

BCC Mtg. Date: March 12, 2019



ANNUAL INVESTMENT REPORT

FOR THE YEAR ENDED
SEPTEMBER 30, 2018

PHIL DIAMOND, CPA
ORANGE COUNTY COMPTROLLER

EXECUTIVE SUMMARY

The portfolio earned \$31.1 million for an effective rate of return of 1.64% on an average daily balance of \$1.89 billion in Fiscal Year 2018. For comparison, the portfolio earned \$17.7 million for an effective rate of return of 1.05% on an average daily balance of \$1.69 billion in Fiscal Year 2017. Investments were made in compliance with the Investment Policy's permitted investment types, composition limits and allowable maturities.

The investment portfolio is affected by domestic monetary policy and national economic activity. The Federal Reserve raised the fed funds target rate range by 25 basis points four times in Fiscal Year 2018. Fed funds ended the year at the 2.00%-2.25% range established in September. These policy actions led to higher interest rates across the yield curve. The Fed increased rates on favorable trends in the labor market and rising economic activity. Household spending and business fixed investment also continued to strengthen.

Interest earnings on the County's portfolio surged higher on the Fed's rate hikes. Earnings in the current operating sub-portfolio, which has a maximum maturity of 13 months, increased by 145% to \$19.6 million. The returns on the current operating sub-portfolio also benefited from an increase in investment balances and a shift in the asset mix to higher-yielding assets. The allocation of funds invested in Florida PRIME, the SBA's local government investment pool, were increased substantially. Allocations to Treasury securities and money market mutual funds were reduced. Florida PRIME generated an average return of 1.98% during Fiscal Year 2018 versus 1.54% for money market mutual funds and 1.41% for Treasury investments in the current operating sub-portfolio.

Section 218.415 (15), Florida Statutes, requires the Orange County Comptroller to provide an annual report to the Board of County Commissioners of the securities in the portfolio by investment type, book value, market value and income earned. This information is presented below as of September 30, 2018.

Summary Table of Portfolio Performance

<u>Investment Type</u>	<u>Book Value September 30, 2018</u>	<u>Market Value September 30, 2018</u>	<u>Earnings Fiscal Year 2018</u>
U.S. Treasuries	\$918,412,452	\$904,468,483	\$15,029,975
Florida PRIME (SBA)	708,197,238	708,197,238	12,752,993
Certificates of Deposit	80,000,000	80,000,000	1,087,584
Bank Money Market Deposit	60,231,560	60,231,560	688,459
Fixed Income Money Market			
Mutual Funds	35,004,120	35,004,120	800,695
Federal Instrumentalities	19,998,079	19,992,900	720,891
Totals	\$1,821,843,449	\$1,807,894,301	\$31,080,597

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ANNUAL INVESTMENT REPORT
for the year ended September 30, 2018
ORANGE COUNTY, FLORIDA

I. INVESTMENT POLICY

Section 218.415, Florida Statutes provides units of local government with the ability to conduct investment activity outside the framework of that Statute that is consistent with a written plan adopted by the local governing body. Orange County's (County) investment activity is authorized by the Investment Policy (Policy) adopted by the Board of County Commissioners (BCC). The Policy applies to all investment activities and financial assets of the BCC excluding funds invested in the Orange County Retiree Health Care Benefit Trust, which was created solely to provide funding and payment of post-retirement benefits to beneficiaries. The Orange County Comptroller (Comptroller) approved and the BCC adopted a new Investment Policy in January 2018.

The County's investment activity was conducted in accordance with written procedures and internal controls.

II. INVESTMENT ADVISORY COMMITTEE

The Committee was established by the Comptroller to formulate investment strategies, provide short-range direction, and monitor the performance and structure of the County's portfolio. The Committee is chaired by the Chief Deputy Comptroller and the other members are community volunteers with financial expertise. During the fiscal year, the community volunteers were Robert Tessier, Daniel Johnson, Kimberly Sterling and Jacinta Mathis. Mr. Tessier is the Comptroller for the Orange County Library System; Mr. Johnson is a Shareholder at Carlton Fields Jorden Burt, P.A.; Ms. Sterling is a Vice President, Shareholder and Wealth Advisor at Resource Consulting Group; and Ms. Mathis is a Business, Real Estate and Wealth Management Attorney at Mathis Law Group.

Subsequent to the end of the fiscal year, Mr. Tessier decided to step down from his position on the Committee.

III. INVESTMENT OBJECTIVES

The Policy describes three specific objectives to be applied in managing the County's investments. The primary investment objective is **safety** of the County's funds. The portfolio is managed in a manner that seeks to ensure the preservation of capital in the overall portfolio. To achieve this objective, investments are diversified across a variety of securities offering independent returns and maturities. On average in Fiscal Year 2018, approximately 56% of portfolio assets were invested in Treasuries and money market mutual funds comprised of Treasuries and Treasury-backed repurchase agreements. Treasuries are considered to have the lowest default risk of any security type because they are guaranteed by the full faith and credit of the United States Government.

The second investment objective is to maintain sufficient **liquidity**. The County's funds are invested to match maturities with forecasted expenditures for operating, payroll and capital needs. Liquidity also encompasses the ability to sell an investment when necessary, with minimal delay and minimal loss of principal.

Maximizing yield on the portfolio is the County's third investment objective. This objective is only sought after the first two investment objectives are met.

IV. PORTFOLIO PERFORMANCE

Acceptable portfolio performance is the result of balancing the rewards of investing, or the income earned, with the risks associated with those investments. Factors influencing the portfolio's performance include the types of investments permitted, allowable maturities, liquidity requirements, domestic monetary policy, sensitivity of asset values to changes in market conditions, local economic activity (the dollars available to be invested) and the investment operation.

The portfolio earned \$31.1 million for an effective rate of return of 1.64% on an average daily balance of \$1.89 billion in Fiscal Year 2018. For comparison, the portfolio earned \$17.7 million for an effective rate of return of 1.05% on an average daily balance of \$1.69 billion in Fiscal Year 2017.

This report discusses in detail each of the factors influencing portfolio performance, as well as the County's depository banking relationship and debt refinancing activities.

V. PERMITTED INVESTMENTS AND ALLOWABLE MATURITIES

Table 1 summarizes the permitted investments, composition limits and maximum allowable maturities. The County's excess funds are invested according to Orange County Code Section 17-5, which authorizes the Comptroller to invest in specific permitted investment types. The permitted investments are restricted by the Policy's composition limits and maximum allowable maturities. The Policy also restricts the investment maturities of current operating funds to not more than 13 months, the investment maturities of noncurrent operating funds to not more than 60 months, and the investments of bond reserves, construction funds and other non-operating funds to a term appropriate to the need for the funds. Following is a brief description of each investment type. It is generally regarded that the following investment types are safe investments and meet the Policy's first objective, safety.

Table 1 – Permitted Investments

<u>Investment Type</u>	<u>Composition Limit</u>	<u>Maximum Maturity</u>
Florida PRIME (SBA)	40%	NA
Treasuries	100%	10 Years
Instrumentalities	45%	10 Years
CDs & Savings Accounts	30%	One Year
Repurchase Agreements	20%	30 Days
Bankers' Acceptances	15%	270 Days
Commercial Paper	15%	270 Days
Municipal Obligations	10%	Three Years
Money Markets	25%	NA

A. Florida Local Government Surplus Funds Trust Fund (Florida PRIME)

Florida PRIME is administered by the Florida State Board of Administration (SBA) for the purpose of pooling investment funds of local governments in an investment portfolio of money market instruments that provide liquidity while preserving capital. As of October 1, 1997, the SBA had converted Florida PRIME to a “2a-7 like” investment pool (SEC Rule 2a-7 of the Investment Company Act of 1940). On February 13, 2008, the Trustees of the SBA hired Federated Investors to manage Florida PRIME, effective on March 1, 2008. The SBA takes reasonable care to maintain a weighted average maturity of 60 days or less and to have no more than 25% of assets in a single industry sector, except the financial services industry. In addition, the SBA will generally comply with the diversification limitation of having at least 50% of the portfolio invested in securities rated A-1+ or those deemed to be of comparable credit quality. On September 30, 2018, Florida PRIME was invested in fixed rate and floating rate bank instruments, fixed rate and floating rate asset backed commercial paper, fixed rate and floating rate corporate commercial paper, money market mutual funds, floating rate corporate notes and repurchase agreements. A maximum of 40% of the portfolio may be invested in Florida PRIME but when combined with money market mutual funds, may not exceed 50% of the portfolio.

B. U.S. Treasury Securities (Treasuries)

The securities comprising Treasuries are direct obligations of the U.S. Government. The securities are designated by maturity. Treasury bills have maturities of one year or less, Treasury notes have maturities of two to 10 years, and Treasury bonds have maturities of more than 10 years. The prices of the longer maturities are more volatile because they are more sensitive to interest rate fluctuations. Treasury yields are typically lower than yields on debt issued by federal agencies sponsored by the U.S. Government.

C. Federal Agency Securities (Instrumentalities)

Instrumentalities are securities issued by federal agencies sponsored by the U.S. Government. The Policy allows purchases of bonds, notes or debentures of the issuing agencies including Federal Farm Credit Banks, Federal Home Loan Bank or its district banks, Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac). Instrumentalities vary in maturities. Yields on Instrumentalities are typically greater than yields of similar Treasuries. The Policy further restricts investments in any one agency to 15% of the portfolio.

D. Certificates of Deposit and Savings Accounts (CDs/Savings)

The Comptroller may invest in nonnegotiable, interest bearing CDs and savings accounts in state or national banks located in Florida, and having their deposits secured by Chapter 280, Florida Statutes, known as the Florida Security for Public Deposits Act. The issuing bank must not be listed with any nationally known credit watch organization. There is some liquidity risk with CDs because they are subject to penalties for early withdrawal. The Policy further restricts CDs/Savings in any one bank to 5% of the portfolio.

E. Repurchase Agreements (Repos)

A Repo is a financial transaction in which the County exchanges cash for ownership of specific securities with a simultaneous agreement to sell back the securities. Overnight Repos mature in one day. Other Repos are written to mature in specific multi-day periods and are known as term Repos. Other Repos are written as open transactions with indefinite terms subject to liquidation by either party. Yields tend to run close to the federal funds rate. The Policy calls for the specific securities to be only those Treasuries or Instrumentalities allowed by the Policy with maturities less than five years and having a market value of 102% during the term. The County may enter into a Repo transaction only with qualified financial institutions, which have executed a Master Repurchase Agreement with the Comptroller. The Policy further restricts transactions with any one financial institution to 5% of the portfolio, except for overnight Repos.

F. Bankers' Acceptances (BAs)

BAs are generally bearer form securities comprised of underlying letters of credit used to finance international trade. A BA is created from a letter of credit issued by an importer's bank to pay a foreign exporter for goods expected to be received. The exporter will normally present this letter of credit to its bank for a discounted payment. The exporter's bank then presents the letter of credit to a U.S. correspondent bank for payment at which time it is marked *Accepted*. Upon

acceptance, the BA becomes an irrevocable and unconditional obligation of the accepting bank, and it is also an obligation of the importer and any endorser thereof. BAs typically have maturities of 180 days or less. Yields are generally greater than Treasuries and Instrumentalities of similar maturity. The Policy requires BAs to be inventory-based, issued by a domestic bank that has an uninsured and unguaranteed obligation rating of at least P-1 and A by Moody's Investors Service and A-1 and A by S&P Global, and ranked in the top 50 domestically chartered insured commercial banks that have consolidated assets of \$300 million or more as reported by the Federal Reserve Board. The Policy further restricts the investment with any one financial institution to 5% of the portfolio.

G. Commercial Paper (CP)

CP is unsecured short-term debt issued primarily by corporations to finance receivables and other short-term needs. CP has a maximum maturity of 270 days. Yields are typically greater than Treasuries and Instrumentalities of similar maturity. The Policy requires the issuer to be rated P-1 by Moody's Investors Service and A-1 by S&P Global and, if backed by a letter of credit, the long-term debt of the credit provider must be rated at least A by two nationally recognized rating agencies. The credit provider must also be ranked in the top 50 domestically chartered insured commercial banks that have consolidated assets of \$300 million or more as reported by the Federal Reserve Board. The Policy further restricts the investment with any one financial institution to 2.5% of the portfolio.

H. Municipal Obligations

For situations necessary to comply with arbitrage regulations, the Comptroller may invest in taxable and tax-exempt debt, and general obligation and revenue bonds issued by state and local governments. Long-term debt must be rated at least Aa by Moody's Investors Service and AA by S&P Global. Short-term debt must be rated at least MIG-2 by Moody's Investors Service and SP-2 by S&P Global. The Policy further restricts the investment with any one issuer to 3% of the portfolio.

I. Fixed Income Money Market Mutual Funds (Money Markets)

Money Markets are pools of securities providing income and liquidity. The Policy enables the Comptroller to invest in SEC qualified fixed income Money Markets with underlying investments in Treasuries and Treasury-backed repurchase agreements. The average maturity of the underlying investments may not exceed one year. A maximum of 25% of the portfolio may be invested in Money Markets but when combined with Florida PRIME may not exceed 50% of the portfolio. The Policy further restricts the investment with any one fund to 10% of the portfolio.

VI. LIQUIDITY REQUIREMENTS

The second objective in managing the County's investments is the provision for sufficient liquidity. On a regular basis, the County's receipts and disbursements are analyzed to determine trends in cash inflow and outflow. Cash inflows are invested upon receipt and immediately become part of the portfolio.

The portfolio provides cash for daily payment of operating and capital expenditures, biweekly payment of payroll expenditures, and semiannual debt service payments. Debt service payments are funded through sinking funds held by the County. Average daily payments for operating and capital expenditures increased 9.3% to \$5.9 million in Fiscal Year 2018 compared with \$5.4 million in Fiscal Year 2017. Average biweekly payments for payroll expenditures rose 4.8% to \$15.2 million from \$14.5 million, excluding a one-time disbursement, in Fiscal Year 2017. The Fiscal Year 2017 biweekly payroll number excludes retroactive pay following the settlement of contract negotiations between the County and the International Association of Fire Fighters.

Total debt service payments fell to \$92.7 million in Fiscal Year 2018 from \$112.3 million in Fiscal Year 2017. The debt service payments in Fiscal Year 2017 exclude \$20.8 million of debt service funds used to refinance bonds. The decrease in debt service payments in Fiscal Year 2018 was primarily attributable to the timing of the initial \$21.5 million principal payment on the Tourist Development Tax Refunding Revenue Bonds, Series 2017, which did not occur until the first day of Fiscal Year 2019.

VII. DOMESTIC MONETARY POLICY AND NATIONAL ECONOMIC ACTIVITY

In addition to the types of permitted investments and allowable maturities, and liquidity requirements, portfolio performance is influenced by domestic monetary policy and national economic activity. The Policy provides that the Comptroller will utilize federal funds rates, Treasury yield curves, and major U.S. economic barometers in making investment decisions. Yields usually fall or remain stable when monetary policy and economic indicators point to declines in inflationary pressure. Yields usually rise when the economy shows signs of increasing inflation. Domestic monetary policy and economic activity significantly influence the County's portfolio performance.

The Federal Reserve Board (Fed) conducts domestic monetary policy. The Fed controls monetary policy through open market operations, the discount rate and bank reserve requirements. The Fed's Board of Governors administers the discount rate and bank reserve requirements, and the Federal Open Market Committee (FOMC) conducts open market operations. Open market operations have the most significant impact on the County's portfolio performance. The FOMC reviews economic and financial conditions, assesses risks to the economic outlook and attempts to alter the federal funds rate through monetary policy. The federal funds rate is the interest rate at which banks lend to other banks overnight. Changes in federal funds rates trigger events that affect other short term interest rates and, ultimately, a range of economic variables.

The FOMC increased the target range for federal funds by 25 basis points four times during Fiscal Year 2018. The target range opened the fiscal year at 1.00%-1.25% and ended the year at 2.00%-2.25%. The Fed increased rates on favorable trends in the labor market and rising economic activity. Household spending and business fixed investment also continued to strengthen. Inflation remained near the Fed's target of 2%. In September, the Fed dropped the language that described monetary policy as *accommodative*. The change indicated that monetary policy was near a level that neither promoted nor slowed economic activity.

Yields on Treasury bills and short-term Treasury notes are strongly influenced by the federal funds rate, as well as anticipated changes in this rate. The average Treasury yield curve shifted upward during Fiscal Year 2018. The largest increases occurred in the 3-month to 2-year range. The smallest increase occurred in the 30-year Treasury. The yield on the 3-month Treasury increased by 94 basis points; 6-month, 100 basis points; 1-year, 105 basis points; 2-year, 102 basis points; 5-year, 75 basis points; 10-year, 47 basis points; and 30-year, 10 basis points.

The curve shifted in a parallel fashion between the 3-month and the 5-year Treasuries but flattened in the 10-year to 30-year time frame. The average spread between the 30-year Treasury and the 3-month Treasury was 1.31 percentage points in Fiscal Year 2018 compared with 2.15 percentage points in the prior year. Longer-term rates have been relatively stable in an environment of low wage growth and moderate inflation. However, the flattening of the yield curve may also reflect expectations for weaker economic conditions in the future.

In October 2017, the Fed launched a balance sheet normalization program to gradually reduce the size of its \$4.5 trillion balance sheet. The Fed began by allowing \$10 billion of securities to mature each month without reinvestment. The amount was increased by \$10 billion quarterly until reaching \$50 billion in October 2018. The Fed plans to reduce the size of its balance sheet to levels below that of the past few years but larger than it was before the financial crisis.

Subsequent to the end of the fiscal year, on December 19, 2018, the FOMC raised the fed funds target range to 2.25%-2.50% from 2.00%-2.25%. The Fed increased rates on a strengthening labor market and strong rate of growth in economic activity. The Committee believed further gradual increases may be needed due to expanding economic activity, low unemployment and moderate inflation.

Earnings growth was driven by the sharp increase in short term interest rates. More than half of the overall portfolio's assets were invested in the current operating sub-portfolio, which has a maximum maturity of 13 months. The returns on the current operating sub-portfolio exceeded the returns on the longer-term sub-portfolios despite the normally sloped yield curve. The returns on the long-term sub-portfolios reflect investments made over the last few years when interest rates were lower.

Shown below in Chart 1 are the average 30-year Treasury yield curves for fiscal years 2014 through 2018, followed by Chart 2, which compares the monthly portfolio rates of return with the monthly intended and effective federal funds rates for the same period.

Chart 1 – Average U.S. Treasury Yield Curves

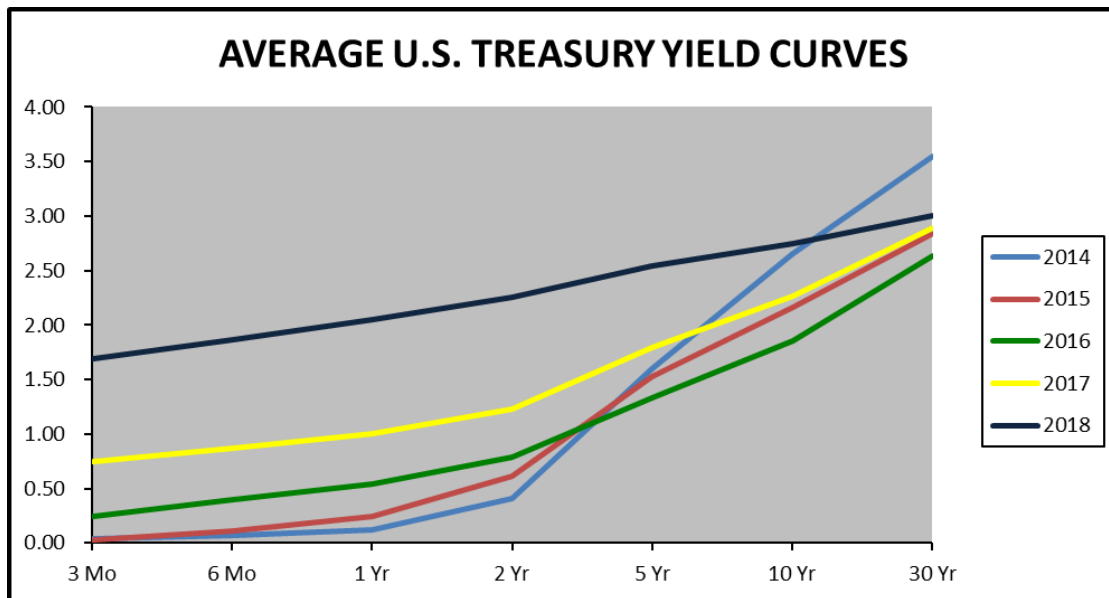
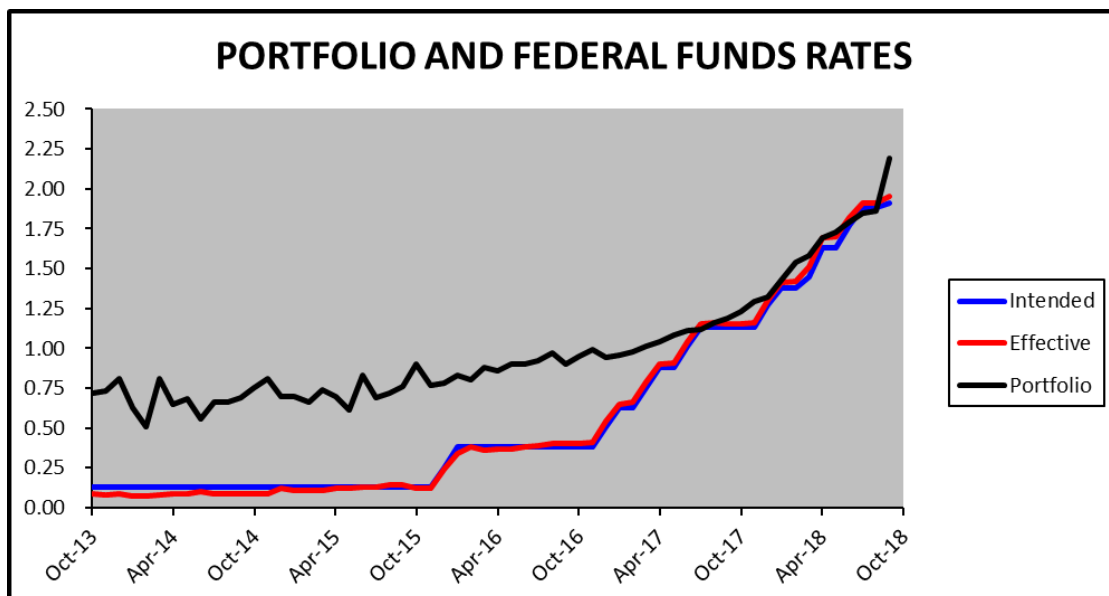


Chart 2 – Portfolio and Federal Funds Rates



Economic barometers are data points that represent trends in the general economy. These barometers significantly influence interest rates on most government and corporate securities nationwide. Shown below in Charts 3 through 13 are the barometers followed by the Comptroller in developing investment strategy during the fiscal year, together with a brief explanation of each.

Chart 3 – Gross Domestic Product

Gross domestic product (GDP) is a measure of the total value of goods and services produced in the United States for a given time period. Quarterly percent changes in the chain price index provide a broad-based estimate of GDP at constant, or inflation adjusted, dollar prices. GDP is the most comprehensive economic scorecard because it is the broadest measure of aggregate economic activity including personal consumption expenditures, investment, net exports and government expenditures. Changes in the GDP chain price index are a widely followed, market-moving indicator. GDP is published by the U.S. Department of Commerce.

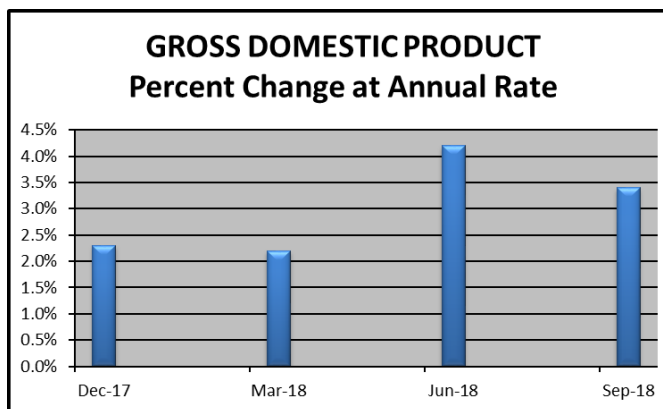


Chart 4 – Nonfarm Payrolls

Nonfarm payrolls (NFP) measure the number of jobs in the nonagricultural economy. Monthly changes reflect the changes in actual numbers of paid employees in business and government establishments. NFP is a coincident indicator of the level of economic activity. Changes are closely watched because they are representative of the state of the economy. NFP is published by the U.S. Department of Labor.

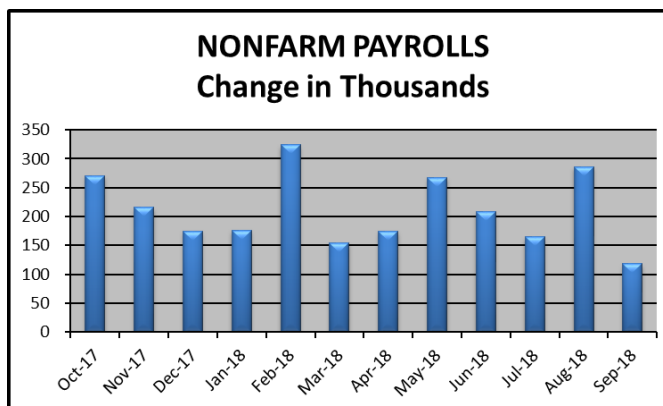


Chart 5 – Unemployment Rate

The unemployment rate is the ratio of the total number of unemployed to the total labor force. The labor force consists of those working and those seeking employment. Monthly changes in this rate and NFP are widely regarded together as the primary monthly economic indicator because the combined data helps forecast other important economic barometers. The unemployment rate is published by the U.S. Department of Labor.

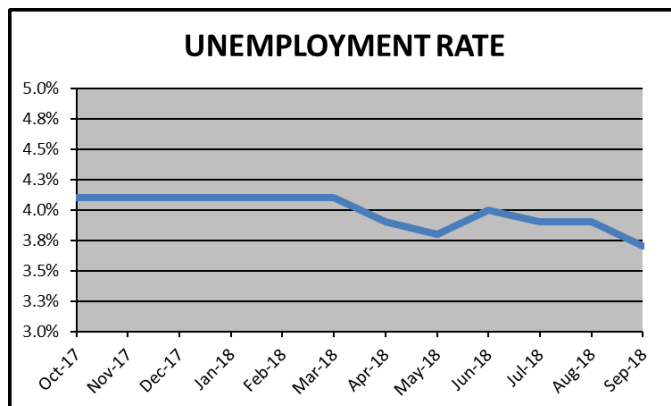


Chart 6 – Personal Consumption Expenditures

Personal consumption expenditures (PCE) is a measure of goods and services purchased by persons in the United States. PCE is the most important and typically the most stable of the four components that comprise GDP. PCE normally represents more than two-thirds of GDP. The three sectors of PCE are durable goods (expected to last three years or more), nondurable goods (less than three years) and services. Services account for approximately 65% of PCE. The U.S. Department of Commerce publishes PCE.

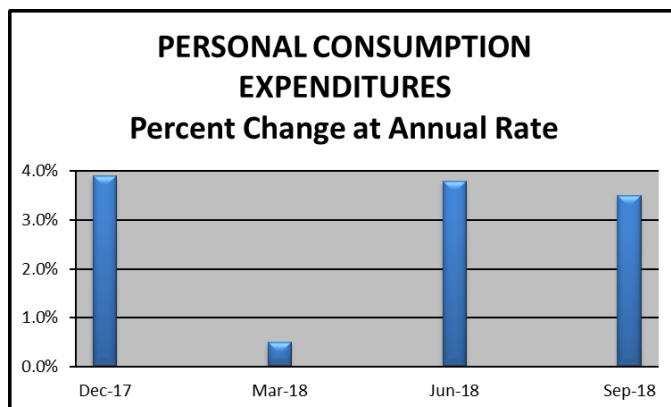


Chart 7 – Retail Sales (Excluding Autos)

Retail sales is a measure of consumer spending for a given month. This reading is used to help forecast PCE and GDP. The control component, retail sales excluding autos, is used to measure the growth rate in the non-service component of PCE. This indicator is hard to forecast and the market is often sensitive to large, unexpected readings. The U.S. Census Bureau of the Department of Commerce publishes retail sales.

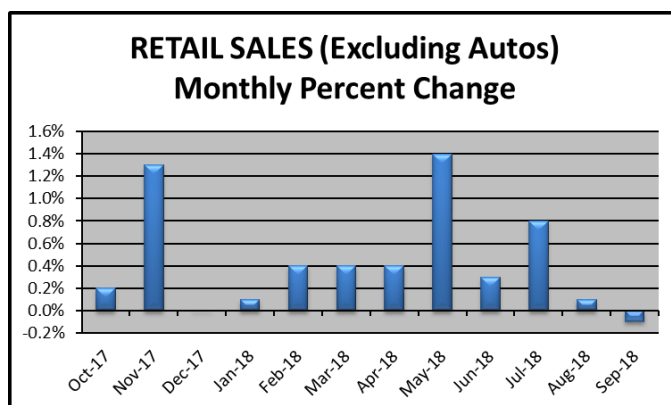


Chart 8 – Consumer Sentiment

Consumer sentiment is a measure of how consumers view prospects for their own financial condition, how they view prospects for the general economy in the near term, and their view of the economy over the long term. Monthly levels of consumer sentiment are included in the Conference Board's Index of Leading Economic Indicators and are associated with consumer spending. The University of Michigan and Thomson Reuters publish the report on consumer sentiment.

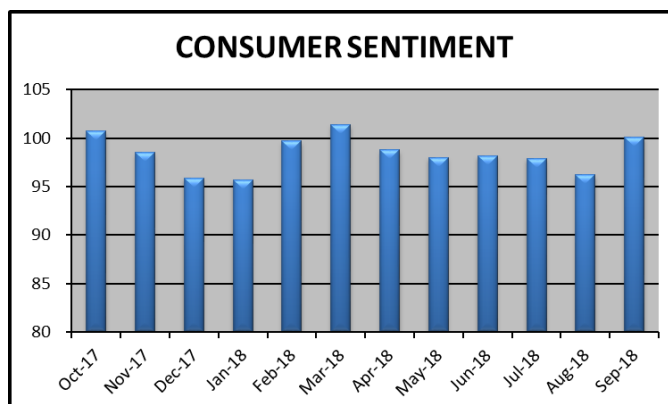


Chart 9 – Consumer Price Index

The consumer price index (CPI) is a measure of the average price of a fixed basket of goods and services that consumers in the U.S. buy on a regular basis. Monthly percent changes in the index reflect the average change in consumer prices. The CPI is widely followed and regarded by many as the measure of inflation. CPI is published by the U.S. Department of Labor.

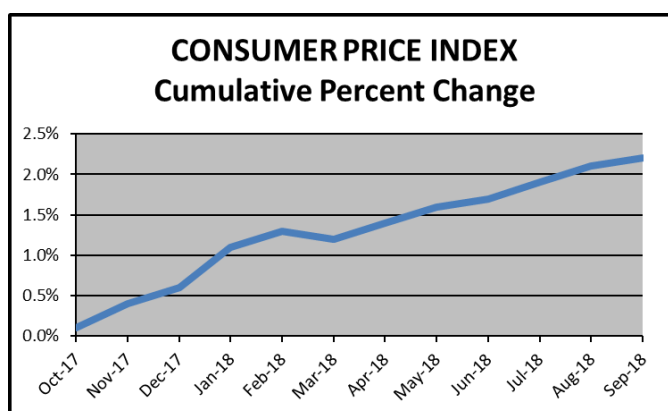


Chart 10 – Core Consumer Price Index

Core CPI excludes food and energy costs from the CPI. The core CPI rate is believed by many to be a better approximation of underlying inflation than the CPI because it removes items that are subject to large, temporary price changes. Economists and market analysts monitor core CPI for its greater monthly stability. Core CPI is published by the U.S. Department of Labor.

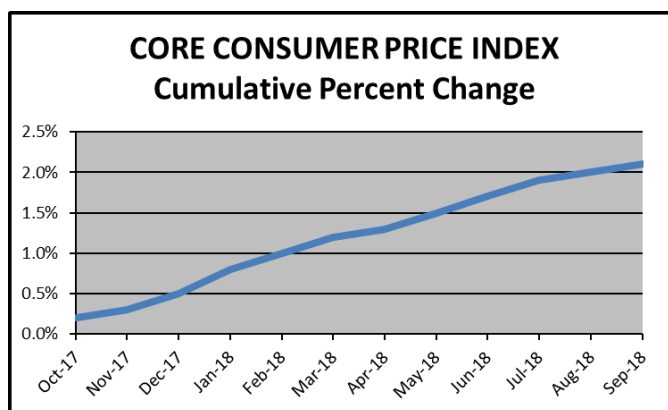


Chart 11 – Producer Price Index

The producer price index (PPI) is a measure of the average level of prices of a fixed basket of goods and services received by domestic producers. Monthly percent changes reflect the rate of change in such prices. Changes in the PPI are widely followed as a significant indicator of inflation trends. PPI is published by the U.S. Department of Labor.

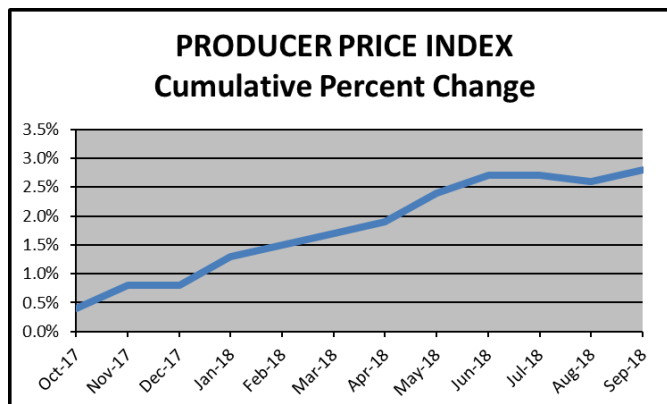


Chart 12 – Housing Starts

Housing starts is a measure of the number of residential units on which construction has begun each month. The level of housing starts is widely followed as a significant indicator of residential construction trends and demand for furniture, home furnishings and appliances. Housing starts is published by the U.S. Department of Commerce.

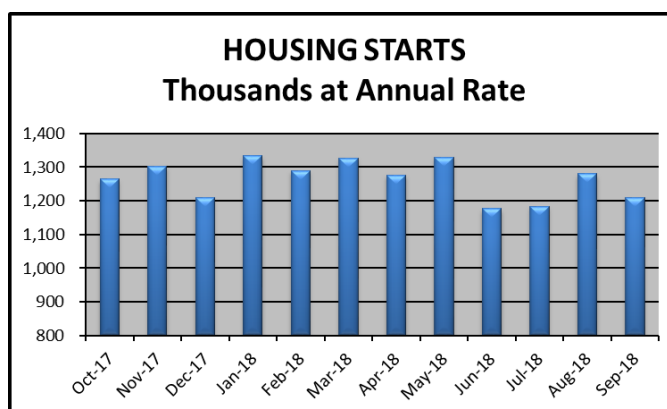
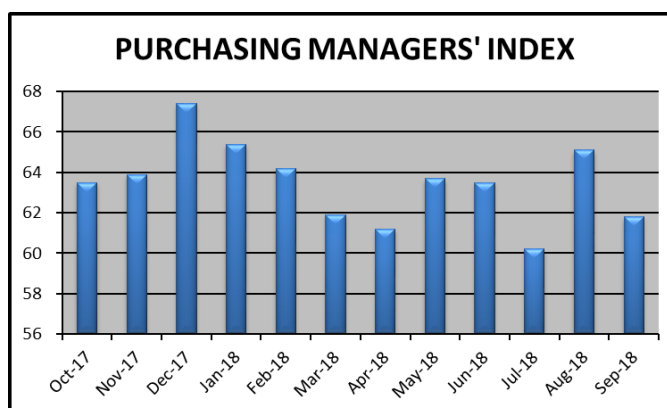


Chart 13 – Purchasing Managers' Index

The purchasing managers' index (PMI) is derived from surveys of purchasing managers about the general direction of production, orders, inventories, employment, vendor deliveries and prices. PMI is an indicator of overall factory sector trends. Historically, readings above 50 are associated with expanding manufacturing activity; readings over 42.7 indicate that the overall economy is expanding. Readings below 50 are typically associated with contractions in manufacturing and readings below 42.7 indicate that the overall economy is contracting. PMI is widely followed because it gauges momentum in manufacturing and corporate earnings. The Institute for Supply Management publishes PMI.



Going into Fiscal Year 2018, economists did not expect the economy to keep growing at rates near 3.0%. According to a survey conducted by Bloomberg, GDP was forecast to average roughly 2.4% in calendar year 2018. The labor market was strengthening and the Federal Reserve expected inflation to remain below its 2% target. The Fed was somewhat puzzled by the persistently low inflation and wage growth despite very low unemployment. The Fed projected that it would hike rates three times in calendar year 2018 to bring the fed funds rate up to 2.1%.

Indicated in Charts 3 through 13, the barometers reflect varying economic conditions throughout the fiscal year. According to GDP, the economy was growing at an annual rate of 2.3% in the first quarter of the fiscal year following a revised 2.8% in the fourth quarter of the previous fiscal year. Growth decelerated on a surge in imports and a decline in inventories. However, there was some positive news in personal consumption expenditures and business fixed investment. Consumer spending, which represents approximately 70% of the economy, increased at a 3.9% rate compared with 2.2% in the previous quarter. Business fixed investment increased 6.8%, driven by the largest increase in new equipment purchases in three years. The US economy added an average of 220,000 jobs per month during the quarter and unemployment was at 4.1%. CPI increased at a rate of 0.2% in December 2017 on rising shelter costs. Given the strong labor market and firm rate of inflation, the Fed raised the target rate range for fed funds by 25 basis points to 1.25%-1.50%.

The pace of GDP growth ticked down to 2.2% in the quarter ended March 31, 2018. The slower growth was primarily attributable to a sharp drop in consumer spending, which declined to a 0.5% pace. There were, however, signs the economy was gaining momentum. Nonfarm payrolls expanded by an average of 218,000 jobs per month and inflation rose at the fastest pace in a year. The core CPI, which excludes food and energy, increased 0.2% or more in each month of the quarter. The positive economic outlook was supported by an unexpected surge in consumer sentiment. In March, the consumer sentiment index reached 101.4, the highest reading since January 2004. In March, the Fed increased the fed funds target range to 1.50%-1.75%.

GDP surged to a 4.2% annual growth rate, the fastest since 2014, in the quarter ended June 30, 2018. The increase was propelled by positive contributions from consumer and business spending, exports and federal government spending. PCE rebounded to a 3.8% growth rate and business spending increased at a 8.7% pace. The unemployment rate was 4.0% in June and nonfarm payrolls expanded at an average rate of 217,000 jobs per month in the quarter. The PPI index rose 0.3% in June and 3.4% for the 12-month period ended in June, the highest year-over-year increase since 2011. The rising prices indicated that cost pressures in the production pipeline were mounting on growing demand and tariffs. In June, the Federal Reserve increased the fed funds target range to 1.75%-2.00%.

GDP grew at a 3.4% annualized rate in the quarter ended September 30, 2018. Although the rate of growth slowed, the economy continued to expand at a robust pace. The strong rate of growth was primarily attributable to a 3.5% increase in personal consumption

expenditures, partially offset by a decline in exports and a decrease in business investment. Exports were adversely affected by the tariff battle between the US and China. The unemployment rate dropped to 3.7% in September, the lowest level in 49 years, and the consumer sentiment index surged above 100 for the third time in the fiscal year. Consumer optimism reflected favorable economic conditions, low unemployment and a rising stock market. In September, the Fed increased the range for the overnight lending rate to 2.00%-2.25%.

Going into Fiscal Year 2019, economists expect the rate of GDP growth to slow. According to a survey conducted by Bloomberg, GDP is forecast to average roughly 2.7% in calendar year 2019. The unemployment rate is near historic lows and the Federal Reserve expects inflation to remain near its 2% target over the next year. Subsequent to the end of the fiscal year, stock prices fell and the yield curve inverted between the 1-year and 5-year Treasuries. The curve inverts when shorter-term rates are higher than longer-term rates. Yield curve inversions have often preceded recessions in the past.

VIII. LOCAL ECONOMIC ACTIVITY

In addition to the types of permitted investments and allowable maturities, liquidity requirements, and domestic monetary policy and national economic activity, the portfolio's effective rate of return is influenced by the local economy. The County derived approximately 80% of its Fiscal Year 2018 revenues from 12 revenue sources including several taxes, user fees and charges, state-shared revenues and investment income. Shown in Table 2 are the County's 12 major revenues received in Fiscal Years 2018 and 2017.

Table 2 – Orange County's 12 Major Revenue Sources

<u>Revenue</u>	<u>FY 2018</u>	<u>FY 2017</u>
Ad Valorem Tax	\$765,716,434	\$701,828,655
Tourist Development Tax	276,847,383	254,942,009
Water Utilities System Operations	199,021,062	189,403,100
Half-Cent Sales Tax	190,487,596	174,610,976
Public Service Tax	94,967,192	93,506,468
Convention Center Operations	77,334,204	78,713,109
Impact Fees (excl. School Impact Fees)	73,142,671	66,221,547
Fuel Taxes	48,128,554	47,125,273
Mandatory Refuse Fees	46,180,186	41,282,681
State Revenue Sharing	43,483,984	41,274,291
Solid Waste Tipping Fees	35,392,462	31,650,436
Interest Earnings	31,080,597	17,701,740
Totals	\$1,881,782,325	\$1,738,260,285

IX. INVESTMENT OPERATIONS

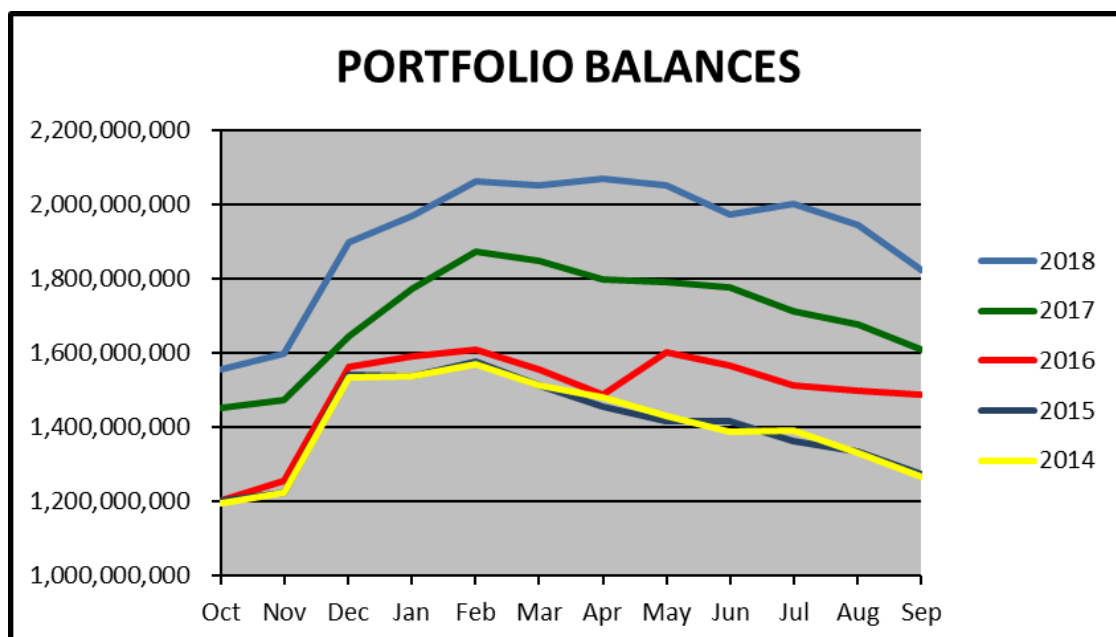
Qualified professionals in the Comptroller's Office conduct investing activities in accordance with Florida Statutes, County Ordinances, and written policies and procedures. Monthly reports of investment activity and positions are prepared and distributed to Comptroller management, management of the BCC and the Investment Advisory Committee. Regular meetings of the Committee are held to monitor the portfolio, evaluate investment performance and discuss investment strategies.

The Comptroller uses sophisticated techniques in carrying out its investment activities including the use of electronic bank and trust account systems; electronic funds transfer; on-line, real-time monitoring of U.S. securities markets; and electronic trading. Bank account balances, cash requirements, investment positions and trust account activity are determined daily. Current conditions and evaluations of domestic monetary policy and national economic activity are considered in purchasing investments.

A. Portfolio Balances

The portfolio's opening balance in Fiscal Year 2018 was \$1.61 billion and the average daily balance was \$1.89 billion. The portfolio's ending balance for Fiscal Year 2018 was \$1.82 billion, up \$213.5 million from the prior year. Expenditures from the portfolio rose to \$1.97 billion from \$1.92 billion in 2017. The increase was attributable to higher operating and capital expenditures and payroll expenses. Shown in Chart 14 are the portfolio balances as of the end of each month in fiscal years 2014 through 2018.

Chart 14 – Portfolio Balances



B. Portfolio Composition

As of September 30, 2018, the portfolio was fully invested in permitted investments within allowable composition limits. As shown in Chart 15 below, the portfolio contained Treasuries, Florida PRIME (SBA), Instrumentalities, CDs, Bank Money Market Deposits and Money Markets comprised of Treasuries and Treasury-backed repurchase agreements. Chart 16, September 30, 2017 Portfolio Composition by Investment Type, is presented for comparative purposes.

Chart 15 – September 30, 2018 Portfolio Composition by Investment Type

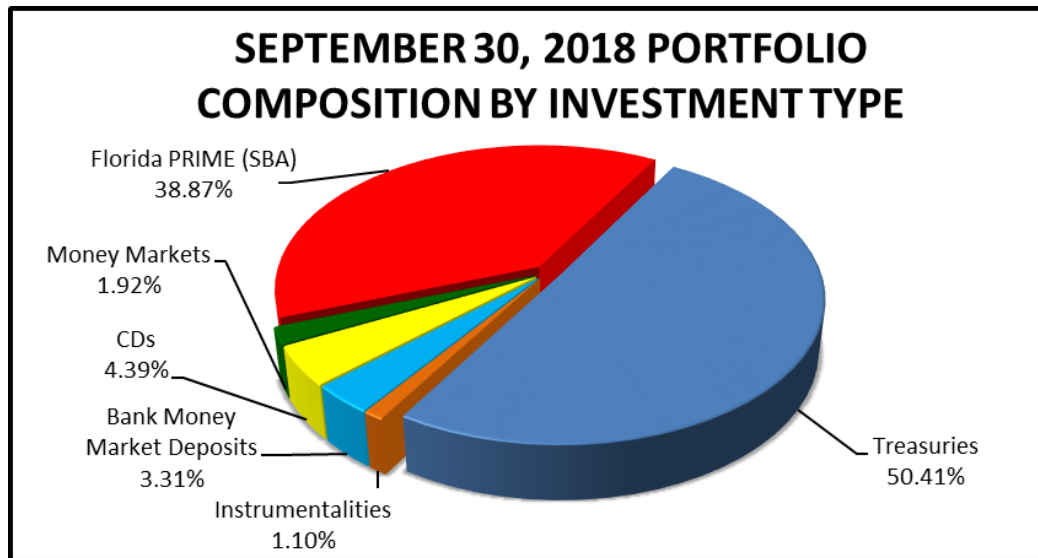
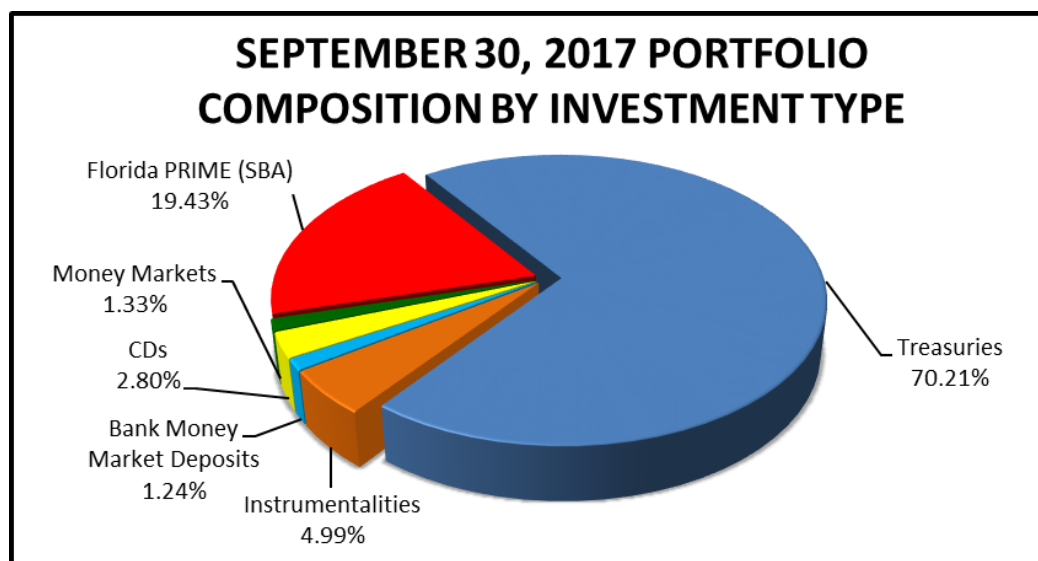


Chart 16 – September 30, 2017 Portfolio Composition by Investment Type



The portfolio was managed in compliance with the Policy, which requires the portfolio to be diversified by investment type. However, Treasuries may represent 100% of the portfolio because they are backed by the full faith and credit of the United States Government. During Fiscal Year 2018, the average allocation to Florida PRIME (SBA) increased sharply, while the allocation to Treasuries was significantly lower. Changes in the average portfolio composition can be seen in Charts 17 and 18.

Chart 17 – FY 2018 Average Portfolio Composition by Investment Type

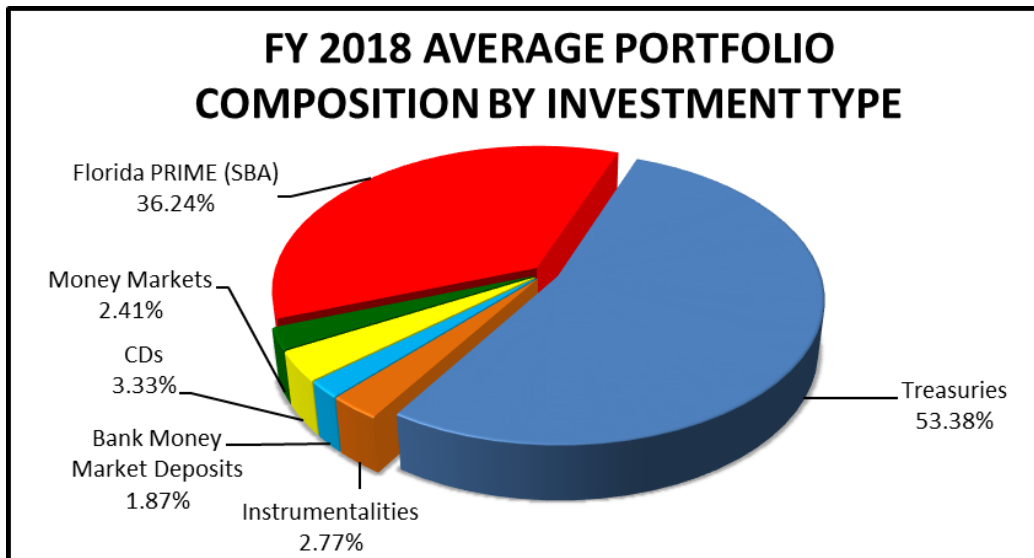
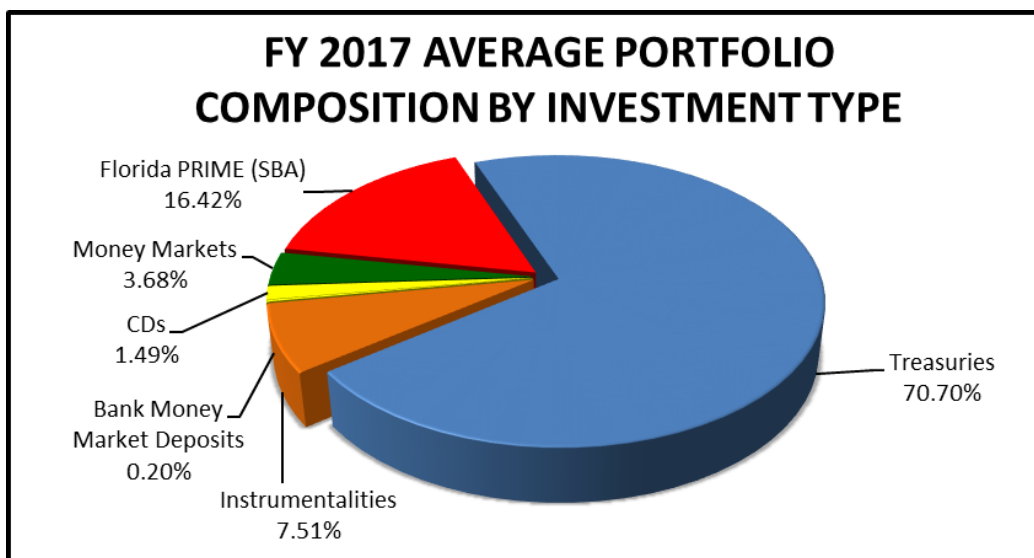


Chart 18 – FY 2017 Average Portfolio Composition by Investment Type



The portfolio is comprised of four sub-portfolios: current operating, intermediate term, noncurrent operating and debt service reserve. The current operating sub-portfolio has a maximum maturity of 13 months and is managed to meet

operating, payroll and debt service requirements. The intermediate term sub-portfolio has a maximum maturity of 36 months and was established to increase returns on excess liquidity and diversify investment maturities across the yield curve. The noncurrent sub-portfolio is comprised of a 5-year ladder designed to meet longer term funding requirements. Investments in the debt service reserve sub-portfolio are governed by the County's bond covenants. The Policy requires debt service reserve and project construction investments to have terms that coincide with the expected use of the funds and in accordance with debt covenants, but not to exceed 10 years. The September 30, 2018 Portfolio Composition by Sub-portfolio is presented below. Chart 20, September 30, 2017 Portfolio Composition by Sub-portfolio, is presented for comparative purposes.

Chart 19 – September 30, 2018 Portfolio Composition by Sub-portfolio

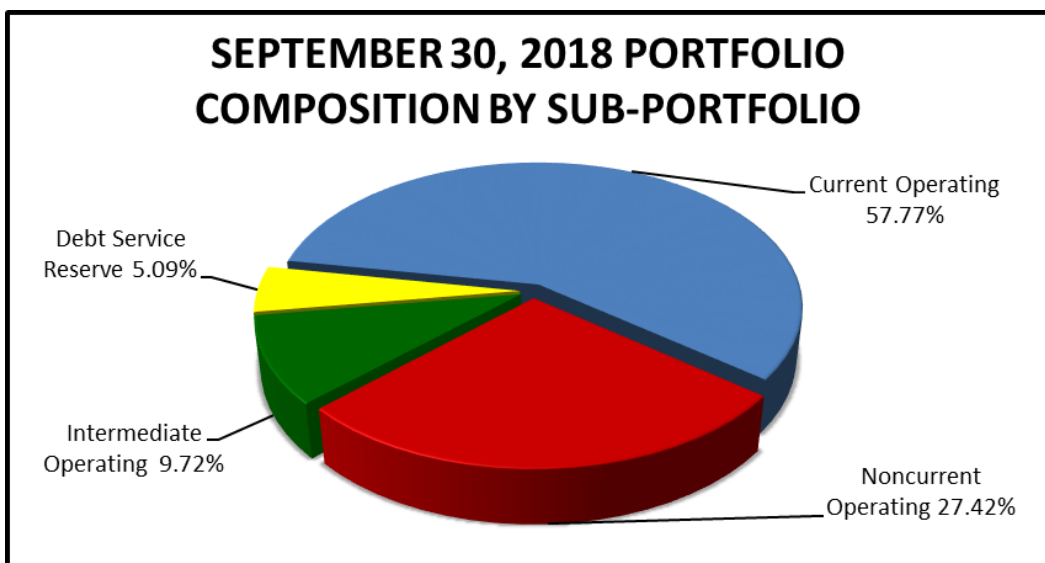
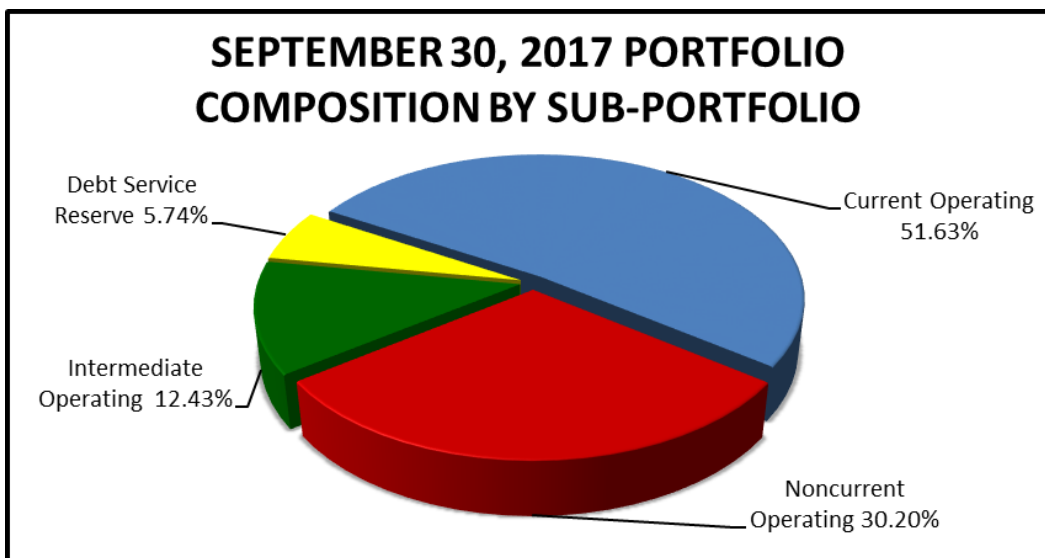


Chart 20 – September 30, 2017 Portfolio Composition by Sub-portfolio



In Fiscal Year 2018, current operating funds represented a larger percentage of the average portfolio composition. The increase in the average balance of the overall portfolio from the prior year was entirely invested in the current operating sub-portfolio, increasing its allocation on a percentage basis. The change in average composition by sub-portfolio is presented below in Charts 21 and 22.

Chart 21 – FY 2018 Average Portfolio Composition by Sub-portfolio

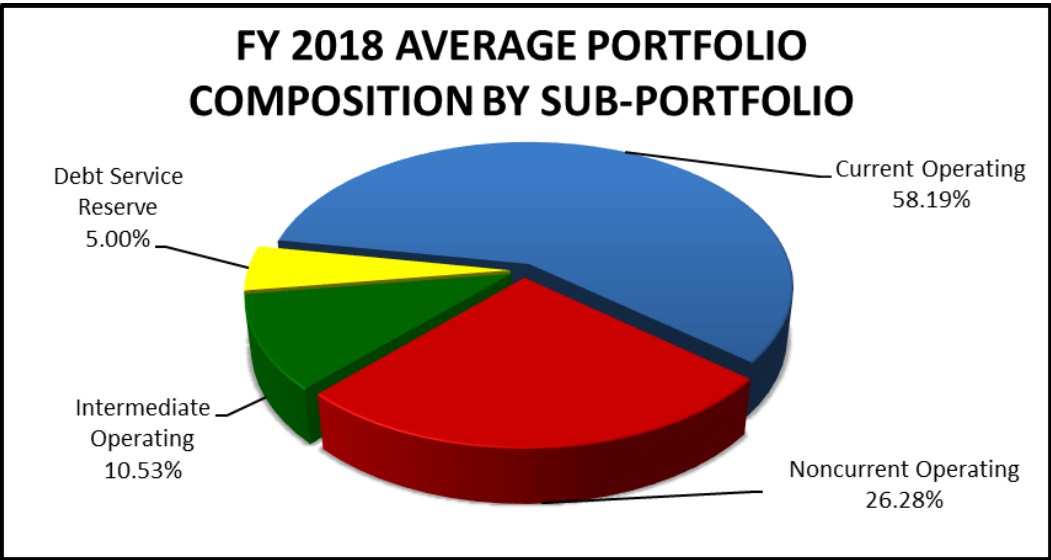
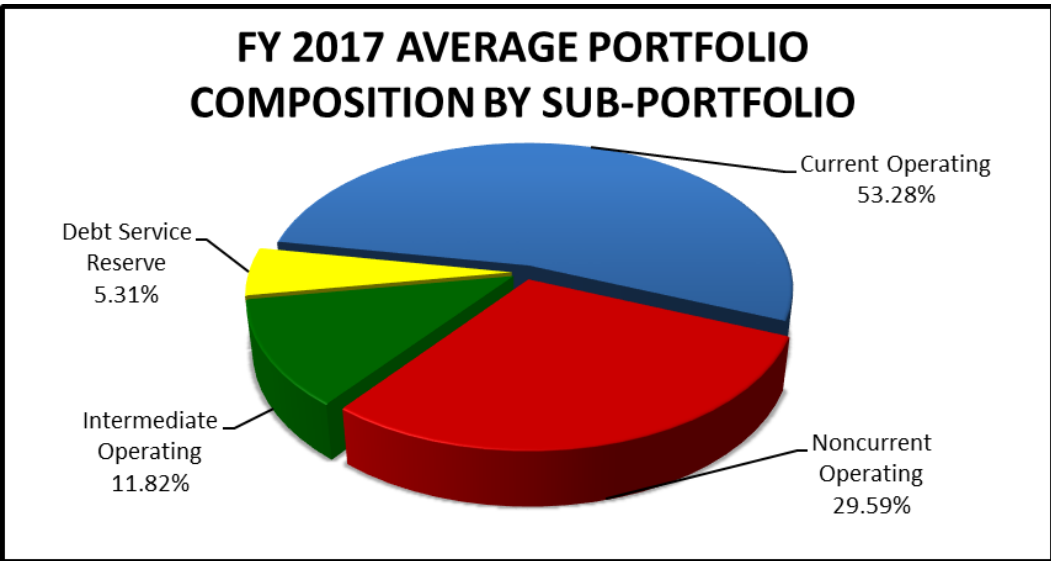


Chart 22 – FY 2017 Average Portfolio Composition by Sub-portfolio



C. Portfolio Maturities

The Policy requires sufficient liquidity and diversity in maturities. Shown in Table 3 are the average terms of each investment type at September 30, 2018 and 2017. Average term is the weighted average number of days from purchase to maturity of the investment. Average terms extend past 13 months in some cases due to the long-term investment of noncurrent operating funds, intermediate term funds, project construction funds and debt service reserve funds.

Table 3 – Year-end Average Term by Investment Type (Days)		
Investment Type	FY 2018	FY 2017
Florida PRIME (SBA)	1	1
Money Market Funds	1	1
Bank Money Market Deposits	1	1
Certificates of Deposit	342	365
Instrumentalities	363	358
Treasuries	1,288	1,122

Available balances were invested for an average term of 669 days in Fiscal Year 2018 compared with an average term of 802 days in Fiscal Year 2017. Table 4 below reports the average term of the portfolio for each month in Fiscal Years 2018 and 2017. The portfolio's average days to maturity was 320 days in Fiscal Year 2018 compared with 432 days in 2017. Average days to maturity is the average number of days remaining to maturity for the portfolio. Table 5 below reports the average days to maturity for each month in Fiscal Years 2018 and 2017. The average term and average days to maturity fell on an increase in the balance of the current operating sub-portfolio, as well as the strategy of keeping investment maturities short in a rising rate environment. The County's net gain in revenues over the prior year was entirely invested in the current operating sub-portfolio. The balance of investments in the noncurrent and intermediate term sub-portfolios was unchanged.

Table 4 – Average Term (Days)

Period	FY 2018	FY 2017
October	834	908
November	819	896
December	673	831
January	657	775
February	617	749
March	614	754
April	618	765
May	620	768
June	633	770
July	629	797
August	644	793
September	669	816
Average	669	802

Table 5 – Average Days to Maturity

Period	FY 2018	FY 2017
October	406	535
November	424	519
December	341	479
January	327	436
February	305	415
March	304	414
April	298	403
May	292	406
June	289	393
July	281	388
August	280	385
September	292	414
Average	320	432

D. Interest Earnings and Yields

The dollar amount of interest earnings is used in historical and budgetary comparisons, and in cash flow analysis. The portfolio earned \$31,080,597 on an average daily balance of \$1,894,563,978 in Fiscal Year 2018. For comparison, the portfolio earned \$17,701,740 on an average daily balance of \$1,690,316,441 in Fiscal Year 2017. Actual interest income was \$23,519,214 more than the budgeted amount in Fiscal Year 2018. For comparison, actual interest income was \$11,060,172 more than the budgeted amount in Fiscal Year 2017. Budgeted and actual interest earnings for both fiscal years are shown in Table 6 below.

Table 6 – Budget and Actual Interest Earnings

	<u>FY 2018</u>	<u>FY 2017</u>
Actual	\$31,080,597	\$17,701,740
Budget	<u>7,561,383</u>	<u>6,641,568</u>
Variance	\$23,519,214	\$11,060,172

The Fiscal Year 2018 interest earnings and effective rate of return on each sub-portfolio are shown below in Table 7. The Fiscal Year 2017 interest earnings and effective rate of return by sub-portfolio are provided in Table 8 for comparison.

Table 7 – FY 2018 Interest Earnings and Effective Rate of Return by Sub-portfolio

FY 2018		
<u>Sub-portfolio</u>	<u>Interest Earnings</u>	<u>Effective Rate of Return</u>
Current Operating	\$19,589,499	1.78%
Noncurrent Operating	7,817,686	1.57%
Intermediate Term	2,231,798	1.12%
Debt Service Reserve	<u>1,441,614</u>	<u>1.52%</u>
Total	\$31,080,597	1.64%

Table 8 – FY 2017 Interest Earnings and Effective Rate of Return by Sub-portfolio

FY 2017		
<u>Sub-portfolio</u>	<u>Interest Earnings</u>	<u>Effective Rate of Return</u>
Current Operating	\$8,008,907	0.89%
Noncurrent Operating	6,885,890	1.38%
Intermediate Term	2,074,018	1.04%
Debt Service Reserve	<u>732,925</u>	<u>0.82%</u>
Total	\$17,701,740	1.05%

The effective rate of return on the current operating sub-portfolio, which has a maximum maturity of 13 months, surged upward by 89 basis points to 1.78%. The increase in the rate of return was primarily attributable to higher short term interest rates following the Fed's four quarter-point rate hikes during the year, which increased the target range for fed funds from 1.00%-1.25% to 2.00%-2.25%. Returns also benefited from larger balances and increased investments in Florida PRIME and bank money market deposits.

The rate of return on the noncurrent operating sub-portfolio increased by 19 basis points and the intermediate term portfolio rose by 8 basis points. The smaller growth rates in the return on the noncurrent operating sub-portfolio (5-year ladder) and intermediate term sub-portfolio (3-year ladder) were attributable to the longer maturities of the investments in these sub-portfolios. The returns in these longer-term sub-portfolios reflected investments made in prior years when interest rates were lower, whereas all investments in the current operating portfolio are reinvested at market rates within 13 months. Nevertheless, the higher rates of return on the noncurrent operating sub-portfolio and the intermediate term sub-portfolio resulted from the reinvestment of maturing securities at higher market interest rates.

Returns in the debt service reserve sub-portfolio increased by 70 basis points to 1.52%. The higher rate of return on this sub-portfolio was primarily attributable to the sharp increase in short-term rates. Investments in this portfolio were made to match maturities to the County's debt service due dates. All investments in this sub-portfolio had maturities of less than 13 months.

The dollar amount of earnings by itself has little meaning as a measurement of portfolio performance. A better gauge of portfolio performance is the effective rate of return, which is measured in percent and can be compared to rates in prior years and to comparable investments. For Fiscal Year 2018, the portfolio's effective rate of return was 1.64%. In Fiscal Year 2017, the portfolio's effective rate of return was 1.05%. Shown below in Table 9 are the effective rates of return for the permitted investment types during Fiscal Years 2018 and 2017.

Table 9 – Average Portfolio Effective Rate of Return by Investment Type

<u>Investment Type</u>	<u>FY 2018</u>	<u>FY 2017</u>
Florida PRIME (SBA)	1.98%	1.12%
Bank Money Market Deposits	1.96%	1.38%
Certificates of Deposit	1.74%	1.06%
Treasuries	1.44%	1.09%
Money Markets	1.54%	0.52%
Instrumentalities	1.30%	0.79%

The higher rates of return were attributable to sharp increases in market interest rates. The Fed hiked rates four times during the fiscal year, increasing the

overnight lending rate by a full percentage point. The impact of these rate hikes is reflected in the substantial increases in returns on short-term investments such as the SBA, bank money market deposits, money market mutual funds and certificates of deposit. Treasuries had the smallest increase due to the long-term strategies employed in the noncurrent operating and intermediate term sub-portfolios, which are entirely comprised of Treasury securities. Most of these longer-term investments were made in past years when interest rates were lower.

Investments staff is authorized to sell securities that fall within 13 months of maturity if a capital gain can be realized. The proceeds are immediately reinvested in a Treasury note at the end of the noncurrent operating sub-portfolio's 5-year ladder or the intermediate term sub-portfolio's 3-year ladder. Roll down the yield curve sales generated \$6,775 in capital gains in Fiscal Year 2018. Opportunities to sell investments profitably were limited by higher market interest rates.

E. Benchmark Comparisons

Portfolio performance is best measured when compared with rates of return on comparable investments. The Comptroller has established benchmarks as a means to monitor portfolio performance. A benchmark is a passive portfolio rate of return that represents expected returns with given levels of risk. In establishing benchmarks for the portfolio, the Comptroller evaluated investments with maturities and credit, market and liquidity risks comparable to the permitted investments. The Comptroller continued using certain Treasuries, the ICE BofAML 0-1 Year Treasury Index and the effective federal funds rate as benchmarks for Fiscal Year 2018. The Comptroller also continued to use an internally calculated benchmark named the Committee Benchmark. This customized benchmark is computed using the yields on the effective federal funds rate, the 6-month constant maturity Treasury, the 2-year constant maturity Treasury and the 3-year constant maturity Treasury. Treasuries are defined in Section V above, and the effective federal funds rate is described in Section VII above. The ICE BofAML Index is the average yield of approximately 20 Treasuries with maturities of one year or less.

The County's portfolio was outperformed by all its benchmarks except effective fed funds. The lower return on the portfolio relative to the benchmarks was attributable to the sharp increase in market interest rates. Longer-term investments made over the past few years in the noncurrent operating and intermediate term sub-portfolios curtailed growth in the overall portfolio's rate of return. However, the rate of return on the portfolio increased enough to eclipse the effective fed funds benchmark. The County's portfolio received a boost from larger investments in short-term securities, particularly the SBA and bank money market deposits.

Table 10 – Benchmark Comparisons

<u>Benchmark</u>	<u>FY 2018</u>	<u>Variance</u>	<u>FY 2017</u>	<u>Variance</u>
Portfolio	1.64%		1.05%	
3-Month Treasury	1.69%	-0.05%	0.75%	0.30%
6-Month Treasury	1.87%	-0.23%	0.87%	0.18%
ICE BofAML 0-1 Year Treasury	1.81%	-0.17%	0.86%	0.19%
1-Year Treasury	2.05%	-0.41%	1.00%	0.05%
2-Year Treasury	2.25%	-0.61%	1.23%	-0.18%
Effective Fed Funds	1.58%	0.06%	0.81%	0.24%
Committee Benchmark	1.87%	-0.23%	1.02%	0.26%

F. Brokers, Dealers and Direct Issuers

Management of the portfolio was also accomplished in compliance with the Policy, which requires the portfolio to be diversified by financial institution. The Policy indicates that the Comptroller shall purchase securities only from financial institutions which are qualified as public depositories by the Chief Financial Officer of the State of Florida, from primary securities dealers as designated by the Federal Reserve Bank of New York, from securities dealers certified by the County's Business Development Division as Minority/Women Business Enterprises and having offices in Florida, or from direct issuers of CP and BAs. The Policy also requires a minimum of three competitive offers.

The Comptroller records the number and amount of purchases and sales by financial institutions and dealers. Shown below in Table 11 are the primary dealers and qualified public depositories (QPD) ranked by Fiscal Year 2018 percentage of total County transactions and compared with percentage of transactions in Fiscal Year 2017.

Table 11 – QPD, Dealers and Direct Issuers

<u>Broker/Dealer</u>	<u>Status</u>	<u>FY2018</u> <u>% of Total</u>	<u>FY2017</u> <u>% of Total</u>
Bank of Montreal (BMO)	Primary	34.10%	41.34%
Wells Fargo	Primary	22.75%	19.84%
Citigroup	Primary	11.07%	13.67%
Florida Community Bank	QPD	8.18%	3.28%
Jefferies & Company, Inc.	Primary	7.72%	9.17%
BankUnited, NA	QPD	6.73%	1.64%
City National Bank	QPD	5.42%	1.09%
Compass Bank	QPD	2.69%	-
Cantor Fitzgerald & Co.	Primary	1.34%	-
RBC Capital Markets	Primary	-	8.88%
Sunshine Bank	QPD	-	1.09%

X. DEPOSITORY BANKING

General banking and cash management services are provided by an Agreement for Banking Services with Wells Fargo Bank, N.A., for the period July 1, 2013 through June 30, 2016. Wells Fargo was selected as the County's banking institution in a competitive procurement process. The Agreement provides for three one-year extensions upon mutual consent of the parties. In April 2018, the County and Wells Fargo exercised the final one-year option and extended the agreement through June 30, 2019. Wells Fargo is a member of the Federal Reserve System and the National Automated Clearing House Association. Wells Fargo is also a QPD as defined by the Florida Security for Public Deposits Act.

Services provided by Wells Fargo under the Agreement include general banking, non-interest bearing and interest bearing transaction accounts, retail and wholesale lockbox, and electronic funds transfers. Discussed below is a brief description of each service.

A. General Banking

General banking services include deposits, check writing, credit card processing, stop payments, return item processing, money changing, account analysis, bank statements, full check reconciliation, electronic information reporting and positive payment. Positive payment is an electronic process involving the County's checking accounts that reduces the risk of check fraud and allows unauthorized checks to be automatically returned to the payee.

B. Non-Interest Bearing and Interest Bearing Checking Accounts

The County has the option to establish non-interest bearing or interest bearing accounts. The account types, non-interest or interest bearing, were selected to ensure the maximum benefit was earned by the BCC, Comptroller and Retiree Health Care Benefit Trust.

Non-interest bearing checking accounts are full-service demand deposit accounts that generate interest income on available funds. The BCC has 17 accounts including collection and deposit, and disbursement accounts. Five of the 17 accounts are checking accounts. Available balances are compensated at the upper bound of the targeted federal funds range less 5 basis points; however, the County does not earn interest on balances in excess of those needed to offset service fees.

The Comptroller has seven bank accounts open under this contract, including two checking accounts, and another account was established for the Retiree Health Care Benefit Trust. These accounts are interest bearing accounts, except the Comptroller's Transfer of Lien account. Available balances are compensated at the mid-point of the targeted fed funds range less 10 basis points. Earnings in

excess of those needed to offset service fees are paid to the Comptroller and Trust, respectively.

All bank balances are covered by the Federal Deposit Insurance Corporation (FDIC) up to a total of \$250,000 and collateralized by the Florida Security for Public Deposits Act.

C. Lockbox

Wells Fargo provides wholesale lockbox services to the Fire Rescue Department and the Solid Waste System. Wells Fargo also provides wholetail lockbox services to the Water Utility System and the County's Red Light Running Program. A wholetail lockbox is a hybrid of a retail lockbox and a wholesale lockbox. A lockbox is a method of collecting regular, recurring payments from customers of the County. The County's lockboxes provide faster deposit of payments, reduce handling and processing time, and strengthen internal controls by separating the cash handling responsibilities from invoicing and billing responsibilities.

D. Electronic Funds Transfers (EFT)

EFT are electronic communications of financial transactions between banks and bank customers. Wells Fargo provides the County with the capability to receive and disburse funds through the Federal Reserve Wire System, immediately and overnight. Automated clearinghouse transfers (ACH) include the ability to directly draw from customer (Water Utilities) and taxpayer (Tourist Development and Public Service Tax) accounts for immediate credit to the County's accounts. ACH transfers also provide for direct deposit of employee payroll earnings for immediate credit to their accounts, and for the County's payment of various state and federal tax liabilities. The Comptroller utilizes comprehensive ACH debit blocking to prevent unauthorized disbursements.