

Formulas	Issue	GO Bonds (Aaa/AAA/AAA)			Public Facility Revenue Bonds (Aa1-Aa2/AA+/AA+)		
		Series 2021A	Series 2019A	Series 2018A	Series 2020A	Series 2018A	Series 2016A
	Sale Date	8/4/2021	7/10/2019	2/27/2018	6/3/2020	3/14/2018	10/18/2016
A	True Interest Cost	1.4425%	2.2607%	2.8857%	1.7176%	2.9096%	2.4588%
B	10-Year US Treasury	1.182%	2.062%	2.894%	0.746%	2.818%	1.739%
(A/B)	Ratio of TIC / 10-Year UST	122.040%	109.635%	99.712%	230.237%	103.251%	141.392%
D	Virginia Beach Yield in 10 Years	0.850%	1.590%	2.490%	0.970%	2.600%	1.890%
(D-E)	Spread to 10-Year MMD	0.030%	-0.010%	0.000%	0.130%	0.090%	0.150%
(D/B)	Ratio of 10-Year VB Yield/10-Year UST	71.91%	77.11%	86.04%	130.03%	92.26%	108.68%

General Market							
E	10-Year 'AAA' MMD	0.820%	1.600%	2.490%	0.840%	2.510%	1.740%
(E/B)	Ratio of 10-Yr MMD/10-Yr UST	69.37%	77.59%	86.04%	112.60%	89.07%	100.06%

Formulas	Issue	Storm Water Utility Revenue Bonds (Aa1/--/AAA)			Water and Sewer System Revenue Bonds (Aa1/AAA/AAA)		
		Series 2020A	Series 2019	Series 2015	Series of 2020A	Series of 2016A	Series of 2013
	Sale Date	9/23/2020	2/13/2019	1/14/2015	10/14/2020	5/25/2016	10/29/2013
A	True Interest Cost	2.0133%	3.1337%	2.8296%	1.8133%	2.6989%	3.6203%
B	10-Year US Treasury	0.672%	2.703%	1.946%	0.726%	1.867%	2.521%
(A/B)	Ratio of TIC / 10-Year UST	299.596%	115.935%	145.408%	249.769%	144.556%	143.607%
D	Virginia Beach Yield in 10 Years	0.890%	2.250%	2.050%	1.030%	1.760%	2.530%
(D-E)	Spread to 10-Year MMD	0.050%	0.060%	0.200%	0.080%	0.060%	0.090%
(D/B)	Ratio of 10-Year VB Yield/10-Year UST	132.44%	83.24%	105.34%	141.87%	94.27%	100.36%

General Market							
E	10-Year 'AAA' MMD	0.840%	2.190%	1.850%	0.950%	1.700%	2.440%
(E/B)	Ratio of 10-Yr MMD/10-Yr UST	125.00%	81.02%	95.07%	130.85%	91.06%	96.79%

	Averages for Each Credit				
	GO	PFRBs	Stormwater	Water & Sewer	All Credits
True Interest Cost	2.1963%	2.3620%	2.6589%	2.7108%	2.4820%
Ratio of 10-Year VB Yield/10-Year UST	78.354%	110.325%	107.009%	112.166%	101.963%
Ratio of TIC/10-Year UST	110.463%	158.293%	186.980%	179.311%	158.762%

Current 10-Year Treasury (4/4/2022)	2.395%
Avg Ratio of 10-Year VB Yield/10-Year UST	101.963%
Implied VB 10-Year Rate	2.442%
Avg Ratio of TIC/10-Year UST	158.762%
Implied TIC	3.802%