



King County Investment Pool

Portfolio Review

Quarter Ended September 30, 2019

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Executive Summary

Purpose, Scope and Approach	<ul style="list-style-type: none">• PFM Asset Management LLC (“PFM”) prepared this report to update our ongoing analysis and to address any Investment Pool developments since our June 2019 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, 2019, with reference to holdings in past periods.• The review encompasses all current investments in the County’s Investment Pool.
Investment Program and Portfolio Review	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• The U.S. Treasury yield curve remained inverted during the quarter, despite a Fed rate cut, as the longer-term yields moved lower over the period. While credit spreads widened, they remained tight by historical standards and equity markets saw increased volatility as concerns grew over slowing global growth.• The U.S. economy showed some signs of slowing with GDP growth of 2.0% in the second quarter.• Inflation remained subdued with Core PCE, the Fed’s preferred measure of inflation, remaining below the Fed’s target of 2%.• The Fed maintained its dovish outlook, with Fed Chair Powell addressing the risks of escalating trade tensions and slowing in the manufacturing segment of the global economy. The fed funds target range is currently 1.75% to 2.00%.• U.S equities closed the quarter nearly unchanged as uncertainty over trade, a slowing global economy, and heightened geopolitical risks put a ceiling on stock prices.
Observations	<ul style="list-style-type: none">• The portfolio is of very high credit quality. The majority of securities (80%) 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, the County maintained broad issuer diversification during the quarter.• The Portfolio’s duration over the quarter was 80% of the benchmark’s duration.• The County Pool appears to provide adequate liquidity, with 16.3% (or \$1.13 billion) invested in a combination of the State LGIP, bank deposits, and repurchase agreements (overnight) and 39.7% 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%	<p>Must be issued by Federal Agencies of the United States.</p> <p>Investments in MBS will count toward the total that can be invested in any one agency as described in U.S. Agencies above.</p> <p>Full faith and credit MBS are limited to 25%.</p>	<p>Senior debt obligations issued by any government sponsored enterprise, agency or instrumentality of the United States.</p> <p>The securities must pass the Federal Financial Institutions Examination Council ("FFIEC") suitability test, which banks use to determine lowest risk securities.</p>	5 year average life at time of purchase
Corporate Notes	<p>25% of total market value when combined with commercial paper</p> <p>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.</p>	<p>3% per issuer rated AA or better.</p> <p>2% per issuer rated in broad single A category.</p> <p>Split ratings will take most conservative rating.</p> <p>Maximum 3% per issuer in combined categories of commercial paper and corporate notes.</p> <p>Maximum 5% per issuer applied across investment types.</p>	<p>Must be rated at least in the broad single A category or better.</p> <p>Broad single A category with a negative outlook may not be purchased.</p>	<p>5 years</p> <p>The maximum duration of the corporate notes portfolio shall not exceed 3 years.</p>

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	<ul style="list-style-type: none"> 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, 2019 was \$7.0 billion, a decrease of approximately \$300 million over the quarter. The County's investment pool decreased percentage allocations to Supranational Agencies (-0.66%), Commercial Paper (-0.49%), Corporates (-1.91%), and the LGIP (-1.72%) . All sectors remain with applicable policy limits. Sectors that grew over the quarter were U.S. Treasuries (+0.85%), Federal Agencies (+0.87%), Repurchase Agreements (+2.93%), and Cash and Equivalents (+0.14%).
Credit Quality	<ul style="list-style-type: none"> Approximately 66% of the County pool's assets are guaranteed or supported by the U.S. government. Furthermore, 11% is invested in the State LGIP, where about 65% of the LGIP is invested directly in U.S. Treasuries or federal 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 71%. Corporate allocations (both commercial paper and corporate notes) decreased over the quarter to 18% of the portfolio from 22%, and all securities remain investment grade. Allocations to corporate notes continue to be below the maximum allocation limit of 25%. Total allocations of corporate notes and commercial paper also do not exceed the 50% allocation limit set forth in the County's Investment Policy.
Maturity Distribution	<ul style="list-style-type: none"> All maturities fall within the limits set forth in the County's Investment Policy. Approximately 58% of the Pool's assets mature in one year or less, above the minimum of 40% that is mandated by the Investment Policy.

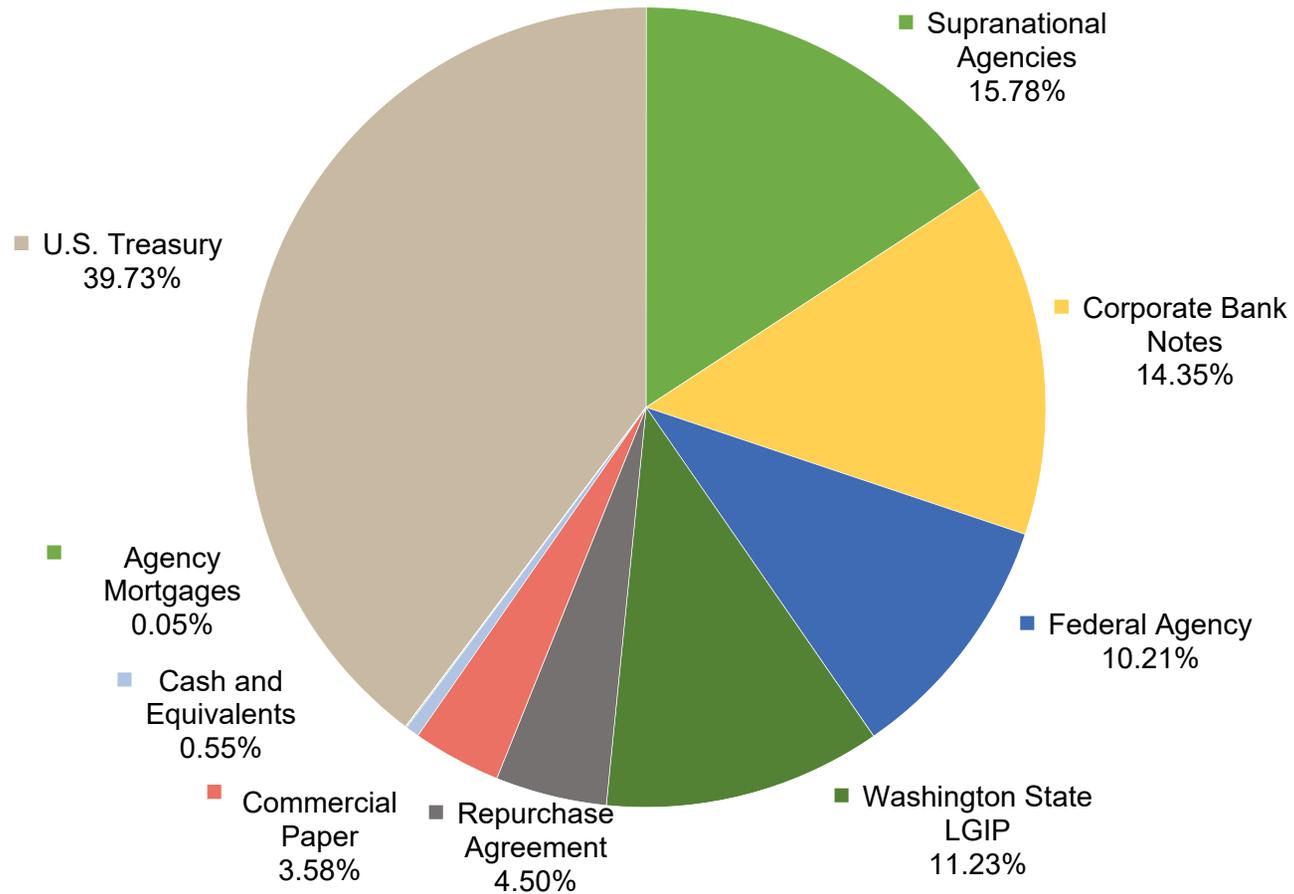
Security Type	Market Value(\$)	Allocation Percentage	Within Policy Limits	Max Maturity Held	Within Policy Limits
U.S. Treasury	2,762,904,350	39.73%	✓	4.75 years	✓
Supranational Agencies	1,097,558,141	15.78%	✓	2.33 years	✓
Corporate Bank Notes	998,271,464	14.35%	✓	4.60 years	✓
Federal Agency	710,373,650	10.21%	✓	2.99 years	✓
Washington State LGIP	781,204,654	11.23%	✓	1 day	✓
Repurchase Agreement	313,000,000	4.50%	✓	1 day	✓
Commercial Paper	249,098,694	3.58%	✓	105 days	✓
Cash and Equivalents	38,276,889	0.55%	✓	1 day	✓
Agency Mortgages	3,647,496.01	0.05%	✓	3.3 years (WAL)	✓
TOTAL	6,954,335,338	100.00%			

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



II. Sector Allocation

Sector Diversification
as of September 30, 2019



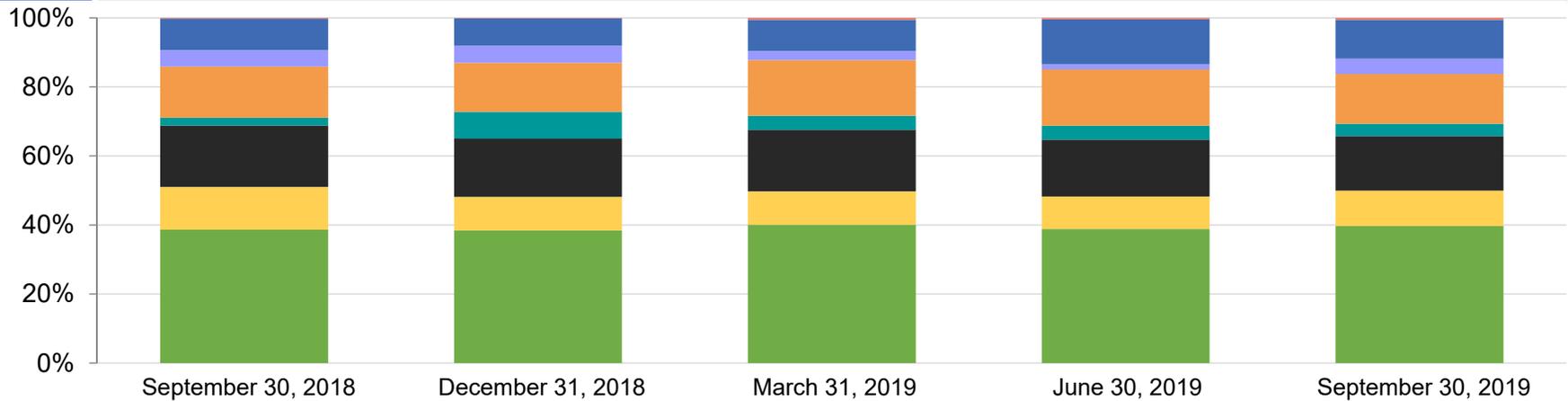
**Percentages may not total to 100% due to rounding.*



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

Changes in Sector Allocation

- The portfolio increased exposure to U.S. Treasuries by +0.85%, federal agencies by +0.87%, repurchase agreements by 2.93%, and cash and cash equivalents by +0.14% while decreasing allocations to all other sectors.
- **U.S. Treasuries** During the third quarter, exposure to U.S. Treasuries increased slightly to 39.73% from 38.88%.
- **Federal Agencies** Federal agency allocations, including supranationals and mortgage securities, decreased by -0.21% over the period.
- **Corporate Notes** The County's allocation to corporate notes decreased over the quarter to 14.35% from 16.26%.
- **Commercial Paper** Commercial paper decreased over the period from 4.08% to 3.58% of the portfolio.
- **Washington State LGIP** Balances invested in the State LGIP declined from 12.96% of the portfolio to 11.23%.
- **Repurchase Agreements** The portfolio's allocation to repurchase agreements increased from 1.57% to 4.50% of the portfolio.



	September 30, 2018	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019
U.S. Treasury	38.66%	38.46%	40.12%	38.88%	39.73%
Federal Agencies	12.35%	9.67%	9.59%	9.35%	10.21%
Agency Mortgages	0.06%	0.05%	0.05%	0.05%	0.05%
Supranational Agencies	17.79%	16.89%	17.86%	16.44%	15.78%
Commercial Paper	2.23%	7.71%	4.04%	4.08%	3.58%
Corporate Notes	14.35%	14.2%	16.1%	16.26%	14.35%
Repurchase Agreements	4.78%	4.90%	2.59%	1.57%	4.50%
Washington State LGIP	9.11%	7.89%	9.06%	12.96%	11.23%
Cash and Equivalents	0.23%	0.19%	0.55%	0.41%	0.55%

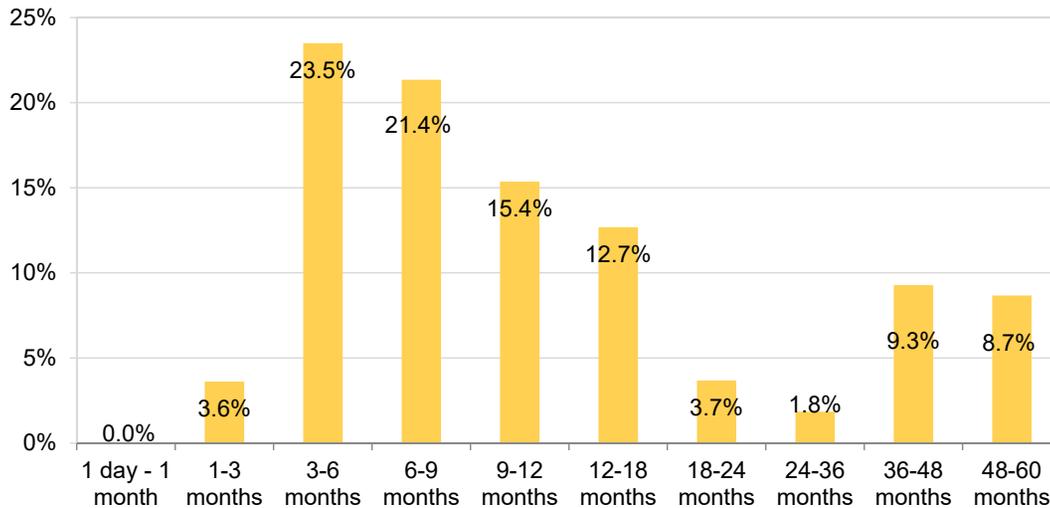
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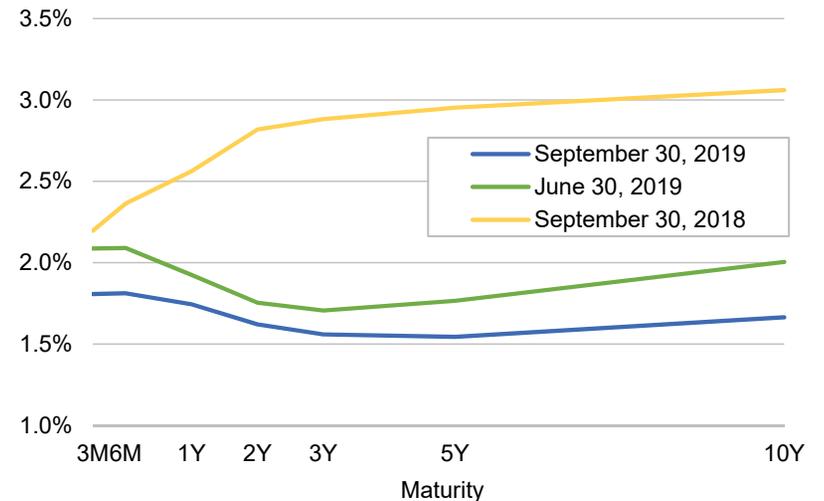
II. Sector Allocation – U.S. Treasury Securities

Topic	Observations
Observations	<ul style="list-style-type: none"> The County's balances held in U.S. Treasuries increased from 38.88% of the total portfolio to 39.73%. The U.S. Treasury yield curve remained inverted, despite a September rate cut, as longer-term yields were bid lower amid growing concerns over global growth, trade, and an intensifying geopolitical landscape. <ul style="list-style-type: none"> The 10-year Treasury yield was down 32 bps (-0.32%), while the 2-year yield fell 12 bps (-0.12%). The majority of the Pool's Treasury investments (63.83% of all Treasury holdings) have remaining maturities of less than one year. The weighted average maturity (WAM) of the County's Treasury allocation increased over the quarter from 441 days to 504 days due to the purchase of longer-dated securities. 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, before the inversion began. The County's Treasury holdings continue to be concentrated in shorter term securities, primarily in the 6-18 month area of the curve as longer term issues remain expensive relative to securities in the shorter term end.

U.S. Treasury Maturity Distribution
as of June 30, 2019



U.S. Treasury Yield Curve
9/30/19 vs 8/31/19 vs 9/30/18



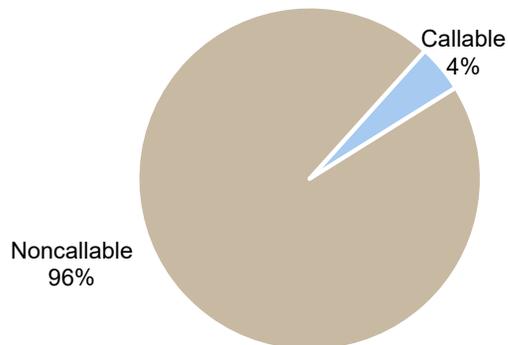
* Source Bloomberg Financial Systems



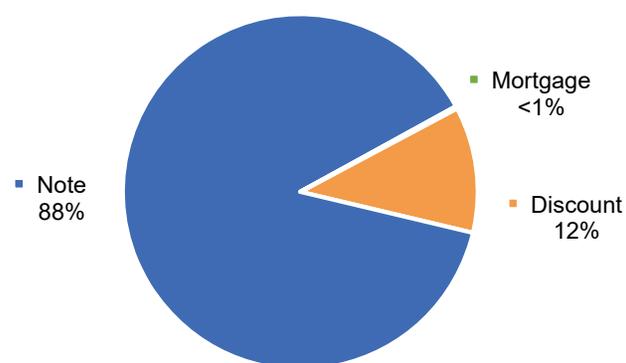
II. Sector Allocation – Federal Agencies

Topic	Observations			
Structure (as % of Federal Agency Allocations)	• Non-Callable	95.6%	• Discount Notes	8.3%
	• Callable	4.4%	• Coupon Bearing Notes	91.5%
Diversification (as % of Federal Agency Allocations)	• Freddie Mac (FHLMC)	6.4%	• Federal Farm Credit Bank (FFCB)	8.3%
	• Federal Home Loan Bank (FHLB)	13.5%	• Freddie Mac Mortgage-Backed (FHR)	0.0%
	• Fannie Mae (FNMA)***	11.2%	• Fannie Mae Mortgage-Backed (FNR)	0.2%
	• Supranational Agencies	60.6%		
Conclusions	<ul style="list-style-type: none"> 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 0.86% in the quarter from 9.35% to 10.21%. All supranational agency holdings are below the 35% issuer limit, and represent nearly 16% of the entire portfolio. The County Pool's only allocation to agency mortgages is in Fannie Mae pools, totaling approximately 0.05% of the total portfolio. 			

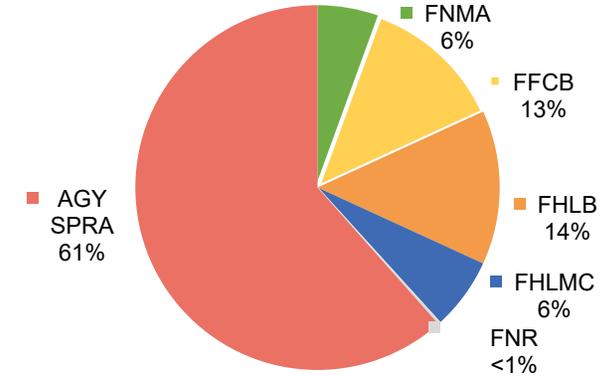
Callable vs. Non-Callable
as of September 30, 2019



Structure Distribution
as of September 30, 2019



Issuer Diversification
as of September 30, 2019



*All calculations above are based on total cash equivalents exposure, not overall Portfolio.

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

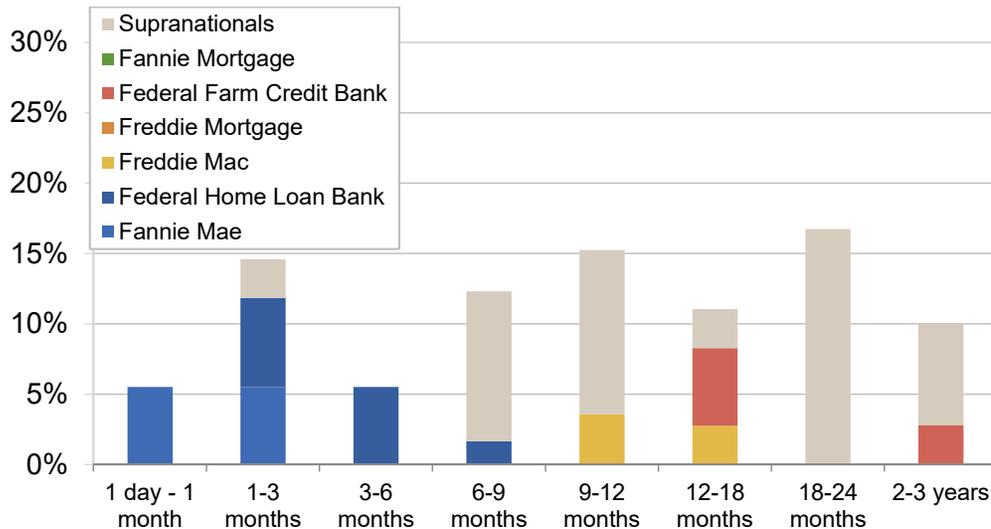
***Includes discount notes



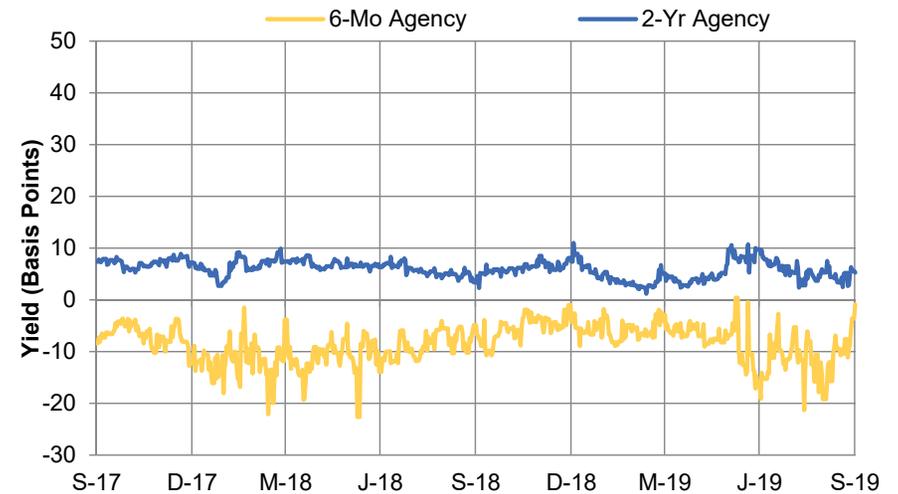
II. Sector Allocation – Federal Agencies

Topic	Observations
Maturity Distribution	<ul style="list-style-type: none"> 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 371 days on June 30th to 230 days on September 30th. Agency spreads in the shorter end (6-month agency, chart bottom right) bounced from near their narrowest in 2 years to their widest in 2 years over the period as the Fed cut rates. The spread between 2-year agency securities and 2-year U.S. Treasuries (chart bottom right) trended lower over the quarter. <ul style="list-style-type: none"> While at the widest level in over 3 months, the spread between shorter federal agency securities and U.S. Treasuries was essentially 0 bps at the end of quarter. 2-year federal agencies provided little value relative to U.S. Treasuries, with the spread closing the quarter at about 5 bps. When yields of federal agencies and Treasuries are relatively close, the U.S. Treasury security is typically preferred. The portfolio made no purchases of Agency securities over the quarter as the sector provided little value relative to U.S. Treasuries.

Federal Agency Maturity Distribution by Name
as of June 30, 2019



Federal Agency Yield Spreads to Treasuries
Past 24 Months



* Source Bloomberg Financial Systems

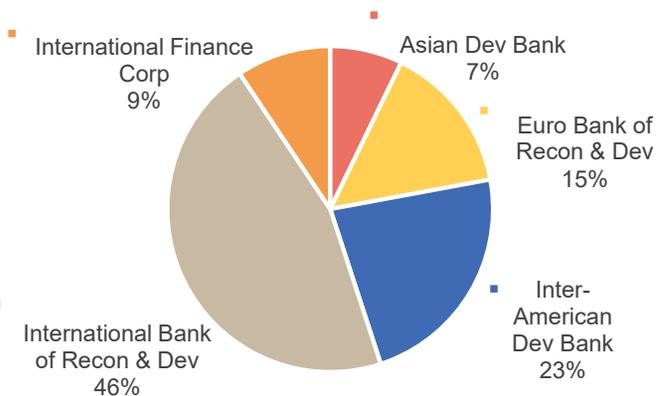
- Agency Mortgage maturities are calculated as average life. Average life data taken from Bloomberg Financial Markets
- Callable securities are shown to their next call date.
- All other Agency maturities are calculated as days to maturity.



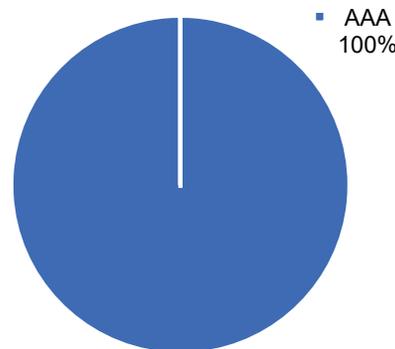
II. Sector Allocation – Supranational Agencies

Topic	Observations
Credit Distribution	<ul style="list-style-type: none"> The portfolio had 3 supranational issues mature over the quarter. The County maintained exposure to five supranational issuers. <ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> The portfolio's allocation to supranational agencies is concentrated in maturities over 1 year, with 63% having a remaining maturity of over 1 year.
Spread to Agency Rates	<ul style="list-style-type: none"> The chart on the right shows the spread between supranational agencies and federal agency securities. <ul style="list-style-type: none"> Supranational agencies have some value relative to both comparable maturity U.S. Treasuries and federal agencies in the current environment. However, supranational agency issuance is seasonal, and tends to be highest in the beginning of a calendar year. The lack of new supranational supply can place a ceiling on spreads. Tighter spreads make relative value options more difficult to find.

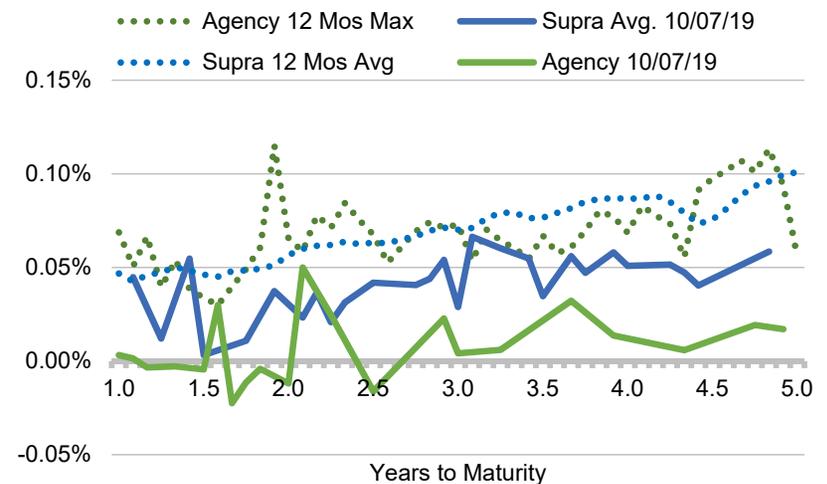
Issuer Distribution
as of September 30, 2019



Credit Distribution
as of September 30, 2019



Supranational Agency vs. Federal Agency Yield Spreads



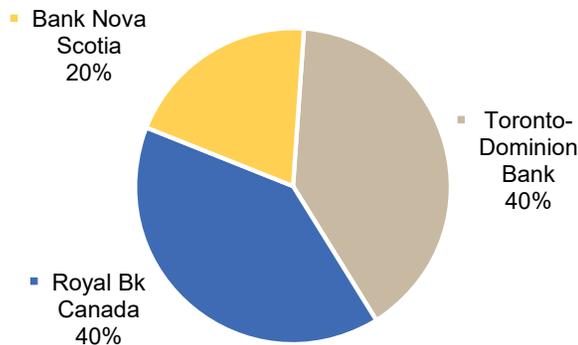
* Source Bloomberg Financial Systems



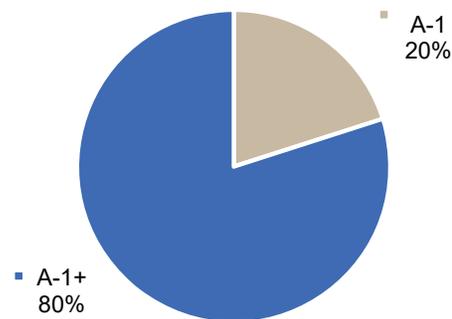
II. Sector Allocation – Commercial Paper

Topic	Observations
Issuer Diversification	<ul style="list-style-type: none"> The County's allocation to commercial paper decreased by -0.50% over the quarter, ending the period at 3.58% of the total portfolio. The portfolio holds Toronto-Dominion Bank, the Bank of Nova Scotia, and the Royal Bank of Canada. While commercial paper yields have receded during the year, commercial paper continued to be attractive relative to government securities. <ul style="list-style-type: none"> With attractive spreads, commercial paper has provided incremental returns while allowing the County to tap into a broader universe of issuers compared to the alternative of U.S. T-bills and federal agency discount notes.
Credit Distribution	<ul style="list-style-type: none"> 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 as A-1.
Conclusions	<ul style="list-style-type: none"> 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 generally offer greater yields than other short term securities and overnight investments. The Portfolio's allocation to commercial paper declined over the quarter as the County's second quarter purchases of Walt Disney and Canadian Imperial Bank paper matured during period.

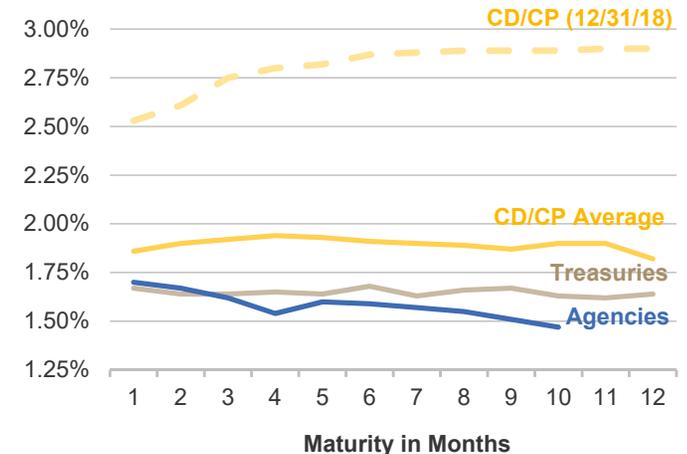
Issuer Distribution
as of September 30, 2019



Credit Distribution
as of September 30, 2019



Current Short-Term Yields
as of September 30, 2019



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



II. Sector Allocation – Corporate Notes

Topic	Observations
Maturity Distribution	<ul style="list-style-type: none"> The County's exposure to corporate notes declined by -1.91% over the quarter, from 16.36% to 14.35%. To end the period, its corporate note holdings were from high quality issuers, with 60% of its corporate notes carrying a rating of at least AA-. <ul style="list-style-type: none"> Callable corporate notes made up 44.44% of the County's corporate sleeve. With Fed Funds Futures pricing in as many as 2 interest rate cuts before the end of the year, the call risk in the portfolio is heightened, though calls are generally very close to maturity. All corporate holdings mature in less than 5 years and the weighted average life of the corporate note portion of the portfolio is 1.46 years. The graph on the right below shows the spread for financial corporates and industrial corporates when compared to a similar-maturity Treasury security. Spreads have continued the trend lower from their December 2018 peak and closed the quarter low from a historical perspective. Spreads on financials, which make up a large portion of the County's corporate holdings, closed the quarter wider than industrials.

Credit & Issuer Distribution	S&P Short	S&P Long	Moody's Short	Moody's Long	% of Corporate Holdings	% of Portfolio
Apple Inc.	A-1+	AA+	P-1	Aa1	11.88%	1.88%
Bank of Montreal	A-1	A+	P-1	Aa2	10.04%	1.58%
Toronto Dominion Bank	A-1+	AA-	P-1	Aa3	8.82%	1.38%
Microsoft Corp	A-1+	AAA	P-1	Aaa	8.71%	1.37%
US Bank	A-1+	AA-	P-1	A1	7.56%	1.29%
Proctor & Gamble Co	A-1+	AA-	P-1	Aa3	7.12%	1.18%
PNC Bank	A-1	A	P-1	A2	7.08%	1.11%
Bank of New York Mellon	A-1+	AA-	P-1	Aa2	6.64%	1.10%
JP Morgan Chase	A-1	A+	P-1	Aa2	4.47%	1.03%
Bank of Nova Scotia	A-1	A+	P-1	Aa2	8.27%	0.70%
United Parcel	A-1	A	P-1	A2	2.66%	0.43%
Honeywell International	A-1	A	P-1	A2	2.53%	0.41%
Canadian Imperial Bank	A-1	A+	P-1	Aa2	2.44%	0.40%
3M Co	A-1+	AA-	P-1	A1	2.26%	0.37%
Walt Disney Co	A-1	A	P-1	A2	0.73%	0.12%
Home Depot Inc.	A-1	A	P-1	A2	7.08%	1.88%

Corporate/Treasury Yield Spreads
September 2016 through September 2019



* Source Bloomberg Financial Systems

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

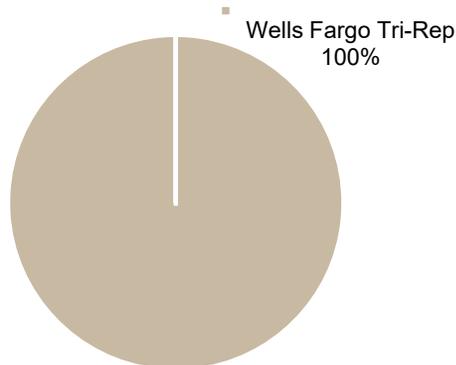
**Source Moody's



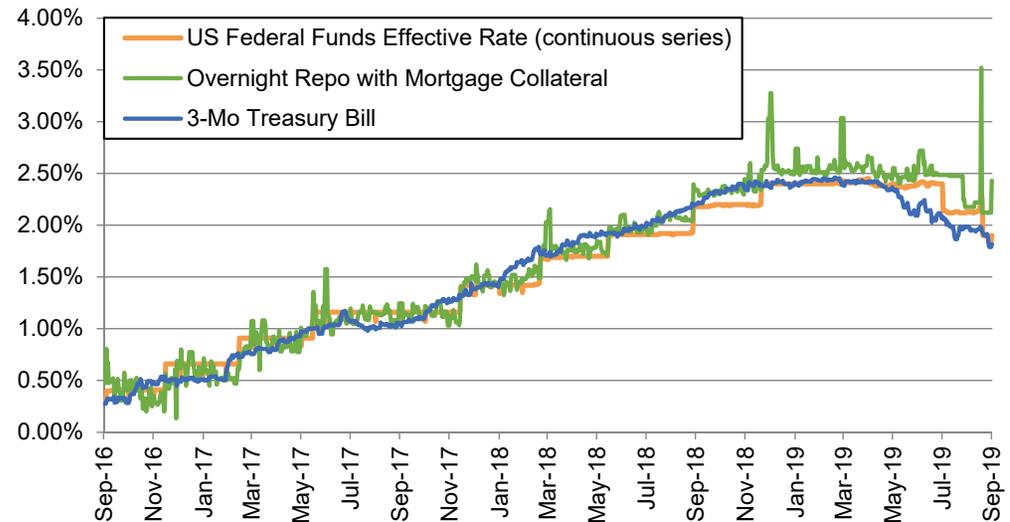
II. Sector Allocation – Repurchase Agreements

Topic	Observations
Issuer Diversification	<ul style="list-style-type: none"> The County increased tri-party repurchase agreement allocations over the quarter, with 4.50% of the portfolio allocated to the sector at quarter-end, compared to 1.57% in June. At the end of the quarter, the portfolio utilized one repurchase agreement provider, Wells Fargo Bank, with an allocation of \$313 million. This allocation falls within the permitted investment guidelines of 25% per issuer and 100% maximum to the sector.
Credit Distribution	<ul style="list-style-type: none"> Standard & Poor's rates Wells Fargo'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	<ul style="list-style-type: none"> As of September 30, 2019, the repurchase agreement sector's weighted-average yield was 2.38%, down 9 bps compared to the last quarter. Yields for overnight repurchase agreements were trending lower, keeping in line with short-term Treasury rates, until September saw repo rates rise dramatically as a result of a perfect storm of corporate tax payments and new U.S. Treasury supply. The Fed stepped in with extraordinary measures to inject liquidity into the markets to quell the volatility.

Issuer/Credit Distribution
as of September 30, 2019



Short-Term Yields
September 2016 through September 2019

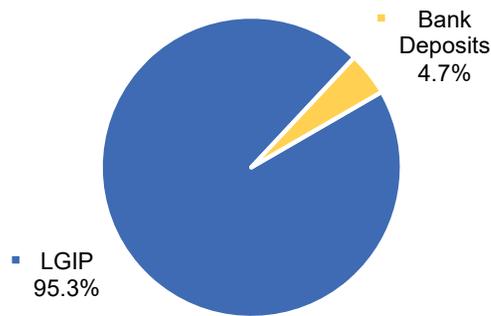




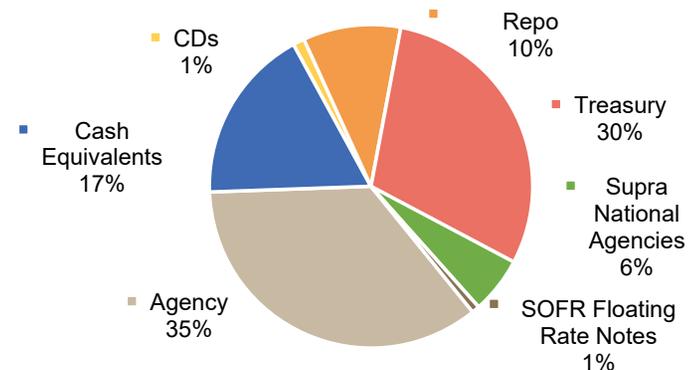
II. Sector Allocation – LGIPs and Cash Equivalents

	Underlying Investments	Rating (Short-Term: S&P/ Moody's/Fitch)	Observations
Washington State LGIP	<ul style="list-style-type: none"> U.S. Treasuries 29.8% Federal Agencies 35.3% Supra National Agencies 5.7% Repurchase Agreements 9.8% Certificates of Deposit 1.2% Cash Equivalents 17.6% SOFR Floating Notes 0.8% <i>As of September 30, 2019</i>	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> The County currently has allocated \$781 million to the Washington State LGIP, a decline from last quarter's \$949 million 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 U.S. Treasuries, supranationals, and CDs and it saw a -5.95% decline in its allocation to repurchase agreements.
Cash Equivalents	<ul style="list-style-type: none"> State LGIP 95.3% U.S. Bank 4.16% Key Bank 0.47% Bank of America 0.05% 	<ul style="list-style-type: none"> <u>U.S. Bank:</u> A-1+/P-1/F1+ <u>Key Bank:</u> A-2/P-2/F-1 <u>Bank of America:</u> A-1/P-1/F1+ 	<ul style="list-style-type: none"> 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 holdings increased slightly over the quarter, from 0.41% to 0.55% of the total portfolio.

Cash Equivalents Distribution
as of September 30, 2019



Washington State LGIP Sector Distribution
as of September 30, 2019



*All calculations above are based on total cash equivalents exposure, not overall Portfolio.

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

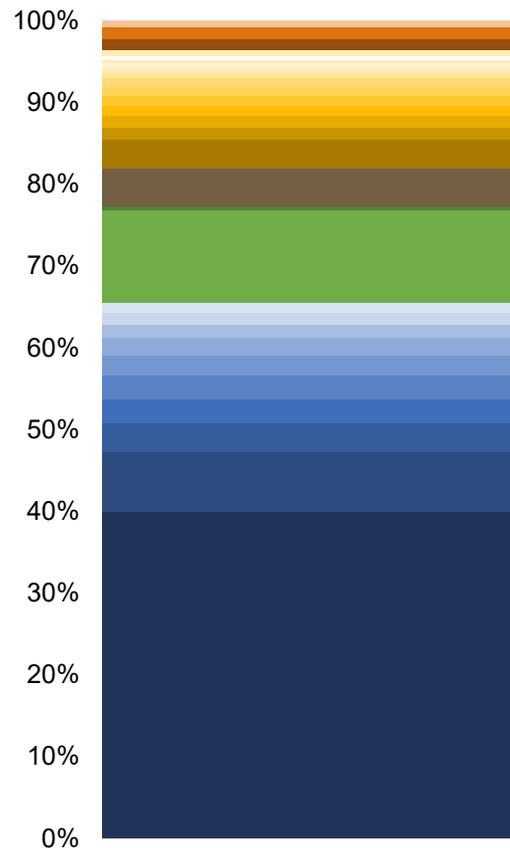


III. Issuer Concentration

Issuer Exposure

- The County continues to maintain a well-diversified portfolio by issuer, as shown in the chart below.
- Approximately 65.78% of the portfolio is allocated directly to U.S. government guaranteed or government supported entities.
- Of the remaining 34.22% of the portfolio, 16.28% is allocated to ultra short-term or overnight investment vehicles, including the State LGIP, repurchase agreements, and bank deposits. The remaining 17.94% is allocated to credit issuers, including commercial paper and corporate notes.

U.S. Treasury (100% Limit)	39.73%
Agency Issuers	Percentage (35% Limit)
Intn'l Bk of Recon & Dev	7.21%
FHLB	3.52%
FNMA	2.92%
Inter-American Dev Bk	2.89%
Euro Bk of Recon & Dev	2.35%
FFCB	2.17%
FHLMC	1.65%
International Finance Corp	1.48%
Asian Dev Bank	1.13%
Washington State LGIP (25% Limit)	11.23%
Overnight Deposits	Percentage (No Limit)
US Bank	0.49%
Key Bank	0.05%
Bank of America	0.01%
Repo Issuers	Percentage (25% Limit)
Wells Fargo Tri-Repo	4.50%



Corporate Issuers	Percentage (5% Limit)
Apple Inc.	1.93%
Bank of Montreal	1.63%
Toronto Dominion Bank	1.43%
Microsoft Corp	1.42%
Bank of Nova Scotia	1.34%
US Bank	1.23%
Proctor & Gamble Co	1.16%
PNC Bank	1.15%
Bank of New York Mellon	1.08%
JP Morgan Chase	0.73%
United Parcel	0.43%
Honeywell International	0.41%
Canadian Imperial Bank	0.40%
3M Co	0.37%
Home Depot Inc.	0.12%
CP Issuers	Percentage (5% Limit)
Royal Bank Canada	1.43%
Toronto-Dominion	1.43%
Bank Nova Scotia	0.72%

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.

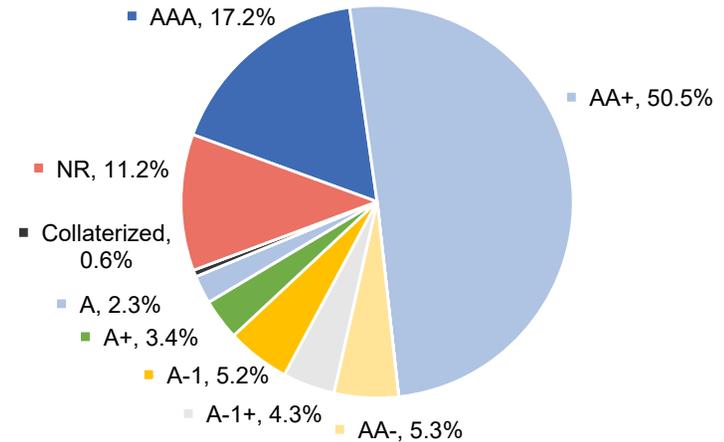


IV. Overall Credit Quality

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 decreased its credit exposure through commercial paper and corporate notes over the quarter, ending at 17.94% of the portfolio, compared to 20.34% last quarter.
 - Commercial paper now accounts for 3.58% of the entire portfolio, while corporate notes account for 14.35%.
- Corporate note allocations held throughout the quarter have ratings of AA- or higher.
 - Commercial paper allocations are all rated A-1/P-1 or higher.
- The 11.3% 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, 10.92% 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, 2019



Corporate/CP Issuer Ratings Table
as of September 30, 2019

Issuer Distribution	Sectors Invested	S&P Short*	S&P Long*	Moody's Short**	Moody's Long**
Apple Inc.	Corp	A-1+	AA+	P-1	Aa1
Bank of Montreal	Corp	A-1	A+	P-1	Aa2
Toronto Dominion Bank	Corp/CP	A-1+	AA-	P-1	Aa3
Microsoft Corp	Corp	A-1+	AAA	P-1	Aaa
US Bank	Corp	A-1+	AA-	P-1	A1
Proctor & Gamble Co	Corp	A-1+	AA-	P-1	Aa3
Royal Bank of Canada	Corp/CP	A-1+	AA-	P-1	A2
PNC Bank	Corp	A-1	A	P-1	A2
Bank of New York Mellon	Corp	A-1+	AA-	P-1	Aa2
JP Morgan Chase	Corp	A-1	A+	P-1	Aa2
Bank of Nova Scotia	Corp/CP	A-1	A+	P-1	Aa2
United Parcel	Corp	A-1	A	P-1	A2
Honeywell International	Corp	A-1	A	P-1	A2
Canadian Imperial Bank	Corp	A-1	A+	P-1	Aa2
3M Co	Corp	A-1+	AA-	P-1	A1
Home Depot Inc.	Corp	A-1	A	P-1	A2

*Ratings by S&P; Percentages may not add to 100% due to rounding.

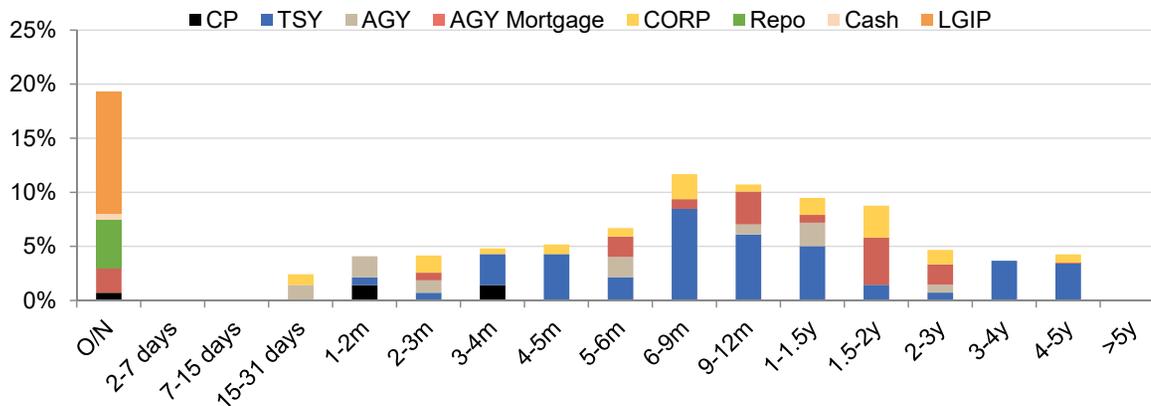
** Source Moody's



V. Maturity Distribution

Maturity Distribution	Observations
Weighted Average Maturity (“WAM”)	<ul style="list-style-type: none"> 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 5.0% 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: <ul style="list-style-type: none"> Allowing previously purchased, longer-dated U.S. Treasury and federal agency investments to naturally shorten in maturity and roll-down the yield curve. Targeting purchases in the following spaces: <ul style="list-style-type: none"> High-quality corporate notes with maturities between 1 and 2 years, which provided additional portfolio diversification. US Treasury purchases in the longer-end (more than 3 years) of the curve . The WAM of the portfolio ended the quarter at 377 days, up from 368 days at previous quarter-end. The increase in portfolio WAM can primarily be attributed to purchases of higher quality corporate notes and U.S. Treasury purchases in the longer-end of the curve.
Liquidity	<ul style="list-style-type: none"> 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 16.3% of the portfolio invested in a combination of the Washington State LGIP, bank deposits, and repurchase agreements (overnight liquidity), another 2.4% of the portfolio’s holdings are scheduled to mature within the next thirty-one days.

Maturity Distribution as of September 30, 2019



Contribution to Maturity

Sector	9/30/19	6/30/19
Supranational Agencies	60.52	67.30
Cash	0.01	0.00
Corporate Notes	76.42	81.68
Commercial Paper	2.24	3.76
Federal Agencies	35.00	40.55
The Washington State LGIP	0.11	0.13
Agency Mortgages	2.57	2.59
Repurchase Agreements	0.05	0.02
US Treasuries	200.38	171.53
Maturity:	377 days	368 days

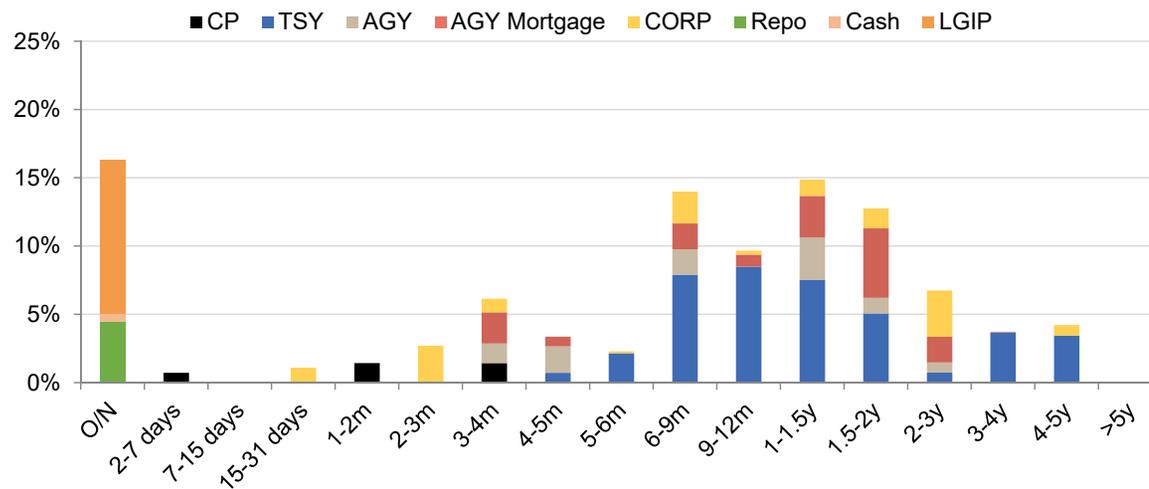
Agency Mortgage maturities are reported as average life. Average life data taken from Bloomberg Financial Markets
 Callable securities shown to their call date.
 All other security maturities are reported as days to maturity. WA LGIP is considered to have a one day maturity.



V. Duration Distribution

Duration Distribution	Observations
Definition	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The portfolio's weighted average duration is within the IPS guidelines (no greater than 1.5 years). As of September 30th, the duration of the County Investment Pool was 0.93 years, a decrease from the previous quarter which ended with a duration of 1.00 year. <ul style="list-style-type: none"> For performance and duration comparison purposes, the portfolio is measured against a blended benchmark consisting of 40% Bank of America Merrill Lynch 3-Month Treasury Index and 60% Bank of America Merrill Lynch 1-3 Year Treasury & Agency Index. The Pool decreases duration over the quarter to 78% of the benchmark's duration which was 1.19 years for the third quarter of 2019.

Duration Distribution as of September 30, 2019



Contribution to Duration		
Sector	9/30/19	6/30/19
Supranational Agencies	0.16	0.18
Cash	0.00	0.00
Corporate Notes	0.15	0.16
Commercial Paper	0.01	0.03
Federal Agencies	0.07	0.11
The Washington State LGIP	0.00	0.03
Agency Mortgages	0.00	0.00
Repurchase Agreements	0.00	0.01
US Treasuries	0.53	0.48
Duration:	0.93 years	1.00 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.

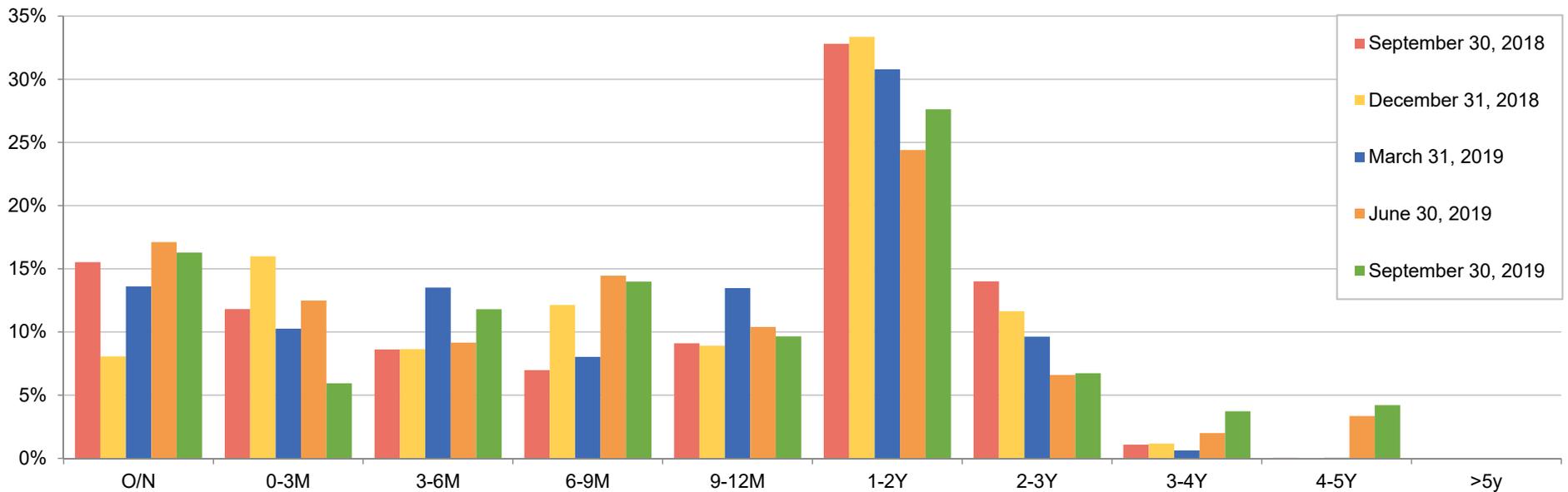


V. Changes in Portfolio Maturity Distribution

Changes in Portfolio Maturity Distribution

- When viewing the current maturity distribution (green bars) in relation to previous periods, a few primary observations are noted:
 - It appears the County targeted increased allocations in the 3-to-6 month portion of the yield curve and the 1-5 year portion during the third quarter of 2019.
 - The increase in allocation to 3-to-6 month maturities are primarily due to roll downs from the 6-9 month bucket.
 - Increases in the 4-5-year portion of the curve are due to new purchases, primarily in the U.S. Treasury sector.
- While the 1-5 year segment of the curve is expensive in the current yield curve environment, the County will likely be well positioned for additional interest rate cuts and continued slowing in the global economy.
 - Locking in yields in the 1-5 year area of the curve allows the portfolio to benefit from incremental income whether the Fed cuts rates further or not and would help generate incremental returns as the securities' value rises with any further rate cuts.

Maturity Distribution September 30, 2018 to September 30, 2019



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.



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