

Griffith, Ballard & Company

Valuation Interest Rate Calculations

For use during Valuation Year 2021

Based on Actual Rates through June 30, 2021

MOODY'S CORPORATE AVERAGE YIELDS

Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
2.70%	2.71%	2.80%	2.89%	2.79%	2.72%	2.85%	3.05%	3.38%	3.25%	3.28%	3.11%
12-Month Average: 2020:			3.34%	2019:	4.31%	2018:	4.05%	36-Month Average: 2020:			3.90%

CURRENT YEAR PROJECTED AVERAGES

		projected if future monthly average changes by					
		-0.50%	+0.50%	-1.00%	+1.00%	-2.00%	+2.40%
Average	Average						
12-month average	2.96%	2.96%	2.96%	2.96%	2.96%	2.96%	2.96%
36-month average	3.54%	3.54%	3.54%	3.54%	3.54%	3.54%	3.54%
Lower	2.96%	2.96%	2.96%	2.96%	2.96%	2.96%	2.96%

PROJECTED VALUATION RATES, BASED ON ABOVE

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

* 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:

	1/1/21-3/31/21	4/1/21-6/30/21	7/1/21-9/30/21	10/1/21-12/31/21
A	1.00%	1.00%	1.25%	1.00%
B	1.50%	1.75%	1.75%	1.50%
C	2.00%	2.00%	2.25%	2.00%
D	2.25%	2.50%	2.75%	2.25%

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	2021				2020			
	Duration	Ref*	A	B	C	Ref*	A	B
5 Years or Less	2.96%	3.00%	3.00%	3.00%	3.34%	3.25%	3.25%	3.25%
5+ to 10 Years	2.96%	3.00%	3.00%	3.00%	3.34%	3.25%	3.25%	3.25%
10+ to 20 Years	2.96%	3.00%	3.00%	3.00%	3.34%	3.25%	3.25%	3.25%
Greater than 20 Years	2.96%	3.00%	3.00%	3.00%	3.34%	3.25%	3.25%	3.25%

FLEXIBLE PREMIUM DEFERRED ANNUITY

ISSUE-YEAR BASIS	2021				2020			
	Duration	Ref*	A	B	C	Ref*	A	B
5 Years or Less	2.96%	3.00%	3.00%	3.00%	3.34%	3.25%	3.25%	3.25%
5+ to 10 Years	2.96%	3.00%	3.00%	3.00%	3.34%	3.25%	3.25%	3.25%
10+ to 20 Years	2.96%	3.00%	3.00%	3.00%	3.34%	3.25%	3.25%	3.25%
Greater than 20 Years	2.96%	3.00%	3.00%	3.00%	3.34%	3.25%	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-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20
5-Yr CMT:	1.64%	1.68%	1.56%	1.32%	0.59%	0.39%	0.34%	0.34%	0.28%	0.27%
Minimum Rate:	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
5-Yr CMT:	0.27%	0.34%	0.39%	0.39%	0.45%	0.54%	0.82%	0.86%	0.82%	0.84%
Minimum Rate:	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%