SUPREME COURT
FILED

APR 23 2018

Jorge Navarrete Clerk

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Deputy

No. S239958

**IN THE SUPREME COURT
OF THE STATE OF CALIFORNIA**

CAL FIRE LOCAL 2881 (formerly known as CDF Firefighters), *et al.*

Petitioners and Appellants,

v.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
(CalPERS)

Defendant and Respondent,

and

THE STATE OF CALIFORNIA,

Intervener and Respondent.

On Review From The Court Of Appeal For the First Appellate District,
Division Three, Civil No. A142793

After An Appeal From the Superior Court For The State of California,
County of Alameda, Case Number RG12661622, Hon. Evelio Grillo,
Presiding Judge

MOTION FOR JUDICIAL NOTICE; DECLARATION OF YONATAN L. MOSKOWITZ

Filed Concurrently with PETITIONERS AND APPELLANTS' CONSOLIDATED ANSWER TO AMICI CURIAE

MESSING ADAM & JASMINE LLP
Gary M. Messing, Bar No. 75363
gary@majlabor.com
*Gregg McLean Adam, Bar No. 203436
gregg@majlabor.com
Jason H Jasmine, Bar No. 215757
jason@majlabor.com
Yonatan L. Moskowitz, Bar No. 306717
yonatan@majlabor.com
235 Montgomery St., Suite 828
San Francisco, California 94104
Telephone: 415.266.1800
Facsimile: 415.266.1128

Attorneys for Petitioners and Appellants CAL FIRE Local 2881, et al.

No. S239958

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jason@majlabor.com
Yonatan L. Moskowitz, Bar No. 306717
yonatan@majlabor.com
235 Montgomery St., Suite 828
San Francisco, California 94104
Telephone: 415.266.1800
Facsimile: 415.266.1128

Attorneys for Petitioners and Appellants CAL FIRE Local 2881, et al.

MOTION FOR JUDICIAL NOTICE

Under California Rule of Court 8.252, subd. (a)(2)(A), (B), and (D) and Evidence Code section 452, subd. (c), (d), (g) and (h) and section 459, Petitioners and Appellants CAL FIRE LOCAL 2881, *et al.* ("Petitioners") move this Court to take judicial notice of the documents identified below.

The following documents are attached to the Declaration of Yonatan L. Moskowitz pursuant to California Rule of Court Rule 8.252, subd. (a)(3):

A. A true and correct copy of the CalPERS Publication, called "A Solid Foundation for the Future," dated December 31, 2017, and available at <<https://www.calpers.ca.gov/docs/forms-publications/solid-foundation-for-the-future.pdf>>;

B. A true and correct copy of the Petition for Hearing in the case *Allen v. City of Long Beach* (1955) 45 Cal.2d 128, Civil Nos. 19866 and 19867, filed on February 11, 1955;

C. A true and correct excerpt from a publication of Little Hoover Commission, called "Better Regulation: Improving California's Rulemaking Process," dated October 2011, and available at <<http://www.cbrt.org/wp-content/uploads/2012/04/Report209.pdf>>;

D. A true and correct copy of section 3.28.710 of the San Jose Municipal Code;

E. A true and correct copy of a publication of the Federal Reserve Bank of Minneapolis called "CPI Calculator Information," and available at <<https://www.minneapolisfed.org/community/financial-and-economic-education/cpi-calculator-information>>;

F. A true and correct copy of a publication by CalPERS called "Miscellaneous Plan of the Metropolitan Water District of Southern California," dated July 2017, and available at

<<https://www.calpers.ca.gov/docs/actuarial-reports/2016/metropolitan-water-district-of-southern-california-miscellaneous-2016.pdf>>;

G. A true and correct copy of a CalPERS publication titled "CalPERS Economic Impacts in California," dated July 2017;

H. A true and correct copy of a publication of the United States Census Bureau called "*Quick Facts, California*," and available at <<https://www.census.gov/quickfacts/CA>>;

I. A true and correct copy of a document obtained from WKYT News, purporting to be a Verified Complaint from the case *Kentucky ex. rel. Beshear v. Bevin* (Franklin Co., April 11, 2018) No. 18-CI-00379 which is available at <<https://www.scribd.com/document/376109053/Pension-Reform-Lawsuit#from_embed>>;

J. A true and correct copy of the Stipulation to Submit Cause without Oral Argument in the case *Allen v. City of Long Beach* (1955) 45 Cal.2d 128, Civil Nos. 19866 and 19867, and filed on April 27, 1955.

Petitioners' Motion for Judicial Notice is based on this notice, the attached Memorandum of Points and Authorities, the accompanying Declaration of Yonatan L. Moskowitz, the accompanying exhibits, and the Answer to Amici Curiae.

Respectfully submitted,

DATED: April 23, 2018 MESSING ADAM & JASMINE LLP

By: ______________________

Gary M. Messing
Gregg McLean Adam
Jason H Jasmine
Yonatan L. Moskowitz
Attorneys for Petitioners and Appellants
CAL FIRE Local 2881, *et al.*

MEMORANDUM OF POINTS AND AUTHORITIES

Petitioners move this Court to take judicial notice of the documents identified in the above Request for Judicial Notice which support the Petitioners' request for relief. Judicial notice is the appropriate procedure to bring these documents to the Court's attention. (Cal. Evid. Code § 459, subd. (a); Rules of Court, Rule 8.252, subd. (a)(2).)

All of these documents are necessary for Petitioners to respond to arguments raised by amici in their filings. Amici's briefs raise novel arguments relying on documents, statistics, and facts that were not in the record prior to amicus' filings, and therefore Petitioners have sought out these documents in order to bolster their response.

None of these documents were submitted to the trial court or the court of appeal below.

California Evidence Code section 452, subd. (c) provides that judicial notice may be taken of ". . . Official acts of the legislative, executive, and judicial departments of the United States and of any state of the United States." It also provides that judicial notice may be taken of any document published, recorded, or filed by any executive department. (*See also Serrano v. Priest* (1971) 5 Cal.3d 584, 591; *Wolfe v. State Farm Fire & Casualty Ins. Co.* (1996) 46 Cal. App.4th 554, 567 FN.16; *Hogen v. Valley Hosp.* (1980) 147 Cal.App.3d 119, 125.) "Official acts" include reports, records, files, and notices maintained by local governments, including counties. (*Cruz v. County of Los Angeles* (1985) 173 Cal.App.3d 1131, 1134.)

California Evidence Code section 452, subd. (d) provides that judicial notice may be taken of "[r]ecords of (1) any court of this state or (2) any court of record of the United States or of any state of the United States."

California Evidence Code section 452, subd. (g) provides that judicial notice may be taken of "[f]acts and propositions that are of such common knowledge within the territorial jurisdiction of the court that they cannot reasonably be the subject of dispute."

California Evidence Code section 452, subd. (h) provides that judicial notice may be taken of "[f]acts and propositions that are of such common knowledge within the territorial jurisdiction of the court that they cannot reasonably be the subject of dispute."

Appendices A, F, and G include documents published by Respondent CalPERS as part of its execution of its executive function, and therefore are proper subjects for judicial notice under Evidence Code section 452, subd. (c).

Appendices B, I, and J are filings in court cases before both this Court and a court in the Commonwealth of Kentucky, and therefore are proper subjects for judicial notice under California Evidence Code section 452, subd. (d).

Appendix C is a publication of the Little Hoover Commission of the State Government of California, which is also a proper subject for notice under California Evidence Code section 452, subd. (c) and (d).

Appendix D is an excerpt from the municipal code of the City of San Jose, and therefore is a proper subject for judicial notice under California Evidence Code section 452, subd. (c).

Appendix E is a publication of the Federal Reserve (which is within the United States federal government's executive branch), and states information that is of a sufficiently general knowledge that it cannot be subject to challenge, and is therefore a proper subject for judicial notice under Evidence Code § 452, subd. (c) and (g).

Appendix H is a publication of the United States Census Bureau (which is within the United States federal government's executive branch),

and states information that is not reasonably subject to dispute and which is capable of immediate and accurate determination by resort to sources of reasonably indisputable accuracy. It is therefore a proper subject for judicial notice under Evidence Code § 452, subd. (c) and (h).

Based on the foregoing reasons and authorities, Petitioners respectfully request that the Court grant their Motion for Judicial Notice.

Respectfully submitted,

DATED: April 23, 2018 MESSING ADAM & JASMINE LLP

By: ______________________

Gary M. Messing
Gregg McLean Adam
Jason H Jasmine
Yonatan L. Moskowitz
Attorneys for Petitioners and Appellants
CAL FIRE Local 2881, *et al.*

DECLARATION OF YONATAN L. MOSKOWITZ

I, Yonatan L. Moskowitz, declare as follows:

1. I am an attorney at law duly licensed to practice before all of the courts of the State of California. I represent Petitioners and Appellants CAL FIRE LOCAL 2881, *et al.* ("Petitioners") in this action. I have personal knowledge of the matters set forth below.

2. Exhibit A to this Motion is a true and correct copy of the CalPERS Publication, called "A Solid Foundation for the Future", dated December 31, 2017, which I accessed at <<https://www.calpers.ca.gov/docs/forms-publications/solid-foundation-for-the-future.pdf>>;

3. Exhibits B and J to this Motion are true and correct copies of the Petition for Hearing in the case *Allen v. City of Long Beach* (1955) 45 Cal.2d 128, Civil Nos. 19866 and 19867, filed on February 11, 1955 and the Stipulation to Submit Cause without Oral Argument in the case *Allen v. City of Long Beach* (1955) 45 Cal.2d 128, Civil Nos. 19866 and 19867, filed on April 27, 1955, which I received from the California State Archives upon my request;

4. Exhibit C to this Motion is a true and correct excerpt from a publication of Little Hoover Commission, called "Better Regulation: Improving California's Rulemaking Process," dated October 2011, which I accessed at <<http://www.lhc.ca.gov/sites/lhc.ca.gov/files/Reports/209/Report209.pdf>>;

5. Exhibit D to this Motion is a true and correct copy of section 3.28.710 of the San Jose Municipal Code, which I accessed on April 20, 2018 at https://library.municode.com/ca/san_jose/codes/code_of_ordinances?nodeI

d=TIT3PE_IIREPL_CH3.281975FEEMREPL_PT6MECO_3.28.710NOR ACOET;

6. Exhibit E to this Motion is a true and correct copy of a publication of the Federal Reserve Bank of Minneapolis called "CPI Calculator Information," which I accessed at <<https://www.minneapolisfed.org/community/financial-and-economic-education/cpi-calculator-information>>;

7. Exhibit F to this Motion is a true and correct copy of a publication by CalPERS called "Miscellaneous Plan of the Metropolitan Water District of Southern California," dated July 2017, which I accessed at <<https://www.calpers.ca.gov/docs/actuarial-reports/2016/metropolitan-water-district-of-southern-california-miscellaneous-2016.pdf>>.

8. Exhibit G to this Motion is a true and correct copy of a publication by CalPERS titled "CalPERS Economic Impacts in California," dated July 2017, which I requested from CalPERS (web@calpers.ca.gov) and received by e-mail;

9. Exhibit H to this Motion is a true and correct copy of the website *Quick Facts, California*, published by the United States Census Bureau, which I accessed at https://www.census.gov/quickfacts/CA.

10. Exhibit I to this Motion is a true and correct copy of a document obtained from WKYT News, purporting to be a Verified Complaint from the case *Kentucky ex. rel. Beshear v. Bevin* (Franklin Co., April 11, 2018) No. 18-CI-00379 which I accessed at <<https://www.scribd.com/document/376109053/Pension-Reform-Lawsuit#from_embed>>.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 23rd day of April 2018 at San Francisco, California

Yonatan L. Moskowitz

00049627-2

EXHIBIT A

A Solid Foundation for the Future

Acting on the discount rate, asset allocation, and amortization, CalPERS has built a solid path forward for the long-term future of the fund.

We have provided retirement security for California's public employees for more than 85 years. Through good times and bad, CalPERS has been a strong, reliable presence in our members' lives. Our $21 billion in annual benefit payments help fuel economic activity across the Golden State.

How We've Strengthened the Fund

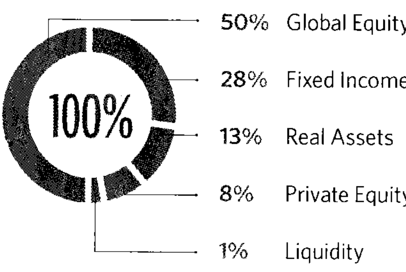
Over the past few years, we've adopted strong measures to ensure the long-term future of the CalPERS fund so that we can pay the benefits our members have earned after a career in public service.

Lower Discount Rate

Lowered the discount rate from 7.5% to 7% over three years *(assumed rate of return)*

New Asset Allocation

Adopted new strategic asset allocation effective July 1, 2018



Shorter Amortization

Shortened the amortization period for employers to pay their unfunded liability

significant long-term savings

Our Members Tell Our Story

They depend on us to help them achieve a measure of financial security in retirement after a career dedicated to public service.

We partner with 2,945 employers to provide pension benefits for retirees and their beneficiaries on behalf of the state, public agencies, school districts, and special districts. Our members include public employees from across California, including peace officers, firefighters, secretaries, custodians, bus drivers, and their beneficiaries.

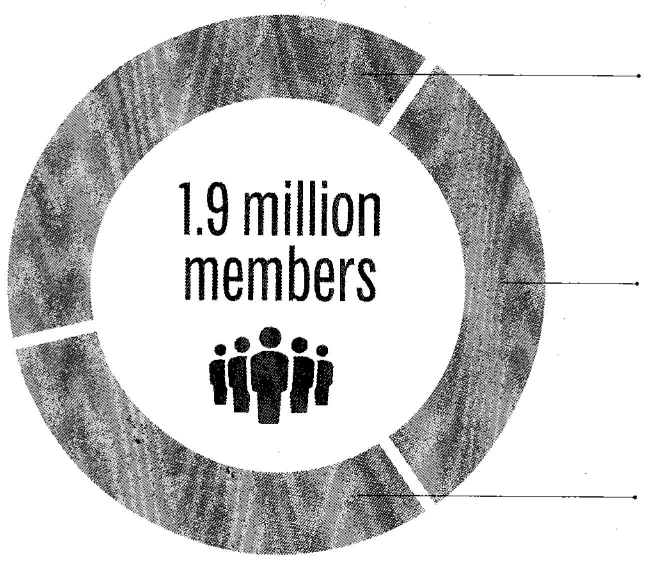
$21.4 bil. paid in pension benefits annually *(FY 2016-17)*

$2,876 average monthly allowance for all retirees

$3,182 average monthly allowance for members retiring in FY 2016-17

64% of all service retirees receive monthly allowance less than $3,000

3% only earn pensions greater than $100,000, typically city leaders, physicians, and university employees



38% School members

31% Public Agency members

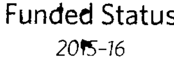
31% State members

Investing for the Long Term

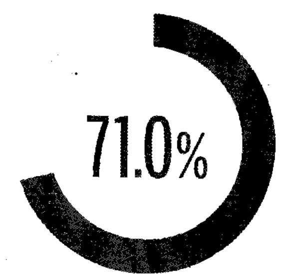
Our bottom line is strong and getting stronger.

The numbers that measure a pension plan's health have been on the rise, and recent investment returns and cash flow improvements only strengthen our position.

Every dollar we save by reducing our operating or investments costs, or by developing simpler, more efficient processes, is another dollar we can invest toward our members' benefits.



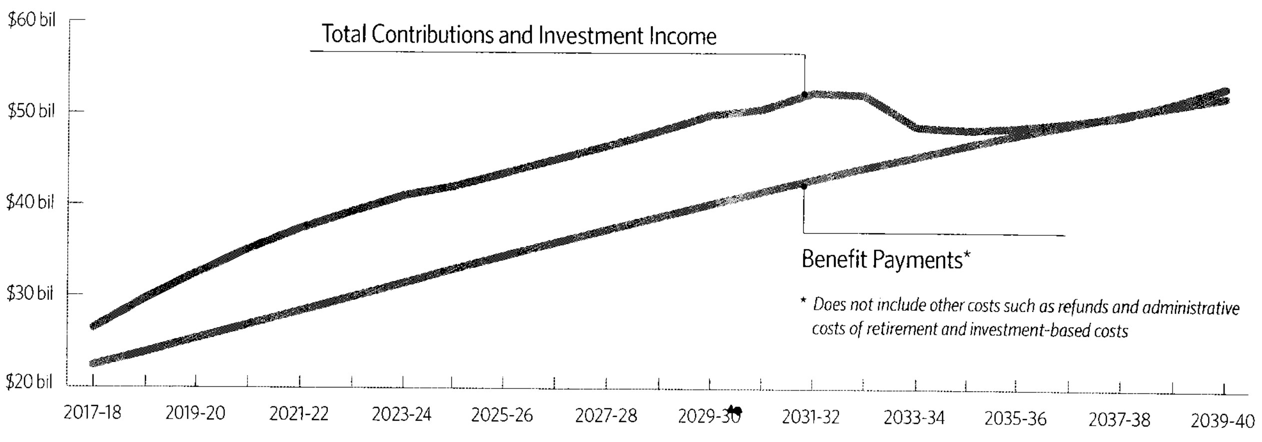
2015-16



Funded Status

December 31, 2017

Total Fund Cash Flows are Improving



$350 billion
in assets as of December 31, 2017

1.5–2% reduction
in overhead costs each of the next 5 fiscal years

15.7% investment returns
in calendar year 2017; 11.2% in FY 2016-17

300+ → 150 reduction
in external managers

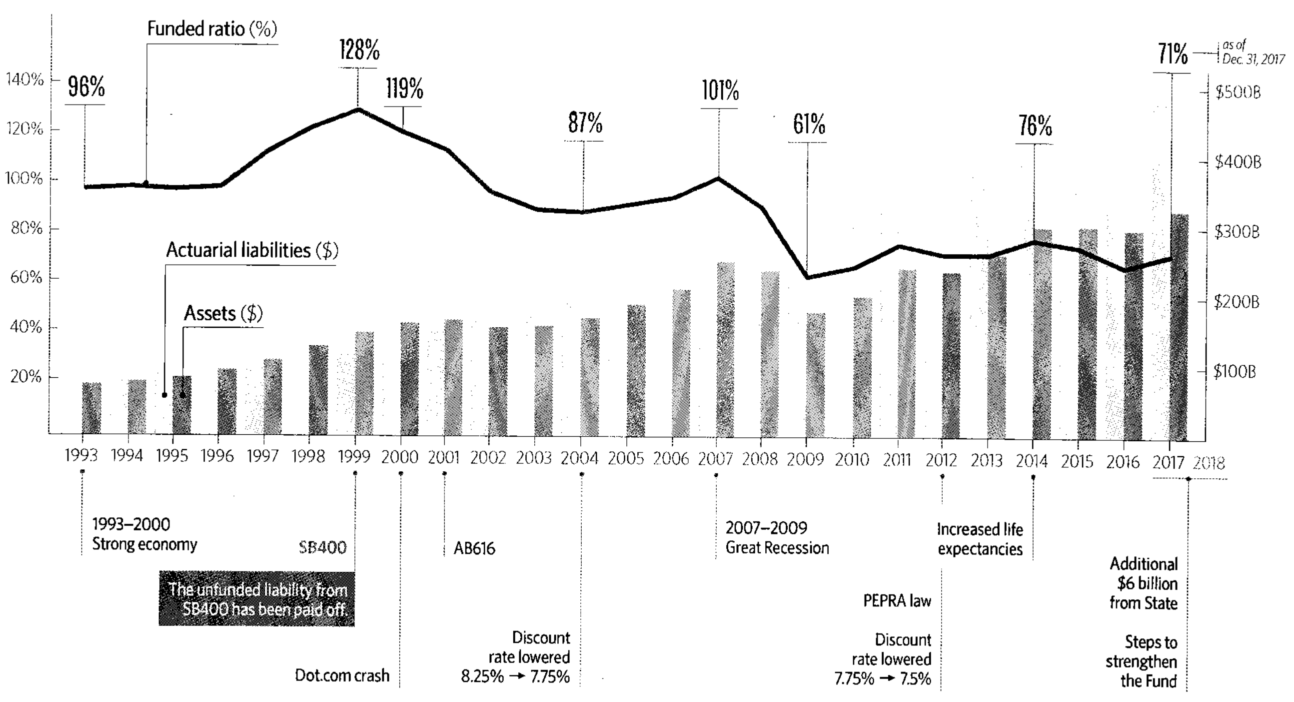
$47 billion
increase in assets in calendar year 2017

$170 million savings
in reducing investment expenses in FY 2015-16

Retirement Security Across the Decades

We opened our doors in 1932 in the middle of the Great Depression, after California voters approved creating a plan to provide retirement security to the state's public employees. Over the decades we have faced challenges and made tough decisions in the best interest of our members and the fund.

Historical Factors Impact Funded Status (1993-2018)



It will take time to increase our funded status, but lowering the discount rate, adopting a new strategic asset allocation, and shortening amortization period, as well as improving efficiency and reducing operational costs, will strengthen the sustainability of the CalPERS fund for decades to come.

California Public Employees' Retirement System
400 Q Street, P.O. Box 942701
Sacramento, CA 94229-2701
www.calpers.ca.gov

EXHIBIT B

ORIGINAL

L.A. 22894
L.A. 22895

2ND CIVIL NOS.
19866 and 19867

In the Supreme Court of the State of California

2d Civil No. 19866.

MANNING T. ALLEN, *et al.*,
Plaintiffs and Appellants,
vs.
CITY OF LONG BEACH, a municipal corporation, *et al.*,
Defendants and Respondents.

2d Civil No. 19867.

ELWIN L. ALGER, *et al.*,
Plaintiffs and Appellants,
vs.
CITY OF LONG BEACH, a municipal corporation, *et al.*,
Defendants and Respondents.

APPEAL FROM SUPERIOR COURT OF LOS ANGELES COUNTY.
HON. PAUL NOURSE, JUDGE.

PETITION FOR HEARING.

FILED

ALBERT D. WHITE,
320 Pine Avenue,
Long Beach 12, California,

NOWLAND M. REID,
100 East Ocean Boulevard,
Long Beach 2, California,

Attorneys for Plaintiffs and Appellants, Manning T. Allen, et al.

KENNETH SPERRY,
110 Pine Avenue,
Long Beach 2, California,

Attorney for Plaintiffs and Appellants, Elwin L. Alger, et al.

Parker & Son, Inc., Law Printers, Los Angeles. Phone MA. 6-9171.

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2ND CIVIL NOS. 19866 and 19867

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In the Supreme Court of the State of California

2d Civil No. 19866.

MANNING T. ALLEN, *et al.*,
Plaintiffs and Appellants,
vs.
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Defendants and Respondents.

2d Civil No. 19867.

ELWIN L. ALGER, *et al.*,
Plaintiffs and Appellants,
vs.
CITY OF LONG BEACH, a municipal corporation, *et al.*,
Defendants and Respondents.

PETITION FOR HEARING.

To the Honorable Chief Justice and Associate Justices of the Supreme Court:

Plaintiffs and appellants in the above-entitled causes hereby respectfully petition this Honorable Court for a hearing after the decision of the District Court of Appeal, Second Appellate District, Division 1, upon the ground that such hearing is necessary to secure uniformity of decision, and likewise for the settlement of important questions of law. The decision was filed January 3, 1955, and is reported at 130 A. C. A. 72, 278 P. 2d 466.

Plaintiffs and appellants' petition for rehearing, in which attention was called to the fact that material facts were omitted from and incorrectly stated in the opinion, that the opinion was based upon an apparent misapprehension of one of the principal legal issues presented, and

that substantial legal issues presented by the briefs were not considered by the opinion, was denied without opinion under date of January 26, 1955.

Questions Presented.

Presented for decision in this matter is the question of whether or not a municipal corporation may by charter amendment substantially reduce the retirement benefits originally offered as an inducement to obtain the services of the active members of its Police and Fire Departments after such employees have already served from six to eighteen years, without violating the contract and due-process clauses of the State and Federal Constitutions, where the only apparent purpose of such modification is to reduce the City's existing contractual obligations under the existing pension system, without offering any corresponding advantages of any kind, and where the practical effect of such a modification tends to defeat rather than to promote the legitimate objects of the pension system. Another important question presented (but incorrectly stated in the opinion) is whether the substitution of a "fixed" monthly pension based upon the past earnings of the employee, for a "fluctuating" retirement pension measured by the pay currently provided for the rank or position previously held by the employee at the time of retirement, which was expressly designed to keep his future retirement benefits adjusted to the changing value of the dollar and the current cost of living, constitutes a "reasonable modification" within the purview of the principles recently announced by this court in the case of *Wallace v. City of Fresno,* 42 Cal. 2d 180, 265 P. 2d 884, wherein it is stated that a "city has no more right to adopt an amendment which does not come within the purposes of

the rule permitting modifications than a private insurance carrier would have to change an annuity policy," and that the "permissible scope" of such modifications is limited to changes which are aimed at keeping the pension system adjusted "to changing conditions and at the same time maintain the integrity of the system and carry out its beneficient policy." Here the apparent purpose of the change which has been approved by the opinion of the District Court of Appeal is precisely the opposite of the "permissible" purposes of such modifications as outlined by this court in the *Wallace* case, because it eliminates a provision that was expressly designed to keep the monthly retirement benefits adjusted to changing economic conditions (*Casserly v. City of Oakland,* 6 Cal. 2d 64, 56 P. 2d 237), and substitutes therefor a fixed monthly payment which may or may not be adequate in terms of purchasing power to supply the basic economic needs of the pensioner, dependent solely upon future economic conditions. On this question the conclusions of the trial judge and of the District Court of Appeal herein, as we will show, are diametrically opposed to the conclusions of the same trial judge and Division 3 of the same District Court of Appeal, in the case of *English v. City of Long Beach,* 126 A. C. A. 535, 272 P. 2d 875, which involved the constitutionality of the same charter section.

Likewise presented by the briefs, but not discussed in the opinion, is the question of whether or not the City may levy a special tax upon the salaries of approximately one-half of the members of an existing pension system, and use it to liquidate the City's existing general obligation to retired members of the same system, without violating the provisions of Article XI, Section 15, of the California Constitution, and the equal protection clauses

of the State and Federal Constitutions. In the same category is the question of whether or not a former declaratory judgment between the same parties by which it was expressly determined that the defendant city was under a contractual obligation to pay definite retirement benefits to each plaintiff upon his completing 25 or more years of service, that the right of each plaintiff to mature and receive such retirement benefits was a vested contractual right within the protection of the contract and due-process clauses of the State and Federal Constitutions, and that the defendant City's contention that plaintiffs' pension rights were subject to further reduction and modification by future charter amendment was invalid, is *res adjudicata* of any of the issues presented in the cases at bar.

Under the provisions of Section 187 of the Long Beach City Charter, as construed by the final declaratory judgment of the Superior Court, entered July 6, 1949, in the case of *Adams et al. v. City of Long Beach,* Superior Court Action No. LBC-14130, 101 Cal. App. 2d 15, 2d Civil No. 17544, in which all of the present parties were plaintiffs and defendants, respectively, the City was under a contractual obligation to pay each plaintiff, upon the completion of 25 or more years of service in its Police or Fire Department, a retirement pension equal to "fifty per cent (50%) of the annual salary of the rank or position held by such member one year prior to the date of retirement," payable in equal monthly installments. By its decision in that case, the trial court determined that these same plaintiffs had voluntarily submitted to certain salary deductions and had refrained from accepting other higher-paying employment opportunities during the ten years which preceded the entry of said judgment in reliance upon the belief that they were earning the right

to receive the specific retirement, disability and death benefits offered by said charter section, and decreed that upon completion of the required number of years of service, said plaintiffs "will be entitled to receive, and it will be the duty of defendants to pay or cause to be paid to them from the City Treasury of the City of Long Beach in equal monthly installments an annual pension in an amount equal to one-half or more of the salary attached to the rank held by such plaintiff or plaintiffs one year prior to the date of their respective retirements, in accordance with the formula and in the manner and for the term prescribed by Section 187, subdivision (2) of said charter prior to its purported repeal * * *." [Clk. Tr. Alger, p. 17.] By the same judgment it was determined that all of the contentions which were urged by the defendant City in its answer and cross-complaint, which included the specific contention that plaintiffs' rights were subject to further modification at the instance of the electorate, were invalid. This portion of the judgment was affirmed on appeal, the only modification being to eliminate the right of each plaintiff to increase his pension benefits by serving longer than the minimum period of service required to entitle him to receive a pension equal to 50% of the salary attached to the rank held by him for a period of one year prior to retirement. (See App. Op. Br. pp. 10 to 13.)

By the provisions of Section 187.2, the constitutionality of which is challenged by the instant proceeding in declaratory relief, the charter framers sought to substitute a fixed or "frozen" monthly payment for the fluctuating pension previously provided by Section 187, which latter provision, as pointed out by this court "is admirably suited to accomplish justice for retired officers, as well as for the city" because a "pension measured by the pay

of officers of similar rank" keeps the current monthly payments adjusted to the changing value of the dollar and the current cost of living. (*Casserly v. City of Oakland,* 6 Cal. 2d 64, 56 P. 2d 237; *Terry v. City of Berkeley,* 41 Cal. 2d 698, 263 P. 2d 833.) In its opinion in the case at bar, however, the District Court of Appeal erroneously states the question presented by this change as being: "And does the method of computing these pensions on the average salaries for the last five years, instead of the last year, come within the same scope?" (Alluding to the rule of reasonable modification.) Elsewhere in the opinion, the court stated, "before the amendment this amount was computed upon the employee's salary for the last year only of his service." (P. 74.) As pointed out in our petition for rehearing, the foregoing statement of the question is strictly erroneous because, prior to 1951, the provisions of Section 187 required the payment of a fluctuating monthly pension measured by the salary currently provided for the position previously held by the retired employee for one year or more prior to his retirement (*cf. Casserly v. City of Oakland, supra*), and this portion of the challenged amendment as applied to retired members and their dependents was specifically held to be unconstitutional and void by Division 3 of the same court in the cases of *Harrison et al. v. City of Long Beach,* 126 A. C. A. 543, 273 P. 2d 37; *Combs et al. v. City of Long Beach,* 126 A. C. A. 542, 272 P. 2d 880; *Alexander et al. v. City of Long Beach,* 126 A. C. A. 544, 273 P. 2d 685; and *English v. City of Long Beach,* 126 A. C. A. 535, 272 P. 2d 875 (petition for hearing unanimously denied by this court under date of September 2, 1954). In fact, in the *English* case, the court held that the substitution of the fixed monthly payment for the fluctuating pension provided by Section 187, as attempted by sub-

division (b) of Section 187.2 was unconstitutional and void as applied to the daughter of a police officer whose service-connected death occurred before June 5, 1951, but whose right to receive the pension benefits did not fully mature until after the effective date of the amendment upon the remarriage of her mother in September of 1951. In response to the City's contention that the fixed pension provided by Section 187.2 might eventually prove to be more valuable to the pensioner than the fluctuating pension provided by Section 187, depending upon future economic developments, the court, after alluding to the holding of this court in the recent case of *Wallace v. City of Fresno,* 42 Cal. 2d 180, 265 P. 2d 884, at page 878 of the Pacific Reporter said:

> "Pensioners need their money as it falls due and cannot be required to exchange it for the promise that if they live long enough they may possibly get it back."

We therefore have the anomalous situation where two divisions of the District Court of Appeal have arrived at opposite conclusions with respect to constitutionality of the same charter amendment. In fact, the same trial judge who rendered the decision in the cases at bar on February 10, 1953, came to the opposite conclusion with respect to the reasonableness of the modification insofar as it attempts to substitute a fixed monthly payment for the fluctuating pension measured by the salary currently provided for the rank previously held, in his later memorandum opinion in the *English* case, which was filed June 4, 1953. In concluding that the change brought about by Section 187.2 was "not based upon reason but is irrational and arbitrary" and hence, that it did not fall within the scope of the purposes for which the power to modify has

been implied as determined by this court in the cases of *Kern v. City of Long Beach,* 29 Cal. 2d 848, 179 P. 2d 799; *Packer v. Board of Retirement,* 35 Cal. 2d 212, 217 P. 2d 660; and *Wallace v. City of Fresno, supra,* Judge Nourse observed:

> "* * * If the decision of the Supreme Court in the Kern case is applicable here and decisive of the question here, then as I read that decision, a change in pensions must not only leave a substantial pension but the change must be reasonable. While it may not be said here that the pension fixed under 187.2 is not substantial, it is apparent that the change is not based upon reason but is irrational and arbitrary.
>
> "The Supreme Court in the Kern and Packer cases assigned as the reason for its decision that the city must necessarily retain the power to change the mount of pensions payable, the following: 'The rule permitting modification of pensions is a necessary one since pension systems must be kept flexible to permit adjustments in accord with changing conditions and retain the integrity of the system and carry out its beneficient policy.' (*Kern v. City of Long Beach,* pp. 854-855.) 'A different ruling, in fact, would remove a considerable amount of the flexibility necessary for operation of pension systems because it would mean that provisions benefiting any third persons would be frozen in the law with respect to all employees *then in service* and that these interests could not be removed regardless of whether the employee was given other pension benefits which might be of greater value to him than the one sought to be eliminated. Thus, although all pension rights are earned by the employee and are a part of his compensation, the rule urged by petitioner could operate to the disadvantage of the employee by making it

> impossible or impracticable for the governmental body to substitute a new system designed to meet changing conditions which would furnish a greater total benefit to the employee than he formerly had.' (*Packer v. City of Long Beach,* pp. 217-218.)
>
> "Section 187, subdivision 4, in effect at the time of English's death, did provide a method by which pensions would not be frozen and through which the pension payable would fluctuate with changing economic conditions. By Section 187.2, however, the City seeks not to meet any changing economic conditions but to freeze pensions at a fixed sum and irrespective of whether or not at the time of the death of an employee living costs and wages are rising or falling, with the result that in a period of rising costs such as the present, the pensions become inadequate and disproportionate to salaries fixed for active employees and the cost of living, while in time of a depression or a deflationary economic period the pension would still be disproportionate to salaries and living costs and would place an economic burden upon the city.
>
> "The purpose of Section 187.2 could not have been to meet any changing condition but rather to freeze an existing condition. There is no pension fund to be protected and the city does not assert and could not assert that that was the reason for the enactment of the section.
>
> "It seems evident to me that in order to be reasonable, an act of the city altering the pension rights of one entitled to a pension, the act of the city must conform to and fall within the scope of the reasons assigned by the Supreme Court for holding that the power to alter existed. If this is not true then the city might, in time of rising living costs, amend its

> charter so as to provide for fixed payments, and when the economic cycle changed again alter its charter so as to decrease the pensions thereofore fixed, or if the power of the city is not so limited then the city might grant a lump sum payment in lieu of all monthly payments to accrue, so long as the lump sum was substantial though not proportionate to the value of the monthly annuities theretofore granted."

Curiously enough, the decision of Division 3 in the *English* case, *supra*, was not even mentioned in the opinion in the cases at bar, although specific reference thereto was made in the briefs. (App. Rep. Br. pp. 4 to 6.) In disposing of essentially the same question, the opinion of the District Court of Appeal in the cases at bar at page 78 states:

> "The method of computation of plaintiffs' pensions on the five-year average is also within the power of the municipality. Whether they will lose or gain will depend upon economic conditions when they retire. Salaries follow our national economy, and no one can look into the future and say whether they will go up or go down. This part of the amendment is as much an adjustment to changing conditions as was the old system, fluctuating year by year."

The foregoing observation seemingly ignores the obvivoius fact that the very purpose of the fluctuating pension is to keep the monthly payments adjusted to the ever-changing value of the dollar, and the current cost of living, and thereby eliminates a definite hazard to both the pensioner and the City which the court recognized when it said that, "no one can look into the future and say whether they (salaries) will go up or go down." In other words, the principal value of the fluctuating pension which was promised to the instant plaintiffs when they

accepted employment was the assurance that they would be paid a monthly retirement benefit that would be adequate in terms of purchasing power to satisfy their basic economic needs after they had become too old to render further effective service. As observed by Division 3 of the same court in the *English* case, the average pensioner needs his "money as it falls due"; he can ill afford to "gamble" on future economic conditions. Hence, the fundamental question presented in the case at bar is whether the defendant City may unilaterally compel the prospective pensioner to exchange his partially earned right to receive a fluctuating retirement pension which was specifically designed to keep his monthly payments adjusted to future economic conditions, for a promise to pay a fixed monthly pension which may or may not be adequate in terms of purchasing power to satisfy his basic economic needs, depending solely upon future economic conditions.

Furthermore, it should be noted that it is not the "economic conditions" which prevail at the time that plaintiffs "retire" which will determine "whether they will lose or gain" by the amendment, but rather the economic conditions which prevail throughout the period of their natural lives following their retirement which will determine this factor. It is common knowledge that the purchasing power of the dollar in terms of necessaries of life has decreased approximately 50% during the past sixteen years. To the widow or retired employee who is dependent upon a "fixed" monthly benefit such as that provided by Section 187.2, a real hardship has resulted. We can only judge the future by the past. The retirement pension provided by Section 187 eliminated this definite hazard by providing monthly benefits measured by

the current salary of employees of the same rank. If, on the other hand, the value of the dollar is increased and current salaries are adjusted downward, the retired employee is not injured because the cost of living will have come down accordingly. (*Casserly v. City of Oakland, supra.*) In such an eventuality, however, the active employee, under the terms of Section 187.2, would be compelled to retire the moment he becomes eligible in order to prevent his fixed pension from decreasing in value, regardless of his natural inclination to continue in the service of the City. Hence, the substitution of the fixed pension based upon past average earnings provides an incentive for the premature retirement of competent employees, which is contrary to the primary objective of the pension system, namely, to attract and retain the services of competent employees. (*Kern v. City of Long Beach, supra.*)

In addition to this, the amendment provides for the taking of 10% from the monthly salary of each plaintiff until he is eligible for retirement, and the use thereof to pay the City's existing obligations to retired employees. This money is not required to be set aside or accumulated so as to create any kind of a reserve for the payment of future pensions, as under the State Retirement System (Govt. Code, Secs. 20122, 20131, 20132, 20230, 20565, etc.), but may be all used as it is deducted, for the payment of pensions already granted. The only circumstance under which the employee is entitled to any refund of his own compulsory salary contributions is the termination of his employment before he becomes eligible for retirement. If he should die the day after he retires, and fails to leave a widow or other dependent who qualifies for the dependent's pension, the City is under no obligation of any kind

to return any portion of the salary deductions provided for by Section 187.2. As analyzed by the trial court in its memorandum opinion:

> "It is self-evident that the result of the operation of Section 187.2 is to make a reduction in the pensions to which plaintiffs are entitled. It is self-evident that this reduction is not uniform." [Clk. Tr. Alger, p. 78, lines 5 to 8.]
>
> "Boiled down, the alterations effected in the plaintiffs' rights under Section 187.2 amount to this: the retirement pay as to some of the plaintiffs is cut approximately 40%, as to others it is cut in a much lesser amount. Plaintiffs who had a long period of employment at the time of the enactment of the section receive a greater pension than those of lesser periods of employment, the difference in amount of pensions decreasing as does the length of time which the employee must serve in order to retire after the enactment of the section; the pension rights once granted are fixed in amount rather than fluctuating with the cost of living. (I assume that salaries will increase and decrease in accordance with the cost of living.)" [Clk. Tr. Alger, p. 80, lines 9 to 20.]

It is also self-evident that if the member should die after retirement, but before receiving by way of monthly retirement benefits an amount equal to his accumulated salary deductions, his partially earned retirement pension as originally provided by Charter, Section 187 will have been entirely eliminated as the result of Section 187.2. Hence, the fundamental question presented by this phase of the amendment is whether the City may by charter amendment substantially reduce these partially earned retirement benefits (in some instances as much as 40%) without the consent of its employee and without offering

any corresponding benefits of any sort, without violating the contract and due-process clauses of the State and Federal Constitutions, or the provisions of Article XI, Section 15 of the California Constitution, which expressly prohibits the taking of private property for the purpose of paying municipal obligations. To date no case has been discovered in this state which discusses or elaborates upon the meaning and effect of Article XI, Section 15 of the California Constitution.

POINT ONE.

A Hearing Is Necessary to Secure Uniformity of Decision.

A. The Opinion of the District Court of Appeal Herein Is in Conflict With the Decisions of This Court and Other Decisions of the District Courts of Appeal of This State.

At the outset it is apparent that in construing Section 187 of the Long Beach City Charter, which made provision for the payment of retirement benefits equal to a certain percentage of "the annual salary attached to the rank or position held by him in such department one year prior to the date of his retirement" as providing for the payment of a "fixed" pension "computed upon the employee's salary for the last year only of her service" [p. 74] the opinion of the District Court of Appeal is in direct conflict with the following decisions, all of which hold that identical language requires the payment of a fluctuating pension which increases or decreases with the salaries of the active employees. (*Casserly v. City of*

Oakland, 6 Cal. 2d 64, 56 P. 2d 237; *Terry v. City of Berkeley,* 41 Cal. 2d 698, 263 P. 2d 833; *Klench v. Board of Pension Fund Commissioners,* 79 Cal. App. 171, 249 Pac. 46, and *English v. City of Long Beach,* 126 A. C. A. 535, 272 P. 2d 875 (hearing denied by this court.)

In the recent case of *Terry v. City of Berkeley, supra,* this court at page 834 of the Pacific Reporter said:

> "The plaintiff relies upon Casserly v. City of Oakland, 1936, 6 Cal. 2d 64, 56 P. 2d 237, wherein a provision of the charter of the City of Oakland provided that a pension should be 'equal to one-half of the salary attached to the rank held' at the date of retirement. *The court held that this provision provided for a fluctuating pension, which increased or decreased as the salaries paid to active employees increased or decreased.*" (Italics ours.)

In *English v. City of Long Beach, supra,* which, as we have shown, involved the constitutionality of the same charter section, the court at page 876 of the Pacific Reporter said:

> "Petitioners' right to a pension which vested in them upon the death of Mr. English was not limited to 50 per cent of the amount of salary as of the time of death but followed any changes that might be made in the salary attached to the rank of patrolman. Casserly v. City of Oakland, 6 Cal. 2d 64, 56 P. 2d 237; Terry v. City of Berkeley, 41 Cal. 2d 698, 263 P. 2d 833. The salary of a patrolman which was $305 per month from April 11, 1950 to July 1, 1951, was increased to $335 per month from July 1, 1951 to July 18, 1951, $355 per month from July 18, 1951 to July 1, 1952, and, from July 1, 1952 to date, to $370 per month."

In construing the same charter section, the District Court of Appeal in its opinion in the case at bar at page 74 said:

> "The parts of this new section pertinent to this inquiry are as follows:
>
> "(a) That the amount to be paid to each person receiving a pension after the effective date of the section shall be computed upon the average salary earned by him during five years immediately preceding his retirement.
>
> *"Before the amendment this amount was computed upon the employee's salary for the last year only of his service."* (Italics ours.)

Again at page 77 of its opinion, the court in outlining the problems presented, said:

> "* * * And does the method of computing these pensions on the average salaries for the last five years, instead of the last year, come within the same scope?"

The same misinterpretation is evidenced by the following statement of the court at page 78 of its opinion:

> "The method of computation of plaintiffs' pensions on the five-year average is also within the power of the municipality. Whether they will lose or gain will depend upon economic conditions when they retire."

It is thus apparent that throughout its opinion, the District Court of Appeal construed Section 187 of the Long Beach City Charter as providing for the payment of a fixed pension based upon the "employee's salary for the last year only of his service," and not a fluctuating pension as contended for by plaintiffs and appellants, and in fact, as admitted by the City in its briefs. This fact was

specifically called to the attention of the District Court of Appeal in our petition for rehearing, at page 9 to 11.

In affirming the judgment of the trial court, wherein it was determined that "plaintiffs and each of them, upon becoming eligible for retirement" will only be entitled to receive a fixed monthly pension "equal to fifty per cent (50%) of the average monthly salary earned by each of said plaintiffs during the last five (5) years immediately preceding the date of their respective retirements" instead of the fluctuating retirement benefits which were offered by Section 187 of the charter at all times since 1925, the opinion is in conflict with the principles announced by this court in the recent case of *Wallace v. City of Fresno,* 42 Cal. 2d 180, 265 P. 2d 884, and is squarely in conflict with the holding of Division 3 of the same District Court of Appeal in the cases of *English v. City of Long Beach, supra, Combs, et al. v. City of Long Beach, supra, Alexander, et al. v. City of Long Beach, supra,* and *Harrison, et al. v. City of Long Beach, supra,* wherein it was held that the same charter amendment was unconstitutional insofar as it attempted to substitute a "fixed" pension for the "fluctuating" pension originally provided for by Section 187, as applied to some 300 members of the same system who were fortunate enough to have retired or have become eligible for retirement, prior to June 5, 1951. If this particular change is unreasonable as applied to Cheryl English, the daughter of a police officer who succumbed to a service-connected injury prior to June 5, 1951, but whose immediate right to receive the pension did not accrue until the remarriage of her mother in September of 1951, it is difficult to understand why it should be declared to be reasonable as to the instant plaintiffs who were actuated to undertake

employment with the City by the same statutory offer. True, Officer English had completed his contract of employment with the City (insofar as he was able) prior to June 5, 1951, but the "reasonableness" of the modification as applied to existing employees as pointed out by this court in the *Wallace* case, turns upon the question of whether or not its apparent purpose was to keep the system adjusted to "changing conditions and at the same time maintain the integrity of the system and carry out its beneficent policy." (42 Cal. 2d at p. 184.) Can it be said that the elimination of the "fluctuating" pension which was expressly designed to keep the monthly retirement benefits adjusted to changing economic conditions, and the substitution therefor of a "fixed" monthly payment, based solely upon past earnings, which may or may not be adequate in terms of future purchasing power to supply the basic economic needs of the pensioner, comes within the scope of the purposes as above stated by this court? We submit that it does not for the same reasons which later compelled the same trial judge to come to the opposite conclusion in the *English* case, namely:

> "* * * By Section 187.2, however, the City seeks not to meet any changing economic conditions but to freeze pensions at a fixed sum and irrespective of whether or not at the time of the death of an employee living costs and wages are rising or falling, with the result that in a period of rising costs such as the present, the pensions become inadequate and disproportionate to salaries fixed for active employees and the cost of living, while in time of a depression or a deflationary economic period the pension would still be disproportionate to salaries and living costs and would place an economic burden upon the city.

> "The purpose of Section 187.2 could not have been to meet any changing condition but rather to freeze an existing condition. There is no pension fund to be protected and the city does not assert and could not assert that that was the reason for the enactment of the section." (App. Op. Br. pp. 38 to 39.)

Although it may be more difficult for the court to appreciate the practical effect of a change from a "fluctuating" to a "fixed" pension at this time, because the amount of the fixed pension cannot be determined until the time of retirement, and the adequacy thereof in terms of future purchasing power is dependent upon the conditions which prevail throughout the remainder of the natural life of the pensioner and his dependents, the underlying principle is the same. The fluctuating pension measured by the current salary of the rank is specifically designed to keep the monthly payments adjusted at all times to the changing value of the dollar and the current cost of living; it is fair to the City as well as to the pensioner (*Casserly v. City of Oakland, supra*); it insures the pensioner against a condition of penury or want throughout the remainder of his life by providing a monthly sum that is adequate to supply his basic economic needs; it eliminates the "gamble" that he can ill afford to take (*English v. City of Long Beach, supra*). The fixed pension, on the other hand, tends to defeat rather than to insure the successful operation of the pension system by making the adequacy of the pension payments depend solely upon the uncertainty of future economic conditions, and in addition thereto, it provides a definite incentive for the premature retirement of competent employees, *i. e.,* in times of a deflationary cycle, all employees who are eligible to retire will be compelled to

do so in order to prevent a reduction of their retirement benefits which are based upon past earnings. At the same time a fixed pension places an unreasonable economic burden upon the City, not only by compelling it to pay a larger pension, but to pay retirement pensions to many competent employees who would otherwise be willing to continue in the service of the City.

The District Court of Appeal recognized the guiding principles which were announced by this court in the *Wallace* case when it stated at page 77 of its opinion:

> "Reasonable modifications may be made by governmental agencies when necessary to keep pension systems adjusted to changing conditions, to maintain the integrity of such systems, and to carry out their *benefit* (beneficent) policy. (Citing authorities.)
>
> "The permissible scope of such changes should be to safeguard pension systems, adjust them to changing conditions, and to carry out their policy." (Citing *Wallace v. City of Fresno, supra.*)

The court failed, however, as we have shown to apply the foregoing principles in analyzing the obvious purpose and effect of the changes brought about by Section 187.2.

The conflict between the opinion of the District Court of Appeal herein and the principles announced by this court in the cited cases of *Kern v. City of Long Beach, supra, Packer v. Board of Retirement, supra,* and *Wallace v. City of Fresno, supra,* is even more apparent when we consider that portion of Section 187.2 which provides for the arbitrary deduction of 10% from the salary of each plaintiff until he is eligible for retirement and the use thereof to liquidate the City's existing obligations to re-

tired members of the system. The pertinent provisions of Section 187.2 are as follows:

> "(c) There is hereby created a fund to be known as the 'Police and Fire Pension Fund,' for the purpose of meeting the payment of pensions, the right to which pensions became vested by reason of the provisions of Section 187 of this Charter prior to the repeal thereof by the adoption of Section 187.1 hereof. Said fund shall be a continuing fund and shall not be subject to transfer at the close of the fiscal year. The City Council may, from time to time, appropriate or transfer money to said fund. All deductions from the salaries of certain members of the Police and Fire Departments required to be made by this section shall be placed in said fund. The money in said fund shall be used only for the payment of such pensions as are referred to in this section, or the payment, with interest of amounts deducted from salaries of members of said departments, as herein provided.
>
> * * * * * * * *
>
> "(d) Ten per cent (10%) of the salary of each person, who is a member of the Police or Fire Department on the effective date of this section and who has certain vested rights by reason of the provisions of Section 187 of this Charter prior to the repeal thereof by the adoption of Section 187.1 hereof, shall be deducted from such salary and paid semi-monthly into the 'Police and Fire Pension Fund,' until such member has completed the number of years of service required for his eligibility for retirement. An amount equal to all amounts so deducted shall be paid to such person upon his ceasing to be a member of either of said departments by reason of resignation or discharge prior to such person's having completed the number of years of service required for his eligibility for re-

> tirement. No member absent by reason of ordered military service shall be paid the amount of his deductions. * * * In the event any person, from whose salary deductions have been made pursuant to this section, dies before retirement, such amounts shall be paid to his estate or designated beneficiary; provided, however, no payment whatever shall be made in the event any person shall be eligible to be granted a pension by reason of such death. There shall be added to the total amount payable by the City, representing said deductions, at the time of payment thereof, accrued interest thereon, compounded annually, at the rate of two and one-half per cent (2½%) per annum."

As previously pointed out under our discussion of "Questions Presented," the practical result of the foregoing provisions as construed by the trial court, "is to make a reduction in the pensions to which plaintiffs are entitled," which in some instances amounts to as much as 40%, by compelling the employee to "loan" to the City an amount equal to approximately 40% of the actuarial equivalent of his retirement pension at the time he becomes eligible for retirement. As pointed out by the trial court in its memorandum opinion, the plaintiffs Nettlehorst and Crandall would have to pay into the pension system approximately $9,000.00 apiece prior to becoming eligible for retirement, at which time the actuarial equivalent of their retirement pensions would be $34,513.00 and $35,165.00, respectively, whereas the plaintiff Shortman would have to contribute $10,437.00 for a retirement pension having a potential value of some $25,000.00. [Clk. Tr. Alger p. 82, line 5, to p. 83, line 19.] The trial court's illustrations were, of course, based upon the assumption that each party plaintiff would live to mature his pension and likewise

that he would live to the normal expectancy following his retirement. If, on the other hand, the employee should die a few days following his retirement without leaving a widow or dependent who could qualify for the pension, his salary deductions would have been entirely forfeited, since there is no provision for repayment of the same. It is only in the event that his service is terminated before retirement that the salary deductions are required to be repaid. Neither can it be successfully contended that the foregoing provisions were intended as establishing a reserve for the payment of pensions because the section contains no such provision. All sums that are paid into the pension fund, including the salary deductions, are required to be used

> "for the purpose of meeting the payment of pensions, the right to which pensions became vested by reason of the provisions of Section 187 of this Charter prior to the repeal thereof by the adoption of Section 187.1 hereof."

Following the abortive repeal of Section 187 by the adoption of Section 187.1, this court held specifically that the City alone was obligated to appropriate and make available "sufficient funds to pay all pensions due and which may become due in the future" under the terms of said Section 187, and that

> "the pension payments directed to be made by subdivision (2) of Section 187 of the Charter, as amended in 1925 and 1931, St. 1925, p. 1333, St. 1931, p. 2785, constitute general obligations of the city and are not limited in the manner urged by the city." (*City of Long Beach v. Lentz, et. al.*, 27 Cal. 2d 890, 165 P. 2d 677.)

This was an action in declaratory relief brought by the City for the express purpose of determining its obligations with respect to the payment of the pensions provided by Section 187, following its purported repeal in 1945. By the terms of the declaratory judgment which was affirmed on appeal, it was expressly determined,

> "that under and by virtue of the terms of Section 187, and 187.1 of the city charter of said city the plaintiff, City of Long Beach, is obligated to pay at once the pension payments which have heretofore accrued and to pay in full the various pensions provided for by said sections in regular monthly installments as they accrue or become payable to the various persons named in said amended complaint; and that said defendants and persons so named are entitled to receive and to be paid from the treasury of said city in regular monthly installments all sums which have heretofore or which may hereafter accrue or become payable to them in accordance with the terms of said charter sections." [Clk. Tr. L. A. No. 19485, p. 36, line 24, to p. 37, line 11.]

In the later case of *Allen et al. v. City of Long Beach,* 101 Cal. App. 2d 15, 224 P. 2d 792, in which all of the present parties plaintiff were likewise plaintiffs and the defendant City was a party defendant, the court further determined that, "the defendant city auditor is not authorized or required to make any * * * deductions from the salaries of any of the plaintiffs as previously required by subdivision (6) of Section 187." [Clk. Tr. p. 49, lines 13 to 20; 2nd Civil No. 17544.] It is thus apparent that the practical purpose and effect of the 10% salary deduction provided for by Section 187.2 was to take the property of the instant plaintiffs and use it to liquidate the City's general obligation to the more than

300 retired members of the existing pension system. Unless the conditional right to the repayment of plaintiffs' own salary deductions is to be considered an advantage, it is further apparent that the change thus brought about by Section 187.2 was designed solely for the benefit of the City and that no advantage to the employee was contemplated. Certainly the change does not meet the limitations prescribed by this court in the *Packer* and *Wallace* cases, when it stated that a "city has no more right to adopt an amendment which does not come within the purposes of the rule permitting modifications than a private insurance carrier would have to change an annuity policy," and that the purpose of the rule is to permit the city to "make reasonable modifications of pensions, prior to retirement, for the purpose of keeping the pension system flexible to permit adjustments in accord with changing conditions *and at the same time maintain the integrity of the system and carry out its beneficent policy.*' (42 Cal. 2d at pp. 183 and 184; italics added.) In other words, the "implied qualification" of power to make such reasonable modifications is an exception to the general rule which prohibits the passage of any law which impairs the obligation of a contract. (*Islais Co., Ltd. v. Matheson,* 3 Cal. 2d 647, 45 P. 2d 326; *Indiana ex rel. Anderson v. Brand,* 303 U. S. 95, 82 L. Ed. 685; and cases cited at pp. 30 to 33 of App. Op. Br.) From the standpoint of the constitutional mandate which prohibits the impairment of contractual obligations, there is no real difference between the "piecemeal" destruction of a contract under the guise of "reasonable modification" which takes away as much as 40% of the value of a contractual right, and the total elimination of all pension benefits pursuant to a condition subsequent as was attempted in the *Wallace* case. In order to come within

the bounds of "reasonable modification," the change must maintain "the integrity of the system" and this, we submit, can only be done by offering corresponding advantages to the employee where the benefits originally offered have been substantially reduced as plainly demonstrated by the reasoning of this court in the case of *Packer v. Board of Retirement, supra.* In fact, the rationale of the opinion in the *Packer* case makes it clear that in order for a modification of an existing pension system to be considered reasonable as it applied to existing employees, the amendment must provide substantially the same net benefits as originally held out to the employee. Here the court was concerned with the effect of a 1941 amendment to the County Peace Officers' Retirement Law, as originally enacted in 1931, which had the effect of eliminating the widow's right to a death benefit where the peace officer died after retirement from causes which were not service-connected. The amendment in qustion brought about several other modifications which increased the net benefits payable to the members of the system. In order for the widow to obtain a pension, her husband having died of natural causes in 1947, she contended that she had a separate and distinct contractual right which was vested in nature. In analyzing the situation thus presented this court was careful to point out that no contractual relationship as such existed between the widow and the county and that her pension rights were merely a portion of her husband's compensation. In determining that the statute under consideration did not exceed "the bounds of reasonable modification," this court at page 664 of the Pacific Reporter said:

> "* * * A comparison of the statutes shows that under certain circumstances the 1941 law would give county peace officers and their families greater

> benefits than they had before, and the changes, considered as a whole, did not exceed the bounds of a reasonable modification. * * *
>
> "*The basic conditions under which a county peace officer could obtain a pension were substantially unchanged.* Both before and after 1941 he could retire and receive payments amounting to half his terminal salary, not exceeding $150 per month, if his retirement was due to a service-connected disability or if he had served for 20 years and reached the required age. (Retirement Law, §§11, 12.) * * *
>
> "Because of the nature of the changes made in 1941 *it would be difficult, if not impossible, to determine whether, as to an employee still on active duty, the total value of all pension rights, considered together, had been reduced and, if so, to what monetary extent.*" (Italics added.)

It is thus apparent that the true basis of the holding of this court in the *Packer* case was its ultimate conclusion that "the total value of all pension rights, considered together" as they related to the existing employees, were substantially the same as they were before the modification. This concept was emphasized by this court in the *Wallace* case when it stated at page 183:

> "* * * It is, of course, true that when a city originally sets up its pension system it has a rather wide latitude in prescribing the terms and conditions for retirement, and it may adopt restrictions that would be considered unreasonable impairments of the contract if subsequently imposed upon employees who have served under the pension plan."

Unless the terms "reasonable and substantial" as used by this court in the *Kern, Packer* and *Wallace* cases were intended to relate back to the benefits as originally prom-

ised, it is obvious that the principles therein announced are meaningless and clearly at variance with settled principles of contract and constitutional law. The word "reasonable" is a relative term which must take its meaning from the circumstances under which it is used (*Pabst v. Finmand,* 190 Cal. 124, 211 Pac. 11), and the same is true of the word "substantial." (*Fuhrman v. American Nat. Bldg. & Loan Assn.,* 126 Cal. App. 202, 14 P. 2d 601.) This conclusion is further manifest from the court's admonition that one of the primary requisites of such a modification must be to "maintain the integrity of the system." The word "integrity" is defined in Webster's Collegiate Dictionary, 5th Edition, as meaning: "(1) State or quality of being complete, undivided, or unbroken; entirety. (2) *Unimpaired state;* * * *. (3) Moral soundness; honesty; uprightness." The same term as used in Probate Code, Section 401, has been defined by this court as meaning: "Soundeness of moral principle and character, as shown by a person's dealing with others, in making and performance of contracts, in fidelity or honesty in the discharge of trusts. In short, it is used as a synonym for probity, honesty and uprightness in business relations with others." (*In re Bauquier,* 88 Cal. 302, 307, 26 Pac. 178, 532; *Estate of Gordon,* 142 Cal. 125, 131, 75 Pac. 672.) How can it be said that the integrity of the City's existing contractual obligation to the present plaintiffs has been maintained by a modification which admittedly has the practical effect of reducing their partially earned retirement benefits by as much as 40%, without any pretense at adding any corresponding advantages, and which at the same time subjects them to the hazards of future insecurity by eliminating their right to receive a fluctuating pension that was automatically geared to future economic conditions. As

observed by this court at page 186 of its opinion in the *Wallace* case, "it would seem obvious that the city should not be permitted to urge one detriment to offset another."

The only reasons suggested in the opinion of the District Court of Appeal as warranting the changes brought about by Section 187.2 are that, "When the city set up its pension system in the beginning it failed to require reasonable contributions from the beneficiaries of the system," and "that to require pension systems to be supported in too great amount from taxes of municipalities, or other governmental agencies, will in the long run destroy the pension systems themselves." In other words, the theory seems to be that because the City failed to require what the court deemed to be "reasonable contributions" from the members of its Police and Fire Departments for the past 26 years, during which time more than 300 members and their dependents have been granted pensions, which have been held to be general obligations of the City (*England v. City of Long Beach,* 27 Cal. 2d 343, 163 P. 2d 865; *City of Long Beach v. Lentz, supra; Alexander et al. v. City of Long Beach, supra;* and *Harrison v. City of Long Beach, supra*) and during which time the pension system has been entirely repealed insofar as it related to members employed after March 29, 1945, the City may now single out some 228 employees who have been held to have a vested contractual right to earn and receive the benefits offered by the old system (*Kern v. City of Long Beach, supra; Adams v. City of Long Beach,* 101 Cal. App. 2d 15, 224 P. 2d 792) and saddle them with an arbitrary tax equal to 10% of their salaries to help defray the City's existing pension obligations. The next result of this provision is to take the property of these plaintiffs and use it to liquidate the

City's existing obligations to the members who have already retired, which is directly in contravention with the mandate of Article XI, Section 15 of the California Constitution. The unfairness of this arbitrary tax from the standpoint of the equal protection clauses of the State and Federal Constitutions which require the equal distribution of the tax burden, is manifest. (*Soares v. City of Santa Maria,* 38 Cal. App. 2d 215, 100 P. 2d 1108; *Barker Bros. v. City of Los Angeles,* 10 Cal. 2d 603, 76 P. 2d 97; and the cases cited at p. 57 of App. Op. Br.) The reasoning of the court in this respect likewise overlooks two fundamental principles which have been clearly defined by this court, namely, (1) that the retirement, death and disability benefits which become payable under a charter provision such as Section 187, are not gratuities, but "are in effect deferred compensation," which is actually earned by the employee as "an integral part" of his compensation for services rendered (*Kern v. City of Long Beach, supra; Terry v. City of Berkeley, supra; Skaggs v. City of Los Angeles,* 43 A. C. 503, 275 P. 2d 9) and, (2) that the obligation to pay these pensions has been held to be a general obligation on the part of the City just as much as its obligation to pay the current salaries of its employees. (*Kern v. City of Long Beach, supra; City of Long Beach v. Lentz, supra.*) Since the primary purpose of any pension system is to benefit the City as a whole, *i.e.,* to attract and retain the services of competent persons, and the tax burden for municipal purposes must be equally distributed, there is no legal basis for levying a special tax upon a few employees who may or may not eventually benefit from the system, to help defray the City's general obligations thereunder. As pointed out by the court in the case of *Hibbard, et al. v. State ex*

rel. Ward, 65 Ohio St. 574, 64 N. E. 109, which is squarely in point upon this question:

> "* * * Money taken from the teachers by virtue of this statute is either taxation for the public good or it is the taking of money from one person for the benefit of another, contrary to the will of such person from whom it is taken, and without his consent. * * * Contracts were made with the teachers to pay them a certain salary, and from that salary as agreed to be paid 1 per cent. was deducted and devoted to this purpose. A teacher's salary is his property. He has a right, under the constitution, to use that salary for his own benefit or for the benefit of the others, as he sees fit. If he thinks it best to provide for old age, he may do so; but, if he prefers to spend his money as he earns it, it is his right under the constitution, to do that."

The principles stated in the foregoing decision which is quoted at length at pages 53 to 56 of our opening brief, are fully supported by the decisions of this court in the cases of *Mordecai v. Board of Supervisors,* 183 Cal. 434, 192 Pac. 40; *Accounting Corp. of America v. State Board of Accountancy,* 34 Cal. 2d 186, 208 P. 2d 984; *Del Mar Canning Co. v. Payne et al.,* 29 Cal. 2d 380, 175 P. 2d 231, and other cases cited at page 57 of appellants' opening brief.

Furthermore, the assumption that the City failed in the beginning "to require reasonable contributions from the beneficiaries of the system" is unfounded and overlooks the fact that these plaintiffs offered to prove that they refrained from accepting other higher-paying employment opportunities in order to earn their vested contractual right to receive the specific retirement benefits offered by Section 187, and emphasizes the prejudicial

effect of the trial court's ruling upon the materiality of this evidence. (See App. Op. Br. pp. 79 to 88.) Where, as here, the City, by offering to pay certain specific retirement benefits, has been able to secure the services of these plaintiffs for periods up to 19 years at much lower salaries than they were offered elsewhere, it seems rather apparent that the City has already received a "reasonable contribution" from them, *i.e.*, in addition to the 2% salary deduction to which they consented by accepting employment with knowledge of the terms of the statute, they have made valuable contributions in the form of services rendered in connection with highly hazardous occupations at lower salaries than they would otherwise have agreed to. Now that the City has received the value of these services, it is tantamount to the perpetration of a fraud to compel them to contribute 10% of their salaries to the City, or forfeit their partially earned retirement benefits. (*Kern v. City of Long Beach, supra; Los Angeles Traction Co. v. Wilshire*, 135 Cal. 654; *Mobley etc. Co. v. Borden*, 129 Ohio St. 375, 195 N. E. 697; *Sieck v. Hall*, 139 Cal. App. 279, 34 P. 2d 844; *Restatement of the Law of Contracts*, Vol. I, Sec. 45; and other authorities cited at pp. 81 to 87 of App. Op. Br.)

It has also been suggested by the respondent City that the arbitrary 10% salary deduction provided by Section 187.2 was necessary in order to equalize the current salaries of the instant plaintiffs with those of certain other employees of the Police and Fire Departments who were appointed after the repeal of Section 187, and from whom similar salary deductions are required under the provisions of the State Retirement System, to which they have recently become parties. The District Court of Appeal in its opinion likewise makes the observation that, "Section 187.2 contains substantially the same provisions as in the State Retirement System." We submit that the foregoing statement is entirely inaccurate, and that an analysis of the provisions of the State Retirement System as compared to the retirement system provided by Section 187 of the Long Beach City Charter, including the provisions of Section 187.2, will reveal that the two systems are entirely different.

Likewise the relationship between the instant plaintiffs and the defendant City is entirely different from the relationship which currently exists between the City and those members of its Police and Fire Departments who accepted employment after March 29, 1945. The instant plaintiffs accepted employment with the City upon the understanding that they would be paid, in addition to their current salaries, certain specific retirement benefits upon the completion of a given number of years of service, and that their contributions to the retirement fund would be a flat 2% of their salary. (Stats. 1931, p. 2780.) One the other hand, those employees who accepted employment in the Police and Fire Departments after March 29, 1945, did so with the knowledge that Section 187 had been repealed and that no pension benefits of any kind were being offered to them. Before they became members of the State Retirement System an election was held, at which they were given the opportunity of indicating their desire to join or not to join by a secret ballot. Before they voted they were given a schedule of the rates which they must contribute if they elected to join the system, and were told that these rates could be adjusted from time to time, based upon the results of an actuarial survey of the cost of operating the system. (Govt. Code, Secs. 20457 and 20458.) Furthermore, it should be noted

that Section 20459 of the same Code provides that "if the public agency has an existing local retirement, pension or annuity fund or system, and the proposed contract is to make all or part of the members of the local system members of this system, the employees voting shall be limited to active members of the local system voting as a unit, and a two-thirds vote of approval by such employees is necessary." Thus, if we assume for the purpose of argument, that the pension benefits provided by Section 187.2 are in anywise similar to those provided for under the State Retirement System, the net effect of the charter amendment under consideration would be to compel the instant plaintiff to become parties to the State Retirement System without affording them the right of election as specifically provided by the Government Code. Under the provisions of Section 187.2, no choice whatever was given to the instant plaintiffs. The 10% assessment is not only compulsory, but it is five times the amount which the employee impliedly consented should be deducted from his salary at the time he accepted employment. Furthermore, the benefits payable to policemen and firemen who are members of the State Retirement System are substantially different from those payable to the instant plaintiffs under their contract with the City which was entered into pursuant to the terms of Section 187 of the Charter as amended in 1931. For example, a policeman or fireman who is a member of the State Employees' Retirement System is entitled to receive his full salary for not to exceed one year following a service-connected diasibility (Labor Code, Sec. 4850), where as the disability benefits payable by Section 187, subdivision (3) amount to only 50% of the salary attached to the rank held by such injured policeman or fireman. Likewise, a member of the State Retirement Sys-

tem receives certain off-the-job disability benefits which are not provided for by Sections 187 or 187.2. (Govt. Code, Secs. 21020 to 21103.) The benefits payable to the members of the State Retirement System are payable from a trust fund which is required to be kept actuarially sound at all times, and the member is advised in advance that his contributions may be adjusted periodically for this purpose, whereas the payments required to be made by Section 187 are general obligations of the City. (*City of Long Beach v. Lentz, supra.*) Under the provisions of Sections 187 and 187.2 of the City Charter, the employee has no vested interest in the salary deductions which are required to be made from his salary whereas under the State Retirement System a separate account is required to be kept of the contributions of each member, and his right or that of his designated beneficiary to receive the actuarial equivalent of his accumulated contributions is never lost. (See *Goodwin v. Firemen's Relief and Pension Fund,* 72 Cal. App. 2d 445, 164 P. 2d 512; Govt. Code, Secs. 20131, 20132, 20230, 21250 to 21263, 21330 to 21335.) The retirement benefits payable under the State Retirement System are based solely upon actuarial principles, whereas those provided by Section 187.2 are based solely upon a certain percentage of average past earnings. (Govt. Code, Secs. 21250 to 21263.) The salary deductions provided for by the State Retirement System are justified upon the theory that by consenting to join the system, the employee impliedly, if not expressly, consents thereto (*Knight v. Board, etc. Employees' Retirement,* 32 Cal. 2d 400, 196 P. 2d 547; *Clarke v. Ireland, et al.,* 122 Mont. 246, 199 P. 2d 965), whereas the compulsory nature of the 10% tax provided for by Section 187.2 has all of the attributes of a tax. (*San Francisco v. Liverpool and London and Globe Insurance*

Co., 74 Cal. 113, 15 Pac. 380; *Shealor v. City of Lodi*, 23 Cal. 2d 647, 145 P. 2d 574; *Ex parte Kotta*, 187 Cal. 27, 200 Pac. 957.) Furthermore, it should be noted that the State Retirement System and the salary deductions therein provided for have been expressly authorized by the provisions of Article IV, Section 22a of the California Constitution, whereas no similar power has been delegated to chartered municipalities by the provisions of Article XI of the Constitution, and hence, the right to require deductions from the salaries of its employees to support a local retirement system can only be justified upon the theory that the employee impliedly consents to such deduction by the acceptance of employment with knowledge of the specific charter provisions. Furthermore, it should be noted that under the express provisions of the Government Code, any amendment of the contract between a local contracting agency and the State Retirement System which has the effect of increasing the contributions of its employees or decreasing the benefits payable, must be approved by a majority vote of the employees affected. (Govt. Code, Secs. 20457 to 20461.5.)

Even if it were to be assumed for the purpose of argument that the provisions of the challenged charter section would in the future tend to equalize the pension benefits received by appellants with those provided for recently employed members of the Police and Fire Departments who are now under the State Retirement System, appellants submit that this fact provides no basis for materially reducing the vested contractual rights which appellants had admittedly earned at the time Section 187.2 was adopted. In fact, the premise which underlies this contention is contrary to our constitutional form of government, and would permit the taking of valuable property rights away

from those who have already earned them merely to equalize their financial condition with that of other persons who had not earned such vested contractual rights. As observed by the District Court of Appeal in the case of *Alstott v. City of Long Beach*, 104 Cal. App. 2d 441, 231 P. 2d 498:

> "* * * we think it would have been arbitrary and unreasonable to reduce the rights of the older employees to those of the younger class, or to elevate the latter to a higher status which they had not earned." (231 P. 2d at p. 501.)

No theory of contract law allows the City of Long Beach to alter the terms of its contract with appellants merely because it has entered into a different and less onerous contract with an entirely different group of city employees at a later date. No case in this state dealing with the reduction of constitutionally vested contractual pension benefits has ever suggested that partially earned retirement benefits may be substantially reduced for the purpose of equalizing the existing vested rights of one group with that of a subsequently hired group of employees who voluntarily elected to come under an entirely different pension system. On the contrary the language of this court in the *Wallace* case clearly implies that conditions which might be properly included in a pension system prior to employment, could not be constitutionally inserted after employment has commenced, viz.:

> "* * * It is, of course, true that when a city originally sets up its pension system it has a rather wide latitude in prescribing the terms and conditions of retirement, and it may adopt restrictions that would be considered unreasonable impairments of the contract if subsequently imposed upon employees who

have served under the pension plan." (42 Cal. 2d at p. 183.)

Likewise of interest in this connection are the following remarks of the Honorable Malcolm Douglas, Judge of the Superior Court of King County in the State of Washington, in determining a somewhat similar problem in a case of first impression in that state:

> "When a policeman, or any other municipal or state or Federal employee, or member of the armed services, makes government service or military service his career, certainly one of the great inducements is the retirement privilege that goes with it. Until very recent decades there were not many retirement systems outside of the Army and Navy and government service, but in the last quarter of a century, of course, retirement systems have been extended to almost every line of business. Now when one takes a position as a city fireman or a city policeman, or as a member of the judiciary of the state, or as an officer in the Army, and pays into a fund for the purpose of providing security when the day of retirement comes, that privilege of retirement is obviously one of the great inducements that takes him into such service. And I think it is fair to observe that it is a very substantial inducement. I think many a man would not accept employment as a policeman or as a fireman, or as a judge, unless he knew that in addition to the monthly salary he draws during his actual service, when he completes a certain number of years of service and pays into a fund his old age will be provided for by at least a substantial pension.
>
> "How can it be said that when he does that, and furnishes that service and makes those payments according to the terms of the law then existing, that the legislature or any other municipal body can come along at a later time and substantially reduce and impair those rights without running squarely into the constitutional prohibition against the state impairing the obligation of contracts?"

After alluding to the case of *Kern v. City of Long Beach, supra,* and the fact that the case contains dictum which is inconsistent with the ultimate holding of the court, Judge Douglas continued:

> "* * * If you can't take away a pension entirely, certainly you can't take away a third of it for the same reasons. The impairment is substantial when you take away a third of it, as has been done in the case before this court. I wouldn't go so far as to say that a city, or the legislature, cannot patch up a defective pension law and make necessary modifications to make it a workable system as long as there is not a substantial modification, but when there is a substantial modification downward, there is a substantial impairment of a contractual right. And that the city may not do." (*Bakenus et ux. v. The City of Seattle, et al.,* Superior Court Action No. 467488, oral opinion on demurrer rendered August 18, 1954.)

In holding that the former judgment in the declaratory relief action between the same parties, which had for its express purpose a determination of the nature and extent of the vested contractual rights which had been acquired by plaintiffs as the result of their having accepted employment in reliance upon the specific benefits offered by Section 187, was not *res adjudicata* of the same issues as presented in the case at bar, the opinion of the District

Court of Appeal herein is likewise contrary to the principles announced in the following decisions.

Rolapp, et al. v. Federal Bldg. & Loan Assn., 11 Cal. App. 2d 337, 53 P. 2d 974;

Knox v. Wolfe, 73 Cal. App. 2d 494, 167 P. 2d 3;

Olwell, et al. v. Hopkins, et al., 28 Cal. 2d 147, 168 P. 2d 972;

Price v. Sixth District Agricultural Ass'n, 201 Cal. 502, 258 Pac. 587;

Shore v. Shore, 43 A. C. 697;

Denio v. City of Huntington Beach, 74 Cal. App. 2d 424, 168 P. 2d 785;

Todhunter v. Smith, 219 Cal. 690, 28 P. 2d 916.

These cases definitely hold that the court may in an action in declaratory relief decide the present as well as the future rights of the parties under an existing contractual relationship, that the doctrine of *res adjudicata* applies as well to the determination of questions of law as it does to questions of fact, and that an erroneous decision with respect to a particular issue is just as binding upon the parties as a valid one. In the former proceeding in declaratory relief, the defendant city, as we have shown, specifically presented the contention that plaintiffs' existing contractual rights were subject to further reduction and modification at the hands of the electorate and the trial court determined that this contention was invalid. It further decreed that plaintiffs were entitled to certain specific benefits upon completing the required number of years of service, and these portions of the decision were affirmed upon appeal. (See App. Op. Br. pp. 60-78.) We therefore submit that both the trial court and the District Court of Appeal erred in concluding that the former declaratory judgment was not *res adjudicata* of the issues presented in the cases at bar.

POINT TWO.

A Hearing Is Necessary for the Settlement of Important Questions of Law.

From the preceding discussion it is apparent that the instant case presents a number of questions which are of vital importance to thousands of public employees throughout this state, and which have not as yet been determined by this court. It is common knowledge that practically every municipality of any size in this state has established some sort of a retirement system in order to attract and retain the services of competent employees. This is particularly true with respect to the hazardous occupation of policemen and firemen.

To date the "permissible scope" of modifications which may be made by a municipality in an existing pension system as applied to employees who have accepted employment in reliance upon a statute which offers definite retirement benefits, without impairing the obligations of its contract, has only been considered by this court in two cases, namely, *Packer v. Board of Retirement, supra*, and *Wallace v. City of Fresno, supra*. In the case of *Kern v. City of Long Beach, supra*, this court announced by way of constructive dictum certain principles which have obviously been misconstrued by many trial courts throughout this state and the District Courts of Appeal, as evidenced by the conflicting decisions and opinions of the trial court in the case at bar and the cases of *English v. City of Long Beach, supra, Harrison, et al. v. City of Long Beach, supra; Combs, et al. v. City of Long Beach, supra*, and *Alexander, et al. v. City of Long Beach, supra*. To date the question of whether or not there can be a substantial reduction of retirement benefits without offering any corresponding advantages has never been squarely

decided by this court, although the principles announced by it in the *Wallace* case would indicate that it would be considered an "unreasonable impairment." Likewise, the question of whether or not a fixed pension based on past earnings can be substituted for a fluctuating pension, which was specifically designed to keep the monthly benefits adjusted to the changing value of the dollar and the current cost of living, has never been decided by this court.

The proper construction to be placed upon Article XI, Section 15, of the California Constitution, which expressly prohibits the taking of private property and the use thereof for the payment of municipal obligations, has never been before any court of appellate jurisdiction in this state.

In view of the manifest importance of the foregoing questions, it is submitted that a hearing should be granted by this court, if for no other reason.

Conclusion.

In view of the apparent conflict which exists between the opinion of the District Court of Appeal herein, and the decision of Division 3 of the same court in the *English* case, as well as the principles announced by this court in the *Wallace* and *Packer* cases, and of the importance of the questions herein presented, it is submitted that a hearing should be granted by this Honorable Court.

Respectfully submitted,

ALBERT D. WHITE and
NOWLAND M. REID,
Attorneys for Plaintiffs and Appellants, Manning T. Allen, et al.

KENNETH SPERRY,
Attorney for Plaintiffs and Appellants, Elwin L. Alger, et al.

APPENDIX.

Opinion of the District Court of Appeal.

[Civ. No. 19866. Second Dist., Div. One. Jan. 3, 1955.]

Manning T. Allen *et al.*, Plaintiffs and Appellants, v. City of Long Beach *et al.*, Defendants and Appellants.

[Civ. No. 19867. Second Dist., Div. One. Jan 3, 1955.]

Elwin L. Alger *et al.*, Plaintiffs and Appellants, v. City of Long Beach *et al.*, Defendants and Appellants.

Appeals from portions of judgments of the Superior Court of Los Angeles County. Paul Nourse, Judge. Affirmed.

Actions for declaratory relief. Judgments holding part of city pension plan valid and other part invalid, affirmed.

Albert D. White, Nowland M. Reid and Kenneth Sperry for Plaintiffs and Appellants.

Walhfred Jacobson and Irving M. Smith, City Attorneys, and Clifford E. Hayes, Deputy City Attorney, for Defendants and Appellants.

DRAPEAU, J.—The same legal issues are presented by the two above-entitled actions for declaratory relief. By stipulation they were consolidated for trial in the superior court, and were briefed and argued together on appeal. So but one opinion has been prepared, which is, of course, applicable to each case.

The plaintiffs in one case are all members of the police force of the city of Long Beach, the plaintiffs in the other case are all members of the fire department of the said city. Each of them has a vested right to a pension under the provisions of section 187 of the freeholders' charter

of the city. (See Kern v. City of Long Beach, 29 Cal. 2d 848 [179 P. 2d 799]; Palaske v. City of Long Beach, 93 Cal. App. 2d 120 [208 P. 2d 764]; and Allen v. City of Long Beach, 101 Cal. App. 2d 15 [224 P. 2d 792].)

Section 187 was enacted in 1925. It was held that pension rights under the section were an obligation of the city, whether or not funds were available in the pension fund. (England v. City of Long Beach, 27 Cal. 2d 343 [163 P. 2d 865].)

In 1944 section 187.1 was enacted, effective March 29, 1945. This section repealed section 187, and all pension rights thereunder, with a saving clause applicable only to those who had served twenty years prior to the effective date of the amendment.

This section was held unconstitutional and void as to city employees who commenced work after the adoption of section 187. (Kern v. City of Long Beach, *supra.*) In that case our Supreme Court said (at p. 856) that the employees of the city of Long Beach had "a vested pension right and that respondent city, by completely repealing all pension provisions, has attempted to impair its contractual obligations. This it may not constitutionally do . . ."

Now the courts of California are again called upon to construe the rights of the city of Long Beach and these same employees in another amendment to the city charter, effective June 5, 1951, section 187.2.

The parts of this new section pertinent to this inquiry are as follows:

(a) That the amount to be paid to each person receiving a pension after the effective date of the section shall be computed upon the average salary earned by him during five years immediately preceding his retirement.

Before the amendment this amount was computed upon the employee's salary for the last year only of his service.

(b) Establishing a pension fund, out of which all city pensions will be paid, into which the city will pay by appropriation money to keep the fund solvent, and into which also each employee shall pay 10 per cent of his salary, deducted semimonthly.

Originally no contributions were required. Later on 2 per cent was deducted from salaries for the pension fund.

(c) That upon the termination of service of any employee before the effective date of his retirement, he shall be paid back all of the deductions from his salary, together with interest thereon at the rate of 2½ per cent compounded annually.

(d) That any employee absent from his employment by reason of military service shall pay to the city upon his return the amount of money that would have been deducted from his salary had he not been so absent.

Section 187.2 contains substantially the same provisions as in the state retirement system.

Thus it appears that these plaintiffs are beneficiaries of what might be termed a bobtailed pension system. For they were all employed after section 187 went into effect in 1925, and before it was repealed in 1945. Members of the police and fire departments employed after 1945 are given pension rights under the state retirement system, the city having contracted with that system, as permitted by law.

Plaintiffs attack the new charter section because they assert that all of their pension rights as set forth in section 187 were finally adjudicated in Allen v. City of

Long Beach, *supra,* 101 Cal. App. 2d 15, and in Palaske v. City of Long Beach, *supra,* 93 Cal. App. 2d 120; that the city does not have the power to modify any of said rights by amendment to its charter; that these rights are part and parcel of a contract between each plaintiff and the city, continuing, and protected under constitutional law.

In support of these assertions plaintiffs rely upon sections 11 and 21 of article I, and section 15 of article XI of the Constitution of the State of California, and section 10 of article I of the Constitution of the United States, and the cases stated.

Certain of the plaintiffs also attack that part of the new charter amendment, with respect to payments required to be made by employees returning from military service.

Plaintiffs contend that section 187.2 substantially alters the city's existing contractual obligation to them, in that the provision for deducting 10 per cent of their salaries in effect reduced by more than 40 per cent retirement, death, and disability benefits that would otherwise have been payable to them. They say that, according to the testimony of an actuary called by the city, the practical effect of the 10 per cent deduction is to compel each of them to pay approximately one-half of the ultimate cost to the city of their pension plan. They say also: "subdivision (2) of Section 187.2 would change the basis of the retirement pension from an amount which fluctuates in accordance with the salary currently attached to the rank held at the time of retirement to a fixed pension based upon 'the applicable percentage of the average monthly salary during the five years immediately preceding the retirement or death of the person whose service

formed the basis of such right to a pension.' " And that: "It cannot be gainsaid that the right to receive a pension which fluctuates with the salary currently attached to the rank held at the time of death or retirement is a valuable right, because this formula tends to adjust the pension benefits to the current value of the dollar."

So plaintiffs argue that the amendment is unconstitutional as impairing the obligation of the city's existing contract with them; furthermore, that it provides for an arbitrary assessment of tax, contrary to the due-process and equal-protection clauses of our state and federal Constitutions, as well as article XI, section 15 of the California Constitution, which prohibits taking private property to pay municipal obligations.

The superior court found that section 187.2 is constitutional and valid; that the provisions of the section set forth a reasonable and substantial pension plan, excepting only the one provision relative to employees returning from military service. The court found that that provision was unreasonable and invalid.

Plaintiffs appeal from that portion of the judgment that followed, adverse to them; and the city appeals from that portion of the judgment adverse to it.

In an able and well considered memorandum of opinion the trial judge points out that the cases relied upon by plaintiffs are not solely determinative of the issues here; that the pension rights of these employees must be construed in the light of all the decisions of the Supreme Court and of the District Court of Appeal affecting their rights under section 187 of the city charter, and affecting rights of others under like provisions in other laws.

The trial judge says in his opinion:

"In the cases of Kern v. City of Long Beach, 29 Cal. 2d 848 [179 P. 2d 799], and Packer v. Retirement Board, 35 Cal. 2d 212 [217 P. 2d 660], the Supreme Court has unequivocally held that while the right to a pension is a contractual one which vests upon employment and cannot be destroyed, it is nevertheless not a right to a pension in any certain amount or any certain terms but only a right to a 'substantial or reasonable pension' and that this right, that is, the right to a 'substantial or reasonable pension,' is subject to the implied qualifications that the governing body (in this case, the electorate of Long Beach) may make reasonable modifications and changes in the system and that 'the amount, terms and conditions of the benefits may be altered.'"

This court agrees with this reasoning, and with the trial court's finding that the changes in the pension right of plaintiffs made by the new section left them with a substantial and reasonable pension plan. The city of Long Beach was empowered to make the changes, and with the one exception, none of the changes trenched upon any constitutional right of plaintiffs.

Reasonable modifications may be made by governmental agencies when necessary to keep pension systems adjusted to changing conditions, to maintain the integrity of such systems, and to carry out their benefit policy. (Terry v. City of Berkeley, 41 Cal. 2d 698 [263 P. 2d 833]; Packer v. Board of Retirement, 35 Cal. 2d 212 [217 P. 2d 660]; Kern v. City of Long Beach, *supra*, 29 Cal. 2d 848; Rustad v. City of Long Beach, 122 Cal. App. 2d 106 [264 P. 2d 955]; Allstot v. City of Long Beach, 104 Cal. App. 2d 441 [231 P. 2d 498].)

The permissible scope of such changes should be to safeguard pension systems, adjust them to changing conditions, and to carry out their policy. (Wallace v. City of Fresno, 42 Cal. 2d 180 [265 P. 2d 884].)

So we come to grips with the principal questions in this case: Does the requirement that plaintiffs pay 10 per cent of their salaries into the pension fund come within the permissible scope of the power to change or modify pension systems by governmental agencies? And does the method of computing these pensions on the average salaries for the last five years, instead of the last year, come within the same scope?

Applying the principles stated in the cases compels the conclusion that the changes in plaintiffs' pension system made by section 187.2 (with the one exception stated) are within the permissible scope of such changes as defined by the courts of this state.

It is unfortunate that the plaintiffs in these two cases have had so much litigation with their employer. It is unfortunate too that when the city set up its pension system in the beginning it failed to require reasonable contributions from the beneficiaries of the system, and then attempted to deprive them of their pension rights altogether.

Whether plaintiffs or the city are responsible for the litigation is beside the point. The duty of our courts is to determine whether or not the charter amendment goes beyond the bounds of reasonable modification of the pension system. In this analysis it becomes apparent that to require pension systems to be supported in too great amount from taxes of municipalities, or other governmental agencies, will in the long run destroy the systems themselves. For in the long run the tax burden upon

succeeding generations may well become so onerous that the people will find a way to discontinue such overweighted pension system entirely. And it is but fair and right that all the beneficiaries of pensions systems should pay some fair share of the cost of the benefits of which they are assured. Now the city pays in excess of $650,000 a year to pensioners under plaintiffs' system, and under the challenged amendment those not yet pensioned pay approximately $110,000 a year.

Plaintiffs' argument that if this judgment is affirmed they can be saddled next year with a 20 or 30 per cent deduction, and so on, increasing until all their rights are wiped out lacks substance. For any increase in deductions must stand or fall with the test of reasonableness as used in the cases.

The method of computation of plaintiffs' pensions on the five-year average is also within the power of the municipality. Whether they will lose or gain will depend upon economic conditions when they retire. Salaries follow our national economy, and no one can look into the future and say whether they will go up or go down. This part of the amendment is as much an adjustment to changing conditions as was the old system, fluctuating year by year.

Upon the same reasoning, and applying the same legal principles, this court has concluded that there was no error in finding that the issues in this case were not *res adjudicata*, or in rejecting evidence that plaintiffs had refrained from accepting other higher paying employment in the belief that they were earning the right to receive the specific retirement benefits provided before the adoption of section 187.2. The right of the electorate of the city of Long Beach to make reasonable modifications

in its pension system was not, and could not have been an issue in the cases upon which plaintiffs ground their claims of *res adjudicata*.

Finally this court agrees with the exception made by the trial court relative to employees in military service. This question is determined by section 395.1 of the Military and Veterans Code. This section provides that an employee returning to his employment in any governmental agency after military service "shall be entitled to participate in insurance . . . pursuant to established rules and practices . . . in effect at the time such officer or employee left his office or position to join the armed forces of the United States."

This exception is unreasonable, as the word is used in California cases having to do with this subject, when the disparity in the compensation ordinarily paid in the armed forces with that paid in civil service is considered. One discharged after some time in the armed forces could lose all of his pension rights as a civil servant, due to conditions beyond his control. It is doubtful whether men returning from any extended military service would be financially able to make up arrears of unpaid deductions required for reinstatement in a civil pension system.

The judgments are, and each of them is, affirmed. All of the parties shall pay their own costs.

Doran, Acting *P. J.*, and Mosk, *J. pro tem.*,* concurred.

---

*Assigned by Chairman of Judicial Council.

AFFIDAVIT OF SERVICE BY MAIL

IN THE

SUPREME COURT

OF THE

STATE OF CALIFORNIA

Manning T. Allen, et al
Plaintiffs & Appellants

City of Long Beach
Defendants & Respondents

STATE OF CALIFORNIA }
COUNTY OF LOS ANGELES } ss.

Robert W. Parker Jr., being first duly sworn, deposes and says: That this affiant is a citizen of the United States of America, a resident of the County of Los Angeles, over the age of eighteen years, not a party to the within and above entitled action; that this affiant is making this service for Kenneth Sperry who is the attorney for the Appellants in this action; that this affiant is of the firm of Parker & Son, Inc., 241 East Fourth Street, who are the printers and agents in this matter for said attorney......, and have their offices in the City of Los Angeles, State of California.

That on the 11th day of February 1955, affiant served the within Petition for Hearing on the Respondent in this action, by placing a true copy thereof in an envelope addressed to the attorney......of record for said Respondent at the business/residence address of said attorney......, as follows: City Attorney of Long Beach
604 City Hall, Long Beach, Calif.

and also served a true copy on ......
County Clerk of ...... County, at the county seat of said county, by then sealing said envelope........ and depositing the same, with postage thereon fully prepaid, in the United States Post Office at Los Angeles, California.

That there is delivery service by United States mail at the place...... so addressed or there is a regular communication by mail between the place of mailing and the place...... so addressed.

Robert W. Parker Jr.

Subscribed and sworn to before me this 11th day of February 1955

Marguerite F. Cripps
MARGUERITE F. CRIPPS,
Notary Public, in and for the County of Los Angeles, State of California.

My Commission Expires January 3, 1956.

Received copy of the within for the judge who tried the case this 11th day of February, A. D. 1955.

HAROLD J. OSTLY, *County Clerk.*
By Robt. M Parker, *Deputy.*

Received three copies of the within for the Clerk of the District Court of Appeal this 11th day of February, A. D. 1955.

[signature]

Deputy.

Service of the within and receipt of a copy thereof is hereby admitted this 11th day of February, A. D. 1955.

Affidavit Enclosed

2-11-55—35

EXHIBIT C

Introduction

In conversations with local and regional business leaders and economic development specialists in late 2009 as part of the Commission's study of state-level economic development activities, the Commission heard repeatedly about California's regulatory environment and the need for greater clarity and consistency in how regulations were developed.

After the Commission issued its 2010 report, *Making Up For Lost Ground: Creating A Governor's Office of Economic Development*, and the subsequent opening of the Governor's Office of Economic Development, the Commission continued to explore concerns about the state's regulatory development process. The Commission heard that while most businesses and public entities covered by regulations recognize regulations as essential to a fair, safe and stable society, many felt that California's regulatory process was inconsistent, often unbalanced and lacked transparency and accountability. These factors have undermined confidence in the system.

Often when regulated entities complain about regulation, what they really mean is a statute that they find particularly onerous. That is a matter beyond the scope of this study. At other times, however, it is the regulation and the process that developed it that they object to. At the regulatory level, department staff, as well as regulated and unregulated stakeholders, often struggle to find regulatory solutions to legislation that lacks focus.

The Commission also heard complaints about the overlap of state, federal and local regulations, and the difficulty business owners had in planning expansions and investments because of it. "It would be nice to know at the start what the rules are instead of being hit with surprises all along the process," Casey Houweling, who expanded his sustainable tomato and cucumber green house operations in Oxnard, told the Commission.[1]

The State Water Resources Control Board may have one set of conditions, while the nine regional boards may impose conditions of their own, but at least all are state entities. Navigating the process can be equally daunting for air quality regulations as the California Air Resources Board is a state agency, though local air boards, with their

own priorities are not. Their goals, however, are to improve measureable benefits for the public good.

The Study Process

The Commission embarked on this study in June 2010 to see what changes could be made in the regulatory process to improve transparency and accountability, consistency and predictability.

In a bipartisan request, Senate Minority Leader Robert Dutton and Assemblymember Felipe Fuentes in July 2010 asked the Commission to focus specifically on how regulatory agencies developed and used economic assessments in developing new rules. A copy of this request is included in Appendix D. The Commission also had been encouraged to take up the topic by the California State Board of Food and Agriculture, which expressed concern that growers and ranchers faced layers of state, federal and local regulations that sometimes conflict.

The conclusions and recommendations in this report are based on written and oral testimony presented in two public hearings and a public advisory committee meeting, all held in Sacramento, as well as extensive interviews and staff research.

The Commission held the first hearing on October 28, 2010, to learn about the landscape of economic analysis in the development of regulations and to hear from regulated groups, including representatives from the building and agriculture industries. The Commission also heard from economists from the City and County of San Francisco and the State of Arizona about their regulatory review practices.

The second hearing, on January 27, 2011, focused on different approaches to economic analysis, the state's regulatory oversight practices and how two agencies used economic analysis in developing proposed regulations. The Commission also heard from an owner of a Fresno transportation firm who had been affected by diesel particulate regulations. Hearing witnesses are listed in Appendix A.

On August 26, 2011, the Commission held an advisory committee meeting to learn more about the concerns and perspectives of non-regulated stakeholders, specifically environmental groups and labor representatives, about the use of economic impact analysis in the development of regulations. Participants in this meeting are listed in Appendix B.

Throughout the study, Commission staff received valuable input through extensive interviews and meetings with experts in economic analysis, the rulemaking process and regulatory review practices at the city, state and federal levels. The process involved interviews with current and former state employees who have been involved in the process both at the rulemaking level and at the review and oversight level. Their input was important and invaluable. The research process also relied on interviews with outside economists, many of them academics, who had participated in California's regulatory process and could provide informed and independent perspectives.

Though the Commission greatly benefited from the contributions of all who shared their expertise, the findings and recommendations in this report are the Commission's own.

Hearing agendas, written testimony submitted electronically for each of the hearings, as well as this report are available online at the Commission's Web site, www.lhc.ca.gov. The Commission hearings are archived on the California Channel, accessible at www.calchannel.com.

EXHIBIT D

3.28.710 - Normal Rate of Contribution - Determination.

A. For non-Tier 2 members: Except as provided under Section 3.28.200.A.1 and 3.28.200.A.2., the normal rate of contribution required of members shall be such that, based on interest and mortality tables and other relevant actuarial data, the total amount of normal contributions which will be required of members under the provisions of this Chapter will be sufficient to pay, when due, three-elevenths (3/11) of the amount of all pensions, allowances and other benefits which are and will become payable under this System on account or because of current service rendered on or after July 1, 1975; provided and excepting, however, that if and when, from time to time, the members' normal rate of contribution is hereafter amended or changed, the new rate shall not include any amount designed to thereafter recover from members or return to members the difference between the amount of normal contributions theretofore actually required to be paid by members and any greater or lesser amount which, because of amendments hereafter made to this System or as a result of experience under this System, said members should have theretofore been required to pay in order to make their normal contributions equal three-elevenths (3/11) of the abovementioned pensions, allowances and other benefits which are or will become payable on account or because of current service rendered on or after July 1, 1975, and before the effective date of the new rate. Notwithstanding the foregoing, members subject to this subsection A shall be responsible for any additional contributions described in Section 3.28.200, to the extent applicable to such member.

B. For Tier 2 members: Except as provided under 3.28.200.B, the normal rate of contribution required of Tier 2 members shall be such that, based on interest and mortality tables and other relevant actuarial data, the total amount of normal contributions which will be required of members under the provisions of this Chapter will be sufficient to pay, when due, half of the amount of all pensions, allowances and other benefits which are and will become payable under this System on account or because of service rendered by Tier 2 members, including any amount designed to recover from members the difference between the amount of normal contributions theretofore actually required to be paid by members and any greater amount which, because of amendments hereafter made to this System or as a result of experience under this System, said members should have theretofore been required to pay in order to make their normal contributions half of the cost of the abovementioned pensions, allowances and other benefits which are or will become payable to such Tier 2 members on or after September 30, 2012.

C. There shall be no offset to normal cost contribution rates in the event Plan funding exceeds one hundred percent (100%). Both the City and employees shall always make the full annual required Plan contributions as calculated by the Retirement Board actuaries which will be in compliance with applicable laws and will ensure the qualified status under the Internal Revenue Code.

(Prior code § 2904.1251; Ords. 29120, 29904, 30017.)

EXHIBIT E

CPI Calculator Information

What is a dollar worth?

The Consumer Price Index (CPI) is a measure of the average change in prices over time in a market basket of goods and services. The Bureau of Labor Statistics releases CPI data monthly.

- Consumer Price Index and Inflation Rates, 1913-
- Consumer Price Index and Inflation Rates (Estimate), 1800-
- CPI calculator
- App information

How the CPI is used to make these calculations

What would an item or service purchased in 2017 be worth in 19?? dollars?

Example:

The CPI is used to calculate how prices have changed over the years. Let's say you have $7 in your pocket to purchase some goods and services today. How much money would you have needed in 1950 to buy the same amount of goods and services?

The CPI for 1950 = 24.1
The CPI for 2017 = 244.73*
Use the following formula to compute the calculation:
1950 Price = 2017 Price x (1950 CPI / 2017 CPI*)
$0.69 = $7.00 x (24.1 / 244.7)

What would an item or service purchased in 19?? be worth in 2017 dollars?

Example:

Let's say your parents told you that in 1950 a movie cost 25 cents. How could you tell if movies have increased in price faster or slower than most goods and services? To convert that price into today's dollars, use the CPI.

The CPI for 1950 = 24.1
The CPI for 2017 = 244.7*
A movie in 1950 = $0.25
Use the following formula to compute the calculation:
2017 Price = 1950 Price x (2017 CPI* / 1950 CPI)
$2.54 = $0.25 x (244.7 / 24.1)

A full-price movie at a Minneapolis theater costs between $7.00 and $11.00. Looks like movies have increased in price faster than most other goods and services.

*An estimate for 2017 is based on the change in the CPI from third quarter 2016 to third quarter 2017.

Latest Content from the Minneapolis Fed

Food-system initiatives promote health and wealth in North Minneapolis
Community Dividend

New Northside market offers fresh food and promising pathways
Community Dividend

U.S. inequality: It's worse than we thought
The Region

Looking ahead for the Twin Ports
fedgazette

Neel Kashkari at Howard University Symposium on Too Big to Fail
President's Speeches

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Regional Economy
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Other Federal Reserve System Sites

Board of Governors
Atlanta
Boston
Chicago
Cleveland
Dallas
Kansas City
New York
Philadelphia
Richmond
San Francisco
St. Louis

EXHIBIT F

California Public Employees' Retirement System
Actuarial Office
P.O. Box 942701
Sacramento, CA 94229-2701
TTY: (916) 795-3240
(888) 225-7377 phone · (916) 795-2744 fax
www.calpers.ca.gov

July 2017

MISCELLANEOUS PLAN OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA (CalPERS ID: 4104962804)
Annual Valuation Report as of June 30, 2016

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2016 actuarial valuation report of your pension plan. Your 2016 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your CalPERS staff actuary, whose signature appears in the "Actuarial Certification" section on page 1, is available to discuss the report with you after August 31, 2017.

Required Contributions

The exhibit below displays the minimum required employer contributions and the Employee PEPRA Rate for Fiscal Year 2018-19 along with estimates of the required contributions for Fiscal Years 2019-20 and 2020-21. Member contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer contributions in this report do not reflect any cost sharing arrangement you may have with your employees.**

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability	Employee PEPRA Rate
2018-19	8.273%	$39,554,600	6.00%
Projected Results			
2019-20	*8.7%*	*$47,539,000*	*TBD*
2020-21	*9.7%*	*$53,336,000*	*TBD*

The actual investment return for Fiscal Year 2016-17 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.375 percent. ***If the actual investment return for Fiscal year 2016-17 differs from 7.375 percent, the actual contribution requirements for the projected years will differ from those shown above.***

Moreover, the projected results for Fiscal Years 2019-20 and 2020-21 also assume that there are no future plan changes, no further changes in assumptions other than those recently approved, and no liability gains or losses. Such changes can have a significant impact on required contributions. Since they cannot be predicted in advance, the projected employer results shown above are estimates. The actual required employer contributions for Fiscal year 2019-20 will be provided in next year's report.

For additional details regarding the assumptions and methods used for these projections please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section.

The required contributions shown above include a Normal Cost component expressed as a percentage of payroll and a payment toward Unfunded Accrued Liability expressed as a dollar amount. Actual contributions for Fiscal Year 2018-19 and all future years will be collected on that basis. For illustrative total contribution requirements expressed as percentages of payroll, please see pages 4 and 5 of the report.

The "Risk Analysis" section of the valuation report on page 21 also contains estimated employer contributions in future years under a variety of investment return scenarios.

Changes since the Prior Year's Valuation

On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations. The minimum employer contributions for Fiscal Year 2018-19 determined in this valuation were calculated using a discount rate of 7.375 percent. The projected employer contributions on Page 5 are calculated assuming that the discount rate will be lowered to 7.25 percent next year and to 7.00 percent the following year as adopted by the Board.

Beginning with Fiscal Year 2017-18 CalPERS began collecting employer contributions toward the plan's unfunded liability as dollar amounts instead of the prior method of a contribution rate. This change addresses potential funding issues that could arise from a declining payroll or reduction in the number of active members in the plan. Funding the unfunded liability as a percentage of payroll could lead to the underfunding of the plans. Due to stakeholder feedback regarding internal needs for total contributions expressed as a percentage of payroll, the reports have been modified to include such results in the contribution projection on page 5. These results are provided for information purposes only. Contributions toward the unfunded liability will continue to be collected as dollar amounts.

The CalPERS Board of Administration adopted a Risk Mitigation Policy which is designed to reduce funding risk over time. This Policy has been temporarily suspended during the period over which the discount rate is being lowered. More details on the Risk Mitigation Policy can be found on our website.

Besides the above noted changes, there may also be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Actuarial Methods and Assumptions." The effects of the changes on the required contributions are included in the "Reconciliation of Required Employer Contributions" section.

We understand that you might have a number of questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after August 31 to contact us with actuarial questions. If you have other questions, you may call the Customer Contact Center at (888)-CalPERS or (**888-225-7377**).

Sincerely,

SCOTT TERANDO
Chief Actuary

ACTUARIAL VALUATION as of June 30, 2016

for the MISCELLANEOUS PLAN of the METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

(CalPERS ID: 4104962804)
(Rate Plan ID: 84)

REQUIRED CONTRIBUTIONS FOR FISCAL YEAR July 1, 2018 – June 30, 2019

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ACTUARIAL CERTIFICATION

To the best of our knowledge, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the MISCELLANEOUS PLAN OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA. This valuation is based on the member and financial data as of June 30, 2016 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

The undersigned is an actuary for CalPERS, a member of the American Academy of Actuaries and the Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

BARBARA J. WARE, FSA, MAAA
Enrolled Actuary
Senior Pension Actuary, CalPERS

HIGHLIGHTS AND EXECUTIVE SUMMARY

- INTRODUCTION
- PURPOSE OF THE REPORT
- REQUIRED CONTRIBUTIONS
- PLAN'S FUNDED STATUS
- PROJECTED EMPLOYER CONTRIBUTIONS
- COST
- CHANGES SINCE THE PRIOR YEAR'S VALUATION
- SUBSEQUENT EVENTS

Introduction

This report presents the results of the June 30, 2016 actuarial valuation of the MISCELLANEOUS PLAN OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for Fiscal Year 2018-19.

Purpose of the Report

The actuarial valuation was prepared by the CalPERS Actuarial Office using data as of June 30, 2016. The purpose of the report is to:

- Set forth the assets and accrued liabilities of this plan as of June 30, 2016;
- Determine the required employer contributions for the fiscal year July 1, 2018 through June 30, 2019;
- Provide actuarial information as of June 30, 2016 to the CalPERS Board of Administration and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement No. 68 for an Agent Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available from CalPERS and details for ordering are available on our website.

The measurements shown in this actuarial valuation may not be applicable for other purposes. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; and changes in plan provisions or applicable law.

California Actuarial Advisory Panel Recommendations

This report includes all the basic disclosure elements as described in the *Model Disclosure Elements for Actuarial Valuation Reports* recommended in 2011 by the California Actuarial Advisory Panel (CAAP), with the exception of including the original base amounts of the various components of the unfunded liability in the Schedule of Amortization Bases shown on page 15.

Additionally, this report includes the following "Enhanced Risk Disclosures" also recommended by the CAAP in the Model Disclosure Elements document:

- A "Deterministic Stress Test," projecting future results under different investment income scenarios
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 6.0 percent, 7.0 percent and 8.0 percent.

Required Contributions

		Fiscal Year 2018-19
Required Employer Contribution		
Employer Normal Cost Rate		**8.273%**
Plus Either		
1) Monthly Employer Dollar UAL Payment	**$**	**3,296,217**
Or		
2) Annual UAL Prepayment Option	**$**	**38,172,043**
Required PEPRA Member Contribution Rate		**6.00%**

The total minimum required employer contribution is the ***sum*** *of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll)* ***plus*** *the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly in dollars).*

Only the UAL portion of the employer contribution can be prepaid ***(which must be received in full no later than July 31).*** *Plan Normal Cost contributions will be made as part of the payroll reporting process. If there is contractual cost sharing or other change, this amount will change.*

§20572 of the Public Employees' Retirement Law assesses interest at an annual rate of 10 percent if a contracting agency fails to remit the required contributions when due.

For additional detail regarding the determination of the required contribution for PEPRA members, see Appendix D. Required member contributions for Classic members can be found in Appendix B.

		Fiscal Year 2017-18		Fiscal Year 2018-19
Normal Cost Contribution as a Percentage of Payroll				
Total Normal Cost		14.781%		15.163%
Employee Contribution[1]		6.928%		6.890%
Employer Normal Cost		7.853%		8.273%
Projected Annual Payroll for Contribution Year	$	216,562,734	$	223,495,119
Estimated Employer Contributions Based On Projected Payroll				
Total Normal Cost	$	32,010,138	$	33,888,565
Employee Contribution[1]		15,003,466		15,398,814
Employer Normal Cost		17,006,672		18,489,751
Unfunded Liability Contribution		32,560,150		39,554,600
% of Projected Payroll (illustrative only)		15.035%		17.698%
Estimated Total Employer Contribution	$	49,566,822	$	58,044,351
% of Projected Payroll (illustrative only)		22.888%		25.971%

[1] For classic members, this is the percentage specified in the Public Employees Retirement Law, net of any reduction from the use of a modified formula or other factors. For PEPRA members, the member contribution rate is based on 50 percent of the normal cost. A development of PEPRA member contribution rates can be found in Appendix D. Employee cost sharing is not shown in this report.

Plan's Funded Status

	June 30, 2015	June 30, 2016
1. Present Value of Projected Benefits	$ 2,253,262,133	$ 2,372,280,758
2. Entry Age Normal Accrued Liability	2,060,838,792	2,166,285,855
3. Market Value of Assets (MVA)	$ 1,556,550,472	$ 1,523,692,793
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	$ 504,288,320	$ 642,593,062
5. Funded Ratio [(3) / (2)]	75.5%	70.3%

This measure of funded status is an assessment of the need for future employer contributions based on the selected actuarial cost method used to fund the plan. The UAL is the present value of future employer contributions for service that has already been earned and is in addition to future normal cost contributions for active members. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next six fiscal years. Projected results reflect the adopted changes to the discount rate described in Appendix A, "Actuarial Methods and Assumptions." The projections also assume that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. The projected normal cost percentages in the projections below do not reflect that the normal cost will decline over time as new employees are hired into PEPRA or other lower cost benefit tiers.

	Required Contribution	Projected Future Employer Contributions (Assumes 7.375% Return for Fiscal Year 2016-17)					
Fiscal Year	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**
Normal Cost %	8.273%	8.7%	9.7%	9.7%	9.7%	9.7%	9.7%
UAL Payment	39,554,600	47,539,000	53,336,000	60,805,000	67,424,000	71,915,000	75,759,000
*Total as a % of Payroll**	*26.0%*	*29.4%*	*32.2%*	*34.6%*	*36.5%*	*37.4%*	*38.1%*
Projected Payroll	*223,495,119*	*230,199,973*	*237,105,972*	*244,219,152*	*251,545,727*	*259,092,099*	*266,864,861*

*Illustrative only and based on the projected payroll shown.

Changes in the UAL due to actuarial gains or losses as well as changes in actuarial assumptions or methods are amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A. This method phases in the impact of unanticipated changes in UAL over a 5-year period and attempts to minimize employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years where there is a large increase in UAL the relatively small amortization payments during the ramp up period could result in a funded ratio that is projected to decrease initially while the contribution impact of the increase in the UAL is phased in.

Due to the adopted changes in the discount rate for the next two valuations in combination with the 5-year phase-in ramp, the increases in the required contributions are expected to continue for seven years from Fiscal Year 2018-19 through Fiscal Year 2024-25.

For projected contributions under alternate investment return scenarios, please see the "Analysis of Future Investment Return Scenarios" in the "Risk Analysis" section.

Cost

Actuarial Cost Estimates in General

What is the cost of the pension plan?

Contributions to fund the pension plan are comprised of two components:

- The Normal Cost, expressed as a percentage of total active payroll.
- The Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount.

For fiscal years prior to FY 2017-18, the Amortizations of UAL component was expressed as percentage of total active payroll. Starting with FY 2017-18, the Amortization of UAL component will be expressed as a dollar amount and will be invoiced on a monthly basis. There will be an option to prepay this amount during July of each fiscal year.

The Normal Cost component will continue to be expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (which includes mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (which includes future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS best estimate of the future experience of the plan and are long term in nature. We recognize that all the assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 7.0 percent over the 20 years ending June 30, 2016, yet individual fiscal year returns have ranged from -24 percent to +21.7 percent. In addition, CalPERS reviews all the actuarial assumptions on an ongoing basis by conducting in depth experience studies every four years.

Changes since the Prior Year's Valuation

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective, even if the valuation date is prior to the effective date of the amendment.

This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" and Appendix B for a summary of the plan provisions used in this valuation. The effect of any mandated benefit changes or plan amendments on the unfunded liability is shown in the "(Gain)/Loss Analysis" and the effect on the employer contribution is shown in the "Reconciliation of Required Employer Contributions." It should be noted that no change in liability or contribution is shown for any plan changes which were already included in the prior year's valuation.

Actuarial Methods and Assumptions

On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations. The minimum employer contributions for Fiscal Year 2018-19 determined in this valuation were calculated using a discount rate of 7.375 percent. The projected employer contributions on Page 5 are calculated assuming that the discount rate will be lowered to 7.25 percent next year and 7.00 percent the following year as adopted by the Board. The decision to reduce the discount rate was primarily based on reduced capital market assumptions provided by external investment consultants and CalPERS investment staff. The specific decision adopted by the Board reflected recommendations from CalPERS staff and additional input from employer and employee stakeholder groups. Based on the investment allocation adopted by the Board and capital market assumptions, the reduced discount rate assumption provides a more realistic assumption for the long term investment return of the fund.

Notwithstanding the Board's decision to phase into a 7.0 percent discount rate, subsequent analysis of the expected investment return of CalPERS assets or changes to the investment allocation may result in a change to this three year discount rate schedule. A comprehensive analysis of all actuarial assumptions and methods including the discount rate will be conducted in 2017.

Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2016. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the required contribution, while investment returns above the assumed rate of return will decrease the actuarial cost of the plan.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2017. Any subsequent changes or actions are not reflected.

ASSETS

- **RECONCILIATION OF THE MARKET VALUE OF ASSETS**
- **ASSET ALLOCATION**
- **CALPERS HISTORY OF INVESTMENT RETURNS**

Reconciliation of the Market Value of Assets

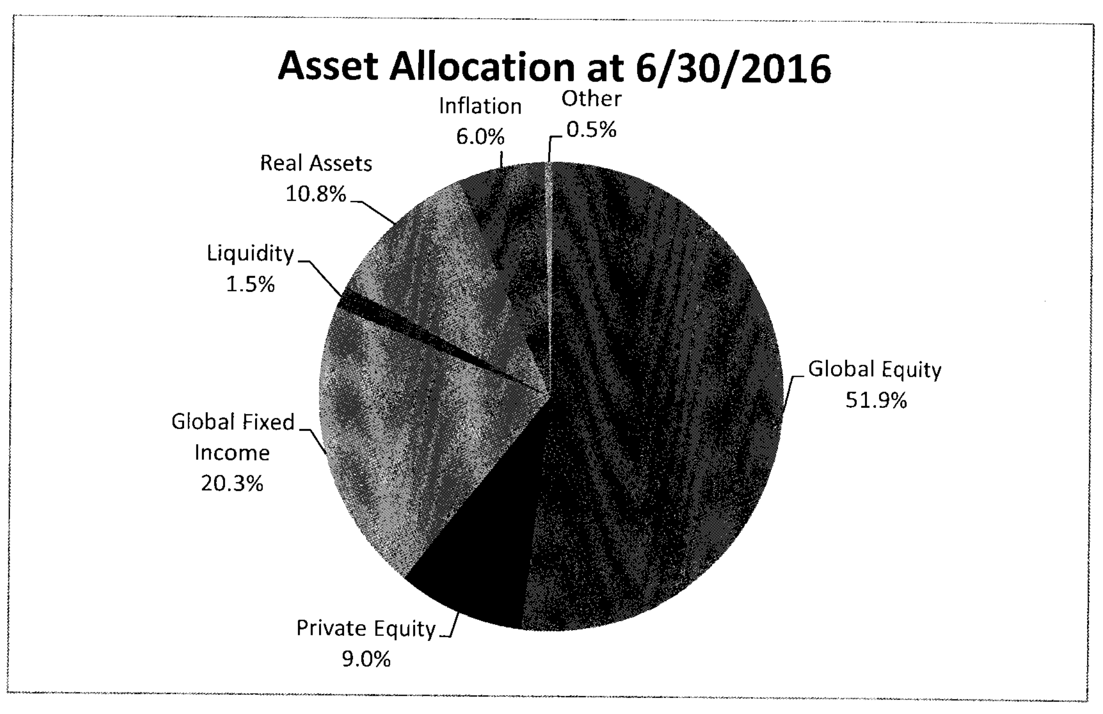
1.	Market Value of Assets as of 6/30/15 including Receivables	$	1,556,550,472
2.	Change in Receivables for Service Buybacks		(625,420)
3.	Employer Contributions		38,396,861
4.	Employee Contributions		14,344,411
5.	Benefit Payments to Retirees and Beneficiaries		(91,667,827)
6.	Refunds		(733,628)
7.	Lump Sum Payments		0
8.	Transfers and Miscellaneous Adjustments		1,164,332
9.	Net Investment Return		6,263,592
10.	Market Value of Assets as of 6/30/16 including Receivables	$	1,523,692,793

Asset Allocation

CalPERS adheres to an Asset Allocation Strategy which establishes asset class allocation policy targets and ranges, and manages those asset class allocations within their policy ranges. CalPERS Investment Belief No. 6 recognizes that strategic asset allocation is the dominant determinant of portfolio risk and return. On February 19, 2014, the CalPERS Board of Administration adopted changes to the current asset allocation as shown in the Policy Target Allocation below expressed as a percentage of total assets.

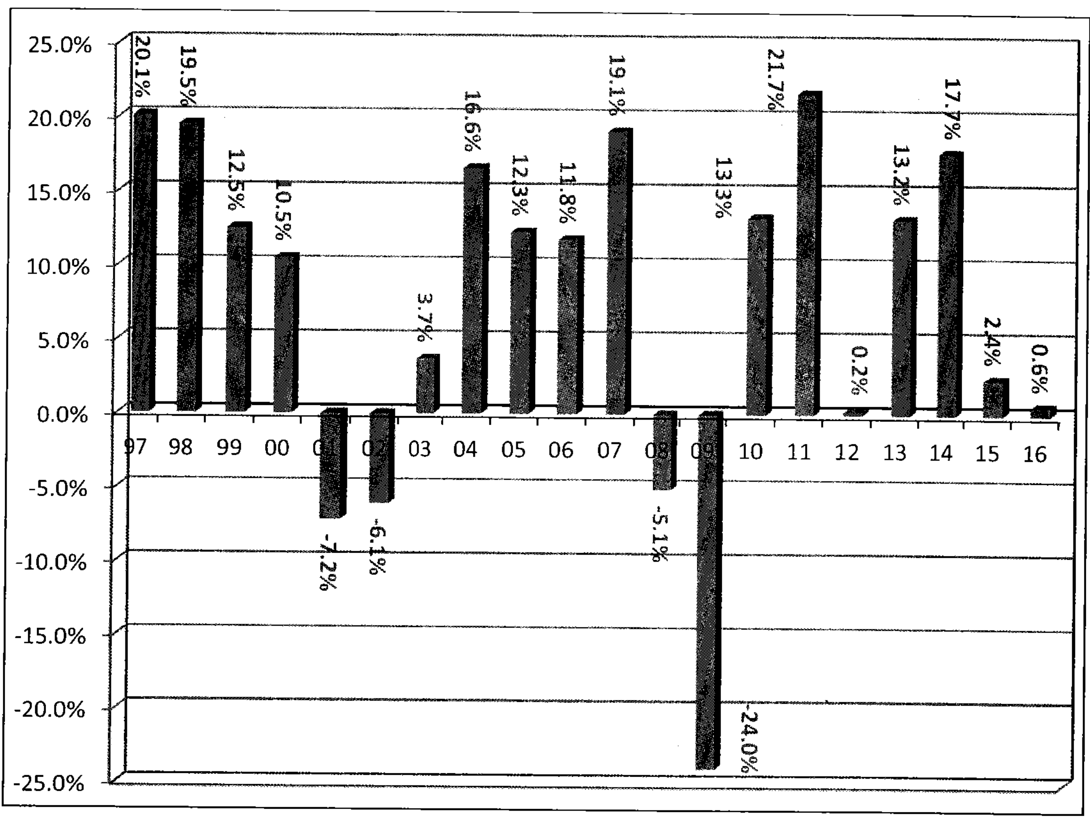
The asset allocation and market value of assets shown below reflect the values of the Public Employees' Retirement Fund (PERF) in its entirety as of June 30, 2016. The assets for METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA MISCELLANEOUS PLAN are part of the PERF and are invested accordingly.

(A) Asset Class	(B) Market Value ($ Billion)	(C) Policy Target Allocation
Public Equity	153.1	51.0%
Private Equity	26.4	10.0%
Global Fixed Income	59.9	20.0%
Liquidity	4.5	1.0%
Real Assets	31.8	12.0%
Inflation Sensitive Assets	17.8	6.0%
Other	1.6	0.0%
Total Fund	**$295.1**	**100.0%**



CalPERS History of Investment Returns

The following is a chart with the 20-year historical annual returns of the Public Employees Retirement Fund for each fiscal year ending on June 30. Beginning in 2002, the figures are reported as gross of fees.



The table below shows historical geometric mean annual returns of the Public Employees Retirement Fund for various time periods ending on June 30, 2016, (figures are reported as gross of fees). The geometric mean rate of return is the average rate per period compounded over multiple periods. It should be recognized that in any given year the rate of return is volatile. The portfolio has an expected volatility of 11.8 percent per year based on the most recent Asset Liability Modelling study. The volatility is a measure of the risk of the portfolio expressed in the standard deviation of the fund's total return distribution, expressed as a percentage. Consequently, when looking at investment returns, it is more instructive to look at returns over longer time horizons.

History of CalPERS Geometric Mean Rates of Return and Volatilities					
	1 year	**5 year**	**10 year**	**20 year**	**30 year**
Geometric Return	0.6%	6.6%	5.0%	7.0%	8.2%
Volatility	–	8.1%	14.0%	11.8%	10.1%

LIABILITIES AND CONTRIBUTIONS

- **DEVELOPMENT OF ACCRUED AND UNFUNDED LIABILITIES**
- **(GAIN) / LOSS ANALYSIS 06/30/15 - 06/30/16**
- **SCHEDULE OF AMORTIZATION BASES**
- **30-YEAR AMORTIZATION SCHEDULES AND ALTERNATIVES**
- **RECONCILIATION OF REQUIRED EMPLOYER CONTRIBUTIONS**
- **EMPLOYER CONTRIBUTION HISTORY**
- **FUNDING HISTORY**

Development of Accrued and Unfunded Liabilities

		June 30, 2015	June 30, 2016
1. Present Value of Projected Benefits			
a) Active Members	$	1,147,558,599	1,188,656,823
b) Transferred Members		25,904,694	25,287,374
c) Terminated Members		23,336,374	24,492,732
d) Members and Beneficiaries Receiving Payments		1,056,462,466	1,133,843,829
e) Total	$	2,253,262,133	2,372,280,758
2. Present Value of Future Employer Normal Costs	$	99,894,041	110,091,418
3. Present Value of Future Employee Contributions	$	92,529,300	95,903,485
4. Entry Age Normal Accrued Liability			
a) Active Members [(1a) - (2) - (3)]	$	955,135,258	982,661,920
b) Transferred Members (1b)		25,904,694	25,287,374
c) Terminated Members (1c)		23,336,374	24,492,732
d) Members and Beneficiaries Receiving Payments (1d)		1,056,462,466	1,133,843,829
e) Total	$	2,060,838,792	2,166,285,855
5. Market Value of Assets (MVA)	$	1,556,550,472	1,523,692,793
6. Unfunded Accrued Liability (UAL) [(4e) - (5)]	$	504,288,320	642,593,062
7. Funded Ratio [(5) / (4e)]		75.5%	70.3%

(Gain)/Loss Analysis 6/30/15 – 6/30/16

To calculate the cost requirements of the plan, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year, actual experience is compared to the expected experience based on the actuarial assumptions. This results in actuarial gains or losses, as shown below.

1. Total (Gain)/Loss for the Year		
a) Unfunded Accrued Liability (UAL) as of 6/30/15	$	504,288,320
b) Expected Payment on the UAL during 2015-16		24,401,837
c) Interest through 6/30/16 [.075 x (1a) - ((1.075)^{½} - 1) x (1b)]		36,923,098
d) Expected UAL before all other changes [(1a) - (1b) + (1c)]		516,809,581
e) Change due to plan changes		0
f) Change due to assumption change		31,213,949
g) Expected UAL after all other changes [(1d) + (1e) + (1f)]		548,023,530
h) Actual UAL as of 6/30/16		642,593,062
i) Total (Gain)/Loss for 2015-16 [(1h) - (1g)]	$	94,569,532
2. Contribution (Gain)/Loss for the Year		
a) Expected Contribution (Employer and Employee)	$	54,433,612
b) Interest on Expected Contributions		2,004,358
c) Actual Contributions		52,741,272
d) Interest on Actual Contributions		1,942,043
e) Expected Contributions with Interest [(2a) + (2b)]		56,437,970
f) Actual Contributions with Interest [(2c) + (2d)]		54,683,315
g) Contribution (Gain)/Loss [(2e) - (2f)]	$	1,754,655
3. Asset (Gain)/Loss for the Year		
a) Market Value of Assets as of 6/30/15	$	1,556,550,472
b) Prior Fiscal Year Receivables		(4,903,336)
c) Current Fiscal Year Receivables		4,277,916
d) Contributions Received		52,741,272
e) Benefits and Refunds Paid		(92,401,455)
f) Transfers and Miscellaneous Adjustments		1,164,332
g) Expected Int. [.075 x (3a + 3b) + ((1.075)^{½} - 1) x ((3d) + (3e) + (3f))]		114,956,038
h) Expected Assets as of 6/30/16 [(3a) + (3b) + (3c) + (3d) + (3e) + (3f) + (3g)]		1,632,385,239
i) Market Value of Assets as of 6/30/16		1,523,692,793
j) Asset (Gain)/Loss [(3h) - (3i)]	$	108,692,446
4. Liability (Gain)/Loss for the Year		
a) Total (Gain)/Loss (1i)	$	94,569,532
b) Contribution (Gain)/Loss (2g)		1,754,655
c) Asset (Gain)/Loss (3j)		108,692,446
d) Liability (Gain)/Loss [(4a) - (4b) - (4c)]	$	(15,877,569)

Schedule of Amortization Bases

There is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2016.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: Fiscal Year 2018-19.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and the need to provide public agencies with their required employer contribution well in advance of the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment on the UAL for a fiscal year is equal to the Expected Employer Contribution for the fiscal year minus the Expected Normal Cost for the year. The Employer Contribution for the first fiscal year is determined by the actuarial valuation two years ago and the contribution for the second year is from the actuarial valuation one year ago. The Normal Cost Rate for each of the two fiscal years is assumed to be the same as the rate determined by the current valuation. All expected dollar amounts are determined by multiplying the rate by the expected payroll for the applicable fiscal year, based on payroll as of the valuation date.

Reason for Base	Date Established	Amortization Period	Balance 6/30/16	Expected Payment 2016-17	Balance 6/30/17	Expected Payment 2017-18	Balance 6/30/18	Scheduled Payment for 2018-19
ASSUMPTION CHANGE	06/30/03	7	$41,892,877	$5,691,714	$39,084,614	$5,862,465	$35,892,306	$5,998,613
METHOD CHANGE	06/30/04	8	$(4,226,951)	$(527,268)	$(3,992,323)	$(543,086)	$(3,724,001)	$(555,433)
ASSUMPTION CHANGE	06/30/09	13	$45,687,398	$4,188,143	$44,717,010	$4,313,787	$43,544,861	$4,401,423
SPECIAL (GAIN)/LOSS	06/30/09	23	$54,239,210	$3,584,910	$54,524,600	$3,692,457	$54,719,594	$3,751,313
SPECIAL (GAIN)/LOSS	06/30/10	24	$18,403,330	$1,190,306	$18,527,158	$1,226,015	$18,623,116	$1,245,069
ASSUMPTION CHANGE	06/30/11	15	$36,671,757	$3,080,839	$36,183,875	$3,173,264	$35,564,239	$3,234,775
SPECIAL (GAIN)/LOSS	06/30/11	25	$11,292,906	$715,724	$11,384,111	$737,196	$11,459,793	$748,366
PAYMENT (GAIN)/LOSS	06/30/12	26	$1,770,443	$110,086	$1,786,940	$113,389	$1,801,231	$115,064
(GAIN)/LOSS	06/30/12	26	$57,603,438	$3,581,794	$58,140,168	$3,689,247	$58,605,137	$3,743,731
(GAIN)/LOSS	06/30/13	27	$228,376,381	$6,239,970	$238,753,163	$9,640,754	$246,371,276	$13,047,952
ASSUMPTION CHANGE	06/30/14	18	$94,212,070	$1,794,522	$99,300,692	$3,696,715	$102,793,512	$5,648,415
(GAIN)/LOSS	06/30/14	28	$(144,547,154)	$(2,033,061)	$(153,100,810)	$(4,188,105)	$(160,052,200)	$(6,372,714)
(GAIN)/LOSS	06/30/15	29	$75,433,874	$(377,031)	$81,387,809	$1,146,052	$86,202,599	$2,323,338
ASSUMPTION CHANGE	06/30/16	20	$31,213,949	$(916,395)	$34,465,564	$(943,887)	$37,985,473	$715,977
(GAIN)/LOSS	06/30/16	30	$94,569,534	$164,838	$101,373,229	$0	$108,849,505	$1,508,711
TOTAL			**$642,593,062**	**$26,489,091**	**$662,535,799**	**$31,616,263**	**$678,636,441**	**$39,554,600**

30-Year Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to CalPERS amortization policy. There has been considerable interest from many agencies in paying off these unfunded accrued liabilities sooner and the possible savings in doing so. As a result, we have provided alternate amortization schedules to help analyze the current amortization schedule and illustrate the advantages of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternate "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. Note that the payments under each alternate scenario increase by 3 percent per year. **The schedules do not reflect the impact of adopted discount rate changes that will become effective beyond June 30, 2016. Therefore, future amortization payments displayed in the Current Amortization Schedule on the following page will not match projected amortization payments shown in connection with Projected Employer Contributions provided elsewhere in this report.**

The Current Amortization Schedule typically contains individual bases that are both positive and negative. Positive bases result from plan changes, assumption changes or plan experience that result in increases to unfunded liability. Negative bases result from plan changes, assumption changes or plan experience that result in decreases to unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years such as:

- A positive total unfunded liability with a negative total payment,
- A negative total unfunded liability with a positive total payment, or
- Total payments that completely amortize the unfunded liability over a very short period of time

In any year where one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over a reasonable period.

The Current Amortization Schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS amortization policy. For purposes of this display, total payments include any negative payments. Therefore, the amount of estimated savings may be understated to the extent that negative payments appear in the current schedule.

30-Year Amortization Schedule and Alternatives

	Current Amortization Schedule*		Alternate Schedules			
			20 Year Amortization		15 Year Amortization	
Date	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2018	678,636,441	39,554,600	678,636,441	50,729,765	678,636,441	61,725,946
6/30/2019	687,698,647	47,340,356	676,118,728	52,251,658	664,724,275	63,577,724
6/30/2020	689,361,440	52,097,017	671,838,319	53,819,207	647,867,239	65,485,056
6/30/2021	686,217,921	57,360,288	665,617,905	55,433,784	627,790,583	67,449,608
6/30/2022	677,388,667	61,585,003	657,265,681	57,096,797	604,197,567	69,473,096
6/30/2023	663,530,525	63,432,552	646,574,234	58,809,701	576,767,790	71,557,289
6/30/2024	646,735,881	65,335,528	633,319,349	60,573,992	545,155,386	73,704,007
6/30/2025	626,730,729	59,918,060	617,258,724	62,391,212	508,987,096	75,915,128
6/30/2026	610,863,883	62,419,206	598,130,591	64,262,948	467,860,190	78,192,581
6/30/2027	591,235,121	64,291,781	575,652,228	66,190,837	421,340,234	80,538,359
6/30/2028	568,218,339	66,220,535	549,518,372	68,176,562	368,958,691	82,954,510
6/30/2029	541,505,460	68,207,151	519,399,497	70,221,858	310,210,348	85,443,145
6/30/2030	510,763,934	70,253,366	484,939,980	72,328,514	244,550,544	88,006,439
6/30/2031	475,634,896	65,897,331	445,756,116	74,498,370	171,392,194	90,646,632
6/30/2032	442,428,898	65,026,338	401,433,997	76,733,321	90,102,597	93,366,031
6/30/2033	407,676,495	59,004,105	351,527,223	79,035,320		
6/30/2034	376,601,457	56,603,946	295,554,448	81,406,380		
6/30/2035	345,721,726	54,006,673	232,996,743	83,848,571		
6/30/2036	315,255,957	51,202,623	163,294,763	86,364,029		
6/30/2037	285,448,949	51,483,232	85,845,696	88,954,949		
6/30/2038	253,152,902	51,734,595				
6/30/2039	218,214,553	53,286,633				
6/30/2040	179,091,250	54,885,231				
6/30/2041	135,426,106	42,690,435				
6/30/2042	101,177,137	39,127,365				
6/30/2043	68,094,429	33,919,799				
6/30/2044	37,968,051	18,402,974				
6/30/2045	21,698,683	10,496,106				
6/30/2046	12,422,695	9,561,457				
6/30/2047	3,431,104	3,555,376				
Totals		**1,498,899,662**		**1,363,127,775**		**1,148,035,551**
Interest Paid		**820,263,221**		**684,491,334**		**469,399,110**
Estimated Savings				**135,771,887**		**350,864,111**

* This schedule does not reflect the impact of adopted discount rate changes that will become effective beyond June 30, 2016. For Projected Employer Contributions, please see Page 5.

Reconciliation of Required Employer Contributions

Normal Cost (% of Payroll)

1. For Period 7/1/17 – 6/30/18	
a) Employer Normal Cost	7.853%
b) Employee Contribution	6.928%
c) Total Normal Cost	14.781%
2. Changes since the prior year annual valuation	
a) Effect of changes in demographics results	(0.053%)
b) Effect of plan changes	0.000%
c) Effect of changes in assumptions	0.435%
d) Net effect of the changes above [sum of (a) through (c)]	0.382%
3. For Period 7/1/18 – 6/30/19	
a) Employer Normal Cost	8.273%
b) Employee Contribution	6.890%
c) Total Normal Cost	15.163%
Employer Normal Cost Change [(3a) – (1a)]	0.420%
Employee Contribution Change [(3b) – (1b)]	(0.038%)

Unfunded Liability Contribution ($)

1. For Period 7/1/17 – 6/30/18	32,560,150
2. Changes since the prior year annual valuation	
a) Effect of (gain)/loss during prior year[1]	1,508,711
b) Effect of plan changes	0
c) Effect of changes in assumptions[2]	715,977
d) Changes to prior year amortization payments[3]	4,769,762
e) Effect of changes due to Fresh Start	0
f) Effect of elimination of amortization base	0
g) Net effect of the changes above [sum of (a) through (f)]	6,994,450
3. For Period 7/1/18 – 6/30/19 [(1)+(2g)]	39,554,600

[1] The unfunded liability contribution for the (gain)/loss during the year prior to the valuation date is 20 percent of the "full" annual requirement due to the 5-year ramp. Increases to this amount that occur during the ramp period will be included in line d) in future years.

[2] The unfunded liability contribution for the change in assumptions is 20 percent of the "full" annual requirement due to the 5-year ramp. Increases to this amount that occur during the ramp period will be included in line d) in future years.

[3] Includes changes due to 5-year ramp, payroll growth assumption, and re-amortization under new discount rate.

The amounts shown for the period 7/1/17 – 6/30/18 may be different if a prepayment of unfunded actuarial liability is made or a plan change became effective after the prior year's actuarial valuation was performed.

Employer Contribution History

The table below provides a recent history of the required employer contributions for the plan, as determined by the annual actuarial valuation. It does not account for prepayments or benefit changes made during a fiscal year.

		Required By Valuation	
Fiscal Year	Employer Normal Cost	Unfunded Rate	Unfunded Liability Payment ($)
2013 - 14	7.614%	8.692%	N/A
2014 - 15	7.551%	10.098%	N/A
2015 - 16	7.830%	11.908%	N/A
2016 - 17	7.841%	12.906%	N/A
2017 - 18	7.853%	N/A	32,560,150
2018 - 19	8.273%	N/A	39,554,600

Funding History

The table below shows the recent history of the actuarial accrued liability, the market value of assets, the funded ratio and the annual covered payroll.

Valuation Date	Accrued Liability	Market Value of Assets (MVA)	Unfunded Liability	Funded Ratio	Annual Covered Payroll
06/30/11	$ 1,674,273,673	$ 1,257,198,566	$ 417,075,107	75.1%	$ 190,711,171
06/30/12	1,730,939,013	1,227,131,908	503,807,105	70.9%	184,657,361
06/30/13	1,804,537,241	1,355,885,365	448,651,876	75.1%	184,561,428
06/30/14	1,983,273,573	1,560,047,879	423,225,694	78.7%	195,830,068
06/30/15	2,060,838,792	1,556,550,472	504,288,320	75.5%	198,185,580
06/30/16	2,166,285,855	1,523,692,793	642,593,062	70.3%	204,529,694

RISK ANALYSIS

- **ANALYSIS OF FUTURE INVESTMENT RETURN SCENARIOS**
- **ANALYSIS OF DISCOUNT RATE SENSITIVITY**
- **VOLATILITY RATIOS**
- **HYPOTHETICAL TERMINATION LIABILITY**

Analysis of Future Investment Return Scenarios

Analysis was performed to determine the effects of various future investment returns on required employer contributions. The projections below provide a range of results based on five investment return scenarios assumed to occur during the next four fiscal years (2016-17, 2017-18, 2018-19 and 2019-20). The projections also assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

Each of the five investment return scenarios assumes a return of 7.375 percent for fiscal year 2016-17. For fiscal years 2017-18, 2018-19, and 2019-20 each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are -3.0 percent, 3.0 percent, 7.0 percent (7.25 percent for 2017-18), 11.0 percent and 17.0 percent.

The alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four year period ending June 30, 2020. Using the expected returns and volatility of the asset classes in which the funds are invested, we produced ten thousand stochastic outcomes for this period. We then selected annual returns that approximate the 5th, 25th, 50th, 75th, and 95th percentiles for these outcomes. For example, of all of the 4-year outcomes generated in the stochastic analysis, approximately 25 percent of them had an average annual return of 3.0 percent or less.

Required contributions outside of this range are also possible. In particular, while it is unlikely that investment returns will average less than -3.0 percent or greater than 17.0 percent over this four year period, the possibility of a single investment return less than -3.0 percent or greater than 17.0 percent in any given year is much greater.

Assumed Annual Return From 2017-18 through 2019-20	**Projected Employer Contributions**			
	2019-20	**2020-21**	**2021-22**	**2022-23**
(3.0%)				
Normal Cost	8.7%	9.7%	9.7%	9.7%
UAL Contribution	$47,539,000	$55,789,000	$68,136,000	$82,096,000
3.0%				
Normal Cost	8.7%	9.7%	9.7%	9.7%
UAL Contribution	$47,539,000	$54,353,000	$63,869,000	$73,640,000
Assumed Discount Rate				
Normal Cost	8.7%	9.7%	9.7%	9.7%
UAL Contribution	$47,539,000	$53,336,000	$60,805,000	$67,424,000
11.0%				
Normal Cost	8.7%	9.7%	9.9%	10.1%
UAL Contribution	$47,539,000	$52,438,000	$57,892,000	$61,455,000
17.0%				
Normal Cost	8.7%	9.7%	10.4%	11.1%
UAL Contribution	$47,539,000	$51,001,000	$53,270,000	$52,032,000

Given the temporary suspension of the Risk Mitigation Policy during the period over which the discount rate assumption is being phased down to 7.0 percent, the projections above were performed without reflection of any possible impact of this Policy for Fiscal Years 2019-20 and 2020-21.

The projected normal cost percentages do not reflect that the normal cost will decline over time as new employees are hired into PEPRA or other lower cost benefit tiers.

Analysis of Discount Rate Sensitivity

Shown below are various valuation results as of June 30, 2016 assuming alternate discount rates. Results are shown using the current discount rate of 7.375 percent as well as alternate discount rates of 6.0 percent, 7.0 percent, and 8.0 percent. The alternate rate of 7.0 percent was selected since the Board has adopted this rate as the final discount rate at the end of the three year phase-in of the reduction in this assumption. The rates of 6.0 percent and 8.0 percent were selected since they illustrate the impact of a 1 percent increase or decrease to the 7.0 percent assumption. This analysis shows the potential plan impacts if the PERF were to realize investment returns of 6.0 percent, 7.0 percent, or 8.0 percent over the long-term.

This type of analysis gives the reader a sense of the long-term risk to required contributions. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

Sensitivity Analysis				
As of June 30, 2016	**Plan's Normal Cost**	**Accrued Liability**	**Unfunded Accrued Liability**	**Funded Status**
7.375% (current discount rate)	15.163%	$2,166,285,855	$642,593,062	70.3%
6.0%	21.192%	$2,561,341,674	$1,037,648,881	59.5%
7.0%	16.571%	$2,264,268,315	$740,575,522	67.3%
8.0%	13.135%	$2,016,983,420	$493,290,627	75.5%

Volatility Ratios

The actuarial calculations supplied in this communication are based on a number of assumptions about long-term demographic and economic behavior. Unless these assumptions (terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise required employer contributions from one year to the next. Therefore, employer contributions will inevitably fluctuate, especially due to the ups and downs of investment returns.

Asset Volatility Ratio (AVR)

Plans that have higher asset-to-payroll ratios experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an asset-to-payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an asset-to-payroll ratio of 4. Shown below is the asset volatility ratio, a measure of the plan's current volatility. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

Liability Volatility Ratio (LVR)

Plans that have higher liability-to-payroll ratios experience more volatile employer contributions (as a percentage of payroll) due to investment return and changes in liability. For example, a plan with a liability-to-payroll ratio of 8 is expected to have twice the contribution volatility of a plan with a liability-to-payroll ratio of 4. The liability volatility ratio is also included in the table below. It should be noted that this ratio indicates a longer-term potential for contribution volatility. The asset volatility ratio, described above, will tend to move closer to the liability volatility ratio as the plan matures. Since the liability volatility ratio is a long-term measure, it is shown below at the current discount rate (7.375 percent) as well as the discount rate the Board has adopted to determine the contribution requirement in the June 30, 2018 actuarial valuation (7.00 percent).

Contribution Volatility		As of June 30, 2016
1. Market Value of Assets without Receivables	$	1,519,414,877
2. Payroll		204,529,694
3. Asset Volatility Ratio (AVR) [(1) / (2)]		7.4
4. Accrued Liability (7.375% discount rate)	$	2,166,285,855
5. Liability Volatility Ratio (LVR) [(4) / (2)]		10.6
6. Accrued Liability (7.00% discount rate)		2,264,268,315
7. Projected Liability Volatility Ratio [(6) / (2)]		11.1

Hypothetical Termination Liability

The hypothetical termination liability is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2016. The plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. For this hypothetical termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees.

A more conservative investment policy and asset allocation strategy was adopted by the CalPERS Board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the PERF and consequently, a lower discount rate assumption. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 2-year period centered around the valuation date.

Market Value of Assets (MVA)	Hypothetical Termination Liability[1,2] @ 1.75%	Funded Status	Unfunded Termination Liability @ 1.75%	Hypothetical Termination Liability[1,2] @ 3.00%	Funded Status	Unfunded Termination Liability @ 3.00%
$1,523,692,793	$3,943,970,307	38.6%	$2,420,277,514	$3,418,782,475	44.6%	$1,895,089,682

[1] The hypothetical liabilities calculated above include a 7 percent mortality contingency load in accordance with Board policy. Other actuarial assumptions can be found in Appendix A.

[2] The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 1.75 percent on June 30, 2016, and was 2.75 percent on January 31, 2017.

In order to terminate the plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. CalPERS advises you to consult with the plan actuary before beginning this process.

PLAN'S MAJOR BENEFIT PROVISIONS

Plan's Major Benefit Options

Shown below is a summary of the major optional benefits for which your agency has contracted for this plan. A description of principal standard and optional plan provisions is in Appendix B of this report.

	Contract Package			
Benefit Provision	Active Misc	Active Misc	Active Misc	Receiving Misc
Benefit Formula	2.0% @ 55	2.0% @ 55	2.0% @ 62	
Social Security Coverage	No	No	No	
Full/Modified	Full	Full	Full	
Employee Contribution Rate	7.00%	7.00%	6.00%	
Final Average Compensation Period	One Year	One Year	Three Year	
Sick Leave Credit	Yes	Yes	Yes	
Non-Industrial Disability	Improved	Improved	Improved	
Industrial Disability	No	No	No	
Pre-Retirement Death Benefits				
Optional Settlement 2W	Yes	Yes	Yes	
1959 Survivor Benefit Level	Level 4	Level 4	Level 4	
Special	No	No	No	
Alternate (firefighters)	No	No	No	
Post-Retirement Death Benefits				
Lump Sum	$500	$500	$500	$500
Survivor Allowance (PRSA)	Yes	Yes	Yes	Yes
COLA	2%	2%	2%	2%

APPENDICES

- APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS
- APPENDIX B – PRINCIPAL PLAN PROVISIONS
- APPENDIX C – PARTICIPANT DATA
- APPENDIX D – DEVELOPMENT OF PEPRA MEMBER CONTRIBUTION RATES
- APPENDIX E – GLOSSARY OF ACTUARIAL TERMS

APPENDIX A

ACTUARIAL METHODS AND ASSUMPTIONS

- ACTUARIAL DATA
- ACTUARIAL METHODS
- ACTUARIAL ASSUMPTIONS
- MISCELLANEOUS

Actuarial Data

As stated in the Actuarial Certification, the data which serves as the basis of this valuation has been obtained from the various CalPERS databases. We have reviewed the valuation data and believe that it is reasonable and appropriate in aggregate. We are unaware of any potential data issues that would have a material effect on the results of this valuation, except that data does not always contain the latest salary information for former members now in reciprocal systems and does not recognize the potential for unusually large salary deviation in certain cases such as elected officials. Therefore, salary information in these cases may not be accurate. These situations are relatively infrequent, however, and when they do occur, they generally do not have a material impact on the required employer contributions.

Actuarial Methods

Actuarial Cost Method

The actuarial cost method used is the Entry Age Normal Cost Method. Under this method, projected benefits are determined for all members and the associated liabilities are spread in a manner that produces level annual cost as a percentage of pay in each year from the member's entry age to their assumed retirement age on the valuation date. The cost allocated to the current fiscal year is called the normal cost.

The actuarial accrued liability for active members is then calculated as the portion of the total cost of the plan allocated to prior years. The actuarial accrued liability for members currently receiving benefits and for members entitled to deferred benefits is equal to the present value of the benefits expected to be paid. No normal costs are applicable for these participants.

Amortization of Unfunded Actuarial Accrued Liability

The excess of the total actuarial accrued liability over the market value of plan assets is called the unfunded actuarial accrued liability (UAL). Funding requirements are determined by adding the normal cost and an amortization payment toward the unfunded liability. The unfunded liability is amortized as a "level percent of pay". Commencing with the June 30, 2013 valuation, all new gains or losses are amortized over a fixed 30-year period with a 5-year ramp up at the beginning and a 5-year ramp down at the end of the amortization period. All changes in liability due to plan amendments (other than golden handshakes) are amortized over a 20-year period with no ramp. Changes in actuarial assumptions or changes in actuarial methodology are amortized over a 20-year period with a 5-year ramp up at the beginning and a 5-year ramp down at the end of the amortization period. Changes in unfunded accrued liability due to a Golden Handshake will be amortized over a period of five years.

The 5-year ramp up means that the payments in the first four years of the amortization period are 20 percent, 40 percent, 60 percent and 80 percent of the "full" payment which begins in year five. The 5-year ramp down means that the reverse is true in the final four years of the amortization period.

Exceptions for Inconsistencies:

An exception to the amortization rules above is used whenever their application results in inconsistencies. In these cases, a "fresh start" approach is used. This means that the current unfunded actuarial liability is projected and amortized over a set number of years. For example, a fresh start is needed in the following situations:

1) When a positive payment would be required on a negative unfunded actuarial liability (or conversely a negative payment on a positive unfunded actuarial liability); or
2) When there are excess assets, rather than an unfunded liability. In this situation, a 30-year fresh start is used.

It should be noted that the actuary may determine that a fresh start is necessary under other circumstances. In all cases of a fresh start, the period is set by the actuary at what is deemed appropriate; however, the period will not be greater than 30 years.

Exceptions for Inactive Plans:

The following exceptions apply to plans classified as Inactive. These plans have no active members and no expectation to have active members in the future.

- Amortization of the unfunded liability is on a "level dollar" basis rather than a "level percent of pay" basis. For amortization layers which utilize a ramp up and ramp down, the "ultimate" payment is constant.
- Actuarial judgment will be used to shorten amortization periods for Inactive plans with existing periods that are deemed too long given the duration of the liability. The specific demographics of the plan will be used to determine if shorter periods may be more appropriate.

Asset Valuation Method

It is the policy of the CalPERS Board of Administration to use professionally accepted amortization methods to eliminate a surplus or an unfunded accrued liability in a manner that maintains benefit security for the members of the System while minimizing substantial variations in required employer contributions. On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and rate smoothing policies. Beginning with the June 30, 2013 valuations that set the employer contribution for Fiscal Year 2015-16, CalPERS employs a policy that amortizes all gains and losses over a fixed 30-year period. The increase or decrease in the rate is then spread directly over a 5-year period. This method is referred to as "direct rate smoothing." CalPERS no longer uses an actuarial value of assets and only uses the market value of assets. The direct rate smoothing method is equivalent to a method using a 5 year asset smoothing period with no actuarial value of asset corridor and a 25-year amortization period for gains and losses.

PEPRA Normal Cost Rate Methodology

Per Government Code Section 7522.30(b) the "normal cost rate" shall mean the annual actuarially determined normal cost for the plan of retirement benefits provided to the new member and shall be established based on actuarial assumptions used to determine the liabilities and costs as part of the annual actuarial valuation. The plan of retirement benefits shall include any elements that would impact the actuarial determination of the normal cost, including, but not limited to, the retirement formula, eligibility and vesting criteria, ancillary benefit provisions, and any automatic cost-of-living adjustments as determined by the public retirement system.

Each non-pooled plan is considered to be stable with a sufficiently large demographic of actives. It is preferable to determine normal cost using a large active population ongoing so that this rate remains relatively stable. The total PEPRA normal cost will be calculated using all active members within a non-pooled plan until the number of members covered under the PEPRA formula meets either:

1. 50 percent of the active population, or
2. 25 percent of the active population and 100 or more PEPRA members

Once either of the conditions above are met for a non-pooled plan, the total PEPRA normal cost will be based on the active PEPRA population in the plan.

Accordingly, the total normal cost will be funded equally between employer and employee based on the demographics of the employees of that employer.

Actuarial Assumptions

In 2014, CalPERS completed a 2-year asset liability management study incorporating actuarial assumptions and strategic asset allocation. On February 19, 2014, the CalPERS Board of Administration adopted relatively modest changes to the asset allocation that reduced the expected volatility of returns. The adopted asset allocation was expected to have a long-term blended return that continued to support a discount rate assumption of 7.5 percent at that time. The Board also approved several changes to the demographic assumptions that more closely aligned with actual experience. The most significant of these is mortality improvement to acknowledge the greater life expectancies we are seeing in our membership and expected continued improvements. These new actuarial assumptions were first used in the June 30, 2014 valuation to set the Fiscal Year 2016-17 contribution for public agency employers.

On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations. The minimum employer contributions for Fiscal Year 2018-19 determined in this valuation were calculated using a discount rate of 7.375 percent. The projected employer contributions on Page 5 are calculated assuming that the discount rate will be lowered to 7.25 percent next year and 7.00 percent the following year as adopted by the Board. The decision to reduce the discount rate was primarily based on reduced capital market assumptions provided by external investment consultants and CalPERS investment staff. The specific decision adopted by the Board reflected recommendations from CalPERS staff and additional input from employer and employee stakeholder groups. Based on the investment allocation adopted by the Board and capital market assumptions, the reduced discount rate schedule provides a more realistic assumption for the long term investment return of the fund.

Notwithstanding the Board's decision to phase into a 7.0 percent discount rate, subsequent analysis of the expected investment return of CalPERS assets or changes to the investment allocation may result in a change to this three year discount rate schedule. A comprehensive analysis of all actuarial assumptions and methods including the discount rate will be conducted in 2017.

For more details and additional rationale for the selection of the actuarial assumptions, please refer to the CalPERS Experience Study and Review of Actuarial Assumptions report from January 2014 that can be found on the CalPERS website under: "Forms and Publications". Click on "View All" and search for Experience Study.

All actuarial assumptions (except the discount rates used for the hypothetical termination liability) represent an estimate of future experience rather than observations of the estimates inherent in market data.

Economic Assumptions

Discount Rate

The prescribed discount rate assumption adopted by the Board on December 21, 2016 is 7.375 percent compounded annually (net of investment and administrative expenses) as of 6/30/2016.

The Board also prescribed that the assumed discount rate will reduce to 7.25 percent compounded annually (net of expenses) as of 6/30/2017, and 7.0 percent compounded annually (net of expenses) as of 6/30/2018. These further changes to the discount rate assumption are not reflected in the determination of required contributions determined in this report for Fiscal Year 2018-19.

Termination Liability Discount Rate

The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date.

The hypothetical termination liabilities in this report are calculated using an observed range of market interest rates. This range is based on the lowest and highest 20-year Treasury bond observed during an approximate 2-year period centered around the valuation date. The 20-year Treasury bond has a similar duration to most plan liabilities and serves as a good proxy for the termination discount rate. The 20-year Treasury yield was 1.75 percent on June 30, 2016.

Salary Growth

Annual increases vary by category, entry age, and duration of service. A sample of assumed increases are shown below.

Public Agency Miscellaneous

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.1220	0.1160	0.1020
1	0.0990	0.0940	0.0830
2	0.0860	0.0810	0.0710
3	0.0770	0.0720	0.0630
4	0.0700	0.0650	0.0570
5	0.0640	0.0600	0.0520
10	0.0460	0.0430	0.0390
15	0.0420	0.0400	0.0360
20	0.0390	0.0380	0.0340
25	0.0370	0.0360	0.0330
30	0.0350	0.0340	0.0320

Public Agency Fire

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.2000	0.1980	0.1680
1	0.1490	0.1460	0.1250
2	0.1200	0.1160	0.0990
3	0.0980	0.0940	0.0810
4	0.0820	0.0780	0.0670
5	0.0690	0.0640	0.0550
10	0.0470	0.0460	0.0420
15	0.0440	0.0420	0.0390
20	0.0420	0.0390	0.0360
25	0.0400	0.0370	0.0340
30	0.0380	0.0360	0.0340

Public Agency Police

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.1500	0.1470	0.1310
1	0.1160	0.1120	0.1010
2	0.0950	0.0920	0.0830
3	0.0810	0.0780	0.0700
4	0.0700	0.0670	0.0600
5	0.0610	0.0580	0.0520
10	0.0450	0.0430	0.0370
15	0.0450	0.0430	0.0370
20	0.0450	0.0430	0.0370
25	0.0450	0.0430	0.0370
30	0.0450	0.0430	0.0370

Salary Growth (continued)

Public Agency County Peace Officers

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.1770	0.1670	0.1500
1	0.1340	0.1260	0.1140
2	0.1080	0.1030	0.0940
3	0.0900	0.0860	0.0790
4	0.0760	0.0730	0.0670
5	0.0650	0.0620	0.0580
10	0.0470	0.0450	0.0410
15	0.0460	0.0450	0.0390
20	0.0460	0.0450	0.0380
25	0.0460	0.0450	0.0380
30	0.0460	0.0440	0.0380

Schools

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.0900	0.0880	0.0820
1	0.0780	0.0750	0.0700
2	0.0700	0.0680	0.0630
3	0.0650	0.0630	0.0580
4	0.0610	0.0590	0.0540
5	0.0580	0.0560	0.0510
10	0.0460	0.0450	0.0410
15	0.0420	0.0410	0.0380
20	0.0390	0.0380	0.0350
25	0.0370	0.0350	0.0330
30	0.0350	0.0330	0.0310

- The Miscellaneous salary scale is used for Local Prosecutors.
- The Police salary scale is used for Other Safety, Local Sheriff, and School Police.

Overall Payroll Growth

3.00 percent compounded annually (used in projecting the payroll over which the unfunded liability is amortized). This assumption is used for all plans with active members.

Inflation

2.75 percent compounded annually.

Non-valued Potential Additional Liabilities

The potential liability loss for a cost-of-living increase exceeding the 2.75 percent inflation assumption, and any potential liability loss from future member service purchases are not reflected in the valuation.

Miscellaneous Loading Factors

Credit for Unused Sick Leave

Total years of service is increased by 1 percent for those plans that have accepted the provision providing Credit for Unused Sick Leave.

Conversion of Employer Paid Member Contributions (EPMC)

Total years of service is increased by the Employee Contribution Rate for those plans with the provision providing for the Conversion of Employer Paid Member Contributions (EPMC) during the final compensation period.

Norris Decision (Best Factors)

Employees hired prior to July 1, 1982 have projected benefit amounts increased in order to reflect the use of "Best Factors" in the calculation of optional benefit forms. This is due to a 1983 Supreme Court decision, known as the Norris decision, which required males and females to be treated equally in the determination of benefit amounts. Consequently, anyone already employed at that time is given the best possible conversion factor when optional benefits are determined. No loading is necessary for employees hired after July 1, 1982.

Termination Liability

The termination liabilities include a 7 percent contingency load. This load is for unforeseen improvements in mortality.

Demographic Assumptions

Pre-Retirement Mortality

Non-industrial death rates vary by age and gender. Industrial death rates vary by age. See sample rates in table below. The non-industrial death rates are used for all plans. The industrial death rates are used for safety plans (except for Local Prosecutor safety members where the corresponding miscellaneous plan does not have the Industrial Death Benefit).

	Non-Industrial Death (Not Job-Related)		Industrial Death (Job-Related)
Age	Male	Female	Male and Female
20	0.00031	0.00020	0.00003
25	0.00040	0.00023	0.00007
30	0.00049	0.00025	0.00010
35	0.00057	0.00035	0.00012
40	0.00075	0.00050	0.00013
45	0.00106	0.00071	0.00014
50	0.00155	0.00100	0.00015
55	0.00228	0.00138	0.00016
60	0.00308	0.00182	0.00017
65	0.00400	0.00257	0.00018
70	0.00524	0.00367	0.00019
75	0.00713	0.00526	0.00020
80	0.00990	0.00814	0.00021

Miscellaneous plans usually have industrial death rates set to zero unless the agency has specifically contracted for industrial death benefits. If so, each non-industrial death rate shown above will be split into two components; 99 percent will become the non-industrial death rate and 1 percent will become the industrial death rate.

Post-Retirement Mortality

Rates vary by age, type of retirement, and gender. See sample rates in table below. These rates are used for all plans.

	Healthy Recipients		Non-Industrially Disabled (Not Job-Related)		Industrially Disabled (Job-Related)	
Age	Male	Female	Male	Female	Male	Female
50	0.00501	0.00466	0.01680	0.01158	0.00501	0.00466
55	0.00599	0.00416	0.01973	0.01149	0.00599	0.00416
60	0.00710	0.00436	0.02289	0.01235	0.00754	0.00518
65	0.00829	0.00588	0.02451	0.01607	0.01122	0.00838
70	0.01305	0.00993	0.02875	0.02211	0.01635	0.01395
75	0.02205	0.01722	0.03990	0.03037	0.02834	0.02319
80	0.03899	0.02902	0.06083	0.04725	0.04899	0.03910
85	0.06969	0.05243	0.09731	0.07762	0.07679	0.06251
90	0.12974	0.09887	0.14804	0.12890	0.12974	0.09887
95	0.22444	0.18489	0.22444	0.21746	0.22444	0.18489
100	0.32536	0.30017	0.32536	0.30017	0.32536	0.30017
105	0.58527	0.56093	0.58527	0.56093	0.58527	0.56093
110	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

The post-retirement mortality rates above include 20 years of projected on-going mortality improvement using Scale BB published by the Society of Actuaries.

Marital Status

For active members, a percentage who are married upon retirement is assumed according to member category as shown in the following table.

Member Category	Percent Married
Miscellaneous Member	85%
Local Police	90%
Local Fire	90%
Other Local Safety	90%
School Police	90%

Age of Spouse

It is assumed that female spouses are 3 years younger than male spouses. This assumption is used for all plans.

Terminated Members

It is assumed that terminated members refund immediately if non-vested. Terminated members who are vested are assumed to follow the same service retirement pattern as active members but with a load to reflect the expected higher rates of retirement, especially at lower ages. The following table shows the load factors that are applied to the service retirement assumption for active members to obtain the service retirement pattern for separated vested members:

Age	Load Factor Miscellaneous	Load Factor Safety
50	190%	310%
51	110%	190%
52	110%	105%
53 through 54	100%	105%
55	100%	140%
56 and above	100% (no change)	100% (no change)

Termination with Refund

Rates vary by entry age and service for miscellaneous plans. Rates vary by service for safety plans. See sample rates in tables below.

Public Agency Miscellaneous

Duration of Service	Entry Age 20	Entry Age 25	Entry Age 30	Entry Age 35	Entry Age 40	Entry Age 45
0	0.1742	0.1674	0.1606	0.1537	0.1468	0.1400
1	0.1545	0.1477	0.1409	0.1339	0.1271	0.1203
2	0.1348	0.1280	0.1212	0.1142	0.1074	0.1006
3	0.1151	0.1083	0.1015	0.0945	0.0877	0.0809
4	0.0954	0.0886	0.0818	0.0748	0.0680	0.0612
5	0.0212	0.0193	0.0174	0.0155	0.0136	0.0116
10	0.0138	0.0121	0.0104	0.0088	0.0071	0.0055
15	0.0060	0.0051	0.0042	0.0032	0.0023	0.0014
20	0.0037	0.0029	0.0021	0.0013	0.0005	0.0001
25	0.0017	0.0011	0.0005	0.0001	0.0001	0.0001
30	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001
35	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Public Agency Safety

Duration of Service	Fire	Police	County Peace Officer
0	0.0710	0.1013	0.0997
1	0.0554	0.0636	0.0782
2	0.0398	0.0271	0.0566
3	0.0242	0.0258	0.0437
4	0.0218	0.0245	0.0414
5	0.0029	0.0086	0.0145
10	0.0009	0.0053	0.0089
15	0.0006	0.0027	0.0045
20	0.0005	0.0017	0.0020
25	0.0003	0.0012	0.0009
30	0.0003	0.0009	0.0006
35	0.0003	0.0009	0.0006

The police termination and refund rates are also used for Public Agency Local Prosecutors, Other Safety, Local Sheriff, and School Police.

Schools

Duration of Service	Entry Age 20	Entry Age 25	Entry Age 30	Entry Age 35	Entry Age 40	Entry Age 45
0	0.1730	0.1627	0.1525	0.1422	0.1319	0.1217
1	0.1585	0.1482	0.1379	0.1277	0.1174	0.1071
2	0.1440	0.1336	0.1234	0.1131	0.1028	0.0926
3	0.1295	0.1192	0.1089	0.0987	0.0884	0.0781
4	0.1149	0.1046	0.0944	0.0841	0.0738	0.0636
5	0.0278	0.0249	0.0221	0.0192	0.0164	0.0135
10	0.0172	0.0147	0.0122	0.0098	0.0074	0.0049
15	0.0115	0.0094	0.0074	0.0053	0.0032	0.0011
20	0.0073	0.0055	0.0038	0.0020	0.0002	0.0002
25	0.0037	0.0023	0.0010	0.0002	0.0002	0.0002
30	0.0015	0.0003	0.0002	0.0002	0.0002	0.0002
35	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002

Termination with Vested Benefits

Rates vary by entry age and service for miscellaneous plans. Rates vary by service for safety plans. See sample rates in tables below.

Public Agency Miscellaneous

Duration of Service	Entry Age 20	Entry Age 25	Entry Age 30	Entry Age 35	Entry Age 40
5	0.0656	0.0597	0.0537	0.0477	0.0418
10	0.0530	0.0466	0.0403	0.0339	0.0000
15	0.0443	0.0373	0.0305	0.0000	0.0000
20	0.0333	0.0261	0.0000	0.0000	0.0000
25	0.0212	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000	0.0000

Public Agency Safety

Duration of Service	Fire	Police	County Peace Officer
5	0.0162	0.0163	0.0265
10	0.0061	0.0126	0.0204
15	0.0058	0.0082	0.0130
20	0.0053	0.0065	0.0074
25	0.0047	0.0058	0.0043
30	0.0045	0.0056	0.0030
35	0.0000	0.0000	0.0000

- When a member is eligible to retire, the termination with vested benefits probability is set to zero.
- After termination with vested benefits, a miscellaneous member is assumed to retire at age 59 and a safety member at age 54.
- The Police termination with vested benefits rates are also used for Public Agency Local Prosecutors, Other Safety, Local Sheriff, and School Police.

Schools

Duration of Service	Entry Age 20	Entry Age 25	Entry Age 30	Entry Age 35	Entry Age 40
5	0.0816	0.0733	0.0649	0.0566	0.0482
10	0.0629	0.0540	0.0450	0.0359	0.0000
15	0.0537	0.0440	0.0344	0.0000	0.0000
20	0.0420	0.0317	0.0000	0.0000	0.0000
25	0.0291	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000	0.0000

Non-Industrial (Not Job-Related) Disability

Rates vary by age and gender for miscellaneous plans. Rates vary by age and category for safety plans.

	Miscellaneous		Fire	Police	County Peace Officer	Schools	
Age	Male	Female	Male and Female	Male and Female	Male and Female	Male	Female
20	0.0002	0.0001	0.0001	0.0001	0.0001	0.0003	0.0003
25	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
30	0.0002	0.0002	0.0001	0.0002	0.0001	0.0001	0.0002
35	0.0005	0.0008	0.0001	0.0003	0.0004	0.0005	0.0004
40	0.0012	0.0016	0.0001	0.0004	0.0007	0.0015	0.0010
45	0.0019	0.0022	0.0002	0.0005	0.0013	0.0030	0.0019
50	0.0021	0.0023	0.0005	0.0008	0.0018	0.0039	0.0024
55	0.0022	0.0018	0.0010	0.0013	0.0010	0.0036	0.0021
60	0.0022	0.0014	0.0015	0.0020	0.0006	0.0031	0.0014

- The miscellaneous non-industrial disability rates are used for Local Prosecutors.
- The police non-industrial disability rates are also used for Other Safety, Local Sheriff, and School Police.

Industrial (Job-Related) Disability

Rates vary by age and category.

Age	Fire	Police	County Peace Officer
20	0.0001	0.0000	0.0004
25	0.0003	0.0017	0.0013
30	0.0007	0.0048	0.0025
35	0.0016	0.0079	0.0037
40	0.0030	0.0110	0.0051
45	0.0053	0.0141	0.0067
50	0.0277	0.0185	0.0092
55	0.0409	0.0479	0.0151
60	0.0583	0.0602	0.0174

- The police industrial disability rates are also used for Local Sheriff and Other Safety.
- Fifty percent of the police industrial disability rates are used for School Police.
- One percent of the police industrial disability rates are used for Local Prosecutors.
- Normally, rates are zero for miscellaneous plans unless the agency has specifically contracted for industrial disability benefits. If so, each miscellaneous non-industrial disability rate will be split into two components: 50 percent will become the non-industrial disability rate and 50 percent will become the industrial disability rate.

Service Retirement

Retirement rates vary by age, service, and formula, except for the safety ½ @ 55 and 2% @ 55 formulas, where retirement rates vary by age only.

Service Retirement

Public Agency Miscellaneous 1.5% @ 65

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.008	0.011	0.013	0.015	0.017	0.019
51	0.007	0.010	0.012	0.013	0.015	0.017
52	0.010	0.014	0.017	0.019	0.021	0.024
53	0.008	0.012	0.015	0.017	0.019	0.022
54	0.012	0.016	0.019	0.022	0.025	0.028
55	0.018	0.025	0.031	0.035	0.038	0.043
56	0.015	0.021	0.025	0.029	0.032	0.036
57	0.020	0.028	0.033	0.038	0.043	0.048
58	0.024	0.033	0.040	0.046	0.052	0.058
59	0.028	0.039	0.048	0.054	0.060	0.067
60	0.049	0.069	0.083	0.094	0.105	0.118
61	0.062	0.087	0.106	0.120	0.133	0.150
62	0.104	0.146	0.177	0.200	0.223	0.251
63	0.099	0.139	0.169	0.191	0.213	0.239
64	0.097	0.136	0.165	0.186	0.209	0.233
65	0.140	0.197	0.240	0.271	0.302	0.339
66	0.092	0.130	0.157	0.177	0.198	0.222
67	0.129	0.181	0.220	0.249	0.277	0.311
68	0.092	0.129	0.156	0.177	0.197	0.221
69	0.092	0.130	0.158	0.178	0.199	0.224
70	0.103	0.144	0.175	0.198	0.221	0.248

Public Agency Miscellaneous 2% @ 60

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.010	0.013	0.015	0.018	0.019	0.021
51	0.009	0.011	0.014	0.016	0.017	0.019
52	0.011	0.014	0.017	0.020	0.022	0.024
53	0.010	0.012	0.015	0.017	0.020	0.021
54	0.015	0.019	0.023	0.025	0.029	0.031
55	0.022	0.029	0.035	0.040	0.045	0.049
56	0.018	0.024	0.028	0.033	0.036	0.040
57	0.024	0.032	0.038	0.043	0.049	0.053
58	0.027	0.036	0.043	0.049	0.055	0.061
59	0.033	0.044	0.054	0.061	0.068	0.076
60	0.056	0.077	0.092	0.105	0.117	0.130
61	0.071	0.097	0.118	0.134	0.149	0.166
62	0.117	0.164	0.198	0.224	0.250	0.280
63	0.122	0.171	0.207	0.234	0.261	0.292
64	0.114	0.159	0.193	0.218	0.244	0.271
65	0.150	0.209	0.255	0.287	0.321	0.358
66	0.114	0.158	0.192	0.217	0.243	0.270
67	0.141	0.196	0.238	0.270	0.301	0.337
68	0.103	0.143	0.174	0.196	0.219	0.245
69	0.109	0.153	0.185	0.209	0.234	0.261
70	0.117	0.162	0.197	0.222	0.248	0.277

Service Retirement

Public Agency Miscellaneous 2% @ 55

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.014	0.018	0.021	0.025	0.027	0.031
51	0.012	0.014	0.017	0.020	0.021	0.025
52	0.013	0.017	0.019	0.023	0.025	0.028
53	0.015	0.020	0.023	0.027	0.030	0.034
54	0.026	0.033	0.038	0.045	0.051	0.059
55	0.048	0.061	0.074	0.088	0.100	0.117
56	0.042	0.053	0.063	0.075	0.085	0.100
57	0.044	0.056	0.067	0.081	0.091	0.107
58	0.049	0.062	0.074	0.089	0.100	0.118
59	0.057	0.072	0.086	0.103	0.118	0.138
60	0.067	0.086	0.103	0.123	0.139	0.164
61	0.081	0.103	0.124	0.148	0.168	0.199
62	0.116	0.147	0.178	0.214	0.243	0.288
63	0.114	0.144	0.174	0.208	0.237	0.281
64	0.108	0.138	0.166	0.199	0.227	0.268
65	0.155	0.197	0.238	0.285	0.325	0.386
66	0.132	0.168	0.203	0.243	0.276	0.328
67	0.122	0.155	0.189	0.225	0.256	0.304
68	0.111	0.141	0.170	0.204	0.232	0.274
69	0.114	0.144	0.174	0.209	0.238	0.282
70	0.130	0.165	0.200	0.240	0.272	0.323

Public Agency Miscellaneous 2.5% @ 55

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.004	0.009	0.019	0.029	0.049	0.094
51	0.004	0.009	0.019	0.029	0.049	0.094
52	0.004	0.009	0.020	0.030	0.050	0.095
53	0.008	0.014	0.025	0.036	0.058	0.104
54	0.024	0.034	0.050	0.066	0.091	0.142
55	0.066	0.088	0.115	0.142	0.179	0.241
56	0.042	0.057	0.078	0.098	0.128	0.184
57	0.041	0.057	0.077	0.097	0.128	0.183
58	0.045	0.061	0.083	0.104	0.136	0.192
59	0.055	0.074	0.098	0.123	0.157	0.216
60	0.066	0.088	0.115	0.142	0.179	0.241
61	0.072	0.095	0.124	0.153	0.191	0.255
62	0.099	0.130	0.166	0.202	0.248	0.319
63	0.092	0.121	0.155	0.189	0.233	0.302
64	0.091	0.119	0.153	0.187	0.231	0.299
65	0.122	0.160	0.202	0.245	0.297	0.374
66	0.138	0.179	0.226	0.272	0.329	0.411
67	0.114	0.149	0.189	0.229	0.279	0.354
68	0.100	0.131	0.168	0.204	0.250	0.322
69	0.114	0.149	0.189	0.229	0.279	0.354
70	0.127	0.165	0.209	0.253	0.306	0.385

Service Retirement

Public Agency Miscellaneous 2.7% @ 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.004	0.009	0.014	0.035	0.055	0.095
51	0.002	0.006	0.011	0.030	0.050	0.090
52	0.006	0.012	0.017	0.038	0.059	0.099
53	0.010	0.017	0.024	0.046	0.068	0.110
54	0.032	0.044	0.057	0.085	0.113	0.160
55	0.076	0.101	0.125	0.165	0.205	0.265
56	0.055	0.074	0.093	0.127	0.160	0.214
57	0.050	0.068	0.086	0.118	0.151	0.204
58	0.055	0.074	0.093	0.127	0.161	0.215
59	0.061	0.082	0.102	0.138	0.174	0.229
60	0.069	0.093	0.116	0.154	0.192	0.250
61	0.086	0.113	0.141	0.183	0.225	0.288
62	0.105	0.138	0.171	0.218	0.266	0.334
63	0.103	0.135	0.167	0.215	0.262	0.329
64	0.109	0.143	0.177	0.226	0.275	0.344
65	0.134	0.174	0.215	0.270	0.326	0.401
66	0.147	0.191	0.235	0.294	0.354	0.433
67	0.121	0.158	0.196	0.248	0.300	0.372
68	0.113	0.147	0.182	0.232	0.282	0.352
69	0.117	0.153	0.189	0.240	0.291	0.362
70	0.141	0.183	0.226	0.283	0.341	0.418

Public Agency Miscellaneous 3% @ 60

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.012	0.018	0.024	0.039	0.040	0.091
51	0.009	0.014	0.019	0.034	0.034	0.084
52	0.014	0.020	0.026	0.043	0.044	0.096
53	0.016	0.023	0.031	0.048	0.050	0.102
54	0.026	0.036	0.045	0.065	0.070	0.125
55	0.043	0.057	0.072	0.096	0.105	0.165
56	0.042	0.056	0.070	0.094	0.103	0.162
57	0.049	0.065	0.082	0.108	0.119	0.180
58	0.057	0.076	0.094	0.122	0.136	0.199
59	0.076	0.100	0.123	0.157	0.175	0.244
60	0.114	0.148	0.182	0.226	0.255	0.334
61	0.095	0.123	0.152	0.190	0.214	0.288
62	0.133	0.172	0.211	0.260	0.294	0.378
63	0.129	0.166	0.204	0.252	0.285	0.368
64	0.143	0.185	0.226	0.278	0.315	0.401
65	0.202	0.260	0.318	0.386	0.439	0.542
66	0.177	0.228	0.279	0.340	0.386	0.482
67	0.151	0.194	0.238	0.292	0.331	0.420
68	0.139	0.179	0.220	0.270	0.306	0.391
69	0.190	0.245	0.299	0.364	0.414	0.513
70	0.140	0.182	0.223	0.274	0.310	0.396

Service Retirement

Public Agency Miscellaneous 2% @ 62

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.000	0.000	0.000	0.000	0.000	0.000
51	0.000	0.000	0.000	0.000	0.000	0.000
52	0.010	0.013	0.016	0.019	0.022	0.024
53	0.013	0.017	0.020	0.024	0.027	0.031
54	0.021	0.027	0.033	0.039	0.045	0.050
55	0.044	0.056	0.068	0.080	0.092	0.104
56	0.030	0.039	0.047	0.055	0.063	0.072
57	0.036	0.046	0.056	0.066	0.076	0.086
58	0.046	0.059	0.072	0.085	0.097	0.110
59	0.058	0.074	0.089	0.105	0.121	0.137
60	0.062	0.078	0.095	0.112	0.129	0.146
61	0.062	0.079	0.096	0.113	0.129	0.146
62	0.097	0.123	0.150	0.176	0.202	0.229
63	0.089	0.113	0.137	0.162	0.186	0.210
64	0.094	0.120	0.145	0.171	0.197	0.222
65	0.129	0.164	0.199	0.234	0.269	0.304
66	0.105	0.133	0.162	0.190	0.219	0.247
67	0.105	0.133	0.162	0.190	0.219	0.247
68	0.105	0.133	0.162	0.190	0.219	0.247
69	0.105	0.133	0.162	0.190	0.219	0.247
70	0.125	0.160	0.194	0.228	0.262	0.296

Service Retirement

Public Agency Fire ½ @ 55 and 2% @ 55

Age	Rate	Age	Rate
50	0.0159	56	0.1108
51	0.0000	57	0.0000
52	0.0344	58	0.0950
53	0.0199	59	0.0441
54	0.0413	60	1.00000
55	0.0751		

Public Agency Police ½ @ 55 and 2% @ 55

Age	Rate	Age	Rate
50	0.0255	56	0.0692
51	0.0000	57	0.0511
52	0.0164	58	0.0724
53	0.0272	59	0.0704
54	0.0095	60	1.0000
55	0.1667		

Service Retirement

Public Agency Police 2% @ 50

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.005	0.005	0.005	0.005	0.017	0.089
51	0.005	0.005	0.005	0.005	0.017	0.087
52	0.018	0.018	0.018	0.018	0.042	0.132
53	0.044	0.044	0.044	0.044	0.090	0.217
54	0.065	0.065	0.065	0.065	0.126	0.283
55	0.086	0.086	0.086	0.086	0.166	0.354
56	0.067	0.067	0.067	0.067	0.130	0.289
57	0.066	0.066	0.066	0.066	0.129	0.288
58	0.066	0.066	0.066	0.066	0.129	0.288
59	0.139	0.139	0.139	0.139	0.176	0.312
60	0.123	0.123	0.123	0.123	0.153	0.278
61	0.110	0.110	0.110	0.110	0.138	0.256
62	0.130	0.130	0.130	0.130	0.162	0.291
63	0.130	0.130	0.130	0.130	0.162	0.291
64	0.130	0.130	0.130	0.130	0.162	0.291
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Service Retirement

Public Agency Fire 2% @ 50

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.009	0.009	0.009	0.009	0.013	0.020
51	0.013	0.013	0.013	0.013	0.020	0.029
52	0.018	0.018	0.018	0.018	0.028	0.042
53	0.052	0.052	0.052	0.052	0.079	0.119
54	0.067	0.067	0.067	0.067	0.103	0.154
55	0.089	0.089	0.089	0.089	0.136	0.204
56	0.083	0.083	0.083	0.083	0.127	0.190
57	0.082	0.082	0.082	0.082	0.126	0.189
58	0.088	0.088	0.088	0.088	0.136	0.204
59	0.074	0.074	0.074	0.074	0.113	0.170
60	0.100	0.100	0.100	0.100	0.154	0.230
61	0.072	0.072	0.072	0.072	0.110	0.165
62	0.099	0.099	0.099	0.099	0.152	0.228
63	0.114	0.114	0.114	0.114	0.175	0.262
64	0.114	0.114	0.114	0.114	0.175	0.262
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement

Public Agency Police 3% @ 55

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.004	0.004	0.004	0.004	0.015	0.086
51	0.014	0.014	0.014	0.014	0.034	0.114
52	0.026	0.026	0.026	0.026	0.060	0.154
53	0.038	0.038	0.038	0.038	0.083	0.188
54	0.071	0.071	0.071	0.071	0.151	0.292
55	0.061	0.061	0.061	0.061	0.131	0.261
56	0.072	0.072	0.072	0.072	0.153	0.295
57	0.065	0.065	0.065	0.065	0.140	0.273
58	0.066	0.066	0.066	0.066	0.142	0.277
59	0.118	0.118	0.118	0.118	0.247	0.437
60	0.065	0.065	0.065	0.065	0.138	0.272
61	0.084	0.084	0.084	0.084	0.178	0.332
62	0.108	0.108	0.108	0.108	0.226	0.405
63	0.084	0.084	0.084	0.084	0.178	0.332
64	0.084	0.084	0.084	0.084	0.178	0.332
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Service Retirement

Public Agency Fire 3% @ 55

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.001	0.001	0.001	0.006	0.016	0.069
51	0.002	0.002	0.002	0.006	0.018	0.071
52	0.012	0.012	0.012	0.021	0.040	0.098
53	0.032	0.032	0.032	0.049	0.085	0.149
54	0.057	0.057	0.057	0.087	0.144	0.217
55	0.073	0.073	0.073	0.109	0.179	0.259
56	0.064	0.064	0.064	0.097	0.161	0.238
57	0.063	0.063	0.063	0.095	0.157	0.233
58	0.065	0.065	0.065	0.099	0.163	0.241
59	0.088	0.088	0.088	0.131	0.213	0.299
60	0.105	0.105	0.105	0.155	0.251	0.344
61	0.118	0.118	0.118	0.175	0.282	0.380
62	0.087	0.087	0.087	0.128	0.210	0.295
63	0.067	0.067	0.067	0.100	0.165	0.243
64	0.067	0.067	0.067	0.100	0.165	0.243
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement

Public Agency Police 3% @ 50

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.050	0.050	0.050	0.099	0.240	0.314
51	0.034	0.034	0.034	0.072	0.198	0.260
52	0.033	0.033	0.033	0.071	0.198	0.259
53	0.039	0.039	0.039	0.080	0.212	0.277
54	0.045	0.045	0.045	0.092	0.229	0.300
55	0.052	0.052	0.052	0.105	0.248	0.323
56	0.042	0.042	0.042	0.087	0.221	0.289
57	0.043	0.043	0.043	0.088	0.223	0.292
58	0.054	0.054	0.054	0.109	0.255	0.333
59	0.054	0.054	0.054	0.108	0.253	0.330
60	0.060	0.060	0.060	0.121	0.272	0.355
61	0.048	0.048	0.048	0.098	0.238	0.311
62	0.061	0.061	0.061	0.122	0.274	0.357
63	0.057	0.057	0.057	0.115	0.263	0.343
64	0.069	0.069	0.069	0.137	0.296	0.385
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Service Retirement

Public Agency Fire 3% @ 50

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.020	0.020	0.020	0.040	0.130	0.192
51	0.008	0.008	0.008	0.023	0.107	0.164
52	0.023	0.023	0.023	0.043	0.136	0.198
53	0.023	0.023	0.023	0.043	0.135	0.198
54	0.027	0.027	0.027	0.048	0.143	0.207
55	0.043	0.043	0.043	0.070	0.174	0.244
56	0.053	0.053	0.053	0.085	0.196	0.269
57	0.054	0.054	0.054	0.086	0.197	0.271
58	0.052	0.052	0.052	0.084	0.193	0.268
59	0.075	0.075	0.075	0.116	0.239	0.321
60	0.065	0.065	0.065	0.102	0.219	0.298
61	0.076	0.076	0.076	0.117	0.241	0.324
62	0.068	0.068	0.068	0.106	0.224	0.304
63	0.027	0.027	0.027	0.049	0.143	0.208
64	0.094	0.094	0.094	0.143	0.277	0.366
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement

Public Agency Police 2% @ 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.011	0.011	0.011	0.011	0.020	0.036
51	0.009	0.009	0.009	0.009	0.016	0.028
52	0.018	0.018	0.018	0.018	0.034	0.060
53	0.037	0.037	0.037	0.037	0.067	0.119
54	0.049	0.049	0.049	0.049	0.089	0.159
55	0.063	0.063	0.063	0.063	0.115	0.205
56	0.045	0.045	0.045	0.045	0.082	0.146
57	0.064	0.064	0.064	0.064	0.117	0.209
58	0.047	0.047	0.047	0.047	0.086	0.154
59	0.105	0.105	0.105	0.105	0.130	0.191
60	0.105	0.105	0.105	0.105	0.129	0.188
61	0.105	0.105	0.105	0.105	0.129	0.188
62	0.105	0.105	0.105	0.105	0.129	0.188
63	0.105	0.105	0.105	0.105	0.129	0.188
64	0.105	0.105	0.105	0.105	0.129	0.188
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Service Retirement

Public Agency Fire 2% @ 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.005	0.005	0.005	0.005	0.008	0.012
51	0.006	0.006	0.006	0.006	0.009	0.013
52	0.012	0.012	0.012	0.012	0.019	0.028
53	0.033	0.033	0.033	0.033	0.050	0.075
54	0.045	0.045	0.045	0.045	0.069	0.103
55	0.061	0.061	0.061	0.061	0.094	0.140
56	0.055	0.055	0.055	0.055	0.084	0.126
57	0.081	0.081	0.081	0.081	0.125	0.187
58	0.059	0.059	0.059	0.059	0.091	0.137
59	0.055	0.055	0.055	0.055	0.084	0.126
60	0.085	0.085	0.085	0.085	0.131	0.196
61	0.085	0.085	0.085	0.085	0.131	0.196
62	0.085	0.085	0.085	0.085	0.131	0.196
63	0.085	0.085	0.085	0.085	0.131	0.196
64	0.085	0.085	0.085	0.085	0.131	0.196
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement

Public Agency Police 2.5% @ 57

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.014	0.014	0.014	0.014	0.025	0.045
51	0.012	0.012	0.012	0.012	0.021	0.038
52	0.025	0.025	0.025	0.025	0.046	0.081
53	0.047	0.047	0.047	0.047	0.086	0.154
54	0.063	0.063	0.063	0.063	0.115	0.205
55	0.076	0.076	0.076	0.076	0.140	0.249
56	0.054	0.054	0.054	0.054	0.099	0.177
57	0.071	0.071	0.071	0.071	0.130	0.232
58	0.057	0.057	0.057	0.057	0.103	0.184
59	0.126	0.126	0.126	0.126	0.156	0.229
60	0.126	0.126	0.126	0.126	0.155	0.226
61	0.126	0.126	0.126	0.126	0.155	0.226
62	0.126	0.126	0.126	0.126	0.155	0.226
63	0.126	0.126	0.126	0.126	0.155	0.226
64	0.126	0.126	0.126	0.126	0.155	0.226
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Service Retirement

Public Agency Fire 2.5% @ 57

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.007	0.007	0.007	0.007	0.010	0.015
51	0.008	0.008	0.008	0.008	0.012	0.018
52	0.016	0.016	0.016	0.016	0.025	0.038
53	0.042	0.042	0.042	0.042	0.064	0.096
54	0.057	0.057	0.057	0.057	0.088	0.132
55	0.074	0.074	0.074	0.074	0.114	0.170
56	0.066	0.066	0.066	0.066	0.102	0.153
57	0.090	0.090	0.090	0.090	0.139	0.208
58	0.071	0.071	0.071	0.071	0.110	0.164
59	0.066	0.066	0.066	0.066	0.101	0.151
60	0.102	0.102	0.102	0.102	0.157	0.235
61	0.102	0.102	0.102	0.102	0.157	0.236
62	0.102	0.102	0.102	0.102	0.157	0.236
63	0.102	0.102	0.102	0.102	0.157	0.236
64	0.102	0.102	0.102	0.102	0.157	0.236
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement

Public Agency Police 2.7% @ 57

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.0138	0.0138	0.0138	0.0138	0.0253	0.0451
51	0.0123	0.0123	0.0123	0.0123	0.0226	0.0402
52	0.0249	0.0249	0.0249	0.0249	0.0456	0.0812
53	0.0497	0.0497	0.0497	0.0497	0.0909	0.1621
54	0.0662	0.0662	0.0662	0.0662	0.1211	0.2160
55	0.0854	0.0854	0.0854	0.0854	0.1563	0.2785
56	0.0606	0.0606	0.0606	0.0606	0.1108	0.1975
57	0.0711	0.0711	0.0711	0.0711	0.1300	0.2318
58	0.0628	0.0628	0.0628	0.0628	0.1149	0.2049
59	0.1396	0.1396	0.1396	0.1396	0.1735	0.2544
60	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
61	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
62	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
63	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
64	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
65	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

- These rates also apply to Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Service Retirement

Public Agency Fire 2.7% @ 57

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.0065	0.0065	0.0065	0.0065	0.0101	0.0151
51	0.0081	0.0081	0.0081	0.0081	0.0125	0.0187
52	0.0164	0.0164	0.0164	0.0164	0.0254	0.0380
53	0.0442	0.0442	0.0442	0.0442	0.0680	0.1018
54	0.0606	0.0606	0.0606	0.0606	0.0934	0.1397
55	0.0825	0.0825	0.0825	0.0825	0.1269	0.1900
56	0.0740	0.0740	0.0740	0.0740	0.1140	0.1706
57	0.0901	0.0901	0.0901	0.0901	0.1387	0.2077
58	0.0790	0.0790	0.0790	0.0790	0.1217	0.1821
59	0.0729	0.0729	0.0729	0.0729	0.1123	0.1681
60	0.1135	0.1135	0.1135	0.1135	0.1747	0.2615
61	0.1136	0.1136	0.1136	0.1136	0.1749	0.2618
62	0.1136	0.1136	0.1136	0.1136	0.1749	0.2618
63	0.1136	0.1136	0.1136	0.1136	0.1749	0.2618
64	0.1136	0.1136	0.1136	0.1136	0.1749	0.2618
65	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Service Retirement

Schools 2% @ 55

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.005	0.009	0.013	0.015	0.016	0.018
51	0.005	0.010	0.014	0.017	0.019	0.021
52	0.006	0.012	0.017	0.020	0.022	0.025
53	0.007	0.014	0.019	0.023	0.026	0.029
54	0.012	0.024	0.033	0.039	0.044	0.049
55	0.024	0.048	0.067	0.079	0.088	0.099
56	0.020	0.039	0.055	0.065	0.072	0.081
57	0.021	0.042	0.059	0.070	0.078	0.087
58	0.025	0.050	0.070	0.083	0.092	0.103
59	0.029	0.057	0.080	0.095	0.105	0.118
60	0.037	0.073	0.102	0.121	0.134	0.150
61	0.046	0.090	0.126	0.149	0.166	0.186
62	0.076	0.151	0.212	0.250	0.278	0.311
63	0.069	0.136	0.191	0.225	0.251	0.281
64	0.067	0.133	0.185	0.219	0.244	0.273
65	0.091	0.180	0.251	0.297	0.331	0.370
66	0.072	0.143	0.200	0.237	0.264	0.295
67	0.067	0.132	0.185	0.218	0.243	0.272
68	0.060	0.118	0.165	0.195	0.217	0.243
69	0.067	0.133	0.187	0.220	0.246	0.275
70	0.066	0.131	0.183	0.216	0.241	0.270

Miscellaneous

Internal Revenue Code Section 415

The limitations on benefits imposed by Internal Revenue Code Section 415 are taken into account in this valuation. Each year the impact of any changes in this limitation since the prior valuation is included and amortized as part of the actuarial gain or loss base. This results in lower contributions for those employers contributing to the Replacement Benefit Fund and protects CalPERS from prefunding expected benefits in excess of limits imposed by federal tax law.

Internal Revenue Code Section 401(a)(17)

The limitations on compensation imposed by Internal Revenue Code Section 401(a)(17) are taken into account in this valuation. Each year, the impact of any changes in the compensation limitation since the prior valuation is included and amortized as part of the actuarial gain or loss base. The compensation limit for classic members for the 2016 calendar year is $265,000.

APPENDIX B

PRINCIPAL PLAN PROVISIONS

The following is a description of the principal plan provisions used in calculating costs and liabilities. We have indicated whether a plan provision is standard or optional. Standard benefits are applicable to all members while optional benefits vary among employers. Optional benefits that apply to a single period of time, such as Golden Handshakes, have not been included. Many of the statements in this summary are general in nature, and are intended to provide an easily understood summary of the Public Employees' Retirement Law. The law itself governs in all situations.

Service Retirement

Eligibility

A classic CalPERS member or PEPRA Safety member becomes eligible for Service Retirement upon attainment of age 50 with at least 5 years of credited service (total service across all CalPERS employers, and with certain other retirement systems with which CalPERS has reciprocity agreements). For employees hired into a plan with the 1.5 percent at 65 formula, eligibility for service retirement is age 55 with at least 5 years of service. PEPRA miscellaneous members become eligible for service retirement upon attainment of age 52 with at least 5 years of service.

Benefit

The service retirement benefit is a monthly allowance equal to the product of the *benefit factor*, *years of service*, and *final compensation.*

- The *benefit factor* depends on the benefit formula specified in your agency's contract. The table below shows the factors for each of the available formulas. Factors vary by the member's age at retirement. Listed are the factors for retirement at whole year ages:

Miscellaneous Plan Formulas

Retirement Age	1.5% at 65	2% at 60	2% at 55	2.5% at 55	2.7% at 55	3% at 60	PEPRA 2% at 62
50	0.5000%	1.092%	1.426%	2.000%	2.000%	2.000%	N/A
51	0.5667%	1.156%	1.522%	2.100%	2.140%	2.100%	N/A
52	0.6334%	1.224%	1.628%	2.200%	2.280%	2.200%	1.000%
53	0.7000%	1.296%	1.742%	2.300%	2.420%	2.300%	1.100%
54	0.7667%	1.376%	1.866%	2.400%	2.560%	2.400%	1.200%
55	0.8334%	1.460%	2.000%	2.500%	2.700%	2.500%	1.300%
56	0.9000%	1.552%	2.052%	2.500%	2.700%	2.600%	1.400%
57	0.9667%	1.650%	2.104%	2.500%	2.700%	2.700%	1.500%
58	1.0334%	1.758%	2.156%	2.500%	2.700%	2.800%	1.600%
59	1.1000%	1.874%	2.210%	2.500%	2.700%	2.900%	1.700%
60	1.1667%	2.000%	2.262%	2.500%	2.700%	3.000%	1.800%
61	1.2334%	2.134%	2.314%	2.500%	2.700%	3.000%	1.900%
62	1.3000%	2.272%	2.366%	2.500%	2.700%	3.000%	2.000%
63	1.3667%	2.418%	2.418%	2.500%	2.700%	3.000%	2.100%
64	1.4334%	2.418%	2.418%	2.500%	2.700%	3.000%	2.200%
65	1.5000%	2.418%	2.418%	2.500%	2.700%	3.000%	2.300%
66	1.5000%	2.418%	2.418%	2.500%	2.700%	3.000%	2.400%
67 & up	1.5000%	2.418%	2.418%	2.500%	2.700%	3.000%	2.500%

Safety Plan Formulas

Retirement Age	½ at 55 *	2% at 55	2% at 50	3% at 55	3% at 50
50	1.783%	1.426%	2.000%	2.400%	3.000%
51	1.903%	1.522%	2.140%	2.520%	3.000%
52	2.035%	1.628%	2.280%	2.640%	3.000%
53	2.178%	1.742%	2.420%	2.760%	3.000%
54	2.333%	1.866%	2.560%	2.880%	3.000%
55 & Up	2.500%	2.000%	2.700%	3.000%	3.000%

* For this formula, the benefit factor also varies by entry age. The factors shown are for members with an entry age of 35 or greater. If entry age is less than 35, then the age 55 benefit factor is 50 percent divided by the difference between age 55 and entry age. The benefit factor for ages prior to age 55 is the same proportion of the age 55 benefit factor as in the above table.

PEPRA Safety Plan Formulas

Retirement Age	2% at 57	2.5% at 57	2.7% at 57
50	1.426%	2.000%	2.000%
51	1.508%	2.071%	2.100%
52	1.590%	2.143%	2.200%
53	1.672%	2.214%	2.300%
54	1.754%	2.286%	2.400%
55	1.836%	2.357%	2.500%
56	1.918%	2.429%	2.600%
57 & Up	2.000%	2.500%	2.700%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance. An agency may contract for an optional benefit where any unused sick leave accumulated at the time of retirement will be converted to credited service at a rate of 0.004 years of service for each day of sick leave.

- The *final compensation* is the monthly average of the member's highest 36 or 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). The standard benefit is 36 months. Employers had the option of providing a final compensation equal to the highest 12 consecutive months for classic plans only. Final compensation must be defined by the highest 36 consecutive months' pay under the 1.5% at 65 formula. PEPRA members have a cap on the annual salary that can be used to calculate final compensation for all new members based on the Social Security contribution and benefit base. For employees that participate in Social Security this cap is $118,775 for 2016 and for those employees that do not participate in Social Security the cap for 2016 is $142,530. Adjustments to the caps are permitted annually based on changes to the CPI for all urban consumers.

- Employees must be covered by Social Security with the 1.5% at 65 formula. Social Security is optional for all other benefit formulas. For employees covered by Social Security, the modified formula is the standard benefit. Under this type of formula, the final compensation is offset by $133.33 (or by one third if the final compensation is less than $400). Employers may contract for the full benefit with Social Security that will eliminate the offset applicable to the final compensation. For employees not covered by Social Security, the full benefit is paid with

no offsets. Auxiliary organizations of the CSUC system may elect reduced contribution rates, in which case the offset is $317 if members are not covered by Social Security or $513 if members are covered by Social Security.

- The miscellaneous and PEPRA safety service retirement benefit is not capped. The classic Safety service retirement benefit is capped at 90 percent of final compensation.

Vested Deferred Retirement

Eligibility for Deferred Status

A CalPERS member becomes eligible for a deferred vested retirement benefit when he or she leaves employment, keeps his or her contribution account balance on deposit with CalPERS, **and** has earned at least 5 years of credited service (total service across all CalPERS employers, and with certain other retirement systems with which CalPERS has reciprocity agreements).

Eligibility to Start Receiving Benefits

The CalPERS classic members and PEPRA safety members become eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for deferred status and upon attainment of age 50 (55 for employees hired into a 1.5% @ 65 plan). PEPRA miscellaneous members become eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for deferred status and upon attainment of age 52.

Benefit

The vested deferred retirement benefit is the same as the service retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

Non-Industrial (Non-Job Related) Disability Retirement

Eligibility

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all CalPERS employers, and with certain other retirement systems with which CalPERS has reciprocity agreements). There is no special age requirement. *Disabled* means the member is unable to perform his or her job because of an illness or injury, which is expected to be permanent or to last indefinitely. The illness or injury does not have to be job related. A CalPERS member must be actively employed by any CalPERS employer at the time of disability in order to be eligible for this benefit.

Standard Benefit

The standard Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.8 percent of final compensation, multiplied by *service*, which is determined as follows:

- *Service* is CalPERS credited service, for members with less than 10 years of service or greater than 18.518 years of service; or

- *Service* is CalPERS credited service plus the additional number of years that the member would have worked until age 60, for members with at least 10 years but not more than 18.518 years of service. The maximum benefit in this case is 33 1/3 percent of final compensation.

Improved Benefit

Employers have the option of providing the improved Non-Industrial Disability Retirement benefit. This benefit provides a monthly allowance equal to 30 percent of final compensation for the first 5 years of service, plus 1 percent for each additional year of service to a maximum of 50 percent of final compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

Industrial (Job Related) Disability Retirement

All safety members have this benefit. For miscellaneous members, employers have the option of providing this benefit. An employer may choose to provide the increased benefit option or the improved benefit option.

Eligibility

An employee is eligible for Industrial Disability Retirement if he or she becomes disabled while working, where disabled means the member is unable to perform the duties of the job because of a work-related illness or injury, which is expected to be permanent or to last indefinitely. A CalPERS member who has left active employment within this group is not eligible for this benefit, except to the extent described below.

Standard Benefit

The standard Industrial Disability Retirement benefit is a monthly allowance equal to 50 percent of final compensation.

Increased Benefit (75 percent of Final Compensation)

The increased Industrial Disability Retirement benefit is a monthly allowance equal to 75 percent final compensation for total disability.

Improved Benefit (50 percent to 90 percent of Final Compensation)

The improved Industrial Disability Retirement benefit is a monthly allowance equal to the Workman's Compensation Appeals Board permanent disability rate percentage (if 50 percent or greater, with a maximum of 90 percent) times the final compensation.

For a CalPERS member not actively employed in this group who became disabled while employed by some other CalPERS employer, the benefit is a return of accumulated member contributions with respect to employment in this group. With the standard or increased benefit, a member may also choose to receive the annuitization of the accumulated member contributions.

If a member is eligible for service retirement and if the service retirement benefit is more than the industrial disability retirement benefit, the member may choose to receive the larger benefit.

Post-Retirement Death Benefit

Standard Lump Sum Payment

Upon the death of a retiree, a one-time lump sum payment of $500 will be made to the retiree's designated survivor(s), or to the retiree's estate.

Improved Lump Sum Payment

Employers have the option of providing an improved lump sum death benefit of $600, $2,000, $3,000, $4,000 or $5,000.

Form of Payment for Retirement Allowance

Standard Form of Payment

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is alive. The retiree may choose to provide for a portion of his or her allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in his or her retirement allowance. Such reduction takes into account the amount to be provided to the beneficiary and the probable duration of payments (based on the ages of the member and beneficiary) made subsequent to the member's death.

Improved Form of Payment (Post-Retirement Survivor Allowance)

Employers have the option to contract for the post-retirement survivor allowance.

For retirement allowances with respect to service subject to the modified formula, 25 percent of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, without a reduction in the retiree's allowance. For retirement allowances with respect to service subject to the full or supplemental formula, 50 percent of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, without a reduction in the retiree's allowance. This additional benefit is referred to as post-retirement survivor allowance (PRSA) or simply as survivor continuance.

In other words, 25 percent or 50 percent of the allowance, the continuance portion, is paid to the retiree for as long as he or she is alive, and that same amount is continued to the retiree's spouse (or if no eligible spouse, to unmarried child(ren) until they attain age 18; or, if no eligible child(ren), to a qualifying dependent parent) for the rest of his or her lifetime. This benefit will not be discontinued in the event the spouse remarries.

The remaining 75 percent or 50 percent of the retirement allowance, which may be referred to as the option portion of the benefit, is paid to the retiree as an annuity for as long as he or she is alive. Or, the retiree may choose to provide for some of this option portion to be paid to any designated beneficiary after the retiree's death. Benefit options applicable to the option portion are the same as those offered with the standard form. The reduction is calculated in the same manner but is applied only to the option portion.

Pre-Retirement Death Benefits

Basic Death Benefit

This is a standard benefit.

Eligibility

An employee's beneficiary (or estate) may receive the basic death benefit if the member dies while actively employed. A CalPERS member must be actively employed with the CalPERS employer providing this benefit to be eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit may choose to receive that death benefit instead of this basic death benefit.

Benefit

The basic death benefit is a lump sum in the amount of the member's accumulated contributions, where interest is currently credited at 7.5 percent per year, plus a lump sum in the amount of one month's salary for each completed year of current service, up to a maximum of six months' salary. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

1957 Survivor Benefit

This is a standard benefit.

Eligibility

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50 for classic and safety PEPRA members and age 52 for miscellaneous PEPRA members, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other retirement systems with which CalPERS has reciprocity agreements). A CalPERS member must be actively employed with the CalPERS employer providing this benefit to be eligible for this benefit. An eligible survivor means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried child(ren) under age 18. A member's survivor who is eligible for any other pre-retirement death benefit may choose to receive that death benefit instead of this 1957 Survivor benefit.

Benefit

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified service retirement benefit that the member would have been entitled to receive if the member had retired on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to dependent child(ren), the benefit will be discontinued upon death or attainment of age 18, unless the child(ren) is disabled. The total amount paid will be at least equal to the basic death benefit.

Optional Settlement 2W Death Benefit

This is an optional benefit.

Eligibility

An employee's *eligible survivor* may receive the Optional Settlement 2W Death benefit if the member dies while actively employed, has attained at least age 50 for classic and safety PEPRA members and age 52 for miscellaneous PEPRA members, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other retirement systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death. A member's survivor who is eligible for any other pre-retirement death benefit may choose to receive that death benefit instead of this Optional Settlement 2W Death benefit.

Benefit

The Optional Settlement 2W Death benefit is a monthly allowance equal to the service retirement benefit that the member would have received had the member retired on the date of his or her death and elected Optional Settlement 2W. (A retiree who elects Optional Settlement 2W receives an allowance that has been reduced so that it will continue to be paid after his or her death to a surviving beneficiary.) The allowance is payable as long as the surviving spouse lives, at which time it is continued to any unmarried child(ren) under age 18, if applicable. The total amount paid will be at least equal to the basic death benefit.

Special Death Benefit

This is a standard benefit for safety members. An employer may elect to provide this benefit for miscellaneous members.

Eligibility

An employee's *eligible survivor(s)* may receive the special death benefit if the member dies while actively employed and the death is job-related. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried child(ren) under age 22. An eligible survivor who chooses to receive this benefit will not receive any other death benefit.

Benefit

The special death benefit is a monthly allowance equal to 50 percent of final compensation, and will be increased whenever the compensation paid to active employees is increased but ceasing to increase when the member would have attained age 50. The allowance is payable to the surviving spouse until death at which time the allowance is continued to any unmarried child(ren) under age 22. There is a guarantee that the total amount paid will at least equal the basic death benefit.

If the member's death is the result of an accident or injury caused by external violence or physical force incurred in the performance of the member's duty, and there are *eligible* surviving child(ren) (*eligible* means unmarried child(ren) under age 22) in addition to an eligible spouse, then an **additional monthly allowance** is paid equal to the following:

- if 1 eligible child: 12.5 percent of final compensation
- if 2 eligible children: 20.0 percent of final compensation
- if 3 or more eligible children: 25.0 percent of final compensation

Alternate Death Benefit for Local Fire Members

This is an optional benefit available only to local fire members.

Eligibility

An employee's *eligible survivor(s)* may receive the alternate death benefit in lieu of the basic death benefit or the 1957 Survivor benefit if the member dies while actively employed and has at least 20 years of total CalPERS service. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried child(ren) under age 18.

Benefit

The Alternate Death benefit is a monthly allowance equal to the service retirement benefit that the member would have received had the member retired on the date of his or her death and elected Optional Settlement 2W. (A retiree who elects Optional Settlement 2W receives an allowance that has been reduced so that it will continue to be paid after his or her death to a surviving beneficiary.) If the member has not yet attained age 50, the benefit is equal to that which would be payable if the member had retired at age 50, based on service credited at the time of death. The allowance is payable as long as the surviving spouse lives, at which time it is continued to any unmarried child(ren) under age 18, if applicable. The total amount paid will be at least equal to the basic death benefit.

Cost-of-Living Adjustments (COLA)

Standard Benefit

Retirement and survivor allowances are adjusted each year in May for cost of living, beginning the second calendar year after the year of retirement. The standard cost-of-living adjustment (COLA) is 2 percent. Annual adjustments are calculated by first determining the lesser of 1) 2 percent compounded from the end of the year of retirement or 2) actual rate of inflation. The resulting increase is divided by the total increase provided in prior years. For any particular year, the COLA adjustment may be less than 2 percent (when the rate of inflation is low), may be greater than the rate of inflation (when the rate of inflation is low after several years of high inflation) or may even be greater than 2 percent (when inflation is high after several years of low inflation).

Improved Benefit

Employers have the option of providing a COLA of 3 percent, 4 percent, or 5 percent, determined in the same manner as described above for the standard 2 percent COLA. An improved COLA is not available with the 1.5% at 65 formula.

Purchasing Power Protection Allowance (PPPA)

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 80 percent of the initial allowance at retirement adjusted for inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan.

Employee Contributions

Each employee contributes toward his or her retirement based upon the retirement formula. The standard employee contribution is as described below.

- The percent contributed below the monthly compensation breakpoint is 0 percent.
- The monthly compensation breakpoint is $0 for full and supplemental formula members and $133.33 for employees covered by the modified formula.
- The percent contributed above the monthly compensation breakpoint depends upon the benefit formula, as shown in the table below.

Benefit Formula	Percent Contributed above the Breakpoint
Miscellaneous, 1.5% at 65	2%
Miscellaneous, 2% at 60	7%
Miscellaneous, 2% at 55	7%
Miscellaneous, 2.5% at 55	8%
Miscellaneous, 2.7% at 55	8%
Miscellaneous, 3% at 60	8%
Miscellaneous, 2% at 62	50% of the Total Normal Cost
Miscellaneous, 1.5% at 65	50% of the Total Normal Cost
Safety, 1/2 at 55	Varies by entry age
Safety, 2% at 55	7%
Safety, 2% at 50	9%
Safety, 3% at 55	9%
Safety, 3% at 50	9%
Safety, 2% at 57	50% of the Total Normal Cost
Safety, 2.5% at 57	50% of the Total Normal Cost
Safety, 2.7% at 57	50% of the Total Normal Cost

The employer may choose to "pick-up" these contributions for classic members (Employer Paid Member Contributions or EPMC). EPMC is prohibited for new PEPRA members.

An employer may also include Employee Cost Sharing in the contract, where employees agree to share the cost of the employer contribution. These contributions are paid in addition to the member contribution.

Auxiliary organizations of the CSUC system may elect reduced contribution rates, in which case the offset is $317 and the contribution rate is 6 percent if members are not covered by Social Security. If members are covered by Social Security, the offset is $513 and the contribution rate is 5 percent.

Refund of Employee Contributions

If the member's service with the employer ends, and if the member does not satisfy the eligibility conditions for any of the retirement benefits above, the member may elect to receive a refund of his or her employee contributions, which are credited with 6 percent interest compounded annually.

1959 Survivor Benefit

This is a pre-retirement death benefit available only to members not covered by Social Security. Any agency joining CalPERS subsequent to 1993 is required to provide this benefit if the members are not covered by Social Security. The benefit is optional for agencies joining CalPERS prior to 1994. Levels 1, 2 and 3 are now closed. Any new agency or any agency wishing to add this benefit or increase the current level may only choose the 4th or Indexed Level.

This benefit is not included in the results presented in this valuation. More information on this benefit is available on the CalPERS website at www.calpers.ca.gov.

APPENDIX C

PARTICIPANT DATA

- SUMMARY OF VALUATION DATA
- ACTIVE MEMBERS
- TRANSFERRED AND TERMINATED MEMBERS
- RETIRED MEMBERS AND BENEFICIARIES

Summary of Valuation Data

	June 30, 2015	June 30, 2016
1. **Active Members**		
a) Counts	1,767	1,782
b) Average Attained Age	49.88	49.49
c) Average Entry Age to Rate Plan	33.07	33.19
d) Average Years of Service	16.81	16.30
e) Average Annual Covered Pay	$ 112,159	$ 114,775
f) Annual Covered Payroll	198,185,580	204,529,694
g) Projected Annual Payroll for Contribution Year	216,562,734	223,495,119
h) Present Value of Future Payroll	1,341,176,199	1,400,832,034
2. **Transferred Members**		
a) Counts	198	190
b) Average Attained Age	51.17	51.62
c) Average Years of Service	4.59	4.55
d) Average Annual Covered Pay	$ 101,941	$ 105,102
3. **Terminated Members**		
a) Counts	780	759
b) Average Attained Age	50.84	51.06
c) Average Years of Service	3.07	3.04
d) Average Annual Covered Pay	$ 49,172	$ 50,024
4. **Retired Members and Beneficiaries**		
a) Counts	1,976	2,040
b) Average Attained Age	71.07	71.19
c) Average Annual Benefits	$ 44,905	$ 46,428
5. **Active to Retired Ratio** [(1a) / (4a)]	0.89	0.87

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

Average Annual Benefits represents benefit amounts payable by this plan only. Some members may have service with another agency and would therefore have a larger total benefit than would be included as part of the average shown here.

Active Members

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

Distribution of Active Members by Age and Service

	Years of Service at Valuation Date						
Attained Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-25**	**25+**	**Total**
15-24	19	0	0	0	0	0	19
25-29	65	9	0	0	0	0	74
30-34	83	36	11	2	0	0	132
35-39	80	40	28	12	3	0	163
40-44	54	49	34	17	21	4	179
45-49	43	43	40	29	37	42	234
50-54	31	28	45	49	64	121	338
55-59	23	30	35	34	51	181	354
60-64	8	12	27	20	33	110	210
65 and over	2	2	8	9	26	32	79
All Ages	**408**	**249**	**228**	**172**	**235**	**490**	**1,782**

Distribution of Average Annual Salaries by Age and Service

	Years of Service at Valuation Date						
Attained Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-25**	**25+**	**Average**
15-24	$69,470	$0	$0	$0	$0	$0	$69,470
25-29	62,254	84,064	0	0	0	0	64,907
30-34	72,638	97,221	107,349	97,095	0	0	82,606
35-39	85,112	100,945	108,195	106,313	112,852	0	95,034
40-44	93,073	105,491	112,706	114,021	128,240	105,626	106,597
45-49	90,568	108,329	118,297	130,340	127,908	137,729	117,870
50-54	99,489	121,399	120,543	131,473	135,908	134,499	128,173
55-59	103,139	102,874	107,916	130,301	130,234	138,971	128,422
60-64	123,639	104,430	120,814	113,035	129,481	133,557	127,281
65 and over	115,315	181,765	142,887	140,428	113,842	121,122	124,518
All Ages	**$82,845**	**$105,316**	**$115,705**	**$125,495**	**$129,094**	**$135,107**	**$114,775**

Transferred and Terminated Members

Distribution of Transfers to Other CalPERS Plans by Age, Service, and average Salary

Attained Age	Years of Service at Valuation Date							
	0-4	5-9	10-14	15-19	20-25	25+	Total	Average Salary
15-24	0	0	0	0	0	0	0	$0
25-29	0	0	0	0	0	0	0	0
30-34	5	1	0	0	0	0	6	89,077
35-39	10	1	0	0	0	0	11	86,193
40-44	18	3	0	0	0	0	21	97,019
45-49	28	10	3	3	2	0	46	118,741
50-54	26	8	3	4	0	0	41	96,368
55-59	21	8	5	2	0	0	36	110,142
60-64	16	3	0	2	2	0	23	109,970
65 and over	6	0	0	0	0	0	6	90,312
All Ages	**130**	**34**	**11**	**11**	**4**	**0**	**190**	**105,102**

Distribution of Terminated Participants with Funds on Deposit by Age, Service, and average Salary

Attained Age	Years of Service at Valuation Date							
	0-4	5-9	10-14	15-19	20-25	25+	Total	Average Salary
15-24	0	0	0	0	0	0	0	$0
25-29	6	0	0	0	0	0	6	59,596
30-34	18	2	0	0	0	0	20	58,575
35-39	54	2	2	0	0	0	58	36,743
40-44	116	12	0	0	0	0	128	39,175
45-49	102	26	7	0	1	1	137	53,422
50-54	90	30	14	6	2	1	143	55,694
55-59	87	22	7	1	0	0	117	57,103
60-64	84	10	5	1	0	0	100	49,289
65 and over	49	1	0	0	0	0	50	48,005
All Ages	**606**	**105**	**35**	**8**	**3**	**2**	**759**	**50,024**

Retired Members and Beneficiaries

Distribution of Retirees and Beneficiaries by Age and Retirement Type*

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Total
Under 30	0	0	0	0	0	3	3
30-34	0	0	0	0	0	1	1
35-39	0	0	0	0	0	2	2
40-44	0	1	0	0	0	1	2
45-49	0	3	0	0	0	4	7
50-54	23	6	0	2	0	8	39
55-59	146	20	0	3	0	10	179
60-64	285	27	2	7	0	23	344
65-69	366	17	0	2	0	41	426
70-74	296	22	0	3	0	49	370
75-79	193	19	3	1	0	47	263
80-84	137	10	0	0	0	49	196
85 and Over	104	3	0	3	0	98	208
All Ages	**1550**	**128**	**5**	**21**	**0**	**336**	**2,040**

Distribution of Average Annual Disbursements to Retirees and Beneficiaries by Age and Retirement Type*

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Average
Under 30	$0	$0	$0	$0	$0	$7,511	$7,511
30-34	0	0	0	0	0	17,262	17,262
35-39	0	0	0	0	0	35,141	35,141
40-44	0	28,198	0	0	0	15,457	21,828
45-49	0	42,503	0	0	0	22,003	30,789
50-54	36,351	30,327	0	26,798	0	12,558	30,054
55-59	52,587	29,662	0	25,161	0	23,733	47,954
60-64	56,803	28,268	646	47,840	0	48,397	53,493
65-69	55,033	27,812	0	33,384	0	34,400	51,859
70-74	52,799	32,641	0	50,513	0	38,208	49,650
75-79	45,998	29,353	1,782	6,738	0	41,812	43,393
80-84	43,469	23,755	0	0	0	30,514	39,224
85 and Over	38,880	23,009	0	8,037	0	25,380	31,846
All Ages	**$51,193**	**$29,292**	**$1,327**	**$33,958**	**$0**	**$32,425**	**$46,428**

Retired Members and Beneficiaries (continued)

Distribution of Retirees and Beneficiaries by Years Retired and Retirement Type*

Years Retired	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Total
Under 5 Yrs	460	9	1	5	0	112	587
5-9	349	14	0	1	0	86	450
10-14	282	27	1	4	0	65	379
15-19	223	33	0	5	0	28	289
20-24	156	23	2	4	0	27	212
25-29	57	14	1	0	0	12	84
30 and Over	23	8	0	2	0	6	39
All Years	**1550**	**128**	**5**	**21**	**0**	**336**	**2,040**

Distribution of Average Annual Disbursements to Retirees and Beneficiaries by Years Retired and Retirement Type*

Years Retired	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Average
Under 5 Yrs	$60,590	$29,542	$3,251	$48,461	$0	$37,497	$55,506
5-9	52,453	35,181	0	25,106	0	31,872	47,922
10-14	50,681	29,305	502	32,497	0	33,394	45,869
15-19	45,365	27,349	0	34,412	0	28,380	41,473
20-24	39,492	33,487	1,048	33,475	0	26,376	36,694
25-29	38,838	27,239	789	0	0	16,791	33,302
30 and Over	16,919	18,203	0	4,880	0	12,509	15,887
All Years	**$51,193**	**$29,292**	**$1,327**	**$33,958**	**$0**	**$32,425**	**$46,428**

* Counts of members do not include alternate payees receiving benefits while the member is still working. Therefore, the total counts may not match information on page 25 of the report. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

APPENDIX D

DEVELOPMENT OF PEPRA MEMBER CONTRIBUTION RATES

Development of PEPRA Members Contribution Rates

The table below shows the determination of the Member contribution rates based on 50 percent of the Total Normal Cost for each respective plan on June 30, 2016.

Assembly Bill (AB) 340 created PEPRA that implemented new benefit formulas and a final compensation period as well as new contribution requirements for new employees. In accordance with Section Code 7522.30(b), "new members ... shall have an initial contribution rate of at least 50 percent of the normal cost rate." The normal cost for the plan is dependent on the benefit levels, actuarial assumptions and demographics of the plan particularly the entry age into the plan. Should the total normal cost of the plan change by one percent or more from the base total normal cost established for the plan, the new member rate shall be 50 percent of the new normal cost rounded to the nearest quarter percent.

		Basis for Current Rate		Rates Effective July 1, 2018			
Rate Plan Identifier	**Plan**	**Total Normal Cost**	**Member Rate**	**Total Normal Cost**	**Change**	**Change Needed**	**Member Rate**
26046	Miscellaneous PEPRA	11.817%	6.000%	12.087%	0.270%	No	6.000%

For a description of the methods used to determine the Total Normal Cost for this purpose, please see the "PEPRA Normal Cost Rate Methodology" section in Appendix A.

APPENDIX E

GLOSSARY OF ACTUARIAL TERMS

Glossary of Actuarial Terms

Accrued Liability *(also called Actuarial Accrued Liability or Entry Age Normal Accrued Liability)*
The total dollars needed as of the valuation date to fund all benefits earned in the past for *current* members.

Actuarial Assumptions
Assumptions made about certain events that will affect pension costs. Assumptions generally can be broken down into two categories: demographic and economic. Demographic assumptions include such things as mortality, disability and retirement rates. Economic assumptions include discount rate, salary growth and inflation.

Actuarial Methods
Procedures employed by actuaries to achieve certain funding goals of a pension plan. Actuarial methods include funding method, setting the length of time to fund the Accrued Liability and determining the Value of Assets.

Actuarial Valuation
The determination, as of a valuation date of the Normal Cost, Accrued liability, and related actuarial present values for a pension plan. These valuations are performed annually or when an employer is contemplating a change to their plan provisions.

Amortization Bases
Separate payment schedules for different portions of the Unfunded Liability. The total Unfunded Liability of a Risk Pool or non-pooled plan can be segregated by "cause," creating "bases" and each such base will be separately amortized and paid for over a specific period of time. However, all bases are amortized using investment and payroll assumptions from the current valuation. This can be likened to a home having a first mortgage of 24 years remaining payments and a second mortgage that has 10 years remaining payments. Each base or each mortgage note has its own terms (payment period, principal, etc.)

Generally, in an actuarial valuation, the separate bases consist of changes in unfunded liability due to contract amendments, actuarial assumption changes, actuarial methodology changes, and/or gains and losses. Payment periods are determined by Board policy and vary based on the cause of the change.

Amortization Period
The number of years required to pay off an Amortization Base.

Classic Member (under PEPRA)
A classic member is a member who joined CalPERS prior to January, 1, 2013 and who is not defined as a new member under PEPRA. (See definition of new member below)

Discount Rate Assumption
The actuarial assumption that was called "investment return" in earlier CalPERS reports or "actuarial interest rate" in Section 20014 of the California Public Employees' Retirement Law (PERL).

Entry Age
The earliest age at which a plan member begins to accrue benefits under a defined benefit pension plan. In most cases, this is the age of the member on their date of hire.

Entry Age Normal Cost Method
An actuarial cost method designed to fund a member's total plan benefit over the course of his or her career. This method is designed to yield a rate expressed as a level percentage of payroll.
(The assumed retirement age less the entry age is the amount of time required to fund a member's total benefit. Generally, the older a member on the date of hire, the greater the entry age normal cost. This is mainly because there is less time to earn investment income to fund the future benefits.)

Fresh Start

A Fresh Start is when multiple amortization bases are collapsed to one base and amortized together over a new funding period.

Funded Status

A measure of how well funded, or how "on track" a plan or risk pool is with respect to assets versus accrued liabilities. A ratio greater than 100 percent means the plan or risk pool has more assets than liabilities and a ratio less than 100 percent means liabilities are greater than assets.

GASB 68

Statement No. 68 of the Governmental Accounting Standards Board. The accounting standard governing a state or local governmental employer's accounting and financial reporting for pensions. GASB 68 replaces GASB 27 effective the first fiscal year beginning after June 15, 2014.

New Member (under PEPRA)

A new member includes an individual who becomes a member of a public retirement system for the first time on or after January 1, 2013, and who was not a member of another public retirement system prior to that date, and who is not subject to reciprocity with another public retirement system.

Normal Cost

The annual cost of service accrual for the upcoming fiscal year for active employees. The normal cost should be viewed as the long term contribution rate.

Pension Actuary

A business professional that is authorized by the Society of Actuaries, and the American Academy of Actuaries to perform the calculations necessary to properly fund a pension plan.

PEPRA

The California Public Employees' Pension Reform Act of 2013

Prepayment Contribution

A payment made by the employer to reduce or eliminate the year's required employer contribution.

Present Value of Benefits (PVB)

The total dollars needed as of the valuation date to fund all benefits earned in the past or expected to be earned in the future for *current* members.

Unfunded Accrued Liability (UAL)

When a plan or pool's Value of Assets is less than its Accrued Liability, the difference is the plan or pool's Unfunded Accrued Liability (or unfunded liability). If the unfunded liability is positive, the plan or pool will have to pay contributions exceeding the Normal Cost.

EXHIBIT G

CalPERS
Economic Impacts
in California

July 2017

This study reflects impacts for the fiscal year ending June 30, 2016.

CalPERS benefit payments and investments in California are **essential** to the state's economy.

Benefit Impacts

$20.9 billion

Economic activity generated from CalPERS benefit payments

page 7

$850.6 million

Taxes generated from CalPERS benefit payments

page 7

$1.7 billion

Supports California's real estate sector

page 8

Investment Impacts

$27.3 billion

CalPERS investments in California

page 13

145,000

California jobs supported by CalPERS real estate portfolio

page 15

59%

California private equity investments in high minority areas

page 16

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Revenues by Industry . . . 8
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Introduction

The California Public Employees' Retirement System (CalPERS) is the nation's largest defined benefit public pension fund, providing retirement benefit services to more than 1.8 million members. As of June 30, 2016, CalPERS provided ongoing monthly retirement benefit payments (benefit payments) to 650,943 retirees, beneficiaries, and survivors (benefit recipients). Roughly 85 percent of these benefit recipients resided in California. Defined benefit plans, such as CalPERS, not only provide benefits, but also contribute substantially to the local economy. This study focuses on CalPERS benefit recipients residing in California and estimates the economic impacts of CalPERS benefit payments.

Over the past two fiscal years, CalPERS faced unstable financial markets, a maturing workforce, rising retiree population, and longer life expectancies. As of June 30, 2016, CalPERS' investment portfolio totaled $295.1 billion, a decrease of 2.3 percent from the previous year.[1] Despite these challenges, CalPERS continues to stimulate the California economy by providing benefit payments to more than 562,000 benefit recipients in California and investing $27.3 billion throughout the state (as of June 30, 2016). This money provides several ancillary benefits throughout the state's economy.

CalPERS recently conducted economic impact analyses to estimate the economic impact of CalPERS benefit payments on income, employment, and investments in fiscal year (FY) 2015-16.[2] This document summarizes findings from the analyses.

Economic Structure of California

According to the International Monetary Fund (IMF), California's economy was equivalent to the sixth largest in the world in 2015. When comparing the growth rate across nations, California's economy grew at a rate of 4.5 percent from 2015 to 2016, which was greater than China (the 2nd largest economy).[3]

Top 10 National and State Gross Domestic Product (GDP) Levels and Growth Rates, 2015

	GDP, in billions*	Growth Rate, 2015 to 2016
US**	15,523	3.2%
China	11,008	3.6%
Japan	4,123	7.0%
Germany	3,358	3.3%
United Kingdom	2,849	-3.1%
California***	2,458	4.5%
France	2,422	1.8%
India	2,091	9.5%
Italy	1,816	1.8%
Brazil	1,773	-13.4%

**GDP in current dollars*

*** U.S. GDP excludes California*

**** California GDP data from the U.S. Bureau of Economic Analysis (BEA). May 2017.*

Source: Report for Selected Country Groups and Subjects. World Economic Outlook. IMF. April 2016.

As reported by the U.S. Bureau of Labor Statistics (BLS), in 2015, California's economy generated more than $2.4 trillion in economic activity and supported more than 22.6 million jobs. California's labor force increased by 3.1 percent during the 2015 calendar year, averaging an unemployment rate of 6.2 percent, which is 2.7 percentage points lower than it was in 2013.[4]

Snapshot of California's Economy in 2015

Economic Structure of California

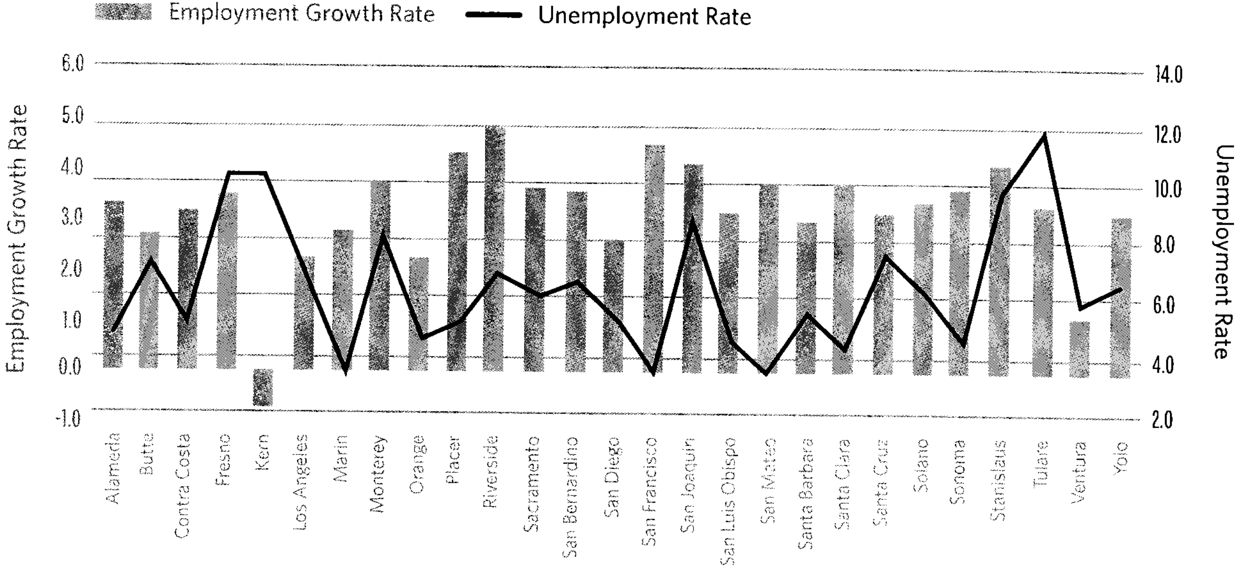
Gross Domestic Product (GDP)	$2,458,092,270,147
GDP per Capita	$62,795
Population	39,144,820
Employment	22,625,287
Average Worker Compensation	$58,172

Source: IMPLAN Group, LLC, IMPLAN System

Despite this growth, the state continues to experience regional differences in economic recovery. Employment growth across California counties varies by the labor force size. The BLS found that of California's 58 counties, 27 had a labor force exceeding 750,000 workers as of December 2015. Overall, these 27 counties accounted for 93.1 percent of total employment within the state. Except for Kern County (-0.8 percent), employment in each of these counties increased. Riverside and San Francisco counties experienced the largest employment growth of 4.6 percent and 4.9 percent, respectively.[5]

When considering unemployment, two out of the 27 largest labor force counties had double-digit unemployment rates. Tulare County had the highest unemployment rate among the selected counties (11.7 percent) and ranked third among all 58 counties in California. Imperial County had the highest unemployment rate (24.0 percent) across all counties.[6]

California's 27 Largest Labor Force Counties, 2015



Source: County Employment and Wages in California – Fourth Quarter 2015: Western Information Office. U.S. Bureau of Labor Statistics.

Statewide Impact of CalPERS Benefit Payments

CalPERS benefit recipients provide a steady infusion of economic activity in California. Direct benefit payments represent an injection of income into the local economy, stimulating the economy through consumption, generating additional tax revenue, and supporting local jobs. In addition, CalPERS benefit payments provide a reliable income stream that plays a vital role in stabilizing the local economy during economic downturns.

The economy and benefit payments change at different rates, thus the relationship is dynamic and the economic impact of benefit payments depends on the relative rates of change. This study uses a static input-output model to estimate the economic impacts of CalPERS benefit payments. Input-output models provide a "snapshot in time" of how the economy is structured. They do not provide information on why the structure changed and what effect any change may have had on the aggregate economy. As a result, the estimated impacts represent fixed economic conditions and assumptions. Consequently, year-to-year comparisons of CalPERS economic impact studies are inappropriate because assumptions change and the economy is not static.

$370 million

Property taxes generated from CalPERS benefit payments

In FY 2015-16, CalPERS paid $17.4 billion in benefits to 562,239 California benefit recipients; $20.3 billion was paid to all benefit recipients. IMPLAN estimates the $17.4 billion benefits paid supported nearly 129,000 jobs throughout California and generated more than $20 billion of economic activity across the state.

CalPERS Benefit Recipient Population and Benefit Payments

Benefit Recipient Summary	California	All[7]
Number of benefit recipients	562,239	650,943
Average annual allowance	$30,990	$31,219
Annual retirement benefit payments	$17.4 billion	$20.3 billion

Source: my|CalPERS retirement benefit data, includes PERS, LRS, JRS, and JRS II (FY 2015-16)

Estimated Impacts of CalPERS Benefit Payments in California

Economic impact[8]	$20,982,500,882
Sales tax generated	$480,914,681
Property tax generated	$369,741,356
Employment supported	128,969

Source: Derived by IMPLAN using my|CalPERS retirement benefit data (FY 2015-16)

$481 million

Sales tax revenue from CalPERS benefit payments

Tax Revenue

CalPERS benefit recipients generate sales tax revenue when they consume goods and services. CalPERS benefit recipients also provide a steady stream of property tax revenue, which is vital to California's local communities. In FY 2015-16, IMPLAN estimates that CalPERS benefit recipients generated nearly $481 million in sales tax revenue and $370 million in property tax revenue.

$1.7 billion

Real estate revenue generated from CalPERS benefit payments

Revenues by Industry

CalPERS benefit recipients generate business revenue in many industry sectors. In FY 2015-16, benefit payments generated the greatest economic impact in terms of revenues in the imputed rental activity for the owner-occupied dwellings sector. This sector captures the average rental income homeowners would receive if they rented their dwelling. Additionally, CalPERS benefit payments generated revenue totals of more than:

- $1.7 billion in the real estate market
- $1.3 billion for hospitals and physician offices

Top Ten Industry Sectors With Estimated Revenue Generated by CalPERS Benefit Payments

Top 10 Industry Sectors	Revenues
Owner-occupied dwellings	$1,800,507,932
Real estate	$1,717,160,889
Wholesale trade	$1,055,631,822
Hospitals	$723,971,679
Other financial investment activities	$557,309,648
Offices of physicians	$552,226,607
Limited-service restaurants	$501,347,966
Religious organizations	$473,819,884
Monetary authorities and depository credit intermediation	$467,076,775
Wireless telecommunications carriers (except satellite)	$459,616,571

Source: Derived by IMPLAN using my|CalPERS retirement benefit data (FY 2015-16)

Jobs Supported by Industry

CalPERS benefit payments supported an estimated 128,969 jobs spanning many industries throughout the state. In FY 2015-16, the single job sector most affected by benefit payments was real estate. However, when combining similarly defined industry sectors, CalPERS benefit payments supported:

- 11,696 restaurant related sector jobs (9.1 percent of total jobs supported)
- 7,952 hospitals and physician offices jobs (6.2 percent of total jobs supported)
- 7,446 retail related industry jobs (5.8 percent of total jobs supported)

Top Ten Industry Sectors with the Estimated Number of Jobs Supported by CalPERS Benefit Payments

Industry sector	Jobs
Real estate	7,388
Full-service restaurants	6,121
Limited-service restaurants	5,575
Individual and family services	4,260
Hospitals	4,046
Wholesale trade	3,984
Offices of physicians	3,906
Retail - General merchandise stores	3,801
Retail - Food and beverage stores	3,645
Other financial investment activities	3,070

Source: Derived by IMPLAN using CalPERS retirement benefit data (FY 2015-16)

128,969

Jobs supported by CalPERS benefit payments

$2.2 billion

Economic impact in Los Angeles County from CalPERS benefit payments

Regional Impacts

CalPERS benefit payments provide an infusion of economic stimulus throughout California; however, the overall impact of the benefit payments is not geographically uniform. Counties with larger Gross Regional Products (GRP) and concentrations of CalPERS benefit recipients tend to generate larger dollar economic impacts, while counties with smaller GRPs generate smaller dollar economic impacts.

Los Angeles County had the largest economy at $663.23 billion GRP, the largest percentage of CalPERS benefit recipients, and the largest economic impact from CalPERS benefit payments at $2.2 billion. Sacramento County experienced the second largest economic impact from CalPERS benefit payments at $1.97 billion. Though these larger regions may experience greater total economic impact from CalPERS benefit payments, the relative economic impact may be less than those in smaller economies.

Total Economic Impacts of CalPERS Benefit Payments by Region

Region	County	Percent of CalPERS Benefit Recipient Population	Gross Regional Product (in billions)	Economic Impacts (in billions)
Southern California	Los Angeles	13.7	$663.23	$2.20
	Orange	6.0	$237.17	$1.29
	Riverside	6.6	$73.13	$1.14
	San Bernardino	5.5	$76.65	$0.85
Central Valley	Sacramento	10.0	$79.52	$1.97
Bay Area	Santa Clara	3.9	$243.89	$0.59
	San Francisco	0.8	$143.12	$0.12
	San Mateo	1.4	$93.68	$0.21
	Marin	0.6	$20.96	$0.11
Eastern Sierra	Calaveras	0.4	$1.02	$0.05
Northern	Shasta	1.3	$6.15	$0.24

Source: Derived by IMPLAN using my|CalPERS retirement benefit data (FY 2015-16)

On a per capita basis, counties with large GRPs tend to mitigate the economic impact of CalPERS benefit payments because the payments represent a smaller share of the county's overall economy. Understanding the relative nature of these estimated economic impacts is important because it illustrates which regions will have an actual boost in their economy.

Though Los Angeles and Sacramento counties have large GRPs, and the largest benefit recipient population and benefit payments, the relative impact of CalPERS benefit payments are more moderate when compared to smaller economies. For example, Calaveras County's GRP represents 0.4 percent of California's economy (ranked 49th out of all 58 counties). However, the average benefit payments make up a larger share of Calaveras County's economy, making the relative economic impact significantly greater than Los Angeles County. Moreover, the weighted economic impact per CalPERS benefit recipient to GRP per capita suggests that the economic impact of each additional benefit dollar increased GRP per capita by $1.02 in Calaveras County, compared to $0.44 in Los Angeles.

Economic impact of CalPERS benefit payments is greater in smaller economies

Relative Economic Impact of CalPERS Benefit Payments by County

County	Percent of CalPERS Benefit Recipient Population	Economic Impacts (in billions)	Gross Regional Product per Capita	Economic Impacts per Benefit Recipient relative to GRP per Capita
Calaveras	0.4	$0.05	$22,834	$1.02
Riverside	6.6	$1.14	$30,972	$0.99
Shasta	1.3	$0.24	$34,259	$0.93
San Bernardino	5.5	$0.85	$36,018	$0.76
Sacramento	10.0	$1.97	$52,966	$0.66
Orange	6.0	$1.29	$74,823	$0.52
Los Angeles	13.7	$2.20	$65,213	$0.44
Marin	0.6	$0.11	$80,234	$0.39
Santa Clara	3.9	$0.59	$127,155	$0.21
San Mateo	1.4	$0.21	$122,441	$0.21
San Francisco	0.8	$0.12	$165,489	$0.17

Source: Derived by IMPLAN using my|CalPERS retirement benefit data (FY 2015-16)

CalPERS benefit recipients generate important economic impacts throughout the state. These benefits are particularly important in regions with less robust economies, such as Calaveras, Riverside, and Shasta counties. Recipients stimulate the economy in these regions by consuming goods and services which otherwise may not have been consumed.

Weighted Economic Impacts of CalPERS Benefit Payments by County

Source: Derived by IMPLAN using my|CalPERS retirement benefit data (FY 2015-16)

Calaveras Riverside Shasta

Counties with highest economic stimulus from CalPERS benefits

$27.3 billion

CalPERS investments in California

Overview of CalPERS Investments in California

CalPERS invests in California because of its vibrant and diverse economy. As of June 30, 2016, the CalPERS investment portfolio totaled $295.1 billion. Investments in California accounted for approximately 9.3 percent, or $27.3 billion, of CalPERS' portfolio.[9]

CalPERS' investment objective is to achieve an appropriate risk-adjusted return on investment. Investments in California, however, create additional ancillary benefits. These benefits include investments, jobs supported, and socially beneficial impacts.

CalPERS California Investments by Asset Class

Asset Class[10]	Dollars Invested in CA (in billions)	Percent of Dollars invested in CA*
Global Equities[11]	$13.3	8.7%
Global Fixed Income	$3.3	5.5%
Private Equity	$2.3	9.0%
Real Estate	$8.0	29.0%
Infrastructure	$0.35	13.3%

As of June 30, 2016

**The "Percent of Dollars in CA" represents the total dollars invested in CA relative to the total portfolio value of each asset class.*

Jobs Supported by CalPERS Investments

Local job support is an important ancillary benefit of CalPERS California investments. CalPERS invests in California companies, which provide the indirect benefit of supporting California workers who stimulate the economy. These workers create economic activity in their local communities by purchasing goods and services.

However, the role that CalPERS' capital plays in sustaining the activities of a public company differs substantially from a private company or project. Specifically, CalPERS is one of thousands of capital providers to public companies, with an indirect connection to the activities of these businesses.

As such, total jobs figures for CalPERS' public markets and private markets are presented separately on the following pages, recognizing the different relationship between the capital CalPERS provides and employment outcomes.

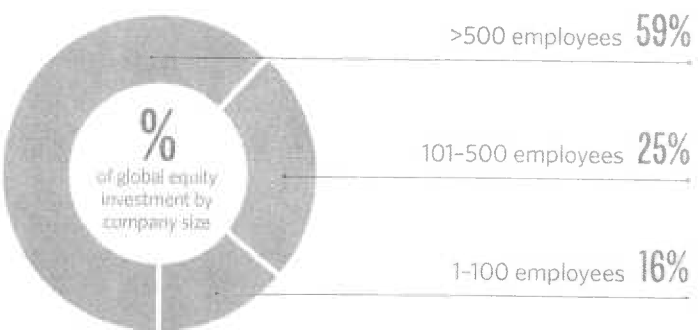
>1 million

California jobs supported by CalPERS public investment

Public Markets

CalPERS invests in 589 California-headquartered public companies, which employ more than one million Californians. Twenty-two percent of these companies' facilities are located in California, which is higher than companies with headquarters outside of California (only four percent of their facilities are located in the state). Many of these public companies, such as Google, Apple, and Disney, are iconic to California.

Percentage of Global Equity Investment by Company Size



CalPERS global fixed income investments include $762 million invested directly in 21 California-headquartered companies without the assistance of external third-party investment managers. These companies are larger in comparison to companies in other asset classes, with a median size of approximately 23,000 employees. Combined, these companies employ an estimated 268,000 workers and operate 2,400 local facilities in California.[12]

Percentage of Global Fixed Income Investment by Company Size

$2.3 billion

Invested in 711 private companies in California

Private Markets

CalPERS private market investments include private equity, real estate, and infrastructure and can be more directly attributed to job creation and other ancillary benefits than investments in public markets. This is typically the case because CalPERS is a larger investor among a more targeted group of private market investors. CalPERS invests in 711 private companies in California that employ an estimated 113,000 workers. Approximately 29 percent of CalPERS total real estate investments are in California. The diverse real estate assets provide additional benefits to the local economy, including:

- Creation of construction jobs
- Construction-related economic activity
- New retail, industrial, and commercial opportunities
- Infusion of real assets into a community

CalPERS real estate investments support an estimated 145,000 jobs in California. Additionally, CalPERS real estate projects in the development and construction phase supported 14,000 jobs in California. The construction phase of CalPERS real estate projects not only provides direct benefits to the construction industry, they also provide indirect benefits to other workers throughout the state. As a result of the economic multiplier effect, construction workers create economic activity and support additional jobs when they consume goods and services where projects are located.

113,000

California jobs supported by CalPERS private market investments

In addition to providing the ancillary benefit of job creation, CalPERS investments generate social benefits by providing capital to areas that have limited access to institutional private equity assets, such as geographic regions surrounding Silicon Valley. Private equity investment in California is highly concentrated, as approximately 95 percent of all private equity investment is in six percent of California's ZIP codes.[13] Furthermore, CalPERS private equity investments are located in high minority, high unemployment, low-to-moderate income (LMI), and rural areas.[14]

59%

Private equity investments in high minority areas

Percentage of Investments and Dollars in These Areas

Area	Percent of Investments	Percent of Dollars
Limited Capital Access	14%	25%
High Minority	59%	60%
High Unemployment	3%	2%
LMI	29%	23%
Rural	4%	8%

Note: Many of the areas overlap, therefore, the percentages for each column exceeds 100 percent.

Infrastructure investment supports an estimated 4,400 jobs statewide. CalPERS invests $345.7 million in infrastructure throughout California. More than 26 percent of this investment goes towards projects that provide water supplies to drought-prone areas. Infrastructure investments may serve as a catalyst for further job creation by having the potential to improve the transportation, energy, power and water sectors.

22,935

Jobs supported by CalPERS California Initiative

CalPERS California Initiative

In 2001, CalPERS established the California Initiative to invest private equity in traditionally underserved markets, primarily in California. Since its inception, the California Initiative has invested over $1 billion, with $296 million currently invested in 113 active companies and supporting 22,935 jobs in 2016. The objective of the initiative is to generate financial returns that meet or exceed industry benchmarks. The initiative provides an ancillary benefit of providing capital to traditionally underserved markets.

Number of Jobs Supported and Created Since the California Initiative's Inception

Ancillary Benefits	Overall	Within California	Percent within California
Total Jobs Supported	176,559	40,947	23%
Total Jobs Created Since Investment [15]	36,365	14,175	39%
Percentage of Job Growth Since Investment	26%	53%	N/A

Source: CalPERS for California 2016

Summary

CalPERS is the nation's largest defined benefit public pension fund, providing retirement benefits to more than 1.8 million members and ongoing monthly benefit payments to 650,943 retirees, beneficiaries, and survivors. CalPERS' benefit payments and investments in California are essential to the state's economy.

CalPERS' benefit payments generate economic activity that supports jobs and increases business and tax revenue. The stable and steady economic impacts are significant throughout the state but especially important in areas where the economy is less robust.

CalPERS' investments provide capital to many businesses headquartered in California. Additionally, CalPERS investments provide social and other ancillary benefits that are vital to the state.

Endnotes

1. *CalPERS for California 2016*. p. 3. California Public Employees' Retirement System. June 2016. Assets reported in the CalPERS Comprehensive Annual Financial Report (CAFR), fiscal year ended June 30, 2016 stood at $302 billion. p. 97.

2. See Data and Methodology section.

3. "Report for Selected Country Groups and Subjects". *World Economic Outlook*. International Monetary Fund. n.p. April 2016. Web. 3 March 2017.

4. *State Employment and Unemployment Summary*. U.S. Bureau of Labor Statistics. U.S. Bureau of Labor Statistics. March 2017. Web. 30 March 2017.

5. *County Employment and Wages in California – Fourth Quarter 2015: Western Information Office*. U.S. Bureau of Labor Statistics. 27 July 2016. Web. 10 Mar. 2017.

6. Ibid.

7. These totals represent benefit payments of the Public Employees' Retirement System (PERS), the Judges' Retirement System (JRS), JRS II, and the Legislators' Retirement System (LRS). This figure does not include return of member contributions or refunds. CalPERS 2015-16 CAFR. pp.137-142. California Public Employees' Retirement System. June 2016.

8. The economic impacts represent the economic activity stimulated by the initial activity change (i.e., direct impact of CalPERS benefit payments). The money injected into the economy recirculates through the economy via household spending, stimulating economic growth. This study focuses on the induced economic impacts, not the total. The induced impacts represent the additional revenue generated from the direct impact (i.e., additional labor income, additional income generated through the purchase of goods and services, etc.).

9. *CalPERS for California 2016*. CalPERS. Sacramento, CA. June 2016. Print. 1 June 2017.

10. Definitions of the asset classes are listed below:

Asset Class	Definition
Public Equities	Investments in public companies domestically and internationally, for example through the New York Stock Exchange.
Private Equity	Investments in private companies that are not publically traded.
Real Estate	Investments in commercial, residential and industrial property.
Fixed Income	Investments in loans provided to governments, companies, and other borrowers.
Infrastructure	Investments in real assets including bridges, toll roads, utilities, and airports.

11. Public companies use all sources of capital to create and sustain jobs, not just CalPERS investment.

12. The global fixed income employment figure of 268,000 workers is based on publicly available data for this asset class, which was available for 21 companies that received direct corporate bond investment from CalPERS. These 21 companies are also present in CalPERS public equity portfolio. Job estimates cannot be combined, as this would constitute double counting.

13. According to data from Thomson Reuters analyzing all private equity transactions between 2002 and 2011, nearly 95 percent of all private equity in California has been committed to 6 percent of California ZIP codes.

14. Definitions to the areas where private market investment may be especially socially beneficial are listed below:

High Unemployment:

The State of California Employment Training Panel (ETP) defines high unemployment areas as being 25 percent higher than the state average, if the state's average unemployment rate is less than 10 percent.

As of March 13, 2017, California average unemployment rate was 5.1 percent; therefore any ZIP code with an unemployment rate above 6.4 percent is considered a High Unemployment Area, see ETP High Unemployment Areas available at https://www.etp.ca.gov/Program-Info/High-Unemployment-Areas.aspx for more information.

Rural:

Rural areas are ZIP codes in which the percent of the rural population is more than the median percent of the rural population in all California ZIP codes (above 3.67 percent). See "Advancing Rural America," U.S. Small Business Administration (SBA) Office of Advocacy, available at www.sba.gov/advo/research/rural_sb.html.

According to the SBA, rural business access to capital has historically been limited. Future access to capital may be constrained further as bank mergers replace community banks with larger entities that are less interested in non-credit card small-sized loans.

High Minority:

High Minority Areas are ZIP codes in which the percent of the minority population is more than the median percent of the minority population in all California ZIP codes (above 24 percent). See "MBDA Study Finds Capital Access Remains Major Barrier to Success for Minority-Owned Firms" for more information on access to capital in minority communities. U.S. Department of Commerce Minority Business Development Agency, January 29, 2010, available at http://www.mbda.gov/pressroom/press-releases/mbda-study-finds-capital.

LMI:

Low-to Moderate-Income (LMI) Areas are predominantly (50 percent or more) composed of LMI residents (46 percent of U.S. ZIP codes fall into this category). A

Endnotes (continued)

census tract is determined to be LMI when:

- Median income of the tract is at or less than 80 percent of the metropolitan statistical area median or less than 80 percent of the statewide, non-metropolitan area median income.
- At least 20 percent of the population lives in poverty.
- The unemployment rate is at least 1.5 times the national average (based on US Census Bureau and 2006-2010 American Community Survey data, consistent with research on the California Initiative. 1.5 times the 2006-10 national average of 6.8 percent is 10.2 percent).

Limited Capital Access:

According to data from Thomson Reuters analyzing all private equity transactions between 2002 and 2011, nearly 95 percent of all private equity in California has been committed to 6 percent of California ZIP codes. ZIP codes not included in this 6 percent are considered Limited Capital Access Areas.

15 "Total Jobs Created since Investment" represents net jobs created for the entire California Initiative portfolio and aggregates job losses and gains at both active and exited portfolio companies.

Data and Methodology

I. Data

The data used for this study comes from two sources, my|CalPERS retirement data and IMPLAN. The retirement data includes monthly gross allowances for benefit recipients who resided in California in FY 2015-16 (July 1, 2015 through June 30, 2016). The population examined in this study includes California benefit recipients from four retirement systems that CalPERS administers: Public Employees' Retirement System (PERS), Legislators' Retirement System (LRS), Judges' Retirement System (JRS), and JRS II. The economic impacts for the overall state, counties, and legislative districts were also analyzed. This report only summarizes statewide and a few regional impacts. Results for California's counties and legislative districts can be viewed here: https://www.calpers.ca.gov/page/about/organization/facts-at-a-glance/economic-impacts-ca.

II. Methodology

This study measures the economic impacts of CalPERS benefit payments using IMPLAN, an input-out modeling software that measures the regional or local effects given a change in economic activity. IMPLAN is widely used by governments, universities, and public and private sector organizations to assess the economic impact of projects in many industry sectors. IMPLAN compiles data from several federal data sources in order to assess the impact of an infusion of income spread throughout a local economy. IMPLAN uses a Social Accounting Matrix (SAM) to capture all industry transactions in a local economy. The SAM describes a local economy in terms of the flow of dollars within a region while also accounting for non-industry related transactions including tax payments by businesses and households.

This study utilizes IMPLAN's updated Regional Purchasing Coefficients, known as the Trade Flows model, and the household income activity to calculate the economic impacts of CalPERS benefit payments. According to IMPLAN, the Regional Purchasing Coefficients (RPCs) represents the proportion of each dollar (local demand) for a given commodity that is purchased locally. Higher RPCs indicate less leakage and larger input-output multipliers. Prior to development of the Trade Flows model, IMPLAN Group used a set of econometric equations to estimate RPCs for each shippable commodity. According to IMPLAN, the econometric RPC methodology and assumptions have not been updated since its initial inception. The Trade Flows model is a superior method for calculating regional economic impacts because Trade Flows account for the proximity and size of alternative markets. In general, Trade Flows will have larger multipliers due to improved regional modeling and because leakage across geographical area is better captured.

Additionally, to estimate the economic impacts at the county-level, staff conducted a Multi-Regional Input-Output (MRIO) analysis. MRIO models account for multi-regional differences across counties, leakage caused by inter-county commerce, and spending patterns across all households rather than fixed expenditure patterns. Due to data limitations, MRIO models only apply to county-level analyses. MRIO analyses for geographical areas smaller than county regions (i.e., ZIP codes) produce less reliable results.

Lead Researcher:

Stephanie Tuttle

Contributors:

Kyle Harris

Kari Yoshizuka

Valerie Wong

Jan Falzarano

Jie Zhou

Erik Bell

Aron Womack

Matt Facer

The Retirement Research and Planning Division would like to thank David Merwin, Amy Morgan, Tara Gallegos, and Elaine Yamaguchi for their valuable comments.

For more information on the study "CalPERS for California 2016," visit **www.calpers.ca.gov**

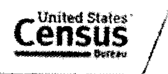
For questions about this report, contact the CalPERS Office of Communications & Stakeholder Relations at (916) 795-3991 or **newsroom@calpers.ca.gov**

California Public Employees' Retirement System
400 Q Street
P.O. Box 942701
Sacramento, CA 94229-2701
www.calpers.ca.gov

Produced by CalPERS Office of Communications & Stakeholder Relations with CalPERS Retirement Research and Planning Division

July 2017.08.10

EXHIBIT H



QuickFacts
California

QuickFacts provides statistics for all states and counties, and for cities and towns with a ***population of 5,000 or more***.

Table

ALL TOPICS	California
Population estimates, July 1, 2017, (V2017)	**39,536,653**
PEOPLE	
Population	
Population estimates, July 1, 2017, (V2017)	**39,536,653**
Population estimates, July 1, 2016, (V2016)	39,250,017
Population estimates base, April 1, 2010, (V2017)	37,254,518
Population estimates base, April 1, 2010, (V2016)	37,254,522
Population, percent change - April 1, 2010 (estimates base) to July 1, 2017, (V2017)	6.1%
Population, percent change - April 1, 2010 (estimates base) to July 1, 2016, (V2016)	5.4%
Population, Census, April 1, 2010	37,253,956
Age and Sex	
Persons under 5 years, percent	▲ 6.3%
Persons under 18 years, percent	▲ 23.2%
Persons 65 years and over, percent	▲ 13.6%
Female persons, percent	▲ 50.3%
Race and Hispanic Origin	
White alone, percent (a)	▲ 72.7%
Black or African American alone, percent (a)	▲ 6.5%
American Indian and Alaska Native alone, percent (a)	▲ 1.7%
Asian alone, percent (a)	▲ 14.8%
Native Hawaiian and Other Pacific Islander alone, percent (a)	▲ 0.5%
Two or More Races, percent	▲ 3.8%
Hispanic or Latino, percent (b)	▲ 38.9%
White alone, not Hispanic or Latino, percent	▲ 37.7%
Population Characteristics	
Veterans, 2012-2016	1,720,635
Foreign born persons, percent, 2012-2016	27.0%
Housing	
Housing units, July 1, 2016, (V2016)	14,060,525
Owner-occupied housing unit rate, 2012-2016	54.1%
Median value of owner-occupied housing units, 2012-2016	$409,300
Median selected monthly owner costs -with a mortgage, 2012-2016	$2,157
Median selected monthly owner costs -without a mortgage, 2012-2016	$517
Median gross rent, 2012-2016	$1,297
Building permits, 2016	102,350
Families & Living Arrangements	
Households, 2012-2016	12,807,387
Persons per household, 2012-2016	2.95
Living in same house 1 year ago, percent of persons age 1 year+, 2012-2016	85.7%
Language other than English spoken at home, percent of persons age 5 years+, 2012-2016	44.0%
Education	
High school graduate or higher, percent of persons age 25 years+, 2012-2016	82.1%
Bachelor's degree or higher, percent of persons age 25 years+, 2012-2016	32.0%
Health	
With a disability, under age 65 years, percent, 2012-2016	6.8%
Persons without health insurance, under age 65 years, percent	▲ 8.3%

Is this page helpful? X
Yes No

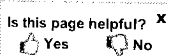
Economy	
In civilian labor force, total, percent of population age 16 years+, 2012-2016	63.0%
In civilian labor force, female, percent of population age 16 years+, 2012-2016	57.1%
Total accommodation and food services sales, 2012 ($1,000) (c)	90,830,372
Total health care and social assistance receipts/revenue, 2012 ($1,000) (c)	248,953,592
Total manufacturers shipments, 2012 ($1,000) (c)	512,303,164
Total merchant wholesaler sales, 2012 ($1,000) (c)	666,652,186
Total retail sales, 2012 ($1,000) (c)	481,800,461
Total retail sales per capita, 2012 (c)	$12,665
Transportation	
Mean travel time to work (minutes), workers age 16 years+, 2012-2016	28.4
Income & Poverty	
Median household income (in 2016 dollars), 2012-2016	$63,783
Per capita income in past 12 months (in 2016 dollars), 2012-2016	$31,458
Persons in poverty, percent	▲ 14.3%

BUSINESSES

Businesses	
Total employer establishments, 2016	922,477[1]
Total employment, 2016	14,600,349[1]
Total annual payroll, 2016 ($1,000)	886,643,923[1]
Total employment, percent change, 2015-2016	1.9%[1]
Total nonemployer establishments, 2015	3,206,958
All firms, 2012	3,548,449
Men-owned firms, 2012	1,852,580
Women-owned firms, 2012	1,320,085
Minority-owned firms, 2012	1,619,857
Nonminority-owned firms, 2012	1,819,107
Veteran-owned firms, 2012	252,377
Nonveteran-owned firms, 2012	3,176,341

GEOGRAPHY

Geography	
Population per square mile, 2010	239.1
Land area in square miles, 2010	155,779.22
FIPS Code	06



Value Notes

1. Includes data not distributed by county.

▲ Estimates are not comparable to other geographic levels due to methodology differences that may exist between different data sources.

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable. Click the Qı left of each row in TABLE view to learn about sampling error.

The vintage year (e.g., V2017) refers to the final year of the series (2010 thru 2017). *Different vintage years of estimates are not comparable.*

Fact Notes

- **(a)** Includes persons reporting only one race
- **(b)** Hispanics may be of any race, so also are included in applicable race categories
- **(c)** Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data

Value Flags

- **-** Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in th interval of an open ended distribution.
- **D** Suppressed to avoid disclosure of confidential information
- **F** Fewer than 25 firms
- **FN** Footnote on this item in place of data
- **NA** Not available
- **S** Suppressed; does not meet publication standards
- **X** Not applicable
- **Z** Value greater than zero but less than half unit of measure shown

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Sm Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

Is this page helpful? X
Yes No

EXHIBIT I

COMMONWEALTH OF KENTUCKY
FRANKLIN CIRCUIT COURT
DIVISION ___
CIVIL ACTION NO. 18-CI-_______

COMMONWEALTH OF KENTUCKY
ex rel. ANDY BESHEAR, ATTORNEY GENERAL

and

KENTUCKY EDUCATION ASSOCIATION

and

KENTUCKY STATE LODGE FRATERNAL ORDER OF POLICE PLAINTIFFS

v.

VERIFIED COMPLAINT FOR A DECLARATION OF RIGHTS, A TEMPORARY INJUNCTION, AND A PERMANENT INJUNCTION

MATTHEW G. BEVIN, in his official capacity
as Governor of the Commonwealth of Kentucky

SERVE: Office of the Attorney General
700 Capitol Avenue, Suite 118
Frankfort, Kentucky 40601

and

BERTRAM ROBERT STIVERS, II, in his official capacity
as President of the Kentucky Senate

SERVE: 702 Capitol Avenue
Annex Room 236
Frankfort, Kentucky 40601

David Byerman, Director
Legislative Research Commission
700 Capitol Avenue, Room 300
Frankfort, Kentucky 40601-3449

and

DAVID W. OSBORNE, in his official capacity as
Speaker Pro Tempore of the Kentucky House of Representatives

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SERVE: 702 Capitol Avenue
Annex Room 332C
Frankfort, Kentucky 40601

David Byerman, Director
Legislative Research Commission
700 Capitol Avenue, Room 300
Frankfort, Kentucky 40601-3449

and

BOARD OF TRUSTEES OF THE TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY

SERVE: Office of the Attorney General
700 Capitol Avenue, Suite 118
Frankfort, Kentucky 40601

and

BOARD OF TRUSTEES OF THE KENTUCKY RETIREMENT SYSTEMS DEFENDANTS

SERVE: Office of the Attorney General
700 Capitol Avenue, Suite 118
Frankfort, Kentucky 40601

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**** **** **** ****

Come now the Plaintiffs, Commonwealth of Kentucky, *ex rel.* Andy Beshear, Attorney General, Kentucky Education Association ("KEA"), and the Kentucky State Lodge Fraternal Order of Police ("Kentucky State FOP Lodge"), by and through counsel, and bring this action for a declaration of rights, a temporary injunction, and a permanent injunction against the Defendants, Matthew Griswold Bevin, in his official capacity as Governor of the Commonwealth of Kentucky ("Governor Bevin"), Bertram Robert Stivers, II, in his official capacity as President of the Kentucky Senate ("Senator Stivers"), David W. Osborne, in his official capacity as Speaker Pro Tempore of the Kentucky House of Representatives ("Representative Osborne"), the Board of

Trustees of the Kentucky Teachers Retirement System ("KTRS"), and the Board of Trustees of the Kentucky Retirement Systems ("KRS").

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INTRODUCTION

March 29, 2018 was the 57th day of the 2018 Kentucky Legislative Session. By this time, a "pension reform" bill – Senate Bill 1 – had been introduced in the Senate, but had failed to secure the necessary votes to pass that single chamber and lay dormant after being returned to committee. Strong public opposition led the sponsor of SB 1 to declare the bill was "on life support," and the President of the Senate stated that there was "little hope" the bill would pass.

Then, just after 2:00 p.m. on March 29, the Kentucky House of Representatives called for a recess, so that its Committee on State Government could meet. The unannounced meeting was not held in the legislative hearing rooms, but instead in a small conference room. Claiming the space was too small, the public – including the hundreds of teachers rallying outside – was excluded. At that time, the Committee called Senate Bill 151 ("SB 151"), an 11-page bill relating to sewer services.

The Committee immediately amended SB 151, stripping all language about sewers. The bill suddenly became a massive 291-page overhaul of Kentucky's public pension systems. The Chair, Representative Jerry T. Miller, announced the Committee would vote on the bill during the meeting, even though most committee members had not seen, much less read, the 291-page "surprise" bill. Nor had any actuarial analysis been prepared, as required by KRS 6.350, which is necessary to determine if the bill will work, *i.e.*, would the bill save money or cost the Commonwealth the additional $3 plus billion that has since been reported. The Committee allowed no public testimony, excluding any say for the public employees whose pensions were

being cut. And the Committee did not make a single copy of the bill available to the public during the meeting to allow Kentucky citizens to know what their "public servants" were doing.

Just minutes after the bill passed the committee on a purely partisan vote, it was called on the floor of the full House, where the new SB 151 received its first public reading. Once again, state representatives were forced to vote on the bill without reading it, without public testimony, and without an actuarial analysis. The vote also occurred in violation of Section 46 of the Kentucky Constitution, which required the "new" bill – and not some prior sewer version – to receive three readings on three different days.

Only 49 of the 100 state representatives voted for the bill, with 46 voting against and 5 not voting. The Speaker Pro Tempore of the House signed the bill, instead of the Speaker himself as required by Section 56 of the Kentucky Constitution. SB 151 then moved to the Senate, which likewise rushed it through passage late into the night, avoiding the same hearings and public participation that had defeated its own attempts at cutting pensions for public employees. Governor Bevin signed the bill into law on April 10, 2018.

As passed, the new SB 151 substantially alters and ultimately reduces the retirement benefits of the over 200,000 active members of the pension systems, including teachers, police officers, and firefighters. In doing so, it breaks the "inviolable" contract that the Commonwealth made with its public employees under KRS 21.480, KRS 61.692, KRS 78.852, and KRS 161.714. Under those laws, the legislature promised Kentucky's public employees that, in exchange for their decades of public service, they would be guaranteed certain retirement benefits. By enacting SB 151, Governor Bevin and the General Assembly have substantially impaired and broken that contract, in violation of the Kentucky Constitution and state statute.

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The process under which SB 151 was passed also violates numerous provisions of both the Kentucky Constitution and state statute. These laws were designed to prevent the exact trickery and exclusion of the public that the General Assembly exhibited on March 29. Each of these violations – including violations of Sections 2, 46, and 56 of the Kentucky Constitution and KRS 6.350 and 6.955 – invalidate SB 151.

Kentucky's employees and the people they serve will suffer irreparable injury if SB 151 is allowed to take effect. Already, the Governor's threats to strip retirement benefits from public employees have led to record retirements of teachers, state troopers, and other public servants. If SB 151 is allowed to take effect, hundreds – and perhaps thousands – of additional public employees will retire, leading to both an education and public safety crisis. Indeed, the mere passage of SB 151 resulted in the closure of 27 school districts the very next day and the following Monday because teachers have begun to take their sick days as a direct consequence of SB 151's elimination of their ability to use such days to calculate their retirement eligibility.

Plaintiffs therefore respectfully request that the Court enter an order declaring SB 151 unconstitutional and enjoining Governor Bevin, the Board of Trustees of KTRS, and the Board of Trustees of KRS from enforcing it.

NATURE OF ACTION

1. This Verified Complaint for a Declaration of Rights, a Temporary Injunction, and a Permanent Injunction is governed by the Kentucky Declaratory Judgment Act, KRS 418.010, *et seq.*, and Kentucky Rules of Civil Procedure ("CR") 57 and 65.

2. KRS 418.040 provides this Court with authority to "make a binding declaration of rights, whether or not consequential relief is or could be asked" when a controversy exists. An

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actual and justiciable controversy regarding violations of the Kentucky Constitution and state laws clearly exists in this action.

3. CR 65 permits this Court to issue a preliminary injunction and, in a final judgment, a permanent injunction, which may restrict or mandatorily direct the doing of an act.

4. The Attorney General requests an expedited review pursuant to KRS 418.050 and CR 57. SB 151 unconstitutionally eliminates benefits promised to public employees, causing them immediate harm. Moreover, hundreds of public employees have already announced their intention to retire – a significant increase over the historical average – in response to the introduction of pension "reform." Absent immediate relief, SB 151 will force more teachers, law enforcement officers, firefighters, and other crucial public employees to choose between continued employment or the reduction or loss of benefits that were guaranteed to them by state law and the Kentucky Constitution. For these reasons, this justiciable controversy presents an immediate concern that the Court should promptly resolve.

PARTIES

5. Plaintiff, Andy Beshear, is the duly elected Attorney General of the Commonwealth of Kentucky, a constitutional office pursuant to Sections 91, 92, and 93 of the Kentucky Constitution. Pursuant to KRS 15.020, Attorney General Beshear is the chief law officer of the Commonwealth and all of its departments, commissions, agencies, and political subdivisions. Attorney General Beshear is duly authorized by the Kentucky Constitution, statutes and the common law, including his *parens patriae* authority, to enforce Kentucky law. As Attorney General, he has the authority to bring actions for injunctive and other relief to enforce the Kentucky Constitution and the Commonwealth's statutes and regulations, including the

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authority to bring an action against the Governor and other state agencies for injunctive relief. *See* KY. CONST. § 91; KRS 15.020.

6. Plaintiff, KEA, is a not-for-profit corporation organized under the laws of Kentucky. KEA is a voluntary membership association comprised of student, active and retired teachers and active and retired education support professionals. KEA advocates for the professional welfare of its members. All active and retired members of KEA participate in or are annuitants of KTRS or CERS.

7. Plaintiff, Kentucky State FOP Lodge, is a fraternal organization composed of current and retired law enforcement officers, as well as local and regional lodges throughout the Commonwealth. It is dedicated to, among other things, bettering the conditions under which its individual members serve, and generally promoting the rights and welfare of law enforcement officers. Its members include both current and retired participants in the state and county retirement systems.

8. Defendant, Matthew Griswold Bevin, is the duly elected Governor of the Commonwealth of Kentucky, a constitutional office. The Governor is the Chief Magistrate of the Commonwealth, pursuant to Section 69 of the Kentucky Constitution, and he is charged by Section 81 of the Constitution with taking care that the laws of the Commonwealth be "faithfully executed." Moreover, Governor Bevin controls the Board of Trustees of KRS through his power to appoint ten of its members, as well as the Secretary of the Personnel Cabinet. KRS 61.645(1)(a), (e). Governor Bevin also exercises influence over the Board of Trustees of KTRS through his power to appoint two of its members and the chief state school officer. KRS

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161.250(1)(b)(3). Further, Governor Bevin has stated that he believes he has "absolute authority" to reorganize any state board pursuant to KRS 12.028.[1]

9. Defendant, Bertram Robert Stivers, II, is the President of the Kentucky Senate, a constitutional office. At all relevant times, Senator Stivers was the presiding officer of the Kentucky Senate.

10. Defendant, David W. Osborne, is the Speaker Pro Tempore of the Kentucky House of Representatives.

11. Defendant, Board of Trustees of the Teachers' Retirement System of the State of Kentucky, is responsible for the general administration and management of KTRS. KRS 161.250(1)(a). KTRS is an independent agency and instrumentality of the Commonwealth with the powers and privileges of a corporation and the purpose of providing retirement allowances for teachers and their beneficiaries and survivors. KRS 161.230. The Board's membership consists of the chief state school officer and the State Treasurer as ex officio members, two trustees appointed by the Governor, four elected teacher trustees, two elected lay trustees, and an elected retired teacher trustee. KRS 161.250(1)(b).

12. Defendant, Board of Trustees of the Kentucky Retirement Systems, is responsible for the general administration and management of the Kentucky Employees Retirement System ("KERS"), the County Employees Retirement System ("CERS"), and the Kentucky State Police Retirement System ("SPRS"). KRS 61.645. The Board of Trustees of KRS consists of seventeen members: the Secretary of the Personnel Cabinet, three trustees elected by the members of CERS, one trustee elected by members of SPRS, two trustees elected by members of

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[1] Jack Brammer, *Bevin Says He Has "Absolute Authority" to Disband Any State Board*, Lexington Herald-Leader, June 21, 2016 (available at http://www.kentucky.com/news/politics-government/article85085272.html) (last visited Apr. 2, 2018).

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KERS, and ten trustees appointed by the Governor. KRS 61.645(1). The Board of Trustees of KRS has the powers and privileges of a corporation, which it exercises to oversee KERS, CERS, and SPRS.

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JURISDICTION AND VENUE

13. An actual, justiciable controversy exists, and this Court has subject matter jurisdiction over this action pursuant to KRS 418.040, KRS 23A.010, CR 57, and CR 65.

14. Venue is appropriate in this Court pursuant to KRS 452.405, because the primary offices of the Attorney General and the Defendants are located in Frankfort, Franklin County, Kentucky. Furthermore, this action generally relates to violations of Kentucky law, which were either determined or accomplished in Frankfort, Franklin County, Kentucky. Additionally, this action generally relates to violations of the Kentucky Constitution that occurred in Frankfort, Franklin County, Kentucky.

15. Pursuant to KRS 418.040, *et seq.*, this Court may properly exercise *in personam* jurisdiction over the Defendants. Because Senator Stivers and Representative Osborne are named as defendants in their official capacities, the Court may exercise *in personam* jurisdiction over the General Assembly.

FACTUAL BACKGROUND

The General Assembly Attaches Pension Reform to a Sewage Bill

16. On February 15, 2018, SB 151 was introduced in the Senate as "an act relating to the local provision of wastewater services." The nine-page bill was referred to the Senate Committee on Natural Resources & Energy Committee the next day.

17. On March 12, 2018, SB 151 was taken from that committee, given its first constitutionally mandated reading on the floor of the Senate, and returned to that committee. For this reading, the content of SB 151 dealt only with sewer services.

18. On March 13, 2018, SB 151 was again taken from the Senate Committee on Natural Resources & Energy, given its second constitutionally mandated reading, and then returned to the committee. For this second reading, the content of SB 151 dealt only with sewer services.

19. On March 14, 2018, the Senate Committee on Natural Resources & Energy reported SB 151 favorably, with a Committee Substitute. Again, the hearing and vote dealt with SB 151 as an 11-page bill dealing with sewer services.

20. On March 16, 2018, SB 151 received another reading on the floor of the Senate, and passed 36-0. The vote was in favor of the content of the bill, which dealt exclusively with sewer services.

21. Thus, during its first, second, and third readings on the floor of the Senate, SB 151 was "an act relating to the local provision of wastewater services." It did not contain any provisions relating to the state pension system.

22. On March 19, 2018, SB 151 was received in the House of Representatives and sent to the House Committee on Committees.

23. On March 20, 2018, SB 151, as it then existed exclusively as a sewer bill, was taken from the Committee on Committees, given its constitutionally mandated first reading on the House floor, and returned to the Committee on Committees, which posted SB 151 to the House Committee on State Government.

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24. On March 21, 2018, SB 151 was taken from the House Committee on State Government, given its constitutionally mandated second reading on the House floor – again, exclusively as a sewer bill – and returned to the same committee.

25. At the time of both its first and second readings in the House of Representatives, SB 151 was "an act relating to the local provision of wastewater services." It did not contain any provisions relating to the state pension system.

26. Just after 2:00 p.m. on March 29, 2018, the House of Representatives recessed so that the House Committee on State Government could meet. The previously unannounced meeting was held in a small conference room and the public was excluded. At that time, the Committee called SB 151, which was still an 11-page bill relating to sewer services.

27. House Committee Substitute 1 to SB 151 was then introduced. The Substitute stripped all provisions of the wastewater treatment bill and replaced it with pension reform provisions.

28. The new SB 151 completely overhauled the public pension system and, as set forth more fully below, it unconstitutionally breached the inviolable contract that the Commonwealth made with its public employees, including its teachers and police officers.

29. The House Committee on State Government refused to hear testimony from the public concerning SB 151.

30. During the Committee meeting, Representative Jim Wayne objected to holding a vote on SB 151 because no actuarial analysis was provided to the members of the Committee or attached to the bill, in violation of KRS 6.350.

31. The Chair of the House Committee on State Government, Representative Jerry T. Miller, overruled Representative Wayne's objection, and called for a vote on SB 151 shortly

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after it was distributed to Committee members, thereby ensuring that the Committee members did not have time to read SB 151 in its entirety.

32. The Committee on State Government then reported the bill favorably to the House. Only then was the title amended by a vote of the Committee, changing it from "an act relating to the local provision of wastewater services" to "an act relating to retirement."

33. The new SB 151 was immediately reported to the House of Representatives, all on the evening of March 29, 2018. It then received its first reading on the floor of the House of Representatives in its new form, as "an act relating to retirement."

34. Again, Representative Wayne objected to the passage of SB 151 without an actuarial analysis. The Speaker Pro Tempore of the House, Representative Osborne, ruled that it was legal to pass SB 151 without such an analysis. Representative Rocky Adkins appealed this ruling of the Chair, but the ruling was upheld by a vote of 58-33.

35. The House of Representatives then passed SB 151 by a vote of 49-46. Representative Osborne, who is the Speaker Pro Tempore of the House of Representatives, then signed the bill on the line labeled "Speaker-House of Representatives."

36. Also during the evening of March 29, 2018, SB 151 was received in the Senate. The Senate then voted to concur in the House Committee Substitute and the amendment to the title. The Senate then passed the bill by a vote of 22-15.

37. SB 151 never received a reading in the Senate after the title and contents of the bill were completely changed, eliminating the provisions relating to wastewater treatment and replacing them wholesale with provisions relating to public pensions.

38. Thus, in a matter of mere hours, SB 151 was completely transformed from its original subject matter, reported out of the House State Government Committee, approved by the

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House of Representatives, and approved by the Senate in the dark of night – all before any stakeholders had the opportunity even to read the 291-page bill, much less comment on it.

39. Section 46 of the Kentucky Constitution provides, in relevant part, that "[e]very bill shall be read at length on three different days in each House, but the second and third readings may be dispensed with by a majority of all the members elected to the House in which the bill is pending."

40. No vote was taken in either the House of Representatives or the Senate with regard to SB 151 to suspend the constitutional requirement that a bill receive three separate readings on three separate days in each House prior to passage.

41. SB 151 never received a reading in the Senate in the form in which it was passed – that is, as an act relating to retirement, as opposed to an act relating to wastewater treatment.

42. Moreover, Representative Osborne signed SB 151 on the line for the signature of the "Speaker-House of Representatives."

43. Section 56 of the Kentucky Constitution provides, in pertinent part, that "[n]o bill shall become a law until the same shall have been signed by the presiding officer of each of the two Houses in open session."

44. Under Kentucky law, the Speaker of the House is the presiding officer of the House of Representatives.

45. Representative Osborne is not the Speaker of the House of Representatives, as that position is vacant until filled pursuant to Section 34 of the Kentucky Constitution.

46. In addition, SB 151 was reported out of the House State Government Committee without an actuarial analysis.

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47. KRS 6.350, a duly enacted statute, provides that no bill affecting pensions may be reported out of Committee unless accompanied by an actuarial analysis.

48. To date, no actuarial analysis has been performed on SB 151. Instead, a purported actuarial analysis was later added to the bill on the Legislative Research Commission ("LRC") website as an obvious attempt to paper over the fact that SB 151 was passed in violation of the law, because the actuarial analysis was never provided to members of the House Committee on State Government.

49. Specifically, the purported actuarial analysis came too late because it was added to the LRC website after the House Committee on State Government had already reported SB 151. Moreover, the purported actuarial analysis failed to account for the provisions of SB 151 as amended, claiming that it was the same as SB 1 even though numerous provisions between the two bills differed that affected the financial impact of SB 151. In addition, the purported actuarial analysis was provided only by auditors for KRS, and did not contain any analysis of the effects of SB 151 on KTRS.

50. SB 151 was also voted on by both the House of Representatives and the Senate even though it was not accompanied by a fiscal note, and even though neither of those bodies voted by a two-thirds majority to waive the fiscal note requirement.

51. KRS 6.955 specifically prohibits both chambers of the General Assembly from voting on a bill that "relates to any aspect of local government or any service provided thereby" unless the bill is accompanied by a fiscal note, the contents of which are described in KRS 6.965, or unless the chamber of the General Assembly votes, by a two-thirds majority, to waive the fiscal note requirement.

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52. Governor Bevin signed SB 151 into law on April 10, 2018.[2]

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SB 151 Breaks the Commonwealth's Inviolable Contract

53. The General Assembly promised Kentucky's public employees that, in exchange for their public service, they would be guaranteed certain retirement benefits. This promise was made in the form of a contract, which was passed into law. *See* KRS 21.480; KRS 61.692; KRS 78.852; KRS 161.714. The statutes the General Assembly passed declared this contract to be "inviolable," meaning the General Assembly could not later break it.

54. Kentucky's public employees have upheld their end of the bargain by rendering services for the benefit of the people of the Commonwealth.

55. The new SB 151 made substantial and material changes to the benefits that had been promised to participants in the KTRS, KERS, SPRS, and CERS public pension systems.

56. By enacting and enforcing SB 151, Defendants have materially breached and substantially impaired the inviolable contracts between the Commonwealth and public employees, as set forth below.

Kentucky Teachers Retirement System

57. The General Assembly created an inviolable contract with public educators under KRS Chapter 161. The contract protects benefits provided between KRS 161.220 and KRS 161.710. *See* KRS 161.714.

58. SB 1 amends KRS 161.623, which is within the inviolable contract. In doing so, it unlawfully and materially reduces, alters, or impairs pension benefits due to KTRS members.

[2] The signed SB 151 is available at http://apps.sos.ky.gov/Executive/Journal/execjournalimages/2018-Reg-SB-0151-2470.pdf.

59. Specifically, the inviolable contract does not cap the amount of accrued sick leave that teachers who started before July 1, 2008, may convert to additional service credit for purposes of their retirement. *See* KRS 161.623.

60. Moreover, the inviolable contract currently caps the amount of accrued sick leave that teachers who started on or after July 1, 2008, may convert to additional service credit for purposes of their retirement at 300 days. *See* KRS 161.623(8).

61. Section 74 of SB 151 caps the amount of accrued sick leave that members may convert to the amount accrued as of December 31, 2018. This limitation materially alters and impairs the rights and benefits due to employees, and therefore violates the inviolable contract.

Kentucky Employees Retirement System

62. The KERS pension rights and benefits are located at KRS Chapter 61, with the inviolable contract found in KRS 61.510-61.705. *See* KRS 61.692.

63. SB 1 amends or repeals these very statutes, thereby unlawfully and materially reducing, altering, or impairing pension benefits due to KERS members, as set forth more fully below.

64. The inviolable contract allows lump-sum payments for compensatory time to be included in the creditable compensation of Tier I nonhazardous employees. *See* KRS 61.510. Section 14 of SB 151 expressly excludes lump-sum payments from creditable compensation for non-hazardous, Tier I employees, retiring after July 1, 2023. This exclusion materially alters and impairs the ultimate calculation of KERS members' retirement allowances, and therefore violates the inviolable contract.

65. Under the inviolable contract, uniform and equipment allowances may be included in KERS members' creditable compensation. *See* KRS 61.510. Section 14 of SB 151

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expressly excludes such allowances as well as undefined "other expense allowances," paid on or after January 1, 2019, from creditable compensation. This exclusion materially alters and impairs the ultimate calculation of KERS members' retirement allowances, and therefore violates the inviolable contract.

66. The inviolable contract guarantees KERS Tier I members may use accumulated, unused sick leave to determine retirement eligibility. *See* KRS 61.546. Section 16 of SB 151 prohibits KERS Tier I employees from using sick leave service credit for retirement eligibility, if they retire on or after January 1, 2023. Because this prohibition materially impairs the rights and benefits due to members, it violates the inviolable contract.

67. The inviolable contract does not require deductions in any amount from KERS Tier I members' creditable compensation for hospital and medical insurance. *See* KRS 61.702(2)(b). Section 30 of SB 151 requires an employer of a KERS Tier I member employed after July 1, 2003 to deduct up to 1% of the member's creditable compensation for purposes of hospital and medical insurance under the plan. Because this provision alters and impairs the ultimate calculation of KERS members' retirement allowances, it violates the inviolable contract.

68. The inviolable contract requires Tier I hazardous employees' final compensation be calculated using the creditable compensation from the three (3) fiscal years the employee was paid the highest average monthly rate. It requires the highest five (5) fiscal years for Tier I nonhazardous employees. *See* KRS 61.510. In either case, the inviolable contract does not require that the fiscal years used for calculation be complete fiscal years. *Id.* Section 14 of SB 151 requires, after January 1, 2019, that Tier I hazardous employees' final compensation be calculated using the creditable compensation from their highest three (3) *complete* fiscal years, and that the highest five (5) *complete* fiscal years be used to calculate for Tier I nonhazardous

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employees' final compensation. Because SB 151 alters and impairs the final compensation calculation guaranteed to hazardous and nonhazardous Tier I employees, it violates the inviolable contract.

69. KERS Tier I and Tier II employees who opted into the current hybrid cash balance plan are guaranteed an annual interest credit of at least 4%. *See* KRS 61.597. Section 19 of SB 151 removes this guarantee, and instead guarantees a return of 0%. Because this change materially impairs the rights of these employees, it violates the inviolable contract.

Kentucky State Police Retirement System

70. The SPRS pension rights and benefits are located at KRS Chapter 16, with the inviolable contract found in KRS 16.510-16.645. *See* KRS 16.652.

71. SB 151 amends or repeals these very statutes, thereby unlawfully and materially reducing, altering, or impairing pension benefits due to SPRS members.

72. The inviolable contract guarantees SPRS Tier I members may use accumulated, unused sick leave to determine retirement eligibility. *See* KRS 16.645; KRS 61.546. Section 16 of SB 151 prohibits SPRS Tier I employees from using sick leave service credit for retirement eligibility, if they retire on or after January 1, 2019. This prohibition materially impairs rights and benefits due to members, and therefore violates the inviolable contract.

73. The inviolable contract does not include deductions in any amount from SPRS Tier I members' creditable compensation for hospital and medical insurance. *See* KRS 16.645; KRS 61.702(2)(b). Section 30 of SB 151 requires an employer of a SPRS Tier I member, employed after July 1, 2003, to deduct up to 1% of the member's creditable compensation for purposes of hospital and medical insurance under the plan. Because this provision alters and

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impairs the ultimate calculation of SPRS members' retirement allowances, it violates the inviolable contract.

County Employees Retirement System

74. The CERS pension rights and benefits are located at KRS Chapter 78, with the inviolable contract found in KRS 78.510-78.852. *See* KRS 78.852.

75. SB 151 amends or repeals these very statutes, thereby unlawfully and materially reducing, altering, or impairing pension benefits due to CERS members.

76. The inviolable contract allows lump-sum payments for compensatory time to be included in the creditable compensation of Tier I nonhazardous employees. *See* KRS 78.510. Section 15 of SB 151 expressly excludes lump-sum payments from creditable compensation for non-hazardous, Tier I employees, retiring after July 1, 2023. This exclusion materially alters and impairs the ultimate calculation of CERS members' retirement allowances and therefore violates the inviolable contract.

77. Under prior law, uniform and equipment allowances may be included in CERS members' creditable compensation. *See* KRS 78.510. Section 15 of SB 151 expressly excludes uniform and equipment allowances as well as undefined "other expense allowances," paid on or after January 1, 2019, from creditable compensation. This exclusion materially alters and impairs the ultimate calculation of CERS members' retirement allowances, and therefore violates the inviolable contract.

78. The inviolable contract guarantees CERS members may use accumulated, unused sick leave to determine retirement eligibility. *See* KRS 78.616. Section 17 of SB 151 prohibits CERS employees from using sick leave service credit for retirement eligibility, if they retire on

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or after January 1, 2023. This prohibition materially impairs rights and benefits guaranteed to CERS members, and therefore violates the inviolable contract.

79. The inviolable contract does not include deductions, in any amount, from CERS Tier I members' creditable compensation for hospital and medical insurance. *See* KRS 78.545; KRS 61.702(2)(b). Section 30 of SB 151 requires an employer of a CERS Tier I member, employed after July 1, 2003, to deduct up to 1% of the member's creditable compensation for purposes of hospital and medical insurance under the plan. As this provision alters and impairs the ultimate calculation of CERS members' retirement allowances, it violates the inviolable contract.

80. The inviolable contract requires CERS Tier I hazardous employees' final compensation to be calculated using the creditable compensation from the three (3) fiscal years the employee was paid the highest average monthly rate. It requires the highest five (5) years for CERS Tier I nonhazardous employees. *See* KRS 78.510. In either case, the inviolable contract does not require that the fiscal years used for calculation be complete fiscal years. *Id.* Section 15 of SB 151 requires, after January 1, 2019, that CERS Tier I hazardous employees' final compensation be calculated using the creditable compensation from their highest three (3) *complete* fiscal years, and that the highest five (5) *complete* fiscal years be used to calculate CERS Tier I nonhazardous employees' final compensation. Because this provision alters and impairs the ultimate calculation of CERS members' retirement allowances, it violates the inviolable contract.

81. CERS Tier I and Tier II employees who opted into the current hybrid cash balance plan are guaranteed an annual interest credit of at least 4%. *See* KRS 61.597; KRS 78.545. Section 19 of SB 151 removes this guarantee, and instead guarantees a return of

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0%. Because this change materially impairs the rights of these employees, it violates the inviolable contract.

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SB 151 Violates the Kentucky Constitution

82. By letters dated February 28, 2018 and March 6, 2018, the Attorney General notified all members of the General Assembly and the public that the pension bills it was considering – then SB 1 and its Committee Substitute -- violated the inviolable contract in 21 ways.

83. Those letters therefore put the General Assembly and the public on notice that SB 1, if passed, would breach the inviolable contract and therefore violate the Kentucky Constitution.

84. Specifically, the letters explained that a substantial impairment of the contract would violated Section 19 of the Kentucky Constitution, which prohibits the enactment of "any law impairing the obligation of contracts."

85. SB 151 contains 15 of the violations of the inviolable contract identified in the Attorney General's letters. Nevertheless, the General Assembly passed SB 151 and Governor Bevin signed it into law.

86. Moreover, the General Assembly declined to enact or even consider measures that would provide revenue dedicated to funding the retirement systems.

87. SB 151 is therefore not reasonable or necessary to serve an important public purpose.

88. Because SB 151 substantially impairs the contractual benefits guaranteed to Kentucky's public employees, and because Defendants cannot show that SB 151 is reasonable

and necessary to serve an important public purpose, SB 151 violates Section 19 of the Kentucky Constitution.

89. Moreover, SB 151 obligates the Commonwealth to pay *more* toward the state pension systems than under current law, rather than create a savings. Specifically, SB 151 will cost $3.3 billion in debt for state pension systems and $1.7 billion in debt for local pension systems over the next 35 years. *See* Affidavit of Jason Bailey, ¶ 22, attached as Exhibit A.

The Public Has Suffered and Will Suffer
Irreparable Injury Absent a Permanent Injunction

90. As a direct result of Defendants' efforts to abrogate public employees' rights to the promised retirement benefits, record numbers of public employees have retired rather than be subjected to an unlawful reduction in benefits.

91. For instance, in September 2017, after Governor Bevin introduced his plan to dismantle the public pension systems, the number of state and local government employees who retired surged 37% over the same month in the previous year.[3]

92. KTRS saw an even greater increase in the number of teacher retirees—a jump of 64% following Governor Bevin's pension proposal.[4]

93. The unprecedented wave of retirements has continued to the present, and it will only accelerate now that SB 151 has been signed into law. Defendants' actions have left public employees who are eligible to retire with an impossible choice: retire now, or lose the pension

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[3] John Cheves, *September Retirements Surge as Kentucky Lawmakers Consider Pension Overhaul*, Lexington Herald-Leader, Sept. 6, 2017 (available at http://www.kentucky.com/news/politics-government/article171567482.html) (last visited Apr. 3, 2018).

[4] Tom Loftus, *Kentucky Pension Crisis: More Public Employees Are Retiring As Governor Bevin Works on Reform*, Courier-Journal, Oct. 10, 2017 (available at https://www.courier-journal.com/story/news/politics/2017/10/10/kentucky-pension-crisis-retirements-surge-bevin-works-reform/749214001/) (last visited Apr. 3, 2018).

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benefits you were promised. The Commonwealth is harmed by the early retirement of thousands of capable teachers and other public servants who would prefer to remain working, but must retire to protect the pension benefits on which they and their families depend. Moreover, the retirement systems themselves are hurt by these early retirements, which cause each annuitant to be paid benefits longer than actuarially projected and cut short the anticipated employer and employee contributions to the system. *See* Affidavit of Stephanie Winkler, ¶ 12, attached hereto as Exhibit B. The enactment of SB 151 makes this harm imminent.

94. Moreover, because SB 151 removes teachers' ability to use sick days for retirement eligibility after the end of the current year, teachers have begun to use their sick days now.

95. The result of teachers using sick days has already become apparent. Already, on March 30, 2018, 27 school districts were forced to cancel school because teachers called in sick, to the detriment of the schoolchildren and their parents.

96. In light of the foregoing, Defendants' actions to impair the inviolable contracts between public employees and the Commonwealth violate Section 19 of the Kentucky Constitution.

CLAIMS

Count I
Declaratory Judgment
Violation of Section 19 of the Kentucky Constitution

97. Plaintiffs incorporate by reference each and every allegation previously set forth in this Complaint as if fully set forth herein.

98. Section 19 of the Kentucky Constitution similarly provides that "[n]o ex post facto law, nor any law impairing the obligation of contracts, shall be enacted."

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99. SB 151 substantially impairs the inviolable contract between the Commonwealth and its public employees established in KRS 21.480, KRS 61.692, KRS 78.852, and KRS 161.714 by reducing the benefits provided to those employees.

100. SB 151 therefore violates Section 19 of the Kentucky Constitution.

Count II
Declaratory Judgment
Violation of Section 46 of the Kentucky Constitution

101. Plaintiffs incorporate by reference each and every allegation previously set forth in this Complaint as if fully set forth herein.

102. Section 46 of the Kentucky Constitution provides, in relevant part, that "[e]very bill shall be read at length on three different days in each House, but the second and third readings may be dispensed with by a majority of all the members elected to the House in which the bill is pending."

103. SB 151, as passed, received only one reading in the House of Representatives.

104. The House of Representatives did not vote, "by a majority of all the members elected to the House in which the bill is pending," to dispense with the second and third readings of SB 151, as passed.

105. SB 151, as passed, did not receive any readings in the Senate.

106. SB 151 therefore violates Section 46 of the Kentucky Constitution.

Count III
Declaratory Judgment
Violation of Section 56 of the Kentucky Constitution

107. Plaintiffs incorporate by reference each and every allegation previously set forth in this Complaint as if fully set forth herein.

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108. Section 56 of the Kentucky Constitution provides, in pertinent part, that "[n]o bill shall become a law until the same shall have been signed by the presiding officer of each of the two Houses in open session."

109. Under Kentucky law, the Speaker of the House is the presiding officer of the House of Representatives.

110. SB 151 was signed by Representative Osborne, who is not the Speaker of the House.

111. SB 151 therefore was not properly signed by the presiding officer of the House of Representatives, in violation of Section 56 of the Kentucky Constitution.

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Count IV
Declaratory Judgment
Violation of Section 13 of the Kentucky Constitution

112. Plaintiffs incorporate by reference each and every allegation previously set forth in this Complaint as if fully set forth herein.

113. Section 13 of the Kentucky Constitution provides, in relevant part, that "[n]or shall any man's property be taken or applied to public use without the consent of his representatives, and without just compensation being previously made to him."

114. SB 151 deprives public employees of their contractual rights to certain retirement benefits, as set forth above.

115. SB 151 does not provide public employees with any compensation in exchange for depriving them of their contractual rights.

116. The contractual rights deprived by SB 151 are the property of the public employees.

117. SB 151 therefore violates Section 13 of the Kentucky Constitution.

Count V
Declaratory Judgment
Violation of KRS 6.350

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118. Plaintiffs incorporate by reference each and every allegation previously set forth in this Complaint as if fully set forth herein.

119. KRS 6.350 provides, in relevant part: "A bill which would increase or decrease the benefits or increase or decrease participation in the benefits or change the actuarial accrued liability of any state-administered retirement system shall not be reported from a legislative committee of either house of the General Assembly for consideration by the full membership of that house unless the bill is accompanied by an actuarial analysis." KRS 6.350(1).

120. As introduced to the House Committee on State Government on March 29, 2018, SB 151 will decrease the benefits provided to the participants of KTRS, KERS, SPRS, and CERS, each of which is a state-administered retirement system.

121. The House Committee on State Government reported SB 151 to the floor of the House of Representatives without an actuarial analysis.

122. SB 151 was therefore passed in violation of KRS 6.350(1).

Count VI
Declaratory Judgment
Violation of KRS 6.955

123. Plaintiffs incorporate by reference each and every allegation previously set forth in this Complaint as if fully set forth herein.

124. KRS 6.955 provides, in relevant part: "No bill or resolution which relates to any aspect of local government or any service provided thereby shall be voted on by either chamber of the General Assembly unless a fiscal note has been prepared and attached to the bill pursuant to KRS 6.960, except that, if in the chamber in which the bill is being considered, two-thirds

(2/3) of the members elected vote to waive the fiscal note requirement, no note shall be required. The fiscal note waiver shall be certified by the clerk of the chamber in which the bill is being considered, and such certification shall be attached to the bill. Although waived in one chamber, a fiscal note shall be required when the bill goes to the other chamber unless a majority of the members elected to such chamber vote to waive the fiscal note requirement." KRS 6.955(1).

125. SB 151 affects local government because it creates, alters, or amends provisions of law requiring local governments to contribute to the pensions of their employees.

126. Both the House of Representatives and the Senate passed SB 151 without including a fiscal note, and without a vote by two-thirds (2/3) of the members of either chamber to waive the fiscal note requirement.

127. SB 151 was therefore passed in violation of KRS 6.955.

Count VII
Declaratory Judgment
Violation of Section 2 of the Kentucky Constitution

128. Plaintiffs incorporate by reference each and every allegation previously set forth in this Complaint as if fully set forth herein.

129. Section 2 of the Kentucky Constitution provides, "[a]bsolute and arbitrary power over the lives, liberty and property of freemen exists nowhere in a republic, not even in the largest majority."

130. SB 151 was passed in a procedure that violated constitutional and statutory requirements, and it deprives public employees of their constitutional and statutory rights.

131. The passage of SB 151 therefore violates the rights of the people of the Commonwealth to be free from the exercise of arbitrary power over their lives, liberty, and property, in violation of Section 2 of the Kentucky Constitution.

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Count VIII
Injunctive Relief Against Governor Bevin
(All Plaintiffs)

132. Plaintiffs incorporate by reference each and every allegation previously set forth in this Complaint as if fully set forth herein.

133. Plaintiffs are entitled to relief in the form of injunctive relief, both temporary and permanent, restraining and enjoining Governor Bevin and his agents, attorneys, and any other person in active concert or participation with him, from enforcing or complying with SB 151, or in any way unconstitutionally reducing or eliminating the retirement benefits provided to public employees under the inviolable contracts.

134. By reducing retirement benefits beginning July 1, 2018, SB 151 forces public employees to choose between retiring immediately or losing retirement benefits they had previously been promised in an inviolable contract.

135. Moreover, by causing public employees to retire, SB 151 inflicts harm on the Commonwealth, which will be deprived of the services provided by essential, experienced public employees.

136. SB 151 therefore threatens imminent harm to the public and public employees by violating the Kentucky Constitution's prohibition on the impairment of contracts.

137. By reason of the actions and violations described above, KTRS, KERS, SPRS, and CERS participants, as well as the citizens of the Commonwealth, suffered immediate and irreparable injury and will continue to so suffer unless Governor Bevin is immediately restrained and permanently enjoined from enforcing SB 151, or in any way unconstitutionally reducing or eliminating the retirement benefits provided to public employees under the inviolable contracts.

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138. Plaintiffs have no adequate remedy at law or otherwise to address this injury, save in a court of equity.

139. No court has refused a previous application for a restraining order or injunction in this matter.

Count IX
Injunctive Relief Against Board of Trustees of KTRS
(Commonwealth and KEA)

140. Plaintiffs incorporate by reference each and every allegation previously set forth in this Complaint as if fully set forth herein.

141. Plaintiffs are entitled to relief in the form of injunctive relief, both temporary and permanent, restraining and enjoining the Board of Trustees of KTRS and its agents, attorneys, and any other person in active concert or participation with it, from enforcing or complying with SB 151, or in any way unconstitutionally reducing or eliminating the retirement benefits provided to public school employees under the inviolable contracts.

142. By reducing retirement benefits beginning July 1, 2018, SB 151 forces public employees to choose between retiring immediately or losing retirement benefits they had previously been promised in an inviolable contract.

143. Moreover, by causing public employees to retire, SB 151 inflicts harm on the public, who will be deprived of the services provided by essential public employees.

144. SB 151 therefore threatens imminent harm to the public and public employees by violating Kentucky's prohibition on the impairment of contracts.

145. By reason of the actions and violations described above, KTRS participants, as well as the citizens of the Commonwealth, suffered immediate and irreparable injury and will continue to so suffer unless the Board of Trustees of KTRS is immediately restrained and

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permanently enjoined from enforcing or complying with SB 151, or in any way unconstitutionally reducing or eliminating the retirement benefits provided to public employees under the inviolable contracts.

146. Plaintiffs have no adequate remedy at law or otherwise to address this injury, save in a court of equity.

147. No court has refused a previous application for a restraining order or injunction in this matter.

Count X
Injunctive Relief Against Board of Trustees of KRS
(Commonwealth and Kentucky State FOP Lodge)

148. Plaintiffs incorporate by reference each and every allegation previously set forth in this Complaint as if fully set forth herein.

149. Plaintiffs are entitled to relief in the form of injunctive relief, both temporary and permanent, restraining and enjoining the Board of Trustees of KRS and its agents, attorneys, and any other person in active concert or participation with him, from enforcing or complying with SB 151, or in any way unconstitutionally reducing or eliminating the retirement benefits provided to public employees under the inviolable contracts.

150. By reducing retirement benefits beginning July 1, 2018, SB 151 forces public employees to choose between retiring immediately or losing retirement benefits they had previously been promised in an inviolable contract.

151. Moreover, by causing public employees to retire, SB 151 inflicts harm on the public, who will be deprived of the services provided by essential, experienced public employees.

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152. SB 151 therefore threatens imminent harm to the public and public employees by violating the Kentucky Constitution's prohibition on the impairment of contracts.

153. By reason of the actions and violations described above, KERS, SPRS, and CERS participants, as well as the citizens of the Commonwealth, suffered immediate and irreparable injury and will continue to so suffer unless the Board of Trustees of KRS is immediately restrained and permanently enjoined from enforcing or complying with SB 151, or in any way unconstitutionally reducing or eliminating the retirement benefits provided to public employees under the inviolable contracts.

154. Plaintiffs have no adequate remedy at law or otherwise to address this injury, save in a court of equity.

155. No court has refused a previous application for a restraining order or injunction in this matter.

156. Plaintiffs are entitled to further relief as may be shown by the evidence and legal authority that may be presented in this proceeding. Plaintiffs reserve the right to amend this Complaint, as necessary, to request any further relief to which they are entitled.

WHEREFORE, Plaintiffs demand judgment against Defendants as set forth in the prayer for relief, below.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs demand as follows:

I. That this Court issue a declaration and order that:

A. SB 151 breaches the inviolable contract between the Commonwealth and its public employees.

B. SB 151 violates Section 2 of the Kentucky Constitution.

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C. SB 151 violates Section 13 of the Kentucky Constitution.

D. SB 151 violates Section 19 of the Kentucky Constitution.

E. SB 151 was passed in violation of Section 46 of the Kentucky Constitution.

F. SB 151 was passed in violation of Section 56 of the Kentucky Constitution.

G. SB 151 was passed in violation of KRS 6.350.

H. SB 151 was passed in violation of KRS 6.955.

II. That the Court issue a restraining order, temporary injunction, and permanent injunction, restraining and enjoining Governor Bevin and all his agents, attorneys, representatives, and any other persons in active concert or participation with him from enforcing SB 151 or in any way reducing or eliminating the retirement benefits provided to public employees under the inviolable contracts.

III. That the Court issue a restraining order, temporary injunction, and permanent injunction, restraining and enjoining the Board of Trustees of KTRS and all its agents, attorneys, representatives, and any other persons in active concert or participation with it from enforcing SB 151 or in any way reducing or eliminating the retirement benefits provided to public employees under the inviolable contract.

IV. That the Court issue a restraining order, temporary injunction, and permanent injunction, restraining and enjoining the Board of Trustees of KRS and all its agents, attorneys, representatives, and any other persons in active concert or participation with it from enforcing SB 151 or in any way reducing or eliminating the retirement benefits provided to public employees under the inviolable contract.

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V. That Plaintiffs be awarded any and all other relief to which they are is entitled, including attorneys' fees and costs.

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DATE: April 11, 2018

Respectfully Submitted,

ANDY BESHEAR
ATTORNEY GENERAL

By: /s/ Andy Beshear
J. Michael Brown (jmichael.brown@ky.gov)
Deputy Attorney General
La Tasha Buckner (latasha.buckner@ky.gov)
Assistant Deputy Attorney General
S. Travis Mayo (travis.mayo@ky.gov)
Executive Director,
Office of Civil and Environmental Law
Marc G. Farris (marc.farris@ky.gov)
Samuel Flynn (samuel.flynn@ky.gov)
Assistant Attorneys General
Office of the Attorney General
700 Capitol Avenue
Capitol Building, Suite 118
Frankfort, Kentucky 40601
(502) 696-5300
(502) 564-8310 FAX

Counsel for Plaintiff Commonwealth of Kentucky, ex rel. *Andy Beshear, Attorney General*

/s/ *Jeffrey S. Walther*, by permission
Jeffrey S. Walther (jwalther@wgmfirm.com)
Walther, Gay & Mack, PLC
163 East Main Street, Suite 200
Lexington, Kentucky 40588
(859) 225-4714

Counsel for Plaintiff Kentucky Education Association

/s/ *David Leightty*, by permission
David Leightty (dleightty@earthlink.net)
Priddy, Cutler, Naake & Meade PLLC
2303 River Road, Suite 300
Louisville, Kentucky 40206
(502) 632-5292

Counsel for Plaintiff Kentucky FOP Lodge

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VERIFICATION

I, J. MICHAEL BROWN, Deputy Attorney General, upon being duly sworn, do hereby swear that I have read the foregoing Verified Complaint for a Declaration of Rights, a Temporary Injunction, and a Permanent Injunction and the factual allegations set out therein are true and correct to the best of my knowledge and belief.

J. Michael Brown

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF FRANKLIN)

Subscribed, sworn to and acknowledged before me by this 11 day of April, 2018, by J. Michael Brown.

Notary Public

Printed Name: Abigail R. Hartge

My Commission Expires: March 24, 2021

ABIGAIL R. HARTGE
NOTARY PUBLIC
State At Large, Kentucky
My Commission Expires March 24, 2021

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VERIFICATION

I, STEPHANIE WINKLER, President of the Kentucky Education Association, upon being duly sworn, do hereby swear that I have read the foregoing Verified Complaint for a Declaration of Rights, a Temporary Injunction, and a Permanent Injunction and the factual allegations set out therein are true and correct to the best of my knowledge and belief.

Stephanie Winkler

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF FRANKLIN)

Subscribed, sworn to and acknowledged before me by Stephanie Winkler this 9th day of April, 2018.

Notary Public #517584

Printed Name: MARY W. RUBLE

My Commission Expires: Aug. 18, 2018

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VERIFICATION ON BEHALF OF STATE FOP

I, Berl Perdue, Jr. President of the Kentucky State Fraternal Order of Police, hereby state that I have reviewed the Complaint in this matter and that the factual statements in the Complaint relating to the sworn law enforcement officers, and to the Kentucky State Fraternal Order of Police and its associated Lodges, are true and accurate to the best of my information and belief.

Berl Perdue, Jr.

Subscribed and sworn to before me by Berl Perdue, Jr., this 11th day of April, 2018.

Notary Public, State at Large, Kentucky

My commission expires: 8-4-2018
556555

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Exhibit A

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AFFIDAVIT OF JASON BAILEY

Comes the Affiant, after being duly sworn, and states as follows:

1. My name is Jason Bailey. I am a founder and Executive Director of the Kentucky Center for Economic Policy. I have been the Executive Director since 2011.

2. The Kentucky Center for Economic Policy (KCEP) seeks to improve the quality of life for all Kentuckians through research, analysis and education on important policy issues facing the Commonwealth. KCEP produces research on timely issues; promotes public conversation about those issues through media and presentations; and advocates to decision makers on the need for policies that move all Kentuckians forward.

3. In my role I regularly give testimony, issue analysis in the form of reports, issue facts sheets, and give presentations on budget and tax; economic security; education; health care; jobs and economy; and workforce and economic development.

4. KCEP is a member of the State Priorities Partnership, a national network of organizations that work to address state tax and budget issues and their impact on low- and moderate-income families. The State Priorities Partnership is coordinated by the Center on Budget and Policy Priorities. KCEP is also a member of the Working Poor Families Project and the Economic Analysis and Research Network (EARN).

5. Prior to my role as Executive Director of the Kentucky Center for Economic Policy, I was the Policy Director for 8 years at Mountain Association for Community Economic Development.

6. I received my Bachelor's Degree from Carson-Newman College in 1998 and a Master's Degree in Public Administration with a specialization in public finance in 2007 from New York University.

7. My public service work includes appointments to the Governor's Blue Ribbon Commission on Tax Reform and the Kentucky Teachers' Retirement System Funding Work Group.

8. In the scope of my job, I analyzed Senate Bill 151. The legislation, introduced and passed suddenly in the General Assembly on March 29, 2018, moves new teachers into a less secure hybrid cash balance plan and ends the inviolable contract moving forward for them, making their benefits vulnerable to further cuts in the future.

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9. Senate Bill 151 also caps the use of sick leave for teacher retirement benefits and weakens the already-modest hybrid cash balance for state and local non-hazardous employees.

10. By ending the inviolable contract for new teachers, the General Assembly can now also weaken the cash balance benefit at any time in the future. That could include lowering the amount employers credit to teachers' accounts each year (set in the legislation initially at 8 percent of teachers' pay, whereas teachers contribute their current 9.105 percent of pay) or giving them even less of the investment returns.

11. Currently teachers have a legally protected benefit based on when they are hired, providing them with the security of knowing what they will receive when they retire.

12. SB 151 shifts about 1/3 of the cost of the hybrid cash balance plan to school districts, which must contribute 2 percent of new teachers' pay for the benefit. This change will continue the trend of the state backing away from its responsibility to fund K-12 education and asking local schools to bear a larger share of costs. That pattern is creating a growing gap between rich and poor school districts, which is returning to levels that were declared unconstitutional in the 1980s.

13. The bill caps the use of sick leave in calculating retirement benefits for current teachers to the amount of sick leave accrued as of December 31, 2018. This change will also add more costs to local school districts that will have to pay more for substitute teachers as use of sick days increases. The bill raises the retirement eligibility for new teachers to age 65 with 5 years of work experience or at least age 57 and an age plus years of service that equal a minimum of 87. Currently, teachers can retire with full benefits at age 60 with at least 5 years' experience or at any age with 27 years' experience.

14. State and local workers' plans are cut again, and the defined contribution option takes resources from pension plans.

15. The bill weakens the hybrid cash balance plan for state and local non-hazardous employees that was created just five years ago — evidence that ending the teachers' inviolable contract means benefits might be cut further in the future.

16. The state and local non-hazardous plan guaranteed workers a 4 percent rate of return and gave them 75 percent of investment returns above that amount, while the new plan under SB 151 will — like the benefit for new teachers — guarantee

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only a 0-percent rate of return and 85 percent of investment returns above that level. That means less in retirement benefits for these workers.

17. What's more, the plan introduces a 401(a) defined contribution (DC) option for state and local non-hazardous employees in which the employer contributes 4 percent of pay (employees put in 5 percent). Workers who choose the DC plan cannot later switch back to the hybrid cash balance plan.

18. The actuary says the DC plan is slightly more expensive than the weakened hybrid cash balance plan, and gives people 100 percent of investment returns rather than 85 percent in the cash balance option. Although DC plans are riskier for employees and will earn lower investment returns over time, the actuary projects that 25 percent of employees will end up in the DC plan.

19. The more employees who contribute to the DC plan instead of paying into the defined benefit/cash balance plan pool, the more the traditional plan is vulnerable to further deterioration. SB 151 allows the Kentucky Retirement Systems (KRS) board to contract with an outside entity to manage the DC investments.

20. The bill also requires KRS employees hired between 2003 and 2008 to pay an additional 1 percent of pay for retiree health care. Kentucky's retiree health plans are currently on a strong growth trajectory under the current law, without the need for additional contributions, with the KERS hazardous health plan 118 percent funded now.

21. The plan ends the ability of current employees to use sick leave service credit for determining retirement eligibility after 2023, and eliminates a $5,000 post-retirement death benefit for those hired starting in 2014.

22. Actuarial analysis of its impact on Kentucky Retirement Systems, which was attached after the bill was passed, shows it does not save money. It fact, it will cost $3.3 billion in debt for the state pension systems and $1.7 billion in debt for the local pension systems over the next 35 years.

23. The added costs are because the plan resets the 30-year period used to pay off the liabilities to start in 2019 rather than 2013, lowering annual payments slightly but resulting in more costs over the entire period. The ability to reset the 30-year period shows that an urgency to pay off unfunded liabilities and repeated claims of imminent insolvency in the plans were unfounded.

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Jason Bailey, Executive Director
Kentucky Center for Economic Policy

COMMONWEALTH OF KENTUCKY

COUNTY OF Madison

Subscribed, sworn to and acknowledged before me by this 2nd day of April, 2018, by Jason Bailey.

Notary Public

Printed Name: DEBRA J. REARDON

My Commission Expires: 09/01/2018

Debra J. Reardon
Notary Public, ID No. 516929
State at Large, Kentucky
My Commission Expires on Sept. 1, 2018

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Exhibit B

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COMMONWEALTH OF KENTUCKY
FRANKLIN CIRCUIT COURT
DIVISION ___
CIVIL ACTION NO. 18-CI-________

COMMONWEALTH OF KENTUCKY
ex rel. ANDY BESHEAR, ATTORNEY GENERAL

and

KENTUCKY EDUCATION ASSOCIATION

and

KENTUCKY STATE FRATERNAL ORDER OF POLICE LODGE PLAINTIFFS

v.

MATTHEW G. BEVIN, in his official capacity
as Governor of the Commonwealth of Kentucky, et al. DEFENDANTS

AFFIDAVIT OF STEPHANIE WINKLER

I, Stephanie Winkler, being duly sworn, hereby state as follows:

1. I currently serve as the elected president of the Kentucky Education Association. I have served in this capacity since June 15, 2013. I am also a teacher duly certified in the Commonwealth of Kentucky. Before becoming President of KEA, I taught 4th grade in Madison County Public Schools.

2. KEA is a voluntary membership organization for school employees and represents over 40,000 members throughout Kentucky. KEA is affiliated with the National Education Association, and has local affiliates in every school district in the state. KEA is the largest professional association in Kentucky.

3. KEA represents public school teachers in grades P-12, classified support professional employees, school administrators, Education and Workforce Development Cabinet employees, Kentucky Community and Technical College system employees, college students

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preparing to become teachers, and retired educators. We advocate for their employment and professional interests, including wages, school funding, pensions and health insurance.

4. For months, beginning in September/October of 2017 and continuing to the present, KEA and other stakeholders have been advocating against significant structural changes to the public pension systems. We don't believe structural changes are necessary, but instead believe the legislature should fund the systems per the appropriate actuarial calculations. For months affected stakeholder groups, including KEA members, have been contacting their legislators at home and at their offices, making their opinions known on this issue. The pension discussion has garnered a lot of press coverage and has been the primary political topic of interest in Kentucky for months.

5. During the afternoon of March 29, 2018, the House of Representatives State Government committee took SB 151, an act originally dealing with wastewater services, and amended it to include a massive pension reform bill. The bill was rushed to the floor of the House of Representatives, which passed it and sent it to the Senate, which passed it late that night. All these legislative maneuvers took place on the same day, without giving KEA or the public any chance to comment on the provisions of the bill, or even review the bill to be able to understand it.

6. SB 151 was also passed without the legally required actuarial analysis, so neither KEA nor the public has had an opportunity to properly review the actual financial impact of the bill.

7. After months of being publicly insulted by the governor, who asserted that teachers "hoarded" their sick leave and that they were too "unsophisticated" and "ignorant" to understand their own pension system, this secretive and manipulative legislative maneuver to

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push through legal changes to the public pension systems that KEA and other stakeholders were vocally opposed to was the final straw. The governor and a majority of the legislature constantly tout transparency and accountability for public education and the public pension systems, but don't hold themselves to that same standard. Teachers were appalled by the process, which they accurately judged to be outrageous and obviously implemented for the sole purpose of keeping educators and the public from having any input. They reacted strongly. Immediately after the passage of SB 151, thousands of teachers across the state called in sick for Friday, March 30. Over twenty school districts were forced to close due to insufficient numbers of teachers and substitute teachers to cover classes and ensure that students were educated and supervised in a safe environment.

8. Although KEA did not call for the sickout action, it has continued intermittently around the state every day since SB151 was passed. Based on posts we see on social media and conversations our members are having with their colleagues, we reasonably believe that teachers and other educational professionals will continue to protest the passage and possible implementation of SB151 by continuing to call in sick, which will result in continued understaffing or school closings.

9. SB 151 irreparably harms teachers and other educational professionals by violating the inviolable contract that they each entered into with the Commonwealth on the day they each began their public employment. SB 151 illegally diminishes or eliminates the benefits that teachers were promised as conditions of their employment as part of that inviolable contract.

10. SB 151 irreparably harms teachers, educational professionals, and students in that it will strongly induce teachers to retire earlier than they originally planned. KEA reasonably expects that after the passage of SB 151, teachers who are eligible to do so will retire prior to the

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dates that their benefits will be diminished, thereby depriving them of income and the personal fulfillment of teaching. These teachers will also have to significantly accelerate their financial and personal planning for retirement.

11. The retirements will also irreparably harm students and will adversely impact their educations by removing the most experienced and knowledgeable teachers from the classroom.

12. SB 151 irreparably harms the Teacher Retirement System of Kentucky ("TRS") in which certified educators participate, and will also irreparably harm the County Employees' Retirement System ("CERS") in which classified personnel participate. As part of their actuarial analysis, the pension systems project the expected rates of retirement. That rate is the basis for investment decisions and is a factor in calculating the statutory employer and employee contributions to be received from each participant. Early retirements shift participants from active contributors to annuitants earlier than actuarially projected. Cutting off those contributions sooner than expected places an unanticipated financial burden on the systems, decreases the time over which the contributions are invested, and obligates each system to pay out retirees over a longer period of time than originally assumed.

13. SB 151 irreparably harms education by discouraging talented students from entering the education profession. The provisions of SB151 create a hybrid cash balance plan that will apply to new hires after July 1, 2018. This plan shifts the financial risk of retirement entirely onto the employee, who may or may not gather enough savings and investment income during his or her career to retire with adequate income. Currently, teachers are guaranteed a defined benefit in retirement based on a factor determined by their final average wage, age and years of service. Once payout of a defined pension begins, it continues for the entire life of the

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retiree. The hybrid cash balance plan may allow a future retiree to purchase a lifetime annuity with the proceeds of his or her accumulated account, but the amount of monthly income the retiree will receive will be utterly unpredictable and will have little relationship to what the individual earned as an active teacher. This scheme injects significant financial risk into choosing public education as a profession in Kentucky. Public employment used to be attractive not for its annual salary, but for the defined benefit pension that could be earned over a career. Given these new developments, college students will be far less inclined to become educators knowing that they will earn less annually than their private sector counterparts and will also not be guaranteed a secure retirement. Furthermore, the provisions of SB151 eliminate the "inviolable contract" for all new hires, meaning that the General Assembly may renege on even these questionable promises at any time

14. SB 151 also irreparably harms teachers and educational professionals by disrespecting them, demeaning their contributions, and devaluing their decades of public service. Throughout the legislative session, many KEA members have complained to KEA that they have been disrespected and disparaged during the legislative process. The illegal violation of the Commonwealth's inviolable contract, and the secretive manner in which the General Assembly rushed it through, demonstrate a willful indifference to the legal rights of teachers and educators, the promises that the Commonwealth has made to its teachers, and the daily sacrifices made by teachers and educators in striving to educate our children. SB 151 is a direct affront to the teaching profession in Kentucky and everyone in it.

15. Finally, and most importantly, the manner by which the legislature passed this bill is an irreparable harm to the democratic process and to all peoples' faith in government. Legislators are elected by the people and are accountable to the people, and are supposed to act

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in a manner that creates faith in the deliberative process and confidence in the government and in their leadership. However, all that was utterly undermined by the process used to pass SB151. The legislators involved were deceptive and purposely opaque and their acts were an affront to every thinking, voting citizen of the state. It's worth noting that the rally that occurred in Frankfort on Monday, April 2, 2018 had in attendance not just teachers, but also other public employees, parents, students, and taxpayers. Many of the people who turned out in protest were not directly affected by SB151. They turned out to publicly object to the insulting, disrespectful way the House and Senate behaved toward all citizens.

Further affiant sayeth naught.

Stephanie Winkler

COMMONWEALTH OF KENTUCKY)
) ss.
COUNTY OF Franklin)

Subscribed and sworn to before me by Stephanie Winkler, Affiant, on this 9th day of April, 2018.

Notary Public

Notary Number: 517584

My commission expires: August 18, 2018

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EXHIBIT J

IN THE SUPREME COURT

OF THE

STATE OF CALIFORNIA

FILED

APR 27 1955

WILLIAM I. SULLIVAN, Clerk

By [signature] L. A. Deputy

MANNING T. ALLEN, et al.,

Plaintiffs and Appellants,

vs.

CITY OF LONG BEACH, a municipal corporation, et al.,

Defendants and Respondents.

L. A. No. 22894

ELWIN L. ALGER, et al.,

Plaintiffs and Appellants,

vs.

CITY OF LONG BEACH, a municipal corporation, et al.,

Defendants and Respondents.

L. A. No. 22895

STIPULATION TO SUBMIT CAUSE WITHOUT ORAL ARGUMENT.

IT IS HEREBY STIPULATED AND AGREED by and between counsel for the respective parties hereto that the above entitled causes may be submitted for decision without oral argument, upon the printed briefs now on file.

1 DATED: This 26th day of April, 1955.

WALHFRED JACOBSON, City Attorney,
CLIFFORD E. HAYES, Deputy City Attorney

BY: Clifford E. Hayes

Attorneys for Defendants City of Long Beach, etc., et al.

ALBERT D. WHITE and
NOWLAND M. REID

BY: Albert D. White

Attorneys for plaintiffs Manning T. Allen et al.

Kenneth Sperry
KENNETH SPERRY
Attorney for plaintiffs Elwin L. Alger, et al.

#/

KENNETH SPERRY
ATTORNEY AT LAW

SUITE 1017 SECURITY BUILDING · LONG BEACH 2, CALIFORNIA
TELEPHONE 749-79

April 26, 1955

Clerk of Supreme Court
10th Floor, State Building
Los Angeles 12, California

Attention: David Blomgren, Deputy Clerk

Inre: Allen et al. v. City of Long Beach et al., L. A. No. 22894;

Alger et al. v. City of Long Beach et al., L. A. No. 22895.

Dear Sir:

Enclosed herewith please find stipulation to submit the above cases without oral argument, in accordance with our telephone conversation of even date.

Yours very truly,

Kenneth Sperry
KENNETH SPERRY

KS: mm
Encl.

Mr Sullivan:

These 2 causes are on the Tentative LA May 31, etc., Calendar.

Dave

Stip. attached.