

# OLIVER WYMAN

Oliver Wyman Actuarial Consulting

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## Calculation of Second Injury Fund Liability

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# Billing Mechanism

- **January Advance Assessment due in February**
- **July Final Assessment due in August**



# August 2005 Final Assessment: 2005 Funding

$$\frac{1}{2} \times \left[ \frac{1,289,989}{387,674,522} + \frac{2,340,036}{105,153,724} \right] \times 135,000,000$$

$$\left[ \frac{67,500,000}{387,674,522} \times 1,289,989 + \frac{67,500,000}{105,153,724} \times 2,340,036 \right]$$

$$[17.4\% \times 1,289,989 + 64.2\% \times 2,349,036]$$

$$\left( \begin{array}{c} 2005 \\ \text{Compensation} \\ \text{Assessment} \end{array} \right) \times \left( \begin{array}{c} 2004 \\ \text{Employer} \\ \text{Compensation} \\ \text{Paid} \end{array} \right) + \left( \begin{array}{c} 2005 \\ \text{Participation} \\ \text{Assessment} \end{array} \right) \times \left( \begin{array}{c} 2004 \\ \text{Employer} \\ \text{Participation} \\ \text{Cost} \end{array} \right)$$

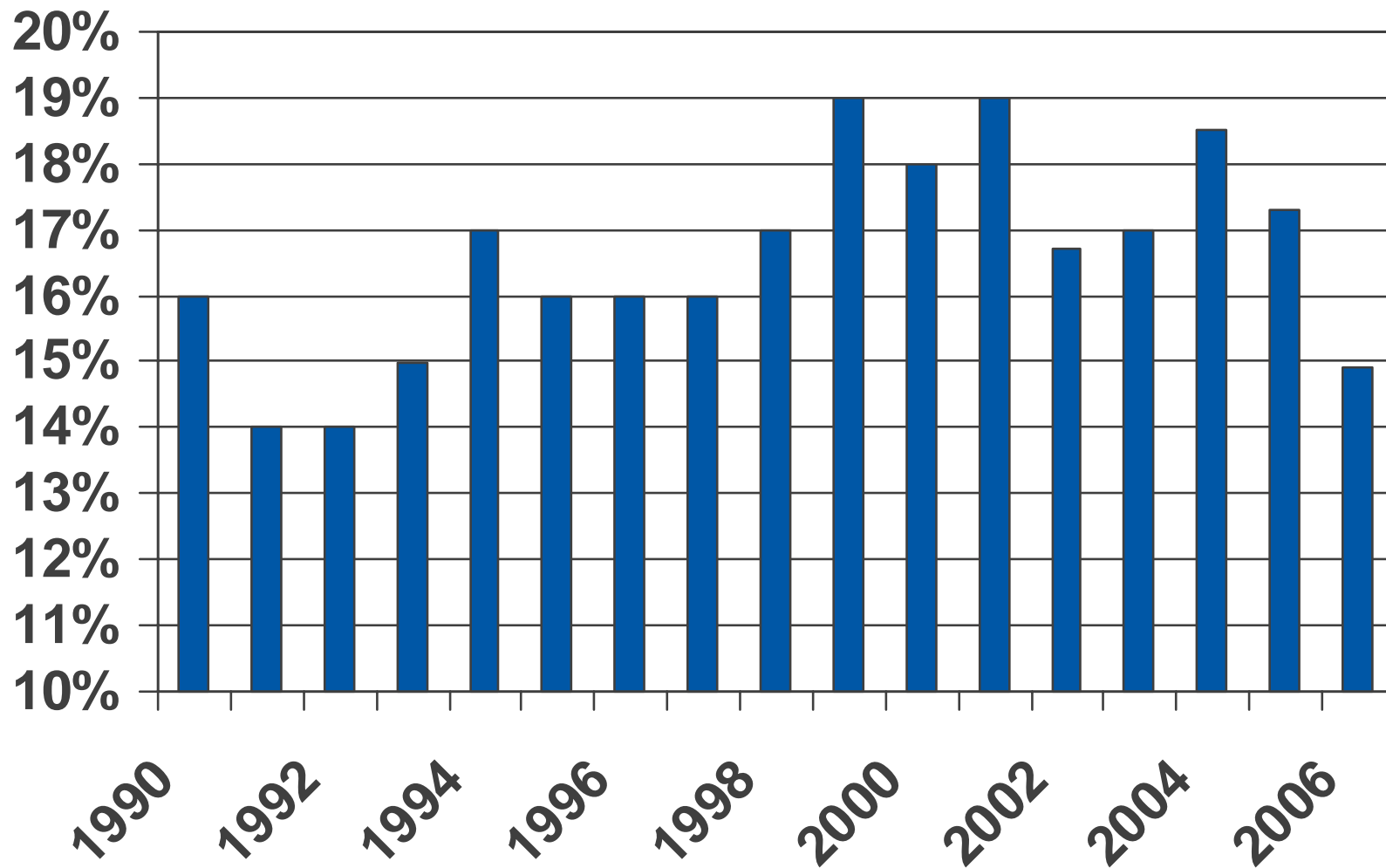
2005 Compensation Assessment: 17.4%

2005 Participation Assessment: 64.2%

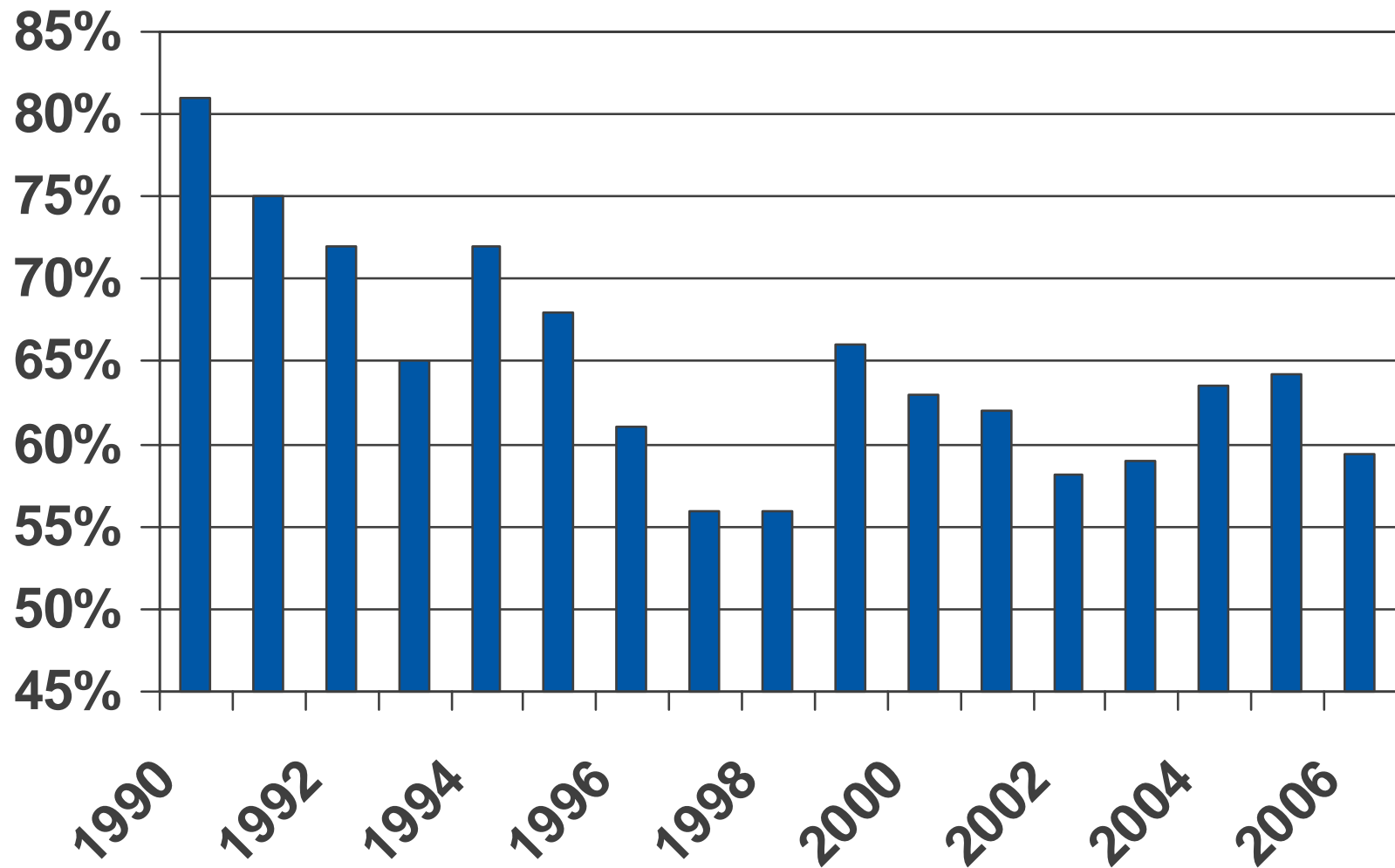
# Considerations

- **One Year Lag in Billing**
  - Funding for 2005 is based on 2004 employer payments
- **Compensation Assessment is same for all employers**
- **Participation Assessment is same for all employers**

# History of Compensation Assessments



# History of Participation Assessments



# Compensation Assessment Percentages

Annual Assessments	
Year	Percentage
1990	16.00%
1991	14.00%
1992	14.00%
1993	15.00%
1994	17.00%
1995	16.00%
1996	16.00%
1997	16.00%
1998	17.00%
1999	19.00%
2000	18.00%
2001	19.00%
2002	16.70%
2003	17.00%
2004	18.50%
2005	17.30%
2006	14.90%
<b>All Year Average</b>	<b>16.55%</b>

# Liability for Compensation Assessments

**Actual Compensation Payments of 1,400,000 in 2006  
Generates an Expected Compensation Assessment  
of 232,000 in 2007**

**Estimated Compensation Payments of 1,300,000 in  
2007 Generates an Expected Compensation  
Assessment of 215,000 in 2008**

**Estimated Compensation Payments of 1,200,000 in  
2008 Generates an Expected Compensation  
Assessment of 199,000 in 2009**

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# Calculation of Compensation Assessments

Compensation Payment Year	Estimated Compensation Paid	Estimated Compensation Assessment Percentage	Assessment Payment Year	Estimated Assessment	Discounted at 5%
2006	<b>1,400,000</b>	16.55%	2007	232,000	226,000
2007	1,300,000	16.55%	2008	215,000	200,000
2008	1,200,000	16.55%	2009	199,000	176,000
2009	1,100,000	16.55%	2010	182,000	153,000
2010	1,000,000	16.55%	2011	166,000	133,000
2011	900,000	16.55%	2012	149,000	114,000
2012	800,000	16.55%	2013	132,000	96,000
2013	700,000	16.55%	2014	116,000	80,000
2014	600,000	16.55%	2015	99,000	66,000
2015	500,000	16.55%	2016	83,000	52,000
2016	400,000	16.55%	2017	66,000	40,000
2017	300,000	16.55%	2018	50,000	28,000
2018	200,000	16.55%	2019	33,000	18,000
2019	100,000	16.55%	2020	17,000	9,000

Total: 1,739,000 1,391,000



# Calculation of Participation Assessments

Participation Year	Estimated Participation Paid	Assessment Payment Year	Estimated Assessment	Discounted at 5%
2006	26,000	2007	16,845	16,439
2007	25,926	2008	16,797	15,612
2008	25,772	2009	16,698	14,780
2009	25,609	2010	16,592	13,988
2010	25,437	2011	16,481	13,232
2011	25,255	2012	16,363	12,511
...	...	...	...	...
...	...	...	...	...
2062	23	2063	15	1
2063	12	2064	8	0
2064	5	2065	3	0
2065	2	2066	1	0
2066	1	2067	0	0
2067	0	2068	0	0

		Total:	492,890	247,860
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# Consideration of Improving Life Expectancy

- Calendar Year Life Tables Reflect Current Mortality
  - Do not reflect increasing life expectancy over time
- Generation Life Tables Reflect Increasing Life Expectancy

Example: 50 Year Old Male Life Expectancy

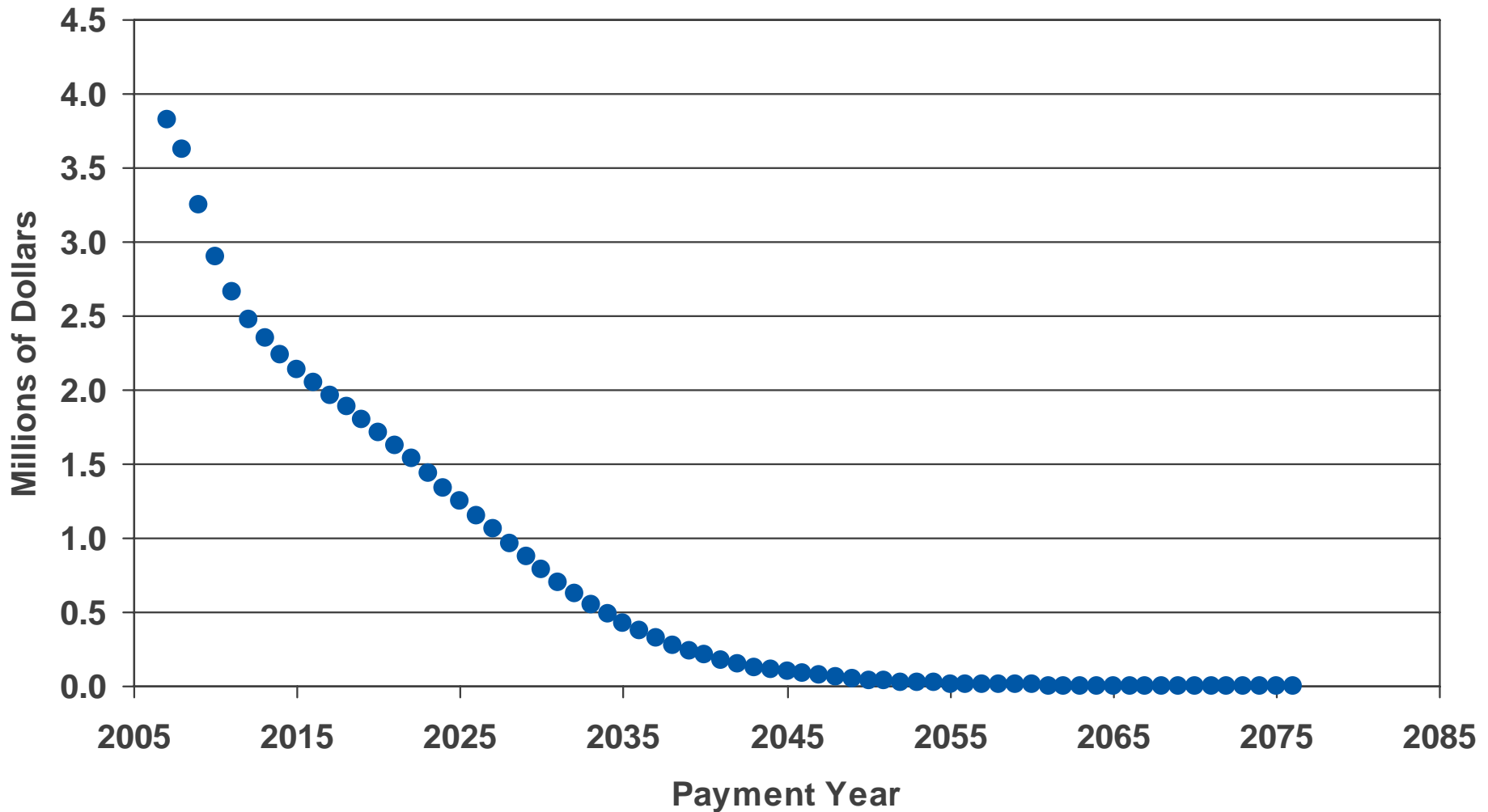
2000 Life Table	28.26 years
2006 Adjusted	29.84 years
2007 Adjusted	29.93 years
2008 Adjusted	30.01 years
2009 Adjusted	30.09 years
2010 Adjusted	30.18 years

# Impact on Annuity Values

<b>Life Table</b>	<b>Life Expectancy</b>	<b>Annuity with 3.0% COLA</b>	<b>Annuity with 3.0% COLA, 5.0% Interest to Discount</b>
2000 Life Table	28.26	48.52	21.05
2006 Adjusted	29.84	52.75	21.92
2007 Adjusted	29.93	52.97	21.97
2008 Adjusted	30.01	53.19	22.02
2009 Adjusted	30.09	53.41	22.07
2010 Adjusted	30.18	53.62	22.11

Assumes Mid Year Payment for Discounting  
Assumes Mid Year COLA

# Expected Annual Payout Second Injury Fund Liabilities Oliver Wyman Client



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