



**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**



**APRIL 2017**

Risk Advisory Onboarding & Project Plan

**City of San Jose**

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# Onboarding & project plan overview

# Overview – Onboarding & Project Plan

| Activity/Task                               | Owned By   | Participants              | Start Date | Projected Completion Date |
|---|------------|---------------------------|------------|---------------------------|
| Risk System Implementation                  | Verus/MSCI | Verus, BarraOne, SJ Staff | Q2 2017    | Q4 2017                   |
| Risk Dashboard                              | Verus      | Verus                     | Q1 2017    | Q4 2017                   |
| Assessment – Current State                  | Verus      | Verus, SJ Staff           | Q1 2017    | Q2 2017                   |
| Assessment – Enterprise Risk Tolerance      | Verus      | Verus, Trustees, SJ Staff | Q1 2017    | Q3 2017                   |
| Design – Risk Philosophy & Policies         | Verus      | Verus, SJ Staff, Trustees | Q4 2017    | Q2 2018                   |
| Risk Management Tool – Communication Report | Verus      | Verus, SJ Staff, Trustees | Q4 2017    | Q2 2018                   |

# Risk system & dashboard

# Risk System Implementation

- Implementation of the risk system starts by building infrastructure to feed San Jose's investment data into the risk system (BarraOne).



# Risk Dashboard

- Verus' independently creates Risk Dashboards, which are designed for calculating and communicating the level and nature of risk in client portfolios. These are a key element of our risk management approach.
- We do not rely on one or a few numbers to look at risk, but rather use a “multiple lens approach” to look at risk.

1 Portfolio risk



2 Portfolio equity beta



3 Portfolio interest rate risk - Duration

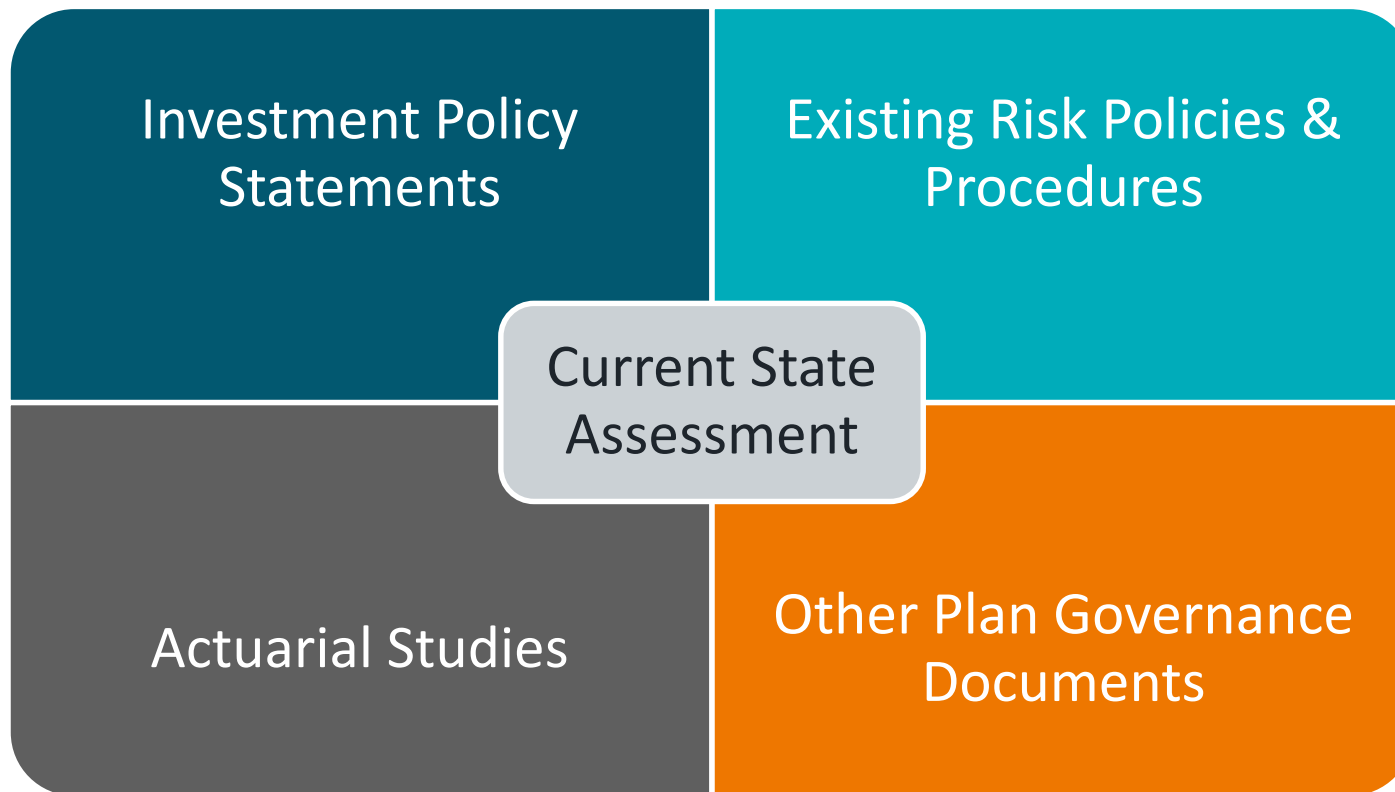


# Assessment – Current state & Enterprise risk tolerance



# Assessment – Current State

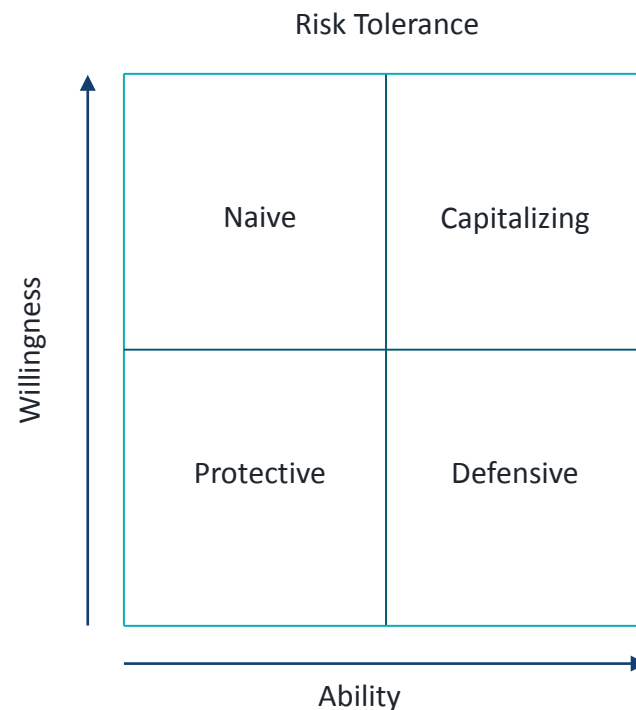
- In order for us to develop the best risk management framework, first we need to start by reviewing important information regarding the plan as well as governing documents.



# Assessment – Enterprise Risk Tolerance

- This process starts by identifying board investment objectives and beliefs.
- Enterprise Risk Tolerance involves identifying issues affecting the plan
  - This will help us determine both the willingness and ability to accept risk.
- Risk management education will be critical in this process to help the board to make more informed decisions.

Properly assessing Enterprise Risk Tolerance has important and practical implications for investment strategy development



# Design – Risk philosophy & policies

# Design – Risk Philosophy & Policies

- Risk management is a culture, not a system.
- There are many useful tools available to quantify various investment risks, but it is more critical that the investment committees, staff, and consultants are appropriately thinking about risk.
  - Naturally, when an organization uses a framework that is relevant for everyone involved, communication is greatly improved.
- Solidifying risk philosophy and policies will increase the likelihood of successfully implementing a risk management framework and ensuring it is included in decision-making going forward.

# Risk management tool

# Risk Management Tool – Communication Report

Risk management involves understanding the major drivers of risk in your portfolio and ensuring the exposures to those risks are intentional. Communication reports will be customized based on risk philosophy and policies and may include:

- Active Risk
- Relative Factor Risk
- Asset class weight
- Tail Risk
- Beta
- Duration
- Leverage

## 1 Total portfolio active risk

Sum of active risk factor contribution



## 2 Portfolio relative risk

(Total portfolio risk - total BM risk) / total BM risk

(8.3% - 7.8%) / 7.8% = 5.9%



## 3 Equity factor relative risk

(Portfolio equity factor risk - BM equity factor risk) / total BM risk

(5.2% - 4.5%) / 7.8% = 9.0%



# Appendix: Detailed Project Plan

# San Jose Risk Advisory Onboarding & Project Plan

