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LEOFF 2 Preliminary Actuarial Valuation Results

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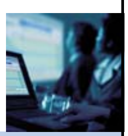
Today's Presentation

- Background on Funding Methods
- Updated 2010 Actuarial Valuation
- Preliminary 2011 Actuarial Valuation
- Informational – no Board action needed today



Actuarial Funding Basics

- Estimate future benefits to be paid from the plan
  - How much will they be
  - When will they be paid and for how long
- Estimate future investment returns
- Use an actuarial cost method to determine amount and timing of contributions to fund the future benefit payments
  - Various methods differ in how the funding of benefits is spread over time

Every Actuarial Cost Method Has A "Normal Cost"

- "Next year's cost"
- The cost of expected future benefits that are allocated to the next year of service
- If everything happens as planned, all normal costs plus investment earnings will be sufficient to pay all future benefits
- What can go wrong?
  - Actuarial gains/losses or excess/shortfall of past contributions
  - Reality is different than the underlying assumptions
  - Benefit provisions change
  - Actual contributions differ from the normal cost

Some Actuarial Cost Methods Treat Gains/Losses Different

- Two general choices
- Adjust the normal cost
  - Include the shortfall/excess of past contributions in the normal cost
  - Gains/losses spread over the current workforce (covered payroll)
  - Prevents the accumulation of an Unfunded Actuarial Accrued Liability (UAAL)
  - Produces more volatile normal costs
  - Aggregate Method
- Add a separate amortization cost
  - Amortization policy needed to determine payment schedule
  - Can spread shortfall/excess of past contributions beyond today's workforce creating a UAAL
  - Provides more stability in the normal cost
  - Entry Age Normal Cost Method

Funding Policy Adopted By The Board

- Combines components of both methods
- Underlying method is Aggregate Actuarial Cost Method
  - Does not produce an Unfunded Actuarial Accrued Liability (UAAL)
  - Rate fluctuates with experience, including investment returns
- Rate stability added by applying minimum (rate floor) to the calculated Aggregate rates
  - Ninety percent of the normal cost under the Entry Age Normal Cost Method (EANC)
  - Does not include separate amortization cost from EANC method
- Short-term Policy
  - Minimum based on 100 percent of EANC
  - Rates adopted for three biennia, 2011-17

Updated 2010 Valuation

- Implemented economic assumption changes adopted by the Board during the 2011 Interim

	2010	2010 Updated	Difference
Investment Return	8.00%	7.50%	(0.50%)
Inflation	3.50%	3.00%	(0.50%)
General Salary Increase	4.50%	3.75%	(0.75%)

- No phase-in recommended for LEOFF 2
  - No short-term budget impact

Economic Assumptions Impact Liabilities And Contributions

	2010	2010 Updated	Impact on Liabilities	Impact on Contributions
Investment Return	8.00%	7.50%	⬆	⬆ / ⬇
Inflation	3.50%	3.00%	--	--
General Salary Increase	4.50%	3.75%	⬇	⬇ / ⬆

Liabilities And Contribution Rates Increased

(Dollars in Millions)	2010	2010 Updated	Difference
Present Value of Projected Benefits	$7,933	$8,204	$271
Present Value of Earned Benefits	$4,863	$5,078	$215

LEOFF 2 Contribution Rates				
	2010	2010 Updated	Difference	Adopted 2011-17
Member	7.37%	7.57%	0.20%	8.46%
Employer*	4.42%	4.54%	0.12%	5.08%
State	2.95%	3.03%	0.08%	3.38%

**Excludes administrative expense rate.*

Funded Status Decreased

LEOFF 2 Funded Status			
(Dollars in Millions)	2010	2010 Updated	Difference
Accrued Liability	$4,863	$5,078	$215
Valuation Assets	$6,043	$6,043	--
Unfunded Liability	($1,179)	($965)	$214
Funded Ratio	124%	119%	(5%)

2010 Revised Valuation Summary

- Assumptions represent state actuary's best estimate
- Contribution rates increased
  - Still below adopted rates
  - Not a contribution rate-setting valuation
- Funded status dropped 5 percent

Purpose Of The 2011 Actuarial Valuation

- Contribution rate-setting valuation
  - Current rates adopted through 2015-17 Biennium
  - Board can adopt new rates for ensuing biennium, 2013-15
- Calculate contribution rates to adequately fund future benefits
  - Update data, assets, and new legislation
- Check funding progress
- Certify the underlying data, assumptions, and methods are reasonable and conform with current actuarial standards of practice

2011 Actuarial Valuation Results Are Preliminary

- Concurrent outside actuarial audit underway
  - Results presented in July
- Actuarial valuation will be finalized following Board adoption in July

Summary Of The 2011 Preliminary Valuation Results

- 21.14 percent return on market value of assets
  - July 1, 2010, through June 30, 2011
- Deferred asset losses of $255 million
  - Deferred losses at 2010 were $961 million
- Calculated contribution rates did not change from the updated 2010 valuation
  - Aggregate rate decreased
  - EANC rate remains the same
- Funded status unchanged from the updated 2010 valuation
  - Plan remains healthy
- Underlying data, assumptions, and methods remain reasonable

Change In Participant Data From Last Valuation

LEOFF 2	2010	2011 Preliminary	Difference
Number of actives	16,775	16,805	30
Average annual salary	$88,828	$91,322	$2,494
Average attained age	42.2	42.7	0.50
Average service	13.3	13.8	0.50
Number of annuitants	1,639	2,015	376

Update Asset Values

- Market Value of Assets (MVA) reported by WSIB
- Calculate 2011 asset gain (or loss) based on 7.5 percent expected return
- Develop Actuarial Value of Assets (AVA) by smoothing past and current asset gains (or losses)
  - Smooth gain (or loss) over a period up to eight years
  - AVA limited to 30 percent "corridor" around MVA
  - Smoothing method reduces contribution rate and funded status volatility

Change In Assets From Last Valuation

LEOFF 2			
(Dollars in Millions)	2010	2011 Preliminary	Difference
Market value (MV)	$5,081	$6,366	$1,285
Contributions less disbursements*	$204	$200	($4)
Investment return	$569	$1084	$515
Return on assets**	13.21%	21.14%	7.93%

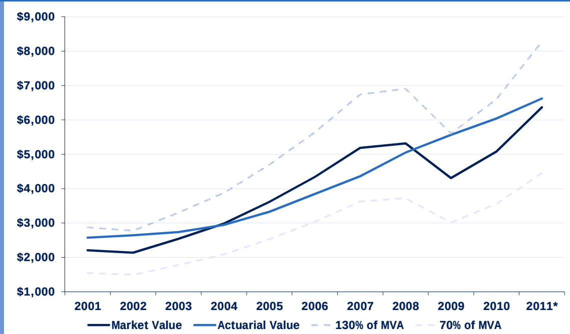
**Includes transfers, restorations, and payables.*
***Time-weighted return on market value of assets.*

Actuarial Value Of Assets

Calculation of Actuarial Value of Assets				
LEOFF 2				
(Dollars in Millions)				2011 Preliminary
Market Value of Assets				$6,366
Deferred Gains and (Losses)				
Plan Year Ending	Return on Assets*	Years Deferred	Years Remaining	Amount Deferred**
6/30/2011	21.08%	8	7	612
6/30/2010	12.99%	5	3	131
6/30/2009	(22.64%)	8	5	(1,033)
6/30/2008	(1.33%)	8	4	(246)
6/30/2007	22.74%	8	3	174
9/30/2006	15.77%	8	2	71
9/30/2005	17.55%	8	1	36
Total Deferral				($255)
Actuarial Value of Assets***				**$6,621**

**Dollar-weighted rate of return.*
***Amount of asset gains and (losses) left to recognize, or apply, in future valuations.*
****Actuarial Value of Assets can never be less than 70% or greater than 130% of the Market Value of Assets.*

A Comparison Of Market And Actuarial Value Of Assets



*Preliminary.

Change In Liabilities From Last Valuation

LEOFF 2			
(Dollars in Millions)	**2010**	**2011 Preliminary**	**Difference**
Present Value of Fully Projected Benefits*	$8,204	$8,720	$516
Present Value of Earned Benefits**	$5,078	$5,576	$498
Valuation Interest Rate	7.50%	7.50%	--

*Today's value of all future plan benefits for current members.
**Today's value of all future plan benefits that have been earned as of the valuation date by current plan members.

Change In Contribution Rates From Last Valuation

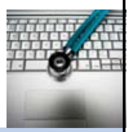
LEOFF 2				
Member Rates	**2010**	**2011 Preliminary**	**Difference**	**Adopted 2011-17**
Aggregate Rate	6.38%	6.20%	(0.18%)	
90% EANC Rate	7.57%	7.57%	--	
100% EANC Rate	8.41%	8.41%	--	8.46%

Funded Status Is A Measure Of Plan Health

- Funded status =

  Actuarial Value of Assets
  divided by
  Today's Value of Earned Benefits

- If the funded status exceeds 100 percent, the plan has more than $1 of assets for every $1 of earned benefits

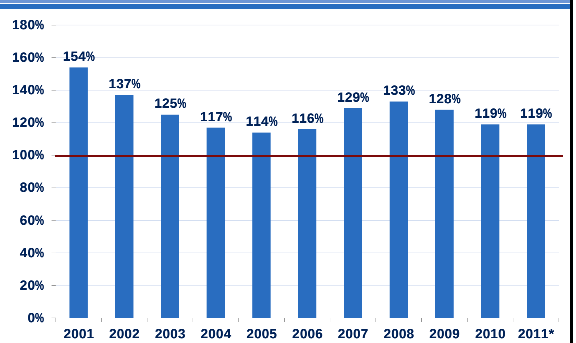


Change In Funded Status From Last Valuation

LEOFF 2			
(Dollars in millions)	**2010**	**2011 Preliminary**	**Difference**
Today's value of earned benefits*	$5,078	$5,576	$498
Actuarial value of assets	$6,043	$6,621	$578
Unfunded liability	($965)	($1,044)	($79)
Funded status	119%	119%	--

**Calculated using the Project Unit Credit Actuarial Cost Method. We use this method for reporting the plan's funded status but not for calculating contribution rates.*

Historical Funded Status



**Preliminary.*

Closing Comments

- Calculated contribution rates below current adopted rates
  - Both rates remain reasonable
- Current funded status exceeds 100 percent and is considered healthy
- Actuarial valuation is snap-shot in time
- Continue to recognize asset losses
  - Upward pressure on contribution rates in the short-run
  - Downward pressure on funded status in the short-run
- Actuarial projections provide view into the future
  - Help determine if short-term policy should continue
  - Available after valuation is finalized

Questions