



# **AGENDA**

## ***Finance and Administration Committee Meeting***

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### **Committee Members**

Andrew Do, Chairman  
Richard Murphy, Vice Chairman  
Michael Hennessey  
Steve Jones  
Todd Spitzer  
Michelle Steel

Orange County Transportation Authority  
Headquarters  
550 South Main Street  
Board Room – Conf. Room 07  
Orange, California

**Wednesday, June 27, 2018 at 10:30 a.m.**

Any person with a disability who requires a modification or accommodation in order to participate in this meeting should contact the OCTA Clerk of the Board, telephone (714) 560-5676, no less than two (2) business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

Agenda descriptions are intended to give members of the public a general summary of items of business to be transacted or discussed. The posting of the recommended actions does not indicate what action will be taken. The Committee may take any action which it deems to be appropriate on the agenda item and is not limited in any way by the notice of the recommended action.

All documents relative to the items referenced in this agenda are available for public inspection at [www.octa.net](http://www.octa.net) or through the Clerk of the Board's office at the OCTA Headquarters, 600 South Main Street, Orange, California.

### **Call to Order**

### **Pledge of Allegiance**

Director Jones

### **1. Public Comments**

### **Special Calendar**

### **2. Taxable Sales Forecast - UCLA Anderson Forecast - Jerry Nickelsburg, PhD, Senior Economist, and William Yu, PhD, Economist Sam Kaur/Andrew Oftelie**

Orange County Transportation Authority contracts with several economic specialists to provide an annual 30-year taxable sales forecast for Measure M2. The latest forecasts were received in Spring 2018. Jerry Nickelsburg, PhD and William Yu, PhD, from UCLA Anderson Forecast will provide an update on the annual forecast and economic outlook for Orange County to the Finance and Administration Committee.



## **Consent Calendar (Items 3 through 7)**

All items on the Consent Calendar are to be approved in one motion unless a Committee Member or a member of the public requests separate action or discussion on a specific item.

### **3. Approval of Minutes**

Approval of the minutes of the Finance and Administration Committee meeting of June 13, 2018.

### **4. Local Agency Investment Fund - May 2018**

Rodney Johnson/Andrew Oftelie

#### **Overview**

The Orange County Transportation Authority invests a portion of its liquid portfolio in the State of California Local Agency Investment Fund. Each month, the State Treasurer's office publishes a report detailing the composition of the pool. The attached summary statements from the report are for the month ending May 31, 2018. The report has been reviewed and is consistent with the investment practices of the State Treasurer's Office.

#### **Recommendation**

Receive and file as an information item.

### **5. Orange County Treasurer's Management Report - May 2018**

Rodney Johnson/Andrew Oftelie

#### **Overview**

The Orange County Transportation Authority invests a portion of its liquid portfolio in the Orange County Investment Pool. Each month, the Orange County Treasurer publishes a comprehensive report detailing the composition of the pool and the prevailing economic and market conditions. The attached Treasurer's Management Report for the Orange County Investment Pool is for the month ending May 31, 2018. The report has been reviewed and is consistent with the investment practices of the Orange County Treasurer.

#### **Recommendation**

Receive and file as an information item.



- 6. Orange County Transportation Authority Investment and Debt Programs Report - May 2018**  
Rodney Johnson/Andrew Oftelie

**Overview**

The Orange County Transportation Authority has a comprehensive investment and debt program to fund its immediate and long-term cash flow demands. Each month, the Treasurer submits a report detailing investment allocation, performance, compliance, outstanding debt balances, and credit ratings for the Orange County Transportation Authority's debt program. This report is for the month ending May 31, 2018. The report has been reviewed and is consistent with the investment practices contained in the Investment Policy.

**Recommendation**

Receive and file as an information item.

- 7. Amendment to the 91 Express Lanes Riverside County Transportation Commission / Orange County Transportation Authority Facility Agreement**  
Kirk Avila/Ken Phipps

**Overview**

The 91 Express Lanes Riverside County Transportation Commission / Orange County Transportation Authority Facility Agreement prescribes the funding transfers between the two agencies for costs incurred for the rent and any shared operational expenses in relation to the 91 Express Lanes. An amendment is needed to account for the reimbursement of shared operating costs incurred by the Riverside County Transportation Commission for the period July 1, 2018 through June 30, 2019.

**Recommendation**

Authorize the Chief Executive Officer to negotiate and execute Amendment No. 3 to Agreement No. C-5-3828 between the Orange County Transportation Authority and Riverside County Transportation Commission, in the amount of \$2,078,750, for the reimbursement of shared operational expenses through June 30, 2019.



## **Regular Calendar**

### **8. 91 Express Lanes Account Plan Changes**

Kirk Avila/Ken Phipps

#### **Overview**

Commencing January 1, 2019, all California tolling agencies will be required to read a new transponder protocol, 6C. This new protocol will lower the cost of transponders for the 91 Express Lanes. As a result, staff from the Orange County Transportation Authority and Riverside County Transportation Commission have developed a deployment plan for the distribution of new transponders, and have revised account plans and fees for the 91 Express Lanes.

#### **Recommendation**

Adopt changes to the 91 Express Lanes' account plans and policies.

## **Discussion Items**

### **9. Chief Executive Officer's Report**

### **10. Committee Members' Reports**

### **11. Closed Session**

There are no Closed Session items scheduled.

### **12. Adjournment**

The next regularly scheduled meeting of this Committee will be held at **10:30 a.m. on Wednesday, July 11, 2018**, at the Orange County Transportation Authority Headquarters, 550 South Main Street, Board Room - Conference Room 07, Orange, California.



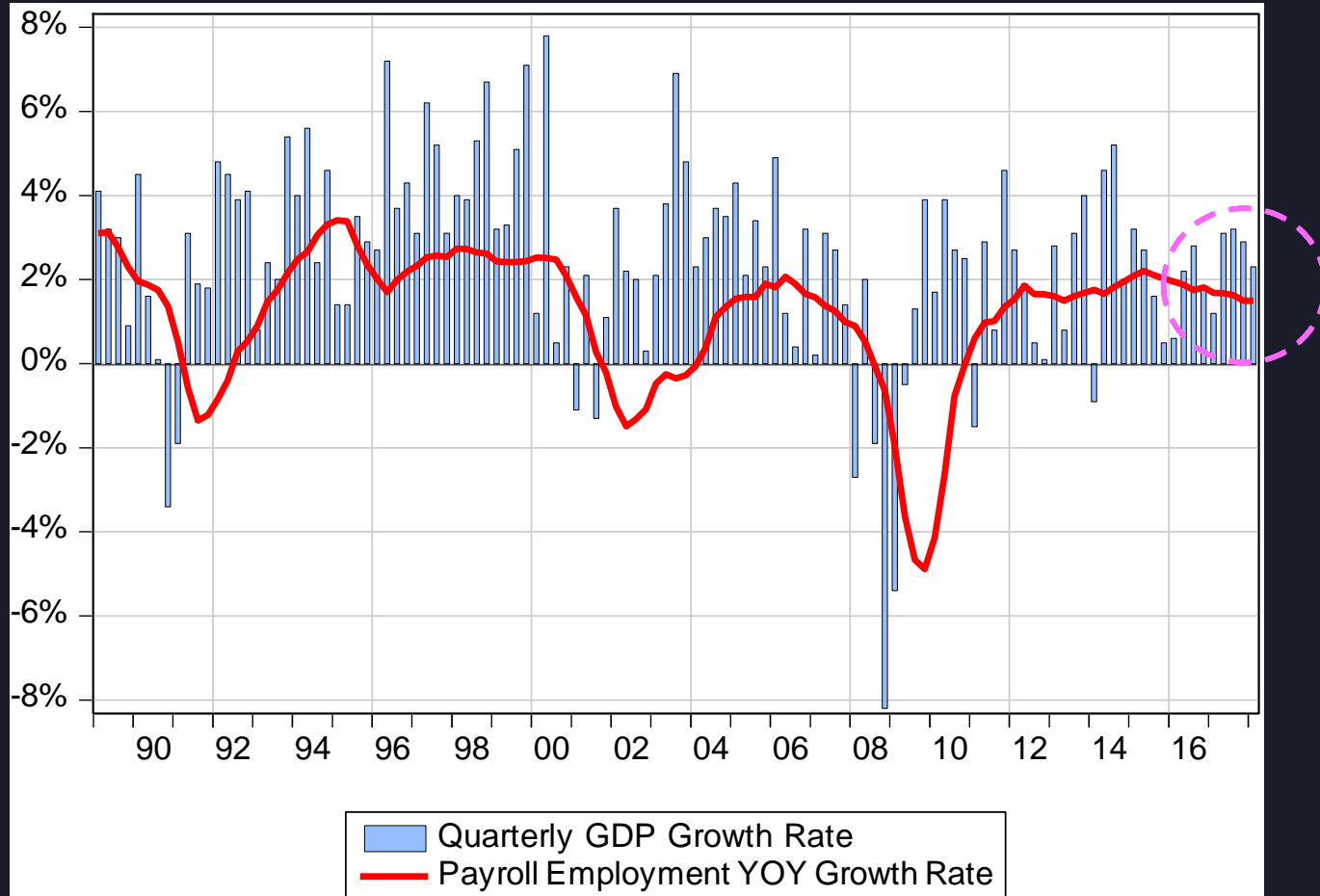
# The Economic Outlook and Orange County Taxable Sales Forecast

OCTA Briefing, June 27, 2018

Jerry Nickelsburg, Director  
William Yu, Economist

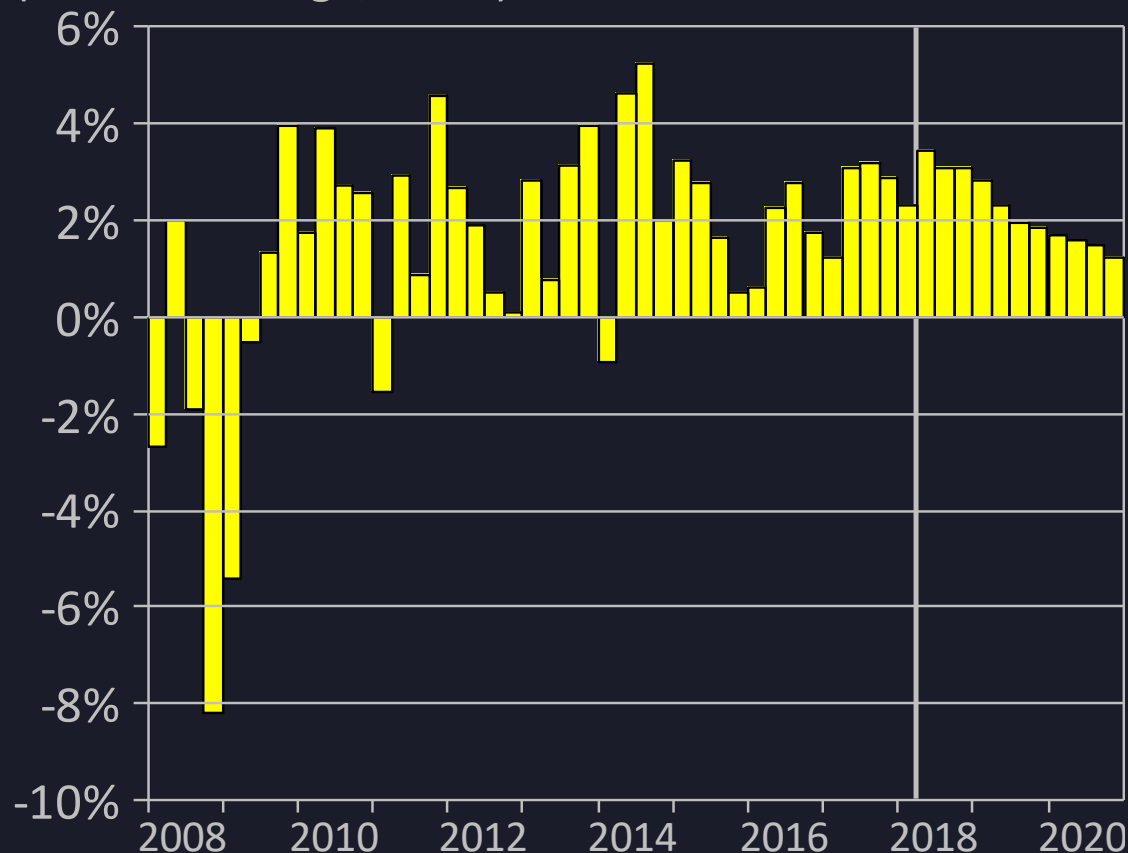
UCLA Anderson Forecast

# U.S. economy is growing at 3%

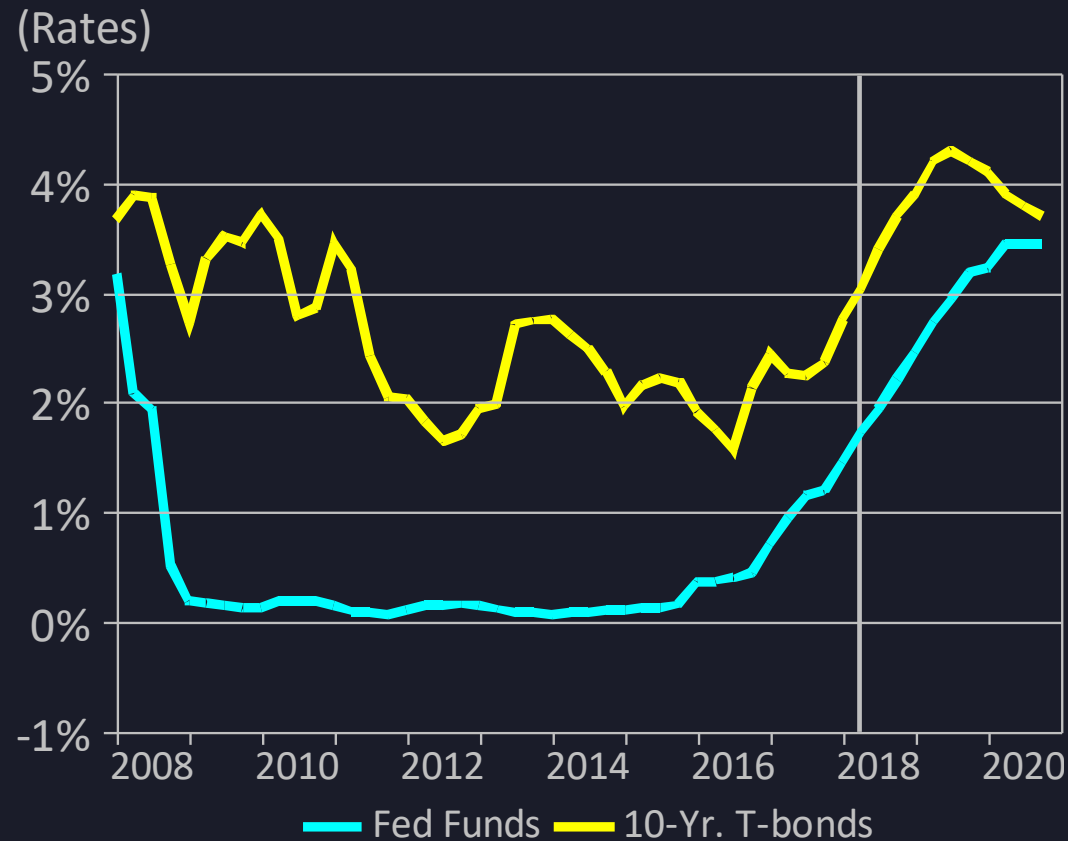


# 3% real GDP growth in '18 slowing in '19, and '20

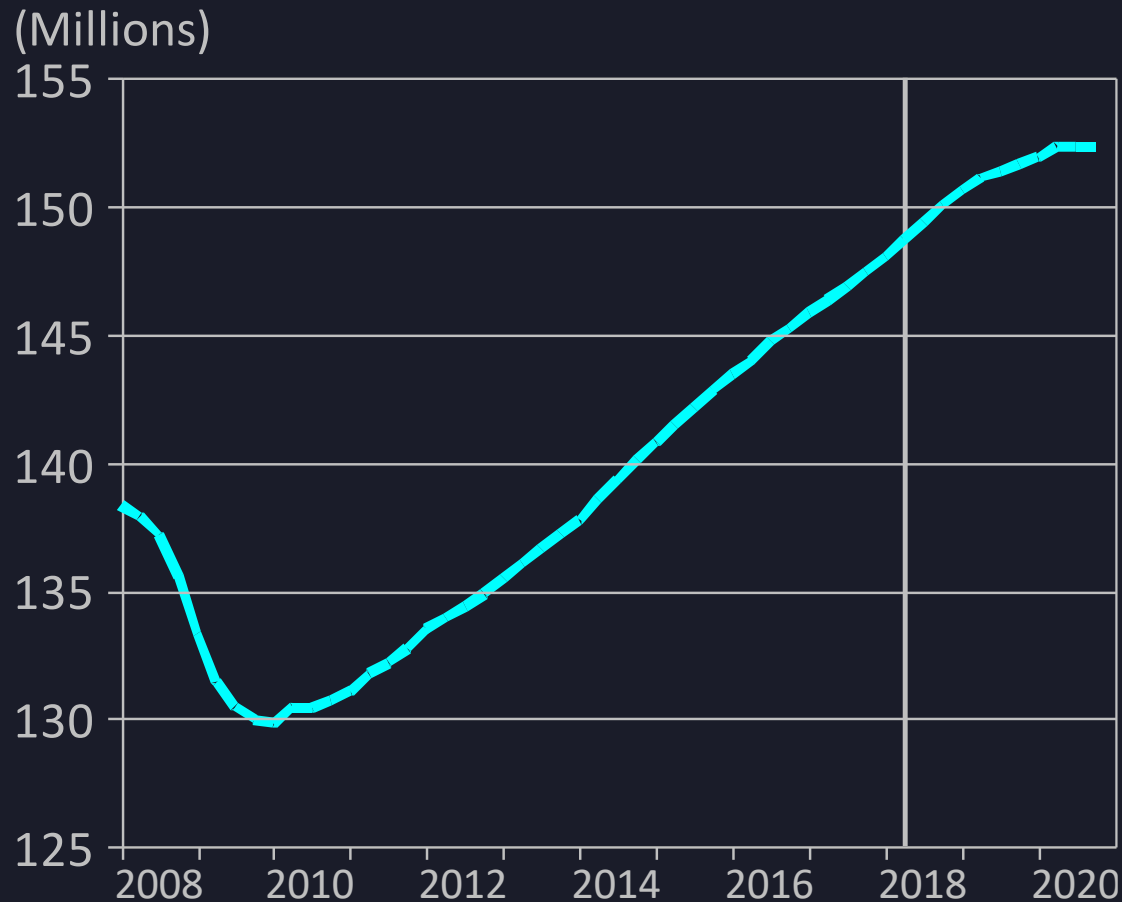
(Percent Change, SAAR)



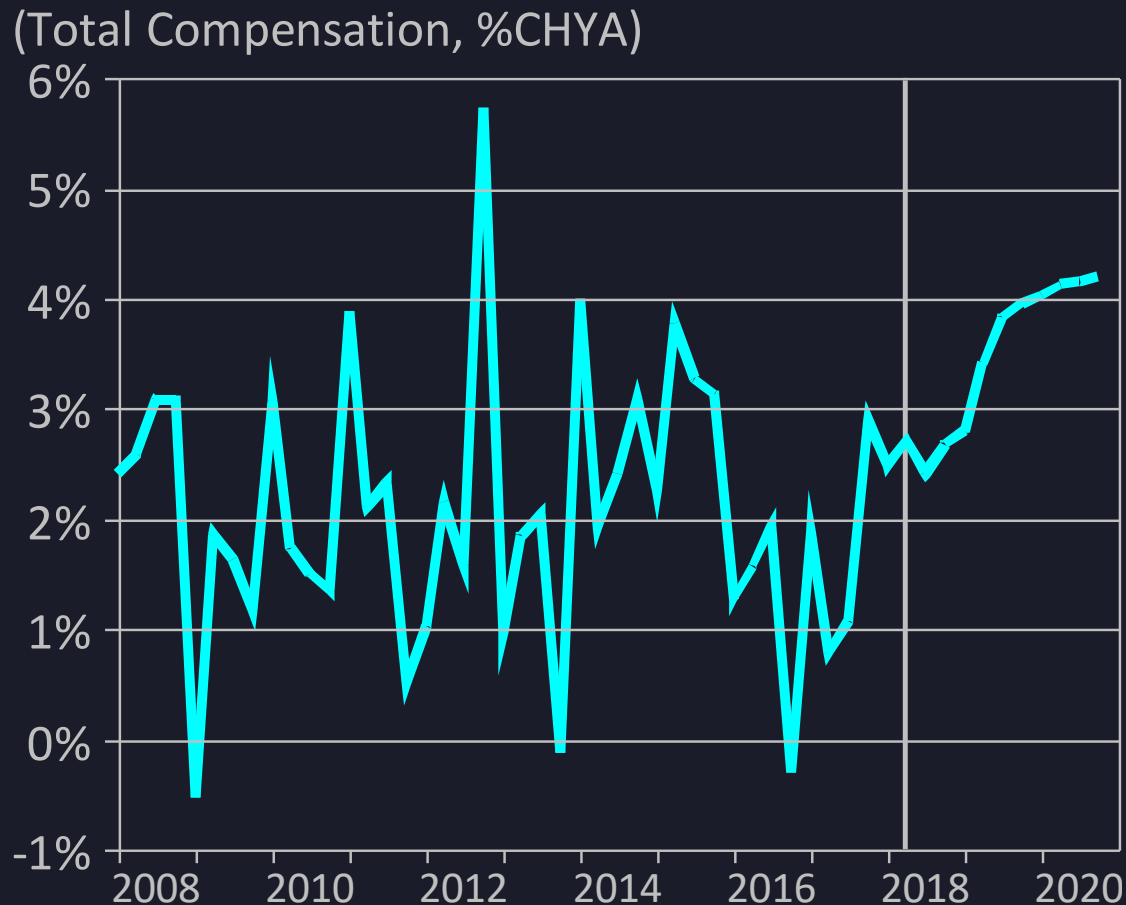
# Interest rates on the rise



# Employment growth remains solid



# Employee compensation rises with tightened labor markets



# With higher inflation

(Percent Change Year Ago)

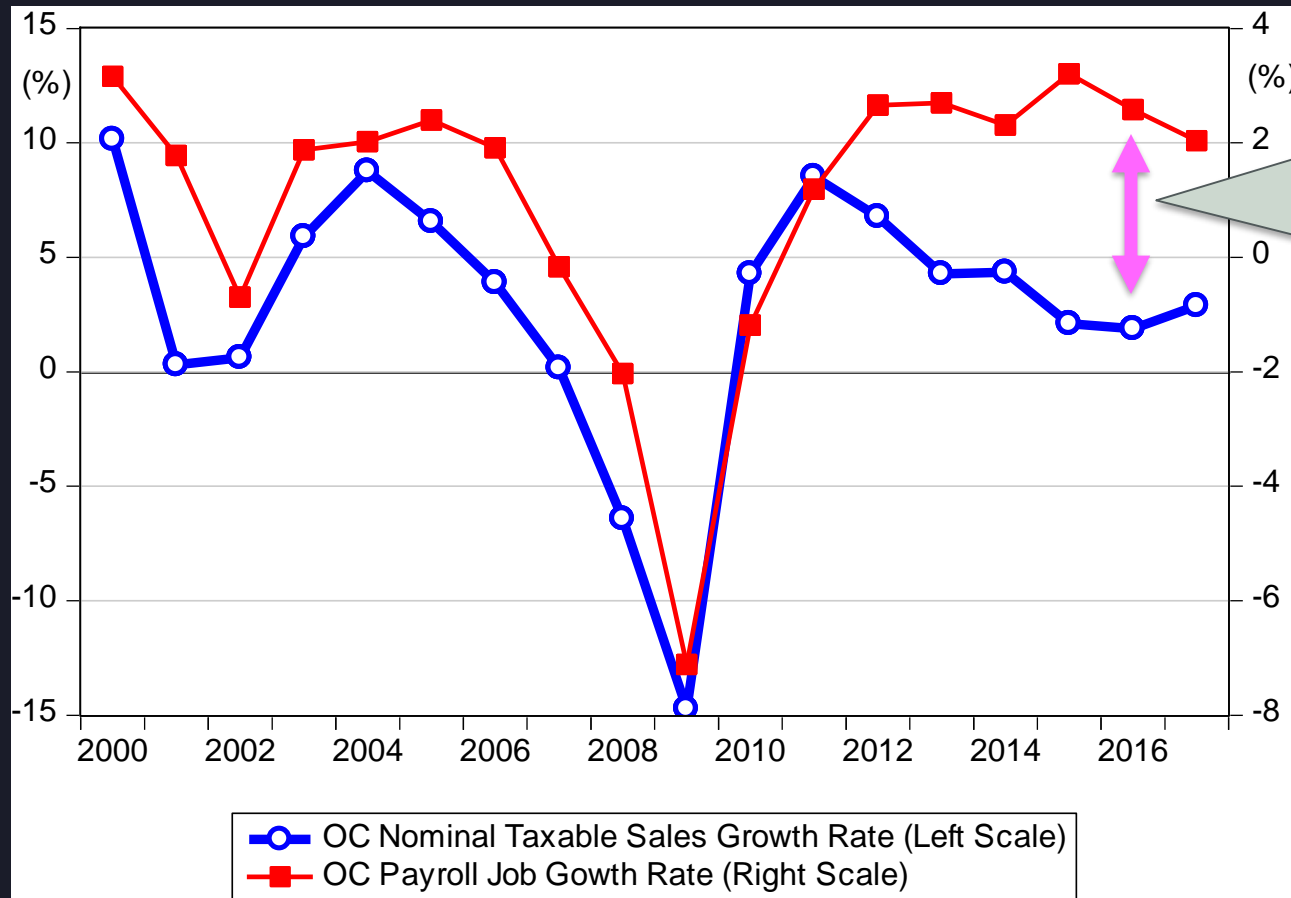


# Where are we in the housing cycle?





# Why our forecasts on O.C. taxable sales in the past few years were too optimistic?

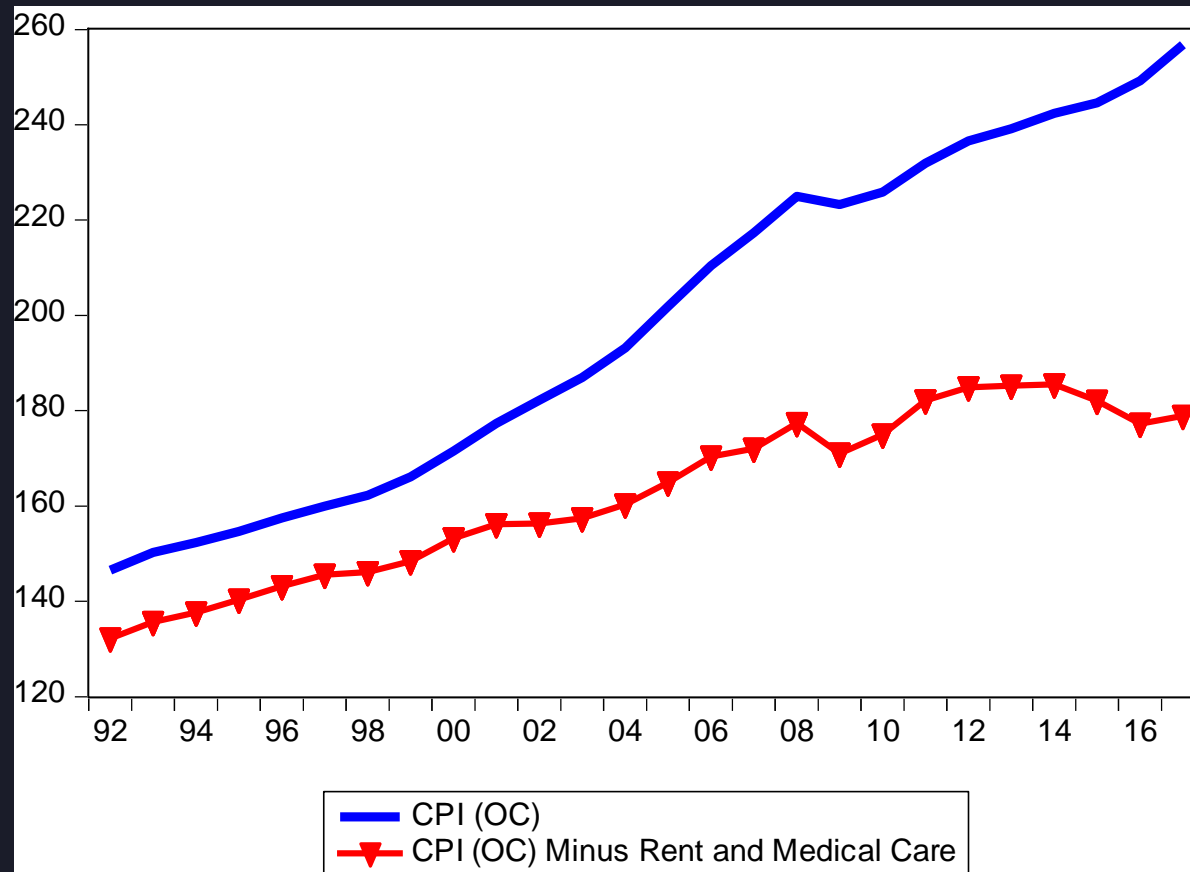


While OC economy was doing well, its taxable sales growth were pretty weak.

## We suggest three reasons:

- (1) In 2014 and 2015, CPI inflation was almost zero due to the oil/gasoline price slump.
  - Oil prices have been stabilized.
- (2) Online retailers without CA physical presence did not collect sales tax.
  - Recent Supreme Court ruling says all online retail purchase need to pay sales tax.
- (3) Traditional CPI inflation didn't measure taxable sales well in recent years.

# Inflation on housing and medical care is higher than that of most taxable sales goods

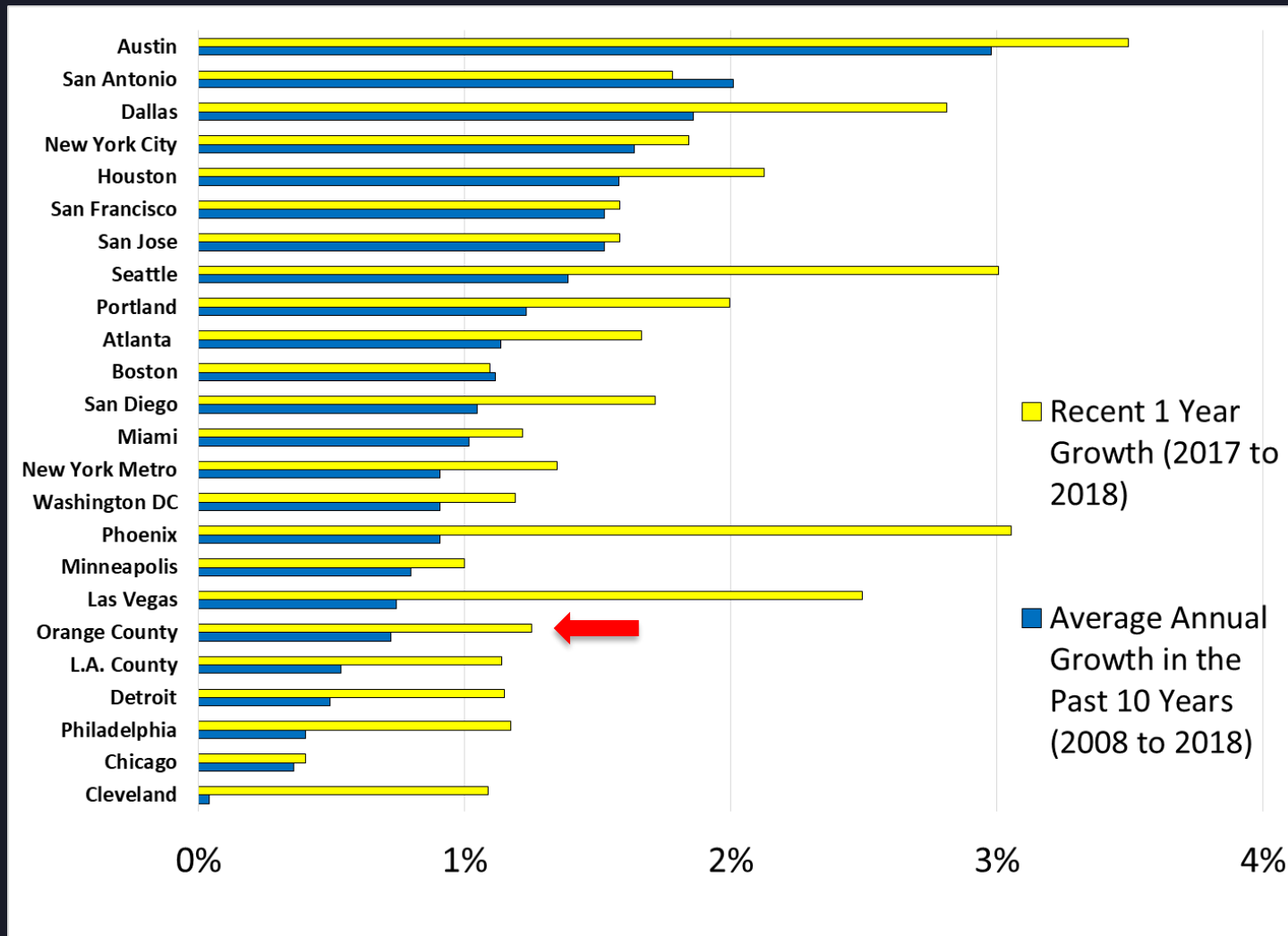


We develop a new measurement of CPI for taxable sales.

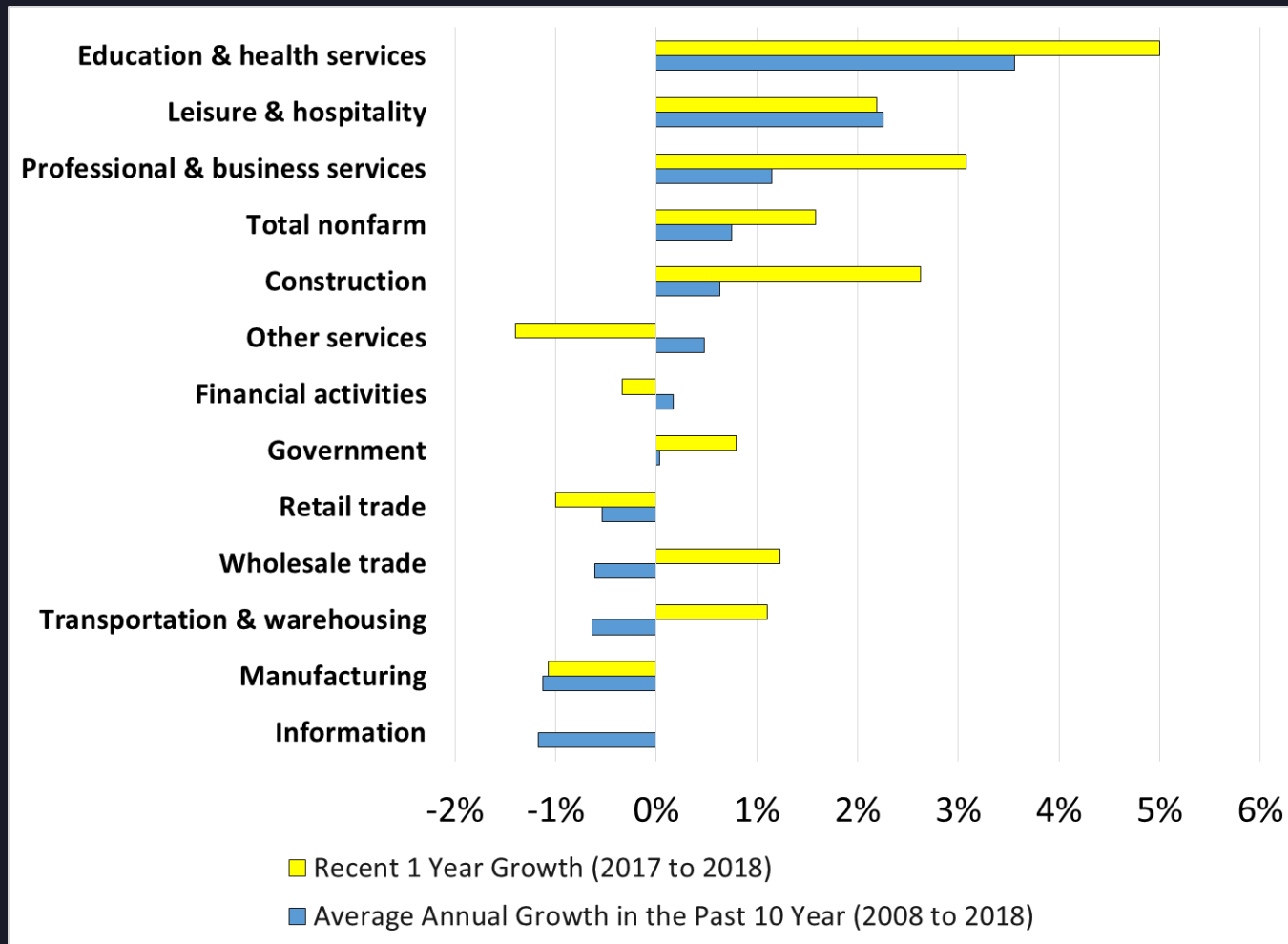
# California Forecast

	2018	2019	2020
Payroll employment	2.2%	1.7%	0.8%
Unemployment rate	4.1%	3.8%	4.1%
Real personal income	2.5%	3.6%	2.9%
Population growth	0.7%	0.7%	0.6%

# Major metro payroll employment growths

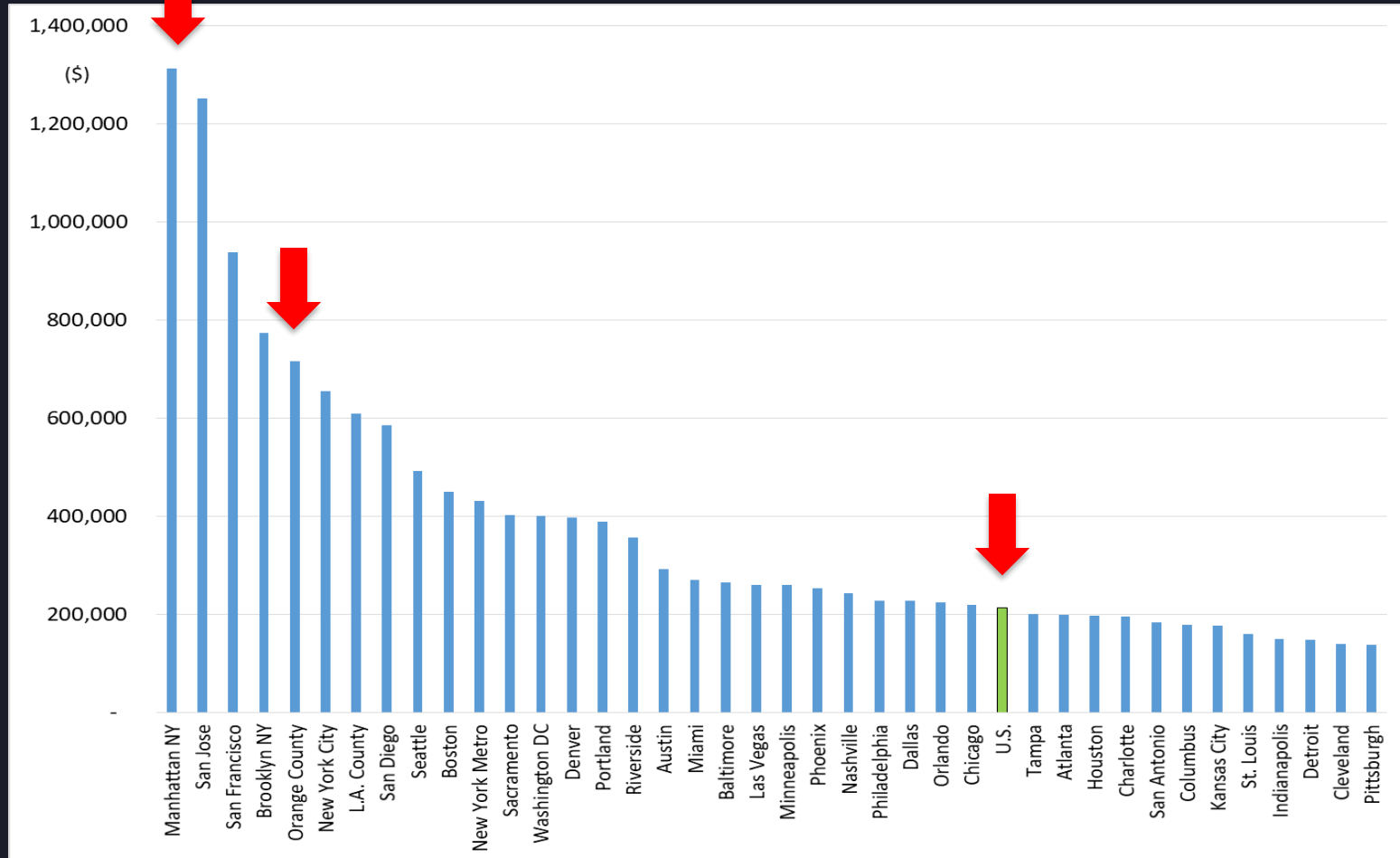


# Orange County sector payroll job growth



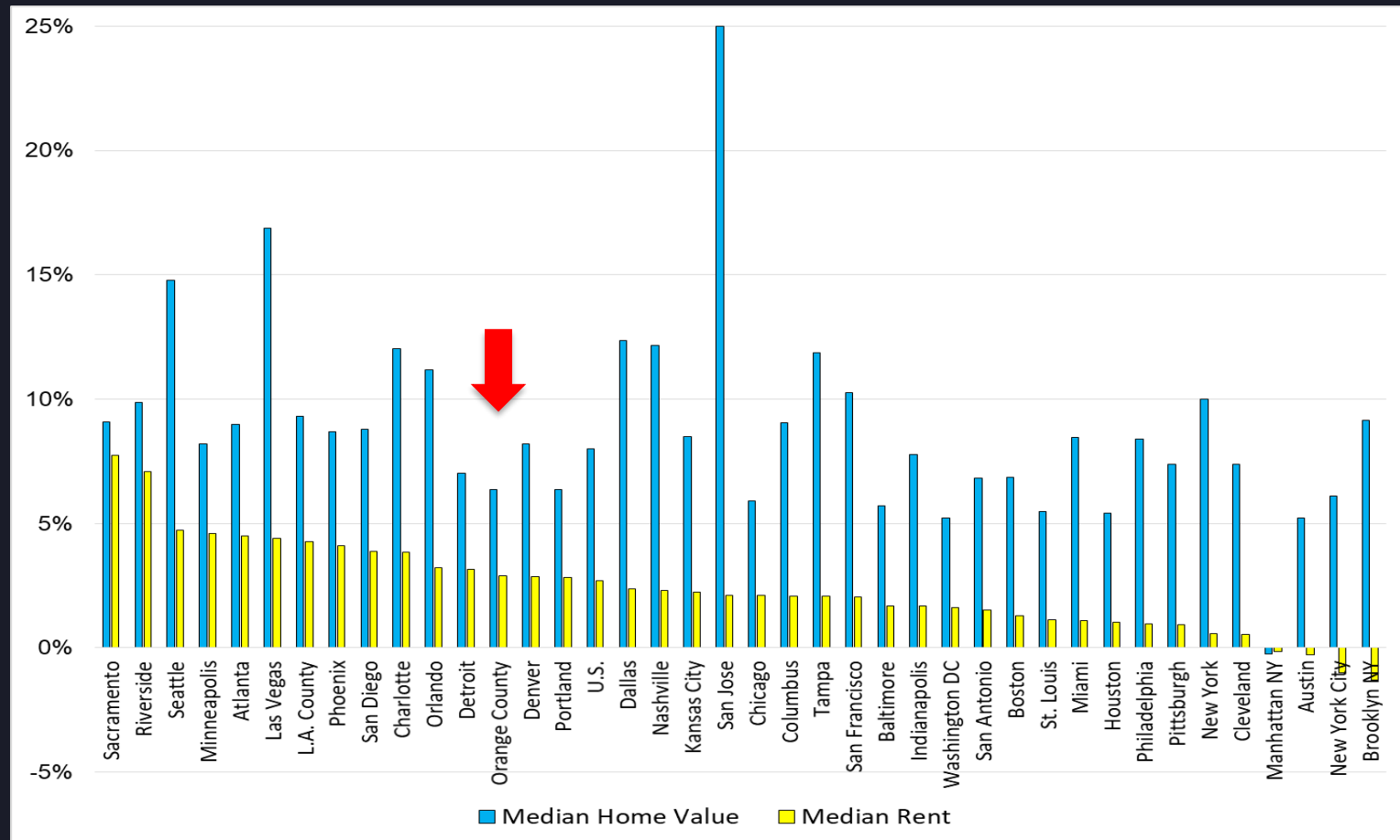
# Zillow's median home value index

in March 2018 for major metros in the U.S.



# O.C. housing market is doing well.

Year-over-year growth rate (17m3 to 18m3)  
of Zillow's median home value and median rent





# Forecast risk: full-blown trade wars

- U.S. economy (\$20 trillion); exports \$2.5 trillion; imports \$3.1 trillion.
- U.S. economy might dip into recession
- U.S. exports growth might slow
- U.S. imports prices might go up
- China's FDI investments to California might decline

### 2016 Orange County Forecast (Made in April 2016)

	CPI Inflation	Nominal Taxable Sales Level (Million\$)	Nominal Taxable Sales Growth	Real Taxable Sales Growth
<b>2016</b>	2.4%	66,337	6.5%	<b>4.0%</b>
<b>2017</b>	3.0%	69,775	5.2%	<b>2.1%</b>

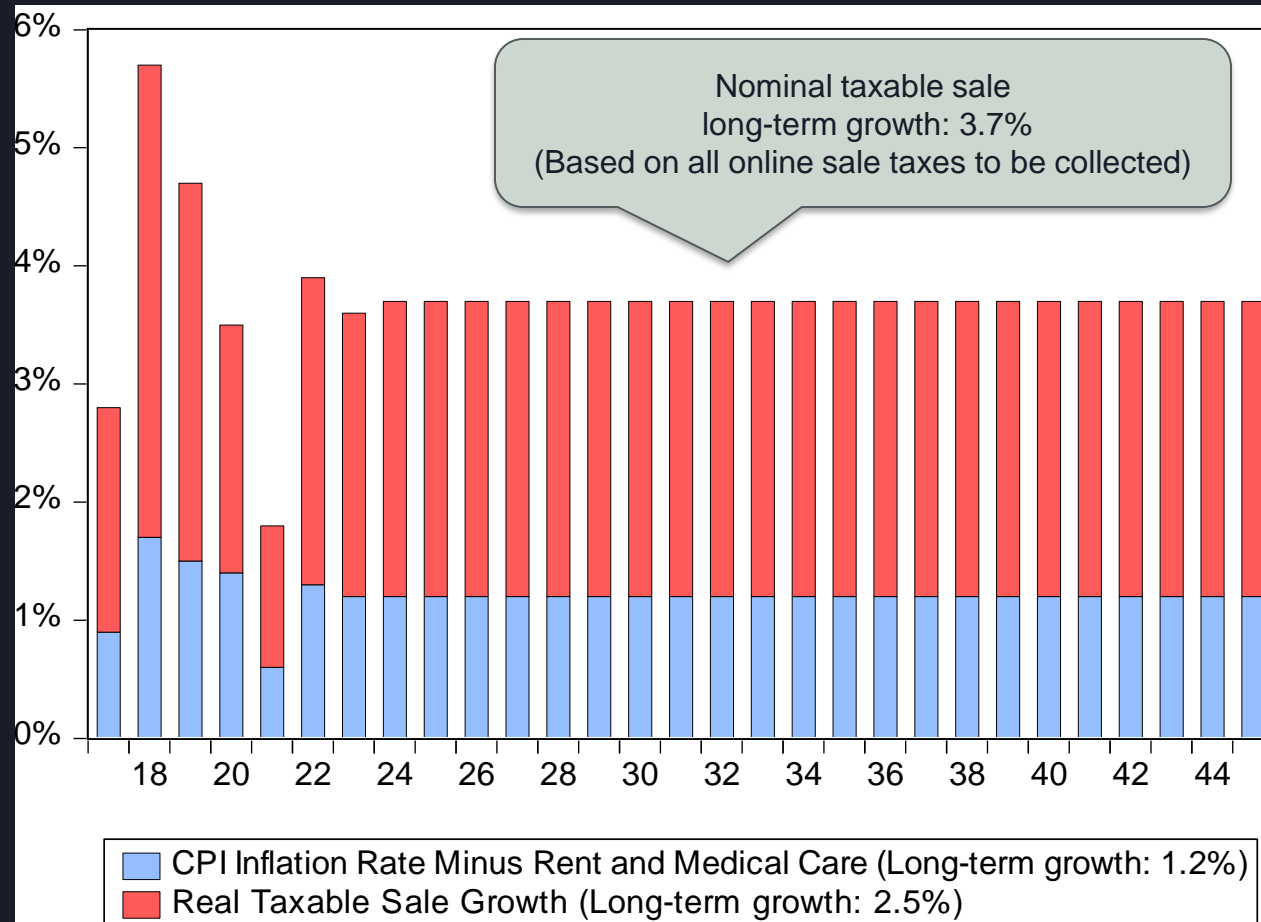
### Real Data (2017 estimated)

<b>2016</b>	<b>1.9%</b>	<b>62,511</b>	<b>1.9%</b>	
<b>2017</b>	<b>3.0%</b>	<b>64,313</b>	<b>2.9%</b>	

### Recalculated 2016 Forecast with new CPI measurement with forecast of real taxable sale growth made in April 2016

	<b>CPI Inflation (For Taxable Sales)</b>	Nominal Taxable Sales Level (Million\$)	Nominal Taxable Sales Growth	Real Taxable Sales Growth
<b>2016</b>	<b>-2.6%</b>	<b>62,160</b>	<b>1.3%</b>	<b>4.0%</b>
<b>2017</b>	<b>0.9%</b>	<b>64,042</b>	<b>3.0%</b>	<b>2.1%</b>

# Orange County Nominal Taxable Sales Growth Forecast





# MINUTES

## *Finance and Administration Committee Meeting*

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### **Committee Members Present**

Andrew Do, Chairman  
Richard Murphy, Vice Chairman  
Michael Hennessey

### **Committee Members Absent**

Steve Jones  
Todd Spitzer  
Michelle Steel

### **Staff Present**

Darrell E. Johnson, Chief Executive Officer  
Ken Phipps, Deputy Chief Executive Officer  
Laurena Weinert, Clerk of the Board  
Gina Ramirez, Deputy Clerk of the Board  
James Donich, General Counsel  
OCTA Staff and Members of the General Public

## **Call to Order**

The June 13, 2018 regular meeting of the Finance and Administration Committee was called to order by Committee Chairman Andrew Do at 10:38 a.m.

## **Pledge of Allegiance**

Committee Vice Chairman R. Murphy led in the Pledge of Allegiance.

### **1. Public Comments**

No public comments were received.

## **Special Calendar**

### **2. Investment Management Presentation**

Andrew Oftelie, Executive Director of Finance and Administration, provided opening comments and introduced:

- Mia Corral Brown, Senior Vice President of Chandler Asset Management
- Jayson Schmitt, CFA, Executive Vice President of Chandler Asset Management

Ms. Corral Brown presented a PowerPoint on the following:

- Introduction to Chandler Asset Management,
- Specializing in Investment Management for Public Agencies, and
- Understanding our Clients Needs.

### **2. (Continued)**

Mr. Schmitt presented a PowerPoint on the following:

- Safety Comes First,
- Implementing a Disciplined, Repeatable Investment Process,
- Orange County Transportation Authority's (OCTA) Chandler Managed Portfolio as of May 31, 2018,
- Philosophy & Vision,
- Economic Update,
- Employment,
- Inflation,
- Gross Domestic Product,
- Bond Yields, and
- Disclosures.

A discussion ensued regarding:

- Trade Wars,
- Lower cost of manufacturing services in other parts of the country,
- Impact on Gross Domestic Product,
- Mobility as a nation and regional mobility has greatly reduced,
- Portfolio versus benchmark-US Treasury type,
- Demographics of the workforce,
- Quality of life concerns (i.e., cost of living),
- Taxes and recession,
- Yield curve-not inverted,
- Corporate risk, and
- General trends.

### **Consent Calendar (Items 3 through 6)**

Committee Chairman Do announced that Directors Jones, Spitzer, and Steel were absent due to attending a federal hearing regarding the homeless litigation matter.

Darrell E. Johnson, Chief Executive Officer (CEO), announced that due to lack of quorum, staff would like to continue agenda Item 3 to the next Finance and Administration Committee meeting. Also, Items 4, 5, and 6 will be forwarded to the June 25, 2018 Board of Directors meeting for consideration without the Committee's vote.

### **3. Approval of Minutes**

Due to a lack of quorum, the minutes of the May 23, 2018, will return to the next Finance and Administration Committee meeting for consideration.



**4. Fiscal Year 2017-18 Third Quarter Budget Status Report**

Due to lack of quorum, no action was taken on this item, and it will be forwarded to the June 25, 2018 Board of Directors meeting.

**5. Sole Source Agreement for Upgraded ID Card System**

Due to lack of quorum, no action was taken on this item, and it will be forwarded to the June 25, 2018 Board of Directors meeting.

**6. Agreement for Data Center Colocation Services**

Director Hennessey pulled this item to inquire on the definition of Tier III.

Barry Reynolds, Department Manager of Systems Operations Management, responded that a Tier III data center is a location with redundant and dual-powered servers, storage, and network links. This allows for any planned maintenance activity of power and cooling systems to take place without disrupting the operation of computer hardware located in the data center.

Director Hennessey inquired on why Coresite, LLC (Coresite) was unwilling to sign its proposal.

Virginia Abadessa, Director of Contracts Administration & Materials Management, stated that when Coresite was given an opportunity to sign its proposal, Coresite stated its legal counsel advised them that it would legally bind them to the proposal that they were submitting to us.

Due to lack of quorum, no action was taken on this item, and it will be forwarded to the June 25, 2018 Board of Directors meeting.

**Regular Calendar**

There were no Regular Calendar items scheduled.

**Discussion Items**

**7. Update: Senior Mobility Program Operated by Korean American Senior Association**

Janet Sutter, Executive Director of Internal Audit, provided a PowerPoint presentation on the status of the corrective actions taken by the Korean American Senior Association (KASA) with regard to the findings identified in the senior mobility program as follows:



**7. (Continued)**

- Wheelchair Accessibility,
- Cost Reporting & Support,
- Minimum Age Requirement, and
- Trips outside of the Service Plan.

Committee Vice Chairman R. Murphy thanked Ms. Sutter and staff for the great job on assisting the KASA staff with the corrective actions.

Mr. Johnson, CEO, noted that internal audit's review is complete at this time and OCTA staff will continue to monitor and provide oversight as appropriate to the program.

**8. Chief Executive Officer's Report**

Mr. Johnson, CEO, reported on the following:

- On June 13<sup>th</sup>, OCTA will host the final open house to provide information and answer questions about the Interstate 405 Improvement Project. The open house will take place at the Orange Coast College Student Center in Costa Mesa from 6:00 p.m. - 8:00 p.m.
- On June 21<sup>st</sup>, OCTA will be offering free bus rides through the OC Bus mobile app for National Dump the Pump Day to encourage people to use public transportation and ridesharing. OCTA is also partnering with Waze Carpool to offer free carpools throughout Orange County from June 18<sup>th</sup> to June 22<sup>nd</sup>.
- On June 18<sup>th</sup>, he will be traveling to Washington, D.C. to meet with the Acting Federal Transit Administration Administrator to discuss the OC Streetcar program. In addition, he will be traveling to New York to join Chairwoman Bartlett, Vice Chairman Shaw, and Committee Chairman Do for OCTA's annual meetings with the rating agencies and financial institutions.

**9. Committee Members' Reports**

Committee Chairman Do thanked staff for inviting Chandler Asset Management to present the Investment Management Presentation under Item 2.



**10. Closed Session**

There were no Closed Session items scheduled.

**11. Adjournment**

The meeting adjourned at 11:17 a.m.

The next regularly scheduled meeting of this Committee will be held at **10:30 a.m. on Wednesday, June 27, 2018**, at the Orange County Transportation Authority Headquarters, 550 South Main Street, Board Room - Conference Room 07, Orange, California.

ATTEST

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Gina Ramirez  
Deputy Clerk of the Board

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Andrew Do  
Committee Chairman





**June 27, 2018**

**To:** Finance and Administration Committee

**From:** Darrell E. Johnson, Chief Executive Officer

A handwritten signature in blue ink, appearing to read "Kenneth R. Johnson", is written over the "From:" line.

**Subject:** Local Agency Investment Fund - May 2018

### **Overview**

The Orange County Transportation Authority invests a portion of its liquid portfolio in the State of California Local Agency Investment Fund. Each month, the State Treasurer's office publishes a report detailing the composition of the pool. The attached summary statements from the report are for the month ending May 31, 2018. The report has been reviewed and is consistent with the investment practices of the State Treasurer's Office.

### **Recommendation**

Receive and file as an information item.

### **Discussion**

As of May 31, 2018, the fair value including accrued interest of the Pooled Money Investment Account (PMIA) was \$82,929,518,442 with an average monthly effective yield of 1.76 percent and a month-end weighted average maturity of 190 days. The Local Agency Investment Fund (LAIF) is a component of the State of California PMIA. The month-end balance of LAIF was \$22,474,043,130. The Orange County Transportation Authority's month-end balance in LAIF was \$10,374,927.

The average monthly effective yield is the average of the daily yield for the month. The yield is the income return on an investment, such as the interest received from holding a particular security. The yield is usually expressed as an annual percentage rate based on the investment's cost and current market value.

**Summary**

The Orange County Transportation Authority is submitting a copy of the Local Agency Investment Fund statements and summary reports to the Finance and Administration Committee. The statements are for the month ending May 31, 2018.

**Attachment**

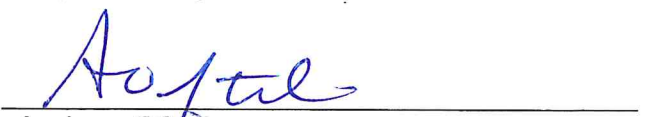
A. Local Agency Investment Fund – As of May 31, 2018

**Prepared by:**



Rodney Johnson  
Deputy Treasurer  
Treasury/Public Finance  
(714) 560-5675

**Approved by:**



Andrew Otejie  
Executive Director,  
Finance and Administration  
(714) 560-5649

**ATTACHMENT A**

Local Agency Investment Fund  
P.O. Box 942809  
Sacramento, CA 94209-0001  
(916) 653-3001

[www.treasurer.ca.gov/pmla-laif/laif.asp](http://www.treasurer.ca.gov/pmla-laif/laif.asp)

June 18, 2018

ORANGE COUNTY TRANSPORTATION AUTHORITY

MANAGER, TREASURY/PUBLIC FINANCE  
550 SOUTH MAIN STREET  
P.O. BOX 14184  
ORANGE, CA 92613-1584

PMIA Average Monthly Yields

**Account Number:**

80-30-001

Tran Type Definitions

May 2018 Statement

**Account Summary**

Total Deposit:	0.00	Beginning Balance:	10,374,927.27
Total Withdrawal:	0.00	Ending Balance:	10,374,927.27



**JOHN CHIANG  
TREASURER  
STATE OF CALIFORNIA**



**PMIA Performance Report**

Date	Daily Yield*	Quarter to Date Yield	Average Maturity (in days)
05/14/18	1.75	1.69	188
05/15/18	1.75	1.69	188
05/16/18	1.76	1.69	191
05/17/18	1.76	1.69	190
05/18/18	1.76	1.69	188
05/19/18	1.76	1.69	188
05/20/18	1.76	1.70	188
05/21/18	1.77	1.70	189
05/22/18	1.77	1.70	187
05/23/18	1.77	1.70	188
05/24/18	1.78	1.70	190
05/25/18	1.79	1.70	190
05/26/18	1.79	1.71	190
05/27/18	1.79	1.71	190
05/28/18	1.79	1.71	190
05/29/18	1.79	1.71	190
05/30/18	1.80	1.71	191
05/31/18	1.80	1.71	190
06/01/18	1.81	1.71	196
06/02/18	1.81	1.71	196
06/03/18	1.81	1.71	196
06/04/18	1.81	1.72	193
06/05/18	1.81	1.72	193
06/06/18	1.81	1.72	192
06/07/18	1.82	1.72	190
06/08/18	1.82	1.72	190
06/09/18	1.82	1.72	190
06/10/18	1.82	1.72	190
06/11/18	1.83	1.73	188
06/12/18	1.82	1.73	187
06/13/18	1.83	1.73	184

\*Daily yield does not reflect capital gains or losses

[View Prior Month Daily Rates](#)

**LAIF Performance Report**

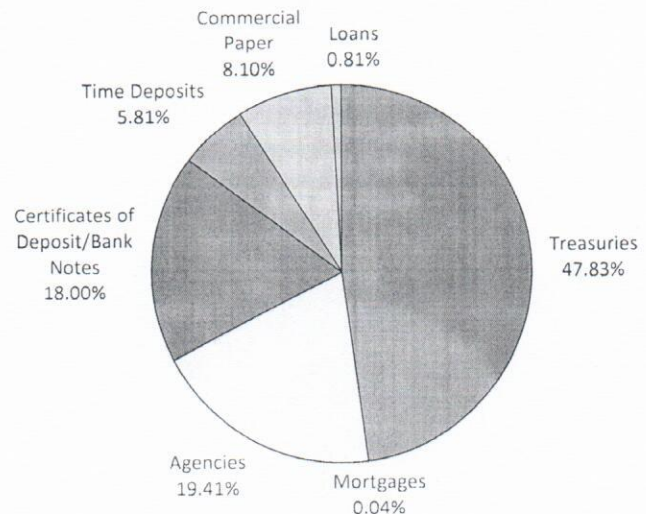
**Quarter Ending 03/31/18**

Apportionment Rate: 1.51%  
 Earnings Ratio: 0.00004135534904993  
 Fair Value Factor: 0.997538001  
 Daily: 1.59%  
 Quarter to Date: 1.43%  
 Average Life: 183

**PMIA Average Monthly  
Effective Yields**

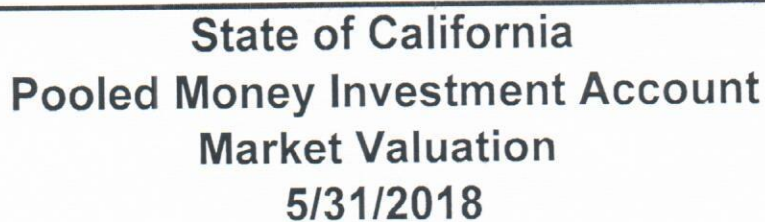
May 2018 1.755  
 Apr 2018 1.661  
 Mar 2018 1.524

**Pooled Money Investment Account  
Portfolio Composition  
05/31/18  
\$82.8 billion**



Based on data available as of 6/13/2018





Fair Value Including Accrued Interest	\$	82,929,518,442.19
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Repurchase Agreements, Time Deposits, AB 55 & General Fund loans, and Reverse Repurchase agreements are carried at portfolio book value (carrying cost).



**June 27, 2018**

**To:** Finance and Administration Committee

**From:** Darrell E. Johnson, Chief Executive Officer

A handwritten signature in blue ink, appearing to read "Darrell E. Johnson", is written over the "From:" line.

**Subject:** Orange County Treasurer's Management Report - May 2018

### **Overview**

The Orange County Transportation Authority invests a portion of its liquid portfolio in the Orange County Investment Pool. Each month, the Orange County Treasurer publishes a comprehensive report detailing the composition of the pool and the prevailing economic and market conditions. The attached Treasurer's Management Report for the Orange County Investment Pool is for the month ending May 31, 2018. The report has been reviewed and is consistent with the investment practices of the Orange County Treasurer.

### **Recommendation**

Receive and file as an information item.

### **Discussion**

As of May 31, 2018, the book value of the Orange County Investment Pool (OCIP) Money Market Fund was \$1,271,385,224 with a monthly gross yield of 1.54 percent and a month-end average days to maturity of 51 days. The OCIP Extended Fund book value was \$6,657,239,607 with a monthly gross yield of 1.48 percent and a month-end average days to maturity of 414 days. The Orange County Transportation Authority's month-end balance in the OCIP was \$3,900,169; the combined pool had a monthly gross yield of 1.50 percent and month-end average days to maturity of 312 days.

The monthly gross yield is the average of the daily yield for the month. The yield is the income return on an investment, such as the interest received from holding a particular security. The yield is usually expressed as an annual percentage rate based on the investment's cost and current market value.

During May there were no additions or deletions to the Treasurer's Approved Issuer List. Both the Money Market Fund and the Extended Fund were in

compliance at month-end. Pages 26 through 99 containing investment inventory are not included in the attachment. Copies of OCIP's investment inventory reports are available upon request.

**Summary**

The Orange County Transportation Authority is submitting a copy of the Orange County Treasurer's Management Report to the Finance and Administration Committee. The report is for the month ending May 31, 2018.

**Attachment**

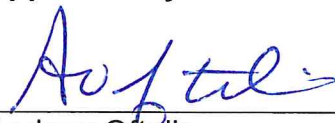
- A. Treasurer's Monthly Investment Report – May 31, 2018

**Prepared by:**



Rodney Johnson  
Deputy Treasurer  
Treasury/Public Finance  
(714) 560-5675

**Approved by:**



Andrew Otfelie  
Executive Director,  
Finance and Administration  
(714) 560-5649



# *Treasurer's Monthly* **INVESTMENT** MAY 2018 **REPORT**

From the Office of  
SHARI L. FREIDENRICH, CPA, CCMT, CPFA, ACPFIM  
Orange County Treasurer





COUNTY OF ORANGE

**TREASURER'S INVESTMENT REPORT**  
**For May 31, 2018**

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	- <i>Investments with Trustees - CEO/Public Finance</i>	
	- <i>Investments with Trustees - John Wayne Airport</i>	
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OFFICE OF THE TREASURER-TAX COLLECTOR  
SHARI L. FREIDENRICH, CPA, CCMT, CPFA, ACPFIM



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**INTERDEPARTMENTAL COMMUNICATION**

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**Date:** June 18, 2018

**To:** Supervisor Andrew Do, Chairman  
Supervisor Shawn Nelson, Vice-Chairman  
Supervisor Michelle Steel  
Supervisor Todd Spitzer  
Supervisor Lisa Bartlett

**From:** Shari L. Freidenrich, CPA, CCMT, CPFA, ACPFIM *54*

**Subject:** Treasurer's Investment Report for the Month Ended May 31, 2018

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Attached please find the Treasurer's Investment Report for the County of Orange for the month ended May 31, 2018. The County Treasurer provides this report in compliance with California Government Code Sections 53607, 53646, and 27134 and the County's Investment Policy Statement (IPS). We have included some charts and other data for your information including charts on fund composition and the top ten pool participants. This report is also publicly available on our website at [ocgov.com/ocinvestments](http://ocgov.com/ocinvestments).

**INVESTMENT POOL COMPOSITION**

The investments contained within this report are as of May 31, 2018. The Investment Pool Statistics summary shows the total investment responsibility of the County Treasurer as delegated by the Board of Supervisors: the Orange County Investment Pool (OCIP) that includes the Voluntary Participants' funds, the Orange County Educational Investment Pool (OCEIP), the John Wayne Airport Investment Fund and various other non-Pooled investment funds. The investment practices and policies of the Treasurer are based on compliance with State law and prudent money management. The primary goal is to invest public funds in a manner which will provide maximum security of principal invested with secondary emphasis on providing adequate liquidity to Pool Participants and lastly to achieve a market rate of return within the parameters of prudent risk management while conforming to all applicable statutes and resolutions governing the investment of public funds.

The County Treasurer established three Money Market Funds, the Orange County Money Market Fund (OCMMF), the Orange County Educational Money Market Fund (OCEMMF), and the John Wayne Airport Investment Fund, which all are invested in cash-equivalent securities and provide liquidity for immediate cash needs. Standard & Poor's, on March 6, 2017, reaffirmed their highest rating of AAAM on the OCMMF and the OCEMMF. The County Treasurer also established the Extended Fund that is invested to meet cash needs between one and five years out. The Orange County Investment Pool is comprised of the Orange County Money Market Fund and portions of the Extended Fund. The Orange County Educational Investment Pool is comprised of the Orange County Educational Money Market Fund and portions of the Extended Fund.

The maximum maturity of investments for the OCMMF and the OCEMMF is 13 months, with a maximum weighted average maturity (WAM) of 60 days, and they have a current WAM of 51 and 54, respectively. The maximum maturity of investments for the John Wayne Airport Investment Fund is 15 months, with a maximum WAM of 90 days, and a current WAM of 83. The maximum maturity of the Extended Fund is five years, with duration not to exceed the Merrill Lynch 1-3 Year index +25% (2.35), and the duration is currently at 1.12. The investments in all of the funds are marked to market daily to determine the value of the funds. To further maintain safety, adherence to an investment strategy of only purchasing top-rated securities and diversification of instrument types and maturities is required.

**ECONOMIC UPDATE**

In May 2018, the job market added 223,000 new jobs, and April's job numbers were revised downward by 5,000 to 159,000. The U.S. unemployment rate for May decreased to 3.8% from 3.9% in the prior month. The U.S. Gross Domestic Product first quarter rate was revised to 2.2% from the rate reported in April of 2.3%. The Empire State Manufacturing Index increased to 20.1 from 15.8 in April, while the Philadelphia Fed Index increased to 34.4 from 23.2



in April. The Federal Reserve uses these indexes as regional economic gauges, and a reading above zero signals economic expansion. With respect to housing, S&P/CaseShiller reported that housing prices continue to show positive momentum as year-over-year prices increased for the seventy-first consecutive month in March, up 6.53% from a year ago. The index for pending home sales increased 0.4% on a year-over-year basis in April. On June 13, 2018, the Federal Open Markets Committee (FOMC) raised the benchmark Federal Funds rate by 0.25% resulting in a new target range of 1.75% to 2.00%.

The 10-year Treasury rate fell from 2.95% in April to 2.83% in May. The short-term 90-day T-bill ended the month at 1.93%, up from 1.87% in April. The rate on the 2-year Treasury note was 2.40% at the end of May, down from 2.49% in April.

#### **INVESTMENT INTEREST YIELDS AND FORECAST**

The current gross interest yield year-to-date for fiscal year 2017/2018 is 1.26% for both the OCIP and the OCEIP. The current net yield for fiscal year 2017/2018 for both OCIP and OCEIP is 1.20%. The forecasted gross and net yields for fiscal year 2017/2018 are expected to be 1.28% and 1.22% for both the OCIP and the OCEIP respectively, slightly higher than prior forecasted rates of 1.24% and 1.18%.

#### **APPORTIONMENT OF COMMINGLED POOL INTEREST EARNINGS**

Each month, the County Treasurer apportions the accrued interest earnings to each pool participant. As of the first business day of the following month accrued, but unpaid, interest earnings are added to pool participants' average balances in determining a participant's relative share of the pool's monthly earnings. The actual cash distribution will generally be paid in the month following. The April 2018 interest income that was expected to be paid in June 2018 is now expected to be paid in July 2018. In addition, the interest earnings for May 2018 are expected to be paid in August 2018. The investment administrative fee for fiscal year 2017/2018 is still expected to be slightly less than 6.0 basis points.

The County Treasurer completed the review of the investment administrative fee (fee) for fiscal year 2014/2015. The actual fee is 6.9 basis points, which is lower than the basis points initially charged at 6.7. The net refund to the pooled funds is approximately \$80,000. Pool participants will receive a refund in June 2018 based on their pool balances in fiscal year 2014/2015. The fiscal year 2015/2016 and 2016/2017 fee reviews are almost completed and expected to generate refunds for pool participants to be paid in the next quarter.

#### **TEMPORARY TRANSFERS**

The County Treasurer, as required by Constitution Article XVI, Section 6, and per the Board of Supervisor's Resolution 15-016, is authorized to make temporary transfers to school districts to address their short-term cash flow needs. The loans are secured by tax receipts to be received by the County Treasurer, as the banker for the school districts. There are no temporary transfers outstanding as of May 31, 2018.

#### **PORTFOLIO HOLDINGS OF DEBT ISSUED BY POOL PARTICIPANTS**

Under guidelines outlined in the current IPS, the County Treasurer may invest in "A" or above rated securities issued by municipalities. Municipal debt issued by the County of Orange is exempt from this credit rating requirement. The Investment Pools may invest no more than 5% of individual pool assets in any one issuer, with the exception of the County of Orange which has a 10% limit. The Investment Pools have a total market value of \$456 million in County of Orange debt, which represents approximately 4.9% of total pooled assets. Prior to purchasing any pool participant debt, a standardized credit analysis is performed.

#### **COMPLIANCE SUMMARY**

The investment portfolios had no compliance exceptions for the month of May 2018.

#### **CREDIT UPDATE**

During May, there was one change to the Treasurer's Approved Issuer List. As reported last month, S&P placed the L/T issuer credit rating of Walmart Inc. on Negative Outlook. An ongoing credit analysis of all issuers owned in the Investment Pools is reviewed on a daily, monthly, quarterly, and annual basis.

I certify that this report includes all pooled and non-pooled investments as of May 31, 2018 and is in conformity with all State laws and the IPS approved by the Board of Supervisors on November 14, 2017. The investments herein shown provide adequate liquidity to meet the next six months of projected cash flow requirements. I am available if you have any questions on this Investment Report at (714) 834-7625.

Enclosures  
cc: Distribution List



ORANGE COUNTY TREASURER-TAX COLLECTOR  
SUMMARY OF INVESTMENT DATA  
INVESTMENT TRENDS

	MAY 2018	APRIL 2018	INCREASE (DECREASE)	NET CHANGE %	MAY 2017	INCREASE (DECREASE)	NET CHANGE %
<u>Orange County Investment Pool (OCIP)</u>							
End Of Month Market Value <sup>1</sup>	\$ 4,476,504,300	\$ 4,933,166,856	\$ (456,662,556)	-9.26%	\$ 4,448,425,471	\$ 28,078,829	0.63%
End Of Month Book Value <sup>1</sup>	\$ 4,496,370,640	\$ 4,957,417,899	\$ (461,047,259)	-9.30%	\$ 4,454,297,789	\$ 42,072,851	0.94%
Monthly Average Balance <sup>2</sup>	\$ 4,734,810,290	\$ 5,436,193,386	\$ (701,383,096)	-12.90%	\$ 4,628,711,980	\$ 106,098,310	2.29%
Year-To-Date Average Balance	\$ 4,492,600,368	\$ 4,468,379,375	\$ 24,220,992	0.54%	\$ 4,191,096,602	\$ 301,503,766	7.19%
Monthly Accrued Earnings <sup>4</sup>	\$ 6,021,421	\$ 6,545,579	\$ (524,158)	-8.01%	\$ 3,913,084	\$ 2,108,337	53.88%
Monthly Net Yield <sup>4</sup>	1.44%	1.40%	0.04%	3.00%	0.95%	0.49%	51.58%
Year-To-Date Net Yield <sup>4</sup>	1.20%	1.17%	0.03%	2.25%	0.79%	0.41%	51.30%
Annual Estimated Gross Yield <sup>5</sup>	1.28%	1.24%	0.04%	3.23%	0.87%	0.41%	47.47%
Weighted Average Maturity (WAM) <sup>6</sup>	312	282	29	10.44%	341	(29)	-8.60%
<u>Orange County Educational Investment Pool (OCEIP)</u>							
End Of Month Market Value <sup>1</sup>	\$ 4,918,314,640	\$ 5,120,564,428	\$ (202,249,788)	-3.95%	\$ 4,631,728,793	\$ 286,585,847	6.19%
End Of Month Book Value <sup>1</sup>	\$ 4,939,824,348	\$ 5,146,174,182	\$ (206,349,834)	-4.01%	\$ 4,637,838,311	\$ 301,986,037	6.51%
Monthly Average Balance	\$ 5,002,112,056	\$ 4,840,402,593	\$ 161,709,463	3.34%	\$ 4,683,368,969	\$ 318,743,087	6.81%
Year-To-Date Average Balance <sup>3</sup>	\$ 4,612,950,232	\$ 4,574,034,050	\$ 38,916,182	0.85%	\$ 4,107,345,192	\$ 505,605,040	12.31%
Monthly Accrued Earnings <sup>4</sup>	\$ 6,591,891	\$ 6,008,880	\$ 583,010	9.70%	\$ 3,980,638	\$ 2,611,253	65.60%
Monthly Net Yield <sup>4</sup>	1.49%	1.45%	0.04%	2.84%	0.95%	0.54%	56.53%
Year-To-Date Net Yield <sup>4</sup>	1.20%	1.17%	0.03%	2.68%	0.80%	0.40%	50.50%
Annual Estimated Gross Yield <sup>5</sup>	1.28%	1.24%	0.04%	3.23%	0.87%	0.41%	46.34%
Weighted Average Maturity (WAM) <sup>6</sup>	304	284	21	7.28%	341	(37)	-10.71%

<sup>1</sup> Market values provided by Bloomberg and Northern Trust. The OCIP and OCEIP market values in April 2018 and May 2018 are slightly lower than book values due to the four Federal Reserve short-term rate increases totaling 1.00% since March 1, 2017, but both have a net asset value of 1.00 and have sufficient liquidity to meet projected cash flow needs.

<sup>2</sup> In May 2018, OCIP monthly average balance decreased from the prior month primarily due to distributions of secured property tax receipts.

<sup>3</sup> OCEIP year-to-date average balance were higher than May 2017 primarily due to the receipt of proceeds of school bonds issuance totaling \$389 million being received late in March 2017 which increased current year average, plus a current year increase in school districts secured tax apportionments of \$146 million.

<sup>4</sup> In May 2018, the OCIP and OCEIP monthly accrued earnings, monthly yet yields and year-to-date yet yields were higher than the prior year primarily due to the four increases in the Federal Reserve short-term rates totaling 1.00% since March 1, 2017.

<sup>5</sup> The OCIP and OCEIP annual estimated gross yields for May 2017 are reported at the actual annual gross yields for FY 16/17, and their annual estimated gross yields for May 2018 have been revised to 1.28%. The OCIP and OCEIP annual estimated gross yields for FY 17/18 are higher than FY 16/17 yield of 0.87% primarily due to increases in the Federal Reserve short-term rates of 1.00% since March 1, 2017.

<sup>6</sup> The OCIP WAM in May 2018 was higher than the prior month primarily due to more investments with longer maturities being purchased. The OCIP and OCEIP WAMs in May 2017 were lower than in May 2017 primarily from purchases of shorter-term securities in the Extended Fund that added more value due to the flattening of the yield curve.

**ORANGE COUNTY TREASURER-TAX COLLECTOR**  
**INVESTMENT POOL STATISTICS**  
**FOR THE MONTH ENDED: May 31, 2018**

**INVESTMENT STATISTICS - By Investment Pool<sup>(1)</sup>**

DESCRIPTION	CURRENT BALANCES	Average Days to Maturity	Daily Yield as of 5/31/18	MONTHLY Gross Yield	Current NAV
<b>COMBINED POOL BALANCES (includes the Extended Fund)</b>					
Orange County Investment Pool (OCIP)	MARKET Value \$ 4,476,504,300	312	1.61%	1.50%	1.00
	COST (Capital) \$ 4,499,125,904				
	MONTHLY AVG Balance \$ 4,734,810,290				
	BOOK Value \$ 4,496,370,640				
Orange County Educational Investment Pool (OCEIP)	MARKET Value \$ 4,918,314,640	304	1.63%	1.55%	1.00
	COST (Capital) \$ 4,943,314,075				
	MONTHLY AVG Balance \$ 5,002,112,056				
	BOOK Value \$ 4,939,824,348				

**INVESTMENT STATISTICS - Non Pooled Investments<sup>(2)</sup>**

DESCRIPTION	CURRENT BALANCE	INVESTMENT BALANCES AT COST	
Specific Investment			
Funds:	MARKET Value \$ 105,948,957	John Wayne Airport Investment Fund	\$ 50,970,394
283, 505, FVSD, CCCD	COST (Capital) \$ 106,968,582	Fountain Valley School District Fund 40	\$ 34,810,654
	MONTHLY AVG Balance \$ 106,878,543	Repurchase Agreement	\$ 1,081,500
	BOOK Value \$ 106,844,624	CCCD Series 2017E Bonds	\$ 20,106,034
			\$ 106,968,582

**MONTH END TOTALS**

INVESTMENTS & CASH		INVESTMENTS & CASH	
<b>COUNTY MONEY MARKET FUND (OCMMF)</b>			
County Money Market Fund	\$ 1,270,204,763	OCIP	\$ 4,504,008,445
County Cash	\$ 4,882,541	OCEIP	\$ 4,953,856,081
<b>EXTENDED FUND</b>	\$ 6,665,364,006	Specific Investment Funds	\$ 106,968,582
<b>EDUCATIONAL MONEY MARKET FUND (OCEMMF)</b>		Non-Pooled Cash	\$ 20,087,702
Educational Money Market Fund	\$ 1,506,871,210		
Educational Cash	\$ 10,542,006		
<b>NON-POOLED INVESTMENTS &amp; CASH</b>			
Non-Pooled Investments	\$ 106,968,582		
Non-Pooled Cash	\$ 20,087,702		
	\$ 9,584,920,810		\$ 9,584,920,810

**KEY POOL STATISTICS**

INTEREST RATE YIELD		WEIGHTED AVERAGE MATURITY (WAM)	
OCMMF - MONTHLY GROSS YIELD	1.54%	OCMMF	51
OCEMMF - MONTHLY GROSS YIELD	1.71%	OCEMMF	54
JOHN WAYNE AIRPORT - MONTHLY GROSS YIELD	1.70%	JOHN WAYNE AIRPORT WAM	83
OCIP - YTD NET YIELD <sup>(3)</sup>	1.20%	LGIP WAM (Standard & Poors)	38
OCEIP - YTD NET YIELD <sup>(3)</sup>	1.20%		
90-DAY T-BILL YIELD - MONTHLY AVERAGE	1.88%		



**ORANGE COUNTY TREASURER-TAX COLLECTOR**  
**INVESTMENT POOL STATISTICS**  
**FOR THE MONTH ENDED: May 31, 2018**

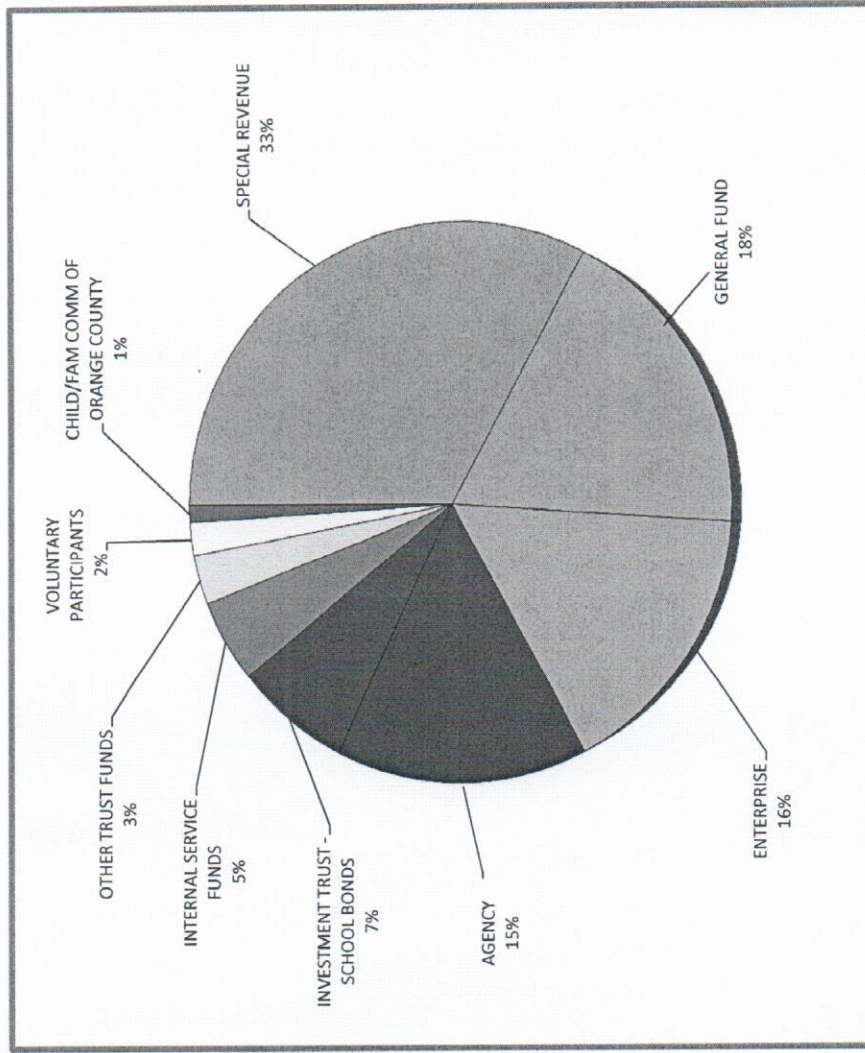
**INVESTMENT STATISTICS - By Investment Fund<sup>(4)</sup>**

DESCRIPTION	CURRENT BALANCES	Average Days to Maturity	Daily Yield as of 5/31/18	MONTHLY Gross Yield	Current NAV
<u>County Money Market Fund (OCMMF)</u>	MARKET Value \$ 1,271,767,146 COST (Capital) \$ 1,270,204,763 MONTHLY AVG Balance \$ 1,453,249,621 BOOK Value \$ 1,271,385,224	51	1.73%	1.54%	1.00
<u>Educational Money Market Fund (OCEMMF)</u>	MARKET Value \$ 1,507,610,060 COST (Capital) \$ 1,506,871,210 MONTHLY AVG Balance \$ 1,565,798,224 BOOK Value \$ 1,507,570,157	54	1.80%	1.71%	1.00
<u>Extended Fund</u>	MARKET Value \$ 6,615,441,734 COST (Capital) \$ 6,665,364,006 MONTHLY AVG Balance \$ 6,717,874,501 BOOK Value \$ 6,657,239,607	414	1.56%	1.48%	0.99
<b>ALLOCATION OF EXTENDED FUND</b>					
<u>Extended Fund</u> <u>OCIP Share</u>	MARKET Value \$ 3,204,737,154 COST (Capital) \$ 3,228,921,141 MONTHLY AVG Balance \$ 3,281,560,669 BOOK Value \$ 3,224,985,416	414	1.56%	1.48%	0.99
<u>OCEIP Share</u>	MARKET Value \$ 3,410,704,580 COST (Capital) \$ 3,436,442,865 MONTHLY AVG Balance \$ 3,436,313,832 BOOK Value \$ 3,432,254,191	414	1.56%	1.48%	0.99
<u>Modified Duration</u>	1.12				

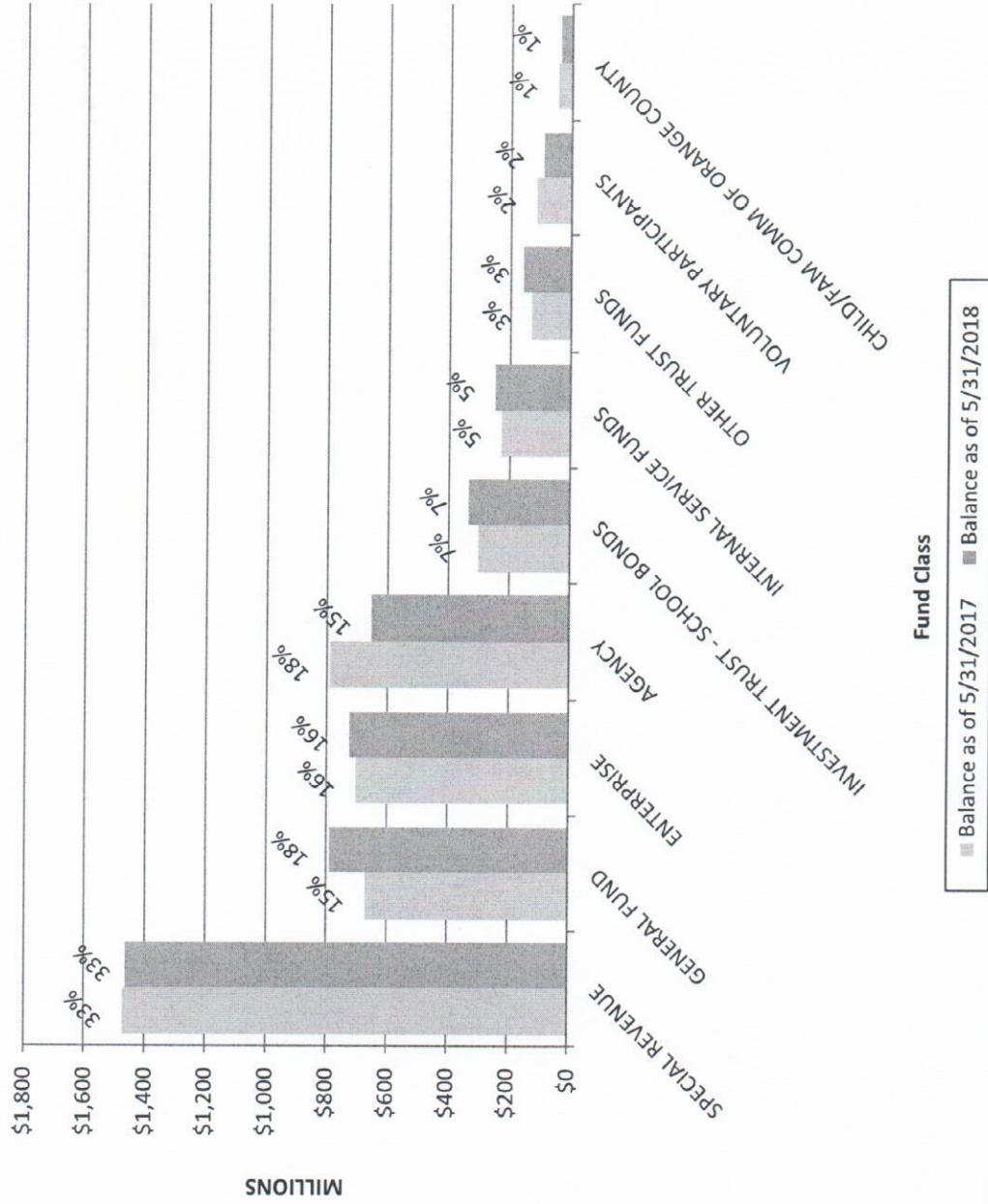
- (1) The Combined Pool Balances include the County and Educational Money Market Funds and their respective portions of the Extended Fund.
- (2) Specific non-pooled investments are reported in compliance with Government Code Section 53646 (b)(1). Detailed descriptions are included in the inventory listing in Section VII of this report.
- (3) The Net Yield differs from the Monthly Gross Yield as it includes the Treasury Investment administrative fees.
- (4) Book Value is computed as Cost reduced by amortization of premium and increased by the accretion of discount of the Investment Portfolio. Net Asset Value (NAV) is equal to Market Value divided by Book Value. The Extended Fund Market Value is lower than Book Value causing the NAV to be lower than 1.00 due to the four Federal Reserve short-term rate increases of 1.00% since 2017. When the Extended Fund is combined with the OCMMF and OCEMMF, both OCIP and OCEIP have a NAV of 1.00.

# ORANGE COUNTY INVESTMENT POOL COMPOSITION BY FUND AS OF MAY 31, 2018

FUNDS	BALANCE
SPECIAL REVENUE	\$ 1,465,112,444
GENERAL FUND	789,863,703
ENTERPRISE	724,664,932
AGENCY	654,264,799
INVESTMENT TRUST - SCHOOL BONDS	334,644,675
INTERNAL SERVICE FUNDS	248,882,521
OTHER TRUST FUNDS	158,450,708
VOLUNTARY PARTICIPANTS	91,205,100
CHILD/FAM COMM OF ORANGE COUNTY	36,919,563
<b>TOTAL</b>	<b>\$ 4,504,008,445</b>

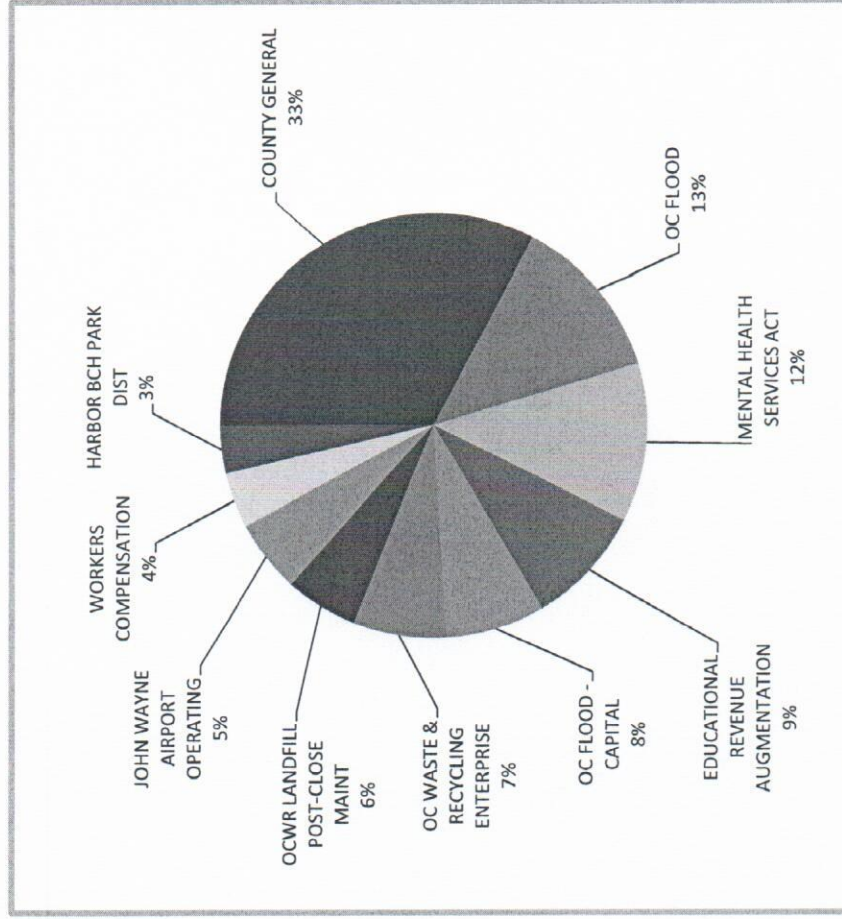


ORANGE COUNTY INVESTMENT POOL  
COMPOSITION BY FUND  
AS OF MAY 31





ORANGE COUNTY INVESTMENT POOL  
TOP TEN POOL PARTICIPANTS  
AS OF MAY 31, 2018

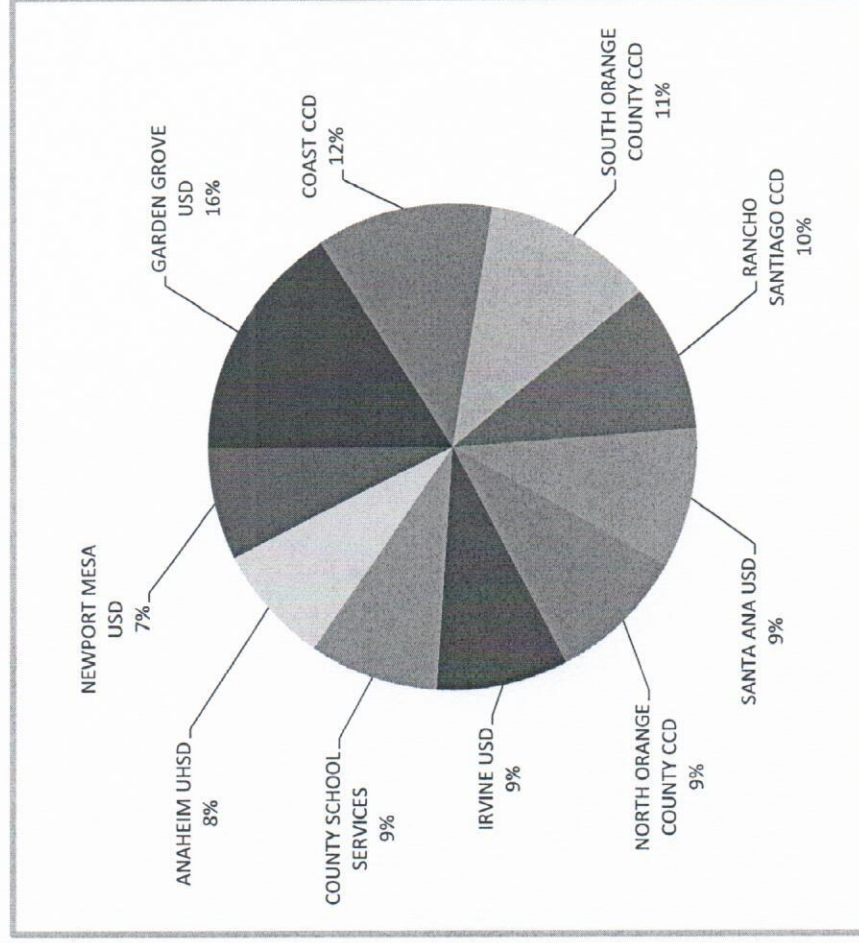


FUND #	FUND NAME	BALANCE
100	COUNTY GENERAL	\$ 743,297,505
400	OC FLOOD	286,296,022
13Y	MENTAL HEALTH SERVICES ACT	277,176,814
664	EDUCATIONAL REVENUE AUGMENTATION	204,982,734
404	OC FLOOD - CAPITAL	171,870,634
299	OC WASTE & RECYCLING ENTERPRISE	160,418,214
279	OCWR LANDFILL POST-CLOSE MAINT	125,434,324
280	JOHN WAYNE AIRPORT OPERATING	124,935,980
293	WORKERS COMPENSATION	95,009,049
405	HARBOR BCH PARK DIST	84,647,840
TOTAL		\$ 2,274,069,116

# ORANGE COUNTY EDUCATIONAL INVESTMENT POOL TOP TEN POOL PARTICIPANTS AS OF MAY 31, 2018

DISTRICT #	SCHOOL DISTRICT	BALANCE <sup>(1)</sup>
72	GARDEN GROVE USD	\$ 492,033,688 (1)
90	COAST CCD	360,550,981 (1)
96	SOUTH ORANGE COUNTY CCD	348,676,218
92	RANCHO SANTIAGO CCD	304,289,097 (1)
84	SANTA ANA USD	287,270,149 (1)
88	NORTH ORANGE COUNTY CCD	283,668,354 (1)
75	IRVINE USD	270,286,048 (1)
94	COUNTY SCHOOL SERVICES	263,614,856
64	ANAHEIM UHSD	246,216,068 (1)
78	NEWPORT MESA USD	229,613,547 (1)
<b>TOTAL</b>		<b>\$ 3,086,219,006</b>

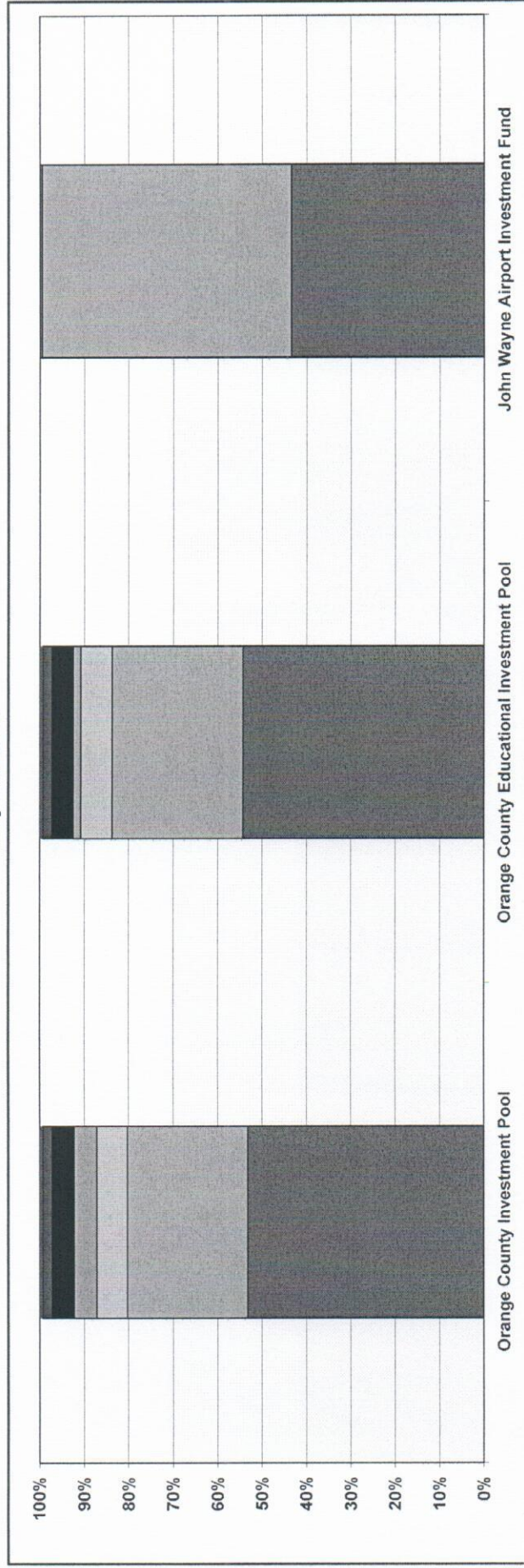
(1) BALANCES INCLUDE GENERAL OBLIGATION BONDS PROCEEDS



# ORANGE COUNTY TREASURER - TAX COLLECTOR

## BY INVESTMENT TYPE - By Percentage Holdings

May 31, 2018



Orange County Investment Pool			
	In Thousands		%
U. S. GOVERNMENT AGENCIES	\$ 2,382,796		53.23%
U. S. TREASURIES	1,210,344		27.04%
MEDIUM-TERM NOTES	306,966		6.86%
MONEY MARKET MUTUAL FUNDS	228,148		5.06%
MUNICIPAL DEBT	221,013		4.94%
CERTIFICATES OF DEPOSIT	96,180		2.15%
LOCAL AGENCY INVESTMENT FUND	31,057		0.69%
	<u>\$ 4,476,504</u>		<u>100.00%</u>

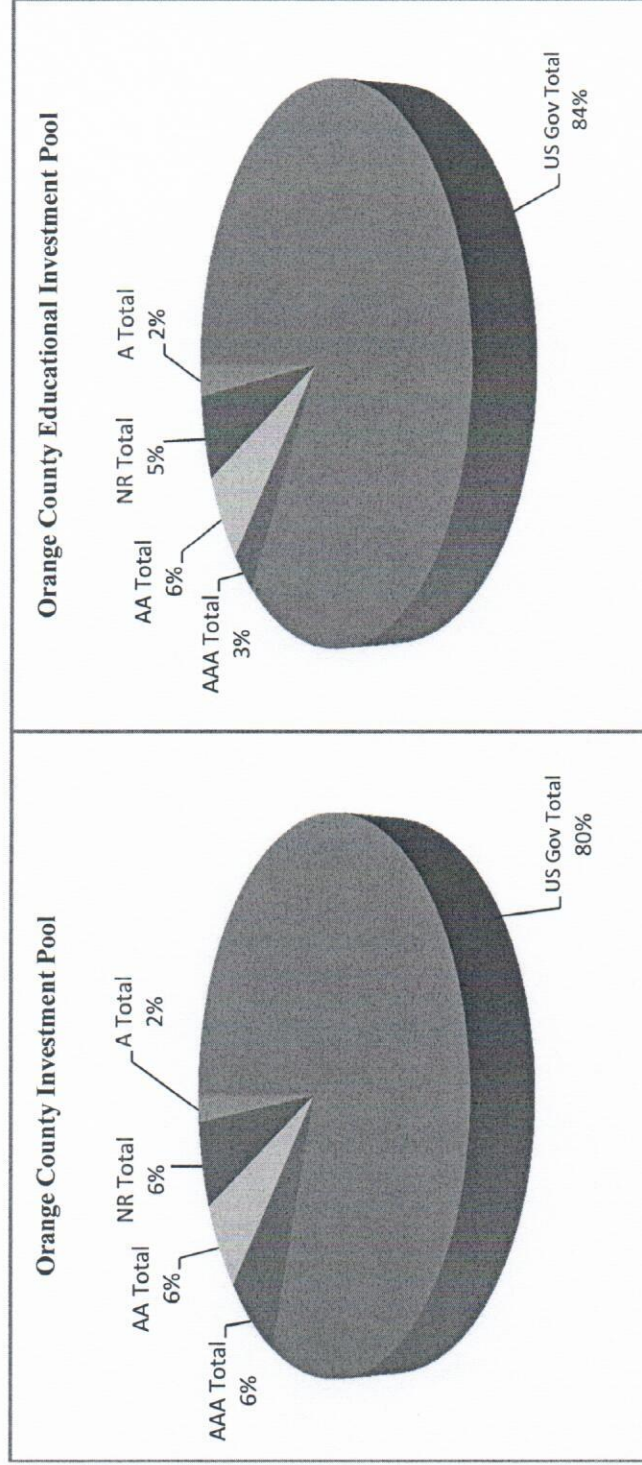
Orange County Educational Investment Pool			
	In Thousands		%
U. S. GOVERNMENT AGENCIES	\$ 2,671,241		54.31%
U. S. TREASURIES	1,445,349		29.39%
MEDIUM-TERM NOTES	349,040		7.10%
MONEY MARKET MUTUAL FUNDS	82,053		1.67%
MUNICIPAL DEBT	235,218		4.78%
CERTIFICATES OF DEPOSIT	102,361		2.08%
LOCAL AGENCY INVESTMENT FUND	33,053		0.67%
	<u>\$ 4,918,315</u>		<u>100.00%</u>

John Wayne Airport Investment Fund			
	In Thousands		%
U. S. GOVERNMENT AGENCIES	\$ 22,133		43.43%
U. S. TREASURIES	28,574		56.07%
MONEY MARKET MUTUAL FUNDS	251		0.50%
	<u>\$ 50,958</u>		<u>100.00%</u>

Calculated Using Market Value at 5/31/2018



# **ORANGE COUNTY TREASURER - TAX COLLECTOR** **CREDIT QUALITY BY MARKET VALUE** **May 31, 2018**

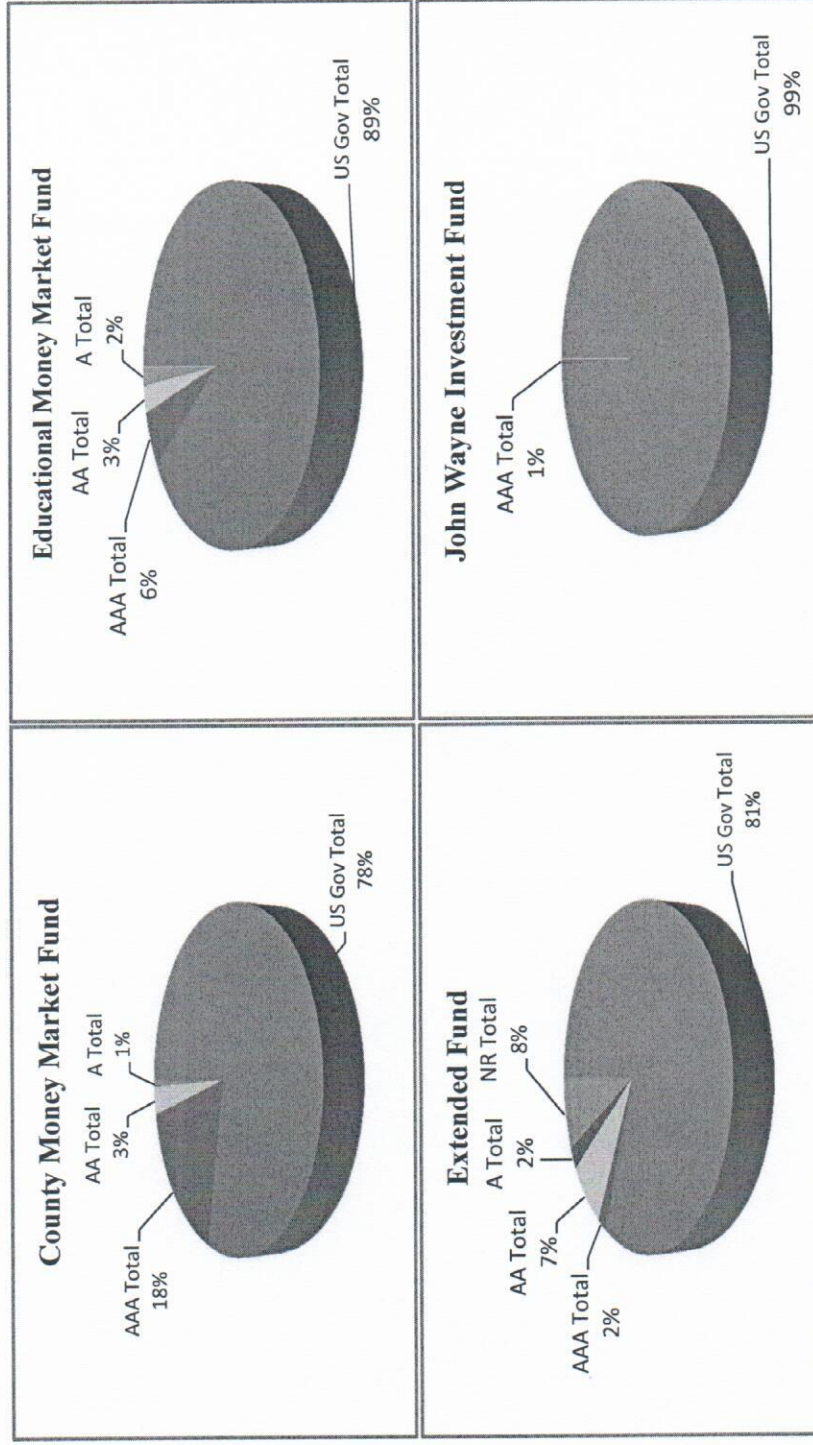


US GOV Includes Agency & Treasury Debt  
 AA includes AA+, AA-, & AA  
 A includes A+, A-, & A  
 NR Includes LAIF and Orange County Pension Obligation Bonds

# ORANGE COUNTY TREASURER - TAX COLLECTOR

## CREDIT QUALITY BY MARKET VALUE

May 31, 2018



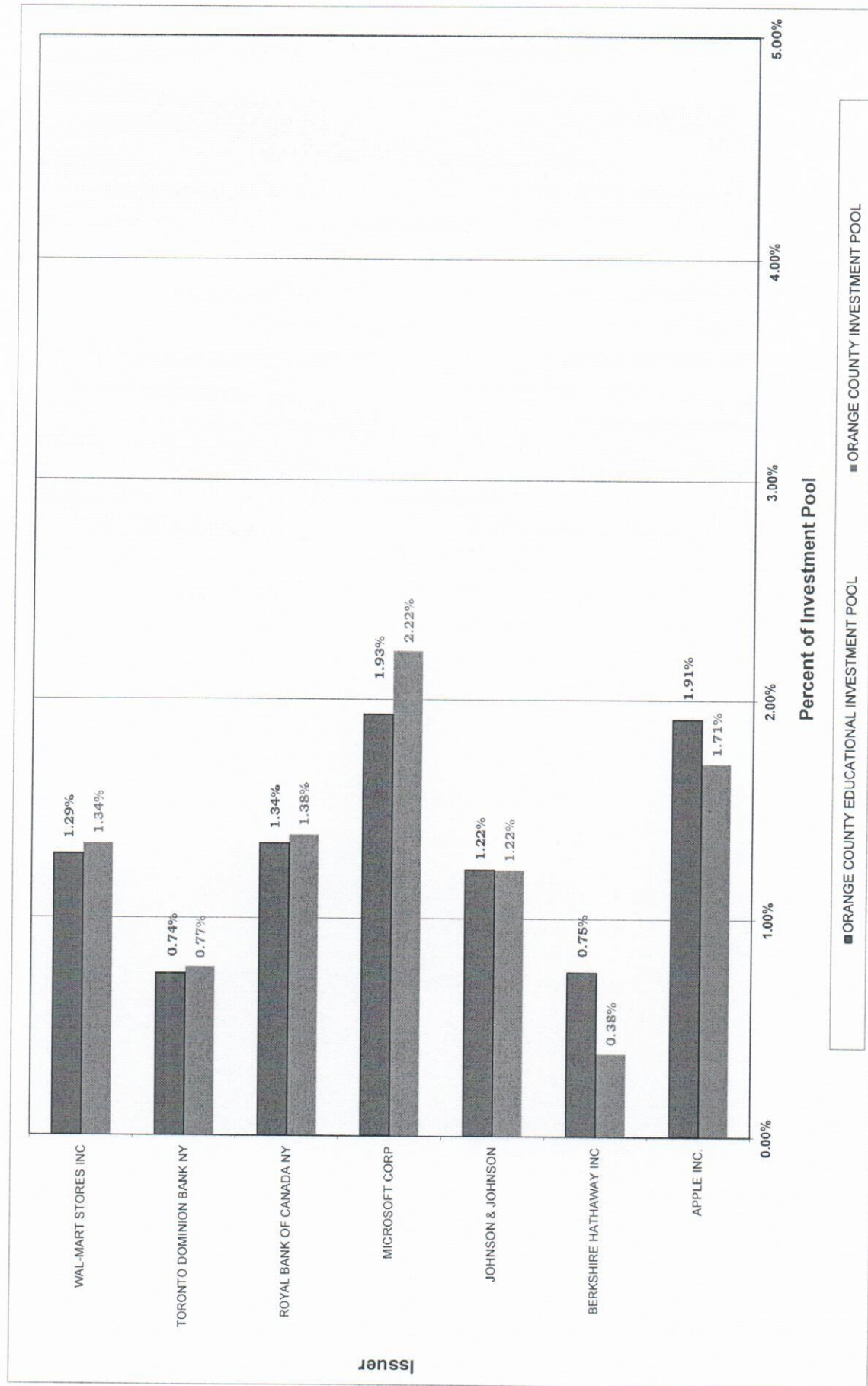
US GOV Includes Agency & Treasury Debt

AA includes AA+, AA-, & AA

A includes A+, A-, & A

NR Includes LAIF and Orange County Pension Obligation Bonds

**ORANGE COUNTY TREASURER - TAX COLLECTOR**  
**MEDIUM-TERM NOTES / CERTIFICATES OF DEPOSIT**  
**ISSUER CONCENTRATION-By Investment Pool**  
 May 31, 2018





# ORANGE COUNTY TREASURER-TAX COLLECTOR

## APPROVED ISSUER LIST - OCIP, OCEIP, and JWA

May 31, 2018

ISSUER	S/T RATINGS			L/T RATINGS		
	S&P	Moody's	Fitch	S&P	Moody's	Fitch
<b>U.S. TREASURY SECURITIES</b>						
U.S. GOVERNMENT	A-1+	P-1	F1+	AA+	Aaa	AAA
<b>U.S. GOVERNMENT AGENCY SECURITIES</b>						
FEDERAL NATIONAL MORTGAGE ASSOCIATION	A-1+	P-1	F1+	AA+	Aaa	AAA
FEDERAL HOME LOAN MORTGAGE CORPORATION	A-1+	P-1	F1+	AA+	Aaa	AAA
FEDERAL HOME LOAN BANKS	A-1+	P-1	NR	AA+	Aaa	NR
FEDERAL FARM CREDIT BANKS	A-1+	P-1	F1+	AA+	Aaa	AAA
<b>MEDIUM-TERM NOTES</b>						
APPLE INC	A-1+	P-1	NR	AA+	Aa1	NR
JOHNSON & JOHNSON	A-1+	P-1	F1+	AAA	Aaa	AAA
MICROSOFT CORPORATION	A-1+	P-1	F1+	AAA	Aaa	AA+
WALMART INC *	A-1+	P-1	F1+	AA	Aa2	AA
BERKSHIRE HATHAWAY INC **	A-1+	P-1	NR	AA	Aa2	A+
BERKSHIRE HATHAWAY FINANCE **	NR	NR	NR	NR	Aa2	A+
<b>ISSUERS ON HOLD</b>						
ROYAL BANK OF CANADA NY (JULY, 2016) ***	A-1+	P-1	F1+	AA-	A1	AA
TORONTO DOMINION BANK NY (MARCH, 2017) ****	A-1+	P-1	F1+	AA-	Aa2	AA-
<b>MUNICIPAL BONDS</b>						
ORANGE CNTY CA PENSION OBLG 2017 A	NR	NR	NR	NR	NR	NR
ORANGE CNTY CA PENSION OBLG 2018 A	NR	NR	NR	NR	NR	NR
<b>STATE POOL - LOCAL AGENCY INVESTMENT FUND</b>						
LOCAL AGENCY INVESTMENT FUND	NR	NR	NR	NR	NR	NR
<b>MONEY MARKET MUTUAL FUNDS *****</b>						
NAME OF FUND	S & P		Moody's		Fitch	
INVESCO GOVERNMENT & AGENCY SHORT-TERM INVESTMENTS TRUST (AIM)	AAAm		Aaa-mf		AAAmmf	
GOLDMAN SACHS FINANCIAL SQUARE GOVT FUND	AAAm		Aaa-mf		NR	
MORGAN STANLEY INSTITUTIONAL LIQUIDITY FUNDS - GOVT	AAAm		Aaa-mf		NR	
NORTHERN INSTITUTIONAL TREASURY PORTFOLIO	AAAm		NR		NR	

\* S&P placed its L/T issuer credit rating on Negative Outlook (S&P - May 9, 2018).

\*\* Further purchase restrictions apply due to Investment Policy Statement rating limits.

\*\*\* Moody's downgraded its L/T issuer credit rating from Aa3 to A1 on May 10, 2017 and kept the L/T issuer credit rating on Negative Outlook. On Negative Outlook (S&P - June 6, 2016).

\*\*\*\* Moody's downgraded its L/T issuer credit rating from Aa1 to Aa2 on May 10, 2017 and kept the L/T issuer credit rating on Negative Outlook.

\*\*\*\*\* All money market funds are institutional money market funds investing in debt issued or guaranteed by the U.S. Government and its agencies.

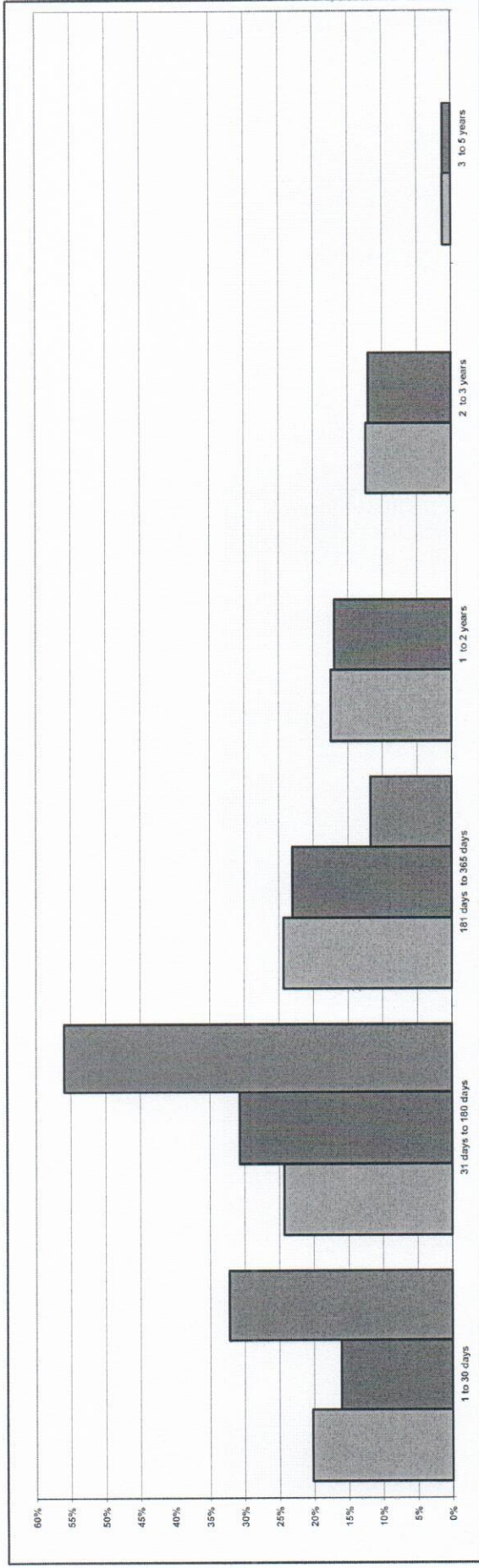
**Orange County Treasurer-Tax Collector**  
**Changes in Approved Issuer's List**  
**For the Month Ended May 31, 2018**

During May, there was one change to the Treasurer's Approved Issuer List. As reported last month, 2018, S&P placed the L/T issuer credit rating of Walmart Inc. on Negative Outlook. An ongoing credit analysis of all issuers owned in the Investment Pools is reviewed on a daily, monthly, quarterly, and annual basis.



# ORANGE COUNTY TREASURER - TAX COLLECTOR MATURITIES DISTRIBUTION

May 31, 2018



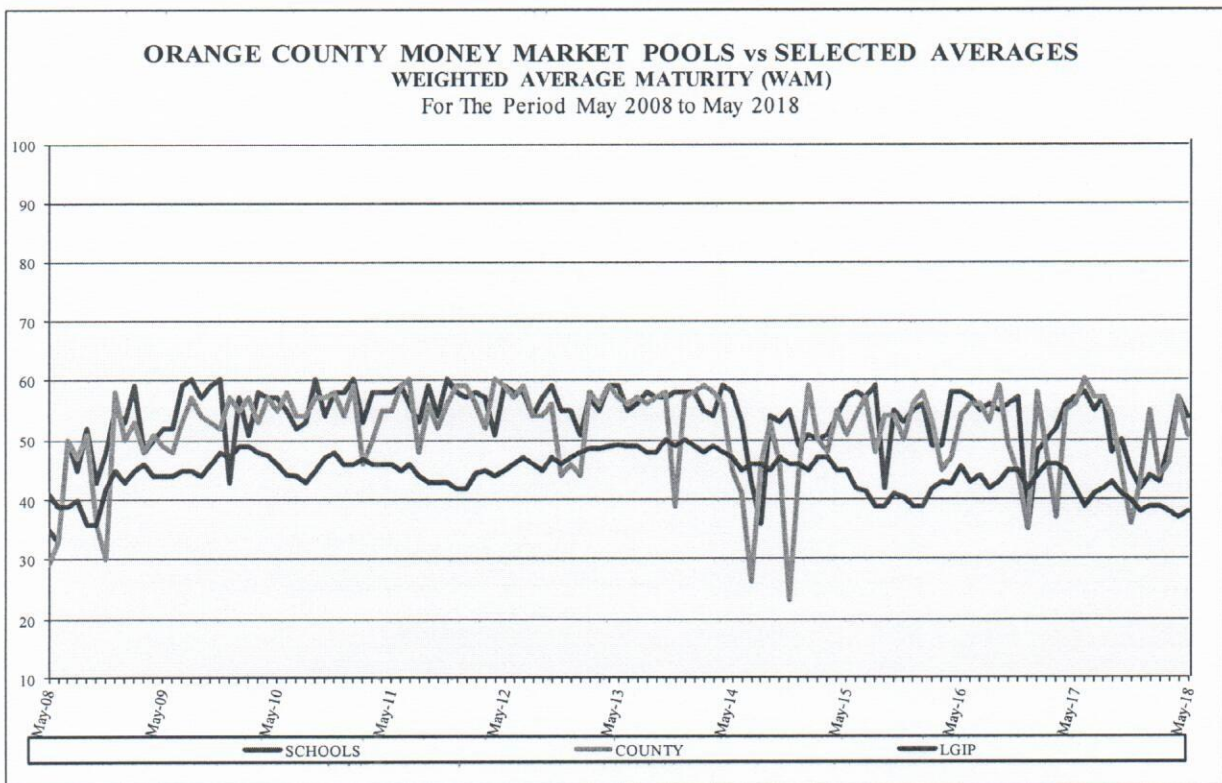
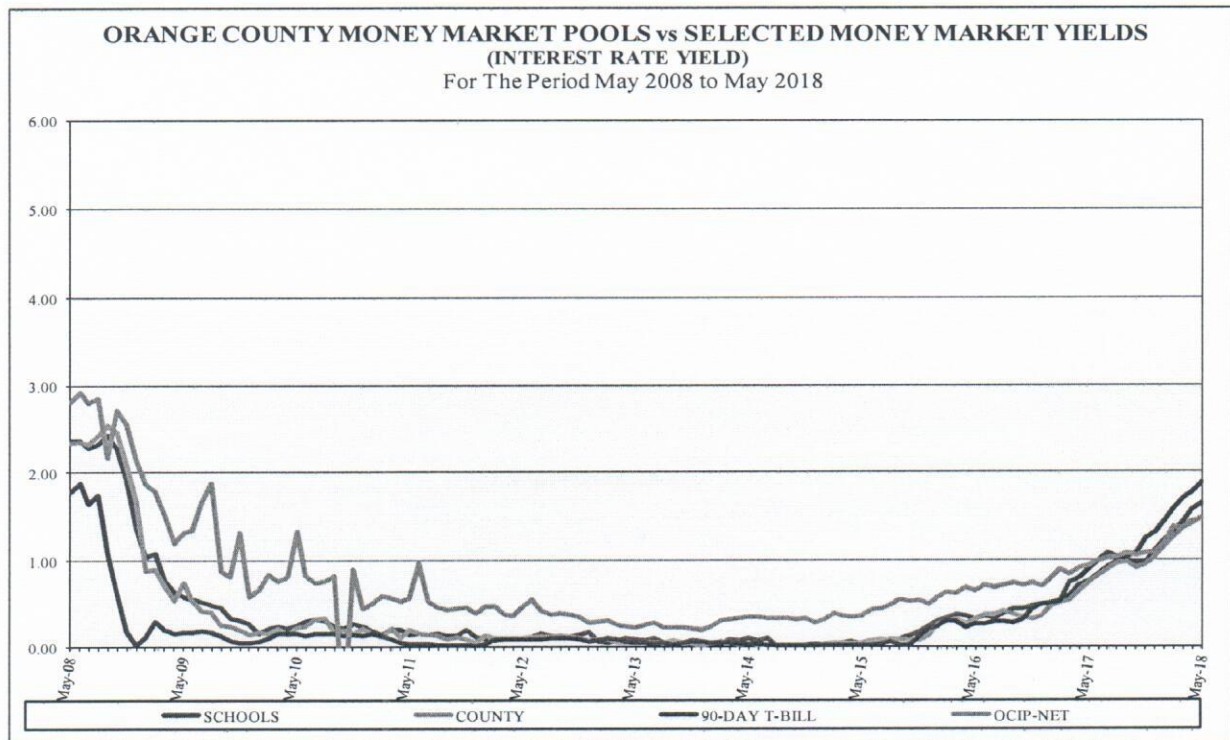
ORANGE COUNTY INVESTMENT POOL			
	In Thousands <sup>1,2</sup>		%
1 TO 30 DAYS	\$ 910,763		20.23%
31 TO 180 DAYS	1,095,363		24.33%
181 TO 365 DAYS	1,095,763		24.34%
1 YEAR TO 2 YEARS	786,905		17.48%
2 YEARS TO 3 YEARS	557,466		12.37%
3 YEARS TO 5 YEARS	56,194		1.25%
TOTAL	\$ 4,502,454		100.00%

ORANGE COUNTY EDUCATIONAL INVESTMENT POOL			
	In Thousands <sup>1,2</sup>		%
1 TO 30 DAYS	\$ 795,277		16.08%
31 TO 180 DAYS	1,518,864		30.71%
181 TO 365 DAYS	1,141,183		23.07%
1 YEAR TO 2 YEARS	837,479		16.93%
2 YEARS TO 3 YEARS	593,294		12.00%
3 YEARS TO 5 YEARS	59,806		1.21%
TOTAL	\$ 4,945,903		100.00%

JOHN WAYNE AIRPORT INVESTMENT FUND			
	In Thousands <sup>1,2</sup>		%
1 TO 30 DAYS	\$ 16,451		32.25%
31 TO 180 DAYS	28,560		55.99%
181 TO 365 DAYS	6,000		11.76%
1 YEAR TO 5 YEARS	-		0.00%
TOTAL	\$ 51,011		100.00%

<sup>1</sup> Maturity Limits are calculated using face value. All final maturities are in compliance with the IPS during May.

<sup>2</sup> Floating Rate Notes are deemed to have a maturity date equal to their next interest reset date. The Orange County Investment Pool, Orange County Educational Investment Pool and JWA Investment Fund did not hold any Floating Rate Notes as of 5/31/2018.



•For the Month Ended May 31, 2018, S&P LGIP – 1.74; S&P LGIP WAM -38; 90-Day T-Bill – 1.88; OCIP – Net – 1.44



**ORANGE COUNTY TREASURER-TAX COLLECTOR**

**INVESTMENT POOL YIELDS**

June 1, 2017 - May 31, 2018

PERIOD ENDING - MONTH / YEAR	MONTH END MARKET VALUE	EARNINGS FOR MONTH	GROSS AVERAGE YIELD FOR MONTH	MONTH END WAM
<i>Current Month May 2018</i>				
County Pool - Money Market Fund	\$ 1,271,767,146	\$ 1,895,963	1.54%	51
Educational Pool - Money Market Fund	\$ 1,507,610,060	\$ 2,273,000	1.71%	54
Extended Fund	\$ 6,615,441,734	\$ 8,444,349	1.48%	414
<i>April 2018</i>				
County Pool - Money Market Fund	\$ 1,677,026,990	\$ 2,621,771	1.47%	57
Educational Pool - Money Market Fund	\$ 1,715,592,154	\$ 1,887,341	1.64%	57
Extended Fund	\$ 6,661,112,140	\$ 8,045,347	1.46%	397
<i>March 2018</i>				
County Pool - Money Market Fund	\$ 1,466,459,327	\$ 1,551,676	1.41%	46
Educational Pool - Money Market Fund	\$ 1,149,359,827	\$ 1,585,016	1.48%	49
Extended Fund	\$ 6,652,243,109	\$ 7,957,780	1.40%	415
<i>February 2018</i>				
County Pool - Money Market Fund	\$ 1,396,683,700	\$ 1,284,889	1.32%	44
Educational Pool - Money Market Fund	\$ 1,273,494,829	\$ 1,464,904	1.37%	43
Extended Fund	\$ 6,647,720,511	\$ 7,473,044	1.46%	428
<i>January 2018</i>				
County Pool - Money Market Fund	\$ 1,245,291,533	\$ 1,659,517	1.21%	55
Educational Pool - Money Market Fund	\$ 1,594,050,298	\$ 2,213,711	1.28%	44
Extended Fund	\$ 6,595,804,419	\$ 6,473,087	1.24%	423
<i>December 2017</i>				
County Pool - Money Market Fund	\$ 2,128,947,374	\$ 2,182,701	1.10%	43
Educational Pool - Money Market Fund	\$ 2,136,417,171	\$ 1,446,683	1.17%	42
Extended Fund	\$ 5,906,097,678	\$ 6,050,707	1.18%	375
<i>November 2017</i>				
County Pool - Money Market Fund	\$ 1,459,897,098	\$ 1,124,024	1.02%	36
Educational Pool - Money Market Fund	\$ 1,154,471,530	\$ 889,369	1.03%	45
Extended Fund	\$ 5,996,926,512	\$ 5,910,266	1.19%	399
<i>October 2017</i>				
County Pool - Money Market Fund	\$ 1,387,117,541	\$ 938,038	0.97%	45
Educational Pool - Money Market Fund	\$ 1,008,484,106	\$ 1,026,340	1.03%	50
Extended Fund	\$ 5,975,091,002	\$ 5,972,076	1.17%	416
<i>September 2017</i>				
County Pool - Money Market Fund	\$ 885,572,484	\$ 752,100	1.05%	54
Educational Pool - Money Market Fund	\$ 1,319,525,808	\$ 1,129,853	1.06%	48
Extended Fund	\$ 5,974,063,472	\$ 5,798,039	1.18%	443
<i>August 2017</i>				
County Pool - Money Market Fund	\$ 912,746,691	\$ 748,603	1.03%	57
Educational Pool - Money Market Fund	\$ 1,342,259,072	\$ 1,320,805	1.04%	57
Extended Fund	\$ 5,975,786,893	\$ 5,754,302	1.13%	454
<i>July 2017</i>				
County Pool - Money Market Fund	\$ 925,588,577	\$ 869,951	0.96%	57
Educational Pool - Money Market Fund	\$ 1,625,874,675	\$ 1,449,778	0.99%	55
Extended Fund	\$ 5,820,623,739	\$ 5,661,871	1.13%	464
<i>June 2017</i>				
County Pool - Money Market Fund	\$ 1,127,901,842	\$ 1,015,069	0.90%	60
Educational Pool - Money Market Fund	\$ 1,821,324,948	\$ 1,188,057	0.91%	58
Extended Fund	\$ 5,876,238,402	\$ 5,545,780	1.14%	487
<b>Fiscal Year July 1, 2017 - June 30, 2018</b>	<b>Average Month End Market Value Balance</b>	<b>YTD Interest Income</b>	<b>YTD Gross Yield</b>	<b>YTD Average</b>
Orange County Investment Pool	\$ 4,417,891,279	\$ 51,901,434	1.26%	311
Orange County Educational Investment Pool	\$ 4,618,940,466	\$ 53,955,467	1.26%	307



# ORANGE COUNTY TREASURER-TAX COLLECTOR

## CASH AVAILABILITY PROJECTION

### FOR THE SIX MONTHS ENDING NOVEMBER 30, 2018

Government Code Section 53646 (b) (3), effective on January 1, 1996, requires the Treasurer-Tax Collector to include a statement in the investment report, denoting the ability of the Orange County Investment Pool (OCIP) and the Orange County Educational Investment Pool (OCEIP) to meet their expenditure requirements for the next six months.

The OCIP and OCEIP consist of funds in the treasury deposited by various entities required to do so by statute, as well as those entities voluntarily depositing monies in accordance with Government Code Section 53684.

The Treasurer-Tax Collector is required to disburse monies placed in the treasury as directed by the Auditor-Controller and the Department of Education, except for the making of legal investments, to the extent funds are transferred to one or more clearing funds in accordance with Government Code Section 29808.

The Treasurer-Tax Collector, in her projection of cash availability to disburse funds as directed by the Auditor-Controller and the Department of Education, is primarily relying on historical trends involving deposits and withdrawals and known future cash flows. No representation is made as to an individual depositor's ability to meet their anticipated expenditures with anticipated revenues.

The Cash Availability Projection for the six months ending November 30, 2018, indicates the ability of the pools to meet projected cash flow requirements. However, there will usually be differences between projected and actual results because events and circumstances frequently do not occur as expected and those differences may be material.

ORANGE COUNTY INVESTMENT POOL				
Month	Investment Maturities	Projected Deposits	Projected Disbursements	Cumulative Available Cash
May 2018 - Ending Cash				\$ 4,882,541
June	\$ 888,011,993	\$ 250,540,286	\$ 751,862,967	391,571,853
July	446,472,751	283,413,826	602,243,709	519,214,721
August	126,339,243	441,512,290	322,112,032	764,954,222
September	244,040,016	377,011,049	334,197,923	1,051,807,364
October	218,561,933	982,475,626	588,508,427	1,664,336,496
November	149,407,801	1,185,277,842	1,130,616,747	1,868,405,392

ORANGE COUNTY EDUCATIONAL INVESTMENT POOL				
Month	Investment Maturities	Projected Deposits	Projected Disbursements	Cumulative Available Cash
May 2018 - Ending Cash				\$ 10,542,006
June	\$ 690,307,584	\$ 889,514,870	\$ 683,639,759	906,724,701
July	783,456,597	211,481,841	549,212,278	1,352,450,861
August	289,700,474	264,553,364	595,215,689	1,311,489,010
September	238,880,798	525,974,481	607,365,625	1,468,978,664
October	259,103,991	315,686,564	712,298,064	1,331,471,155
November	122,628,632	756,452,721	698,090,277	1,512,462,231

**ORANGE COUNTY TREASURER-TAX COLLECTOR**  
**STATEMENT OF ACCOUNTABILITY**  
**For the Month Ended May 31, 2018**

	<u>Month</u>
<b>Treasurer's Accountability at the Beginning of the Period:</b>	<b><u>10,247,447,259</u></b>
<b>Cash Receipts:</b>	
County	380,883,505
School and Community College Districts	489,117,082
<b>Total Cash Receipts</b>	<b><u>870,000,587</u></b>
<b>Cash Disbursements:</b>	
County	842,466,912
School and Community College Districts	692,353,172
<b>Total Cash Disbursements</b>	<b><u>1,534,820,084</u></b>
<b>Net Change in Cost Value of Pooled Assets</b>	<b><u>(664,819,497)</u></b>
<b>Net Increase in Non-Pooled Investments</b>	<b>225,131</b>
<b>Net Increase in Non-Pooled Cash</b>	<b><u>2,067,917</u></b>
<b>Treasurer's Accountability at the End of the Period:</b>	<b><u>9,584,920,810</u></b>
<b>Assets in the Treasury at the End of the Period (at Cost Value):</b>	
<b>Pooled Investments:</b>	
Orange County Investment Pool	4,499,125,904
Orange County Educational Investment Pool	4,943,314,075
<b>Total Pooled Investments</b>	<b><u>9,442,439,979</u></b>
<b>Non-Pooled Investments:</b>	
Non-Pooled Investments - John Wayne Airport	50,970,394
Non-Pooled Investments - Fountain Valley School District Fund 40	34,810,654
Non-Pooled Investments - CCCD Series 2017E Bonds	20,106,034
Non-Pooled Investments - Other	1,081,500
<b>Total Non-Pooled Investments</b>	<b><u>106,968,582</u></b>
<b>Cash:</b>	
Cash in banks - County	4,848,551
Cash in banks - Schools	10,542,006
Cash in banks - OC Sheriff	17,800,820
Cash in banks - John Wayne Airport	2,286,882
Cash - Other	33,990
<b>Total Cash</b>	<b><u>35,512,249</u></b>
<b>Total Assets in the Treasury at the End of the Period:</b>	<b><u>9,584,920,810</u></b>



**ORANGE COUNTY TREASURER-TAX COLLECTOR  
INVESTMENT POLICY (IPS) COMPLIANCE SUMMARY**  
May 31, 2018

Investment Policy (IPS) Guidelines	Investment Type	Orange County Money Market Fund		Extended Fund		Orange County Educational Money Market Fund		John Wayne Airport Investment Fund	
Diversification Limit		Market Value of Investments <sup>(1)</sup>	Percent of Portfolio	Market Value of Investments <sup>(1)</sup>	Percent of Portfolio	Market Value of Investments <sup>(1)</sup>	Percent of Portfolio	Market Value of Investments <sup>(1)</sup>	Percent of Portfolio
100%	U.S. Treasuries Securities	\$ 353,686,536	27.81%	\$ 1,768,372,038	26.73%	\$ 533,634,718	35.40%	\$ 28,574,407	56.07%
100%	U.S. Government Agency Securities	644,391,768	50.67%	3,588,535,175	54.24%	821,109,620	54.46%	22,132,551	43.43%
30%	Municipal Debt	-	0.00%	456,231,932	6.90%	-	0.00%	-	0.00%
30%	Medium-Term Notes	45,541,000	3.58%	539,651,652	8.16%	70,813,277	4.70%	-	0.00%
40%	Banker Acceptances	-	0.00%	-	0.00%	-	0.00%	-	0.00%
40%	Commercial Paper	-	0.00%	-	0.00%	-	0.00%	-	0.00%
30%	Negotiable Certificates of Deposits	-	0.00%	198,541,130	3.00%	-	0.00%	-	0.00%
\$65MM	Local Agency Investment Fund (LAIF)	-	0.00%	64,109,807	0.97%	-	0.00%	-	0.00%
20%	Repurchase Agreements	-	0.00%	-	0.00%	-	0.00%	-	0.00%
20%	Money Market Mutual Funds	228,147,842	17.94%	-	0.00%	82,052,445	5.44%	251,026	0.50%
20%	Investment Pools	-	0.00%	-	0.00%	-	0.00%	-	0.00%
30%	Supranationals	-	0.00%	-	0.00%	-	0.00%	-	0.00%
		\$ 1,271,767,146	100.00%	\$ 6,615,441,734	100.00%	\$ 1,507,610,050	100.00%	\$ 50,957,984	100.00%

Investment Policy (IPS) Guidelines	Compliance Category (Yes/No)	Orange County Money Market Fund		Extended Fund		Orange County Educational Money Market Fund		John Wayne Airport Investment Fund	
5%	Percentage Limits	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
20%	Issuer Limit	Yes <sup>(3)</sup>	Yes <sup>(3)</sup>	N/A	N/A	Yes <sup>(3)</sup>	Yes <sup>(3)</sup>	Yes	Yes
50%	Money Market Mutual Fund Issuer	Yes <sup>(4)</sup>	Yes <sup>(4)</sup>	Yes <sup>(4)</sup>	Yes <sup>(4)</sup>	Yes <sup>(4)</sup>	Yes <sup>(4)</sup>	Yes <sup>(4)</sup>	Yes <sup>(4)</sup>
See Above	Government Agencies Issuer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Diversification Limit								
60 Days	Maturity/Duration Limits								
90 Days	Weighted Average Maturity - Money Market Fund	Yes/50.62	Yes/50.62	N/A	N/A	Yes/53.92	Yes/53.92	N/A	N/A
	Weighted Average Maturity - JWA Investment Fund	N/A	N/A	N/A	N/A	N/A	N/A	Yes/82.69	Yes/82.69
>Merrill 1-3 Year Index+25% (2.35)	Duration <sup>(5)</sup>	N/A	N/A	Yes/1.12	Yes/1.12	N/A	N/A	N/A	N/A
13 Months/397 days	Final Maturity - Money Market Fund	Yes/304	Yes/304	N/A	N/A	Yes/340	Yes/340	N/A	N/A
15 Months/458 days	Final Maturity - John Wayne Airport Investment Fund	N/A	N/A	N/A	N/A	N/A	N/A	Yes/304	Yes/304
5 Years/1826 days	Final Maturity - Extended Fund	N/A	N/A	Yes/1461	Yes/1461	N/A	N/A	N/A	N/A
A-1/ > A	Rating Limits	Yes	Yes	N/A	N/A	Yes	Yes	Yes	Yes
≥ A-1/P-1/F2	Money Market Fund Short Term/Long Term	Yes	Yes	N/A	N/A	Yes	Yes	Yes	Yes
A-1/ > AA <sup>(6)</sup>	Short Term Debt/No Split Ratings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Approved Issuer List	Extended Fund Short Term/Long Term	Yes	Yes	Yes <sup>(6)</sup>	Yes <sup>(6)</sup>	Yes	Yes	Yes	Yes
Broker/Dealer List	Authorized Issuer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Authorized Financial Dealer/Institution	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
0.995 - 1.005	Net Asset Value - Money Market Fund and JWA	Yes/1.0003	Yes/1.0003	N/A	N/A	Yes/1.0000	Yes/1.0000	Yes/1.0001	Yes/1.0001

- (1) All investments are marked to market in compliance with the narrow valuation range prescribed by the IPS and market values are provided by Bloomberg Professional Services and Northern Trust.
- (2) Excludes US Government Debt per the 2018 IPS policy approved by the Board of Supervisors on November 14, 2017 effective on January 1, 2018.
- (3) Rating Agency requirements limit investment in each Money Market Mutual Fund to 10%.
- (4) GSE issuers rated 'AA-' or higher with final maturities of 30 days or less are excluded from the calculation of the 50% limit per IPS for the Extended Fund and the JWA Investment Fund and from the Rating Agency limit of 33% for the two Money Market Funds.
- (5) IPS states all pools, except short-term pools, shall have an effective duration not to exceed a leading 1-3 year index +25%. Duration provided above (1 12) is a modified duration, which does not take into consideration all embedded options such as callable bonds or mortgage backed bonds. This presentation is not considered materially different from the effective duration requirement specified in IPS.
- (6) Securities issued by Royal Bank of Canada NY were rated above 'AA' at the time of purchase and are in compliance with IPS.
- Note: Compliance exceptions, if any, are noted by red shading for the specific IPS guideline and investment pool.

**ORANGE COUNTY TREASURER-TAX COLLECTOR**  
**INVESTMENT POLICY (IPS) AND TREASURY OVERSIGHT COMMITTEE (TOC) COMPLIANCE SUMMARY**  
**May 31, 2018**

COMPLIANCE CATEGORY	RESPONSIBLE PARTY	REGULATORY/POLICY GUIDELINES	CURRENT STATUS
Annual Compliance Audit	TOC	Performance Evaluation-Cal Govt. Code 27134	Calendar year 2016 and six months ended 6/30/17 in progress.
Quarterly Schedule of Assets Review	AC	Performance Evaluation-Cal Govt. Code 26920(a)	December 31, 2017 and March 31, 2018 in progress.
Annual Schedule of Assets Audit	AC	Performance Evaluation-Cal Govt. Code 26920(b)	June 30, 2017 in progress.
Quarterly Continuous Compliance Auditing	TOC	TOC Directive	March 31, 2018 and June 30, 2018 in progress.
Investment Administrative Fee	TTC	Compensation Agreement-Cal Govt. Code 27013	FY 14/15, FY 15/16 and FY 16/17 in progress.
Annual Broker/Dealer Review	TTC	Authorized Financial Dealers and Qualified Institutions	Calendar year 2017 in progress.
Annual Broker/Dealer IPS Certification	TTC	Authorized Financial Dealers and Qualified Institutions	All 2017 IPS certifications received for active approved brokers (one broker removed).
IPS Compliance Deficiencies	TTC	Investment/Diversification/Maturity Restrictions/Form 700	FY 17/18 identified three compliance incidents as of May 31, 2018
TOC Bylaw Changes	BOS	TOC Review and BOS Annual Approval	The TOC reviewed Bylaws and made one change at the October 18, 2017 meeting. The BOS approved on November 14, 2017.
Annual IPS Approval	BOS	TOC Review and BOS Annual Approval	The TOC reviewed proposed IPS changes at the October 18, 2017 meeting and did not make any additional changes. The BOS approved on November 14, 2017.
TOC Annual Report	BOS	TOC Bylaws Rule 30 - Oral and Written Report	The TOC 2017 Annual Report was presented to BOS meeting on February 27, 2018.
Broker/Financial Institution List	TTC	OC Gift Ban Ordinance and Form 700	The TOC members were provided a list of active TTC Broker/Dealers and Financial Institutions at the TOC meeting on October 18, 2017.
Certificates of Compliance	TTC	TOC Bylaws Rule 34 - Annual	The TOC members are in compliance for calendar year 2018.
Ethics Training	TTC	TOC Bylaws Rule 34 - Every Two Years	The TOC members are in compliance for calendar year 2016 (one submitted in January 2017).
Conflict of Interest Form 700 Filing	TTC	TOC Bylaws Rule 34 / IPS - Every Year	All TOC members and designated employees are in compliance for calendar year 2017.

LEGEND	
Auditor-Controller	AC
Board of Supervisors	BOS
Treasury Oversight Committee	TOC
Office of Treasurer-Tax Collector	TTC

**Orange County Treasurer-Tax Collector  
Noncompliance Detail  
For the Month Ended May 31, 2018**

During May, the Orange County Investment Pool (OCIP), the Orange County Educational Investment Pool (OCEIP), and the John Wayne Airport Investment Fund were all free of noncompliance incidents.



# MONTHLY TREASURER'S INVESTMENT REPORT

## Distribution List

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### County of Orange Elected Officials

Honorable Sandra Hutchens, Sheriff-Coroner  
Honorable Hugh Nguyen, Clerk-Recorder  
Honorable Claude Parrish, Assessor  
Honorable Anthony J. Rackaukas, Jr., District Attorney/Public Administrator  
Honorable Eric Woolery, Auditor-Controller

### Treasury Oversight Committee

Gary Capata  
Frank Kim  
Al Mijares  
Laura Parisi  
Richard Rohm  
Eric Woolery

### County of Orange Departments

Assessor  
Auditor-Controller  
Child Support Services  
Clerk of the Board  
Clerk-Recorder  
County Counsel  
County Executive Office  
District Attorney/Public Administrator  
Health Care Agency  
Human Resources Services  
Independent Review  
In-Home Supportive Services  
John Wayne Airport  
OC Community Resources  
OC Dana Point Harbor  
OC Public Works  
OC Waste & Recycling  
Performance Audit  
Probation  
Public Defender  
Registrar of Voters  
Sheriff-Coroner  
Social Services Agency

### County Agencies

Children & Families Commission  
Civic Center Commission  
Law Library  
Orange County Employees Retirement System  
Orange County Cemetery District  
Orange County Fire Authority  
Orange County Transportation Authority  
Transportation Corridor Agencies

### State of California

CDIAC  
Superior Court

### Orange County School Districts

Orange County Department of Education  
Anaheim City School District  
Anaheim Union High School District  
Brea-Olinda Unified School District  
Buena Park School District  
Capistrano Unified School District  
Centralia School District

Cypress School District  
Fountain Valley School District  
Fullerton School District  
Fullerton Joint Union High School District  
Garden Grove Unified School District  
Huntington Beach City School District  
Huntington Beach Union High School District  
Irvine Unified School District  
Laguna Beach Unified School District  
La Habra City School District  
Los Alamitos Unified School District  
Lowell Joint School District  
Magnolia School District  
Newport-Mesa Unified School District  
Ocean View School District  
Orange Unified School District  
Placentia-Yorba Linda Unified School District  
Saddleback Valley Unified School District  
Santa Ana Unified School District  
Savanna School District  
Tustin Unified School District  
Westminster School District

### Orange County Community College Districts (CCD)

Coast Community CCD  
North Orange County CCD  
Rancho-Santiago CCD  
South Orange County CCD

### Orange County Regional Occupational Programs (ROP)

Capistrano-Laguna Beach ROP  
Coastline ROP  
North Orange County ROP

### Voluntary Pool Participants (date approved)

Serrano Water District (6-22-99)  
City of Villa Park (10-2-01)  
City of Tustin (5-21-02)  
Mesa Water District (8-9-02)  
Orange County Water District (3-30-04)  
Municipal Water District of OC (7-27-04)  
Orange County Mosquito and Vector Control District (11-14-06)  
Buena Park Library District (2-9-10)  
Local Agency Formation Commission (10-5-10)  
Villa Park Community Services Foundation (4-5-11)  
City of Laguna Niguel (3-13-14)  
City of Lake Forest (12-16-15)  
Foothill/Eastern TCA (10-14-16)  
San Joaquin Hills TCA (10-14-16)  
Foothill/Eastern TCA/RCC (11-17-16)  
City of Laguna Woods (5-10-17)  
City of Mission Viejo (10-2-17)  
Placentia Library District (10-16-17)



**June 27, 2018**

**To:** Finance and Administration Committee

**From:** Darrell E. Johnson, Chief Executive Officer

**Subject:** Orange County Transportation Authority Investment and Debt Programs Report - May 2018

### **Overview**

The Orange County Transportation Authority has a comprehensive investment and debt program to fund its immediate and long-term cash flow demands. Each month, the Treasurer submits a report detailing investment allocation, performance, compliance, outstanding debt balances, and credit ratings for the Orange County Transportation Authority's debt program. This report is for the month ending May 31, 2018. The report has been reviewed and is consistent with the investment practices contained in the Investment Policy.

### **Recommendation**

Receive and file as an information item.

### **Discussion**

As of May 31, 2018, the Orange County Transportation Authority's (OCTA) outstanding investments totaled \$1.5 billion. The portfolio is divided into two managed portfolios: the liquid portfolio for immediate cash needs and the short-term portfolio for future budgeted expenditures. In addition to these portfolios, OCTA has funds invested in debt service reserve funds for the 91 Express Lanes Program. The weighted average book yield for the OCTA portfolio is 1.85 percent.

The book yield measures the exact income, or interest, on a bond without regard to market price change. The yield is the income return on an investment, such as the interest received from holding a particular security. The yield is usually expressed as an annual percentage rate based on the investment's cost and market value.

OCTA's debt portfolio had an outstanding principal balance of \$578.8 million as of May 31, 2018. Approximately 54 percent of the outstanding

balance is comprised of Measure M2 debt, 18 percent is associated with the 91 Express Lanes Program and 28 percent is the Transportation Infrastructure Finance and Innovation Act Loan.

***Summary***

The Treasurer is submitting a copy of the Orange County Transportation Authority Investment and Debt Programs report to the Finance and Administration Committee. The report is for the month ending May 31, 2018.

***Attachment***

- A. Orange County Transportation Authority Investment and Debt Programs  
– For the Period Ending May 31, 2018.

**Prepared by:**



Rodney Johnson  
Deputy Treasurer  
Treasury/Public Finance  
(714) 560-5675

**Approved by:**

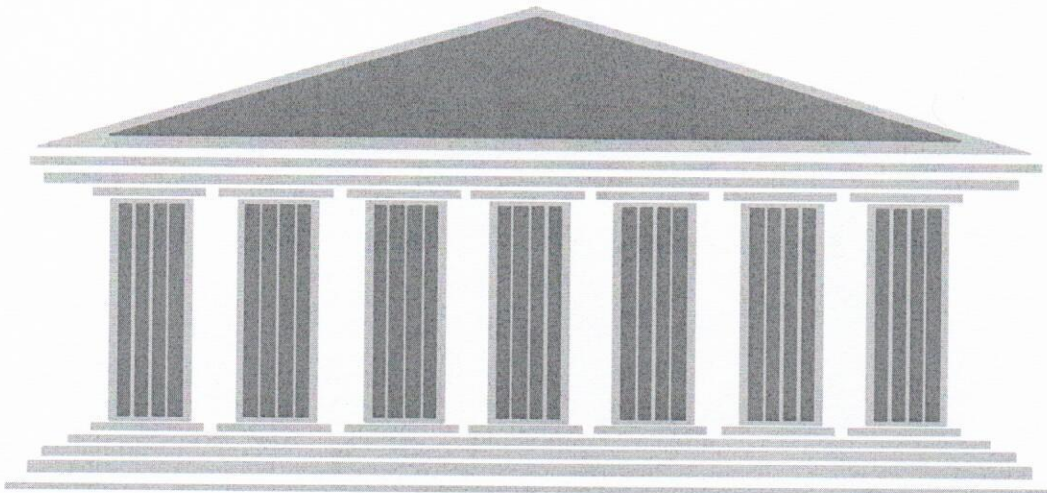


Andrew Oftelie  
Executive Director,  
Finance and Administration  
(714) 560-5649



**Treasury/Public Finance Department's  
Report On**

**Orange County Transportation Authority  
Investment and Debt Programs**



**Presented to the  
Finance and Administration Committee**

**For The Period Ending  
May 31, 2018**

# INVESTMENT PROGRAM

# Investment Profile

## 5/31/2018

---

<u>Portfolio Manager</u>	<u>Depository</u>	<u>Role</u>	<u>Type of Investment</u>	<u>Amount (\$ Millions)</u>
<i>ACTIVELY MANAGED INVESTMENTS</i>				
Logan Circle Partners	Union Bank	Custodian	Short-Term Operating	346.3
Chandler Asset Management	Union Bank	Custodian	Short-Term Operating	345.7
Payden & Rygel Investment Counsel	Union Bank	Custodian	Short-Term Operating	346.8
Public Financial Management (PFM)	Union Bank	Custodian	Short-Term Operating	345.7
<i>POOLED INVESTMENTS</i>				
California State Treasurer	LAIF	Custodian	Liquid	10.4
Orange County Treasurer	OCIP	Custodian	Legal Requirement	3.9
<i>CASH INVESTMENTS</i>				
OCTA	BNY Mellon	Trustee	Liquid	61.9
OCTA	Bank of the West	Broker	Liquid	15.7
OCTA	U.S Bank	Trustee	Liquid	0.0
<i>DEBT SERVICE RESERVE FUNDS</i>				
91 Express Lanes 2013 Ref. Bonds	U.S Bank	Trustee	Commercial Paper	11.0
91 Express Lanes 2013 Ref. Bonds	Bank of the West	Trustee	Commercial Paper	10.0
91 Express Lanes 2013 Ref. Bonds	Bank of the West	Trustee	Commercial Paper	3.0
Bank Deposits/Cash				0.3
<b>TOTAL</b>				<b>\$1,500.7</b>

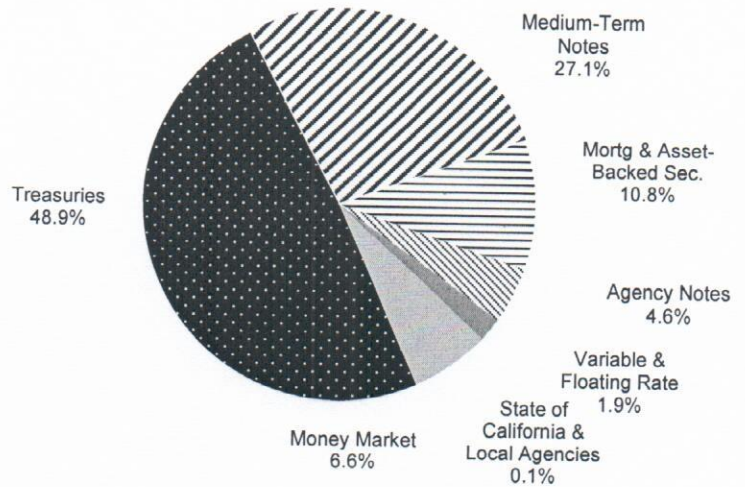
# Short-Term Portfolio - \$1.39 Billion

As of 5/31/18

## Part 1 of 2

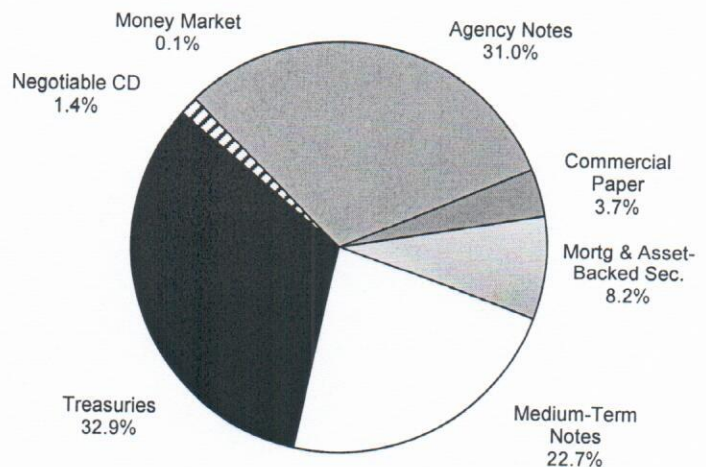
### Logan Circle Partners

Book Value	\$	346,309,808
Market Value	\$	341,848,204



### Chandler Asset Management

Book Value	\$	345,707,788
Market Value	\$	342,379,564



Market Value Reported By Custodial Bank



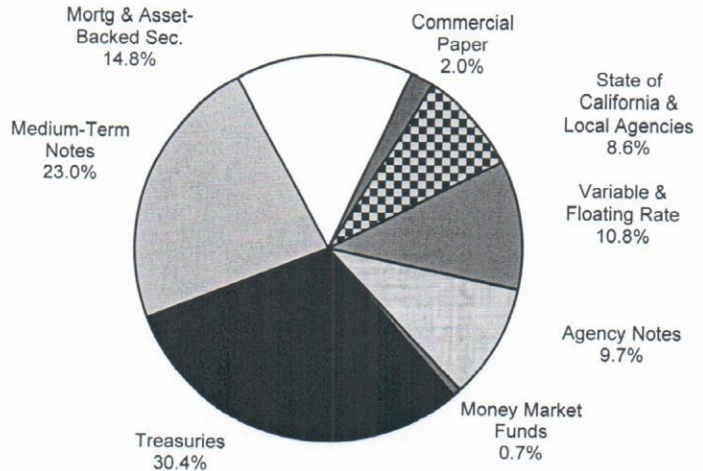
# Short-Term Portfolio - \$1.39 Billion

## As of 5/31/18

### Part 2 of 2

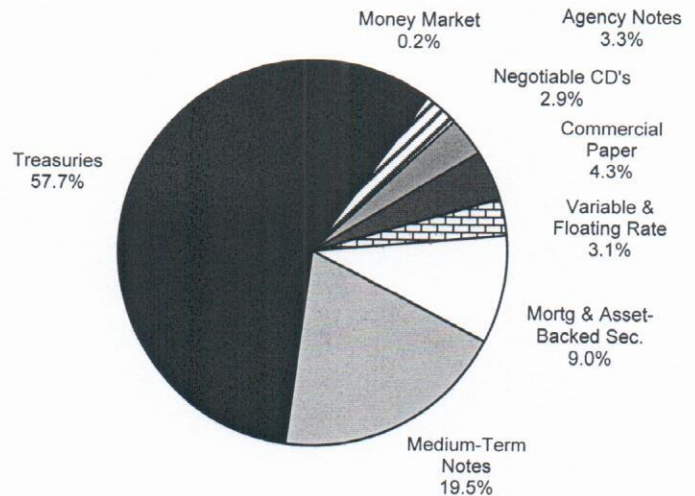
#### Payden & Rygel

Book Value	\$	346,778,978
Market Value	\$	343,905,506



#### Public Financial Management (PFM)

Book Value	\$	345,739,588
Market Value	\$	342,518,841



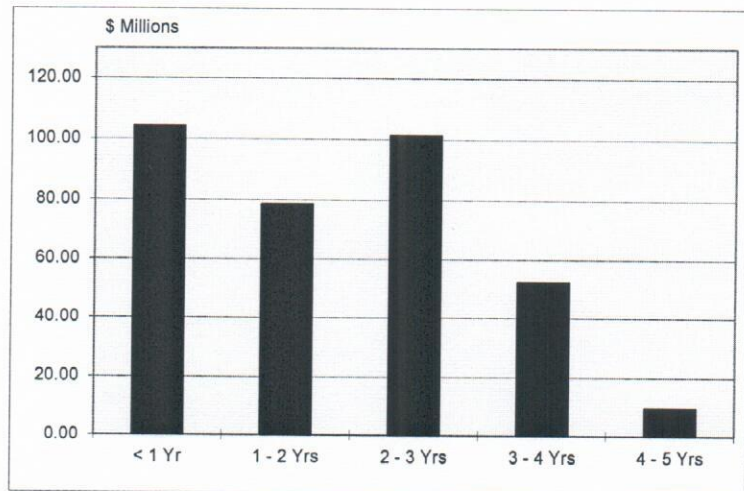
Market Value Reported By Custodial Bank



# Short-Term Portfolio Maturity Schedule As of 5/31/18

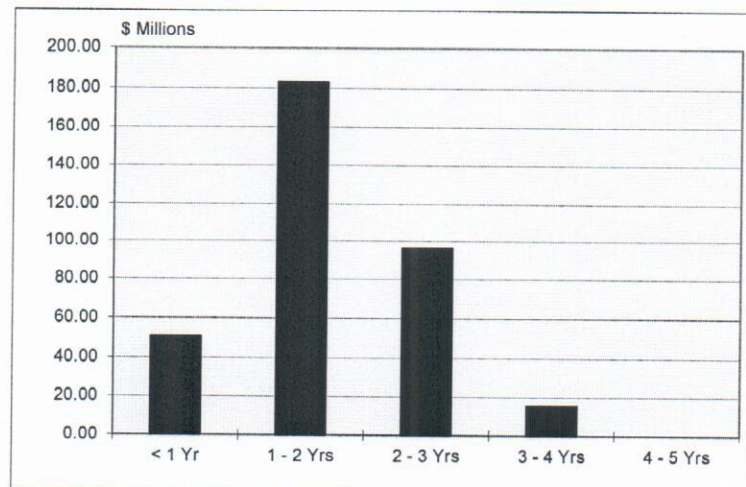
## Logan Circle Partners (\$346.3 M)

Monthly Return	0.38%
TSY Benchmark	0.36%
Gov/Corp Benchmark	0.37%
Fiscal YTD Return	0.39%
TSY Benchmark	0.06%
Gov/Corp Benchmark	0.19%
12 Month Return	0.35%
TSY Benchmark	-0.02%
Gov/Corp Benchmark	0.14%



## Chandler Asset Management (\$345.7 M)

Monthly Return	0.35%
Benchmark Comparison	0.36%
Gov/Corp Benchmark	0.37%
Fiscal YTD Return	0.24%
TSY Benchmark	0.06%
Gov/Corp Benchmark	0.19%
12 Month Return	0.21%
TSY Benchmark	-0.02%
Gov/Corp Benchmark	0.14%

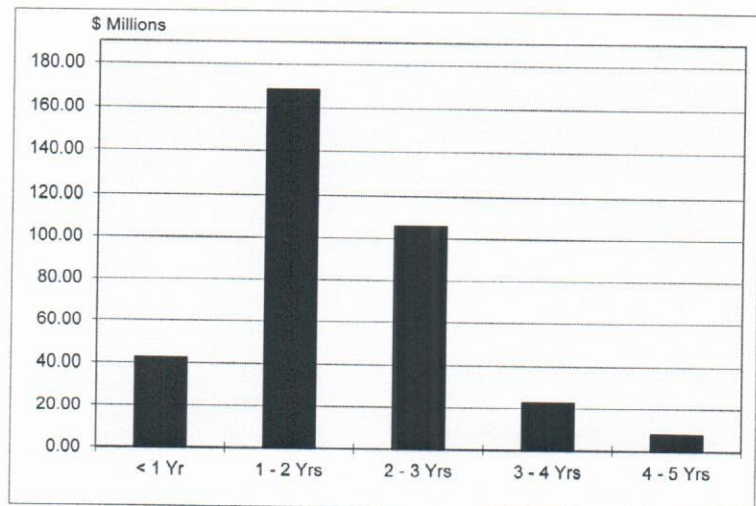


Yield Curve Change From 4/30/18 to 5/31/18			
	4/30/18	5/31/18	Change
1 Year	2.237%	2.227%	-0.0100%
2 Year	2.490%	2.429%	-0.0610%
3 Year	2.628%	2.552%	-0.0760%
5 Year	2.798%	2.697%	-0.1010%
30 Year	3.124%	3.026%	-0.0980%

# Short-Term Portfolio Maturity Schedule As of 5/31/18

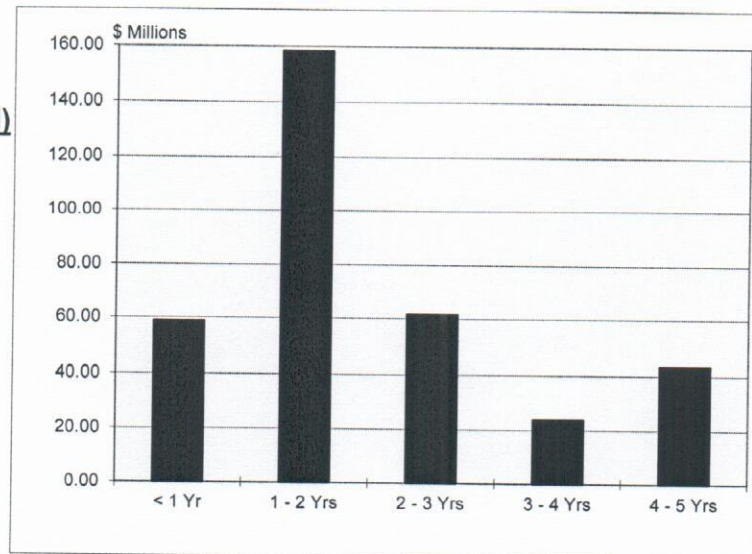
## Payden & Rygel (\$346.8 M)

Monthly Return	0.32%
TSY Benchmark	0.36%
Gov/Corp Benchmark	0.37%
Fiscal YTD Return	0.51%
TSY Benchmark	0.06%
Gov/Corp Benchmark	0.19%
12 Month Return	0.50%
TSY Benchmark	-0.02%
Gov/Corp Benchmark	0.14%



## Public Financial Management (\$345.7 M)

Monthly Return	0.38%
TSY Benchmark	0.36%
Gov/Corp Benchmark	0.37%
Fiscal YTD Return	0.24%
TSY Benchmark	0.06%
Gov/Corp Benchmark	0.19%
12 Month Return	0.18%
TSY Benchmark	-0.02%
Gov/Corp Benchmark	0.14%



### Yield Curve Change From 4/30/18 to 5/31/18

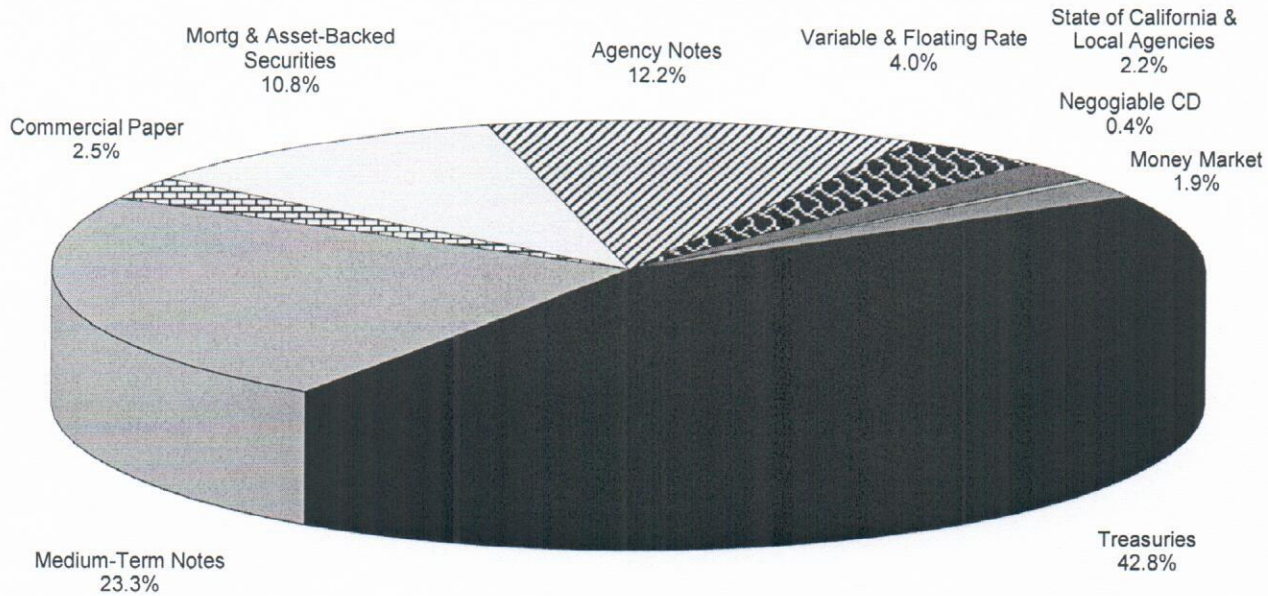
	<u>4/30/18</u>	<u>5/31/18</u>	<u>Change</u>
1 Year	2.237%	2.227%	-0.0100%
2 Year	2.490%	2.429%	-0.0610%
3 Year	2.628%	2.552%	-0.0760%
5 Year	2.798%	2.697%	-0.1010%
30 Year	3.124%	3.026%	-0.0980%



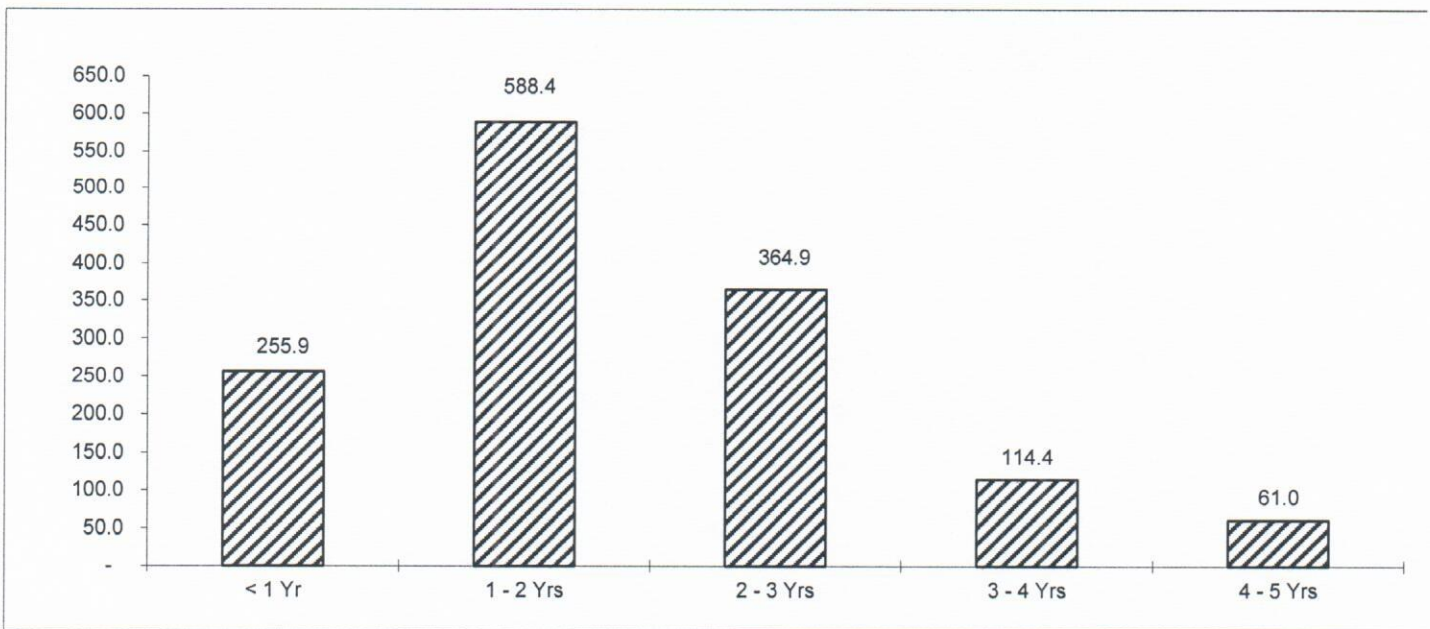
# Short-Term Portfolio

## As of 5/31/18

### Total Portfolio Composition



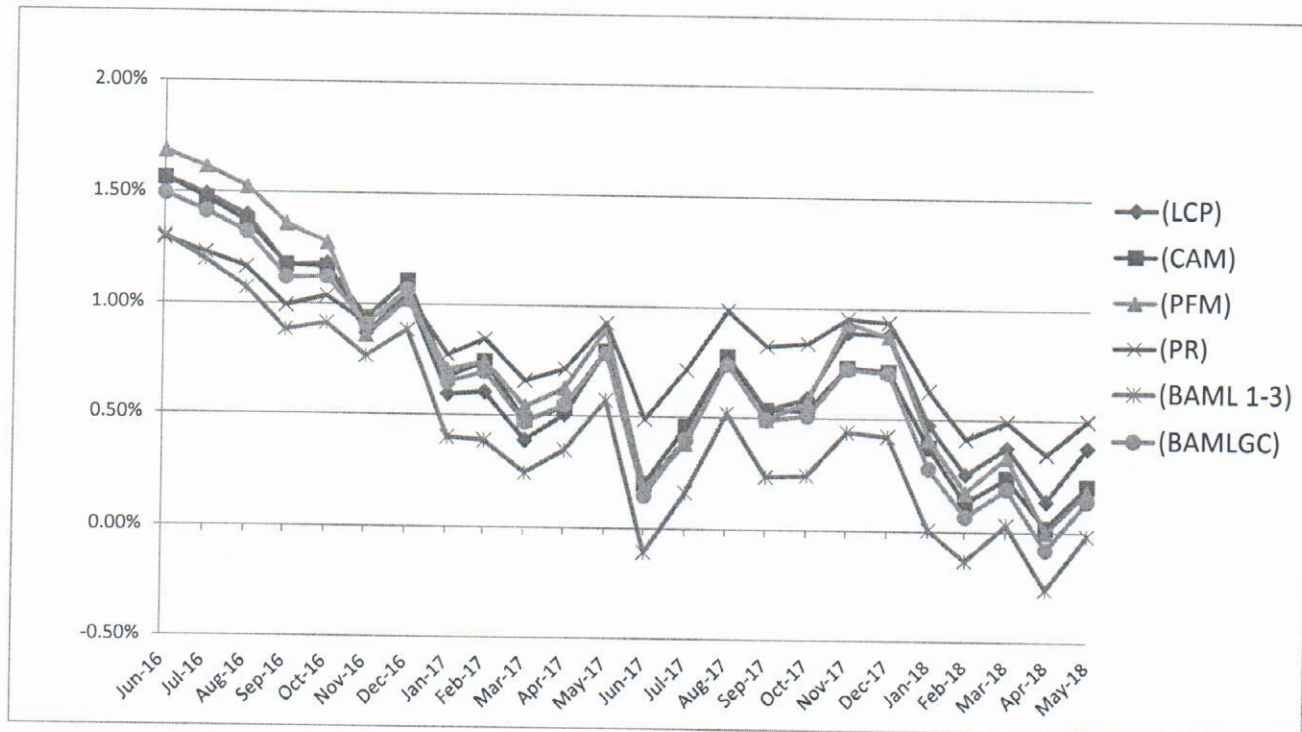
### Total Portfolio Maturity Schedule



# Short-Term Portfolio Performance

## As of 5/31/18

Trailing 1-Year Total Return  
Vs. The Bank of America Merrill Lynch (BAML) 1-3 Benchmarks



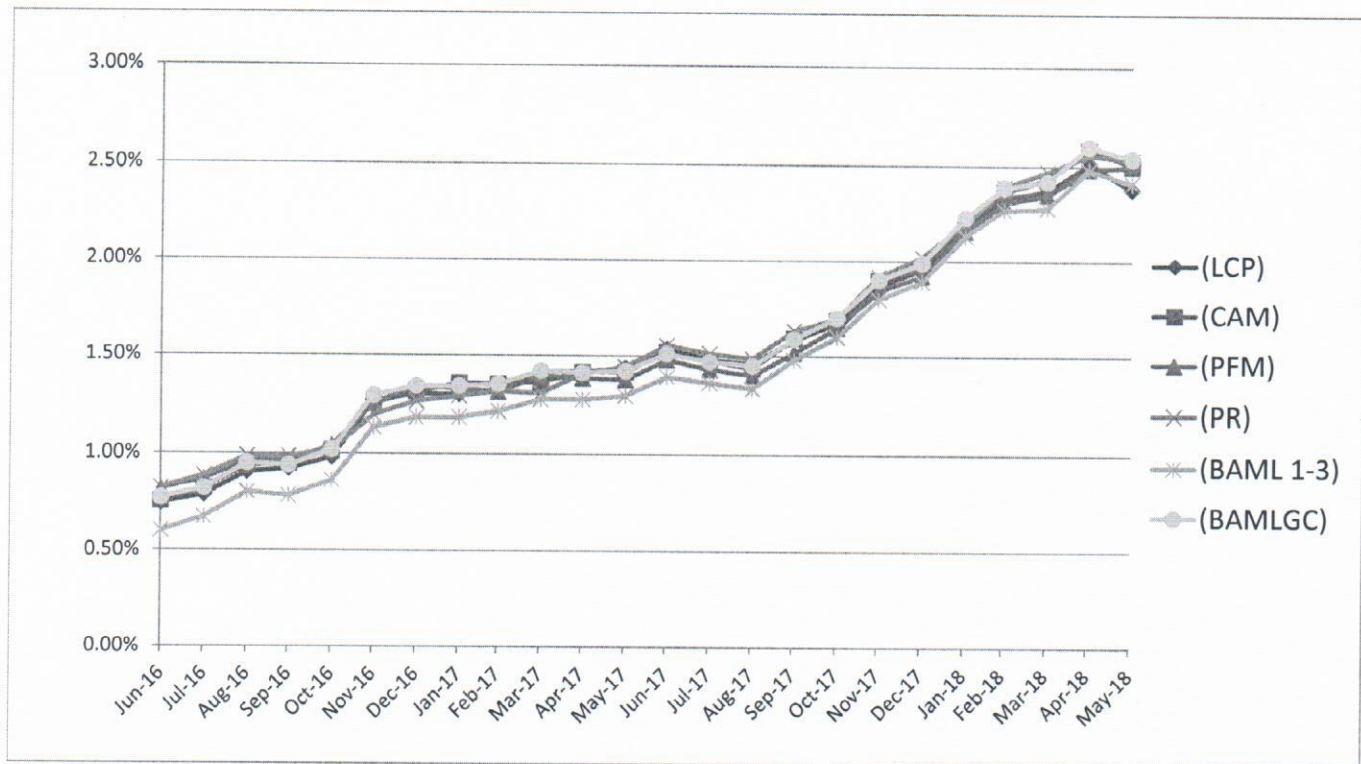
	Logan Circle Partners (LCP)	Chandler Asset Mgmt (CAM)	Public Fin Mgmt (PFM)	Payden & Rygel (PR)	ICE/BAML 1-3 Yr Trsy (BAML 1-3)	ICE/ BAML 1-3 Yr Gov/Corp (BAMLGC)
Jun-16	1.57%	1.56%	1.69%	1.30%	1.31%	1.49%
Jul-16	1.49%	1.47%	1.62%	1.23%	1.20%	1.42%
Aug-16	1.40%	1.37%	1.52%	1.16%	1.07%	1.32%
Sep-16	1.17%	1.18%	1.36%	0.99%	0.88%	1.12%
Oct-16	1.18%	1.17%	1.28%	1.04%	0.92%	1.12%
Nov-16	0.87%	0.94%	0.86%	0.92%	0.76%	0.91%
Dec-16	1.04%	1.11%	1.02%	1.05%	0.89%	1.07%
Jan-17	0.59%	0.67%	0.70%	0.77%	0.40%	0.65%
Feb-17	0.60%	0.74%	0.74%	0.85%	0.39%	0.69%
Mar-17	0.39%	0.48%	0.54%	0.65%	0.25%	0.47%
Apr-17	0.51%	0.54%	0.62%	0.71%	0.35%	0.55%
May-17	0.79%	0.80%	0.90%	0.93%	0.57%	0.78%
Jun-17	0.17%	0.20%	0.18%	0.49%	-0.11%	0.15%
Jul-17	0.40%	0.46%	0.38%	0.71%	0.16%	0.40%
Aug-17	0.76%	0.78%	0.74%	0.99%	0.52%	0.74%
Sep-17	0.54%	0.54%	0.49%	0.82%	0.24%	0.49%
Oct-17	0.59%	0.53%	0.57%	0.84%	0.24%	0.51%
Nov-17	0.89%	0.73%	0.94%	0.96%	0.44%	0.72%
Dec-17	0.88%	0.71%	0.87%	0.94%	0.42%	0.70%
Jan-18	0.48%	0.38%	0.41%	0.62%	0.01%	0.28%
Feb-18	0.26%	0.13%	0.18%	0.42%	-0.13%	0.07%
Mar-18	0.38%	0.24%	0.34%	0.49%	0.03%	0.19%
Apr-18	0.14%	0.02%	0.00%	0.35%	-0.26%	-0.08%
May-18	0.38%	0.21%	0.18%	0.50%	-0.02%	0.14%



# Comparative Yield Performance

## As of 5/31/18

### Historical Yields Vs. The Bank of America Merrill Lynch (BAML) 1-3 Benchmarks



	Logan Circle Partners (LCP)	Chandler Asset Mgmt (CAM)	Public Fin Mgmt (PFM)	Payden Rygel (PR)	ICE/BAML 1-3 Yr Trsy (BAML 1-3)	ICE/ BAML 1-3 Yr Gov/Corp (BAMLGC)
Jun-16	0.74%	0.75%	0.82%	0.82%	0.60%	0.77%
Jul-16	0.79%	0.82%	0.87%	0.89%	0.67%	0.82%
Aug-16	0.91%	0.94%	0.96%	0.99%	0.80%	0.95%
Sep-16	0.92%	0.95%	0.96%	0.98%	0.78%	0.94%
Oct-16	0.98%	1.02%	1.04%	1.02%	0.86%	1.02%
Nov-16	1.26%	1.25%	1.25%	1.19%	1.13%	1.29%
Dec-16	1.30%	1.31%	1.34%	1.26%	1.18%	1.34%
Jan-17	1.29%	1.36%	1.33%	1.29%	1.18%	1.34%
Feb-17	1.32%	1.35%	1.31%	1.31%	1.21%	1.35%
Mar-17	1.42%	1.36%	1.39%	1.30%	1.27%	1.42%
Apr-17	1.42%	1.41%	1.38%	1.41%	1.27%	1.41%
May-17	1.44%	1.42%	1.37%	1.44%	1.29%	1.42%
Jun-17	1.54%	1.52%	1.48%	1.55%	1.39%	1.51%
Jul-17	1.48%	1.48%	1.43%	1.51%	1.36%	1.47%
Aug-17	1.46%	1.44%	1.40%	1.49%	1.33%	1.45%
Sep-17	1.59%	1.59%	1.52%	1.63%	1.48%	1.59%
Oct-17	1.67%	1.69%	1.65%	1.70%	1.60%	1.70%
Nov-17	1.87%	1.90%	1.84%	1.92%	1.80%	1.90%
Dec-17	1.96%	1.97%	1.92%	2.02%	1.89%	1.99%
Jan-18	2.18%	2.19%	2.16%	2.20%	2.13%	2.23%
Feb-18	2.34%	2.37%	2.31%	2.39%	2.27%	2.39%
Mar-18	2.37%	2.43%	2.35%	2.47%	2.28%	2.42%
Apr-18	2.51%	2.58%	2.48%	2.55%	2.48%	2.60%
May-18	2.38%	2.51%	2.50%	2.53%	2.41%	2.54%



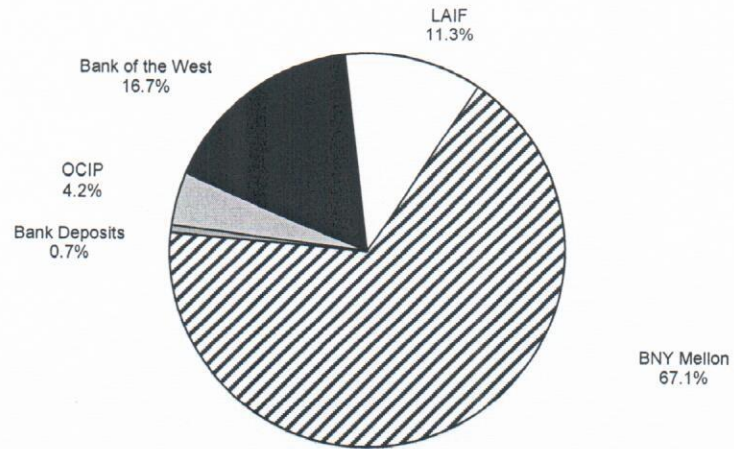
# Liquid Funds Portfolio - \$92.2 M

## As of 5/31/18

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### Other Liquid Funds

Book Value	\$	92,176,586
Market Value	\$	92,176,586



Yield Curve Change From 4/30/18 to 5/31/18			
	4/30/18	5/31/18	Change
1 Month	1.624%	1.739%	0.1150%
3 Month	1.802%	1.900%	0.0980%
6 Month	2.007%	2.079%	0.0720%

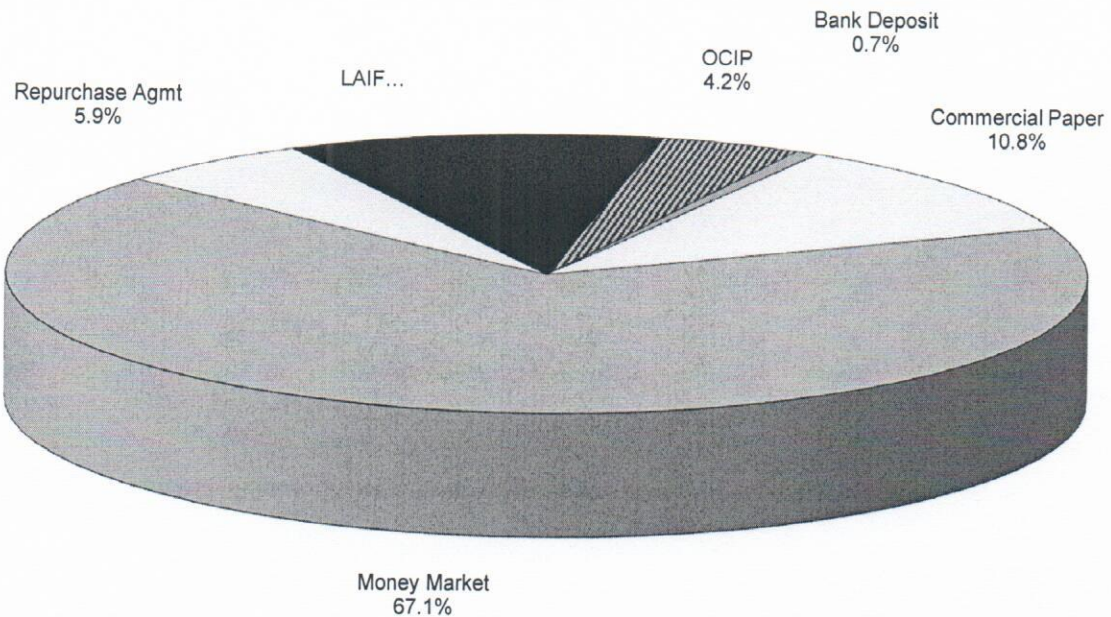
Market Value Reported By Custodial Bank

# Liquid Portfolio

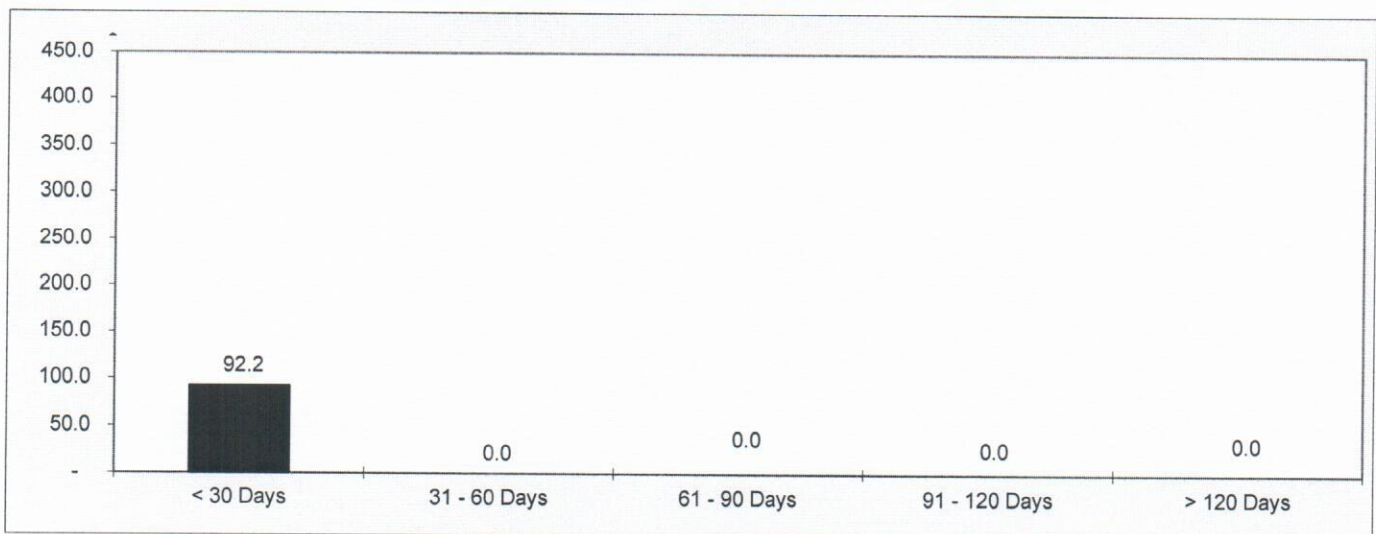
## As of 5/31/18

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### Total Portfolio Composition



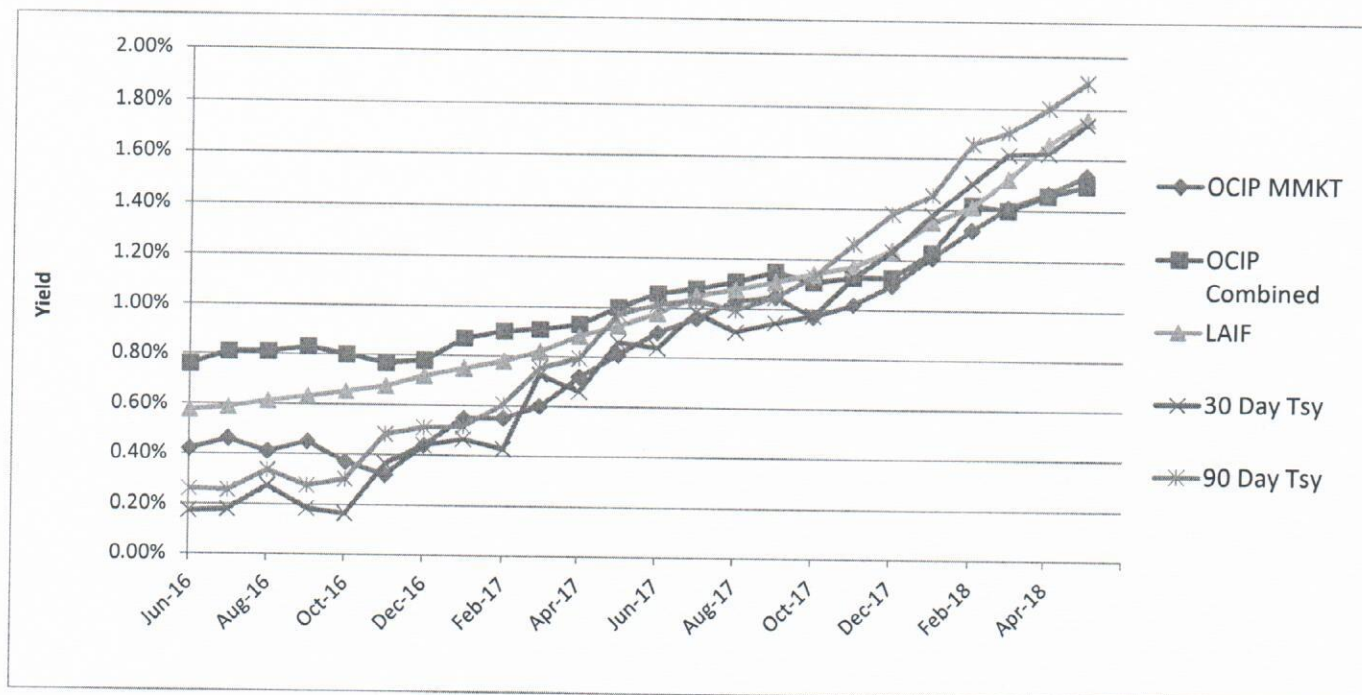
### Maturity Schedule For Liquid Portfolio



# Liquid Portfolio Performance

## As of 5/31/18

### Trailing 2-Year Yield OCIP, LAIF, 30 & 90 Day Treasury Bills



	OCIP MMKT	OCIP Combined	LAIF	30 Day Tsy	90 Day Tsy
Jun-16	0.42%	0.76%	0.58%	0.17%	0.26%
Jul-16	0.46%	0.81%	0.59%	0.18%	0.26%
Aug-16	0.41%	0.81%	0.61%	0.27%	0.34%
Sep-16	0.45%	0.83%	0.63%	0.19%	0.28%
Oct-16	0.37%	0.80%	0.65%	0.17%	0.30%
Nov-16	0.32%	0.77%	0.68%	0.37%	0.48%
Dec-16	0.44%	0.78%	0.72%	0.44%	0.51%
Jan-17	0.55%	0.87%	0.75%	0.46%	0.52%
Feb-17	0.55%	0.90%	0.78%	0.43%	0.61%
Mar-17	0.60%	0.91%	0.82%	0.73%	0.75%
Apr-17	0.72%	0.93%	0.88%	0.66%	0.80%
May-17	0.81%	1.00%	0.93%	0.86%	0.97%
Jun-17	0.90%	1.06%	0.98%	0.84%	1.01%
Jul-17	0.96%	1.08%	1.05%	0.98%	1.03%
Aug-17	1.03%	1.11%	1.08%	0.91%	0.99%
Sep-17	1.05%	1.15%	1.11%	0.94%	1.05%
Oct-17	0.97%	1.11%	1.14%	0.98%	1.13%
Nov-17	1.02%	1.13%	1.17%	1.13%	1.26%
Dec-17	1.10%	1.13%	1.24%	1.23%	1.38%
Jan-18	1.21%	1.23%	1.35%	1.38%	1.46%
Feb-18	1.32%	1.42%	1.41%	1.51%	1.66%
Mar-18	1.41%	1.40%	1.52%	1.62%	1.71%
Apr-18	1.47%	1.46%	1.66%	1.62%	1.80%
May-18	1.54%	1.50%	1.76%	1.74%	1.90%



# Investment Policy Compliance

## As of 5/31/18

<u>Investment Instruments</u>	<u>Dollar Amount Invested</u>	<u>Percent Of Portfolio</u>	<u>Investment Policy Maximum Percentages</u>
U.S. Treasuries	588,009,394	39.2%	100%
Federal Agencies & U.S. Government Sponsored *	167,976,784	11.2%	100%
State of California & Local Agencies	30,124,238	2.0%	25%
Money Market Funds & Mutual Funds	87,825,258	5.9%	20%
Bankers Acceptances	0	0.0%	30%
Negotiable Certificates of Deposit	14,983,811	1.0%	30%
Commercial Paper	68,467,687	4.6%	25%
Medium Term Maturity Corporate Securities	319,538,919	21.3%	30%
Mortgage and Asset-backed Securities	148,568,192	9.9%	10%
Repurchase Agreements	5,404,856	0.4%	75%
Investment Agreements Pursuant To Indenture	0	0.0%	100%
Local Agency Investment Fund (LAIF)	10,374,927	0.7%	\$ 40 Million
Orange County Investment Pool (OCIP)	3,900,169	0.3%	\$ 40 Million
CAMP	0	0.0%	10%
Variable & Floating Rate Securities	54,894,152	3.7%	30%
Debt Service Reserve Funds - Investment Agreements	0	0.0%	Not Applicable
Bank Deposits	619,452	0.0%	5%
Derivatives (hedging transactions only)	0	0.0%	5%
<b>TOTAL</b>	<b>1,500,687,839</b>	<b>100.0%</b>	

\* See attached page for a detailed listing of this category

# Investment Policy Compliance

## As of 5/31/18

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### Detail Composition

<u>Investment Instruments</u>	<u>Dollar Amount Invested</u>	<u>Percent Of Total Portfolio</u>	<u>Investment Policy Guidelines</u>
<u>Federal Agencies &amp; U.S. Government Sponsored</u>			
Federal Home Loan Bank (FHLB)	65,941,443	4.4%	35%
Federal Home Loan Mortgage Corporation (FHLMC)	53,843,975	3.6%	35%
Federal Farm Credit Bank (FFCB)	20,800,936	1.4%	35%
Federal National Mortgage Association (FNMA)	41,564,432	2.8%	35%
	182,150,786 *	12.1%	

\* The Total Dollar Amount Invested Equals The Dollar Amount Invested For Federal Agency Securities, Variable & Floating Rate (Agency) Securities, And A Portion Of Mortgage (Agency) & Asset-back Securities.

### Money Market Funds (MMF) & Mutual Funds

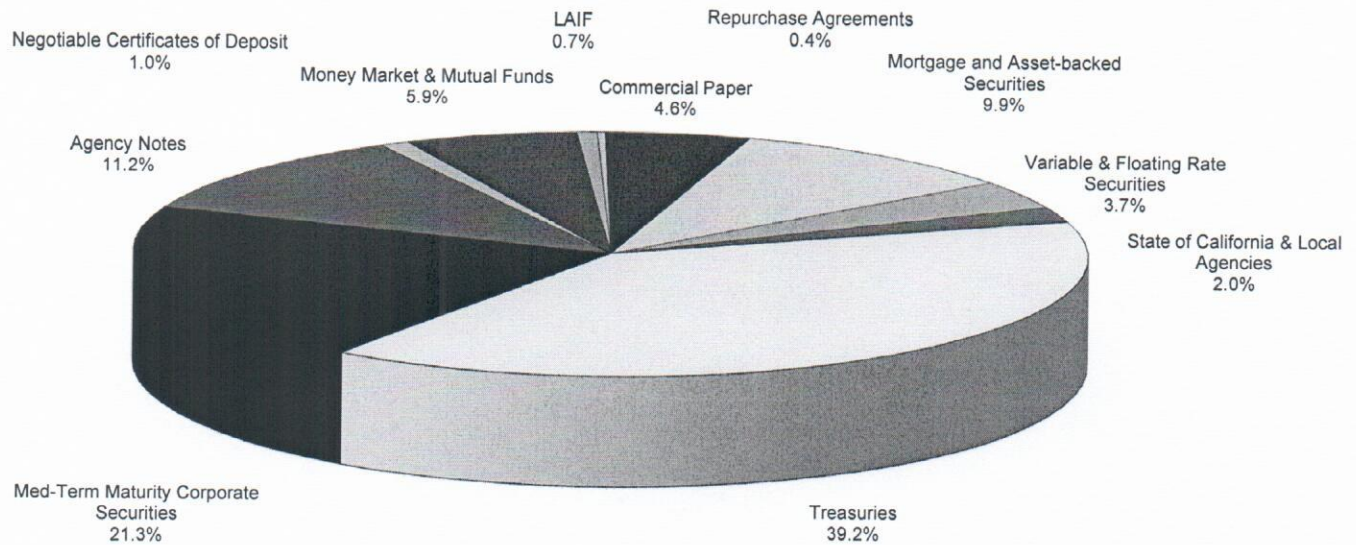
First American Obligations Treasury Fund	405	0.0%
Goldman Sach Fin. Square Govt. MMF	0	0.0%
Blackrock Institutional T-Fund	25,944,956	1.7%
Fidelity Treasury Obligations MMF	43,541,208	2.9%
Federated Treasury Obligations Fund	<u>18,338,689</u>	<u>1.2%</u>
	87,825,258	5.9%



# Investment Allocation

## As of 5/31/18

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# Negative Credit Watch

## As of 5/31/18

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<u>Manager / Security</u>	<u>Par Amount</u>	<u>Maturity</u>	<u>S&amp;P</u>	<u>Moody's</u>	<u>Fitch Ratings</u>
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**PFM**

<i>Qualcom</i>	1,540,000	Various*	A	A1	NA
On February 20, 2018, Standard & Poor's placed the long-term ratings of Qualcom under review for possible downgrade.					

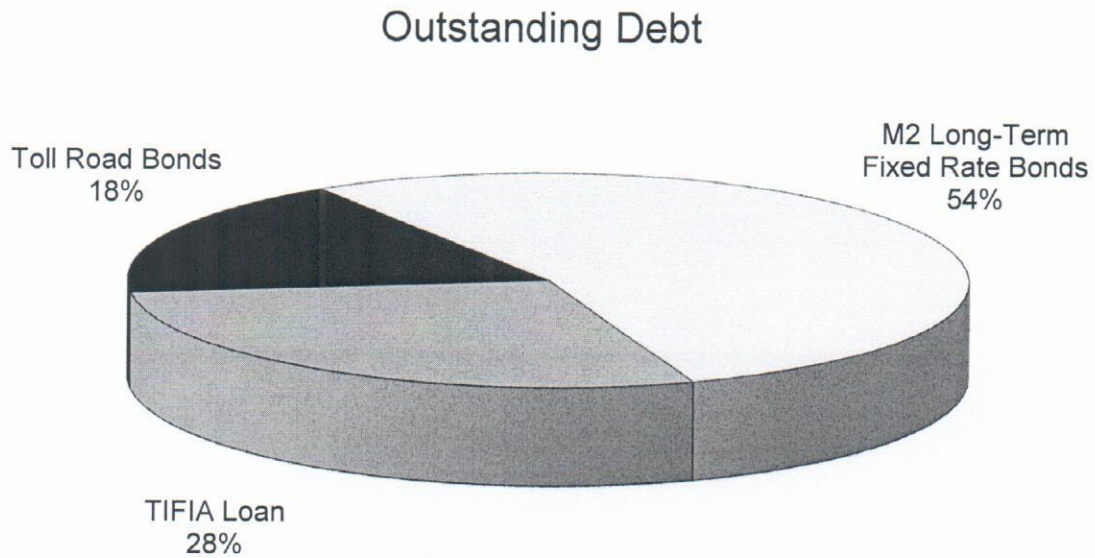
\* Securities will mature on 5/18/18 and 5/20/20.

## DEBT PROGRAM

# Total Outstanding Debt

## As of 5/31/18

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**TOTAL OUTSTANDING DEBT:     \$578,840,000**



# Outstanding Debt

## As of 5/31/18

### Orange County Local Transportation Authority (OCLTA-M2)

#### 2010 Series A Taxable Build America Bonds - Sales Tax Revenue Bonds

Issued:	\$	293,540,000
Outstanding:		293,540,000
Debt Service FY 2018:		13,409,389
Pledged Revenue Source:	M2 Sales Tax Revenues	
Ratings	Aa2/AA+/AA+	
Final Maturity		2041

#### 2010 Series B Tax-Exempt Sales Tax Revenue Bonds

Issued:	\$	59,030,000
Outstanding:		16,695,000
Debt Service FY 2018:		8,913,100
Pledged Revenue Source:	M2 Sales Tax Revenues	
Ratings	Aa2/AA+/AA+	
Final Maturity		2020

### 91 Express Lanes

#### 2013 OCTA 91 Express Lanes Refunding Bonds

Issued:	\$	124,415,000
Outstanding:		103,605,000
Debt Service FY 2018:		10,794,700
Pledged Revenue Source:	91 Toll Road Revenues	
Underlying Ratings	A1/AA-/A	
Final Maturity		2030

### 405 Express Lanes

#### 2017 TIFIA Loan

Outstanding:	\$	165,000,000
Debt Service FY 2018:		1,000,313
Pledged Revenue Source:	405 Toll Road Revenues	
Ratings	Baa2/BBB-/BBB-	
Final Maturity		2058



**June 27, 2018**

**To:** Finance and Administration Committee

**From:** Darrell E. Johnson, Chief Executive Officer

**Subject:** Amendment to the 91 Express Lanes Riverside County Transportation Commission / Orange County Transportation Authority Facility Agreement

**Overview**

The 91 Express Lanes Riverside County Transportation Commission / Orange County Transportation Authority Facility Agreement prescribes the funding transfers between the two agencies for costs incurred for the rent and any shared operational expenses in relation to the 91 Express Lanes. An amendment is needed to account for the reimbursement of shared operating costs incurred by the Riverside County Transportation Commission for the period July 1, 2018 through June 30, 2019.

**Recommendation**

Authorize the Chief Executive Officer to negotiate and execute Amendment No. 3 to Agreement No. C-5-3828 between the Orange County Transportation Authority and Riverside County Transportation Commission, in the amount of \$2,078,750, for the reimbursement of shared operational expenses through June 30, 2019.

**Discussion**

In order to facilitate the exchange of funds between the two agencies, the 91 Express Lanes Riverside County Transportation Commission / Orange County Transportation Authority Facility Agreement (ROFA) was executed in November 2015. This agreement prescribes the funding transfers between the two agencies for costs incurred for the rent and any shared operational expenses in relation to the 91 Express Lanes. Under the terms of ROFA, both agencies are to establish an annual fiscal year amount for the funding and payment of joint operating costs each year. Staff has identified the shared operational expenses and has assigned responsibility for the administration and payment of these expenses. An amendment to the ROFA is required, in the amount of \$2,078,750,

to reimburse the Riverside County Transportation Commission (RCTC) for joint operating costs incurred through June 30, 2019 by RCTC. Some of these operating costs include credit card processing fees, systems and equipment maintenance services, transponder purchases, and services relating to the transition to the new transponder protocol.

Funding for Amendment No. 3 to Agreement No. C-5-3828 is included in Orange County Transportation Authority's Fiscal Year 2018-19 Budget, 91 Express Lanes Account.

***Summary***

Staff recommends the Board authorize the Chief Executive Officer to negotiate and execute Amendment No. 3 to Agreement No. C-5-3828 between the Orange County Transportation Authority and Riverside County Transportation Commission, in the amount of \$2,078,750, for the reimbursement of shared operational expenses through June 30, 2019.

**Amendment to the 91 Express Lanes Riverside County  
Transportation Commission / Orange County  
Transportation Authority Facility Agreement**

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**Page 3**

***Attachments***

- A. Amendment No.3 to 91 Express Lanes RCTC-OCTA Facility Agreement ("ROFA")
- B. Riverside County Transportation Commission – Orange County Transportation Authority Facility Agreement No. C-5-3828 Fact Sheet

***Prepared by:***



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Kirk Avila  
General Manager  
Express Lanes Programs  
(714) 560-5674

***Approved by:***



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Ken Phipps  
Deputy, Chief Executive Officer  
Executive Office  
(714) 560-5637



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Virginia Abadessa  
Director, Contracts Administration and  
Materials Management  
(714) 560-5623



**AMENDMENT NO. 3  
TO 91 EXPRESS LANES  
RCTC- OCTA FACILITY AGREEMENT  
("ROFA")**

This Amendment No. 3 to 91 Express Lanes RCTC-OCTA Facility Agreement (Identified as RCTC Agreement No. 16-31-025-00 and OCTA Agreement No. C-5-3828) ("Amendment No. 3") is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2018 by and between the Riverside County Transportation Commission ("RCTC") and the Orange County Transportation Authority ("OCTA"). RCTC and OCTA are sometimes referred to herein individually as "Party", and collectively as the "Parties".

**Recitals**

A. The Parties previously entered into that certain Cooperative Agreement for State Route 91 Express Lanes and Corridor Improvements, dated December 16, 2011 ("Cooperative Agreement"), which, among other things, anticipated the sharing of certain joint operating costs incurred in conjunction with the coordinated operation of the OCTA 91 Express Lanes and the RCTC 91 Express Lanes.

B. The Parties previously entered into that certain RCTC-OCTA Facility Agreement ("ROFA"), dated November 4, 2015, for implementation of certain portions of the Cooperative Agreement pertaining to the lease, expansion, and joint use of the Toll Related Facilities. The ROFA sets forth the rights and obligations of the Parties related to the lease, expansion, and joint use of the Toll Operations Center, as that term is defined in the ROFA. Section 5 of the ROFA addresses the payment of rent and other costs for the Toll Operations Center. Section 8 of the ROFA contemplated that the Parties would enter into subsequent amendments to the ROFA address the terms for implementation of the Cooperative Agreement with respect to expansion, lease and joint use of the Customer Service Center and payment for Third Party Vendor Agreements, as those terms are defined in the ROFA.

C. Pursuant to Section 8, the Parties previously entered into that Amendment No. 1 to the ROFA, dated October 26, 2016, which added Exhibit "B" entitled "ROFA Addendum for CSC Build-Out" to address the build-out of the Customer Service Center and CSC lease payments. Section 4 of Exhibit "B" addresses payment of Rent for the Customer Service Center.

D. Pursuant to Section 8, the Parties previously entered into that Amendment No. 2 to the ROFA, dated April 11, 2017, which added Addendum 1 entitled "ROFA Addendum for Funding and Payment of Certain Joint Operating Costs" (i) to identify certain third party vendor agreements entered into by OCTA or RCTC, respectively, related to operation of the 91 Express Lanes ("Third Party Vendor Agreements"), (ii) to identify certain purchases administered by one Party and to be jointly funded by the other Party, (iii) to provide for the allocation of funding by each Party to reimburse the other Party for its share of costs incurred under such Third Party Vendor Agreements and for such purchases, and (iv) for OCTA to allocate funding to reimburse RCTC for payment of certain future costs related to third party contracts and purchases

administered by Cofiroute, USA LLC ("Cofiroute") and not funded under that certain three party operating agreement entered into by OCTA, RCTC and Cofiroute, dated as of May 24, 2013, as amended ("ORCOA"). Addendum No. 1 as added by Amendment No. 2 to the ROFA only addresses the funding and payment of joint operating costs and third party contract costs incurred through June 30, 2018.

E. The Parties now desire to enter into this Amendment No. 3 in order to update Addendum No. 1 to set forth terms pertaining to the allocation of funding and payment by each Party for costs incurred by the other Party under Third Party Vendor Agreements and for Rent associated with the Toll Operations Center and Customer Service Center, and for certain costs incurred by RCTC for third party contracts and purchases administered by Cofiroute for operation of the 91 Express Lanes, and not funded under the ORCOA, for the period from July 1, 2018 through June 30, 2019.

NOW THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, it is mutually understood and agreed as follows:

1. **Amendment.** Effective July 1, 2018, ROFA Addendum 1 entitled "ROFA Addendum for Funding and Payment of Certain Joint Operating Costs" is hereby replaced in its entirety with the Addendum No. 1 attached hereto, which is incorporated herein by reference, setting forth terms pertaining to the allocation of funding and payment by each Party for costs incurred by the other Party under Third Party Vendor Agreements and for Rent associated with the Toll Operations Center and Customer Service Center, and for certain costs incurred by RCTC for third party contracts and purchases administered by Cofiroute for operation of the 91 Express Lanes, and not funded under the ORCOA, for the period from July 1, 2018 through June 30, 2019.

2. **Continuing Effect of Agreement.** Except as amended by this Amendment No. 3, all provisions of the ROFA, as previously amended, shall remain unchanged and in full force and effect. Except as otherwise expressly stated, the incorporation of costs pertaining to Rent pertaining to the Toll Operations Center and the Customer Service Center into Addendum No. 1 is not intended to amend or supersede other applicable provisions of the ROFA, as previously amended, pertaining to the rights and obligations of the Parties with respect to payment of such costs.

3. **Counterparts.** This Amendment No. 3 may be executed in duplicate originals, each of which is deemed to be an original, but when taken together shall constitute but one and the same instrument.

## Addendum 1

### ROFA Addendum for Funding and Payment of Certain Joint Operating Costs

This ROFA Addendum for Funding and Payment of Certain Joint Operating Costs (hereafter “Addendum”) sets forth the respective rights and obligations of RCTC and OCTA, respectively, pertaining to the payment and reimbursement of certain costs incurred by the other Party under the identified Third Party Vendor Agreements and of certain purchases made by one Party to be jointly funded by the other Party, and to the allocation of funding by OCTA to reimburse RCTC for payment of certain third party contract costs and purchases administered by Cofiroute and not funded under the ORCOA. For budgeting and funding allocation purposes only, this Addendum No. 1 also incorporates the estimated costs for Rent under the TOC Lease and the CSC Lease to be shared by the Parties pursuant to Section 5 of the ROFA and Section 4 of Exhibit “B” to the ROFA, respectively.

1. **Defined Terms.** Capitalized terms used in this Addendum, including in the recitals to Amendment No. 3, and not otherwise defined herein shall have the meanings set forth in the Cooperative Agreement.

2. **Funding and Payment for Certain Joint Operating Costs.**

The Parties agree that there are certain joint operating costs for the Toll Related Facilities, as identified in Section 2.8.5 of the Cooperative Agreement, that will be incurred by one Party on behalf of the other Party, and by Cofiroute for the benefit of both Parties. Each Party agrees to reimburse the other Party for its share of the joint operating costs incurred from July 1, 2018 through June 30, 2019 (the “Current Fiscal Year”) according to the Percentage Cost Split as follows:

A. **RCTC Payments to OCTA for Third Party Vendor Agreements or Purchases and for Leases Administered by OCTA.** RCTC hereby allocates \$1,861,250 for its share of joint operating costs incurred by OCTA during the Current Fiscal Year. The initial list of Third Party Vendor Agreements or purchases to be administered by OCTA, and jointly funded by RCTC, for the Current Fiscal Year is included in Exhibit “A” attached to this Addendum and incorporated herein by reference. OCTA agrees to obtain RCTC approval of any new or additional Third Party Vendor Agreements or purchases not listed in Exhibit “A”, and subject to cost sharing as set forth herein. Additions and changes to Exhibit “A” may be approved in writing by RCTC’s Executive Director, or designee, without an amendment to this Addendum provided that the total costs to be shared by RCTC do not exceed the amount set forth in this paragraph. OCTA shall invoice RCTC monthly for the joint operating costs identified in Exhibit “A”, and RCTC shall reimburse all approved costs within 30 days of receipt of an invoice from OCTA. For budgeting and funding allocation purposes only, Exhibit “A” includes RCTC’s estimated proportionate share of costs for Rent for the Current Fiscal Year under the TOC Lease and the CSC Lease. The Parties acknowledge and agree that this estimate is subject to change based on extensions of the CSC Lease, changes in the amount of estimated CAM Expenses, and other unforeseen expenses, and that RCTC’s

obligations for payment of its proportionate share of Rent and related late fees under the TOC Lease and the CSC Lease shall remain subject to Section 5 of the ROFA and Section 4 of Exhibit "B" to the ROFA, respectively.

**B. OCTA Payments to RCTC for Third Party Vendor Agreements or Purchases Administered by RCTC.** OCTA hereby allocates \$907,750 for its share of joint operating costs incurred by RCTC during the Current Fiscal Year. The initial list of Third Party Vendor Agreements or purchases to be administered by RCTC, and jointly funded by OCTA, for the Current Fiscal Year is included in Exhibit "B" attached to this Addendum and incorporated herein by reference. RCTC agrees to obtain OCTA approval of any new or additional Third Party Vendor Agreements or purchases not listed in Exhibit "B", and subject to cost sharing as set forth herein. Additions and changes to Exhibit "B" may be approved in writing by OCTA's Chief Executive Officer, or designee, without an amendment to this Addendum provided that the total costs to be shared by OCTA do not exceed the amount set forth in this paragraph. RCTC shall invoice OCTA monthly for the joint operating costs identified in Exhibit "B", and OCTA shall reimburse all approved costs within 30 days of receipt of an invoice from RCTC.

**C. OCTA Reimbursement to RCTC for Third Party Contracts and Purchases Up to \$50,000 Initiated by Cofiroute in the name of the 91 Express Lanes and Initially Paid by RCTC.** OCTA hereby allocates \$1,171,000 for its share of costs for third party contracts and purchases up to \$50,000 made in the name of the 91 Express Lanes, initiated by Cofiroute and not funded under the ORCOA, for the Current Fiscal Year. The initial list of such third party contracts and purchases to be initiated by Cofiroute in the name of the 91 Express Lanes and jointly funded by the Parties for the Current Fiscal Year is included in Exhibit "C" attached to this Addendum and incorporated herein by reference. RCTC and OCTA shall each approve, in advance, any procurements to be made by Cofiroute and jointly funded in accordance with this paragraph. Additions and changes to Exhibit "C" may be approved in writing by RCTC's Executive Director and OCTA's Chief Executive Officer, or their designees, without an amendment to this Addendum. RCTC shall pay the full invoiced amount directly to the third party contractor or vendor for approved jointly funded procurements as described herein, and shall invoice OCTA monthly for OCTA's share of such costs, which share shall be based on the Percentage Cost Split. OCTA shall reimburse RCTC for all approved costs within 30 days of receipt of an invoice.

- 2. Annual Cost Allocation.** The Parties agree to establish the annual fiscal year amounts for the funding and payment of joint operating costs as described herein by January 15 of each year.
- 3. Processing of Funding and Payment of Joint Operating Costs.** The Parties agree to work together to establish administrative procedures for the processing of joint operating costs as described in this Addendum.

[Signatures on following page]



**SIGNATURES TO  
AMENDMENT NO. 3 TO  
91 EXPRESS LANES RCTC-OCTA FACILITY AGREEMENT ("ROFA")  
BETWEEN RIVERSIDE COUNTY TRANSPORTATION COMMISSION  
AND  
ORANGE COUNTY TRANSPORTATION AUTHORITY**

**RIVERSIDE COUNTY  
TRANSPORTATION COMMISSION**

By: \_\_\_\_\_

Its: \_\_\_\_\_

**ORANGE COUNTY  
TRANSPORTATION  
AUTHORITY**

By: \_\_\_\_\_

Its: \_\_\_\_\_

APPROVED AS TO FORM:  
BEST BEST & KRIEGER LLP

By: \_\_\_\_\_  
Counsel to the Riverside  
County Transportation Commission

APPROVED AS TO FORM:  
WOODRUFF, SPRADLIN & SMART,  
APC

By: \_\_\_\_\_  
General Counsel to Orange  
County Transportation  
Authority

# EXHIBIT A

## CONTRACTS/PURCHASES ADMINISTERED BY OCTA

### OCTA Administered Costs July 1, 2018 to June 30, 2019

Description	Total Shared Costs	Shared Amount (RCTC Share)
Trademark Counsel	6,000	3,000
Customer Newsletter and Annual Report	30,000	15,000
Credit Card Processing Fee	1,500,000	750,000
Toll Road Property Insurance	250,000	125,000
Armor Car Services	10,000	5,000
91 Express Lanes Telecommunications Expense	50,000	25,000
Printing of Customer Notification Materials	50,000	25,000
Bank Service Charge	25,000	12,500
Transponders	130,000	65,000
Telephone Software/Hardware Maintenance	32,500	16,250
Other Miscellaneous Expenses	5,000	2,500
Marketing	200,000	100,000
SR-91 Implementation Plan	70,000	35,000
Lease <sup>1</sup>	530,000	265,000
Toll Operations Consulting Services	620,000	310,000
PC Workstations/Hardware	100,000	50,000
Roadway Closures	30,000	30,000
Collection Services	54,000	27,000
<b>Total</b>	<b>3,692,500</b>	<b>1,861,250</b>

<sup>1</sup> Represents estimated Rent under TOC Lease through June 30, 2019 and estimated Rent under the CSC Lease through March 31, 2019. This estimate is subject to change based on extension of the CSC Lease, changes in the amount of estimated CAM Expenses, and other unforeseen expenses. Section 5 of the ROFA governs RCTC's obligations for payment of its proportionate share of Rent and related late fees under the TOC Lease. Section 4 of Exhibit "B" to the ROFA governs RCTC's obligations for payment of its proportionate share of Rent and related late fees under the CSC Lease.

EXHIBIT B

CONTRACTS/PURCHASES ADMINISTERED BY RCTC

**RCTC Administered Costs  
July 1, 2018 to June 30, 2019**

<b>Description</b>	<b>Total Shared Costs</b>	<b>Shared Amount (OCTA Share)</b>
Traffic Operations Center System Maintenance	120,000	60,000
Variable Message Signs Support and Maintenance	34,000	17,000
Toll Operations Consulting Services	545,000	272,500
Transponders	840,000	420,000
Software	200,000	100,000
Utilities	10,000	5,000
Equipment Maintenance	6,500	3,250
Roadway Closures	30,000	30,000
<b>Total</b>	<b>1,785,500</b>	<b>907,750</b>

# EXHIBIT C

## CONTRACTS/PURCHASES ADMINISTERED BY COFIROUTE

### Cofiroute Administered Costs July 1, 2018 to June 30, 2019

Description	Total Shared Costs	Shared Amount
Roadway Repair Materials	5,000	2,500
Utilities	24,000	12,000
Office Supplies and Equipment	30,000	15,000
Postage Fees	10,000	5,000
PC Workstations/Hardware	65,000	32,500
Software	40,000	20,000
Business Expenses	6,000	3,000
Other Miscellaneous Expenses	5,000	2,500
Network Evaluation/PCI (Payment Card Industry) Compliance	35,000	17,500
91 Express Lanes Telecommunications Expense	7,000	3,500
Printing of Customer Notification Materials	18,000	9,000
Credit Card Processing Fees	150,000	75,000
System Maintenance and Support	150,000	75,000
Equipment Maintenance Services	150,000	75,000
Computer Hardware/Software	170,000	85,000
Collection Services	52,000	26,000
Tools and Equipment	20,000	10,000
6C Transition	1,405,000	702,500
<b>Total</b>	<b>2,342,000</b>	<b>1,171,000</b>



**Riverside County Transportation Commission –  
Orange County Transportation Authority Facility  
Agreement No. C-5-3828 Fact Sheet**

1. September 28, 2015, \$515,793, approved by Board of Directors (Board).
  - Authorized payment to the Riverside County Transportation Commission (RCTC) for reimbursement of tenant improvements for the 91 Express Lanes Anaheim Office.
  - Authorized Facility Agreement with RCTC pertaining to funding exchanges for rent, leasehold improvements, and any shared improvements implemented by the Orange County Transportation Authority and RCTC.
2. November 4, 2015, Agreement No. C-5-3828, approved by Contracts Administration and Materials Management Department (CMM).
  - Facility Agreement pertaining to funding exchanges for rent, leasehold improvements, and any shared improvements implemented by the Orange County Transportation Authority and RCTC.
3. October 26, 2016, Amendment No. 1 to Agreement No. C-5-3828, \$0.00, approved by CMM.
  - Amendment set forth terms pertaining to the construction of tenant improvements to, and the payment of rent for, the Customer Service Center in conjunction with operation of the RCTC 91 Express Lanes.
4. March 27, 2017, Amendment No. 2 to Agreement No. C-5-3828, \$431,308, approved by the Board.
  - Amendment for the reimbursement of shared operational expenses for the 91 Express Lanes through June 30, 2018.
5. June 25, 2018, Amendment No. 3 to Agreement No. C-5-3828, \$2,078,750, pending Board approval.
  - Amendment for the reimbursement of shared operational expenses for the 91 Express Lanes through June 30, 2019.

Total committed to Agreement No. C-5-3828: \$3,025,851.



**June 27, 2018**

**To:** Finance and Administration Committee  
**From:** Darrell E. Johnson, Chief Executive Officer  
**Subject:** 91 Express Lanes Account Plan Changes

### **Overview**

Commencing January 1, 2019, all California tolling agencies will be required to read a new transponder protocol, 6C. This new protocol will lower the cost of transponders for the 91 Express Lanes. As a result, staff from the Orange County Transportation Authority and Riverside County Transportation Commission have developed a deployment plan for the distribution of new transponders, and have revised account plans and fees for the 91 Express Lanes.

### **Recommendation**

Adopt changes to the 91 Express Lanes' account plans and policies.

### **Background**

For a toll facility to operate in the State of California, the equipment used in the lanes, as well as the transponders mounted on the vehicles, must conform to the specifications for Automatic Vehicle Identification systems. These specifications are under Chapter 16, Division 2, Title 21 of the California Code of Regulations (Title 21). The California Department of Transportation (Caltrans) provides oversight of Title 21.

The requirement ensures interoperability amongst the toll agencies operating in California and makes it more convenient for patrons so they do not need to establish multiple accounts with the different toll facilities for traveling on their roads. Instead, a transponder issued from one facility can be used on any other facility in California, including the Bay Area bridges in Northern California, the toll roads operated by the Transportation Corridor Agencies (TCAs), and the toll facilities in Los Angeles and San Diego counties.

The current Title 21 protocol was developed over 20 years ago. Title 21 protocol transponders are available only in hard-case forms and require batteries to

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power the circuitry. Through the years, new technologies and protocols have emerged, offering multiple advantages over the Title 21 protocol. One of these protocols, ISO 18000-63, also known as 6C, was being used in several tolling facilities in the United States and was identified by the California Toll Operators Committee (CTOC) as the protocol to replace the Title 21 protocol. CTOC, comprised of California toll facility operators/owners, was formed to facilitate electronic tolling interoperability within California.

The 6C protocol is an open, non-proprietary communication standard developed by the International Organization of Standards for passive radio frequency identification transponders and readers. Since it does not require a battery to operate, 6C transponders are available in a variety of forms, such as hard-case for 2-position, and 3-position switchables and sticker types. Sticker transponders can either be interior mounted or exterior mounted. The cost of an internal 6C sticker transponder is less than \$1.00, which is substantially lower than a standard Title 21 transponder, which costs around \$13.00. The 6C switchable transponders cost less than \$11, as compared to the Title 21 switchable transponders at \$15. The 6C protocol also has an established 6C programming standard and certification process used by multiple agencies and vendors to ensure transponder and reader equipment conform to the tolling 6C protocol. The 6C protocol is used by toll operators in Colorado, Utah, and Washington, which can potentially facilitate regional interoperability.

In order to modify the Title 21 regulations to replace the current protocol to the new 6C protocol, CTOC tasked Caltrans to begin the administrative rulemaking process through the California Office of Administrative Law (OAL) and to determine when the Title 21 protocol should sunset. A joint effort from all CTOC agencies and Caltrans was undertaken to draft language to amend Title 21. In November 2017, Caltrans informed the CTOC agencies that OAL has approved the regulatory changes to move to the 6C protocol. The updated regulation establishes 6C as the state's electronic toll collection protocol, which requires all CTOC toll facilities to read and process the 6C protocol transactions on January 1, 2019, and requires the phase out of the existing Title 21 protocol by January 1, 2024.

Over the past eight months, CTOC members have been collaboratively working together to discuss the implementation process. Each agency is evaluating their own account plans and systems to ensure they are ready for the change to 6C. In the Southern California region, the TCAs have received Board of Directors approval to their account plan changes, while Los Angeles Metro and San Diego Association of Governments are still evaluating whether changes will be made to their account plans.

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***Discussion***

The Riverside County Transportation Commission (RCTC) has been jointly operating the 91 Express Lanes with the Orange County Transportation Authority (OCTA) since the Riverside County portion commenced operations in March 2017. During the past several months, staff from each agency have met to discuss the advancement of the transition to 6C, which includes changes to account plans and policies, modifications to both the in-lane and back-office systems, procurement of 6C transponders, and development of public outreach and marketing activities.

**Account Plans/Policy Changes**

The change to the new 6C protocol provides an opportunity to reevaluate the current account plans, which have been in place since the toll facility was operated by the California Private Transportation Company, the original owner of the 91 Express Lanes. Given that 6C transponders costs are lower than the Title 21 transponders, the goals are to pass along the cost savings to the customers, increase transponder market penetration, offer simplified and competitive account plans, and to minimize the financial impacts to the 91 Express Lanes. Currently there are four 91 Express Lanes account plans: Standard, Convenience, Express Club, and Special Access. With the exception of the Special Access Plan, there is a fee per transponder charge associated with the plans. It is the intent of both agencies to issue a 6C sticker transponder to every vehicle listed on the customer accounts, thereby increasing the number of transponders per account. As of May 31, 2018, there are 140,666 accounts with 443,902 vehicles tied to those accounts. To avoid penalizing customers because of this change in technology, staff recommends changing from a per transponder fee structure to a per account fee structure. Staff is proposing changes to the Convenience, Express Club, and Standard Plans. At this time, there are no changes to the Special Access Plans.

**Convenience Plan (52,400 Customers ~ 37.3 percent)**

The current Convenience Plan requires customers to pay a one-time fee of \$75 per transponder, with no recurring monthly fees. This plan is geared towards the occasional user. Staff is recommending to change the one-time fee to \$100 per account, with no recurring monthly fees, regardless of the number of transponders. The current Convenience Plan customers will be grandfathered into the new plan without incurring any additional costs and removing the requirement to pay \$75 for any additional transponders.



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**Express Club (1,648 Customers ~ 1.2 percent)**

The current Express Club Plan requires customers to pay a \$20 monthly fee per transponder in order to receive a \$1 discount per tolled trip on the 91 Express Lanes. This account plan has the smallest customer base with less than 1,700 customers. Staff is recommending to eliminate this plan, which reduces the number of account types offered. The current Express Club Plan customers will be asked to select between the new Convenience Plan, as previously mentioned, or the new Standard Plan, which closely resembles the Express Club Plan.

**Standard Plan (75,520 Customers ~ 53.7 percent)**

For the current Standard Plan, customers must use at least \$7 in tolls per transponder per month on the 91 Express Lanes. If the customer does not use the \$7 monthly minimum requirement per transponder, the customer will be charged for the difference between the \$7 and the toll usage amount. Staff is proposing to change to a \$2 monthly account fee, regardless of the number of transponders on the account. In addition, staff is proposing to modify the Standard Plan with a concept similar to the Express Club, whereby customers will receive a \$1 per trip discount for all tolled trips on the 91 Express Lanes after 30 trips, with a maximum discount capped at \$50 per account. (Travel on both the OCTA and RCTC segments of the 91 Express Lanes is counted as two trips.) The discount provides an incentive for customers to use the toll lanes more often. Current Standard Plan customers who have not had to pay any monthly minimum fees during the past six months, will be transitioned to the new Convenience Plan at no cost to the customer.

In addition to making the account plan changes, staff is recommending modification to certain account policies. Currently, when a customer opens an account with cash, they are required to deposit \$35 for the internal Title 21 transponder or \$50 for the externally mounted Title 21 transponder. If the customer damages or loses the transponder, the customer forfeits the \$35/\$50 deposit if they have a cash account, or is charged the amount if it is a credit card account. This model was established when transponder costs ranged from \$25 to \$35 each. With the new 6C technology, this model is no longer required. Staff is recommending that 6C sticker transponders be issued to every vehicle listed on the customers' account, at no cost to the customer during the transition period, and recommends a phased approach for those customers who have switchable transponders, whereby the customers will be able to keep their existing transponders until they are no longer operable. At that time, they can exchange their Title 21 switchable transponder for a 6C switchable transponder at no cost. Customers requesting additional transponders and new customers will be required to purchase the transponders. Proposed pricing for the 6C sticker transponder and switchable

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transponder are \$5 and \$15, respectively. This is to recoup the cost of the transponder, in addition to the associated packaging and mailing costs required. It is envisioned that the issuance of the 6C transponders will begin in early 2019.

#### Financial Impact

A model was developed in order to determine the financial impact of the proposed account plans and policy changes. The model took into consideration the reduction of revenues due to the change to a per account fee structure and elimination of the Express Club plan, the offering of the \$1 discount to a wider account base, the offset of savings realized from the lower cost of the 6C transponders, as well as the revenues earned from the sale of transponders

OCTA currently generates \$2.43 million per year in account revenue fees. This amount will be reduced to approximately \$1.17 million with the proposed changes to the account structures. This loss in revenues will be partially offset by the reduction in costs for the new 6C transponders (OCTA will save approximately \$390,000 per year). Overall, it is estimated that OCTA will generate approximately \$870,000 less in net revenues associated with the account fee changes during the first year. In addition, the dollar discount program associated with the Standard Plan is estimated to cost approximately \$450,000.

Within 15 years, the net loss in account revenues to OCTA will be fully offset with the growth of new accounts and the revenue generated by the selling of new transponders. Although the anticipated changes in account fees will generate less net revenues to OCTA, these amounts are still within the projected amounts for future revenues contained in the cash flows for the program. These account fee changes will not significantly impact debt service coverage ratios or the financial integrity of the 91 Express Lanes.

#### 6C Transponder Procurement

RCTC, in coordination with OCTA, is leading the 6C transponder procurement effort for both agencies. Transponder purchases are operational expenses shared between the two agencies. Reimbursement to RCTC for the transponder purchases will be facilitated through the 91 Express Lanes Riverside County Transportation Commission / Orange County Transportation Authority Facility Agreement.

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**Public Outreach and Marketing**

Public outreach will be key to making a smooth transition from the Title 21 protocol to 6C protocol transponders, especially with regards to the new mounting instructions for sticker transponders, instructions for proper disposal of the Title 21 transponders and elimination of the transponder beep. OCTA and RCTC will need to develop new marketing collateral and instructions to the customers, in addition to making changes to the external website. In late 2018, a marketing campaign will be launched to inform customers of the upcoming transponder replacement program and to encourage customers to update their account information to ensure they received the proper number of new transponders.

**In-Lane and Back-Office Systems Modification**

Modification to both the in-lane and back-office systems will be required in order to read and process the new 6C protocol. Staff from both RCTC and OCTA have provided inputs to the functional requirements, with development to commence shortly. The identification and processing of 6C transponders in both the in-lane and back-office systems are to be implemented alongside the existing requirements of identifying and processing Title 21 protocol transponders until the protocol sunsets in 2024.

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***Summary***

In November 2017, the Title 21 regulation was updated to replace the Title 21 protocol with the 6C protocol as the state's electronic toll collection protocol effective January 1, 2019, and requires the phase out of the existing Title 21 protocol by January 1, 2024. During the past several months, staff from RCTC and OCTA have met to discuss the advancement of the transition to 6C, which includes changes to account plans and policies, modifications to both the in-lane and back-office systems, procurement of 6C transponders, and development of public outreach and marketing activities. The change to the new 6C protocol provides an opportunity to reevaluate the current account plans. Staff is recommending changes to some of the 91 Express Lanes account plans and account policies.

***Attachments***

*None.*

***Prepared by:***

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Kirk Avila  
General Manager  
Express Lanes Programs  
(714) 560-5674

***Approved by:***

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Ken Phipps  
Deputy, Chief Executive Officer  
Executive Office  
(714) 560-5637



# 91 Express Lanes Account Plan Changes

# Title 21 California Code of Regulations

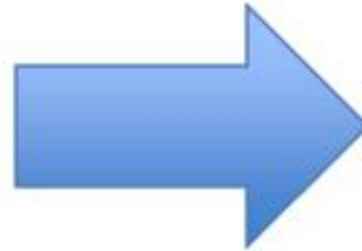
- All tolling agencies in California must conform to Title 21 specifications
- Ensures interoperability amongst toll agencies
- Title 21 was updated to establish 6C as state's electronic toll collection protocol
- Mandates transition to 6C by January 1, 2019
- Phase-out Title 21 protocol transponders by January 1, 2024

# 6C Protocol

- Open, non-proprietary communication standard
- Does not require a battery to operate
- Different form factors
  - Hard-case switchables
  - Interior-mounted or exterior-mounted stickers
- Lower costs
- Used by other toll operators in Western Region

# 6C Transponders

Title 21 Transponders



6C Sticker Transponders



6C Switchable Transponders (Prototypes)





# Factors Driving Account Changes

- Current fee structure based upon number of transponders per account
- 6C sticker transponders to be issued to every vehicle, increasing number of transponders
- Desire to offer competitive account plans

# 91 Express Lanes Account Plans

	Current	Proposed
Convenience (52,400 Customers ~ 37.3%)	\$75 per transponder, no future fees	\$100 per account transponder, no future fees
Express Club (1,648 Customers ~ 1.2%)	\$20 per transponder per month, \$1 per trip discount for all tolled trips on the 91 Express Lanes	Eliminating
Standard (75,520 Customers ~ 53.7%)	\$7 monthly minimum toll usage on the 91 Express Lanes, offset by toll usage	\$2 per account per month; \$1 per trip discount for all tolled trips on the 91 Express Lanes after 30 trips with maximum discount capped at \$50 per account
Special Access (11,098 Customers ~ 7.9%)	No fees; Discounts for HOV3+, motorcycles, pure zero-emission vehicles, disabled veteran or disabled person license plate holders	No changes

# Account Policy Changes

	Current	Transition	Proposed
<b>Sticker Transponder</b>	Not Applicable	Free to existing customers.	Sell for \$5 per transponder
<b>Standard Transponder</b>	Transponder Deposit, Lost/Damaged Fee \$35/\$50	Not Applicable	Not Applicable
<b>Switchable Transponder</b>	Transponder Deposit, Lost/Damaged Fee \$35	Free to existing customers with switchable transponder	Sell for \$15 per transponder

# Transition Goals

- Pass along cost savings to the customers
- Increase transponder market penetration
- Offer simplified and competitive account plans
- Minimize financial impacts



# Other Transition Elements

- 6C transponder procurement
- Development of public outreach and marketing activities
- System modifications
  - In-Lane
  - Back-Office

# Recommendations and Next Steps

- Seek concurrence from Orange County Transportation Authority and Riverside County Transportation Commission Boards for adoption of the changes to the 91 Express Lanes account plans and policies
- Finalize transponder replacement program
- Implement changes