



# Investment Process

Investment Advisory Committee Meeting  
September 21, 2011

# IAC Responsibilities

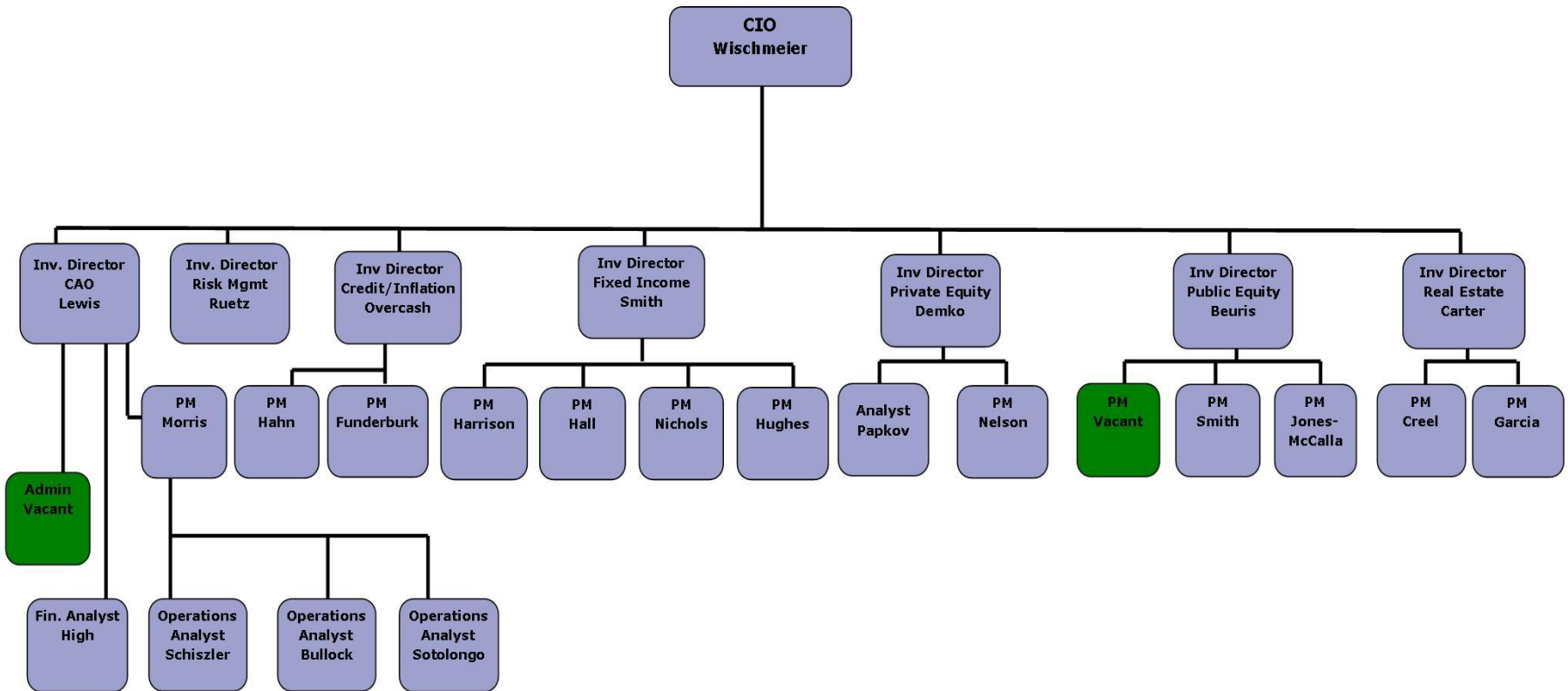
Investment Advisory Committee Charter (Section IV. F):

## **Review and Evaluate the Selection and Monitoring of Investment Managers.**

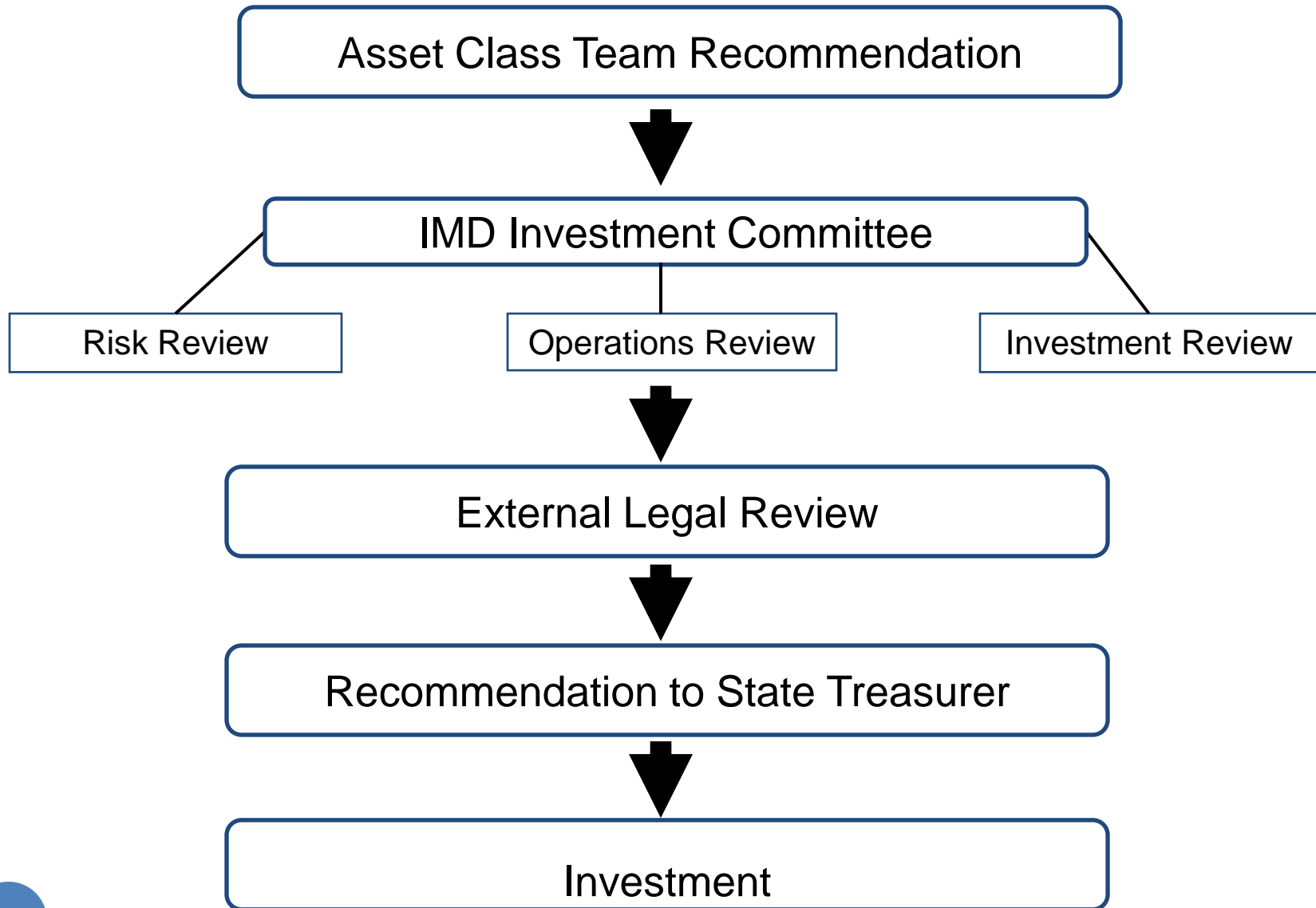
The IAC will review the process used by staff and consultants in the selection and monitoring of investment managers made for the Retirement Systems. The IAC will also review the way the staff and consultants monitor managers, unless requested by the State Treasurer; the IAC has no independent responsibility for the selection or monitoring of managers itself.

# Investment Organization

## Investment Management Division



# Investment Approval Process



# Risk Review

- Risk analysis completed for all investment recommendations
- Risk report written for each investment recommendation
- Risk review includes:
  - Asset allocation considerations
  - Fit within portfolio; fit with existing investments
  - Idiosyncratic risks of each individual investment
- Risk management is part of team's everyday process; not considered ex-post
- Investment ideas generated by Director of Risk Management also to be vetted by Investment Committee (e.g. Rebalancing Strategies)

# Operations Review

- Operations analysis completed for all investment recommendations
- Operations report written for each investment recommendation
- Operations review includes:
  - Look at middle and back office operations for each individual investment
  - Fit within portfolio; fit with existing investments
- Required operational changes incorporated during deal negotiation
- New operational due diligence process under development; independent review process by team not involved in the investment review
- Best Practices of similarly situated investment portfolios include documented and separate operational due diligence processes

# Investment Review

## *Externally Managed Investments*

- Deal logs used to track progress of investments during reviews by each asset class
- Investment Committee
  - Full review of investment recommendations by CIO/Directors
  - Detailed investment memorandum provided in advance of scheduled meetings
  - No formal vote; but effective veto right on any recommendation

## *Internally Managed Investments*

- Historical trades reviewed
- Investment Committee
  - Strategy for asset class reviewed at meetings
  - Recommendations regarding portfolio position reviewed
  - Key trades discussed in advance

# Service Providers



# Service Provider Selection Examples

- Selection of a Risk System Provider
  - Request for Information / Questionnaire
  - Met with several risk system vendors
  - Broad NCRS Investment Staff participation in the selection process
  - Met with and spoke to several institutional investors about their experiences with their risk systems
  - Proof of concept was developed
  - Conducted client reference calls
- Selection of Optional-Use Transition Management Providers
  - Researched independent analysis of top transition managers
  - Identified NCRS transition needs; customized request for information / questionnaire
  - Interviewed key personnel from top rated firms
  - Selected four providers to allow for flexibility

# Public Markets

# Public Manager Search Process

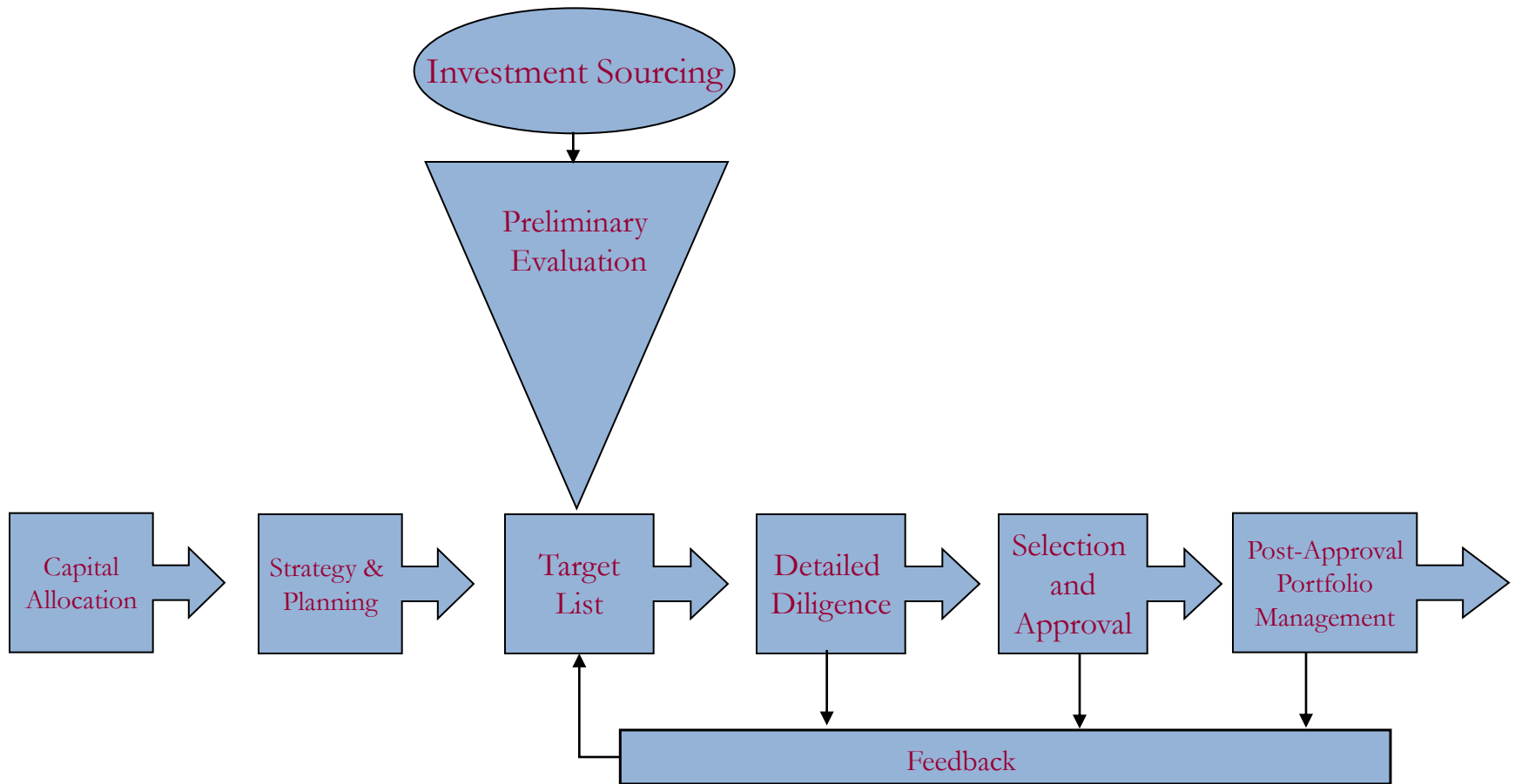
- Key Steps:
  - NCRS Staff strives to be aware of top quartile managers through on-going meetings with managers, peer contacts, research publications, manager search database, etc
    - eVestment is recognized as a premier manager search database and provides comprehensive information for nearly 6,000 equity products
  - Request for Information is sent to a list of ~10 managers for an initial screening
  - Request for Proposal is sent to a short list of ~5 managers to allow for more in-depth analysis of the firm, their process, management team, historical attribution, etc

# Public Manager Analysis/Recommendation

- Staff evaluates individual managers as well as assesses the impact of an individual manager on the existing portfolio (i.e. expected return, correlations, tracking error, etc)
- Two to three managers selected for on-site due diligence visits
- Global Equity Team presents recommendation to IMD Investment Committee
- Final recommendation incorporates comments from IMD Investment Committee and presented to Treasurer for approval

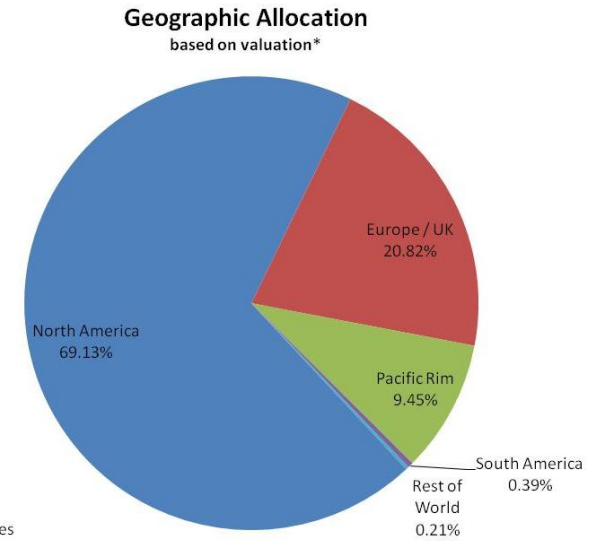
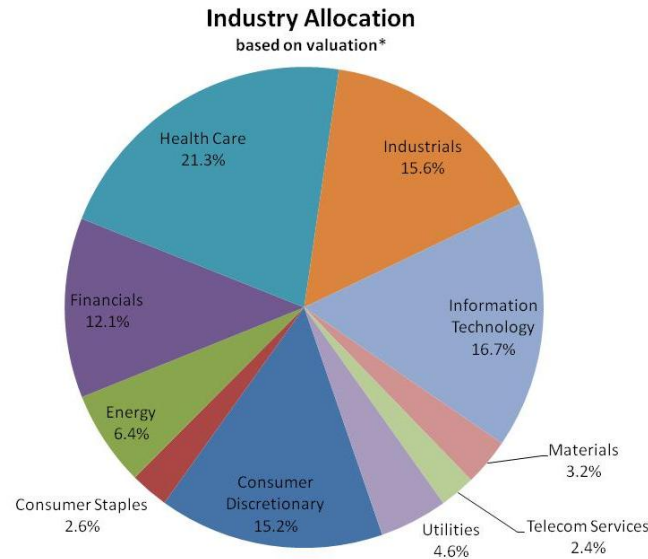
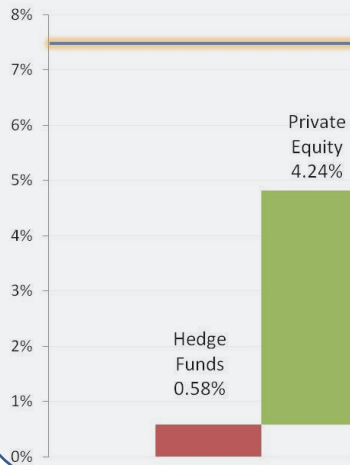
# Private Markets

# Due Diligence and Investment Process



# Capital Allocation

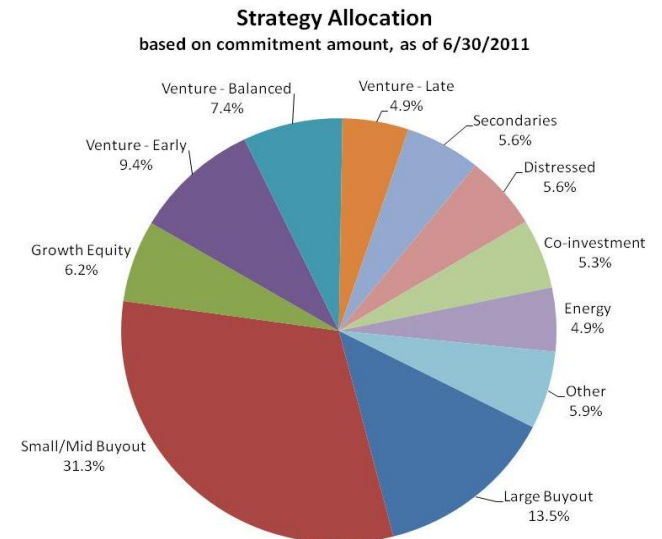
As of 6/30/2011, Alternatives represented 4.82% of the NCRS portfolio  
 - within its 7.5% Legislative Cap.



\*valuation based on latest available data.

## Policy Targets relative to Actual Portfolio weights

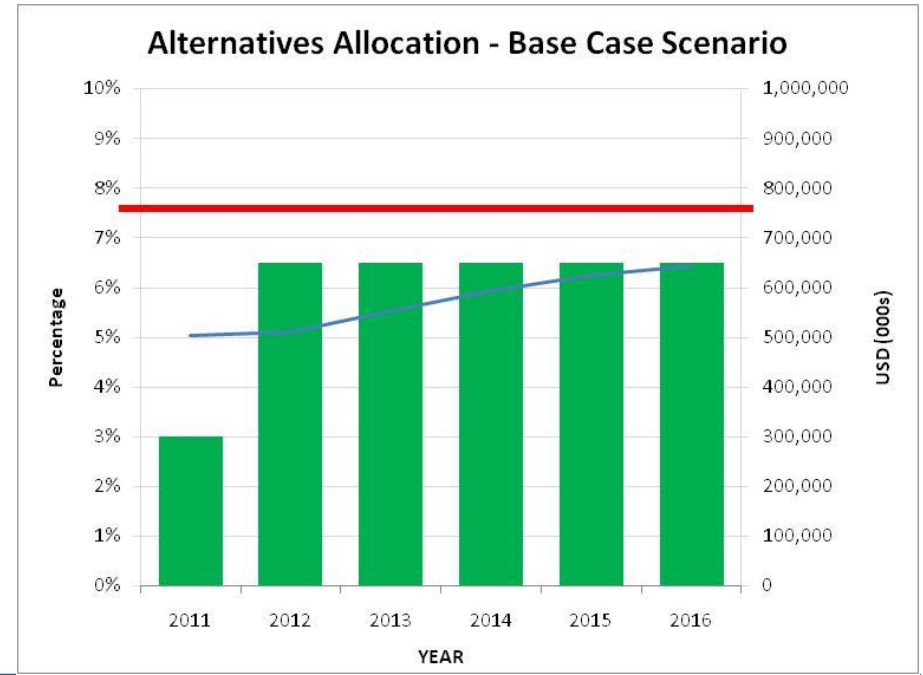
Strategy	MIN	TARGET	MAX	Actual
Buyouts	40.0%	50.0%	60.0%	44.7%
Growth Equity	5.0%	10.0%	15.0%	6.2%
Venture	10.0%	20.0%	25.0%	21.7%
Special Situations	5.0%	20.0%	35.0%	27.3%



# Strategy & Planning

## Base Case Scenario

- Return = 5.0% for Total Plan
- Achieves approximately 6.5% Alternatives allocation



## Stress Test Scenarios

- Stressed Year (Y1) = Total Plan AUM decline of 26%
- Y1 + 1 year = Total Plan AUM increase of 13%
- Return in other years = 5.0% for Total Plan
- Maintains compliance with Legislative cap

		Alternatives as % of Total Plan					
		2011	2012	2013	2014	2015	2016
Stressed Year	2011	n/a	n/a	n/a	n/a	n/a	n/a
	2012	5.04%	6.94%	6.59%	6.81%	6.88%	6.79%
	2013	5.04%	5.00%	7.27%	6.77%	6.83%	6.74%
	2014	5.04%	5.00%	5.24%	7.46%	6.78%	6.69%
	2015	5.04%	5.00%	5.24%	5.37%	7.47%	6.64%
	2016	5.04%	5.00%	5.24%	5.37%	5.38%	7.32%
Commitments		\$300	\$400	\$400	\$400	\$400	\$400
		USD 000s					



# Investment Sourcing to Target List

- Utilize Multiple Deal Sources, Including:
  - Consultants
  - Current General Partners
  - Staff Relationships
  - Conferences
  - Networking with Industry Contacts

<i>INTERNAL USE ONLY - CONTAINS TRADE SECRET INFORMATION</i>				
Asset Class	Firm Name	Status	Interest / Commitment	Additional Information
Private Equity	Firm A	Detailed DD	\$50MM	New to NCRS
Private Equity	Firm B	Detailed DD	Pending	first time fund
Private Equity	Firm C	Detailed DD	\$75MM	existing investor in Fund XX
Private Equity	Firm D	Detailed DD	Pending	New to NCRS
Private Equity	Firm E	Introduction	Pending	first time fund/Plan XX is anchor @ \$75MM (\$50MM at 1st dose w/ \$100MM threshold)
Private Equity	Firm F	Introduction	Pending	New to NCRS
Private Equity	Firm G	Introduction	Pending	existing investor in Fund I and II
Private Equity	Firm H	Introduction	Pending	New to NCRS
Private Equity	Firm I	Introduction	Passed	Likely too little allocation pursue
Private Equity	Firm J	Introduction	Passed	New to NCRS - size
Private Equity	Firm K	Introduction	Pending	existing investor in Fund IV
Private Equity	Firm L	Passed	allocation constraint	existing investor in Fund XX - passed due to allocation constraint (closed prior)
Private Equity	Firm M	Passed	Passed	Not a Private Equity Strategy consideration; would be in Credit
Private Equity	Firm N	Passed	Passed	New to NCRS
Private Equity	Firm O	Investment Committee: +	\$100MM	existing investor in Fund XX and YY

# Detailed Due Diligence

## Multiple Factors Considered, Including:

- Performance Quartile Analysis
- Investment Track Record Analysis
- Partner Deal Attribution
- Recalculation of Internal Rate of Returns
- Portfolio Company Discussions
- GP Meetings / On-Site Team Evaluation
- Reference Calling
- Legal Review and Negotiation