



MOA Trust Fund Investment Flexibility June 2006

Michael J. O'Leary CFA
Executive Vice President
Callan Associates Inc.

Overview & Summary

- Institutional investment practices have evolved
 - Other Alaska funds such as the Anchorage Police & Fire Pension Fund, the State pension funds and the Alaska Permanent Fund routinely use investments and approaches not available to the MOA Trust.
- Recommend broader investment flexibility
 - Through municipal code and investment policy changes
- Proposed changes affect a limited portion of Trust's assets (approximately 20%)
- Proposed changes are sought to improve probability of achieving high real return objectives
- This presentation will briefly review current practices and MOA limitations and proposed enhancements.

Summary Continued

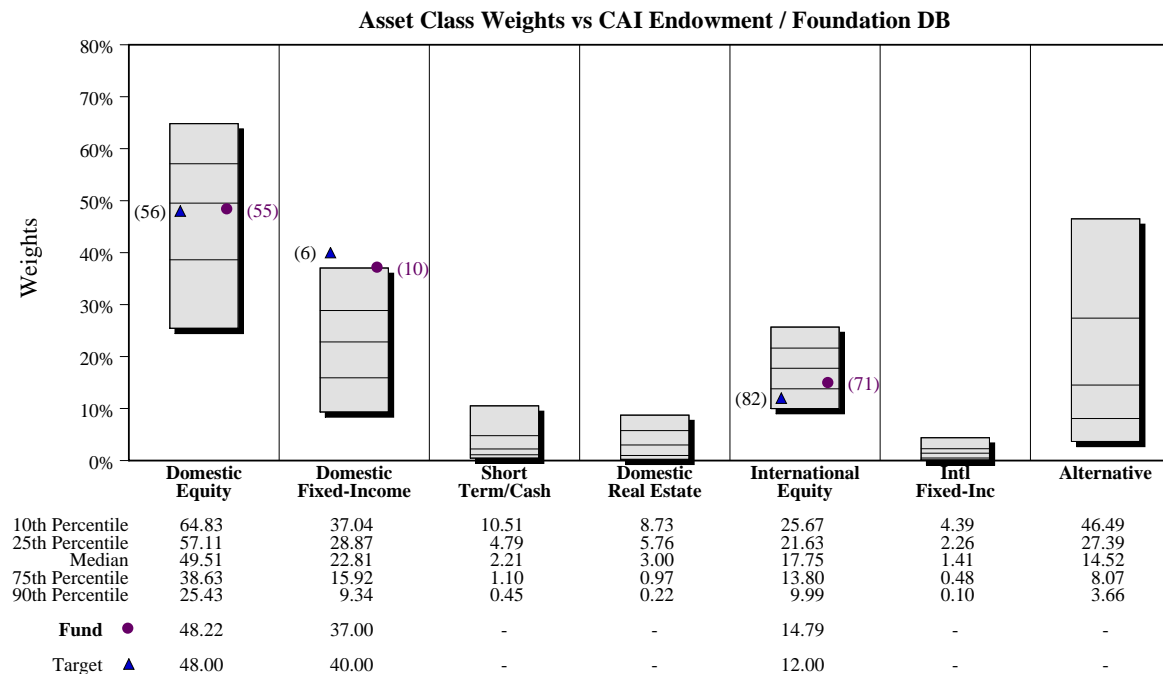
- Other major Alaska-based funds have & use greater flexibility.
 - Anchorage Police & Fire Pension Fund - real estate and high yield bonds.
 - Alaska Permanent Fund invests in real estate, private equity and absolute return strategies.
 - The Alaska State Pension systems invest in real estate; high yield bonds, absolute return strategies and private equity.
 - The University of Alaska invests in private equity, non-investment grade bonds, absolute return strategies and real estate.
- We believe that the three categories of proposed changes would collectively enhance return and increase the probability of the MOA Trust achieving its long-term investment goals.

Current Situation

- Significant limitations in municipal code re:
 - types of fixed income securities
 - investment techniques utilized
 - ability to invest in real estate.
- Trust's investment goal - preserve the purchasing power of the corpus while distributing a 5% of average market value
 - *The Trust needs to achieve a total return (change in market value plus income) in excess of the long-run inflation rate plus 5%.*
- The investment objective is similar to endowments and comparable to the Alaska Permanent Fund.

MOA Trust versus Callan database

- The graph below depicts the MOA Trust's asset allocation and policy target by major asset category in relation to other endowments and foundations in the Callan database as of 12/31/05.
- The graph illustrates that the Trust has a much greater than average fixed income commitment and no exposure to international bonds, real estate or alternative investments





What are others doing? 2005 NACUBO Study

Survey Responses by Fund Size

NACUBO is the National Association of College and University Business Officers. Annually, the group conducts a detailed study of investment practices. This data, the most recent, is as of 6/30/05. The University of Alaska participates in the study.

It is clear that comparably sized funds are less heavily invested in bonds and have meaningful allocations to asset categories and approaches not used by MOA Trust.

Average Asset Class Allocation of Total Assets									
Investment Pool Assets	Equity %	Fixed Income %	Real Estate %	Cash %	Hedge Funds %	Private Equity %	Venture Capital %	Natural Resources %	Other %
Greater Than \$1.0 Billion	44.9	14.2	4.0	2.0	21.7	5.7	3.6	3.4	0.4
> \$500 Million to <= \$1.0 Billion	53.7	16.0	3.7	1.7	15.8	4.7	2.0	1.9	0.4
> \$100 Million to <= \$500 Million	57.8	18.9	3.0	2.5	11.4	2.2	1.1	1.3	1.7
> \$50 Million to <= \$100 Million	60.6	22.1	3.2	3.8	7.0	0.7	0.4	0.5	1.7
> \$25 Million to <= \$50 Million	61.2	23.3	3.8	3.3	5.8	0.3	0.3	0.6	1.5
Less than or Equal to \$25 Million	60.7	27.8	1.7	6.1	2.4	0.2	0.0	0.1	1.0
Public	58.4	23.5	2.7	4.2	7.1	1.3	0.6	0.9	1.2
Independent	58.5	20.6	3.2	3.1	9.5	1.7	0.9	1.0	1.5
Equal-weighted Average	58.5	21.5	3.1	3.5	8.7	1.6	0.8	0.9	1.4
Dollar-weighted Average	48.3	17.2	4.5	1.7	16.6	3.9	3.2	3.6	1.0

Commission & Consultant Recommendations

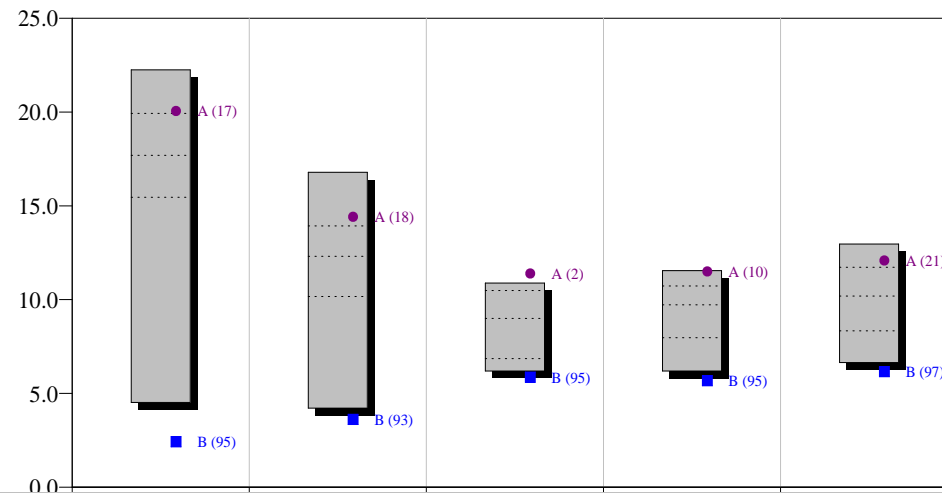
- Seek a gradual change in investment authority/flexibility
- Ultimately, we would like to see the MOA Trust Fund governed by the “Prudent Expert” standard and not limited by a “list” of permitted investments.
- Initially seek limited authority in three distinct areas.
 - 1 *Authority to invest 5% of Trust assets in institutional real estate (the investment would be in a diversified vehicle that owns equity interests in real properties)*
 - 2 *Authority to invest up to 10% of Trust assets in fixed income obligations that are currently not currently authorized such as high yield (below investment grade) bonds, non-dollar denominated bonds and emerging market debt instruments.*
 - 3 *Authority to invest up to 5% of Trust assets in other investments that are not specifically authorized for investment. This “basket” clause might be utilized to invest in hedge funds; private equity limited partnerships or other investments not currently authorized.*
- Change should increase return to meet real return expectation without additional risk
 - *Add 32 basis points (approximately \$416,000 per year based on \$130 million market value)*



#1 Introducing Institutional Quality Direct Real Estate (5%)

Real estate should return more than bonds, produce attractive income returns and reduce overall portfolio volatility on a year to year basis. The graph below demonstrates range of returns for similar vehicles. We expect future returns to average a more normal return of approximately 7.6% annually.

Returns for Periods Ended December 31, 2005 Group: CAI Open-End Real Estate Funds



NCREIF = National Council of Real Estate Investment Fiduciaries. Their index is a widely used benchmark of institutional real estate property total returns.

Leh Aggr Bd.= the Lehman Aggregate Bond Index. Widely used measure of the investment grade bond market.

	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
Median Manager	17.70	12.32	9.00	9.73	10.19
NCREIF Index -A	20.06	14.42	11.40	11.51	12.09
LB:Aggr Bd - B	2.43	3.63	5.87	5.68	6.16

#2 Expanding the bond universe by allowing the use of high yield, non-dollar and emerging market debt instruments (10%)



- Currently, the MOA Trust is limited to “core” bond investments.
- Table below contrasts the median return for various Callan (CAI) bond manager peer groups and illustrates the return differences for typical types of managers.
 - The *CAI Core Bond Style* represents the median return achieved by “core” bond managers.
 - The *CAI Core Plus Style* represents the median return achieved by managers who have the flexibility to invest more broadly.
 - The *CAI High Yield & Emerging debt* style groups and indexes illustrate the performance of “specialty” niches often utilized by the *Core Plus* managers.

Returns for Periods Ended December 31, 2005

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
CAI:Core Bond Style	0.64	2.78	3.98	6.04	5.87	6.33
CAI:Core Plus Style	0.71	2.96	5.21	6.41	6.18	6.69
CAI:High Yield Style	1.23	3.53	12.84	8.56	6.61	7.62
CAI:Emerging Debt	1.86	13.70	19.38	16.89	18.23	16.07
LB:Aggr Bd	0.59	2.43	3.62	5.87	5.68	6.16
ML:High Yield CP Idx	0.66	2.81	13.15	8.75	5.83	6.80
JPM:Emer Mkt Bond +	2.10	11.86	17.22	12.79	15.00	13.62

LB Aggr = Lehman Aggregate Bond Index - a widely used measure of the investment grade bond market.

ML High Yield CP Idx = the Merrill Lynch High Yield Cash Pay Index - a widely used measure of the below investment grade bond market.

JPM Emer Mkt Bond = the JP Morgan Emerging Markets Bond Index - a widely used measure of the emerging market bond markets.



#3 Introduce a limited “basket” flexibility to be used for other investment approaches (5%)

- Flexibility most likely would be used to introduce “absolute return”
 - Perhaps a conservatively oriented Fund of Funds Hedge Fund.
- The table below depicts the returns achieved by a median hedge funds of funds.
 - The returns for the Lehman Aggregate bond index & 90-day T-bills are shown for comparative purposes.
 - The median fund of funds has tended to achieve greater than bond market returns with only slightly greater volatility.

Returns for periods ended March 31, 2006

	<i>Last Year</i>	<i>Last 3 Years</i>	<i>Last 5 Years</i>	<i>Last 7 Years</i>	<i>Last 10 Years</i>
Median Manager	9.62	8.46	6.96	9.63	10.86
LB:Aggr Bd B	2.43	3.63	5.87	5.68	6.16
T-bills	3.53	2.09	2.24	3.23	3.82

Asset Mix Comparison

- Using Callan’s 5-year projections (see appendix), we used an asset optimization program to develop comparisons
- Calculated return & risk statistics for
 - current policy; and
 - proposed potential policy that reflects implementation of the recommendations.

Portfolio Component	MOA-Current	MOA-Proposed
Broad Domestic Equity	48%	45%
International Equity	12%	15%
Domestic Fixed	40%	20%
High Yield	0%	6%
Non US Fixed	0%	4%
Real Estate	0%	5%
Absolute Return	0%	5%
Cash Equivalents	0%	0%
Totals	100%	100%
Expected Return	7.42%	7.74%
Standard Deviation	10.57%	11.60%
Sharpe Ratio	0.32%	0.32%

Expected total return increases by 32 basis points per year.

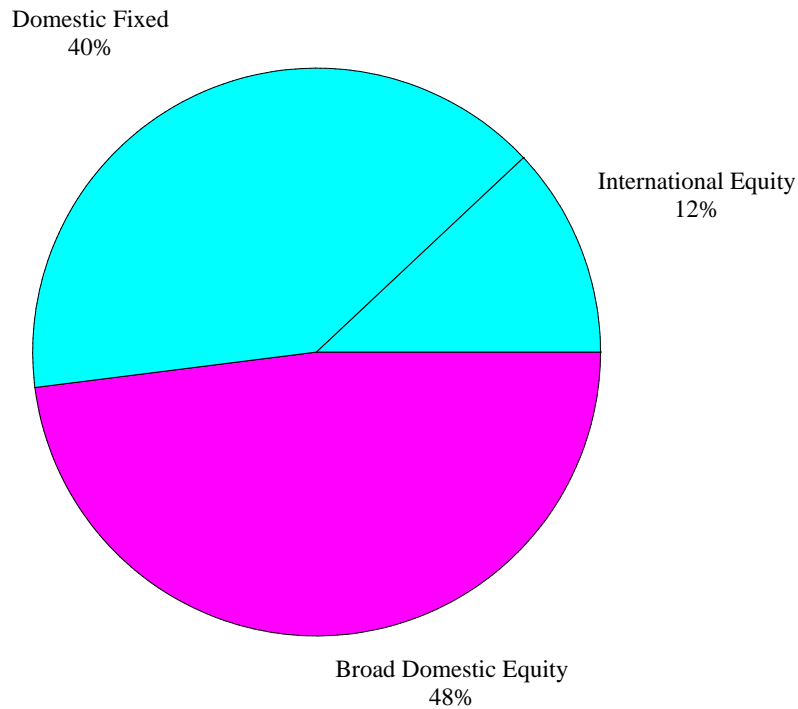
Return per unit of risk (Sharpe ratio) remains unchanged

Sharpe ratio is a measure of “risk adjusted” return. It is calculated by subtracting the “risk free” return (cash equivalents) from the expected total return and dividing the remainder by the volatility (standard deviation).

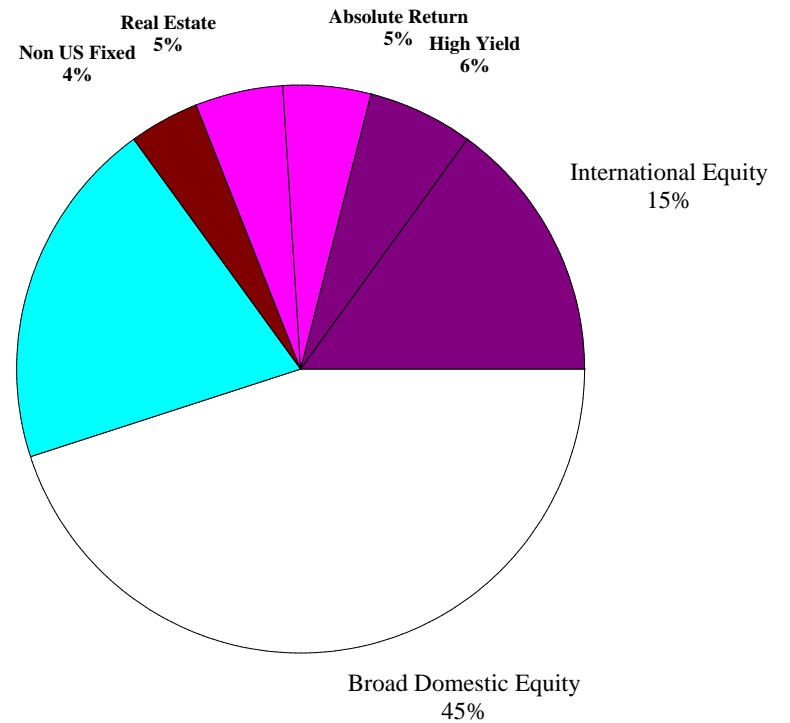
Graphic Illustration

Proposed policy is more broadly diversified

**Asset Class Allocation
Optimization Set: 2006
MOA-Current**

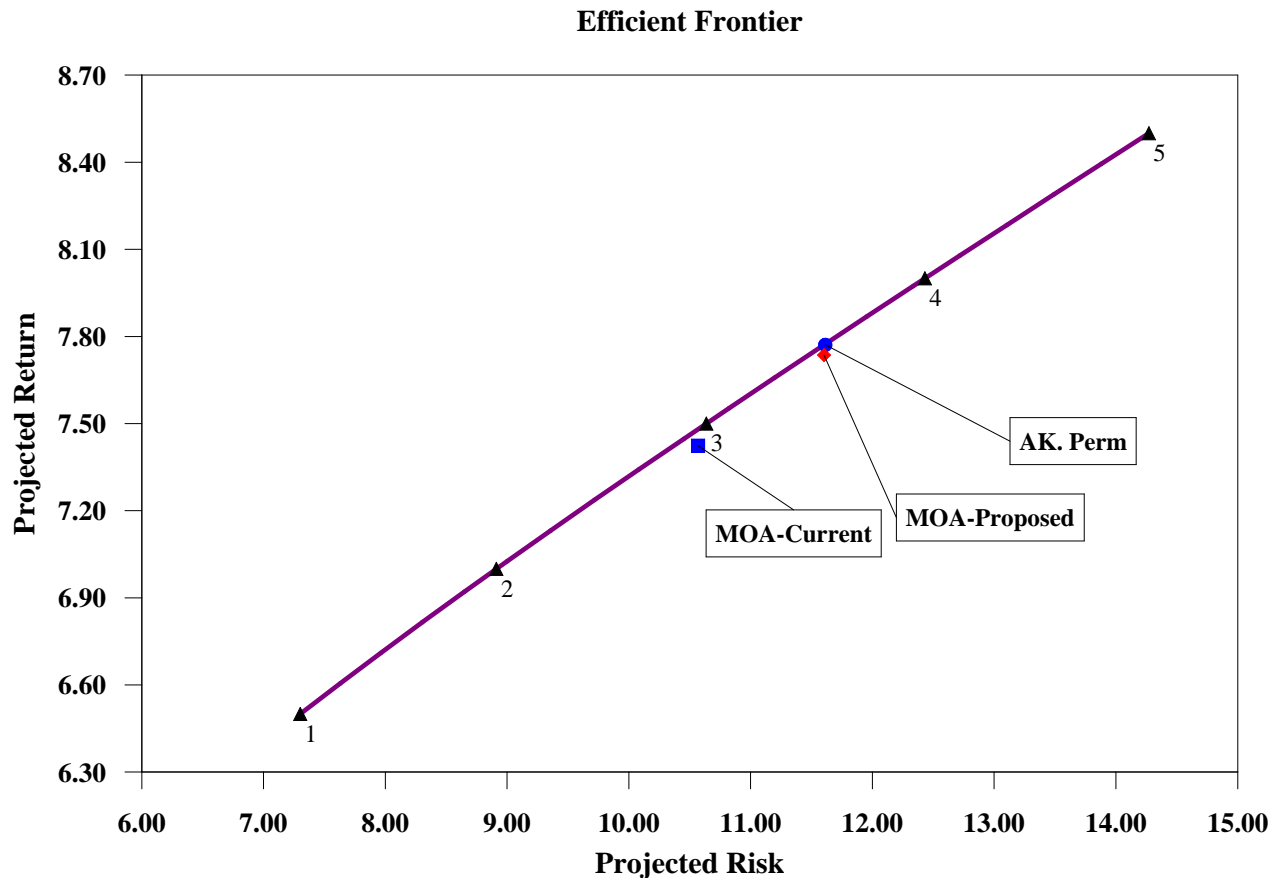


**Asset Class Allocation
Optimization Set: 2006
MOA-Proposed**



Graphic Comparison

Current Alaska Permanent Fund Corporation Asset Allocation Policy is included for illustrative purposes.



The APFC asset allocation policy adopted in November 2005 and modeled using the return, risk and correlation estimates used to calculate the expected return and risk for the MOA Trust Fund.

Appendix

Pulling it together

- The table below presents Callan's 5-year capital market projections of return and risk. Last year's 5-year projections are also detailed.

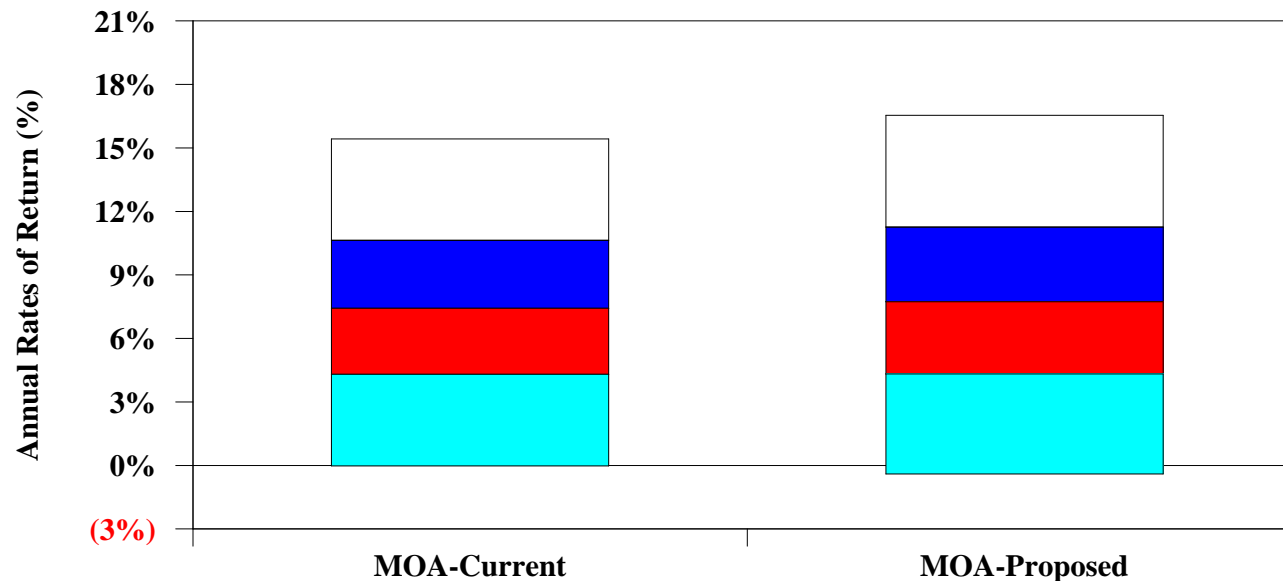
Summary of 5-Year Capital Market Projections (2006-2010)

Asset Class	Index	Projected Annual Return	Projected Standard Deviation (Risk)	Projected Yield	2005 Projections	
Equities						
Broad Domestic Equity	Russell 3000	9.00%	16.90	2.10	9.00%	16.90
Large Cap	S&P 500	8.85%	16.40	2.20	8.85%	16.40
Small/Mid Cap	Russell 2500	9.85%	22.70	1.20	9.85%	22.70
International Equity	MSCI EAFE	9.20%	20.10	2.20	9.25%	20.10
Emerging Markets Equity	MSCI EMF	9.80%	32.90	0.00	9.80%	33.00
Fixed Income						
Domestic Fixed	LB Aggregate	5.00%	4.50	5.00	4.75%	4.50
Defensive	LB Gov't 1-3 Year	4.25%	2.30	4.25	3.75%	2.30
TIPS	LB TIPS	4.65%	6.00	4.65	4.40%	6.00
+ High Yield	CSFB High Yield	6.75%	12.10	6.75	6.75%	12.10
+ Non US\$ Fixed	Citi Non-US Gov't	4.90%	9.60	4.65	4.65%	9.60
Other						
+ Real Estate	Callan Real Estate	7.60%	16.50	7.00	7.60%	16.50
Private Equity	VE Post Venture Cap	12.00%	34.00	0.00	12.00%	34.00
+ Absolute Return	Callan Hedge FoF	6.50%	10.20	0.00	6.50%	10.50
Cash Equivalents	90-Day T-Bill	4.00%	0.80	4.00	3.25%	0.80
Inflation						
	CPI-U	2.75%	1.40		2.60%	1.40

+ denotes new asset categories to be utilized with expanded flexibility

5-Year Comparison of Range of Returns

Range of Projected Rates of Return
 Projection Period: 5 years
 Optimization Set: 2006

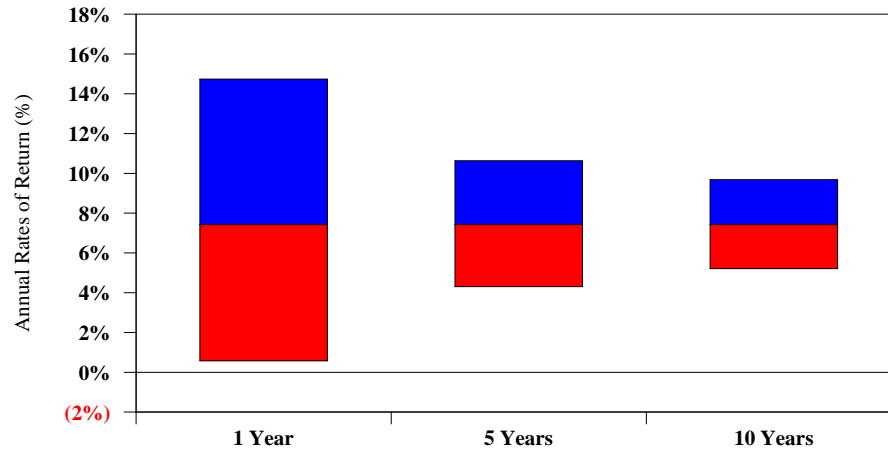


5th Percentile	15.43%	16.54%
25th Percentile	10.64%	11.26%
Median	7.42%	7.74%
75th Percentile	4.31%	4.32%
95th Percentile	(0.02%)	(0.40%)

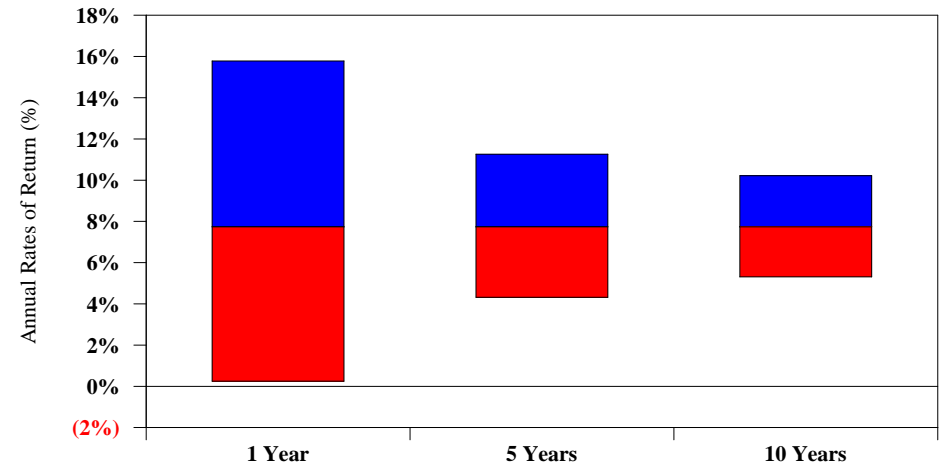
Comparison of the two policies demonstrates that the median expected return for the proposed policy is 32 basis points (0.32%) higher than the current policy. The range of expected returns is also slightly greater.

Current & Possible Range Of Return Comparison over 1,5 and 10 Year Periods

Range of Projected Rates of Return
MOA-Current
Optimization Set: 2006



Range of Projected Rates of Return
MOA-Proposed
Optimization Set: 2006



25th Percentile
Median
75th Percentile

1 Year	5 Years	10 Years
14.74%	10.64%	9.69%
7.42%	7.42%	7.42%
0.57%	4.31%	5.21%

25th Percentile
Median
75th Percentile

1 Year	5 Years	10 Years
15.78%	11.26%	10.22%
7.74%	7.74%	7.74%
0.25%	4.32%	5.31%

Note that the range of expected returns narrows significantly as the time period is expanded. Also observe that the proposed policy has a very similar (albeit slightly wider and generally higher) range of potential returns over all three time spans.