

Tuesday, February 22, 2023

To: Mr. Willis Towers, Managing Director of Gazebo Securities

From: Alex Gazzolo, Sief Salameh, Oswaldo Gomez

Memo: Bids for Hanover Park (NJ) Regional High School District GO Bonds

Summary of Bids: The Regional High School District of Hanover Park, New Jersey, is set to offer \$44.3 Million of unlimited general obligation bonds for competitive bidding starting tomorrow February 23rd. Using an average coupon rate computed by comparable unlimited tax GOs from New Jersey public school districts, a precise yield analysis for AA bonds, and predicted market trends for AAA bond yields, we offer two distinct bids that demonstrate the range of TIC and prices our firm is willing to offer. At the high price end, we suggest a maximum TIC of 3.84% at an average price of \$102.30 and an average yield of 3.39%. Alternatively, a low TIC offer would be set at 3.40% at an average price of \$104.06 and an average yield of 3.16%. Included here are the bid details:

Table 1: TIC and Yields Across Indices

Summary								
Yield Type	Cost of Issuance	Average Coupon	Average Price	Average Yield	Proceeds	TIC IRR	TIC	
AA Rating	1%	3.60%	\$104.06	3.16%	\$46,223,425.56	\$45,761,191.30	3.40%	Max Price/ Minimum TIC
AA Rating	3%	3.60%	\$104.06	3.16%	\$46,223,425.56	\$44,836,722.79	3.64%	
MMD+30	1%	3.60%	\$104.01	3.19%	\$46,209,852.51	\$45,747,753.98	3.40%	
MMD+30	3%	3.60%	\$104.01	3.19%	\$46,209,852.51	\$44,823,556.93	3.64%	
MMD+50	1%	3.60%	\$102.30	3.39%	\$45,418,285.08	\$44,964,102.23	3.60%	
MMD+50	3%	3.60%	\$102.30	3.39%	\$45,418,285.08	\$44,055,736.53	3.84%	Minimum Price/ Max TIC

Analysis Across Yields: To evaluate the position of the bond, we utilized a comprehensive analysis that compares the bond's True Interest Costs (TIC) across different yield curves as of February 22nd, 2023. We aimed to identify how various yields could affect the TIC and price. Our calculations for AA rated bonds come from The BondWave AA QCurve, while our other three predictions come from the municipal market data (MMD) data source. However, since we understand that MMD's tracker focuses on AAA rated bond yields, we predicted the AA yields by adding 30 and 50 basis points to the yield rates. This method provided us with a more accurate estimate of the yields for AA rated bonds. Maturities, par amounts, and coupons were kept constant across the various estimators. The coupon rate was computed using the average coupon rates from the Township of East Hanover and the Borough of Northvale - which provided us with a rate of 3.68% across the two issuers. Information about these constants is shown in the attached appendix. We also estimated two costs of issuances - 1 and 3 percent based on possible low and high underwriter spreads. Table 1 displays these estimates. The maximum True Interest Cost (TIC) found in the MMD +50 bps calculation, represents the total amount the issuer will pay when we account for a 3 percent issuance cost, a lower par-value average, and a high yield rate average. In contrast, the minimum True Interest Cost (TIC) found in the AA calculation, represents the total amount the issuer will pay when accounting for a 1 percent issuance cost, a higher par-value average, and a lower yield rate average.

Likely Investors: Based on the yield curve chart (Table 3), we expect for commercial banks and households to purchase and invest in the MMD +50 maximum TIC bid due to the steep yield curve that occurs at maturity year 10. These investors employ strategies that allow them to "borrow short and invest long", and such yield curves are attractive for these buyers. In contrast, we expect mutual funds to invest in the AA minimum TIC bid due to the relatively stable yield curve that also occurs at maturity year 10. The AA curve and the MMD+30 bps both display similar levels of yields making it an attractive investment opportunity for mutual funds concerned about the lower prices on the long end of steepening yields.

Appendix:

Table 2: AA Bid 1% Issuance

**The Board of Education of the Hanover Park Regional High School District
\$44.35 Million, 20 YEAR OFFERING**

Settlement Date 3/14/2023
Dated Date 3/15/2023

Year	Maturity	Principal	Coupon	Price	Yield	Interest	Total Debt Service	Proceeds
1	3/15/2024	\$1,204,000	3.00%	99.68	3.33%	\$ 1,609,720	\$ 2,813,720	\$ 1,200,089
2	3/15/2025	\$2,045,000	3.00%	99.73	3.14%	\$ 1,573,600	\$ 3,618,600	\$ 2,039,522
3	3/15/2026	\$2,050,000	3.25%	100.74	2.99%	\$ 1,512,250	\$ 3,562,250	\$ 2,065,256
4	3/15/2027	\$2,150,000	3.25%	101.42	2.87%	\$ 1,445,625	\$ 3,595,625	\$ 2,180,523
5	3/15/2028	\$2,150,000	3.25%	102.14	2.79%	\$ 1,375,750	\$ 3,525,750	\$ 2,195,982
6	3/15/2029	\$2,150,000	3.50%	104.19	2.74%	\$ 1,305,875	\$ 3,455,875	\$ 2,239,998
7	3/15/2030	\$2,150,000	3.50%	104.94	2.72%	\$ 1,230,625	\$ 3,380,625	\$ 2,256,274
8	3/15/2031	\$2,150,000	3.50%	105.44	2.74%	\$ 1,155,375	\$ 3,305,375	\$ 2,266,865
9	3/15/2032	\$2,200,000	3.50%	105.63	2.79%	\$ 1,080,125	\$ 3,280,125	\$ 2,323,775
10	3/15/2033	\$2,250,000	3.50%	105.43	2.87%	\$ 1,003,125	\$ 3,253,125	\$ 2,372,093
11	3/15/2034	\$2,300,000	3.75%	107.42	2.96%	\$ 924,375	\$ 3,224,375	\$ 2,470,688
12	3/15/2035	\$2,350,000	3.75%	106.72	3.08%	\$ 838,125	\$ 3,188,125	\$ 2,507,961
13	3/15/2036	\$2,400,000	3.75%	105.91	3.19%	\$ 750,000	\$ 3,150,000	\$ 2,541,869
14	3/15/2037	\$2,400,000	3.75%	105.04	3.30%	\$ 660,000	\$ 3,060,000	\$ 2,520,872
15	3/15/2038	\$2,400,000	3.75%	104.11	3.40%	\$ 570,000	\$ 2,970,000	\$ 2,498,650
16	3/15/2039	\$2,400,000	4.00%	106.20	3.491%	\$ 480,000	\$ 2,880,000	\$ 2,548,808
17	3/15/2040	\$2,400,000	4.00%	105.35	3.58%	\$ 384,000	\$ 2,784,000	\$ 2,528,489
18	3/15/2041	\$2,400,000	4.00%	104.51	3.66%	\$ 288,000	\$ 2,688,000	\$ 2,508,193
19	3/15/2042	\$2,400,000	4.00%	103.68	3.73%	\$ 192,000	\$ 2,592,000	\$ 2,488,314
20	3/15/2043	\$2,400,000	4.00%	102.88	3.79%	\$ 96,000	\$ 2,496,000	\$ 2,469,205
Average			3.60%	104.06	3.16%			
Total		\$44,349,000				\$ 18,474,570	\$ 62,823,570	\$ 46,223,426
Cost of Issuance		1.00%						
TIC		3.398%						

Table 3: Yield Curves

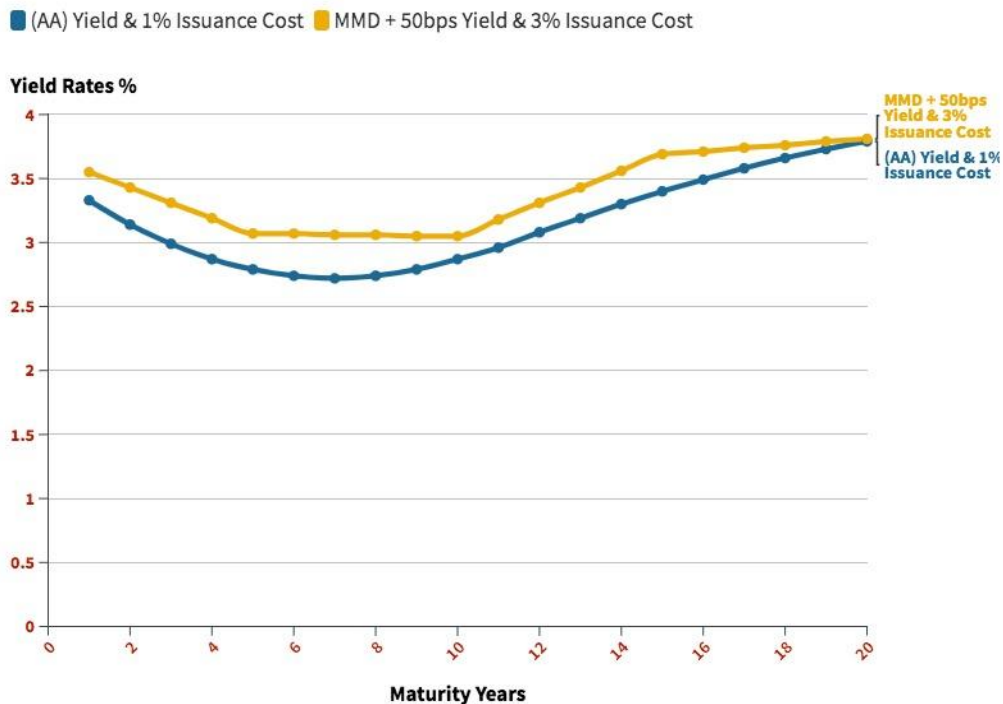


Table 4: AA Bid 3% Issuance

The Board of Education of the Hanover Park Regional High School District
\$44.35 Million, 20 YEAR OFFERING

Settlement Date 3/14/23
Dated Date 3/15/23

Year	Maturity	Principal	Coupon	Price	Yield	Interest	Total Debt Service	Proceeds	TIC IRR Calculation
1	3/15/24	\$1,204,000	3.00%	99.68	3.33%	\$ 1,609,720	\$ 2,813,720	\$ 1,200,089	\$ (44,836,723)
2	3/15/25	\$2,045,000	3.00%	99.73	3.14%	\$ 1,573,600	\$ 3,618,600	\$ 2,039,522	\$ 2,813,720
3	3/15/26	\$2,050,000	3.25%	100.74	2.99%	\$ 1,512,250	\$ 3,562,250	\$ 2,065,256	\$ 3,618,600
4	3/15/27	\$2,150,000	3.25%	101.42	2.87%	\$ 1,445,625	\$ 3,595,625	\$ 2,180,523	\$ 3,562,250
5	3/15/28	\$2,150,000	3.25%	102.14	2.79%	\$ 1,375,750	\$ 3,525,750	\$ 2,195,982	\$ 3,595,625
6	3/15/29	\$2,150,000	3.50%	104.19	2.74%	\$ 1,305,875	\$ 3,455,875	\$ 2,239,998	\$ 3,525,750
7	3/15/30	\$2,150,000	3.50%	104.94	2.72%	\$ 1,230,625	\$ 3,380,625	\$ 2,256,274	\$ 3,455,875
8	3/15/31	\$2,150,000	3.50%	105.44	2.74%	\$ 1,155,375	\$ 3,305,375	\$ 2,266,865	\$ 3,380,625
9	3/15/32	\$2,200,000	3.50%	105.63	2.79%	\$ 1,080,125	\$ 3,280,125	\$ 2,323,775	\$ 3,305,375
10	3/15/33	\$2,250,000	3.50%	105.43	2.87%	\$ 1,003,125	\$ 3,253,125	\$ 2,372,093	\$ 3,280,125
11	3/15/34	\$2,300,000	3.75%	107.42	2.96%	\$ 924,375	\$ 3,224,375	\$ 2,470,688	\$ 3,253,125
12	3/15/35	\$2,350,000	3.75%	106.72	3.08%	\$ 838,125	\$ 3,188,125	\$ 2,507,961	\$ 3,224,375
13	3/15/36	\$2,400,000	3.75%	105.91	3.19%	\$ 750,000	\$ 3,150,000	\$ 2,541,869	\$ 3,188,125
14	3/15/37	\$2,400,000	3.75%	105.04	3.30%	\$ 660,000	\$ 3,060,000	\$ 2,520,872	\$ 3,150,000
15	3/15/38	\$2,400,000	3.75%	104.11	3.40%	\$ 570,000	\$ 2,970,000	\$ 2,498,650	\$ 3,060,000
16	3/15/39	\$2,400,000	4.00%	106.20	3.491%	\$ 480,000	\$ 2,880,000	\$ 2,548,808	\$ 2,970,000
17	3/15/40	\$2,400,000	4.00%	105.35	3.58%	\$ 384,000	\$ 2,784,000	\$ 2,528,489	\$ 2,548,808
18	3/15/41	\$2,400,000	4.00%	104.51	3.66%	\$ 288,000	\$ 2,688,000	\$ 2,508,193	\$ 2,528,489
19	3/15/42	\$2,400,000	4.00%	103.68	3.73%	\$ 192,000	\$ 2,592,000	\$ 2,488,314	\$ 2,508,193
20	3/15/43	\$2,400,000	4.00%	102.88	3.79%	\$ 96,000	\$ 2,496,000	\$ 2,469,205	\$ 2,488,314
Average			3.60%	104.06	3.16%				\$ 2,469,205
Total		\$44,349,000				\$ 18,474,570	\$ 62,823,570	\$ 46,223,426	
Cost of Issuance		3.00%							
TIC		3.635%							

Table 5: MMD+30 Bid 1% Issuance

The Board of Education of the Hanover Park Regional High School District
\$44.35 Million, 20 YEAR OFFERING

Settlement Date 3/14/23
Dated Date 3/15/23

Year	Maturity	Principal	Coupon	Price	Yield	Interest	Total Debt Service	Proceeds	TIC IRR Calculation	MMD Curve Interpolation
1	3/15/24	\$1,204,000	3.00%	99.66	3.35%	\$ 1,609,720	\$ 2,813,720	\$ 1,199,878	\$ (45,747,754)	Maturity 1MMD 3.05%
2	3/15/25	\$2,045,000	3.00%	99.56	3.23%	\$ 1,573,600	\$ 3,618,600	\$ 2,035,947	\$ 2,813,720	5 2.57%
3	3/15/26	\$2,050,000	3.25%	100.40	3.11%	\$ 1,512,250	\$ 3,562,250	\$ 2,058,166	\$ 3,618,600	10 2.55%
4	3/15/27	\$2,150,000	3.25%	100.97	2.99%	\$ 1,445,625	\$ 3,595,625	\$ 2,170,940	\$ 3,562,250	15 3.19%
5	3/15/28	\$2,150,000	3.25%	101.76	2.87%	\$ 1,375,750	\$ 3,525,750	\$ 2,187,821	\$ 3,595,625	30 3.56%
6	3/15/29	\$2,150,000	3.50%	103.47	2.87%	\$ 1,305,875	\$ 3,455,875	\$ 2,224,682	\$ 3,525,750	
7	3/15/30	\$2,150,000	3.50%	104.02	2.86%	\$ 1,230,625	\$ 3,380,625	\$ 2,236,484	\$ 3,455,875	
8	3/15/31	\$2,150,000	3.50%	104.56	2.86%	\$ 1,155,375	\$ 3,305,375	\$ 2,248,116	\$ 3,380,625	
9	3/15/32	\$2,200,000	3.50%	105.10	2.85%	\$ 1,080,125	\$ 3,280,125	\$ 2,312,130	\$ 3,305,375	
10	3/15/33	\$2,250,000	3.50%	105.62	2.85%	\$ 1,003,125	\$ 3,253,125	\$ 2,376,508	\$ 3,280,125	
11	3/15/34	\$2,300,000	3.75%	107.20	2.98%	\$ 924,375	\$ 3,224,375	\$ 2,465,545	\$ 3,253,125	
12	3/15/35	\$2,350,000	3.75%	106.41	3.11%	\$ 838,125	\$ 3,188,125	\$ 2,500,668	\$ 3,224,375	
13	3/15/36	\$2,400,000	3.75%	105.44	3.23%	\$ 750,000	\$ 3,150,000	\$ 2,530,606	\$ 3,188,125	
14	3/15/37	\$2,400,000	3.75%	104.30	3.36%	\$ 660,000	\$ 3,060,000	\$ 2,503,320	\$ 3,150,000	
15	3/15/38	\$2,400,000	3.75%	103.02	3.49%	\$ 570,000	\$ 2,970,000	\$ 2,472,398	\$ 3,060,000	
16	3/15/39	\$2,400,000	4.00%	105.90	3.51%	\$ 480,000	\$ 2,880,000	\$ 2,541,641	\$ 2,970,000	
17	3/15/40	\$2,400,000	4.00%	105.85	3.54%	\$ 384,000	\$ 2,784,000	\$ 2,540,340	\$ 2,880,000	
18	3/15/41	\$2,400,000	4.00%	105.76	3.56%	\$ 288,000	\$ 2,688,000	\$ 2,538,161	\$ 2,784,000	
19	3/15/42	\$2,400,000	4.00%	105.63	3.59%	\$ 192,000	\$ 2,592,000	\$ 2,535,149	\$ 2,688,000	
20	3/15/43	\$2,400,000	4.00%	105.47	3.61%	\$ 96,000	\$ 2,496,000	\$ 2,531,352	\$ 2,592,000	
Average			3.60%	104.01	3.19%				\$ 2,496,000	
Total		\$44,349,000				\$ 18,474,570	\$ 62,823,570	\$ 46,209,853		
Cost of Issuance		1.00%								
TIC		3.402%								

Table 6: MMD+30 Bid 3% Issuance

The Board of Education of the Hanover Park Regional High School District \$44.35 Million, 20 YEAR OFFERING										
Settlement Date		3/14/23								
Dated Date		3/15/23								
Year	Maturity	Principal	Coupon	Price	Yield	Interest	Total Debt Service	Proceeds	TIC IRR Calculati MMD Curve Interpolation	
1	3/15/24	\$1,204,000	3.00%	99.66	3.35%	\$ 1,609,720	\$ 2,813,720	\$ 1,199,878	\$ (44,823,557)	Maturity/IMD_AA/Maturity_ID_AAA_Interpolated MMD_plus_30bps
2	3/15/25	\$2,045,000	3.00%	99.56	3.23%	\$ 1,573,600	\$ 3,618,600	\$ 2,035,947	\$ 2,813,720	1 3.05% 1 3.05%
3	3/15/26	\$2,050,000	3.25%	100.40	3.11%	\$ 1,512,250	\$ 3,562,250	\$ 2,058,166	\$ 3,618,600	5 2.57% 2 2.93%
4	3/15/27	\$2,150,000	3.25%	100.97	2.99%	\$ 1,445,625	\$ 3,595,625	\$ 2,170,940	\$ 3,562,250	10 2.55% 3 2.81%
5	3/15/28	\$2,150,000	3.25%	101.76	2.87%	\$ 1,375,750	\$ 3,525,750	\$ 2,187,821	\$ 3,595,625	15 3.19% 4 2.69%
6	3/15/29	\$2,150,000	3.50%	103.47	2.87%	\$ 1,305,875	\$ 3,455,875	\$ 2,224,682	\$ 3,525,750	30 3.56% 5 2.57%
7	3/15/30	\$2,150,000	3.50%	104.02	2.86%	\$ 1,230,625	\$ 3,380,625	\$ 2,236,484	\$ 3,455,875	6 2.57%
8	3/15/31	\$2,150,000	3.50%	104.56	2.86%	\$ 1,155,375	\$ 3,305,375	\$ 2,248,116	\$ 3,380,625	7 2.56%
9	3/15/32	\$2,200,000	3.50%	105.10	2.85%	\$ 1,080,125	\$ 3,280,125	\$ 2,312,130	\$ 3,305,375	8 2.56%
10	3/15/33	\$2,250,000	3.50%	105.62	2.85%	\$ 1,003,125	\$ 3,253,125	\$ 2,376,508	\$ 3,280,125	9 2.55%
11	3/15/34	\$2,300,000	3.75%	107.20	2.98%	\$ 924,375	\$ 3,224,375	\$ 2,465,545	\$ 3,253,125	10 2.55%
12	3/15/35	\$2,350,000	3.75%	106.41	3.11%	\$ 838,125	\$ 3,188,125	\$ 2,500,668	\$ 3,224,375	11 2.68%
13	3/15/36	\$2,400,000	3.75%	105.44	3.23%	\$ 750,000	\$ 3,150,000	\$ 2,530,606	\$ 3,188,125	12 2.81%
14	3/15/37	\$2,400,000	3.75%	104.30	3.36%	\$ 660,000	\$ 3,060,000	\$ 2,503,320	\$ 3,150,000	13 2.93%
15	3/15/38	\$2,400,000	3.75%	103.02	3.49%	\$ 570,000	\$ 2,970,000	\$ 2,472,398	\$ 3,060,000	14 3.06%
16	3/15/39	\$2,400,000	4.00%	105.90	3.51%	\$ 480,000	\$ 2,880,000	\$ 2,541,641	\$ 2,970,000	15 3.19%
17	3/15/40	\$2,400,000	4.00%	105.85	3.54%	\$ 384,000	\$ 2,784,000	\$ 2,540,340	\$ 2,880,000	16 3.21%
18	3/15/41	\$2,400,000	4.00%	105.76	3.56%	\$ 288,000	\$ 2,688,000	\$ 2,538,161	\$ 2,784,000	17 3.24%
19	3/15/42	\$2,400,000	4.00%	105.63	3.59%	\$ 192,000	\$ 2,592,000	\$ 2,535,149	\$ 2,688,000	18 3.26%
20	3/15/43	\$2,400,000	4.00%	105.47	3.61%	\$ 96,000	\$ 2,496,000	\$ 2,531,352	\$ 2,592,000	19 3.29%
Average			3.60%	104.01	3.19%				\$ 2,496,000	20 3.31%
Total		\$44,349,000				\$18,474,570	\$ 62,823,570	\$ 46,209,853		21
Cost of Issuance		3.00%								22
TIC		3.638%								23
										24
										25
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										27
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										29
										30 3.56%

Table 7: MMD+50 Bid 1% Issuance

The Board of Education of the Hanover Park Regional High School District \$44.35 Million, 20 YEAR OFFERING										
Settlement Date		3/14/23								
Dated Date		3/15/23								
Year	Maturity	Principal	Coupon	Price	Yield	Interest	Total Debt Service	Proceeds	TIC IRR Calculati MMD Curve Interpolation	
1	3/15/24	\$1,204,000	3.00%	99.46	3.55%	\$ 1,609,720	\$ 2,813,720	\$ 1,197,532	\$ (44,964,102)	Maturity/IMD_AA/Maturity_ID_AAA_Interpolated MMD_plus_30bps
2	3/15/25	\$2,045,000	3.00%	99.17	3.43%	\$ 1,573,600	\$ 3,618,600	\$ 2,028,118	\$ 2,813,720	1 3.05% 1 3.05%
3	3/15/26	\$2,050,000	3.25%	99.83	3.31%	\$ 1,512,250	\$ 3,562,250	\$ 2,046,510	\$ 3,618,600	5 2.57% 2 2.93%
4	3/15/27	\$2,150,000	3.25%	100.22	3.19%	\$ 1,445,625	\$ 3,595,625	\$ 2,154,810	\$ 3,562,250	10 2.55% 3 2.81%
5	3/15/28	\$2,150,000	3.25%	100.83	3.07%	\$ 1,375,750	\$ 3,525,750	\$ 2,167,820	\$ 3,595,625	15 3.19% 4 2.69%
6	3/15/29	\$2,150,000	3.50%	102.36	3.07%	\$ 1,305,875	\$ 3,455,875	\$ 2,200,804	\$ 3,525,750	30 3.56% 5 2.57%
7	3/15/30	\$2,150,000	3.50%	102.74	3.06%	\$ 1,230,625	\$ 3,380,625	\$ 2,208,949	\$ 3,455,875	6 2.57%
8	3/15/31	\$2,150,000	3.50%	103.12	3.06%	\$ 1,155,375	\$ 3,305,375	\$ 2,217,007	\$ 3,380,625	7 2.56%
9	3/15/32	\$2,200,000	3.50%	103.49	3.05%	\$ 1,080,125	\$ 3,280,125	\$ 2,276,723	\$ 3,305,375	8 2.56%
10	3/15/33	\$2,250,000	3.50%	103.85	3.05%	\$ 1,003,125	\$ 3,253,125	\$ 2,336,721	\$ 3,280,125	9 2.55%
11	3/15/34	\$2,300,000	3.75%	105.28	3.18%	\$ 924,375	\$ 3,224,375	\$ 2,421,349	\$ 3,253,125	10 2.55%
12	3/15/35	\$2,350,000	3.75%	104.37	3.31%	\$ 838,125	\$ 3,188,125	\$ 2,452,682	\$ 3,224,375	11 2.68%
13	3/15/36	\$2,400,000	3.75%	103.29	3.43%	\$ 750,000	\$ 3,150,000	\$ 2,479,000	\$ 3,188,125	12 2.81%
14	3/15/37	\$2,400,000	3.75%	102.06	3.56%	\$ 660,000	\$ 3,060,000	\$ 2,449,406	\$ 3,150,000	13 2.93%
15	3/15/38	\$2,400,000	3.75%	100.69	3.69%	\$ 570,000	\$ 2,970,000	\$ 2,416,474	\$ 3,060,000	14 3.06%
16	3/15/39	\$2,400,000	4.00%	103.42	3.71%	\$ 480,000	\$ 2,880,000	\$ 2,482,055	\$ 2,970,000	15 3.19%
17	3/15/40	\$2,400,000	4.00%	103.26	3.74%	\$ 384,000	\$ 2,784,000	\$ 2,478,189	\$ 2,880,000	16 3.21%
18	3/15/41	\$2,400,000	4.00%	103.07	3.76%	\$ 288,000	\$ 2,688,000	\$ 2,473,577	\$ 2,784,000	17 3.24%
19	3/15/42	\$2,400,000	4.00%	102.84	3.79%	\$ 192,000	\$ 2,592,000	\$ 2,468,264	\$ 2,688,000	18 3.26%
20	3/15/43	\$2,400,000	4.00%	102.60	3.81%	\$ 96,000	\$ 2,496,000	\$ 2,462,295	\$ 2,592,000	19 3.29%
Average			3.60%	102.30	3.39%				\$ 2,496,000	20 3.31%
Total		\$44,349,000				\$18,474,570	\$ 62,823,570	\$ 45,418,285		21
Cost of Issuance		1.00%								22
TIC		3.602%								23
										24
										25
										26
										27
										28
										29
										30 3.56%

Table 8: MMD+50 Bid 3% Issuance

The Board of Education of the Hanover Park Regional High School District \$44.35 Million, 20 YEAR OFFERING								
Settlement Date	3/14/23							
Dated Date	3/15/23							
Year	Maturity	Principal	Coupon	Price	Yield	Interest	Total Debt Service	Proceeds
1	3/15/24	\$1,204,000	3.00%	99.46	3.55%	\$ 1,609,720	\$ 2,813,720	\$ 1,197,532
2	3/15/25	\$2,045,000	3.00%	99.17	3.43%	\$ 1,573,600	\$ 3,618,600	\$ 2,028,118
3	3/15/26	\$2,050,000	3.25%	99.83	3.31%	\$ 1,512,250	\$ 3,562,250	\$ 2,046,510
4	3/15/27	\$2,150,000	3.25%	100.22	3.19%	\$ 1,445,625	\$ 3,595,625	\$ 2,154,810
5	3/15/28	\$2,150,000	3.25%	100.83	3.07%	\$ 1,375,750	\$ 3,525,750	\$ 2,167,820
6	3/15/29	\$2,150,000	3.50%	102.36	3.07%	\$ 1,305,875	\$ 3,455,875	\$ 2,200,804
7	3/15/30	\$2,150,000	3.50%	102.74	3.06%	\$ 1,230,625	\$ 3,380,625	\$ 2,208,949
8	3/15/31	\$2,150,000	3.50%	103.12	3.06%	\$ 1,155,375	\$ 3,305,375	\$ 2,217,007
9	3/15/32	\$2,200,000	3.50%	103.49	3.05%	\$ 1,080,125	\$ 3,280,125	\$ 2,276,723
10	3/15/33	\$2,250,000	3.50%	103.85	3.05%	\$ 1,003,125	\$ 3,253,125	\$ 2,336,721
11	3/15/34	\$2,300,000	3.75%	105.28	3.18%	\$ 924,375	\$ 3,224,375	\$ 2,421,349
12	3/15/35	\$2,350,000	3.75%	104.37	3.31%	\$ 838,125	\$ 3,188,125	\$ 2,452,682
13	3/15/36	\$2,400,000	3.75%	103.29	3.43%	\$ 750,000	\$ 3,150,000	\$ 2,479,000
14	3/15/37	\$2,400,000	3.75%	102.06	3.56%	\$ 660,000	\$ 3,060,000	\$ 2,449,406
15	3/15/38	\$2,400,000	3.75%	100.69	3.69%	\$ 570,000	\$ 2,970,000	\$ 2,416,474
16	3/15/39	\$2,400,000	4.00%	103.42	3.71%	\$ 480,000	\$ 2,880,000	\$ 2,482,055
17	3/15/40	\$2,400,000	4.00%	103.26	3.74%	\$ 384,000	\$ 2,784,000	\$ 2,478,189
18	3/15/41	\$2,400,000	4.00%	103.07	3.76%	\$ 288,000	\$ 2,688,000	\$ 2,473,577
19	3/15/42	\$2,400,000	4.00%	102.84	3.79%	\$ 192,000	\$ 2,592,000	\$ 2,468,264
20	3/15/43	\$2,400,000	4.00%	102.60	3.81%	\$ 96,000	\$ 2,496,000	\$ 2,462,295
Average		\$44,349,000	3.60%	102.30	3.39%	\$ 18,474,570	\$ 62,823,570	\$ 45,418,285
Total Cost of Issuance		3.00%						
TIC		3.841%						

Table 9: Average Coupons

Issues	Dated Date	Average	Average
THE BOARD OF EDUCATION OF THE TOWNSHIP OF EAST HANOVER COUNT	12/21/22	3.625	3.2115
THE BOARD OF EDUCATION OF THE BOROUGH OF NORTHVALE IN THE CO	12/6/22	3.725	3.408
Total Average		3.675	3.30975