

# King County Investment Pool

Portfolio Review

**Quarter Ended December 31, 2020** 



# **Executive Summary**

Purpose, Scope and Approach	<ul> <li>PFM Asset Management LLC ("PFM") prepared this report to update our ongoing analysis and to address any Investment Pool developments since our September 2020 review. Our approach included a detailed portfolio analysis and Investment Policy Compliance review, based on the County's Investment Policy, dated July 26, 2017.</li> <li>Our analysis was based on the Investment Pool's holdings as of December 31, 2020, with reference to holdings in past periods.</li> <li>The review encompasses all current investments in the County's Investment Pool.</li> </ul>
Investment Program and Portfolio Review	<ul> <li>PFM reviewed the County's portfolio with respect to Investment Policy Compliance, Sector Allocation, Issuer Concentration, Credit Quality, Maturity Distribution, and Duration Distribution.</li> <li>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.</li> </ul>
Market Recap	<ul> <li>U.S. economic conditions are characterized by: <ul> <li>Slow vaccine rollout amid rising COVID-19 cases, hospitalizations, and deaths in the U.S.</li> <li>Weakening job growth and slowing consumer spending</li> <li>Stable credit conditions amid continued Federal Reserve accommodation and new fiscal stimulus</li> <li>High equity valuations</li> <li>New administration in Washington, but democracy in crisis amid U.S. Capitol riot</li> </ul> </li> <li>The U.S. Treasury yield curve steepened modestly in December as rates on 10-year and 30-year maturities rose, while shorter-term rates remained anchored near zero.</li> <li>Congress passed a \$900 billion economic relief package, including new household stimulus checks, expanded unemployment benefits, support for small businesses and schools, and resources for the vaccine effort.</li> <li>At its December meeting, the Federal Reserve held rates near zero and reaffirmed its commitment that monetary policy will continue to support the economy until the recovery is complete and the economy achieves maximum employment and inflation consistent with the Fed's new 2% average over time. Market expectations indicate short-term interest rates are likely to stay near zero through the foreseeable future.</li> <li>U.S. labor market weakened materially as the U.S. economy lost 140,000 jobs in December, driven by sharp, COVID-induced losses in leisure and hospitality. The unemployment rate held at 6.7%.</li> <li>American consumers cut back spending on both goods and services. Meanwhile, personal income was dragged down as government loan programs ended and other social programs expired.</li> </ul>
Observations	<ul> <li>The portfolio is of very high credit quality. The majority of securities (89%) are explicitly guaranteed or carry a high level of support by the U.S. Government (U.S. Treasury, federal agency and U.S. instrumentalities) and/or possess overnight liquidity (Washington State LGIP, bank deposits, and repurchase agreements).</li> <li>The County maintained broad issuer diversification during the quarter.</li> <li>The Portfolio's duration over the quarter was 96% of the benchmark's duration.</li> <li>The County Pool appears to provide adequate liquidity, with 17% (or \$1.4 billion) invested in a combination of the State LGIP, bank deposits, and repurchase agreements (overnight) and 14% of the portfolio invested in U.S. Treasuries.</li> </ul>



#### **Investment Pool Portfolio Review**

#### **Portfolio Review**

- I. Investment Policy Compliance
- **II.** Sector Allocation
  - U.S. Treasuries
  - Federal Agencies
  - Supranational Agencies
  - Commercial Paper
  - Corporate Notes
  - Repurchase Agreements
  - LGIP and Cash Equivalents
- III. Issuer Concentration
- IV. Overall Credit Quality
- V. Maturity and Duration Distribution



### **Investment Policy Compliance – Investment Policy Summary**

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

Туре	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.	Federal Reserve Bank of New York  In 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 the purposes of aggregating ers across sectors, overnight repo	
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.	<ol> <li>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</li> <li>A minimum asset and capital size of \$5 billion in assets and \$175 million in capital</li> </ol>	Overnight only
Reverse Repurchase Agreement	20%	5% per investment dealer	<ol> <li>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</li> <li>a minimum asset and capital size of \$5 billion in assets and \$175 million in capital</li> </ol>	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)**

Туре	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	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)**

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

#### **Additional Notes to the Investment Policy**

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



# I. Investment Policy Compliance – County Investment Pool

Topic	Observations
Sector Allocation	<ul> <li>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.</li> <li>The County's Investment Pool balance (market value) as of December 31, 2020 was \$8.1 billion, relatively unchanged from last quarter.</li> <li>The County's investment pool decreased percentage allocations to the Washington State LGIP (-4.27%), Cash and Cash Equivalents (-1.39%), U.S. Treasuries (-1.26%), Federal Agencies (-0.92%), and Corporates (-0.44%). All sectors remain with applicable policy limits.</li> <li>Sectors that grew over the quarter were Supranational Agencies (+4.82%), Repurchase Agreements (+3.12%), and Commercial Paper (+0.37%).</li> </ul>
Credit Quality	<ul> <li>Approximately 72% of the County pool's assets are guaranteed or supported by the U.S. government. Furthermore, 12% is invested in the State LGIP, where about 83% of the LGIP is invested directly in U.S. Treasuries, federal agencies, and supranational agencies. Additionally, considering the County pool's holdings of repurchase agreements and bank accounts collateralized by government securities, the overall government-related credit quality exceeds 89%.</li> <li>Combined corporate allocations (both commercial paper and corporate notes) remained at approximately 11% of the portfolio, and all securities remain investment grade. Combined allocations to corporate notes and commercial paper continue to be below the maximum allocation limit of 25%.</li> <li>Total allocations to corporate related issues also do not exceed the 50% allocation limit set forth in the County's Investment Policy.</li> </ul>
Maturity Distribution	<ul> <li>All maturities fall within the limits set forth in the County's Investment Policy.</li> <li>Approximately 62% of the Pool's assets mature in one year or less, above the minimum of 40% that is mandated by the Investment Policy.</li> </ul>

Security Type	Market Value(\$)	Allocation Percentage	Within Policy Limits	Max Maturity Held	Within Policy Limits
U.S. Treasury	1,125,620,220	13.95%	✓	3.50 years	✓
Supranational Agencies	1,854,671,074	22.98%	✓	3.14 years	✓
Corporate Notes	456,386,731	5.65%	✓	3.35 years	✓
Federal Agency	2,819,139,365	34.93%	✓	4.27 years	✓
Washington State LGIP	981,309,054	12.16%	✓	1 day	✓
Repurchase Agreement	366,000,000	4.53%	✓	1 day	✓
Commercial Paper	449,859,027	5.57%	✓	200 days	✓
Cash and Equivalents	15,452,111	0.19%	✓	1 day	✓
Agency Mortgages	2,565,410	0.03%	✓	3.2 years (WAL)	✓
TOTAL	8,071,002,992	100.00%			

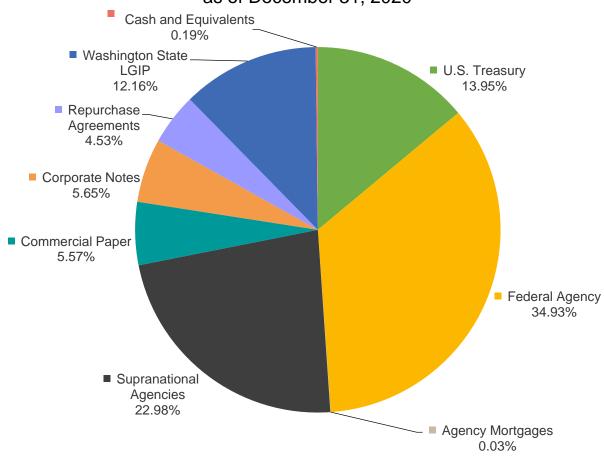
<sup>\*</sup>Percentages may not total to 100% due to rounding.



#### **II. Sector Allocation**

#### **Sector Diversification**





<sup>\*</sup>Percentages may not total to 100% due to rounding.



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

Changes in Sector Allocation

- The portfolio increased exposure to federal agencies by +3.89%, Repurchase Agreements by +3.12%, and Commercial Paper by +0.33% while decreasing or maintaining allocations to all other sectors.
- U.S. Treasuries During the fourth quarter, exposure to U.S. Treasuries further decreased from 15.21% to 13.95%.
- Federal Agencies Federal agency allocations, excluding supranationals and mortgage securities, decreased by -0.92% over the period.
- Corporate Notes The County's allocation to corporate notes decreased over the quarter from 6.09% to 5.65%.
- <u>Commercial Paper</u> Commercial paper increased over the period from 5.24% to 5.57% of the portfolio.
- Washington State LGIP Balances invested in the State LGIP decreased from 16.43% of the portfolio to 12.16%.
- Repurchase Agreements The portfolio's allocation to repurchase agreements increased from 1.41% to 4.53% of the portfolio.



	December 31, 2019	March 31, 2020	June 30, 2020	September 30, 2020	December 31, 2020
U.S. Treasury	37.03%	30.58%	19.05%	15.21%	13.95%
Federal Agencies	11.56%	16.78%	31.43%	35.85%	34.93%
Agency Mortgages	0.05%	0.04%	0.04%	0.04%	0.03%
Supranational Agencies	20.41%	21.33%	16.69%	18.16%	22.98%
Commercial Paper	7.29%	3.87%	4.87%	5.24%	5.57%
Corporate Notes	11.70%	9.74%	6.59%	6.09%	5.65%
Repurchase Agreements	3.24%	2.50%	2.80%	1.41%	4.53%
Washington State LGIP	8.36%	14.92%	18.35%	16.43%	12.16%
Cash and Equivalents	0.35%	0.23%	0.18%	1.58%	0.19%

<sup>\*</sup>Percentages may not total to 100% due to rounding.

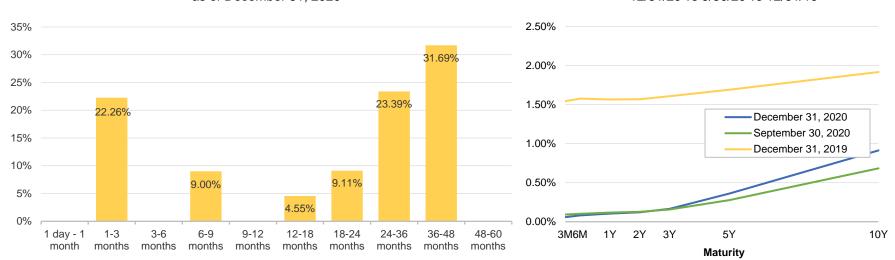


### II. Sector Allocation – U.S. Treasury Securities

Topic	Observations
Observations	<ul> <li>The County's balances held in U.S. Treasuries further decreased from 15.21% of the total portfolio to 13.95%.</li> <li>Short-term U.S. Treasury yields remained near historical lows, while the curve steepened with longer-term yields ending the quarter higher as a result of increased inflation expectations and prospects for further fiscal and monetary stimulus. <ul> <li>The 10-year Treasury yield increased 23 basis points (+0.23%), while the 2-year yield fell 1 bp (-0.01%).</li> </ul> </li> <li>Roughly one-third of the Pool's Treasury investments (31.26% of all Treasury holdings) have remaining maturities of one year or less.</li> <li>The weighted average maturity (WAM) of the County's Treasury allocation decreased over the quarter from 713 days to 677 days as only one Treasury security matured, and no significant purchases were made.</li> <li>The chart on the left below displays the current maturity distribution of the County's allocations to U.S. Treasuries while the chart on the right compares the current shape of the U.S. Treasury yield curve to the yield curve last quarter, and the yield curve one year ago. The County's Treasury holdings continue to favor the longer-term securities. As the short end of the yield curve remains unchanged, shorter-term Treasuries offer little relative value.</li> </ul>



**U.S. Treasury Yield Curve** 12/31/20 vs 9/30/20 vs 12/31/19

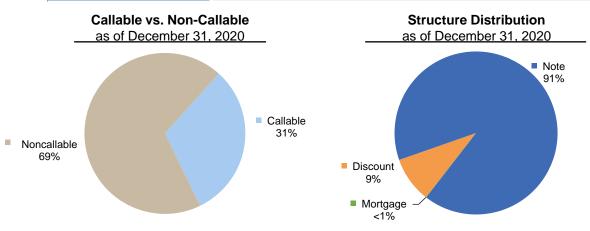


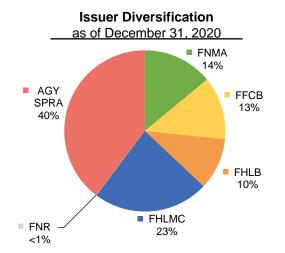
<sup>\*</sup> Source Bloomberg Financial Systems



### **II. Sector Allocation – Federal Agencies**

Торіс	Observations			
Structure (as % of Federal Agency Allocations)	<ul><li>Non-Callable</li><li>Callable</li></ul>	68.9% 31.1%	<ul><li>Discount Notes</li><li>Coupon Bearing Notes</li><li>Agency Mortgage</li></ul>	9.1% 90.9% < 0.1%
<b>Diversification</b> (as % of Federal Agency Allocations)	<ul> <li>Federal Farm Credit Bank (FFCB)***</li> <li>Freddie Mac (FHLMC)</li> <li>Federal Home Loan Bank (FHLB)***</li> <li>Supranational Agencies***</li> </ul>	12.6% 23.3% 10.4% 39.7%	<ul> <li>Fannie Mae (FNMA)***</li> <li>Fannie Mae Mortgage-Backed (FNR)</li> <li>Freddie Mac Mortgage-Backed (FHR)</li> </ul>	14.0% < 0.1% 0.0%
Conclusions	<ul> <li>The County's federal agency holdings continue to be well diversified. All issuer allocations fall within the issuer guidelines and security structures in the County's investment policy (max per agency issuer 35%).</li> <li>The percentage of the portfolio invested in federal agencies, excluding supranationals and mortgage securities, decreased by -0.92% in the quarter from 35.85% to 34.93%. Within this federal agency allocation, the portion of callable securities has decreased to 31.1% from 40.8% since the end of the third quarter.</li> <li>All supranational agency holdings are below the 35% issuer limit and represent approximately 23% of the entire portfolio.</li> <li>The County Pool's only allocation to agency mortgages is in Fannie Mae pools, totaling approximately 0.03% of the total portfolio.</li> </ul>			





<sup>\*</sup>All calculations above are based on total federal agency exposure, not overall Portfolio.

<sup>\*\*</sup>Percentages may not total to 100% due to rounding.

<sup>\*\*\*</sup>Includes discount notes

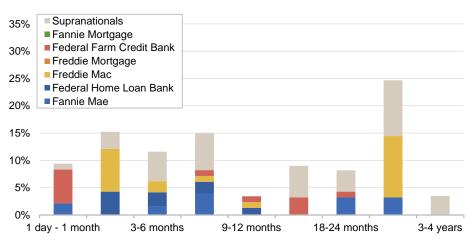


### **II. Sector Allocation – Federal Agencies**

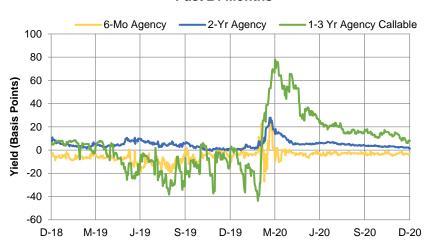
Topic	Observations
Maturity Distribution	<ul> <li>The County's federal agency maturity distribution falls within the limits set forth by the Investment Policy Statement.</li> <li>Over the quarter, the weighted average maturity (WAM) of the County's federal agency holdings increased from 386 days on September 30<sup>th</sup> to 428 days on December 31<sup>st</sup>.</li> <li>The portfolio purchased approximately \$1.29 billion in federal agency securities over the quarter with an average WAM of 491 days. Compared to the third quarter, the WAM of new agency purchases increased from 430 days.</li> <li>Strong demand for agency bonds has pushed incremental yield spreads in basis points down to single digits. Longer maturities remain an attractive entry point via new issuances.</li> <li>2-year federal agencies provide little value relative to U.S. Treasuries, with the spread closing the quarter at about 1 bp.</li> <li>When yields of federal agencies and Treasuries are relatively close, the U.S. Treasury security is typically preferred.</li> </ul>

#### Federal Agency Maturity Distribution by Name

as of December 31, 2020



# Federal Agency Yield Spreads to Treasuries Past 24 Months



\* Source Bloomberg Financial Systems

Agency Mortgage maturities are calculated as average life. Average life data taken from Bloomberg Financial Markets

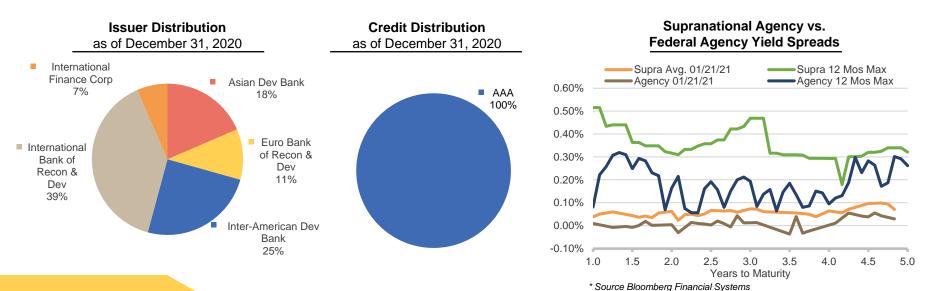
Callable securities are shown to their next call date.

All other Agency maturities are calculated as days to maturity.



### II. Sector Allocation – Supranational Agencies

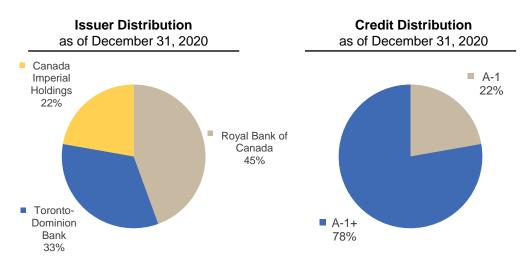
Topic	Observations
Credit Distribution	<ul> <li>Based on the holdings as of December 31<sup>st</sup>, three supranational securities will mature over the next quarter.</li> <li>The County maintained exposure to five supranational issuers.         <ul> <li>The U.S. is the largest country from a shareholder perspective for all five Supranational issuers (co-largest with Japan for the Asian Development Bank), meaning the U.S. has the largest decision-making power, and these securities are considered to have been issued by federal instrumentalities.</li> </ul> </li> <li>By continuing to invest in this sector, the County is able to diversify the portfolio and add to its high credit quality, while also capturing additional yield over federal agency and Treasury securities.         <ul> <li>The portfolio's allocation to supranational agencies is well-balanced across maturities, with roughly 59% having a remaining maturity of over 1 year.</li> </ul> </li> </ul>
Spread to Agency Rates	<ul> <li>The chart on the right shows the spread between supranational agencies and federal agency securities.</li> <li>The supranational sector saw light seasonal issuance in the fourth quarter. In some cases, supranational spreads compressed to levels below those on comparable-maturity federal agencies, making them less attractive from a yield perspective.</li> </ul>

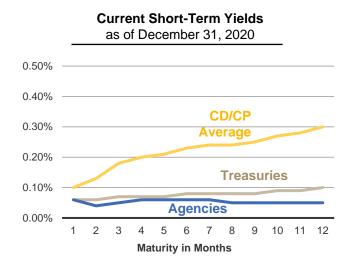




### II. Sector Allocation – Commercial Paper

Topic	Observations
Issuer Diversification	<ul> <li>The County's allocation to commercial paper increased by +0.33% over the quarter, ending the period at 5.57% of the total portfolio.</li> <li>The portfolio holds commercial paper from Toronto-Dominion Bank, the Royal Bank of Canada, and Canada Imperial Holdings.</li> <li>Short-term commercial paper spreads completely reversed the brief, crisis-induced sell-off March which suppressed the value of most money market instruments.</li> <li>With attractive spreads further out on the yield curve, commercial paper continues to provide incremental returns while allowing the County to tap into a broader universe of issuers compared to the alternative of U.S. T-Bills and federal agency discount notes.</li> </ul>
Credit Distribution	Standard & Poor's rates the short-term credit of Royal Bank of Canada and Toronto-Dominion as A-1+, and Canada Imperial Holdings as A-1.
Conclusions	<ul> <li>From an overall portfolio duration perspective, utilizing short term commercial paper helps the County to offset the purchasing of longer term securities. These commercial paper investments have historically offered greater yields than other short term securities and overnight investments.</li> <li>The Portfolio's total allocation to commercial paper increased over the quarter as the County's previous commercial paper investments matured and the proceeds were reinvested into issues by the Royal Bank of Canada and Toronto-Dominion Bank.</li> </ul>





<sup>\*</sup>All calculations above are based on total commercial paper exposure, not overall Portfolio.

<sup>\*\*</sup>Percentages may not total to 100% due to rounding.

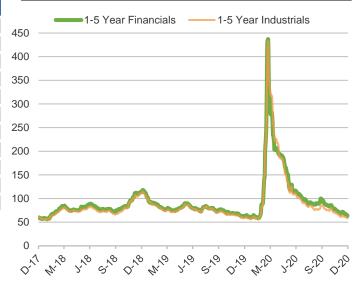


### **II. Sector Allocation – Corporate Notes**

Topic	Observations
Maturity Distribution	<ul> <li>The County's exposure to corporate notes declined by -0.44% over the quarter, from 6.09% to 5.65%. To end the period, the Pool's corporate note holdings were from high quality issuers, with 47% of it's corporate notes carrying a rating of at least AA- by S&amp;P.</li> <li>Callable corporate notes made up 26% of the County's corporate sleeve, with all call dates being about a month before maturity.</li> <li>All corporate holdings mature in less than 4 years and the weighted average maturity of the corporate note portion of the portfolio is 1.25 years.</li> <li>The graph on the right below shows the spread for financial corporates and industrial corporates when compared to similar-maturity Treasuries. Investment grade corporate bond spreads trended lower, ending the quarter near historical lows. Financials, which make up a large portion of the county's corporate holdings, closed the quarter slightly wider than industrials, but at a smaller difference compared to last quarter.</li> <li>Market demand remains insatiable, pushing spreads tighter, while issuance is expected to fall from the record new supply seen in 2020.</li> </ul>

Credit & Issuer Distribution	S&P Short	S&P Long	Moody's Short	Moody's Long	% of Corporate Holdings	% of Portfolio
3M Company	A-1	A+	P-1	A1	2.3%	0.13%
Apple Inc.	A-1+	AA+	P-1	Aa1	16.6%	0.94%
Bank of Montreal	A-1	A+	P-1	Aa2	23.0%	1.30%
Bank of Nova Scotia	A-1	A+	P-1	Aa2	9.5%	0.54%
Canadian Imperial Bank	A-1	A+	P-1	Aa2	9.9%	0.56%
Home Depot Inc.	A-1	Α	P-1	A2	1.8%	0.10%
Honeywell International	A-1	Α	P-1	A2	6.4%	0.36%
Microsoft Corp	A-1+	AAA	P-1	Aaa	5.3%	0.30%
Procter & Gamble Co	A-1+	AA-	P-1	Aa3	10.2%	0.58%
Toronto-Dominion Bank	A-1+	AA-	P-1	Aa1	7.1%	0.40%
US Bank	A-1+	AA-	P-1	A1	7.9%	0.45%

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



\*Source Bloomberg Financial Systems

<sup>\*</sup>Source: Bloomberg Financial Systems as of 1/20/2021

<sup>\*</sup>Percentages may not total to 100% due to rounding.

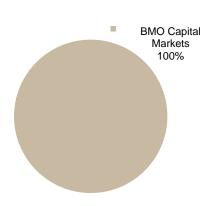


### **II. Sector Allocation – Repurchase Agreements**

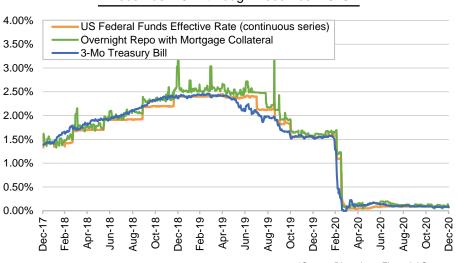
Topic	Observations
Issuer Diversification	<ul> <li>The County increased its tri-party repurchase agreement allocation over the quarter, with 4.53% of the portfolio allocated to the sector at quarter-end, compared to 1.41% at September 30, 2020.</li> <li>At the end of the quarter, the portfolio utilized one repurchase agreement provider, BMO Capital Markets, with an allocation of \$336 million.</li> <li>This allocation falls within the permitted investment guidelines of 25% per issuer and 100% maximum to the sector.</li> </ul>
Credit Distribution	<ul> <li>Standard &amp; Poor's rates BMO's short-term issuer credit as A-1.</li> <li>While this issuer has a high-quality rating from S&amp;P, the ultimate quality of the repurchase agreement depends on the underlying collateral.</li> </ul>
Conclusions	<ul> <li>As of December 31, 2020, the repurchase agreement sector's weighted-average yield was 0.07%, down 2 bps (0.02%) compared to the last quarter.</li> <li>Yields for overnight repurchase agreements remained near zero, in-line with short-term Treasuries, as the Fed funds target rate remains at the zero lower bound.</li> </ul>

#### Issuer/Credit Distribution

as of December 31, 2020



# Short-Term Yields December 2017 through December 2020



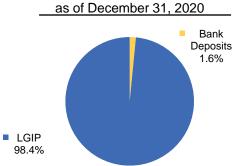
\*Source Bloomberg Financial Systems



### II. Sector Allocation – LGIPs and Cash Equivalents

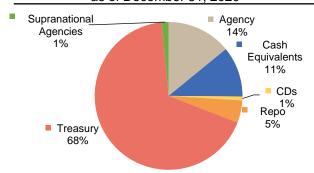
	Underlying Investments	Rating (Short-Term: S&P/ Moody's/Fitch)	Observations
Washington State LGIP	<ul> <li>U.S. Treasuries 67.6%</li> <li>Federal Agencies 14.1%</li> <li>Supra National Agencies 1.5%</li> <li>Repurchase Agreements 4.9%</li> <li>Certificates of Deposit 0.9%</li> <li>Cash Equivalents 11.0%</li> <li>As of December 31, 2020</li> </ul>	• N/A	<ul> <li>The County currently has allocated \$1.0 billion to the Washington State LGIP, a decrease from last quarter's \$1.3 billion figure.</li> <li>The County's allocation to the State LGIP continues to serve as the primary source of overnight liquidity for the portfolio.</li> <li>The State LGIP increased its exposure to U.S. Treasuries (+9.3%), while it decreased its supranational, federal agency, repurchase agreement, cash equivalent and certificates of deposit allocations.</li> </ul>
Cash Equivalents	<ul> <li>State LGIP 98.45%</li> <li>U.S. Bank 1.51%</li> <li>Key Bank 0.01%</li> <li>Bank of America 0.03%</li> </ul>	<ul> <li>U.S. Bank:</li></ul>	<ul> <li>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.</li> <li>The portfolio's cash equivalents holdings decreased over the quarter, from 1.58% to 0.19% of the total portfolio.</li> </ul>

#### **Cash Equivalents Distribution**



#### **Washington State LGIP Sector Distribution**





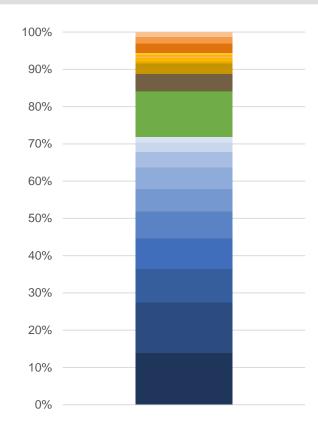


#### **III. Issuer Concentration**

#### **Issuer Exposure**

- The County maintains a well-diversified portfolio by issuer, as shown in the tables and graph 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, 17% is allocated to ultra short-term or overnight investment vehicles, including the State LGIP, repurchase agreements, and bank deposits. The remaining 11% is allocated to credit issuers, including commercial paper and corporate notes.

U.S. Treasury (100% Limit)	13.95%
Agency Issuers	Percentage (35% Limit)
FHLMC	13.48%
Intn'l Bk of Recon & Dev	9.02%
FNMA	8.15%
FFCB	7.32%
FHLB	6.02%
Inter-American Dev Bk	5.71%
Asian Dev Bank	4.26%
Euro Bk of Recon & Dev	2.49%
International Finance Corp	1.51%
Washington State LGIP (25% Limit)	12.16%
Overnight Deposits	Percentage (No Limit)
US Bank	0.19%
Bank of America	<0.01%
Key Bank	<0.01%
Repo Issuers	Percentage (25% Limit)
BMO Capital Markets Corp	4.53%



Corporate Issuers	Percentage (5% Limit)
Bank of Montreal	1.30%
Apple Inc	0.94%
Procter & Gamble Co	0.58%
Canadian Imperial Bank	0.56%
Bank of Nova Scotia	0.54%
US Bank	0.45%
Toronto-Dominion Bank	0.40%
Honeywell International	0.36%
Microsoft Corp	0.30%
3M Company	0.13%
Home Depot Inc	0.10%
CP Issuers	Percentage (5% Limit)
Royal Bank of Canada	2.48%
Toronto-Dominion Bank	1.86%
Canadian Imperial Bank	1.24%

Percentages may not add to 100% due to rounding.

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

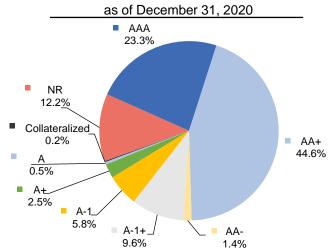


### IV. Overall Credit Quality

#### **County Investment Pool Credit Analysis**

- The County Pool's overall average credit position remains very strong and is primarily concentrated in U.S. government guaranteed and/or supported securities which maintain a long-term credit rating of AA+ by Standard & Poor's and federal agency discount notes, which maintain a short-term credit rating of A-1+ by S&P.
- The County also maintained its holdings of supranational agencies, which are rated AAA.
- The County maintained its credit exposure through commercial paper and corporate notes over the quarter, ending at 11.23% of the portfolio, compared to 11.34% last quarter.
  - Commercial paper accounts for 5.57% of the entire portfolio, while corporate notes account for 5.65%.
- Corporate note allocations held throughout the quarter have ratings of A or higher.
  - Commercial paper allocations are all rated A-1/P-1 or higher.
- The 12.2% 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, 0.71% of the County's Pool is allocated indirectly to corporate securities (repurchase agreements and certificates of deposit).

#### Total Pool Credit Distribution\*



#### **Corporate/CP Issuer Ratings Table**

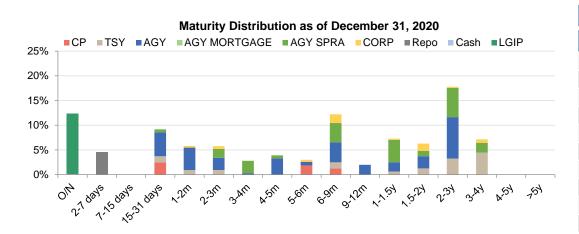
as of December 31, 2020

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



### **V. Maturity Distribution**

Maturity Distribution	Observations
Weighted Average Maturity ("WAM")	<ul> <li>The County continues to invest across its permitted maturity range, as seen in the chart below.</li> <li>A majority of the holdings, 62% of the portfolio, are scheduled to mature within the next twelve months, a 7% decrease from the previous quarter-end but well above the 40% mandated by the investment policy.</li> <li>It appears the County's maturity strategies over the past several quarters have included:         <ul> <li>Allowing previously purchased, longer-dated U.S. Treasury investments to naturally shorten in maturity and roll-down the yield curve.</li> <li>Targeting purchases in the following spaces:</li></ul></li></ul>
Liquidity	<ul> <li>The County Pool appears to provide adequate liquidity, both in terms of final maturities and the sectors in which the portfolio has invested. In addition to the 17% of the portfolio invested in a combination of the Washington State LGIP, bank deposits, and repurchase agreements (overnight liquidity), another 15% of the portfolio's holdings are scheduled to mature within the next two months.</li> <li>Given the continued uncertainty regarding revenues and expenditures for governmental budgets, it is important to maintain a generous amount in overnight and short-term funds in case of unforeseen cash flow needs.</li> </ul>



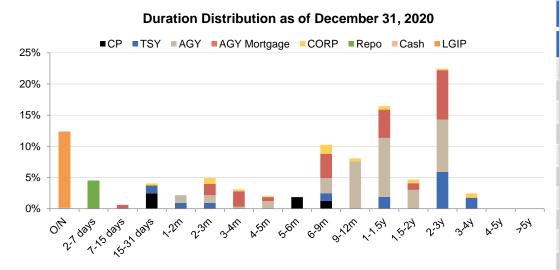
Contribution to Maturity				
Sector	12/31/20	9/30/20		
Supranational Agencies	118.36	99.65		
Cash	0.00	0.02		
Corporate Notes	25.93	29.47		
Commercial Paper	6.34	6.94		
Federal Agencies	129.59	110.13		
The Washington State LGIP	0.12	0.16		
Agency Mortgages	0.37	0.42		
Repurchase Agreements	0.18	0.01		
US Treasuries	94.36	108.49		
Maturity:	375 days	355 days		

All other security maturities are reported as days to maturity. WA LGIP is considered to have a one day maturity.



### **V. Duration Distribution**

<b>Duration Distribution</b>	Observations
Definition	<ul> <li>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.</li> <li>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.</li> </ul>
Duration	<ul> <li>The portfolio's weighted average duration is within the IPS guidelines (no greater than 1.5 years).</li> <li>As of December 31, the duration of the County Investment Pool was 1.11 years, an increase from the previous quarter which ended at 1.07 years.         <ul> <li>The increase in portfolio duration was driven by the County's slightly reduced allocations to overnight securities, and recent investments in Federal Agencies and Supranational Agencies.</li> <li>The portfolio is measured against a blended benchmark consisting of 40% ICE Bank of America Merrill Lynch 3-Month Treasury Index and 60% ICE Bank of America Merrill Lynch 1-3 Year Treasury &amp; Agency Index.</li> <li>The overall portfolio, and the benchmark, duration increased over the quarter. Compared to the benchmark, the portfolio's duration increased from 93% to 96% of the benchmark duration for the period ending December 31.</li> </ul> </li> </ul>



Contribution to Duration				
Sector	12/31/20	9/30/20		
Supranational Agencies	0.32	0.27		
Cash	0.00	0.00		
Corporate Notes	0.06	0.07		
Commercial Paper	0.02	0.02		
Federal Agencies	0.47	0.43		
The Washington State LGIP	0.00	0.00		
Agency Mortgages	0.00	0.00		
Repurchase Agreements	0.00	0.00		
US Treasuries	0.25	0.29		
Duration:	1.11 years	1.07 years		

Agency Mortgage durations are shown as effective duration taken from Bloomberg Financial Markets.

Duration for Federal Agency Discount Notes and Repurchase Agreements are calculated as days to maturity. WA LGIP and bank deposits considered to have a one day duration.

All other security durations are calculated as effective duration as given by Bloomberg Financial Markets.

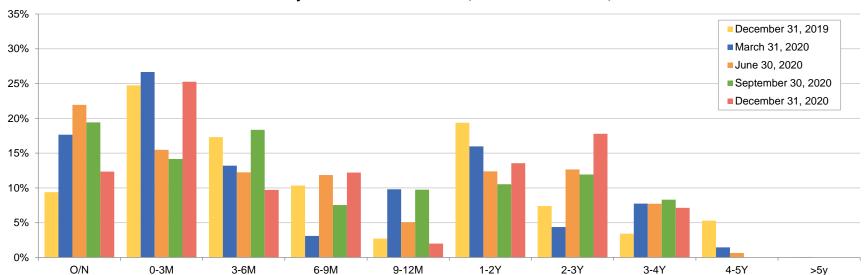


### V. Changes in Portfolio Maturity Distribution

# **Changes in Portfolio Maturity Distribution**

- When viewing the current maturity distribution (red bars) in relation to previous periods, a few primary observations are noted:
  - It appears the County targeted increased allocations in the 0-to-3 month, and 2-to-3 year portion of the yield curve during the fourth quarter of 2020.
    - The decrease in allocation to overnight securities is primarily due to the reduced allocations in the State LGIP, and the repurchase agreements being classified in the 0-to-3 month bucket.
    - o The increase in the 0-to-3 month portion of the curve is primarily due to roll down from the 3-to-6 month bucket and purchases of new callable agency securities. The 6-to-9 month maturity bucket also increased as a result of securities rolling down from the 9-to-12 month portion.
- Compared to the third quarter, the yield curve has steepened and therefore offers modest value to invest farther out in the 1-5 year space.
  - Locking in yields in the 1-5 year area of the curve and finding relative value within sectors may allow the portfolio to benefit from
    incremental income as short-term interest rates are expected to remain near zero for the foreseeable future.

#### Maturity Distribution December 31, 2019 to December 31, 2020





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