

Advisory Group Input on Risk and Health Measures

Introduction

The Risk Assessment Advisory Group of the SCPP met on November 16th and held a discussion on risk and health measures. As part of this discussion, the group conducted a structured brainstorming exercise where each member responded to the following three questions posed by staff:

1. What does a healthy pension system look like?
2. What things might prevent achieving the healthy pension system envisioned above?
3. What specific outcomes do you want to avoid?

The purpose of the exercise was to gather input from the group that will help staff identify risk and health measures for the SCPP risk assessment project. The questions were designed to gather information on risk and health factors from different perspectives. During the exercise, members took turns responding to the questions until they had given all their responses. Responses were not discussed or critiqued during the exercise.

The responses provided by members are documented below. Due to the nature of the exercise, there is some duplication and overlap in the responses.

Question #1

What does a healthy pension system look like?

1. Pension system guaranteed
2. Honesty and integrity in actuarial assumptions and funding
3. Provide stability in retirement
4. A fulfillment of a promise for the particular pension system
5. Would be funded
6. Fully funded (in prudent political terms)
7. Stable and predictable

8. Attract and retain key skills for employers
9. Contribution rate stability
10. Would align with clear policy goals
11. Allows for growth and challenges of inflation and distressed economy
12. Rewards long term service
13. Simple in structure
14. Competitive with other states
15. Funding system stable and reasonable
16. Flexible and portable
17. Sustainable
18. Provides for adequate living expenses
19. Clear and credible in its decision-making
20. Relevant to a new generation of young workers
21. Provides a recruitment tool
22. Promised benefits need to be protected by the State
23. Would enhance personal retirement plans
24. Provides an excellent return on investment
25. Flexible, adapting to broad changes in economic climate
26. Aligns system's investment strategy with the payout strategy
27. Neither political nor partisan
28. Can be tailored to individuals
29. Targeted to address differences in different career paths
30. Affordable – for both employees and employers
31. Incentivizes overall life cycle employment costs

32. Does not entertain retroactive benefit improvements
33. Responsive to changes in investment environment and to constituent concerns regarding fairness
34. Well managed
35. Provides an equitable approach to distribute deficits and surpluses
36. Considered a well-run business by taxpayers and voters
37. Good years to cover for the bad years
38. Always looking long term
39. Would not implement benefit improvements via leapfrogging
40. Understandable by non-expert legislators
41. Legislators recognize the importance of a healthy pension system and the importance of funding it
42. Under-promises and over-delivers
43. Provides a guaranteed benefit in retirement
44. Conforms to actuarial best practices
45. Addresses the age 53-65 gap and the problem of retirement after age 65
46. Cannot provide for everything in retirement, only a part
47. Fairly distributes costs
48. Cross-connects with other strategic concerns of taxpayers (health care, child care, etc.)
49. Clearly defines its benefits and its contributions
50. Recognizes this is a tool to address the broader aging population
51. Transparent to public
52. Funded as a State obligation – similar to a debt paid outside of operating budgets
53. Its benefits are financed during working lifetime of participants and thereby its funding should therefore be protected for the beneficiaries

54. Robust enough to weather short-term budget priorities
55. Bounded by parameters, keep it safe from short-term budget priorities
56. Model to other systems
57. Maybe should have constitutional protection for the pension systems

Question #2

What things might prevent achieving the healthy pension system envisioned above?

1. Economic recession
2. Enhancing benefits beyond the capability of fully funding those enhancements before retirement
3. Current authorizing environment for benefit improvements
4. Lack of funding
5. Another crash or depression
6. Lack of honesty and integrity in funding and analysis of pensions
7. Investment volatility
8. Public opinion – pension envy
9. Mismanagement of investments
10. Failing to solve (address) the current funding problems
11. Lack of political will – risk avoidance
12. Lack of economic growth
13. Inflation
14. Not adhering to sound actuarial recommendations
15. Expedient budget decisions that burn bridges to long term recovery
16. Lowered priorities for expectations of pensions
17. Pulling more funds into the general fund budget

18. Rising health care costs
19. Playing politics with the pension system
20. Legislative overreaction: PERS 401(K)
21. Losing credibility with beneficiaries and the public
22. People living longer than funding assumptions
23. Implementing benefit improvements through leapfrogging
24. Over-promising and under-funding
25. Funding retroactive benefit improvements
26. Failure of coherent legislative governance/failure of SCPP process
27. Lack of collaboration between policy-makers and stakeholders
28. Lack of a clear policy direction for the pension system
29. Failure to build sufficient reserves during the good times
30. Individual constituencies pulling for their own self-interest
31. Ignoring the experts
32. Lack of positive labor relations
33. Lack of legislative understanding of the funding of pensions
34. Governor's budget priorities becoming disconnected from actuarial reality
35. Untimely responses to changing environments
36. Failure to protect a high quality Office of the State Actuary
37. Small gains taken at the expense of huge pension bow waves
38. Complexity of the current pension system
39. Perception that pensions are the end-all for everything in retirement
40. Volatility of State revenue
41. Ineffective or intermittent communication about the pension system

42. Failure to complete this new risk assessment process
43. Including pension funding in the general fund budget
44. Not understanding when a retirement system or plan needs to be closed

Question #3

What specific outcomes do you want to avoid?

1. Not being able to deliver the promise to the beneficiaries
2. End this process without overall policies for the pension system
3. Being forced to close Plans 2
4. Moving away from a defined benefit
5. Passing the problems on to future State leaders
6. Underfunding
7. Plan closure for fiscal expedience
8. Running out of money
9. Precipitous increase in plan contributions
10. Further complicating the pension system
11. Pension payments by employers that are unaffordable
12. Further fracturing the pension system
13. Loss of defined benefits
14. Further politicizing the pension system
15. Excessive rate volatility
16. Adding benefits that cannot be funded
17. Sense of entitlement
18. Underfunding – puts all pension systems at risk

19. Damaging the quality of our career workforce
20. Plans oriented only at the aging workforce
21. Overpromising
22. Breaking faith with existing retirees
23. Going to all cash system – pay as you go
24. Leapfrogging
25. Retroactive benefit improvements
26. Killing the messengers

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The Select Committee on Pension Policy
Risk Assessment Advisory Group

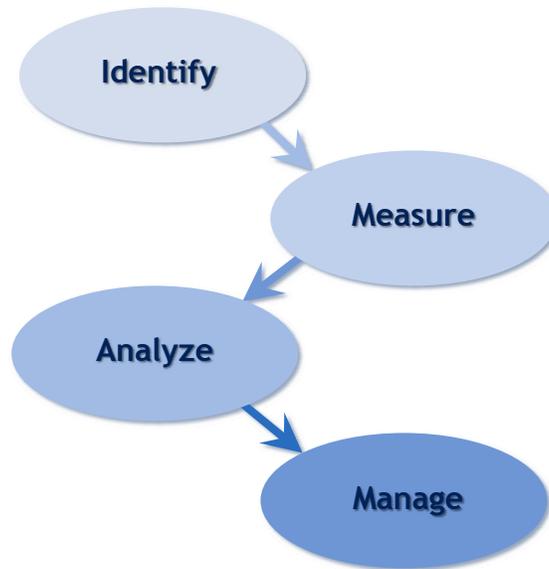
Overview of Risk Assessment Process And Timeline

*Background Material
December 14, 2009*



Office of the State Actuary
"Securing tomorrow's pensions today."

General Process For A Risk Assessment



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"Securing tomorrow's pensions today."

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Step 1: Identify

- What health risks do the systems face?
- Identification involves looking for
 - Bad outcomes you want to avoid
 - Factors that hinder the good outcomes you want to achieve



Step 2: Measure

- 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



Step 3: Analyze

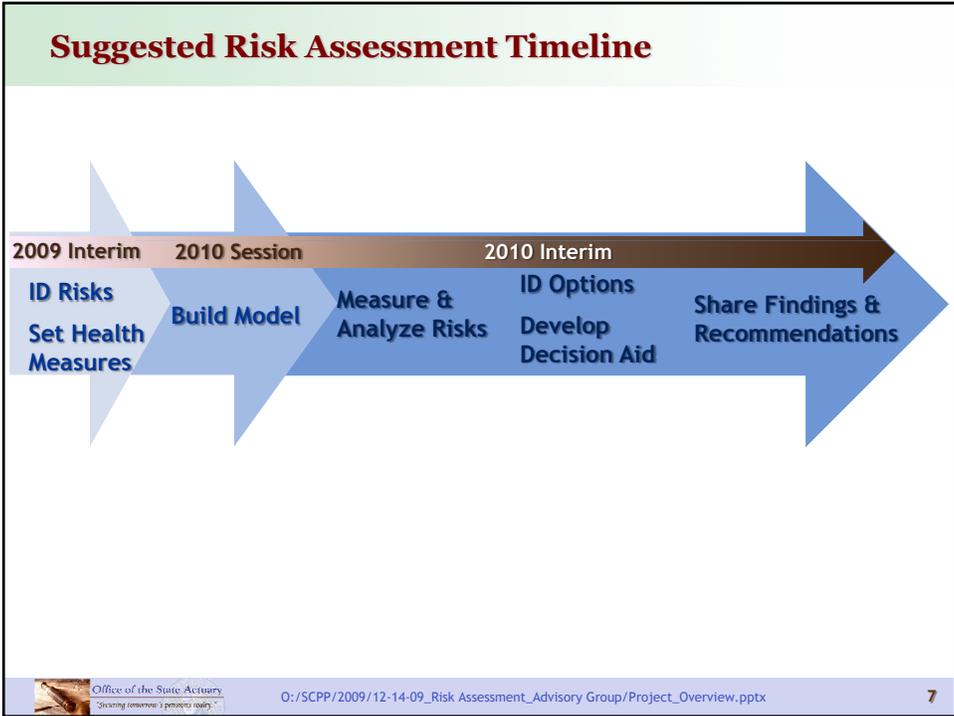
- The “how” and “why” step
- Analysis informs
 - Gives you a better handle on health risks
 - Helps you target options for managing risks
- Answers questions such as
 - How do the risks show up?
 - Are there *underlying factors* causing the risk?
 - Are risks interacting to compound the effect?
 - Are the risks or the underlying factors controllable? To what extent?
- Uncovering *root causes* and knowing the *level of control* brings to light possible options for managing risks



Step 4: Manage

- Once risks are identified, measured, and analyzed, they can be managed
- Managing risk involves
 - Deciding how much controllable risk to live with
 - Planning for risk beyond your control
 - Avoiding risks you can't survive
- Some risk management already in place
 - WSIB manages investment risk
 - Are there other risks to manage?
- Who looks out for the retirement system as a whole?







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Overview of Risk Model and Preliminary Risk Measures

*Background Material
December 14, 2009*



Office of the State Actuary
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Risk Model Overview

- Economic scenario generation
- Projected valuation
- Projected contribution
- Store key results for measurement



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Economic Scenario Generation

- Model generates thousands of equally likely annual economic scenarios
- Scenarios include annual changes in
 - Inflation
 - Investment returns
 - GF-S revenue
- Example - random economic scenario
 - Inflation = 3 percent
 - Investment return = -2 percent
 - GF-S growth = 0 percent



Projected Valuation

- Economic scenario produces an annual change in assets and available revenue
- Assets compared to projected pension liability to produce a required contribution for each year
- Example continued
 - Liabilities ↑
 - Assets ↓
 - Funded status ↓
 - Contribution rates ↑



Projected Contribution

- Model compares required contribution to available revenue
- Model projects actual contribution made each year
 - Based on past practices
- Example continued
 - Contributions ↑
 - GF-S ↔
 - Percent of recommended contributions made ↓



Store Key Results

- Model stores key results at the end of each annual scenario
- Key results = risk measures
- Example continued - of 5,000 economic scenarios
 - 1,000 missed paying the full recommended contribution
 - When missed, the average shortfall was 10 percent
 - The funded status was below 80 percent in 100 scenarios



Risk And Health Measures

- The outcomes you desire or want to avoid
- The risks you want to manage through funding and benefit policy changes
- Example continued
 - Probability of contributing less than recommended contribution = 20 percent
 - Percent of recommended contribution rate missed = 10 percent
 - Probability of funded status below 80 percent = 2 percent



Preliminary Identification

- Advisory group provided input on risks and desired outcomes in November
- Measurable risks/outcomes included in model
- Other risks/outcomes documented for future strategic planning efforts



Preliminary Risk And Health Measures

- OSA identified fourteen preliminary measures in five categories for risk assessment model
 - Contributions
 - Benefit adequacy
 - Funded status
 - Complexity
 - Cost-sharing



Preliminary Contribution Measures

- Probability of actual contribution below required
- Percent of required contribution made
- Maximum change in contribution rate
- Average change in contribution rate



Preliminary Benefit Adequacy Measures

- Employer-provided replacement Ratio (RR) at retirement
- Volatility of RR in retirement
- Minimum RR that is guaranteed
- Probability of retirees' purchasing power falling below x percent of starting value



Preliminary Funded Status Measures

- Chance of running out of money
- Amount of worst-case 50-year Pay-As-You-Go contributions
- Chance of funded status below X percent
- Average funded status



Preliminary Complexity Measures

- Number of separate benefits in plan design



Preliminary Cost-Sharing Measures

- Percent of cost paid by employer



Questions for Advisory Group

- Do you see additional measures we can model?
- Should we remove any of the preliminary measures?
- Other questions about measures?



Next Steps For Risk Assessment Project

- Build risk assessment model (OSA)
- Measure and analyze risks (OSA)
- Identify options and develop decision aid (OSA and SCPP)
- Share findings and recommendations (SCPP)

