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# Joint AAA/SOA Preferred Mortality Project Status Report – March 2007

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# PM Project Status Report

- Major topics of discussion since last NAIC Meeting
  - Nature of valuation basic tables (tables without margin)
  - Number of tables



# Nature of tables

- Tables that vary with face amount
  - Rationale -- Mortality experience improves by face amount range
  - Question -- Within a specific face amount range, how do you adjust for different underwriting results?
- Tables that directly reflect preferred underwriting
  - Question – What should be used as the indicator preferred underwriting and how predictive is the indicator?
    - Underwriting Criteria Score
    - Risk Class Rank/Number of Risk Classes



# Decision Making Process

- Presentation to POG by 2 teams representing both options
- POG encourages the Valuation Basic Table team to continue down the track of developing valuation basic tables that directly reflect preferred underwriting
- Representatives of the VBT team meet with the POG to discuss the view of the POG and first steps to implement
- POG asks VBT team to analyze available data to determine the valuation basic table with lowest mortality



# Mortality Experience by Risk Class Rank/UC score

<u>Aggregation of Specific data</u>												
Data Specs:		Issue Ages 25+				Face Amounts 100k - 2,499k			Durations 1-10			
No. of Risk Classes	Risk Class No.	Max UCS Score	Proportion by Amt	A/E by Amt	Actual Claims by Amt	Expected Claims by Amt		Max UCS Score	Proportion by Amt	A/E by Amt	Actual Claims by Amt	Expected Claims by Amt
<u>Male Non-Smoker</u>						<u>Female Non-Smoker</u>						
2	1	82.9	58.8%	47.3%	48,663	102,840		80.3	49.9%	47.3%	48,663	102,840
	2	141.0	100.0%	71.0%	360,916	507,993		141.0	100.0%	67.1%	138,235	206,118
3	1	53.7	38.6%	51.6%	135,019	261,468		52.2	45.1%	51.3%	42,847	83,445
	2*	77.4	68.6%	60.2%	279,819	464,791		76.3	71.8%	52.3%	69,480	132,847
	3	141.0	100.0%	73.3%	496,878	677,849		141.0	100.1%	65.8%	121,805	185,177
4	1	53.4	47.1%	40.3%	73,993	183,752		52.2	51.7%	41.4%	27,777	67,066
	2*	75.5	71.0%	45.7%	126,576	277,069		68.6	70.2%	43.7%	39,806	91,118
	3*	99.1	84.0%	49.8%	163,188	327,768		93.9	82.5%	46.1%	49,371	107,050
	4	141.0	100.0%	55.4%	216,387	390,317		141.0	100.1%	49.2%	63,846	129,838
All				66.5%	1,186,632	1,784,409				61.4%	353,364	575,512

\* - UCS is an estimate



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<u>Male Smoker</u>						<u>Female Smoker</u>					
2	1	78.0	60.9%	66.2%	55,912	84,462	78.5	58.4%	98.4%	24,127	24,525
	2	142.0	100.0%	79.7%	110,533	138,685	142.0	100.0%	120.7%	50,693	41,995
3	1	105.0	74.1%	76.8%	11,620	15,124	105.0	79.8%	31.1%	1,150	3,694
	2*	121.3	95.8%	87.6%	17,120	19,552	121.4	96.3%	42.6%	1,900	4,459
	3	142.0	100.0%	90.1%	18,385	20,409	142.0	99.9%	45.4%	2,100	4,627
All				81.0%	128,866	159,094			113.2%	52,776	46,622

\* - UCS is an estimate

