

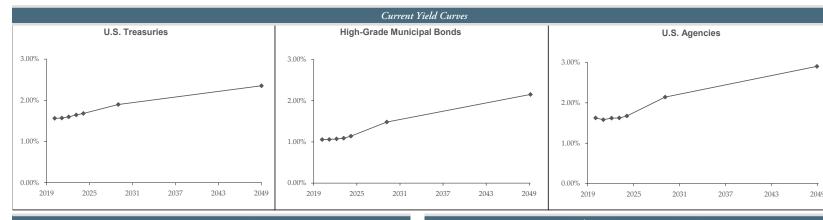
## YIELD ANALYSIS

December 31, 2019

U.S. Treasury Yields					
Coupon	Maturity	YTM			
0.000%	12/31/20	1.56%			
1.625%	12/31/21	1.57%			
1.625%	12/15/22	1.60%			
2.625%	12/31/23	1.65%			
1.750%	12/31/24	1.68%			
1.750%	11/15/29	1.90%			
2.375%	11/15/49	2.35%			

Municipal Bond Yields <sup>1</sup>					
Maturity	YTM	Tax-Equiv. <sup>2</sup>			
12/30/20	1.06%	1.51%			
12/30/21	1.06%	1.51%			
12/30/22	1.07%	1.53%			
12/30/23	1.09%	1.56%			
12/30/24	1.14%	1.63%			
12/30/29	1.48%	2.12%			
12/30/49	2.15%	3.07%			

U.S. Agency Yields - Active Bonds					
Agency	Coupon	Maturity	Price	YTM	To Muni (bp)
FHLMC	1.875%	11/17/20	\$100.20	1.62%	+12
FHLB	1.875%	11/29/21	\$100.52	1.58%	+7
FHLB	2.500%	12/09/22	\$102.47	1.62%	+9
FHLB	2.250%	12/08/23	\$102.32	1.62%	+7
FFCB	1.625%	12/03/24	\$99.47	1.67%	+5
FHLB	2.125%	12/14/29	\$99.67	2.14%	+2
FFCB	2.625%	10/15/49	\$93.91	2.90%	-17



Corporate Bond Yields					
Description	P	rice	YTM	To Treasury (bp)	
WFC (A2/A-) 2.1% 7/26/2021	\$10	00.31	1.88%	+31	
JPM (A2/A-) 3.11% 8/29/2024	\$10	02.02	2.63%	+99	
C (A3/BBB+) 3% 5/15/2026	\$10	01.24	2.74%	+106	
MS (A3/BBB+) 4.05% 3/13/2029	\$10	08.49	2.94%	+104	
4.00% 3.00% - 2.00% - 1.00% - 0.00%	•	•		<b>→</b>	
2020 2022	2024	2026	2028	2030	

Bullet & Callable Agency Bond Yields <sup>3</sup>					
Description	Call Date	Price	YTM	YTW	
FNMA 1.35% 12/18/2020	01/18/20	\$99.30	1.94%	1.94%	
FFCB 1.59% 12/10/2021	12/10/20	\$99.94	1.60%	1.60%	
FHLB 2% 12/11/2024	09/11/20	\$100.11	1.97%	1.84%	
FFCB 2.65% 11/13/2029	02/13/20	\$100.11	2.63%	1.69%	
4.00% 3.00% 2.00% 1.00% 2020 2022	2024 2	.026 2	2028	2030	