

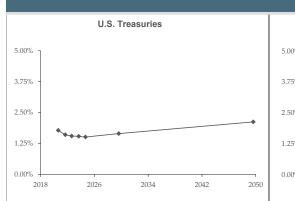
YIELD ANALYSIS

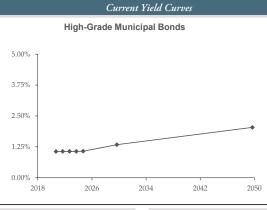
September 10, 2019

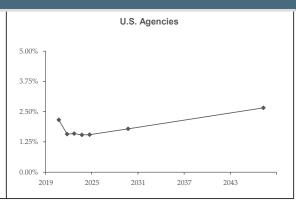
U.S. Treasury Yields					
Coupon	Maturity	YTM			
0.000%	08/13/20	1.78%			
1.500%	08/31/21	1.60%			
1.500%	08/15/22	1.55%			
2.750%	08/31/23	1.54%			
1.250%	08/31/24	1.51%			
1.625%	08/15/29	1.65%			
2.250%	08/15/49	2.12%			

Municipal Bond Yields ¹						
Maturity	YTM	Tax-Equiv. ²				
09/09/20	1.06%	1.52%				
09/09/21	1.07%	1.52%				
09/09/22	1.07%	1.52%				
09/09/23	1.07%	1.52%				
09/09/24	1.08%	1.54%				
09/09/29	1.34%	1.91%				
09/09/49	2.04%	2.91%				

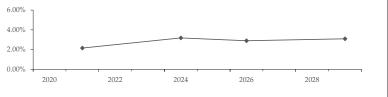
U.S. Agency Yields - Active Bonds						
Agency	Coupon	Maturity	Price	YTM	To Muni (bp)	
FHLMC	2.160%	09/10/20	\$100.00	2.16%	+64	
FNMA	1.375%	10/07/21	\$99.60	1.57%	+5	
FNMA	1.375%	09/06/22	\$99.37	1.59%	+7	
FNMA	2.875%	09/12/23	\$105.16	1.54%	+2	
FHLB	2.875%	09/13/24	\$106.38	1.55%	+1	
FHLMC	6.750%	09/15/29	\$145.26	1.79%	-12	
FFCB	3.580%	04/11/47	\$117.54	2.66%	-25	







Corporate Bond Yields						
o Treasury (bp)						
+56						
+165						
+139						
+144						



Bullet & Callable Agency Bond Yields ³						
Description	Call Date	Price	YTM	YTW		
FHLB 2.58% 3/20/2020	09/20/19	\$100.01	2.55%	2.55%		
FHLB 1.5% 6/30/2021	09/17/19	\$98.98	1.99%	1.99%		
FHLMC 2.82% 5/20/2024	11/20/19	\$100.13	2.78%	2.13%		
FHLB 3.04% 2/28/2029	09/17/19	\$100.00	3.03%	3.04%		
6.000/						
6.00%]						

