

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM
BOARD OF RETIREMENT
2223 E. WELLINGTON AVENUE, SUITE 100
SANTA ANA, CALIFORNIA

REGULAR MEETING
Monday, July 16, 2018
9:00 a.m.

AGENDA

The Orange County Board of Retirement welcomes you to this meeting. This agenda contains a brief general description of each item to be considered. The Board of Retirement may take action on any item included in the following agenda; however, except as otherwise provided by law, no action shall be taken on any item not appearing on the agenda. The Board of Retirement may consider matters included on the agenda in any order, and not necessarily in the order listed.

PLEDGE OF ALLEGIANCE

SWEARING IN OF OCERS BOARD MEMBER – HUGH NGUYEN, ORANGE COUNTY CLERK RECORDER

PUBLIC COMMENTS

At this time, members of the public may comment on (1) matters not included on the agenda, provided that the matter is within the subject matter jurisdiction of the Board; and (2) any matter appearing on the Consent Agenda.

When addressing the Board, please state your name for the record prior to providing your comments. Speakers will be limited to three (3) minutes.

In addition, public comment on matters listed on this agenda will be taken at the time the item is addressed. Persons wishing to address items on the agenda should provide written notice to the Secretary of the Board prior to the Board's discussion on the item by signing in on the Public Comment Sign-In Sheet located at the back of the room.

CONSENT AGENDA

All matters on the Consent Agenda are to be approved by one action unless a Board Member requests separate action on a specific item.

BENEFITS

C-1 OPTION 4 RETIREMENT ELECTION

Recommendation: Grant election of retirement benefit payment, Option 4, based on Segal Consulting's actuarial report.

(1) Maritza Partida

ADMINISTRATION

C-2 BOARD MEETING MINUTES

Regular Board Meeting Minutes

June 18, 2018

Recommendation: Approve minutes.

ACTION ITEMS

NOTE: Public comment on matters listed in this agenda will be taken at the time the item is addressed, prior to the Board’s discussion of the item. Persons wishing to address items on the agenda should provide written notice to the Secretary of the Board prior to the Board’s discussion on the item by signing in on the Public Comment Sign-In Sheet located at the back of the room.

A-1 INDIVIDUAL ACTION ON ANY ITEM TRAILED FROM THE CONSENT AGENDA

A-2 EARLY PAYMENT OF EMPLOYER CONTRIBUTIONS PROGRAM – 2019

Presentation by Brenda Shott, Assistant Chief Executive Officer Finance and Internal Operations and Molly Murphy, Chief Investment Officer

Recommendation: Approve the terms of a prepayment discount program for the advance payment of employer contributions, including the discount rate to be used, for contribution year July 2019 - June 2020.

A-3 SENSITIVITY ANALYSIS OF ALTERNATIVE ECONOMIC ASSUMPTIONS

Presentation by Paul Angelo, Segal Consulting

A-4 CONSIDER TAKING POSITION ON PROPOSED FEDERAL LEGISLATION – PUBLIC EMPLOYEE PENSION TRANSPARENCY ACT (PEPTA)

Recommendation: Staff recommends an opposed position.

INFORMATION ITEMS

I-1 MEMBER MATERIALS DISTRIBUTED

Written Report

Application Notices
Death Notices

July 16, 2018
July 16, 2018

I-2 AUDIT COMMITTEE MEETING MINUTES

Written Report

I-3 CEO FUTURE AGENDAS AND 2018 OCERS BOARD WORK PLAN

Written Report

I-4 QUIET PERIOD – NON-INVESTMENT CONTRACTS

Written Report

I-5 LEGISLATIVE UPDATE

Written Report

I-6 2018 STRATEGIC PLANNING WORKSHOP – PROPOSED AGENDA TOPICS

Written Report

I-7 SECOND QUARTER 2018 EDUCATION AND TRAVEL EXPENSE REPORT

Written Report

I-8 BOARD OF RETIREMENT – GENERAL ELECTION

Written Report

I-9 CONTRACT STATUS FOR NAMED SERVICE PROVIDERS

Written Report

I-10 2018 PRIMA CONFERENCE

Written Report

I-11 SOCIETY OF HUMAN RESOURCES MANAGEMENT (SHRM)

Written Report

I-12 BOARD COMMUNICATION

Written Report

I-13 ILLUSTRATIONS OF RETIREMENT COSTS, UNFUNDED ACTUARIAL ACCRUED LIABILITY AND FUNDED RATIO UNDER ALTERNATIVE ECONOMIC SCENARIOS

Presentation by Paul Angelo, Segal Consulting

I-14 CEM BENCHMARKING REPORT

Presentation by Steve Delaney, Chief Executive Officer and Sally Choi, Consultant

DISABILITY/MEMBER BENEFITS AGENDA

11:00AM

NOTE: WHEN CONSIDERING DISABILITY RETIREMENT APPLICATIONS OR MEMBER APPEALS OF BENEFIT OR DISABILITY RETIREMENT DETERMINATIONS, THE BOARD MAY ADJOURN TO CLOSED SESSION TO DISCUSS MATTERS RELATING TO THE MEMBER'S APPLICATION OR APPEAL, PURSUANT TO GOVERNMENT CODE SECTIONS 54957 OR 54956.9. IF THE MATTER IS A DISABILITY APPLICATION UNDER SECTION 54957, THE MEMBER MAY REQUEST THAT THE DISCUSSION BE IN PUBLIC.

DISABILITY/MEMBER BENEFITS AGENDA

11:00AM

OPEN SESSION

DISABILITY CONSENT AGENDA

All matters on the Disability Consent Agenda are to be approved by one action unless a Board member requires separate action on a specific item. If separate action is requested, the item will be discussed during agenda item DA-1.

DC-1 DISABILITY APPLICATION – JEFFREY REINIG

Fire Captain, Orange County Fire Authority, Safety Member

Recommendation: Grant service connected disability retirement with an effective date of July 28, 2017.

DC-2 DISABILITY APPLICATION – JACOB WILDBERGER

Firefighter/Paramedic, Orange County Fire Authority, Safety Member

Recommendation: Grant service connected disability retirement with an effective date of the day after last day of regular compensation.

DC-3 DISABILITY APPLICATION – LORETTA PALMINTERI

Coach Operator, Orange County Transportation Authority, General Member

Recommendation: Grant service connected disability retirement with an effective date of March 14, 2017.

DC-4 DISABILITY APPLICATION – MICHAEL WHEATLEY

District Attorney Investigator, Orange County District Attorney/Public Administrator's Office, Safety Member

Recommendation: Grant service connected disability retirement with an effective date of February 14, 2018.

CLOSED SESSION
(Government Code sections 54957 and 54956.9)

The Board will adjourn to Closed Session pursuant to Government Code sections 54957 or 54956.9 to discuss matters relating to member applications or appeals. The member may request that the discussion relating to his or her application or appeal take place in Open Session.

ACTION ITEMS

DA-1: INDIVIDUAL ACTION ON ANY ITEM TRAILED FROM THE DISABILITY CONSENT AGENDA

DA-2: DISABILITY APPLICATION – JEFF DEL CAMPO

Emergency Transportation Technician, Orange County Fire Authority, General Member

Recommendation: Staff recommends that the Board of Retirement adopt the findings and recommendations of the Hearing Officer and grant Applicant’s application for service connected disability retirement with an effective date of March 16, 2011.

BOARD MEMBER COMMENTS

CHIEF EXECUTIVE OFFICER/STAFF COMMENTS

COUNSEL COMMENTS

ADJOURNMENT: (IN MEMORY OF THE ACTIVE MEMBERS, RETIRED MEMBERS, AND SURVIVING SPOUSES WHO PASSED AWAY THIS PAST MONTH)

NOTICE OF NEXT MEETINGS

INVESTMENT COMMITTEE MEETING

**July 26, 2018
9:00 A.M.**

**ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM
2223 E. WELLINGTON AVENUE, SUITE 100
SANTA ANA, CA 92701**

DISABILITY COMMITTEE MEETING

August 7, 2018

9:00 A.M.

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

2223 E. WELLINGTON AVENUE, SUITE 100

SANTA ANA, CA 92701

REGULAR BOARD MEETING

August 20, 2018

9:00 A.M.

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

2223 E. WELLINGTON AVENUE, SUITE 100

SANTA ANA, CA 92701

All supporting documentation is available for public review in the retirement office during regular business hours, 8:00 a.m. – 5:00 p.m., Monday through Thursday and 8:00 a.m. – 4:30 p.m. on Friday.

It is OCERS' intention to comply with the Americans with Disabilities Act ("ADA") in all respects. If, as an attendee or participant at this meeting, you will need any special assistance beyond that normally provided, OCERS will attempt to accommodate your needs in a reasonable manner. Please contact OCERS via email at adminsupport@ocers.org or call 714-558-6200 as soon as possible prior to the meeting to tell us about your needs and to determine if accommodation is feasible. We would appreciate at least 48 hours' notice, if possible. Please also advise us if you plan to attend meetings on a regular basis.

C-1



Memorandum

DATE: July 16, 2018
TO: Members of the Board of Retirement
FROM: Adina Bercaru, Member Services Manager
SUBJECT: OPTION 4 RETIREMENT ELECTION – MARITZA PARTIDA

Recommendation

Grant election of retirement benefit payment, Option 4, based on Segal Consulting's actuarial report.

Background/Discussion

This member has requested Option 4 as the benefit payment option for her non service connected disability retirement allowance effective April 11, 2018.

The approval of Option 4 will not increase OCERS liability because the cost of this Option 4 benefit is proportional to the cost of the other benefit plans. Segal Consulting has calculated the member's monthly allowance as indicated in the attached letter as well as the allowance payable to the member's children.

Submitted by:



A. B. – APPROVED

Adina Bercaru
Member Services Manager



DIRECT DIAL NUMBER
415-263-8254

100 Montgomery Street Suite 500 San Francisco, CA 94104-4308
T 415.263.8200 www.segalco.com

E-MAIL ADDRESS
mcalcagno@segalco.com

PERSONAL & CONFIDENTIAL

June 27, 2018

Ms. Adina Bercaru
Member Services Manager
Orange County Employees Retirement System
2223 Wellington Avenue
Santa Ana, CA 92701-3101

**Re: Orange County Employees Retirement System
Option 4 Calculation for Maritza Partida – 2nd Revision**

Dear Adina:

Pursuant to your request, we have revised the Option 4 benefits payable to Maritza Partida dated March 14, 2018 to reflect the actual retirement information and the Option 4 continuance benefit percentage elected by the member.

The monthly benefits payable to the member and the data we used for our calculations are as follows:

Member's Date of Birth	
Date of Retirement	April 11, 2018
Plan of Membership	General Plan J
Monthly Unmodified Benefit	\$2,619.95
Type of Retirement	Non-Service Connected Disability
Daughter	Lylih Guadalupe Sandoval
Daughter's Date of Birth	
Son	Marco Antonio Arturo Sandoval
Son's Date of Birth	

We have been requested to calculate an Option 4 benefit based on the following continuance percentages:

<u>(% Continuance)</u>		
<u>Daughter</u>	<u>Son</u>	<u>Other Features</u>
50%	50%	<u>With</u> reversion between two beneficiaries: Provides 100% continuance to the surviving child upon the death of first child

It is our understanding that pursuant to Regulation §1.401(a)(9)-6, the maximum percentage continuance benefit that can be provided to a non-spouse beneficiary may be limited if the difference in the member's age and the non-spouse beneficiary's age is greater than ten years. Based on advice previously provided by OCERS on similar calculations, we have used the member's age and the youngest beneficiary's age in determining such age difference. This approach is similar to the one we have been asked to follow for a few of our other 1937 Act County Employees Retirement System clients. The actual calculation is as follows:

- Step 1:** Calculate the difference in age between the member and the youngest beneficiary based on their ages on their birthdays during the calendar year of retirement (42-5=37).
- Step 2:** If the member is retiring before age 70, the age difference determined in Step 1 is reduced by the number of years that the member is retiring before age 70 (37-(70-42)=9).
- Step 3:** The maximum percentage continuance benefit can be found in the table provided in §1.401(a)(9)-6 which for an adjusted age difference of 9 years is 100%.

Based on the member's age and the youngest non-spouse beneficiary's age at retirement date, there is no need to reduce the total 100% continuance benefits payable to the two designated beneficiaries requested by the member.

	<u>Payable while the Member is Alive</u>	<u>Payable After the Member's Death</u>
Monthly benefit payable to member		
Annuity	\$800.93	
Pension	<u>1,276.91</u>	
Total	\$2,077.84	\$0
Monthly benefit payable to each beneficiary while both beneficiaries are alive	\$0	\$1,038.92
Monthly benefit payable to the surviving beneficiary after the death of the other beneficiary	\$0	\$2,077.84

ACTUARIAL ASSUMPTIONS

Effective interest rate of 4.126214% per year, which is calculated using an investment return assumption of 7.25% per year together with a cost-of-living adjustment assumption of 3.00% per year.

RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 with ages set forward six years for males and set forward three years for females weighted 40% male and 60% female for members.

RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 weighted 60% male and 40% female for beneficiaries.

Please let us know if you have any comments or questions. As in all matters pertaining to the interpretation and application of the law, Plan, or individual Option 4 Calculation provisions, you should be guided by the advice of the Plan's Legal Counsel.

Sincerely,



Molly Calcagno, ASA, MAAA
Assistant Actuary

AW/bbf

Orange County Employees Retirement
2223 E. Wellington Ave., Suite 100
Santa Ana, CA 92701

5 my
April 7, 2018

Attn: Megan Cortez, Disability Coordinator

I am choosing Option 4 as the benefit payment option for my disability application with OCERS and would like the Continuance Percentages paid to my children and named primary beneficiaries under that option as follows:

- a. Lyliah Guadalupe Sandoval (Daughter) – 50%
- b. Marco Antonio Arturo Sandoval (Son) – 50%

I would also like to have 100% paid to the surviving child upon the death of the other child.

Sincerely,


Maritza Partida

RECEIVED

APR 05 2018

Orange County Employees
Retirement System

C-2

**ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM
BOARD OF RETIREMENT
2223 E. WELLINGTON AVENUE, SUITE 100
SANTA ANA, CALIFORNIA**

**REGULAR MEETING
Monday, June 18, 2018
9:00 a.m.**

MINUTES

Chair Prevatt called the meeting to order at 9:01 a.m.

Attendance was as follows:

Present: Chris Prevatt, Chair; Chuck Packard, Vice-Chair; Eric Gilbert; David Ball; Roger Hilton; Shawn Dewane; Frank Eley; Russell Baldwin, Wayne Lindholm and Shari Freidenrich

Also Present: Steve Delaney, Chief Executive Officer; Brenda Shott, Assistant CEO, Finance and Internal Operations; Suzanne Jenike, Assistant CEO, External Operations; Molly Murphy, Chief Investment Officer; Jenny Sadoski, Director of Information Technology; Gina Ratto, General Counsel; Lee Fink, Deputy General Counsel; Anthony Beltran, Visual Technician; Megan Cortez; Disability Coordinator; Cammy Danciu, Recording Secretary.

Guests: Harvey Leiderman

Mr. Baldwin led the Pledge of Allegiance.

CONSENT AGENDA

All matters on the Consent Agenda are to be approved by one action unless a Board Member or a member of the public requests separate action on a specific item.

A **motion** was made by Mr. Ball **seconded** by Mr. Eley to approve the consent agenda.

Motion passed **unanimously**.

BENEFITS

C-1 OPTION 4 RETIREMENT ELECTION

Recommendation: Grant election of retirement benefit payment, Option 4, based on Segal Consulting's actuarial report.

(1) Gary Lee

- (2) Michael Murphy
- (3) William Valdez
- (4) Michael Whalen

ADMINISTRATION

C-2 BOARD MEETINGS AND COMMITTEE MEETINGS

Disability Committee Minutes	April 24, 2018
Regular Board Meeting Minutes	May 14, 2018

Recommendation: Approve minutes.

ACTION ITEMS

NOTE: Public comment on matters listed in this agenda will be taken at the time the item is addressed, prior to the Board’s discussion of the item. Persons wishing to address items on the agenda should provide written notice to the Secretary of the Board prior to the Board’s discussion on the item by signing in on the Public Comment Sign-In Sheet located at the back of the room.

A-1 INDIVIDUAL ACTION ON ANY ITEM TRAILED FROM THE CONSENT AGENDA

A-2 DECEMBER 31, 2017 ACTUARIAL VALUATION

Presentation by Andy Yeung, Segal Consulting

Recommendation: Approve the Actuarial Valuation and Review as of December 31, 2017 and adopt contribution rates for Fiscal Year 2019 – 2020 as recommended by Segal Consulting.

Mr. Andy Yeung and Ms. Molly Calcagno of Segal Consulting presented the complete Actuarial Valuation and Review as of December 31, 2017. The Board was requested to formally adopt the report and the contribution rates that will go into effect in Fiscal Year 2019-2020.

Ms. Freidenrich arrived at 9:07am.

Mr. Ball asked Mr. Yeung to elaborate and discuss the 3 ½ % payroll growth and the amortization period, as it relates to “level percentage of pay” compared to “level contributions.”

Mr. Delaney explained that the comparisons will be discussed in detail at the Strategic Planning workshop that will be held offsite in September 2018.

Mr. Ball also requested that Segal explain on a rough basis how much of OCERS UAAL is a result of assumption changes verses fund losses. This information needs to be presented to help the public better understand the development of a UAAL.

Mr. Packard agreed with Mr. Ball and asked Segal if they can provide a cumulative breakdown as to how much is actually assumption changes and the other components or losses.

Mr. Yeung stated that it can be done.

Mr. Eley stepped out at 9:43am

Mr. Eley returned at 9:47am

A **motion** was made by Mr. Packard **seconded** by Mr. Hilton to approve the Actuarial Valuation and Review as of December 31, 2017 and adopt contribution rates for Fiscal Year 2019 – 2020 as recommended by Segal Consulting.

Motion passed **unanimously**.

The Board recessed for break at 10:02am.

The Board reconvened for break at 10:17am.

A-3 2017 AUDITED FINANCIAL STATEMENTS AND COMPREHENSIVE ANNUAL FINANCIAL REPORTS

Presentation by Brenda Shott, Assistant Chief Executive Officer and Tracy Bowman, Director of Finance

Recommendation: Approve the following recommendations presented to the Audit Committee during a meeting held on June 7, 2018:

1. Approve OCERS' audited financial statements for the year ended December 31, 2017.
2. Direct staff to finalize OCERS' 2017 Comprehensive Annual Financial Report (CAFR)
3. Approve the Governmental Accounting Standards Board (GASB) Statement 67 Actuarial Valuation as of December 31, 2017.
4. Receive and file Macias, Gini & O'Connell LLP's (MGO) "OCERS' Report to the Audit Committee for the Year Ended December 31, 2017" and their "Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*."

Ms. Shott and Ms. Bowman presented the 2017 Audited Financial Statements and CAFR as also was presented to the Audit Committee on June 7, 2018.

A motion was made by Mr. Eley seconded by Mr. Ball to approve approve the following recommendations presented to the Audit Committee during a meeting held on June 7, 2018:

1. Approve OCERS' audited financial statements for the year ended December 31, 2017.
2. Direct staff to finalize OCERS' 2017 Comprehensive Annual Financial Report (CAFR)
3. Approve the Governmental Accounting Standards Board (GASB) Statement 67 Actuarial Valuation as of December 31, 2017.
4. Receive and file Macias, Gini & O'Connell LLP's (MGO) "OCERS' Report to the Audit Committee for the Year Ended December 31, 2017" and their "Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*."

Motion passed unanimously.

A-4 GASB 68 VALUATION AND AUDIT REPORT

Presentation by Brenda Shott, Assistant Chief Executive Officer and Tracy Bowman, Director of Finance

Recommendation: Approve the following recommendations from the Audit Committee during a meeting held on June 7, 2018:

1. Approve OCERS' audited Schedule of Allocated Pension Amounts by Employer as of and for the Year Ended December 31, 2017.
2. Approve the Governmental Accounting Standards Board (GASB) Statement 68 Actuarial Valuation as of December 31, 2017 for distribution to employers.

Ms. Shott and Ms. Bowman presented the GASB 68 Valuation and Audit Report as also was presented to the Audit Committee on June 7, 2018.

A motion was made by Mr. Eley seconded by Mr. Ball to approve approve the following recommendations from the Audit Committee during a meeting held on June 7, 2018:

1. Approve OCERS' audited Schedule of Allocated Pension Amounts by Employer as of and for the Year Ended December 31, 2017.
2. Approve the Governmental Accounting Standards Board (GASB) Statement 68 Actuarial Valuation as of December 31, 2017 for distribution to employers.

Motion passed unanimously.

INFORMATION ITEMS

I-1 MEMBER MATERIALS DISTRIBUTED

Written Report

Application Notices
Death Notices

June 18, 2018
June 18, 2018

I-2 CEO FUTURE AGENDAS AND 2018 OCERS BOARD WORK PLAN

Written Report

I-3 QUIET PERIOD – NON-INVESTMENT CONTRACTS

Written Report

I-4 LEGISLATIVE UPDATE

Written Report

I-5 2018 STRATEGIC PLANNING WORKSHOP – PROPOSED AGENDA TOPICS

Written Report

I-6 BUSINESS CONTINUITY AND DISASTER RECOVERY PLAN UPDATE

Written report

Mr. Packard ***pulled*** item I-6 for discussion.

Mr. Packard asked for a better explanation between the targeted completion date versus estimated completion date.

Ms. Sadoski stated that all items have been completed. There were some initial delays in the Henderson location but from the time the memo was written until Board meeting day of June 18, 2018, all items have been completed.

Mr. Ball asked if something were to happen today, does OCERS have a backup plan in place.

Mr. Gossard stated yes, OCERS has a backup in place should anything happen.

I-7 2018 ANNUAL OCERS BUSINESS PLAN PROGRESS – MID YEAR REVIEW

Written Report

I-8 OCERS 2018-2020 STRATEGIC PLAN PROGRESS – MID YEAR REVIEW

Written Report

I-9 UPDATE BOARD ELECTION, SAFETY MEMBER AND ALTERNATE SAFETY MEMBER RESULTS

Written Report

I-10 NIPA ANNUAL FORUM AND EXPO (NAFE)

Written Report

I-11 2018 MILKEN INSTITUTE CONFERENCE

Written Report

I-12 BUSINESS CONTINUITY AND DISASTER RECOVERY PLAN EXERCISE EXECUTIVE SUMMARY

Written Report

I-13 DISPOSITION OF EQUIPMENT

Written Report

I-14 BOARD COMMUNICATION

Written Report

I-15 BOARD SURFACE TABLET DEPLOYMENT

Presentation by Jenny Sadoski, Director of Information Technology, Information Technology, OCERS

Ms. Sadoski discussed the Surface Tablet Deployment and the transition from current iPads to Microsoft Surface Pro tablets.

Ms. Freidenrich asked about the security difference between the iPad and Microsoft Surface Pro.

Ms. Sadoski stated that the Microsoft Surface Pro is much safer compared to the iPad.

Mr. Eley asked how many staff members have been using these Microsoft tablets.

Ms. Sadoski stated that the investments department and executive staff have all been using the Microsoft tablet for a while as well as Mr. Gossard has been using it for a year.

Mr. Ball asked if the system would still work on Apple products.

Ms. Sadoski stated yes.

Mr. Eley stepped out at 10:50am.

Mr. Eley returned at 10:53am.

*** * * * * END OF INDIVIDUAL ITEMS AGENDA * * * * ***

DISABILITY APPLICATIONS/MEMBER APPEALS AGENDA

11:00 A.M.

NOTE: WHEN CONSIDERING DISABILITY RETIREMENT APPLICATIONS OR MEMBER APPEALS OF BENEFIT OR DISABILITY RETIREMENT DETERMINATIONS, THE BOARD MAY ADJOURN TO CLOSED SESSION TO DISCUSS MATTERS RELATING TO THE MEMBER'S APPLICATION OR APPEAL, PURSUANT TO GOVERNMENT CODE SECTIONS 54957 OR 54956.9. IF THE MATTER IS A DISABILITY APPLICATION UNDER SECTION 54957, THE MEMBER MAY REQUEST THAT THE DISCUSSION BE IN PUBLIC.

DISABILITY/MEMBER BENEFITS AGENDA

11:00AM

OPEN SESSION

DISABILITY CONSENT AGENDA

All matters on the Disability Consent Agenda are to be approved by one action unless a Board member requires separate action on a specific item. If separate action is requested, the item will be discussed during agenda item DA-1.

DC-1 DISABILITY APPLICATION – RITA CASTILLO

Recommendation: The Disability Committee met on June 5, 2018 and recommends that the Board of Retirement grant non-service connected disability retirement to Rita Castillo with an effective date of December 14, 2016. (General Member)

DC-2 DISABILITY APPLICATION – FRANK GONZALES

Recommendation: The Disability Committee met on June 5, 2018, and recommends that the Board of Retirement grant service connected disability retirement to Frank Gonzales with an effective date of October 20, 2016. (Safety Member)

DC-3 DISABILITY APPLICATION – ARNESIA JONES

Recommendation: The Disability Committee met on June 5, 2018, and recommends that the Board of Retirement grant Service Connected Disability Retirement to Arnesia Jones with an effective date of July 25, 2017.

DC-4 DISABILITY APPLICATION – DEBORA VANDOR

Recommendation: The Disability Committee met on June 5, 2018, and recommends that the Board of Retirement grant service connected disability retirement to Debora Vandor with an effective date of September 15, 2017. (General Member)

Ms. Freidenrich pulled item DC-3 for discussion.

A **motion** was made by Mr. Ball **seconded** by Mr. Dewane to approve the remainder of the Disability Consent Agenda.

Motion **passed** unanimously.

ACTION ITEMS

DA-1 INDIVIDUAL ACTION ON ANY ITEM TRAILED FROM THE DISABILITY CONSENT AGENDA

DC-3

The Board adjourned into closed session at 11:03am

Board reconvened from closed session at 11:16am

Chair Prevatt stated that item DC-3 passed **unanimously**.

PUBLIC COMMENTS: At this time members of the public may address the Board of Retirement regarding any items within the subject matter jurisdiction of the Board, provided that no action may be taken on non-agendized items unless authorized by law.

N/A

BOARD MEMBER COMMENTS

Mr. Gilbert thanked the Board for everything they have done for fire fighters.

Mr. Eley, Mr. Baldwin, Mr. Hilton and Mr. Packard thanked Mr. Gilbert for his service to the OCERS Board.

CHIEF EXECUTIVE OFFICER/STAFF COMMENTS

Both Ms. Shott and Ms. Jenike discussed OCERS staffing updates.

Mr. Delaney thanked Mr. Fink for his service to OCERS as June 18, 2018 was his last Board meeting.

Mr. Hilton stepped out at 10:56am.

Mr. Hilton returned at 10:59am.

COUNSEL COMMENTS

N/A

ADJOURNMENT: (IN MEMORY OF THE ACTIVE MEMBERS, RETIRED MEMBERS, AND SURVIVING SPOUSES WHO PASSED AWAY THIS PAST MONTH)

Active Members

New, Jane

Retired Members

Adams, John
Brantley, Raymond
Cregut, Evelyn
Elmes, Roy
Gates, Bonnie
Goss, Janice
Kasules, Marty
Kempler, Irwin
Key, Virginia
Kratsch, William
Leiby, David
Medina, Trinidad
Miles, Shirley
Radko, Zbigniew
Robinson, Madeline
Ruiz, Manuel
Salovesh, Charles
Thomas, Joan
Webster, John
Winn, Long
Wolters, Floy

Surviving Spouses

Heisler, Ronald
Macluskie, Helen

Ortner, Marilyn
Picarski, Robert
Spencer, Dorothy

There being no further business to bring before the Board, the meeting adjourned at 11:25a.m.

Submitted by:

Approved by:

Steve Delaney
Secretary to the Board

Chris Prevatt
Chairman

A-2

Memorandum

DATE: July 3, 2018
TO: Members of the Board of Retirement
FROM: Brenda Shott, Assistant CEO, Finance and Internal Operations and Molly Murphy, CIO
SUBJECT: **EARLY PAYMENT OF EMPLOYER CONTRIBUTIONS PROGRAM - 2019**

Recommendation

Approve the terms of a prepayment discount program for the advance payment of employer contributions, including the discount rate to be used, for contribution year July 2019 through June 2020.

Background

On July 17, 2017 Government Code Section 31582 was amended by the passage of SB 671 which was introduced by Senator Moorlach. This section of the Government Code relates to county's employee retirement contributions. The amended Government Code Section 31582 (b) and (c) (the Code) states:

(b) "The board of supervisors may authorize the county auditor to make an advance payment of all or part of the county's estimated annual contribution to the retirement fund, provided that the payment is made not later than 30 days after the commencement of the county's fiscal year. This subdivision does not prevent the board of supervisors from authorizing the county auditor to make an advance payment for the estimated annual county contributions for an additional year or partial year if the advance payment is made no later than 30 days after the commencement of the county fiscal year for which the advance payment is made. If the advance is only a partial payment of the county's estimated annual contribution, remaining transfers to the retirement fund shall be made at the end of each month or at the end of each pay period until the total amount required for the year is contributed. Transfers shall be adjusted at the end of the fiscal year to reflect the actual contribution required for that year.

(c) A district subject to Section 31585 may also authorize an advance payment of all or part of the district's estimated annual contribution to the retirement fund, provided that the payment is made no later than 30 days after the commencement of the district's fiscal year. This subdivision does not prevent the governing body of a district from authorizing the district to make an advance payment for the estimated annual district contributions for an additional year or partial year if the advance payment is made no later than 30 days after the commencement of the district fiscal year for which the advance payment is made. If the advance is only a partial payment of the district's estimated annual contribution, payments to the retirement fund shall be made at the end of each month or at the end of each pay period until the total amount required for the year is contributed. This amount shall be adjusted at the end of the fiscal year to reflect the actual contribution required for that year."

In connection with the Code, OCERS has annually offered plan sponsors the opportunity to receive a discount on their employer contributions if they paid their contributions early with a lump sum payment. The program dates back to Fiscal Year 2005-2006, and is brought back to the Board annually for consideration on the program terms to offer for the next year. Timely consideration of the program is

appropriate now, in order to give plan sponsors adequate time to plan funding for a lump sum payment in January, should the plan be approved for the upcoming contribution year.

Plan sponsor interest in such a program remains high as eleven of the thirteen plan sponsors with active members elected to prepay contributions of \$475M for Fiscal Year 2018-2019 (Superior Court and OCERS are the two employers who do not participate). An early payment program is primarily a tool for plan sponsor budget management, rather than a long-term funding technique for the system. Prepaid contributions allow OCERS to deploy cash on a more concentrated basis; however, they also increase OCERS' internal cash flow and short-term cash overlay portfolio risk, and challenge the efficiency of dollar cost averaging during periods of volatile markets. The Board approved revised program provisions in 2014 (for FY15-16) which reduced investment related risks. Specifically, the discount rate offered to the plan sponsors for prepaying their contributions was reduced from 7.25% down to 5.8% (which equates to a 20% rate reduction from the actuarial assumed rate of return). The rationale behind the reduced rate primarily centers around the theory that during "ripe, full-value market periods" in which most stock indexes are trading at levels materially above the prior market-cycle peak with valuation metrics above historical averages *and* the national real per capita GDP materially exceeds the prior business cycle peak the Board should enact a risk-reduction policy by reducing the prepayment discount rate. Based on the market conditions in 2015, the Board again approved the same discount rate of 5.8% in for FY16-17, and reduced the discount rate to 4.5% for FY17-18 and FY18-19.

Discussion

Participation in the Contribution Prepayment Program

The Contribution Prepayment Program allows employers to pay their upcoming year's contribution in a lump sum prior to the beginning of the employers' fiscal year. Employers who prepay their contributions in January pay their full year of contributions six months prior to when their first bi-weekly payment would otherwise be due. Should an employer who had previously participated in the prepayment program decide to opt out of the program this year, they would make no employer contributions from January 2019 through June 2019. This is because they would have paid their full year of contributions for FY18-19 in January 2018 and the FY19-20 contributions would not be due until after the first pay period in July 2019. OCERS has also allowed the prepayment to be made in July at half the discount rate. This option has not been utilized by employers in the past.

Prepayment Discount Rate

Employer contributions rates are calculated by the System's actuary in the annual actuarial valuation assuming that contributions are collected in installments between July and June of the employer fiscal year for which the rates are effective. Since that means they are received, on average, at the middle of that fiscal year, the actuary determines the rates assuming that the contributions will earn only one-half of the investment return assumption (currently 7% per year) during the fiscal year they are contributed. If instead, for example, an employer pays all estimated employer contributions in July, at the beginning of the fiscal year when installments were assumed to have begun, it would be appropriate to provide a half-year of interest credit because the contributions will be in the fund generating investment income for (on average) an additional one-half year. For purposes of this program we have termed this interest credit as a "prepayment discount".

The annual rate used for applying a prepayment discount has generally been the annual assumed rate of return used in the applicable actuarial valuation for the system (as this is the rate that the actuary used when calculating the contribution rate). The practice surrounding prepayment of contributions varies across the '37 Act Systems as many systems have recently made changes to how they administer their programs. Some of the systems use their assumed rate of return as a prepayment discount (Contra Costa, Merced, Sonoma San Mateo), there are a some systems that use a fraction of the assumed rate (Stanislaus,

Tulare, San Bernardino and Los Angeles) a few systems offer the program but with no discount (Kern and Santa Barbara) and several systems either don't offer a prepayment option or do not have any employers that want to participate (Mendicino, San Joaquin, Imperial, and Marin).

The actual discount amount provided to the plan sponsor is calculated as a function of both the annual rate and the timing of when OCERS receives payment of the contributions (discounted cash flows). For example, payments received in July would be discounted using one-half the approved discount rate in the discounted cash flow calculation because OCERS would have assumed to earn on average one-half year of additional investment income at the assumed earnings rate on contributions received during the period. Prepayments of contributions made in January (which has been the practice at OCERS), six months prior to the beginning of the contribution year, would be discounted using the full annual discount rate because the prepaid contributions would be on deposit for an additional six months prior to the beginning of the fiscal year and so, on average, would be received a full year earlier than if paid in installments during the contribution year.

From an actuarial perspective, the prepayment program, as originally designed (using the assumed rate of return as the discount rate for prepayment of contributions), resulted in equivalent mathematical funding into the system. As described above, normally, the employer and the members make their contributions to OCERS at the end of every pay period. For that reason, in the actuarial valuation, the actuary determines the contribution rates by assuming contributions will earn only about one-half year of interest during the year they are contributed, to account for the collection of the contributions, on the average, at around the middle of the year. That interest calculation is done using the long-term investment return assumption, currently 7%. (The actuary also adds interest to account for the 18-month delay in implementing rates from the date of the valuation to the beginning of the following fiscal year.) As such, if the employer were to make its contributions at the beginning of the fiscal year (or earlier), it would be actuarially neutral to provide an interest credit calculated using the same 7% that is built into the contribution rates.

However, from an investment perspective, the prepaid contributions are invested in a derivatives overlay program that will synthetically replicate the OCERS' asset allocation strategy, thus ensuring that all funds are immediately participating in global markets. As benefit payments are paid and investment opportunities are funded, the dollars invested in the overlay program will be drawn down throughout the year. While the prepayment program should not introduce any additional risks to achieving long-term investment assumption of 7%, the prepayment program does present a market timing risk with prepaid contributions coming in one lump sum rather than in installments throughout the year that can then be invested into the market using a dollar cost averaging methodology. This risk should be tolerable in the long-term but should be recognized in the short-term.

Calculation of prepayment amount

There are several factors needed to calculate the discounted prepayment amount when contributions are paid early. Projected payroll amounts are the starting point for calculating the prepayment amount and are provided by plan sponsors for each rate group or plan they participate in and are prepaying contributions. The projected payroll amount (as estimated by the plan sponsors) is multiplied by the employer's contribution rate for the applicable rate group. Per the Code, only employer contributions paid by the employer and credited to the employer's account (not the employee's account) are eligible for the discount. More specifically, reverse pick up arrangements whereby employees pay a portion of the employer's required contribution and employer pick up arrangements whereby employers pay a portion of employee's required contribution are excluded from the prepayment discount program. The resulting product is then divided by one plus the discount rate.

OCERS' staff compares the projected contribution amount to actual contributions throughout the period in order to ensure that the annual required contribution is collected.

Any investment variation caused by the timing of the contributions becomes a part of the normal actuarial valuation process – i.e., rates for the future will rise and fall based on the assets in the system. Therefore, no adjustment of the early contribution payment is made on the basis of actual returns during the year.

Minimum Amount to participate

In addition to identifying an appropriate discount factor the Board has also adopted plan provisions that define the minimum prepayment amounts and established contribution payment time frames. The previously adopted polices required that employers prepay at least 50% of the estimated annual contribution in order to be eligible for the discount and established that prepaid contributions be received by either January 15th or July 15th.

Conclusion:

Staff recommends that the Board approve an early payment discount on employer contributions paid by the employer for contribution year July 2019 through June 2020 with the following terms:

- a) Use a discount rate of 4.5% when calculating the present value of discounted cash flows if payment is received by January 15, 2019 or 2.25% if payment is received after January 15, 2019 but before July 15, 2020
- b) Contributions not paid early must be paid pro rata over the year with no discount being credited
- c) OCERS’ staff will compare the payroll estimates used to calculate the prepayment amount for each participating plan sponsor to actual payroll each pay period. Should actual payroll be 5% greater than estimated payroll for four consecutive pay periods, the plan sponsor will be required to pay additional contributions each pay period for the additional salary above the projected salary used to calculate the prepayment (no discount would be applied to the additional amount)
- d) Plan sponsors that have more than one plan or rate group are required to provide the estimated pensionable salary separately for each plan or group
- e) Only employer contributions paid by the employer are eligible for the prepaid discount program (employee pick-ups and reverse pick-ups are ineligible)
- f) The application of the prepayment of contributions will be applied to pay periods 2019-15 through 2020-14
- g) OCERS will reconcile the prepaid contributions to the actual contributions at the end of the contribution year. Any overpayments will be made available to either apply to the following year’s prepayment of employer contributions or to the current year’s bi-weekly employer contributions (Note: overpayments cannot be applied to employee contributions). Any under payments will be collected from the employer.

Submitted by:

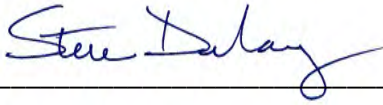


Brenda Shott
Assistant CEO, Finance and Internal Operations



Molly A. Murphy, CFA
Chief Investment Officer

Approved by:



Steve Delaney

Chief Executive Officer

Employer Prepayment Program



July 16, 2018

Molly Murphy, CFA

Background

- Government Code Section 31582 (b) and (c) (the Code) states: “The board of supervisors may authorize the county auditor to make an advance payment of all or part of the county’s /district’s estimated annual contribution to the retirement fund...”
- The System’s actuary sets employer contributions rates that assume contributions will earn only one-half year of investment return in the year they are made, recognizing that contributions are collected in installments throughout the fiscal year
- If an employer pays a lump sum prior to the beginning of the fiscal year (or earlier), the employer receives a “prepayment discount” to recognize that the contributions are expected to generate more investment income than was anticipated when the rates were set

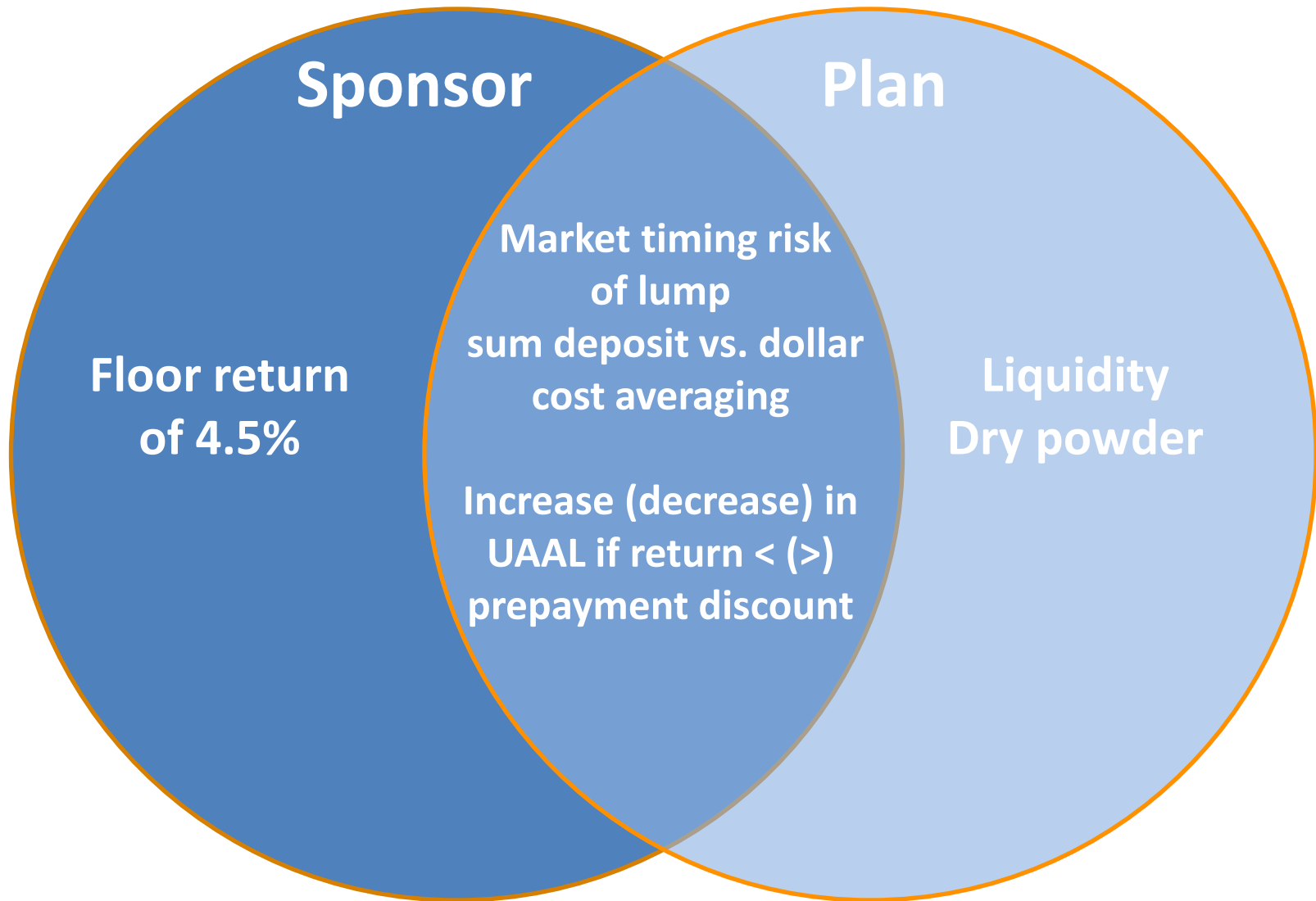
Background

- OCERS' prepayment program dates back to FY05-06
- OCERS has annually offered plan sponsors a prepayment discount on their contributions via an early lump sum payment
- OCERS' prepayment discount for FY18-19: 4.5%
- Since the program's inception, OCERS has reduced the prepayment discount two times

	FY05-06...14-15	FY15-16	FY16-17	FY17-18	FY18-19
Prepayment Discount	7.25%	5.80%	5.80%	4.50%	4.50%

- In 2017, OCERS surveyed 26 CA plans:
 - 15 responded and 8 offered a prepayment program
 - Prepayment discount rates ranged from their respective actuarial rate, (e.g., 7.25%) down to 1.75%

Analysis: Risks & Rewards



Analysis: Rate Optimization

20-Year Expected Returns¹

Asset Class	OCERS Adopted Asset Allocation Policy (%)
Global Public Equity	35
Private Equity	8
Core Fixed Income	17
Credit	13
Real Assets	22
Risk Mitigation	5
Cash	0
<i>20-Year Expected Return (Geometric)</i>	<i>7.8</i>
<i>Standard Deviation</i>	<i>13.0</i>
<i>Probability of achieving at least a 7.25% return²</i>	<i>57.4</i>
<i>Probability of achieving at least a 4.50% return³</i>	<i>87.8</i>

¹ 20-Year Expected Returns based on Meketa's 2016 Annual Asset Study

² Probability of achieving at least a 7.25% annualized return over the next 20 years

³ Probability of achieving at least a 4.50% annualized return over the next 20 years

Recommendation

- **Perspective**
 - Prepayments represent ~ \$400 million/\$15.8 billion portfolio, or ~2.5% of OCERS' Plan assets
- **Benefit/Opportunity**
 - Additional liquidity to Plan may improve opportunistic investing options
- **Recommendation**
 - Maintain the 4.5% discount rate
 - Keep prepayments at Parametric's cash overlay program to immediately equitize cash & hold to meet outflows during the year

A-3

Memorandum

DATE: July 16, 2018
TO: Members, Board of Retirement
FROM: Steve Delaney, Chief Executive Officer
SUBJECT: **SENSITIVITY ANALYSES OF ALTERNATIVE ECONOMIC ASSUMPTIONS**

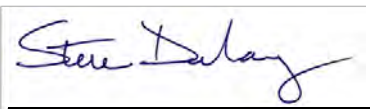
Written Report

Background/Discussion

OCERS entered into a new contract with Segal Consulting (Segal) in August 2016. Under the new contract, Segal agreed to provide up to four sensitivity analyses of alternative economic actuarial assumptions as part of the annual actuarial valuation process. The sensitivity analyses are provided on an aggregate basis for OCERS as a whole rather than on an individual rate group basis. After receiving from Segal recommendations on assumptions to be used in the analyses and a full Board discussion at the June 12, 2017 Board meeting the Board Chair provided direction to the actuary on the assumptions to be used in the 2017 sensitivity analyses. Those sensitivity analyses were delivered in Segal's July 7, 2017 letter and presented to the Board on July 17, 2017.

Segal has again proposed a set of sensitivity analyses for 2018 (attached) consistent with the new economic assumptions adopted by the Board in 2017. Paul Angelo will present the recommendations at the July 16, 2018 meeting and again seek direction from the Board Chair on which analyses to perform in 2018. Those sensitivity analyses will be presented to the Board at the Board's September 2018 educational retreat and will be informational only. As we are not presently in an actuarial assumption review period, the sensitivity analyses are simply to provide further context for the economic assumptions currently in use.

Submitted by:



Steve Delaney
Chief Executive Officer

Orange County Employees Retirement System (OCERS)

Alternative Economic Assumptions for Use in 2018 Sensitivity Analyses

July 16, 2018

Paul Angelo, FSA, EA, MAAA, FCA

Segal Consulting

Review of Scope and Terminology (from new Actuarial Standard on Risk Assessments)

- Scenario testing – impact of occurrence of possible event(s)
 - For example, illustrations prepared each year to show impact of one year of favorable or unfavorable market return
 - Metrics studied, both by rate group and for entire plan
 - Employer contribution rate
 - Funded ratio
 - Unfunded Actuarial Accrued Liability
 - Scenario test will be repeated using results from 12/31/17 valuation
- Sensitivity testing – impact of change in actuarial assumption(s)
 - Same metrics but using alternative long term economic assumptions (i.e., different from those used in 12/31/17 valuation)
 - Now performed every year, even if no experience study
 - Results only for entire plan

OCERS Scenario Testing – Impact due to One Year of Favorable or Unfavorable Market Return

- Under three hypothetical market returns for year following valuation
 - 0.00%
 - 7.00% (current baseline)
 - 14.00%
- Metrics studied (by Rate Group)
 - Employer contribution rate
 - Funded ratio
 - Unfunded Actuarial Accrued Liability
- Can be useful as a budgeting tool for the employer
 - Next year's employer contribution rate can be estimated as actual year-to-date market return becomes available from OCERS
- Scenario testing will be updated using results and assumptions from 12/31/17 valuation

OCERS Sensitivity Testing – Hypothetical Impact of Alternative Economic Assumptions

- Metrics studied (for the entire System) – first done in 2017
 - Employer contribution rate
 - Funded ratio
 - Unfunded Actuarial Accrued Liability
- Illustrates “what if” impact of changes to economic assumptions
 1. Inflation (2.75% used in 12/31/17 valuation)
 - COLA increases for retirees
 - Component of salary increases for actives and wage increases for amortizing UAAL
 - Component of investment return assumption
 2. Real return (4.25% used in 12/31/17 valuation)
 3. Investment return (7.00% used in 12/31/17 valuation)
- In practice, only two alternative assumptions are identified
 - Since $\text{Inflation} + \text{Real Return} = \text{Investment Return}$

OCERS Economic Assumptions

	<u>12/31/17 Valuation</u>		<u>12/31/14-16 Valuation</u>		<u>12/31/12-13 Valuation</u>		<u>12/31/11 Valuation</u>	
	<u>Return</u>	<u>Pay*</u>	<u>Return</u>	<u>Pay*</u>	<u>Return</u>	<u>Pay*</u>	<u>Return</u>	<u>Pay*</u>
Price Inflation	2.75%	2.75%	3.00%	3.00%	3.25%	3.25%	3.50%	3.50%
Real Wages	n/a	0.50%	n/a	0.50%	n/a	0.50%	n/a	0.25%
Net Real Return	4.25%	n/a	4.25%	n/a	4.00%	n/a	4.25%	n/a
Total	7.00%	3.25%	7.25%	3.50%	7.25%	3.75%	7.75%	3.75%

* Excludes Merit and Promotion component of assumed individual salary increases

Sensitivity Testing – **PRIOR YEAR (2017)** Alternative Economic Assumptions

Proposed by Segal	Inflation	Real Return	Investment Return
Baseline	3.00%	4.25%	7.25%
Alt #1: Lower inflation (only)	2.75%	4.25%	7.00%
Alt #2: Lower real return (only)	3.00%	4.00%	7.00%
Alt #3: Lower inflation and lower real return	2.75%	4.00%	6.75%
Alt #4: Much lower inflation and lower real return	2.50%	4.00%	6.50%

Selected by OCERS	Inflation	Real Return	Investment Return
Baseline	3.00%	4.25%	7.25%
Alt #1: Lower inflation only (as proposed)	2.75%	4.25%	7.00%
Alt #2: Lower real return only (as proposed)	3.00%	4.00%	7.00%
Alt #3: <u>Same</u> inflation and <u>much</u> lower real return	3.00%	3.75%	6.75%
Alt #4: <u>Higher</u> inflation and lower real return	3.25%	4.00%	7.25%

Sensitivity Testing – Proposed 2018 Alternative Economic Assumptions

- Includes #3 as proposed last year and #4 as selected by OCERS
 - All adjusted relative to new (baseline) actuarial assumptions

Proposed by Segal	Inflation	Real Return	Investment Return
Baseline (current assumptions)	2.75%	4.25%	7.00%
Alt #1: Lower inflation only	2.50%	4.25%	6.75%
Alt #2: Lower real return only	2.75%	4.00%	6.75%
Alt #3: Lower inflation and lower real return	2.50%	4.00%	6.50%
Alt #4: Higher inflation and lower real return	3.00%	4.00%	7.00%

- The above alternatives are not necessarily assumptions Segal would recommend in any future triennial experience study



A-4

Memorandum

DATE: July 16, 2018
TO: Members of the Board of Retirement
FROM: Gina M. Ratto, General Counsel
SUBJECT: **CONSIDER TAKING POSITION ON PROPOSED FEDERAL LEGISLATION – PUBLIC EMPLOYEE PENSION TRANSPARENCY ACT (PEPTA)**

Recommendation

Take an OPPOSE position on the Public Employee Pension Transparency Act.

Background/Discussion

On June 28, 2018, Representative Devin Nunes (R-CA) reintroduced federal legislation (H.R. 6290) referred to as the Public Employee Pension Transparency Act (PEPTA). The bill is cosponsored by Rep. Ken Calvert (R-CA), Rep. Chris Stewart (R-UT) and Rep. Tom McClintock (R-CA). A summary of the proposed legislation, issued by Rep. Nunes, is attached. Similar legislation was proposed by Rep. Nunes in 2010, 2011 and 2013, but was never enacted.

Principally, PEPTA would require state and local pension plans to disclose their liabilities based on U.S. Treasury rates rather than expected rates of return on investments. The underlying premise of PEPTA is that the existing accounting system that governs state and local pensions results in understated liabilities, and is “flawed and masks the magnitude of what is owed to public employees.” Using current accounting standards, Rep. Nunes states that in 2015, state and municipal public pensions disclosed a total unfunded liability of \$1.378 trillion; but that if the U.S. Treasury rate were used, the liability would increase to \$3.846 trillion. H.R. 6290 would also require the Secretary of the Treasury to provide the disclosure of pension liabilities to the public through a searchable website and would eliminate the federal tax-exempt bonding authority of state and local governments that do not comply with the new requirements.

NASRA, NCPERS and NCTR have reached out to their members, including OCERS, to ask that they write to their respective delegations to urge them to oppose PEPTA. A copy of the letter of opposition sent by the national organizations to Rep. Nunes and to all of the other members of the House of Representatives is attached.

Staff recommends that OCERS send a letter to its delegation urging them to oppose PEPTA, and that OCERS take an OPPOSE position on PEPTA.

Attachments

Submitted by:

A handwritten signature in blue ink that reads "Gina M. Ratto". The signature is written in a cursive style and is positioned above a horizontal line.

Gina M. Ratto
General Counsel



Public Employee Pension Transparency Act

SUMMARY

Background

Most state and local governments offer their employees defined benefit pension plans. According to the U.S. Census Bureau, state and local governments have promised pension benefits to almost 15 million active employees and another 10.3 million retirees and their dependents that are currently receiving benefit payments.

Under these plans, employees are promised an annual payment that begins when the employee retires. The annual payment typically depends on the employee's age, tenure, and late-career salary. When the federal government promises a future payment to a worker, it creates a financial liability for taxpayers, which must be fulfilled when the worker retires.

To meet future pension liabilities, governments manage their own pension funds, to which both employees and governments typically contribute. To supplement these current contributions, state and local governments sometimes borrow money (i.e. create more public debt) by selling Pension Obligation Bonds (POB) to investors. Together, these funds are dedicated to providing promised retirement benefits. If the pension funds do not have sufficient cash to pay for the retirement benefits of public employees when those obligations come due, governments will be forced to transfer funds from their general operating budgets to ensure payments are made. This will require additional taxes, spending cuts, debt or all three. In many cases, state constitutional and legal protections make it impossible to default on public pension obligations.

The Status Quo

While there are accounting standards governing state and local pensions, those standards allow most pension funds to value future obligations to pensioners using expected rates of return on investments rather than lower-rate, risk-free U.S. Treasury rates. When higher discount rates are used, present values of future payments become lower and often understate liabilities. The accounting system used by state and local governments to determine their pension liabilities is flawed and masks the magnitude of what is owed to public employees.

A 2014 IGM Forum survey found that 75% of financial economists either agreed or strongly agreed with the statement that “by discounting pension liabilities at high interest rates under government accounting standards, many U.S. state and local governments understate their pension liabilities and the costs of providing pensions to public-sector workers.” The survey group included experts from our nation's most prominent schools of accounting and finance including MIT, Harvard, Yale, U.C. Berkeley, the University of Chicago, Princeton, and Stanford. Furthermore, 69% of those surveyed either agreed or strongly agreed that “during



Rep. Devin Nunes (CA-22)
Public Employee Pension Transparency Act
115th Congress

the next two decades some U.S. states, unless they substantially increase taxes, cut spending, and/or change public-sector pensions, will require a combination of severe austerity budgets, a federal bailout, and/or default.” Yet despite this clear consensus of experts, public pensions continue to report misleading information to taxpayers, retirees and public policy decision makers.

Reforms Needed

Public pension accounting should provide citizens and government officials with a sense of how indebted taxpayers are to state and local government employees. Additionally, it should accurately reflect the economic cost of newly-earned pensions each year.

In 2015, state and municipal public pension officials, using current government accounting standards, disclosed unfunded liabilities of \$1.378 trillion (7.6% of 2015 U.S. GDP). However, this enormous number dramatically understates the true nature of the debt confronting taxpayers because public pension plans are able to calculate their liabilities using self-selected and unreasonably high discount rates. In many instances, they also distort fair market value of assets in order to hide debt. When these accounting gimmicks are excluded from the calculations, unfunded liabilities in 2015 significantly increase to \$3.846 trillion.

What the Bill Does

The Public Employee Pension Transparency Act would address this situation by:

- Requiring state and local pension plans to disclose their liabilities based on U.S. Treasury rates in a uniform and transparent manner,
- Requiring the Secretary of the Treasury to provide these disclosures to the public through a searchable website, and
- Eliminating the federal tax-exempt bonding authority of state and local governments that do not comply with these requirements.

The bill also makes it explicitly clear that state and local pension obligations are solely the responsibility of those entities and that the federal government will not provide a bailout.

Please contact my policy advisor, Max Kannen, with any questions at Maxwell.Kannen@mail.house.gov or phone at 5-2523.



Rep. Devin Nunes (CA-22)
Public Employee Pension Transparency Act
115th Congress

National Conference of State Legislatures (NCSL)
International Association of Fire Fighters (IAFF)
National Association of Counties (NACo)
National Association of Police Organizations (NAPO)
United States Conference of Mayors (USCM)
National Education Association (NEA)
National League of Cities (NLC)
American Federation of State, County and Municipal Employees (AFSCME)
International City/County Management Association (ICMA)
National Association of State Treasurers (NAST)
National Association of State Auditors Comptrollers and Treasurers (NASACT)
Government Finance Officers Association (GFOA)
International Public Management Association for Human Resources (IPMA-HR)
County Executives of America (CEA)
National Public Employer Labor Relations Association (NPELRA)
National Conference of State Social Security Administrators (NCSSSA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)
National Association of State Retirement Administrators (NASRA)

June 20, 2018

The Honorable Devin Nunes
U.S. House of Representatives
Washington, D.C., 20515

RE: Opposition to the Public Employee Pension Transparency Act (PEPTA)

Dear Representative Nunes:

On behalf of the national organizations listed above, representing state and local governments, elected officials, finance professionals, employees and retirement systems, we are writing to express our strong opposition to harmful legislation – The Public Employee Pension Transparency Act (PEPTA) – currently being circulated by Congressman Devin Nunes (R-CA). This bill would set a dangerous precedent with regard to unfunded federal mandates, taxation of municipal bonds, and intrusion into the operations of state and local governments. We strongly urge you to oppose this proposal and any attempts to add it to other legislation under consideration.

PEPTA does not protect benefits, save taxpayer dollars or improve retirement system financing. To the contrary, it conflicts with existing governmental accounting standards, inserts the federal government into areas that are the fiscal responsibility of sovereign States and localities, imposes costly federal regulation, and threatens to eliminate the tax-exempt bonding authority of state and local governments.

The legislation not only violates the principles of federalism, but represents a fundamental lack of understanding regarding state and local government operations and financing, including accounting standards and strict legal constraints already in place that require open financial reporting and processes:

- **State and local government retirement systems are subject to significant oversight, regulation and transparency.** Public pensions are established under state statutes, local ordinances or both; subject to fiduciary, investment and administrative laws as well as to open records and sunshine statutes; and overseen by elected governmental bodies, state and local regulators, elected office holders, the public, and independent boards of trustees.
- **Government accounting standards are set by an independent body, regularly reviewed, and were recently updated with regard to state and local pension disclosures.** The Governmental Accounting Standards Board (GASB) is recognized by governments, the accounting industry, and the capital markets as the official source of generally accepted accounting principles (GAAP) for state and local governments. GASB standards for financial disclosures must be followed to receive a clean audit. GASB was established by state and local government organizations in conjunction with the Financial Accounting Foundation, in recognition of the fact that governments are fundamentally different from for-profit business enterprises, including their unique time horizons, oversight, revenue streams, constitutional or contractual protections, stakeholders and accountability for resources. GASB recently completed a multi-year process of reviewing and significantly revising its accounting standards on public pension reporting, which are now in effect. In doing so, GASB considered and rejected the assumptions and calculations proposed by PEPTA as inappropriate for governmental entities.
- **Actuarial valuations and assumptions are publicly disclosed and under review.** Actuarially determined pension contributions, as well as the assumptions that underlie them, are already required to be included in government financial notes, along with a government's 10-year pension contribution history. The financial condition of the retirement system, including funded status and necessary contributions, must be certified by qualified actuaries that adhere to Actuarial Standards of Practice (ASOP). ASOPs are maintained by the Actuarial Standards Board (ASB), which identifies what U.S. actuaries should consider, document, and disclose. The ASB is reviewing ASOPs applicable to pensions, including potential changes relating to assumptions and disclosures.
- **State and local retirement systems' financial information is publicly available, including on a searchable database.** Data on public pension plans and their finances are available, accessible to the general public at no cost and without request, on public retirement system websites. In addition, Comprehensive Annual Financial Reports and Actuarial Valuations are publicly available on [Public Plans Data](#), a searchable database which contains detailed annual data on the largest state/local pensions in the US., accounting for 95 percent of total state/local pension assets and membership.

In addition to the substantial regulation and transparency that is already in place for state and local government retirement systems, the proposed legislation also ignores the fact that every state and countless localities have recently made modifications to pension financing, benefits structures, or both – none of which required federal intervention.

Federal interference into the fiscal affairs of state and local governments is neither requested nor warranted. Therefore, we strongly urge your opposition to PEPTA and any attempts to include it, or other harmful provisions relating to state and local government finance and pensions, in any legislation under consideration.

We would welcome the opportunity to visit with you or your staff to discuss these important issues, provide additional information and answer any questions you might have. Please feel free to contact any of our organizations' legislative staff listed below:

Max Behlke, NCSL, (202) 624-5400, max.behlke@ncsl.org
Ben Timmons, IAFF, (202) 737-8484, btimmins@iaff.org
Jack Peterson, NACo, (202) 942-4254, jpeterson@naco.org
Bill Johnson, NAPO, (703) 549-0775, bjohnson@napo.org
Larry Jones, USCM, (202) 293-2352, ljones@usmayors.org
Sylvia Johnson, NEA, (202) 822-7345, syjohnson@nea.org
Brian Egan, NLC, (202) 626-3000, egan@nlc.org
Ed Jayne, AFSCME, (202) 429-1188, ejayne@afscme.org
Elizabeth K. Kellar, ICMA, (202) 962-3611, ekellar@ICMA.org
Shaun Snyder, NAST, (202) 744-6663, shaun@statetreasurers.org
Cornelia Chebinou, NASACT, (202) 624-5487, cchebinou@nasact.org
Michael Belarmino, GFOA, (202) 393-8024, mbelarmino@gfoa.org
Neil Reichenberg, IPMA-HR, (703) 549-7100, nreichenberg@ipma-hr.org
Mike Griffin, CEA, 202-628-3585, mgriffin@countyexecutives.org
Sean Robinson, NPELRA, (858) 299-3150, sean@npelra.org
Dean Konder, NCSSSA, (303) 318-8060, dean.conder@state.co.us
Hank Kim, NCPERS, (202) 624-1456, hank@ncpers.org
Leigh Snell, NCTR, (540) 333-1015, lsnell@nctr.org
Jeannine Markoe Raymond, NASRA, (202) 624-1417, jeannine@nasra.org

I-1

*Orange County Employees Retirement System
Retirement Board Meeting
July 16, 2018
Application Notices*

<i>Member Name</i>	<i>Agency/Employer</i>	<i>Retirement Date</i>
Aquilar, Maria	Social Services Agency	5/11/2018
Anderle, Kay	District Attorney	8/17/2017
Anderson, Tamara	Sheriff's Dept	3/10/2018
Borsetto, Catherine	District Attorney	5/2/2018
Buell, Roy	Probation	3/30/2018
Campbell, Judith	Social Services Agency	4/27/2018
Carter, Robert	Sheriff's Dept	5/11/2018
Cathey, Anthony	OCTA	5/7/2018
Cradle, Jenny	Fire Authority (OCFA)	4/27/2018
Davies, Mark	OCTA	5/22/2018
Davies, Francis	Auditor-Controller	1/5/2018
Farris, Randy	Child Support Services	5/2/2018
Gamboa, Jose	Health Care Agency	3/30/2018
Gibson, Michael	OCTA	3/20/2018
Ginther, Michael	District Attorney	5/10/2018
Johnson Oyan, Julie	Health Care Agency	5/22/2018
Ledesma, David	OC Community Resources	4/27/2018
Lee, Gary	Fire Authority (OCFA)	3/30/2018
Lohayza, Robert	Health Care Agency	5/19/2018
Moreno, Sonja	Sheriff's Dept	5/18/2018
Murphy, Michael	Fire Authority (OCFA)	3/30/2018
Nguyen, Michael	OC Community Resources	9/7/2016
Parra, Steven	OCTA	5/2/2018
Perez-Lopez, Shirley	Sheriff's Dept	5/4/2018
Peterson, Lynn	Superior Court	5/23/2018
Reisinger, Caroline	OC Vector Control	4/20/2018
Rubin, Joan	Superior Court	4/24/2018
Salazar, Addy	Probation	5/23/2018
Schulte, Aaron	Sheriff's Dept	3/31/2018
Sellingner, Mark	OCTA	5/18/2018
Sheldon, John	OC Community Resources	4/26/2018
Silva, Armando	OCTA	5/2/2018
Sims, Rod	Probation	5/2/2018
Small, Shawn	Probation	5/11/2018
Smart, Tonette	Auditor-Controller	3/31/2018
So, Kayetano	OCTA	5/5/2018
Spencer, Richard	Sanitation District	3/30/2018
Thompson, Michael	Sheriff's Dept	5/23/2018
Valdez, William	Fire Authority (OCFA)	3/30/2018
Wallace, John	Sheriff's Dept	5/19/2018
Wamsley-Goldsmith, Sheryl	Health Care Agency	5/11/2018
Whalen, Michael	Fire Authority (OCFA)	3/16/2018
Whitehead, Kelly	Social Services Agency	5/11/2018

*Orange County Employees Retirement
Retirement Board Meeting
July 16, 2018
Death Notices*

<i>Retired Members</i>	<i>Agency/Employer</i>
Barela, John	Registrar of Voters
Barnard, Roberta	Social Services Agency
Bennett, Shirley	OC Community Resources
Brandt, Lincoln	City of San Juan Capistrano
Braun, Mary	UCI
De Marco, Ralph	Health Care Agency
Diethorn, Audrey	Health Care Agency
Faley, Mary	Superior Court
Grant, Robert	Probation
Hall, Judi	Probation
Horne, Lucinda	Social Services Agency
Hoyle, Viola	Sheriff's Dept.
Jones, Donald	CEO - GSA
Kane, John	Health Care Agency
Kleeger, Sonia	Health Care Agency
May, Charles	County Executive Office (CEO)
Mc Nichols, Joyce	Social Services Agency
Munoz, Isabel	Health Care Agency
Murphy, Claire	County Executive Office (CEO)
Nelson, William	Sheriff's Dept
Parks, Carolyn	OCTA
Schorer, Ervin	Auditor-Controller
Smith, John	Superior Court
Solis, Baldemar	Sheriff's Dept
Wadginski, Francis	Probation
Williams, Robert	County of Orange

<i>Surviving Spouses</i>	
Chaisson, Miriam	
Cheatham, Norma	
Cowder, Cecil	
Fogle, Irene	
Hitchcock, Dorothy	
Kincaid, Margaret	
Wayne, Vivian	

I-2

**ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM
BOARD OF RETIREMENT
2223 WELLINGTON AVENUE, SUITE 100
SANTA ANA, CA 92701**

AUDIT COMMITTEE MEETING

June 7, 2018

1:00 p.m.

MINUTES

The Chair called the meeting to order at 1:03 p.m. and read the opening statement for the record. Attendance was as follows:

Present: Frank Eley, Chair; Charles Packard, Vice Chair; Russell Baldwin; Shari Freidenrich

Staff: Brenda Shott, Assistant CEO, Internal Operations; Gina Ratto, General Counsel; Tracy Bowman, Director of Finance; Molly Murphy; Chief Investment Officer; Mark Adviento, Internal Auditor; Sonal Sharma, Recording Secretary; Anthony Beltran, Audio Visual Technician

ACTION ITEMS

A-1 2017 FINANCIAL STATEMENTS AUDIT

Presentation by Linda Hurley, Macias, Gini & O'Connell (MGO)

Recommendation: For the Audit Committee to recommend to the Board of Retirement the following:

1. Approve OCERS' audited financial statements for the year ended December 31, 2017.
2. Direct staff to finalize OCERS' 2017 Comprehensive Annual Financial Report (CAFR).
3. Approve the Governmental Accounting Standards Board (GASB) Statement 67 Actuarial Valuation as of December 31, 2017.
4. Receive and file Macias, Gini & O'Connell LLP's (MGO) "OCERS' Report to the Audit Committee for the Year Ended December 31, 2017" and their "Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*."

Linda Hurley presented a verbal report of the results of MGO's 2017 Financial Statements Audit to the Committee.

Following discussion, a **motion** was made by Mr. Packard, **seconded** by Ms. Freidenrich, for the Audit Committee to approve the recommendation.

The **motion passed unanimously**.

A-2 GASB 68 VALUATION AND AUDIT REPORT

Presentation by Tracy Bowman, Director of Finance.

Presentation by Linda Hurley, MGO.

Recommendation: For the Audit Committee to recommend to the Board of Retirement the following:

1. Approve OCERS' audited Schedule of Allocated Pension Amounts by Employer as of and for the Year Ended December 31, 2017.
2. Approve the Governmental Accounting Standards Board (GASB) Statement 68 Actuarial Valuation as of December 31, 2017 for distribution to employers.

Tracy Bowman, Director of Finance, presented a verbal overview of Segal Consulting's GASB 68 Actuarial Valuation as of December 31, 2017 to the Committee.

Linda Hurley presented a verbal report of the results of MGO's audit of OCERS' Schedule of Allocated Pension Amounts by Employer as of and for the Year Ended December 31, 2017 to the Committee.

Following discussion, a **motion** was made by Mr. Packard, **seconded** by Ms. Freidenrich, for the Audit Committee to approve the recommendation.

The **motion passed unanimously.**

INFORMATION ITEMS

I-1 STATUS UPDATE OF 2018 AUDIT PLAN

Mark Adviento, Internal Auditor, presented a status update of the 2018 Audit Plan to the Committee.

PUBLIC COMMENTS:

None.

COMMITTEE MEMBERS COMMENTS:

Committee Members discussed the status of OCERS' search for a Director of Internal Audit.

CHIEF EXECUTIVE OFFICER/STAFF COMMENTS:

None.

The meeting adjourned at 2:00pm.

Submitted by:

Approved by:

Brenda Shott
Secretary to the Committee

Frank Eley
Committee Chair

I-3

Memorandum

DATE: July 16, 2018
TO: Members of the Board of Retirement
FROM: Steve Delaney, Chief Executive Officer
SUBJECT: **CEO FUTURE AGENDAS AND 2018 OCERS BOARD WORK PLAN**

Written Report

AGENDA TOPICS FOR THE OCERS BOARD OF RETIREMENT

AUGUST

OCERS By the Numbers
The Evolution of the OCERS UAAL
Quarterly Securities Litigation Update
Lean Process Update

SEPTEMBER

Strategic Planning Workshop

OCTOBER

Strategic Planning Workshop & Investment Forum Notes
Approve 2019 Business Plan
Approve 2019-2021 Strategic Plan
Voting Direction for SACRS Business Meeting

Submitted by:



Steve Delaney
Chief Executive Officer

OCERS RETIREMENT BOARD - 2018 Work Plan

	Jan	Feb	Mar	Apr	Jun	Jul	Aug	Sep (Offsite)	Oct	Nov	Dec
System Oversight		STAR COLA Posting (I)	Approve 2018 STAR COLA (A)		Mid-Year Review of 2018 Business Plan Progress (I)	Approve Early Payment Rates for Fiscal Year 2018-19 (A)	Review 2nd Quarter Budget to Actuals Financial Report (I)	Strategic Planning Workshop (I)	Overview of 2019 Administrative Budget and Investment (Workshop) (I)	Review 3rd Quarter Budget to Actuals Financial Report (I)	CEO Compensation (A)
		Approve 2018 COLA (A)	Quarterly 2018-2020 Strategic Plan Review (A)		Approve December 31, 2017 Actuarial Valuation & Funded Status of OCERS (A)		Receive OCERS by the Numbers (I)		Approve 2019-2021 Strategic Plan (A)	Approve 2019 Administrative (Operating) Budget (A)	
					Approve 2017 CAFR (A)		Receive Evolution of the UAAL (I)		Approve 2019 Business Plan (A)	Annual CEO Performance Review (A)	
					Quarterly 2018-2020 Strategic Plan Review (A)						
Board Governance				Brown Act Training (I)						Adopt 2019 Board Meeting Calendar (A)	Adopt Annual Work Plan for 2019 (A)
				Conflict of Interest Training (I)							Vice-Chair Election (A)
Regulation / Policies											
Compliance			State of OCERS (A)	Form 700 and OCERS Annual Disclosure Due (A)	Receive Financial Audit (I)					Status of Board Education Hours for 2018 (I)	

(A) = Action (I) = Information

I-4

Memorandum

DATE: July 3, 2018
TO: Members of the Board of Retirement
FROM: Steve Delaney, Chief Executive Officer
SUBJECT: QUIET PERIOD – NON-INVESTMENT CONTRACTS

Written Report

Background/Discussion

1. Quiet Period Policy Guidelines – Named Service Providers

The following guidelines established by the Quiet Period Policy, section 3.c, will govern a search process for Named Service Providers:

“All Board and Investment Committee Members, and staff not directly involved in the search process, shall refrain from communicating with Service Provider candidates regarding any product or service related to the search offered by the candidate throughout the quiet period,...”

2. Quiet Period Guidelines – Non-Named Service Providers

There are no policy guidelines regarding a quiet period for non-Named Service Providers. However, the following language is included in all distributed RFP’s:

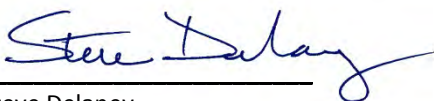
“From the date of issuance of this RFP until the selection of one or more respondents is completed and announced, respondents are not permitted to communicate with any OCERS staff member or Board Members regarding this procurement, except through the Point of Contact named herein. Respondents violating the communications prohibition may be disqualified at OCERS’ discretion. Respondents having current business with OCERS must limit their communications to the subject of such business.”

Distributed RFP’s

The RFP’s noted below are subject to the quiet period until such time as a contract(s) is finalized.

- We plan to distribute an RFP in July for Hearing Officer Services.

Submitted by:



Steve Delaney
Chief Executive Officer

I-5

Memorandum

DATE: July 16, 2018
TO: Members of the Board of Retirement
FROM: Gina M. Ratto, General Counsel
SUBJECT: LEGISLATIVE UPDATE

Written Report

Background/Discussion

The California Legislature reconvened on January 3, 2018 to commence the second year of the 2017 - 2018 legislative session. The 2018 Legislative Calendar is attached for the Board's information. **Note that this Legislative Update is current as of July 2, 2018, and the last day for policy committees to meet and report bills is July 6, 2018, and summer recess begins on that day.**

A comprehensive list and description of the pending bills that staff is monitoring is attached. Below is a brief summary of the bills that may be of greater interest to the Board. **Updates to the last report to the Board are indicated in bold and underlined text.**

SACRS Sponsored Bills

- **SB 1270 (Vidak)** The CERL authorizes the retirement boards of five specified counties to appoint assistant administrators and chief investment officers who, following appointment, are outside county charter, civil service, and merit system rules, except as specified. The CERL provides that these administrators and officers are employees of the county, as specified, while serving at the pleasure of the appointing boards, and that they may be dismissed without cause. This bill would apply these provisions to any county if the board of supervisors for that county, by resolution adopted by majority vote, makes those provisions applicable in the county. **(STATUS: Read 3rd time in Assembly and ordered to the Senate on 6/28/18.)**

Bills That Would Amend the CERL or Other Laws That Apply to OCERS

- **AB 283 (Cooper)** would amend the CERL to require, for purposes of determining permanent incapacity of certain peace officers, that those members be evaluated by the retirement system to determine if they can perform all of the usual and customary duties of a peace officer as described under Section 830 of the Penal Code. The bill would apply to members who file applications for disability on or after the effective date of the bill, except for cases on appeal at that time. **(STATUS: In Senate Committee on PE&R.)**
- **AB 1912 (Rodriguez) Amended June 20, 2018.** Under existing law, the Joint Exercise of Powers Act ("JPA Act"), the debts, liabilities and obligations of a joint powers authority ("JPA") are the debts, liabilities and

obligations of the parties to the JPA agreement “unless the agreement specifies otherwise.” This bill would amend this provision of the JPA Act to state that the parties to the JPA agreement are not permitted to “agree otherwise” with respect to the retirement liabilities of the JPA if the JPA contracts with a public retirement system (including a CERL system). In other words, the JPA agreement can’t relieve any of the parties to the agreement of their liability for the pension obligation. This provision of the bill is prospective.

AB 1912 would also add a section to the JPA Act to state that a JPA that contracts with a public retirement system and the members of the JPA – both current and former – would be **required, upon termination or a decision to dissolve or cease operations of the agency**, to mutually agree as to the apportionment of the JPA’s retirement obligations, **within 60 calendar days**, provided that the agreement equals the total retirement liability of the JPA. **If the member agencies are unable to mutually agree to the apportionment, the bill would require them to be jointly and severally liable for the retirement liability of the JPA.**

The bill also amends several other provisions of the PERL with respect to JPAs participating in the CalPERS plan and PERL provisions affecting termination of participation by JPAs in the CalPERS plan. **(STATUS: Re-referred to Senate Committee on JUD on 6/26/18.)**

- **AB 2076 (Rodriguez)** The CERL authorizes the Los Angeles County Employees Retirement Association (LACERA) to adjust retirement payments due to errors or omissions, as specified, permits a member permanently incapacitated for duty to retire for disability only if specified criteria are met, and requires the LACERA board to determine the effective date of retirement in those cases, as specified. This bill would authorize LACERA to correct a prior board decision determining the effective date of retirement for a member permanently incapacitated for disability that was made between January 1, 2013, and December 31, 2015, and was based upon an error of law existing at the time of the decision, as specified. The bill would authorize a member seeking correction under these provisions to file an application with the board no later than one year from the date these provision, become operative. **(STATUS: Read 2nd time in Senate and ordered to Consent Calendar on 6/27/18.)**
- **SB 1244 (Wieckowski)** The California Public Records Act (CPRA) requires state and local agencies to make their public records available for public inspection and to make copies available upon request and payment of a fee, unless the public records are exempt from disclosure. The CPRA makes specified records exempt from disclosure and provides that disclosure by a state or local agency of a public record that is otherwise exempt constitutes a waiver of the exemption.

Further, the CPRA requires a court to award court costs and reasonable attorney fees to the plaintiff if the plaintiff prevails in litigation filed pursuant to the CPRA, and requires the court to award court costs and reasonable attorney fees to the public agency if the court finds that the plaintiff’s case is clearly frivolous. This bill would replace “plaintiff” with “requester” in that provision. **(STATUS: Referred to Assembly Committee on JUD on 6/11/18.)**

Other Bills of Interest

- **AB 2571 (Fletcher)** This bill, if consistent with fiduciary responsibilities of a public investment fund as determined by its board, would require a public investment fund to require alternative investment vehicles to report at least annually certain information concerning specified hospitality employers relating to race and gender pay equity and sexual harassment. The bill would require a public investment fund to disclose the information provided to the fund at least once annually in a report presented at a meeting open to the public and would require the fund to provide the report upon request to a member of the Legislature. The bill would authorize the Department of Fair Employment and Housing to issue regulations for the implementation of these reporting requirements. The bill would define terms for purposes of the reporting provisions and repeal the reporting provisions on January 1, 2022.

Existing law provides that board members and other officers and employees of CalPERS and CalSTRS, and certain other entities, shall be held harmless and eligible for indemnification from the General Fund in connection with prescribed actions relating to prohibited investments. The bill would additionally provide that board members of any public pension or retirement system, other officers and employees, and investment managers under contract with the system would also be held harmless and eligible for indemnification from the General Fund in connection with actions taken pursuant to the bill. **(STATUS: Re-referred to Assembly PRSS Committee.)**

- **AB 3084 (Levine)** Existing law requires all state and local public retirement systems to submit audited financial statements to the State Controller at the earliest practicable opportunity within 6 months of the close of each fiscal year. This bill would require each governing body of a public agency that provides other postemployment benefits to, in an annual financial statement submitted to the Controller, in a form prescribed by the Controller, show that the public agency has met or if it has not met, detail why it has not met, and what the public agency is doing to meet, specified parameters related to the provision of other postemployment benefits, including (a) Making targeted prefunding contributions on a timely basis; (b) Depositing contributions in an irrevocable qualified trust for the exclusive benefit of plan members; (c) Investing contributions in excess of any pay-as-you-go amounts in a diversified investment portfolio with a defined investment policy; and (d) Ensuring that the discounted rate used to develop the actuarial account liability and normal cost recognizes the expected return of the entire portfolio. **(STATUS: Referred to Assembly Committee on APPR. Held under submission.)**
- **AB 3150 (Brough)** Existing law requires each state and local public pension or retirement system, on and after the 90th day following the completion of the annual audit of the system, to provide a concise annual report on the investments and earnings of the system, as specified, to any member who makes a request and pays a fee, if required, for the costs incurred in preparation and dissemination of that report. This bill would also require each state and local pension or retirement system to post a concise annual audit of the information described above on that system's Internet Web site no later than the 90th day following the audit's completion. By imposing new duties on local retirement systems, the bill would impose a state-mandated local program. **(STATUS: Referred to Assembly PRSS Committee.)**

Bills that apply to CalPERS and/or CalSTRS Only:

- **SB 656 (Moorlach & Lara)** This bill would authorize a judge who is not otherwise eligible to retire and who has attained 60 years of age with a minimum of 5 years of service, or who has accrued 20 or more years of service, to leave his or her monetary credits on deposit with the Judges' Retirement System II, to retire, and upon reaching retirement age, as specified, to receive a monthly retirement allowance, as provided. The bill would prescribe procedures to apply if the judge fails to elect within 30 days of separation and would authorize the board to charge an administrative fee, as specified, to a judge who elects to apply these provisions. The bill would specify the retirement allowance provided to a surviving spouse or other beneficiary, and would make other conforming changes in relation to these provisions. The bill would also provide, for the purposes of the Judges' Retirement System II, and for a judge first appointed or elected to office on or after January 1, 2019, that a surviving spouse is a spouse who was married to the judge continuously from the date of retirement until the judge's death. This bill contains other related provisions and other existing laws. (STATUS: Re-referred to Assembly Committee on APPR on 6/20/18.)
- **SB 964 (Allen)** This bill would, until January 1, 2035, require CalPERS and CalSTRS to analyze climate-related financial risk, as defined, to the extent the CalPERS and CalSTRS boards identify the risk as a material risk to the retirement system. The bill, by January 1, 2020, and every 3 years thereafter, would require each board to publicly report on the climate-related financial risk of its public market portfolio, including alignment of each system with a specified climate agreement and California climate policy goals and the exposure of the fund to long-term risks, as specified. The bill would provide that it does not require either board to take action unless the board determines in good faith that the action is consistent with its fiduciary responsibilities. (STATUS: Re-referred to Assembly Committee on APPR on 6/20/18.)
- **SB 1033 (Moorlach)** The PERL authorizes retirement systems to enter into agreements to provide certain reciprocal benefits to employees that are employed by other agencies that are parties to the agreement if the employees meet specified requirements, a practice commonly referred to as reciprocity. Reciprocity provides for the application of the final compensation paid by a subsequent employer to service provided to a prior employer. The PERL provides that a public agency that has agreed to reciprocity with CalPERS also has reciprocity with all other agencies that have entered into those agreements with CalPERS, among others. The PERL requires the CalPERS Board to ensure that a contracting agency that creates a significant increase in actuarial liability as a result of increased compensation paid to a nonrepresented employee bears the associated liability, except as specified, including a portion that would otherwise be borne by another contracting agency. The PERL requires the system actuary to assess an increase in liability, in this regard, to the employer that created it at the time the increase is determined and to make adjustments to that employer's contribution rates to account for the increased liability. This bill would require that an agency participating in CalPERS that increases the compensation of a member who was previously employed by a different agency to bear all actuarial liability for the action, if it results in an increased actuarial liability beyond what would have been reasonably expected for the member. The bill would require, in this context that the increased actuarial liability be in addition to reasonable compensation growth that is anticipated for a member

who works for an employer or multiple employers over an extended time. The bill would require, if multiple employers cause increased liability, that the liability be apportioned equitably among them. The bill would apply to an increase in actuarial liability, as specified, due to increased compensation paid to an employee on and after January 1, 2019. **(STATUS: Re-referred to Senate Committee on PE&R.)**

- **SB 1124 (Leyva)** Amended May 25, 2018. This bill would establish new procedures under the PERL for cases in which a member's benefits are erroneously calculated by the state or a contracting agency. The bill, with respect to a memorandum of understanding (MOU) entered into before January 1, 2019, would require the system, upon determining that compensation for an employee member covered by that MOU reported by the state or a contracting agency conflicts with specified law, to discontinue the reporting of the disallowed compensation and not to pay benefits based on the disallowed compensation, except as provided. The bill would require the contributions made on the disallowed compensation, for active members, to be credited against future contributions on behalf of the member. The bill would require CalPERS, with respect to retired members or beneficiaries whose final compensation at retirement was predicated upon disallowed compensation, to permanently adjust the benefit to reflect the inclusion of the disallowed compensation. The bill would also require that the retired member or beneficiary be permitted to retain the benefit level and not be required to repay that benefit, if, among other things, the member was unaware the compensation was disallowed when reported. The bill would require the applicable state or contracting agency to pay the cost associated with the new entitlement, as specified. This bill contains other related provisions and other existing laws. **(STATUS: Re-referred to Assembly Committee on APPR on 6/20/18.)**
- **SB 1166 (Pan)** Amended June 18, 2018. This bill would require that any CalPERS contracting agency that fails to make its required employer contributions on time, **and fails to cure the delinquency within 7 days**, to notify members and retired members who are current or past employees of that agency, or their beneficiaries, of the agency's delinquency by mail within 30 days of the payment having become delinquent. The bill would require the board to provide contact information in a specified format to contracting agencies for the purpose of providing notice to members and retired members who are current or past employees of that agency, or to their beneficiaries, and would prescribe a process in this regard. The bill would immunize contracting agencies for failure to provide notice if the contact information is incomplete or incorrect. **(STATUS: Re-referred to Assembly Committee on APPR on 6/20/18.)**
- **SB 1413 (Nielsen)** This bill would enact the California Employers' Pension Prefunding Trust Program and establish the California Employers' Pension Prefunding Trust Fund to allow state and local public agency employers that participate in CalPERS and provide a defined benefit pension plan to their employees to prefund their required pension contributions. The bill contains other related provisions. **(STATUS: Re-referred to Assembly Committee on APPR on 6/21/18.)**

Divestment Proposals (CalPERS and CalSTRS Only)

- **AB 1597 (Nazarian) Non-substantive amendment on 6/11/18.** This bill would prohibit the boards of administration of the CalPERS and CalSTRS from making additional or new investments, or renewing existing investments, of public employee retirement funds in an investment vehicle in Turkey that is issued by the government of Turkey or that is owned, controlled, or managed by the government of Turkey. The bill would require the boards to liquidate existing investments in Turkey in these types of investment vehicles within 6 months of the passage of a federal law imposing sanctions on Turkey. The bill would require these boards, within one year of the passage of a federal law imposing sanctions on Turkey, to make a specified report to the Legislature and the Governor regarding these actions. The bill would provide that its provisions do not require a board to take any action that the board determines in good faith is inconsistent with its constitutional fiduciary responsibilities to the retirement system. The bill would indemnify from the General Fund and hold harmless the present, former, and future board members, officers, and employees of, and investment managers under contract with, the boards, in connection with actions relating to these investments. (STATUS: **Re-referred to Senate Committee on JUD.**)

Attachments

Submitted by:



Gina M. Ratto
General Counsel

**2017—2018 LEGISLATIVE SESSION BILLS OF INTEREST
LEGISLATIVE UPDATE (July 16, 2018) – ATTACHMENT**

AB 283 (Cooper): The CERL currently provides that a member who is permanently incapacitated shall be retired for disability despite age if, among other conditions, the member’s incapacity is a result of injury or disease arising out of and in the course of the member’s appointment, and that employment contributes substantially to that incapacity or the member has completed five years of service and not waived retirement in respect to the particular incapacity or aggravation thereof, as specified. The bill would amend the CERL to require, for purposes of determining permanent incapacity of certain peace officers, that those members be evaluated to determine if they can perform all of the usual and customary duties of a peace officer as described under Section 830 of the Penal Code. The bill would apply to members who file applications for disability on or after the effective date of the bill , except for cases on appeal at that time. **(STATUS: In Senate Committee on PE&R.)**

AB 526 (Cooper) This bill would make the Sacramento County Employees Retirement System a district under the CERL. **(STATUS: In Senate Committee on PE&R.)**

AB 1597 (Nazarian) Non-substantive amendment on 6/11/18. This bill would prohibit the boards of administration of the CalPERS and CalSTRS from making additional or new investments, or renewing existing investments, of public employee retirement funds in an investment vehicle in Turkey that is issued by the government of Turkey or that is owned, controlled, or managed by the government of Turkey. The bill would require the boards to liquidate existing investments in Turkey in these types of investment vehicles within 6 months of the passage of a federal law imposing sanctions on Turkey. The bill would require these boards, within one year of the passage of a federal law imposing sanctions on Turkey, to make a specified report to the Legislature and the Governor regarding these actions. The bill would provide that its provisions do not require a board to take any action that the board determines in good faith is inconsistent with its constitutional fiduciary responsibilities to the retirement system. The bill would indemnify from the General Fund and hold harmless the present, former, and future board members, officers, and employees of, and investment managers under contract with, the boards, in connection with actions relating to these investments. **(STATUS: Re-referred to Senate Committee on JUD.)**

AB 1912 (Rodriguez) Amended June 20, 2018. Under the Joint Exercise of Powers Act (“JPA Act”), the debts, liabilities and obligations of a joint powers authority (“JPA”) are the debts, liabilities and obligations of the parties to the JPA agreement “unless the agreement specifies otherwise.” This bill would amend this provision of the JPA Act to state that the parties to the JPA agreement are not permitted to “agree otherwise” with respect to the retirement liabilities of the JPA if the JPA contracts with a public retirement system (including a CERL system). In other words, the JPA agreement can’t relieve any of the parties to the agreement of their liability for the pension obligation. This provision of the bill is prospective.

AB 1912 would also add a section to the JPA Act to state that a JPA that contracts with a public retirement system and the members of the JPA – both current and former – would be **required, upon termination or a decision to dissolve or cease operations of the JPA**, to mutually agree as to the apportionment of the JPA's retirement obligations, **within 60 calendar days**, provided that the agreement equals the total retirement liability of the JPA. **If the member agencies are unable to mutually agree to the apportionment, the bill would require them to be jointly and severally liable for the retirement liability of the JPA.**

The bill also amends several other provisions of the PERL with respect to JPAs participating in the CalPERS plan and PERL provisions affecting termination of participation by JPAs in the CalPERS plan. **(STATUS: Re-referred to Senate Committee on PE & R on 6/20/18.)**

AB 2076 (Rodriguez) The CERL authorizes a county retirement system in Los Angeles County to adjust retirement payments due to errors or omissions, as specified, and permits a member permanently incapacitated for duty to retire for disability only if specified criteria are met and requires the board to determine the effective date of retirement in those cases, as specified. This bill would authorize a county retirement system in Los Angeles County to correct a prior board decision determining the effective date of retirement for a member permanently incapacitated for disability that was made between January 1, 2013, and December 31, 2015, and was based upon an error of law existing at the time of the decision, as specified. The bill would authorize a member seeking correction under these provisions to file an application with the board no later than one year from the date these provision, become operative. **(STATUS: Read 2nd time in Senate and ordered to Consent Calendar on 6/27/18.)**

AB 2196 (Cooper) Amended 6/13/2018 (1) Under the PERL, members may make certain elections, including elections to purchase service credit for various types of public service, upon payment of additional contributions. Existing law permits a member who retires before paying off the entire amount for service credit to pay the balance due or total amount if no payroll deductions had been made prior to retirement by deductions from his or her retirement allowance equal to those authorized as payroll deductions, as specified. This bill would permit the member, survivor, or beneficiary, as an alternative, to elect to receive an allowance that is reduced by the actuarial equivalent of any balance remaining unpaid by the member. The bill would also provide that all elections taking effect on or after January 1, **2020**, including elections for normal contributions, arrears contributions, absences, or public service, would become due and payable at the time of member's retirement or preretirement death. The bill would additionally require the member, survivor, or beneficiary to have his or her allowance reduced by the actuarial equivalent of any balance remaining unpaid by the member, except as specified.

(2) Existing law permits a member of CalPERS who has elected to receive credit for service and who retires for disability, including a safety member who retires due to industrial disability, to elect to cancel the installments prospectively, in accordance with certain provisions. This bill would specify that for an election taking place on or after January 1, **2020**, the amount ~~of the election~~ remaining for normal contributions, arrears, contributions, absences, or public service would become due and payable at the time of the member's retirement or preretirement death. The bill would provide that in these circumstances the member, survivor, or beneficiary

would have his or her allowance reduced by the actuarial equivalent of any balance remaining unpaid by the member.

(3) Existing law specifies that an election by a member to receive credit for service under the PERL is effective only if accompanied by a lump-sum payment or an authorization for payments, in accordance with regulations of the CalPERS board; authorizes a member paying for credit for service in after-tax installments to suspend these payments for a period not to exceed 12 months, with payments automatically resuming at the end of the period or earlier, if requested by the member; and permits a member who retires during the suspension period to make, prior to retirement, a lump-sum payment for the recalculated balance due or cancel installment payments. This bill would permit a member, **on or after January 1, 2020**, as an alternative to these two options, to reduce his or her allowance by the actuarial equivalent of the recalculated balance remaining unpaid by the member.

(4) Under the provisions of the PERL governing the payment of additional service credit, a member's failure to elect to make a lump-sum payment of the election to cancel installment payments results in the resumption of installment payments as of the member's retirement date. This bill instead provide that, **for elections with an initial effective date** on or after January 1, **2020**, a member's failure to elect to make a lump-sum payment or cancel his or her installment payments would result in the member's allowance being reduced by the actuarial equivalent of the recalculated balance remaining unpaid.

(5) The PERL establishes retirement formulas, known as the Second Tier, modified First Tier, and First Tier, which are applicable to specified members of the retirement system, and a member who elects to be subject to Second Tier benefits is paid his or her accumulated contributions plus interest, subject to specified conditions. Effective January 1, 2000, a member who received service credit subject to Second Tier benefits may elect to become subject to First Tier benefits and contribution rates. That law requires a member who elects to become subject to First Tier benefits to deposit accumulated contributions the member withdrew while he or she was subject to Second Tier benefits, plus interest, as specified, and this deposit requirement may be satisfied by an actuarial equivalent reduction in the member's retirement allowance. This bill would instead specify that this deposit requirement may be satisfied by an election to reduce the member's allowance by the actuarial equivalent of any balance remaining unpaid by the number at the time of the member's retirement or preretirement death. The bill would also specify that, for a member who elects to receive First Tier credit on or after January 1, **2020**, any unpaid balance of that member would become due and payable at the time of the member's retirement or preretirement death, with the member, survivor, or beneficiary's allowance reduced by the actuarial equivalent of any balance remaining unpaid by the member. **(STATUS: Read 2nd time in Senate and ordered to Consent Calendar on 6/26/18.)**

AB 2571 (Fletcher) This bill, if consistent with fiduciary responsibilities of a public investment fund as determined by its board, would require a public investment fund to require alternative investment vehicles to report at least annually certain information concerning specified hospitality employers relating to race and gender pay equity and sexual harassment. The bill would require the fund to disclose the information it receives at least once annually in a report presented at a meeting open to the public and would require the fund to provide the report upon request to a member of the Legislature. The bill would authorize the Department of Fair

Employment and Housing to issue regulations for the implementation of these reporting requirements. The bill would define terms for purposes of the reporting provisions and repeal the reporting provisions on January 1, 2022.

Existing law provides that board members and other officers and employees of CalPERS and CalSTRS, and certain other entities, shall be held harmless and eligible for indemnification from the General Fund in connection with prescribed actions relating to prohibited investments. The bill would additionally provide that board members of any public pension or retirement system, other officers and employees, and investment managers under contract with the system shall also be held harmless and be eligible for indemnification from the General Fund in connection with actions taken pursuant to the bill. **(STATUS: Re-Referred to Assembly PRSS Committee.)**

AB 3084 (Levine) Existing law requires all state and local public retirement systems to submit audited financial statements to the State Controller at the earliest practicable opportunity within 6 months of the close of each fiscal year. This bill would require each governing body of a public agency that provides other postemployment benefits to, in an annual financial statement submitted to the Controller, in a form prescribed by the Controller, show that the public agency has met or if it has not met, detail why it has not met, and what the public agency is doing to meet, specified parameters related to the provision of other postemployment benefits, including (a) Making targeted prefunding contributions on a timely basis; (b) Depositing contributions in an irrevocable qualified trust for the exclusive benefit of plan members; (c) Investing contributions in excess of any pay-as-you-go amounts in a diversified investment portfolio with a defined investment policy; and (d) Ensuring that the discounted rate used to develop the actuarial account liability and normal cost recognizes the expected return of the entire portfolio. **(STATUS: Referred to Assembly Committee on APPR. Held under submission.)**

AB 3150 (Brough) Existing law requires each state and local public pension or retirement system, on and after the 90th day following the completion of the annual audit of the system, to provide a concise annual report on the investments and earnings of the system, as specified, to any member who makes a request and pays a fee, if required, for the costs incurred in preparation and dissemination of that report. This bill would also require each state and local pension or retirement system to post a concise annual audit of the information described above on that system's Internet Web site no later than the 90th day following the audit's completion. By imposing new duties on local retirement systems, the bill would impose a state-mandated local program. This bill contains other related provisions and other existing laws. **(STATUS: Referred to Assembly PRSS Committee.)**

SB 656. (Moorlach & Lara) This bill would authorize a judge who is not otherwise eligible to retire and who has attained 60 years of age with a minimum of 5 years of service, or who has accrued 20 or more years of service, to leave his or her monetary credits on deposit with the Judges' Retirement System II, to retire, and upon reaching retirement age, as specified, to receive a monthly retirement allowance, as provided. The bill would prescribe procedures to apply if the judge fails to elect within 30 days of separation and would authorize the board to charge an administrative fee, as specified, to a judge who elects to apply these provisions. The bill would specify the retirement allowance provided to a surviving spouse or other beneficiary, and would make other conforming changes in relation to these provisions. The bill would also provide, for the purposes of the Judges' Retirement System II, and for a judge first appointed or elected to office on or after January 1, 2019, that a surviving spouse is a spouse who was married to the judge continuously from the date of retirement

until the judge's death. This bill contains other related provisions and other existing laws. (STATUS: Re-referred to Assembly Committee on APPR on 6/20/18.)

SB 964 (Allen) This bill would, until January 1, 2035, require CalPERS and CalSTRS to analyze climate-related financial risk, as defined, to the extent the CalPERS and CalSTRS boards identify the risk as a material risk to the retirement system. The bill, by January 1, 2020, and every 3 years thereafter, would require each board to publicly report on the climate-related financial risk of its public market portfolio, including alignment of each system with a specified climate agreement and California climate policy goals and the exposure of the fund to long-term risks, as specified. The bill would provide that it does not require either board to take action unless the board determines in good faith that the action is consistent with its fiduciary responsibilities. **(STATUS: Re-referred to Assembly Committee on APPR on 6/20/18.)**

SB 1033 (Moorlach) The PERL authorizes retirement systems to enter into agreements to provide certain reciprocal benefits to employees that are employed by other agencies that are parties to the agreement if the employees meet specified requirements, a practice commonly referred to as reciprocity. Reciprocity provides for the application of the final compensation paid by a subsequent employer to service provided to a prior employer. The PERL provides that a public agency that has agreed to reciprocity with CalPERS also has reciprocity with all other agencies that have entered into those agreements with CalPERS, among others. The PERL requires the CalPERS Board to ensure that a contracting agency that creates a significant increase in actuarial liability as a result of increased compensation paid to a nonrepresented employee bears the associated liability, except as specified, including a portion that would otherwise be borne by another contracting agency. The PERL requires the system actuary to assess an increase in liability, in this regard, to the employer that created it at the time the increase is determined and to make adjustments to that employer's contribution rates to account for the increased liability. This bill would require that an agency participating in CalPERS that increases the compensation of a member who was previously employed by a different agency to bear all actuarial liability for the action, if it results in an increased actuarial liability beyond what would have been reasonably expected for the member. The bill would require, in this context that the increased actuarial liability be in addition to reasonable compensation growth that is anticipated for a member who works for an employer or multiple employers over an extended time. The bill would require, if multiple employers cause increased liability, that the liability be apportioned equitably among them. The bill would apply to an increase in actuarial liability, as specified, due to increased compensation paid to an employee on and after January 1, 2019. **(STATUS: Re-referred to Senate Committee on PE&R.)**

SB 1060, 1061, 1062 (Mendoza) The PERL requires certain public employers to contribute moneys to CalPERS. Existing law prohibits the state, school employers, and contracting agencies, as defined, from refusing to pay the employers' contribution as required by the PERL. SB 1060 would require a contracting agency that fails to make a required contribution to CalPERS to notify members of the delinquency within 30 days, as specified. The State Teachers' Retirement Law establishes the Defined Benefit Program of the CalSTRS. The law requires certain employers, as defined, to contribute moneys to the CalSTRS. SB 1061 would require an employer that fails to make a required contribution to CalSTRS to notify members of the delinquency within 30 days, as specified. SB

1062 would require certain employers that fail to make a required employer contribution to CalSTRS or CalPERS to notify members of the delinquency within 30 days, as specified. **(STATUS: In Senate; pending referral.)**

SB 1124 (Leyva) This bill would establish new procedures under the PERL for cases in which a member's benefits are erroneously calculated by the state or a contracting agency. The bill, with respect to a memorandum of understanding (MOU) entered into before January 1, 2019, would require the system, upon determining that compensation for an employee member covered by that MOU reported by the state or a contracting agency conflicts with specified law, to discontinue the reporting of the disallowed compensation and not to pay benefits based on the disallowed compensation, except as provided. The bill would require the contributions made on the disallowed compensation, for active members, to be credited against future contributions on behalf of the member. The bill would require CalPERS, with respect to retired members or beneficiaries whose final compensation at retirement was predicated upon disallowed compensation, to permanently adjust the benefit to reflect the inclusion of the disallowed compensation. The bill would also require that the retired member or beneficiary be permitted to retain the benefit level and not be required to repay that benefit, if, among other things, the member was unaware the compensation was disallowed when reported. The bill would require the applicable state or contracting agency to pay the cost associated with the new entitlement, as specified. This bill contains other related provisions and other existing laws. **(STATUS: Re-referred to Assembly Committee on APPR on 6/20/18.)**

SB 1166 (Pan) Amended June 18, 2018. This bill would require that any CalPERS contracting agency that fails to make its required employer contributions on time, **and fails to cure the delinquency within 7 days**, to notify members and retired members who are current or past employees of that agency, or their beneficiaries, of the agency's delinquency by mail within 30 days of the payment having become delinquent. The bill would require the board to provide contact information in a specified format to contracting agencies for the purpose of providing notice to members and retired members who are current or past employees of that agency, or to their beneficiaries, and would prescribe a process in this regard. The bill would immunize contracting agencies for failure to provide notice if the contact information is incomplete or incorrect. **(STATUS: Re-referred to Assembly Committee on APPR on 6/20/18.)**

SB 1244 (Wieckowski) The California Public Records Act (CPRA) requires state and local agencies to make their public records available for public inspection and to make copies available upon request and payment of a fee, unless the public records are exempt from disclosure. The CPRA makes specified records exempt from disclosure and provides that disclosure by a state or local agency of a public record that is otherwise exempt constitutes a waiver of the exemption.

Further, the CPRA requires a court to award court costs and reasonable attorney fees to the plaintiff if the plaintiff prevails in litigation filed pursuant to the CPRA, and requires the court to award court costs and reasonable attorney fees to the public agency if the court finds that the plaintiff's case is clearly frivolous. This bill would replace "plaintiff" with "requester" in that provision. **(STATUS: Referred to Assembly Committee on JUD on 6/11/18.)**

SB 1270 (Vidak) The CERL authorizes the retirement boards of five specified counties to appoint assistant administrators and chief investment officers who, following appointment, are outside county charter, civil service, and merit system rules, except as specified. The CERL provides that these administrators and officers are employees of the county, as specified, while serving at the pleasure of the appointing boards, and that they may be dismissed without cause. This bill would apply these provisions to any county if the board of supervisors for that county, by resolution adopted by majority vote, makes those provisions applicable in the county.

(STATUS: Read 3rd time in Assembly and ordered to Senate on 6/28/18.)

SB 1413 (Nielsen) This bill would enact the California Employers' Pension Prefunding Trust Program and establish the California Employers' Pension Prefunding Trust Fund to allow state and local public agency employers that participate in the CalPERS plan that provide a defined benefit pension plan to their employees to prefund their required pension contributions. The bill contains other related provisions. **(STATUS: Re-referred to Assembly Committee on APPR on 6/21/18.)**

2018 TENTATIVE LEGISLATIVE CALENDAR
 COMPILED BY THE OFFICE OF THE SECRETARY OF THE SENATE
 Revised 11/16/16

DEADLINES

JANUARY						
S	M	T	W	TH	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

- Jan. 1** Statutes take effect (Art. IV, Sec. 8(c)).
- Jan. 3** **Legislature Reconvenes** (J.R. 51(a)(4)).
- Jan. 10** Budget must be submitted by Governor (Art. IV, Sec. 12(a)).
- Jan. 12** Last day for **policy committees** to hear and report to **fiscal committees** fiscal bills introduced in their house in the **odd-numbered year** (J.R. 61(b)(1)).
- Jan. 15** Martin Luther King, Jr. Day.
- Jan. 19** Last day for any committee to hear and report to the **floor** bills introduced in that house in the odd-numbered year (J.R. 61(b)(2)). Last day to **submit bill requests** to the Office of Legislative Counsel.
- Jan. 31** Last day for each house to **pass bills introduced** in that house in the odd-numbered year (J.R. 61(b)(3), (Art. IV, Sec. 10(c)).

FEBRUARY						
S	M	T	W	TH	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

- Feb. 16** Last day for bills to be **introduced** (J.R. 61(b)(4), (J.R. 54(a)).
- Feb. 19** Presidents' Day.

MARCH						
S	M	T	W	TH	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

- Mar. 22** **Spring Recess** begins upon adjournment of this day's session (J.R. 51(b)(1)).
- Mar. 30** Cesar Chavez Day observed.

APRIL						
S	M	T	W	TH	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

- Apr. 2** **Legislature Reconvenes** from Spring Recess (J.R. 51(b)(1)).
- Apr. 27** Last day for **policy committees** to hear and report to **fiscal committees** fiscal bills introduced in their house (J.R. 61(b)(5)).

MAY						
S	M	T	W	TH	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

- May 11** Last day for **policy committees** to hear and report to the floor **nonfiscal** bills introduced in their house (J.R. 61(b)(6)).
- May 18** Last day for **policy committees** to meet prior to June 4 (J.R. 61(b)(7)).
- May 25** Last day for **fiscal committees** to hear and report to the floor bills introduced in their house (J.R. 61(b)(8)). Last day for **fiscal committees** to meet prior to June 4 (J.R. 61(b)(9)).
- May 28** Memorial Day.
- May 29- June 1 Floor Session only.** No committees, other than conference or Rules committees, may meet for any purpose (J.R. 61 (b)(10)).

*Holiday schedule subject to Senate Rules committee approval

2018 TENTATIVE LEGISLATIVE CALENDAR
 COMPILED BY THE OFFICE OF THE SECRETARY OF THE SENATE
 Revised 11/16/16

JUNE						
S	M	T	W	TH	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

- June 1** Last day for each **house to pass bills** introduced in that house (J.R. 61(b)(11)).
- June 4** Committee meetings may resume (J.R. 61(b)(12)).
- June 15** Budget Bill must be passed by **midnight** (Art. IV, Sec. 12(c)(3)).
- June 28** Last day for a legislative measure to qualify for the Nov. 6 General Election ballot (Elections code Sec. 9040).
- June 29** Last day for **policy committees** to hear and report **fiscal bills** to fiscal committees (J.R. 61(b)(13)).

JULY						
S	M	T	W	TH	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

- July 4** Independence Day.
- July 6** Last day for **policy committees** to meet and report bills (J.R. 61(b)(14)). **Summer Recess** begins upon adjournment provided Budget Bill has been passed (J.R. 51(b)(2)).

AUGUST						
S	M	T	W	TH	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- Aug. 6** **Legislature Reconvenes** (J.R. 51(b)(2)).
- Aug. 17** Last day for **fiscal committees** to meet and report bills (J.R. 61(b)(15)).
- Aug. 20-31** **Floor Session only.** No committees, other than Conference and Rules Committees, may meet for any purpose (J.R. 61(b)(16)).
- Aug. 24** Last day to **amend** on the floor (J.R. 61(b)(17)).
- Aug. 31** Last day for **each house to pass bills**, except bills that take effect immediately or bills in Extraordinary Session (Art. IV, Sec. 10(c), (J.R. 61(b)(18)). **Final Recess** begins upon adjournment (J.R. 51(b)(3)).

*Holiday schedule subject to Senate Rules committee approval

IMPORTANT DATES OCCURRING DURING INTERIM STUDY RECESS

2018

- Sept. 30 Last day for Governor to sign or veto bills passed by the Legislature before Sept. 1 and in the Governor's possession on or after Sept. 1 (Art. IV, Sec. 10(b)(2)).
- Nov. 6 General Election
- Nov. 30 Adjournment *Sine Die* at midnight (Art. IV, Sec. 3(a)).
- Dec. 3 12 Noon convening of the 2019-20 Regular Session (Art. IV, Sec. 3(a)).

2019

- Jan. 1 Statutes take effect (Art. IV, Sec. 8(c)).

I-6



Memorandum

DATE: July 16, 2018
TO: Members of the Board of Retirement
FROM: Steve Delaney, Chief Executive Officer
SUBJECT: 2018 STRATEGIC PLANNING WORKSHOP – PROPOSED AGENDA TOPICS

Written Report

Background/Discussion

Normally at this July meeting, I would present to the Board a final proposed Strategic Planning Workshop agenda for the sessions to be held in September 2018. Unfortunately a number of my planned speakers are likely unavailable, and I am still working behind the scenes on alternative topics and speakers. My special thanks to both Mr. Emkin and Mr. McCourt who each provided me a number of possible alternative speakers if needed.

There is still time for Trustees to let me know of interest they may have in a particular area of study or concept. I will return to the August meeting of the Board with a proposed final agenda.

Submitted by:

A handwritten signature in blue ink that reads "Steve Delaney".

Steve Delaney
Chief Executive Officer

I-7

Memorandum


DATE: July 5, 2018
TO: Members of the Board of Retirement
FROM: Tracy Bowman, Director of Finance
SUBJECT: **SECOND QUARTER 2018 EDUCATION AND TRAVEL EXPENSE REPORT**

Written Report

Background/Discussion

In accordance with OCERS' Travel Policy, the Chief Executive Officer is required to submit a quarterly report to the Board of Retirement on conference attendance and related expenditures incurred by OCERS' Board Members and staff. Attached is the Second Quarter 2018 Education and Travel Expense Report that includes all expenses submitted through July 5, 2018.

Submitted by:

 **OCERS T.B. - Approved**

Tracy Bowman
Director of Finance

EDUCATION AND TRAVEL EXPENSE REPORT
Second QUARTER 2018
Submitted Through July 5, 2018**

Name	Trip OR Class Dates	Trip Name	Destination	Trip Type	Mileage	Reg. Fee	Meals	Airfare	Hotel	Trans.	Misc.	2018 YTD Total	2017 Total*
BALDWIN	1/22/18	SACRS Committee Meeting	Sacramento, CA	Meeting	-	-	23.23	372.97	-	37.07	-	433.27	
	1/24-1/26/18	2018 IREI Visions, Insights & Perspectives (VIP) Americas (1)	Dana Point, CA	Conference	-	-	28.29	-	576.40	192.34	-	797.03	
	2/2/18	CALAPRS Trustees' Round Table	Los Angeles, CA	Conference	-	125.00	-	-	-	-	-	125.00	
	2/24-2/28/18	NASRA/NIRS Winter System Round Table/Legislative Meeting	Washington, D.C.	Conference/Meeting	-	650.00	179.87	772.60	1,232.25	72.51	-	2,907.23	
	3/3-3/6/18	CALAPRS General Assembly 2018	Indian Wells, CA	Conference	-	100.00	-	-	773.88	-	-	873.88	
	4/25-4/27/18	Institutional Investor-Public Funds Round Table	Beverly Hills, CA	Conference	-	-	31.21	-	506.10	225.25	-	762.56	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	156.43	-	276.43	
	5/30-6/1/18	US SIF Investing for a Sustainable World	Washington, D.C.	Conference	-	725.00	172.41	698.60	891.99	106.26	-	2,594.26	
	6/8/18	CALAPRS Trustees' Round Table	Oakland, CA	Conference	-	125.00	-	200.96	217.70	-	-	543.66	
8/4-8/8/18	NASRA Annual Conference	Coronado, CA	Conference	-	1,130.00	-	-	1,306.84	-	-	2,436.84		
Sub Total					-	2,975.00	435.01	2,045.13	5,505.16	789.86	-	11,750.16	19,856.95
BALL	1/17/18	The Pacific Club-Scott Malpass Presentation	Newport Beach, CA	Conference	-	25.00	-	-	-	-	-	25.00	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	-	-	120.00	
	7/30-8/1/18	IFEBP Alternative Investment Strategies	San Francisco, CA	Training	-	3,995.00	-	201.96	-	-	-	4,196.96	
Sub Total					-	4,140.00	-	201.96	-	-	4,341.96	10,266.16	
DEWANE					-	-	-	-	-	-	-	-	
Sub Total					-	-	-	-	-	-	-	-	2,698.26
ELEY	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	70.80	-	190.80	
Sub Total					-	120.00	-	-	-	70.80	-	190.80	5,208.28
FREIDENRICH	4/23-4/26/18	IFEBP Portfolio Concepts & Management	Philadelphia, PA	Training	-	5,295.00	8.62	343.61	1,056.80	78.59	-	6,782.62	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	-	-	120.00	
	7/30-8/1/18	IFEBP Alternative Investment Strategies	San Francisco, CA	Training	-	3,995.00	-	-	-	-	-	3,995.00	
Sub Total					-	9,410.00	8.62	343.61	1,056.80	78.59	-	10,897.62	1,269.42
GILBERT	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	29.00	120.00	-	-	-	32.00	-	181.00	
Sub Total					29.00	120.00	-	-	-	32.00	-	181.00	2,651.12
HILTON	1/28-1/30/18	NAPO Pension & Benefits Seminar	Las Vegas, NV	Conference	13.90	595.00	92.25	133.96	393.22	72.50	-	1,300.83	
	2/24-2/28/18	NASRA/NIRS Winter System Round Table	Washington, D.C.	Conference	14.39	650.00	101.51	403.01	933.80	107.88	-	2,210.59	
	3/3-3/6/18	CALAPRS General Assembly 2018	Indian Wells, CA	Conference	101.48	100.00	18.32	-	788.88	-	-	1,008.68	
	4/10-4/11/18	The Pension Bridge Annual 2018	San Francisco, CA	Conference	21.58	-	-	147.96	734.96	111.02	-	1,015.52	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	75.00	-	195.00	
	6/8/18	CALAPRS Trustees' Round Table	Oakland, CA	Conference	-	125.00	-	262.96	217.70	26.00	-	631.66	
	7/23-7/25/18	2018 Pension Bridge	Chicago, IL	Conference	-	-	-	399.96	-	-	-	399.96	
Sub Total					151.35	1,590.00	212.08	1,347.85	3,068.56	392.40	-	6,762.24	12,533.98
PACKARD	1/17/18	The Pacific Club-Scott Malpass Presentation	Newport Beach, CA	Conference	-	25.00	-	-	-	-	-	25.00	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	-	-	120.00	
	7/30-8/1/18	IFEBP Alternative Investment Strategies	San Francisco, CA	Conference	-	3,995.00	-	-	-	-	-	3,995.00	
Sub Total					-	4,140.00	-	-	-	-	4,140.00	11,431.68	
PREVATT	2/24-2/28/18	NASRA/NIRS Winter System Round Table/Legislative Meeting	Washington, D.C.	Conference/Meeting	24.74	650.00	169.69	720.30	1,142.26	102.70	25.00	2,834.69	
	3/3-3/6/18	CALAPRS General Assembly 2018	Indian Wells, CA	Conference	141.70	100.00	46.90	-	773.88	-	15.00	1,077.48	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	80.80	-	200.80	
	5/22-5/23/18	Legislative Meetings	Sacramento, CA	Meeting	-	-	90.24	131.41	276.19	85.98	-	583.82	
	7/30-8/1/18	IFEBP Alternative Investment Strategies	San Francisco, CA	Training	-	3,995.00	-	-	-	-	-	3,995.00	
	8/4-8/8/18	NASRA Annual Conference	Coronado, CA	Conference	-	1,130.00	-	-	1,193.48	-	-	2,323.48	
Sub Total					166.44	5,995.00	306.83	851.71	3,385.81	269.48	40.00	11,015.27	17,580.39
BOARD Total					346.79	28,490.00	962.54	4,790.26	13,016.33	1,633.13	40.00	49,279.05	83,496.24
DELANEY	1/17/18	The Pacific Club-Scott Malpass Presentation	Newport Beach, CA	Conference	-	25.00	-	-	-	-	-	25.00	
	1/28-1/30/18	NAPO Pension & Benefits Seminar	Las Vegas, NV	Conference	45.67	595.00	75.49	79.61	383.22	144.41	-	1,323.40	
	2/24-2/28/18	NASRA/NIRS Winter System Round Table/Legislative Meeting	Washington, D.C.	Conference/Meeting	45.67	650.00	142.42	438.59	933.80	156.63	-	2,367.11	
	3/3-3/6/18	CALAPRS General Assembly 2018	Indian Wells, CA	Conference	-	100.00	-	-	-	-	-	100.00	
	4/10-4/11/18	The Pension Bridge Annual 2018	San Francisco, CA	Conference	-	-	78.30	216.00	471.74	131.52	-	897.56	
	4/25-4/27/18	Institutional Investor-Public Funds Round Table	Los Angeles, CA	Conference	36.68	-	-	-	237.62	45.00	-	319.30	
	5/7-5/10/18	CEM Global Pension Administration Conference	Indianapolis, IN	Conference	44.80	-	21.75	371.30	487.89	89.35	-	1,015.09	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	108.35	-	228.35	
	5/22-5/23/18	Legislative Meetings	Sacramento, CA	Meeting	-	-	83.08	246.96	276.19	60.17	-	666.40	
	6/22/18	CALAPRS Administrators Round Table	Oakland, CA	Conference	-	-	-	227.77	126.16	-	-	353.93	
	9/26-9/28	CALAPRS Administrators Institute	Carmel, CA	Conference	-	-	-	234.59	-	164.46	-	399.05	
	10/28-10/31/18	NCPERS Public Safety Conference	Las Vegas, NV	Conference	-	-	-	-	655.83	-	-	655.83	
Sub Total					172.82	1,490.00	401.04	1,814.82	3,572.45	899.89	-	8,351.02	15,226.80
JENIKE	3/3-3/6/18	CALAPRS General Assembly 2018	Indian Wells, CA	Conference	82.73	100.00	-	-	515.92	-	-	698.65	
	3/9/18	Pension Forum	Newport Beach, CA	Conference	14.28	25.00	-	-	-	14.59	-	53.87	
	4/14-4/18/18	CRCEA Spring Conference	Santa Barbara, CA	Conference	146.61	75.00	136.41	-	648.21	15.00	-	1,021.23	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	12.42	120.00	-	-	-	37.60	-	170.02	
	5/20-5/23/18	2018 NIPA Annual Forum & Expo	Las Vegas, NV	Conference	11.07	1,225.00	60.12	525.96	795.93	100.96	-	2,719.04	
	6/7/18	CALAPRS Communications Round Table	Oakland, CA	Conference	-	125.00	-	111.48	217.69	-	-	454.17	
	6/8/18	CALAPRS Benefits Round Table	Oakland, CA	Conference	-	125.00	-	111.48	217.70	-	-	454.18	
	7/23-7/24/18	IFEBP Communication & Technology Institute	Portland, OR	Conference	-	1,225.00	-	-	350.00	-	-	1,575.00	
Sub Total					267.11	3,020.00	196.53	748.92	2,745.45	168.15	-	7,146.16	12,746.13

EDUCATION AND TRAVEL EXPENSE REPORT
Second QUARTER 2018
Submitted Through July 5, 2018**

Name	Trip OR Class Dates	Trip Name	Destination	Trip Type	Mileage	Reg. Fee	Meals	Airfare	Hotel	Trans.	Misc.	2018 YTD Total	2017 Total*
SHOTT	2/25-2/27/18	2018 Gartner CIO Leadership Forum - West	Phoenix, AZ	Training	-	2,700.00	106.62	251.84	1,068.52	173.03	-	4,300.01	
	5/6-5/9/18	GFOA Annual Conference (3)	St. Louis, MO	Conference	-	-	-	387.00	-	-	-	387.00	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	44.80	-	164.80	
	10/22-10/26/18	Wharton School - Investment Strategies & Portfolio Management	Philadelphia, PA	Training	-	10,750.00	-	998.72	-	-	-	11,748.72	
Sub Total					-	13,570.00	106.62	1,637.56	1,068.52	217.83	-	16,600.53	8,032.84
EXECUTIVE Total					439.93	18,080.00	704.19	4,201.30	7,386.42	1,285.87	-	32,097.71	36,005.77
BEESON	1/8-1/10/18	Illiquid Investments RFP	San Diego, CA/Cleveland, OH	Due Diligence	-	-	45.60	333.60	140.50	58.26	-	577.96	
	4/23-4/27/18	BlackRock Investor Conference	New York, NY	Due Diligence/Conference	-	-	58.03	600.00	1,372.36	144.70	-	2,175.09	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	10.00	120.00	-	-	-	18.80	-	148.80	
Sub Total				10.00	120.00	103.63	933.60	1,512.86	221.76	-	2,901.85	3,870.92	
CHARY	1/8-1/10/18	Illiquid Investments RFP	San Diego, CA/Portland, OR/Cleveland, OH	Due Diligence	-	-	81.46	639.80	350.97	69.01	-	1,141.24	
	3/4-3/8/18	AQR, JP Morgan, Morgan Stanley, & Cross Ocean	New York, NY/Greenwich, CT	Due Diligence	-	-	35.89	644.60	-	281.92	-	962.41	
	4/29-5/2/18	Milken Institute 2018 Global Conference	Beverly Hills, CA	Conference	48.83	-	-	-	933.60	121.03	-	1,103.46	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	-	-	120.00	
Sub Total				48.83	120.00	117.35	1,284.40	1,284.57	471.96	-	3,327.11	446.60	
CLEBERG	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	-	-	120.00	
Sub Total					-	120.00	-	-	-	-	-	120.00	493.71
CUARESMA	1/8/18	Illiquid Investments RFP	San Diego, CA	Due Diligence	85.02	-	-	-	-	-	-	85.02	
	3/20/18	PIMCO Client Conference	Newport Beach, CA	Conference	13.41	-	-	-	-	-	-	13.41	
	4/16/18	TorreyCove	San Diego, CA	Meeting	-	-	-	40.00	-	48.61	-	88.61	
	4/25-4/27/18	Criterion, Ascend, GS, Pantheon, AEW, & Jamestown	San Francisco, CA	Due Diligence/Conference/M	-	-	38.70	276.96	-	118.18	-	433.84	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	18.75	-	138.75	
Sub Total				98.43	120.00	38.70	316.96	-	185.54	-	-	759.63	40.50
MURPHY	1/8-1/10/18	Illiquid Investments RFP	San Diego, CA/Portland, OR/Cleveland, OH	Due Diligence	-	-	90.63	513.80	340.60	184.72	-	1,129.75	
	3/5-3/9/18	Thoma Bravo Annual Meeting/Women's PE Summit	San Francisco, CA/Half Moon Bay, CA	Due Diligence/Conference	-	-	113.30	228.60	1,466.03	386.38	-	2,194.31	
	3/14-3/15/18	Oaktree Conference 2018	Beverly Hills, CA	Conference	-	-	-	-	832.40	84.00	-	916.40	
	4/19/18	Tennenbaum Capital Investor Day	Los Angeles, CA	Due Diligence	58.10	-	-	-	-	-	-	58.10	
	4/25-4/27/18	Institutional Investor-Public Funds Round Table	Beverly Hills, CA	Conference	-	-	-	-	737.52	84.00	-	821.52	
	4/29-5/2/18	Milken Institute 2018 Global Conference	Beverly Hills, CA	Conference	54.88	-	28.42	-	1,015.24	248.63	-	1,347.17	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	18.80	-	138.80	
	6/5/18	Manager Research-Private Equity	San Jose, CA/ San Francisco, CA	Due Diligence	-	-	-	202.40	-	20.00	-	222.40	
6/28/18	Institutional Investor's Hedge Funds Industry Awards	New York, NY	Due Diligence	-	-	-	618.40	-	-	-	618.40		
Sub Total				112.98	120.00	232.35	1,563.20	4,391.79	1,026.53	-	-	7,446.85	4,750.59
TURAIGI	4/9/18	Kayne Anderson	Los Angeles, CA	Due Diligence	53.41	-	-	-	-	-	-	53.41	
	4/16/18	TorreyCove	San Diego, CA	Meeting	82.51	-	-	-	-	-	-	82.51	
	4/25-4/27/18	Institutional Investor-Public Funds Round Table	Beverly Hills, CA	Conference	56.14	-	-	-	759.15	126.00	-	941.29	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	10.00	120.00	-	-	-	31.00	-	161.00	
	6/5/18	Manager Research-Private Equity	San Jose, CA/ San Francisco, CA	Due Diligence	6.21	-	-	202.40	-	20.00	-	228.61	
Sub Total				208.27	120.00	-	202.40	759.15	177.00	-	-	1,466.82	-
WALANDER-SARKIN	1/8-1/10/18	Illiquid Investments RFP	San Diego, CA/Portland, OR/Cleveland, OH	Due Diligence	-	-	86.00	639.80	335.36	129.00	-	1,190.16	
	3/5-3/9/18	Thoma Bravo Annual Meeting/Women's PE Summit	San Francisco, CA/Half Moon Bay, CA	Due Diligence/Conference	15.59	-	117.12	228.60	1,512.59	168.56	-	2,042.46	
	4/9/18	Kayne Anderson	Los Angeles, CA	Due Diligence	57.23	-	-	-	-	3.00	-	60.23	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	16.35	120.00	-	-	-	37.55	-	173.90	
	5/24/18	Thoma Bravo	San Francisco, CA	Due Diligence	-	-	-	367.17	-	208.85	-	576.02	
	6/5/18	Manager Research-Private Equity	San Jose, CA/ San Francisco, CA	Due Diligence	-	-	-	202.40	-	164.03	-	366.43	
Sub Total				89.17	120.00	203.12	1,437.97	1,847.95	710.99	-	-	4,409.20	639.48
INVESTMENTS Total				567.68	840.00	695.15	5,738.53	9,796.32	2,793.78	-	-	20,431.46	10,241.80
KINSLER	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	37.60	-	157.60	
	6/7/18	CALAPRS Communications Round Table	Oakland, CA	Conference	-	125.00	22.57	242.96	217.70	32.00	-	640.23	
	7/23-7/24/18	IFEBP Communication & Technology Institute	Portland, OR	Conference	-	1,225.00	-	299.10	350.00	-	-	1,874.10	
Sub Total				-	1,470.00	22.57	542.06	567.70	69.60	-	2,671.93	1,213.73	
RITCHEY	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	37.60	-	157.60	
	6/7/18	CALAPRS Communications Round Table	Oakland, CA	Conference	10.00	125.00	32.31	262.96	217.70	32.00	-	679.97	
Sub Total				10.00	245.00	32.31	262.96	217.70	69.60	-	-	837.57	407.16
COMMUNICATIONS Total					10.00	1,715.00	54.88	805.02	785.40	139.20	-	3,509.50	1,620.89

EDUCATION AND TRAVEL EXPENSE REPORT
Second QUARTER 2018
Submitted Through July 5, 2018**

Name	Trip OR Class Dates	Trip Name	Destination	Trip Type	Mileage	Reg. Fee	Meals	Airfare	Hotel	Trans.	Misc.	2018 YTD Total	2017 Total*
FINK	2/2/18	CALAPRS Attorneys' Round Table	Los Angeles, CA	Conference	60.93	-	-	-	-	21.00	-	81.93	
	2/21-2/23/18	NAPPA 2018 Winter Seminar	Tempe, AZ	Conference	-	485.00	5.42	329.98	1,002.67	55.20	-	1,878.27	
	3/1/18	OCBA The Judges Series	Santa Ana, CA	Conference	-	25.00	-	-	-	6.00	-	31.00	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	10.00	-	-	-	-	18.80	-	28.80	
Sub Total					70.93	510.00	5.42	329.98	1,002.67	101.00	-	2,020.00	3,786.36
FLETCHER	2/2/18	CALAPRS Attorneys' Round Table	Los Angeles, CA	Conference	-	125.00	-	-	-	-	-	125.00	
Sub Total					-	125.00	-	-	-	-	-	125.00	-
MATSUO	2/2/18	CALAPRS Attorneys' Round Table	Los Angeles, CA	Conference	-	125.00	-	-	-	-	-	125.00	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	-	-	120.00	
Sub Total					-	245.00	-	-	-	-	-	245.00	2,684.53
RATTO	2/21-2/23/18	NAPPA 2018 Winter Seminar	Tempe, AZ	Conference	-	555.00	41.72	350.61	759.17	32.14	-	1,738.64	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	16.57	120.00	-	-	-	44.80	-	181.37	
	6/26-6/29/18	NAPPA 2018 Legal Education Conference	Savannah, GA	Conference	-	895.00	-	913.91	-	-	-	1,808.91	
Sub Total				16.57	1,570.00	41.72	1,264.52	759.17	76.94	-	3,728.92	8,126.92	
SINGLETON	5/4/18	CALAPRS Overview Course in Retirement	Oakland, CA	Conference	6.21	250.00	37.05	262.96	206.26	34.00	-	796.48	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	16.57	120.00	-	-	-	18.80	-	155.37	
Sub Total				22.78	370.00	37.05	262.96	206.26	52.80	-	-	951.85	935.50
WEISSBURG	4/9/18	Developing Emotional IQ Seminar	Long Beach, CA	Training	-	149.00	-	-	-	-	-	149.00	
	4/27/18	Advanced legal Writing & Editing	Los Angeles, CA	Training	-	795.00	-	-	-	15.00	-	810.00	
Sub Total				-	944.00	-	-	-	-	15.00	-	959.00	125.00
LEGAL Total					110.28	3,764.00	84.19	1,857.46	1,968.10	245.74	-	8,029.77	15,658.31
ANGON	1/24/18	The Administrative Assistants Conference	Anaheim, CA	Conference	-	199.00	-	-	-	-	-	199.00	
Sub Total					-	199.00	-	-	-	-	-	199.00	-
BERCARU					-	-	-	-	-	-	-	-	
Sub Total					-	-	-	-	-	-	-	-	4,303.02
EDWARDS	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	-	-	120.00	
Sub Total					-	120.00	-	-	-	-	-	120.00	-
FIELDS	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	10.00	120.00	-	-	-	18.80	-	148.80	
Sub Total					10.00	120.00	-	-	-	18.80	-	148.80	-
FLORES	1/31/18	Developing Emotional Intelligence	Anaheim, CA	Training	-	99.00	-	-	-	-	-	99.00	
Sub Total					-	99.00	-	-	-	-	-	99.00	-
GUEVARA	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	-	-	120.00	
Sub Total					-	120.00	-	-	-	-	-	120.00	-
HALBUR	1/19/18	CALAPRS Administrators Round Table	Los Angeles, CA	Conference	46.76	-	-	-	-	-	-	46.76	
	6/6-6/8/18	2018 V3 User Conference	Orlando, FL	Conference	-	1,095.00	-	478.61	627.75	112.67	-	2,314.03	
Sub Total				46.76	1,095.00	-	478.61	627.75	112.67	-	-	2,360.79	505.04
LOMELI					-	-	-	-	-	-	-	-	
Sub Total					-	-	-	-	-	-	-	-	504.51
MARTINEZ	1/24/18	The Administrative Assistants Conference	Anaheim, CA	Conference	-	199.00	-	-	-	-	-	199.00	
Sub Total					-	199.00	-	-	-	-	-	199.00	-
MERIDA	2/2/18	CALAPRS Benefits Round Table	Los Angeles, CA	Conference	-	125.00	-	-	-	33.50	-	158.50	
Sub Total					-	125.00	-	-	-	33.50	-	158.50	125.00
MIRAMONTES					-	-	-	-	-	-	-	-	
Sub Total					-	-	-	-	-	-	-	-	459.96
PANAMENO	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	-	-	120.00	
Sub Total					-	120.00	-	-	-	-	-	120.00	424.00
PERSI					-	-	-	-	-	-	-	-	
Sub Total					-	-	-	-	-	-	-	-	125.00
REYES	1/24/18	The Administrative Assistants Conference	Anaheim, CA	Conference	-	199.00	-	-	-	-	-	199.00	
Sub Total					-	199.00	-	-	-	-	-	199.00	-
RUBIO	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	-	-	120.00	
Sub Total					-	120.00	-	-	-	-	-	120.00	-
TALLASE					-	-	-	-	-	-	-	-	
Sub Total					-	-	-	-	-	-	-	-	125.00
MEMBER SERVICES Total					56.76	2,516.00	-	478.61	627.75	164.97	-	3,844.09	6,571.53

EDUCATION AND TRAVEL EXPENSE REPORT
Second QUARTER 2018
 Submitted Through July 5, 2018**

Name	Trip OR Class Dates	Trip Name	Destination	Trip Type	Mileage	Reg. Fee	Meals	Airfare	Hotel	Trans.	Misc.	2018 YTD Total	2017 Total*
BOWMAN	1/8/18	GFOA Budgeting Best Practices- Personal Budgeting	Newport Beach, CA	Training	-	370.00	-	-	-	24.00	-	394.00	
	1/9/18	GFOA Accounting for Pension and OPEB	Newport Beach, CA	Training	-	370.00	-	-	-	22.00	-	392.00	
Sub Total					-	740.00	-	-	-	46.00	-	786.00	1,587.33
KANG	5/4/18	CALAPRS Overview Course in Retirement	Oakland, CA	Conference	-	250.00	13.14	267.96	206.26	28.00	-	765.36	
Sub Total					-	250.00	13.14	267.96	206.26	28.00	-	765.36	-
FINANCE Total					-	990.00	13.14	267.96	206.26	74.00	-	1,551.36	1,587.33
CORTEZ	2/2/18	CALAPRS Benefits Round Table	Los Angeles, CA	Conference	-	125.00	-	-	-	34.50	-	159.50	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	16.79	120.00	-	-	-	44.80	-	181.59	
Sub Total					16.79	245.00	-	-	-	79.30	-	341.09	322.95
G. GARCIA	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	17.88	120.00	-	-	-	44.80	-	182.68	
Sub Total					17.88	120.00	-	-	-	44.80	-	182.68	498.94
LINARES	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	-	-	120.00	
Sub Total					-	120.00	-	-	-	-	-	120.00	-
SANDOVAL	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	10.00	120.00	-	-	-	44.80	-	174.80	
Sub Total					10.00	120.00	-	-	-	44.80	-	174.80	-
DISABILITY Total					44.67	605.00	-	-	-	168.90	-	818.57	821.89
D'AIELLO	5/11/18	PIHRA- HR Training	Anaheim, CA	Training	-	35.00	-	-	-	-	-	35.00	
Sub Total					-	35.00	-	-	-	-	-	35.00	-
DOEZIE	5/11/18	PIHRA- HR Training	Anaheim, CA	Training	-	35.00	-	-	-	-	-	35.00	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	63.60	-	183.60	
	6/3-6/6/18	PRIMA's 2018 Annual Conference	Indianapolis, IN	Conference	-	590.00	22.08	494.01	628.29	75.00	-	1,809.38	
Sub Total					-	745.00	22.08	494.01	628.29	138.60	-	2,027.98	1,449.03
DURRAH	5/11/18	PIHRA- HR Training	Anaheim, CA	Training	7.63	35.00	-	-	-	3.00	-	45.63	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	25.34	120.00	-	-	-	37.55	-	182.89	
Sub Total					32.97	155.00	-	-	-	40.55	-	228.52	-
E. GARCIA	3/2/18	Position Control	Santa Ana, CA	Training	10.00	-	-	-	-	-	-	10.00	
	4/17/18	Reduction Class	Santa Ana, CA	Training	10.00	-	-	-	-	-	-	10.00	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	4.15	120.00	-	-	-	9.40	-	133.55	
	7/25/2018	Fred Pryor Developing Emotional Intelligence	Anaheim, CA	Training	-	99.00	-	-	-	-	-	99.00	
Sub Total					24.15	219.00	-	-	-	9.40	-	252.55	-
HOCKLESS	5/11/18	PIHRA- HR Training	Anaheim, CA	Training	-	35.00	-	-	-	3.00	-	38.00	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	-	120.00	-	-	-	36.80	-	156.80	
	6/17-6/20/18	SHRM18 Annual Conference & Exposition (4)	Chicago, IL	Conference	-	1,620.00	90.71	407.78	-	89.74	-	2,208.23	
	8/26-8/29/18	PIHRA- HR Conference	Long Beach, CA	Conference	-	745.00	-	-	-	-	-	745.00	
Sub Total					-	2,520.00	90.71	407.78	-	129.54	-	3,148.03	2,145.95
MURRIETTA	1/22/18	FMLA Compliance Seminar	Anaheim, CA	Training	5.50	199.00	-	-	-	8.00	-	212.50	
	4/13/18	Fred Pryor Payroll Law Seminar	Anaheim, CA	Conference	10.00	-	-	-	-	8.00	-	18.00	
	5/2/18	Fred Pryor Human Resource Seminar	Anaheim, CA	Conference	7.96	199.00	-	-	-	8.00	-	214.96	
	5/11/18	PIHRA- HR Training	Anaheim, CA	Training	-	35.00	-	-	-	-	-	35.00	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	20.70	120.00	-	-	-	54.15	-	194.85	
Sub Total					44.16	553.00	-	-	-	78.15	-	675.31	-
WOZNIUK	5/11/18	PIHRA- HR Training	Anaheim, CA	Training	6.65	35.00	-	-	-	-	-	41.65	
	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	8.28	120.00	-	-	-	18.80	-	147.08	
Sub Total					14.93	155.00	-	-	-	18.80	-	188.73	-
ADMINISTRATION Total					116.21	4,382.00	112.79	901.79	628.29	415.04	-	6,556.12	3,594.98
GOSSARD	4/22-4/25/18	2018 Annual PRISM Conference	San Diego, CA	Conference	53.82	550.00	30.28	-	741.09	63.50	-	1,438.69	
Sub Total					53.82	550.00	30.28	-	741.09	63.50	-	1,438.69	20,286.81
JOHNSON	5/18-5/23/18	SharePoint Conference North America	Las Vegas, NV	Conference	-	2,148.00	66.94	193.87	772.11	288.36	-	3,469.28	
Sub Total					-	2,148.00	66.94	193.87	772.11	288.36	-	3,469.28	-
LARA	4/22-4/25/18	2018 Annual PRISM Conference	San Diego, CA	Conference	53.82	550.00	42.06	-	741.09	52.50	-	1,439.47	
Sub Total					53.82	550.00	42.06	-	741.09	52.50	-	1,439.47	2,905.26
SADOSKI	2/12-2/17/18	SANS Security Leadership Essentials (2)	Anaheim, CA	Training	-	6,149.00	-	-	-	-	-	6,149.00	
	4/22-4/25/18	2018 Annual PRISM Conference	San Diego, CA	Conference	-	550.00	-	-	-	-	-	550.00	
Sub Total					-	6,699.00	-	-	-	-	-	6,699.00	6,149.00
IT Total					107.64	9,947.00	139.28	193.87	2,254.29	404.36	-	13,046.44	29,341.07
ADVIENTO	5/15-5/18/18	SACRS Spring Conference	Anaheim, CA	Conference	22.56	120.00	-	-	-	55.55	-	198.11	
	5/9-5/11/18	Arbutus Data Analytics Training	Newport Beach, CA	Training	-	6,095.62	-	-	-	-	-	6,095.62	
	6/25/18	IIA So Cal Educational Conference	Anaheim, CA	Conference	-	275.00	-	-	-	-	-	275.00	
Sub Total					22.56	6,490.62	-	-	-	55.55	-	6,568.73	1,045.80
INTERNAL AUDIT Total					22.56	6,490.62	-	-	-	55.55	-	6,568.73	1,045.80
Total					1,822.52	77,819.62	2,766.16	19,234.80	36,669.16	7,380.54	40.00	145,732.80	189,985.61

Footnotes:

* Prior year totals only presented for 2018 active staff & Board members.

** Excludes expenses for non-travel related training conferences including: misc. lunches, meetings, mileage, strategic planning, and tuition reimbursement.

1 Hotel charge was partially paid in 2017.

2 Registration was purchased in 2017.

3 Trip canceled and a credit has been placed on Alaska Airlines account which will be applied towards a future trip.

I-8



Memorandum

DATE: July 05, 2018
TO: Members of the Board of Retirement
FROM: Cynthia Hockless, Director of Administrative Services
SUBJECT: BOARD OF RETIREMENT – GENERAL ELECTION

Written Report

Background/ Discussion

On July 03, 2018, Administrative Services contacted the Registrar of Voters requesting it to conduct an election for the General Member whose term expires on December 31, 2018. We are awaiting an official response from the Registrar of Voters with a timeline of the process. We anticipate the election will take place in November.

Attachment:

Election Request Letter to the Registrar of Voters

Submitted by:



C.H. – APPROVED

Cynthia Hockless
Director of Administrative Services

Serving the Active and Retired Members of:

CITY OF SAN JUAN
CAPISTRANO

COUNTY OF ORANGE

ORANGE COUNTY
CEMETERY DISTRICT

ORANGE COUNTY
CHILDREN & FAMILIES
COMMISSION

ORANGE COUNTY
DEPARTMENT OF
EDUCATION (CLOSED TO
NEW MEMBERS)

ORANGE COUNTY
EMPLOYEES
RETIREMENT SYSTEM

ORANGE COUNTY FIRE
AUTHORITY

ORANGE COUNTY IN-HOME
SUPPORTIVE SERVICES
PUBLIC AUTHORITY

ORANGE COUNTY LOCAL
AGENCY FORMATION
COMMISSION

ORANGE COUNTY PUBLIC
LAW LIBRARY

ORANGE COUNTY
SANITATION DISTRICT

ORANGE COUNTY
TRANSPORTATION
AUTHORITY

SUPERIOR COURT OF
CALIFORNIA, COUNTY
OF ORANGE

TRANSPORTATION
CORRIDOR AGENCIES

UCI MEDICAL CENTER AND
CAMPUS (CLOSED TO
NEW MEMBERS)

July 03, 2018

VIA EMAIL & PONY MAIL

Marcia Nielsen
Registrar of Voters
1300 N. Grand Avenue, Bldg #C
Santa Ana, CA 92705

Re: General Member Election for the Board of Retirement for the term of office from January 1, 2019 through December 31, 2021

Dear Ms. Nielsen:

The Orange County Employees Retirement System would like to request that the Registrar of Voters conduct an election for the position of General Member of the Board of Retirement whose term of office will expire on December 31, 2018.

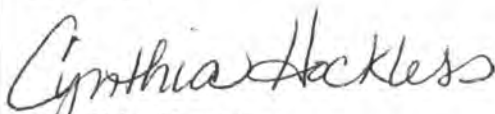
The election for the General Member should be conducted from active General members of the Retirement System.

The new Board member is scheduled to assume office upon the certification of the election results by the Board of Supervisors.

Under separate cover, we will be sending a list of eligible voting General Members.

We are looking forward to working with your office on the various steps of this election process. Should you have any questions regarding this request you may contact me directly at (714) 558-6228.

Sincerely,



Cynthia Hockless
Director of Administrative Services

I-9

Memorandum

DATE: July 3, 2018
TO: Members of the Board of Retirement
FROM: Jim Doezie, Contracts, Risk and Performance Administrator
SUBJECT: **CONTRACT STATUS FOR NAMED SERVICE PROVIDERS**

Written Report

Background/Discussion

1. Performance Reviews – Named Service Providers

The following policy provisions stipulate the terms by which the quality of service providers is to be reviewed:

- The Procurement & Contracting Policy (Section 19) specifies that Named Service Providers will be reviewed every two (2) years.
- The Procurement & Contracting Policy (Section 24.B) specifies that all other service providers will be reviewed at least every three (3) years.
- The Board of Retirement Charter (Item #21) states that an Actuarial Review is needed every five (5) years. (With coordination by the Internal Audit department.)

2. Contract Extensions – Named Service Providers

Sections 16 to 18 of the Procurement and Contracting Board Policy state:

Contracts

16. The CEO or his designee will, with the assistance of legal counsel as appropriate, negotiate and execute all agreements, contracts, and purchase orders with service providers and vendors.
17. All contracts with Named Service Providers will include a provision that the contract is subject to renewal at least every three years, for a total term of no more than six years, at which time the CEO and pertinent committees of the Board will assess the continued appropriateness and cost-effectiveness of the Named Service Provider in question. At the expiration of a six year term, the CEO, or his or her designee, will conduct a RFP.
18. Annually, the CEO will provide the Board of Retirement a schedule of the contracts with Named Service Providers due for renewal in the coming year.

Memorandum

Pursuant to OCERS policy and charter provisions, the schedule below references the Named Service Provider contracts that are up for renewal, expiration, or review:

Named Service Provider	Vendor	Contracted	Contract Expiration	Last Review Date	Next Review Date	Notes
Financial auditor	MGO	2/9/2016	12/31/2020	2/16/2018	Mar-20	Completed review. Pending presentation to Audit Committee
General investment consultant	Meketa	6/15/2016	5/31/2021	6/15/2016	Jun-18	Review in process
Consulting Actuary	Segal	9/28/2016	12/31/2019	9/28/2016	Sep-18	Last review was part of RFP evaluation
Alternative investments consultant	PCA	9/1/2016	9/30/2021	9/1/2016	Sep-18	Last review was part of RFP evaluation
Custodian	State Street	7/1/2017	6/30/2023	7/1/2017	Jul-19	Last review was part of RFP evaluation
Securities lending manager	State Street	7/1/2017	6/30/2023	7/1/2017	Jul-19	Last review was part of RFP evaluation
Actuarial Auditor (Every 5 years)	Cheiron	8/1/2017	12/31/2017	12/31/2017	Aug-22	Reviewed 2017. Report received January, 2018. Next review in 2022
Fiduciary Counsel	Reed Smith	4/1/2015	3/31/2018	3/3/2017	Mar-19	Request to extend the contract to be presented during April 18th Board Meeting

Submitted by:



Jim Doezie
 Contracts, Risk and Performance Administrator

1-10

Memorandum

DATE: July 3, 2018
TO: Members of the Board of Retirement
FROM: Steve Delaney, Chief Executive Officer
SUBJECT: 2018 PRIMA CONFERENCE

Written Report

Background/Discussion

From June 2 to June 6, 2018, Jim Doezie, Contracts, Risk and Performance Administrator, attended the 2018 Public Risk Management Association (PRIMA) annual Conference in Indianapolis, Indiana.

The total cost includes the following:

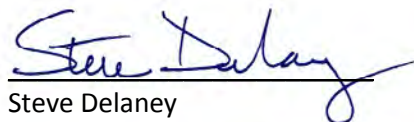
Conference Fee	Hotel	Transportation	Meals	Total
\$590	\$628	\$569	\$22	\$1,809

As PRIMA is not presently a pre-approved conference, OCERS' Travel Policy, Section 19, states:

“Board Members and staff who travel to conference or seminars that are not automatically authorized in paragraphs 8 and 12 shall file with the Chief Executive Officer a report that briefly summarizes the information and knowledge gained that may be relevant to other Board members, provides an evaluation of the conference or seminar, and provides a recommendation concerning future participation. Reports by a Board Member or staff will be made on the Conference / Seminar Report form shown in the appendix. The Chief Executive Officer shall cause a copy of the report to be distributed to each Board Member and to the Chief Investment Officer.”

A report summarizing the conference is attached.

Submitted by:



Steve Delaney
 Chief Executive Officer

Report of Attendance at Conference or Seminar

Name of Staff Attending: Jim Doezie - Contracts, Risk and Performance Administrator
Name of Conference/Seminar: 2018 Public Risk Management Association (PRIMA) annual conference
Location of Conference/Seminar: Indianapolis Convention Center. Indianapolis, Indiana
Conference/Seminar Sponsor: PRIMA Association
Dates of Attendance: June 3rd through June 6th, 2018
Total Cost of Attendance: \$1,809

Brief Summary of Information and Knowledge Gained:

The theme of the 2018 Public Risk Management Association (PRIMA) annual conference was to explore and discuss how to mitigate increasing risks to public and governmental agencies throughout the United States. Included within this theme were numerous sessions which provided knowledge and discussions from experts in the risk field. This included networking with other agency individuals from around the nation. Sessions attended by OCERS staff covered these topics:

- Tips For ERM Implementation Success
- RFP's: Top 10 Do's And Don'ts
- Building An Authentic Workplace Culture
- Emerging Trends And The Use of Data Analytics For Self-Insurance Pooling
- Mission Driven Leadership
- Disruptive Technologies And The Public Sector's Role
- Rethinking Leadership: Overturning Traditional Professional Development

Evaluation of the Conference or Seminar:

The PRIMA Conference affords OCERS staff an excellent opportunity to network with like-minded risk leaders from sister agencies to discuss issues and solutions. Also discussed are current initiatives underway at other agencies, whose representatives are always willing to share what is going well and what could have been done better.

Recommendation Concerning Future Attendance:

I highly recommend that we continue to attend the PRIMA Conference on an annual basis. It is likely the single best Risk Conference we can attend due to the specific focus of both the conference and the attendees on a subject that affects public agencies throughout the nation.

Submitted By:



Jim Doezie - Contracts, Risk and Performance Administrator

Return to: Executive Assistant

Copies to: Board Members, Chief Executive Officer & Assistant Chief Executive Officers

1-11

Memorandum

DATE: July 5, 2018
TO: Members of the Board of Retirement
FROM: Steve Delaney, Chief Executive Officer
SUBJECT: SOCIETY OF HUMAN RESOURCES MANAGEMENT (SHRM)

Written Report

Background/Discussion

From June 16 to June 20, 2018, Cynthia Hockless, Director, Administrative Services, Admin/HR, attended the Society of Human Resources Management (SHRM) Conference in Chicago, Illinois.

The total cost includes the following:

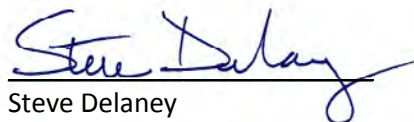
Conference Fee	Hotel	Transportation	Meals	Total
\$1,620	\$1,286.72	\$497.52	\$90.71	\$3,494.95

As SHRM is not presently a pre-approved conference, OCERS' Travel Policy, Section 19, states:

“Board Members and staff who travel to conference or seminars that are not automatically authorized in paragraphs 8 and 12 shall file with the Chief Executive Officer a report that briefly summarizes the information and knowledge gained that may be relevant to other Board members, provides an evaluation of the conference or seminar, and provides a recommendation concerning future participation. Reports by a Board Member or staff will be made on the Conference / Seminar Report form shown in the appendix. The Chief Executive Officer shall cause a copy of the report to be distributed to each Board Member and to the Chief Investment Officer.”

A report summarizing the conference is attached.

Submitted by:



Steve Delaney
 Chief Executive Officer

Report of Attendance at Conference or Seminar

Name of Member Attending: Cynthia Hockless

Name of Conference/Seminar: Society of Human Resources Management (SHRM)

Location of Conference/Seminar: Chicago, IL

Conference/Seminar Sponsor: Society of Human Resources Management (SHRM)

Dates of Attendance: June 16-20, 2018

Total Cost of Attendance: \$3,494.95 (\$1,620.00 registration, Hotel \$1,286.72, Airfare: \$407.78

Meals: \$90.71 Car Shuttle to and from Airport: \$89.74

Brief Summary of Information and Knowledge Gained:

The SHRM Annual Conference & Exposition is the largest conference for HR professionals, for education, networking and professional development. The conference exposed me to new ideas and approaches to HR issues. The conference focused on basic development HR professionals need to innovate and how the work place is changing with the addition of new generations. The sessions I attend included sessions on employment law and legislation, strategic management and leadership development, to name a few. My favorite part of the conference was listening to the keynote speakers like Oscar Munoz-CEO of United Airlines. He shared with conference goers his agency's issues with customer service and a need to ensure everyone follows policies and procedures. Adam Grant-Author and Professor of the Warton School of Business spoke to the group about creating a culture where people can speak up, help solve problems and asked HR professionals to stay engaged by listening to employees on the front line. Sheryl Sandberg-COO of Facebook and Founder of LeanIn.org, spoke on the last day of the conference and discussed her concept of creating lean in circles where small groups meet once a month and support each other and discuss solutions to workplace issues. The conference had a total of 22,000 HR professionals attend from all of the world. The conference also offered an expo with an opportunity to network with many industry vendors offering innovative products and services in HR.

Evaluation of the Conference or Seminar:

The content of the conference was appropriate for HR professionals and managers that handle personnel issues. The conference was great. A huge take-a-way for me was numerous discussions on the involving work environment, in relations to employee needs, workplace design and more complicated HR issues that are anticipated to occur in the future.

Recommendation Concerning Future Attendance:

I enjoyed the opportunity to attend one of the largest HR professionals conference in the world. The sessions were inspiring and it was nice networking and sharing ideas with other HR professionals. Since I am a Certified Professional through the Society of Human Resources Management (SHRM) as a SHRM-CP, my attendance granted me credits towards my CEU's. I recommend attending this conference in the future.

Cynthia Hockless
Signature

Return to: Executive Assistant

Copies to: Board Members
Chief Executive Officer
Assistant Chief Executive Officers

1-12

Memorandum

DATE: July 16, 2018
TO: Members of the Board of Retirement
FROM: Steve Delaney, Chief Executive Officer
SUBJECT: BOARD COMMUNICATION

Written Report

Background/Discussion

To ensure that the public has free and open access to those items that could have bearing on the decisions of the Trustees of the Board of Retirement, the OCERS Board has directed that all written communications to the entire Board during the interim between regular Board meetings be included in a monthly communications summary.

News Links

The various news and informational articles that have been shared with the full Board are being provided to you here by web link address. By providing the links in this publicly available report, we comply with both the Brown Act public meeting requirements, as well as avoid any copyright issues.

The following news and informational links were received by OCERS staff for distribution to the entire Board:

Steve Delaney:

An example of another system that has moved from “level percent of pay” to “level dollar” as their contribution methodology. This is one of the topics that Paul Angelo will be delving into at the September Board Workshop.

- Michigan a model for retirement system debt
<http://www.craigslist.com/article/20180617/blog200/663801/michigan-a-model-for-retirement-system-debt>
- How a local entity managed to exit CalPERS despite the CalPERS high interest termination costs.
http://www.galtheraldonline.com/news/herald-fire-to-be-free-and-clear-of-calpers/article_02ec186a-7a2f-11e8-bbe9-ab530e998462.html

Suzanne Jenike:

- Given increasing costs, Placentia officials send notice they may want out of contract with Orange County Fire Authority.
<https://www.ocregister.com/2018/06/20/given-increasing-costs-placentia-officials-send-notice-they-may-want-out-of-contract-with-orange-county-fire-authority/>
- Irvine City Counsel gives notice it will withdraw from OC Fire Authority.
https://voiceofoc.org/2018/07/irvine-city-council-tired-of-being-a-donor-gives-notice-itll-withdraw-from-oc-fire-authority/?utm_source=Voice+of+OC+Email+Newsletters&utm_campaign=14ae39c1ba-EMAIL_CAMPAIGN_2018_04_11_COPY_02&utm_medium=email&utm_term=0_6100b0e74b-14ae39c1ba-181970781
- OCERS won the Institutional Investor’s Public Pension Plan of the Year. The announcement was made at the 16th annual hedge fund industry awards ceremony in New York City.
<http://www.hedgefundindustryawards.com/>

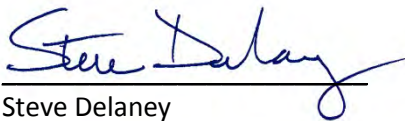
Stephen Wontrobski:

This letter addressing OCERS issues is forwarded for your Board's information.

Sincerely,
Stephen Wontrobski

Attached: Needed Assistance Regarding the OCFA Attorney Withdrawal Opinion

Submitted by:



Steve Delaney
Chief Executive Officer

Stephen M. Wontrobski
Mission Viejo, CA 92692

June 5, 2018

Orange County Board of Supervisors
333 W. Santa Ana Blvd.
Santa Ana, CA 92701

City of Irvine City Council Members
1 Civic Center Plaza
Irvine, CA 92606

Ref: Needed Assistance Regarding the OCFA Attorney Withdrawal Opinion

Dear Board Members,

Background Information

At the OCFA May 24, 2018 Board of Directors meeting in a public comment, I recommended as an option to SFF member cities that they consider leaving the OCFA and rejoining the OCFA in 2020 as a contract member city only for fire services. I have always recommended that all overcharged contract and SFF member cities use non-OCFA private paramedic company services for their 911 EMS paramedic response requirements. These cities would thereby: a) bypass very costly OCFA 911 EMS paramedic response services; b) save millions of dollars each year; and c) avoid future UAAL pension liability associated with those OCFA services.

At the conclusion of the meeting, the OCFA Attorney, Mr. David Kendig, advised me that the my recommendation option was flawed advice. He referred me to the AB 302 (Mendoza) bill, which was passed into law last year. He stated that if Irvine left the OCFA, it not only would have to pay:

1. Costs for a new Fire/EMS Department (I use a hypothetical annual cost of \$45 million); and
2. Its continued OCFA SFF tax dollars, which now approximate \$65 million.

In other words, Irvine would be double charged for its Fire/EMS services. I stated that:

1. It did not seem logical that Irvine would still have its property tax SFF funds for fire and EMS services continue to go to the OCFA, after it had ceased membership in the OCFA JPA; and
2. I believed the Irvine City Attorney had more than likely looked into this matter and would not advise its City Council members to subject Irvine residents to double taxation for Fire/EMS services.

Mr. Kendig advised me to research the issue. I advised him that I would address this concern with County Counsel and the City Attorney for Irvine, who would be way more knowledgeable than me on this matter. He then subsequently sent me the attached e-mail with legislative history attached.

What is now very interesting to me is that in a past conversation with a Dana Point City Council member, I was basically advised of the same assertion. Dana Point is one of the most overcharged SFF cities on a per resident basis.

So more than likely, OCFA Executive staff has been advising Dana Point and possibly other SFF cities of this same OCFA contention. This would certainly dampen any SFF city's desire to lower Fire/EMS costs by leaving membership in the OCFA.

Request for Information from County Counsel and the Irvine City Attorney

Can the Irvine City Attorney and County Counsel please provide information to me, the public, and all OCFA member cities regarding the OCFA's legal contention regarding double taxation for Fire/EMS services.

This information is needed by the following:

- a) OCFA Member City Councils (including Irvine) and their residents, who are considering leaving the OCFA in order to lower their out-sized Fire/EMS costs; and
- b) The Orange County Board of Supervisors.

OCFA Member City Councils and Their Residents

OCFA Member City Councils and their residents desperately need the information because of the following:

1. For most, if not all OCFA member cities, OCFA Fire and EMS service cost represents their second largest city expense item.
2. Various cities, such as, Irvine, Villa Park, Aliso Viejo, Dana Point, and Laguna Niguel have had to endure millions of dollars of overcharges for countless years of OCFA Fire and EMS services with no end in sight.
3. Member cities, such as, Placentia, Seal Beach, Laguna Woods and Westminster are cash strapped and need economic cost relief for Fire and EMS services.
4. Various member cities are headed down the road to city bankruptcy due to ever increasing public safety cost. It was reported that Laguna Woods is currently destined for city bankruptcy by 2020, unless something is done to address its public safety costs.
5. Santa Ana and other member cities may desire to outsource their 911 EMS response services to private ambulance companies supplying both 911 EMS paramedic response and ambulance transport services. This could be done, while maintaining in-house overall management and oversight control of this operation. It wasn't many years ago that Santa Ana actually handled its own 911 EMS services.
6. The legal opinion information is needed by the County, various OCFA member City Councils, Member Cities' Financial Review Committees, and member cities and County residents to aid them in their decision making process regarding such matters as:
 - a) Whether or not to file a required notice of withdrawal by June 30, 2018 from the OCFA.
 - b) Whether to seek through an RFP process more economical fire services from neighboring City Fire Departments or private firefighting companies.

- c) Whether to outsource 911 EMS paramedic response and ambulance transport services on a competitive RFP bid basis to outside private paramedic staffed ambulance companies to achieve major cost savings.
- d) Whether to bundle and outsource Fire and 911 EMS paramedic response and ambulance transport services on a competitive RFP bid basis to private companies that provide both fire and private paramedic ambulance services to achieve even a higher amount of cost savings.
- e) Whether to establish a separate fire department to serve an individual OCFA member city or a group of cities.
- f) Whether cities should form a mini-JPA to provide non-OCFA fire and EMS services.

Board of Supervisors

Board members will be asked in the near future, if they wish to exit membership in the OCFA. Based on my own cost studies, the County would save millions of dollars each year by exiting the OCFA's Fire/EMS coverage for the County's unincorporated areas. Everyone appears to know that the County has been for years, and currently is, severely overcharged for OCFA services.

As one option, the County could consider that future Fire/EMS services be secured by issuance and award of one or more separate competitively bid RFP's for Fire and EMS services.

a) Fire Services

The County could consider putting out a competitively bid RFP for County unincorporated area fire services to: a) private fire suppression companies; b) the OCFA; and c) the following Fire Departments: Brea/Fullerton Fire Department, Garden Grove Fire Department, Anaheim Fire Department, City of Orange Fire Department and any other interested agency fire department.

b) EMS Services

The County could consider putting out a competitively bid RFP for its unincorporated area 911 EMS paramedic response and ambulance transport services to private paramedic ambulance companies, the OCFA, and other interested City Fire Departments.

c) Bundling of Fire and EMS Response Services

The County could consider outsourcing Fire and 911 EMS paramedic response and ambulance transport services on a competitive RFP bid basis to outside companies that provide both fire and private paramedic ambulance services to achieve the greatest amount of cost savings.

Legal Issues Concerning the OCFA JPA Notice of Withdrawal

The ability to withdraw from the OCFA JPA has changed from the Original OCFA JPA to the subsequent Amended OCFA JPA. The Original OCFA JPA provided that after an initial three year period, an OCFA member could withdraw on an annual basis. The Amended OCFA JPA provides that unless a member gives its notice to withdraw from the OCFA by June 30, 2018, it is locked into an additional ten year period with the OCFA.

However, the Amended OCFA JPA (Article VII, Section 1, "City Member Withdrawal", Sub-paragraph D, "Rescission of Notice") provides:

"Any notice required hereunder may be rescinded by the member with the approval of the Board of Directors."

The questions then arise:

1. Is it pragmatic for all overcharged SFF member cities and the County to give notices of withdrawal by June 30, 2018?
2. And if no more economical fire/EMS model is found in the future to compete with a possibly radically reformed OCFA cost structure model, then simply rejoin the OCFA in 2020 as a contract (non-SFF) member? This would result in greatly reduced costs for fire and EMS services that are based on actual costs.

Conclusion

Residents in the OCFA SFF member cities of Villa Park, Irvine, Dana Point, Laguna Niguel and Aliso Viejo know that they have been and are continuing to be massively overcharged by the OCFA for Fire/EMS services. It can be expected that their member City Councils will be asked by their residents for a non-biased, non-union, and non-OCFA recommendation to continue with or exit the OCFA. This recommendation will also address whether to switch to private fire suppression and paramedic companies for fire and 911 EMS paramedic response and ambulance transport services in order to save each city millions of dollars every year. The information requested above would aid their City Managers and City Council members in their decision making process of whether to withdraw from the OCFA.

I thank you for any assistance you could provide in this matter.

Sincerely,

Stephen Wontrobski

BOSOCFAattorneyResponse-NeededAssistance-6-5-18

cc: OCEMS; State EMSA Director (Dr. Backer); Overcharged OCFA City Councils of Dana Point, Aliso Viejo, Laguna Niguel, Irvine, and Villa Park; and City Councils of Seal Beach, Westminster, Placentia, Santa Ana, San Clemente, San Juan Capistrano, Lake Forest, Mission Viejo, Laguna Hills and Rancho Santa Margarita

1-13

Memorandum

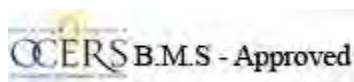
DATE: July 13, 2018
TO: Members, Board of Retirement
FROM: Steve Delaney, Chief Executive Officer
SUBJECT: **ILLUSTRATIONS OF RETIREMENT COSTS, UNFUNDED ACTUARIAL ACCRUED LIABILITY AND FUNDED RATIO UNDER ALTERNATIVE ECONOMIC SCENARIOS**

Written Report

Background/Discussion

Segal Consulting annually prepares an Illustration of Retirement Costs, Unfunded Actuarial Accrued Liability and Funded Ratio under Alternative Economic Scenarios. The illustrations cover a 20 year period to reflect the current 20 year amortization period. The information contained in the letter are not a guarantee of what rates will actually be in the future as rates are impacted by experience and changes in assumptions and funding policy. Mr. Paul Angelo will present this information to the Board at the July 17 meeting and staff will distribute the letter to plan sponsors.

Submitted by:

 CCERS B.M.S. - Approved

Brenda Shott

Assistant CEO, Finance and Internal Operations

VIA E-MAIL and USPS

July 3, 2018

Mr. Steve Delaney
Chief Executive Officer
Orange County Employees Retirement System
2223 Wellington Avenue
Santa Ana, CA 92701-3101

**Re: Illustrations of Retirement Costs, Unfunded Actuarial Accrued Liability and
Funded Ratio under Alternative Investment Return Scenarios**

Dear Steve:

As requested, we have developed 20-year illustrations of the employer contribution rates for OCERS under three sets of market investment return “scenarios” after December 31, 2017. In this letter, we have also provided the Unfunded Actuarial Accrued Liability (UAAL) in dollars and the funded ratio associated with those projected employer contribution rates. These results have been prepared using the results from the December 31, 2017 valuation approved by the Board at its meeting on June 18, 2018.

The three market rate of return scenarios used in this letter are as follows:

- Scenario #1: 0.0% for 2018 and 7.0% thereafter.
- Scenario #2: 7.0% for all years.
- Scenario #3: 14.0% for 2018 and 7.0% thereafter.

Even though the financial impact is shown under only three hypothetical market investment return scenarios for 2018, the financial impact under other possible short-term market investment return scenarios may be approximated by interpolating or extrapolating using the results from the three scenarios shown.¹

¹ For example, a hypothetical market investment return of 3.50% (i.e., one-half of 7.00%) is expected to result in a change in employer’s contribution of about one-half of the difference between those shown for Scenarios #1 and #2, starting with the December 31, 2017 valuation.

The various projections included are as follows:

- The projected contribution rates for the aggregate plan are provided in Attachment A.
- The projected contribution rates for the eleven Rate Groups are provided in Attachment B.
- The projected UAAL and funded ratio for the aggregate plan are provided in Attachment C.
- The projected UAAL and funded ratio for the eleven Rate Groups are provided in Attachments D through N.
- The projected contribution rates for the different plans within the eleven Rate Groups are provided in Attachment O.

This projection also reflects the potential employer savings as current members leave employment and are replaced by new members covered under the tiers required by the California Public Employees' Pension Reform Act of 2013 (CalPEPRA) starting at January 1, 2013 (or January 1, 2015 for Rate Group #5). Please note that some of the changes made by CalPEPRA, such as the sharing of the total Normal Cost on a 50:50 basis, may result in employer savings for current members under the legacy plans. As those changes have not been implemented by the employers and the bargaining parties at OCERS, we have not reflected them in this illustration.

METHODS AND ASSUMPTIONS

The methods and actuarial assumptions we used to prepare the employer contribution rates, the UAAL and the funded ratio are as summarized below:

- The illustrations are based on the actuarial assumptions and census data used in our December 31, 2017 valuation report for the Retirement Plan. With the exception of the market rates of return specified above, it is assumed that all actuarial assumptions would be met in the future and that there would be no change in the future for any of the actuarial assumptions adopted by the Board for the December 31, 2017 valuation.
- The detailed amortization schedule for OCERS' UAAL as of December 31, 2017 is provided in the valuation report. Any subsequent changes in the UAAL due to actuarial gains or losses (e.g., from investment returns on valuation value of assets greater or less than the assumed 7.00%) are amortized over separate 20-year periods.
- An adjustment has been made in the illustrations to reflect the long-term impact on OCERS of the three-year phase-in of the UAAL cost increase due to the changes in actuarial assumptions adopted by the Board starting with the December 31, 2017 valuation. The first year of the three-year phased-in contribution rates would apply to fiscal year 2019-2020, based on the December 31, 2017 valuation.

- CalPEPRA prescribes new benefit formulas for members with a membership date on or after January 1, 2013 (or January 1, 2015 for Rate Group #5). For Rate Groups #1, #3, #5, #9, #10, #11 and #12, we have estimated the Normal Cost savings² associated with the enrollment of those members under the new 2.5% at 67 formula.

For new members within Rate Group #2, only the County's attorneys, San Juan Capistrano members³ and OCERS Management members will receive the 2.5% at 67 formula while all other new members in Rate Group #2 will receive the "new" 1.62% at 65 formulas.⁴ We assumed that the proportion of the payrolls for members who will receive the 2.5% at 67 formula, the Plan T "new" 1.62% at 65 formula and the Plan W "new" 1.62% at 65 formula in the future would remain unchanged from that observed at the December 31, 2017 valuation. As of December 31, 2017, payroll for active members in Rate Group #2 under these three formulas represented about 7.4%, 92.5% and 0.1% of the combined payroll for members under the 2.5% at 67 formula, the Plan T "new" 1.62% at 65 formula and the Plan W "new" 1.62% at 65 formula, respectively. We have estimated the Normal Cost savings² associated with the enrollment of new members under the three new formulas.⁵

For Rate Group #6, #7 and #8 members with a membership date on and after January 1, 2013, we have estimated the Normal Cost savings² associated with the enrollment of those members under the new 2.7% at 57 formula.

- We understand that, with the exception of new members who would be covered under the "new" 1.62% at 65 formulas, in the determination of pension benefits under the CalPEPRA formulas the maximum compensation that can be taken into account for new members on and after January 1, 2018 is equal to \$145,666 in 2018. To the extent this provision will limit covered compensation of the new members, our assumption that the total payroll will increase by 3.25% each year over the projection period (for use in determining the contribution rate for the UAAL) may be overstated somewhat. If so, then there would be an increase in the UAAL contribution rate as the amount required to amortize the UAAL will have to be spread over a somewhat smaller total payroll base.

² We have estimated the potential employer Normal Cost savings assuming that the payroll for new members who would be covered after the December 31, 2017 valuation under the CalPEPRA tiers could be modeled by: (1) projecting the total December 31, 2017 payroll within each Rate Group using the 3.25% assumption used in the valuation to predict annual wage growth for amortizing the UAAL and (2) subtracting the projected closed group payroll from the current members in the December 31, 2017 valuation using the assumptions applied in the valuation to anticipate salary increases as well as termination, retirement (both service and disability) and other exits from active employment.

³ For San Juan Capistrano members with membership dates on or after January 1, 2016, they will be allowed to elect Plan W (1.62% at 65) in lieu of Plan U (2.5% at 67 formula). As of December 31, 2017, there was one member enrolled in Plan W.

⁴ The "new" 1.62% at 65 formula is the CalPEPRA Plan T for non-City of San Juan Capistrano members and the CalPEPRA Plan W for City of San Juan Capistrano members.

⁵ The payroll for new members is split between the 2.5% at 67 formula, the Plan T 1.62% at 65 formula and the Plan W 1.62% at 65 formula based on the proportion of payrolls under those formulas as of December 31, 2017.

- Other than the above adjustments to the Normal Costs from the new CalPEPRA formulas, we have not included any other adjustments for the pre-CalPEPRA members such as the anticipated reduction in proportion (and hence in the associated Normal Cost) of existing Tier 1 active members (with pension benefits based on final one year average formula) relative to the increase in proportion of existing Tier 2 active members (with pension benefits based on final three year average formula) for members in any Rate Group.

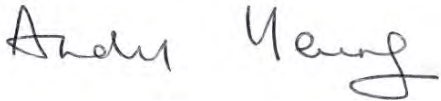
OTHER CONSIDERATIONS

Projections, by their nature, are not a guarantee of future results. The modeling projections are intended to serve as illustrations of future financial outcomes that are based on the information available to us at the time the modeling is undertaken and completed, and the agreed-upon assumptions and methodologies described herein. Emerging results may differ significantly if the actual experience proves to be different from these assumptions or if alternative methodologies are used. Actual experience may differ due to such variables as demographic experience, the economy, stock market performance and the regulatory environment.

This study was prepared under my supervision and I am a member of the American Academy of Actuaries and meet the qualification requirements to provide the opinion contained herein.

Please let us know if you have any questions.

Sincerely,

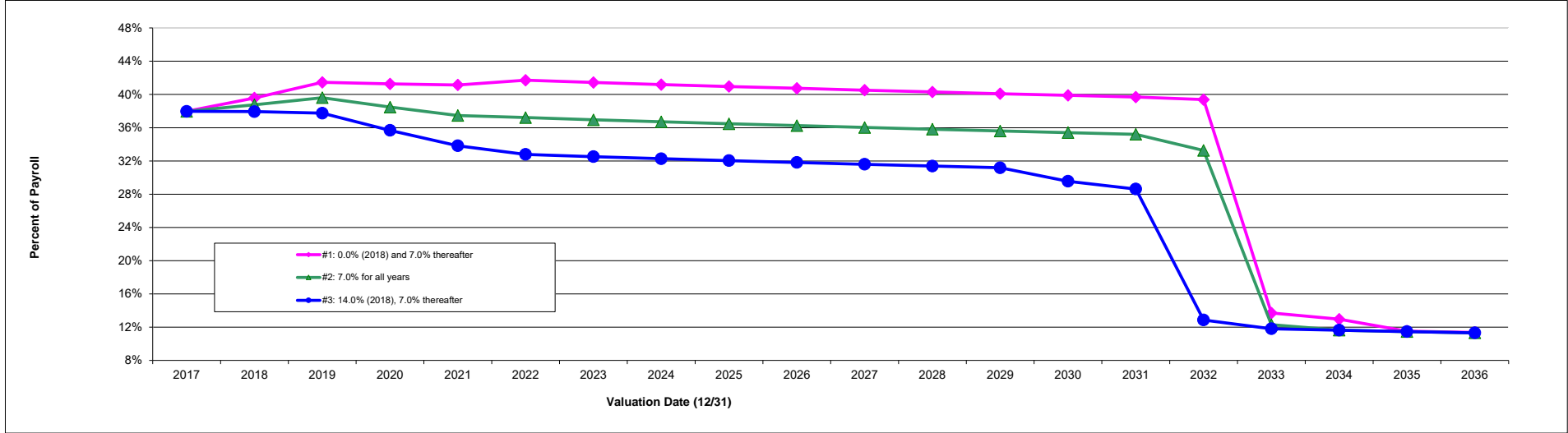


Andy Yeung

MYM/bqb
Enclosures

cc: Suzanne Jenike
Brenda Shott

Attachment A Projected Employer Rates Aggregate Plan



Valuation Date (12/31)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	38.0%	39.6%	41.5%	41.3%	41.1%	41.7%	41.4%	41.2%	41.0%	40.7%	40.5%	40.3%	40.1%	39.9%	39.7%	39.4%	13.7%	13.0%	11.5%	11.4%
#2: 7.0% for all years	38.0%	38.8%	39.6%	38.5%	37.5%	37.2%	37.0%	36.7%	36.5%	36.3%	36.0%	35.8%	35.6%	35.4%	35.2%	33.3%	12.3%	11.6%	11.5%	11.3%
#3: 14.0% (2018), 7.0% thereafter	38.0%	37.9%	37.8%	35.7%	33.8%	32.8%	32.5%	32.3%	32.0%	31.8%	31.6%	31.4%	31.2%	29.6%	28.6%	12.9%	11.8%	11.6%	11.5%	11.3%

Attachment B
Projected Employer Rates by Rate Group
Scenario 1: 0.0% for 2018 and 7.0% thereafter

	Valuation Date (12/31)																			
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
General																				
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	18.3%	19.6%	21.0%	21.0%	21.1%	21.5%	21.5%	21.5%	21.5%	21.5%	21.4%	21.4%	21.4%	21.4%	21.4%	21.3%	10.1%	11.6%	10.1%	10.1%
RG #2 - Plans I, J, O, P, S, T, U and W (County et al.)	35.3%	36.8%	38.6%	38.3%	38.2%	38.6%	38.4%	38.1%	37.9%	37.7%	37.4%	37.2%	37.0%	36.8%	36.6%	36.3%	9.3%	8.8%	8.6%	8.4%
RG #3 - Plans B, G, H and U (OCSD)	12.5%	12.3%	12.4%	12.2%	12.2%	13.0%	12.9%	12.8%	12.7%	12.6%	12.5%	12.4%	12.3%	12.3%	12.2%	12.1%	12.1%	12.0%	12.0%	11.9%
RG #5 - Plans A, B and U (OCTA)	28.0%	29.6%	31.5%	31.5%	31.6%	32.2%	32.2%	32.1%	32.1%	32.1%	32.0%	32.0%	32.0%	31.9%	31.9%	31.8%	12.6%	13.8%	11.4%	11.4%
RG #9 - Plans M, N and U (TCA)	24.5%	25.3%	26.3%	26.2%	26.1%	26.5%	26.3%	26.2%	26.0%	25.9%	25.8%	25.8%	25.7%	25.6%	25.6%	25.4%	11.6%	11.3%	11.3%	11.2%
RG #10 - Plans I, J, M, N and U (OCFA)	29.0%	30.3%	31.8%	31.8%	31.7%	32.2%	32.1%	31.9%	31.8%	31.7%	31.5%	31.4%	31.3%	31.2%	31.0%	30.8%	11.2%	11.1%	11.0%	10.9%
RG #11 - Plans M and N, future service, and U (Cemetery)	12.5%	13.4%	14.6%	14.6%	14.6%	15.2%	15.2%	15.2%	15.1%	15.1%	15.0%	15.0%	15.0%	15.0%	15.0%	14.9%	14.9%	14.9%	14.9%	14.8%
RG #12 - Plans G and H, future service, and U (Law Library)	13.9%	13.6%	14.0%	13.6%	13.3%	13.9%	13.6%	13.3%	13.0%	12.8%	12.6%	12.4%	12.2%	12.2%	12.1%	11.9%	11.8%	11.8%	11.7%	11.6%
Safety																				
RG #6 - Plans E, F and V (Probation)	52.3%	55.1%	58.2%	58.2%	58.2%	59.0%	58.8%	58.6%	58.3%	58.1%	57.8%	57.4%	57.1%	56.7%	56.3%	55.8%	30.2%	25.1%	18.4%	18.0%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	62.4%	65.0%	67.9%	67.7%	67.5%	68.4%	68.1%	67.8%	67.5%	67.3%	67.0%	66.8%	66.5%	66.3%	66.1%	65.7%	29.9%	27.1%	20.5%	20.3%
RG #8 - Plans E, F, Q, R and V (OCFA)	46.2%	47.9%	49.8%	49.4%	49.1%	49.8%	49.1%	48.5%	48.1%	47.7%	47.2%	46.9%	46.4%	46.0%	45.6%	45.1%	18.3%	17.9%	17.6%	17.2%

In the December 31, 2033 valuation, Rate Group #1 would be projected to have a small UAAL rate, which would be entirely offset by the favorable 18-month delay adjustment due to the significant decrease in the UAAL rate in the December 31, 2033 valuation. However, in the following year, the UAAL rate would no longer be offset by the 18-month delay adjustment so the employer rate increases in that year. By the December 31, 2035 valuation, there would no longer be a UAAL rate.

In addition, under this scenario, Rate Group #3 would be expected to use up the entire amount in the O.C. Sanitation District UAAL Deferred Account (that account has a balance of \$14,871,000 as of December 31, 2017) by the December 31, 2019 valuation.

Rates shown throughout these projections for Rate Group #12 have been adjusted for the future service only benefit enhancement.

Similar to prior projections, we have not taken into account the County Investment Account (that account has a balance of \$134,417,000 as of December 31, 2017) in these projections.

Attachment B
Projected Employer Rates by Rate Group
Scenario 2: 7.0% for all years

	Valuation Date (12/31)																			
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
General																				
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	18.3%	19.1%	19.9%	19.3%	18.9%	18.8%	18.8%	18.8%	18.8%	18.8%	18.7%	18.7%	18.7%	18.7%	18.7%	18.6%	10.1%	10.1%	10.1%	10.1%
RG #2 - Plans I, J, O, P, S, T, U and W (County et al.)	35.3%	36.0%	36.8%	35.7%	34.8%	34.5%	34.2%	34.0%	33.7%	33.5%	33.3%	33.1%	32.8%	32.6%	32.4%	32.1%	8.9%	8.8%	8.6%	8.4%
RG #3 - Plans B, G, H and U (OCSD)	12.5%	12.3%	12.2%	12.1%	11.9%	11.8%	11.7%	11.6%	11.5%	11.4%	11.3%	11.2%	11.1%	11.0%	11.0%	10.9%	10.9%	10.8%	10.8%	10.7%
RG #5 - Plans A, B and U (OCTA)	28.0%	28.9%	29.9%	29.0%	28.3%	28.3%	28.2%	28.2%	28.2%	28.1%	28.1%	28.1%	28.0%	28.0%	28.0%	27.9%	11.5%	11.5%	11.4%	11.4%
RG #9 - Plans M, N and U (TCA)	24.5%	24.8%	25.2%	24.5%	23.9%	23.8%	23.6%	23.5%	23.4%	23.3%	23.2%	23.2%	23.1%	23.0%	22.9%	22.8%	11.3%	11.3%	11.3%	11.2%
RG #10 - Plans I, J, M, N and U (OCFA)	29.0%	29.5%	30.2%	29.3%	28.4%	28.3%	28.1%	28.0%	27.9%	27.7%	27.6%	27.5%	27.3%	27.2%	27.1%	11.3%	11.2%	11.1%	11.0%	10.9%
RG #11 - Plans M and N, future service, and U (Cemetery)	12.5%	12.8%	13.1%	12.4%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
RG #12 - Plans G and H, future service, and U (Law Library)	13.9%	13.1%	12.6%	12.2%	11.8%	11.5%	11.3%	11.1%	10.9%	10.7%	10.6%	10.4%	10.3%	10.2%	10.1%	10.0%	9.9%	9.8%	9.8%	9.7%
Safety																				
RG #6 - Plans E, F and V (Probation)	52.3%	54.1%	56.0%	54.7%	53.6%	53.4%	53.2%	52.9%	52.7%	52.4%	52.1%	51.8%	51.4%	51.0%	50.6%	50.1%	24.5%	18.7%	18.4%	18.0%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	62.4%	63.8%	65.1%	63.4%	61.9%	61.6%	61.3%	61.0%	60.7%	60.5%	60.2%	60.0%	59.7%	59.5%	59.3%	58.9%	23.1%	20.6%	20.5%	20.3%
RG #8 - Plans E, F, Q, R and V (OCFA)	46.2%	46.8%	47.2%	45.5%	44.0%	43.6%	42.8%	42.3%	41.8%	41.4%	41.0%	40.6%	40.2%	39.8%	39.4%	18.7%	18.3%	17.9%	17.6%	17.2%

Under this scenario, Rate Group #3 would be expected to use up none of the amount in the O.C. Sanitation District UAAL Deferred Account (that account has a balance of \$14,871,000 as of December 31, 2017) by the December 31, 2036 valuation.

Rates shown throughout these projections for Rate Group #12 have been adjusted for the future service only benefit enhancement.

Similar to prior projections, we have not taken into account the County Investment Account (that account has a balance of \$134,417,000 as of December 31, 2017) in these projections.

Attachment B
Projected Employer Rates by Rate Group
Scenario 3: 14.0% for 2018 and 7.0% thereafter

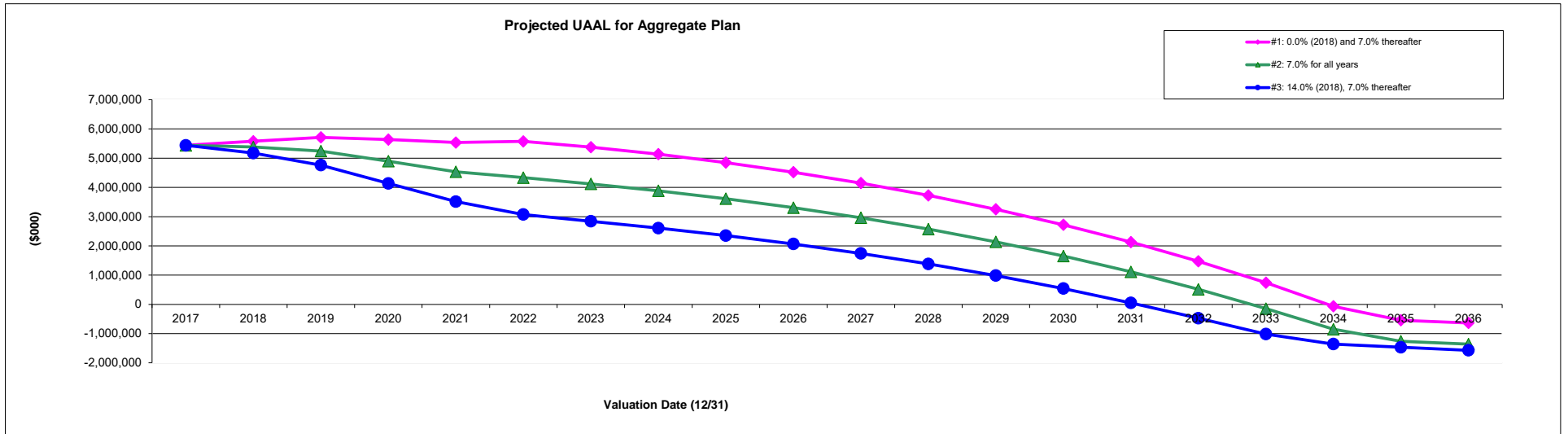
	Valuation Date (12/31)																			
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
General																				
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	18.3%	18.6%	18.7%	17.6%	16.6%	16.1%	16.1%	16.1%	16.1%	16.1%	16.0%	16.0%	16.0%	10.2%	10.2%	10.1%	10.1%	10.1%	10.1%	10.1%
RG #2 - Plans I, J, O, P, S, T, U and W (County et al.)	35.3%	35.3%	35.1%	33.1%	31.4%	30.4%	30.1%	29.9%	29.6%	29.4%	29.1%	28.9%	28.7%	28.5%	28.3%	9.1%	8.9%	8.8%	8.6%	8.4%
RG #3 - Plans B, G, H and U (OCSD)	12.5%	12.3%	12.2%	12.1%	11.9%	11.8%	11.7%	11.6%	11.5%	11.4%	11.3%	11.2%	11.1%	11.0%	11.0%	10.9%	10.9%	10.8%	10.8%	10.7%
RG #5 - Plans A, B and U (OCTA)	28.0%	28.1%	28.2%	26.5%	25.1%	24.4%	24.3%	24.3%	24.2%	24.2%	24.2%	24.1%	24.1%	24.1%	11.5%	11.5%	11.5%	11.5%	11.4%	11.4%
RG #9 - Plans M, N and U (TCA)	24.5%	24.3%	24.1%	22.8%	21.6%	21.0%	20.8%	20.7%	20.6%	20.5%	20.4%	20.3%	20.3%	20.2%	11.5%	11.4%	11.3%	11.3%	11.3%	11.2%
RG #10 - Plans I, J, M, N and U (OCFA)	29.0%	28.8%	28.5%	26.8%	25.2%	24.3%	24.2%	24.0%	23.9%	23.8%	23.6%	23.5%	23.4%	11.5%	11.4%	11.3%	11.2%	11.1%	11.0%	10.9%
RG #11 - Plans M and N, future service, and U (Cemetery)	12.5%	12.1%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
RG #12 - Plans G and H, future service, and U (Law Library)	13.9%	13.1%	12.6%	12.2%	11.8%	11.5%	11.3%	11.1%	10.9%	10.7%	10.6%	10.4%	10.3%	10.2%	10.1%	10.0%	9.9%	9.8%	9.8%	9.7%
Safety																				
RG #6 - Plans E, F and V (Probation)	52.3%	53.1%	53.7%	51.3%	49.0%	47.7%	47.5%	47.3%	47.0%	46.7%	46.5%	46.1%	45.8%	45.4%	45.0%	44.5%	19.2%	18.7%	18.4%	18.0%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	62.4%	62.5%	62.3%	59.1%	56.3%	54.8%	54.5%	54.2%	53.9%	53.7%	53.4%	53.2%	52.9%	52.7%	52.5%	21.0%	20.8%	20.6%	20.5%	20.3%
RG #8 - Plans E, F, Q, R and V (OCFA)	46.2%	45.6%	44.6%	41.6%	38.9%	37.3%	36.6%	36.0%	35.6%	35.2%	34.8%	34.4%	34.0%	19.5%	19.1%	18.7%	18.3%	17.9%	17.6%	17.2%

Under this scenario, Rate Group #3 would be expected to use up none of the amount in the O.C. Sanitation District UAAL Deferred Account (that account has a balance of \$14,871,000 as of December 31, 2017) by the December 31, 2036 valuation.

Rates shown throughout these projections for Rate Group #12 have been adjusted for the future service only benefit enhancement.

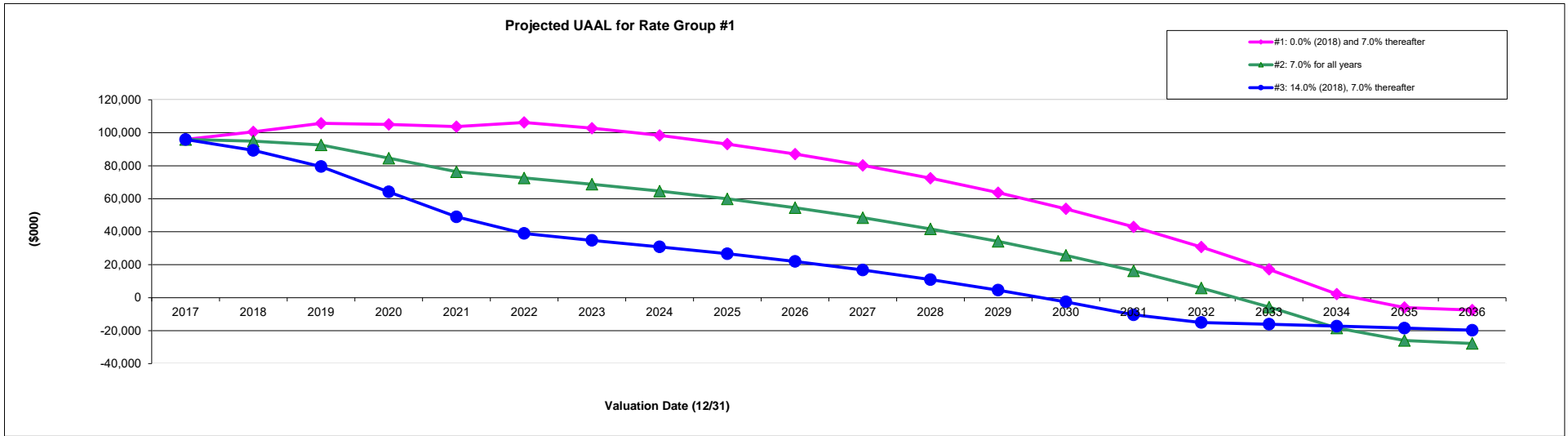
Similar to prior projections, we have not taken into account the County Investment Account (that account has a balance of \$134,417,000 as of December 31, 2017) in these projections.

Attachment C Projected UAAL and Funded Ratio for Aggregate Plan



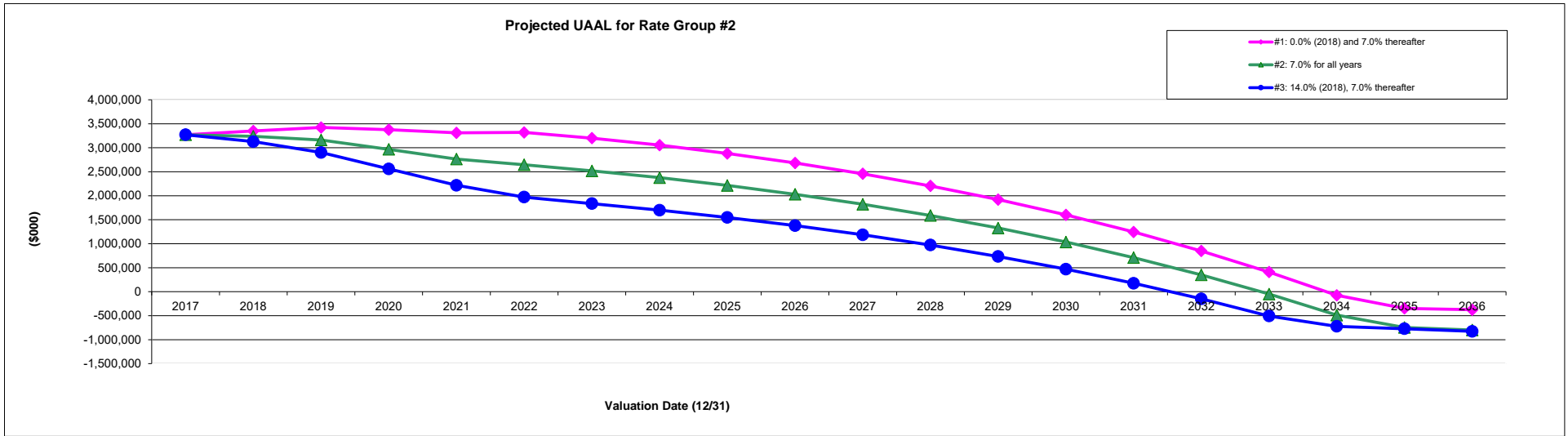
UAAL (\$000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	5,438,302	5,577,765	5,712,362	5,636,773	5,534,382	5,574,889	5,377,296	5,136,322	4,848,995	4,520,647	4,147,767	3,726,542	3,252,928	2,722,530	2,130,525	1,471,812	741,003	-65,956	-543,505	-635,125
#2: 7.0% for all years	5,438,302	5,380,477	5,244,434	4,895,215	4,533,827	4,333,402	4,119,996	3,883,569	3,613,760	3,307,580	2,961,928	2,573,543	2,138,746	1,653,668	1,114,238	515,897	-146,146	-849,557	-1,260,541	-1,356,905
#3: 14.0% (2018), 7.0% thereafter	5,438,302	5,174,635	4,760,695	4,136,735	3,515,158	3,072,624	2,841,830	2,607,768	2,352,632	2,065,555	1,743,835	1,384,568	984,715	540,867	49,411	-472,643	-1,015,325	-1,357,333	-1,466,535	-1,569,194
Funded Ratio																				
#1: 0.0% (2018) and 7.0% thereafter	72.3%	73.1%	73.8%	75.4%	77.0%	77.9%	79.7%	81.5%	83.3%	85.1%	86.9%	88.7%	90.5%	92.4%	94.3%	96.2%	98.1%	100.2%	101.3%	101.4%
#2: 7.0% for all years	72.3%	74.0%	75.9%	78.6%	81.2%	82.9%	84.5%	86.0%	87.5%	89.1%	90.6%	92.2%	93.8%	95.4%	97.0%	98.7%	100.4%	102.1%	103.0%	103.1%
#3: 14.0% (2018), 7.0% thereafter	72.3%	75.0%	78.2%	82.0%	85.4%	87.8%	89.3%	90.6%	91.9%	93.2%	94.5%	95.8%	97.1%	98.5%	99.9%	101.2%	102.5%	103.3%	103.4%	103.6%

Attachment D
Projected UAAL and Funded Ratio for Rate Group #1
Plans A, B and U (non-OCTA, non-OCSD)



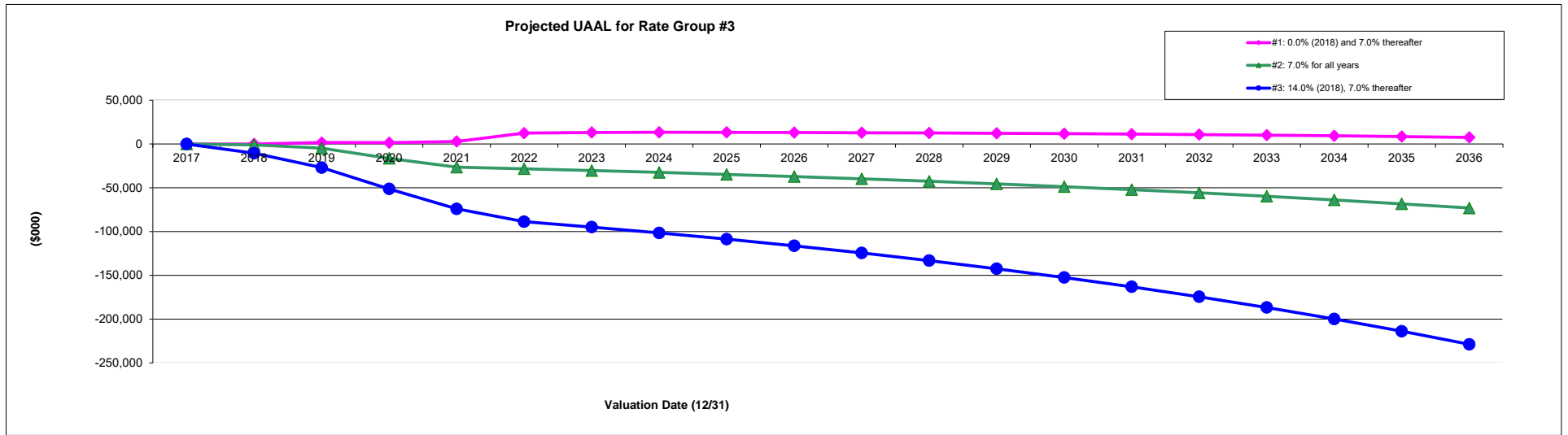
UAAL (\$000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	95,943	100,543	105,735	105,072	103,723	106,266	102,786	98,434	93,158	87,112	80,235	72,460	63,706	53,896	42,942	30,743	17,196	2,234	-5,934	-7,496
#2: 7.0% for all years	95,943	94,937	92,627	84,624	76,403	72,628	68,789	64,639	59,911	54,553	48,509	41,727	34,146	25,692	16,295	5,876	-5,648	-18,323	-25,923	-27,738
#3: 14.0% (2018), 7.0% thereafter	95,943	89,331	79,517	64,160	49,057	38,969	34,777	30,826	26,658	21,991	16,786	10,997	4,577	-2,527	-10,362	-15,038	-16,090	-17,217	-18,422	-19,711
Funded Ratio	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	80.2%	80.3%	80.3%	81.4%	82.5%	82.9%	84.3%	85.6%	87.0%	88.3%	89.7%	91.1%	92.5%	93.9%	95.3%	96.8%	98.2%	99.8%	100.6%	100.7%
#2: 7.0% for all years	80.2%	81.4%	82.8%	85.0%	87.1%	88.3%	89.5%	90.5%	91.6%	92.7%	93.8%	94.9%	96.0%	97.1%	98.2%	99.4%	100.6%	101.8%	102.5%	102.6%
#3: 14.0% (2018), 7.0% thereafter	80.2%	82.5%	85.2%	88.6%	91.7%	93.7%	94.7%	95.5%	96.3%	97.1%	97.8%	98.6%	99.5%	100.3%	101.1%	101.6%	101.6%	101.7%	101.8%	101.8%

Attachment E
Projected UAAL and Funded Ratio for Rate Group #2
Plans I, J, O, P, S, T, U and W (County et al.)



UAAL (\$000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	3,271,320	3,350,013	3,423,669	3,376,367	3,311,752	3,320,375	3,199,957	3,054,091	2,880,970	2,683,229	2,458,741	2,205,216	1,920,273	1,601,272	1,245,290	849,266	410,000	-74,903	-347,973	-375,751
#2: 7.0% for all years	3,271,320	3,238,880	3,162,934	2,968,355	2,765,185	2,646,003	2,518,335	2,376,428	2,214,388	2,030,405	1,822,602	1,589,036	1,327,464	1,035,548	710,862	350,628	-48,055	-487,080	-745,452	-797,634
#3: 14.0% (2018), 7.0% thereafter	3,271,320	3,127,747	2,902,187	2,560,298	2,218,572	1,971,553	1,836,632	1,698,747	1,547,786	1,377,561	1,186,441	972,676	734,462	469,701	176,216	-148,331	-506,453	-721,377	-771,874	-825,905
Funded Ratio																				
#1: 0.0% (2018) and 7.0% thereafter	70.1%	70.9%	71.6%	73.3%	74.9%	75.9%	77.8%	79.6%	81.5%	83.4%	85.4%	87.3%	89.3%	91.4%	93.5%	95.7%	98.0%	100.4%	101.6%	101.7%
#2: 7.0% for all years	70.1%	71.8%	73.8%	76.5%	79.1%	80.8%	82.5%	84.2%	85.8%	87.5%	89.2%	90.9%	92.6%	94.4%	96.3%	98.2%	100.2%	102.3%	103.5%	103.7%
#3: 14.0% (2018), 7.0% thereafter	70.1%	72.8%	75.9%	79.7%	83.2%	85.7%	87.2%	88.7%	90.1%	91.5%	92.9%	94.4%	95.9%	97.5%	99.1%	100.8%	102.5%	103.5%	103.6%	103.8%

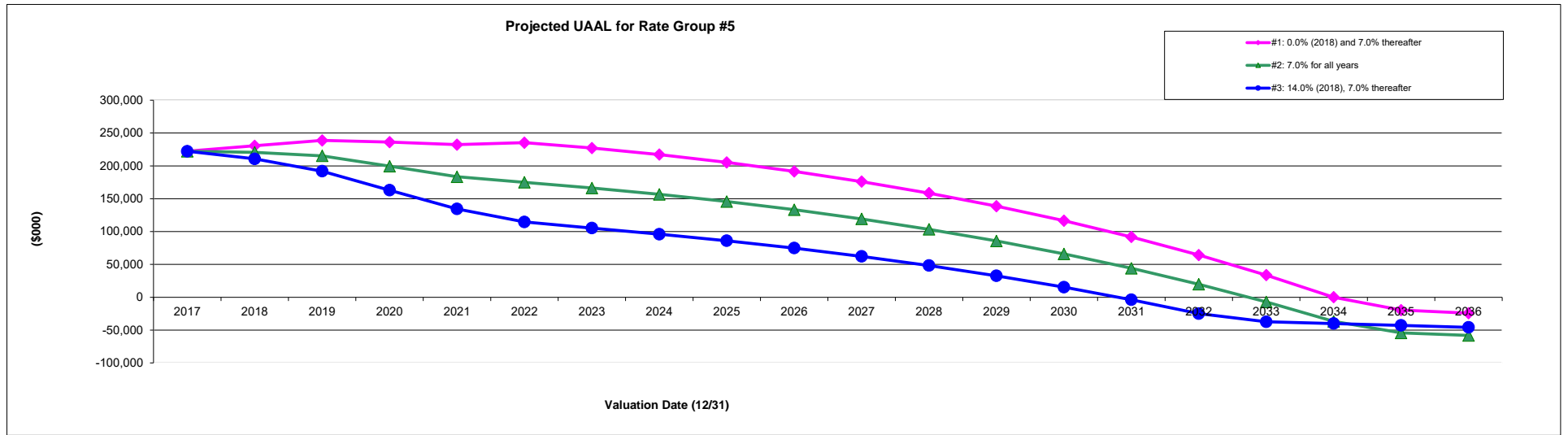
Attachment F Projected UAAL and Funded Ratio for Rate Group #3 Plans B, G, H and U (OCSD)



UAAL (\$000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	0	0	1,625	1,480	2,830	12,441	13,135	13,413	13,273	13,084	12,845	12,552	12,200	11,783	11,295	10,731	10,083	9,345	8,508	7,563
#2: 7.0% for all years	0	-1,006	-4,760	-16,419	-26,489	-28,343	-30,328	-32,450	-34,722	-37,153	-39,753	-42,536	-45,513	-48,699	-52,108	-55,756	-59,659	-63,835	-68,303	-73,085
#3: 14.0% (2018), 7.0% thereafter	0	-10,565	-26,961	-51,273	-74,053	-88,682	-94,890	-101,532	-108,640	-116,244	-124,381	-133,088	-142,404	-152,373	-163,039	-174,451	-186,663	-199,729	-213,710	-228,670
Funded Ratio																				
#1: 0.0% (2018) and 7.0% thereafter	100.0%	100.0%	99.8%	99.8%	99.7%	98.5%	98.5%	98.6%	98.6%	98.7%	98.8%	98.9%	98.9%	99.0%	99.1%	99.2%	99.3%	99.3%	99.4%	99.5%
#2: 7.0% for all years	100.0%	100.1%	100.6%	102.1%	103.2%	103.3%	103.4%	103.5%	103.5%	103.6%	103.7%	103.8%	103.9%	104.0%	104.2%	104.3%	104.4%	104.6%	104.7%	104.9%
#3: 14.0% (2018), 7.0% thereafter	100.0%	101.5%	103.6%	106.6%	109.1%	110.4%	110.6%	110.8%	111.1%	111.3%	111.6%	111.9%	112.3%	112.6%	113.0%	113.4%	113.9%	114.3%	114.8%	115.4%

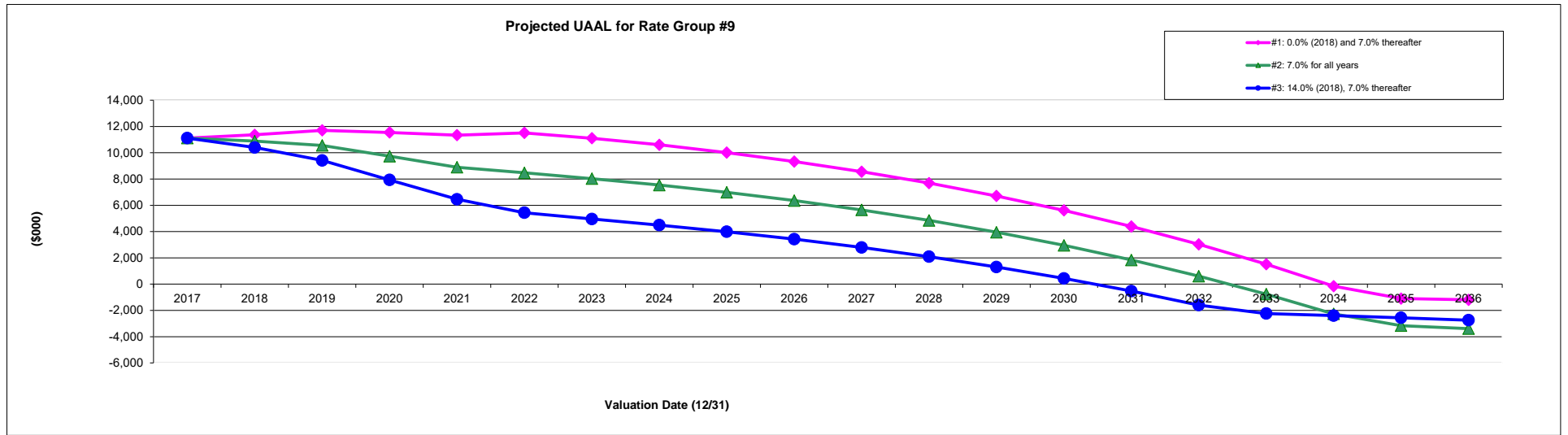
Unlike most of the other Rate Groups, Rate Group #3 has a UAAL under Scenario #1 due to the reemergence of their UAAL amortization layers starting with the December 31, 2019 valuation. While Rate Group #3 is 100% funded as of the December 31, 2017 valuation, they are anticipated to have a restart amortization layer starting with the December 31, 2019 valuation under Scenario #1, which will not drop off until 20 years after that restart amortization layer is established.

Attachment G Projected UAAL and Funded Ratio for Rate Group #5 Plans A, B and U (OCTA)



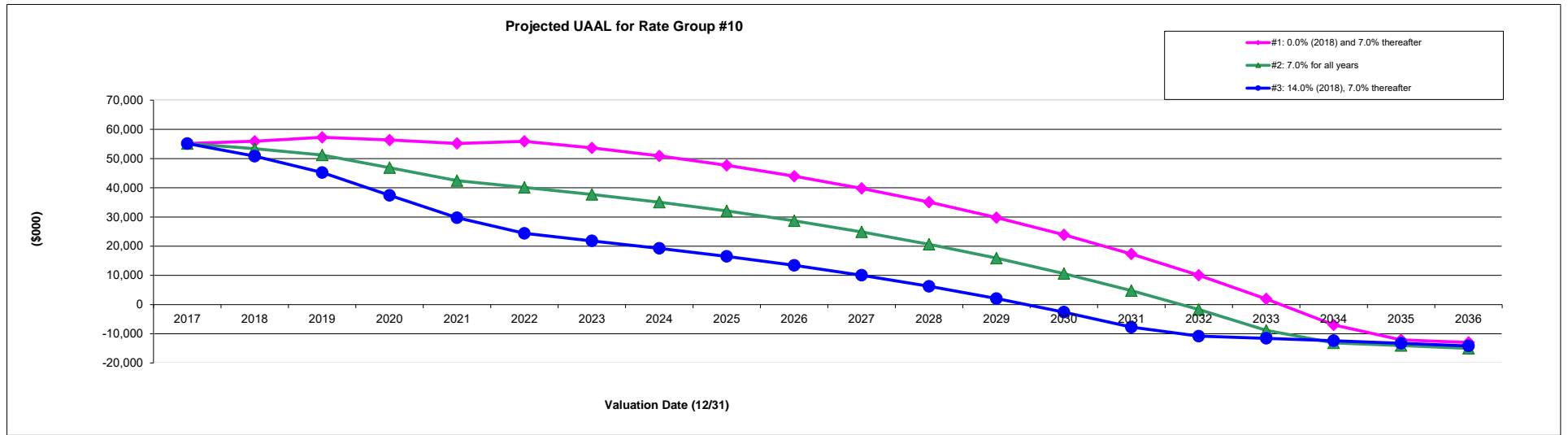
UAAL (\$000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	222,244	230,665	238,763	236,183	232,357	235,344	227,226	217,246	205,280	191,593	176,044	158,472	138,706	116,561	91,839	64,326	33,793	72	-19,546	-24,223
#2: 7.0% for all years	222,244	220,649	215,329	199,587	183,420	175,052	166,302	156,688	145,716	133,271	119,225	103,444	85,775	66,066	44,150	19,838	-7,058	-36,668	-54,224	-58,020
#3: 14.0% (2018), 7.0% thereafter	222,244	210,633	191,891	162,981	134,455	114,714	105,321	96,063	86,082	74,866	62,311	48,300	32,718	15,437	-3,690	-24,804	-37,302	-39,914	-42,707	-45,697
Funded Ratio																				
#1: 0.0% (2018) and 7.0% thereafter	75.7%	76.0%	76.4%	77.7%	79.1%	79.8%	81.4%	83.0%	84.6%	86.2%	87.9%	89.5%	91.2%	92.9%	94.6%	96.4%	98.2%	100.0%	101.0%	101.2%
#2: 7.0% for all years	75.7%	77.1%	78.7%	81.2%	83.5%	85.0%	86.4%	87.7%	89.1%	90.4%	91.8%	93.2%	94.6%	96.0%	97.4%	98.9%	100.4%	101.9%	102.8%	102.9%
#3: 14.0% (2018), 7.0% thereafter	75.7%	78.1%	81.0%	84.6%	87.9%	90.2%	91.4%	92.5%	93.5%	94.6%	95.7%	96.8%	97.9%	99.1%	100.2%	101.4%	102.0%	102.1%	102.2%	102.3%

Attachment H Projected UAAL and Funded Ratio for Rate Group #9 Plans M, N and U (TCA)



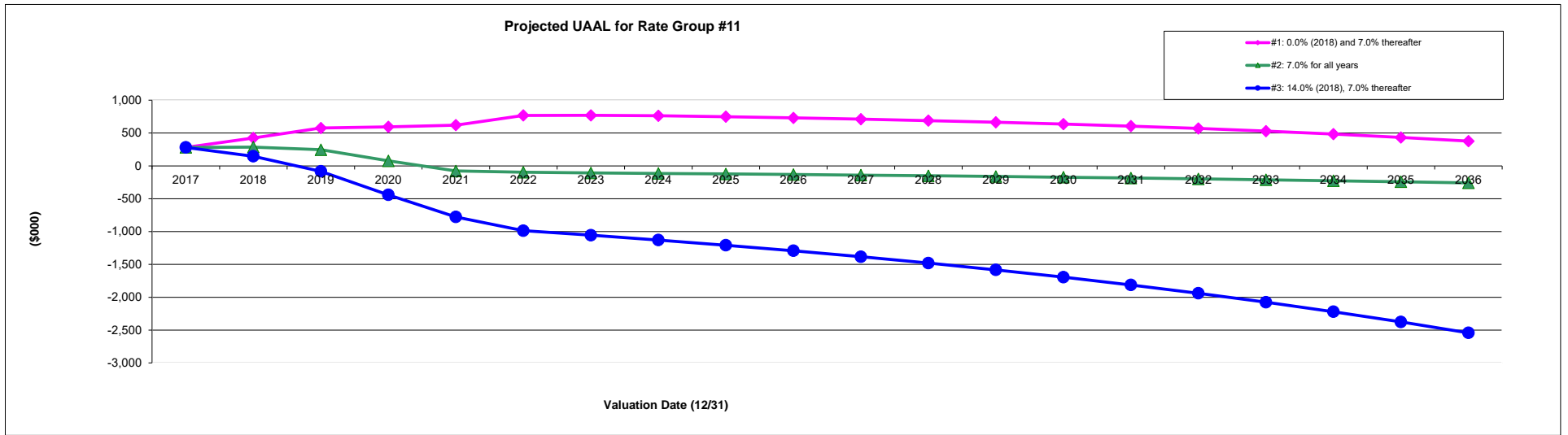
UAAL (\$000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	11,115	11,368	11,702	11,543	11,339	11,511	11,106	10,608	10,012	9,332	8,561	7,691	6,713	5,617	4,393	3,030	1,517	-155	-1,098	-1,193
#2: 7.0% for all years	11,115	10,886	10,558	9,735	8,896	8,471	8,029	7,543	6,989	6,360	5,649	4,850	3,954	2,953	1,840	606	-759	-2,259	-3,161	-3,382
#3: 14.0% (2018), 7.0% thereafter	11,115	10,404	9,415	7,929	6,457	5,436	4,958	4,490	3,989	3,425	2,794	2,090	1,305	434	-530	-1,594	-2,236	-2,392	-2,560	-2,739
Funded Ratio																				
#1: 0.0% (2018) and 7.0% thereafter	74.8%	75.9%	76.7%	78.5%	80.2%	81.1%	82.9%	84.6%	86.3%	88.0%	89.6%	91.2%	92.7%	94.2%	95.7%	97.2%	98.7%	100.1%	100.9%	100.9%
#2: 7.0% for all years	74.8%	76.9%	79.0%	81.9%	84.5%	86.1%	87.6%	89.0%	90.4%	91.8%	93.1%	94.4%	95.7%	97.0%	98.2%	99.4%	100.7%	101.9%	102.5%	102.5%
#3: 14.0% (2018), 7.0% thereafter	74.8%	77.9%	81.3%	85.2%	88.7%	91.1%	92.3%	93.5%	94.5%	95.6%	96.6%	97.6%	98.6%	99.6%	100.5%	101.5%	102.0%	102.0%	102.0%	102.0%

Attachment I Projected UAAL and Funded Ratio for Rate Group #10 Plans I, J, M, N and U (OCFA)



UAAL (\$000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	55,160	55,937	57,270	56,358	55,191	55,897	53,654	50,924	47,676	43,980	39,798	35,088	29,807	23,907	17,337	10,038	1,955	-6,953	-12,095	-12,942
#2: 7.0% for all years	55,160	53,382	51,242	46,887	42,462	40,142	37,727	35,086	32,090	28,710	24,910	20,657	15,913	10,636	4,782	-1,694	-8,841	-13,086	-14,002	-14,983
#3: 14.0% (2018), 7.0% thereafter	55,160	50,827	45,214	37,420	29,738	24,394	21,804	19,254	16,515	13,455	10,046	6,257	2,057	-2,588	-7,712	-10,802	-11,559	-12,368	-13,233	-14,160
Funded Ratio																				
#1: 0.0% (2018) and 7.0% thereafter	76.1%	77.1%	77.9%	79.4%	80.9%	81.7%	83.3%	85.0%	86.6%	88.3%	89.9%	91.5%	93.1%	94.7%	96.4%	98.0%	99.6%	101.3%	102.1%	102.2%
#2: 7.0% for all years	76.1%	78.2%	80.2%	82.9%	85.3%	86.8%	88.3%	89.6%	91.0%	92.3%	93.7%	95.0%	96.3%	97.7%	99.0%	100.3%	101.7%	102.4%	102.5%	102.5%
#3: 14.0% (2018), 7.0% thereafter	76.1%	79.2%	82.5%	86.3%	89.7%	92.0%	93.2%	94.3%	95.4%	96.4%	97.5%	98.5%	99.5%	100.6%	101.6%	102.2%	102.2%	102.3%	102.3%	102.4%

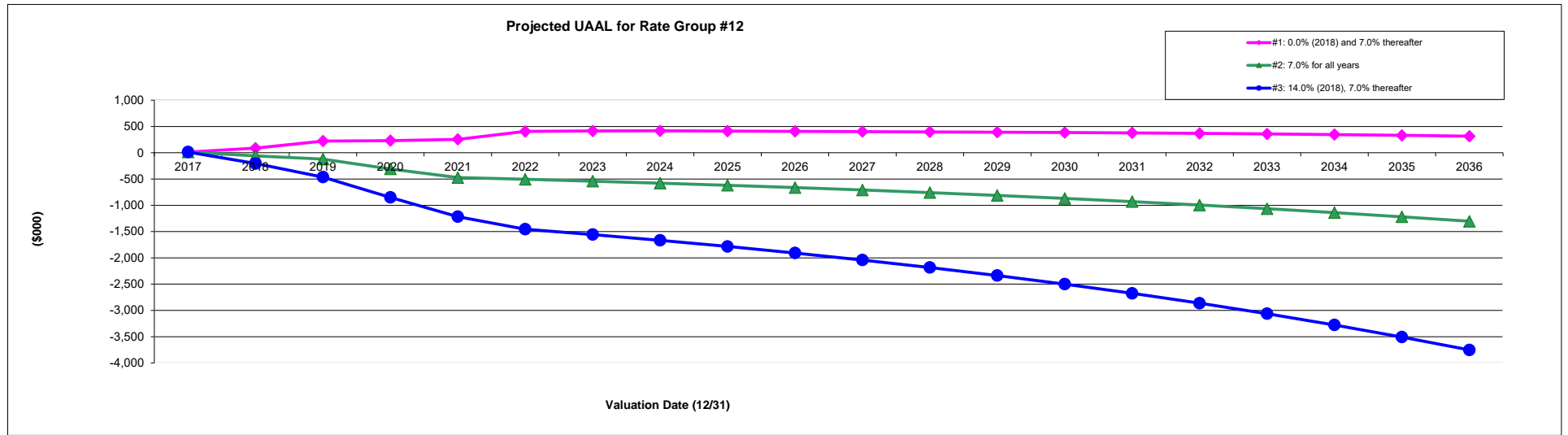
Attachment J
Projected UAAL and Funded Ratio for Rate Group #11
Plans M and N, future service, and U (Cemetery)



UAAL (\$000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	281	426	576	595	620	768	769	763	748	731	711	689	664	636	605	570	529	484	433	376
#2: 7.0% for all years	281	286	246	77	-77	-97	-107	-115	-123	-132	-141	-151	-161	-172	-184	-197	-211	-226	-242	-259
#3: 14.0% (2018), 7.0% thereafter	281	146	-83	-441	-777	-986	-1,055	-1,128	-1,207	-1,292	-1,382	-1,479	-1,583	-1,694	-1,812	-1,939	-2,075	-2,220	-2,375	-2,542

Funded Ratio	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	97.2%	96.0%	95.0%	95.2%	95.4%	94.7%	95.1%	95.5%	95.9%	96.3%	96.6%	97.0%	97.3%	97.6%	97.8%	98.1%	98.4%	98.6%	98.8%	99.1%
#2: 7.0% for all years	97.2%	97.3%	97.9%	99.4%	100.6%	100.7%	100.7%	100.7%	100.7%	100.7%	100.7%	100.7%	100.7%	100.7%	100.7%	100.7%	100.7%	100.7%	100.7%	100.7%
#3: 14.0% (2018), 7.0% thereafter	97.2%	98.6%	100.7%	103.5%	105.7%	106.8%	106.7%	106.7%	106.6%	106.6%	106.5%	106.5%	106.5%	106.5%	106.4%	106.4%	106.4%	106.4%	106.4%	106.4%

Attachment K Projected UAAL and Funded Ratio for Rate Group #12 Plans G, H and U (Law Library)

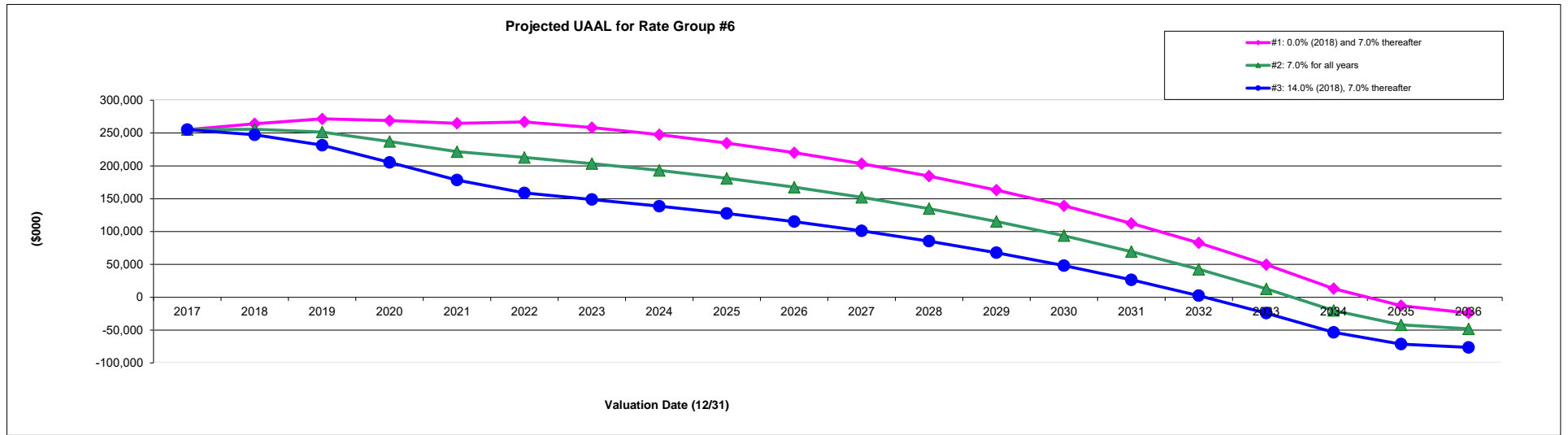


UAAL (\$000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	13	87	222	230	254	406	414	416	412	407	402	396	391	384	377	368	358	345	331	314
#2: 7.0% for all years	13	-59	-120	-308	-472	-506	-541	-579	-619	-663	-709	-759	-812	-869	-929	-995	-1,064	-1,139	-1,218	-1,304
#3: 14.0% (2018), 7.0% thereafter	13	-205	-463	-849	-1,216	-1,455	-1,557	-1,666	-1,782	-1,907	-2,041	-2,184	-2,336	-2,500	-2,675	-2,862	-3,063	-3,277	-3,506	-3,752

Funded Ratio	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	99.9%	99.2%	98.1%	98.1%	98.1%	97.1%	97.2%	97.4%	97.5%	97.7%	97.9%	98.0%	98.1%	98.3%	98.4%	98.5%	98.6%	98.8%	98.9%	99.0%
#2: 7.0% for all years	99.9%	100.5%	101.0%	102.5%	103.6%	103.6%	103.6%	103.7%	103.7%	103.7%	103.8%	103.8%	103.8%	103.9%	103.9%	104.0%	104.0%	104.1%	104.2%	104.2%
#3: 14.0% (2018), 7.0% thereafter	99.9%	101.9%	104.0%	106.9%	109.3%	110.4%	110.5%	110.6%	110.6%	110.7%	110.8%	111.0%	111.1%	111.2%	111.3%	111.5%	111.6%	111.8%	112.0%	112.2%

Attachment L

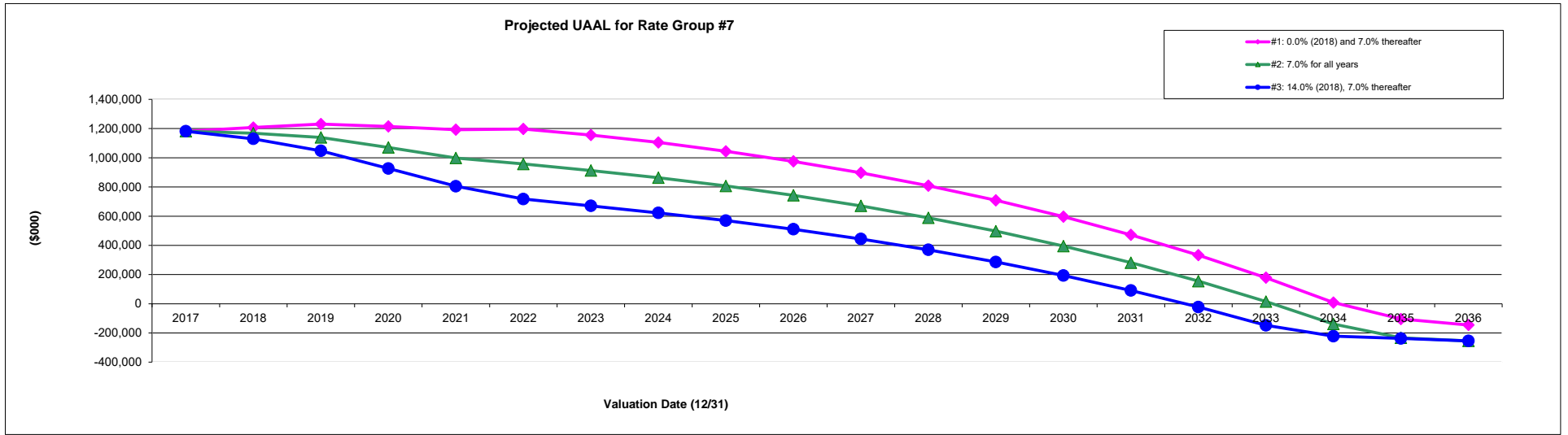
Projected UAAL and Funded Ratio for Rate Group #6 Plans E, F and V (Probation)



UAAL (\$000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	255,122	264,200	271,590	269,005	264,820	266,937	258,221	247,530	234,729	220,061	203,364	184,460	163,160	139,267	112,564	82,817	49,771	13,221	-12,777	-23,924
#2: 7.0% for all years	255,122	255,780	251,524	237,160	221,569	212,815	203,457	193,057	181,137	167,565	152,198	134,884	115,454	93,730	69,527	42,635	12,834	-20,047	-41,921	-48,021
#3: 14.0% (2018), 7.0% thereafter	255,122	247,361	231,465	205,341	178,379	158,818	148,823	138,716	127,675	115,190	101,143	85,405	67,827	48,259	26,535	2,480	-24,096	-53,334	-71,257	-76,245

Funded Ratio	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	69.2%	70.3%	71.5%	73.7%	75.8%	77.2%	79.4%	81.5%	83.6%	85.6%	87.5%	89.4%	91.2%	92.9%	94.6%	96.3%	97.9%	99.5%	100.5%	100.8%
#2: 7.0% for all years	69.2%	71.3%	73.6%	76.8%	79.8%	81.9%	83.8%	85.6%	87.3%	89.0%	90.7%	92.2%	93.8%	95.2%	96.7%	98.1%	99.5%	100.8%	101.6%	101.7%
#3: 14.0% (2018), 7.0% thereafter	69.2%	72.2%	75.8%	79.9%	83.7%	86.5%	88.1%	89.7%	91.1%	92.5%	93.8%	95.1%	96.3%	97.5%	98.7%	99.9%	101.0%	102.1%	102.7%	102.7%

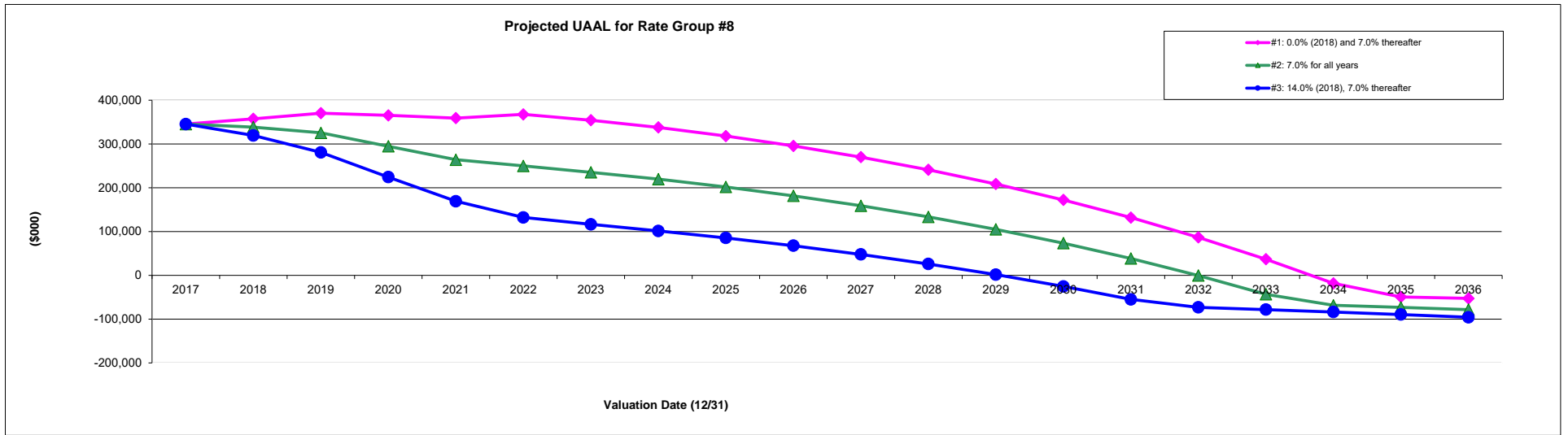
Attachment M
Projected UAAL and Funded Ratio for Rate Group #7
Plans E, F, Q, R and V (Law Enforcement)



UAAL (\$000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	1,181,694	1,207,118	1,230,831	1,214,616	1,192,463	1,197,389	1,155,685	1,104,951	1,044,568	975,512	897,052	808,380	708,613	596,817	471,987	333,043	178,842	8,486	-104,249	-145,308
#2: 7.0% for all years	1,181,694	1,168,304	1,139,276	1,070,677	998,786	957,335	912,950	863,602	807,165	743,010	670,475	588,849	497,365	395,201	281,471	155,222	15,432	-138,652	-233,075	-254,350
#3: 14.0% (2018), 7.0% thereafter	1,181,694	1,129,489	1,047,729	926,787	805,233	717,521	670,502	622,530	570,013	510,743	444,135	369,571	286,388	193,875	91,245	-22,325	-147,705	-221,954	-237,491	-254,116

Funded Ratio	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	69.3%	70.3%	71.3%	73.2%	75.0%	76.1%	78.1%	80.1%	82.1%	84.0%	86.0%	88.0%	89.9%	91.9%	93.9%	95.8%	97.9%	99.9%	101.2%	101.5%
#2: 7.0% for all years	69.3%	71.3%	73.4%	76.3%	79.0%	80.9%	82.7%	84.4%	86.1%	87.8%	89.5%	91.2%	92.9%	94.6%	96.3%	98.1%	99.8%	101.6%	102.6%	102.7%
#3: 14.0% (2018), 7.0% thereafter	69.3%	72.2%	75.6%	79.5%	83.1%	85.7%	87.3%	88.8%	90.2%	91.6%	93.1%	94.5%	95.9%	97.4%	98.8%	100.3%	101.8%	102.5%	102.6%	102.7%

Attachment N Projected UAAL and Funded Ratio for Rate Group #8 Plans E, F, Q, R and V (OCFA)



UAAL (\$000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
#1: 0.0% (2018) and 7.0% thereafter	345,410	357,408	370,379	365,324	359,033	367,556	354,343	337,944	318,169	295,606	270,015	241,137	208,695	172,388	131,895	86,879	36,960	-18,132	-49,105	-52,542
#2: 7.0% for all years	345,410	338,438	325,578	294,838	264,145	249,903	235,384	219,670	201,826	181,653	158,963	133,542	105,163	73,581	38,533	-265	-43,117	-68,242	-73,019	-78,130
#3: 14.0% (2018), 7.0% thereafter	345,410	319,468	280,783	224,381	169,314	132,341	116,515	101,468	85,545	67,768	47,982	26,023	1,704	-25,158	-54,766	-72,976	-78,085	-83,550	-89,399	-95,657
Funded Ratio																				
#1: 0.0% (2018) and 7.0% thereafter	79.0%	79.7%	80.2%	81.6%	83.0%	83.6%	85.1%	86.6%	88.1%	89.5%	90.9%	92.3%	93.7%	95.1%	96.4%	97.8%	99.1%	100.4%	101.1%	101.1%
#2: 7.0% for all years	79.0%	80.7%	82.6%	85.2%	87.5%	88.9%	90.1%	91.3%	92.4%	93.6%	94.7%	95.8%	96.8%	97.9%	99.0%	100.0%	101.1%	101.6%	101.6%	101.7%
#3: 14.0% (2018), 7.0% thereafter	79.0%	81.8%	85.0%	88.7%	92.0%	94.1%	95.1%	96.0%	96.8%	97.6%	98.4%	99.2%	99.9%	100.7%	101.5%	101.9%	101.9%	102.0%	102.0%	102.0%

Attachment O

Projected Employer Rates by Plans within each Rate Group

Scenario 1: 0.0% for 2018 and 7.0% thereafter

	Valuation Date (12/31)																			
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
General																				
RG #1 - Plans A and B	18.6%	20.0%	21.4%	21.4%	21.5%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	21.9%	10.7%	12.2%	10.7%	10.7%
RG #1 - Plan U	17.8%	19.2%	20.6%	20.6%	20.7%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.1%	9.9%	11.4%	9.9%
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	18.3%	19.6%	21.0%	21.0%	21.1%	21.5%	21.5%	21.5%	21.5%	21.5%	21.4%	21.4%	21.4%	21.4%	21.4%	21.3%	10.1%	11.6%	10.1%	10.1%
RG #2 - Plans I and J (non-Children and Families Comm.)	37.1%	37.7%	40.9%	40.9%	41.0%	41.8%	41.8%	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	41.6%	14.7%	14.4%	14.4%
RG #2 - Plans I and J (Children and Families Comm.)	15.4%	17.1%	18.9%	19.0%	19.1%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	17.3%	14.4%	14.4%
RG #2 - Plans O and P	28.9%	29.5%	32.7%	32.8%	32.9%	33.6%	33.6%	33.6%	33.6%	33.6%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.4%	6.6%	6.2%	6.2%
RG #2 - Plan S	34.2%	34.8%	38.0%	38.1%	38.2%	38.9%	38.9%	38.9%	38.9%	38.9%	38.8%	38.8%	38.8%	38.8%	38.8%	38.7%	11.9%	11.5%	11.5%	11.5%
RG #2 - Plan T	29.8%	30.4%	33.6%	33.7%	33.8%	34.5%	34.5%	34.5%	34.5%	34.5%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.3%	7.5%	7.1%	7.1%
RG #2 - Plan U (non-Children and Families Comm.)	31.5%	32.0%	35.3%	35.3%	35.4%	36.1%	36.1%	36.1%	36.1%	36.1%	36.1%	36.1%	36.1%	36.1%	36.1%	36.1%	36.0%	9.1%	8.8%	8.8%
RG #2 - Plan U (Children and Families Comm.)	9.8%	11.5%	13.3%	13.4%	13.5%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%	14.1%	11.6%	8.8%	8.8%
RG #2 - Plan W	31.2%	31.8%	35.0%	35.1%	35.2%	35.9%	35.9%	35.9%	35.9%	35.9%	35.9%	35.9%	35.9%	35.9%	35.9%	35.9%	35.7%	8.9%	8.6%	8.6%
RG #2 - Plans I, J, O, P, S, T, U and W (County et al.)	35.3%	36.8%	38.6%	38.3%	38.2%	38.6%	38.4%	38.1%	37.9%	37.7%	37.4%	37.2%	37.0%	36.8%	36.6%	36.3%	9.3%	8.8%	8.6%	8.4%
RG #3 - Plans G and H	13.3%	13.3%	13.5%	13.4%	13.6%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%
RG #3 - Plan B	11.3%	11.3%	11.4%	11.4%	11.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%
RG #3 - Plan U	10.4%	10.4%	10.6%	10.5%	10.7%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%
RG #3 - Plans B, G, H and U (OCSD)	12.5%	12.3%	12.4%	12.2%	12.2%	13.0%	12.9%	12.8%	12.7%	12.6%	12.5%	12.4%	12.3%	12.3%	12.2%	12.1%	12.1%	12.0%	12.0%	11.9%
RG #5 - Plans A and B	28.0%	29.7%	31.7%	31.8%	31.9%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.4%	13.2%	14.5%	12.1%
RG #5 - Plan U	27.3%	28.9%	30.9%	31.0%	31.1%	31.8%	31.8%	31.8%	31.7%	31.7%	31.7%	31.7%	31.7%	31.7%	31.7%	31.7%	31.6%	12.5%	13.7%	11.3%
RG #5 - Plans A, B and U (OCTA)	28.0%	29.6%	31.5%	31.5%	31.6%	32.2%	32.2%	32.1%	32.1%	32.0%	32.0%	32.0%	32.0%	31.9%	31.9%	31.8%	12.6%	13.8%	11.4%	11.4%
RG #9 - Plans M and N	26.0%	26.9%	28.1%	28.1%	28.2%	28.7%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.5%	14.8%	14.5%	14.5%	14.5%
RG #9 - Plan U	22.5%	23.5%	24.6%	24.6%	24.7%	25.2%	25.1%	25.1%	25.1%	25.1%	25.1%	25.1%	25.1%	25.1%	25.1%	25.1%	25.1%	11.3%	11.0%	11.0%
RG #9 - Plans M, N and U (TCA)	24.5%	25.3%	26.3%	26.2%	26.1%	26.5%	26.3%	26.2%	26.0%	25.9%	25.8%	25.8%	25.7%	25.6%	25.6%	25.4%	11.6%	11.3%	11.3%	11.2%
RG #10 - Plans I and J	30.5%	31.9%	33.6%	33.7%	33.8%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.3%	14.7%	14.7%	14.7%
RG #10 - Plans M and N	29.2%	30.6%	32.4%	32.4%	32.5%	33.2%	33.2%	33.2%	33.2%	33.2%	33.2%	33.2%	33.2%	33.2%	33.2%	33.1%	33.0%	13.5%	13.5%	13.5%
RG #10 - Plan U	26.1%	27.6%	29.3%	29.4%	29.4%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.0%	10.4%	10.4%	10.4%	10.4%
RG #10 - Plans I, J, M, N and U (OCFA)	29.0%	30.3%	31.8%	31.8%	31.7%	32.2%	32.1%	31.9%	31.8%	31.7%	31.5%	31.4%	31.3%	31.2%	31.0%	30.8%	11.2%	11.1%	11.0%	10.9%
RG #11 - Plans M and N, future service	12.5%	13.4%	14.6%	14.6%	14.6%	15.2%	15.2%	15.2%	15.1%	15.0%	14.9%	14.9%	14.9%	14.9%	14.9%	14.9%	14.9%	14.9%	14.9%	14.7%
RG #11 - Plan U	12.5%	13.5%	14.6%	14.6%	14.7%	15.3%	15.2%	15.2%	15.1%	15.1%	15.0%	15.0%	15.0%	15.0%	15.0%	14.9%	14.9%	14.9%	14.9%	14.8%
RG #11 - Plans M and N, future service, and U (Cemetery)	12.5%	13.4%	14.6%	14.6%	14.6%	15.2%	15.2%	15.2%	15.1%	15.0%	14.9%	14.9%	14.9%	14.9%	14.9%	14.9%	14.9%	14.9%	14.9%	14.8%
RG #12 - Plans G and H, future service	14.1%	14.7%	15.6%	15.5%	15.6%	16.5%	16.4%	16.3%	16.2%	16.2%	16.1%	16.1%	16.1%	16.1%	16.1%	16.1%	16.0%	16.0%	16.0%	16.0%
RG #12 - Plan U	9.3%	9.9%	10.8%	10.8%	10.9%	11.7%	11.7%	11.6%	11.5%	11.4%	11.4%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%
RG #12 - Plans G and H, future service, and U (Law Library)	13.9%	13.6%	14.0%	13.6%	13.3%	13.9%	13.6%	13.3%	13.0%	12.8%	12.6%	12.4%	12.2%	12.2%	12.1%	11.9%	11.8%	11.8%	11.7%	11.6%
Safety																				
RG #6 - Plans E and F	52.5%	55.4%	58.7%	58.9%	59.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	59.8%	34.7%	30.1%	23.7%
RG #6 - Plan V	45.4%	48.3%	51.6%	51.8%	51.9%	53.0%	53.0%	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%	52.8%	27.7%	23.0%	16.6%	16.6%
RG #6 - Plans E, F and V (Probation)	52.3%	55.1%	58.2%	58.2%	58.2%	59.0%	58.8%	58.6%	58.3%	58.1%	57.8%	57.4%	57.1%	56.7%	56.3%	55.8%	30.2%	25.1%	18.4%	18.0%
RG #7 - Plans E and F	64.0%	67.0%	70.2%	70.3%	70.5%	71.7%	71.7%	71.7%	71.7%	71.7%	71.6%	71.6%	71.6%	71.6%	71.6%	71.4%	35.8%	33.1%	26.7%	26.7%
RG #7 - Plans Q and R	61.0%	64.0%	67.2%	67.3%	67.5%	68.7%	68.7%	68.7%	68.7%	68.7%	68.6%	68.6%	68.6%	68.6%	68.6%	68.4%	32.8%	30.1%	23.7%	23.7%
RG #7 - Plan V	56.6%	59.6%	62.8%	62.9%	63.1%	64.3%	64.3%	64.3%	64.3%	64.2%	64.2%	64.2%	64.2%	64.2%	64.2%	64.0%	28.4%	25.7%	19.3%	19.3%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	62.4%	65.0%	67.9%	67.7%	67.5%	68.4%	68.1%	67.8%	67.5%	67.3%	67.0%	66.8%	66.5%	66.3%	66.1%	65.7%	29.9%	27.1%	20.5%	20.3%
RG #8 - Plans E and F	48.0%	50.2%	52.5%	52.6%	52.8%	53.9%	53.8%	53.8%	53.8%	53.8%	53.8%	53.8%	53.8%	53.8%	53.8%	53.8%	53.7%	27.2%	27.2%	27.2%
RG #8 - Plans Q and R	42.8%	45.0%	47.3%	47.3%	47.5%	48.6%	48.6%	48.6%	48.6%	48.6%	48.6%	48.6%	48.5%	48.5%	48.5%	48.5%	22.0%	22.0%	22.0%	22.0%
RG #8 - Plan V	36.2%	38.4%	40.7%	40.8%	41.0%	42.1%	42.0%	42.0%	42.0%	42.0%	42.0%	42.0%	42.0%	42.0%	42.0%	41.9%	15.4%	15.4%	15.4%	15.4%
RG #8 - Plans E, F, Q, R and V (OCFA)	46.2%	47.9%	49.8%	49.4%	49.1%	49.8%	49.1%	48.5%	48.1%	47.7%	47.2%	46.9%	46.4%	46.0%	45.6%	45.1%	18.3%	17.9%	17.6%	17.2%

Rates shown above have not been adjusted for employers with future service only benefit enhancement in Rate Group #2 (including Local Agency Formation Commission and Orange County Employees Retirement System but excluding Children and Families Commission).

In the December 31, 2033 valuation, Rate Group #1 would be projected to have a small UAAL rate, which would be entirely offset by the favorable 18-month delay adjustment due to the significant decrease in the UAAL rate in the December 31, 2033 valuation. However, in the following year, the UAAL rate would no longer be offset by the 18-month delay adjustment so the employer rate increases in that year. By the December 31, 2035 valuation, there would no longer be a UAAL rate.

Attachment O
Projected Employer Rates by Plans within each Rate Group
Scenario 2: 7.0% for all years

	Valuation Date (12/31)																			
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
General																				
RG #1 - Plans A and B	18.6%	19.5%	20.3%	19.7%	19.3%	19.3%	19.3%	19.3%	19.3%	19.3%	19.3%	19.3%	19.3%	19.3%	19.3%	19.2%	10.7%	10.7%	10.7%	10.7%
RG #1 - Plan U	17.8%	18.7%	19.5%	18.9%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.5%	18.4%	9.9%	9.9%	9.9%	9.9%
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	18.3%	19.1%	19.9%	19.3%	18.9%	18.8%	18.8%	18.8%	18.8%	18.8%	18.7%	18.7%	18.7%	18.7%	18.7%	18.6%	10.1%	10.1%	10.1%	10.1%
RG #2 - Plans I and J (non-Children and Families Comm.)	37.1%	36.9%	39.1%	38.3%	37.6%	37.6%	37.6%	37.6%	37.6%	37.6%	37.6%	37.6%	37.6%	37.6%	37.6%	37.4%	14.4%	14.4%	14.4%	14.4%
RG #2 - Plans I and J (Children and Families Comm.)	15.4%	16.3%	17.2%	16.4%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.6%	15.6%	15.6%	14.4%	14.4%	14.4%	14.4%
RG #2 - Plans O and P	28.9%	28.7%	31.0%	30.2%	29.5%	29.4%	29.4%	29.4%	29.4%	29.4%	29.4%	29.4%	29.4%	29.4%	29.4%	29.3%	6.2%	6.2%	6.2%	6.2%
RG #2 - Plan S	34.2%	34.0%	36.3%	35.5%	34.8%	34.7%	34.7%	34.7%	34.7%	34.7%	34.7%	34.7%	34.7%	34.7%	34.7%	34.6%	11.5%	11.5%	11.5%	11.5%
RG #2 - Plan T	29.8%	29.6%	31.9%	31.1%	30.4%	30.3%	30.3%	30.3%	30.3%	30.3%	30.3%	30.3%	30.3%	30.3%	30.3%	30.2%	7.1%	7.1%	7.1%	7.1%
RG #2 - Plan U (non-Children and Families Comm.)	31.5%	31.3%	33.5%	32.7%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%	31.8%	8.8%	8.8%	8.8%	8.8%
RG #2 - Plan U (Children and Families Comm.)	9.8%	10.7%	11.8%	10.8%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.0%	10.0%	10.0%	10.0%	8.8%	8.8%	8.8%	8.8%
RG #2 - Plan W	31.2%	31.1%	33.3%	32.5%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	31.7%	31.7%	31.7%	31.6%	8.6%	8.6%	8.6%	8.6%
RG #2 - Plans I, J, O, P, S, T, U and W (County et al.)	35.3%	36.0%	36.8%	35.7%	34.8%	34.5%	34.2%	34.0%	33.7%	33.5%	33.3%	33.1%	32.8%	32.6%	32.4%	32.1%	8.9%	8.8%	8.6%	8.4%
RG #3 - Plans G and H	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
RG #3 - Plan B	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%
RG #3 - Plan U	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%
RG #3 - Plans B, G, H and U (OCSD)	12.5%	12.3%	12.2%	12.1%	11.9%	11.8%	11.7%	11.6%	11.5%	11.4%	11.3%	11.2%	11.1%	11.0%	11.0%	10.9%	10.9%	10.8%	10.8%	10.7%
RG #5 - Plans A and B	28.0%	29.0%	30.0%	29.3%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.5%	12.1%	12.1%	12.1%	12.1%
RG #5 - Plan U	27.3%	28.2%	29.3%	28.5%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.8%	27.7%	11.3%	11.3%	11.3%	11.3%
RG #5 - Plans A, B and U (OCTA)	28.0%	28.9%	29.9%	29.0%	28.3%	28.3%	28.2%	28.2%	28.2%	28.1%	28.1%	28.1%	28.0%	28.0%	28.0%	27.9%	11.5%	11.5%	11.4%	11.4%
RG #9 - Plans M and N	26.0%	26.5%	27.0%	26.4%	25.9%	25.9%	25.9%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	25.9%	14.5%	14.5%	14.5%	14.5%
RG #9 - Plan U	22.5%	23.0%	23.5%	22.9%	22.4%	22.4%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.4%	11.0%	11.0%	11.0%	11.0%
RG #9 - Plans M, N and U (TCA)	24.5%	24.8%	25.2%	24.5%	23.9%	23.8%	23.6%	23.5%	23.4%	23.3%	23.2%	23.1%	23.0%	22.9%	22.8%	22.8%	11.3%	11.3%	11.3%	11.2%
RG #10 - Plans I and J	30.5%	31.2%	32.0%	31.2%	30.5%	30.5%	30.5%	30.5%	30.5%	30.5%	30.5%	30.5%	30.5%	30.5%	30.5%	30.5%	14.7%	14.7%	14.7%	14.7%
RG #10 - Plans M and N	29.2%	29.9%	30.7%	29.9%	29.2%	29.2%	29.2%	29.2%	29.2%	29.2%	29.2%	29.2%	29.2%	29.2%	29.2%	29.2%	13.5%	13.5%	13.5%	13.5%
RG #10 - Plan U	26.1%	26.9%	27.7%	26.9%	26.2%	26.2%	26.2%	26.2%	26.2%	26.2%	26.2%	26.2%	26.2%	26.2%	26.2%	26.2%	10.4%	10.4%	10.4%	10.4%
RG #10 - Plans I, J, M, N and U (OCFA)	29.0%	29.5%	30.2%	29.3%	28.4%	28.3%	28.1%	28.0%	27.9%	27.7%	27.6%	27.5%	27.3%	27.2%	27.1%	11.3%	11.2%	11.1%	11.0%	10.9%
RG #11 - Plans M and N, future service	12.5%	12.8%	13.1%	12.4%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
RG #11 - Plan U	12.5%	12.8%	13.1%	12.4%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
RG #11 - Plans M and N, future service, and U (Cemetery)	12.5%	12.8%	13.1%	12.4%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
RG #12 - Plans G and H, future service	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%
RG #12 - Plan U	9.3%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%
RG #12 - Plans G and H, future service, and U (Law Library)	13.9%	13.1%	12.6%	12.2%	11.8%	11.5%	11.3%	11.1%	10.9%	10.7%	10.6%	10.4%	10.3%	10.2%	10.1%	10.0%	9.9%	9.8%	9.8%	9.7%
Safety																				
RG #6 - Plans E and F	52.5%	54.4%	56.4%	55.4%	54.4%	54.4%	54.4%	54.4%	54.4%	54.3%	54.3%	54.3%	54.3%	54.3%	54.3%	54.2%	29.1%	23.7%	23.7%	23.7%
RG #6 - Plan V	45.4%	47.3%	49.4%	48.3%	47.3%	47.3%	47.3%	47.3%	47.3%	47.3%	47.3%	47.3%	47.3%	47.3%	47.2%	47.2%	47.1%	22.0%	16.6%	16.6%
RG #6 - Plans E, F and V (Probation)	52.3%	54.1%	56.0%	54.7%	53.6%	53.4%	53.2%	52.9%	52.7%	52.4%	52.1%	51.8%	51.4%	51.0%	50.6%	50.1%	24.5%	18.7%	18.4%	18.0%
RG #7 - Plans E and F	64.0%	65.8%	67.4%	66.1%	64.9%	64.9%	64.9%	64.9%	64.9%	64.9%	64.8%	64.8%	64.8%	64.8%	64.8%	64.6%	29.0%	26.7%	26.7%	26.7%
RG #7 - Plans Q and R	61.0%	62.8%	64.4%	63.1%	61.9%	61.9%	61.9%	61.9%	61.9%	61.9%	61.8%	61.8%	61.8%	61.8%	61.8%	61.8%	26.0%	23.7%	23.7%	23.7%
RG #7 - Plan V	56.6%	58.4%	60.0%	58.7%	57.5%	57.5%	57.5%	57.5%	57.5%	57.5%	57.4%	57.4%	57.4%	57.4%	57.4%	57.2%	21.6%	19.3%	19.3%	19.3%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	62.4%	63.8%	65.1%	63.4%	61.9%	61.6%	61.3%	61.0%	60.7%	60.5%	60.2%	60.0%	59.7%	59.5%	59.3%	58.9%	23.1%	20.6%	20.5%	20.3%
RG #8 - Plans E and F	48.0%	49.1%	49.9%	48.7%	47.6%	47.6%	47.6%	47.6%	47.6%	47.6%	47.6%	47.6%	47.6%	47.6%	47.6%	47.2%	27.2%	27.2%	27.2%	27.2%
RG #8 - Plans Q and R	42.8%	43.8%	44.7%	43.4%	42.3%	42.3%	42.3%	42.3%	42.3%	42.3%	42.3%	42.3%	42.3%	42.3%	42.3%	42.0%	22.0%	22.0%	22.0%	22.0%
RG #8 - Plan V	36.2%	37.3%	38.1%	36.9%	35.8%	35.8%	35.8%	35.8%	35.8%	35.8%	35.8%	35.8%	35.8%	35.8%	35.8%	35.8%	15.4%	15.4%	15.4%	15.4%
RG #8 - Plans E, F, Q, R and V (OCFA)	46.2%	46.8%	47.2%	45.5%	44.0%	43.6%	42.8%	42.3%	41.8%	41.4%	41.0%	40.6%	40.2%	39.8%	39.4%	18.7%	18.3%	17.9%	17.6%	17.2%

Rates shown above have not been adjusted for employers with future service only benefit enhancement in Rate Group #2 (including Local Agency Formation Commission and Orange County Employees Retirement System but excluding Children and Families Commission).

Attachment O
Projected Employer Rates by Plans within each Rate Group
Scenario 3: 14.0% for 2018 and 7.0% thereafter

	Valuation Date (12/31)																			
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
General																				
RG #1 - Plans A and B	18.6%	19.0%	19.1%	18.0%	17.1%	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%
RG #1 - Plan U	17.8%	18.2%	18.3%	17.2%	16.3%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	9.9%	9.9%	9.9%	9.9%	9.9%	9.9%	9.9%
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	18.3%	18.6%	18.7%	17.6%	16.6%	16.1%	16.1%	16.1%	16.1%	16.1%	16.0%	16.0%	16.0%	10.2%	10.2%	10.1%	10.1%	10.1%	10.1%	10.1%
RG #2 - Plans I and J (non-Children and Families Comm.)	37.1%	36.1%	37.4%	35.7%	34.2%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.4%	33.4%	33.4%	14.4%	14.4%	14.4%	14.4%	14.4%
RG #2 - Plans I and J (Children and Families Comm.)	15.4%	15.5%	15.5%	14.2%	14.2%	14.3%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%
RG #2 - Plans O and P	28.9%	27.9%	29.2%	27.5%	26.0%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	6.2%	6.2%	6.2%	6.2%	6.2%
RG #2 - Plan S	34.2%	33.2%	34.5%	32.8%	31.3%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	11.5%	11.5%	11.5%	11.5%	11.5%
RG #2 - Plan T	29.8%	28.8%	30.1%	28.4%	26.9%	26.2%	26.2%	26.2%	26.2%	26.2%	26.2%	26.2%	26.2%	26.2%	26.2%	7.1%	7.1%	7.1%	7.1%	7.1%
RG #2 - Plan U (non-Children and Families Comm.)	31.5%	30.5%	31.8%	30.1%	28.6%	27.9%	27.9%	27.9%	27.9%	27.9%	27.8%	27.8%	27.8%	27.8%	27.8%	8.8%	8.8%	8.8%	8.8%	8.8%
RG #2 - Plan U (Children and Families Comm.)	9.8%	9.9%	9.9%	8.6%	8.6%	8.7%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%
RG #2 - Plan W	31.2%	30.3%	31.6%	29.9%	28.4%	27.7%	27.7%	27.7%	27.6%	27.6%	27.6%	27.6%	27.6%	27.6%	27.6%	8.6%	8.6%	8.6%	8.6%	8.6%
RG #2 - Plans I, J, O, P, S, T, U and W (County et al.)	35.3%	35.3%	35.1%	33.1%	31.4%	30.4%	30.1%	29.9%	29.6%	29.4%	29.1%	28.9%	28.7%	28.5%	28.3%	9.1%	8.9%	8.8%	8.6%	8.4%
RG #3 - Plans G and H	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
RG #3 - Plan B	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%
RG #3 - Plan U	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%
RG #3 - Plans B, G, H and U (OCSD)	12.5%	12.3%	12.2%	12.1%	11.9%	11.8%	11.7%	11.8%	11.5%	11.4%	11.3%	11.2%	11.1%	11.0%	11.0%	10.9%	10.9%	10.8%	10.8%	10.7%
RG #5 - Plans A and B	28.0%	28.2%	28.4%	26.8%	25.4%	24.7%	24.7%	24.7%	24.7%	24.7%	24.6%	24.6%	24.6%	24.6%	12.1%	12.1%	12.1%	12.1%	12.1%	12.1%
RG #5 - Plan U	27.3%	27.5%	27.6%	26.0%	24.6%	23.9%	23.9%	23.9%	23.9%	23.9%	23.9%	23.9%	23.9%	23.9%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%
RG #5 - Plans A, B and U (OCTA)	28.0%	28.1%	28.2%	26.5%	25.1%	24.4%	24.3%	24.3%	24.2%	24.2%	24.2%	24.1%	24.1%	24.1%	11.5%	11.5%	11.5%	11.5%	11.4%	11.4%
RG #9 - Plans M and N	26.0%	26.0%	25.8%	24.7%	23.7%	23.1%	23.1%	23.1%	23.1%	23.2%	23.2%	23.2%	23.2%	23.2%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%
RG #9 - Plan U	22.5%	22.5%	22.4%	21.2%	20.2%	19.6%	19.6%	19.6%	19.6%	19.7%	19.7%	19.7%	19.7%	19.7%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
RG #9 - Plans M, N and U (TCA)	24.5%	24.3%	24.1%	22.8%	21.6%	21.0%	20.8%	20.7%	20.6%	20.5%	20.4%	20.3%	20.3%	20.2%	11.5%	11.4%	11.3%	11.3%	11.3%	11.2%
RG #10 - Plans I and J	30.5%	30.5%	30.3%	28.7%	27.3%	26.6%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%
RG #10 - Plans M and N	29.2%	29.2%	29.1%	27.4%	26.0%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	13.5%	13.5%	13.5%	13.5%	13.5%	13.5%	13.5%
RG #10 - Plan U	26.1%	26.1%	26.0%	24.4%	22.9%	22.2%	22.2%	22.2%	22.2%	22.2%	22.2%	22.2%	22.2%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%
RG #10 - Plans I, J, M, N and U (OCFA)	29.0%	28.8%	28.5%	26.8%	25.2%	24.3%	24.2%	24.0%	23.9%	23.8%	23.6%	23.5%	23.4%	11.5%	11.4%	11.3%	11.2%	11.1%	11.0%	10.9%
RG #11 - Plans M and N, future service	12.5%	12.1%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
RG #11 - Plan U	12.5%	12.2%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
RG #11 - Plans M and N, future service, and U (Cemetery)	12.5%	12.1%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
RG #12 - Plans G and H, future service	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%
RG #12 - Plan U	9.3%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%
RG #12 - Plans G and H, future service, and U (Law Library)	13.9%	13.1%	12.6%	12.2%	11.8%	11.5%	11.3%	11.1%	10.9%	10.7%	10.6%	10.4%	10.3%	10.2%	10.1%	10.0%	9.9%	9.8%	9.8%	9.7%
Safety																				
RG #6 - Plans E and F	52.5%	53.4%	54.2%	51.9%	49.8%	48.7%	48.7%	48.7%	48.7%	48.7%	48.7%	48.7%	48.7%	48.7%	48.7%	48.6%	23.7%	23.7%	23.7%	23.7%
RG #6 - Plan V	45.4%	46.3%	47.1%	44.8%	42.7%	41.7%	41.7%	41.6%	41.6%	41.6%	41.6%	41.6%	41.6%	41.6%	41.6%	41.5%	16.6%	16.6%	16.6%	16.6%
RG #6 - Plans E, F and V (Probation)	52.3%	53.1%	53.7%	51.3%	49.0%	47.7%	47.5%	47.3%	47.0%	46.7%	46.5%	46.1%	45.8%	45.4%	45.0%	44.5%	19.2%	18.7%	18.4%	18.0%
RG #7 - Plans E and F	64.0%	64.5%	64.6%	61.8%	59.3%	58.1%	58.1%	58.1%	58.1%	58.1%	58.0%	58.0%	58.0%	58.0%	58.0%	26.7%	26.7%	26.7%	26.7%	26.7%
RG #7 - Plans Q and R	61.0%	61.5%	61.6%	58.8%	56.3%	55.1%	55.1%	55.1%	55.1%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	23.7%	23.7%	23.7%	23.7%	23.7%
RG #7 - Plan V	56.6%	57.1%	57.2%	54.4%	51.9%	50.7%	50.7%	50.7%	50.7%	50.7%	50.6%	50.6%	50.6%	50.6%	50.6%	19.3%	19.3%	19.3%	19.3%	19.3%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	62.4%	62.5%	62.3%	59.1%	56.3%	54.8%	54.5%	54.2%	53.9%	53.7%	53.4%	53.2%	52.9%	52.7%	52.5%	21.0%	20.8%	20.6%	20.5%	20.3%
RG #8 - Plans E and F	48.0%	47.9%	47.4%	44.8%	42.5%	41.4%	41.3%	41.3%	41.3%	41.3%	41.3%	41.3%	41.3%	41.3%	27.2%	27.2%	27.2%	27.2%	27.2%	27.2%
RG #8 - Plans Q and R	42.8%	42.7%	42.1%	39.5%	37.2%	36.1%	36.1%	36.1%	36.1%	36.1%	36.1%	36.1%	36.1%	36.1%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%
RG #8 - Plan V	36.2%	36.1%	35.6%	33.0%	30.7%	29.6%	29.5%	29.5%	29.5%	29.5%	29.5%	29.5%	29.5%	15.4%	15.4%	15.4%	15.4%	15.4%	15.4%	15.4%
RG #8 - Plans E, F, Q, R and V (OCFA)	46.2%	45.6%	44.6%	41.6%	38.9%	37.3%	36.6%	36.0%	35.6%	35.2%	34.8%	34.4%	34.0%	19.5%	19.1%	18.7%	18.3%	17.9%	17.6%	17.2%

Rates shown above have not been adjusted for employers with future service only benefit enhancement in Rate Group #2 (including Local Agency Formation Commission and Orange County Employees Retirement System but excluding Children and Families Commission).

1-14

Memorandum

DATE: July 16, 2018
TO: Members of the Board of Retirement
FROM: Steve Delaney, Chief Executive Officer
SUBJECT: **CEM BENCHMARKING REPORT**

Written Report and Presentation

Background/Discussion

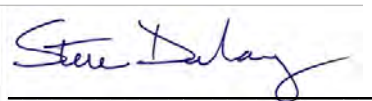
Attached is the most recent biennial benchmarking report as received from CEM Benchmarking Services, headquartered in Toronto, Canada.

While we do not use the report to compare ourselves to other systems due to the many variants from system to system (cost of living, complexity, cultural approach to customer service), seeing data comparison from other systems does provide us with a context in which we can strive to be cost effective in our approach to best in class customer service.

I will be assisted in sharing an executive summary of our challenges and opportunities in the coming years by Ms. Sally Choi, former Deputy Mayor of the City of Los Angeles, as well as former Executive Director of the Los Angeles City Employees Retirement System. Now working in the consultancy world, Ms. Choi has been with us on a limited contractual basis to assist both in Member Services due to the recent retirement of Ms. Catherine Fairley, as well as a number of specific projects in the Executive Office, with review and implementation of the CEM benchmarking report being one of those projects.

Attachment

Submitted by:



Steve Delaney
Chief Executive Officer

BenchmarkAdmin

FYE 2016 Benchmarking Analysis for Orange County Employees Retirement System

CEM Benchmarking Inc.
372 Bay Street, Suite 1000, Toronto, ON, M5H 2W9
Tel: 416-369-0568 Fax: 416-369-0879
www.cembenchmarking.com



Copyright 2018 by CEM Benchmarking Inc. Although the information in this report has been based upon and obtained from sources we believe to be reliable, CEM does not guarantee its accuracy or completeness. The information contained herein is proprietary and confidential and may not be disclosed to third parties without the express written mutual consent of both CEM and Orange County ERS. Prepared on July 3, 2018.

The benefits to benchmarking your administration costs and service:

1. Measure and manage your performance
 - Identify what is important
 - Monitor progress using an independent benchmark
 - Serves as a catalyst for change
2. Communicate to stake-holders
 - Demonstrate success and achievements to governing bodies
 - Identify service gaps to support resource requests
3. Focus on your customer service levels
 - Learn what others are doing that you are not
 - Gain best practice insights into key areas

85 leading global pension systems participate in the benchmarking service.

Participants

United States

Arizona SRS
CalPERS
CalSTRS
City of Austin ERS
City of Detroit
Colorado PERA
Delaware PERS
District of Columbia RB
ERFC
ERS of Georgia
Fairfax County RS
Florida RS
Fort Worth ERF
Idaho PERS
Illinois MRF
Indiana PRS
Iowa PERS
Kansas PERS
LACERA
Michigan ORS
Nevada PERS
NYC BERS
NYC ERS
NYC PPF
NYC TRS
NYSLRS
Ohio PERS
Oregon PERS
Orange County ERS
Pennsylvania PSERS
Pennsylvania SERS
Sacramento County ERS
San Bernardino CERA
San Diego City ERS
Sonoma County ERA
PSRS PEERS of Missouri

South Dakota RS

STRS Ohio
TRS Illinois
TRS Louisiana
TRS of Texas
Utah RS
Virginia RS
Washington State DRS
Wisconsin DETF

Canada

Alberta Pension Services
BC Pension Corporation
Canadian Forces Pension Plans
FPSPP
HOOPP
Local Authorities (Alberta)
OMERS
Ontario Pension Board
Ontario Teachers
OPTrust
RCMP
Saskatchewan Teachers
Saskatchewan Healthcare

United Kingdom

Armed Forces Pension Schemes
British Airways
BSA NHS Pensions
Pension Protection Fund
Principal Civil Service Pension Scheme
Railways Pension Scheme
Rolls Royce
Scottish Public Pension Agency
Teachers' Pensions Scheme
Tesco
Universities Superannuation Scheme

Scandinavia

Alecta
ATP

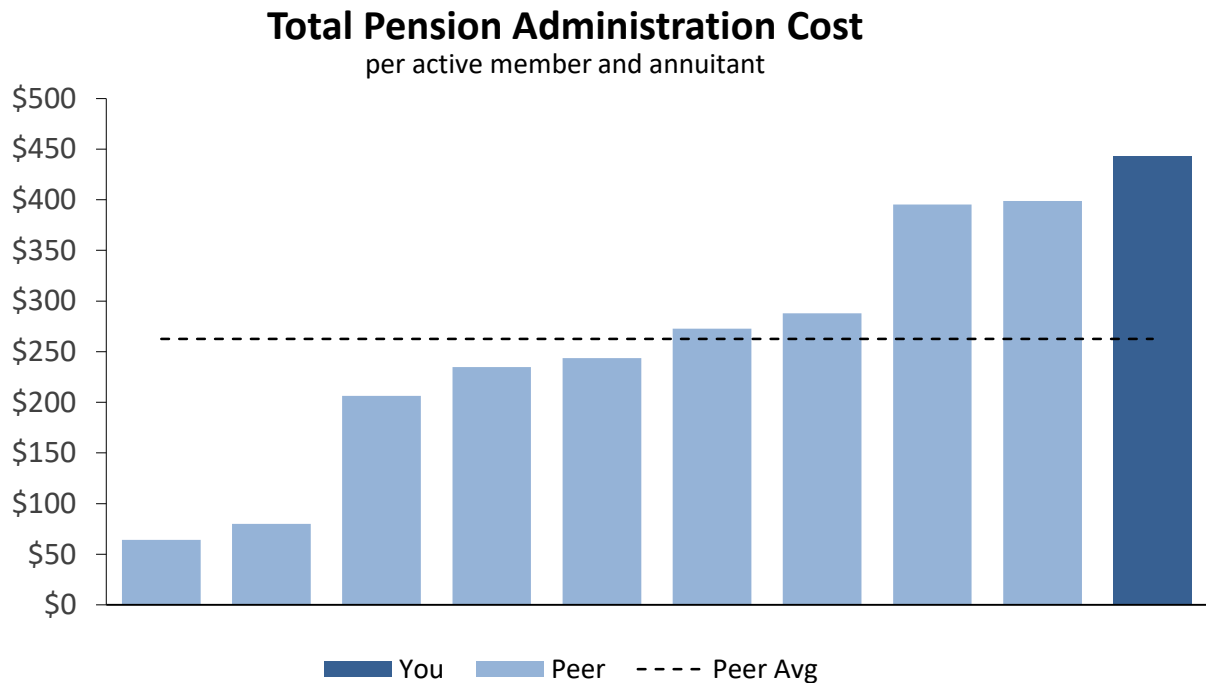
The Netherlands

ABN Amro Pensioenfonds
ABP
BPF Koopvaardij
bpfBOUW
Pensioenfonds Metaal en Techniek
Pensioenfonds PGB
Pensioenfonds TNO
Pensioenfonds van de Metalektro
Pensioenfonds Vervoer
SPW
PFZW
PPF APG
Rabobank Pensioenfonds
Shell Pensioenfonds

Your peer group consists of the following 10 participants:

Peers	Membership		
	Actives Members	Annuitant	Total
Fort Worth ERF	6,551	4,328	10,879
Saskatchewan Teachers	15,428	1,802	17,230
Sacramento County ERS	12,587	11,396	23,983
District of Columbia RB	10,500	14,301	24,801
San Bernardino CERA	21,110	12,179	33,289
Orange County ERS	21,746	16,369	38,115
RCMP	22,425	19,792	42,217
NYC BERS	30,423	17,509	47,932
South Dakota RS	40,452	27,341	67,793
Delaware PERS	43,774	29,876	73,650
Peer Average	22,500	15,489	37,989

Your pension administration cost was \$443 per active member and annuitant. This was \$180 above the peer average of \$262.



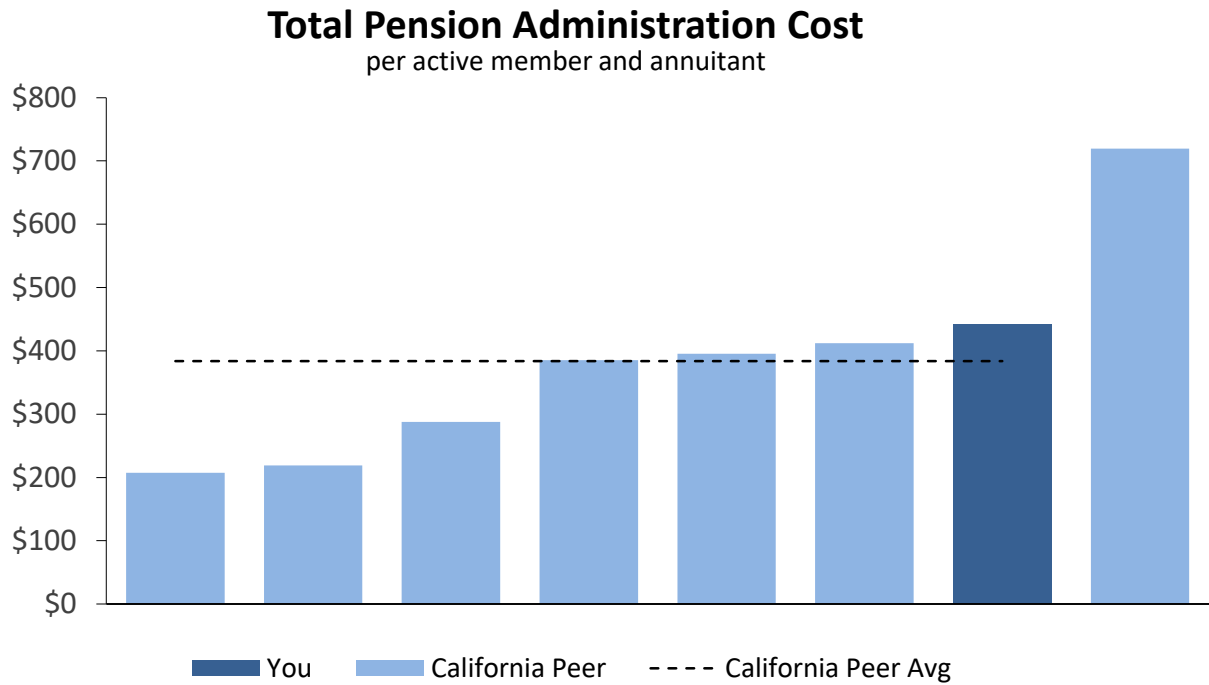
All foreign currency amounts have been converted to USD using Purchasing Power Parity figures as per the OECD (see Appendix B).

Your cost per member calculation is based on total pension administration cost of \$16.9 million. CEM reconciled the reported total pension administration cost per CEM's survey to your FY2016 CAFR.

Your cost per member increased from \$335 last year to \$443 per member. The main reasons why:

- Depreciation increased by \$2.2M which can be directly attributed to the first year depreciation of the V3 project
- Increase of \$1.1M in professional fees due to V3 wrap-up costs
- Increase in salaries and benefits as a result of hiring more (temporary) FTE

California systems tend to be higher cost.



Your total pension administration cost of \$443 was slightly higher than the average of \$384 for all the California systems in the CEM database.

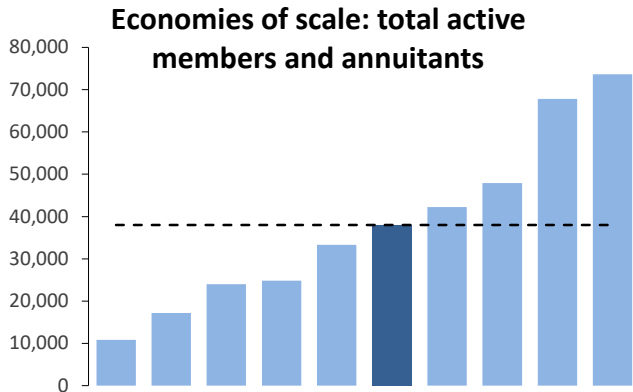
California Systems

- CalPERS
- CalSTRS
- LACERA
- Orange County ERS
- Sacramento County ERS
- San Bernardino CERA
- San Diego City ERS
- Sonoma County ERA

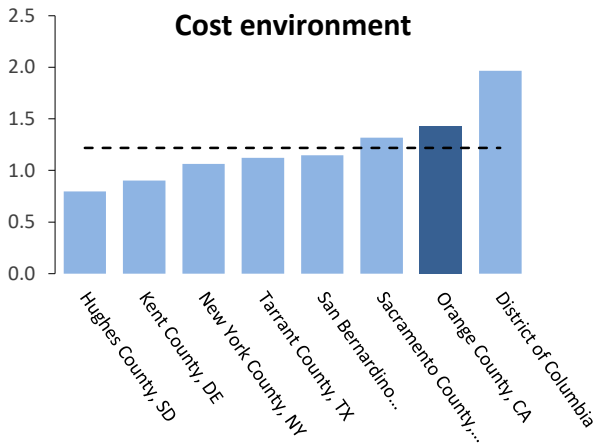
Reasons why your total cost was \$180 higher than the peer average:

Reason	Comparison			Impact \$s per member
	You	Peer average	More/ Less	
	<u>FTE per 10,000 members</u>			
A. Using 56% more FTE to serve members	17.4	11.2	56%	\$59
B. Paying more in total per FTE for:	<u>Cost per FTE</u>			
• Salaries & benefits	\$141,913	\$96,730	47%	
• Building expenses	<u>\$9,940</u>	<u>\$12,000</u>	-17%	
	\$151,852	\$108,729	40%	\$75
C. Paying more per member in total for:	<u>\$s per member</u>			
• Professional Fees	\$80	\$61	32%	
• Amortization	\$61	\$35	75%	
• Charges from sister organizations	\$0	\$13	-100%	
• Other administration expenses	<u>\$37</u>	<u>\$23</u>	62%	
	\$178	\$132	35%	\$46
Total				\$180

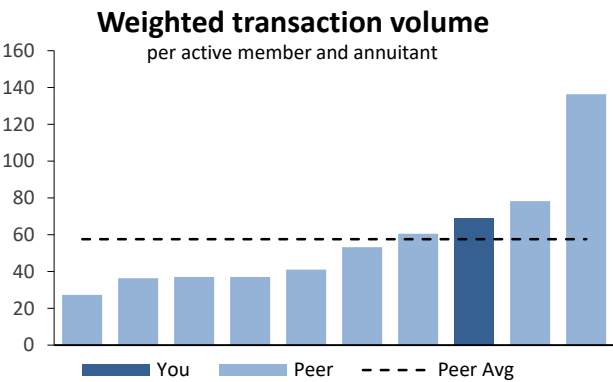
Differences in costs can also be attributed to factors such as economies of scale, cost environment, and differences in transaction volumes.



Research suggests that for every tenfold increase in size, administrative costs fall by \$40 per member. This suggests that you have a \$0.06 per member advantage relative to the peer average.



Your cost environment was 17% higher than the peer average.



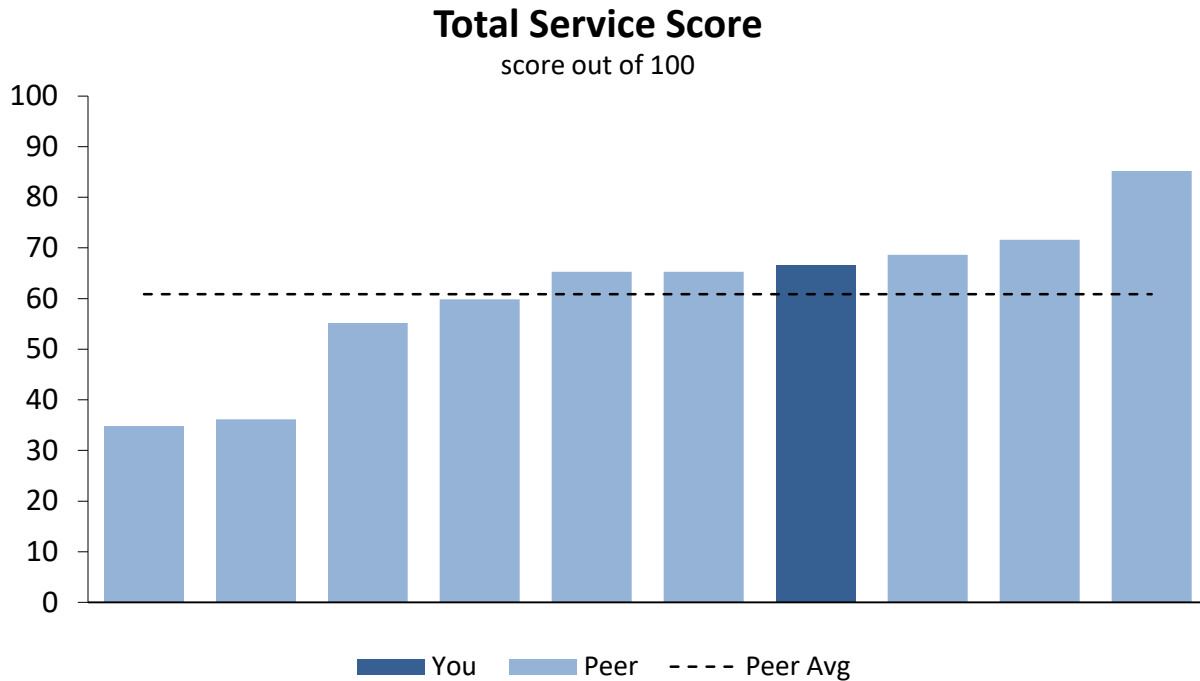
Workloads: your weighted transaction volume was 69, which was 19% above the peer average. This suggests that you do more transactions and/or have a more costly mix of transactions per active member and annuitant. The next page shows you where you are doing more or less transactions in comparison with your peers.

Where are you doing more/fewer transactions than your peers?

Where are you doing more/fewer transactions than your peers?					
Activity	Activity volume description	Your Volume	Volume per 1,000 active members and annuitants		
			You	Peer Avg	More/-less
1. Member Transactions					
A. Pension Payments	annuitants	16,369	429.5	399.3	8%
B. Pension Inceptions	service & survivor inceptions	1,169	30.7	25.0	23%
C. Withdrawals	withdrawals	483	12.7	30.0	-58%
D. Purchases	purchases	406	10.7	10.6	1%
E. Disability	disability applications	71	1.9	1.4	36%
2. Member Communication					
A. Member Calls	calls & emails	76,694	2,012.2	1,135.1	77%
B. Mail Room	incoming letters	12,421	325.9	324.2	1%
C. Pension Estimates	written estimates	4,618	121.2	79.1	53%
D. 1-on-1 Counseling	counseling sessions	2,785	73.1	80.2	-9%
E. Presentations	presentations	85	2.2	0.9	149%
F. Mass Communication	active members	21,746	570.5	600.7	-5%
3. Collections and Data Maintenance					
A. Employer data	active members	21,746	570.5	600.7	-5%
B. Non-employer data	annuitants, inactive members	21,739	570.4	556.5	2%
Weighted Total¹			68.7	57.6	19%

1. The weights used for each transaction type are equal to the 2017 fiscal year global PABS participant median. See section 5 for more details.

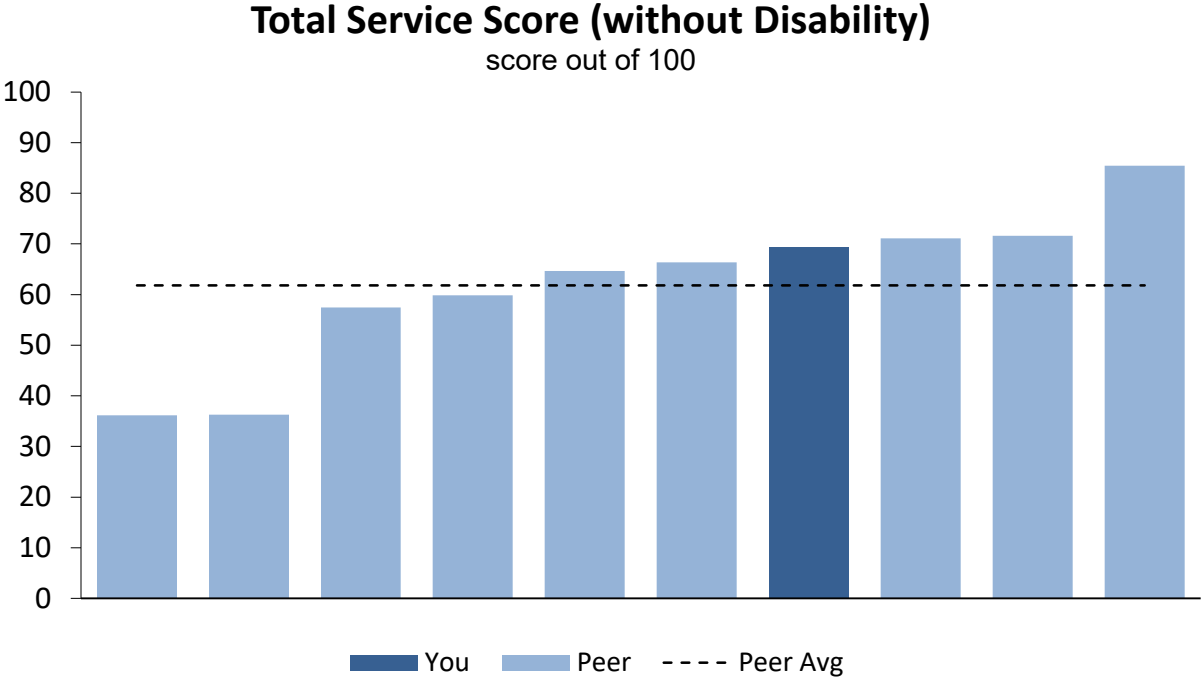
Your total service score was 67 out of 100. This was above the peer average of 61.



Service Scores by Activity				
Activity	You	Peer Average	Weights	
Paying Pensions	100	100	20%	
Pension Inceptions	14	50	7%	
Benefit Estimates	84	36	5%	
1-on-1 Counseling	100	84	7%	
Presentations	90	70	6%	
Member Contacts	45	45	21%	
Website	81	50	11%	
News and Targeted Communication	86	57	4%	
Member Statements	45	60	6%	
Disability	0	30	4%	
Red Tape	80	43	4%	
Satisfaction Surveying	27	29	5%	
Total Service Score	67	61	100%	
Total Service Score - Median		65		

Service is defined as 'Anything a member would like, before considering costs'. Generally speaking this means faster is better, and more services and more availability is better. The Total Service Score is a weighted average of the service scores for each activity. The following pages provide an overview of the key service measure included in your Service Score.

Your total service score was 69, if Disability was excluded. The peer average was 62.

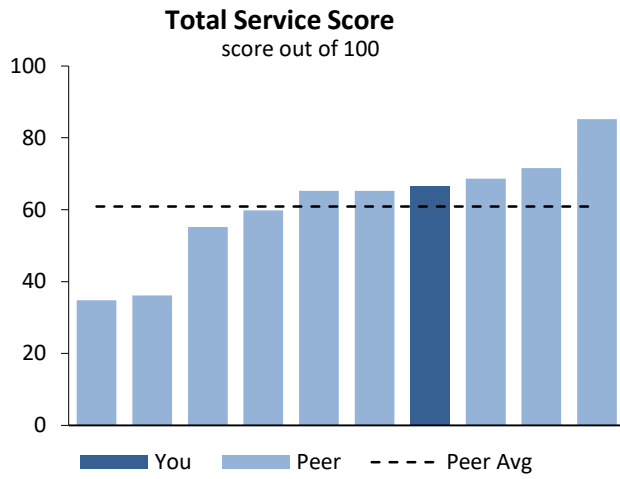


Examples of key service measures included in your Service Score:

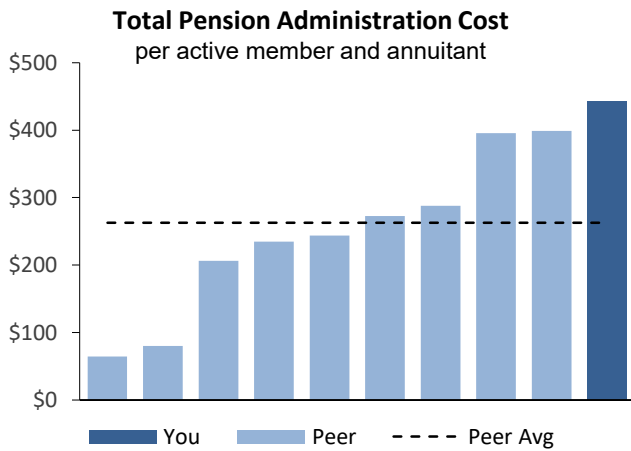
Select Key Service Metrics	You		Peer Avg
	2016	2017	2017
Member Contacts			
• Average total wait time including time negotiating auto attendants, etc.	Unknown	Unknown	55 secs
• % of calls abandoned while in queue, on hold or in menu?	Unknown	Unknown	9%
• How many hours per week can members call service representatives?	39.5	40.0	43.5
Website			
• Can members access their own data in a secure environment?	Yes	Yes	80% Yes
• Do you have an online calculator linked to member data?	Yes	Yes	70% Yes
• # of other website tools offered such as changing address information, registering for counseling sessions and/or workshops, viewing or printing tax receipts, etc.	13	11	6
1-on-1 counseling			
• % of your active membership that attended a 1-on-1 counseling session	2.3%	12.8%	13.1%
• % of your active membership that attended a presentation	5.9%	15.6%	6.1%
Member Statements			
• How current is the data in member statements when mailed?	1.0 mnth	1.0 mnth	2.8 mnths
• Do statements provide an estimate of the future pension entitlement?	No	No	56% Yes
Pension Inceptions			
• What % of annuity pension inceptions are paid without an interruption of cash flow greater than 1 month between the final pay check and the first pension check?	1%	1%	56%

Key Takeaways:

Your total service score was above the peer average.



Your pension administration cost was \$180 above the peer average.



2

Peer Characteristics

This section:

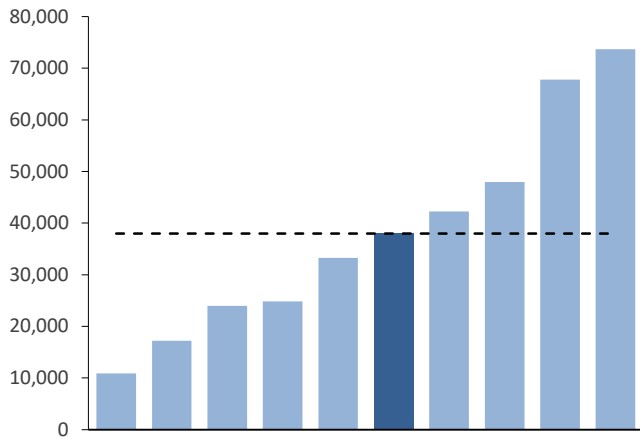
- Details of your peer group.
- A comparison of the characteristics of your peers.

Your peer group consists of 10 peers.

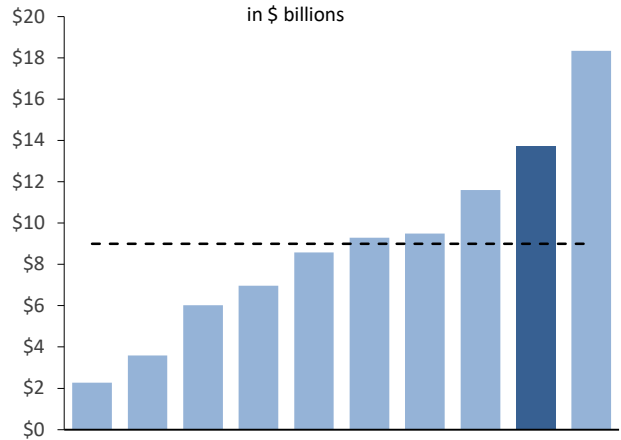
Custom Peer Group for Orange County ERS						
	Members			Assets \$ millions	# employers	# pension admin. FTEs
	Active	Annuitant	Total			
Fort Worth ERF	6,551	4,328	10,879	2,275	2	14
Saskatchewan Teachers	15,428	1,802	17,230	3,589	47	15
Sacramento County ERS	12,587	11,396	23,983	8,584	11	42
District of Columbia RB	10,500	14,301	24,801	6,967	1	23
San Bernardino CERA	21,110	12,179	33,289	9,288	17	56
Orange County ERS	21,746	16,369	38,115	13,730	15	66
RCMP	22,425	19,792	42,217	18,333	1	23
NYC BERS	30,423	17,509	47,932	6,027	7	61
South Dakota RS	40,452	27,341	67,793	11,600	491	34
Delaware PERS	43,774	29,876	73,650	9,500	146	44
Peer Average	22,500	15,489	37,989	8,989	74	38

Graphical comparison of peer characteristics

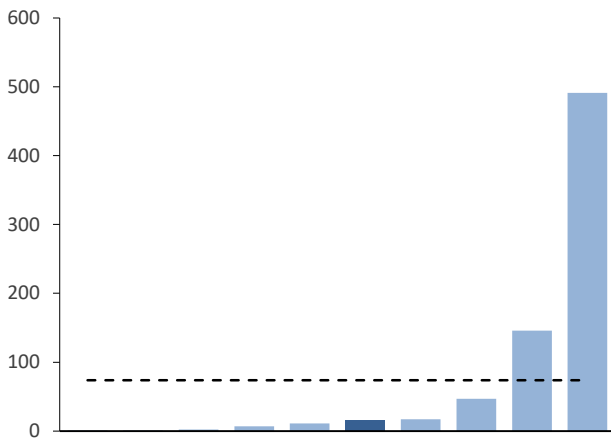
Active Members and Annuitants



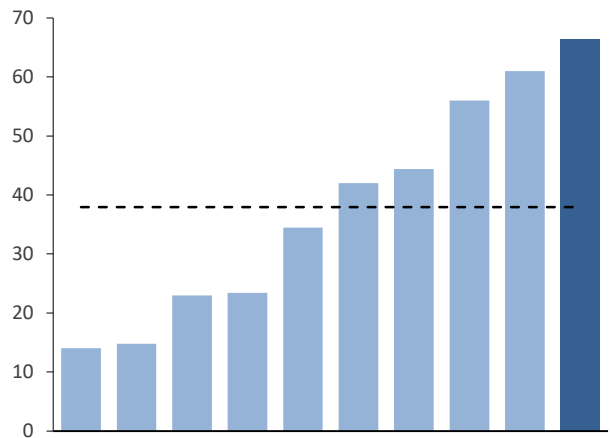
Total Assets



Number of Employers



Number of Administration Staff



You
 Peer
 Peer Avg

Profiles of the 58 benchmarking participants:

page 1 of 2 (excluding Australian, European and UK systems)

Participant	Members by Type			Member Groups										Plan Types						
	Active Members	Annuitants	Inactive Members	City or County Only	State/ County Employees	Teachers	School	Police and/or Fire	Participating Local Employers	Other (Judges etc)	Corporate	Industry	DB	Cash Balance	DB/ Cash Balance	DB/ Money Match	Drop	DC	Hybrid DB/ DC	Administer Retiree Healthcare
Canada																				
Alberta Pension Services	210,663	98,347	50,646	X	X	X	X	X	X				X							
BC Pension Corporation	313,749	181,219	74,077	X	X	X	X	X	X	X	X	X	X	X					X	
Canadian Forces Pension Plans	88,921	111,726	6,556						X				X							
FPSP	297,907	281,227	13,599	X									X							
HOOPP	204,166	92,007	25,687	X				X			X	X	X							
LAPP	157,763	61,923	34,176	X		X	X	X					X							
OMERS	280,162	147,290	42,682				X	X	X	X	X		X							
Ontario Pension Board	41,926	37,985	5,619	X			X		X				X							
Ontario Teachers	181,592	135,778	69,180	X	X	X							X							
OPTrust	45,847	36,406	7,289	X								X	X							
RCMP	22,425	19,792	1,077	X			X						X							
Saskatchewan Teachers	15,428	1,802	8,257	X	X								X						X	
Saskatchewan Healthcare	34,991	14,519	2,799					X			X	X	X							
United States																				
Arizona SRS	206,055	145,117	228,490	X	X	X		X	X				X	X						X
CalPERS	888,934	670,347	370,189	X		X	X	X					X							X
CalSTRS	454,929	291,369	185,452		X								X	X						
City of Austin ERS	9,364	5,934	2,507	X									X							
City of Detroit	9,142	20,997	2,941	X				X					X			X	X	X		
Colorado PERA	240,473	113,767	232,107	X	X	X		X	X				X				X	X	X	
Delaware PERS	43,774	29,876	16,171	X	X	X	X	X	X				X							
District of Columbia RB	10,500	14,301	1,469	X		X	X						X							
ERFC	21,748	11,367	4,446	X		X	X						X							
ERS of Georgia	111,597	69,351	208,896	X		X	X		X				X				X			
Fairfax County RS	18,207	10,995	2,346	X			X	X	X				X	X		X				X
Florida RS	634,326	438,478	120,419	X	X	X	X	X	X				X			X	X			
Fort Worth ERF	6,551	4,328	386	X			X						X							
Idaho PERS	70,073	45,468	34,151	X	X	X	X	X	X				X						X	
Illinois MRF	175,048	121,536	112,600			X	X	X					X							
Indiana PRS	260,005	153,137	75,696	X	X	X	X	X	X				X			X	X	X		
Iowa PERS	169,910	117,759	67,962	X	X	X	X	X	X				X							
Kansas PERS	152,119	96,774	55,755	X	X	X	X	X	X				X							
LACERA	97,221	64,777	13,975	X			X	X					X							X
Michigan ORS	209,848	269,118	567,071	X	X	X	X	X	X				X		X		X	X	X	

Profiles of the 58 benchmarking participants:

page 2 of 2 (excluding Australian, European and UK systems)

Participant	Members by Type			Member Groups										Plan Types						
	Active Members	Annuitants	Inactive Members	City or County Only	State/ County Employees	Teachers	School	Police and/or Fire	Participating Local Employers	Other (Judges etc)	Corporate	Industry	DB	Cash Balance	DB/ Cash Balance	DB/ Money Match	Drop	DC	Hybrid DB/ DC	Administer Retiree Healthcare
United States (continued)																				
Nevada PERS	106,416	63,766	16,752		X	X	X	X		X			X							
NYC BERS	30,423	17,509	1,490	X		X	X						X							
NYCERS*																				
NYC PPF	36,165	49,731	574	X				X					X							
NYC TRS	126,630	95,114	42,590	X		X	X						X						X	
NYSLRS	528,773	452,455	123,551		X		X	X	X	X			X							
Ohio PERS	346,959	208,374	537,309		X			X		X			X	X					X	X
Orange County ERS	21,746	16,369	5,370		X				X				X							
Oregon PERS	172,513	141,382	67,113		X	X	X	X	X	X					X				X	X
PSERS PEERS of Missouri	126,227	88,774	49,908			X	X					X	X							
Pennsylvania PSERS	256,027	219,727	140,725		X	X	X						X							X
Pennsylvania SERS	105,220	127,338	4,738		X	X	X	X		X			X							X
Sacramento County ERS	12,587	11,396	3,425	X				X	X				X							
San Bernardino CERA	21,110	12,179	5,547					X	X	X			X							
San Diego City ERS	7,149	9,210	3,244		X				X				X			X				
Sonoma County ERA	4,071	4,653	1,047	X	X				X				X							
South Dakota RS	40,452	27,341	18,458		X	X	X	X	X	X			X							
STRS Ohio	211,630	160,203	153,283			X							X					X	X	X
TRS Illinois	160,488	120,151	131,812		X	X							X							
TRS Louisiana	89,682	78,269	24,945			X	X						X			X	X			
TRS of Texas	847,673	393,914	262,353		X	X	X						X							X
Utah RS	98,435	62,698	54,803		X	X	X	X	X	X			X					X	X	
Virginia RS	341,200	199,064	147,230		X	X	X	X	X	X			X						X	
Washington State DRS	318,224	178,586	261,981		X	X	X	X	X	X			X						X	
Wisconsin DETF	257,285	197,647	167,191		X	X	X	X	X	X									X	X

* We have not yet received clean data from systems identified with an asterisk.

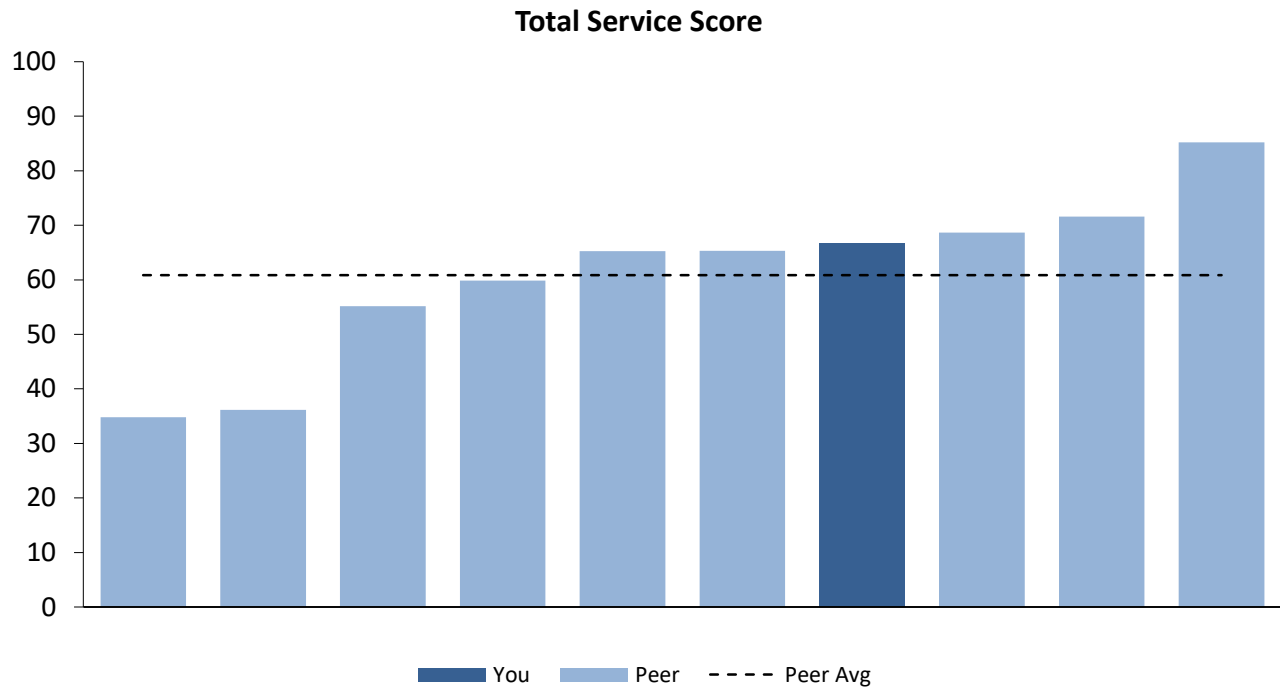
3

Service Levels

This section:

- Analyzes your current service levels relative to your peers, to identify what you do and how it compares to others.
- Identifies areas where you may be able to improve, or reduce, your service levels.
- Provides details of the methodology and criteria we used to evaluate your service levels.

Your total service score was 67 out of 100. This was above the peer average of 61.



Interpreting your Service Results

Higher service scores are not necessarily better. This is because:

- Service is defined as: *'Anything a member would like, before considering costs'*. As this definition does not consider costs, high service may not always be cost effective or optimal. For example, it is higher service to have a call center open 24 hours a day but few systems would be able to justify the cost.
- Our 'weights' are an approximation of the importance of an individual service element. These weights will not always reflect the relative importance that you or your members attach to an individual service element.

The service measures are most useful for identifying what you are doing differently than your peers. Understanding these differences can give you ideas on how you may want to improve, *or reduce*, the service you provide to your members.

Service scores by activity and the weights used to determine the total service score

Service Scores by Activity			
Activity	You	Peer Average	Weights
Paying Pensions	100	100	20.0%
Pension Inceptions	14	50	7.0%
Benefit Estimates	84	36	5.0%
1-on-1 Counseling	100	84	7.0%
Presentations	90	70	6.0%
Member Contacts	45	45	21.0%
Website	81	50	11.0%
News and Targeted Communication	86	57	4.0%
Member Statements	45	60	6.0%
Disability	0	30	4.0%
Red Tape	80	43	4.0%
Satisfaction Surveying	27	29	5.0%
Total Service Score	67	61	100.0%
Total Service Score - Median		65	

How did we determine the weights for each activity?

CEM considered the following 8 criteria to determine the weights used to calculate your total service score:

1. Feedback from Participants

The weights reflect feedback from participants solicited at on-site meetings, symposiums and peer conferences.

2. Relative Cost of Each Activity

The average CEM participant spends 4.8% of its annual budget for member contacts (calls, emails, letters) versus 1.6% for 1-on-1 counseling. Thus, based solely on relative cost, member contacts is 2.9 times more important than 1-on-1 counseling.

3. Relative Volume of Each Activity (i.e., How many times does the service 'touch' a member?)

The average CEM participant initiates 26 pensions and receives 604 calls for every 1,000 active members and annuitants. Thus, based solely on relative volume, calls are 23.5 times more important than pension inceptions.

4. Expectations Based on External Experience

Members have external comparisons for receiving payments, telephone calls and annual statements, but they have no direct experience with the pension inception process. Thus, based solely on external experience, paying pensions and member contacts are more important than pension inceptions.

5. Personalized Human Contact

Research shows that the points of human contact provide the greatest opportunity for generating customer satisfaction. Thus, based solely on personalized human contact, counseling and calls are much more important than 'no contact' activities such as the website or paying annuity pensions.

6. About Members' Money

Nothing gets a member's attention faster than his or her own money. So, based solely on this criteria, activities such as benefit calculators linked to member data, member statements and paying annuity pensions are much more important than newsletters or brochures.

7. Mission Critical

Paying pensions is mission critical. Providing counseling is not.

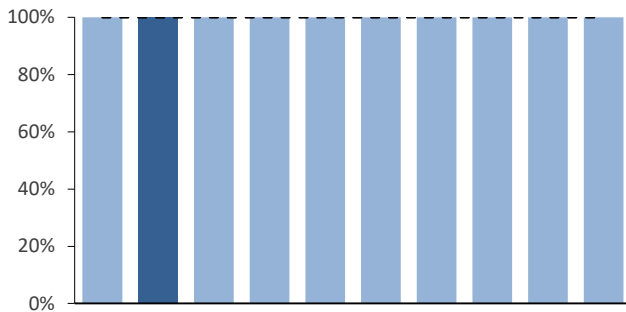
8. Stability

We have been told that keeping the weights stable is more important than continually perfecting them. Clients want to measure their progress against a stable metric.

Graphical comparison of key service measures

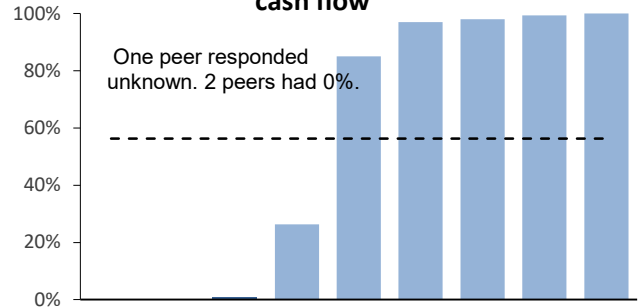
This page shows a sample of key service metrics that we have weighted highly because we believe they are particularly important service measures from a member's perspective.

% Payroll on time

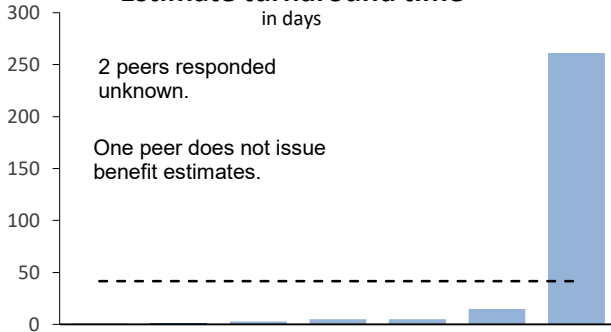


Most peers get a perfect score for this critical measure.

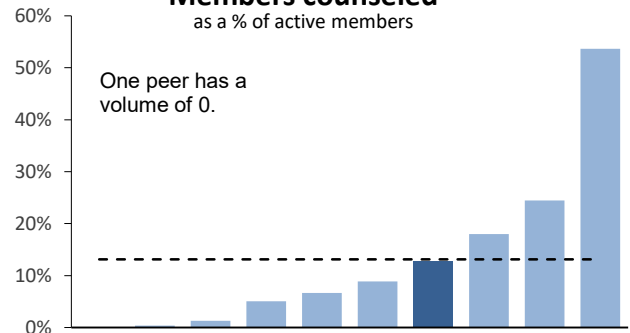
% Inceptions without an interruption of cash flow



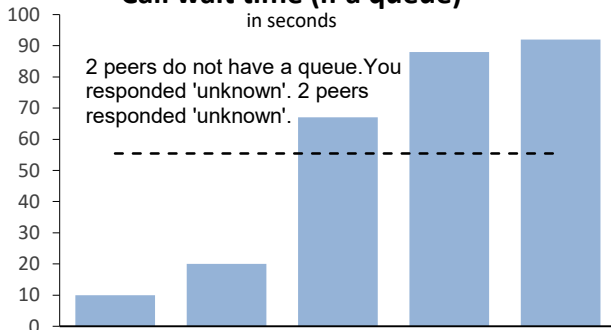
Estimate turnaround time in days



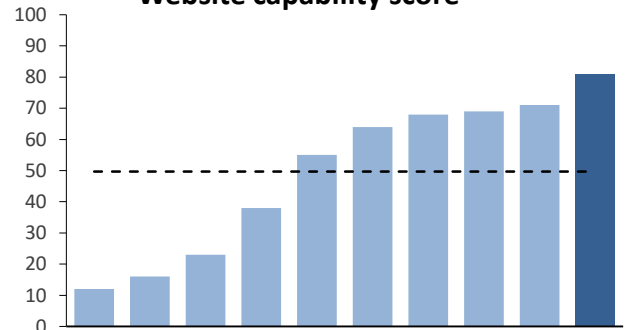
Members counseled as a % of active members



Call wait time (if a queue) in seconds



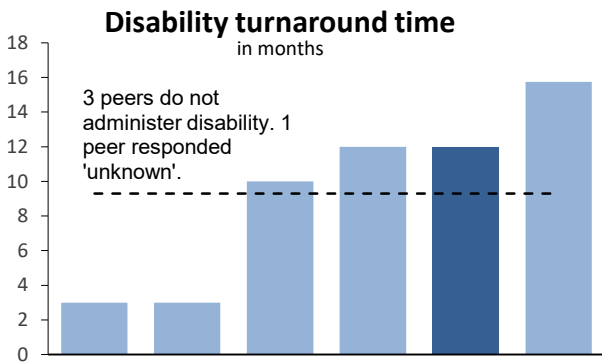
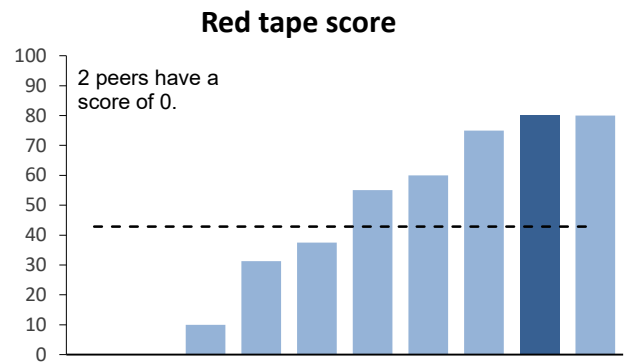
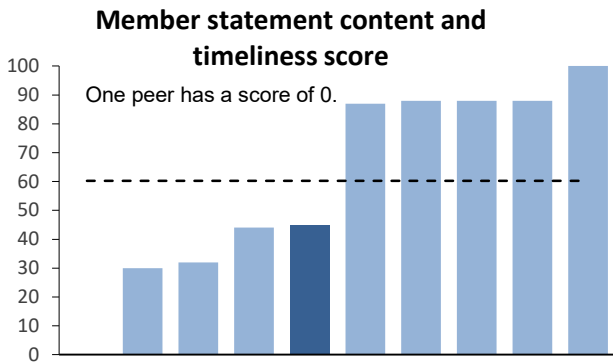
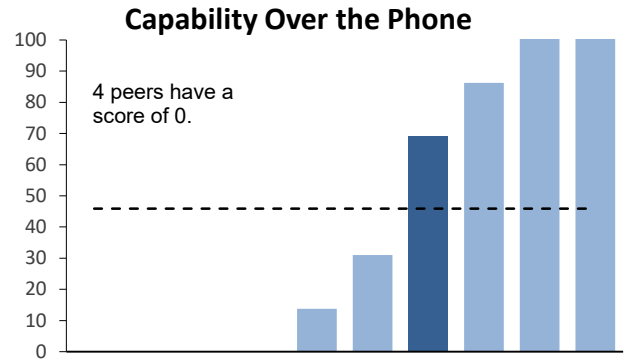
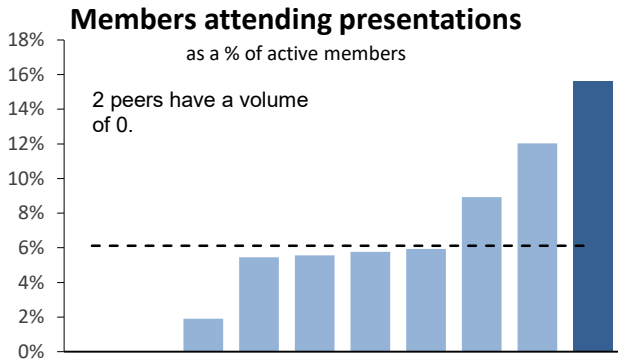
Website capability score



■ You ■ Peer - - - - Peer Avg

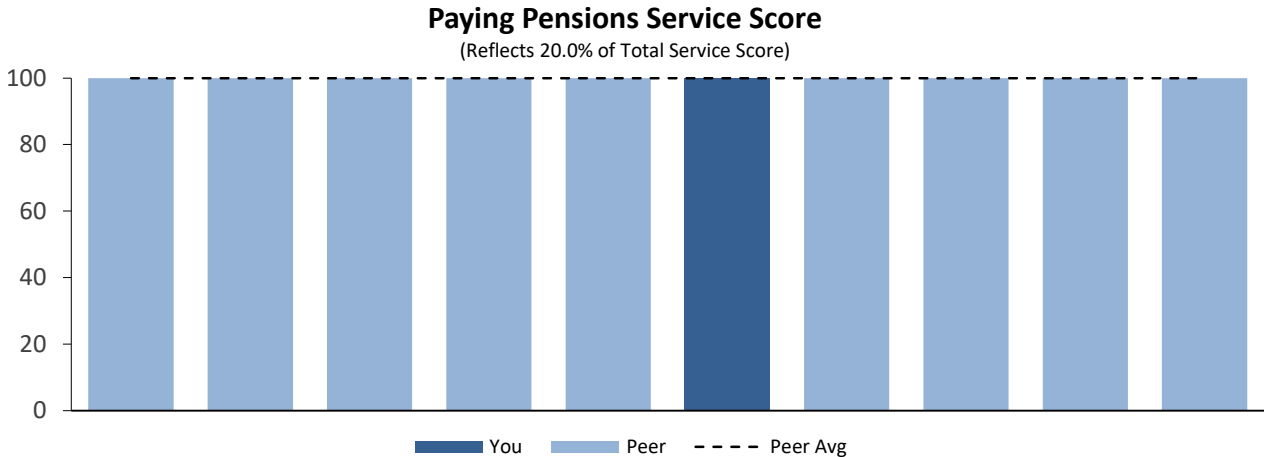
Graphical comparison of key service measures

(continued)



You
 Peer
 Peer Avg

Your service score for paying pensions was 100 out of 100. This compares to a peer average of 100.



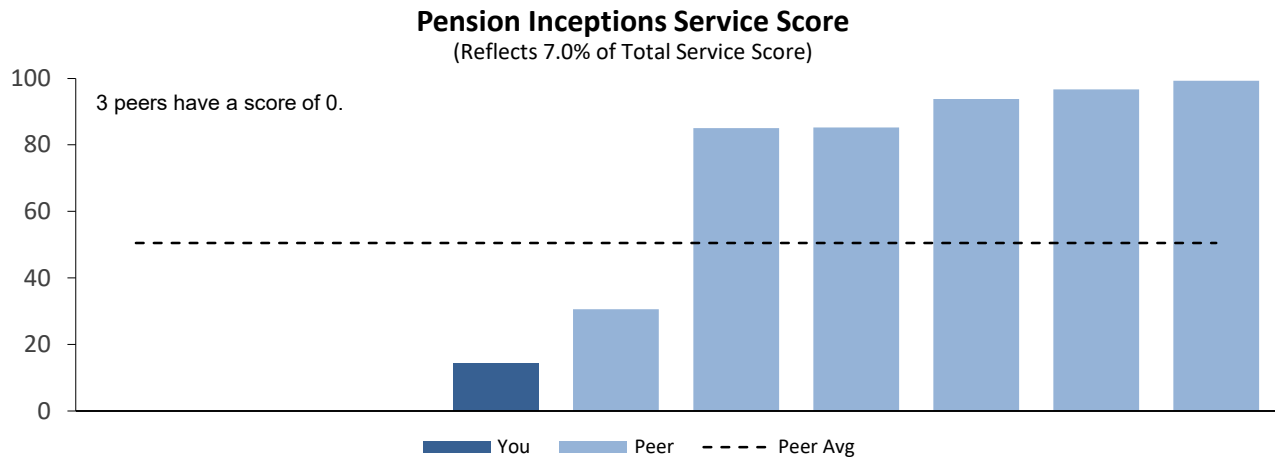
		Your Data	Your Score
1. Scoring method			
+ 100	If none of your pension payrolls were late vis-à-vis your normal payment cycle, otherwise 100 - 10 x numbers of late payrolls x average number of days late.	none	100.0
Total Score			100.0

2. Rationale for the scoring method

Paying the pension payroll on the due date is a critical service requirement for retirement systems. Therefore, almost all systems get a perfect score for this measure, except in the event of a business interruption. A perfect score requires that all regular pension payrolls are paid on their due date.

		You	Peer Avg
3. Survey questions used			
Q24	Were any of your pension payrolls late vis-à-vis your normal payment cycle? [For example, a payroll might be late because of system problems, etc.]	No	0% Yes
	a) If yes, how many payrolls were late?	n/a	n/a
	b) On average, how many days late were they?	n/a	n/a

Your service score for pension inceptions was 14 out of 100. This compares to a peer average of 50.



		Your Data	Your Score
1. Scoring Method			
	<u>Cashflow Interruptions</u>		
+ 85	85 x percent of inceptions that occur within 1 month of final pay check (0% is assumed if unknown)	1.0%	0.9
	<u>Survivor Pensions</u>		
+ 15	15 x percent of pensions paid without interruption to survivors (0% is assumed if unknown)	90.0%	13.5
Total Score			14.4

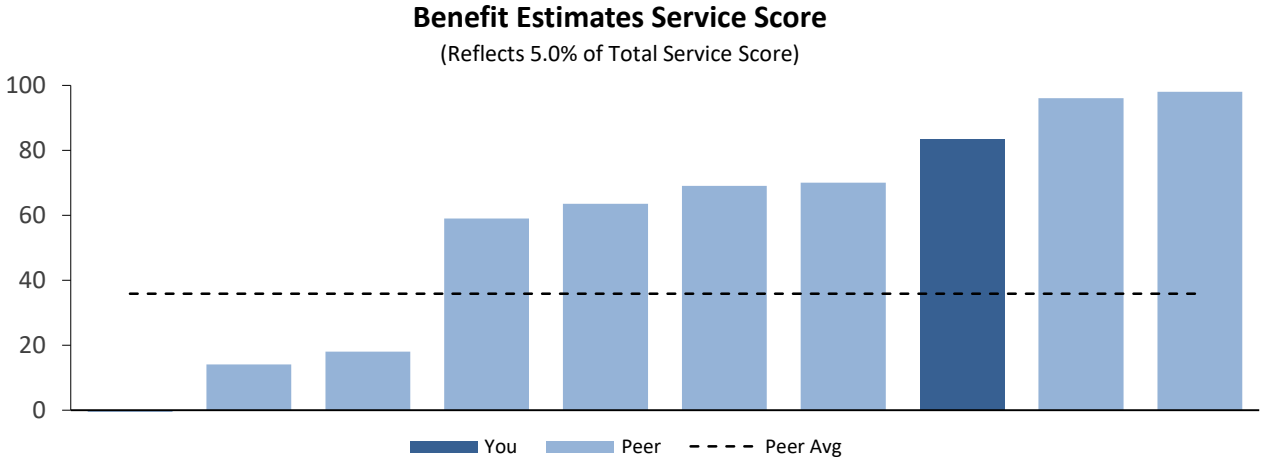
2. Rationale for the scoring method

Cashflow interruptions can cause hardships and irritation for members. In case of a survivor pension this potential hardship comes at a difficult time. A perfect score requires that you can accept a pension or survivor benefit without an interruption of cashflow.

3. Survey questions used

	You	Peer Avg
Q25 What % of pension inceptions to retiring active members were paid without an interruption of cash flow greater than 1 month between the final pay check and the first pension check?	1.0%	56.3%
Q26 What % of survivor pension inceptions are paid without an interruption of cash flow between the pensioner's final pension check and the survivor's first pension check?	90.0%	55.0%

Your service score for benefit estimates was 84 out of 100. This compares to a peer average of 36.



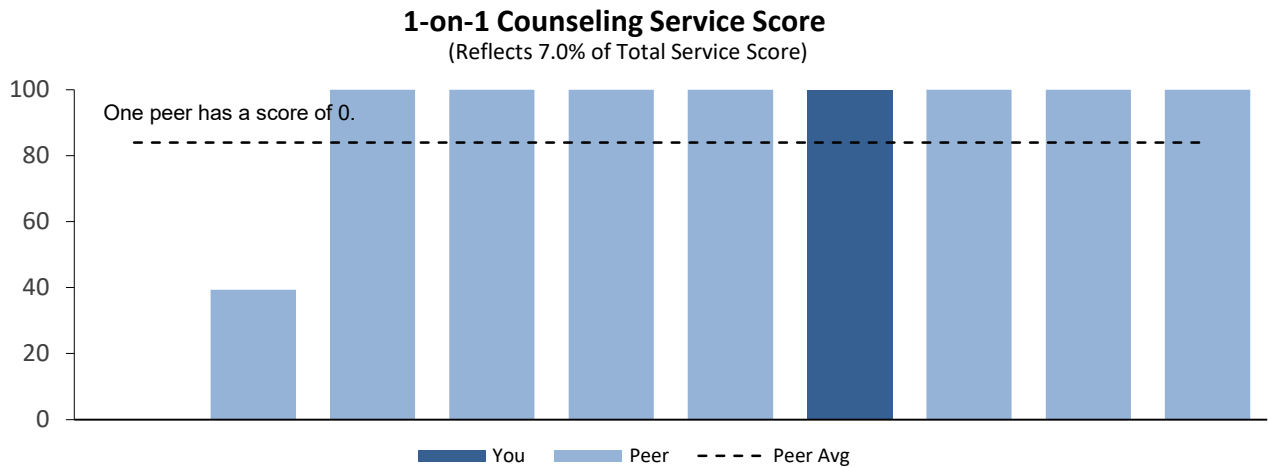
	Your Data	Your Score
1. Scoring method		
<u>Speed of Turnaround</u>		
+ 31	if estimate is mailed in 3 days or less, otherwise 31 minus 1 per day over 3 days to provide a written estimate (30 days is assumed if unknown)	1 day 31.0
+ 4	if you do regularly measure the time to provide an estimate	Yes 4.0
<u>Content</u>		
+ 9.5	if you clearly address if and how the pension benefit is inflation protected	Yes 9.5
n/a	if you discuss the effects of social security	n/a n/a
+ 3.5	if you discuss alternative scenarios that could improve benefit	No 0.0
+ 12	if you model alternative retirement options	Yes 12.0
<u>Alternative Channels</u>		
+ 40	if you also offer estimates via member statement, website and call center, otherwise: 27 if you offer 2 alternatives; 14 if you offer 1; 0 if you offer none	2 channels 27.0
Total Score		83.5

2. Rationale for the scoring method

A perfect score requires that you can turn around an estimate within three days of the request. The more members understand how their pension benefit is affected by inflation, social security, etc. the better they can plan for retirement. A perfect score requires that you provide all this information on a written estimate. More channel choices in obtaining a pension estimate provides greater access and convenience for your members.

3. Survey questions used		You	Peer Avg
Q16	Indicate whether the following capabilities are offered on your website and provide volumes (if available):		
	a) Benefit calculator in non-secure area?	Yes	60% Yes
	b) Benefit calculator in secure area not linked to member data?	No	20% Yes
	c) Benefit calculator in secure area linked to member's salary and service data?	Yes	70% Yes
Q20	Can and will you provide the following information on an immediate real-time basis to members over the phone: [If you do not have real-time access to the information or if your policy is not to give the information over the phone because of security or other concerns then your answer should be 'no'.]		
	a) Estimates of benefits at retirement?	Yes	40% Yes
Q27	On average, how many business days did it take to provide a formal written estimate from the time of initial request from a member? [Do not include time in the mail.]	1	42
	a) Is this a number you regularly measure and track? [versus being an estimate]	Yes	56% Yes
Q28	Do your written pension estimates: [including cover letters etc. sent with the estimate]		
	a) Clearly address if and how the pension benefit is inflation protected or not protected?	Yes	56% Yes
	b) If your pension is coordinated with or reduced by social security is the impact explained?	n/a	67% Yes
	c) Discuss alternative scenarios that could improve the benefit such as purchasing service credit or working longer?	No	44% Yes
	d) Model alternative retirement payment options?	Yes	78% Yes
Q33	Do your member statements for active members include:		
	e) An estimate of the future pension entitlement based on age scenario modeling or assuming the member continues to work until earliest possible retirement?	No	56% Yes

Your service score for 1-on-1 counseling was 100 out of 100. This compares to a peer average of 84.



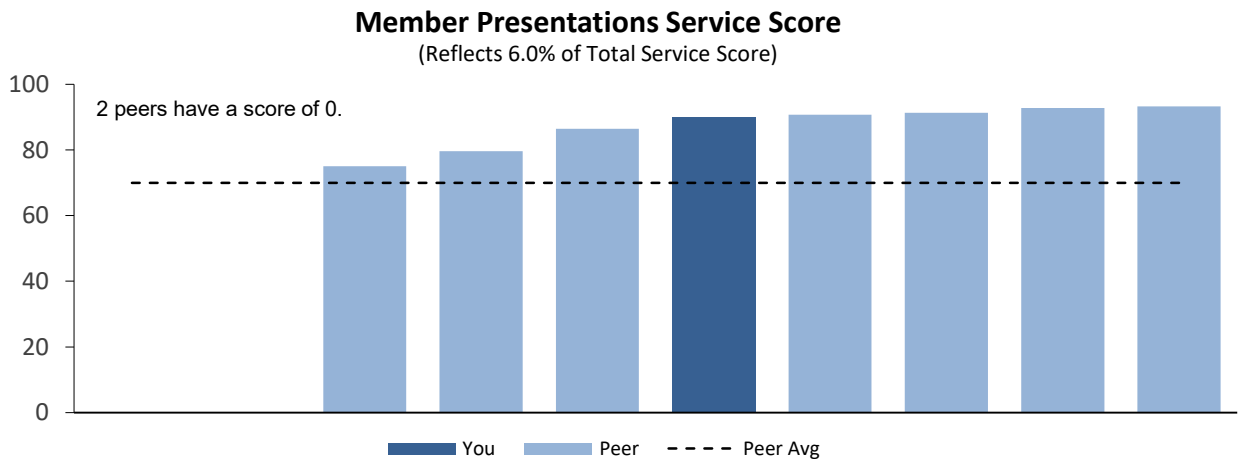
		Your Data	Your Score
1. Scoring method			
	<u>Availability</u>		
+ 100	if members counseled 1-on-1 as a % of your active membership is more than 1%, otherwise 100 x members counseled 1-on-1 per 10,000 active members (+ 25 if unknown)	12.8%	100.0
Total Score			100.0

2. Rationale for the scoring method

Higher volumes imply greater availability, value and greater communication of availability.

3. Survey questions used		You	Peer Avg
Q2	Provide the breakdown of total members between: a) Active members (A)	21,746	22,500
Q14	What were your volumes for: l) Members counseled 1-on-1? (B)	2,785	3,145
	Members counseled 1-on-1 as a % of active members (B / A)	12.8%	13.1%

Your service score for member presentations was 90 out of 100. This compares to a peer average of 70.



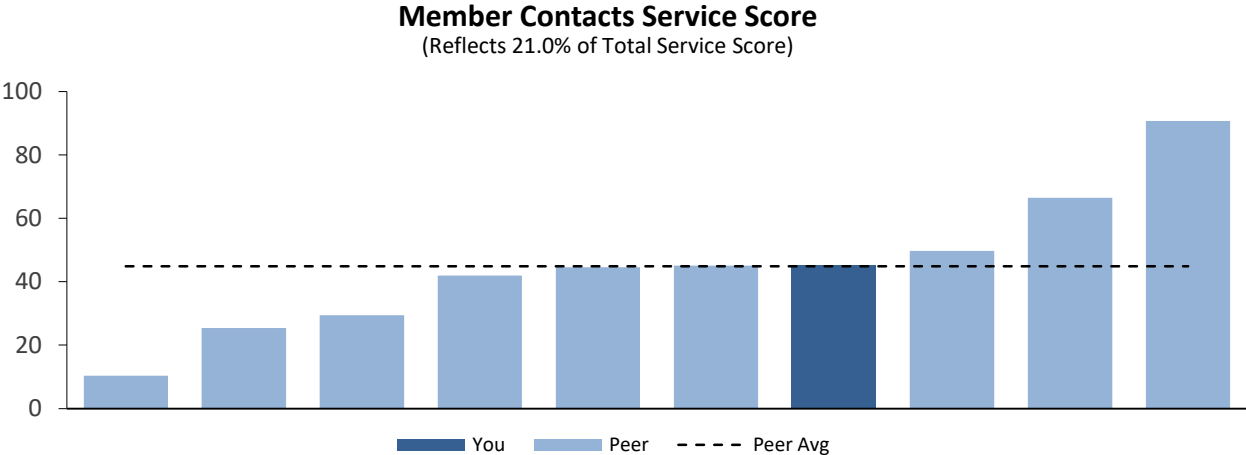
	Your Data	Your Score
1. Scoring method		
<u>Availability</u>		
+ 75 if attendees as a percent of active members is greater than 2.5%, otherwise 30 x attendees as percent of active members (+ 25 if unknown)	15.6%	75.0
<u>Group Size</u>		
+ 25 if average of 20 attendees or fewer per presentation, otherwise 35 - average number of attendees per group presentation / 2 (+ 15 if unknown)	40.0	15.0
Total Score		90.0

2. Rationale for the scoring method

Higher volumes imply greater availability and value. Smaller groups are preferred to larger groups. They provide more opportunities for individual attention.

	You	Peer Avg
3. Survey questions used		
Q2 Provide the breakdown of total members between:		
a) Active members (A)	21,746	22,500
Q14 What were your volumes for:		
m) Presentations to members? (B)	85	39
n) How many members in total attended these presentations? (C)	3,400	1,741
Attendees as a % of active members (C / A)	15.6%	6.1%
Attendees per presentation (C / B)	40.0	43.7

Your service score for member contacts was 45 out of 100. This compares to a peer average of 45.



1. Scoring method	Your Data	Your Score
<u>Availability</u>		
+ 21 if members experience no abandoned calls, less % of abandoned calls X 90 (subject to minimum score of 0), +5 if unknown	Unknown	5.0
+ 3 if your call center is open more than 50 hours per week, otherwise 3 x total weekly operating hours / 50 (subject to a minimum of zero)	40 hours	2.4
+ 24 if members reach a knowledgeable person in 20 seconds or less, otherwise 24 - 0.5 for each second to reach a knowledgeable person (+ 10 if you cannot provide accurate wait times or if you do not have a queue, subject to a minimum of zero)	Unknown	10.0
+ 12 if one or fewer menu layers, + 8 if two menu layers on average or less, + 2.5 if three menu layers on average or less, 0 otherwise	2	8.0
- 4 if a receptionist is the first point of contact	No	0.0

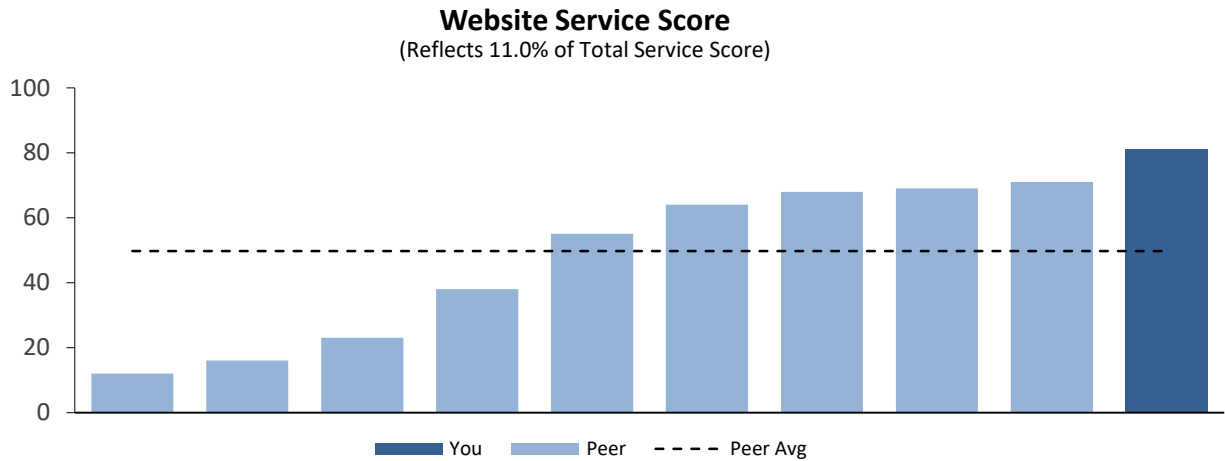
1. Scoring method (continued)		Your Data	Your Score
<u>Capability</u>			
+ 7	if you provide benefit estimates over the phone	Yes	7.0
+ 9	if estimates are based on a calculator linked to member account data	Yes	9.0
+ 5	if you can provide service credit purchase estimates	No	0.0
+ 15	if members can change their address, email, and payment instructions over the phone otherwise +5 for each transaction	0	0.0
+ 4	if you have a workflow system with real-time status of open items	Yes	4.0
Total Score			45.4

2. Rationale for the scoring method

- A perfect score requires callers to reach a knowledgeable person with a wait time of less than 20 seconds.
- Members prefer to get through immediately to a knowledgeable person who can answer their questions.
- Irritation increases rapidly with the number of menu layers.
- Receptionists are often more irritating than a menu layer because of the need to explain your needs twice, incorrect redirection, etc.
- You can serve your members better if you have real time access to all of their records and have tools which will enable you to provide immediate, informed and accurate answers to their questions.
- Your ability to serve members is greatly reduced if your capabilities or policies prevent you from answering questions over the phone.

3. Survey questions used		You	Peer Avg
Q17	When a member calls in, is the first point of human contact usually a receptionist?	No	50% Yes
Q18	Do callers wait in a queue for service representatives?	Yes	80% Yes
	a) If yes, what is the average wait time? [in seconds]	Unknown	55
	b) What is the percentage abandoned calls [i.e. caller hangs-up] while in queue or on hold or in menu?	Unknown	8.9%
Q19	Do members have to navigate a phone menu before speaking to a service representative?	Yes	60% Yes
	If yes:		
	a) What is the average number of menu layers that must be navigated before a caller can speak to a live person? [Count each and every time a caller must select a menu option by pressing a button on the phone as a menu layer. Use the volume-weighted average number of menu layers if there are different menu-tree branches.]	2	2
Q20	Can and will you provide the following information on an immediate real-time basis to members over the phone: [If you do not have real-time access to the information or if your policy is not to give the information over the phone because of security or other concerns then your answer should be 'no'.]		
	a) Estimates of benefits at retirement?	Yes	40% Yes
	a1) If yes, is the estimate based on an interactive benefit calculator linked to the member's actual account data?	Yes	100% Yes
	b) Service credit purchase cost estimates?	No	30% Yes
Q21	Can members calling in perform the following transactions over the phone:		
	a) Change address?	No	20% Yes
	b) Add or change email address?	No	30% Yes
	c) Change payment instructions? [i.e., bank account]	No	10% Yes
Q22	How many hours per week can members call service representatives?	40 hours	44 hours
Q23	Do your service representatives have real time access to a workflow system that lets them know the status of open items?	Yes	60% Yes

Your service score for website was 81 out of 100. This compares to a peer average of 50.



1. Scoring method	Your Data	Your Score
<u>Benefit Calculators</u>		
+ 12 if you have an interactive calculator on your website	Yes	12.0
+ 24 if the calculator is linked to a member's salary and service data	Yes	24.0
+ 3 if you can calculate the cost of purchasing service credit	No	0.0
<u>Salary and Service Credit</u>		
+ 5 if you offer secure access to both salary and service credit data	Yes	5.0
+ 5 if salary & service credit data is up-to-date to the most recent pay period	Yes	5.0
+ 1 if a complete annual history of salary and service credit data is available	No	0.0
<u>Secure Access Design</u>		
+ 4 if members can get online immediately upon registering	Yes	4.0
+ 3 if you greet member by name upon log-in	Yes	3.0
- 2 if you force members to acknowledge a disclaimer every time they log-in	No	0.0
- 2 if you force members to acknowledge a disclaimer every time they use the calculator	No	0.0
+ 1 if inactive members have access to the secure member area	Yes	1.0
+ 2 if you offer a secure mailbox or a digital file which includes a history of recent correspondence and member documents	No	0.0

1. Scoring method (continued)		Your Data	Your Score
<u>Other Transactions and Tools</u>			
+ 1	register for counseling sessions in real time	No	0.0
+ 1	register for presentations	No	0.0
+ 2	live chat	No	0.0
+ 3	change address	Yes	3.0
+ 2	change beneficiaries	Yes	2.0
+ 3	add or change email address	Yes	3.0
+ 1	reset password	Yes	1.0
+ 2	change annuity deposit banking information	Yes	2.0
+ 2	change tax withholding amount	Yes	2.0
+ 3	view or print tax receipts	Yes	3.0
+ 3	view pension payment gross amount and deductions (payment stubs)	Yes	3.0
+ 3	apply for retirement	Yes	3.0
+ 2	if less than 50% of pensions initiated online require follow-up documents or signatures to be mailed in	90.0%	0.0
+ 1	if can check status of retirement application	No	0.0
+ 3	apply for a transfer-out or refund	No	0.0
+ 2	download member statement	Yes	2.0
+ 3	upload documents in lieu of mailing hard copies	No	0.0
+ 3	view pensionable earnings and/ or service without downloading	Yes	3.0
Total Score			81.0

2. Rationale for the scoring method

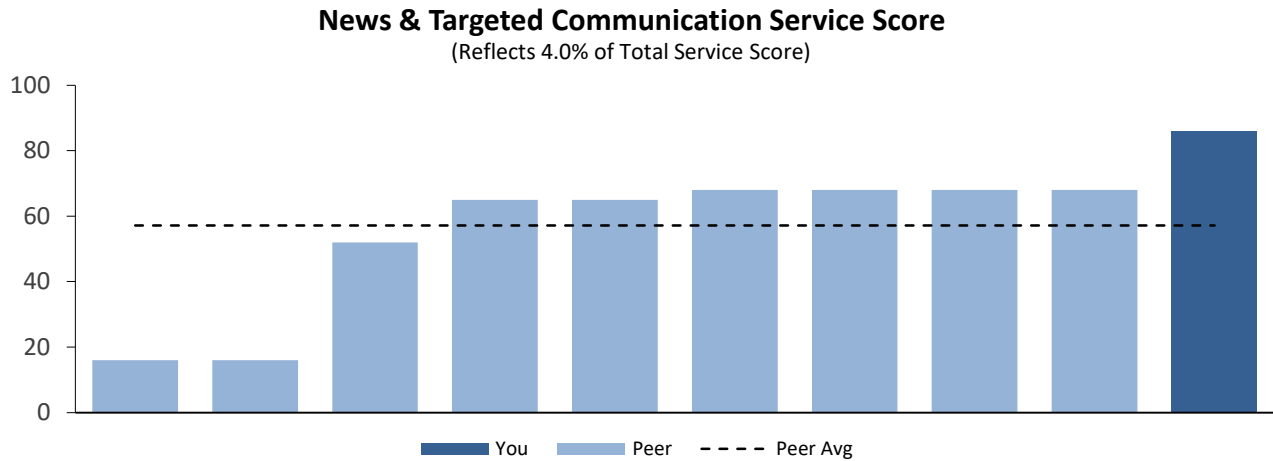
Members visit your website looking for information. The more you can provide, the more tailored and customized to the member, and the easier it is to get on-line, the better.

3. Survey questions used		You	Peer Avg
Q15	Does your website have a secure member area where members can access their own data?	Yes	80% Yes
	If yes:		
	c) If a member wants to register for the first time, does he/she have to wait for a password in the mail?	No	25% Yes
	d) Do you welcome the member by name on the home page of the secure member area?	Yes	75% Yes
	e) Are users required to acknowledge a disclaimer every time they log in?	No	13% Yes
	f) Are users required to acknowledge a disclaimer every time they generate a pension estimate?	No	13% Yes
	g) Do inactive members have access to the secure member area?	Yes	50% Yes

3. Survey questions used (continued)		You	Peer Avg
--------------------------------------	--	-----	----------

Q16	Indicate whether the following capabilities are offered on your website and provide volumes (if available):		
	a) Benefit calculator in non-secure area?	Yes	60% Yes
	b) Benefit calculator in secure area not linked to member data?	No	20% Yes
	c) Benefit calculator in secure area linked to member's salary and service data?	Yes	70% Yes
	d) Service credit purchase calculator?	No	20% Yes
	e) Register for counseling sessions?	No	0% Yes
	e1) Does the member have real-time access to available dates and times?	n/a	n/a Yes
	f) Register for presentations?	No	30% Yes
	g) Live chat?	No	10% Yes
	h) Change address?	Yes	50% Yes
	i) Change beneficiary?	Yes	10% Yes
	j) Change email address?	Yes	80% Yes
	k) Reset password?	Yes	80% Yes
	l) Change banking information for direct deposit?	Yes	20% Yes
	m) Change tax withholding amount?	Yes	20% Yes
	n) Download or print duplicate tax receipts? [i.e., 1099s in the U.S.]	Yes	20% Yes
	o) View pension payment details? [i.e., gross amounts, deductions]	Yes	50% Yes
	p) Submit a retirement application online?	Yes	10% Yes
	p1) Does the online application provide an estimate, final value or neither of the annuity payment the member will receive?	Neither	0% Final
	p2) Approximately what % of retirements initiated online require follow-up documents or signatures to be mailed in?	90.0%	90%
	q) View status of online retirement application?	No	0% Yes
	r) Apply for a refund or transfer-out?	No	0% Yes
	s) Secure mailbox or digital file including history of recent correspondence and member documents?	No	30% Yes
	t) Download member statement? [i.e., Adobe format]	Yes	50% Yes
	u) Upload documents (such as birth certificates)?	No	0% Yes
	v) View pensionable earnings and/or service without downloading?	Yes	70% Yes
	v1) Are both salary and service data available?	Yes	71% Yes
	v2) Is online data up-to-date to the most recent pay period?	Yes	63% Yes
	v3) Is a complete history from the beginning of employment available?	No	0% Yes

Your service score for news and targeted communication was 86 out of 100. This compares to a peer average of 57.



	Your Data	Your Score
1. Scoring method		
<u>Newsletters</u>		
+ 25	if active members receive a newsletter 2 or more times per year, 18 if 1 time, 0 otherwise	4 times 25.0
+ 25	if annuitants receive a newsletter 2 or more times per year, 18 if 1 time, 0 otherwise	4 times 25.0
+ 2	if inactive members receive a newsletter at least annually	4 times 2.0
+ 32	if you have different newsletters for 3 or more of the following segments: all members, actives, inactives, annuitants, age based, gender based, employer/ employment category, other; 18 if 2 segments; 0 otherwise	2 segments 18.0
<u>Other communication</u>		
+ 13	if you issue a 'welcome' kit to new members	Yes 13.0
+ 3	if you include a personalized letter	Yes 3.0
Total Score		86.0

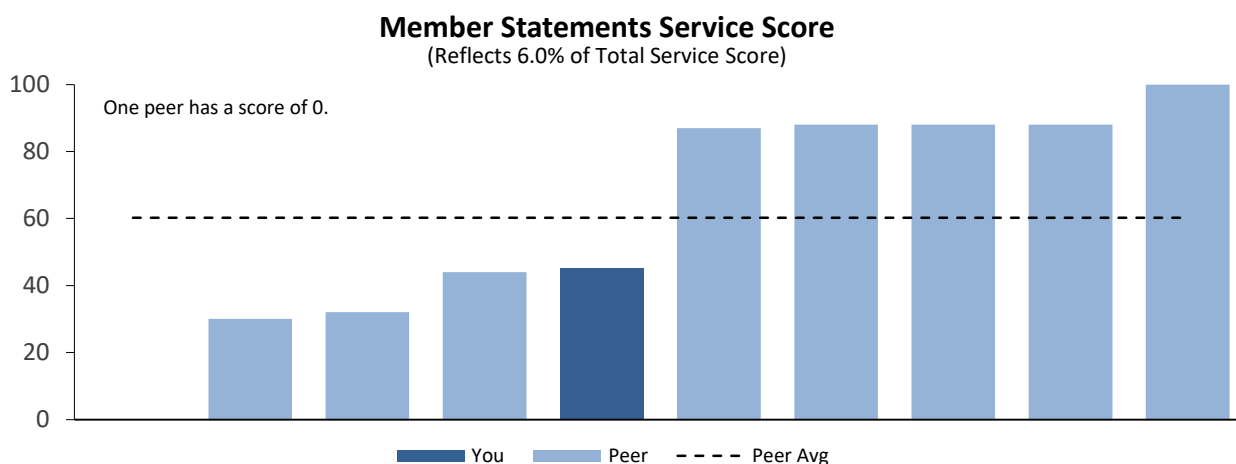
2. Rationale for the scoring method

- Communicating more frequently by newsletter, personalized, and customized messages for different target audiences is higher service.
- Milestone events, such as joining the system, are good opportunities to communicate the value of the benefit.

3. Survey questions used

		You		Peer Avg	
Q29	Indicate whether you sent newsletters or news magazines (in either electronic or paper format) last year to any of the following member segments, and if yes, the number of times it was sent. Only indicate 'yes' if the newsletter was customized for and only sent to members in the segment:				
			#		#
	a) All members (active, inactive and annuitants)?	Yes	4	60% Yes	4
	b) Active and inactives members?	No	n/a	0% Yes	n/a
	c) Active members and annuitants?	No	n/a	10% Yes	2
	d) Active members only?	No	n/a	10% Yes	2
	e) Inactive members only?	No	n/a	0% Yes	n/a
	f) Annuitants only?	No	n/a	10% Yes	2
	g) Age segments (i.e., under 35, 35-50, 50 plus)?	No	n/a	0% Yes	n/a
	h) Women only or men only?	No	n/a	0% Yes	n/a
	i) Employer or employment category (i.e., a different newsletter for teachers vs. bus drivers)?	No	n/a	10% Yes	2
	j) Other?	<u>Yes</u>	3	<u>13% Yes</u>	3
	Total segments		2		1.1
Q35	Are new members issued a 'welcome' kit describing their benefits?	Yes		70% Yes	
	a) If yes, does it include a personalized letter addressing the new member by name?	Yes		71% Yes	

Your service score for member statements was 45 out of 100. This compares to a peer average of 60.



		Your Data	Your Score
1. Scoring method			
+ 20	if data is current to 1 month, otherwise 22 - 2 x number of months out of date	1	20.0
+ 5	if paper member statements mailed directly to the member's home	No	0.0
+ 5	if email or other electronic notice to members that the statement is available in the secure member area	Yes	5.0
+ 5	if sent to inactive members annually or more frequently, otherwise 5 X times per year on average	0	0.0
<u>Content</u>			
+ 10	if summarizes service credit	Yes	10.0
+ 10	if provides pensionable earnings	No	0.0
+ 5	if provides a historical summary of salary and service credit earned each year	No	0.0
+ 10	if shows refund value if you left at the statement date	Yes	10.0
+ 30	if shows estimate of future pension entitlement	No	0.0
Total Score			45.0

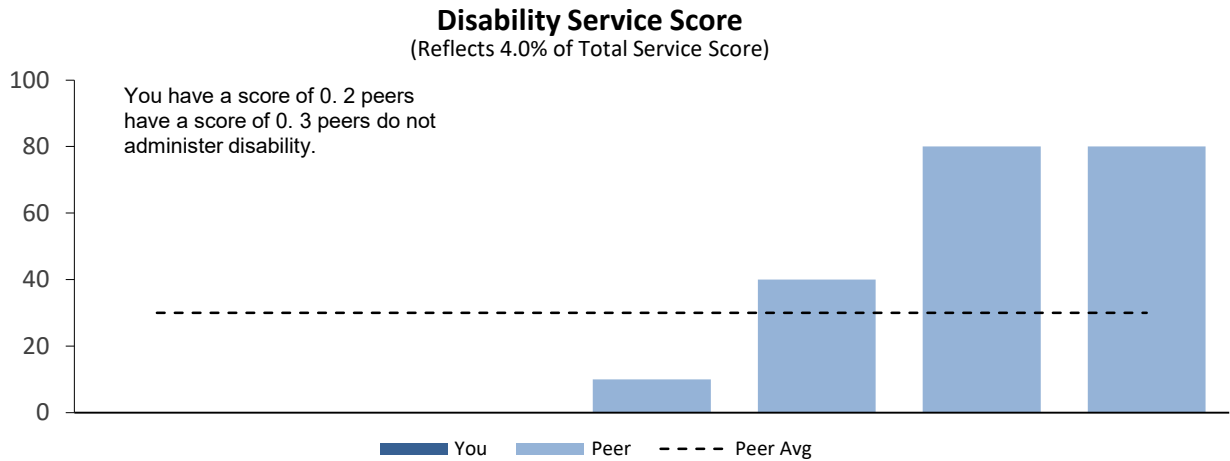
2. Rationale for the scoring method

- Up-to-date, accurate member statements provide one of your best opportunities to communicate the value of the benefit to members.
- Showing an estimate of the future pension entitlement is more important than showing the refund value because the pension entitlement is potentially much more valuable.
- Sending member statements directly to active members' homes or via email or other electronic notice rather than through employers is higher service because the statements are less likely to get lost, and it is more confidential.

3. Survey questions used

	You	Peer Avg
Q31		
Indicate the approximate percentage breakdown of how you send member statements to active members:		
a) Directed through the employer?	0%	0%
b) Mailed directly to members' homes?	0%	77%
c) Email or other electronic notice to members that the statement is available in the secure member area?	100%	23%
Q32		
On average, how current was an active member's data when their member statement was mailed to them?	1	3
Q33		
Do your member statements for active members include:		
a) Total accumulated service credit?	Yes	89% Yes
b) Pensionable earnings?	No	56% Yes
c) A historical summary of salary and service credit earned each year?	No	11% Yes
d) The refund value if you left at the statement date?	Yes	78% Yes
e) An estimate of the future pension entitlement based on age scenario modeling or assuming the member continues to work until earliest possible retirement?	No	56% Yes
Q34		
How frequently do you send member statements to inactive members? [i.e., never, annually, every 2 years, etc.]	Never	1 Per Year

Your service score for disability was 0 out of 100. This compares to a peer average of 30.



	Your Data	Your Score
1. Scoring method		
<u>Timeliness</u>		
+ 100 if you return a decision on a disability application in 1 month or less, otherwise 110 - 10 x number of months to reach a decision	12 months	0.0
Total Score		0.0

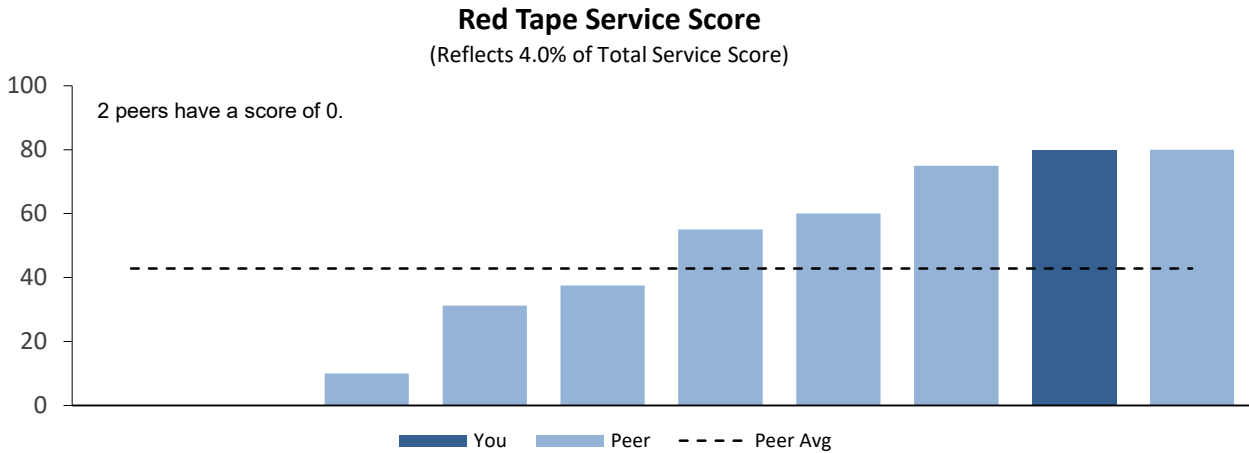
2. Rationale for the scoring method

From a member perspective, faster is higher service.

3. Survey questions used

	You	Peer Avg
Q36 Do you administer disability? If yes, how many months, on average, does it take to return a decision on a disability application from:		
a) the date of the initial receipt to a decision?	12	9

Your service score for red tape was 80 out of 100. This compares to a peer average of 43.



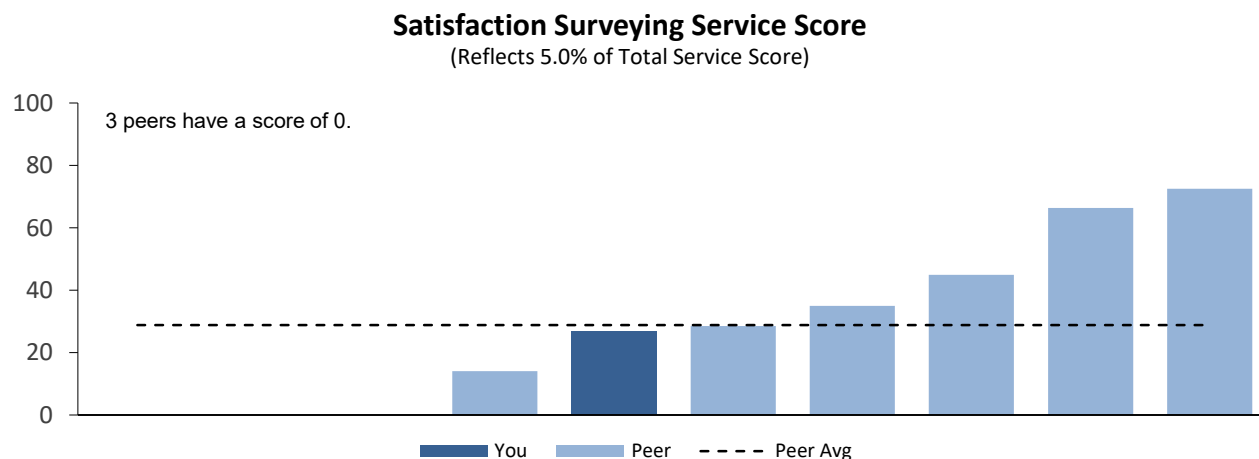
		Your Data	Your Score
1. Scoring method			
	<u>Red Tape</u>		
+ 50	if you do not require notarization of retirement applications, 25 if you require notarization of only some retirement applications, 0 if you require notarization for all retirement applications	None	50.0
+ 20	if you do not require birth/marriage certificates before incepting a pension, 0 if you do require birth/marriage certificates before incepting a pension	Yes	0.0
+ 10	if you do not require notarization for refund applications, 5 if you require notarization of only some refund applications, 0 if you require notarization for all refund applications	None	10.0
	<u>No Notarization Disability</u>		
+ 20	if you do not require notarization of disability applications, 10 if you require notarization of only some disability applications, 0 if you require notarization for all disability applications	None	20.0
Total Score			80.0
Adjusted Total Score if you do not administer disability			80.0

2. Rationale for the scoring method

Extra red tape, like obtaining notarizations, creates work for members and may not provide additional protection for the system. For example, notarizations can be fraudulent. Many systems have decided that the potential risk reduction does not justify the inconvenience caused to members.

3. Survey questions used		You	Peer Avg
Q37	Do you require notarization of all/some/none:		
	a) Normal or early retirement applications?	None	30% All
	b) Refund applications?	None	40% All
	c) Disability applications?	None	43% All
Q38	Do you require a birth or marriage certificate before incepting a pension?	Yes	100% Yes

Your service score for satisfaction surveying was 27 out of 100. This compares to a peer average of 29.



Your service score for satisfaction surveying is the weighted total of the components shown in the table below. The methodology and data used to determine your scores for each of these components is described in detail on the following pages.

Satisfaction Surveying Service Score Components			
	Weight	Do you survey?	Your Score
a. Member telephone calls	50%	No	0
b. Member presentations	16%	Yes	83
c. 1-on-1 counseling	17%	Yes	73
d. Pension inceptions	17%	Yes	6
Weighted total			26.7

1. Scoring method		Your Data	Your Score
<u>Calls</u>			
+ 30	if survey focuses primarily on member telephone calls	n/a	0.0
+ 30	if the longest length of time between the survey and member telephone call is 14 days or less	n/a	0.0
+ 10	if surveys are continuous or more than 11 times per year, + 8 if quarterly, + 3 if once per year	n/a	0.0
+ 10	if you can summarize results by service representative	n/a	0.0
+ 10	if you can summarize results by topic covered	n/a	0.0
+ 10	if survey is delayed at least one day from the member telephone call	n/a	<u>0.0</u>
	Total		0.0
<u>Presentations</u>			
+ 35	if survey focuses primarily on member presentations	Yes	35.0
+ 35	if the longest length of time between the survey and member attending a presentation is 14 days or less	1 day	35.0
+ 10	if surveys are continuous or more than 11 times per year, + 8 if quarterly, + 3 if once per year	1	3.0
+ 10	if you can summarize results by service representative	Yes	10.0
+ 10	if survey is delayed at least one day from the member presentation	No	<u>0.0</u>
	Total		83.0
<u>Counseling</u>			
+ 30	if survey focuses primarily on member counseling	Yes	30.0
+ 30	if the longest length of time between the survey and when the member was counseled is 14 days or less	7 days	30.0
+ 10	if surveys are continuous or more than 11 times per year, + 8 if quarterly, + 3 if once per year	1	3.0
+ 10	if you can summarize results by service representative	No	0.0
+ 10	if you can summarize results by topic covered	No	0.0
+ 10	if survey is delayed at least one day from the session	Yes	<u>10.0</u>
	Total		73.0
<u>Pension Inception Process</u>			
+ 40	if survey focuses only on the annuity pension inception process	No	0.0
+ 40	if the longest length of time between the survey and pension inception is 14 days or less	180 days	0.0
+ 20	if surveys are continuous or more than 11 times per year, + 16 if quarterly, + 6 if once per year	1	<u>6.0</u>
	Total		6.0
Weighted total			26.7

2. Rationale for the scoring method

Best practice satisfaction surveying is single activity focused, sent only to members who have recently received the service, can be summarized by the person that did the work, is performed on a frequent random-sample basis and results are communicated widely. If you measure satisfaction, we assume you do a better job of managing and improving it.

Surveying immediately after the activity tends to give feedback that is heavily influenced by the member's positive or negative impression of the service agent. Surveying a day or so later captures member's feedback regarding the success of the process and whether the member accomplished what they intended to.

3. Survey questions used	Calls		Presentations		Counseling		Pension Inception Process	
	You	Peer Avg	You	Peer Avg	You	Peer Avg	You	Peer Avg
Q39 Satisfaction Surveying								
Did you survey member satisfaction with regard to the activity (per the column headings) in your most recently completed fiscal year? (yes/ no)	No	33% Yes	Yes	56% Yes	Yes	75% Yes	Yes	44% Yes
If yes:								
a) Did the survey focus primarily on the single activity (per the column heading) or was it part of a wider survey on multiple activities? (single activity/ multiple)	n/a	67% Single Activity	Single Activity	100% Single Activity	Single Activity	100% Single Activity	Multiple	50% Single Activity
c) What was the longest possible length of time between the activity and the survey? (in days) [i.e., if you sent a survey to a sample of members that had called sometime in the past year, then the answer is 365 days]	n/a	9 days	1 day	9 days	7 days	4 days	180 days	64 days
d) Is the survey delayed by at least 1 day from the date of the session? (yes/ no)	n/a	100% Yes	No	40% Yes	Yes	67% Yes		
e) How many times did you survey member satisfaction with regard to the activity in your most recently completed fiscal year? (once, quarterly, monthly, on a continuous basis such as every 10th refund, etc.)	n/a	100% ≥ 12	1	60% ≥ 12	1	67% ≥ 12	1	75% ≥ 12
f) Can you break down the survey results by service agent?	n/a	33% Yes	Yes	80% Yes	No	67% Yes		
g) Can you break down the survey results by topic covered?	n/a	67% Yes			No	33% Yes		

4

Cost Analysis

This section:

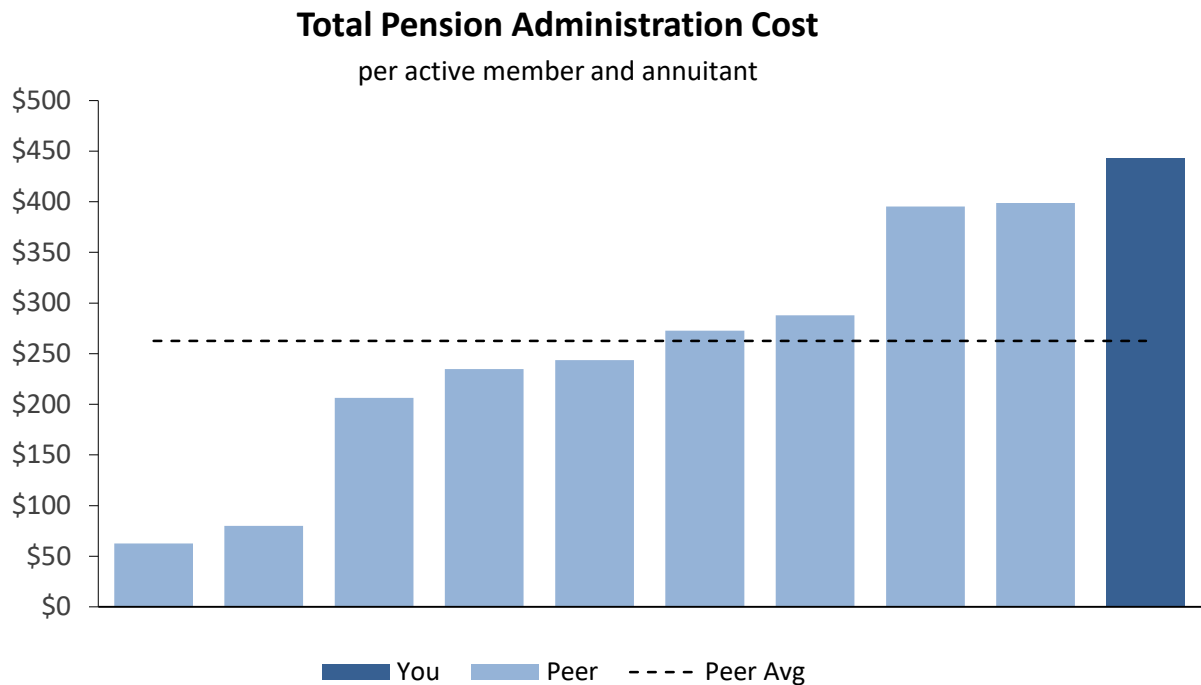
- Compares your total costs per member.
- Shows how differences in FTE, salaries, professional fees and building costs impact your costs.
- Compares other factors that impact costs such as workloads, productivity, economies of scale, cost environment, and major projects.

Your total pension administration cost per the survey was \$16.9 million, or \$443 per active member and annuitant.

Cost Category	In \$000s		as a % of total	
	You	Peer Average	You	Peer Average
Salaries and benefits	9,423	4,005	56%	47%
Professional fees (actuarial, legal, audit, consulting, outsourced IT, etc)	3,065	2,168	18%	25%
Building expenses (rent, depreciation, leasehold amortization, utilities, facility services)	660	368	4%	5%
Cross charges paid to sister organizations	0	283	0%	6%
Amortization and depreciation (non-building)	2,314	1,362	14%	9%
Other administrative expenses	1,408	627	8%	8%
total administration cost (A)	\$16,870	\$8,813	100%	100%
active members and annuitants (B)	38,115	37,989		
\$ per active member and annuitant (A X 1000/B)	\$442.61	\$262.46		

All foreign currency amounts have been converted to USD using Purchasing Power Parity figures as per the OECD (see Appendix B). The benefit of using the same exchange rate for prior years is that changes in costs reflect fluctuations in your peers' costs and not fluctuations in foreign exchange.

Your pension administration cost was \$443 per active member and annuitant. This was \$180 above the peer average of \$262.

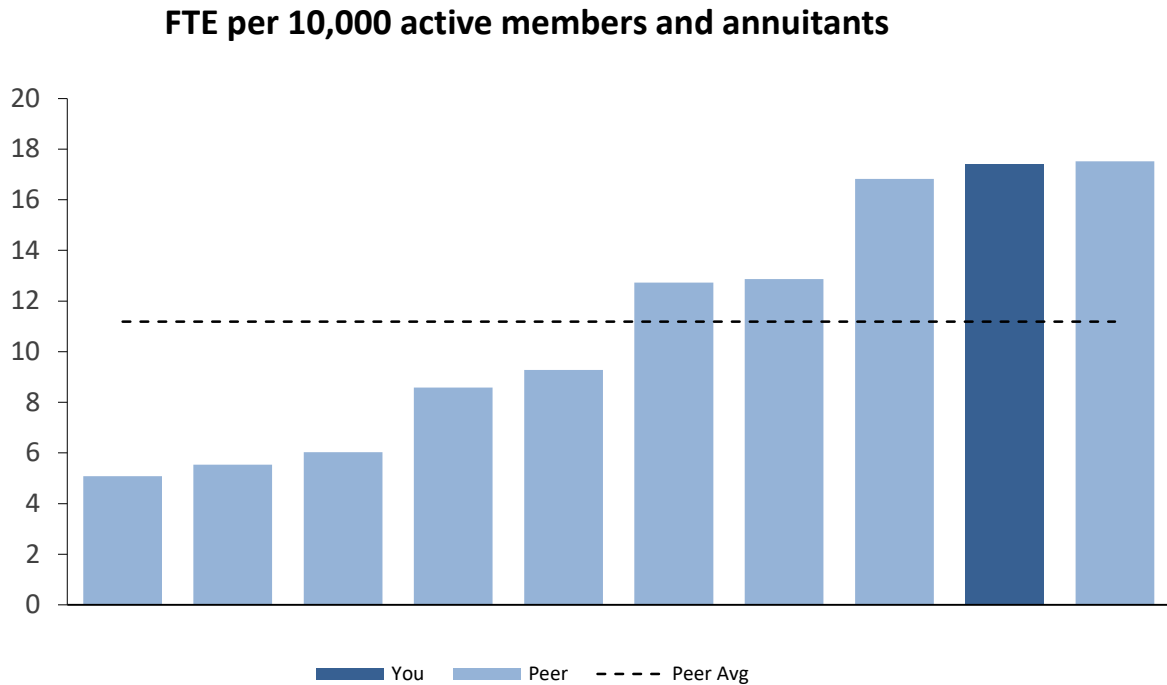


Inactive members are excluded from the total membership because they are much less costly to administer than either active members or annuitants. Inactive members are also excluded from the denominator when determining total cost per member.

Reasons why your total cost was \$180 higher than the peer average:

Reason	Comparison			Impact \$s per member
	You	Peer average	More/ Less	
FTE per 10,000 members				
A. Using 56% more FTE to serve members	17.4	11.2	56%	\$59
Cost per FTE				
B. Paying more in total per FTE for:				
• Salaries & benefits	\$141,913	\$96,730	47%	
• Building expenses	<u>\$9,940</u>	<u>\$12,000</u>	-17%	
	\$151,852	\$108,729	40%	\$75
\$s per member				
C. Paying more per member in total for:				
• Professional Fees	\$80	\$61	32%	
• Amortization	\$61	\$35	75%	
• Charges to sister organizations	\$0	\$13	-100%	
• Other administration expenses	<u>\$37</u>	<u>\$23</u>	62%	
	\$178	\$132	35%	\$46
Total				\$180

You used 56% more FTE to serve your members in comparison to the peer average.



Using more FTE increases your cost relative to the peer average by an estimated \$58.91 per member.

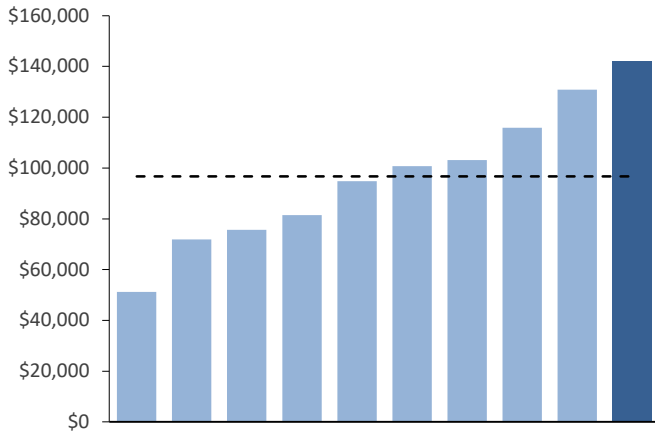
Key reasons for differences in FTE per member include differences in workloads and differences in productivity.

- **Workloads:** your weighted transaction volume was 69, which was 19% above the peer average. This suggests that you do more transactions and/or have a more costly mix of transactions per active member and annuitant. The next page shows you where you are doing more or less transactions in comparison with your peers.
- **Productivity:** your weighted-transaction score per FTE was 39,410, which is 30% lower than the peer average. Differences in productivity are caused by differences in staff capabilities, IT capability, service levels, economies of scale, organizational processes, complexity, projects and outsourcing (i.e., using consultants instead of internal staff will increase productivity per internal FTE).

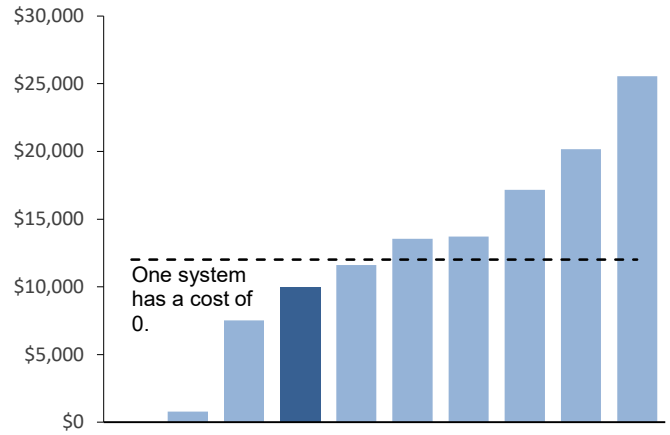
Refer to section 5 Transaction Volumes for more insight into workloads.

Graphical comparisons - Where do you pay more/less?

Salaries & Benefits per FTE

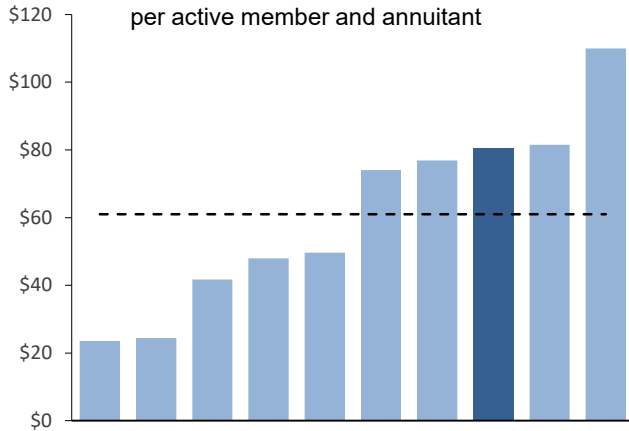


Building & Utilities per FTE



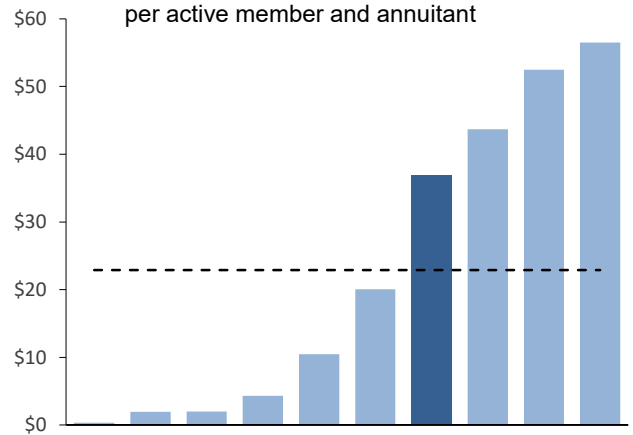
Professional Fees

per active member and annuitant



Other Administrative Costs

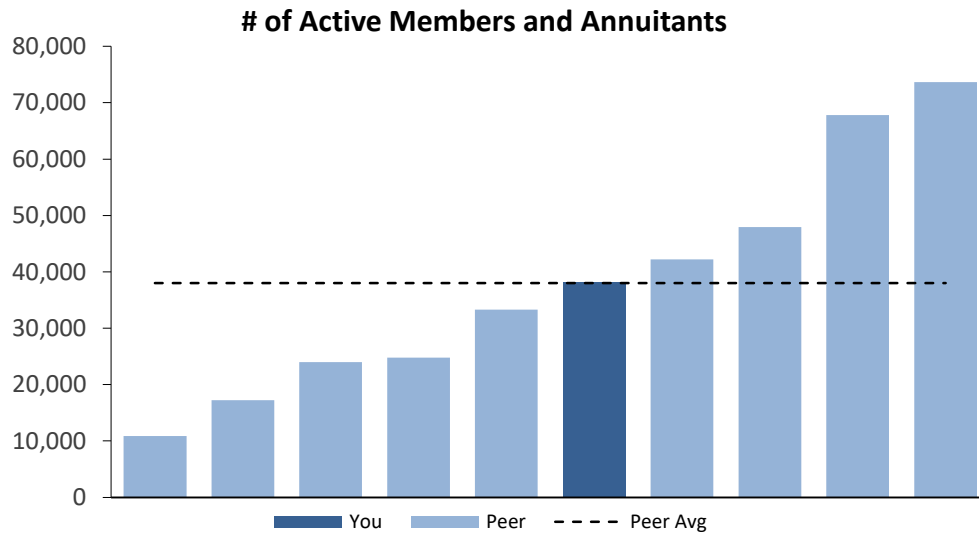
per active member and annuitant



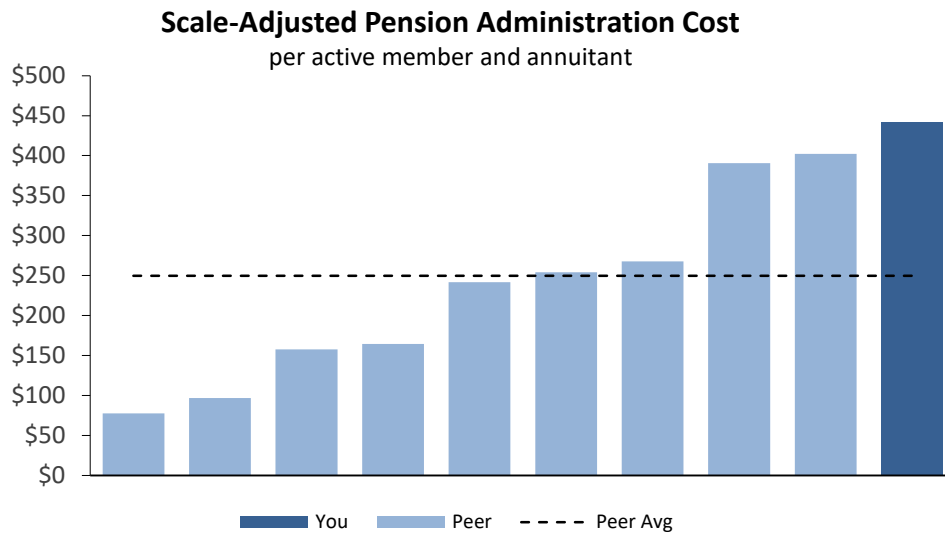
■ You ■ Peer - - - Peer Avg

Economies of scale also impacts costs.

Size is a key driver of costs. Larger funds can spread their fixed base costs over a bigger population.

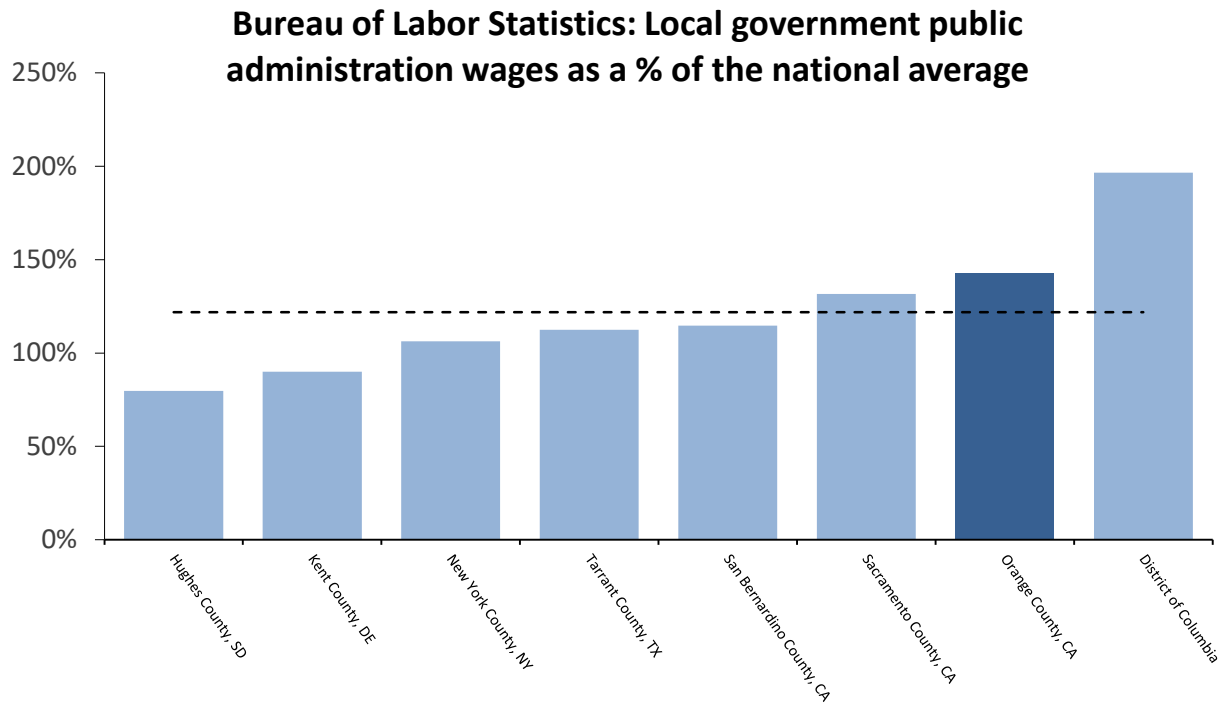


This scale-adjusted graph shows your peers' costs as if they had the same number of members as you:



Your cost environment was 17% higher than the peer average.

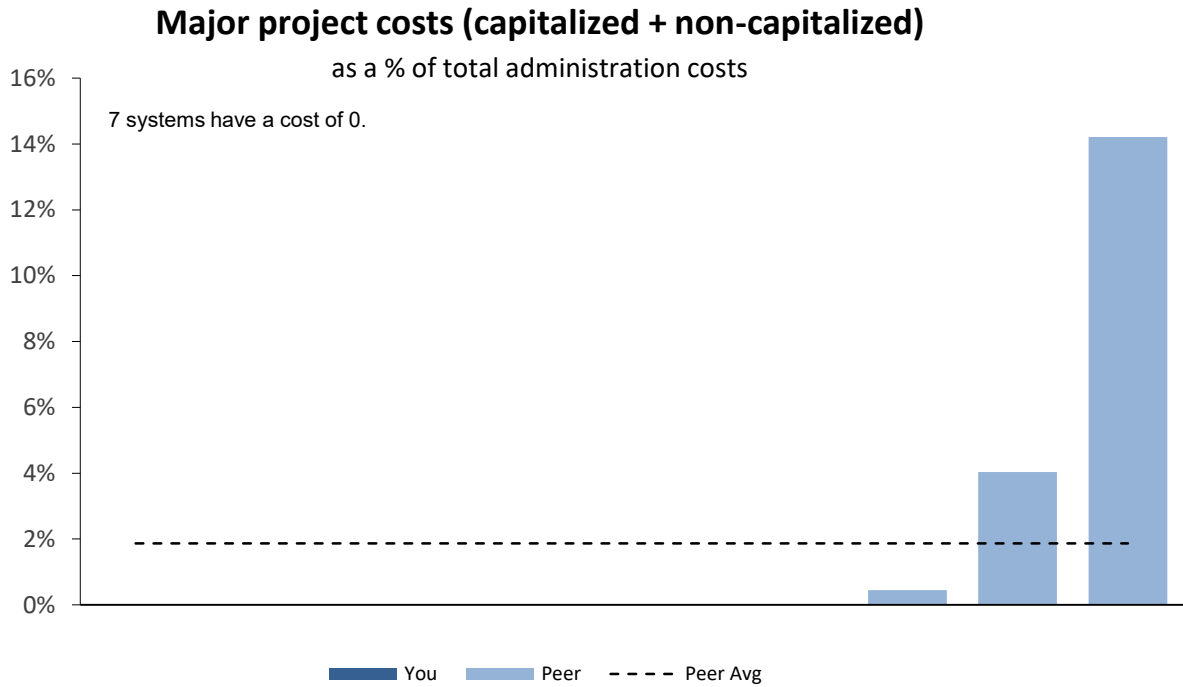
The more expensive the location you are in, the higher your costs. The highest cost environment in your peer group was 146% higher cost than the lowest cost environment.



Source: Bureau of Labor Statistics (BLS), United States Department of Labor

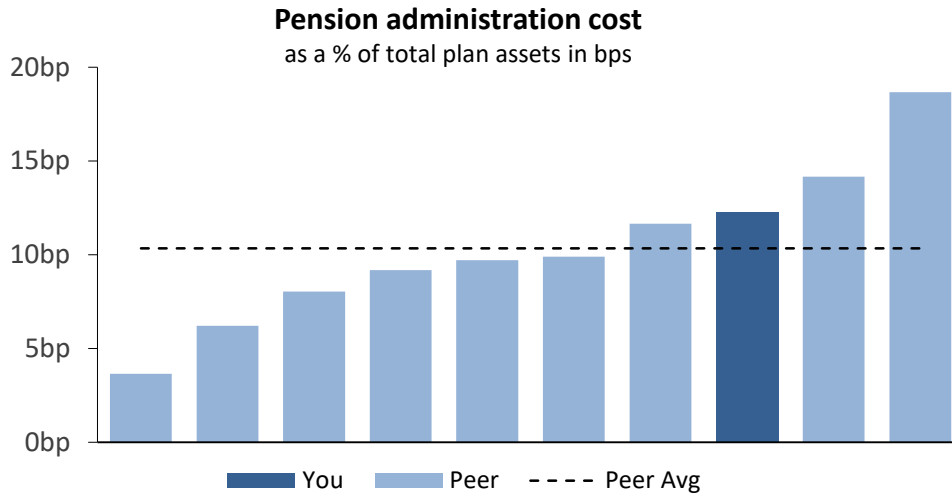
The cost environment measure is based on Bureau of Labor Statistics data for state and local government public administration wages within a given geographical area. It is normalized by dividing it by the national average.

You spent 0% of your total administration cost on major projects. This was below the peer average of 2%.



Differences in investment in major projects can have a very large impact on relative cost performance.

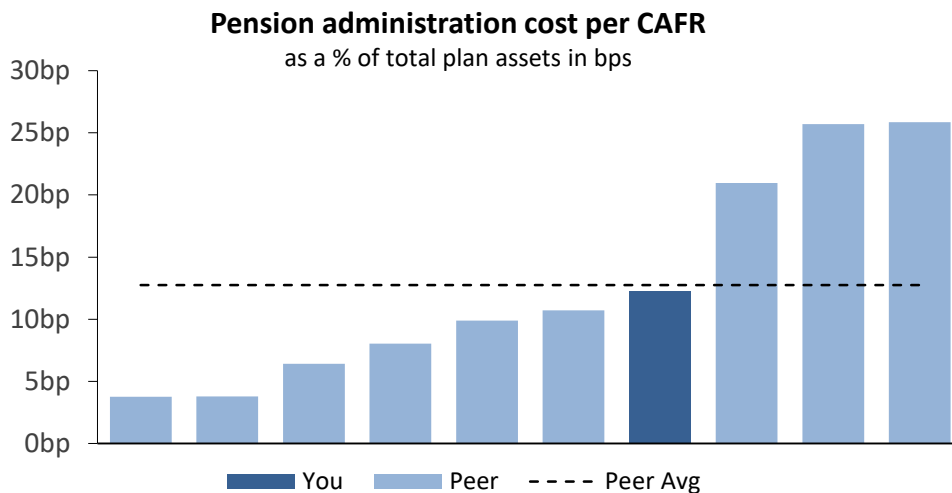
An alternative way of comparing costs is as a percentage of total assets. Your cost of 12.3 bps was above the peer average of 10.3 bps.



Calculation of your pension administration cost as a percentage of total assets

Total pension administration cost in \$000s (A)	\$16,870
Total assets in \$ millions at the end of the calendar year (B)	\$13,730.0
Pension administration cost as a % of total assets in bps (A/B X 10)	12.3 bps
1 basis point (bps) equals 0.01%.	

The above calculation uses your net pension administration cost. These exclude any healthcare or investment management related costs. If healthcare and investment management related costs are included in this calculation, your cost was 12.3 bps compared to a peer average of 12.7.



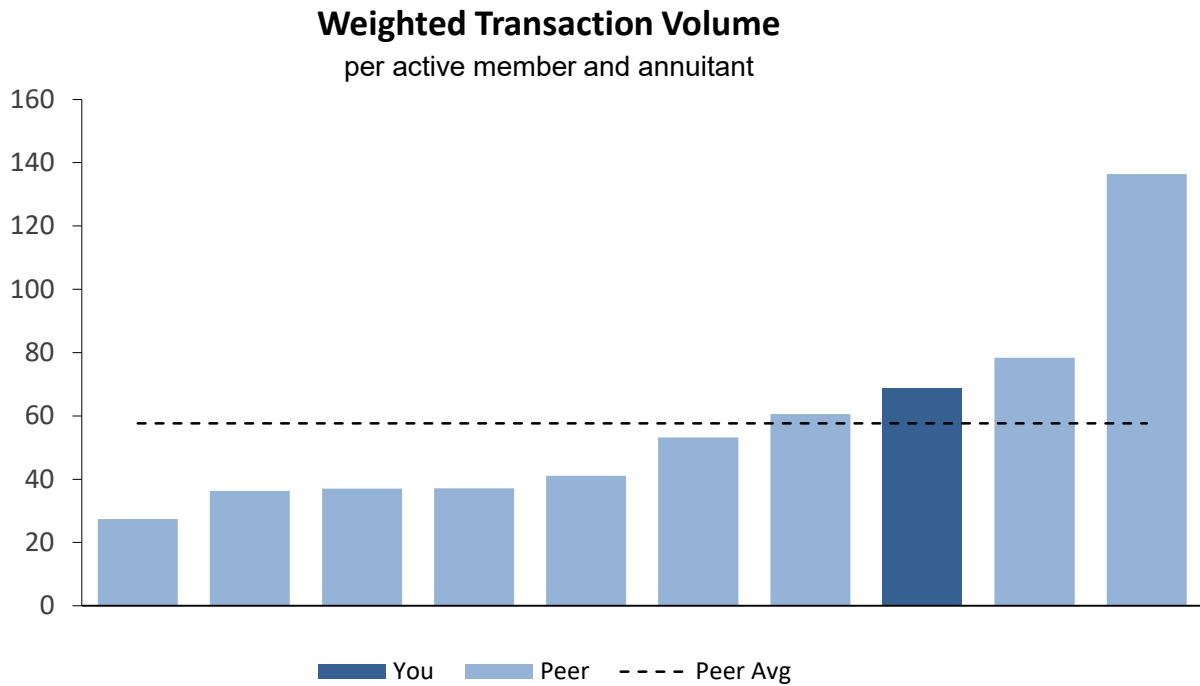
5

Transaction Volumes

This section contains:

- Comparisons of the most important pension administration transaction volumes. Transactions are a major driver of costs. It is higher cost to have higher transaction volumes per member.
- The calculation of your weighted transaction volume score per member. It shows whether your transaction volumes are more or less costly in aggregate.
- Comparisons of online transaction volumes.

Your weighted transaction volume was 19% higher than the peer average.



The weighted transaction volume shows whether your transaction volumes are more or less costly in aggregate.

Differences in volume per member reflect differences in:

- Activities that you administer. For example, some plans do not administer disability.
- Services provided. For example, some plans do not offer counseling.
- Online self-service. For example, self-service can reduce call volumes.
- Membership mix. Active members cause more transaction volumes than annuitants.
- Member demographics. Some member types demand more services than others.

Your weighted transaction volume equals the cost weighted average of 13 key activity volumes.

Calculation of your Weighted Transaction Volume per Member

Activity	Activity volume description	Your Volume (A)	Weight = World PABS Cost per Unit (B)	Weighted Volume (A x B)
1. Member Transactions				
A. Pension Payments	annuitants	16,369	8	126,696
B. Pension Inceptions	service & survivor inceptions	1,169	164	191,903
C. Withdrawals	withdrawals	483	221	106,820
D. Purchases	purchases	406	325	131,938
E. Disability	disability applications	71	1,827	129,691
2. Member Communication				
A. Member Calls	calls & emails	76,694	9	654,967
B. Mail Room	incoming letters	12,421	7	83,718
C. Pension Estimates	written estimates	4,618	89	412,387
D. 1-on-1 Counseling	counseling sessions	2,785	174	485,955
E. Member Presentations	presentations	85	1,641	139,467
F. Mass Communication	active members	21,746	3	65,890
3. Collections and Data Maintenance				
A. Employer data & money	active members	21,746	3	65,890
B. Non-employer data	annuitants, inactives	21,739	1	21,522
Total				2,616,845
Total per active member and annuitant				69

The weights used are the in-house peer median cost per transaction for all participants in CEM's global pension administration benchmarking service. These weights enable us to normalize for the substantial differences in time and effort expended on each type of task. For example, the work effort in responding to a disability application is much higher than answering a telephone call.

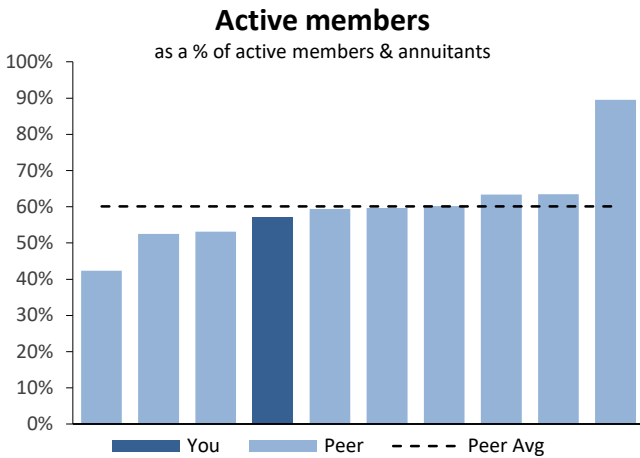
For some activities, we have used members as a proxy for the activity's transactions. For example, active members is used as a proxy for the transactions of employer data and money. The implicit assumption is that data maintenance transactions (such as new hires, leaves, exits, changes in family status, address changes, etc) will occur at similar ratios of members for all schemes.

Where are you doing more/fewer transactions than your peers?

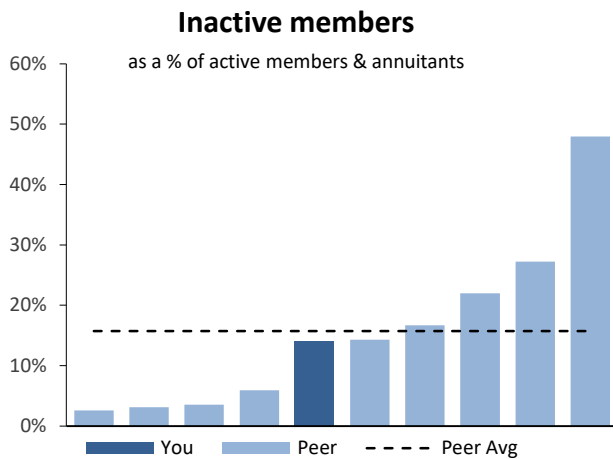
Where are you doing more/fewer transactions than your peers?						
Activity	Activity volume description	Your Volume	Volume per 1,000 active members and annuitants			Cost-impact You vs. Peers
			You	Peer Avg	More/-less	
1. Member Transactions						
A. Pension Payments	annuitants	16,369	429.5	399.3	8%	increasing
B. Pension Inceptions	service & survivor inceptions	1,169	30.7	25.0	23%	increasing
C. Withdrawals	withdrawals	483	12.7	30.0	-58%	decreasing
D. Purchases	purchases	406	10.7	10.6	1%	neutral
E. Disability	disability applications	71	1.9	1.4	36%	increasing
2. Member Communication						
A. Member Calls	calls & emails	76,694	2,012.2	1,135.1	77%	increasing
B. Mail Room	incoming letters	12,421	325.9	324.2	1%	neutral
C. Pension Estimates	written estimates	4,618	121.2	79.1	53%	increasing
D. 1-on-1 Counseling	counseling sessions	2,785	73.1	80.2	-9%	decreasing
E. Presentations	presentations	85	2.2	0.9	149%	increasing
F. Mass Communication	active members	21,746	570.5	600.7	-5%	decreasing
3. Collections and Data Maintenance						
A. Employer data	active members	21,746	570.5	600.7	-5%	decreasing
B. Non-employer data	annuitants, inactives	21,739	570.4	556.5	2%	neutral
Weighted Total			68.7	57.6	19%	increasing

All volumes in the above table are compared on a 'per 1,000 active members and annuitants', even if both member groups do not always cause the volume. This is because active members & annuitants is the divisor used to determine cost per member. Therefore, if you want to know how volumes impact your relative cost performance, they need to be compared on the same basis.

Membership mix impacts transaction volumes



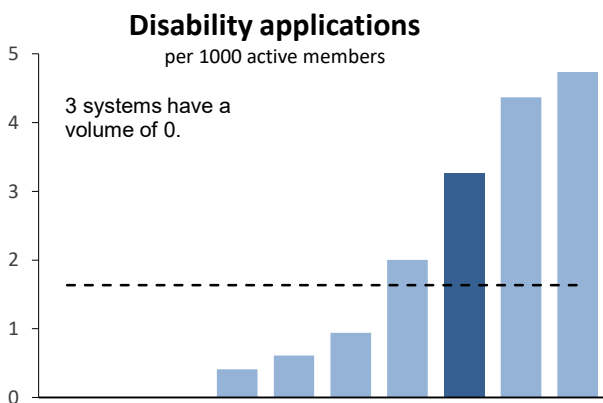
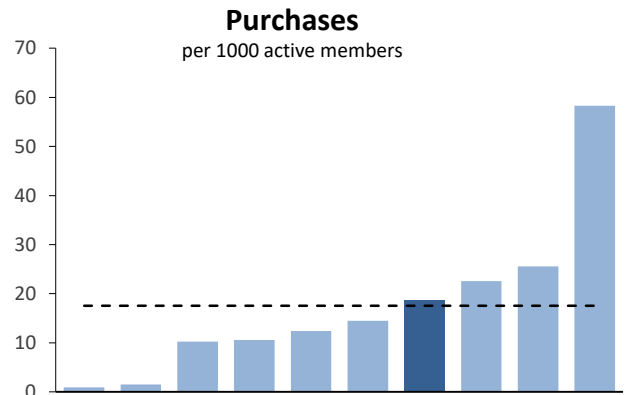
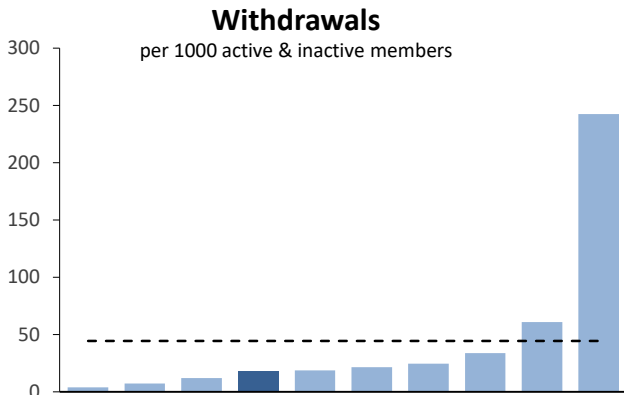
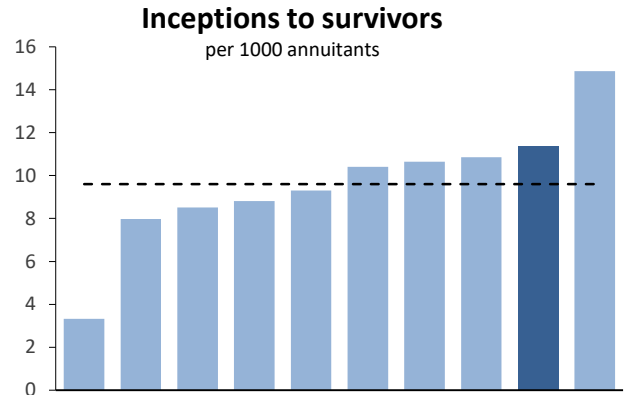
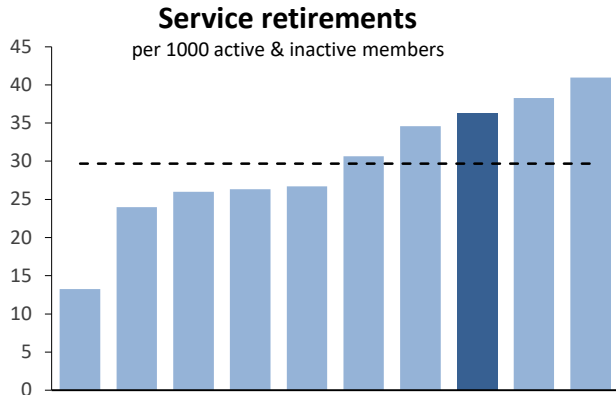
Active members cause more transactions than annuitants. For your system, active members represented 57% of the divisor used to determine cost per member (i.e., active members and annuitants). This was less than the peer average of 60%. Having less active members decreases your relative volumes and costs.



Inactive members cause the fewest transactions. Therefore they are excluded from membership volumes when determining cost per member. But they still cause some transactions (i.e., withdrawals, service retirements, calls). So having fewer inactive members decreases your relative volumes and costs. Your system had fewer. Inactive members represented 14% of the divisor used to determine cost per member (i.e., active members and annuitants) which was fewer than the peer average of 16%.

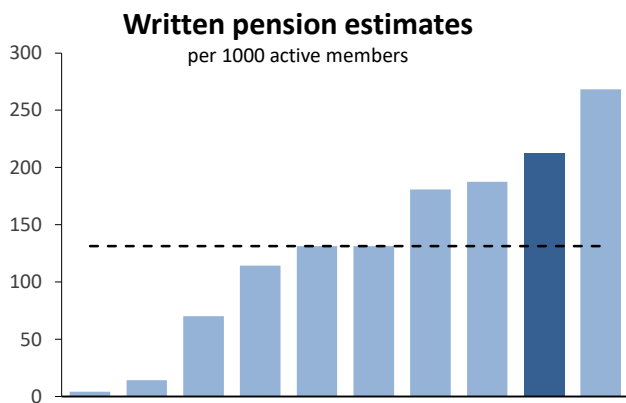
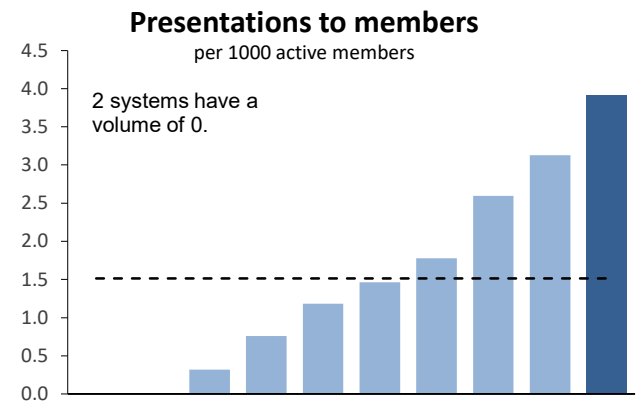
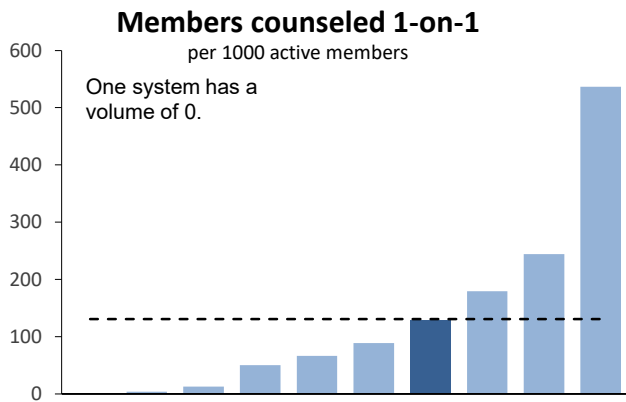
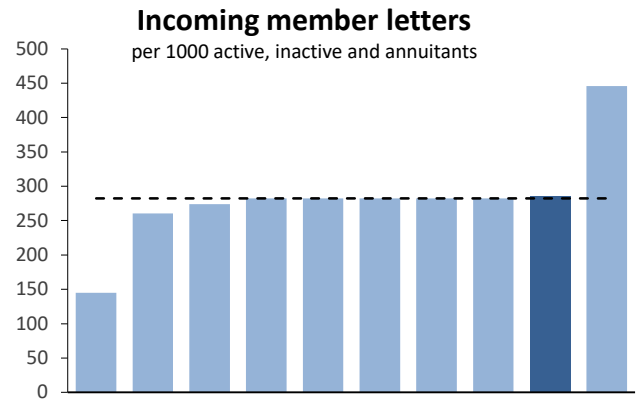
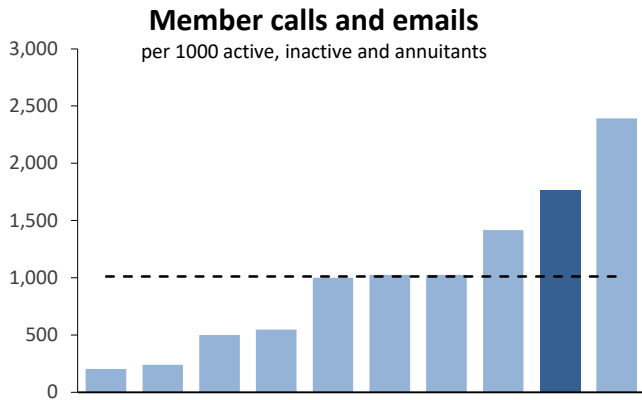
Member transactions - Where are you doing more/less?

Transaction volumes below, and on the following two pages, are compared versus the member group subsets that are most likely to cause the volumes.



You
 Peer
 Peer Avg

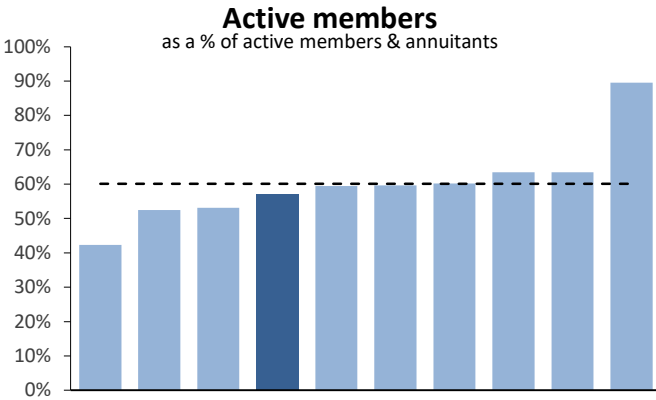
Communication transactions - Where are you doing more/less?



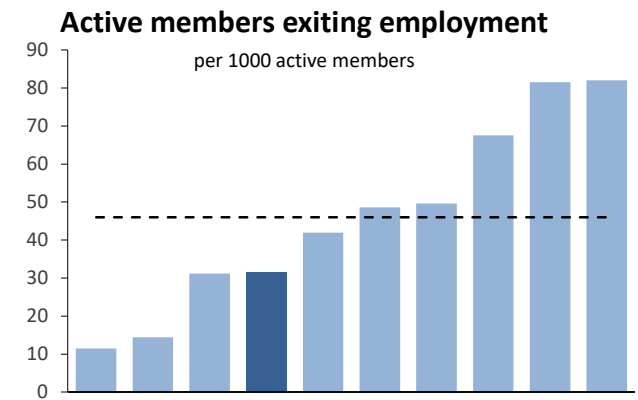
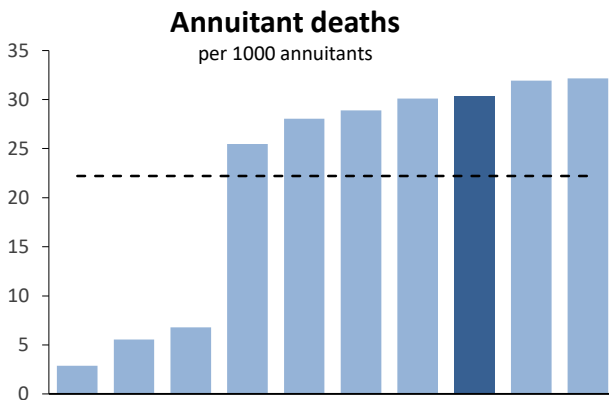
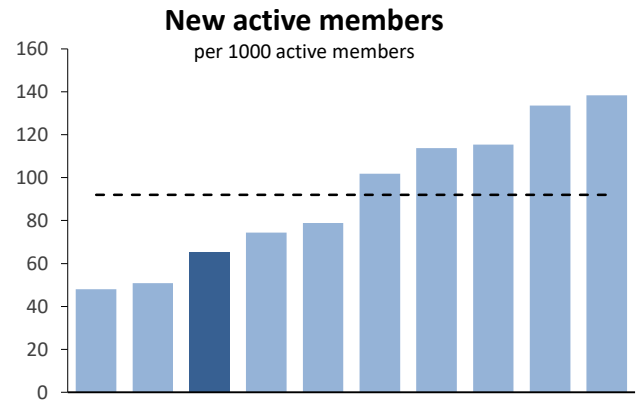
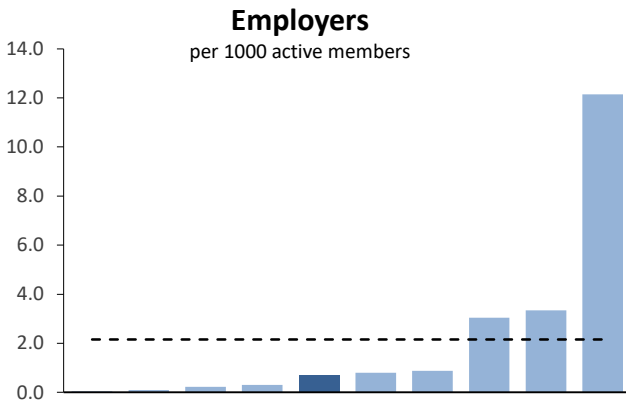
You
 Peer
 Peer Avg

Collections and data transactions - Where are you doing more/less?

The key driver of collection and data transactions and costs is active members which in turn cause data transactions such as service accruals, divorce, leaves of absence, exits, withdrawals, inceptions, deaths, beneficiaries and new members. Annuitants and inactive members cause far fewer data transactions. So if you have a higher ratio of actives relatives to annuitants, this will increase your relative cost per member.

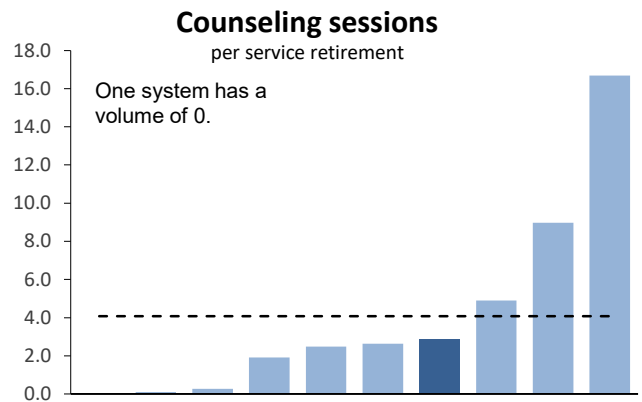
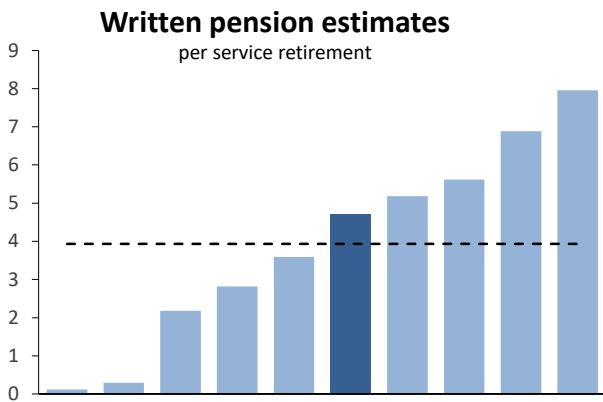
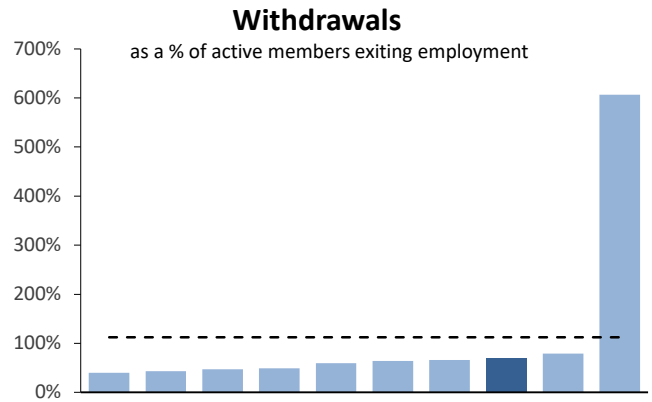
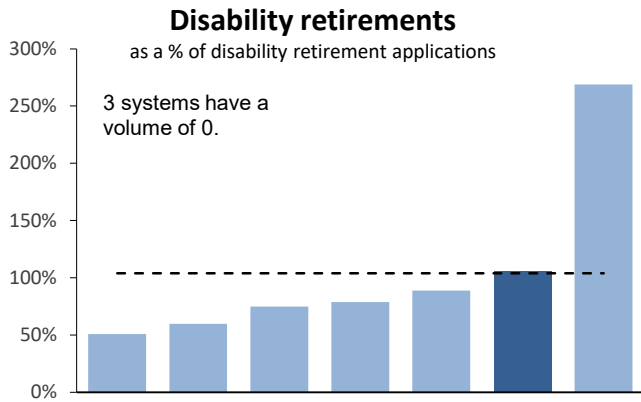


Shown below are secondary drivers of collections and data cost.



■ You ■ Peer - - - Peer Avg

Interesting ratios



Service retirements are not the only driver of counseling sessions. Systems that administer healthcare often counsel retirees on healthcare choices.

You
 Peer
 Peer Avg

Online Transactions

Online Tool	Do you offer?		If offered: Volume per 1,000 active members and annuitants		
	You	Peers	You	Peer Average	# peers able to provide
Benefit Calculators					
In non-secure area	Yes	60% Yes	907	298	4
In secure area not linked to member's data	No	20% Yes	n/a	n/a	0
In secure area linked to member's salary and service data	Yes	70% Yes	4,358	1,240	4
Service credit purchase calculator	No	20% Yes	n/a	1	1
Register for counseling sessions	No	0% Yes	n/a	n/a	0
Real-time access to available dates and times	n/a	n/a Yes			
Register for presentations	No	30% Yes	n/a	27	2
Live chat	No	10% Yes			
Change address	Yes	50% Yes	39	25	2
Change beneficiary	Yes	10% Yes	75	75	1
Change email address	Yes	80% Yes	8	10	3
Reset password	Yes	80% Yes	62	63	3
Tools for annuitants					
Change banking information for direct deposit	Yes	20% Yes	12	12	1
Change tax withholding amount	Yes	20% Yes	30	30	1
Download duplicate tax receipts	Yes	20% Yes	689	689	1
View annuity payment details	Yes	50% Yes	1,377	481	3
Submit a retirement application	Yes	10% Yes	20	20	1
View status of retirement application	No	0% Yes	n/a	n/a	0
Apply for a refund or transfer-out	No	0% Yes	n/a	n/a	0
Secure mailbox or digital file of recent correspondence and member documents	No	30% Yes	n/a	916	1
Download member statement (i.e., Adobe format)	Yes	50% Yes	967	406	3
Upload documents	No	0% Yes	n/a	n/a	0
View pensionable earnings and/or service without downloading	Yes	70% Yes	1,929	980	2
If yes:					
Both salary and service data is available	Yes	71% Yes			
Online data is up-to-date to the most recent pay period	Yes	63% Yes			
A complete annual history from the beginning of employment is available	No	0% Yes			

6

Appendices

Appendix A - Survey Responses

Appendix B - Foreign Currency Conversion

Appendix A - Orange County ERS Survey Responses

Survey Question	Your Data		Peers 2017				Count
	2017	2016	Max.	Median	Min.	Avg	
1 <u>Orange County Employees Retirement System</u> <u>Suzanne Jenike</u> <u>714-558-6215</u> <u>sjenike@ocers.org</u>							
Membership							
2 Provide the breakdown of total members between: <u>End of most recent fiscal year</u>							
a) Active members	21,746	21,525	43,774	21,428	6,551	22,500	10
b) Deferred members	5,370	5,092	18,458	4,398	386	6,165	10
c) Annuitants (Service, Disabled, Survivor)	16,369	15,810	29,876	15,335	1,802	15,489	10
<u>End of prior fiscal year</u>							
a) Active members	21,525	21,460	44,620	21,032	6,317	22,631	10
b) Deferred members	5,092	4,789	17,554	4,557	367	6,182	10
c) Annuitants (Service, Disabled, Survivor)	15,810	15,169	28,746	15,136	1,487	15,036	10
Plan Description							
3 Indicate 'yes' if your employers/ member groups can be described as the following (indicate all that apply):							
a) Is your membership limited to a city or county?	No	No	40% Yes, 60% No, 0% n/a				10
b) Participating Local Employers? [i.e. municipalities have a choice in participating in your plan]	Yes	Yes	50% Yes, 50% No, 0% n/a				10
c) State, Province, Country?	No	No	40% Yes, 60% No, 0% n/a				10
d) Teachers?	No	No	50% Yes, 50% No, 0% n/a				10
e) School Employees (Custodians, Admin. Staff)?	No	No	30% Yes, 70% No, 0% n/a				10
f) Safety (Police, Fire, Sheriff's Dept, etc)?	Yes	Yes	80% Yes, 20% No, 0% n/a				10
g) Other (Judges, Legislators, etc)?	No	No	30% Yes, 70% No, 0% n/a				10
h) Corporate?	No	No	0% Yes, 100% No, 0% n/a				10
i) Industry?	No	No	0% Yes, 100% No, 0% n/a				10
i1) If Industry, describe the industry:	<u>n/a</u>						
4 Which of the following descriptions best describes the non-optional benefit plans that you administer for each of your A plan is non-optional if members' must participate in it, or choose between it and alternatives. Do not include membership in benefit plans that are supplemental and optional such as deferred compensation 457, 403B or 401(k) plans. Do not include plans administered by a 3rd party.							
a) Traditional Defined Benefit ("DB")?	Yes	Yes	100% Yes, 0% No, 0% n/a				10
b) DC Cash Balance (aka Money Purchase)?	No	No	0% Yes, 100% No, 0% n/a				10
c) Hybrid DB/ DC Cash Balance?	No	No	0% Yes, 100% No, 0% n/a				10
d) Hybrid DB/ Money Match?	No	No	0% Yes, 100% No, 0% n/a				10
e) DROP savings?	No	No	0% Yes, 100% No, 0% n/a				10
f) Defined Contribution ("DC")?	No	No	0% Yes, 100% No, 0% n/a				10
g) Hybrid DB/ DC?	No	No	10% Yes, 90% No, 0% n/a				10
h) Other (describe)?	No	No	0% Yes, 80% No, 20% n/a				8
<u>n/a</u>							
5 Which of the following programs do you offer to members AND administer yourself (i.e., design, enrolment, premium collection)?							
a) Pre-retirement health?	No	No	0% Yes, 100% No, 0% n/a				10
b) Post-retirement health?	No	No	10% Yes, 90% No, 0% n/a				10
c) Pre-retirement dental and vision?	No	No	0% Yes, 100% No, 0% n/a				10
d) Post-retirement dental and vision?	No	No	10% Yes, 90% No, 0% n/a				10

Survey Question	Your Data		Peers 2017				Count
	2017	2016	Max.	Median	Min.	Avg	
e) Long-term care insurance?	No	No	10% Yes, 90% No, 0% n/a				10
f) Loans to members?	No	No	10% Yes, 90% No, 0% n/a				10
g) Optional tax deferred savings plans? [i.e., 457, 403, 401k, 401a, etc]	No	No	20% Yes, 80% No, 0% n/a				10
h) Optional insurance? [i.e., life and/or auto and/or home]	No	No	0% Yes, 100% No, 0% n/a				10
i) Other (describe)?	No	No	0% Yes, 100% No, 0% n/a				10
<u>n/a</u>							
<u>n/a</u>							
<u>n/a</u>							
6 What was your total asset value in \$ millions at the end of the fiscal year?	\$13,730.0	\$12,374.0					
7 How many employers do you have?	15	15	491	13	1	74	10
Administration Costs							
8 Total administrative expenses per your financial statements	\$16,870.0	\$12,521.0					
<u>Subtract, if included:</u>							
a) Healthcare administration costs	n/a	n/a					
b) Investment administration costs	n/a	n/a					
<u>Add, if not included:</u>							
c) Amortization and depreciation of administrative assets	n/a	n/a					
d) Actuarial and all other professional fees relating to pension administration	n/a	n/a					
Net pension administration costs	\$16,870.0	\$12,521.0					
9 Provide the breakdown of your net pension administrative costs from question 8 above:							
a) Salaries and benefits	\$9,423.0	\$8,825.0					
b) Professional fees (actuarial, legal, audit, consulting, outsourced IT, etc.)	\$3,065.0	\$1,807.0					
c) Building expenses (rent, depreciation, utilities, facility services, amortization of lease holds)	\$660.0	\$743.0					
d) Amortization and depreciation (non-building)	\$2,314.0	\$24.0					
e) Cross charges paid to sister organizations (do not include building expense cross charges, they belong in 'c' above)	\$0.0	\$0.0					
f) Other administrative expenses	\$1,408.0	\$1,122.0					
Total administrative expenses	\$16,870.0	\$12,521.0					
10 Are any of the following services provided free of charge, or at a subsidized cost, by a sister organization (cost should be included under 9e above):							
<u>Provided by sister org.?</u>							
a) Building?	No	No	20% Yes, 80% No, 0% n/a				10
b) IT services?	No	No	10% Yes, 90% No, 0% n/a				10
c) Actuarial services?	No	No	0% Yes, 100% No, 0% n/a				10
d) Pension payroll?	No	No	30% Yes, 70% No, 0% n/a				10
e) Member data maintenance?	No	No	20% Yes, 80% No, 0% n/a				10
f) Other? Please describe below:	No	No	0% Yes, 100% No, 0% n/a				10
<u>n/a</u>							
<u>Free of charge?</u>							
a) Building?	n/a	n/a	10% Yes, 10% No, 80% n/a				2
b) IT services?	n/a	n/a	0% Yes, 20% No, 80% n/a				2
c) Actuarial services?	n/a	n/a	0% Yes, 0% No, 100% n/a				0
d) Pension payroll?	n/a	n/a	0% Yes, 30% No, 70% n/a				3
e) Member data maintenance?	n/a	n/a	0% Yes, 20% No, 80% n/a				2
f) Other? Please describe below:	n/a	n/a	0% Yes, 10% No, 90% n/a				1

Survey Question	Your Data		Peers 2017				Count
	2017	2016	Max.	Median	Min.	Avg	
11 Provide the number of full-time equivalent ("FTE") of all staff whose compensation is included in 8a above. [i.e. the full time equivalent of all administrative staff, less health care, non-pension and optional benefit, and investment administration staff, less staff whose salaries were capitalized]. Include the FTEs who are under contract, part-time and non-permanent. For example, a person who works 3 days a week counts as 0.6 FTE. Do not include the FTE of unfilled positions.	66.4	63.8	66.4	38.2	14.0	37.9	10
12 Did you capitalize any pension administration related costs last year?	No	Yes	14% Yes, 86% No, 0% n/a				7
a) If yes, total amount capitalized?	n/a	\$3,581.0					
13 Did you have any major project costs that were not capitalized?	No	No	30% Yes, 70% No, 0% n/a				10
a) If yes, what were your total non-capitalized major project costs?	n/a	n/a					
Transaction Volumes							
14 What were your volumes for:							
<u>Change-in-Member-Status Volumes</u>							
a) Service retirement inception?	983	893	1,578	663	240	793	10
b) Inceptions to survivors, partners, ex-partners or dependents?	186	145	311	154	6	156	10
c) Disability retirement inceptions?	75	69	164	30	3	57	9
d) Disability retirement applications?	71	70	100	55	4	50	7
e) Deaths of annuitants?	497	429	960	327	10	376	10
f) New active members?	1,420	1,550	4,668	1,412	740	1,968	10
g) Active members exiting employment? [exclude service and disability retirements]	688	632	2,732	775	222	1,016	10
h) Withdrawals, refunds?	483	207	7,739	453	96	1,255	10
i) Purchases?	406	186	1,774	292	10	410	10
<u>Communication Volumes</u>							
j) Member calls?	59,041	57,355	87,750	32,570	5,200	38,197	7
k) Written pension estimates mailed per member request? [Do not include estimates on annual statements, or given over the phone, or generated through your website]	4,618	885	7,317	3,170	180	3,259	8
l) Members counseled 1-on-1?	2,785	498	16,323	1,526	0	3,145	10
m) Presentations to members?	85	58	85	36	0	39	9
n) How many members in total attended these presentations?	3,400	1,264	3,400	2,041	200	1,741	8
o) Email queries from members?	17,653	12,650	17,653	3,703	1,702	5,729	6
p) Correspondence received from members? [Include all correspondence from members even if the correspondence did not require action.]	12,421	23,400	38,431	12,421	3,693	18,086	5
Website Capabilities							
15 Does your website have a secure member area where members can access their own data?	Yes	Yes	80% Yes, 20% No, 0% n/a				10
If yes:							
a) How many unique members accessed the secure member area? [Count a member only once even if he/she visited multiple times.]	15,988	76,734	22,713	7,318	3,100	10,094	6
b) How many visits in total were there by members to the secure member area? [Count each visit even if the same member visits multiple times.]	143,957	131,635	143,957	54,072	7,160	64,815	4
c) If a member wants to register for the first time, does he/she have to wait for a password in the mail?	No	No	20% Yes, 60% No, 20% n/a				8
d) Do you welcome the member by name on the home page of the secure member area?	Yes	Yes	60% Yes, 20% No, 20% n/a				8
e) Are users required to acknowledge a disclaimer every time they log in?	No	No	10% Yes, 70% No, 20% n/a				8
f) Are users required to acknowledge a disclaimer every time they generate a pension estimate?	No	No	10% Yes, 70% No, 20% n/a				8

Survey Question	Your Data		Peers 2017				Count
	2017	2016	Max.	Median	Min.	Avg	
g) Do inactive members have access to the secure member area?	Yes	Yes	40% Yes, 40% No, 20% n/a				8
16 Indicate whether the following capabilities are offered on your website and provide volumes (if available):							
a) Benefit calculator in non-secure area?	Yes	Yes	60% Yes, 40% No, 0% n/a				10
b) Benefit calculator in secure area not linked to member data?	No	No	20% Yes, 80% No, 0% n/a				10
c) Benefit calculator in secure area linked to member's salary and service data?	Yes	Yes	70% Yes, 30% No, 0% n/a				10
d) Service credit purchase calculator?	No	No	20% Yes, 80% No, 0% n/a				10
e) Register for counseling sessions?	No	No	0% Yes, 90% No, 10% n/a				9
If yes:							
e1) Does the member have real-time access to available dates and times?	n/a	n/a	0% Yes, 0% No, 100% n/a				0
f) Register for presentations?	No	Yes	30% Yes, 70% No, 0% n/a				10
g) Live chat?	No	Yes	10% Yes, 90% No, 0% n/a				10
h) Change address?	Yes	Yes	50% Yes, 50% No, 0% n/a				10
i) Change beneficiary?	Yes	Yes	10% Yes, 90% No, 0% n/a				10
j) Change email address?	Yes	Yes	80% Yes, 20% No, 0% n/a				10
k) Reset password?	Yes	Yes	80% Yes, 20% No, 0% n/a				10
l) Change banking information for direct deposit?	Yes	Yes	20% Yes, 80% No, 0% n/a				10
m) Change tax withholding amount?	Yes	Yes	20% Yes, 80% No, 0% n/a				10
n) Download or print duplicate tax receipts? [i.e., 1099s in the U.S.]	Yes	Yes	20% Yes, 80% No, 0% n/a				10
o) View pension payment details? [i.e., gross amounts, deductions]	Yes	Yes	50% Yes, 50% No, 0% n/a				10
p) Submit a retirement application online?	Yes	Yes	10% Yes, 90% No, 0% n/a				10
If yes:							
p1) Does the online application provide an estimate, final value or neither of the annuity payment the member will receive?	Neither	Neither	0% Final, 10% Neither, 0% Estimate, 90% n/a				1
p2) Approximately what % of retirements initiated online require follow-up documents or signatures to be mailed in?	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	1
q) View status of online retirement application?	No	No	0% Yes, 70% No, 30% n/a				7
r) Apply for a refund or transfer-out?	No	No	0% Yes, 100% No, 0% n/a				10
s) Secure mailbox or digital file including history of recent correspondence and member documents?	No	No	30% Yes, 70% No, 0% n/a				10
t) Download member statement? [i.e., Adobe format]	Yes	Yes	50% Yes, 50% No, 0% n/a				10
u) Upload documents (such as birth certificates)?	No	No	0% Yes, 100% No, 0% n/a				10
v) View pensionable earnings and/or service without downloading?	Yes	Yes	70% Yes, 30% No, 0% n/a				10
If yes:							
v1) Are both salary and service data available?	Yes	Yes	50% Yes, 20% No, 30% n/a				7
v2) Is online data up-to-date to the most recent pay period?	Yes	Yes	50% Yes, 30% No, 20% n/a				8
v3) Is a complete history from the beginning of employment available?	No	No	0% Yes, 70% No, 30% n/a				7
<u>If yes, volume</u>							
a) # Benefit calculator in non-secure area?	34,584	Unknown	34,584	9,599	314	13,524	4
b) # Benefit calculator in secure area not linked to member data?	n/a	n/a	n/a	n/a	n/a	n/a	0
c) # Benefit calculator in secure area linked to member's salary and service data?	166,088	28,228	166,088	8,221	2,179	46,177	4
d) # Service credit purchase calculator?	n/a	n/a	94	94	94	94	1
e) # Register for counseling sessions?	n/a	n/a	n/a	n/a	n/a	n/a	0
f) # Register for presentations?	n/a	n/a	1,516	1,044	571	1,044	2
h) # Change address?	1,503	1,009	1,503	1,131	758	1,131	2
i) # Change beneficiary?	2,872	2,076	2,872	2,872	2,872	2,872	1
j) # Change email address?	310	977	758	310	260	443	3
k) # Reset password?	2,376	6,157	2,600	2,376	1,144	2,040	3
l) # Change banking information for direct deposit?	460	1,001	460	460	460	460	1
m) # Change tax withholding amount?	1,127	1,811	1,127	1,127	1,127	1,127	1

Survey Question	Your Data		Peers 2017				Count
	2017	2016	Max.	Median	Min.	Avg	
n) # Download or print duplicate tax receipts? [i.e., 1099s in the U.S.]	26,272	Unknown	26,272	26,272	26,272	26,272	1
o) # View pension payment details? [i.e., gross amounts, deductions]	52,466	Unknown	52,466	3,380	1,434	19,093	3
p) # Submit retirement application online?	752	789	752	752	752	752	1
q) # View status of online retirement application?	n/a	n/a	n/a	n/a	n/a	n/a	0
r) # Apply for a refund or transfer-out?	n/a	n/a	n/a	n/a	n/a	n/a	0
s) # Digital file including history of recent correspondence and member documents?	n/a	n/a	30,506	30,506	30,506	30,506	1
t) # Download member statement? [i.e., Adobe format]	36,874	11,118	36,874	6,764	3,219	15,619	3
u) # Upload documents (such as birth certificates)?	n/a	n/a	n/a	n/a	n/a	n/a	0
v) # View pensionable earnings and/or service without downloading?	73,510	18,951	73,510	37,841	2,171	37,841	2
Member Calls							
17 When a member calls in, is the first point of human contact usually a receptionist?	No	No	50% Yes, 50% No, 0% n/a				10
18 Do callers wait in a queue for service representatives?	Yes	Yes	80% Yes, 20% No, 0% n/a				10
a) If yes, what is the average wait time? [in seconds]	Unknown	Unknown	92	67	10	55	5
b) What is the percentage abandoned calls [i.e. caller hangs-up] while in queue or on hold or in menu?	Unknown	Unknown	32.0%	5.0%	0.0%	8.9%	5
19 Do members have to navigate a phone menu before speaking to a service representative?	Yes	Yes	60% Yes, 40% No, 0% n/a				10
If yes:							
a) What is the average number of menu layers that must be navigated before a caller can speak to a live person? [Count each and every time a caller must select a menu option by pressing a button on the phone as a menu layer. Use the volume-weighted average number of menu layers if there are different menu-tree branches.]	2	2	3	2	1	2	6
20 Can and will you provide the following information on an immediate real-time basis to members over the phone: [If you do not have real-time access to the information or if your policy is not to give the information over the phone because of security or other concerns then your answer should be 'no'.]	Yes	Yes	40% Yes, 60% No, 0% n/a				10
a) Estimates of benefits at retirement?	Yes	Yes	40% Yes, 0% No, 60% n/a				4
a1) If yes, is the estimate based on an interactive benefit calculator linked to the member's actual account data?	Yes	Yes	30% Yes, 70% No, 0% n/a				10
b) Service credit purchase cost estimates?	No	No					
21 Can members calling in perform the following transactions over the phone:							
a) Change address?	No	No	20% Yes, 80% No, 0% n/a				10
b) Add or change email address?	No	No	30% Yes, 70% No, 0% n/a				10
c) Change payment instructions? [i.e., bank account]	No	No	10% Yes, 90% No, 0% n/a				10
22 How many hours per week can members call service representatives?	40	40	63	40	35	44	10
23 Do your service representatives have real time access to a workflow system that lets them know the status of open items?	Yes	Yes	60% Yes, 40% No, 0% n/a				10
Service Measures							
24 Were any of your pension payrolls late vis-à-vis your normal payment cycle? [For example, a payroll might be late because of system problems, etc.]	No	No	0% Yes, 100% No, 0% n/a				10
a) If yes, how many payrolls were late?	n/a	n/a	n/a	n/a	n/a	n/a	0
b) On average, how many days late were they?	n/a	n/a	n/a	n/a	n/a	n/a	0
25 What % of pension inceptions to retiring active members were paid without an interruption of cash flow greater than 1 month between the final pay check and the first pension check?	1.0%	1.0%	100.0%	85.1%	0.0%	56.3%	9

Survey Question	Your Data		Peers 2017				Count
	2017	2016	Max.	Median	Min.	Avg	
26 What % of survivor pension inceptions are paid without an interruption of cash flow between the pensioner's final pension check and the survivor's first pension check?	90.0%	90.0%	98.4%	70.0%	0.0%	55.0%	9
27 On average, how many business days did it take to provide a formal written estimate from the time of initial request from a member? [Do not include time in the mail.]	1	1	261	5	1	42	7
a) Is this a number you regularly measure and track? [versus being an estimate]	Yes	Yes	50% Yes, 40% No, 10% n/a				6
28 Do your written pension estimates: [including cover letters etc. sent with the estimate]							
a) Clearly address if and how the pension benefit is inflation protected or not protected?	Yes	Yes	50% Yes, 40% No, 10% n/a				9
b) If your pension is coordinated with or reduced by social security is the impact explained?	n/a	n/a	40% Yes, 20% No, 40% n/a				6
c) Discuss alternative scenarios that could improve the benefit such as purchasing service credit or working longer?	No	No	40% Yes, 50% No, 10% n/a				9
d) Model alternative retirement payment options?	Yes	Yes	70% Yes, 20% No, 10% n/a				9
29 Indicate whether you sent newsletters or news magazines (in either electronic or paper format) last year to any of the following member segments, and if yes, the number of times it was sent. Only indicate 'yes' if the newsletter was customized for and only sent to members in the segment:							
a) All members (active, inactive and annuitants)?	Yes	Yes	60% Yes, 40% No, 0% n/a				10
b) Active and inactive members?	No	No	0% Yes, 100% No, 0% n/a				10
c) Active members and annuitants?	No	No	10% Yes, 90% No, 0% n/a				10
d) Active members only?	No	No	10% Yes, 90% No, 0% n/a				10
e) Inactive members only?	No	No	0% Yes, 100% No, 0% n/a				10
f) Annuitants only?	No	No	10% Yes, 90% No, 0% n/a				10
g) Age segments? [i.e., under 35, 35-50, 50 plus]	No	No	0% Yes, 100% No, 0% n/a				10
h) Women only or men only?	No	No	0% Yes, 100% No, 0% n/a				10
i) Employer or employment category? [i.e., a different newsletter for teachers vs. bus drivers]	No	No	10% Yes, 90% No, 0% n/a				10
j) Other? (describe your other newsletter segments below)	Yes	Yes	10% Yes, 70% No, 20% n/a				8
<u>Employee Newsletter</u>							
<u>If yes, # times last year</u>							
a) All members (active, inactive and annuitants)?	4	4	4	4	2	4	6
b) Active and inactive members?	n/a	n/a	n/a	n/a	n/a	n/a	0
c) Active members and annuitants?	n/a	n/a	2	2	2	2	1
d) Active members only?	n/a	n/a	2	2	2	2	1
e) Inactive members only?	n/a	n/a	n/a	n/a	n/a	n/a	0
f) Annuitants only?	n/a	n/a	2	2	2	2	1
g) Age segments (i.e., under 35, 35-50, 50 plus)?	n/a	n/a	n/a	n/a	n/a	n/a	0
h) Women only or men only?	n/a	n/a	n/a	n/a	n/a	n/a	0
i) Employer or employment category (i.e., a different newsletter for teachers vs. bus drivers)?	n/a	n/a	2	2	2	2	1
j) Other? (describe your other newsletter segments below)	3	3	3	3	3	3	1
30 Indicate the approximate percentage breakdown of how you send newsletters to active members:							
a) Forward through employer?	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5
b) Mail to their home?	100.0%	100.0%	100.0%	100.0%	90.5%	98.4%	6
c) Deliver electronically by email or other?	100.0%	100.0%	100.0%	4.8%	0.0%	27.8%	6
31 Indicate the approximate percentage breakdown of how you send member statements to active members:							
a) Directed through the employer?	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8
b) Mailed directly to members' homes?	0.0%	0.0%	100.0%	100.0%	0.0%	76.7%	9
c) Email or other electronic notice to members that the statement is available in the secure member area?	100.0%	100.0%	100.0%	0.0%	0.0%	23.3%	9

Survey Question	Your Data		Peers 2017				Count
	2017	2016	Max.	Median	Min.	Avg	
32 On average, how current was an active member's data when their member statement was mailed to them? [For example, if statements with data current to December 31st are mailed in a staggered mailing beginning May 1st and finishing June 30th, then the members are receiving data that is between 4 and 6 months old, or 5 months old on average.]	1	1	6	2	1	3	9
33 Do your member statements for active members include:							
a) Total accumulated service credit?	Yes	Yes	80% Yes, 10% No, 10% n/a				9
b) Pensionable earnings?	No	No	50% Yes, 40% No, 10% n/a				9
c) A historical summary of salary and service credit earned each year?	No	No	10% Yes, 80% No, 10% n/a				9
d) The refund value if you left at the statement date?	Yes	Yes	70% Yes, 20% No, 10% n/a				9
e) An estimate of the future pension entitlement based on age scenario modeling or assuming the member continues to work until earliest possible retirement?	No	No	50% Yes, 40% No, 10% n/a				9
34 How frequently do you send member statements to inactive members? [i.e., never, annually, every 2 years, etc.]	Never	Never	2	1	0	1	9
35 Are new members issued a 'welcome' kit describing their	Yes	Yes	70% Yes, 30% No, 0% n/a				10
a) If yes, does it include a personalized letter addressing the new member by name?	Yes	Yes	50% Yes, 20% No, 30% n/a				7
36 Do you administer disability?	Yes	Yes	70% Yes, 30% No, 0% n/a				10
If yes, how many months, on average, does it take to return a decision on a disability application from:							
a) the date of the initial receipt to a decision?	12	12	16	11	3	9	6
b) the date if receipt of all necessary documentation to complete an application?	Unknown	Unknown	13	5	1	5	6
37 Do you require notarization of all/some/none:							
a) Normal or early retirement applications?	None	None	30% All, 40% None, 30% Some, 0% n/a				10
b) Refund applications?	None	None	40% All, 50% None, 10% Some, 0% n/a				10
c) Disability applications?	None	None	30% All, 30% None, 10% Some, 30% n/a				7
38 Do you require a birth or marriage certificate before incepting a pension?	Yes	Yes	100% Yes, 0% No, 0% n/a				10

Satisfaction Surveying

39 Satisfaction Surveying							
<u>Calls</u>							
Did you survey member satisfaction with regard to the activity (per the column headings) in your most recently completed fiscal year? (yes/ no)	No	No	30% Yes, 60% No, 10% n/a				9
If yes:							
a) Did the survey focus primarily on the single activity (per the column heading) or was it part of a wider survey on multiple activities? (single activity/ multiple)	n/a	n/a	20% Single Activity, 10% Multiple, 70% n/a				3
b) Was the survey only issued to those members who experienced the activity (per the column heading)? [As opposed to being issued to all or a cross section of members who may or may not have experienced the activity. For example, for the first column, was the survey only issued to members that had called?] (yes/ no)	n/a	n/a	20% Yes, 20% No, 60% n/a				4
c) What was the longest possible length of time between the activity and the survey? (in days) [i.e., if you sent a survey to a sample of members that had called sometime in the past year, then the answer is 365 days]	n/a	n/a	15	7	5	9	3
d) Is the survey delayed by at least 1 day from the date of the session? (yes/ no)	n/a	n/a	30% Yes, 0% No, 70% n/a				3

Survey Question	Your Data		Peers 2017				Count
	2017	2016	Max.	Median	Min.	Avg	
e) How many times did you survey member satisfaction with regard to the activity in your most recently completed fiscal year? (once, quarterly, monthly, on a continuous basis such as every 10th refund, etc.)	n/a	n/a	250	52	12	105	3
f) Can you break down the survey results by service agent?	n/a	n/a	10% Yes, 20% No, 70% n/a				3
g) Can you break down the survey results by topic covered?	n/a	n/a	20% Yes, 10% No, 70% n/a				3
<u>Presentations</u>							
Did you survey member satisfaction with regard to the activity (per the column headings) in your most recently completed fiscal year? (yes/ no)	Yes	Yes	50% Yes, 40% No, 10% n/a				9
If yes:							
a) Did the survey focus primarily on the single activity (per the column heading) or was it part of a wider survey on multiple activities? (single activity/ multiple)	Single Activity	Single Activity	50% Single Activity, 0% Multiple, 50% n/a				4
b) Was the survey only issued to those members who experienced the activity (per the column heading)? [As opposed to being issued to all or a cross section of members who may or may not have experienced the activity. For example, for the first column, was the survey only issued to members that had called?] (yes/ no)	Yes	Yes	40% Yes, 20% No, 40% n/a				6
c) What was the longest possible length of time between the activity and the survey? (in days) [i.e., if you sent a survey to a sample of members that had called sometime in the past year, then the answer is 365 days]	1	1	30	1	1	9	5
d) Is the survey delayed by at least 1 day from the date of the session? (yes/ no)	No	No	20% Yes, 30% No, 50% n/a				5
e) How many times did you survey member satisfaction with regard to the activity in your most recently completed fiscal year? (once, quarterly, monthly, on a continuous basis such as every 10th refund, etc.)	1	1	250	250	1	150	5
f) Can you break down the survey results by service agent?	Yes	Yes	40% Yes, 10% No, 50% n/a				5
<u>Counseling</u>							
Did you survey member satisfaction with regard to the activity (per the column headings) in your most recently completed fiscal year? (yes/ no)	Yes	Yes	60% Yes, 20% No, 20% n/a				8
If yes:							
a) Did the survey focus primarily on the single activity (per the column heading) or was it part of a wider survey on multiple activities? (single activity/ multiple)	Single Activity	Single Activity	60% Single Activity, 0% Multiple, 40% n/a				5
b) Was the survey only issued to those members who experienced the activity (per the column heading)? [As opposed to being issued to all or a cross section of members who may or may not have experienced the activity. For example, for the first column, was the survey only issued to members that had called?] (yes/ no)	Yes	Yes	60% Yes, 10% No, 30% n/a				7
c) What was the longest possible length of time between the activity and the survey? (in days) [i.e., if you sent a survey to a sample of members that had called sometime in the past year, then the answer is 365 days]	7	7	7	3	0	4	6
d) Is the survey delayed by at least 1 day from the date of the session? (yes/ no)	Yes	Yes	40% Yes, 20% No, 40% n/a				6
e) How many times did you survey member satisfaction with regard to the activity in your most recently completed fiscal year? (once, quarterly, monthly, on a continuous basis such as every 10th refund, etc.)	1	1	250	151	1	134	6
f) Can you break down the survey results by service agent?	No	No	40% Yes, 20% No, 40% n/a				6
g) Can you break down the survey results by topic covered?	No	No	20% Yes, 40% No, 40% n/a				6

Survey Question	Your Data		Peers 2017				Count
	2017	2016	Max.	Median	Min.	Avg	
<u>Pension Inception Process</u>							
Did you survey member satisfaction with regard to the activity (per the column headings) in your most recently completed fiscal year? (yes/ no) If yes:	Yes	No	40% Yes, 50% No, 10% n/a				9
a) Did the survey focus primarily on the single activity (per the column heading) or was it part of a wider survey on multiple activities? (single activity/ multiple)	Multiple	n/a	20% Single Activity, 20% Multiple, 60% n/a				4
b) Was the survey only issued to those members who experienced the activity (per the column heading)? [As opposed to being issued to all or a cross section of members who may or may not have experienced the activity. For example, for the first column, was the survey only issued to members that had called?] (yes/ no)	Yes	n/a	30% Yes, 20% No, 50% n/a				5
c) What was the longest possible length of time between the activity and the survey? (in days) [i.e., if you sent a survey to a sample of members that had called sometime in the past year, then the answer is 365 days]	180	n/a	180	30	14	64	4
e) How many times did you survey member satisfaction with regard to the activity in your most recently completed fiscal year? (once, quarterly, monthly, on a continuous basis such as every 10th refund, etc.)	1	n/a	250	131	1	128	4

Appendix B - Foreign currency conversion

All currency amounts have been converted to USD using Purchasing Power Parity figures per the OECD. The table below shows the foreign exchange rates for the past 4 years.

Currency	Purchasing Power Parity ¹			
	2017	2016	2015	2014
United States Dollars - USD	1.00	1.00	1.00	1.00
Canada Dollars - CAD	0.79	0.80	0.82	0.80
Euro - EUR	1.34	1.34	1.31	1.29
Denmark Kroner - DKK	0.14	0.14	0.13	0.13
Sweden Kronor - SEK	0.11	0.11	0.11	0.11
United Kingdom Pounds - GBP	1.42	1.45	1.43	1.43
Australia Dollars - AUD	0.66	0.69	0.69	0.67

1. Source OECD Website, February 2018. 2017 PPP data will be available in February 2018.

2011



FY 2016 CEM Benchmarking Report

July 16, 2018

by

Steve Delaney

1. Measure and manage your performance

- Identify what is important
- Monitor progress using an independent benchmark
- Serves as a catalyst for change

2. Communicate to stakeholders

- Demonstrate success and achievements to governing bodies
- Identify service gaps to support resource requests

3. Focus on your customer service levels

- Learn what others are doing that you are not
- Gain best practice insights into key areas



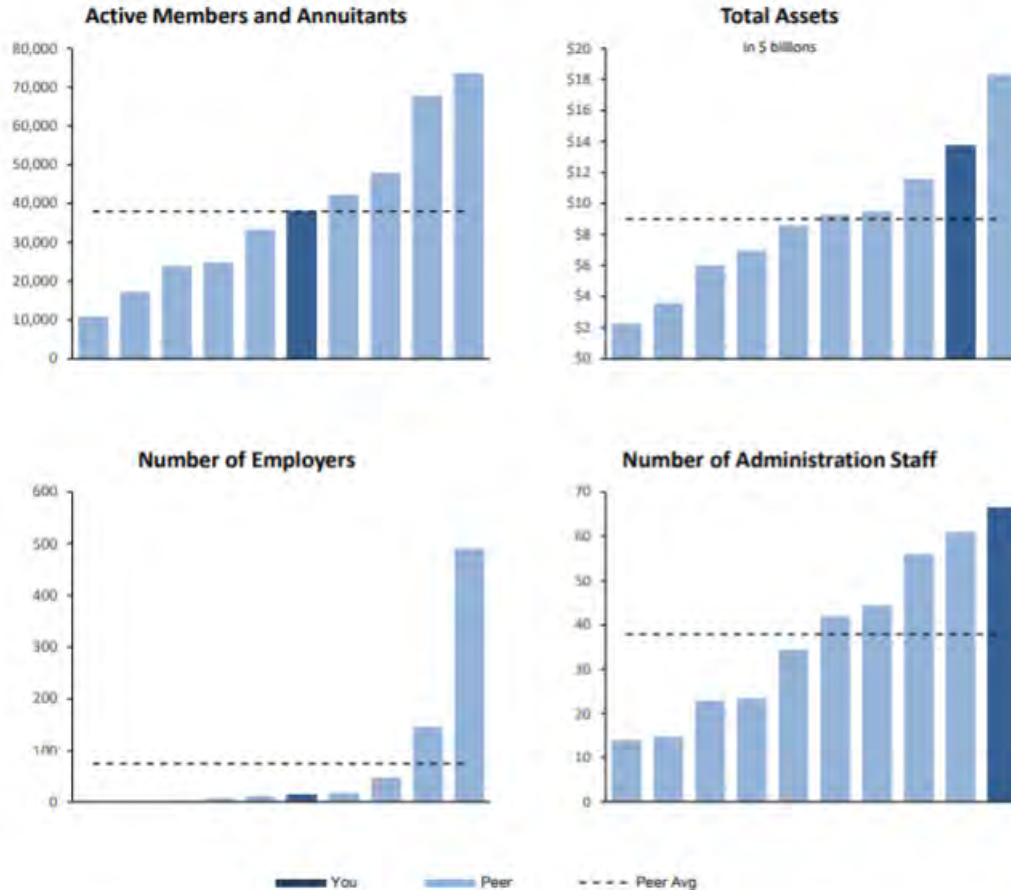
CEM Peer Group Participants

Your peer group consists of the following 10 participants:

Peers	Membership		
	Actives Members	Annuitant	Total
Fort Worth ERF	6,551	4,328	10,879
Saskatchewan Teachers	15,428	1,802	17,230
Sacramento County ERS	12,587	11,396	23,983
District of Columbia RB	10,500	14,301	24,801
San Bernardino CERA	21,110	12,179	33,289
Orange County ERS	21,746	16,369	38,115
RCMP	22,425	19,792	42,217
NYC BERS	30,423	17,509	47,932
South Dakota RS	40,452	27,341	67,793
Delaware PERS	43,774	29,876	73,650
Peer Average	22,500	15,489	37,989

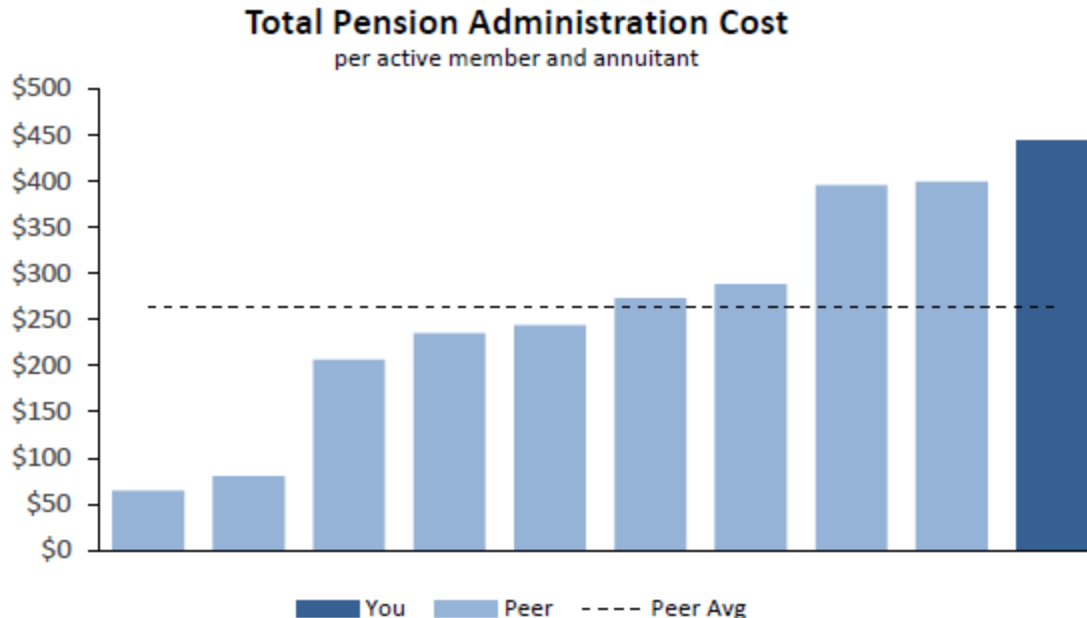


Graphical comparison of peer characteristics



Pension Administration Cost per Member

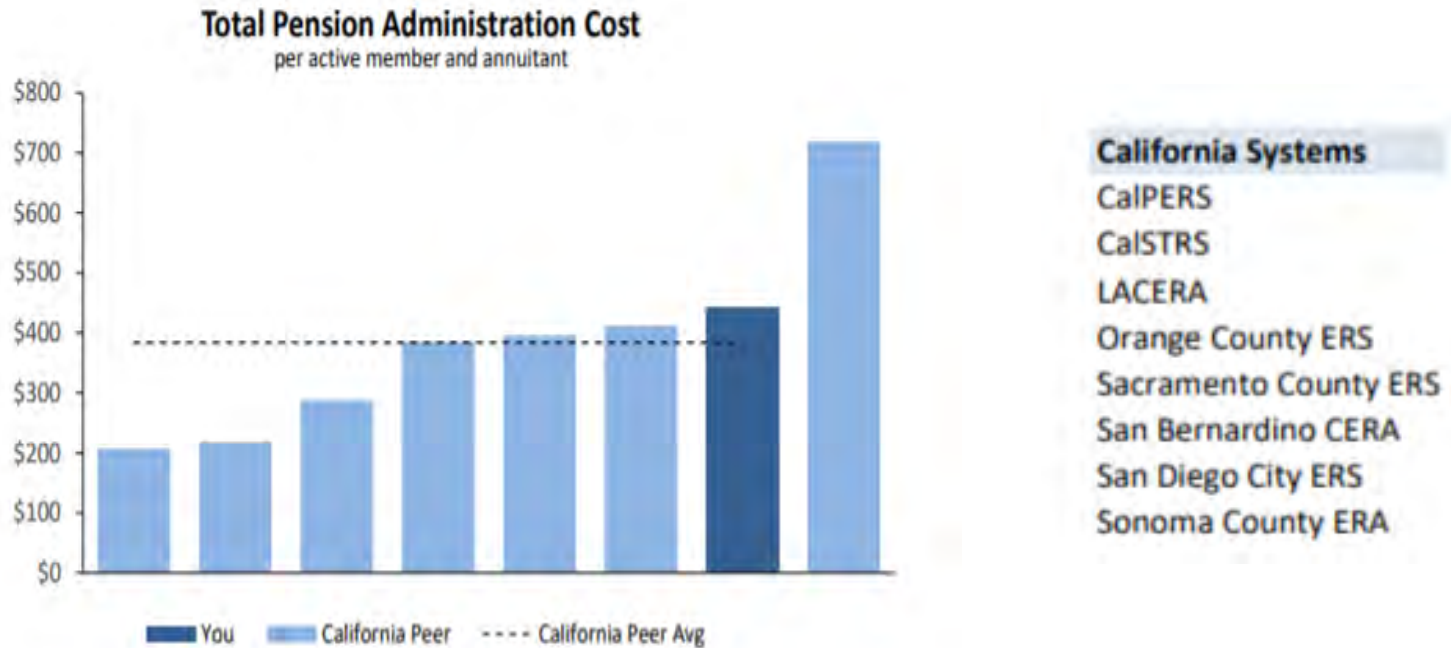
Your pension administration cost was \$443 per active member and annuitant. This was \$180 above the peer average of \$262.



Your cost per member calculation is based on total pension administration cost of \$16.9 million. CEM reconciled the reported total pension administration cost per CEM's survey to your FY2016 CAFR.

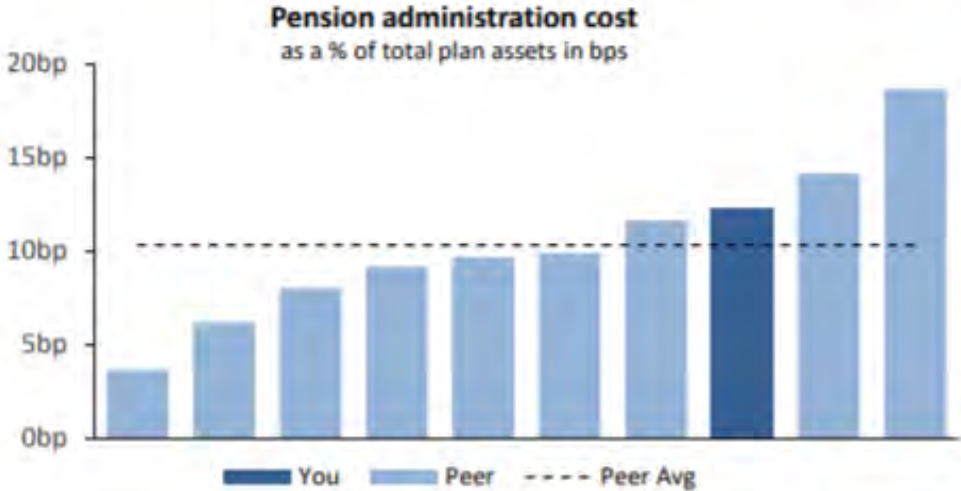
California systems comparison

Your pension administration cost was slightly higher than the average of \$384 for all the California systems in the CEM database.



Pension Administration Costs vs. Total Assets

An alternative way of comparing costs is as a percentage of total assets. Your cost of 12.3 bps was above the peer average of 10.3 bps.



Reasons why OCERS total cost was \$180 above the average

Reason	Comparison		More/ Less	Impact \$\$ per member
	You	Peer average		
<u>FTE per 10,000 members</u>				
A. Using 56% more FTE to serve members	17.4	11.2	56%	\$59
<u>Cost per FTE</u>				
B. Paying more in total per FTE for:				
• Salaries & benefits	\$141,913	\$96,730	47%	
• Building expenses	<u>\$9,940</u>	<u>\$12,000</u>	-17%	
	\$151,852	\$108,729	40%	\$75
<u>\$\$ per member</u>				
C. Paying more per member in total for:				
• Professional Fees	\$80	\$61	32%	
• Amortization	\$61	\$35	75%	
• Charges from sister organizations	\$0	\$13	-100%	
• Other administration expenses	<u>\$37</u>	<u>\$23</u>	62%	
	\$178	\$132	35%	\$46
Total				\$180

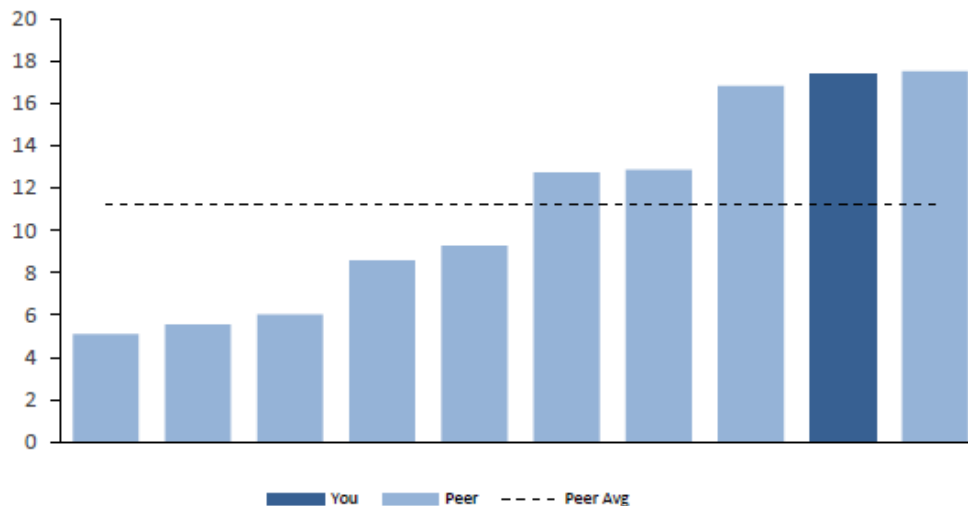
Other factors noted by CEM:

- OCERS operates in a higher cost environment relative to peers – cost is 17% higher in OC
- **Higher workload volume at OCERS – 19% more than the peer avg.**

Comparison of FTE to Serve Members

You used 56% more FTE to serve your members in comparison to the peer average.

FTE per 10,000 active members and annuitants



Key reasons for differences in FTE per member include differences in workloads and productivity.

Workload: OCERS weighted-transaction value is 19% above the peer average.

Productivity: OCERS weighted-transaction score per FTE was 30% lower than the peer average.

Differences in productivity are caused by differences in staff capabilities, IT capability, service levels, economies of scale, organizational processes, complexity, projects and outsourcing. OCERS has complex plans.

Comparison of transaction volume

Where are you doing more/fewer transactions than your peers?					
Activity	Activity volume description	Your Volume	Volume per 1,000 active members and annuitants		
			You	Peer Avg	More/-less
1. Member Transactions					
A. Pension Payments	annuitants	16,369	429.5	399.3	8%
B. Pension Inceptions	service & survivor inceptions	1,169	30.7	25.0	23%
C. Withdrawals	withdrawals	483	12.7	30.0	-58%
D. Purchases	purchases	406	10.7	10.6	1%
E. Disability	disability applications	71	1.9	1.4	36%
2. Member Communication					
A. Member Calls	calls & emails	76,694	2,012.2	1,135.1	77%
B. Mail Room	incoming letters	12,421	325.9	324.2	1%
C. Pension Estimates	written estimates	4,618	121.2	79.1	53%
D. 1-on-1 Counseling	counseling sessions	2,785	73.1	80.2	-9%
E. Presentations	presentations	85	2.2	0.9	149%
F. Mass Communication	active members	21,746	570.5	600.7	-5%
3. Collections and Data Maintenance					
A. Employer data	active members	21,746	570.5	600.7	-5%
B. Non-employer data	annuitants, inactive members	21,739	570.4	556.5	2%
Weighted Total¹			68.7	57.6	19%

FY 2015 cost compared to FY 2016 cost

Administration Costs

OCERS

In \$000s

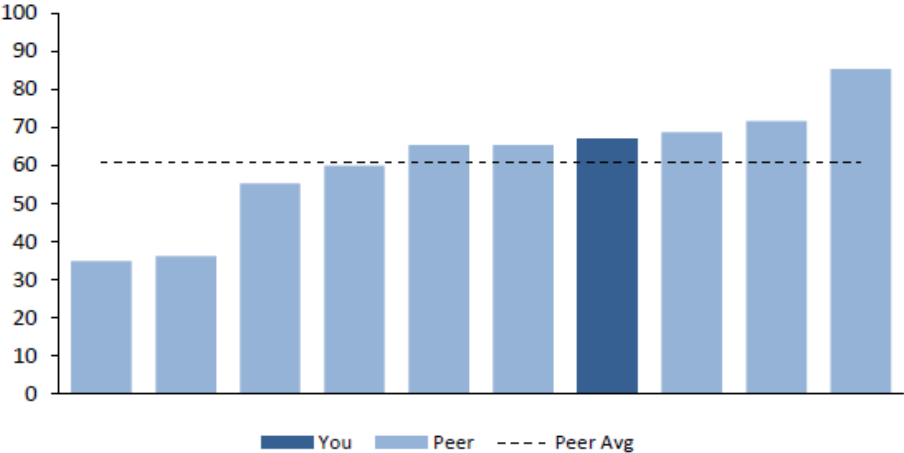
Cost Category	FY 2015	FY 2016	+/-	% change
• Salaries and benefits	8,825	9,423	598	7%
• Professional fees (actuarial, legal, audit, consulting, outsourced IT, etc.)	1,807	3,065	1,258	70%
• Building expenses (rent, depreciation, leasehold, amortization, utilities, facility services)	743	660	(83)	-11%
• Cross charges paid to sister organizations	-	-	-	
• Amortization and depreciation (non-building)	24	2,314	2,290	9542%
• Other administrative expenses	1,122	1,408	286	25%
Total administration cost (A)	\$ 12,521	\$ 16,870	4,349	35%
Active members and annuitants (B)	37,335	38,115	780	2%
\$ per active member and annuitant (A x 1000/B)	\$ 335	\$ 443	\$ 108	32%

Main reasons for increase from last year:

- Depreciation increased by \$2.2M due to the first year of depreciation of the V3 project
- Increase of \$1.1M in professional fees due to V3 wrap-up costs
- Increase in salaries and benefits as a result of hiring more (temporary) FTE

Your total service score was 67 out of 100. This was above the peer average of 61.

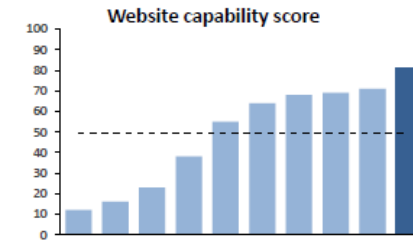
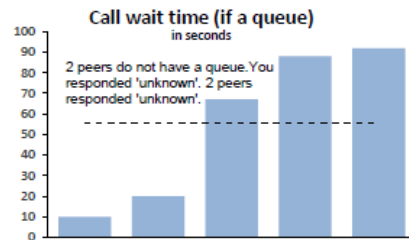
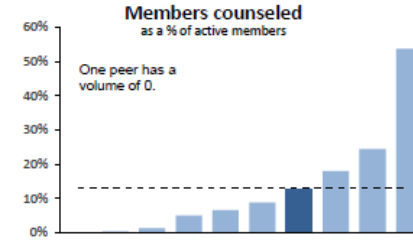
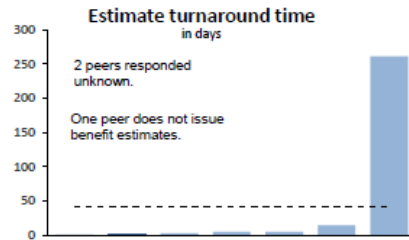
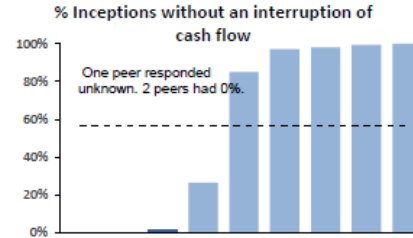
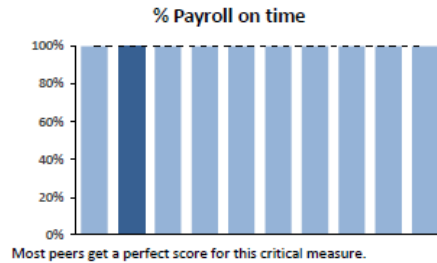
Total Service Score
 score out of 100



Service Scores by Activity

Activity	You	Peer Average	Weights
Paying Pensions	100	100	20%
Pension Inceptions	14	50	7%
Benefit Estimates	84	36	5%
1-on-1 Counseling	100	84	7%
Presentations	90	70	6%
Member Contacts	45	45	21%
Website	81	50	11%
News and Targeted Communication	86	57	4%
Member Statements	45	60	6%
Disability	0	30	4%
Red Tape	80	43	4%
Satisfaction Surveying	27	29	5%
Total Service Score	67	61	100%
Total Service Score - Median		65	

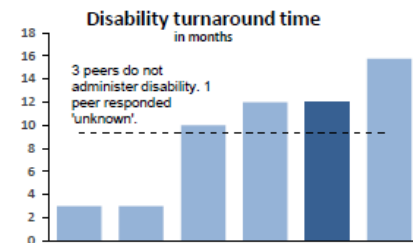
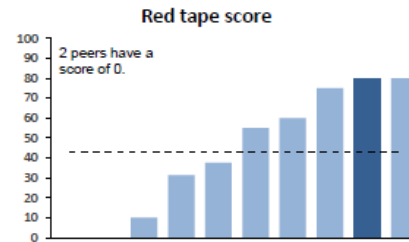
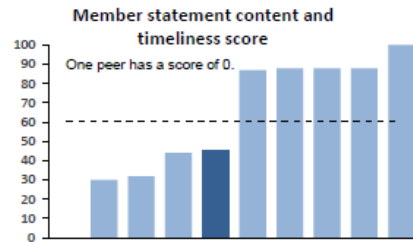
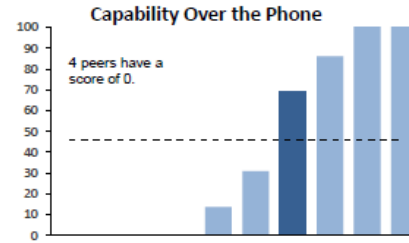
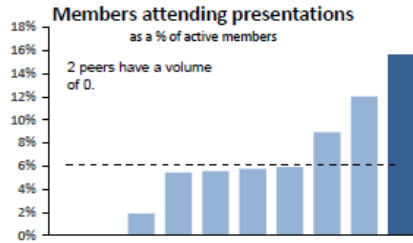
Graphical comparison of key service measures



■ You ■ Peer - - - Peer Avg



Graphical comparison of key service measures (continued)



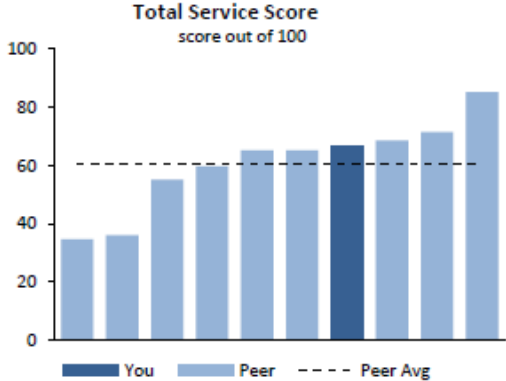
■ You ■ Peer - - - Peer Avg



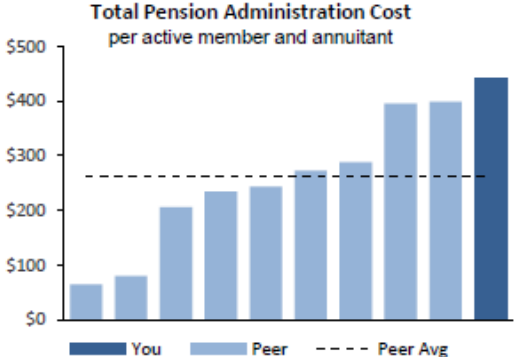
Where OCERS scored higher or lower than the peer average

- Scored **above** peers in the following areas:
 - **Benefit estimates** – OCERS takes 1-day versus peer average of 42-days to provide a formal written pension estimate from the time of initial member request.
 - **Website** – OCERS scored the highest in providing access and the most transaction tools online.
 - **Targeted communications** - newsletters
 - **Avoiding Red tape** – OCERS does not require notarizations of applications
- Scored **lower** than peers in the following areas:
 - **Pension inceptions** – only 1% of inceptions to retiring were paid without interruption to cash flow of greater than 1 month compared to a peer average of 56%. OCERS typically takes less than 2 months.
 - **Member statement** – OCERS does not mail out member statements; they are available on-demand online. CEM values up-to-date accurate, direct mailing to members and doesn't give credit for real-time, secure online access to member statements.
 - **Disability service** – OCERS takes 12 months to turn around an initial decision versus peer average of 9 months.

CEM Key Takeaways



Your total service score was above the peer average.



Your pension administration cost was \$180 above the peer average.

- OCERS' overall service score has not changed significantly year to year. This suggests that there have not been any major process changes/improvements from the previous year.
- There are opportunities to improve your service score.
- OCERS has higher transaction volumes than the peer average – e.g. Pension inceptions was 23% higher in 2012, went down in FY 2015 and back up to 23% in FY 2016. Member calls also have been higher than peer average.
- OCERS' pension administration costs have been above the peer average in every CEM benchmarking survey OCERS has participated.
 - The complexity of plans, higher cost environment (location), higher staffing levels, higher salary costs, and higher workload are impacting your overall cost comparison to your peers.
 - OCERS' cost comparison is likely to be higher again next year because of added positions assuming they are filled.



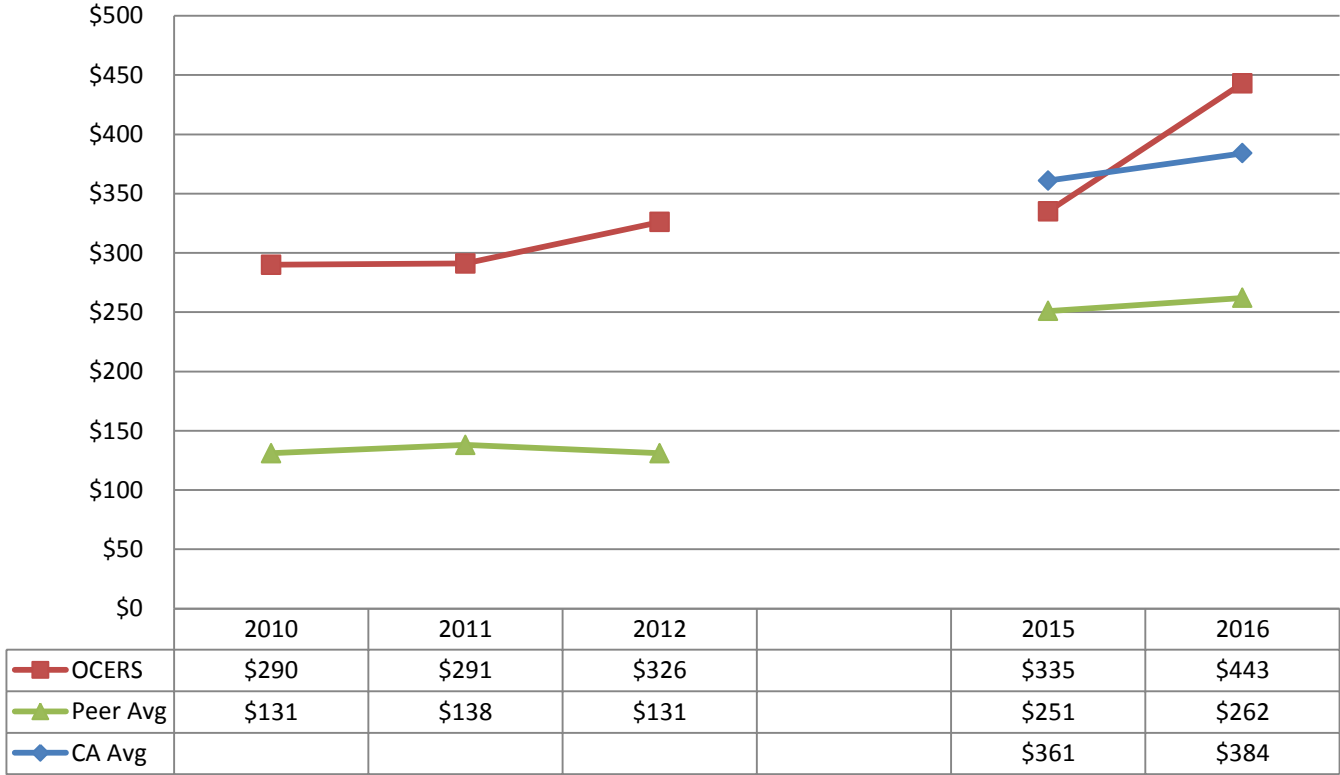
- Identify and prioritize your key performance measures and select areas where you want to improve your score.
- Investigate why OCERS transaction volume is higher and identify potential process improvements in the following areas:
 - Pension inception
 - Disability
 - Call Center
 - Member presentations
 - Written estimates

OCERS Transaction Volume History

Activity	Volume			Volume per 1,000 active members and annuitants			Volume per 1,000 active members and annuitants			Volume per 1,000 active members and annuitants		
	FYE 2012	FYE 2015	FYE 2016	FYE 2012			FYE 2015			FYE 2016		
	OCERS	OCERS	OCERS	OCERS	Peer Avg	more/less than peers	OCERS	Peer Avg	more/less than peers	OCERS	Peer Avg	more/less than peers
1. Member Transactions												
A. Pension Payments	13,947	15,810	16,369	395.0	367.0	8%	423.5	406.0	4%	429.5	399.3	8%
B. Pension Inceptions (service and survivor)	1,064	1,038	1,169	30.0	25.0	20%	27.8	27.4	1%	30.7	25.0	23%
C. Withdrawals	240	207	483	7.0	13.0	-46%	5.5	20.5	-73%	12.7	30.0	-58%
D. Purchases	644	186	406	18.0	20.0	-10%	5.0	8.1	-39%	10.7	10.6	1%
E. Disability Applications	82	70	71	2.0	1.0	100%	1.9	1.2	59%	1.9	1.4	36%
2. Member Communications												
A. Member Calls (calls and emails)	68,388	70,005	76,694	1,939.0	997.0	94%	1,875.1	1,089.3	72%	2,012.2	1,135.1	77%
B. Mail Room (correspondence in)	14,094	23,400	12,421	400.0	539.0	-26%	626.8	404.5	55%	325.9	324.2	1%
C. Pension Estimates* mailed (should not include estimates on annual statements, or given over the phone or website)	1,400	885	4,618	40.0	34.0	18%	23.7	119.1	-80%	121.2	79.1	53%
D. 1-on-1 Counseling	1,926	498	2,785	55.0	60.0	-8%	13.3	47.4	-72%	73.1	80.2	-9%
E. Presentations	65	58	85	2.0	2.0	0%	1.6	1.2	26%	2.2	0.9	149%
F. Mass Communication	35,271	21,525	21,746	1,000.0	1,000.0	0%	576.5	594.0	-3%	570.5	600.7	-5%
3. Collections and Data Maintenance												
A. Employer data (actives)	21,324	21,525	21,746	605.0	633.0	-4%	576.5	594.0	-3%	570.5	600.7	-5%
B. Non-employer data (annuitants, inactive)	39,648	20,902	21,739	1,214.0	1,224.0	-1%	559.9	594.0	-4%	570.4	556.5	2%
Weighted Total per active member & annuitant							45.4	53.7	-15%	68.7	57.6	19%

Historical Administration Costs

Pension Administration Costs by Year
 (Cost per active member & annuitant)



Service Scores by Year

