



# *Health Of Retirement Systems Follow-up*

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*"Securing tomorrow's pensions today."*

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# Future Health Of Retirement Systems

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- OSA reported on the health of LEOFF 2 at the September meeting
- Health expected to gradually decline over the next several years
  - Recent investment losses play significant role for LEOFF 2
- State actuary recommended a risk study to several bodies including LEOFF 2 Board



# Today's Presentation

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- Update on SCPP risk assessment work
- Example of the risk assessment process
- Options for LEOFF 2 Board



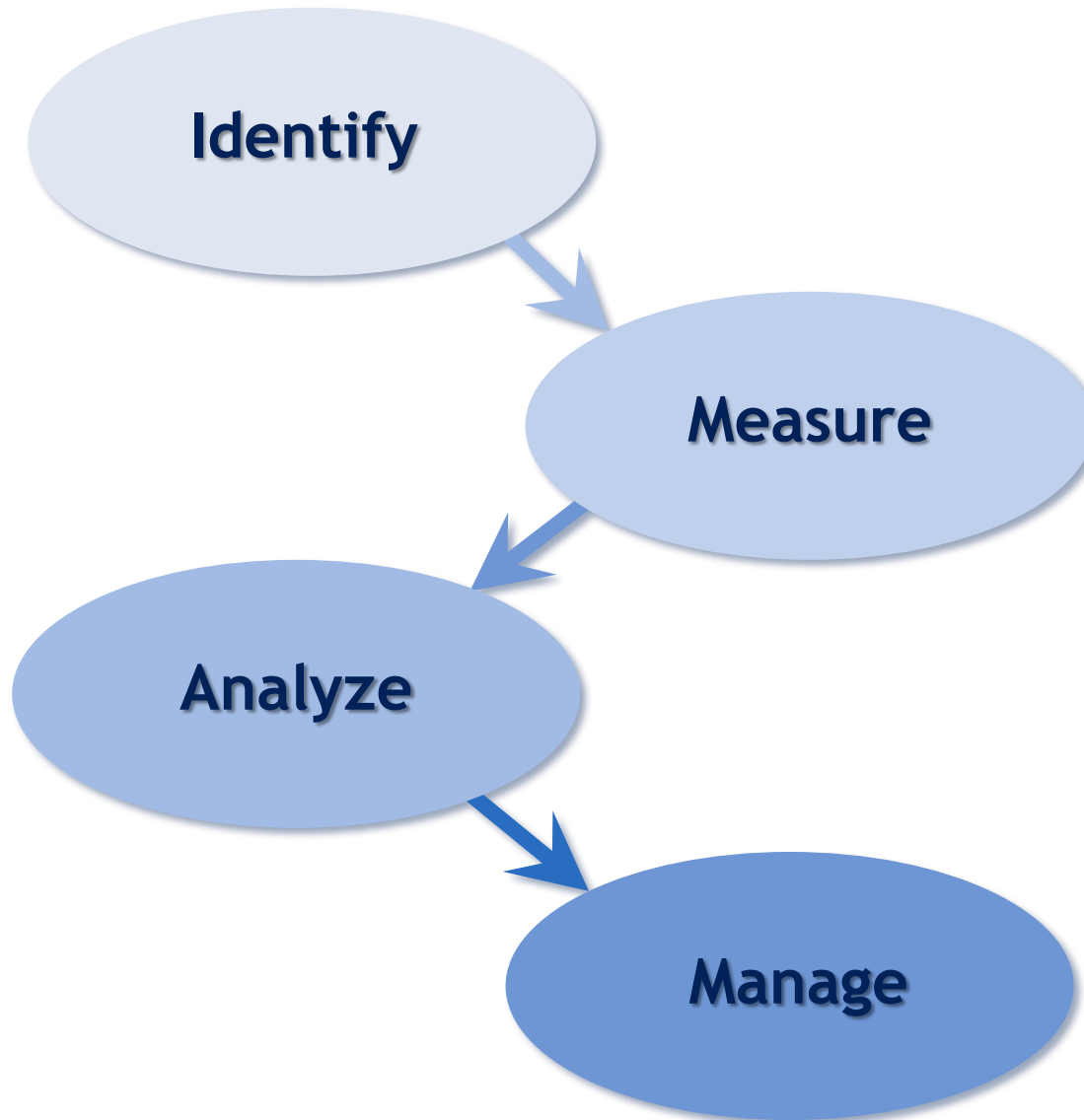
# SCPP Risk Assessment

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- Managing the future health of the retirement systems is a strategic priority of the SCPP
  - Includes a study of health risks faced by the retirement systems
  - Requires building an actuarial risk model
- Executive Committee created an advisory group for the risk assessment
  - Provide input to OSA and serve as a sounding board



# General Process For A Risk Assessment



# Phase One: Identification

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- Identifying health and health risk factors is about asking and answering key questions
  - What is a healthy retirement system?
  - What causes a system's health to decline?
  - What outcomes do you want to achieve?
  - What outcomes do you want to avoid?
- Answering these questions helps uncover important factors in the health of the retirement system



# Identifying Factors Is Not New

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- In the past, factors were identified on an ad-hoc basis
- Policy makers have asked OSA to measure and analyze
  - Chance Plans 1 run out of money
  - Large spikes in future contribution rates
  - Fiscal impact for benefit improvements
- Risk assessment project allows policy makers to
  - Identify health and health risk factors in a comprehensive, focused, and strategic way
  - Analyze interaction among factors



## Phase Two: Measurement

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- After you've identified health risks, *how often* will they occur in the future?
- Probability can be measured using actuarial assumptions and models
- Knowing *when* health risks occur and *how likely* it is that they occur in the future can be a powerful tool for decision-making





# Phase Three: Analysis

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- The “how” and “why” step
  - How do the risks show up?
  - Are there underlying factors causing the risk?
  - Are risks interacting to compound the effect?
  - Are the risks or the underlying factors controllable?
- Uncovering root causes and knowing the level of control brings to light possible options for managing risks



# Phase Four: Management

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- Decide how much controllable risk to live with
- Plan for risk beyond your control
- Avoid risks you can't survive
- Some risk management already in place
  - WSIB manages investment risk



# Status Of SCPP Risk Assessment

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- Identification phase complete
- OSA worked with the advisory group to identify health and health risk factors
  - Advisory group answered questions and provided input
  - Input will help OSA to develop actuarial risk model
- OSA developed preliminary risk measures



# Next Steps For SCPP Risk Assessment

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- OSA will build actuarial risk model during 2010 session
- Measurement and analysis will be shared with SCPP in spring/summer of 2010
- OSA will work with SCPP to identify options and develop recommendations during 2010 interim

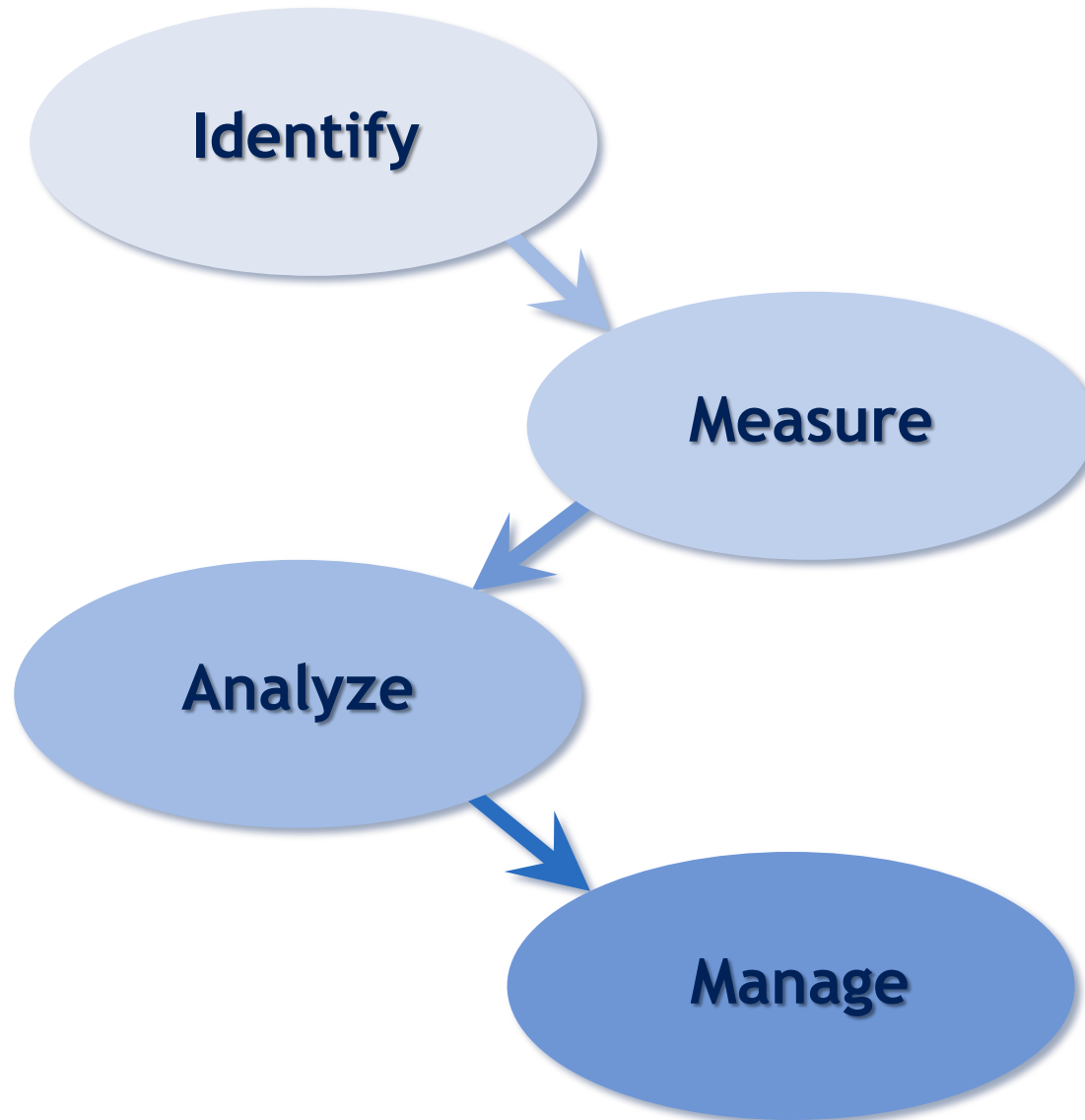


# Questions?

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# One Example Through The Risk Assessment Process



# Identification Phase

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- What is one characteristic of a healthy retirement system?
  - Well funded
- What causes funded status to decline?
  - Liabilities increase more than assets
  - Assets decrease more than liabilities
- What funded status do you want to achieve?
  - A “healthy” funded status: at least 85 percent?
- What funded status do you want to avoid?
  - An “unhealthy at-risk” funded status: below 60 percent?



# Measurement Phase

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- Actuarial risk modeling projects today's funded status into the future using thousands of random "economic events"
  - Annual changes in assets or liabilities that impact funded status
- Model projects and stores funded status results
- Model sorts and groups results to determine chance of certain outcomes
- How and why did this occur?





# Analyze – The How And Why Phase

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- Why did the funded status decline?
  - Significant annual change in assets and/or liabilities
  - Gradual change in assets and/or liabilities
- Are there underlying factors causing this decline (root causes)?
  - Revenue shortfalls?
  - Investment losses?
  - Funding shortfalls?
- Do these root causes interact to compound the effect?
  - If so, how?



# Management Phase

- Are you comfortable with results of the measurement and analysis?
- Is the chance of an unhealthy funded status too high?
- How can you reduce that risk?
  - Introduce changes in policy?
- Use decision aide to evaluate whether policy change improves health of retirement systems



# How Will The Full Project Be Different?

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- Larger scope - several characteristics will be identified
- May identify root causes not measured before
- Interaction of risk factors will be measured
- Decision aide will provide a new way to manage health



# Management Opportunities

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- Test new policies in the actuarial risk model before trying them in the real world
- Develop new strategies for managing the future health of the retirement systems



# Options For LEOFF 2 Board

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- Continue to monitor progress of SCPP's Risk Assessment
  - Updates provided by staff or OSA
- Use model developed in SCPP's Risk Assessment with minor customization for LEOFF 2
  - Alternate revenue
- Begin independent Risk Assessment customized to LEOFF 2
  - Measurement phase could begin spring of 2010



# Questions?

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