

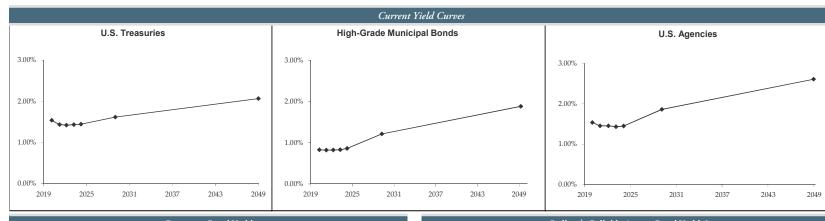
YIELD ANALYSIS

January 28, 2020

U.S. Treasury Yields						
Coupon	Maturity	YTM				
0.000%	12/31/20	1.54%				
1.375%	01/31/22	1.43%				
1.500%	01/15/23	1.42%				
2.500%	01/31/24	1.43%				
1.375%	01/31/25	1.44%				
1.750%	11/15/29	1.61%				
2.375%	11/15/49	2.06%				

Municipal Bond Yields ¹				
Maturity	YTM	Tax-Equiv. ²		
01/27/21	0.83%	1.19%		
01/27/22	0.82%	1.17%		
01/27/23	0.82%	1.18%		
01/27/24	0.83%	1.19%		
01/27/25	0.86%	1.23%		
01/27/30	1.22%	1.74%		
01/27/50	1.89%	2.69%		

U.S. Agency Yields - Active Bonds					
Agency	Coupon	Maturity	Price	YTM	To Muni (bp)
FHLMC	1.875%	11/17/20	\$100.25	1.53%	+35
FHLB	1.875%	11/29/21	\$100.74	1.45%	+28
FHLB	2.500%	12/09/22	\$102.88	1.45%	+27
FHLB	2.250%	12/08/23	\$103.02	1.43%	+24
FFCB	1.625%	12/03/24	\$100.53	1.45%	+21
FHLB	2.125%	12/14/29	\$102.22	1.86%	+12
FFCB	2.625%	10/15/49	\$99.50	2.61%	-9



Corporate Bond Yields					
Description		Price	YTM	To Treasury (bp)	
JPM (A2/A-) 3.05% 10/14/2	.021	\$102.44	1.82%	+39	
WFC (A2/A-) 3% 2/19/202	5	\$104.30	2.08%	+65	
MS (A3/BBB+) 3.63% 1/20		\$108.01	2.35%	+91	
GS (A3/BBB+) 3.3% 3/15/2		\$103.52	2.85%	+124	
4.00% 3.00% - 2.00% - 1.00% - 0.00%		•	•		
2020 2022	2024	2026	2028	2030	

Bullet & Callable Agency Bond Yields ³					
Description	Call Date	Price	YTM	YTW	
FNMA 1.35% 12/18/2020	04/18/20	\$99.20	2.10%	2.10%	
FFCB 1.59% 12/10/2021	12/10/20	\$99.88	1.63%	1.63%	
FHLB 2% 12/11/2024	09/11/20	\$100.02	1.98%	1.96%	
FFCB 2.65% 11/13/2029	02/13/20	\$100.04	2.64%	1.54%	
4.00% 3.00% - 2.00% - 1.00% - 0.00%	•		,	•	
2020 2022	2024	2026	2028	2030	