

King County Investment Pool

Portfolio Review

Quarter Ended September 30, 2015



PFM Asset Management LLC

Presented by:

PFM Asset Management LLC

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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 2015 review. Our approach included a detailed portfolio analysis and Investment Policy Compliance review, based on the County’s Investment Policy, dated September 2015.
- Our analysis was based on the Investment Pool’s holdings as of September 30, 2015, 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 minimal risk to principal.

Market Recap

- Second-quarter gross domestic product (GDP) grew at a 3.9% annualized pace, a strong rebound from the first quarter’s lackluster growth. Job growth slowed in the second quarter but the unemployment rate fell further to 5.1%, its lowest rate since April 2008. Wage growth remained subdued.
- Weakness in emerging-markets economies, most notably China, changed market psychology, triggering heightened volatility and significant downward pressure on equity markets worldwide.
- The Federal Open Market Committee (FOMC) chose not to raise the federal funds target rate at either of its two meetings during the quarter, most recently citing concern about “recent global economic and financial developments.” FOMC officials, however, continue to condition investors for a possible rate hike before year-end.
- Long-term Treasury yields trended lower throughout the quarter, supported by low inflation, slowing global growth, and a hesitant FOMC. Yields on shorter-term instruments (two years and under) initially moved in the opposite direction, rising to peaks in mid-September in anticipation of a near-term federal funds target rate increase. When those hopes were dashed, yields retreated. Short-term Treasury yields ended the quarter mostly lower by a few basis points.

Observations

- The portfolio is of very high credit quality. The majority of securities (86%) 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).
- The County’s Investment Pool balance (market value) as of September 30, 2015 was \$5.6 billion and experienced a net decrease of approximately \$43 million over the quarter, following a \$588 million increase from the prior quarter-end.
- Notable sector allocation shifts over the quarter included **increases** to corporate bank notes (\$268 million), repurchase agreements (\$177 million), US Treasuries (\$100 million), commercial paper (\$100 million), and cash equivalents and the State LGIP (\$1.1 million, combined) and **decreases** to federal agencies (\$689 million) and agency mortgages (\$362,000).
 - The portfolio continued to increase allocations to corporate sectors (bank notes and commercial paper). These sectors now account for 15% of the overall portfolio totaling \$813 million (up from 7% and \$395 million last quarter). These investments add great value to the portfolio as their yields are higher relative to similar maturity government investment options and are all investment grade. Further, recent changes to both State Code and the County’s IPS regarding commercial paper may provide additional opportunities to access and benefit from this portion of the fixed income market.
- Over the past several quarters, the Pool has shifted maturity strategy to reflect a more defensive bias in anticipation of the first fed rate hike expected to occur within the near-term. In order to do so, the Pool has removed excess overnight liquidity and reallocated those investments to attractive-yielding 3 to 9 month securities, while simultaneously shortening longer investments (greater than 3 years) and targeting the 1- to 2.5-year maturity range.
- As of September 30th, the duration of the County Investment Pool is 0.98 years, a slight decrease from a duration of 1.07 years on June 30th. Over the past several quarters, the Pool’s duration has gradually been shifted shorter, which reflects a more defensive posture as noted above.
- In anticipation of the upcoming quarter, over the past four years, for the quarters ended December 31st, the average net **inflow** in the Pool was \$296 million.
 - The County Pool appears to provide adequate liquidity, with 13.6% (or \$764 million) invested in a combination of the State LGIP, bank deposits, and repurchase agreements (overnight) and an additional 44% (or \$2.5 billion) of the portfolio’s holdings scheduled to mature within the next 12 months.

Investment Pool Portfolio Review

Portfolio Review

I. Investment Policy Compliance

II. Sector Allocation

- **U.S. Treasuries**
- **Federal Agencies**
- **Commercial Paper**
- **Corporate Bank Notes**
- **LGIP and Cash Equivalents**

III. Issuer Concentration

IV. Overall Credit Quality

V. Maturity and Duration Distribution

I. Investment Policy Compliance – Investment Policy Summary

- The Investment Policy summary is based on the current Investment Policy for the County Investment Pool, dated September 23, 2015.

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 Agreement	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); and 2. A minimum asset and capital size of \$5 billion in assets and \$175 million in capital	60 days or less
Reverse Repurchase Agreement	20%	5% per investment dealer	1. rated in the highest short-term credit rating category by at least one NRSRO; 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
Bankers' Acceptances	25% When combined with Term Repos (greater than overnight), Certificates of Deposit, Commercial Paper and Bank 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

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

Type	Maximum Portfolio Allocation	Issuer Restrictions	Credit Ratings	Maturity Restrictions
Certificates of Deposit	25% When combined with Banker's Acceptance, Term Repos (greater than overnight), Commercial Paper and Bank 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% When combined with Banker's Acceptance, Certificates of Deposit, Term Repos (greater than overnight) and Bank 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 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 NRSRO. Rated in the highest short-term rating category by at least two NRSROs. If the commercial paper is rated by more than two 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
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

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

Type	Maximum Portfolio Allocation	Issuer Restrictions	Credit Ratings	Maturity Restrictions
Bank Notes	<p>20%</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>Must be issued by a bank organized and operating in the U.S.</p> <p>Maximum 5% per issuer applied across investment types.</p>	Rated in at least the highest three long-term rating categories by at least two NRSROs.	5 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.

I. Investment Policy Compliance – County Investment Pool

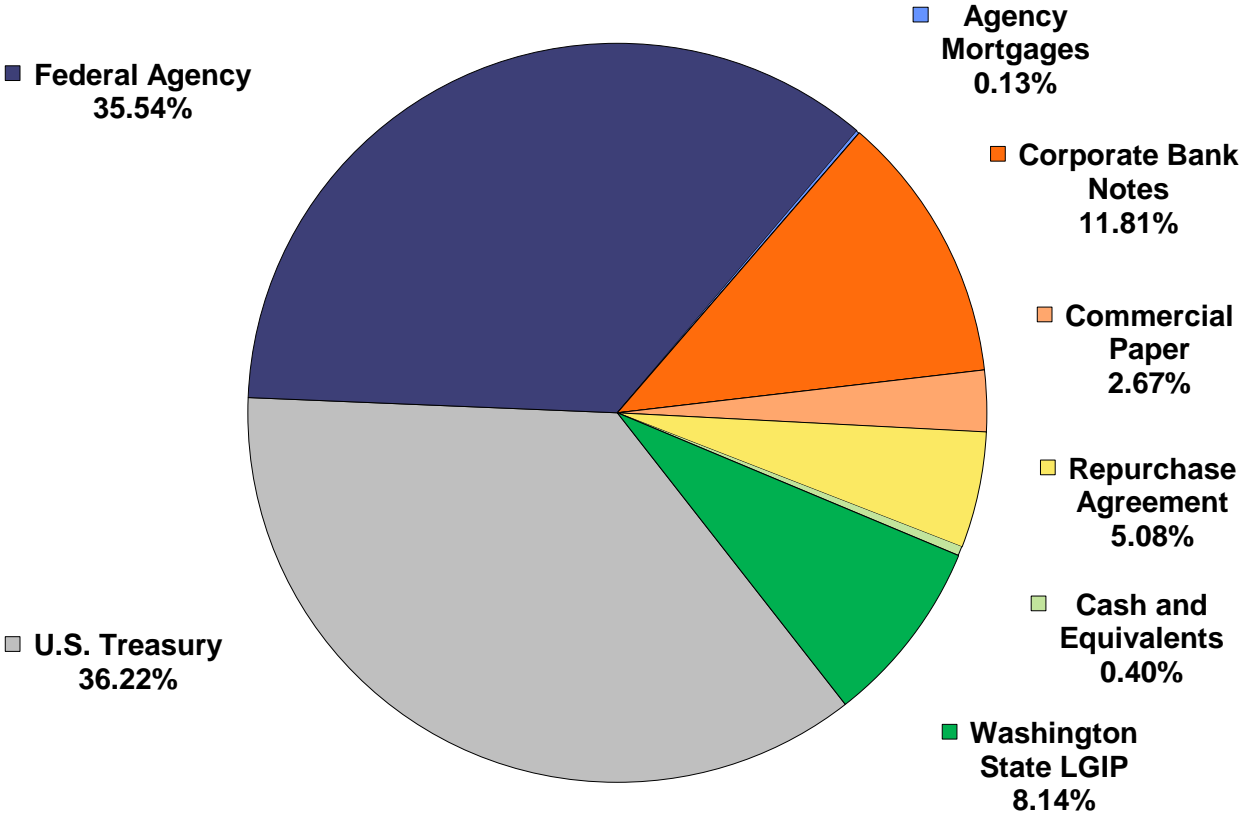
Topic	Observations
Sector Allocation	<ul style="list-style-type: none"> All sector allocations fall within the limits set forth by the County's Investment Policy Statement. The Pool is predominantly invested in U.S. government securities which are either explicitly guaranteed or carry a high level of support by the U.S. government. The County's Investment Pool balance (market value) as of September 30, 2015 was \$5.6 billion and experienced a net decrease of approximately \$43 million over the quarter, following a \$588 million increase from the prior quarter-end. <ul style="list-style-type: none"> The seasonality of the Pool's balances indicates a historical balance decrease is expected for the quarter-ended September 30th. For example, over the past four years (including September 2015), the Pool's balance has decreased, on average, by \$297 million each quarter-ended September 30th. Over the quarter, sectors that experienced balance increases, included: corporate bank notes (\$268 million), repurchase agreements (\$177 million), US Treasuries (\$100 million), commercial paper (\$100 million), and cash equivalents and the State LGIP (\$1.1 million, combined). Sectors that experienced decreases in quarter-over-quarter balances, included: federal agencies (\$689 million) and agency mortgages (\$362,000). The County continues to maintain a small tactical allocation to agency mortgage backed securities, but has not purchased new agency MBS in several quarters. On average, over the past four quarters, federal agency MBS paydowns have totaled \$408,000 per quarter.
Credit Quality	<ul style="list-style-type: none"> Securities held by the County are of very high quality and are within the limits set forth in the County Investment Policy. Approximately 72% of the County's assets are guaranteed or supported by the U.S. government. Further, approximately 8% is invested in the State LGIP, which is not rated; however, 69% of the LGIP is invested in U.S. Treasuries or Federal Agencies. Corporate allocations (both commercial paper and corporate bank notes) were increased over the quarter to nearly 15% of the portfolio from 8% at previous quarter-end; all securities are investment grade.
Maturity Distribution	<ul style="list-style-type: none"> All maturities fall within the maturity limits set forth in the County's Investment Policy. Approximately 58% of the Pool's assets mature in one year or less and approximately 24% of the portfolio is scheduled to mature within the next quarter.

Security Type	Market Value(\$)	Allocation Percentage	Within Policy Limits	Max Maturity Held	Within Policy Limits
U.S. Treasury	2,032,746,950	36.22%	✓	3.25 years	✓
Federal Agency (non-MBS)	1,994,701,352	35.54%	✓	2.65 years	✓
Agency Mortgages	7,566,150	0.13%	✓	4.14 years (WAL)	✓
Municipal Note	0	0.00%	✓	n/a	✓
Corporate Bank Notes	663,053,220	11.81%	✓	4.08 years	✓
Certificates of Deposit	0	0.00%	✓	n/a	✓
Commercial Paper	149,780,861	2.67%	✓	264 days	✓
Repurchase Agreement	285,000,000	5.08%	✓	1 day	✓
Cash and Equivalents	22,457,223	0.40%	✓	1 day	✓
Washington State LGIP	456,907,181	8.14%	✓	1 day	✓
TOTAL	\$ 5,612,212,937	100.00%			

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

II. Sector Allocation

Sector Diversification
as of September 30, 2015



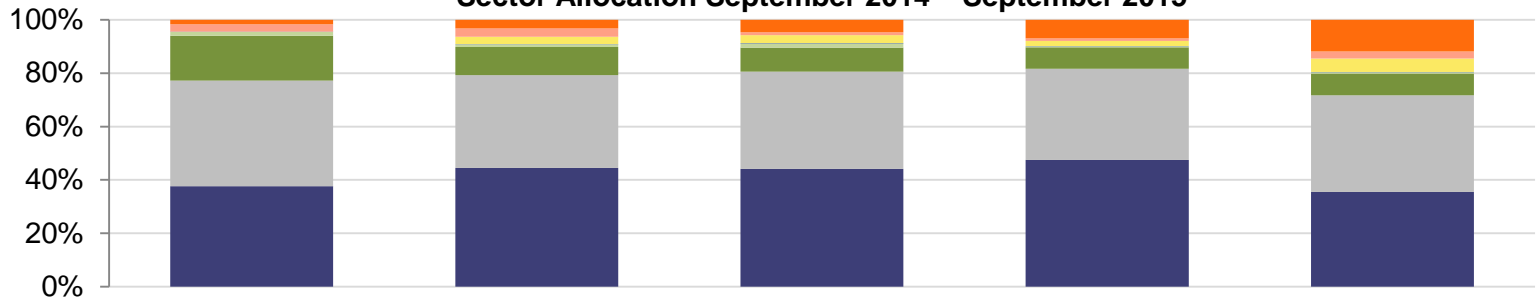
*Percentages may not total to 100% due to rounding.

II. Changes in Portfolio Sector Allocation Over Past 12 Months

Changes in Sector Allocation

- The County's investment pool percentage allocations increased in all sectors, with the exception of federal agency non-MBS (-11.9%) and agency MBS (-0.1%).
- Federal Agencies.** Federal agency allocations dipped below US Treasury allocations for the first time since September 2014. It appears that approximately \$689 million of agency holdings were either sold, called, or matured during the quarter and the proceeds were reinvested in other sectors. The majority of current agency allocations are focused in the 0 to 6 month range.
- US Treasury.** US Treasury allocations were increased by \$100 million over the quarter (on a relative basis allocations increased by 2.1% of the total portfolio). New purchases in the Treasury sector appeared to have been purchased in the 1- to 2.5-year maturity range.
- Corporate Bank Notes.** The portfolio added funds to corporate bank notes over the quarter, marking a continued trend of increasing allocations to this sector over the past several quarters. The past four quarters experienced net increases to the corporate bank note sector of \$84 million, \$68 million, \$157 million, and \$267 million. This sector now accounts for 11.8% of the overall portfolio totaling \$663 million (compared to 7% or \$395 million last quarter).
- Commercial Paper.** The portfolio currently owns three commercial paper issuers totaling \$150 million (or 2.7% of the total portfolio), representing an increase of \$100 million over the quarter. As described in more detail later in this report, Washington State Code was amended during the quarter with regard to commercial paper guidelines. The County's Investment Policy was subsequently amended. Ultimately, this State Code and IPS change provides more flexibility for the County to invest in this sector.
- Washington State LGIP.** Balances invested in the State LGIP remained relatively consistent over the quarter, near \$450 million, and continued to serve as the Pool's primary liquidity vehicle. This sector accounts for 8% of the overall portfolio.
- Repurchase Agreements and Bank Deposits.** At quarter-end, allocations to repurchase agreements had increased by \$177 million over the quarter and accounted for 5% of the total portfolio. Bank deposits were increased modestly by approximately \$1 million over the quarter to \$23 million (less than 0.5% of the total portfolio).

Sector Allocation September 2014 – September 2015



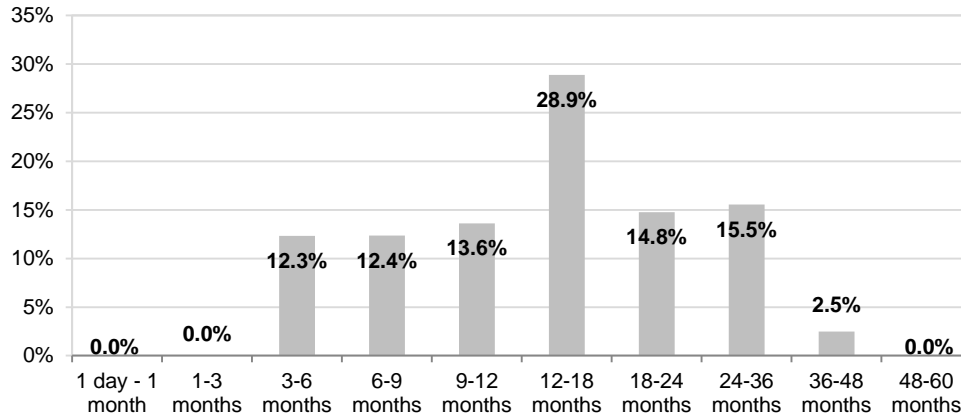
	September 30, 2014	December 31, 2014	March 31, 2015	June 30, 2015	September 30, 2015
Federal Agencies	37.63%	44.52%	44.15%	47.45%	35.54%
U.S. Treasury	39.58%	34.75%	36.40%	34.17%	36.22%
Washington State LGIP	16.81%	10.51%	9.01%	8.08%	8.14%
Cash and Equivalents	1.44%	1.02%	1.51%	0.38%	0.40%
Agency Mortgages	0.18%	0.16%	0.17%	0.14%	0.13%
Municipal Notes	-	-	-	-	-
Repurchase Agreements	-	2.72%	3.00%	1.91%	5.08%
Commercial Paper	2.68%	3.12%	1.08%	0.88%	2.67%
Corporate Bank Notes	1.67%	3.20%	4.69%	6.99%	11.81%

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

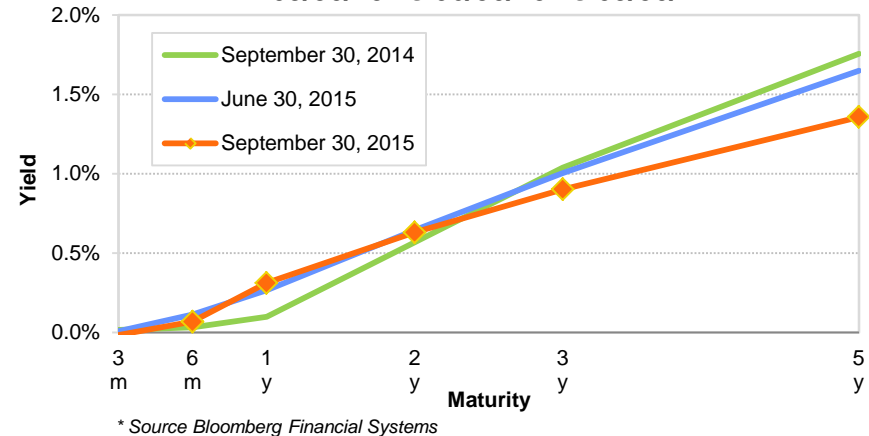
II. Sector Allocation – U.S. Treasury Securities

Topic	Observations
Observations	<ul style="list-style-type: none"> The County's balances held in U.S. Treasuries increased by \$100 million over the quarter and represent 36% of the total portfolio (up from 34% at previous quarter-end). US Treasury allocations now slightly outweigh federal agency allocations (36.2% to 35.5%), the first time in over a year. <ul style="list-style-type: none"> Over the quarter, it appears the Pool targeted approximately \$250 million in new US Treasury notes with maturities in the 1- to 2.5-year maturity range. As shown in the chart on the right below, over the past 12 months, largely the result of ever-increasing expectations of a first Fed overnight rate hike, US Treasury yields on maturities in the 6-month to 2-year area of the yield curve have increased. On the flip side, yields beyond 2 years have fallen, primarily the result of low inflation pressures. <ul style="list-style-type: none"> This has resulted in the yield curve "twisting" around the 2.5 year portion of the yield curve, with 1- to 2-year maturities steepening and 3+ year maturities flattening. The new shape of the yield curve now appears more attractive near the recent fulcrum of yield curve twisting: the 1- to 2.5-year maturity range. The majority of the Pool's Treasury investments (\$1.3 billion, 62% of Treasury holdings, and 22% of the overall portfolio) have remaining maturities of greater than one year and are positioned in the steeper portions of the US Treasury yield curve. The County's weighted average maturity (WAM) of its Treasury allocation decreased modestly over the quarter by 55 days, from 528 days on June 30th to 473 days on September 30th, a strategy that appears consistent with the value and steepness in the current yield curve. The chart below, on the left, illustrates the current maturity distribution of the County's allocations to US Treasuries and the chart on the right illustrates the current shape of the US Treasury yield curve, compared to the yield curve six months ago and one year ago. <ul style="list-style-type: none"> Of the County's Treasury allocations, 38% is allocated to maturities less than 12 months (versus 26% last quarter). This increase is the result of roll-down over the quarter as these securities naturally approached maturity. As liquidity permits and new investment opportunities become available, these short-term US Treasury holdings (less than 12 months) are ideal to trade for (1) longer-term Treasury or corporate bank note investments targeted to the steepest portions of the yield curve and/or (2) higher-yielding, similar-maturity investments in other sectors, such as federal agencies, commercial paper, or short-term corporate bank notes.

U.S. Treasury Maturity Distribution as of September 30, 2015



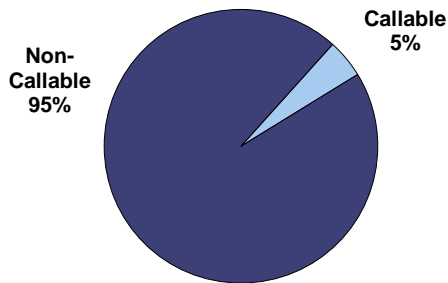
U.S. Treasury Yield Curve 09/30/15 vs 06/30/15 vs 09/30/14



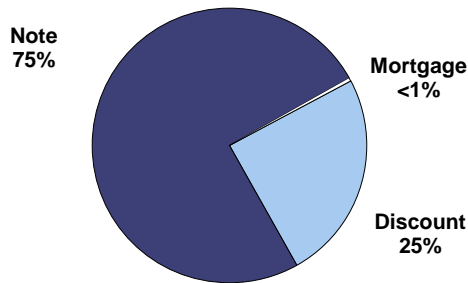
II. Sector Allocation – Federal Agencies

Topic	Observations			
Structure (as % of Federal Agency Allocations)	<ul style="list-style-type: none"> Non-Callable 95% Callable 5% 	<ul style="list-style-type: none"> Discount Notes 25% Coupon bearing Notes 75% Agency Mortgage <1% 		
Diversification (as % of Federal Agency Allocations)	<ul style="list-style-type: none"> Freddie Mac (FHLMC) 12% Federal Home Loan Bank (FHLB) 41% Fannie Mae (FNMA) 25% 	<ul style="list-style-type: none"> Federal Farm Credit Bank (FFCB) 22% Freddie Mac Mortgage-Backed (FHR) 0% Fannie Mae Mortgage-Backed (FNR) <1% 		
Conclusions	<ul style="list-style-type: none"> The County's Federal Agency allocation continues to be well diversified among the four major issuers and among security structures. All issuer allocations fall within the issuer guidelines set forth in the County's investment policy (max per agency issuer 35%). Federal Agency allocations decreased by \$689 million over the quarter. It appears approximately \$226 million of the decreases was the result of callable agencies being called or sold and an additional \$363 million maturing. From a security structure standpoint (the ratio of non-callable to callable securities), the trend of declining callable securities continued over the quarter, as callable allocations decreased to 5% of agency holdings versus 12% at the previous quarter-end. <ul style="list-style-type: none"> Over the past several quarters, increasing yields had continuously decreased the likelihood that callable securities would be called. As a result, a portion of the Pool's callable securities that passed their call date and are now no longer callable contributed to the portfolio's decline in callable securities. However, the opposite effect occurred in 3Q15, as yields rallied, callable securities came "into the money," and those securities were called. The combination of these two effects has resulted in the County's allocation to callable agencies declining to its lowest allocation since December 2010. The County Pool's only remaining allocation to agency mortgages is in Fannie Mae pools, totaling approximately \$7.6 million, which continue to paydown principal (on average \$408,000 per quarter over the past year) and naturally reduce the County's allocation to agency mortgages. 			

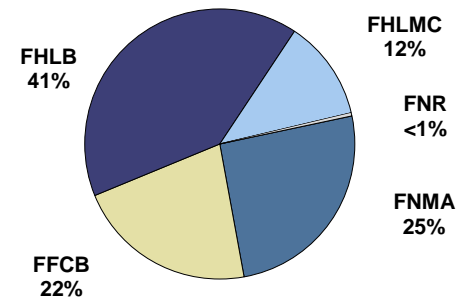
Callable vs. Non-Callable as of September 30, 2015



Structure Distribution as of September 30, 2015



Issuer Diversification as of September 30, 2015



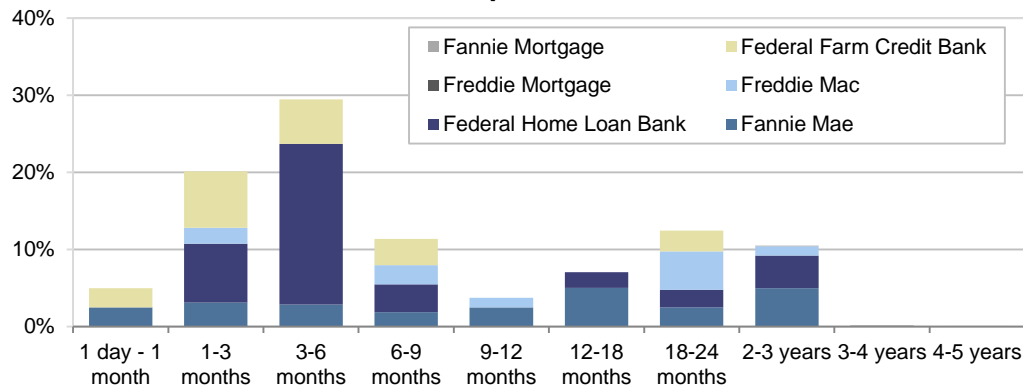
*All calculations above are based on total cash equivalents exposure, not overall Portfolio.

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

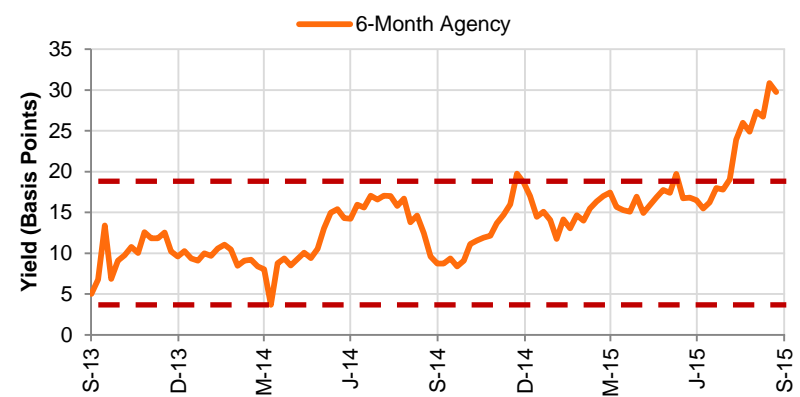
II. Sector Allocation – Federal Agencies

Topic	Observations
Maturity Distribution	<ul style="list-style-type: none"> The County's Federal Agency maturity distribution falls within the limits set forth by its Investment Policy Statement. Over the quarter, the County's weighted average maturity (WAM) of Federal Agency allocations decreased slightly by 4 days, from 299 days on June 30th to 295 days on September 30th. <ul style="list-style-type: none"> It appears that approximately \$689 million in agency securities were either called, sold, or matured during the quarter and the proceeds were reinvested in other sectors. Approximately \$226 million of the outflow from the agency sector appears to be attributed to called agency securities. As of September 30, 2015, 70% of agency allocations were invested in maturities less than 12 months and 55% in maturities less than 6 months. Comparatively, 38% of US Treasury allocations were invested in maturities less than 12 months and 12% in maturities less than 6 months. Conversely, while 30% of agency allocations were invested beyond 1 year, 62% 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 of shorter-term agencies can be attributed to the combination of (1) discount note yields increasing of late and providing higher yields compared to similar duration Treasury securities (as shown in the chart on the right, discount note yields continue to increase) and (2) 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 US Treasury security is typically preferred. Over the past several quarters, allocations to callable agency securities have declined significantly. The combination of (1) callable securities passing their call date and (2) the larger than usual volume and absolute dollar amount of called federal agency securities during the most recent quarter resulted in the portfolio now owning a 5% allocation to callable agency securities (or \$91 million). This is the lowest allocation to callable agencies, from both a percentage and dollar amount, since December 2010.

Federal Agency Maturity Distribution by Name as of September 30, 2015



Short-Term Federal Agency Yields Past 18 Months



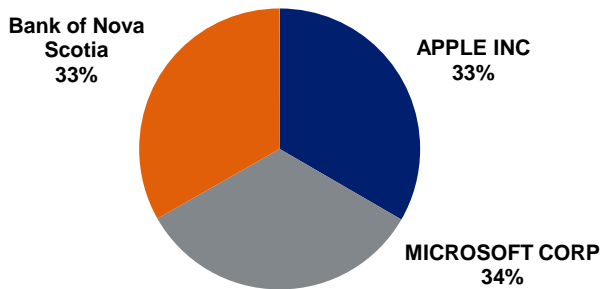
* Source Bloomberg Financial Systems

- 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.

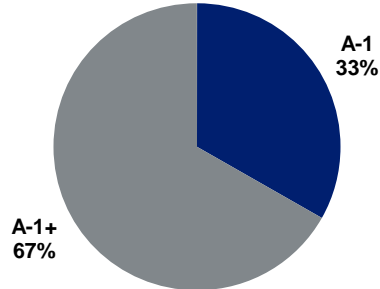
II. Sector Allocation – Commercial Paper

	Observations
Issuer Diversification	<ul style="list-style-type: none"> The County allocations to commercial paper increased over the quarter, by approximately \$100 million, and now account for 2.7% of the total portfolio. The portfolio now owns three commercial paper issuers: Apple Inc, Microsoft Corp, and Bank of Nova Scotia. Over the past several quarters, the County has maintained, or increased, allocations to high-quality commercial paper issues, a strategy that benefits the portfolio from the incremental yield available in this sector relative to government securities of similar maturity. It appears the County continues to regularly reinvest the proceeds of commercial paper maturities into new commercial paper issues. <ul style="list-style-type: none"> “Rolling” short-term commercial paper is an attractive investment strategy relative to most other ultra short-term permitted investment options in the current fixed income market. All allocations fall within the permitted investment guidelines of 5% per issuer and 25% maximum to the sector.
Credit Distribution	<ul style="list-style-type: none"> Standard & Poor’s rates the short-term credit of Apple Inc and Microsoft Corp as A-1+ and Bank of Nova Scotia A-1. Moodys rates the short-term credit of all of the County’s CP issuers as P-1.
Conclusions	<ul style="list-style-type: none"> Commercial paper provides the County an opportunity and an investment outlet to access non-bank, corporate debt (industrial, technology, etc.), as the county’s IPS limits corporate note exposure to banks. During the quarter, State Code was amended to reflect a change that CP issuers (1) now require a long-term rating (for maturities greater than 100 days) in the highest three rating categories (versus highest two categories previously) and (2) the maximum maturity of CP was increased to 270 days (versus 180 days previously). These changes were then reflected and adopted in the County’s Investment Policy. These changes should provide the County with greater flexibility and access to the commercial paper market. High-quality commercial paper has offered 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. As a result, the County’s portfolio may benefit from additional allocations to other high-quality commercial paper issuers. The commercial paper yield curve is steepest in maturities beyond three months (chart on far right).

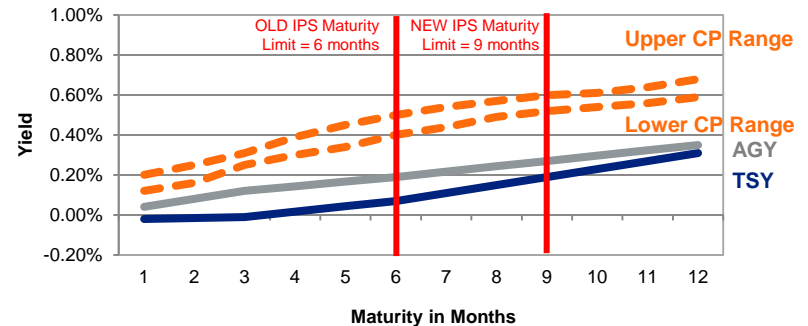
Issuer Distribution
as of September 30, 2015



Credit Distribution
as of September 30, 2015



Current Short-Term Yields
as of September 30, 2015



*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

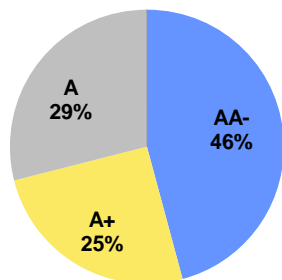
II. Sector Allocation – Corporate Bank Notes

	Observations
Issuer Diversification	<ul style="list-style-type: none"> The County has added allocations to high-quality corporate bank notes for the fifth consecutive quarter. This sector now accounts for 11.8% of the overall portfolio totaling \$662 million, an increase of \$268 million over the quarter. The portfolio's corporate bank note allocations include eight issuers (compared to four issuers at previous quarter-end): US Bank (\$124 million or 2.2% of the total portfolio), Bank of America (\$119 million or 2.1%), Toronto Dominion Bank (\$92 million or 1.6%), Royal Bank of Canada (\$87 million or 1.6%), PNC Bank (\$73 million or 1.3%), Wells Fargo Bank (\$67 million or 1.2%), Bank of Nova Scotia (\$65 million or 1.2%), and Bank of Montreal (\$35 million or 0.6%). Of the County's allocations to corporate bank notes, \$238 million (or 36% of corporate bank notes, down from 44% at previous quarter end) 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. Ultimately, 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 bank note holdings to the next call date, the weighted average maturity of these investments is 1.9 years and the weighted average yield is 1.27%. For perspective, the yield on a 2-year Treasury note is less than 0.63%, which illustrates the significant value that the corporate bank note space offers relative to similar maturity government securities. Of the County's total allocation to this sector, 75% is allocated to maturities beyond 1 year. As shown in the chart below, high-quality corporate notes with maturities between 1 and 5 years offer a noticeable yield advantage relative to Treasuries. All allocations fall within the permitted investment guidelines of 5% per issuer (please refer to following pages) and 20% maximum to the sector.
Credit Distribution	<ul style="list-style-type: none"> All ratings are investment grade and fall within the credit guidelines in the County's IPS S&P ratings (long-term and short-term): <ul style="list-style-type: none"> Bank of America (A and A-1); PNC Bank (A and A-1); US Bank (AA- and A-1+); Wells Fargo Bank (A+ and A-1+); Toronto Dominion Bank (AA- and A-1+); Royal Bank of Canada (AA- and A-1+); Bank of Nova Scotia (A+ and A-1); Bank of Montreal (A+ and A-1) Moodys ratings (long-term and short-term): <ul style="list-style-type: none"> Bank of America (A1 and P-1); PNC Bank (Aa2 and P-1); US Bank (Aa3 and P-1); Wells Fargo Bank (Aa1 and P-1); Toronto Dominion Bank (Aa1 and P-1); Royal Bank of Canada (Aa3 and P-1); Bank of Nova Scotia (Aa2 and P-1); Bank of Montreal (Aa3 and P-1)

Issuer Distribution
as of September 30, 2015

Issuer	% of Corporates	% of Portfolio
US Bank	19%	2.2%
Bank of America	18%	2.1%
Toronto Dominion	14%	1.6%
Royal Bank of Canada	13%	1.6%
PNC Bank	11%	1.3%
Wells Fargo	10%	1.2%
Bank of Nova Scotia	10%	1.2%
Bank of Montreal	5%	0.6%

Credit Distribution (S&P)*
as of September 30, 2015



1-5 Year Financial Corporate/Treasury Yield Spreads
September 2013 through September 2015



* "Credit Distribution" calculations above are based on total commercial paper exposure, not overall Portfolio.

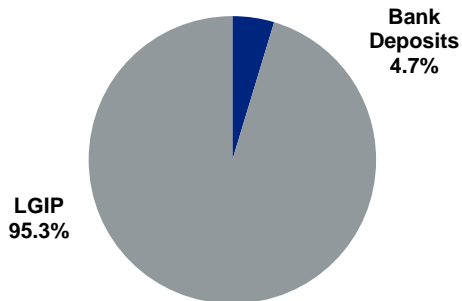
**Percentages may not total to 100% due to rounding.

* Source Bloomberg Financial Systems

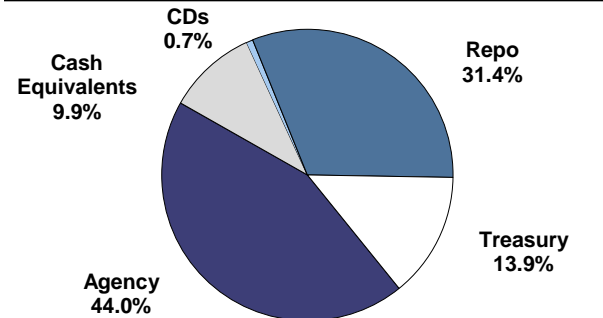
II. Sector Allocation – LGIPs and Cash Equivalents

	Underlying Investments	Rating (Short-Term: S&P/Moody's/Fitch)	Observations
Washington State LGIP	<ul style="list-style-type: none"> Federal Agencies 44.0% U.S. Treasuries 13.9% Cash Equivalents 9.9% Certificates of Deposit 0.7% Repurchase Agreements 31.4% <i>As of September 30, 2015</i>	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> The County currently has allocated \$457 million to the Washington State LGIP, unchanged over the quarter. While the overall allocation by the County to the State LGIP has declined, the LGIP continues to serve as the primary overnight liquidity vehicle for the portfolio and a minimum allocation of 8% to 10% has been generally maintained. Similar to the County Pool's allocation changes over the quarter, the State LGIP also decreased federal agency discount notes quite significantly (-22%), while most other sectors experienced increases in percentage allocations over the quarter, with repurchase agreements leading the way at a 9.1% increase.
Cash Equivalents	<ul style="list-style-type: none"> State LGIP 95.3% U.S. Bank 3.3% Key Bank 1.1% Bank of America 0.3% <i>As of September 30, 2015</i>	<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 100% collateralized by the Public Deposit Protection Commission. The County increased allocations to bank deposits by approximately \$1 million over the quarter to \$22 million. The US Bank account now accounts for over 70% of the Pool's bank deposit allocations (Key Bank 23% and Bank of America 7%). 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 has and continues to provide incremental yield advantages relative to many shorter-term investment options of similar maturity.

Cash Equivalents Distribution as of September 30, 2015



Washington State LGIP Sector Distribution as of September 30, 2015



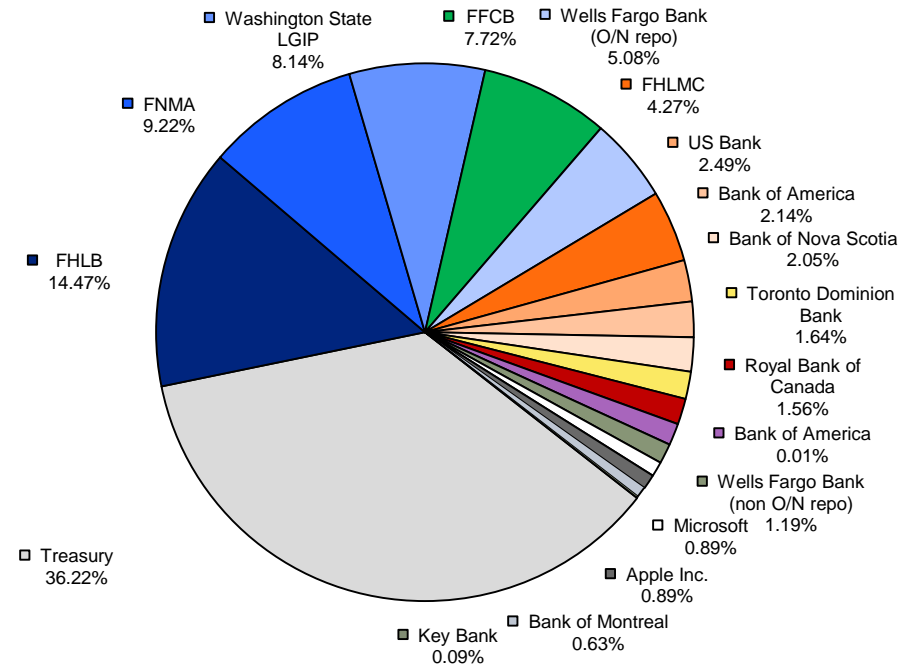
*All calculations above are based on total cash equivalents exposure, not overall Portfolio.
 **Percentages may not total to 100% due to rounding.

III. Issuer Concentration

Issuer Exposure

- The County continues to maintain a well-diversified portfolio by issuer, as is evidenced in the chart below.
- Approximately 72% of the portfolio is allocated directly to U.S. government guaranteed or government supported entities.
- Of the remaining 28% of the portfolio, 14% is allocated to ultra short-term or overnight investment vehicles, including the State LGIP, repurchase agreements, and bank deposits. The remaining 14% is allocated to credit issuers, including commercial paper and corporate bank notes.
- When including the Pool's indirect exposure to issuers through its holdings in the Washington State LGIP, the Pool's allocation to securities issued by U.S. government or government supported entities would increase to 77%.
- The County added five new corporate issuers to the portfolio over the quarter, including: Bank of Nova Scotia (Bank Note), Toronto Dominion Bank (Bank Note), Royal Bank of Canada (Bank Note), Microsoft (CP), and Bank of Montreal (Bank Note).
- Each of the corporate issuers the County owns in the portfolio (including the County's bank deposits) falls within the 5% corporate issuer limit when aggregated among all sectors, as shown in the charts below.

Issuer Distribution	Value	Percentage	Issuer Limit
Treasury	2,032,746,950	36.22%	100%
FHLB	811,814,074	14.47%	35%
FNMA	517,258,620	9.22%	35%
Washington State LGIP	456,907,181	8.14%	25%
FFCB	433,484,121	7.72%	35%
Wells Fargo Bank (O/N repo)	285,000,000	5.08%	25%
FHLMC	239,710,688	4.27%	35%
US Bank	139,876,421	2.49%	5%
Bank of America	120,152,845	2.14%	5%
Bank of Nova Scotia	114,832,900	2.05%	5%
Toronto Dominion Bank	91,996,284	1.64%	5%
Royal Bank of Canada	87,464,360	1.56%	5%
PNC Bank	73,432,959	1.31%	5%
Wells Fargo Bank (non O/N repo)	66,942,939	1.19%	5%
Microsoft	49,996,750	0.89%	5%
Apple Inc.	49,981,361	0.89%	5%
Bank of Montreal	35,356,664	0.63%	5%
Key Bank	5,257,821	0.09%	5%
Total	5,612,212,937	100.00%	



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

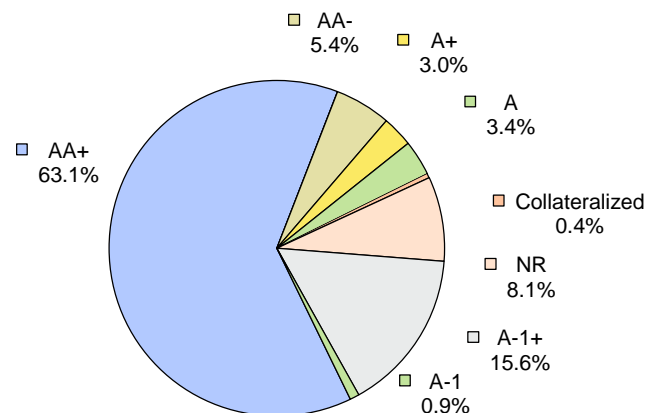
*For the purposes of totaling issuer concentration, issuers are aggregated across all sector types. It is noted however that issuers across sector types may maintain separately rated issuer credits.

IV. Overall Credit Quality

County Investment Pool Credit Analysis

- The County Pool's overall average credit rating 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.
- During the quarter, the County added exposure to high quality corporate issuers, including Bank of Nova Scotia (\$115 million or 2.0% of the total portfolio), Toronto Dominion Bank (\$92 million or 1.6% of the total portfolio), Royal Bank of Canada (\$87 million or 1.6% of the total portfolio), Microsoft (\$50 million or 0.9% of the total portfolio), and Bank of Montreal (\$35 million or 0.6% of the portfolio).
- Allocations were maintained to bank notes for Bank of America, US Bank, Wells Fargo, PNC Bank, and commercial paper for Apple Inc.
 - During the quarter, Washington State Code and the County's IPS were amended to reflect a minimum long-term credit rating on CP issuers with maturities greater than 100 days of at least A (or equivalent). This was a change from the previous minimum of at least AA (or equivalent).
- The County has additional corporate exposure through its 0.4% allocation to bank deposits.
 - These deposits are 100% collateralized by U.S. Treasury and Federal Agency securities, as the County's deposits are covered by the Public Deposit Protection Commission.
- Indirect corporate exposure also comes through the County's investment in the Washington LGIP.
 - Through the LGIP, 2.6% of the County's Pool is allocated indirectly to corporate securities (repurchase agreements and certificates of deposit).
 - The collateralization of the corporate securities held by the LGIP minimizes any credit risk.
- The 8.1% NR allocation represents the County's investment in the Washington State LGIP, which is not currently rated by any ratings agency.
- PFM has no concerns regarding the Pool's current credit distribution.

Credit Distribution* as of September 30, 2015



Issuer Ratings Table (Corp/CD) as of September 30, 2015

Issuer Distribution	Sectors Invested	S&P Short	S&P Long	Moody's Short	Moody's Long
Apple Inc.	CP	A-1+	AA+	P-1	Aa1
Bank of America	Corp	A-1	A	P-1	A1
Bank of Montreal	Corp	A-1	A+	P-1	A1
Bank of Nova Scotia	Corp/CP	A-1	A+	P-1	Aa2
Microsoft	CP	A-1+	AAA	P-1	Aaa
PNC Bank	Corp	A-1	A	P-1	Aa2
Royal Bank of Canada	Corp	A-1+	AA-	P-1	Aa3
Toronto Dominion Bank	Corp	A-1+	AA-	P-1	Aa1
US Bank	Corp	A-1+	AA-	P-1	Aa3
Wells Fargo Bank	Corp	A-1+	AA-	P-1	Aa1

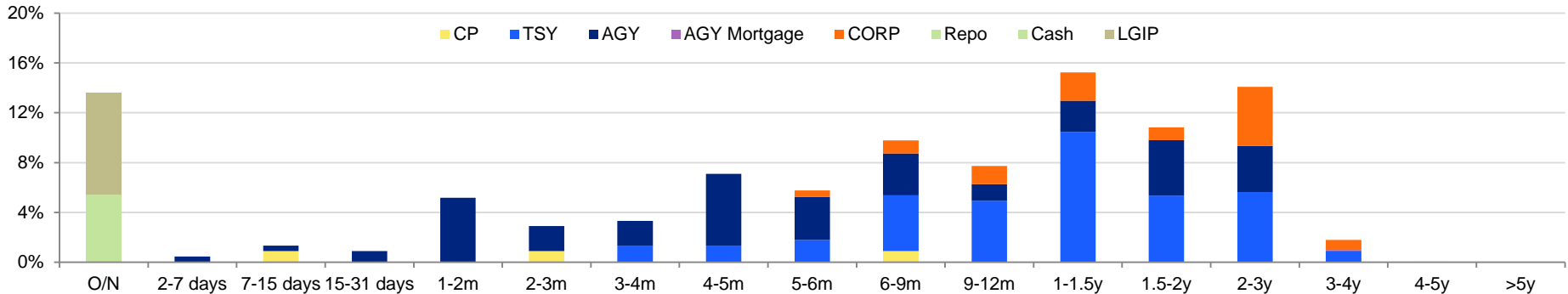
*Ratings by S&P; Percentages may not add to 100% due to rounding.

**Bank ratings of the depositories for the collateralized securities are given on page 14.

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 – 58% of the portfolio – are scheduled to mature or have a call date within the next twelve months. This percentage is only slightly higher compared to the previous quarter end (57%). 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 US Treasury, federal agency, and corporate bank note investments to naturally shorten in maturity and roll-down the yield curve, Reallocate a portion of overnight investments into higher-yielding, short-term investment vehicles, including: commercial paper, corporate bank notes, and agency discount notes, Target duration extensions in the following spaces: <ul style="list-style-type: none"> US Treasuries in the 1.5- to 2.5-year portion the yield curve Corporate bank notes in the 12- to 18-month range and beyond 2.5 years Over the quarter, the WAM of the portfolio shortened to 359 days from 373 days at previous quarter-end. <ul style="list-style-type: none"> New Treasury and corporate bank note securities purchased with maturities in the 1- to 3-year maturity range (approximately \$440 million over the quarter) helped buoy the portfolio’s weighted average maturity near one year.
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 13.6% (or \$764 million) invested in a combination of the Washington State LGIP, bank deposits, and repurchase agreements (overnight liquidity), an additional 3% 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 for the fourth quarter. On average, over the past four years, the County has experienced an average net cash inflow of \$296 million in quarters ended December 31st.

Maturity Distribution as of September 30, 2015

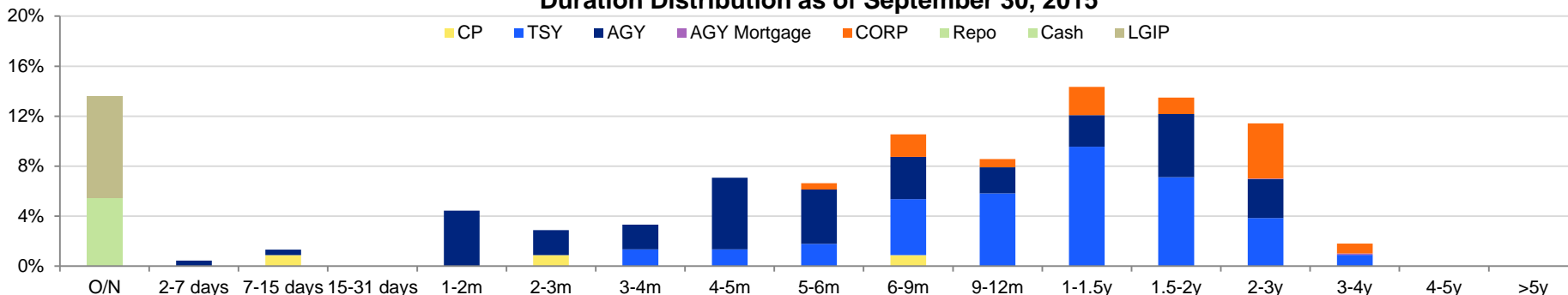


- Agency Mortgage maturities are calculated as average life. Average life data taken from Bloomberg Financial Markets
- Callable securities shown to their call date.
- All other security maturities are calculated as days to maturity. WA LGIP is considered to have a one day maturity.

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. For example, 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 is 0.98 years, a slight decrease from a duration of 1.07 years on June 30th. Over the past four quarters, the Pool's duration has gradually been shifted shorter (3Q14 1.42 years, 4Q14 1.26 years, 1Q15 1.14 years, 2Q15 1.07 years, 3Q15 0.98 years), which appears to reflect a defensive posture as the potential for the first fed overnight rate hike looms. <ul style="list-style-type: none"> The decrease in portfolio duration can also be attributed to a natural shortening of a majority of previously purchased securities. When comparing the weighted average duration of the aggregate portfolio to the WAM of the portfolio, it is observed that the duration (0.98 years) and the WAM (0.98 years) are virtually the same. This difference in duration and WAM has narrowed to zero over the past several quarters (largely due to declining overall allocations to callable agencies). Dating back 24 months, the spread between the portfolio's duration and WAM has decreased consistently from 0.41 years on September 30, 2013 to zero, as of September 30, 2015. For performance and duration comparative 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. As of October 1, 2015, the weighted average duration of the blended benchmark is 1.21 years. <ul style="list-style-type: none"> Over the past several quarters, the County portfolio has shifted to a more defensive bias and as of September 30th was 81% of the benchmark. In anticipation of 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, 2015



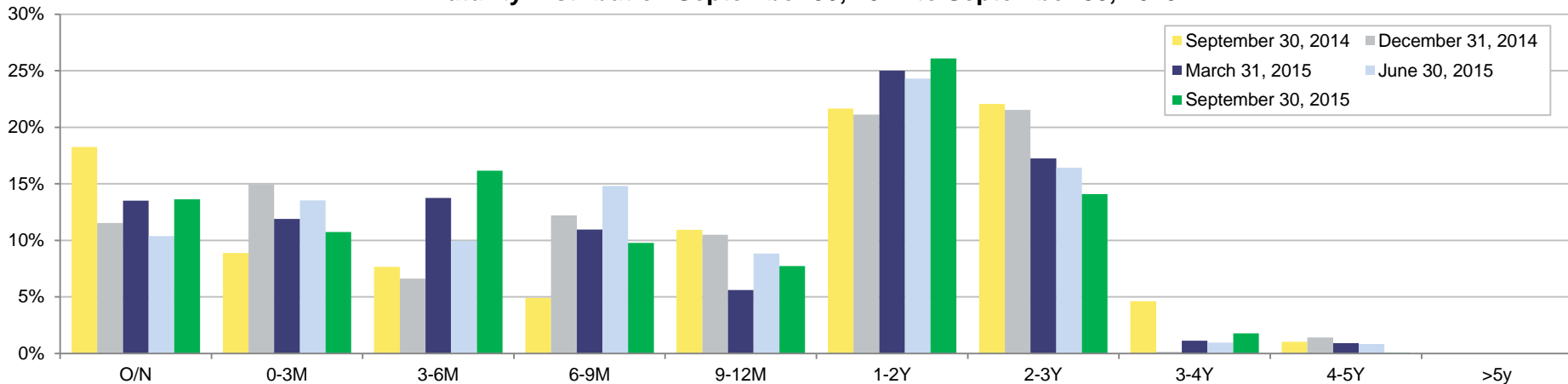
- Agency Mortgage durations are shown as effective duration taken from Bloomberg Financial Markets.
- Duration for Federal Agency Discount Notes and Repurchase Agreements are calculated as days to maturity. WA LGIP and bank deposits considered to have a one day duration.
- All other security durations 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 (dark green bars) in relation to previous periods, a few primary observations are noted:
 - Approximately 12 months ago, the County targeted tactical allocations to the very steep “2-3 Year” and “3-4 Year” maturity range (27% of the portfolio as of 3Q14 versus 16% as of 3Q15), and over the past few quarters those securities have been held, rolling down the yield curve, and naturally shortening in duration to the “1-2 Year” maturity range.
 - The County’s previous tactical allocations to the “3-4 Year” maturity range benefited the portfolio. Over the 12-month period ending September 30, 2015, 1-5 Year Treasuries outperformed 1-3 Year Treasuries by approximately 99 basis points.
 - With the prospect of rising interest rates based on expectations for a Fed rate hike, the portfolio appears to have been positioned with less emphasis on securities in longer durations to help protect market values against the potential rising interest rates.
 - As of September 30, 2015, 26% of the portfolio is positioned in the 1 to 2 year area of the curve, representing a balance of defensive duration posture and steep yield curve positioning (maturities beyond 1 year).
 - Compared to prior quarters, the County has both continuously decreased overnight allocations and increased allocations to the 3 to 12 month maturity ranges, largely due to new credit issue purchases, including high-quality commercial paper and short-term corporate bank notes and increased value in federal agency discount notes. These sectors continue to offer incremental yield advantage relative to similar maturity Treasuries.
 - As noted above, overnight allocations appear to have been gradually reduced. Removing excess liquidity from overnight investment vehicles and aligning short-term maturities to future cash flow dates helps to maximize interest earnings in the current low, short-term interest rate environment.
- 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 four years, for the quarters ending December 31st, the average net **inflow** in the Investment Pool was \$296 million.
 - Over the past four years, for the quarters ending March 31st, the average net **outflow** in the Investment Pool was \$224 million.

Maturity Distribution September 30, 2014 to September 30, 2015



- Agency Mortgage maturities are calculated 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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