

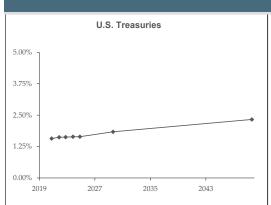
YIELD ANALYSIS

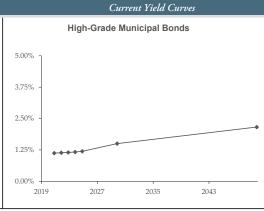
November 5, 2019

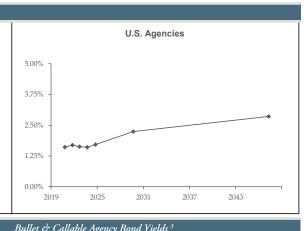
U.S. Treasury Yields				
Coupon	Maturity	YTM		
0.000%	10/08/20	1.57%		
1.500%	10/31/21	1.62%		
1.375%	10/15/22	1.63%		
2.875%	10/31/23	1.64%		
1.500%	10/31/24	1.64%		
1.625%	08/15/29	1.84%		
2.250%	08/15/49	2.33%		

Municipal Bond Yields ¹			
Maturity	YTM	Tax-Equiv. ²	
11/04/20	1.13%	1.61%	
11/04/21	1.14%	1.63%	
11/04/22	1.15%	1.64%	
11/04/23	1.17%	1.67%	
11/04/24	1.20%	1.71%	
11/04/29	1.50%	2.14%	
11/04/49	2.16%	3.09%	

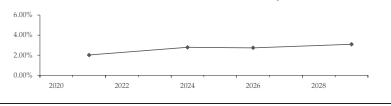
U.S. Agency Yields - Active Bonds					
Agency	Coupon	Maturity	Price	YTM	To Muni (bp)
FHLB	2.625%	10/01/20	\$100.90	1.61%	+1
FNMA	1.375%	10/07/21	\$99.40	1.69%	+7
FNMA	1.375%	09/06/22	\$99.30	1.63%	-2
FFCB	1.700%	09/25/23	\$100.11	1.61%	-6
FHLB	1.680%	10/01/24	\$99.53	1.72%	+1
FFCB	2.430%	09/28/29	\$101.40	2.24%	+10
FFCB	3.580%	04/11/47	\$113.23	2.86%	-23







Corporate Bond Yields					
Description	Price	YTM	To Treasury (bp)		
WFC (A2/A-) 2.1% 7/26/2021	\$100.13	2.02%	+40		
JPM (A2/A-) 3.32% 8/29/2024	\$101.18	2.78%	+114		
C (A3/BBB+) 3% 5/15/2026	\$101.56	2.74%	+109		
MS (A3/BBB+) 4.05% 3/13/2029	\$107.38	3.09%	+125		
6.00%		-			



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Description	Call Date	Price	YTM	YTW
FHLB 2.07% 9/16/2020	12/16/19	\$100.02	2.00%	2.00%
FHLB 2.05% 9/23/2021	03/23/20	\$100.05	2.00%	2.00%
FFCB 1.96% 9/16/2024	09/16/20	\$99.97	1.97%	1.97%
FHLB 2.5% 9/28/2029	12/28/19	\$97.43	2.75%	2.80%
6.00%				

