NISA INVESTMENT ADVISORS, L.L.C.®

NUCLEAR DECOMMISSIONING TRUSTS

2012 Survey of Trust Sponsors

Nuclear Decommissioning Trust Survey

NISA Investment Advisors, L.L.C. (NISA) is pleased to present the 13th edition of the biennial Survey of Nuclear Decommissioning Trust (NDT) Sponsors. This report is published as a resource for, and service to, the NDT community. It is intended to provide insight into investment activities and trends within the NDT industry. Information contained herein has many potential uses and a variety of audiences, including trust sponsors, federal and state regulatory bodies, trust custodians, and investment managers.

U.S. Nuclear Power Plants

- The U.S. Nuclear Regulatory Commission (NRC) is actively reviewing 9 combined license applications from 9 companies and consortia for 14 new units.
- Five new nuclear power plant reactors are currently under construction.
- There are currently 104 nuclear power plant reactors licensed to operate at 65 sites in 31 states by 32 companies. Investor-Owned Utilities (IOUs) represent approximately 82% of operating megawatt capacity.
- The NRC has approved twelve license extensions since the 2010 Survey; 14 others are currently under review and 15 additional submissions are expected.
- Two companies have announced permanent individual unit shutdowns since the last survey.
- Currently, 29 power reactors are undergoing decommissioning or have completed a significant portion of decommissioning.

Survey Data

- Information as of December 31, 2012 was requested from Investor-Owned Utilities.
- Surveys were sent to IOU owners of nuclear plants. Twenty-three completed surveys, representing 96% of total Investor-Owned Utility megawatt capacity, were received.
- Unless otherwise noted, averages are calculated based on the number of responses.

NISA wishes to thank NDT sponsors for their participation in this survey.

Jess B. Yawitz, Ph.D.
Chairman & Chief Executive Officer

William J. Marshall, Ph.D.
President

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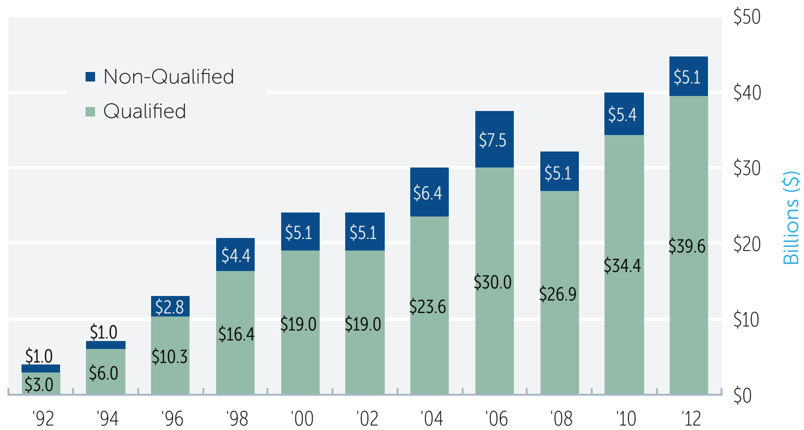
Nuclear Decommissioning Trusts

Estimated Assets

The total estimated market value of NDT assets held by Investor-Owned Utilities grew to almost $45 billion, an increase of 12% ($4.8 billion) from the last survey. Qualified Trust assets increased 15%, while Non-Qualified Trust assets decreased 6%. The discrepancy in asset changes was due to variations in asset allocation within each trust type and the continued pour-over of Non-Qualified Trust assets into Qualified Trusts.

Based on information obtained from recent 10 CFR 50.75(f)(1) filings, Public Power Authorities, Municipalities, and Cooperatives held approximately $5.3 billion in NDT assets as of December 2012. Therefore, as of year-end 2012, we estimate that in total, Nuclear Decommissioning Trust assets exceeded $50 billion.

Total Estimated Assets

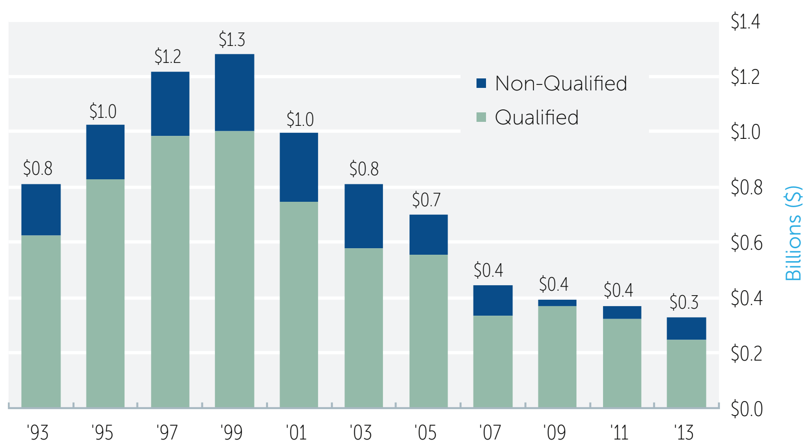


Expected Contributions

Expected contributions continued their declining trend from the prior survey. Nearly 75% of respondents reduced expected 2013 contributions from their 2011 estimates. Projected 2013 contributions are $327 million, with $249 million going to Qualified Trusts and $78 million to Non-Qualified Trusts. Lower inflation assumptions and longer investment horizons resulting from license extensions may be the basis for lower annual contributions.

More than 90% of respondents indicated continued contributions to Qualified Trusts and 30% of respondents indicated continued contributions to Non-Qualified Trusts.

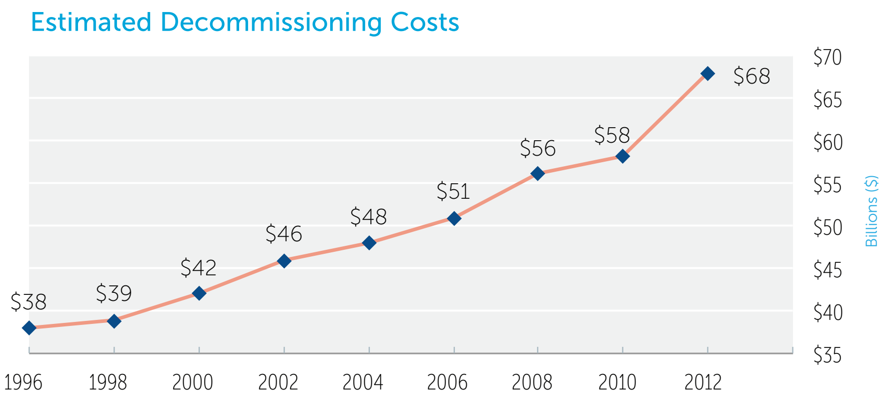
Total Expected Contributions



Estimated Decommissioning Costs

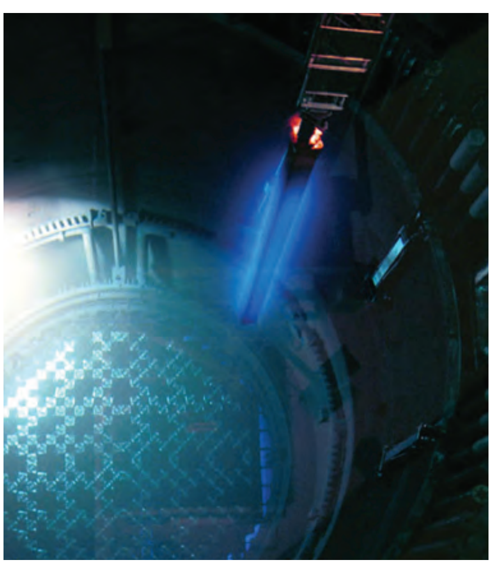
Total 2012 estimated decommissioning costs were $68 billion based on survey responses. The 2012 decommissioning estimate increased 17% from the 2010 Survey and 79% from the 1996 Survey. The annualized cost escalation rate for the 16-year period from 1996 to 2012 was approximately 3.7%.

The estimated costs shown below represent the greater of NRC-filing or site-specific costs provided by respondents. Based on individual survey responses, NRC costs were, on average, 75% of site-specific costs.



NRC Filing Data

We compared selected asset and cost data from publicly available decommissioning financial assurance filings, as of December 31, 2012, to survey data as a reasonableness check. Survey and NRC differences appear to result primarily from assets and costs attributable to non-radiological decommissioning and site-specific vs. CFR 50.75 methodologies. The data in the table below were estimated based on NRC filings.



	NRC	
Operational	Cost	Assets
Investor-Owned Utilities	$50.8B	$41.7B*
Non-Investor-Owned Utilities	$8.9B	$5.3B
TOTAL	$59.7B	$47.0B

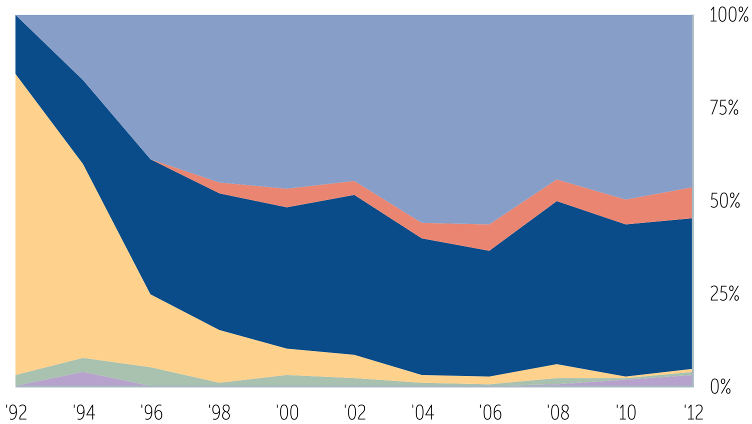
*After Tax

Qualified NDT

Historical Asset Allocation

Despite several significant equity market movements and periods of high volatility over the past decade, asset allocations have remained fairly constant. The average Qualified Trust equity allocation decreased slightly to 55% in 2012 from 57% in 2010. The beneficiary of the decrease was the “Other” category, (primarily hedge funds, private equity, commodities), which for the first time since 1994 rose above 2%. Nearly 30% of sponsors indicated an actual or target allocation to alternative asset strategies. Fixed income allocations remained constant.

Average Trust Allocations

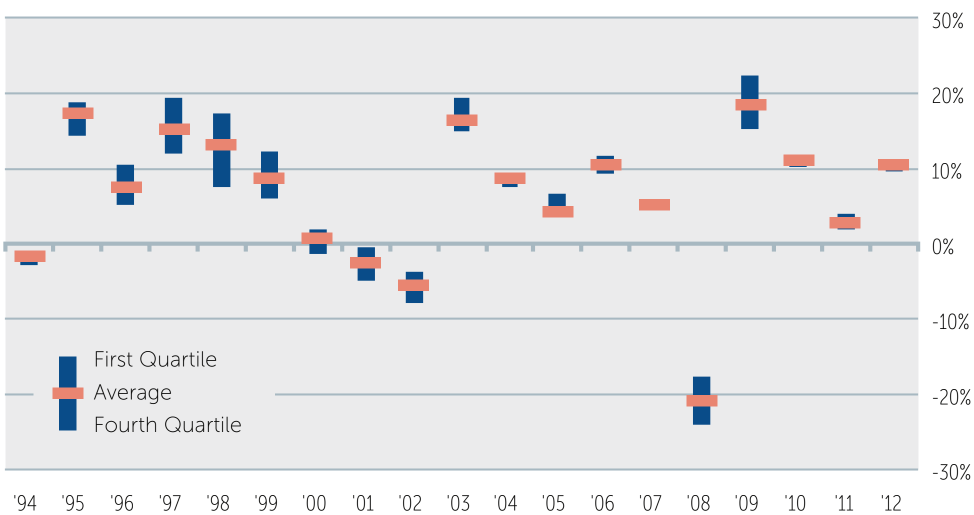


	2010	2012
US Equity	50%	47%
Int'l Equity	7%	8%
Taxable Bonds	41%	41%
Tax-Exempt Bonds	1%	1%
Cash	0%	1%
Other	2%	3%

Historical After-Tax Returns

Qualified Trust performance was positive in both 2011 and 2012. The average trust return has been positive for 9 out of the past 10 years and 15 of the 19 years shown in the graph. The average annual after-tax return for the 19-year period was 6.3%.

After-Tax Returns



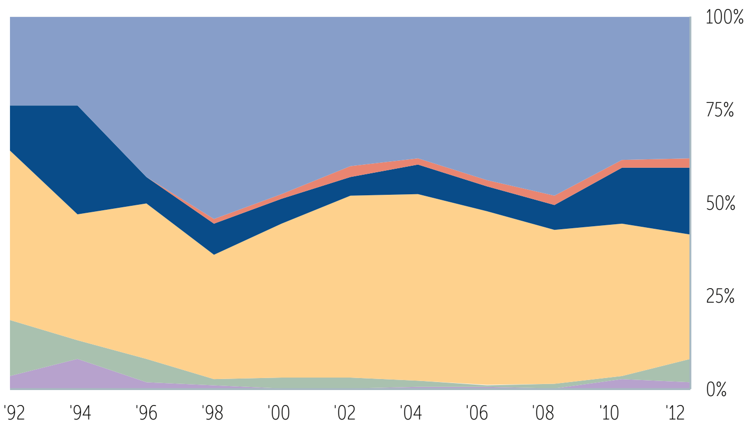
Average Equity Allocation	
2012	55%
2010	56%
2008	50%
2006	64%
2004	60%
2002	49%
2000	52%
1998	48%
1996	39%
1994	18%

Non-Qualified NDT

NQT Historical Asset Allocation

Non-Qualified Trusts have shrunk to a survey-low 11% of total NDT assets as sponsors continue to pour-over. Of the respondents, 18 sponsors reported having Non-Qualified trusts, although a handful of sponsors hold 85% of Non-Qualified Trust assets. Several Non-Qualified Trusts have 100% allocations to a specific asset class. Tax-exempt fixed income as a percentage of Non-Qualified Trusts showed a decline since the 2010 Survey, decreasing to 33% from 41%.

Average Trust Allocations

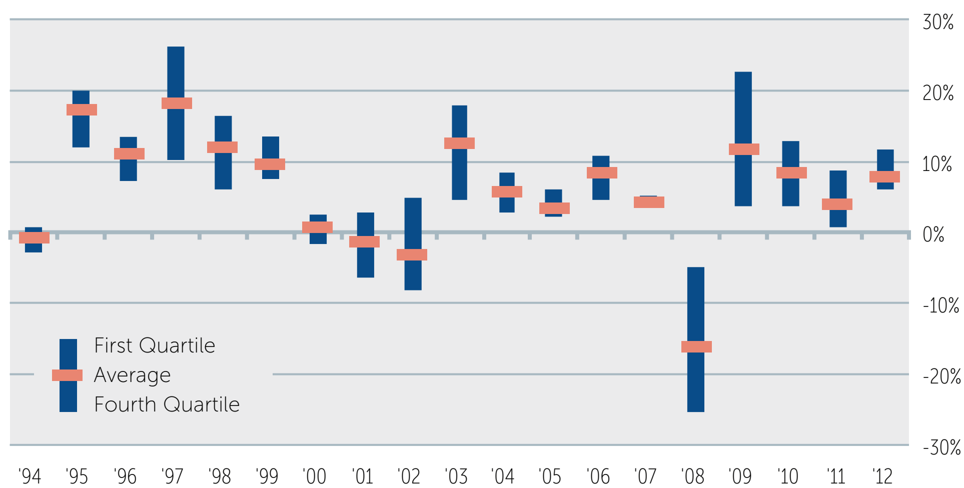


	2010	2012
US Equity	38%	38%
Int'l Equity	2%	3%
Taxable Bonds	15%	18%
Tax-Exempt Bonds	41%	33%
Cash	1%	6%
Other	3%	2%

Historical After-Tax Returns

The average Non-Qualified Trust total after-tax return for the two-year period since the last survey was 12.2%. The pre-tax total returns of the S&P 500 Index and Barclays Capital Full Municipal Bond Index over the same period were 18.5% and 18.2%, respectively. The average annualized after-tax return for the 19-years was 6.0%, which compares favorably with the after-tax return assumptions for the same period.

After-Tax Returns



Average Equity Allocation	
2012	41%
2010	40%
2008	50%
2006	46%
2004	40%
2002	43%
2000	50%
1998	56%
1996	43%
1994	24%

Total NDT

Historical Asset Allocation

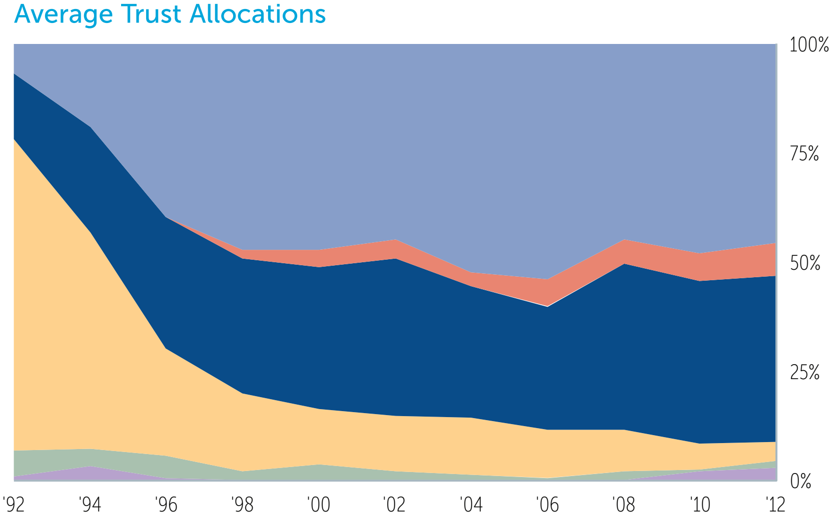
The graph below shows average actual allocations to major asset classes since 1992. The average international equity allocation increased from the last survey, despite returns lagging those of major domestic markets over the past two years.

The average target equity allocation has declined slightly to 55% from its high of approximately 60% in the 2004 - 2008 surveys.

Several respondents indicated allocations to alternative asset strategies resulting in the 3% allocation to the "Other" asset class. For those that indicated an allocation to alternatives, the average target allocation was 15%, although due to the few responses and variability in allocations, the average may be skewed. The median allocation was 10%.

International and Emerging Market Equity, REITs, and International Fixed Income were the most frequently mentioned asset classes being considered for future allocations.

Average Trust Allocations



	2010	2012
US Equity	48%	46%
Int'l Equity	6%	8%
Taxable Bonds	37%	38%
Tax-Exempt Bonds	6%	4%
Cash	0%	1%
Other	2%	3%

Total Trust Equity Allocations

	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	2012
Actual	7%	19%	40%	49%	51%	49%	56%	60%	50%	55%	53%
Target	29%	44%	50%	55%	55%	55%	60%	60%	59%	56%	55%

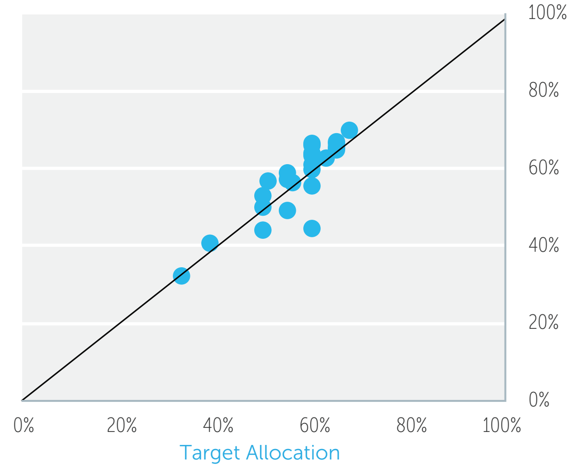
Asset Allocations

Equity Allocations

The chart at the right shows each trust's actual equity allocation relative to its target allocation for December 31, 2012. Observations below the diagonal reflect equity allocations which are below their targets, while those above the diagonal reflect allocations above their targets.

For the 2012 Survey, the average actual equity allocation was close to the average target equity allocation. Based on survey responses, the average overweight was +3% and the average underweight was -4%. One standard deviation around the mean was just under 5%.

2012 Actual vs. Target

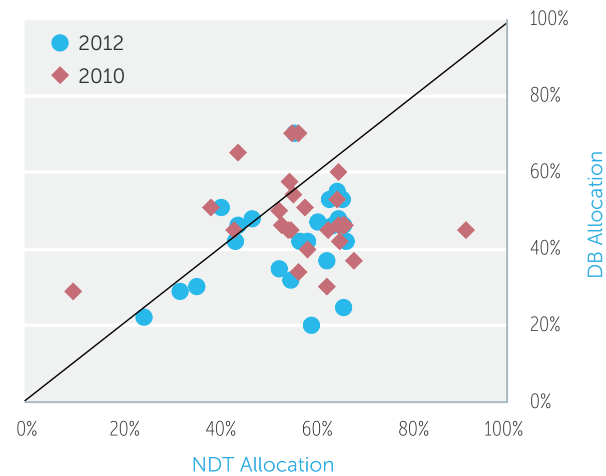


NDT vs. Defined Benefit

The chart at the right shows the relationship of each sponsor's NDT equity allocation relative to its Defined Benefit (DB) equity allocation. Observations above the diagonal indicate a larger equity allocation in the DB plan relative to the NDT. Survey responses indicated that the average NDT had a much larger allocation to the US Equity asset class than did the average DB plan. The majority of DB Fixed Income assets were in longer duration strategies while few Sponsors indicated an allocation to long duration fixed income strategies in their NDTs.

Asset Class - 2012	NDT	DB
US Equity	46%	28%
Int'l Equity	8%	16%
Fixed Income	43%	40%
Other	3%	16%
TOTAL	**100%**	**100%**

Equity Allocations

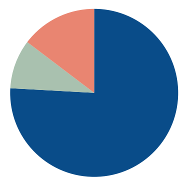


Equity

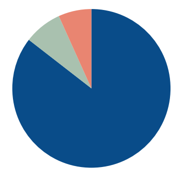
Style Allocations

The estimated total equity allocation was $21.0 billion for Qualified Trusts and $2.1 billion for Non-Qualified Trusts. The average allocation to the most frequently referenced equity styles at the total trust level has remained fairly constant since the 2006 Survey; large cap styles continue to dominate equity allocations. International equity allocations have increased since the last survey despite the MSCI All World-Ex US (US$) Index trailing domestic indices. The S&P 500, S&P 400, S&P 600 and MSCI All World-Ex US (US$) had total returns, as reported by the index providers, of 18.5%, 16.2%, 18.1%, and 2.0%, respectively for the two-year period ending December 31, 2012.

2012 Qualified Trusts



2012 Non-Qualified Trusts

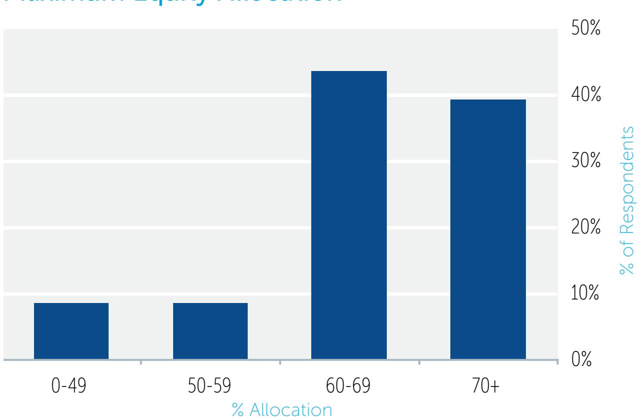


	2012 Qualified Trusts 2012	2012 Qualified Trusts 2010	2012 Non-Qualified Trusts 2012	2012 Non-Qualified Trusts 2010
Large Cap	76%	77%	85%	87%
Mid/Small Cap	9%	10%	8%	7%
International	15%	13%	7%	6%

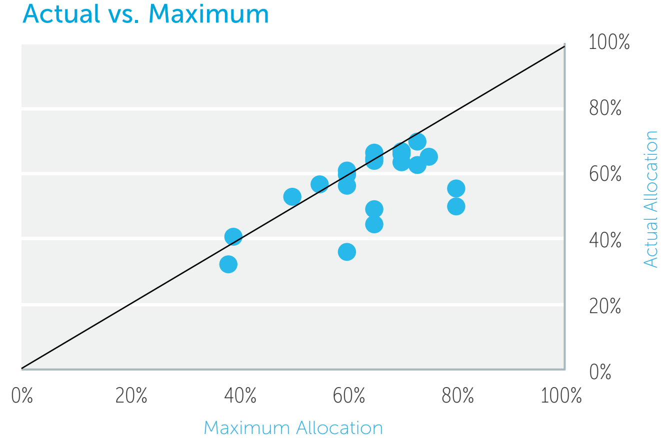
Maximum Allocations

The average maximum equity allocation allowed remained at 62% in 2012 compared to 2010 and down from 74% in 2008. The average actual equity allocation was approximately 9% below the average maximum allowed. Five respondents reported actual allocations above their stated maximum while four respondents were more than 20% below.

Maximum Equity Allocation



Actual vs. Maximum



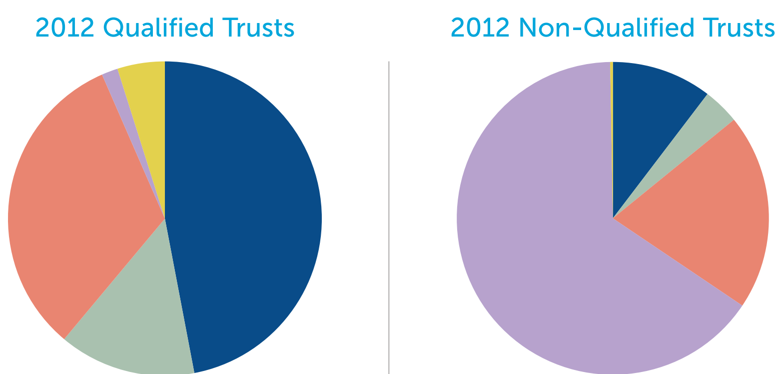
Fixed Income

Sector Allocations

The estimated total fixed income allocation was $17.2 billion for Qualified Trusts and $2.5 billion for Non-Qualified Trusts.

Trusts shifted away from broad-market aggregate benchmarks from the previous survey and into specific categories such as Credit and TIPS. The Qualified Trust sector allocations in the chart below reflect the mix of fixed income benchmarks. The "Other" category includes High Yield and Emerging Market debt, among others.

Non-Qualified sector allocations saw a shift toward corporate securities and away from municipal securities compared to previous surveys.



	2012	2010	2012	2010
Government	47%	45%	10%	12%
Mortgage	14%	22%	4%	4%
Corporate	32%	31%	20%	10%
Tax-Exempt	2%	1%	65%	73%
Other	5%	1%	0%	1%

International Fixed Income and TIPS were the most frequently mentioned fixed income sectors under consideration.

Asset Return Assumptions

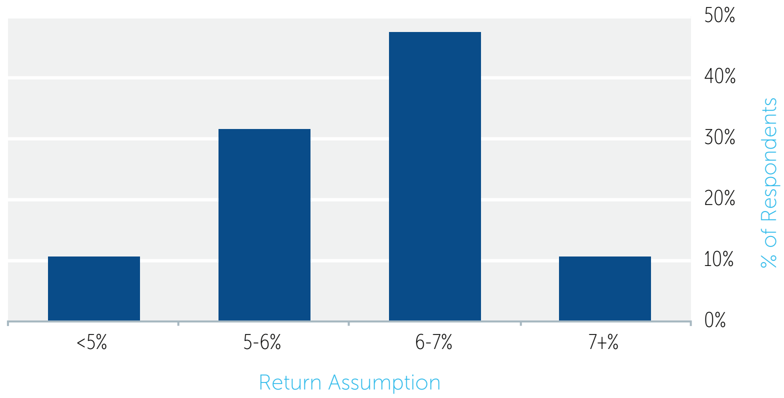
After-Tax Return Assumptions: Qualified Trusts

The Qualified Trust average after-tax return assumption dropped from the last three surveys, and is well below peak levels of the late 1990's. This is due to a 200-plus basis point decline in interest rates and a 100 basis point drop in the equity dividend yield over the same period. Based on each respondent's target asset allocations and expected returns for each asset class, the median after-tax return assumption was 6.2%; the average after-tax return assumption was 6.0%.

Average After-Tax Return Assumption

2012	6.0%
2010	6.3%
2008	6.3%
2006	6.3%
2004	6.6%
2002	6.5%
2000	6.3%
1998	6.7%
1996	6.5%
1994	6.4%
1992	6.1%

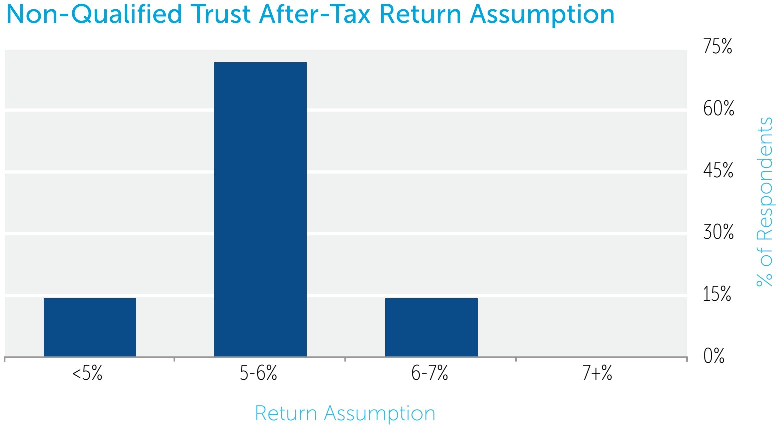
Qualified Trust After-Tax Return Assumption



After-Tax Return Assumptions: Non-Qualified Trusts

The Non-Qualified Trust average after-tax return assumption increased slightly (10 basis points) from the last survey, although it has been fairly steady for the last five surveys. Based on each respondent's target asset allocations and expected returns for each asset class, the median after-tax return assumption was 5.5% as was the average after-tax return assumption. Non-Qualified Trust average after-tax return expectations were about 50 basis points lower than their respective Qualified Trust expected returns, resulting from higher tax rates and lower equity allocations.

Non-Qualified Trust After-Tax Return Assumption



Average After-Tax Return Assumption

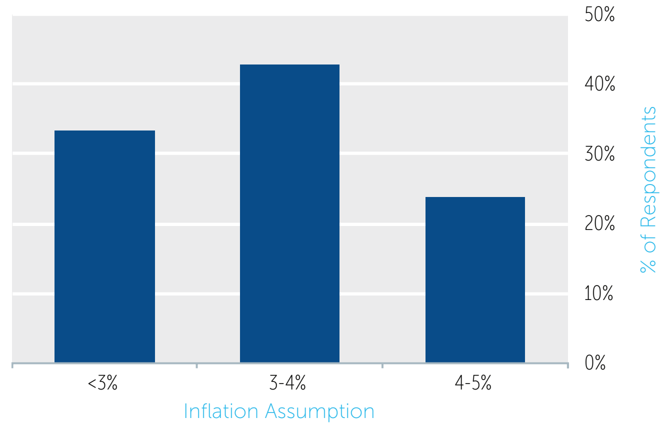
2012	5.5%
2010	5.4%
2008	5.3%
2006	5.4%
2004	5.5%
2002	5.9%
2000	5.8%
1998	6.2%
1996	6.2%
1994	6.0%
1992	6.6%

Cost Inflation Assumptions

Inflation assumptions have a prevailing influence on estimating decommissioning liabilities and determining implied after-tax real rates of return. The average composite cost inflation assumption increased by 10 basis points from the 2010 Survey, even as the CPI 10-year forecast declined by 20 basis points. Respondents were nearly equally distributed between increasing, no change, or decreasing their cost inflation assumption.

Cost Inflation Assumptions

	Average Response	CPI 10-yr Forecast*
2012	3.3%	2.3%
2010	3.2%	2.5%
2008	3.6%	2.4%
2006	4.0%	2.5%
2004	4.2%	2.5%
2002	4.7%	2.5%
2000	4.4%	2.5%
1998	4.3%	2.5%
1996	4.7%	3.0%
1994	5.0%	3.5%
1992	5.2%	3.6%

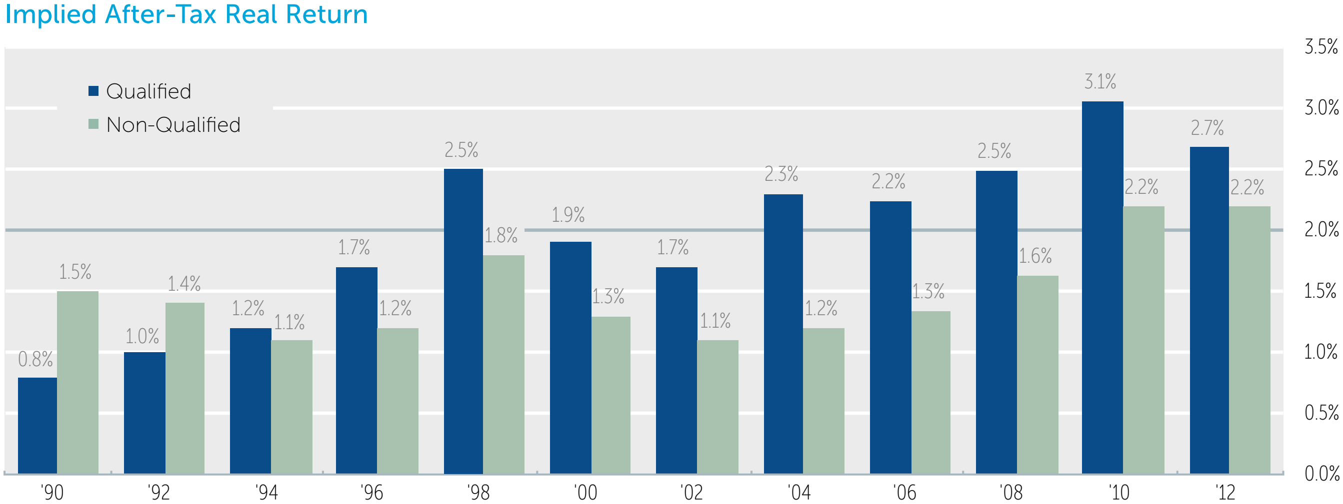


* Livingston Survey, Federal Reserve Bank of Philadelphia.

Implied After-Tax Real Return Assumptions

Implied after-tax real return assumptions were calculated based on each respondent's after-tax return and cost inflation assumptions. The implied after-tax return assumption increase from 1992 to 2012 was due almost exclusively to the decline in the cost inflation assumption. The horizontal line at 2% represents the allowable real return assumption permitted in 10 CFR §50.75 (e) (1) (ii). Weighting the 2012 Qualified and Non-Qualified Trusts' implied after-tax returns by their market values as shown on page 2 yields a total NDT average implied after-tax real return of 2.6%.

Implied After-Tax Real Return



NDT Management

Asset Liability Management Studies (ALM) help sponsors evaluate the funded status of their decommissioning funds and help determine suitable asset allocations. Based on survey responses, ALMs are occurring more frequently. For this survey, the average ALM study-vintage was about 1.5 years; compared to two-plus years in past surveys. Most respondents indicated their ALMs are performed by outside consultants on an ad-hoc basis, and almost 90% of respondents indicated they would undertake an ALM within the next two years. Twenty-five percent of respondents said they considered asset-liability matching in conjunction with their ALM analyses, and 22% said they considered dynamic asset allocation.

Alternative/Absolute Return Strategies (ARS) are not being considered at this time by the majority of respondents. Of those respondents who are considering or have used ARS, Private Equity and Real Estate are the most popular asset classes. Return diversification remains a primary motivation for asset allocation policy changes.

NDT Investments in securities of owner/operators of nuclear power reactors are prohibited by the NRC by licensees that are not "electric utilities." More than two-thirds of responses indicated "no-nuke" restrictions based on NRC or state-level regulations. Almost one-fourth of respondents indicated no nuclear-ownership-based investment restrictions. Over half of respondents utilize their custodian to monitor no-nuke restrictions, while only a quarter rely solely on their investment manager for guideline compliance. Almost three-fourths of respondents required both their manager and custodian to monitor no-nuke investment guidelines.

Derivatives use, or intended use, has changed little in the last several surveys. Approximately half of respondents are permitted to use derivatives in their Nuclear Decommissioning Trusts, some with restrictions. Of those permitted, many have used derivatives over the past two years and of those respondents currently using derivatives, swaps and futures are the most frequently used instruments. The implications of the Dodd-Frank Act may hinder the use of derivatives in NDTs going forward.

NDT/DB – When viewed from either the asset or liability side, NDTs, on average, are approximately half the size of DB plans for IOUs. Given the typical long term nature of both NDTs and DBs, one might surmise similar allocations may be warranted. This remains far from the case. The average DB invests across a broader spectrum of investments and focuses on longer duration fixed income, while the average NDT remains in a more traditional asset mix. There are many potential explanations for this including taxes, regulatory restrictions, the method of viewing the liability, and separate investment committees, among others.

All photos courtesy of NukeWorker.com, the US Nuclear Regulatory Commission & the Nuclear Energy Institute.

U.S. Operating Commercial Nuclear Power Reactors

The NDT Team at NISA

NISA manages all portfolios with a team approach. A team of senior investment professionals services the NDT portfolios, supported by a staff of investment professionals. The Investment Committee (Jess Yawitz, Bill Marshall, Ken Lester, Joe Murphy, David Eichhorn, and Anthony Pope) has the primary responsibility for the overall NDT investment strategy. For equity strategies, Paul Jones shares responsibility and works with the Investment Committee to develop the overall strategy and the strategic profile for each portfolio.

Jess B. Yawitz, Ph.D.
Chairman & Chief Executive Officer

William J. Marshall, Ph.D.
President

Kenneth L. Lester
Managing Director, Portfolio Management

David G. Eichhorn, CFA
Managing Director, Investment Strategies

Anthony R. Pope, CFA
Managing Director, Portfolio Management

Joseph A. Murphy, CFA
Director, Portfolio Management

Paul L. Jones, CFA
Director, Equity Portfolio Management

Gregory J. Yess, CPA
Managing Director, Client Services

William R. Groth, CFA
Manager, Client Services

Aleksandr G. Panchenko
Senior Analyst, Client Services

NISA is a 100% employee-owned investment management firm based in Saint Louis, Missouri. NISA has $89 billion* in securities strategies under management for 149 clients including NDTs, defined benefit plans, defined contribution plans, and other institutional investors. NDT assets are the largest source of NISA's taxable assets under management. NISA has managed assets for NDT clients since our inception in 1994 and currently manages $10 billion* in NDT assets for 15 utilities.

Please contact Paul Jones or Rusty Groth if you would like additional copies of this report or for more information regarding NDT management services. The survey is also available at www.nisa.com.

Paul L. Jones, CFA
Director, Equity Portfolio Management
314.712.1900
Paul.Jones@nisa.com

*As of June 30, 2013

NISA Investment Advisors, L.L.C.
101 South Hanley Road, Suite 1700
St. Louis, MO 63105

T 314.721.1900
F 314.721.3041

www.nisa.com