

COMPARISON REOFFERING YIELDS (Massachusetts) - PAGE 1

September 2020

MUNICIPALITY:	Nashoba Valley Tech. H.S.		Southborough		Marshfield		Medway		Sandwich	
BANK QUALIFIED:	Yes		Yes		No		Yes		No	
RATING:	Aa1		AAA		AA+		AAA		AA+	
AMOUNT:	\$1,830,000		\$3,180,000		\$20,770,000		\$8,510,000		\$21,835,000	
SALE DATE:	9/1/2020		9/2/2020		9/9/2020		9/9/2020		9/9/2020	
TERM:	10		20		30		20		30	
TIC:	0.6101%		1.3316%		1.9182%		1.3477%		1.8552%	
INSURANCE:	No		No		No		No		No	
TERM BONDS:	No		Yes		No		No		No	
TAXABLE:	No		No		No		No		No	
BID:	123.4186		113.5315		106.3834		105.1223		108.1584	
\$ PREMIUM:	\$ 428,560		\$ 430,302		\$ 1,325,832		\$ 435,908		\$ 1,781,387	
		Reoffering		Reoffering		Reoffering		Reoffering		Reoffering
	Coupon	Yield	Coupon	Yield	Coupon	Yield	Coupon	Yield	Coupon	Yield
2021	5.000%	0.160%	5.000%	0.180%	5.000%	0.140%	4.000%	0.160%	5.000%	0.140%
2022	5.000%	0.170%	5.000%	0.190%	5.000%	0.150%	4.000%	0.170%	5.000%	0.150%
2023	5.000%	0.180%	5.000%	0.200%	5.000%	0.170%	4.000%	0.180%	5.000%	0.170%
2024	5.000%	0.220%	5.000%	0.250%	5.000%	0.210%	3.000%	0.220%	5.000%	0.210%
2025	5.000%	0.280%	5.000%	0.310%	5.000%	0.280%	3.000%	0.280%	5.000%	0.280%
2026	5.000%	0.370%	5.000%	0.370%	5.000%	0.370%	3.000%	0.370%	5.000%	0.370%
2027	5.000%	0.500%	5.000%	0.500%	5.000%	0.520%	2.500%	0.500%	5.000%	0.520%
2028	5.000%	0.640%	5.000%	0.640%	5.000%	0.650%	2.500%	0.670%	5.000%	0.650%
2029	5.000%	0.740%	5.000%	0.740%	5.000%	0.760%	2.000%	0.800%	5.000%	0.770%
2030	5.000%	0.840%	5.000%	0.850%	4.000%	0.890%	1.000%	1.000%	4.000%	0.930%
2031					4.000%	0.980%	1.100%	1.100%	4.000%	1.050%
2032					3.000%	1.180%	1.200%	1.200%	3.000%	1.180%
2033			2.000%	1.200%	2.000%	1.560%	1.300%	1.300%	2.000%	1.560%
2034					2.000%	1.660%	1.400%	1.400%	2.000%	1.660%
2035					2.000%	1.730%	1.500%	1.500%	2.000%	1.730%
2036			2.000%	1.500%	2.000%	1.790%	1.600%	1.600%	2.000%	1.790%
2037					2.000%	1.840%	2.000%	1.550%	2.000%	1.840%
2038					2.000%	1.890%	2.000%	1.600%	2.000%	1.890%
2039					2.000%	1.930%	2.000%	1.650%	2.000%	1.930%
2040			2.000%	1.700%	2.000%	1.970%	2.000%	1.700%	2.000%	1.970%
2041					2.000%	2.030%			2.000%	2.030%
2042					2.000%	2.080%			2.000%	2.080%
2043					2.000%	2.110%			2.000%	2.110%
2044					2.000%	2.140%			2.000%	2.140%
2045					2.000%	2.170%			2.000%	2.170%
2046					2.125%	2.180%			2.125%	2.180%
2047					2.125%	2.190%			2.125%	2.190%
2048					2.125%	2.210%			2.125%	2.210%
2049					2.125%	2.230%			2.125%	2.230%
2050					2.125%	2.250%			2.125%	2.250%
	Non-callable		Callable Sept. 1, 2029		Callable Sept. 15, 2029		Callable Sept. 15, 2028		Callable Sept. 15, 2029	

COMPARISON REOFFERING YIELDS (Massachusetts) - PAGE 2

September 2020

MUNICIPALITY:	Quincy		Wilmington		Gloucester		Lowell	
BANK QUALIFIED:	No		No		No		No	
RATING:	AA+		AA+		AA		AA	
AMOUNT:	\$21,225,000		\$28,235,000		\$8,140,000		\$59,945,000	
SALE DATE:	9/10/2020		9/10/2020		9/10/2020		9/10/2020	
TERM:	20		17		20		29	
TIC:	1.3094%		1.6003%		1.3921%		1.8477%	
INSURANCE:	No		No		No		No	
TERM BONDS:	No		No		Yes		Yes	
TAXABLE:	No		Yes		No		No	
BID:	114.4269		99.3771		114.4412		112.6485	
\$ PREMIUM:	\$	3,062,110	\$	(175,876)	\$	1,175,514	\$	7,582,143
		Reoffering		Reoffering		Reoffering		Reoffering
	Coupon	Yield	Coupon	Yield	Coupon	Yield	Coupon	Yield
2021	5.000%	0.140%	1.000%	0.200%	5.000%	0.170%	5.000%	0.190%
2022	5.000%	0.150%	1.000%	0.250%	5.000%	0.200%	5.000%	0.200%
2023	5.000%	0.160%	1.000%	0.350%	5.000%	0.200%	5.000%	0.240%
2024	5.000%	0.200%	1.000%	0.500%	5.000%	0.250%	5.000%	0.290%
2025	5.000%	0.260%	0.550%	0.550%	5.000%	0.300%	5.000%	0.360%
2026	5.000%	0.350%	0.600%	0.600%	5.000%	0.400%	5.000%	0.450%
2027	5.000%	0.490%	0.900%	0.900%	5.000%	0.540%	5.000%	0.590%
2028	5.000%	0.620%	1.200%	1.200%	5.000%	0.650%	5.000%	0.720%
2029	5.000%	0.730%	1.300%	1.300%	5.000%	0.800%	5.000%	0.830%
2030	4.000%	0.830%	1.400%	1.400%	5.000%	0.900%	5.000%	0.930%
2031	2.000%	1.200%	1.550%	1.550%	4.000%	1.000%	4.000%	1.050%
2032	2.000%	1.300%	1.700%	1.700%	2.000%	1.200%	4.000%	1.180%
2033	2.000%	1.400%	1.750%	1.750%	2.000%	1.400%	4.000%	1.310%
2034	2.000%	1.510%	1.800%	1.850%	2.000%	1.600%	3.000%	1.560%
2035	2.000%	1.560%	1.850%	1.850%	2.000%	1.700%	2.000%	1.810%
2036	2.000%	1.710%	1.950%	1.900%	2.000%	1.800%	2.000%	1.910%
2037	2.000%	1.850%	2.000%	2.000%	2.000%	1.850%	2.000%	2.000%
2038	2.000%	2.000%					2.000%	2.040%
2039	2.000%	2.050%					2.000%	2.080%
2040	2.000%	2.150%			2.000%	2.000%	2.000%	2.120%
2041							2.000%	2.170%
2042							2.125%	2.220%
2043								
2044								
2045							2.250%	2.320%
2046								
2047								
2048								
2049							2.250%	2.360%
2050								
	Callable Sept. 15, 2029		Callable March 15, 2031		Callable Sept. 15, 2029		Callable Sept. 1, 2029	

COMPARISON REOFFERING YIELDS (Massachusetts) - PAGE 3

September 2020

MUNICIPALITY:	Middleton		Middleborough		Dracut		Melrose	
BANK QUALIFIED:	Yes		No		No		Yes	
RATING:	AA+		AA		AA		AA+	
AMOUNT:	\$1,500,000		\$24,170,000		\$12,985,000		\$2,630,000	
SALE DATE:	9/15/2020		9/16/2020		9/17/2020		9/17/2020	
TERM:	6		28		20		9	
TIC:	0.3076%		1.8053%		1.2105%		0.5085%	
INSURANCE:	No		No		No		No	
TERM BONDS:	No		Yes		No		No	
TAXABLE:	No		No		No		No	
BID:	115.9873		108.6777		115.1573		117.1627	
\$ PREMIUM:	\$	239,810	\$	2,097,400	\$	1,968,175	\$	451,379
		Reoffering		Reoffering		Reoffering		Reoffering
	Coupon	Yield	Coupon	Yield	Coupon	Yield	Coupon	Yield
2021	5.000%	0.140%	5.000%	0.130%	5.000%	0.150%	5.000%	0.140%
2022	5.000%	0.150%	5.000%	0.130%	5.000%	0.150%	5.000%	0.150%
2023	5.000%	0.200%	5.000%	0.140%	5.000%	0.150%	5.000%	0.160%
2024	5.000%	0.240%	5.000%	0.180%	5.000%	0.200%	5.000%	0.200%
2025	5.000%	0.260%	5.000%	0.240%	5.000%	0.250%	5.000%	0.250%
2026	5.000%	0.380%	5.000%	0.350%	5.000%	0.350%	5.000%	0.370%
2027			5.000%	0.500%	5.000%	0.500%	4.000%	0.500%
2028			5.000%	0.650%	5.000%	0.650%	4.000%	0.650%
2029			5.000%	0.780%	5.000%	0.780%	4.000%	0.760%
2030			4.000%	0.900%	3.000%	0.900%		
2031			3.000%	1.000%	2.000%	1.100%		
2032			2.000%	1.200%	2.000%	1.200%		
2033			2.000%	1.400%	2.000%	1.350%		
2034			2.000%	1.600%	2.000%	1.600%		
2035			2.000%	1.700%	2.000%	1.700%		
2036			2.000%	1.800%	2.000%	1.800%		
2037			2.000%	1.850%	2.000%	1.850%		
2038			2.000%	1.900%	2.000%	1.900%		
2039					2.000%	1.950%		
2040			2.000%	2.000%	2.000%	2.000%		
2041								
2042								
2043								
2044								
2045			2.125%	2.150%				
2046								
2047								
2048			2.125%	2.200%				
	Non-callable		Callable Oct. 1, 2028		Callable Oct. 15, 2029		Non-callable	

COMPARISON REOFFERING YIELDS (Massachusetts) - PAGE 4

September 2020

MUNICIPALITY:	Lynn	Chicopee	Hull	Winthrop
BANK QUALIFIED:	No	No	No	Yes
RATING:	AA	AA-	AA	AA
AMOUNT:	\$6,315,000	\$4,480,000	\$16,025,000	\$1,410,000
SALE DATE:	9/22/2020	9/24/2020	9/24/2020	9/24/2020
TERM:	20	10	20	11
TIC:	1.3982%	0.5487%	1.4027%	0.5885%
INSURANCE:	No	No	No	No
TERM BONDS:	No	No	No	No
TAXABLE:	No	No	No	No
BID:	111.7690	121.4538	113.2493	117.2591
\$ PREMIUM:	\$ 743,212	\$ 961,130	\$ 2,123,200	\$ 243,353
		Reoffering		Reoffering
	Coupon	Yield	Coupon	Yield
	Coupon	Yield	Coupon	Yield
2021	4.000%	0.250%	5.000%	0.160%
2022	4.000%	0.280%	5.000%	0.170%
2023	4.000%	0.300%	5.000%	0.180%
2024	4.000%	0.350%	5.000%	0.200%
2025	4.000%	0.450%	5.000%	0.280%
2026	4.000%	0.550%	5.000%	0.400%
2027	4.000%	0.700%	5.000%	0.540%
2028	4.000%	0.850%	5.000%	0.660%
2029	3.000%	1.100%	5.000%	0.780%
2030	3.000%	1.200%	5.000%	0.880%
2031	3.000%	1.300%		2.000%
2032	3.000%	1.400%		2.000%
2033	3.000%	1.500%		2.000%
2034	2.000%	2.041%		2.000%
2035	2.000%	2.059%		2.000%
2036	2.000%	2.074%		2.000%
2037	2.050%	2.121%		2.000%
2038	2.100%	2.168%		2.000%
2039	2.125%	2.190%		2.000%
2040	2.150%	2.212%		2.000%
	Callable Sept. 1, 2029	Non-callable	Callable Aug. 1, 2029	Non-callable

COMPARISON REOFFERING YIELDS (Massachusetts) - PAGE 5

September 2020

MUNICIPALITY:	Cotuit Fire District		Nantucket		Wachusett RSD		Buckland	
BANK QUALIFIED:	Yes		No		Yes		Yes	
RATING:	AA+		Aaa		Aa2		AA	
AMOUNT:	\$1,510,000		\$10,105,000		\$4,145,000		\$3,045,000	
SALE DATE:	9/29/2020		9/30/2020		9/30/2020		9/30/2020	
TERM:	9		20		9		20	
TIC:	0.4391%		1.4366%		0.6956%		1.4949%	
INSURANCE:	No		No		No		No	
TERM BONDS:	No		No		No		Yes	
TAXABLE:	No		No		No		No	
BID:	116.6306		113.5308		113.8782		104.8119	
\$ PREMIUM:	\$	251,122	\$	1,367,287	\$	575,251	\$	146,522
		Reoffering		Reoffering		Reoffering		Reoffering
	Coupon	Yield	Coupon	Yield	Coupon	Yield	Coupon	Yield
2021	5.000%	0.120%	5.000%	0.120%	4.000%	0.230%		
2022	5.000%	0.130%	5.000%	0.130%	4.000%	0.230%	4.000%	0.350%
2023	5.000%	0.150%	5.000%	0.140%	4.000%	0.240%	4.000%	0.450%
2024	5.000%	0.190%	5.000%	0.180%	4.000%	0.280%	4.000%	0.500%
2025	5.000%	0.250%	5.000%	0.230%	4.000%	0.340%	4.000%	0.550%
2026	5.000%	0.370%	5.000%	0.350%	4.000%	0.500%	4.000%	0.600%
2027	4.000%	0.520%	5.000%	0.470%	4.000%	0.650%	4.000%	0.700%
2028	4.000%	0.650%	5.000%	0.600%	4.000%	0.800%	4.000%	0.800%
2029	4.000%	0.770%	5.000%	0.720%	4.000%	1.000%		
2030			5.000%	0.800%			1.500%	1.000%
2031			3.000%	1.050%				
2032			3.000%	1.200%			1.500%	1.200%
2033			2.000%	1.550%				
2034			2.000%	1.650%				
2035			2.000%	1.700%				
2036			2.000%	1.750%				
2037			2.000%	1.800%				
2038			2.000%	1.850%			1.500%	1.500%
2039			2.000%	1.900%				
2040			2.000%	1.950%				
2041							2.000%	1.750%
	Non-callable		Callable July 15, 2029		Non-callable		Callable Feb 15, 2028	

COMPARISON REOFFERING YIELDS (Connecticut & Maine) - PAGE 6

September 2020

MUNICIPALITY:	Winthrop, ME		Tolland, CT Series A		Tolland, CT Series B		Farmington, CT	
BANK QUALIFIED:	Yes		No		No		Yes	
RATING:	A		AAA		AAA		Aaa	
AMOUNT:	\$4,075,000		\$10,570,000		\$2,210,000		\$4,600,000	
SALE DATE:	9/1/2020		9/9/2020		9/9/2020		9/15/2020	
TERM:	20		20		10		15	
TIC:	1.4146%		1.5485%		0.6730%		1.1679%	
INSURANCE:	Yes		No		No		No	
TERM BONDS:	No		No		No		No	
TAXABLE:	No		No		No		No	
BID:	102.6557		109.0368		114.4732		104.4272	
\$ PREMIUM:	\$	108,220	\$	955,190	\$	319,858	\$	203,651
		Reoffering		Reoffering		Reoffering		Reoffering
	Coupon	Yield	Coupon	Yield	Coupon	Yield	Coupon	Yield
2021	1.000%	0.300%	5.000%	0.150%	5.000%	0.150%	3.000%	0.250%
2022	1.250%	0.350%	5.000%	0.170%	5.000%	0.170%	3.000%	0.280%
2023	1.500%	0.400%	5.000%	0.190%	5.000%	0.190%	3.000%	0.300%
2024	2.000%	0.450%	5.000%	0.220%	5.000%	0.220%	3.000%	0.330%
2025	2.000%	0.550%	5.000%	0.280%	5.000%	0.280%	3.000%	0.350%
2026	2.000%	0.650%	5.000%	0.390%	4.000%	0.390%	3.000%	0.450%
2027	2.000%	0.800%	5.000%	0.510%	4.000%	0.510%	3.000%	0.600%
2028	2.000%	0.950%	4.000%	0.700%	4.000%	0.700%	1.000%	0.900%
2029	2.000%	1.100%	2.000%	1.000%	4.000%	0.830%	1.000%	1.000%
2030	2.000%	1.250%	2.000%	1.120%	4.000%	1.000%	1.500%	1.100%
2031	2.000%	1.400%	2.000%	1.250%			1.250%	1.250%
2032	2.000%	1.500%	2.000%	1.400%			1.500%	1.300%
2033	2.000%	1.600%	2.000%	1.500%			1.500%	1.400%
2034	2.000%	1.650%	2.000%	1.600%			1.450%	1.450%
2035	2.000%	1.750%	2.000%	1.650%			1.500%	1.500%
2036	2.000%	1.850%	2.000%	1.700%				
2037	2.000%	1.950%	2.000%	1.770%				
2038	2.000%	2.000%	2.000%	1.850%				
2039	2.000%	2.050%	2.000%	1.950%				
2040	2.000%	2.100%	2.000%	2.000%				
	Callable Nov. 1, 2030		Callable Sept 15, 2027		Non-callable		Callable Sept. 15, 2027	

COMPARISON REOFFERING YIELDS (Connecticut & Maine) - PAGE 7

September 2020

MUNICIPALITY:	Yarmouth, ME		Suffield, CT		Hebron, CT		Somers, CT	
BANK QUALIFIED:	No		No		Yes		No	
RATING:	Aa2 / AA+		AA+		AAA		AA+	
AMOUNT:	\$57,890,000		\$10,535,000		\$6,000,000		\$9,405,000	
SALE DATE:	9/15/2020		9/16/2020		9/22/2020		9/30/2020	
TERM:	29		20		19		19	
TIC:	1.9879%		1.5880%		1.3559%		1.5348%	
INSURANCE:	No		No		No		No	
TERM BONDS:	Yes		No		No		No	
TAXABLE:	No		No		No		No	
BID:	106.5198		108.0533		105.2136		109.7158	
\$ PREMIUM:	\$ 3,774,312		\$ 848,415		\$ 312,816		\$ 913,771	
		Reoffering		Reoffering		Reoffering		Reoffering
	<u>Coupon</u>	<u>Yield</u>	<u>Coupon</u>	<u>Yield</u>	<u>Coupon</u>	<u>Yield</u>	<u>Coupon</u>	<u>Yield</u>
2021	2.000%	0.180%	5.000%	0.150%				
2022	5.000%	0.190%	5.000%	0.160%	4.000%	0.200%	4.000%	0.200%
2023	5.000%	0.200%	5.000%	0.170%	4.000%	0.220%	4.000%	0.200%
2024	5.000%	0.280%	5.000%	0.220%	4.000%	0.300%	4.000%	0.220%
2025	5.000%	0.380%	5.000%	0.280%	4.000%	0.330%	4.000%	0.280%
2026	5.000%	0.480%	4.000%	0.420%	4.000%	0.380%	4.000%	0.380%
2027	5.000%	0.620%	4.000%	0.570%	4.000%	0.580%	4.000%	0.500%
2028	5.000%	0.760%	3.000%	0.800%	4.000%	0.800%	4.000%	0.640%
2029	2.000%	0.860%	3.000%	1.000%	1.000%	0.900%	4.000%	0.760%
2030	2.000%	0.970%	2.000%	1.200%	1.050%	1.050%	4.000%	0.860%
2031	4.000%	1.120%	2.000%	1.350%	1.200%	1.200%	2.000%	1.150%
2032	4.000%	1.250%	2.000%	1.500%	1.300%	1.300%	2.000%	1.300%
2033	3.000%	1.380%	2.000%	1.580%	1.400%	1.400%	2.000%	1.450%
2034	2.000%	1.720%	2.000%	1.620%	1.450%	1.450%	2.000%	1.500%
2035	2.000%	1.800%	2.000%	1.670%	1.500%	1.500%	2.000%	1.600%
2036	2.000%	1.850%	2.000%	1.720%	1.550%	1.550%	2.000%	1.700%
2037	2.000%	1.900%	2.000%	1.760%	1.600%	1.600%	2.000%	1.750%
2038	2.000%	1.950%	2.000%	1.800%	1.650%	1.650%	2.000%	1.800%
2039	2.000%	2.000%	2.000%	1.850%	1.700%	1.700%	2.000%	1.800%
2040	2.000%	2.030%	2.000%	1.900%	1.700%	1.750%	2.000%	1.900%
2041								
2042								
2043								
2044								
2045	2.250%	2.250%						
2046								
2047								
2048								
2049	2.250%	2.350%						
	Callable Nov. 15, 2030		Callable Oct. 1, 2027		Callable Feb 1, 2028		Callable Oct. 15, 2029	