

Griffith, Ballard & Company

Valuation Interest Rate Calculations

For use during Valuation Year 2022

Based on Actual Rates through June 30, 2022

MOODY'S CORPORATE AVERAGE YIELDS

Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	
2.91%	2.91%	2.91%	3.04%	2.96%	2.97%	3.25%	3.61%	3.88%	4.22%	4.65%	4.78%	
12-Month Average: 2021:			2.96%	2020:		3.34%	2019:	4.31%	36-Month Average: 2021:			3.54%

CURRENT YEAR PROJECTED AVERAGES

Average		projected if future monthly average changes by					
		-0.50%	+0.50%	-1.00%	+1.00%	-2.00%	+2.40%
12-month average	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%
36-month average	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%
Lower	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%

PROJECTED VALUATION RATES, BASED ON ABOVE

Rate		Change from prior yr.		projected if future monthly average changes by						
				-0.50%	+0.50%	-1.00%	+1.00%	-2.00%	+2.40%	
Life Formula	3.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Life Reserve*	3.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Life Nonfor Fctr**	3.75%	0.00%	0.00%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%
Flex Prem DA***	3.25%	0.25%	0.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%
Single Prem DA***	3.25%	0.25%	0.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%

* Minimum change from prior year rate is 0.50%; ** can delay implementation until 1/1/2022; *** for Type C, 10 years and fewer, issue-year basis

NON-JUMBO* IMMEDIATE ANNUITY (< \$250 M Initial Deposit)

Statutory Maximum Valuation Rates for Premium Determination Dates below:

	1/1/22-3/31/22	4/1/22-6/30/22	7/1/22-9/30/22	10/1/22-12/31/22
A	1.25%	2.25%	3.50%	4.00%
B	1.75%	2.50%	3.75%	4.25%
C	2.00%	2.75%	4.00%	4.25%
D	2.50%	3.00%	4.00%	4.25%

NON LIFE CONTINGENT	
RP <= 5	A
5 < RP <= 10	B
10 < RP <= 15	C
RP > 15	D

see VM-22 3.A.2 (Table 1)

LIFE CONTINGENT				
Issue Age:	< 70	70-79	80-89	90+
RP <= 5	D	C	B	A
5 < RP <= 10	D	C	B	B
10 < RP <= 15	D	C	C	C
RP > 15	D	D	D	D

see VM-22 3.A.3 (Table 2)

* For Jumbo Annuities, consult the NAIC website: https://content.naic.org/sites/default/files/pbr_data_2020_vm-22_non-jumbo_and_jumbo_valuation_rates.xlsx

SINGLE PREMIUM DEFERRED ANNUITY

ISSUE-YEAR BASIS	2022				2021			
	Duration	Ref*	A	B	C	Ref*	A	B
5 Years or Less	3.51%	3.50%	3.25%	3.25%	2.96%	3.00%	3.00%	3.00%
5+ to 10 Years	3.51%	3.50%	3.25%	3.25%	2.96%	3.00%	3.00%	3.00%
10+ to 20 Years	3.27%	3.25%	3.25%	3.25%	2.96%	3.00%	3.00%	3.00%
Greater than 20 Years	3.27%	3.25%	3.00%	3.00%	2.96%	3.00%	3.00%	3.00%

FLEXIBLE PREMIUM DEFERRED ANNUITY

ISSUE-YEAR BASIS	2022				2021			
	Duration	Ref*	A	B	C	Ref*	A	B
5 Years or Less	3.51%	3.50%	3.25%	3.25%	2.96%	3.00%	3.00%	3.00%
5+ to 10 Years	3.51%	3.50%	3.25%	3.25%	2.96%	3.00%	3.00%	3.00%
10+ to 20 Years	3.27%	3.25%	3.25%	3.00%	2.96%	3.00%	3.00%	3.00%
Greater than 20 Years	3.27%	3.00%	3.00%	3.00%	2.96%	3.00%	3.00%	3.00%

* 12- preceding month average (if greater than 10 years, use 36- preceding month average, if lower)

DYNAMIC MINIMUM ANNUITY NONFORFEITURE RATES

Five-Year Constant Maturity Treasury (Monthly Average) and Related Minimum Guarantee Rates

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21
5-Yr CMT:	0.39%	0.39%	0.45%	0.54%	0.82%	0.86%	0.82%	0.84%	0.76%	0.77%
Minimum Rate:	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
5-Yr CMT:	0.86%	1.11%	1.20%	1.23%	1.54%	1.81%	2.11%	2.78%	2.87%	3.19%
Minimum Rate:	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.55%	1.60%	1.95%