

Dynamic Valuation and NonForfeiture Interest Rate Calculations

Report through: Aug-18	Current Year Averages Ending: June 2019			Prior Year Averages Ending: June 2018		
Date Prepared: 09/12/18	12 Month: 4.29%	36 Month: 4.13%	12 Month: 4.05%	36 Month: 4.17%		

LIFE INSURANCE CALCULATIONS

Projected 2020 Interest Rates			Val. Break Pt. Rate***		2019 Actual Interest Rates		
Duration	Val*	NFF**	Lower	Higher	Duration	Val	NFF**
10 or Less	3.75	4.75	3.64	8.34	10 or Less	3.75	4.75
10+ - 20	3.75	4.75	3.74	9.24	10+ - 20	3.75	4.75
More than 20	3.50	4.50	3.16	9.24	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 10 Months required to cause a 50 basis points change from the 2019 Actual Rate.

ANNUITY CALCULATIONS

SINGLE PREMIUM IMMEDIATE ANNUITY									
2018 Actual Valuation Interest Rate: 3.75%									
Projected 2019 Valuation Interest Rate: 4.00%			Low Break Point: 4.05			High Break Point: 4.43			
SINGLE PREMIUM or ANNUAL PREMIUM DEFERRED ANNUITY : Issue Year Basis									
Issue Year Basis: 2019 Projected				Cash Settlement	Future Int. Guar.	Type A Break Pt.		Type C Break Pt.	
Duration	A	B	C			Lower	Higher	Lower	Higher
5 or Less	4.00	3.75	3.75			4.05	4.43	4.24	4.85
5+ - 10	4.00	3.75	3.75	Yes	Yes	4.13	4.55	4.24	4.85
10+ - 20	3.75	3.50	3.50			3.89	5.06	3.74	5.21
More than 20	3.50	3.50	3.50			3.74	5.21	4.08	6.65
5 or Less	4.00	3.75	3.75			3.96	4.33	4.10	4.66
5+ - 10	4.00	3.75	3.75	Yes	No	4.05	4.43	4.10	4.66
10+ - 20	3.75	3.50	3.50			3.81	4.74	3.64	4.74
More than 20	3.50	3.50	3.50			3.64	4.74	3.86	5.85
5 or Less	4.00					4.05	4.43		
5+ - 10	4.00	N/A	N/A	No	Yes/No	4.13	4.55	N/A	N/A
10+ - 20	3.75					3.89	4.36		
More than 20	3.50					3.74	4.41		
SINGLE PREMIUM or ANNUAL PREMIUM DEFERRED ANNUITY : Change in Fund Basis									
Change in Fund Basis: 2019 Projected				Cash Settlement	Future Int. Guar.	Type A Break Pt.		Type C Break Pt.	
Duration	A	B	C			Lower	Higher	Lower	Higher
5 or Less	4.25	4.00	3.75			4.16	4.48	4.10	4.66
5+ - 10	4.25	4.00	3.75	Yes	Yes	4.24	4.57	4.10	4.66
10+ - 20	4.00	4.00	3.75			4.05	4.43	4.24	4.85
More than 20	3.75	3.75	3.50			3.99	4.49	3.86	4.62
5 or Less	4.25	4.25	3.75			4.08	4.39	3.99	4.49
5+ - 10	4.25	4.25	3.75	Yes	No	4.16	4.48	3.99	4.49
10+ - 20	4.00	4.00	3.75			3.96	4.33	4.10	4.66
More than 20	3.75	3.75	3.50			3.89	4.36	3.74	4.41

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 Aug 2018: 12 Month - 2.46% 3 Month - 2.78% 1 Month - 2.77%

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 Aug 2018: 12 Month - 1.20% 3 Month - 1.55% 1 Month - 1.50%

HISTORICAL TAX INTEREST RATES*

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
4.06%	4.06%	3.81%	3.46%	2.89%	2.16%	1.79%	1.68%	1.56%	1.46%	1.66%

*No longer applicable. Tax Interest Rates are for historical purposes only due to new tax laws.