King County Investment Pool

Portfolio Review

Quarter Ended September 30, 2020

PFM Asset
Management LLC

213 Market Street
Harrisburg, PA 17101

(717) 232-2723
pfm.com

Executive Summary

Purpose, Scope and Approach	• PFM Asset Management LLC ("PFM") prepared this report to update our ongoing analysis and to address any Investment Pool developments since our June 2020 review. Our approach included a detailed portfolio analysis and Investment Policy Compliance review, based on the County's Investment Policy, dated July 26, 2017. • Our analysis was based on the Investment Pool's holdings as of September 30, 2020, with reference to holdings in past periods. • The review encompasses all current investments in the County's Investment Pool.
Investment Program and Portfolio Review	• PFM reviewed the County's portfolio with respect to Investment Policy Compliance, Sector Allocation, Issuer Concentration, Credit Quality, Maturity Distribution, and Duration Distribution. • The County's Investment Pool appears to provide ample liquidity, is well diversified, and is of sound credit quality. All holdings are investment grade and pose very low risk to principal.
Market Recap	The effects of the coronavirus continued to ripple through global economies and financial markets during the third quarter: • Global Health Crisis –Coronavirus restrictions were gradually eased throughout the U.S. but were followed by regional hot spots of infection, reminding people of how long the virus may linger. • Economic Shutdown –U.S. second quarter GDP plunged by a record annualized rate of 31.7%. For context, GDP fell by 8.4% during the height of the 2008 financial crisis. However, other economic indicators were surprisingly strong and recovered at a faster pace than originally expected, leading various economists to pull forward the expected timeframe for recovery. The labor market has rebounded off its lows; but with the unemployment rate still near 8%, the jobs landscape remains a significant headwind to a more robust and sustained recovery. • Financial Markets –The Federal Reserve (Fed) continued to play a large role in supporting financial market stability. The central bank reaffirmed its ongoing support of many bond market sectors through its continuing purchase and liquidity programs, and it extended the expiration date of many of its lending facilities. The Fed also extended its forward guidance regarding zero short-term interest rates through 2023. The U.S. Treasury yield curve remained relatively unchanged over the quarter, with all maturities ending the quarter within 0.05% of where they began. Yields on shorter-term maturities drifted lower as the lack of new fiscal stimulus resulted in lighter Treasury debt issuance. Longer-dated yields inched only slightly higher, nudged primarily by the Fed's new inflation targeting policy. As a result, Treasury index returns were muted for the quarter. • Diversification away from Treasuries was again additive to performance in the third quarter. Momentum from the narrowing of spreads at the onset of the pandemic continued, albeit at a reduced pace, but led most investment-grade fixed income sectors to generate positive excess returns relative to similar-duration Treasuries.
Observations	• The portfolio is of very high credit quality. The majority of securities (88%) are explicitly guaranteed or carry a high level of support by the U.S. Government (U.S. Treasury, federal agency and U.S. instrumentalities) and/or possess overnight liquidity (Washington State LGIP, bank deposits, and repurchase agreements). • While the credit piece of the portfolio had a tilt to the financial sector, due to Commercial Paper holdings, the County maintained broad issuer diversification during the quarter. • The Portfolio's duration over the quarter was 93% of the benchmark's duration. • The County Pool appears to provide adequate liquidity, with 19% (or $1.5 billion) invested in a combination of the State LGIP, bank deposits, and repurchase agreements (overnight) and 15% of the portfolio invested in U.S. Treasuries.

Investment Pool Portfolio Review

Portfolio Review

I. **Investment Policy Compliance**

II. **Sector Allocation**

- U.S. Treasuries
- Federal Agencies
- Supranational Agencies
- Commercial Paper
- Corporate Notes
- Repurchase Agreements
- LGIP and Cash Equivalents

III. **Issuer Concentration**

IV. **Overall Credit Quality**

V. **Maturity and Duration Distribution**

Investment Policy Compliance – Investment Policy Summary

- The Investment Policy summary is based on the current Investment Policy for the County Investment Pool, dated July 26, 2017.

Type	Maximum Portfolio Allocation	Issuer Restrictions	Credit Ratings	Maturity Restrictions
U.S. Treasuries	100%	None	N/A	Up to 5 years
U.S. Agencies	100%	35% exposure to any single Agency	Senior debt obligations issued by any government sponsored enterprise, agency or instrumentality of the United States.	Up to 5 years
Repurchase Agreements – Top Tier Rating (A-1 or P1)	100%	100% for repurchase agreements with the Federal Reserve Bank of New York 25% maximum exposure to any one repo counterparty. For the purposes of aggregating issuers across sectors, overnight repo counterparties are not included.	The counterparty must have: 1. A rating in the highest short-term credit rating category by at least one Nationally Recognized Statistical Rating Organization (NRSRO) or possess a guarantee by an entity with such a rating; and 2. A minimum asset and capital size of $5 billion in assets and $175 million in capital	60 days or less
Repurchase Agreements – Second Tier Rating (A-2 or P-2)	10%	5% maximum exposure to any one repo counterparty. For the purposes of aggregating issuers across sectors, overnight repo counterparties shall NOT be included.	1. A rating in the second highest short-term credit rating category by at least one Nationally Recognized Statistical Rating Organization (NRSRO) or possesses a guarantee by an entity with such a rating; and 2. A minimum asset and capital size of $5 billion in assets and $175 million in capital	Overnight only
Reverse Repurchase Agreement	20%	5% per investment dealer	1. rated in the highest short-term credit rating category by at least one NRSRO or possesses a guarantee by an entity with such a rating; and 2. a minimum asset and capital size of $5 billion in assets and $175 million in capital	6 months or less
Local Government Investment Pool ("LGIP")	25%	State of Washington LGIP	N/A	N/A

Investment Policy Compliance – Investment Policy Summary (cont'd)

Type	Maximum Portfolio Allocation	Issuer Restrictions	Credit Ratings	Maturity Restrictions
Bankers' Acceptances	25% When combined with Term Repos (greater than overnight), Certificates of Deposit, Commercial Paper and Corporate Notes not to exceed 50% of the Pool assets.	Must be issued by a bank organized and operating in the U.S. Maximum 5% per issuer applied across investment types.	Rated in the highest short-term credit rating category by at least two NRSROs.	Up to 180 days
Certificates of Deposit	25% When combined with Banker's Acceptance, Term Repos (greater than overnight), Commercial Paper and Corporate Notes not to exceed 50% of the Pool assets.	Must be a public depository in the State of Washington. Maximum 5% per issuer applied across investment types.	See RCW 39.58 of the state Code. If not 100% collateralized, must be rated in the highest short-term rating category by at least one NRSRO. Those institutions not meeting the 100% collateralization or minimum credit requirements may receive deposits up to the FDIC or federally guaranteed amounts.	Up to 1 year
Commercial Paper	25% of total market value when combined with Corporate Notes. When combined with Banker's Acceptance, Certificates of Deposit, Term Repos (greater than overnight) and Corporate Notes not to exceed 50% of the Pool assets.	Secondary market purchases only. Must be issued by a bank or corporation organized and operating in the U.S. Maximum 3% per issuer in combined categories of commercial paper and corporate notes. Maximum 5% per issuer applied across investment types.	Purchases with greater than 100 days maturity must have an issuer long-term rating in one of the three highest credit rating categories by one major NRSRO. Rated in the highest short-term rating category by at least two major NRSROs. If the commercial paper is rated by more than two major NRSROs, it must have the highest rating from all of the organizations. State law requires that Commercial Paper be purchased only from dealers.	270 days
General Obligation Municipal Bonds	20%	5% of portfolio: bond issues by pool participants must be purchased on the secondary market only	Rated in at least the highest three long-term rating categories by at least one NRSRO.	5 years

Investment Policy Compliance – Investment Policy Summary (cont'd)

Type	Maximum Portfolio Allocation	Issuer Restrictions	Credit Ratings	Maturity Restrictions
Mortgage-Backed Securities	25%	Must be issued by Federal Agencies of the United States. Investments in MBS will count toward the total that can be invested in any one agency as described in U.S. Agencies above. Full faith and credit MBS are limited to 25%.	Senior debt obligations issued by any government sponsored enterprise, agency or instrumentality of the United States. The securities must pass the Federal Financial Institutions Examination Council ("FFIEC") suitability test, which banks use to determine lowest risk securities.	5 year average life at time of purchase
Corporate Notes	25% of total market value when combined with commercial paper When combined with Banker's Acceptance, Certificates of Deposit, Commercial Paper and Term Repos (greater than overnight) not to exceed 50% of the Pool assets.	3% per issuer rated AA or better. 2% per issuer rated in broad single A category. Split ratings will take most conservative rating. Maximum 3% per issuer in combined categories of commercial paper and corporate notes. Maximum 5% per issuer applied across investment types.	Must be rated at least in the broad single A category or better. Broad single A category with a negative outlook may not be purchased.	5 years The maximum duration of the corporate notes portfolio shall not exceed 3 years.

Additional Notes to the Investment Policy

- The Pool will maintain an effective duration of 1.5 years or less.
- The Pool will maintain at least 40% of its total value in securities having a remaining maturity of 12 months or less.
- Floating rate and variable rate securities are permitted subject to the following criteria:
  1) The rate on the FRN/VRN resets no less frequently than quarterly; and
  2) The FRN/VRN is indexed to a money market rate.
- Major NRSRO is defined as Moody's and Standard & Poor's.
- Purchases prior to 9/15/16 are considered grandfathered in for issuer limit purposes and can be held to maturity.

I. Investment Policy Compliance – County Investment Pool

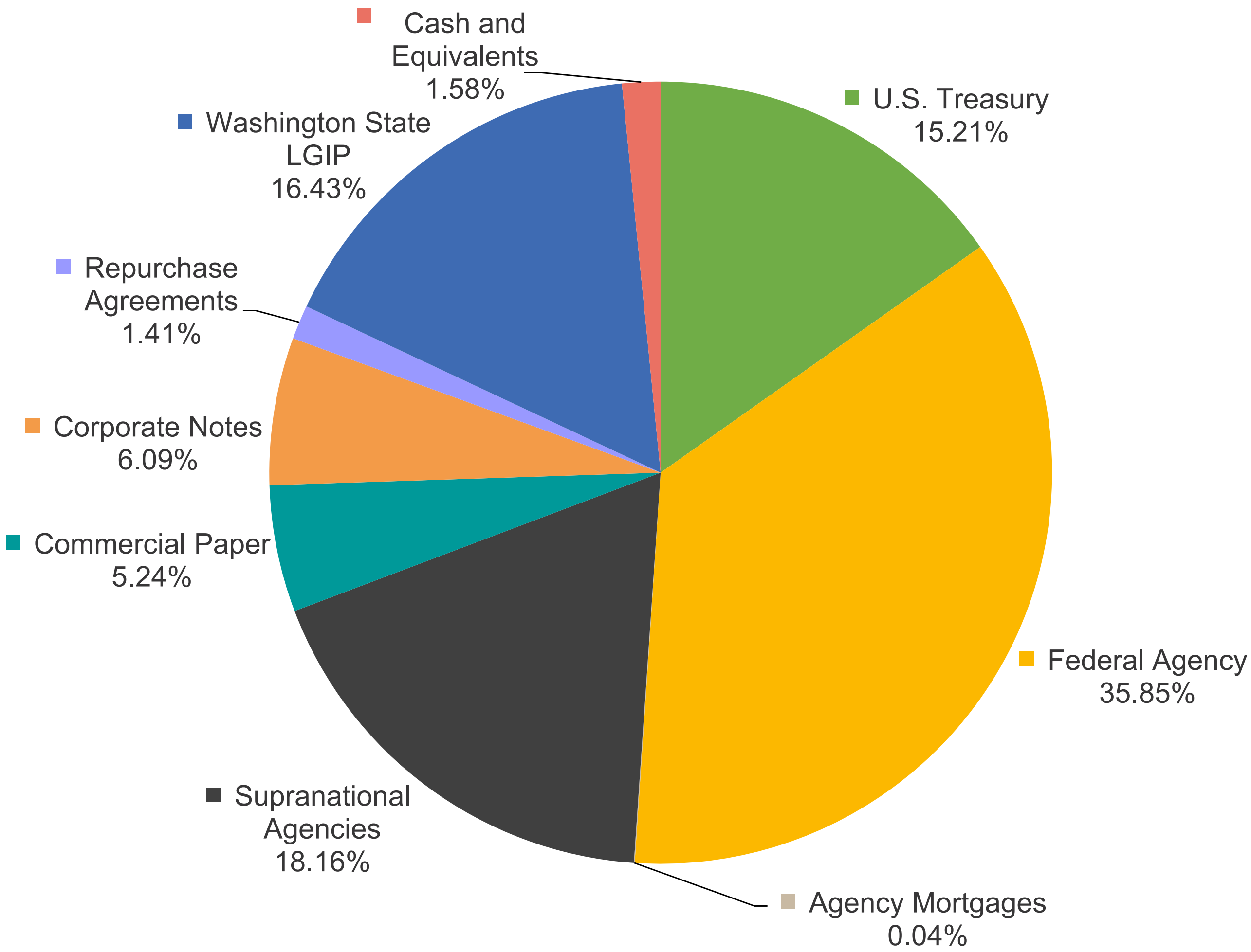
Topic	Observations
Sector Allocation	• All sector allocations fall within the limits set forth by the County's Investment Policy Statement. The Pool is predominantly invested in U.S. government securities which are either explicitly guaranteed or carry a high level of support by the U.S. government. • The County's Investment Pool balance (market value) as of September 30, 2020 was \$8.1 billion, a decrease of approximately \$100 million over the quarter. • The County's investment pool decreased percentage allocations to U.S. Treasuries (-3.84%), Corporates (-0.49%), Repurchase Agreements (-1.40%), and the Washington State LGIP (-1.92%). All sectors remain with applicable policy limits. • Sectors that grew over the quarter were Federal Agencies (+5.87%), Commercial Paper (+0.37%), and Cash and Cash Equivalents (+1.41%).
Credit Quality	• Approximately 69% of the County pool's assets are guaranteed or supported by the U.S. government. Furthermore, 16% is invested in the State LGIP, where about 76% of the LGIP is invested directly in U.S. Treasuries, federal agencies, and supranational agencies. Additionally, considering the County pool's holdings of repurchase agreements and bank accounts collateralized by government securities, the overall government-related credit quality exceeds 81%. • Combined corporate allocations (both commercial paper and corporate notes) remained at approximately 11% of the portfolio, and all securities remain investment grade. Combined allocations to corporate notes and commercial paper continue to be below the maximum allocation limit of 25%. • Total allocations to corporate related issues also do not exceed the 50% allocation limit set forth in the County's Investment Policy.
Maturity Distribution	• All maturities fall within the limits set forth in the County's Investment Policy. • Approximately 69% of the Pool's assets mature in one year or less, above the minimum of 40% that is mandated by the Investment Policy.

Security Type	Market Value($)	Allocation Percentage	Within Policy Limits	Max Maturity Held	Within Policy Limits
U.S. Treasury	1,231,691,860	15.21%	✓	3.75 years	✓
Supranational Agencies	1,470,650,718	18.16%	✓	3.39 years	✓
Corporate Notes	493,500,613	6.09%	✓	3.60 years	✓
Federal Agency	2,903,576,420	35.85%	✓	4.58 years	✓
Washington State LGIP	1,330,702,492	16.43%	✓	1 day	✓
Repurchase Agreement	114,000,000	1.41%	✓	1 day	✓
Commercial Paper	424,706,307	5.24%	✓	268 days	✓
Cash and Equivalents	128,246,166	1.58%	✓	1 day	✓
Agency Mortgages	2,920,265	0.04%	✓	3.2 years (WAL)	✓
TOTAL	**8,099,994,841**	**100.00%**			

**Percentages may not total to 100% due to rounding.*

II. Sector Allocation

Sector Diversification
as of September 30, 2020

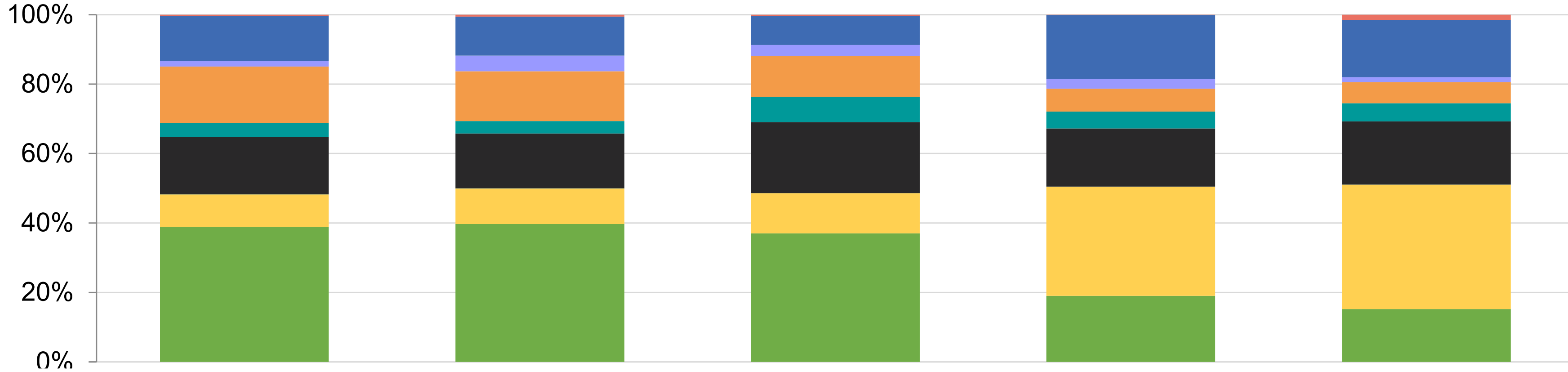


**Percentages may not total to 100% due to rounding.*

II. Changes in Portfolio Sector Allocation over the Past 12 Months

Changes in Sector Allocation

- The portfolio increased exposure to federal agencies by +5.87%, Cash and Cash Equivalents by 1.41%, and Commercial Paper by +0.37% while decreasing or maintaining allocations to all other sectors.
- **U.S. Treasuries** During the third quarter, exposure to U.S. Treasuries further decreased from 19.05% to 15.21%.
- **Federal Agencies** Federal agency allocations, excluding supranationals and mortgage securities, increased by +4.41% over the period.
- **Corporate Notes** The County's allocation to corporate notes decreased over the quarter from 6.59% to 6.09%.
- **Commercial Paper** Commercial paper increased over the period from 4.87% to 5.24% of the portfolio.
- **Washington State LGIP** Balances invested in the State LGIP decreased from 18.35% of the portfolio to 16.43%.
- **Repurchase Agreements** The portfolio's allocation to repurchase agreements decreased from 2.80% to 1.41% of the portfolio.



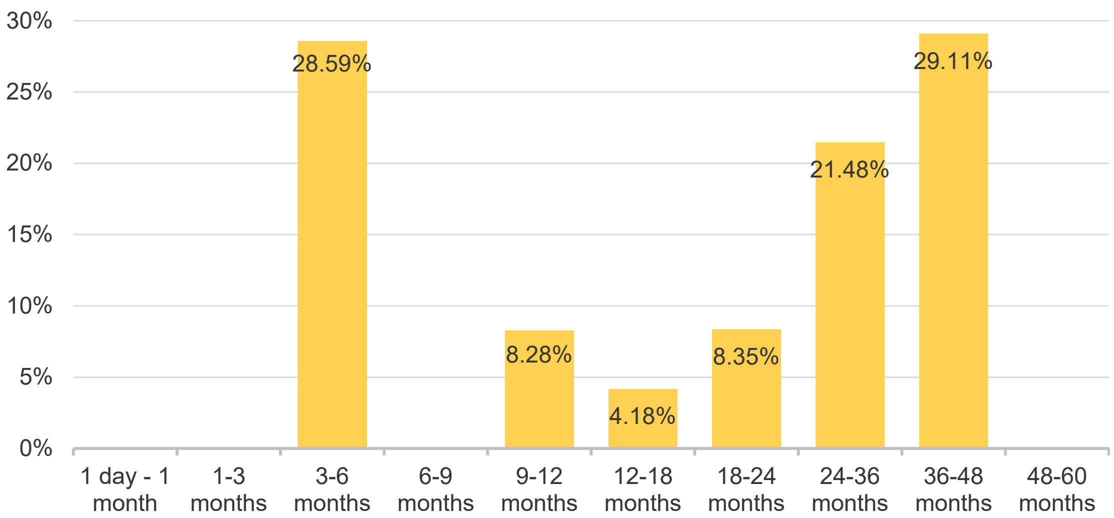
	September 30, 2019	December 31, 2019	March 31, 2020	June 30, 2020	September 30, 2020
U.S. Treasury	39.73%	37.03%	30.58%	19.05%	15.21%
Federal Agencies	10.21%	11.56%	16.78%	31.43%	35.85%
Agency Mortgages	0.05%	0.05%	0.04%	0.04%	0.04%
Supranational Agencies	15.78%	20.41%	21.33%	16.69%	18.16%
Commercial Paper	3.58%	7.29%	3.87%	4.87%	5.24%
Corporate Notes	14.35%	11.70%	9.74%	6.59%	6.09%
Repurchase Agreements	4.50%	3.24%	2.50%	2.80%	1.41%
Washington State LGIP	11.23%	8.36%	14.92%	18.35%	16.43%
Cash and Equivalents	0.55%	0.35%	0.23%	0.18%	1.58%

**Percentages may not total to 100% due to rounding.*

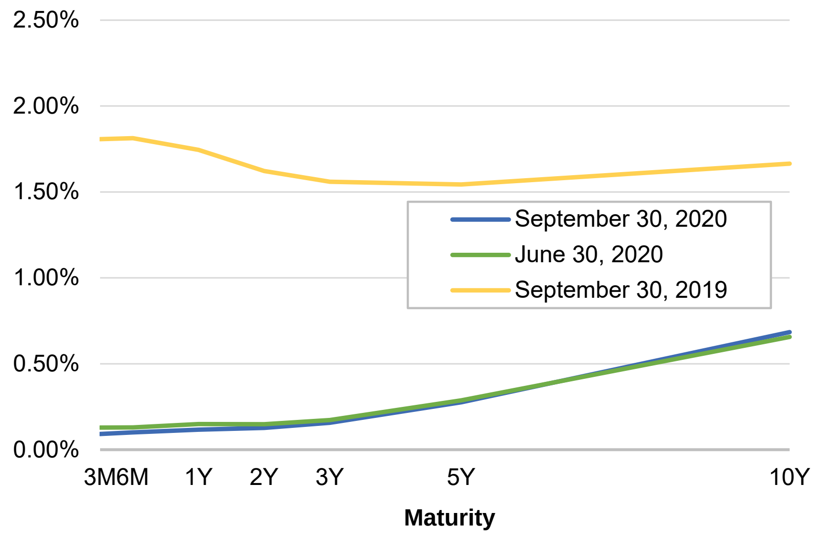
II. Sector Allocation – U.S. Treasury Securities

Topic	Observations
Observations	• The County's balances held in U.S. Treasuries further decreased from 19.05% of the total portfolio to 15.21%. • The U.S. Treasury yields remained near historical lows across the curve as financial markets stabilized, as a result of the Federal Reserve's continued stimulus measures. 10-year Treasury yields ended the quarter marginally higher, with every other tenure sitting relatively lower. • The 10-year Treasury yield increased 2 basis points (+0.02%), while the 2-year yield fell 2 bps (-0.02%). • Less than half of the Pool's Treasury investments (36.87% of all Treasury holdings) have remaining maturities of one year or less. • The weighted average maturity (WAM) of the County's Treasury allocation increased over the quarter from 647 days to 713 days due to five shorter Treasury securities maturing. • The chart on the left below displays the current maturity distribution of the County's allocations to U.S. Treasuries while the chart on the right compares the current shape of the U.S. Treasury yield curve to the yield curve last quarter, and the yield curve one year ago, when it was still inverted. The County's Treasury holdings have shifted to favor the longer-term securities. As yields remain near historical lows, shorter-term Treasuries offer little relative value.

U.S. Treasury Maturity Distribution
as of September 30, 2020



U.S. Treasury Yield Curve
9/30/20 vs 6/30/20 vs 9/30/19

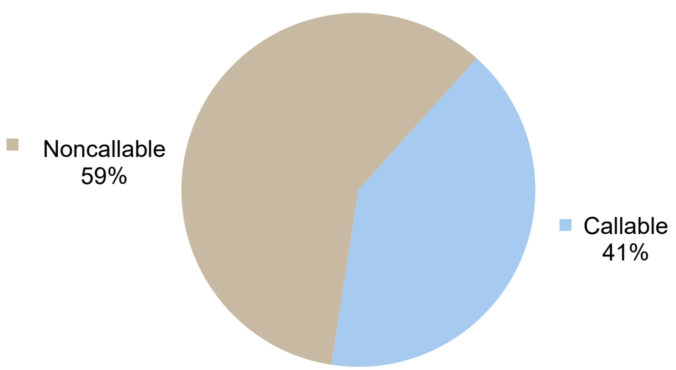


** Source Bloomberg Financial Systems*

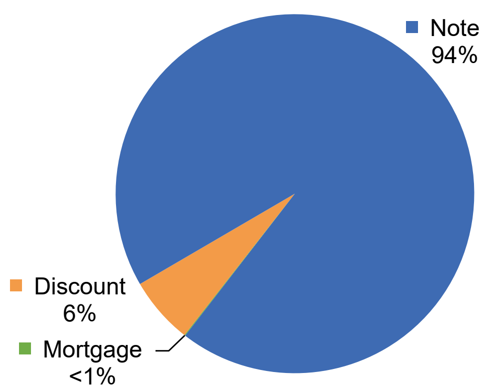
II. Sector Allocation – Federal Agencies

Topic	Observations			
Structure *(as % of Federal Agency Allocations)*	• Non-Callable • Callable	59.2% 40.8%	• Discount Notes • Coupon Bearing Notes • Agency Mortgage	6.1% 93.9% 0.1%
Diversification *(as % of Federal Agency Allocations)*	• Federal Farm Credit Bank (FFCB)*** • Freddie Mac (FHLMC) • Federal Home Loan Bank (FHLB)*** • Supranational Agencies***	10.5% 25.2% 7.1% 33.6%	• Fannie Mae (FNMA)*** • Fannie Mae Mortgage-Backed (FNR) • Freddie Mac Mortgage-Backed (FHR)	23.5% < 0.1% 0.0%
Conclusions	• The County's federal agency holdings continue to be well diversified. All issuer allocations fall within the issuer guidelines and security structures in the County's investment policy (max per agency issuer 35%). • The percentage of the portfolio invested in federal agencies, excluding supranationals and mortgage securities, increased by +4.41% in the quarter from 31.43% to 35.85%. Within this federal agency allocation, the portion of callable securities has increased to 40.8% from 32.9% since the end of the second quarter. • All supranational agency holdings are below the 35% issuer limit and represent approximately 18% of the entire portfolio. • The County Pool's only allocation to agency mortgages is in Fannie Mae pools, totaling approximately 0.04% of the total portfolio.			

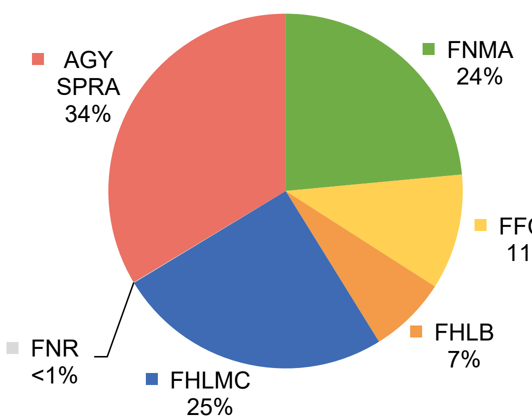
Callable vs. Non-Callable
as of September 30, 2020



Structure Distribution
as of September 30, 2020



Issuer Diversification
as of September 30, 2020

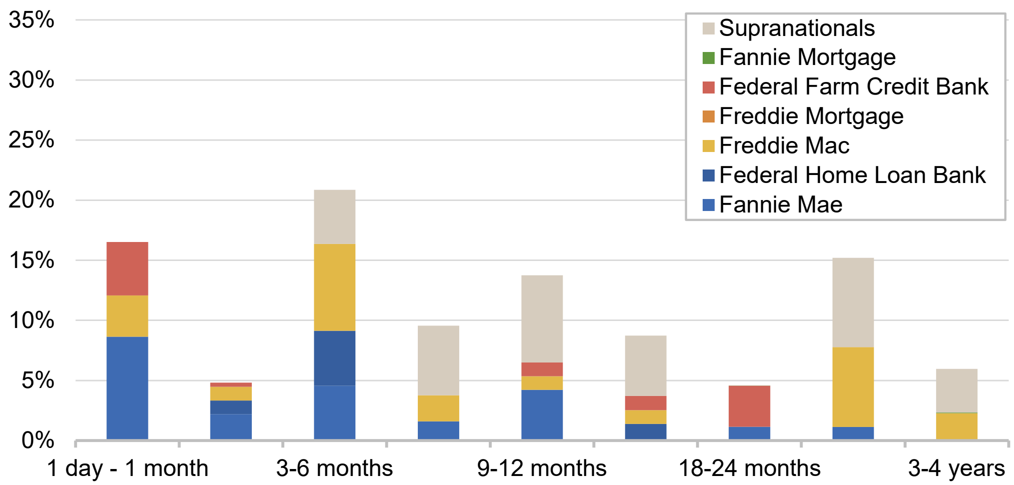


*All calculations above are based on total federal agency exposure, not overall Portfolio.
**Percentages may not total to 100% due to rounding.
***Includes discount notes

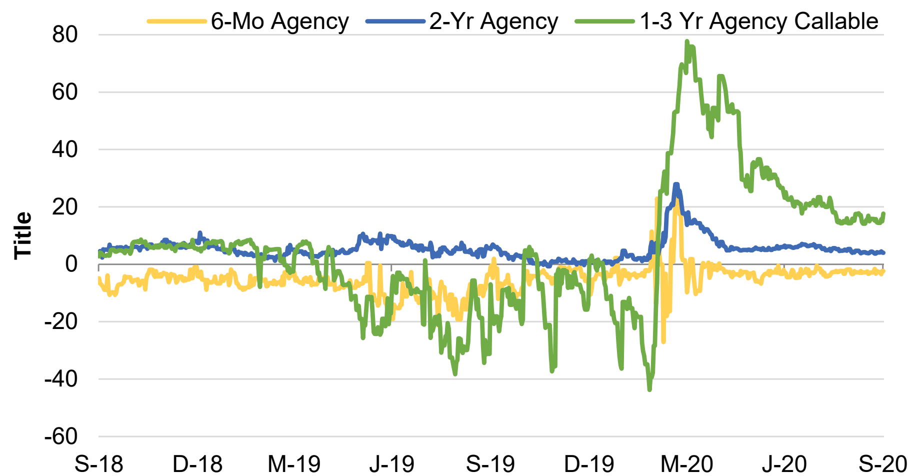
II. Sector Allocation – Federal Agencies

Topic	Observations
Maturity Distribution	• The County's federal agency maturity distribution falls within the limits set forth by the Investment Policy Statement. • Over the quarter, the weighted average maturity (WAM) of the County's federal agency holdings decreased from 404 days on June 30th to 386 days on September 30th. • The portfolio purchased approximately $1.54 billion in federal agency securities over the quarter with an average WAM of 430 days. Compared to the second quarter, the WAM of new agency purchases decreased from 544 days. • Yield spreads on new issue Fannie Mae, Freddie Mac, and Federal Home Loan Bank bonds remained elevated from a historical perspective, especially for maturities of three years and longer. — 2-year federal agencies provide little value relative to U.S. Treasuries, with the spread closing the quarter at about 4 bps. — When yields of federal agencies and Treasuries are relatively close, the U.S. Treasury security is typically preferred.

Federal Agency Maturity Distribution by Name
as of September 30, 2020



Federal Agency Yield Spreads to Treasuries
Past 24 Months



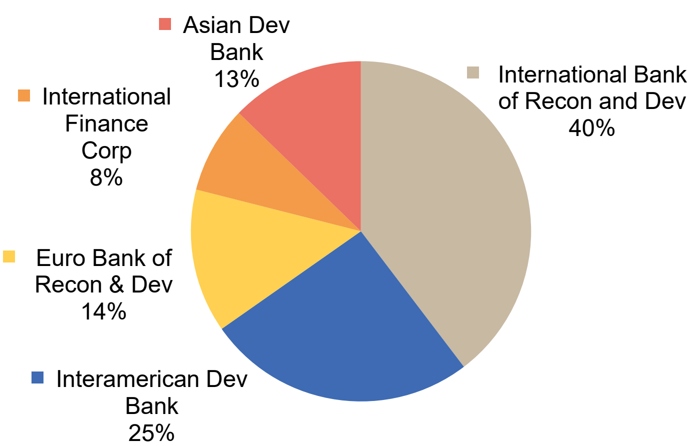
** Source Bloomberg Financial Systems*

- *Agency Mortgage maturities are calculated as average life. Average life data taken from Bloomberg Financial Markets*
- *Callable securities are shown to their next call date.*
- *All other Agency maturities are calculated as days to maturity.*

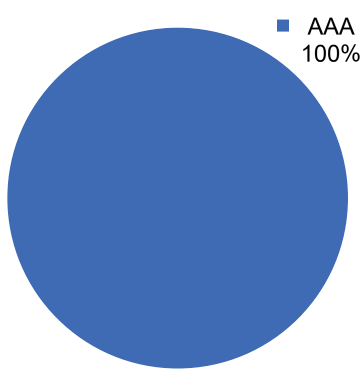
II. Sector Allocation – Supranational Agencies

Topic	Observations
Credit Distribution	• Based on the holdings as of September 30th, there will be no maturing supranational securities in the next quarter. • The County maintained exposure to five supranational issuers. — The U.S. is the largest country from a shareholder perspective for all five Supranational issuers (co-largest with Japan for the Asian Development Bank), meaning the U.S. has the largest decision-making power, and these securities are considered to have been issued by federal instrumentalities. • By continuing to invest in this sector, the County is able to diversify the portfolio and add to its high credit quality, while also capturing additional yield over federal agency and Treasury securities. — The portfolio's allocation to supranational agencies is well-balanced across maturities, with roughly 48% having a remaining maturity of over 1 year.
Spread to Agency Rates	• The chart on the right shows the spread between supranational agencies and federal agency securities. — The supranational sector saw heavy issuance that was met with increased global demand, driving yield spreads narrower. In some cases, supranational spreads compressed to levels below those on comparable-maturity federal agencies, making them unattractive.

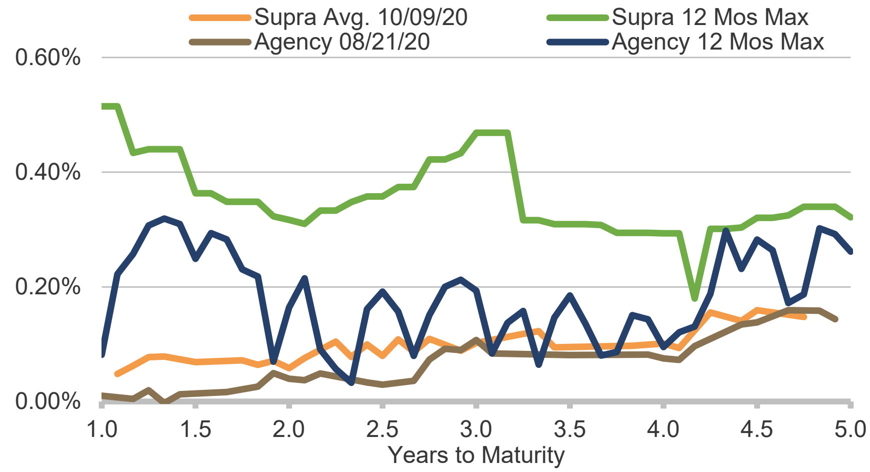
Issuer Distribution
as of September 30, 2020



Credit Distribution
as of September 30, 2020



Supranational Agency vs. Federal Agency Yield Spreads

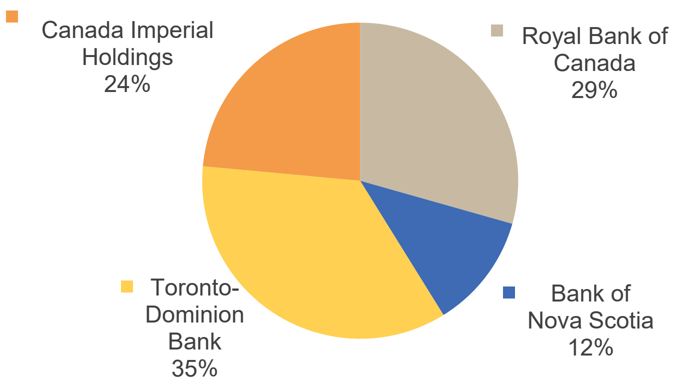


** Source Bloomberg Financial Systems*

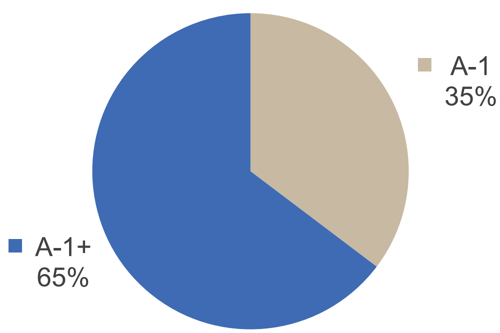
II. Sector Allocation – Commercial Paper

Topic	Observations
Issuer Diversification	• The County's allocation to commercial paper increased by +0.37% over the quarter, ending the period at 5.24% of the total portfolio. • The portfolio holds Toronto-Dominion Bank, the Bank of Nova Scotia, the Royal Bank of Canada, and Canada Imperial Holdings. • Short-term commercial paper spreads completely reversed the brief, crisis-induced sell-off March which suppressed the value of most money market instruments. — Commercial paper offers some relative value compared to Treasury Bills, whose yields ticked up on the back of huge issuances.
Credit Distribution	• Standard & Poor's rates the short-term credit of Royal Bank of Canada and Toronto-Dominion as A-1+, and the Bank of Nova Scotia and Canada Imperial Holdings as A-1.
Conclusions	• From an overall portfolio duration perspective, utilizing short term commercial paper helps the County to offset the purchasing of longer term securities. These commercial paper investments have historically offered greater yields than other short term securities and overnight investments. • The Portfolio's total allocation to commercial paper increased over the quarter as the County's previous commercial paper investments matured and the proceeds were reinvested into issues by the Royal Bank of Canada and Toronto-Dominion Bank.

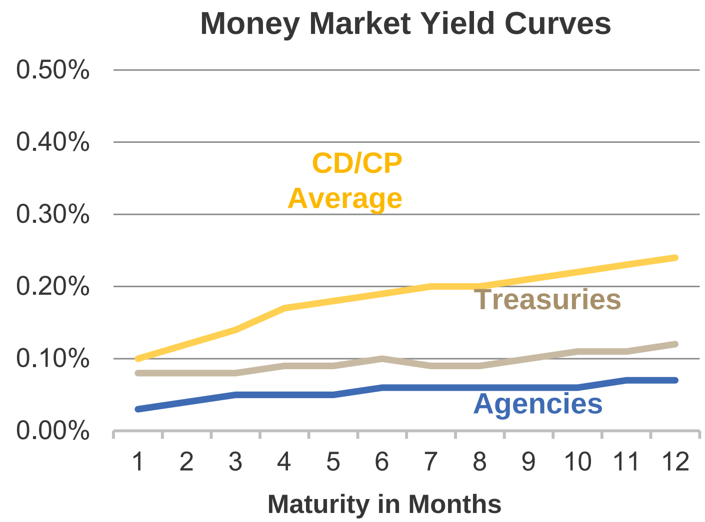
Issuer Distribution
as of September 30, 2020



Credit Distribution
as of September 30, 2020



Current Short-Term Yields
as of September 30, 2020



All calculations above are based on total commercial paper exposure, not overall Portfolio.
***Percentages may not total to 100% due to rounding.*

** Source Bloomberg Financial Systems*

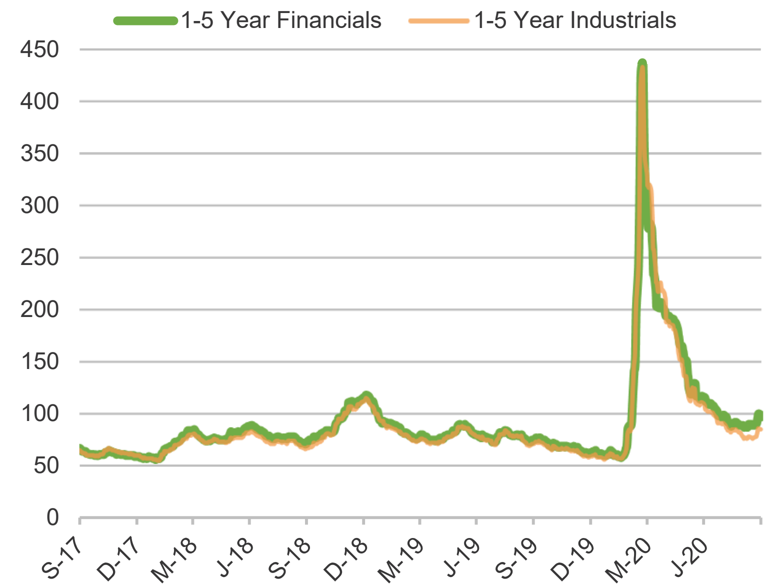
II. Sector Allocation – Corporate Notes

Topic	Observations
Maturity Distribution	• The County's exposure to corporate notes declined by -0.50% over the quarter, from 6.59% to 6.09%. To end the period, the Pool's corporate note holdings were from high quality issuers, with 51% of it's corporate notes carrying a rating of at least AA- by S&P. – Callable corporate notes made up 35% of the County's corporate sleeve, with all call dates being about a month before maturity. – All corporate holdings mature in less than 4 years and the weighted average maturity of the corporate note portion of the portfolio is 1.35 years. – The graph on the right below shows the spread for financial corporates and industrial corporates when compared to similar-maturity Treasuries. Investment grade corporate bond spreads trended lower until they stabilized near the end of the quarter. Financials, which make up a large portion of the county's corporate holdings, closed the quarter slightly wider than industrials and at a larger difference compared to last quarter. – Supply was robust throughout the third quarter as corporations continued to take advantage of the low borrowing rate by issuing at a rapid pace. Investor demand was strong and pressured spreads, while certain industries face significant headwinds into the fourth quarter.

Credit & Issuer Distribution	S&P Short	S&P Long	Moody's Short	Moody's Long	% of Corporate Holdings	% of Portfolio
3M Company	A-1	A+	P-1	A1	5.2%	0.32%
Apple Inc.	A-1+	AA+	P-1	Aa1	15.4%	0.94%
Bank of Montreal	A-1	A+	P-1	Aa2	21.3%	1.30%
Bank of Nova Scotia	A-1	A+	P-1	Aa2	8.8%	0.54%
Canadian Imperial Bank	A-1	A+	P-1	Aa2	5.6%	0.34%
Home Depot Inc.	A-1	A	P-1	A2	1.7%	0.10%
Honeywell International	A-1	A	P-1	A2	5.9%	0.36%
Microsoft Corp	A-1+	AAA	P-1	Aaa	12.7%	0.77%
Procter & Gamble Co	A-1+	AA-	P-1	Aa3	9.4%	0.58%
Toronto-Dominion Bank	A-1+	AA-	P-1	Aa1	6.6%	0.40%
US Bank	A-1+	AA-	P-1	A1	7.3%	0.45%

Source: Bloomberg Financial Systems as of 10/12/2020

Corporate/Treasury Yield Spreads
September 2017 through September 2020 (in basis points)



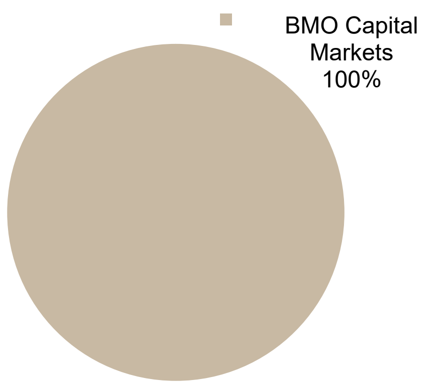
Source Bloomberg Financial Systems

Percentages may not total to 100% due to rounding.

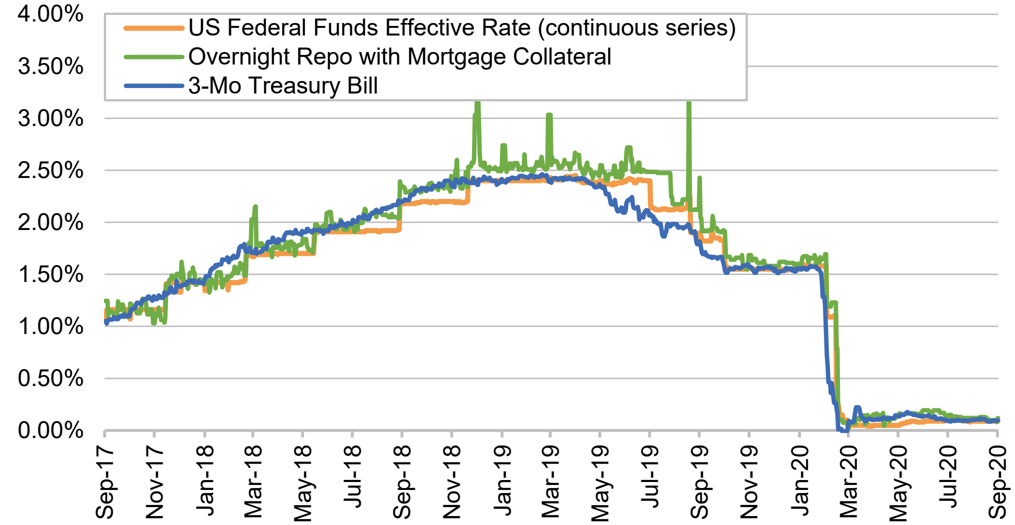
II. Sector Allocation – Repurchase Agreements

Topic	Observations
Issuer Diversification	• The County decreased its tri-party repurchase agreement allocation over the quarter, with 1.41% of the portfolio allocated to the sector at quarter-end, compared to 2.80% at June 30, 2020. • At the end of the quarter, the portfolio utilized one repurchase agreement provider, BMO Capital Markets, with an allocation of $114 million. • This allocation falls within the permitted investment guidelines of 25% per issuer and 100% maximum to the sector.
Credit Distribution	• Standard & Poor's rates BMO's short-term issuer credit as A-1. • While this issuer has a high-quality rating from S&P, the ultimate quality of the repurchase agreement depends on the underlying collateral.
Conclusions	• As of September 30, 2020, the repurchase agreement sector's weighted-average yield was 0.09%, up 4 bps (0.04%) compared to the last quarter. Yields for overnight repurchase agreements remained near zero, in-line with short-term Treasuries, as the Fed funds target rate remains at the zero lower bound.

Issuer/Credit Distribution
as of September 30, 2020



Short-Term Yields
September 2017 through September 2020

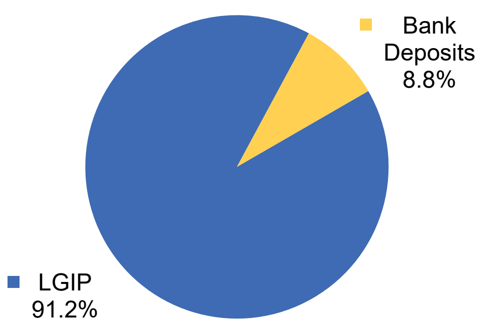


*Source Bloomberg Financial Systems

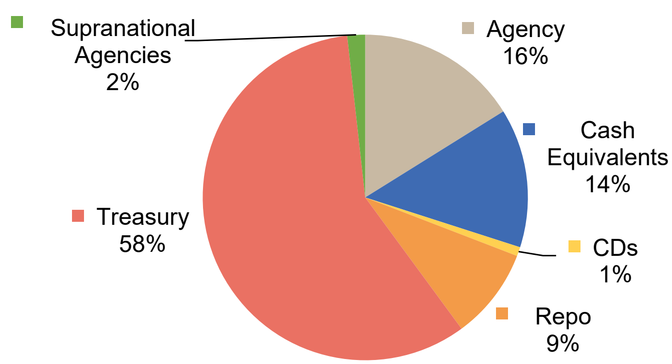
II. Sector Allocation – LGIPs and Cash Equivalents

	Underlying Investments	Rating (Short-Term: S&P/ Moody's/Fitch)	Observations
Washington State LGIP	• U.S. Treasuries 58.3% • Federal Agencies 16.1% • Supra National Agencies 1.8% • Repurchase Agreements 9.1% • Certificates of Deposit 0.9% • Cash Equivalents 13.8% *As of September 30, 2020*	• N/A	• The County currently has allocated $1.3 billion to the Washington State LGIP, a decrease from last quarter's $1.5 billion figure. • The County's allocation to the State LGIP continues to serve as the primary source of overnight liquidity for the portfolio. • The State LGIP increased its exposure to repurchase agreements (+5.3%), federal agencies (+4.19%), and cash equivalents (+2.08%), while it decreased its supranational, U.S. Treasury, and certificate of deposit allocations.
Cash Equivalents	• State LGIP 91.21% • U.S. Bank 8.68% • Key Bank 0.01% • Bank of America 0.10%	• U.S. Bank: A-1+/P-1/F1+ • Key Bank: A-2/P-2/F1 • Bank of America: A-2/P-1/F1	• The County's deposit accounts at U.S. Bank, Key Bank, and Bank of America are FDIC-insured up to FDIC limits, and are collateralized by the Public Deposit Protection Commission. • The portfolio's cash equivalents holdings increased over the quarter, from 0.18% to 1.58% of the total portfolio, principally due to a trade fail at quarter end which temporarily raised the cash balance.

Cash Equivalents Distribution
as of September 30, 2020



Washington State LGIP Sector Distribution
as of September 30, 2020



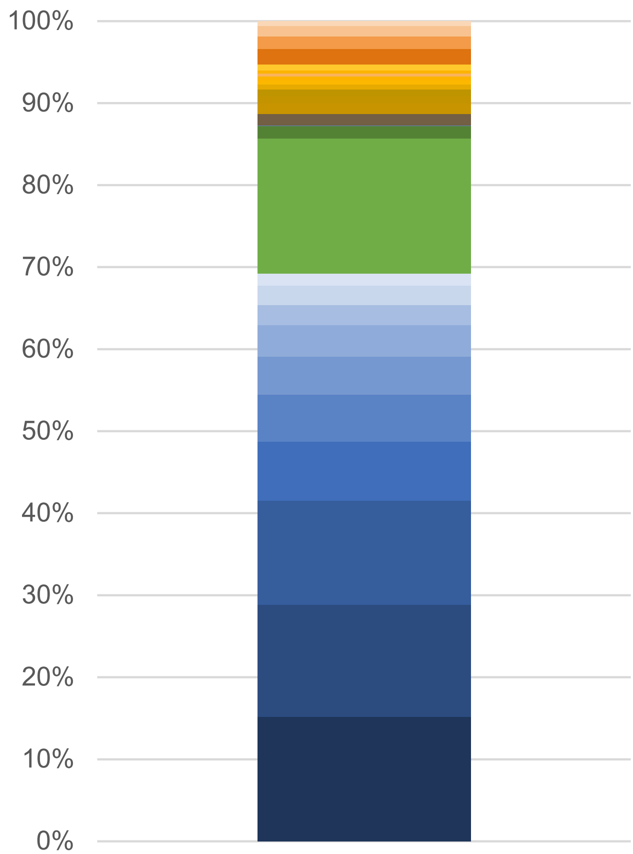
**All calculations above are based on total cash equivalents exposure, not overall Portfolio.*
***Percentages may not total to 100% due to rounding.*

III. Issuer Concentration

Issuer Exposure

- The County maintains a well-diversified portfolio by issuer, as shown in the tables and graph below.
- Approximately 69% of the portfolio is allocated directly to U.S. government guaranteed or government supported entities.
- Of the remaining 31% of the portfolio, 19% is allocated to ultra short-term or overnight investment vehicles, including the State LGIP, repurchase agreements, and bank deposits. The remaining 12% is allocated to credit issuers, including commercial paper and corporate notes.

U.S. Treasury (100% Limit)	15.21%
Agency Issuers	**Percentage (35% Limit)**
FHLMC	13.61%
FNMA	12.74%
Int'l Bk of Recon & Dev	7.20%
FFCB	5.70%
Inter-American Dev Bk	4.65%
FHLB	3.84%
Euro Bk of Recon & Dev	2.48%
Asian Dev Bank	2.32%
International Finance Corp	1.50%
Washington State LGIP (25% Limit)	**16.43%**
Overnight Deposits	**Percentage (No Limit)**
US Bank	1.56%
Bank of America	0.02%
Key Bank	<0.01%
Repo Issuers	**Percentage (25% Limit)**
BMO Capital Markets Corp	1.41%



Corporate Issuers	Percentage (5% Limit)
Bank of Montreal	1.30%
Apple Inc	0.94%
Microsoft Corp	0.77%
Procter & Gamble Co	0.58%
Bank of Nova Scotia	0.54%
US Bank	0.45%
Toronto-Dominion Bank	0.40%
Honeywell International	0.36%
Canadian Imperial Bank	0.34%
3M Company	0.32%
Home Depot Inc	0.10%
CP Issuers	**Percentage (5% Limit)**
Toronto-Dominion Bank	1.85%
Royal Bank of Canada	1.54%
Canadian Imperial Bank	1.23%
Bank of Nova Scotia	0.62%

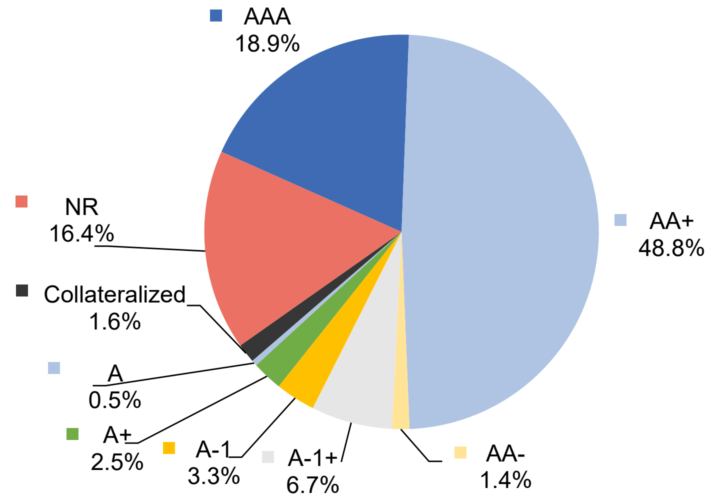
Percentages may not add to 100% due to rounding.
** For the purposes of totaling issuer concentration, issuers are aggregated across all sector types. It is noted however that issuers across sector types may maintain separately rated issuer credits.*

IV. Overall Credit Quality

County Investment Pool Credit Analysis

- The County Pool's overall average credit position remains very strong and is primarily concentrated in U.S. government guaranteed and/or supported securities which maintain a long-term credit rating of AA+ by Standard & Poor's and federal agency discount notes, which maintain a short-term credit rating of A-1+ by S&P.
- The County also maintained its holdings of supranational agencies, which are rated AAA.
- The County maintained its credit exposure through commercial paper and corporate notes over the quarter, ending at 11.34% of the portfolio, compared to 11.46% last quarter.
  - Commercial paper accounts for 5.24% of the entire portfolio, while corporate notes account for 6.09%.
- Corporate note allocations held throughout the quarter have ratings of A or higher.
  - Commercial paper allocations are all rated A-1/P-1 or higher.
- The 16.4% NR allocation represents the County's investment in the Washington State LGIP, which is not currently rated by any ratings agency.
- The County's investment in the Washington LGIP includes indirect corporate exposure:
  - Through the LGIP, 1.64% of the County's Pool is allocated indirectly to corporate securities (repurchase agreements and certificates of deposit).

Total Pool Credit Distribution*
as of September 30, 2020



Corporate/CP Issuer Ratings Table
as of September 30, 2020

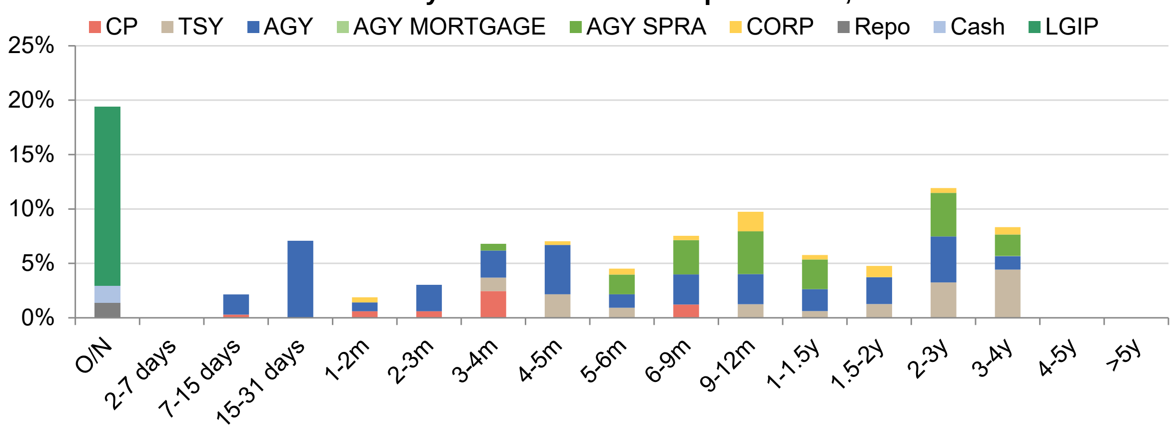
Issuer Distribution	Sectors Invested	S&P Short*	S&P Long*	Moody's Short**	Moody's Long**
3M Company	Corp	A-1	A+	P-1	A1
Apple Inc	Corp	A-1+	AA+	P-1	Aa1
Bank of Montreal	Corp	A-1	A+	P-1	Aa2
Bank of Nova Scotia	Corp/CP	A-1	A+	P-1	Aa2
Canadian Imperial Bank	Corp/CP	A-1	A+	P-1	Aa2
Home Depot Inc	Corp	A-1	A	P-1	A2
Honeywell International	Corp	A-1	A	P-1	A2
Microsoft Corp	Corp	A-1+	AAA	P-1	Aaa
Procter & Gamble Co/The	Corp	A-1+	AA-	P-1	Aa3
Royal Bank of Canada	Corp/CP	A-1+	AA-	P-1	Aa2
Toronto-Dominion Bank	Corp/CP	A-1+	AA-	P-1	Aa1
US Bank	Corp	A-1+	AA-	P-1	A1

**Source: Bloomberg Financial Services as of 10/12/2020*

V. Maturity Distribution

Maturity Distribution	Observations
Weighted Average Maturity ("WAM")	• The County continues to invest across its permitted maturity range, as seen in the chart below. • A majority of the holdings, 69% of the portfolio, are scheduled to mature within the next twelve months, a 3% increase from the previous quarter-end and well above the 40% mandated by the investment policy. • It appears the County's maturity strategies over the past several quarters have included: — Allowing previously purchased, longer-dated U.S. Treasury investments to naturally shorten in maturity and roll-down the yield curve. — Targeting purchases in the following spaces: o Federal agency purchases in the longer-end (primarily between 2-3 years) of the curve. The portion of callable agency purchases increased this quarter, effectively lowering the WAM of new agency purchases when compared to prior quarters. o Supranational purchases in the longer-end (more than 3 years) of the curve. — The WAM of the portfolio ended the quarter at 355 days, down from 367 days at previous quarter-end.
Liquidity	• The County Pool appears to provide adequate liquidity, both in terms of final maturities and the sectors in which the portfolio has invested. In addition to the 19% of the portfolio invested in a combination of the Washington State LGIP, bank deposits, and repurchase agreements (overnight liquidity), another 11% of the portfolio's holdings are scheduled to mature within the next two months. • Given the continued uncertainty regarding revenues and expenditures for governmental budgets, it is important to maintain a generous amount in overnight and short-term funds in case of unforeseen cash flow needs.

Maturity Distribution as of September 30, 2020



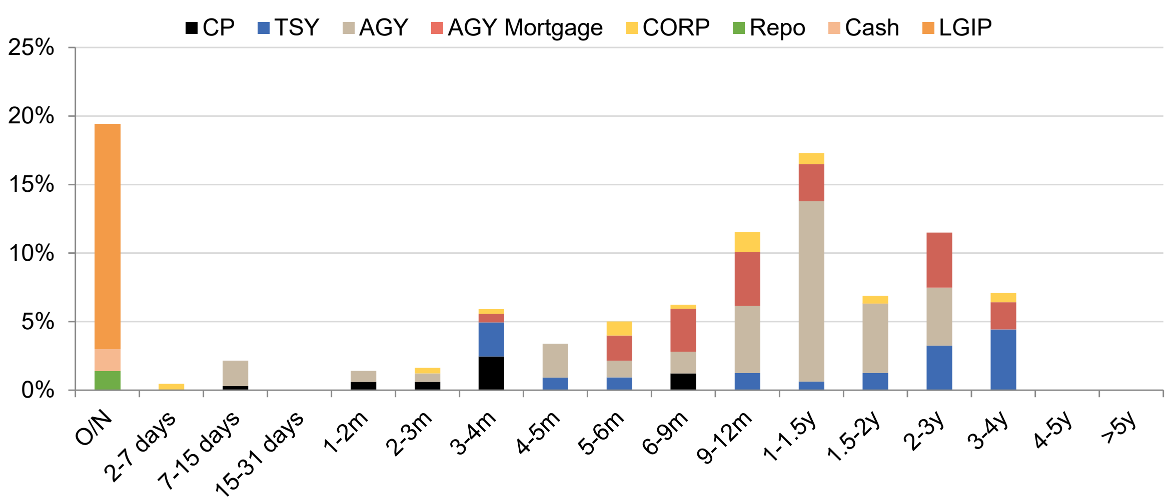
Contribution to Maturity		
Sector	**9/30/20**	**6/30/20**
Supranational Agencies	99.65	81.01
Cash	0.02	0.00
Corporate Notes	29.47	34.60
Commercial Paper	6.94	6.55
Federal Agencies	110.13	120.92
The Washington State LGIP	0.16	0.18
Agency Mortgages	0.42	1.82
Repurchase Agreements	0.01	0.03
US Treasuries	108.49	121.70
Maturity:	**355 days**	**367 days**

Agency Mortgage maturities are reported as average life. Average life data taken from Bloomberg Financial Markets
Callable securities shown to their call date.
All other security maturities are reported as days to maturity. WA LGIP is considered to have a one day maturity.

V. Duration Distribution

Duration Distribution	Observations
Definition	• Duration is a measure of the sensitivity of the value of principal of an investment to a change in interest rates. The value of a portfolio with a higher duration is more sensitive to interest rate increases and decreases. • Duration is often quoted in years and is commonly used as a measure of the market risk of a security or portfolio. Duration can be derived in a number of ways; please refer to the notes at the bottom of this page for details.
Duration	• The portfolio's weighted average duration is within the IPS guidelines (no greater than 1.5 years). • As of September 30, the duration of the County Investment Pool was 1.07 years, an increase from the previous quarter which ended at 0.96 years. – The increase in portfolio duration was driven by the County's slightly reduced allocations to overnight securities, and recent investments in Federal Agencies and Supranational Agencies. – The portfolio is measured against a blended benchmark consisting of 40% ICE Bank of America Merrill Lynch 3-Month Treasury Index and 60% ICE Bank of America Merrill Lynch 1-3 Year Treasury & Agency Index. – The overall portfolio, and the benchmark, duration increased over the quarter. Compared to the benchmark, the portfolio's duration increased from 84% to 93% of the benchmark duration for the period ending September 30.

Duration Distribution as of September 30, 2020



Contribution to Duration

Sector	9/30/20	6/30/20
Supranational Agencies	0.27	0.22
Cash	0.00	0.00
Corporate Notes	0.07	0.08
Commercial Paper	0.02	0.02
Federal Agencies	0.43	0.32
The Washington State LGIP	0.00	0.00
Agency Mortgages	0.00	0.00
Repurchase Agreements	0.00	0.00
US Treasuries	0.29	0.33
Duration:	**1.07 years**	**0.96 years**

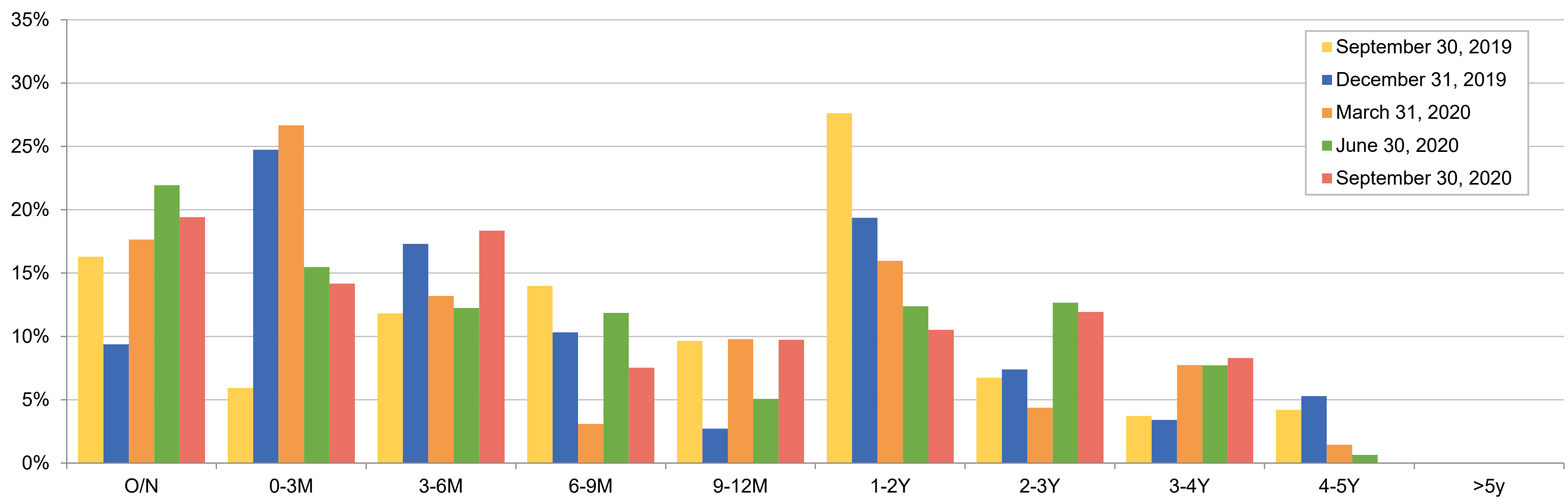
Agency Mortgage durations are shown as effective duration taken from Bloomberg Financial Markets.
Duration for Federal Agency Discount Notes and Repurchase Agreements are calculated as days to maturity. WA LGIP and bank deposits considered to have a one day duration.
All other security durations are calculated as effective duration as given by Bloomberg Financial Markets.

V. Changes in Portfolio Maturity Distribution

Changes in Portfolio Maturity Distribution

- When viewing the current maturity distribution (red bars) in relation to previous periods, a few primary observations are noted:
  - It appears the County targeted increased allocations in the 9-to-12 month, and 3-to-4 year portion of the yield curve during the third quarter of 2020.
    - The decrease in allocation to overnight securities is primarily due to the reduced allocations in repurchase agreements and the State LGIP holdings.
    - The increase in the 3-to-6 month portion of the curve is primarily due to roll down from the 6-to-9 month bucket and purchases of new callable agency securities.
    - Increases in the 9-to-12 month maturity bucket were primarily due to recent purchases of federal agency notes and a few securities that rolled down. The 3-4 year maturity bucket also saw new supranational agency purchases which allowed the portfolio to maintain roughly the same allocation to that portion of the curve.
- Although yields are at or near historic lows across maturities, the yield curve remains positively sloped and therefore offers modest value to invest farther out in the 1-5 year space.
  - Locking in yields in the 1-5 year area of the curve and finding relative value within sectors may allow the portfolio to benefit from incremental income as short-term interest rates are expected to remain near zero for the foreseeable future.

Maturity Distribution September 30, 2019 to September 30, 2020



Agency Mortgage maturities are reported as average life. Average life data taken from Bloomberg Financial Markets
Callable securities shown to their call date.
All other security maturities are calculated as days to maturity. WA LGIP is considered to have a one day maturity.

Disclaimer

This material is based on information obtained from sources generally believed to be reliable and available to the public, however PFM Asset Management LLC cannot guarantee its accuracy, completeness or suitability. This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation. All statements as to what will or may happen under certain circumstances are based on assumptions, some but not all of which are noted in the presentation. Assumptions may or may not be proven correct as actual events occur, and results may depend on events outside of your or our control. Changes in assumptions may have a material effect on results. Past performance does not necessarily reflect and is not a guaranty of future results. The information contained in this presentation is not an offer to purchase or sell any securities.