



King County Investment Pool

Portfolio Review

Quarter Ended September 30, 2017

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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 2017 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, 2017, 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">• As expected, the Federal Open Market Committee (FOMC) did not raise interest rates at their September meeting, and officially announced that the tapering of their balance sheet will begin next month. Markets hardly reacted to the news, a testament to the Fed’s success in promoting transparency in an effort to minimize impact on market volatility.• Positive economic data, stable inflation pressures, and recovering global growth have helped keep the data-dependent Fed on track for a third rate hike this year. Although muted inflation expectations and softness in core personal consumption expenditures (the Fed’s preferred measure of inflation) generated some skepticism, most Fed officials, including Chair Janet Yellen, remained steadfast in their pursuit of continued monetary policy normalization.• In the money market space, federal debt ceiling concerns spooked investors and drove up demand for the neighboring sectors. Subsequent to the passing of a budget resolution and debt ceiling extension, the short-term curve normalized.• U.S Treasury index returns were positive over the third quarter. Flattening of the yield curve caused longer maturities to outperform the shorter ones, as the increase in short-term rates resulted in lower market values for the related sectors.• Federal agencies outperformed comparable-maturity Treasuries, as the sector’s already-narrow yield spreads tightened even further on the back of limited supply and persistent investor demand.• Similarly, corporate yield spreads continued tightening as well, generating outperformance over comparable-maturity Treasuries.
Observations	<ul style="list-style-type: none">• The portfolio is of very high credit quality. The majority of securities (78%) are explicitly guaranteed or carry a high level of support by the U.S. Government (U.S. Treasury and Federal Agency) and/or possess overnight liquidity (Washington State LGIP, bank deposits, and repurchase agreements).• Notable sector allocation shifts over the quarter included a new sector being added to the portfolio; Supranational Agencies (+2.26%), as well as decreases to Federal Agencies (-1.68%) and the Washington State LGIP (-1.49%).• The Pool maintained a defensive duration bias which is evidenced by the Pool ending at 86% of the benchmark’s duration of 1.14 years. In anticipation of continued rising rates, a more defensive duration bias helps mitigate the adverse impact that potential interest rate increases may have on market value.• The County Pool appears to provide adequate liquidity, with 13% (or \$828 million) invested in a combination of the State LGIP, bank deposits, and repurchase agreements (overnight) and an additional 5.4% of the portfolio’s holdings scheduled to mature within the next 31 days.• In anticipation of the upcoming quarter, during the fourth quarters of the past five years, the average net inflow to the Pool was \$357 million.



Investment Pool Portfolio Review

Portfolio Review

I. Investment Policy Compliance

II. Sector Allocation

- U.S. Treasuries
- Federal Agencies
- Supranational Agencies
- Commercial Paper
- Corporate Notes
- 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, 2017 was \$6.6 billion and it experienced a net decrease of approximately \$245 million over the quarter. Over the quarter, sectors that experienced allocation percentage increases included: Supranational Agencies (+2.26%), Corporate Notes (+0.58%), Repurchase Agreements (+0.56%), and Cash & Equivalents (+0.16%). All sectors experiencing an increase over the quarter still remain within applicable policy limits. Sectors that experienced decreases in quarter-over-quarter allocation percentages included: Federal Agencies (-1.68%), the Washington State LGIP (-1.49%), as well as Commercial Paper (-0.24%) and US Treasuries (-0.13%).
Credit Quality	<ul style="list-style-type: none"> Approximately 65% of the County pool's assets are guaranteed or supported by the U.S. government. Furthermore, almost 9% is invested in the State LGIP, where 70% 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 78%. Corporate allocations (both commercial paper and corporate notes) increased over the quarter to almost 20% of the portfolio, up from 19% on June 30, 2017, and all securities are investment grade. Allocations to corporates continue to be below the maximum allocation limit of 25%. Total allocations of corporates, commercial paper, and repurchase agreements also do not exceed the 50% allocation limit set forth in the County's Investment Policy, and ended the quarter at 23%.
Maturity Distribution	<ul style="list-style-type: none"> All maturities fall within the limits set forth in the County's Investment Policy. Approximately 56% of the Pool's assets mature in one year or less, well above the minimum of 40% that is mandated by the Investment Policy.

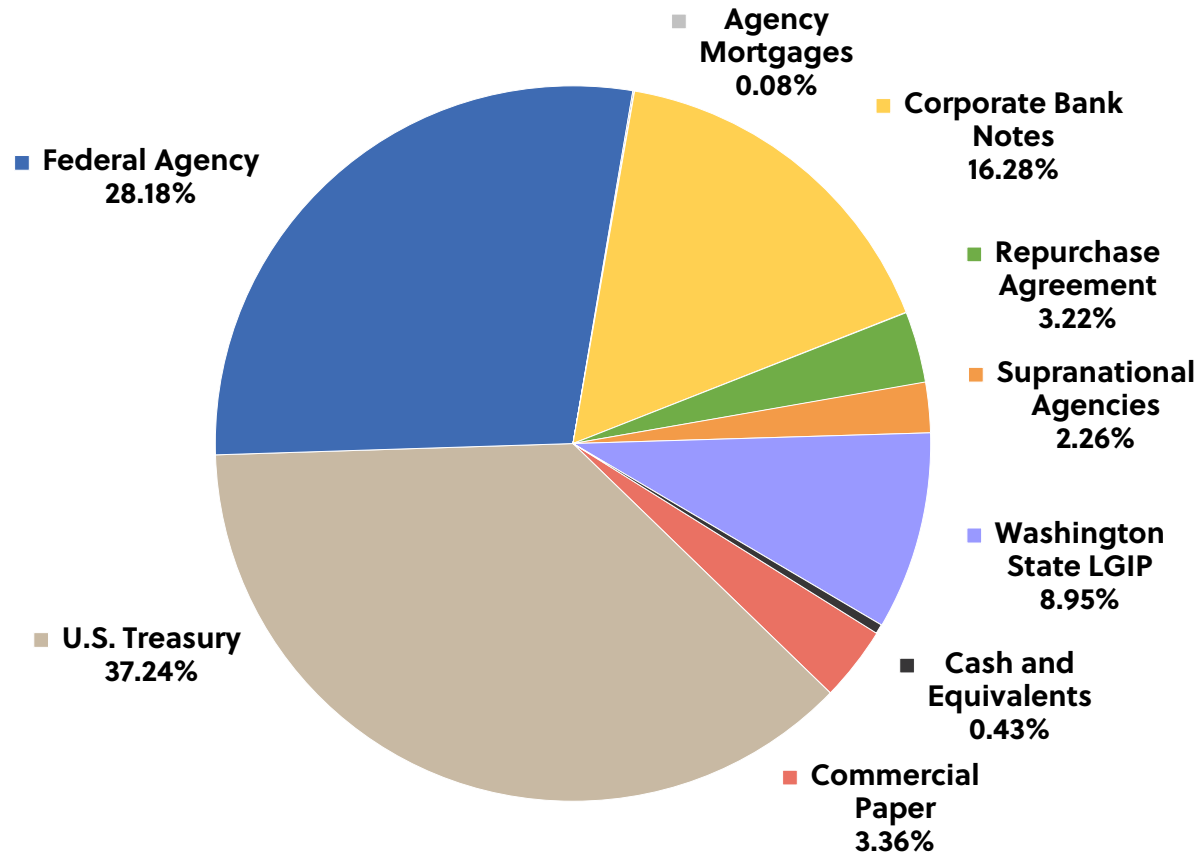
Security Type	Market Value(\$)	Allocation Percentage	Within Policy Limits	Max Maturity Held	Within Policy Limits
U.S. Treasury	2,448,399,100	37.24%	✓	3.34 years	✓
Federal Agency (non-MBS)	1,853,061,416	28.18%	✓	3.00 years	✓
Corporate Notes	1,070,253,167	16.28%	✓	3.86 years	✓
Washington State LGIP	588,358,037	8.95%	✓	1 day	✓
Commercial Paper	221,156,745	3.36%	✓	174 days	✓
Repurchase Agreements	212,000,000	3.22%	✓	1 day	✓
Supranational Agencies	148,410,500	2.26%	✓	2.93 years	✓
Cash and Equivalents	28,040,381	0.43%	✓	1 day	✓
Agency Mortgages	5,253,080	0.08%	✓	3.58 years (WAL)	✓
TOTAL	\$6,574,932,425	100.00%			

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



II. Sector Allocation

Sector Diversification
as of September 30, 2017



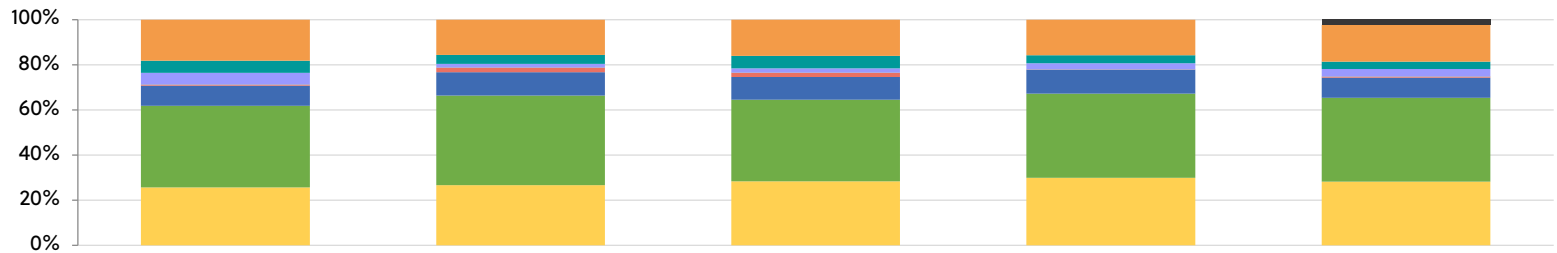
**Percentages may not total to 100% due to rounding.*



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

Changes in Sector Allocation

- The County's investment pool increased percentage allocations to Supranational Agencies (+2.26%), Corporate Notes (+0.58%), Repurchase Agreements (+0.56%), and Cash & Equivalents (+0.16%), while decreases occurred in Federal Agencies (-1.68%), the Washington State LGIP (-1.49%), Commercial Paper (-0.24%) and US Treasuries (-0.13%).
- U.S. Treasuries** U.S. Treasury allocations decreased by \$100 million over the quarter. There were approximately \$100 million of U.S. Treasuries maturing or being sold, with no additional reinvestments being made to this sector over the quarter.
- Federal Agencies** Federal agency allocations remained below U.S. Treasury allocations for the seventh consecutive quarter. Approximately \$251 million of agency holdings matured during the quarter and \$213 million was reinvested into the sector, particularly \$148 into Supranational Agencies.
- Corporate Notes** The portfolio increased allocations to corporate notes over the quarter, now accounting for 16.3% of the overall portfolio totaling approximately \$1.1 billion.
- Commercial Paper** The portfolio currently holds three commercial paper issuers totaling \$221 million (or 3.4% of the total portfolio), representing a decrease of \$25 million over the quarter.
- Washington State LGIP** Balances invested in the State LGIP decreased over the quarter by approximately \$124 million, and continued to serve as the Pool's primary liquidity vehicle. This sector accounts for approximately 9.0% of the overall portfolio.
- Repurchase Agreements and Bank Deposits** Allocations to repurchase agreements increased by \$30 million over the quarter and accounted for 3.2% of the total portfolio. Bank deposits increased by approximately \$10 million over the quarter to \$28 million (or to 0.43% of the total portfolio).



	September 30, 2016	December 31, 2016	March 31, 2017	June 30, 2017	September 30, 2017
U.S. Treasury	36.08%	39.78%	36.23%	37.37%	37.24%
Federal Agencies	25.72%	26.63%	28.34%	29.87%	28.18%
Washington State LGIP	8.96%	10.28%	10.05%	10.44%	8.95%
Cash and Equivalents	0.43%	2.02%	1.91%	0.26%	0.43%
Agency Mortgages	0.11%	0.10%	0.09%	0.08%	0.08%
Repurchase Agreements	5.14%	1.62%	1.78%	2.67%	3.22%
Commercial Paper	5.45%	4.04%	5.54%	3.61%	3.36%
Corporate Notes	18.12%	15.53%	16.06%	15.70%	16.28%
Supranational Agencies	0.00%	0.00%	0.00%	0.00%	2.26%

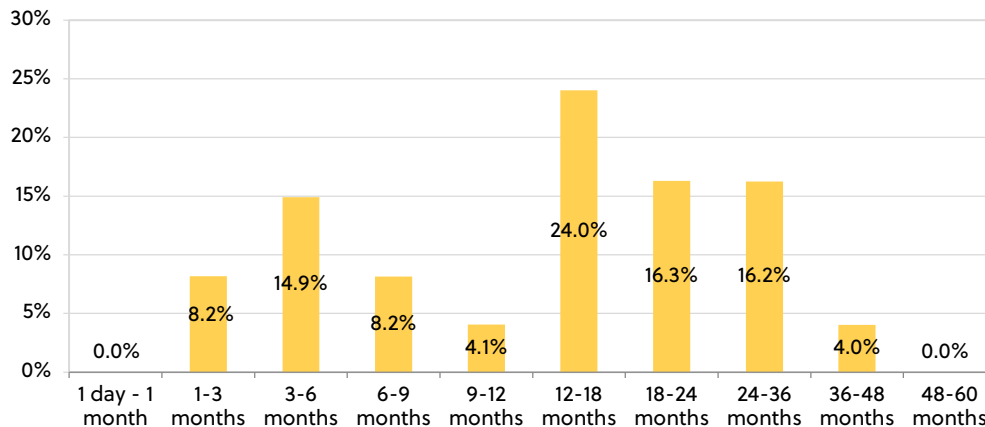
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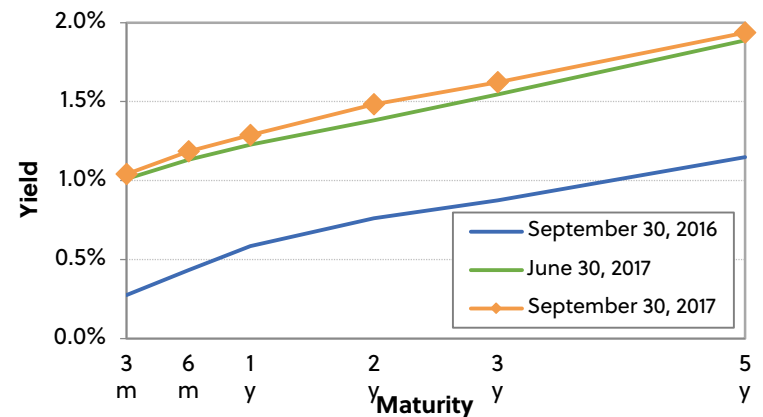
II. Sector Allocation – U.S. Treasury Securities

Topic	Observations
Observations	<ul style="list-style-type: none"> The County's balances held in U.S. Treasuries decreased by \$100 million over the quarter, down to 37.2% of the total portfolio. <ul style="list-style-type: none"> U.S Treasury index returns were positive over the third quarter. Flattening of the yield curve caused longer maturities to outperform the shorter ones, as the increase in short-term rates resulted in lower market values for the related tenors. While returns were positive, Federal agencies and corporate holdings, as well as MBS holdings all outperformed comparable-maturity Treasuries. The majority of the Pool's Treasury investments (\$1.5 billion, or 60.6% of all Treasury holdings) have remaining maturities of greater than one year and are positioned in the steeper portions of the U.S. Treasury yield curve. The County's weighted average maturity (WAM) of its Treasury allocation decreased over the quarter by 72 days, from 532 days on June 30th, to 460 days on September 30th largely due to the lack of reinvestment into this sector, therefore naturally drifting shorter. The chart below, on the left, illustrates the current maturity distribution of the County's allocations to U.S. Treasuries and the chart on the right illustrates the current shape of the U.S. Treasury yield curve, compared to the yield curve three months ago and one year ago. <ul style="list-style-type: none"> Of the County's Treasury allocations, 39.4% is allocated to maturities less than 12 months (versus 37.8% last quarter).

U.S. Treasury Maturity Distribution as of September 30, 2017



U.S. Treasury Yield Curve 9/30/17 vs 6/30/17 vs 9/30/16



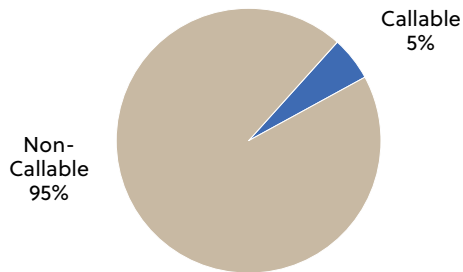
* Source Bloomberg Financial Systems



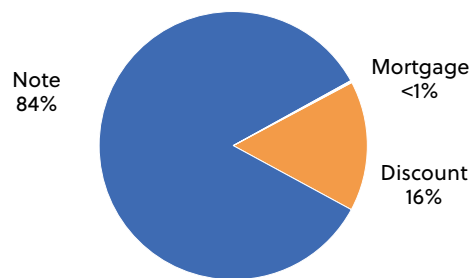
II. Sector Allocation – Federal Agencies

Topic	Observations			
Structure (as % of Federal Agency Allocations)	• Non-Callable	94.6%	• Discount Notes	15.7%
	• Callable	5.4%	• Coupon Bearing Notes	84.1%
Diversification (as % of Federal Agency Allocations)	• Freddie Mac (FHLMC)	32.0%	• Federal Farm Credit Bank (FFCB)	28.4%
	• Federal Home Loan Bank (FHLB)	14.7%	• Freddie Mac Mortgage-Backed (FHR)	0%
	• Fannie Mae (FNMA)	17.3%	• Fannie Mae Mortgage-Backed (FNR)	<1%
	• Supranational Agencies	7.40%		
Conclusions	<ul style="list-style-type: none"> • The County's federal agency allocation continues to be well diversified. All issuer allocations fall within the issuer guidelines set forth among the four major issuers and among security structures in the County's investment policy (max per agency issuer 35%). • Federal agency allocations decreased by \$36 million over the quarter. The decrease was due to \$213 million in new agency purchases, including new supranational agencies (discussed on page 13), paired with \$250 million in maturities. • From a security structure standpoint (the ratio of non-callable to callable securities), callable securities decreased for the fourth consecutive quarter, to 5% of agency holdings, down from 7% last quarter and 8% in the first quarter of 2017. <ul style="list-style-type: none"> – In the past quarter, three holdings experienced a call date. One holding has appeared to be called, and now the remaining two holdings have their next call dates in October and December. – New agency note purchases during the quarter were all non-callable. • The County Pool's only remaining allocation to agency mortgages is in Fannie Mae pools, totaling approximately \$5.3 million. 			

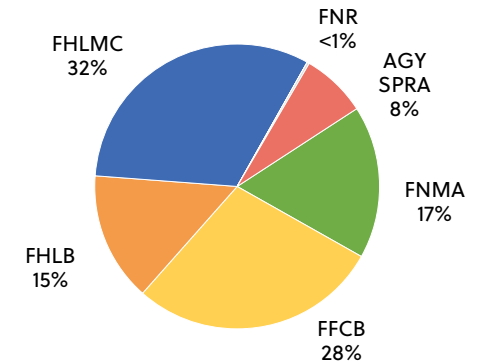
Callable vs. Non-Callable as of September 30, 2017



Structure Distribution as of September 30, 2017



Issuer Diversification as of September 30, 2017



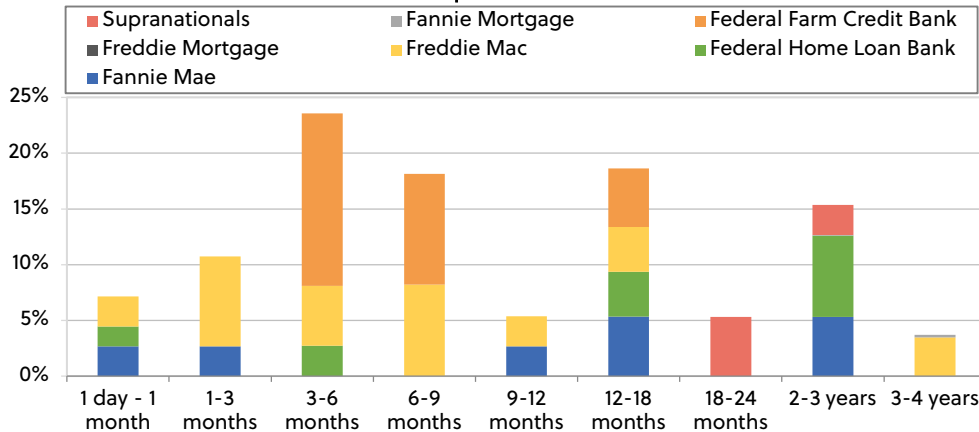
*All calculations above are based on total cash equivalents exposure, not overall Portfolio.
 **Percentages may not total to 100% due to rounding.



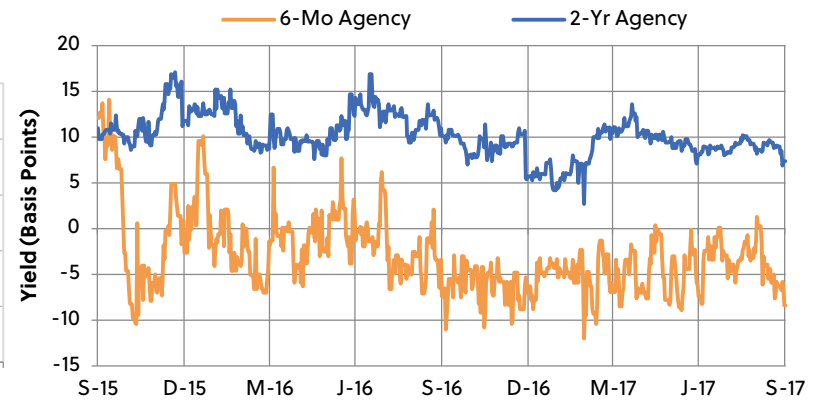
II. Sector Allocation – Federal Agencies

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 County's weighted average maturity (WAM) of federal agency holdings increased by 27 days, from 331 days on June 30th to 358 days on September 30th. <ul style="list-style-type: none"> The County prefers short-term federal agencies and longer-term U.S. Treasuries. This is evident by, as of September 30, 2017, 60% of agency allocations being invested in maturities less than 12 months, versus 39% of U.S. Treasury allocations. Of the agency and U.S. Treasury allocations invested in maturities under a year, 38% of federal agency allocations and 27% of U.S. Treasury allocations were invested in maturities less than 6 months. Conversely, while 40% of agency allocations were invested beyond 1 year, 61% of Treasury allocations were invested beyond 1 year. This "short/long" relationship between Treasuries and agencies illustrates the cross-sector value along the yield curve. <ul style="list-style-type: none"> The overweight to shorter-term agencies can be attributed to the combination of: <ol style="list-style-type: none"> Previously purchased longer-term agencies being held and naturally drifting shorter, and Targeting purchases of longer-term Treasuries due to the relatively tight yield spreads between agency and Treasury securities of similar maturity beyond 2 years. That is, yields of 2-year agencies and Treasuries are relatively close, and in these instances, the U.S. Treasury security is typically preferred for this area of the yield curve.

Federal Agency Maturity Distribution by Name as of September 30, 2017



2-Year Federal Agency Yield Spreads Past 24 Months



* Source Bloomberg Financial Systems

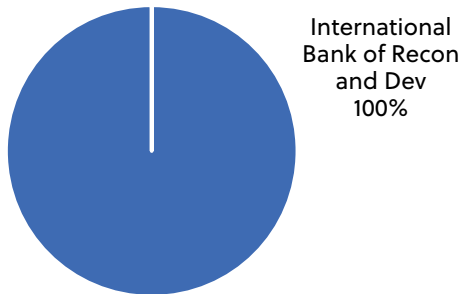
- Agency Mortgage maturities are calculated as average life. Average life data taken from Bloomberg Financial Markets
- Callable securities are shown to their next call date.
- All other Agency maturities are calculated as days to maturity.



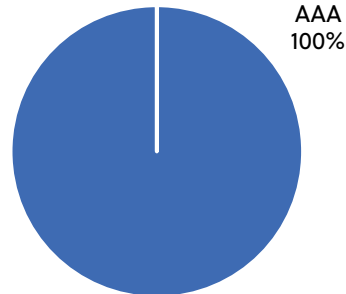
II. Sector Allocation – Supranational Agencies

Topic	Observations
Maturity Distribution	<ul style="list-style-type: none"> Over the quarter, the County began investing in Supranational Agency issues. These holdings are of high quality credit being backed by various member countries and are created in order to support economic development and poverty reduction. Specifically, the County invested in one issuer, the International Bank for Reconstruction and Development (World Bank), rated AAA by Standard & Poor's. <ul style="list-style-type: none"> The U.S. is the largest country from a shareholder perspective for this issuer, meaning they have the largest decision making power. This issuer was established in 1944 with a goal of financing European nations. By investing in this new sector, the County has continued to diversify the portfolio and added to its high credit quality. <ul style="list-style-type: none"> Supranationals that were purchased targeted the 2- to 3-year maturity range.

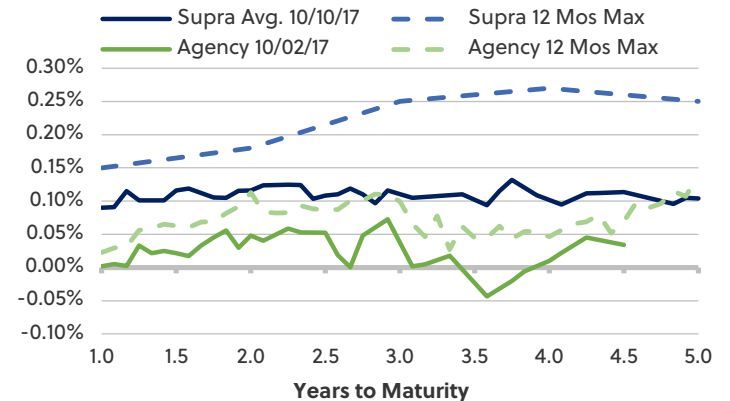
Issuer Distribution
as of September 30, 2017



Credit Distribution
as of September 30, 2017



Supranational Agency vs.
Federal Agency Yield Spreads



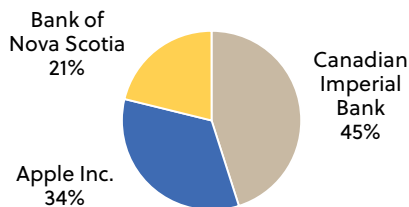
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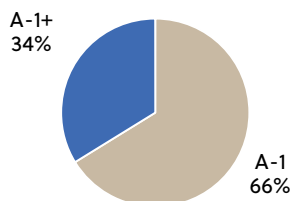
II. Sector Allocation – Commercial Paper

Topic	Observations
Issuer Diversification	<ul style="list-style-type: none"> The County's allocations to commercial paper decreased over the quarter, by approximately \$25 million, and now account for 3.4% of the total portfolio, down from 3.6% at the end of the second quarter. The portfolio owns commercial paper of three issuers: Apple Inc., Canadian Imperial Bank, and Bank of Nova Scotia. These were also held during the second quarter. Federal debt ceiling concerns spooked investors and drove up demand for neighboring sectors. Subsequent to the passing of a budget resolution and debt ceiling extension, the short-term curve normalized. Yield spreads on commercial paper relative to U.S. Treasuries or Federal Agencies continue to narrow from their exceptionally wide levels of late 2016 and early 2017. The incremental yield offered is now modest but commercial paper continues to outperform compared to similar term government securities. <ul style="list-style-type: none"> “Rolling” short-term commercial paper is an attractive investment strategy relative to most other short-term permitted investment options in the current fixed income market.
Credit Distribution	<ul style="list-style-type: none"> Standard & Poor's rates the short-term credit of Apple Inc. as A-1+, and Canadian Imperial Bank and Bank of Nova Scotia as A-1. Moody's rates the short-term credit of all of the County's CP issuers as P-1.
Conclusions	<ul style="list-style-type: none"> High-quality commercial paper has offered a noticeable yield advantage relative to similar maturity Treasury and agency securities over the past several years. This yield advantage of commercial paper is even more pronounced at longer maturities and has grown with regulatory changes to money market mutual funds. Utilizing short term commercial paper helps the County to offset the purchasing of longer term securities while still maintaining a short duration position. These commercial paper investments generally offer greater yields than other short term securities and overnight investments.

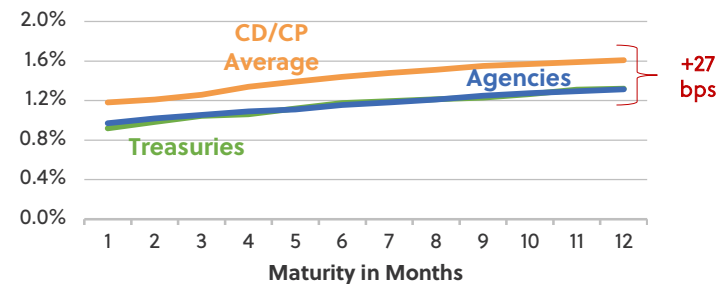
Issuer Distribution
as of September 30, 2017



Credit Distribution
as of September 30, 2017



Current Short-Term Yields
as of September 30, 2017



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

* Source Bloomberg Financial Systems



II. Sector Allocation – Corporate Notes

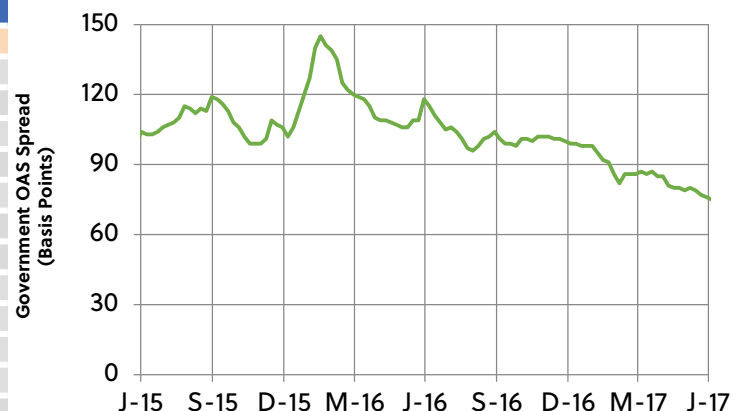
Topic	Observations
Issuer Diversification	<ul style="list-style-type: none"> The County increased allocations over the quarter to high-quality corporate notes. This sector accounts for 16.3% of the overall portfolio totaling approximately \$1.1 billion. Of the County's allocations to corporate notes, \$371 million is allocated to callable structures; however, all of the callable corporate holdings have a "next call date" that is approximately one month before their respective final maturity. As a result, the callable structures of these investments will have minimal impact on maturity and duration management of the overall portfolio. When viewing the County's corporate note holdings to the next call date, the weighted average maturity of these investments is 1.3 years. Of the County's total allocation to this sector, 67% is allocated to maturities beyond 1 year. On May 10, 2017 Moody's Investors Service downgraded the long-term credit ratings of six Canadian banks and their affiliates, reflecting Moody's expectation of a more challenging operating environment for banks in Canada for the rest of 2017 and thereafter, which could lead to deterioration in their asset quality and an increase sensitivity to external shocks. ** <ul style="list-style-type: none"> Permitted investment guidelines are restricted to 2% per issuer rated in broad single A category, putting Royal Bank of Canada just slightly over the policy limit per the new Moody's downgrade, highlighted below. However, since all RBC notes were purchased prior to 9/15/16, they are grandfathered for purposes of issuer limits and can be held to maturity.

Credit & Issuer Distribution	S&P Short	S&P Long	Moody's Short	Moody's Long	% of Corporate Holdings	% of Portfolio
Royal Bank of Canada	A-1+	AA-	P-1	A1	13.05%	2.12%
Microsoft	A-1+	AAA	P-1	Aaa	11.18%	1.82%
US Bank	A-1+	AA-	P-1	A1	10.14%	1.65%
Toronto Dominion Bank	A-1+	AA-	P-1	Aa2	9.77%	1.59%
Wells Fargo Bank	A-1+	AA-	P-1	Aa1	8.87%	1.44%
PNC Bank	A-1	A	P-1	Aa2	8.85%	1.44%
Bank of Montreal	A-1	A+	P-1	A1	7.98%	1.30%
Bank of Nova Scotia	A-1	A+	P-1	A1	6.55%	1.07%
Walt Disney Co	A-1+	A+	P-1	A2	4.86%	0.79%
Bank of America	A-1	A+	P-1	A1	4.21%	0.68%
JP Morgan Chase	A-1	A+	P-1	Aa2	4.00%	0.65%
Apple Inc.	A-1+	AA+	P-1	Aa1	3.17%	0.52%
Canadian Imperial Bank	A-1	A+	P-1	A1	2.79%	0.45%
Colgate-Palmolive Co	A-1+	AA-	P-1	Aa3	2.71%	0.44%
Proctor & Gamble Co	A-1+	AA-	P-1	Aa3	1.87%	0.30%

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

**Source Moody's

1-5 Year Financial Corporate/Treasury Yield Spreads
September 2015 through September 2017



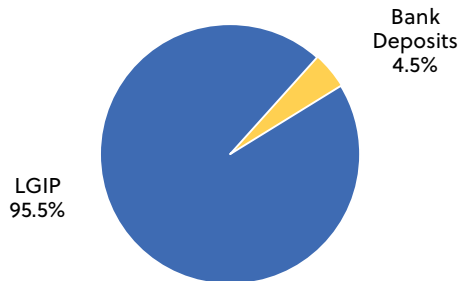
* Source Bloomberg Financial Systems



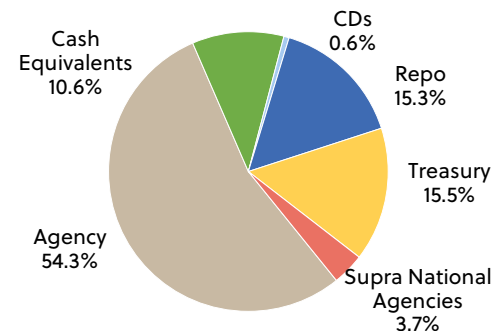
II. Sector Allocation – LGIPs and Cash Equivalents

	Underlying Investments	Rating (Short-Term: S&P/ Moody's/Fitch)	Observations
Washington State LGIP	<ul style="list-style-type: none"> Federal Agencies 54.3% U.S. Treasuries 15.5% Cash Equivalents 10.6% Certificates of Deposit 0.6% Repurchase Agreements 15.3% Supra National Agencies 3.7% <p><i>As of September 30, 2017</i></p>	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> The County currently has allocated \$588 million to the Washington State LGIP, which is a decrease of approximately \$124 million over the previous quarter. 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 agency discount notes by approximately 5.7% and bank deposits by 3.7%, while repurchase agreements decreased by 12.7%. All other sectors experienced modest 1-2% changes in percentage allocations over the quarter.
Cash Equivalents	<ul style="list-style-type: none"> State LGIP 95.5% U.S. Bank 3.0% Key Bank 1.5% Bank of America 0.1% 	<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-2/F-1 	<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 County increased allocations to bank deposits by approximately \$10 million over the quarter, up to \$28 million. The U.S. Bank account represents 66% of the Pool's bank deposit allocations (Key Bank 33% and Bank of America 1%). Additionally, while the County pool is limited to CDs issued by banks in the State of Washington, there still may be an opportunity to add small allocations to CDs, as this sector continues to provide incremental yield advantages relative to many shorter-term investment options of similar maturity.

Cash Equivalents Distribution
as of September 30, 2017



Washington State LGIP Sector Distribution
as of September 30, 2017



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

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

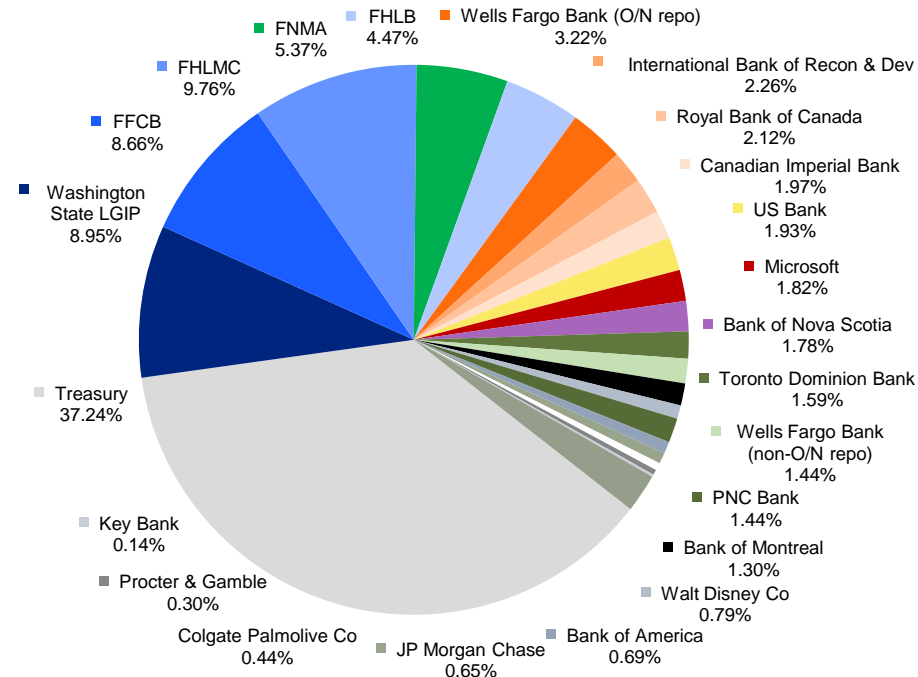


III. Issuer Concentration

Issuer Exposure

- The County continues to maintain a well-diversified portfolio by issuer, as is evidenced by the chart below.
- Approximately 65% of the portfolio is allocated directly to U.S. government guaranteed or government supported entities.
- Of the remaining 35% of the portfolio, 13% is allocated to ultra short-term or overnight investment vehicles, including the State LGIP, repurchase agreements, and bank deposits and 2% is allocated to new Supranational Agency holdings. The remaining 20% is allocated to credit issuers, including commercial paper and corporate notes.
- The County continued to invest in multiple credit issuers over the quarter with purchases of Apple Inc. and Canadian Imperial Bank, which have been issuers consistently used by the County.
- New Supranational Agency holdings (International Bank of Reconstruction & Development) were purchased, adding a new issuer to the County's portfolio.

Issuer Distribution	Value	Percentage	Issuer Limit
Treasury	2,448,399,100	37.24%	100%
FHLMC	641,553,266	9.76%	35%
Washington State LGIP	588,358,037	8.95%	25%
FFCB	569,328,608	8.66%	35%
FNMA	353,262,580	5.37%	35%
FHLB	294,170,041	4.47%	35%
Wells Fargo Bank (O/N repo)	212,000,000	3.22%	25%
Intn'l Bank of Recon & Dev	148,410,500	2.26%	35%
Royal Bank of Canada	139,716,900	2.12%	5%
Canadian Imperial Bank	129,488,211	1.97%	5%
US Bank	127,028,794	1.93%	5%
Microsoft	119,697,600	1.82%	5%
Bank of Nova Scotia	116,920,954	1.78%	5%
Apple Inc.	108,694,353	1.65%	5%
Toronto Dominion Bank	104,510,256	1.59%	5%
Wells Fargo Bank (term repo)	94,964,450	1.44%	5%
PNC Bank	94,710,041	1.44%	5%
Bank of Montreal	85,378,346	1.30%	5%
Walt Disney Co	52,039,220	0.79%	5%
Bank of America	45,181,691	0.69%	5%
JP Morgan Chase	42,760,491	0.65%	5%
Colgate Palmolive Co	28,982,832	0.44%	5%
Procter & Gamble	20,018,800	0.30%	5%
Key Bank	9,357,355	0.14%	5%
Total	\$6,574,932,425	100.00%	



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.

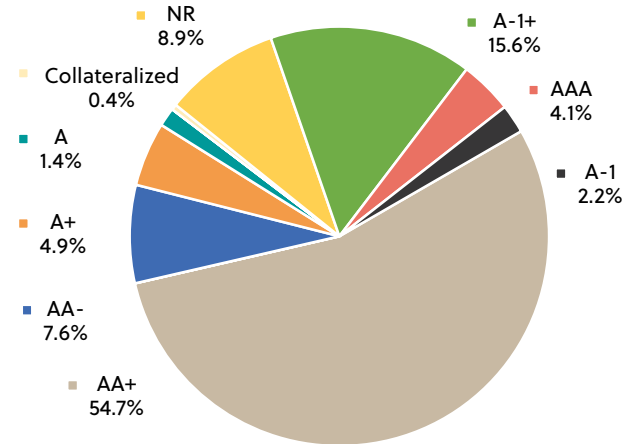


IV. Overall Credit Quality

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 increased its credit exposure through commercial paper and corporate notes over the quarter, ending at approximately 19.7% of the portfolio.
 - Commercial paper now accounts for 3.4% of the entire portfolio, while corporate notes account for 16.3%.
- Allocations were maintained to corporate notes for all previously held issuers and commercial paper allocations were maintained for Canadian Imperial Bank, Bank of Nova Scotia, and Apple Inc.
 - Corporate note allocations held throughout the quarter have ratings of A/A1 or higher.
 - Commercial paper allocations are all rated A-1/P-1 or higher.
- On May 10, 2017 Moody's Investors Service downgraded the long-term credit ratings of six Canadian banks and their affiliates, reflecting Moody's expectation of a more challenging operating environment for banks in Canada for the rest of 2017 and thereafter, which could lead to deterioration in their asset quality and an increase sensitivity to external shocks. **
 - Permitted investment guidelines are restricted to 2% per issuer rated in broad single A category, putting Royal Bank of Canada just slightly over the policy limit per the new Moody's downgrade.
 - However, since all RBC notes were purchased prior to 9/15/16, they are grandfathered for purposes of issuer limits and can be held to maturity.
- The 8.9% 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, 1.4% 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, 2017



Corporate/CP Issuer Ratings Table
as of September 30, 2017

Issuer Distribution	Sectors Invested	S&P Short	S&P Long	Moody's Short	Moody's Long
Royal Bank of Canada	Corp	A-1+	AA-	P-1	A1
Microsoft	Corp	A-1+	AAA	P-1	Aaa
US Bank	Corp	A-1+	AA-	P-1	A1
Toronto Dominion Bank	Corp	A-1+	AA-	P-1	Aa2
Wells Fargo Bank	Corp	A-1+	AA-	P-1	Aa1
PNC Bank	Corp	A-1	A	P-1	Aa2
Bank of Montreal	Corp	A-1	A+	P-1	A1
Bank of Nova Scotia	Corp/CP	A-1	A+	P-1	A1
Walt Disney Co	Corp	A-1+	A+	P-1	A2
Bank of America	Corp	A-1	A+	P-1	A1
JP Morgan Chase	Corp	A-1	A+	P-1	Aa2
Apple Inc.	Corp/CP	A-1+	AA+	P-1	Aa1
Canadian Imperial Bank	Corp/CP	A-1	A+	P-1	A1
Colgate-Palmolive Co	Corp	A-1+	AA-	P-1	Aa3
Proctor & Gamble Co	Corp	A-1+	AA-	P-1	Aa3

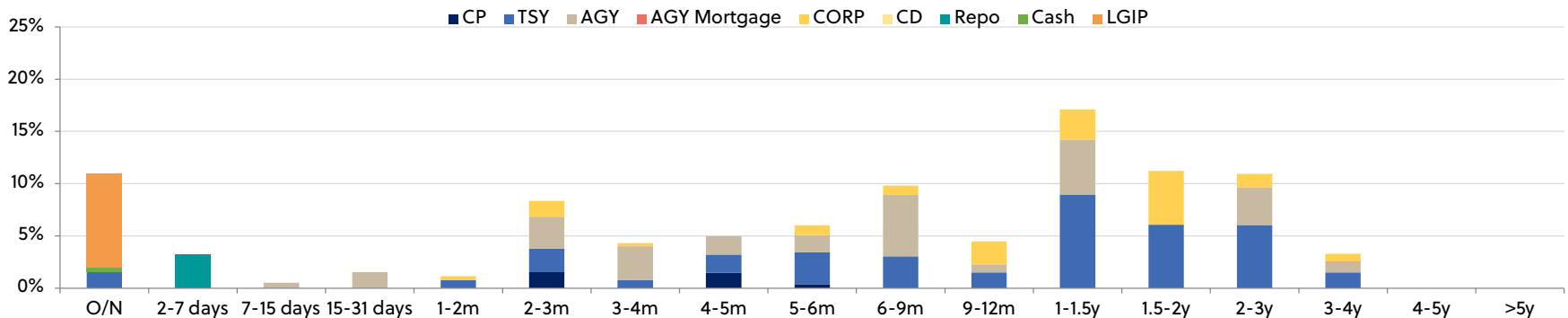
*Ratings by S&P; percentages may not add to 100% due to rounding.
** Source Moody's



V. Maturity Distribution

Maturity Distribution	Observations
Weighted Average Maturity ("WAM")	<ul style="list-style-type: none"> The County continues to diversify holdings across its permitted maturity range, as seen in the chart below. A majority of the holdings – 56% of the portfolio – are scheduled to mature or have a call date within the next twelve months, in line with 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, federal agency, and corporate bank note investments to naturally shorten in maturity and roll-down the yield curve. Targeting purchases in the following spaces: <ul style="list-style-type: none"> One supranational agency totaling \$99 million in the 1- to 2-year range, as well as an FHLMC issue in the 3-4 year maturity range totaling \$65 million. One corporate note issue with PNC Bank, in the 1- to 2-year maturity range totaling \$45 million. The WAM of the portfolio ended the first quarter at 363 days, down from 390 days at previous quarter-end. <ul style="list-style-type: none"> The reduction in portfolio WAM can primarily be attributed to naturally shortening of most maturities within the portfolio.
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 Pool has invested. In addition to the 12.6% (or \$828 million) invested in a combination of the Washington State LGIP, bank deposits, and repurchase agreements (overnight liquidity), an additional 5.4% of the portfolio's holdings are scheduled to mature within the next thirty-one days. Based on historical cash flow patterns, the Pool would expect an increase in funds during the fourth quarter of 2017. On average, over the past five years, the County has experienced an average net cash inflow of \$357 million in quarters ended December 31.

Maturity Distribution as of September 30, 2017



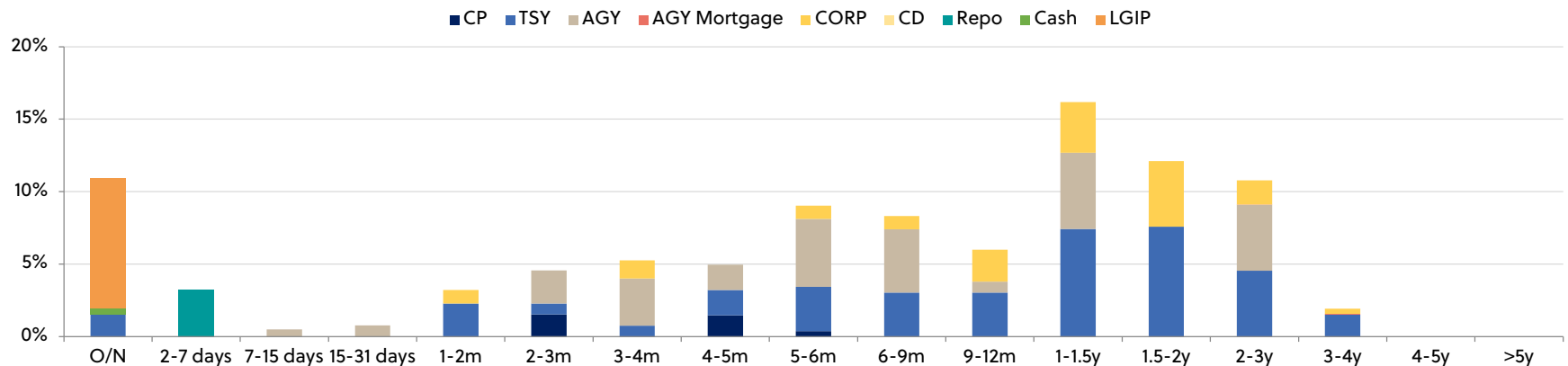
Agency Mortgage maturities are reported as average life. Average life data taken from Bloomberg Financial Markets
 Callable securities shown to their call date.
 All other security maturities are reported as days to maturity. WA LGIP is considered to have a one day maturity.



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 0.98 years, a decrease from the previous quarter which ended at 1.06 years. <ul style="list-style-type: none"> The decrease in portfolio duration can be attributed to holdings naturally shortening paired with purchases of securities in the 3- to 6-month maturity range. 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. <ul style="list-style-type: none"> The Pool maintains a defensive duration bias which is evident by the Pool ending at 86% of the benchmark's duration of 1.14 years. In anticipation of continued rising rates, a more defensive duration bias helps mitigate the adverse impact that potential interest rate increases may have on market value.

Duration Distribution as of September 30, 2017



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.

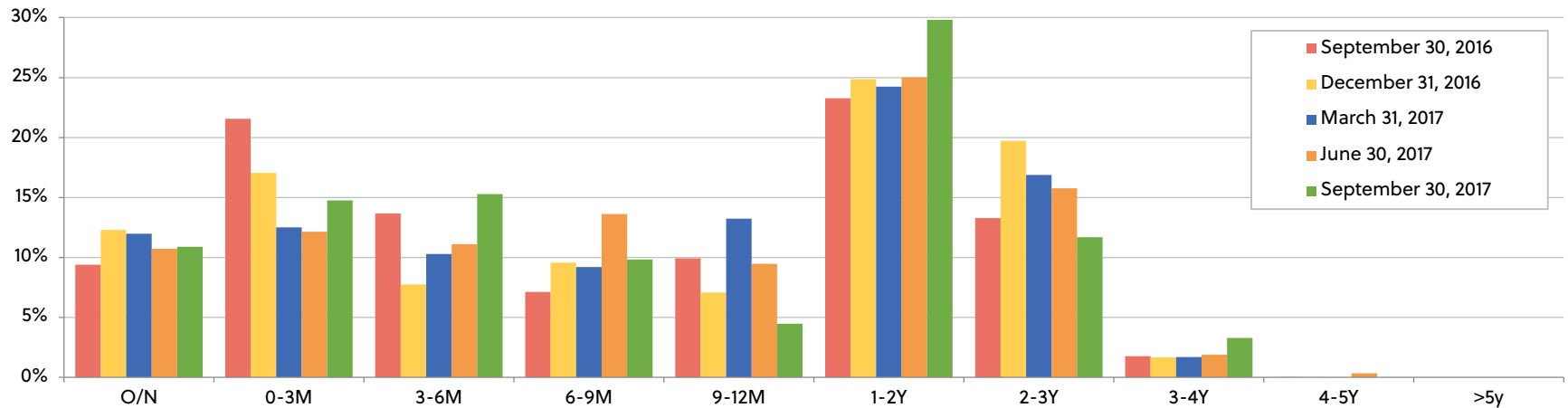


V. Changes in Portfolio Maturity Distribution

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 1- to 2-year portion of the yield curve during the third quarter of 2017.
 - Compared to 12 months ago, the County has shifted from shorter-term investments such as the 0- to 3-month range to target longer-term investments specifically the 1- to 2-year and 3- to 4- year ranges, shown below.
 - The increase in allocations to the 3- to 6-month range is due to naturally shortening of the portfolio.
 - Conversely, increases to the 1- to 2-year and the 3- to 4-year maturity ranges are due to purchases of corporate and agency holdings.
 - Targeting these areas of the curve could offer additional income potential and roll-down opportunities, which add value in a rising rate environment.
 - Overnight allocations appeared to have held steady over the quarter.
- Seasonality of cash flows is critical to maturity distribution and liquidity management and the following is a snapshot of the historical cash flow averages for upcoming quarters.
 - Over the past five years, for the quarters ending December 31, the average net **inflow** from the Investment Pool was \$357 million.
 - Over the past five years, for the quarters ending March 31, the average net **outflow** from the Investment Pool was \$192 million.

Maturity Distribution September 30, 2016 to September 30, 2017



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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