



DENVER
THE MILE HIGH CITY

Prepared By:

Cash, Risk &
Capital Funding
Division

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I. Economic Commentary

Capital markets climbed to all-time highs in the third quarter. Gains were driven by strong corporate earnings and economic growth. The U.S. treasury yield curve remained flat on the long end as the spread between the 10yr and 30yr treasury widened only modestly to 14 basis points at the end of the third quarter. Headline economic data remained mostly positive, but some indicators pointed to less robust growth. The US-China trade dispute continued but effects on the markets remained muted.

The Federal Open Market Committee (FOMC) increased the federal funds rate 25 basis points to a range of 2.0% - 2.25% in September. The Fed continued to unwind its \$4 trillion balance sheet in the third quarter with minimal disruption to markets. Inflationary data remained stable; however, the FOMC's economic projections indicate one additional rate hike remaining this year for a total of four rate hikes in 2018.

Payrolls rose in the third quarter with September figures rising by 134,000. The average payroll increase was 190,000 for the quarter. Wage growth was modest at 0.3% in September, but wage inflation remained subdued. On a year-over-year basis, wages increased 2.8% in September. The

monthly unemployment rate decreased further to 3.7% in September.

The U-6, a broader measure of unemployment, increased to 7.5% in September from 7.4% in August. Manufacturing data indicated continued expansion, with the ISM Index value of 59.8 by quarter end. An ISM Index value above 50 is viewed as expansionary, signaling steady growth over the 2018 calendar year. The housing sector saw home prices increase 5.9% year over year in July driven by tight inventory. Housing starts increased 9.2% and multi-family starts surged 29% in August.

Exposure to credit securities in the portfolios increased during the third quarter. The credit spreads versus U.S. Treasury securities narrowed to its tightest in the past five months as interest rates increased. Additional asset classes continue to facilitate modest growth in incremental earnings for the portfolios.

The City's investment portfolio outperformed the stated benchmark indices by 0.23% as the 10-year U.S. Treasury yield increased to 3.06% from 2.86% the prior quarter.

Portfolios	Market Value
Managed Portfolios	\$6,249,455,234
Special Purpose Portfolios	\$52,374,878
Finance Administrated	\$6,301,830,112



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Investment Portfolio Performance Report

Quarter Ended

09/30/2018

II. Consolidated Portfolio

\$5,625,906,089

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Total Return			
	1-Month	3-Month	YTD
Total Return	-0.02%	0.40%	0.32%
Blended Benchmark (TR)	-0.07%	0.36%	0.09%
Excess Return	0.05%	0.04%	0.23%

Current Return			
	1-Month	3-Month	YTD
Current Return	2.15%	2.00%	1.91%
Blended Benchmark (CR)	2.41%	2.53%	2.41%
Excess Return	-0.26%	-0.53%	-0.50%

Year-to-Date earnings on a current return basis for the Consolidated Portfolio were \$49,332,635.

The 1-5 Year Strategy Blended Benchmark consists of 67.50% Intercontinental Exchange (ICE) BofAML 1-5 Year US Treasury & Agency Index, 17.50% ICE BofAML 1-5 Year AAA-A US Corporate Index, 7.50% ICE BofAML AAA US Asset Backed Securities, 5.00% ICE BofAML 0-3 Year US Agency CMOs and 2.50% ICE BofAML 3-5 Year US Mortgage Backed Securities Index. Prior to 1/1/2016 the benchmark was the BofA Merrill Lynch 1-5 Year US Treasury & Agency Index.

The 1-10 Year Strategy Blended Benchmark consists of 65.00% ICE BofAML 1-10 Year US Treasury & Agency Index, 15.00% ICE BofAML 1-5 Year AAA-A US Corporate Index, 5.00% ICE BofAML AAA US Asset Backed Securities, 7.50% ICE BofAML 0-10 Year US Agency CMOs and 7.50% ICE BofAML 0-10 Year US Mortgage Backed Securities Index. Prior to 1/1/2016 the benchmark was the BofA Merrill Lynch 1-10 Year US Treasury & Agency Index.

Factors Affecting Performance & Management Strategies

- Chandler's proprietary Horizon Model that the City uses with the intent to meet or outperform the benchmarks over time (the Intercontinental Exchange (ICE) BofAML Treasury/Agency 1-5 year index and the ICE BofAML Treasury/Agency 1-10 year index) are revised on a regular basis, reflecting the volatility of both bond market interest rates and interest rate curve movements. The City evaluates the portfolios each time a new Horizon Model is received. The key variables subject to potential revision as a result of Horizon Model changes include duration, composition and structure.
- The portfolios have been allocated towards a modestly shorter benchmark duration within the 1-5 and 1-10 year strategies. We believe the risk to principal far outweighs the potential income gain from extending the duration of the strategies in the event interest rates do continue to rise. Safety of principal is paramount in investing the City's funds.
- Corporate Bonds, Collateralized Mortgage Obligations, Mortgage-Backed Securities, and Asset-Backed Securities are new asset classes approved by voters for implementation in 2014 by an amendment to the City Charter. Purchases of the new asset classes continued to increase as a percentage of total composition during the third quarter of 2018.
- The Consolidated Portfolio benchmarking indices are comprised of five ICE BofAML indices, creating a static weighted blended benchmark. A total of two blended benchmarks are used for the 1-5 year and 1-10 year strategies to closely reflect the portfolio duration and asset allocation constraints.



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Consolidated Portfolio Composition

Characteristics		Credit Quality (S&P)
Average Duration	1.59 yrs	
Average Coupon	2.18%	
Average Yield to Maturity	2.61%	
Average Rating (S&P)	AA+	
Average Life	1.61 yrs	

Asset Allocation	Maturity Distribution

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- The Consolidated Portfolio's net assets increased by approximately \$2.38 billion during the third quarter of 2018. On September 30th, 2018, net assets were \$5.6 billion, compared to \$3.2 billion on June 30th, 2018, as inflows exceeded expenditures. The increase in net assets was primarily due to the issuance of Denver International Airport and National Western Center bond proceeds. The large inflow of bond proceeds was at an historic amount for the City's portfolio.
- The weighted average maturity (WAM), an aggregate portfolio measure of total years remaining until the maturity of all underlying holdings, ended lower during the third quarter. The WAM decreased at end of the quarter, as the portfolio exposure to short term assets increased as a ladder structure was implemented for the influx of bond proceeds into the portfolio. While modestly short benchmark duration, rebalancing and securities purchase activity in the intermediate strategies during the third quarter extended duration more closely with the model and benchmark. The model continues to remain short of benchmark duration.



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Portfolio Management Environment

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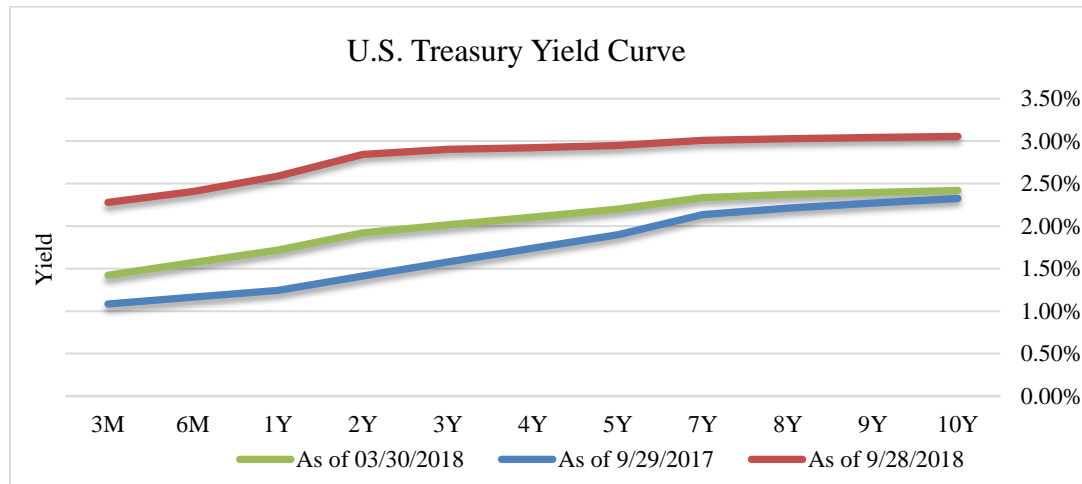
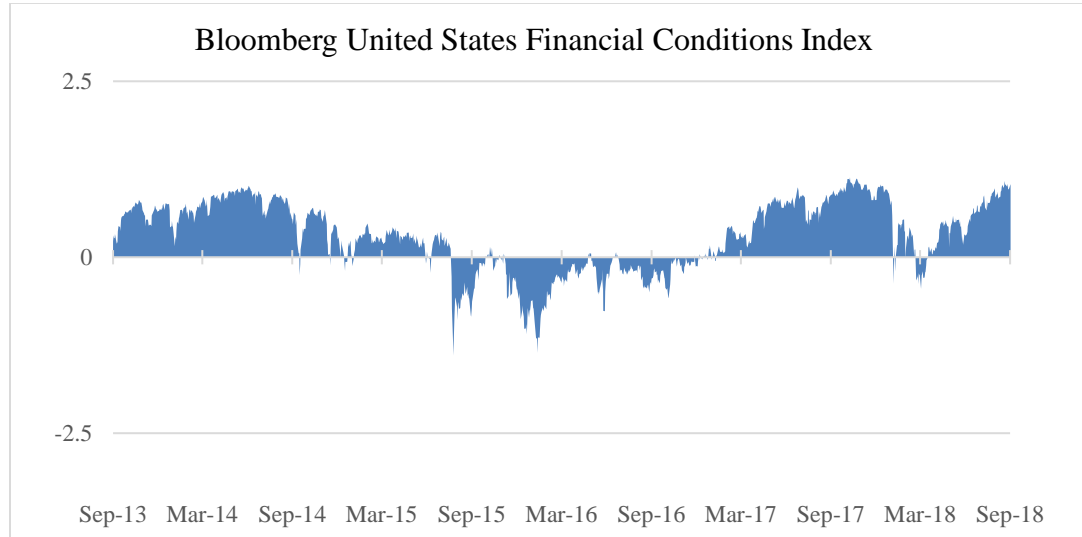
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- The Federal Reserve increased the Fed funds rate to the range of 2.0%-2.25% during the third quarter of 2018. The Fed is projecting an average of 2.38% fed funds rate by the end of 2018, which implies one more 25 basis point hikes by the end of the year.
- The one-month LIBOR rate was 2.26% as of September 30th, 2018, an increase of 17 basis points from June 30th, 2018.
- As of September 30th, 2018, the yield of the two-year Treasury index was 2.82%, and the five-year Treasury index was yielding 2.95%. A year earlier, as of September 30th, 2017, the yield of the two-year Treasury index was 1.48%, and the five-year Treasury index was yielding 1.94%.
- The median of economists' forecast is for a 2.89% two-year Treasury yield at the end of 2018.
- The shape of the yield curve continued to flatten as short-term interest rates increased faster than long-term interest rates. The spread between the two-year Treasury index and the ten-year Treasury index was 24 basis points on September 30th, 2018, compared to 33 basis points June 30th, 2018.



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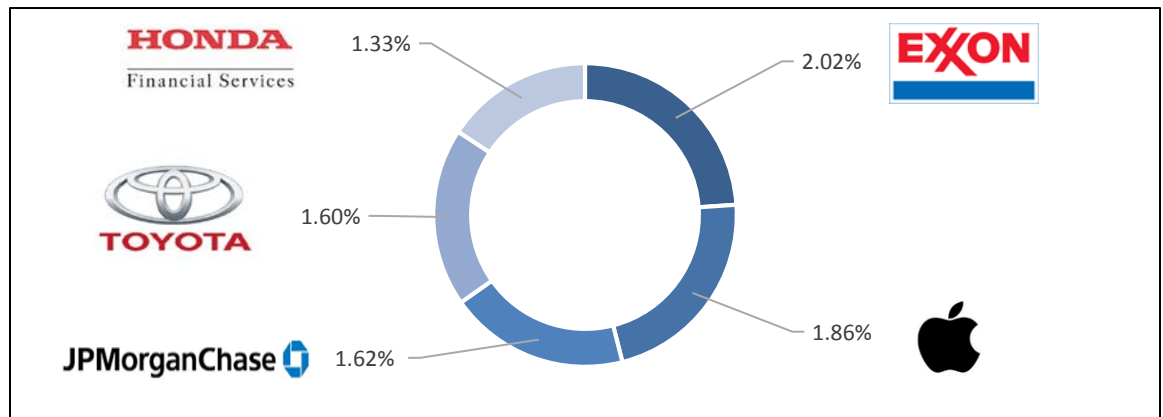
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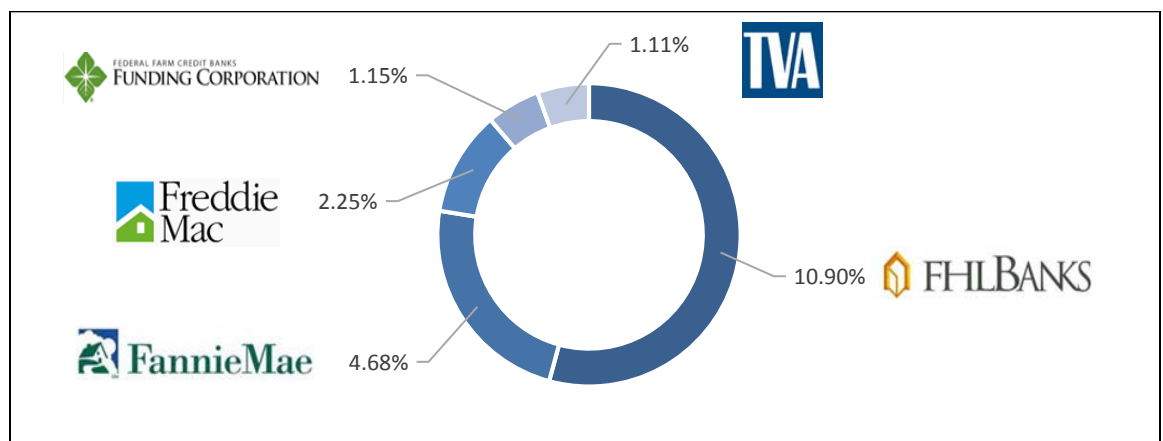
Consolidated Top Holdings

Top 5 Credit Holdings			
Issuer	Market Value	% of Portfolio	Industry
Exxon Mobil Corp	113,408,384	2.02%	Energy
Apple, Inc.	104,835,236	1.86%	Technology
JP Morgan Chase & Co	90,994,693	1.62%	Financial
Toyota Motor Credit Corp	90,217,883	1.60%	Automobiles
American Honda Finance	74,643,269	1.33%	Automobiles
Total	474,099,465	8.43	

*Credit holdings include commercial paper, asset-backed securities, and corporate bonds.



Top 5 Agency Holdings		
Issuer	Book Value	% of Portfolio
FHLB	612,987,792	10.90%
FNMA	263,439,036	4.68%
FHLMC	126,419,139	2.25%
FFCB	64,840,092	1.15%
TVA	62,511,334	1.11%
	1,130,197,393	20.09%





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III. Airport Reserve Portfolio

\$580,302,554

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Total Return			
	1-Month	3-Month	YTD
Total Return	-0.19%	0.27%	-0.24%
Blended Benchmark (TR)	-0.26%	0.21%	-0.44%
Excess Return	0.07%	0.06%	0.20%

Current Return			
	1-Month	3-Month	YTD
Current Return	2.24%	2.25%	2.18%
Blended Benchmark (CR)	2.69%	2.78%	2.66%
Excess Return	-0.45%	-0.53%	-0.48%

Year-to-Date earnings on a current return basis for the Reserve Portfolio were \$7,147,482.

The 1-5 Year Strategy Blended Benchmark consists of 67.50% ICE BofAML 1-5 Year US Treasury & Agency Index, 17.50 % ICE BofAML 1-5 Year AAA-A US Corporate Index, 7.50% ICE BofAML AAA US Asset Backed Securities, 5.00% ICE BofAML 0-3 Year US Agency CMOs and 2.50% ICE BofAML 3-5 Year US Mortgage Backed Securities Index. Prior to 1/1/2016 the benchmark was the BofA Merrill Lynch 1-5 Year US Treasury & Agency Index.

The 1-10 Year Strategy Blended Benchmark consists of 65.00% ICE BofAML 1-10 Year US Treasury & Agency Index, 15.00 % ICE BofAML 1-5 Year AAA-A US Corporate Index, 5.00% ICE BofAML AAA US Asset Backed Securities, 7.50% ICE BofAML 0-10 Year US Agency CMOs and 7.50% ICE BofAML 0-10 Year US Mortgage Backed Securities Index. Prior to 1/1/2016 the benchmark was the BofA Merrill Lynch 1-10 Year US Treasury & Agency Index.

- The Airport Bond Reserve portfolio has a maximum maturity constraint of 10 years. On an ongoing basis, liquidity is generated from income received from the portfolio holdings, as well as from periodic bond calls of Agency securities. All income received during the year is transferred out of this portfolio into the Airport Operating funds contained in the Consolidated Portfolio (subject to ongoing adjustments to the required portfolio balance stated in the bond indenture).
- The Airport Reserve Portfolio benchmarking indices are comprised of five ICE BofAML indices, creating a static weighted blended benchmark. A total of one blended benchmark is utilized for the 1-10 year strategy to closely reflect the portfolio duration and asset allocation constraints.



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Airport Reserve Portfolio Composition

Characteristics		Credit Quality (S&P)
Average Duration	2.73 yrs	
Average Coupon	2.39%	
Average Yield to Maturity	2.84%	
Average Rating (S&P)	AA+	
Average Life	2.95 yrs	

Asset Allocation	Maturity Distribution

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IV. Workers Compensation Portfolio Composition

\$43,246,591

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Characteristics		Credit Quality (S&P)
Average Duration	4.06 yrs	
Average Coupon	2.91%	
Average Yield to Maturity	3.20%	
Average Rating (S&P)	AA+	
Average Life	5.26 yrs	

Asset Allocation	Maturity Distribution

- WC liabilities have a much longer term expected average duration than most other funds managed by the City. For this reason, management has determined that it is prudent to extend the duration of the invested assets associated with these obligations.
- A combination of cash and securities were transferred from the Consolidated Portfolio to the newly established WC portfolio in August 2009. An allocation to cash equivalents appropriate to fund the liquidity needs of the unit was set aside (and is monitored and adjusted monthly), and the balance of the funds were invested in treasury, corporate, agency, municipal, and structured fixed income securities. The annualized current return for the third quarter of 2018 was 2.96%.
- Year-to-Date earnings on a current return basis for the Worker's Compensation were \$923,457.



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V. Special Purpose Portfolios

\$52,374,878

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In addition to the actively managed investments, the Cash, Risk & Capital Funding Division manage three additional portfolios. The FAA (Federal Aviation Administration) Escrow Defeasance portfolio was established to economically defease outstanding airport bonds. The Denver Cableland Trust portfolio was established to fund the annual maintenance expenses for Cableland, a facility donated to the City. These portfolios are authorized by the Investment Policy to contain longer term securities and higher per issuer constraints within the Consolidated and Reserve portfolios. The majority of the investments in these portfolios were purchased in market environments that featured much higher interest rates than those currently available. The investment income and principal of the three portfolios are pledged for specific purposes.

	Market Value	3rd Qtr Current Return	2018 YTD Earnings
FAA Escrow Account	\$48,385,677	6.64%	\$1,944,567
Denver Cableland Trust	\$3,989,201	3.43%	\$101,956

Escrows

Cash, Risk & Capital Funding Division also manages certain investments held in escrow accounts at external financial institutions on behalf of Denver International Airport (primarily representing equipment leases). As of September 30th, 2018, there was an outstanding balance of \$0.

Investment Policy

The City operates under a written Investment Policy, a copy of which can be obtained on the City's website (www.denvergov.org) or by contacting the Cash, Risk & Capital Funding Division at 720-913-3091.

Caroline Hendrickson
Director of Cash & Investments

Gregory T. King
Portfolio Administrator

STATEMENT OF REVIEW OF PORTFOLIO PERFORMANCE

Chandler Asset Management, a Registered Investment Advisor with the Securities and Exchange Commission and noticed filed in the State of Colorado, as Independent Consultant to the City and County of Denver, periodically reviews the City's Investment portfolio and represents the following:

1. The investments, as of September 30, 2018, are authorized by the Denver City Charter and are in compliance with the City's Investment Policy;
2. Upon review of the City's Investment Portfolio Performance Report, and relying on the independent market pricing provided by Interactive Data Corporation, the City's securities appear to be priced accurately. Chandler Asset Management has performed no independent verification of the securities pricing provided herein; and
3. Investment performance as reported in the City's attached Investment Portfolio Performance Report, for the period ending September 30, 2018, appears to be accurately reflected.

Signed this 18th day of October 2018



Nicole Dragoo
COO, Chief Compliance Officer