

## Dynamic Valuation and NonForfeiture Interest Rate Calculations

Report through: <b>Dec-17</b>	Current Year Averages Ending: June 2018	Prior Year Averages Ending: June 2017
Date Prepared: 01/12/18	12 Month: 3.87%      36 Month: 4.11%	12 Month: 4.05%      36 Month: 4.21%

### LIFE INSURANCE CALCULATIONS

Projected 2019 Interest Rates			Val. Break Pt. Rate***		2018 Actual Interest Rates		
Duration	Val*	NFF**	Lower	Higher	Duration	Val	NFF**
10 or Less	3.75	4.75	3.59	10.73	10 or Less	3.75	4.75
10+ - 20	3.75	4.75	3.75	12.23	10+ - 20	3.75	4.75
More than 20	3.50	4.50	2.79	12.23	More than 20	3.50	4.50

\*Minimum change from previous year's rate is 50 basis points. \*\*Function of Valuation Rate.  
 \*\*\*These Columns reflect the average actual rate over the next 6 Months required to cause a 50 basis points change from the 2018 Actual Rate.

### ANNUITY CALCULATIONS

SINGLE PREMIUM IMMEDIATE ANNUITY										
2017 Actual Valuation Interest Rate: 3.75%										
Projected 2018 Valuation Interest Rate:		3.75%		Low Break Point:		3.65		High Break Point:		4.28
SINGLE PREMIUM or ANNUAL PREMIUM DEFERRED ANNUITY : Issue Year Basis										
Issue Year Basis: 2018 Projected				Cash	Future	Type A Break Pt.		Type C Break Pt.		
Duration	A	B	C	Settlement	Int. Guar.	Lower	Higher	Lower	Higher	
5 or Less	3.75	3.50	3.50			3.65	4.28	3.59	4.60	
5+ - 10	3.75	3.50	3.50	Yes	Yes	3.75	4.42	3.59	4.60	
10+ - 20	3.50	3.50	3.50			3.23	4.02	3.75	5.51	
More than 20	3.50	3.25	3.25			3.75	5.51	2.79	4.24	
5 or Less	3.75	3.50	3.50			3.55	4.14	3.45	4.36	
5+ - 10	3.75	3.50	3.50	Yes	No	3.65	4.28	3.45	4.36	
10+ - 20	3.50	3.50	3.50			3.15	3.88	3.59	4.73	
More than 20	3.50	3.25	3.25			3.59	4.73	2.71	3.96	
5 or Less	3.75					3.65	4.28			
5+ - 10	3.75	N/A	N/A	No	Yes/No	3.75	4.42	N/A	N/A	
10+ - 20	3.50					3.23	4.02			
More than 20	3.50					3.75	4.86			
SINGLE PREMIUM or ANNUAL PREMIUM DEFERRED ANNUITY : Change in Fund Basis										
Change in Fund Basis: 2018 Projected				Cash	Future	Type A Break Pt.		Type C Break Pt.		
Duration	A	B	C	Settlement	Int. Guar.	Lower	Higher	Lower	Higher	
5 or Less	3.75	3.75	3.50			3.39	3.94	3.45	4.36	
5+ - 10	3.75	3.75	3.50	Yes	Yes	3.47	4.04	3.45	4.36	
10+ - 20	3.75	3.75	3.50			3.65	4.28	3.59	4.60	
More than 20	3.50	3.50	3.25			3.33	4.18	2.71	3.96	
5 or Less	3.75	3.75	3.50			3.33	3.84	3.33	4.18	
5+ - 10	3.75	3.75	3.50	Yes	No	3.39	3.94	3.33	4.18	
10+ - 20	3.75	3.75	3.50			3.55	4.14	3.45	4.36	
More than 20	3.50	3.50	3.50			3.23	4.02	3.75	4.86	

### INDIVIDUAL DEFERRED ANNUITY MINIMUM NONFORFEITURE VALUES

Five-Year Constant Maturity Treasury Rates (Based on averages of the published Monthly rates.)	
12 Month Average Ending Sep 2017: 1.80%	For the Indicated Periods Ending Dec 2017: 12 Month - 1.91% 3 Month - 2.07% 1 Month - 2.18%
If one of the above rates is your basis, then the Minimum Nonforfeiture Interest Rate would be:	
12 Month Average Ending Sep 2017: 1.00%	For the Indicated Periods Ending Dec 2017: 12 Month - 1.00% 3 Month - 1.00% 1 Month - 1.00%

### HISTORICAL TAX INTEREST RATES

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
3.97%	4.06%	4.06%	3.81%	3.46%	2.89%	2.16%	1.79%	1.68%	1.56%	1.46%

**ACTUAL 2018 APPLICABLE FEDERAL INTEREST RATE: 1.66%**