

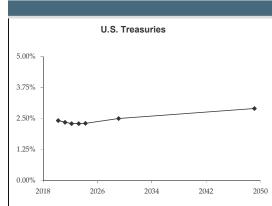
## YIELD ANALYSIS

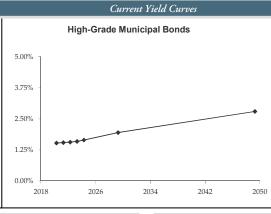
April 9, 2019

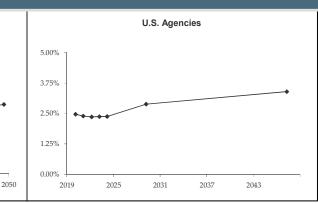
U.S. Treasury Yields				
Coupon	Maturity	YTM		
0.000%	03/26/20	2.42%		
2.250%	03/31/21	2.35%		
2.375%	03/15/22	2.30%		
2.500%	03/31/23	2.30%		
2.125%	03/31/24	2.31%		
2.625%	02/15/29	2.50%		
3.000%	02/15/49	2.90%		

Municipal Bond Yields <sup>1</sup>				
Maturity	YTM	Tax-Equiv. <sup>2</sup>		
04/08/20	1.53%	2.19%		
04/08/21	1.55%	2.21%		
04/08/22	1.57%	2.24%		
04/08/23	1.60%	2.28%		
04/08/24	1.65%	2.35%		
04/08/29	1.95%	2.78%		
04/08/49	2.80%	4.00%		

U.S. Agency Yields - Active Bonds						
Agency	Coupon	Maturity	Price	YTM	To Muni (bp)	
FNMA	1.500%	02/28/20	\$99.15	2.47%	+29	
FNMA	1.375%	02/26/21	\$98.13	2.40%	+19	
FHLB	2.250%	03/11/22	\$99.68	2.37%	+13	
FHLB	2.125%	03/10/23	\$99.07	2.38%	+10	
FHLB	3.250%	03/08/24	\$104.01	2.38%	+3	
FFCB	3.000%	03/14/29	\$100.85	2.89%	+10	
FFCB	3.580%	04/11/47	\$102.81	3.40%	-60	







Description Price   WFC (A2/A-) 2.5% 3/4/2021 \$99.44   IPM (A2/A-) 3.56% 4/23/2024 \$101.53	2.80% 3.19%	To Treasury (bp) +46
111 (112/11) 2.5 % 5/ 1/2521		
IPM (A2/A-) 3.56% 4/23/2024 \$101.53	2 100/	
	3.19/0	+89
BAC (A2/A-) 3.5% 4/19/2026 \$101.29	3.29%	+99
MS (A3/BBB+) 4.05% 3/13/2029 \$100.32	3.97%	+147
6.00% 4.00% 2.00%	•	<b></b>
	026	2028

Description	Call Date	Price	YTM	YTW
FHLB 2.58% 3/20/2020	09/20/19	\$100.03	2.55%	2.55%
FHLB 2.65% 3/11/2021	06/11/19	\$100.00	2.65%	2.65%
FHLMC 3.05% 3/11/2024	06/11/19	\$100.10	3.02%	2.48%
FHLB 3.04% 2/28/2029	04/16/19	\$98.41	3.22%	3.23%
4.00% - 2.00% -	•			<b></b>
2019 2021	2023	2025	2027	2029

Bullet & Callable Agency Bond Yields <sup>3</sup>