

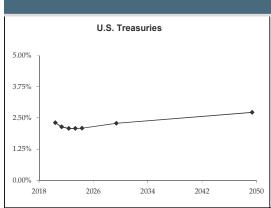
YIELD ANALYSIS

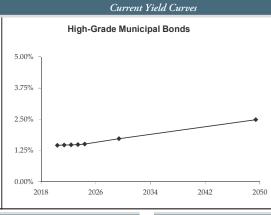
May 28, 2019

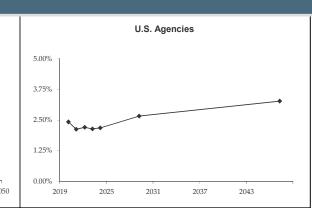
U.S. Treasury Yields				
Coupon	Maturity	YTM		
0.000%	05/21/20	2.31%		
2.250%	04/30/21	2.14%		
2.125%	05/15/22	2.08%		
2.750%	04/30/23	2.08%		
2.250%	04/30/24	2.09%		
2.375%	05/15/29	2.28%		
2.875%	05/15/49	2.72%		

Municipal Bond Yields ¹			
Maturity	YTM	Tax-Equiv. ²	
05/24/20	1.46%	2.08%	
05/24/21	1.47%	2.10%	
05/24/22	1.48%	2.11%	
05/24/23	1.49%	2.13%	
05/24/24	1.51%	2.15%	
05/24/29	1.73%	2.47%	
05/24/49	2.49%	3.55%	

U.S. Agency Yields - Active Bonds					
Agency	Coupon	Maturity	Price	YTM	To Muni (bp)
FNMA	1.500%	02/28/20	\$99.32	2.42%	+34
FNMA	1.375%	02/26/21	\$98.73	2.12%	+2
FHLB	2.250%	03/11/22	\$100.13	2.20%	+9
FHLB	2.750%	03/10/23	\$0.00	2.13%	+1
FHLB	3.250%	03/08/24	\$104.84	2.18%	+2
FFCB	3.000%	03/14/29	\$102.90	2.66%	+20
FFCB	3.580%	04/11/47	\$105.24	3.27%	-28







Description	Price	YTM	To Treasury (bp)
WFC (A2/A-) 2.5% 3/4/2021	\$100.10	2.44%	+30
JPM (A2/A-) 3.56% 4/23/2024	\$102.04	3.05%	+97
BAC (A2/A-) 3.5% 4/19/2026	\$101.59	3.24%	+115
MS (A3/BBB+) 4.05% 3/13/2029	\$102.01	3.76%	+147
6.00% 4.00% 2.00%	•	-	
2020 2022	2024 20	26	2028

Corporate Bond Yields

Description	Call Date	Price	YTM	YTW
FHLB 2.58% 3/20/2020	09/20/19	\$99.96	2.57%	2.57%
FHLB 2.65% 3/11/2021	06/11/19	\$99.95	2.65%	2.65%
FHLMC 3.05% 3/11/2024	06/11/19	\$100.05	3.03%	1.57%
FHLB 3.04% 2/28/2029	06/04/19	\$99.95	3.05%	3.05%
6.00% 4.00% - 2.00% -	, ,	1 ,		· · ·
2019 2021	2023	2025	2027	2029

Bullet & Callable Agency Bond Yields 3