

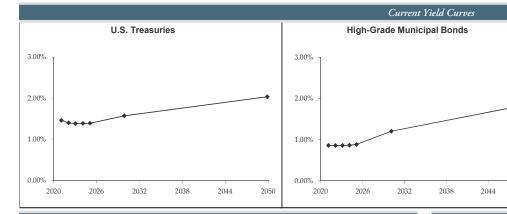
YIELD ANALYSIS

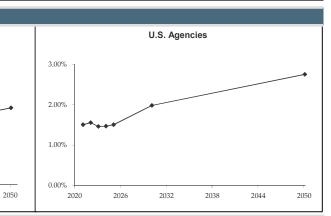
February 11, 2020

U.S. Treasury Yields				
Coupon	Maturity	YTM		
0.000%	01/28/21	1.46%		
1.375%	01/31/22	1.40%		
1.500%	01/15/23	1.38%		
2.500%	01/31/24	1.39%		
1.375%	01/31/25	1.39%		
1.750%	11/15/29	1.57%		
2.375%	11/15/49	2.03%		

Municipal Bond Yields ¹			
Maturity	YTM	Tax-Equiv. ²	
02/10/21	0.86%	1.23%	
02/10/22	0.86%	1.23%	
02/10/23	0.86%	1.23%	
02/10/24	0.87%	1.24%	
02/10/25	0.89%	1.27%	
02/10/30	1.21%	1.73%	
02/10/50	1.87%	2.67%	

U.S. Agency Yields - Active Bonds					
Agency	Coupon	Maturity	Price	YTM	To Muni (bp)
FHLB	1.375%	02/18/21	\$99.85	1.50%	+27
FFCB	1.806%	02/22/22	\$100.38	1.55%	+33
FFCB	1.850%	02/01/23	\$101.07	1.46%	+23
FHLB	2.125%	02/15/24	\$102.50	1.47%	+23
FFCB	2.950%	02/28/25	\$106.93	1.50%	+24
FFCB	2.800%	02/11/30	\$107.10	1.98%	+26
FFCB	2.760%	02/03/50	\$98.87	2.75%	+8





Corporate Bond Yields					
Description	Price	YTM	To Treasury (bp)		
JPM (A2/A-) 3.05% 10/14/2021	\$102.44	1.80%	+40		
WFC (A2/A-) 3% 2/19/2025	\$104.64	2.00%	+62		
MS (A3/BBB+) 3.63% 1/20/2027	\$108.59	2.26%	+87		
GS (A3/BBB+) 3.3% 3/15/2030	\$103.77	2.82%	+125		
4.00% 3.00% 2.00% 1.00% 0.00%	•	1	•		
2020 2022	2024 2026	2028	2030		

Description	Call Date	Price	YTM	YTW
FFCB 1.58% 2/17/2021	02/19/20	\$99.72	1.86%	1.86%
FFCB 1.53% 2/10/2022	02/10/21	\$99.99	1.53%	1.53%
FHLMC 1.97% 2/6/2025	05/06/20	\$99.87	2.00%	2.00%
FHLB 2.64% 2/22/2030	02/19/20	\$99.87	2.65%	2.65%
4.00% 3.00% - 2.00% - 1.00% - 0.00%	•			-
2020 2022	2024	2026	2028	2030

Bullet & Callable Agency Bond Yields ³