

# Understanding the Development of the Recommendations of the Ad Hoc Committee on Formula Review

March 3, 2010

# Purpose

- The Ad Hoc Committee on Formula Review was formed in the fall of 2008 to examine the Authority's funding and cost allocation formulas to ensure sustainability
- The recommendations of the Ad Hoc Committee were presented to the Managers, Finance Officers, and Executive Committees in February 2010
- The purpose of this meeting is to further explain the development of the recommendations and to address questions expressed by the members.

# Historical Perspective of Cost Allocation Revisions

# Guiding Principles at the Authority's Inception

- Authority's Long-term Financial Security
- Rate Stability and Fairness
- Simplicity

# Retrospective Funding Model

- Primary Deposit based on historical costs intended to sufficiently fund upcoming coverage period
- Retro Deposit to reconcile prior deposits based upon individual member experience

# Cost Allocation

- Based on Experience and Exposure
  - Retained Losses
  - Pooled Losses based on Experience
  - Pooled Losses based on Exposure (Payroll)

# Rolling Retro

- Developed to smooth volatility of retro cash flows
  - Initially a four-year installment plan
  - Dampened impact of “good” years and “bad” years

# Payment of Expenses from Investment Earnings

- Developed to reduce costs of coverage for members at a time when reserves appeared more than adequate

# Primary Deposit Variability Caps

- Developed to smooth volatility of primary deposits
  - Limit year-to-year change in primary deposit to +/- 10%

# Recent Developments

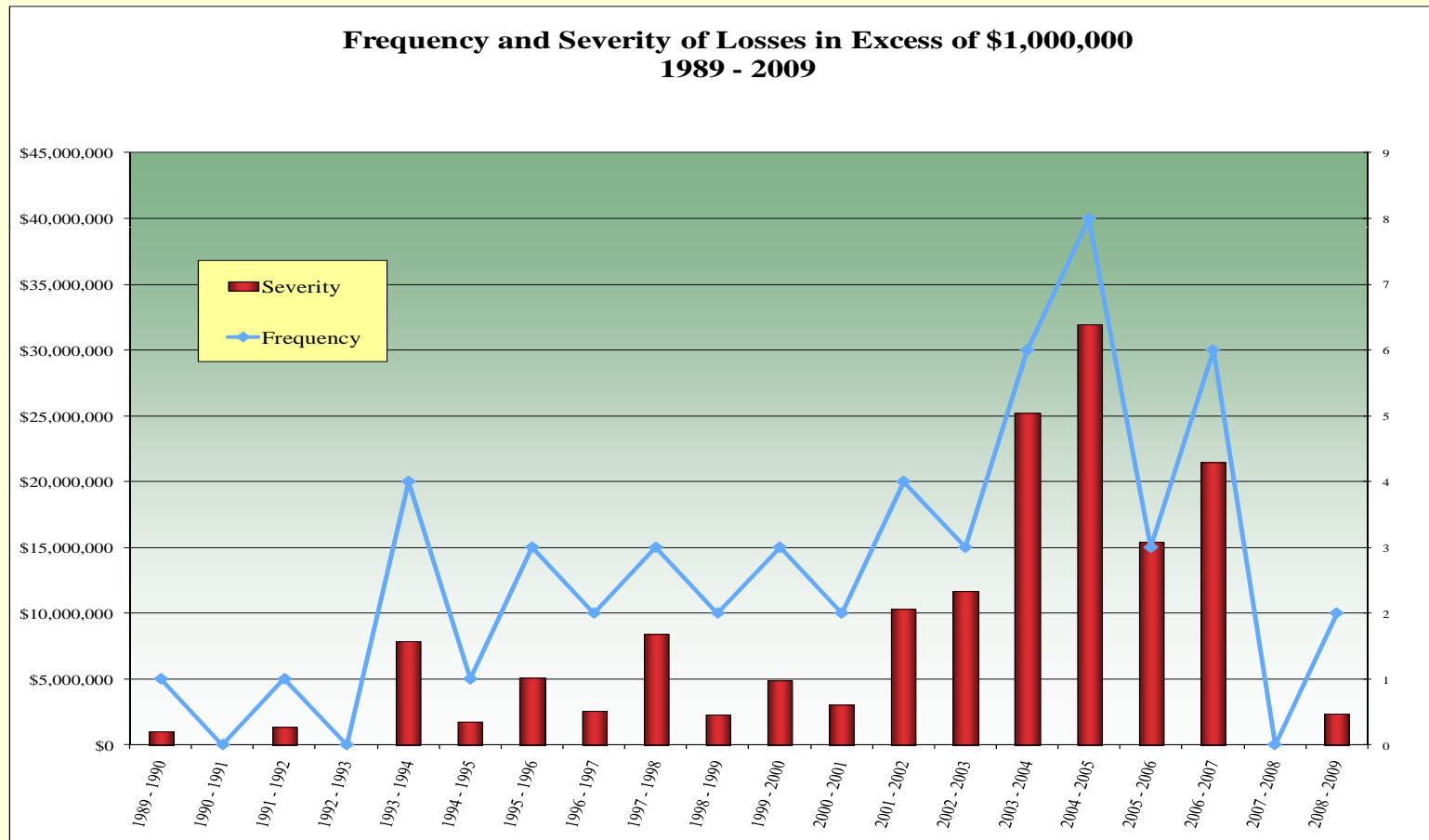
# Insurance Market

- Hard markets required acceptance of higher self-insured retention for the pool
- 9/11 compounded insurance market difficulties

# Large Losses

- Multiple large losses exceeded primary deposit funding thereby requiring significant retrospective deposit assessments
- Rolling Retro extended to eight-year cycle to lessen impact of large losses

# Large Losses



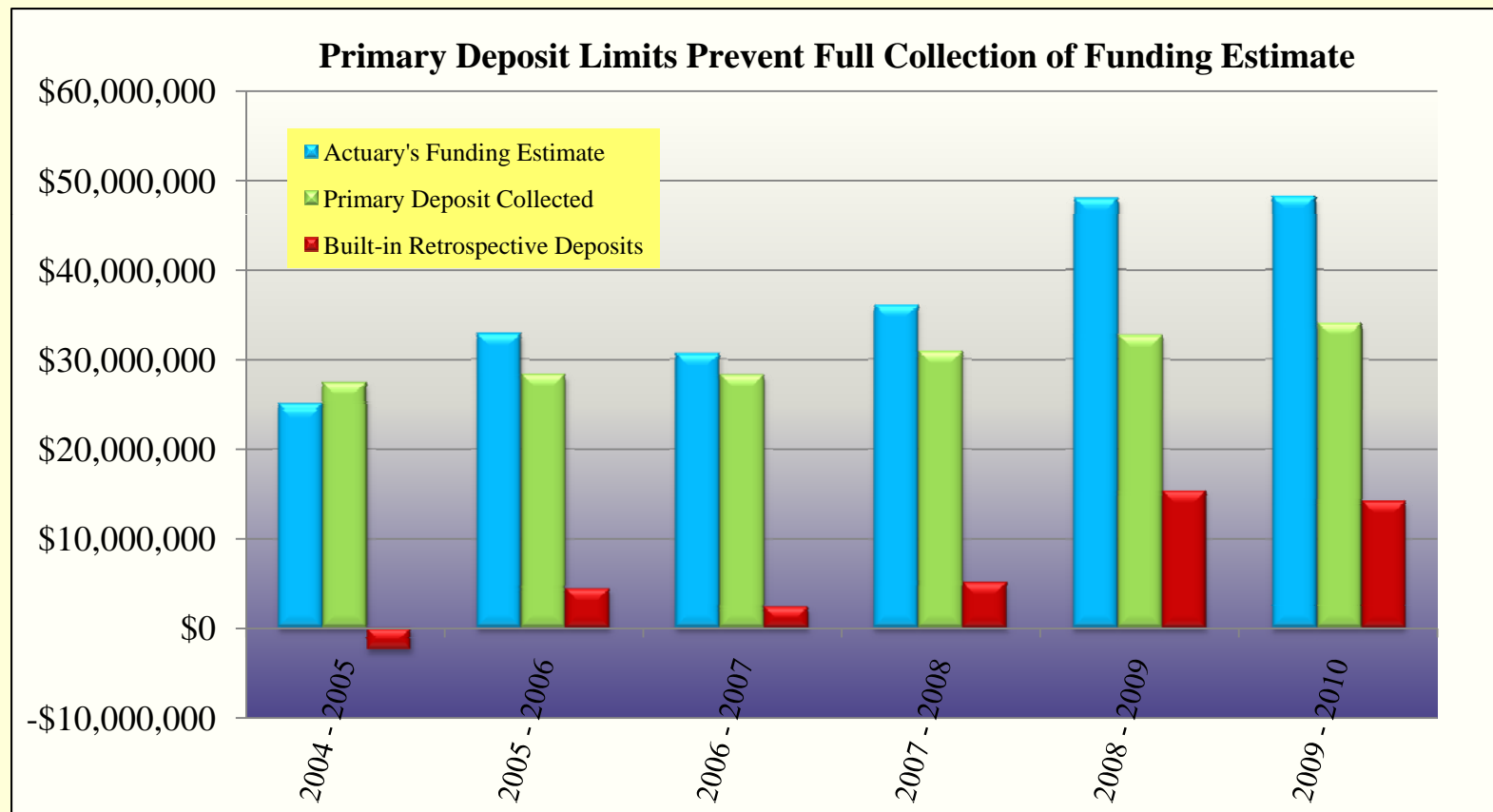
# Funding Impact

- Actuarial estimates increased due to unfavorable loss experience
- Increased primary deposit funding required as a result of increased actuarial estimates

# Primary Deposit Limits

- Limits on primary deposits prevented sufficient up-front funding of coverage period
- Insufficient funding of coverage period recovered through retrospective deposits

# Primary Deposit Limits



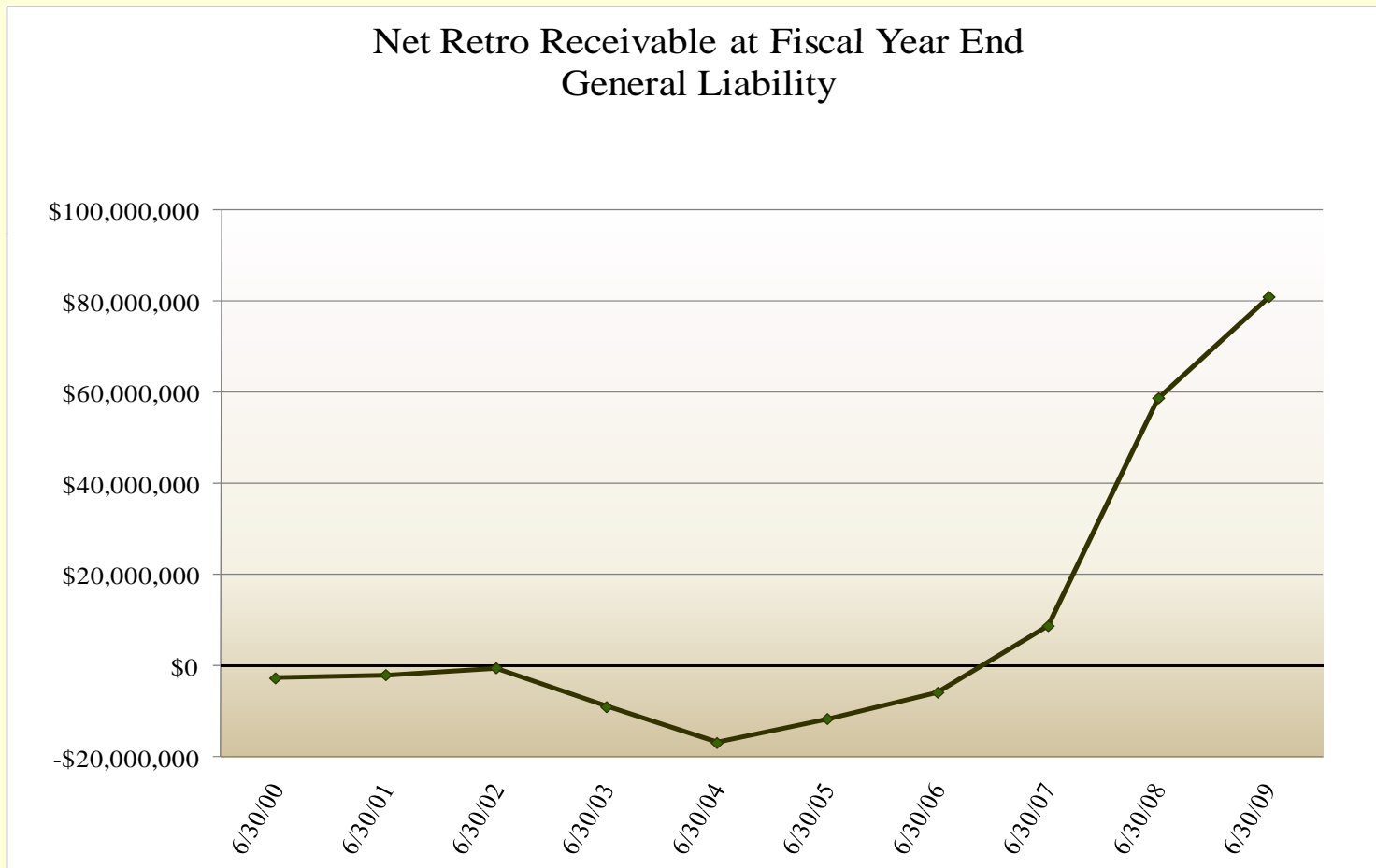
# Credit Risk

- Authority becomes creditor to members as rolling retro receivables mount

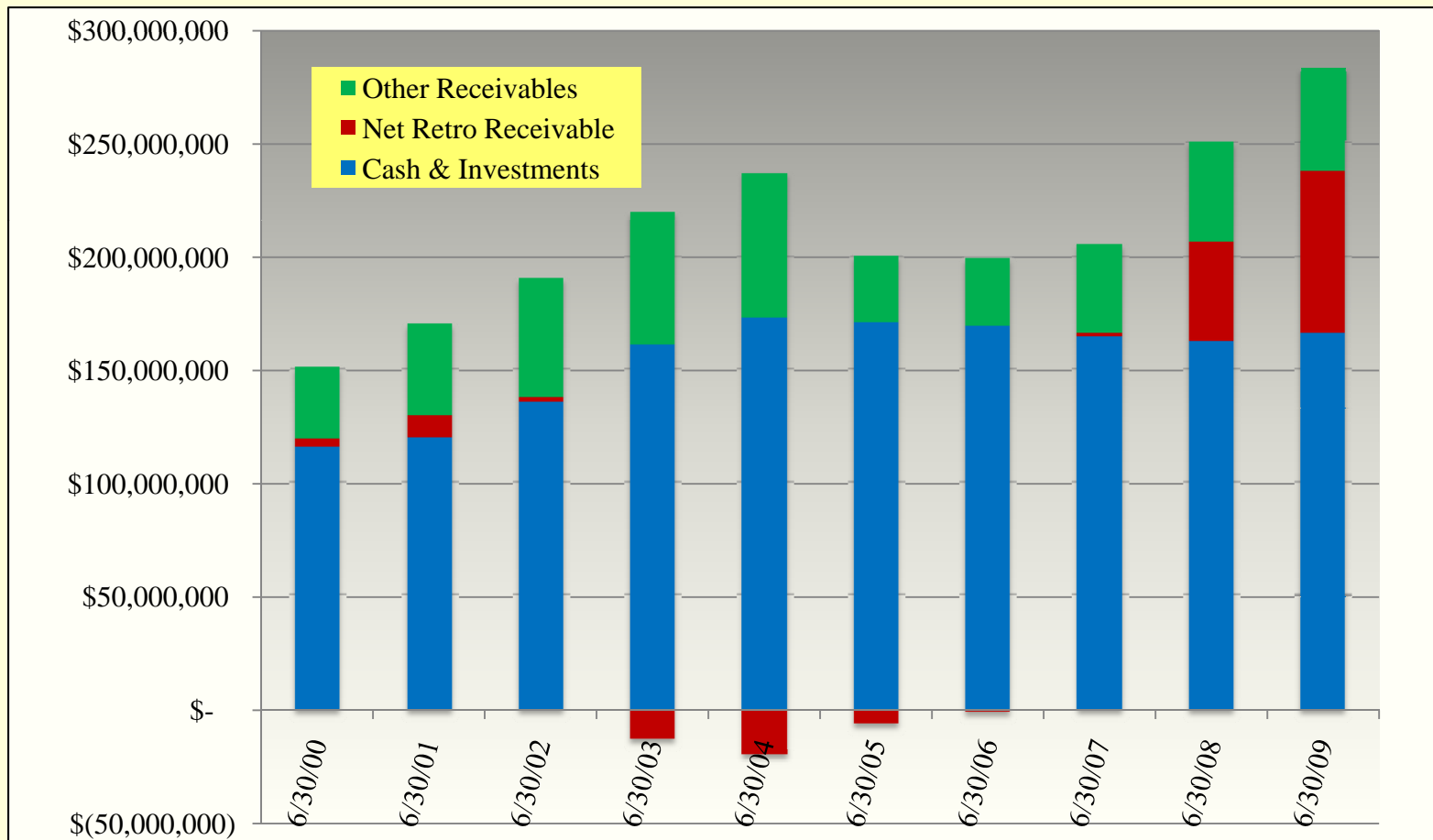
# Net Asset Position

- Liquid Net Asset position of Authority has been compromised by long-term receivables due from members in the form of rolling retro payments owed
- Investment earnings have been reduced due to inability to invest receivables

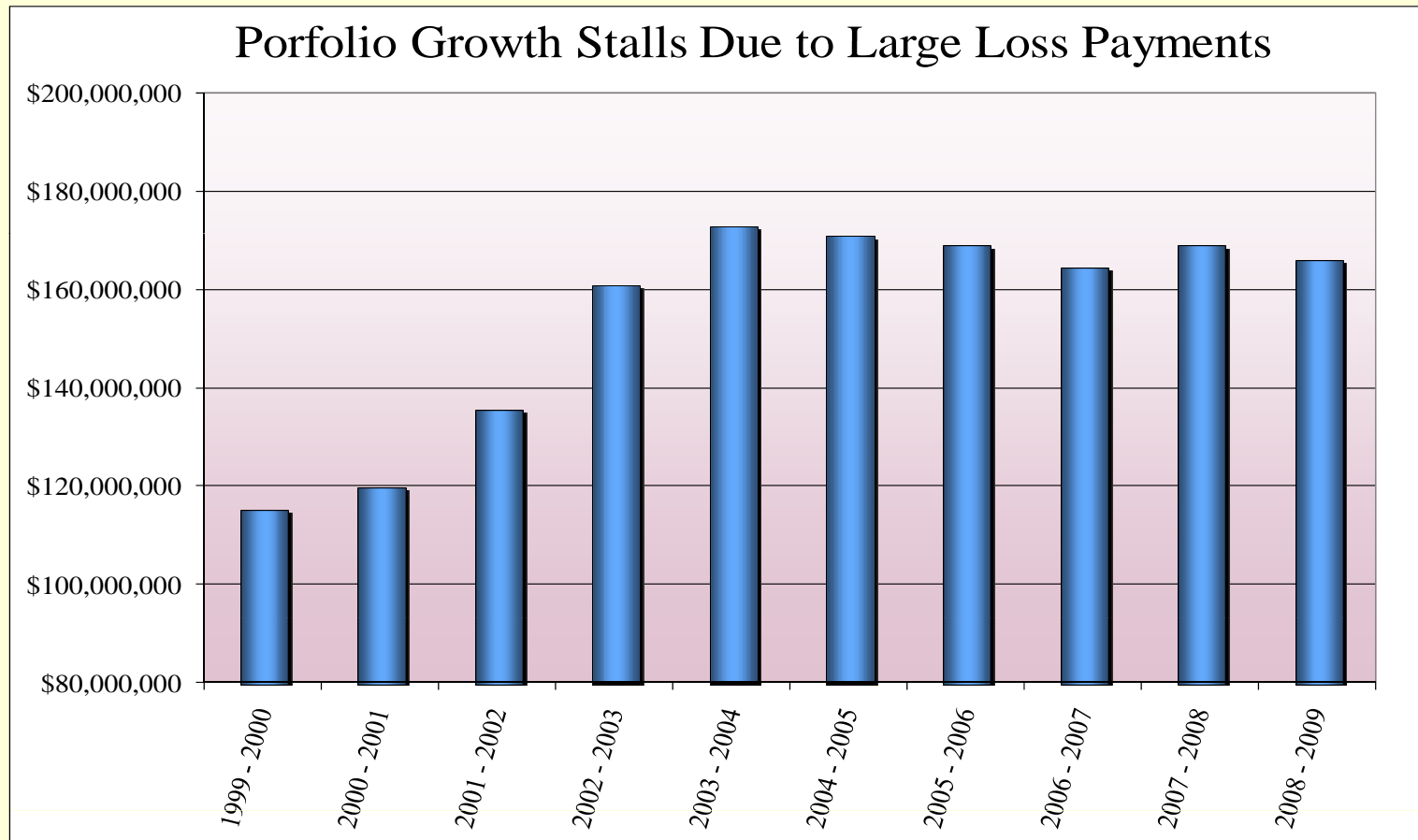
# Net Asset Position



# Net Asset Position



# Investment Impacts



# Ad Hoc Committee Deliberations

# Guiding Principles

- Reaffirmed and Clarified Guiding Principles
  - Authority's long-term financial security
  - Budgetary predictability for members
  - Fairness among members
  - Simplicity of formulas

# Prospective Funding Model

- Determined that all costs associated with upcoming coverage period should be sufficiently funded up-front
  - Annual Contribution made at the beginning of the coverage period should be at 75% confidence level
  - Sufficient up-front funding coupled with credibility weighting will lead to the elimination of retrospective adjustments

# Reasonable Rate Adjustment

- Determined that moderate aggregate increases over the next several years are warranted in order to appropriately fund Annual Contribution and pay-down the retrospective deposits receivable

# Retro Deferral

- Determined that sufficient up-front funding of coverage periods cannot be accomplished while paying down existing retrospective deposits receivable
- Determined that, as the Authority's cash flow permits, retrospective deposits receivable should be deferred in the short term in order to phase-in 75% confidence level funding of the Annual Contribution

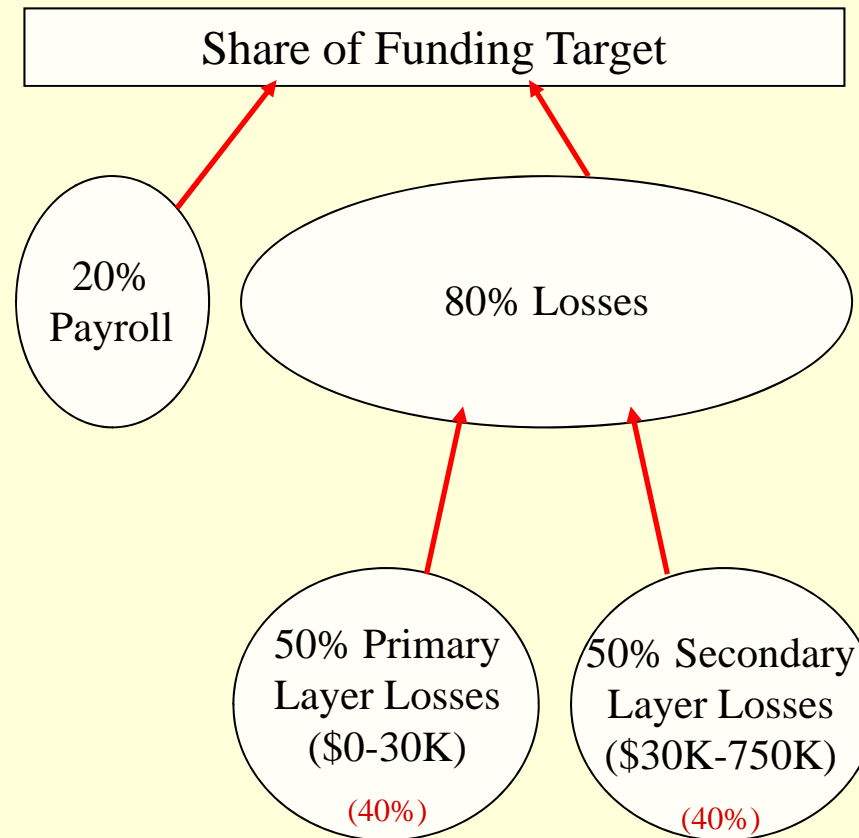
# Credibility Weighting

- Embraced the concept of credibility weighting in the allocation of losses
  - Larger members should have more of their costs determined by their individual experience
  - Smaller members should have less of their costs determined by their individual experience

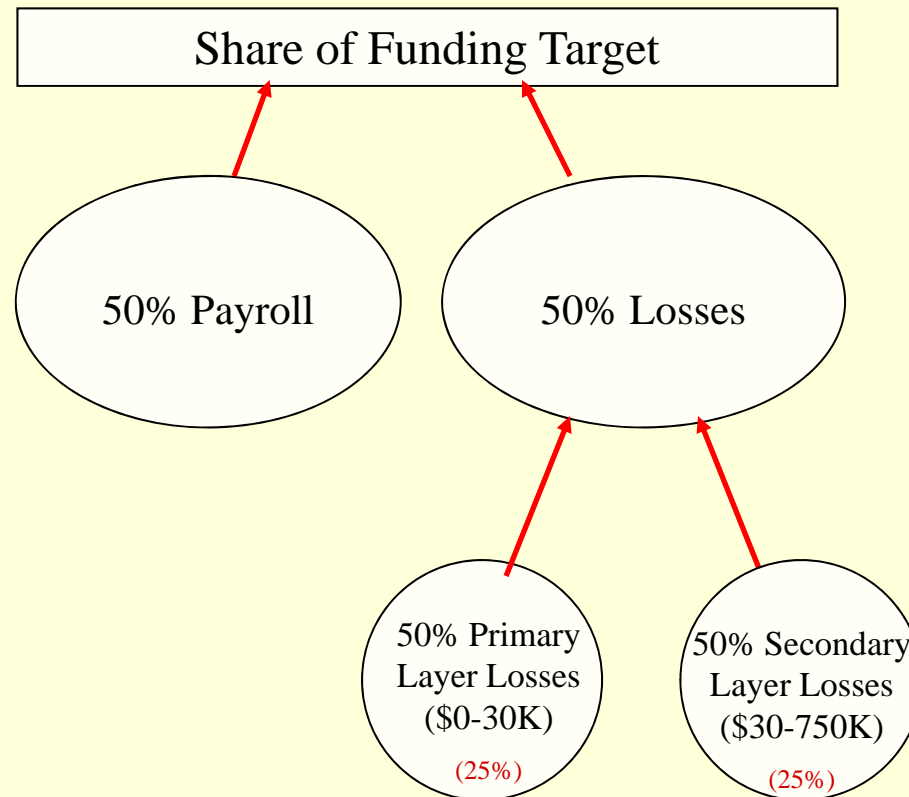
# How Credibility Weighting Affects Cost of Coverage

- Cost of Coverage = (pro rata share of primary layer x 50% of credibility factor) + (pro rata share of secondary layer x 50% of credibility factor) + (pro rata share of payroll x (1.0 - credibility factor)) x funding target
  - Primary Layer: \$0-30,000 (Liability), \$0-50,000 (WC)
  - Secondary Layer: \$30,000-750,000 (Liability), \$50,000-100,000 (WC)
  - Funding Target: All expected costs of the coverage period, based on actuary's funding estimate

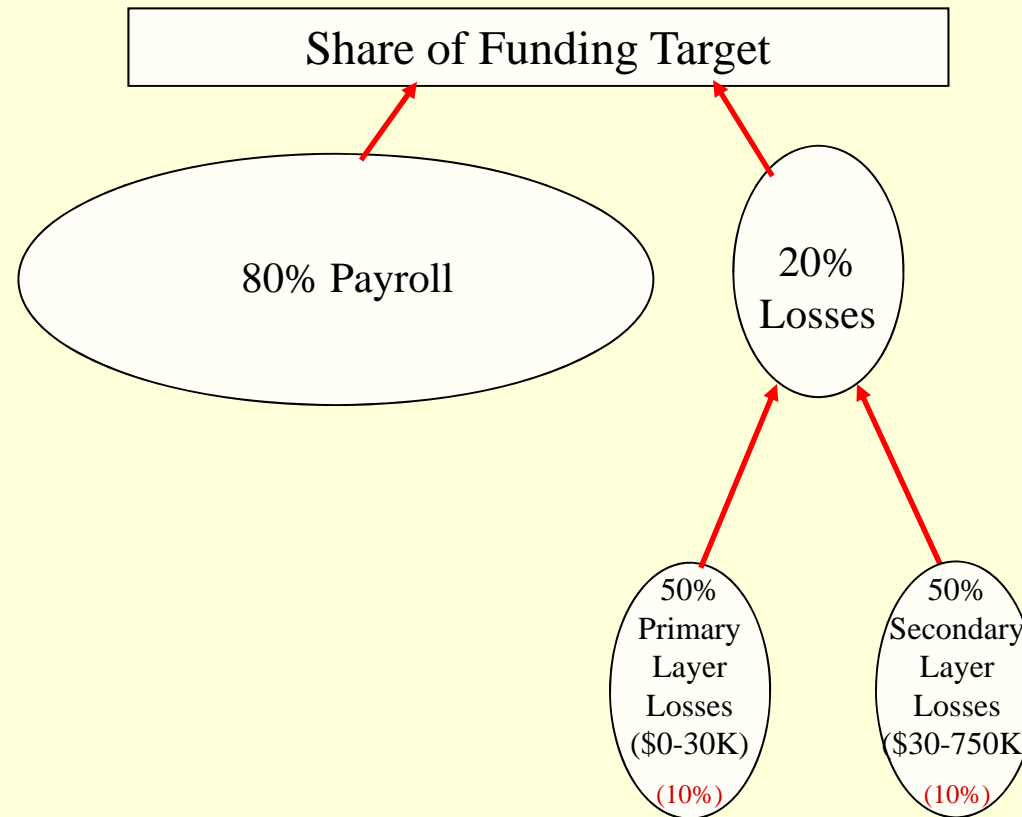
# Credibility Weighting of a Large Member



# Credibility Weighting of a Medium-Sized Member



# Credibility Weighting of a Small Member



# Moderate Impacts

- Recognized the need to dampen impacts on individual members associated with changes to the funding formula
  - Recognized that most members have been underpaying over the past several years
  - Recognized that placing limits on year-to-year contribution increases should not overly burden those members whose contributions are not bound by the limits

# Recommendations

# Update the Model

- Transition from a retrospective funding model to a prospective funding model

# Annual Contribution

- Adequately pre-fund each year with an Annual Contribution that is computed at the 75% confidence level
  - Phase in a 75% confidence level funding to prevent an extraordinary initial increase
  - Transition period expected to be completed in approximately three years

# Credibility Weighting

- Base Annual Contribution on individual member's experience and exposure
  - Larger members have more credible loss experience, so their cost will be based more on their experience relative to other members
  - Smaller members have less credible loss experience, so their cost will be based more on their exposure relative to other members

# Suspension of Retro Deposits

- Temporarily allow members to defer payment of retrospective receivables until Annual Contribution grows to the 75% confidence level
  - Once Annual Contribution is adequate, payment of retrospective receivables will commence
  - Credibility weighting will account for rough equity in the sharing of costs, so retrospective adjustment will be eliminated after transition period
  - Modeling indicates that 75% confidence level funding should be achieved in approximately three years

# Wide Variability Limits

- Control member cash flow volatility by limiting year-to-year changes in the Annual Contribution
- A range of 0% to 35% in the initial year effectively balances the desire to protect against extreme volatility against the need to collect sufficient funds to achieve the funding target
- The limitation band should be reviewed annually to ensure that any limits continue to appropriately balance volatility with funding sufficiency

# Elements of the New Model

- Funding target based on Actuary's funding estimate at 75% confidence level
- Prospective Annual Contribution based on exposure and past five years' experience
- Losses valued as of six months after the end of the coverage period
- Credibility weighting will determine how much of individual member's loss experience is used in determining that member's cost

# Elements of the New Model

- Police exposure rated separately in Liability Program
- Public Safety exposure rated separately in Workers' Compensation Program
- Retrospective adjustments ultimately to be eliminated

# How does the New Model Reflect the Guiding Principles

- Authority's long-term financial security
  - Prospectively funds coverage periods sufficiently
  - Ultimately moves Authority from the role of creditor
- Budgetary predictability for members
  - One Annual Contribution
  - No more retro “surprises”

# How does the New Model Reflect the Guiding Principles

- Fairness among members
  - Credibility weighting gives greater value to experience for those members best able to affect their experience
  - Loss control/risk management efforts are rewarded by lower rates
- Simplicity of formulas
  - Coverage period is paid for with one payment
  - No more confusing, multi-year retro calculations

# Frequently Asked Questions

- Why now?
  - The current model is not sustainable. The cash flow implications of the current model could compromise the Authority's ability to pay claims within the next several years.
- Why not just charge all members 10% more without changing the model?
  - The current model is essentially the same as adopted 32 years ago. Pooling and insurance industry best practices reflect variable credibility weighting to prevent adverse selection.

# Frequently Asked Questions

- Why is Variable Credibility Weighting better?
  - Credibility weighting is the industry standard for equitably allocating risk among different sized members.
- Why does the secondary loss layer need to be counted?
  - The loss layer between \$30,000 and \$750,000 has shown a significant increasing trend over the past several years.
  - Those members that are experiencing these losses should be more responsible for paying for these losses. The current formula does not effectively allocate this layer of losses to those experiencing them.

# Frequently Asked Questions

- We have a good loss history, why are we seeing such a large increase?
  - Most members have good periods and bad periods for losses. The five-year loss history used to determine the Annual Contribution is intended to compensate for these good and bad periods to reduce volatility over time.
- What if we are over paying?
  - During the Transition Period, retrospective calculations will still be performed to ensure members are not inappropriately affected by the change to variable credibility weighting.

# Frequently Asked Questions

- If underfunding is the issue, why does the new model collect less money than the current model?
  - This is reflective of the Ad Hoc Committee's early decision, in light of the economy, to limit pool-wide increases to about 10%.
  - Under the current model, the primary deposit is insufficient and the retrospective receivables continue to grow. The new model is designed to sufficiently fund the coverage period without adding to the outstanding retrospective receivables liability of the members.