

YIELD ANALYSIS

December 11, 2018

U.S. Treasur	Mı	Municipal Bond Yields ¹			U.S. Agency Yields - Active Bonds					
Coupon Maturity	YTM	Maturity	YTM	Tax-Equiv. ²	Agency	Coupon	Maturity	Price	YTM	To Muni (bp)
0.000% 12/05/19	2.69%	12/10/19	1.79%	2.56%	FNMA	1.000%	10/24/19	\$98.53	2.73%	+17
2.750% 11/30/20	2.76%	12/10/20	1.89%	2.70%	FHLB	2.860%	10/15/20	\$100.07	2.81%	+11
2.875% 11/15/21	2.76%	12/10/21	1.94%	2.77%	FHLB	3.000%	09/27/21	\$100.02	2.99%	+22
2.000% 11/30/22	2.76%	12/10/22	2.00%	2.85%	FHLB	2.280%	10/26/22	\$97.63	2.92%	+7
2.875% 11/30/23	2.74%	12/10/23	2.06%	2.94%	FHLMC	2.000%	10/17/23	\$95.31	3.03%	+10
3.125% 11/15/28	2.88%	12/10/28	2.41%	3.44%	FFCB	4.000%	10/23/28	\$106.12	3.24%	-20
3.375% 11/15/48	3.12%	12/10/48	3.13%	4.48%	FFCB	3.580%	04/11/47	\$97.77	3.69%	-79
				Current	: Yield Curves					
U.S. Treasuries			High-Grade Municipal Bonds				U.S. Agencies			
				· ·				3		
5.00% -			5.00%				5.00%			ĺ
3.75% -			3.75% -				2.759/			
			3.3070			•	3.75% -			
2.50% -			2.50% -				2.50% -			

1.25% -			1.25% -				1.25% -			
0.00%			0.00%				0.00%			
2018 2026	2034	2042	2018	2026	2034 2	042	2019 2025	2031	2037	2043
Corporate Bond Yields					Bullet & Callable Agency Bond Yields ³					
Description		Price	YTM	To Treasury (bp)	I	Description	Call Date	Price	YTM	YTW
JPM (A2/A-) 4.25% 10/15/2020		\$101.52	3.39%	+62	FFCB 1.16	% 11/1/2019	N/A	\$98.54	2.69%	2.69%
C (Baa1 *+/BBB+) 3.88	% 10/25/2023	\$99.32	4.03%	+127	FHLB 2.84% 9/25/2020		09/25/19	\$99.83	2.91%	2.91%



111LD 2.04/	0 7/23/2020	07/23/17	Ψ77.00	2.71/0	2.71/0
FFCB 3.34% 10/4/2023		10/04/19	\$100.00	3.34%	3.34%
FFCB 3.7%	10/4/2028	10/04/23	\$100.38	3.65%	3.61%
6.00%					
4.00% - 2.00% -	+	•			
0.00% - 2019	2021	2023	2025	2027	2029