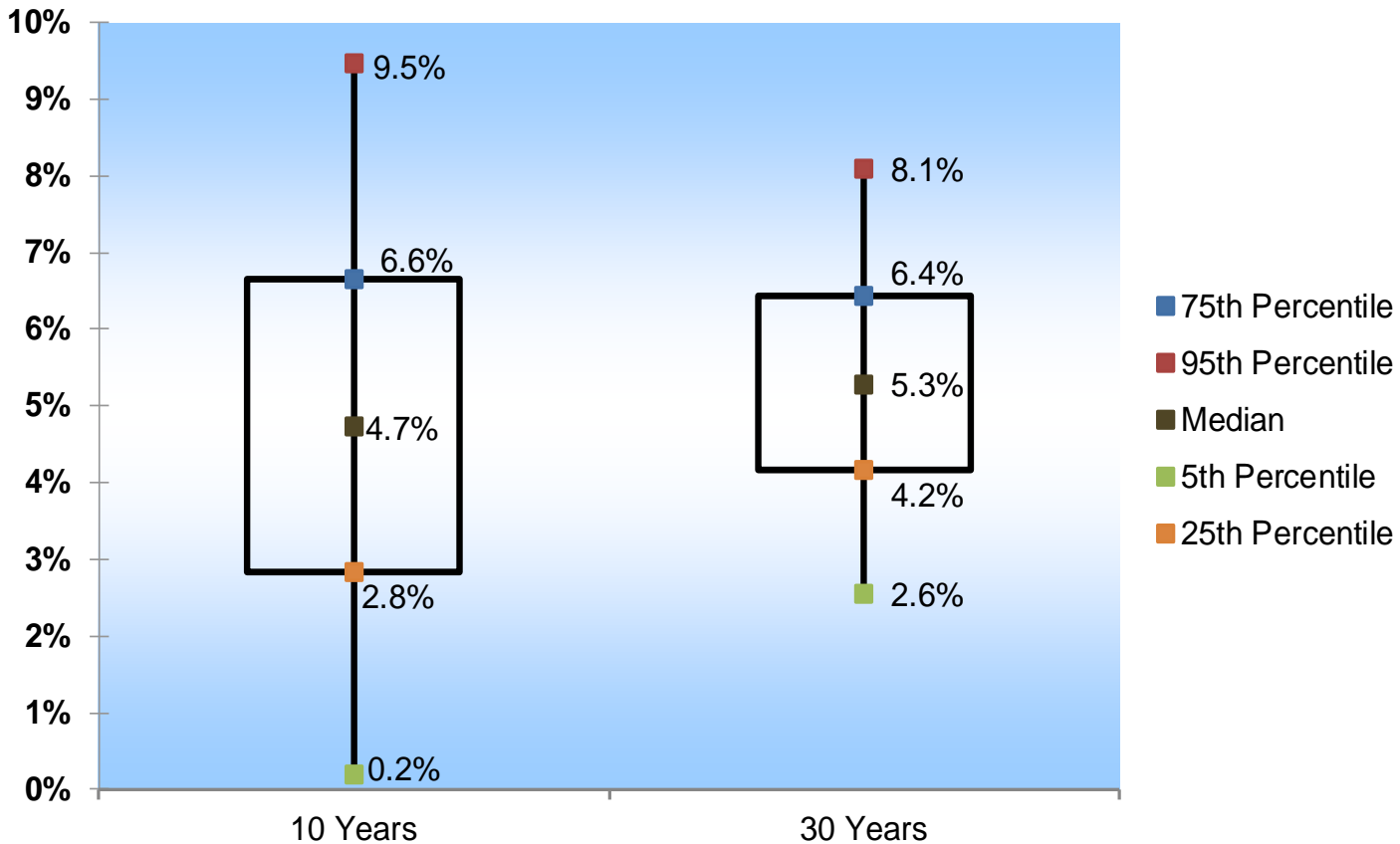
50/50 Endowments -- Projected Returns

| | Long-Term Policy Allocation | Annualized Return (10 Year Forecast) | Standard Deviation (10 Year Forecast) | Annualized Return (30 Year Forecast) | Standard Deviation (30 Year Forecast) |
|-------------------|-----------------------------|--------------------------------------|---------------------------------------|--------------------------------------|---------------------------------------|
| U.S. Equity | 19.0% | 5.9% | 17.4% | 6.4% | 17.9% |
| Non-U.S. Equity | 8.0 | 7.0 | 20.6 | 7.4 | 21.0 |
| Global Equity | 13.0 | 6.5 | 18.5 | 7.0 | 19.0 |
| Fixed Income* | 50.0 | 2.0 | 4.0 | 2.7 | 4.5 |
| Private Equity | 5.0 | 8.2 | 25.0 | 8.7 | 25.5 |
| Real Estate | 5.0 | 6.1 | 17.4 | 6.0 | 17.9 |
| Total Fund | 100.0% | 4.7% | 9.0% | 5.3% | 9.3% |

- The table above presents our median return and volatility forecasts for the 50/50 Endowments over 10- and 30-year periods

*Modeled as 47% Core U.S. Fixed Income, 3% HY Bonds

50/50 Endowments -- Projected Returns (cont'd)



- The chart above presents a forecasted distribution of outcomes for the 50/50 Endowments over 10- and 30-year periods

Aon 10-Year Assumptions: How Expected Returns Have Evolved Over the Past Decade

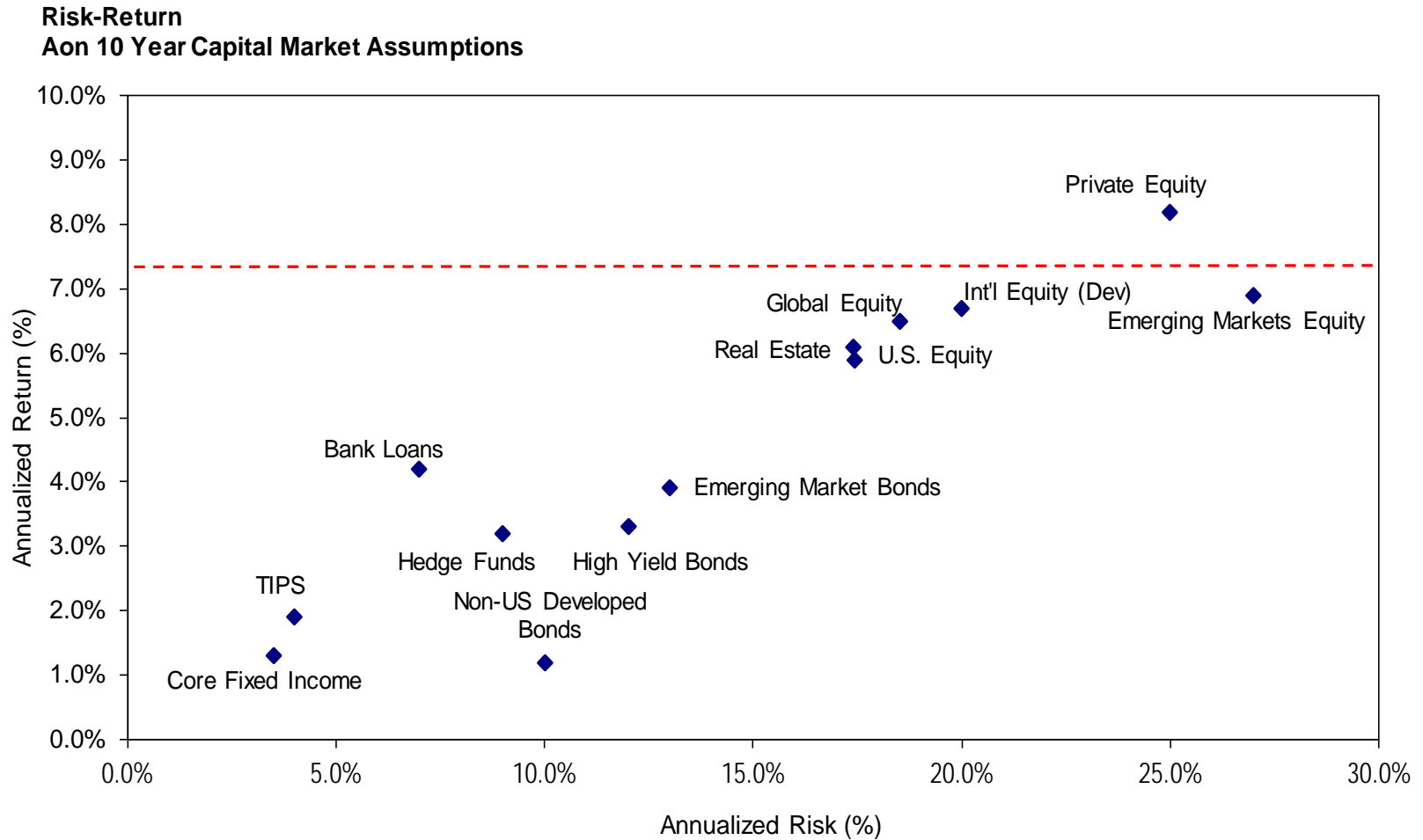
| Asset Class | Expected Nominal Return | | | | | | | | | | |
|-------------------------------------|-------------------------|------|------|------|------|------|------|------|------|------|------|
| | 6/30/21 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 |
| Large Cap U.S. Equity | 5.8% | 5.7% | 6.2% | 6.2% | 6.3% | 6.2% | 6.6 | 6.7% | 7.1% | 7.5% | 8.0% |
| Small Cap U.S. Equity | 6.0 | 5.9 | 6.4 | 6.4 | 6.5 | 6.4 | 6.8 | 6.9 | 7.3 | 7.7 | 8.2 |
| Global Equity | 6.5 | 6.5 | 7.0 | 7.2 | 7.1 | 7.0 | 7.1 | 7.1 | 7.5 | 8.3 | 8.9 |
| International Equity (Developed) | 6.7 | 6.8 | 7.0 | 7.3 | 7.2 | 7.0 | 7.1 | 7.2 | 7.3 | 8.4 | 9.1 |
| Emerging Markets Equity | 6.9 | 6.9 | 7.9 | 8.1 | 7.6 | 7.4 | 8.4 | 8.4 | 8.9 | 9.4 | 9.8 |
| Cash (Gov't) | 1.5 | 0.9 | 1.4 | 2.8 | 2.0 | 1.3 | 1.8 | 2.2 | 2.5 | 1.3 | 1.5 |
| Core Fixed Income (Market Duration) | 1.9 | 1.4 | 2.2 | 3.5 | 2.7 | 2.1 | 2.7 | 2.9 | 3.3 | 1.9 | 2.6 |
| High Yield Bonds | 3.3 | 2.8 | 3.6 | 4.0 | 3.6 | 4.1 | 5.9 | 4.2 | 4.6 | 3.9 | 5.9 |
| Hedge Funds Universe ¹ | 3.2 | 2.8 | 3.3 | 4.2 | 3.7 | 3.4 | 3.8 | 5.0 | 5.2 | 5.2 | 5.7 |
| Real Estate (Broad Market) | 6.1 | 6.1 | 6.1 | 5.9 | 6.0 | 5.4 | 6.6 | 7.0 | 7.2 | 7.4 | 7.3 |
| Private Equity | 8.2 | 8.0 | 8.6 | 8.2 | 8.7 | 8.2 | 9.0 | 9.0 | 9.3 | 9.7 | 9.8 |
| Inflation | 2.2 | 2.1 | 2.1 | 2.3 | 2.3 | 2.1 | 2.0 | 2.2 | 2.1 | 2.3 | 2.1 |

¹ Hedge Fund Universe assumptions are capital market assumptions for fund of hedge funds

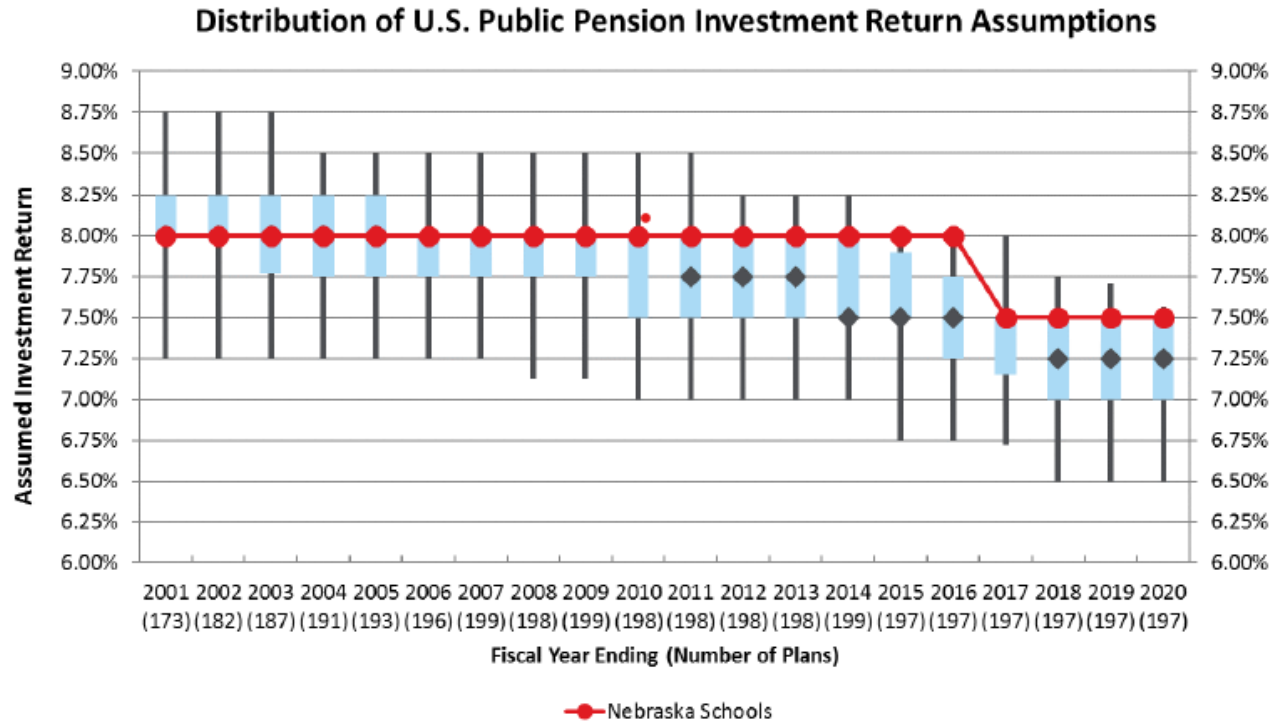
- Our return expectations have decreased over the past several years

| Color Key |
|---------------------|
| Increased from 2011 |
| No Change from 2011 |
| Decreased from 2011 |

Appendix I: Aon Forward Looking Return Expectations by Asset Class

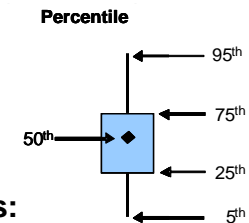


Appendix II: Peer Public Fund Assumed Rates¹



Key Takeaways:

- The public pension peer median actuarial assumption for investment return has declined from 8.00% from 2001-2010 to 7.25% based on the latest survey data
- NPERS' assumption for FYE 2019 (7.50%) fell at the 75th percentile relative to its peers
- If NPERS exceeds (or falls short of) the actuarial return assumption, lower (or higher) funding will be needed in future years



Note: All NPERS Pension Plans will be reducing their expected return assumptions in future years: 7.50% (for 2020), 7.30% (2021), 7.20% (2022), 7.10% (2023), and 7.00% (2024+)

Source: Public Plans Data (publicplansdata.org) as of July 2020; Expected Returns are the assumptions made by the plans included in the data set.

¹ Peers defined as public funds published within publicplansdata.org as of July 2020; Number of plans per year are shown in parentheses

Appendix III: Endowment -- Estimated Yields*

| Health Care Endowments | | |
|-------------------------------|----------------------|---------------|
| | Policy Target | Yield* |
| U.S. Equity | 30.5% | 1.3% |
| Non-U.S. Equity | 13.0% | 2.1% |
| Global Equity | 21.5% | 1.7% |
| Fixed Income | 25.0% | 1.8% |
| Real Estate | 5.0% | 3.9% |
| Private Equity | 5.0% | 0.0% |
| Total Fund | 100.0% | 1.7% |
| 50/50 Endowments | | |
| | Policy Target | Yield* |
| U.S. Equity | 19.0% | 1.3% |
| Non-U.S. Equity | 8.0% | 2.1% |
| Global Equity | 13.0% | 1.7% |
| Fixed Income | 50.0% | 2.9% |
| Real Estate | 5.0% | 3.9% |
| Private Equity | 5.0% | 0.0% |
| Total Fund | 100.0% | 2.3% |

*Based on Index yields at 6/30/2021. Estimates utilize dividend yield for stock indices, wtd. avg. coupon for bond indices, income component of real estate index.

Legal Disclosures and Disclaimers

Investment advice and consulting services provided by Aon Investments USA Inc. The information contained herein is given as of the date hereof and does not purport to give information as of any other date. The delivery at any time shall not, under any circumstances, create any implication that there has been a change in the information set forth herein since the date hereof or any obligation to update or provide amendments hereto.

This document is not intended to provide, and shall not be relied upon for, accounting, legal or tax advice. Any accounting, legal, or taxation position described in this presentation is a general statement and shall only be used as a guide. It does not constitute accounting, legal, and tax advice and is based on Aon Investments' understanding of current laws and interpretation.

Aon Investments disclaims any legal liability to any person or organization for loss or damage caused by or resulting from any reliance placed on that content. Aon Investments reserves all rights to the content of this document. No part of this document may be reproduced, stored, or transmitted by any means without the express written consent of Aon Investments.

Aon Investments USA Inc. is a federally registered investment advisor with the U.S. Securities and Exchange Commission. Aon Investments is also registered with the Commodity Futures Trading Commission as a commodity pool operator and a commodity trading advisor, and is a member of the National Futures Association. The Aon Investments ADV Form Part 2A disclosure statement is available upon written request to:

Aon Investments USA Inc.
200 E. Randolph Street
Suite 700
Chicago, IL 60601
ATTN: Aon Investments Compliance Officer

© Aon plc 2020. All rights reserved.