



AGENDA

RETIREMENT BOARD MEETING

SPECIAL MEETING
December 2, 2015
9:00 a.m.

Retirement Board Conference Room
The Willows Office Park
1355 Willow Way, Suite 221
Concord, California

THE RETIREMENT BOARD MAY DISCUSS AND TAKE ACTION ON THE FOLLOWING:

1. Pledge of Allegiance.
2. Accept comments from the public.

CLOSED SESSION

3. CONFERENCE WITH LABOR NEGOTIATORS
(Government Code Section 54957.6)

Agency designated representatives:
Gail Strohl, Retirement Chief Executive Officer
Christina Dunn, Retirement Admin/HR Manager
Joe Wiley, CCCERA's Chief Negotiator

Unrepresented Employees: All CCCERA unrepresented positions

4. CONFERENCE WITH LABOR NEGOTIATOR
(Government Code Section 54957.6)

Agency designated representative:
Joe Wiley, CCCERA's Chief Negotiator

Unrepresented Employee: Chief Executive Officer

5. The Board will go into closed session under Govt. Code Section 54956.81 to consider the sale of a particular pension fund investment.
6. The Board will continue in closed session pursuant to Govt. Code Section 54956.9(d)(1) to confer with legal counsel regarding pending litigation:

Montgomery v. Montgomery, Solano County Superior Court, Case No. FFL 128451

The Retirement Board will provide reasonable accommodations for persons with disabilities planning to attend Board meetings who contact the Retirement Office at least 24 hours before a meeting.

OPEN SESSION

7. Presentation from Koff and Associates regarding classification and total compensation report.
8. Consider and take possible action to adopt Koff and Associates recommended classification and salary adjustments.
9. Presentation from Verus Consulting presentation regarding final asset allocation selections.
10. Consider and take possible action to adopt a new asset allocation strategy.
11. Miscellaneous
 - a. Staff Report
 - b. Outside Professionals' Report
 - c. Trustees' comments

The Retirement Board will provide reasonable accommodations for persons with disabilities planning to attend Board meetings who contact the Retirement Office at least 24 hours before a meeting.



Final Report of the Classification and Compensation Study

Contra Costa County Employees' Retirement
Association

Volume I – Classification Study for
Unrepresented Classifications

November, 2015

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Final Report – Classification and Compensation Study

Contra Costa County Employees' Retirement Association – Unrepresented
Classifications

November 16, 2015

Ms. Christina Dunn
Administrative Human Resources Manager
Contra Costa County Employees' Retirement Association
1355 Willow Way, Suite 221
Concord, CA. 94520

Dear Ms. Dunn:

Koff & Associates is pleased to present the final classification and compensation report for the study of all positions at the Contra Costa County Employees' Retirement Association. Volume I documents the classification study process and provides recommendations for the classification plan, allocations of individual positions for all Association staff, and class specifications. Volume II, to be sent under separate cover once CCCERA has reviewed the draft total compensation data, documents the market compensation survey, findings, and recommendations.

This first volume incorporates a summary of the study's multi-step process, which included results of written Position Description Questionnaires, interviews with employees, and employee review and comments in the form of draft class descriptions, and class allocation recommendations.

We would like to thank you, Gail Strohl, and other Association staff for your assistance and cooperation, without which this study could not have been brought to its successful completion.

We will be glad to answer any questions or clarify any points as you are implementing the findings and recommendations. It was a pleasure working with the Association and we look forward to future opportunities to provide you with professional assistance.

Very truly yours,

A handwritten signature in purple ink, appearing to read 'Katie Kaneko'.

Katie Kaneko
President



Final Report – Classification and Compensation Study

Contra Costa County Employees’ Retirement Association – Unrepresented
Classifications

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Final Report – Classification and Compensation Study

Contra Costa County Employees' Retirement Association – Unrepresented Classifications

BACKGROUND

In August of 2015, the Contra Costa Employees' Retirement Association contracted with Koff & Associates to conduct a classification and compensation study for all Association staff. This study was precipitated by several factors:

- The concern of management and the employee groups that employees should be recognized for the level and scope of work performed and that they are paid on a fair and competitive basis that allows the Association to recruit and retain a high-quality staff;
- To ensure that class descriptions reflect current programs, responsibilities, and technology;
- The desire to have a classification and compensation plan that can meet the needs of the Association; and
- The desire to ensure that internal relationships of salaries are based upon objective, non-quantitative evaluation factors, resulting in equity across all Association departments.

This report focuses on sixteen (16) classifications that were studied within the Unrepresented group.

CLASSIFICATION STUDY GOALS

The goals and objectives of the classification portion of the study were to:

- Obtain detailed information regarding each position through a variety of techniques, including written Position Description Questionnaires (PDQs) and interviews with employees and management;
- Prepare an updated classification plan, including recommended class descriptions and position allocations that recognizes the scope and level of the various classes and positions, and is perceived as equitable by management and employees alike;
- Provide class descriptions and other documentation that includes information required for compliance with the Americans with Disabilities Act (ADA) and appropriate qualifications, including knowledge, skills, and other requirements that are job-related and meet other legal guidelines; and
- Provide sufficient documentation to allow the Association to maintain the classification system on a regular basis.

CLASSIFICATION STUDY PROCESS

The classification study procedures were as follows:



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- An initial meeting was held with Association management to clarify study scope, objectives, processes, and deliverables.
- An orientation meeting was held to which all employees were invited, to meet consultant staff involved with the project, clarify study objectives and procedures, answer questions, and distribute the PDQs.
- After the PDQs were completed by employees and reviewed by supervisors and consultant staff, interviews were conducted with all employees and management.
- Following the analysis of the classification information gathered, draft class concepts, specifications, and position allocations were developed for management and employee review.
- After resolution of issues, wherever possible, including additional contacts with employees and management to gain details and clarification, appropriate modifications were made to the draft specifications and allocations and this final report was prepared.

CLASSIFICATION CONCEPTS

The Difference between Positions and Classifications

“Position” and “Classification” are two terms that are often used interchangeably, but have very different meanings. As used in this report:

- A position is an assigned group of duties and responsibilities performed by one person. A position can be full-time, part-time, regular or temporary, filled or vacant. Often the word “job” is used in place of the word “position.”
- A classification or class may contain only one position or may consist of a number of positions. When you have several positions assigned to one class, it means that the same title is appropriate for each position; that the scope, level, duties, and responsibilities of each position assigned to the class are sufficiently similar (but not identical) that the same core knowledge, skills, abilities, and other requirements are appropriate for all positions, and that the same salary range is equitable for all positions in the class.

The description of a position often appears as a working desk manual, going into detail regarding work process steps, while a class description emphasizes the general scope and level of responsibilities, plus the knowledge, skills, abilities, and other requirements for successful performance.

When positions are classified, the focus is on assigned job duties and the job related requirements for successful performance, not on individual employee capabilities or amount of work performed. Positions are thus evaluated and classified on the basis of such factors as knowledge, skills, and abilities required to perform the work, the complexity of the work, the authority delegated to make decisions and take action, the responsibility for the work of others and/or for budget expenditures,



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contacts with others (both inside and outside of the organization), and the impact of the position on the organization and working conditions.

The Relationship of Classification and Compensation

Classification and the description of the work and the requirements to perform the work are separate and distinct from determining the worth of that work in the labor market and to the organization. While recommending the appropriate compensation for the work of a class depends upon an understanding of what that work is and what it requires (as noted above), compensation levels are often influenced by two factors:

- The external labor market; and
- Internal relationships within the organization.

Compensation findings and recommendations for the Association will be covered in Volume II of this report.

The Purpose of Having a Classification Plan

A position classification plan provides an appropriate basis for making a variety of human resources decisions such as the:

- Development of job-related recruitment and selection procedures;
- Clear and objective appraisal of employee performance;
- Development of training plans and succession planning;
- Design of an equitable and competitive salary structure;
- Organizational development and the management of change; and
- Provision of an equitable basis for discipline and other employee actions.

In addition to providing this basis for various human resources management and process decisions, a position classification plan can also effectively support systems of administrative and fiscal control. Grouping of positions into an orderly classification system supports planning, budget analysis and preparation, and various other administrative functions.

Within a position classification plan, job classifications can either be broad (containing a number of positions) or narrow (emphasizing individual job characteristics). Broad job classifications are indicated when:

- Employees can be hired with a broad spectrum of knowledge, skill, and/or academic preparation and can readily learn the details of the Association, the department, and the position on-the-job; or
- There is a need for flexibility of the assignment within a department or an organization due to changing programs, technologies, or workload.

Individualized job classifications are indicated when:



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- There is an immediate need to recruit for specialty knowledge and skills;
- There is a minimum of time or capability for on-the-job training; or
- There is an organizational need to provide for specific job recognition and to highlight the differences between jobs.

Most classification plans are a combination of these two sets of factors and we have chosen the middle ground in this study as being most practicable in the Association's changing environment and service delivery expectations, as well as being in line with the Association's strategic plan. This approach resulted in recommendations to retitle one classification to more accurately reflect current responsibilities or use more contemporary titles (e.g., Member Senior Member Services Data Specialist to Data Technology Specialist); or to reclassify certain individuals into existing or entirely new classifications that more accurately reflect current responsibilities (e.g. a Retirement Counselor II to a new classification of Disability Specialist). Detailed allocation recommendations are found in Appendix I of the report.

Class Descriptions

In developing the new and revised classification descriptions for all positions, the basic concepts outlined in the previous pages were utilized. The recommended class descriptions are included in Appendix II of this report.

As mentioned earlier, the class descriptions are based upon the information from the written PDQs completed by each employee, the individual job audit interviews (if required), and from information provided by employees and managers during the review processes. These descriptions provide:

- A written summary documenting the work performed and/or proposed by the incumbents of these classifications;
- Distinctions among the classes; and
- Documentation of requirements and qualifications to assist in the recruitment and selection process.

Just as there is a difference between a position and a class, there is also a difference between a position description and a class description. A position description, often known as a "desk manual", generally lists each duty an employee performs and may also have information about how to perform that duty. A class description normally reflects several positions and is a summary document that does not list each duty performed by every employee. The class description, which is intended to be broader, more general and informational, is intended to indicate the general scope and level of responsibility and requirements of the class, not detail-specific position responsibilities.

The sections of each class description are as follows:

Title: This should be brief and descriptive of the class and consistent with other titles in the classification plan and the occupational area.



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- The title of a classification is normally used for organization, classification, and compensation purposes within the Association. Often working titles are used within a department to differentiate an individual. All positions have a similar level of scope and responsibility; however, the working titles may give assurance to a member of the public that they are dealing with an appropriate individual. Working titles should be authorized by Human Resources to ensure consistency within the Association and across departmental lines.

Definition: This provides a capsule description of the job and should give an indication of the type of supervision received, the scope and level of the work and any unusual or unique factors. The phrase “performs related work as required” is not meant to unfairly expand the scope of the work performed, but to acknowledge that jobs change and that not all duties are included in the class specification.

Supervision Received and Exercised: This section specifies which class or classes provide supervision to the class being described and the type and level of work direction or supervision provided to this class. The section also specifies what type and level of work direction or supervision the class provides to other classes. This assists the reader in defining where the class “fits” in the organization and alludes to possible career advancement opportunities.

Class Characteristics: This can be considered the “editorial” section of the specification, slightly expanding the Definition, clarifying the most important aspects of the class and distinguishing this class from the next higher-level in a class series or from a similar class in a different occupational series.

Examples of Typical Job Functions: This section provides a list of the major and typical duties, intended to define the scope and level of the class and to support the Qualifications, including Knowledge and Skills. This list is meant to be illustrative only. It should be emphasized that the description is a summary document, and that duties change depending upon program requirements, technology, and organizational needs.

Qualifications: This element of the description has several sections:

- A listing of the job-related knowledge and skills required to successfully perform the work. They must be related to the duties and responsibilities of the work and capable of being validated under the Equal Employment Opportunity Commission’s Uniform Guidelines on Selection Procedures. Knowledge (intellectual comprehension) and Skills (acquired proficiency) should be sufficiently detailed to provide the basis for selection of qualified employees.
- A listing of educational and experience requirements that outline minimum and alternative ways of gaining the knowledge and skills required for entrance into the selection process. These elements are used as the basic screening technique for job applicants.



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- Licenses and/or certifications identify those specifically required in order to perform the work. These certifications are often required by an agency higher than the Association (i.e., the State), and can therefore be appropriately included as requirements.

Physical Demands: This section identifies the basic physical abilities required for performance of the work. These are not presented in great detail (although they are more specifically covered for documentation purposes in the PDQs) but are designed to indicate the type of pre-employment physical examination (lifting requirements and other unusual characteristics are included, such as “finger dexterity needed to access, enter, and retrieve data using a computer keyboard”) and to provide an initial basis for determining reasonable accommodation for ADA purposes.

Working Conditions: These can describe certain outside influences and circumstances under which a job is performed; they give employees or job applicants an idea of certain risks involved in the job and what type of protective gear may be necessary to perform the job. Examples are loud noise levels, cold and/or hot temperatures, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and other job conditions.

CLASSIFICATION FINDINGS AND RECOMMENDATIONS

All class descriptions were updated in order to ensure that the format is consistent, and that the duties and responsibilities are current and properly reflect the required knowledge, abilities, and skills.

Retitling of Classifications

The Association’s current classification structure comprises predominantly Contra Costa County classifications titled to reflect their assignment with the Association. The following details the title changes which occurred as a result of the study with most changes confined to eliminating the “retirement” designation from classification titles. As stated earlier in this report, the Association maintains a balance of broad and narrow classifications.

| Current Class Title | Proposed Class Title |
|---|--|
| Retirement Administrative/Human Resources Coordinator | Administrative/Human Resources Supervisor |
| Retirement Administrative/Human Resources Manager | Administrative/Human Resources Manager |
| Retirement Accountant | Accountant |
| Supervising Accountant | Accounting Supervisor |
| Retirement Accounting Manager | Accounting Manager |
| Retirement Benefits Program Coordinator | Retirement Services Supervisor Member Services Supervisor |
| Retirement Benefits Manager | Member Services Manager Retirement Services Manager |
| Retirement Chief Executive Officer | Chief Executive Officer |



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| Current Class Title | Proposed Class Title |
|---|--|
| Retirement Compliance Officer | Compliance Officer |
| Retirement Deputy Chief Executive Officer | Deputy Chief Executive Officer |
| Retirement General Counsel | General Counsel |
| Retirement Information Technology Manager | Information Technology Manager |
| Retirement Information Technology Coordinator I | Information Technology Coordinator |
| Retirement Programmer Analyst | Information Systems Programmer Analyst |

Title changes are recommended to more clearly reflect the level and scope being performed, as well as establish consistency with the labor market and industry standards. Any compensation recommendations (detailed in Volume II) are not dependent upon a new title, but upon the market value as defined by job scope, level and responsibilities, and the qualifications required for successful job performance. All recommended position allocations in Appendix I and class descriptions are included in Appendix II of this report.

New Classifications

The following new classifications were developed; no positions are currently allocated to this new classifications.

- Deputy General Counsel

Exemption Status

One of the major components of the job analysis and classification review is the determination of each classification’s appropriate Fair Labor Standards Act (FLSA) status, i.e., exempt vs. non-exempt from the FLSA overtime rules and regulations.

As we review position description questionnaires and notes from the interviews, we analyze each classification’s essential functions to determine FLSA status. There are three (3) levels for the determination of the appropriate FLSA status that are utilized and on which we base our recommendations. Below are the steps used for the determination of *Exempt* FLSA status.

Salary Basis Test – The incumbents in a classification are paid at least \$455 per week (\$23,660 per year), not subject to reduction due to variations in quantity/quality of work performed. Note: computer professionals’ salary minimum is defined in hourly terms as \$27.63 per hour.

Exemption Applicability – The incumbents in a classification perform any of the following types of jobs:

- Executive: Employee whose primary duty is to manage the business or a recognized department/entity and who customarily directs the work of two or more employees. This also includes individuals who hire, fire, or make recommendations that carry particular weight regarding employment status. Examples: executive, director, owner, manager, supervisor.



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- Administrative: Employee whose primary activities are performing office work or non-manual work on matters of significance relating to the management or business operations of the firm or its customers and which require the exercise of discretion and independent judgment. Examples: coordinator, administrator, analyst, accountant.
- Professional: Employee who primarily performs work requiring advanced knowledge/education and which includes consistent exercise of discretion and independent judgment. The advanced knowledge must be in a field of science or learning acquired in a prolonged course of specialized intellectual instruction. Examples: attorney, physician, statistician, architect, biologist, pharmacist, engineer, teacher.
- Computer professional: Employee who primarily performs work as a computer systems analyst, programmer, software engineer or similarly skilled work in the computer field performing a) application of systems analysis techniques and procedures, including consulting with users to determine hardware, software, or system functional specifications; b) design, development, documentation, analysis, creation, testing, or modification of computer systems or programs, including prototypes, based on and related to user or system design specification; or c) design, documentation, testing, creation or modification of computer programs based on and related to user or system design specifications; or a combination of the duties described above, the performance of which requires the same level of skills. Examples: system analyst, database analyst, network architect, software engineer, programmer.

Job Analysis – A thorough job analysis of the job duties must be performed to determine exempt status. An exempt position must pass both the salary basis and duties tests. The job analysis should include:

- Review of the minimum qualifications established for the job;
- Review of prior class descriptions, questionnaires, and related documentation;
- Confirmation of duty accuracy with management; and
- Review and analysis of workflow, organizational relationships, policies, and other available organizational data.

Non-exempt classifications work within detailed and well-defined sets of rules and regulations, policies, procedures, and practices that must be followed when making decisions. Although the knowledge base required to perform the work may be significant, the framework within which incumbents work is fairly restrictive and finite. (Please note that FLSA does not allow for the consideration of workload and scheduling when it comes to exemption status).

Finally, often times a classification performs both non-exempt and exempt duties, so we analyze time spent on each type of duties. If a classification performs mostly non-exempt duties (i.e. more than 50% of his or her time), then the classification would be considered non-exempt. The unrepresented job classes whose FLSA exemption changed to non-exempt are Retirement Services Supervisor, Member Services Supervisor and Information Technology Coordinator.



MAINTAINING THE CLASSIFICATION PLAN

A classification plan is not a stable, unchanging entity. Positions may grow and change depending upon technology, service delivery requirements, and a number of other factors. As mentioned above, a “snapshot in time” may become outdated quickly in some areas.

We are therefore including this final section to this report, which will assist the Association in identifying appropriate placement of new and/or realigned positions within the recommended classification structure. By utilizing this process, the Association will be able to change and grow the organization while maintaining the classification structure.

In considering whether a position should be placed in a higher/lower classification or where a new classification should be placed within the plan, the following factors should be examined. Although they are not quantified, as requests for reclassification occur, each of the following factors should be addressed. These will provide guidance for maintenance of the classification and compensation plans.

1. Type and Level of Knowledge and Skill Required

This factor defines the level of job knowledge and skill, including those attained by formal education, technical training, on-the job experience, and required certification or professional registration. The varying levels are as follows:

A. The basic or entry-level into any occupational field

This entry-level knowledge may be attained by obtaining a high school diploma, completing specific technical course work, or obtaining a four-year or advanced college or university degree.

B. The experienced or journey-level in any occupational field

This knowledge and skill level recognizes a class that is expected to perform the day-to-day functions of the work independently, but with guidelines (written or oral) and supervisory assistance available. This level of knowledge is sufficient to provide on-the-job instruction to a fellow employee or an assistant when functioning in a lead capacity. Certifications may be required for demonstrating possession of the required knowledge and skills.

C. The advanced level in any occupational field

This knowledge and skill level is applied in situations where an employee is required to perform or deal with virtually any job situation that may be encountered. Guidelines may be limited and creative problem solving may be involved. Supervisory knowledge and skills are considered in a separate factor and should not influence any assessment of this factor.

D. Total mastery of one or more occupational fields



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This level normally requires an advanced level of college or university education and is normally found in a research, educational, or product development situation.

2. Supervisory/Management Responsibility

This factor defines the supervisory and managerial responsibility, including short and long-range planning, budget development and administration, resource allocation, policy and procedure development, and direction of staff.

A. No ongoing direction of programs or staff

The employee is responsible for the performance of his or her own work and may provide side-by-side instruction to a co-worker.

B. Lead direction of staff or program coordination

The employee plans, assigns, directs, and reviews the work of staff performing similar work to that performed by the employee on a day-to-day basis. Training in work procedures is normally involved. If staff direction is not involved, the employee must have responsibility for independently coordinating one or more programs or projects on a regular basis.

C. Full first-line supervisor

The employee performs the supervisory duties listed above, and, in addition, makes effective recommendation and/or carries out selection, performance evaluation, and disciplinary procedures. If staff supervision is not involved, the employee must have programmatic responsibility, including development and implementing goals, objectives, policies and procedures, and budget development and administration.

D. First full managerial level

The employee is considered mid-management, often supervising through subordinate levels of supervision. In addition to the responsibilities outlined above, responsibilities include allocating staff and budget resources among competing demands and performing significant program and service delivery planning and evaluation. Normally, this level would be titled a program or division manager.

E. Department managerial level

The employee is the director of a specified department, normally reporting to the Chief Executive Officer.

F. Chief Executive Officer level

The employee has total administrative responsibility for the Association.

3. Supervision Received

A. Direct Supervision

Direct supervision is usually received by entry-level employees and trainees, i.e., employees who are new to the organization and/or position they are filling. Initially under close supervision, incumbents with basic related experience learn to perform the routine tasks



and activities of the assigned classification. As experience is gained, assignments become more varied and are performed with greater independence. Positions receiving direct supervision usually perform most of the duties required of the positions at the next higher level (i.e., the journey-level in a class series), but are not expected to function at the same skill level and usually exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise. Since this class is often used as a training class, employees may have only limited or no directly related work experience.

B. General Supervision

General supervision is usually received by journey-level and experienced employees, i.e., employees who have been in a position for a period of time and have had the opportunity to be trained and learn most, if not all, duties and responsibilities of the assigned classification. Incumbents are cross-trained to perform the full range of technical work in all of the areas of assignment. Positions at this level are distinguished from the next lower level (i.e., the entry-level in a class series) by the performance of the full range of duties as assigned, working independently, and exercising judgment and initiative. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit.

C. General Direction

General direction is usually received by supervisory or managerial employees, or employees who are highly specialized and/or subject matter experts in a certain field, function, or program. Responsibilities include performing diverse, specialized, and complex work involving significant accountability and decision-making responsibility. The incumbent organizes and oversees day-to-day activities of a work unit, division, function, and/or program and is responsible for providing professional-level support to the next higher classification level (often a Department Head or other executive manager) in a variety of areas. Successful performance of the work requires an extensive professional background as well as skill in coordinating the assigned work with other functional areas, work units, divisions, departments, and/or outside agencies. This class is often distinguished from the next higher classification level in that the latter has overall responsibility for all functions of the assigned department or division and for developing, implementing, and interpreting public policy.

D. Administrative Direction

Administrative direction is usually received by department heads or other executive management classifications. The class' work provides for a wide variety of independent decision-making, within legal and general policy and regulatory guidelines. The class itself often exercises general direction and supervision over other management, supervisory, professional, technical, and administrative support staff through subordinate levels of supervision and oversees, directs, and participates in all activities of the assigned department or work section, including short- and long-term planning, development, and administration. This class often provides assistance to the Chief Executive Officer of the organization in a variety of administrative, coordinative, analytical, and liaison capacities. Successful performance of the work requires knowledge of public policy, retirement



agency functions and activities, including the role of the elected governing body, and the ability to develop, oversee, and implement projects and programs in a variety of areas. Responsibilities include coordinating the activities of the assigned department or work section with those of other departments and outside agencies and managing and overseeing the complex and varied functions of the department. The incumbent is accountable for accomplishing departmental planning and operational goals and objectives and for furthering organizational goals and objectives within general policy guidelines.

E. Policy Direction

Policy direction is received by the organization's Chief Executive Officer who is accountable to the governing body and responsible for enforcement of all codes and regulations, the conduct of all financial activities, and the efficient and economical performance of the organization's operations.

4. Problem Solving

This factor involves analyzing, evaluating, reasoning and creative thinking requirements. In a work environment, not only the breadth and variety of problems are considered, but also guidelines, such as supervision, policies, procedures, laws, regulations, and standards available to the employee.

A. Structured problem solving

Work situations normally involve making choices among a limited number of alternatives that are clearly defined by policies and procedures. Supervision, either on-site or through a radio or telephone, is readily available.

B. Independent, guided problem solving

Work situations require making decisions among a variety of alternatives; however, policies, procedures, standards, and regulations guide the majority of the work. Supervision is generally available in unusual situations.

C. Application of discriminating choices

Work situations require searching for solutions and independently making choices among a wide variety of policies, procedures, laws, regulations, and standards. Interpretation and evaluation of the situation and available guidelines are required.

D. Creative, evaluative, or analytical thinking

Work situations require the analysis and application of organizational policies and goals, complex laws, and/or general business or ethical considerations.

5. Authority for Making Decisions and Taking Action

This factor describes the degree to which employees have the freedom to take action within their job. The variety and frequency of action and decisions, the availability of policies, procedures, laws, and supervisory or managerial guidance, and the consequence or impact of such decisions are considered within this factor.



A. Direct, limited work responsibility

The employee is responsible for the successful performance of his or her own work with little latitude for discretion or decision-making. Direct supervision is readily available.

B. Decision-making within guidelines

The employee is responsible for the successful performance of their own work, but able to prioritize and determine methods of work performance within general guidelines. Supervision is available, although the employee is expected to perform independently on a day-to-day basis. Emergency or unusual situations may occur, but are handled within procedures and rules. Impact of decisions is normally limited to the department or function to which assigned.

C. Independent action with focus on work achieved

The employee receives assignments in terms of long-term objectives, rather than day-to-day or weekly timeframes. Broad policies and procedures are provided, but the employee has latitude for choosing techniques and deploying staff and material resources. Impact of decisions may have significant department or Association wide service delivery and/or budgetary impact.

D. Decisions made within general policy or elected official guidance

The employee is subject only to the policy guidance of elected officials and/or broad regulatory or legal constraints. The ultimate authority for achieving the goals and objectives of the Association are with this employee.

6. Interaction with Others

This factor includes the nature and purpose of contacts with others, from simple exchanges of factual information to the negotiation of difficult issues. It also considers with whom the contacts are made, from co-workers and the public to elected or appointed public officials.

A. Exchange of factual information

The employee is expected to use ordinary business courtesy to exchange factual information with co-workers and the public. Strained situations may occasionally occur, but the responsibilities are normally not confrontational.

B. Interpretation and explanation of policies and procedures

The employee is required to interpret policies and procedures, apply and explain them and influence the public or others to abide by them. Problems may need to be defined and clarified and individuals contacted may be upset or unreasonable. Contacts may also be made with individuals at all levels throughout the Association.

C. Influencing individuals or groups

The employee is required to interpret laws, policies, and procedures to individuals who may be confrontational or to deal with members of professional, business, community, or other groups or regulatory agencies as a representative of the Association.



D. Negotiation with organizations from a position of authority

The employee often deals with public officials, members of boards, councils, commissions, and others to provide policy direction, explain agency missions, and/or negotiate solutions to difficult problems.

7. Working Conditions/Physical Demands

This factor includes specific physical, situational, and other factors that influence the employee's working situation.

A. Normal office or similar setting

The work is performed in a normal office or similar setting during regular office hours (occasional overtime may be required, but compensated for). Responsibilities include meeting standard deadlines, using office and related equipment, lifting materials weighing up to 25 pounds, and communicating with others in a generally non-stressful manner.

B. Varied working conditions with some physical or emotional demands

The work is normally performed indoors, but may have some exposure to noise, heat, weather, or other uncomfortable conditions. Stand-by, call back, or regular overtime may be required. The employee may have to meet frequent deadlines, work extended hours, and maintain attention to detail at a computer or other machinery, deal with difficult people, or regularly perform moderate physical activity.

C. Difficult working conditions and/or physical demands

The work has distinct and regular difficult demands. Shift work (24-7 or rotating) may be required; there may be exposure to hazardous materials or conditions; the employee may be subject to regular emergency callback and extended shifts; and/or the work may require extraordinary physical demands.

Based on the above factors, in the maintenance of the classification plan when an employee is assigned an additional duty or responsibility and requests a change in classification, it is reasonable to ask:

- What additional knowledge and skills are required to perform the duty?
- How does one gain this additional knowledge and skills – through extended training, through a short-term seminar, through on-the-job experience?
- Does this duty or responsibility require new or additional supervisory responsibilities?
- Is there a greater variety of or are there more complex problems that need to be solved as a result of the new duty?
- Does the employee have to make a greater variety of or more difficult decisions as a result of this new duty?
- Are the impacts of decisions greater because of this new duty (effects on staff, budget, department or Association -wide activities, and/or relations with other agencies)?
- Are guidelines, policies, and/or procedures provided to the employee for the performance of this new duty?
- Is the employee interacting with Association workers, the public, or others differently as a result of this new assignment?



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- Have the working or physical conditions of the job changed as a result of this new assignment?

Application of these factors by asking the appropriate questions will enable the Association to maintain the classification and compensation system in a timely and consistent manner.

Again, we want to thank the Association for its time and cooperation in bringing this study to a successful conclusion. It has been a pleasure working with the Contra Costa County Employees' Retirement Association on this critical project. Please do not hesitate to contact us if we can provide any additional information or clarification regarding this report.

Respectfully Submitted,

A handwritten signature in purple ink, appearing to read 'Katie Kaneko'.

Katie Kaneko
President



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Appendix I

Recommended Employee Allocations

**Contra Costa County Employees' Retirement Association
Allocation List - Unrepresented
November 2015**

| Current Title | Proposed Title | Action | Supervisor Title | Comments |
|---|--|---------------|-------------------------|--|
| Retirement Accountant | Accountant | Title Change | Accounting Manager | |
| Retirement Accounting Manager | Accounting Manager | Title Change | Deputy CEO | |
| Supervising Accountant | Accounting Supervisor | Title Change | Accounting Manager | |
| Retirement Admin/HR Manager | Admin/HR Manager | Title Change | CEO | |
| Retirement Admin/HR Coordinator | Admin/HR Supervisor | Title Change | Admin/HR Manager | |
| Retirement Chief Executive Officer | Chief Executive Officer | Title Change | | |
| Retirement Communications Coordinator | Communications Coordinator | Title Change | Admin/HR Manager | |
| Retirement Compliance Officer | Compliance Officer | Title change | CEO | |
| Retirement General Counsel | General Counsel | Title Change | CEO | |
| Deputy Retirement Chief Executive Officer | Deputy Chief Executive Officer | Title Change | CEO | |
| Retirement Programmer Analyst | Information Systems Programmer/Analyst | Title change | IT Manager | |
| Retirement IT Coordinator, Level I | Information Technology Coordinator | Title change | IT Manager | Change title to reflect assigned duties and responsibilities |
| Retirement IT Manager | Information Technology Manager | Title change | CEO | |
| Retirement Benefits Manager | Member Services Manager | Title change | CEO | |
| Retirement Benefits Program Coordinator | Member Services Supervisor | Title change | Benefits Manager | |
| Retirement Benefits Manager | Retirement Services Manager | Title change | CEO | |
| Retirement Benefits Program Coordinator | Retirement Services Supervisor | Title change | Benefits Manager | |



Final Report of the Classification and Compensation Study

Contra Costa County Employees' Retirement
Association

Volume II – Compensation Study for
Unrepresented Classifications

November 2015

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BACKGROUND

As noted in Volume I, in August of 2015, the Contra Costa County Employees' Retirement Association contracted with Koff & Associates to conduct a comprehensive classification and compensation study for all classifications. All classification findings and options for action are found in Volume I; however, this Volume II report presents the compensation findings, recommendations, and options for implementation for the Association's unrepresented classifications only.

This compensation review process was precipitated by:

- The concern of management and the employee groups that employees should be recognized for the level and scope of work performed and that they are paid on a fair and competitive basis that allows the Association to recruit and retain a high-quality staff;
- The desire to have a classification and compensation plan that can meet the needs of the Association; and
- The desire to ensure that internal relationships of salaries are based upon objective, non-quantitative evaluation factors, resulting in equity across the Association.

STUDY PROCESS

Benchmarking Classifications

The study comprised thirteen (13) unrepresented classifications (including the Chief Executive Officer). The proposed classification of Deputy General Counsel was included in the survey to provide the Association with market trends on this classification. Survey classes that had the most consistent and useful survey data were used as "benchmarks" in building the compensation plan. Benchmark classes are those classes that are tied directly to market salary data during the salary setting process. These classes are used as a means of anchoring the Association's overall compensation plan to the market. Other job classifications not surveyed would be aligned on the proposed compensation plan using internal equity principles.

Survey or benchmark classifications included classes that are reasonably well known, and clearly and concisely described. They are commonly used classes such that other like classes may readily be found in other agencies in order to ensure that sufficient compensation data will be compiled.

These survey classifications were included in the study:

- Accountant
- Accounting Manager
- Administrative/Human Resources Manager
- Administrative/Human Resources Supervisor
- Chief Executive Officer



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- Communications Coordinator
- Compliance Officer
- Deputy General Counsel
- General Counsel
- Information Systems Programmer Analyst
- Information Technology Coordinator
- Information Technology Manager
- Retirement Services Manager

When we contact the comparator agencies to identify possible matches for each of the benchmarked classifications, there is an assumption that we will not be able to find comparators that are 100% equivalent to the classifications at the Association. Therefore, we do not match based upon job titles, which can often be misleading, but we analyze each class description before we consider it as a comparator. Our methodology is to analyze each class description according to the factors listed on page 6 and we require that a position's "likeness" be at approximately 70% of the matched position to be included.

When we do not find an appropriate match with one class, we often use "brackets" which can be functional or represent a span in scope of responsibility. A functional bracket means that the job of one classification at the Association is performed by two classifications at a comparator agency. A "bracket" representing a span in scope means that the comparator agency has one class that is "bigger" in scope and responsibility and one position that is "smaller," where the Association's class falls in the middle.

In all, of the thirteen (13) benchmarked classifications identified, we were able to collect sufficient data from the comparator agencies for twelve (12) benchmark classifications. We consider fewer than four comparison matches to be insufficient for analysis because fewer matches make variations in salaries more significant and results may not accurately reflect the market.

Benchmarking Comparator Agencies

The second, most important step in conducting a market salary study is the determination of appropriate agencies for comparison.

In considering the selection of valid agencies for salary comparator purposes, a number of factors should be taken into consideration:

- 1. Organizational type and structure** – We generally recommend that agencies of a similar size, providing similar services to that of the Association be used as comparators. The comparators chosen were comprised eight County 37 Act retirement agencies, and four local agencies, one of which was a County, and three of which were special districts. These local agencies were selected to ensure that organizations with a strong impact on local wages were surveyed specifically for relevant business and administrative classifications.



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-
- 2. Similarity of population, staff, and operational budgets** – These elements provide guidelines in relation to resources required (staff and funding) and available for the provision of services.
 - 3. Scope of services provided and geographic location** – Organizations providing the same services are ideal for comparators and most comparator agencies surveyed provide similar services to the Contra Costa County Employees' Retirement Association, including service and disability retirement. However, given the specialized nature of the Association's services, and the absence of similar agencies within the local market, Koff & Associates recommended a state-wide market of similar sized retirement associations; to ensure that the cost of labor did not skew data, using metrics from the Economic Research Institute, a nationally recognized database, salaries for agencies outside the Bay Area were adjusted to reflect local market salary conditions relative to the salaries paid by the Association.

When it comes to management and executive classifications, the types of services provided by an agency become less important, as each agency still needs administrative, financial, and program-related leadership classifications. At the management level, differences in size and scope of services are more critical when considering comparators, as explained above.

- 4. Labor market** – In the reality that is today's labor market, many agencies are in competition for the same pool of qualified employees. No longer do individuals necessarily live in the communities they serve. As mentioned above, the geographic labor market area, where the Contra Costa County Employees' Retirement Association may be recruiting from or losing employees to, was taken into consideration when selecting comparator organizations. Furthermore, by selecting employers within a geographic proximity to the Association, the resulting labor market data generally reflects the region's cost of living, housing costs, growth rate, and other demographic characteristics to the same extent as competing employers to the Association.
- 5. Compensation Philosophy** – Does the organization regularly conduct a market survey, and, once completed, how is this information applied? Many agencies pay to the median, some pay to the average, others may pay to a higher percentile. In addition, salary ranges may be set strictly upon market base salary values or may include the total value of salary and benefits when developing a compensation policy.

All of the above elements should be considered in selecting the group of comparator agencies. The Association agreed on a list of comparator agencies and the following twelve (12) agencies were originally used as comparators for the purposes of this market study:

1. Alameda County Employees Retirement Association
2. City/County of San Francisco Retirement System
3. Orange County Employees' Retirement System
4. Sacramento County Employees' Retirement System
5. San Bernardino County Employees' Retirement Association
6. San Diego County Employees' Retirement Association
7. San Mateo County Employees' Retirement Association
8. Ventura County Employees' Retirement Association



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9. Central Contra Costa Sanitation District
10. County of Contra Costa
11. Contra Costa Water District
12. East Bay Municipal Water District

Benchmarking Benefit Data Collection

The last element requiring discussion prior to beginning a market survey is the specific benefit data that will be collected and analyzed. The following information was collected for each of the benchmarked classifications:

1. **Monthly Base Salary:** The top of the salary range and/or control point. All figures are presented on a monthly basis.
2. **Employee Retirement** – This includes several figures, 1) the amount of the employee's obligated retirement contribution that is contributed by each agency on behalf of the employee, 2) the amount of the agency's Social Security contribution, and 3) any alternative retirement plan, either private or public where the employee's contribution is made by the agency on behalf of the employee. Employer pick up of the employee's contribution, as described in item (1) is being phased out as pension reform is implemented throughout the State.

In addition to the amount of the employer paid member contribution, we collected information on enhanced benefits, e.g. the value attached to the retirement benefit formula itself (i.e. 2%@55) and the value attached to the basis for the formula calculation (i.e. highest 12 month average, 36 month average, etc.)

The value for enhanced benefits is based upon CalPERS actuarial valuations, as published by CalPERS. The value for each enhanced benefit is based on the midpoint of the impact on total employer contribution rate. For example, the impact on total employer contribution rate for the enhanced benefit of final compensation based on single highest year (CalPERS Optional Benefits Listing Section 20042) ranges from 0.9% to 1.8% for miscellaneous employees. We report the value of single highest year as 1.35%.

Because the benefits formulas for 37 Act counties do not always align directly with the CalPERS formulas and benefits, Koff & Associates calculated the values relative to the CalPERS retirement benefit and formula which is most closely aligned with the 37 Act benefit and formula; we have taken a conservative approach to this evaluation since it is not necessarily an "apples-to-apples" comparison but it does provide an overall assessment of the value of the enhanced benefit. You will note that in some cases, there is a negative value in the spreadsheet and this is an indicator that the benefit provided is of a lesser value than the base formula and benefit.

Because the median of all analyses is used for each classification, we do not consider the data has been skewed in the translation from CalPERS to 37 Act benefits. The four CalPERS benefits which serve as the basis for the analyses are presented below, with an explanation of how the values are reflected in the total compensation spreadsheets. The basis for the



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additional enhanced calculations and the employer pick up is also described in the section below.

- Formulas for Miscellaneous (base formula is 2% at age 60) are based on CalPERS actuarial calculations:
 - 2% at age 55 (CalPERs Optional Benefits Listing Section 21354): this formula provides to local miscellaneous members 2% of pay at age 55 for each year of eligible service credited with that employer; midpoint of range = 3.05%
 - 2.5% at age 55 (CalPERs Optional Benefits Listing Section 21354.4): this formula provides to local miscellaneous members 2.5% of pay at age 55 for each year of eligible service credited with that employer; midpoint of range = 4.95%
 - 2.7% at age 55 (CalPERs Optional Benefits Listing Section 21354.5): this formula provides to local miscellaneous members 2.7% of pay at age 55 for each year of eligible service credited with that employer; midpoint of range = 8.05%
 - 3% at age 60 (CalPERs Optional Benefits Listing Section 21354.3): this formula provides to local miscellaneous members 3% of pay at age 60 for each year of eligible service credited with that employer; midpoint of range = 9.80%.
- Additional Optional Enhanced Benefit Provisions
 - One-Year Final Compensation (Section 20042): the period determining the average monthly pay rate when calculating retirement benefits; base period is thirty-six (36) highest paid consecutive months; one-year final compensation is based on twelve (12) months highest paid consecutive months; midpoint of range for miscellaneous = 1.35%.
 - Employer Paid Member Contribution (Section 20636(c) (4)): the reporting of the value of the employer paid member contribution to their respective 37 Act County Retirement System as special compensation; average value = employer paid member contribution multiplied by employer paid member contribution.

The point of comparison to capture pension benefits was the Legacy tier (sometimes referred to as the Classic tier) at the Association, as well as the comparator agencies. This means that for agencies with a multi-tier retirement system, the tier was captured that is currently available to Legacy members transferring from another agency with retirement reciprocity to the Association.

3. **Insurance** – This is the maximum amount paid by the agency for employees and dependents for a cafeteria or flexible benefit plan and/or health, dental, vision, life, long-term disability, and employee assistance insurance.
4. **Leave** – Other than sick leave, which is usage-based, the number of days off for which the agency is obligated. All days have been translated into direct salary costs.
 - **Vacation** – The number of vacation days available to all employees after five years of employment.
 - **Holidays** – The number of holidays (including floating) available to employees on an annual basis.



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- **Administrative/Personal Leave** – Administrative leave is normally the number of days available to management to reward for extraordinary effort (in lieu of overtime). Personal leave may be available to other groups of employees to augment vacation or other time off.
- 5. **Automobile** – This category includes either the provision of an auto allowance or the provision of an auto for personal use. If a car is provided to any classification for commuting and other personal use, the average monthly rate is estimated at \$450.
- 6. **Deferred Compensation** – We captured deferred compensation provided to all members of a classification with or without the requirement for an employee to provide a matching or minimum contribution.
- 7. **Other** – This category includes any additional benefits available to all in the class.

Please note that all of the above benefit elements are benefits provided to all members of each comparator class. As such, they represent an on-going cost for which an agency must budget. Other benefit costs, such as sick leave, tuition reimbursement, and reimbursable mileage are usage-based and cannot be quantified on an individual employee basis.

Data Collection

Data was collected during the months of October through November 2015, through websites, planned telephone conversations with human resources or other personnel at each comparator agency, and careful review of agency documentation of classification descriptions, memoranda of understanding, organization charts, and other documents.

We believe that the salary data collection step is the most critical for maintaining the overall credibility of any study. We rely very heavily on the Association's classification descriptions developed and approved during the classification part of the study, as they are the foundation for our comparison. Personnel staff of the comparator agencies were interviewed by telephone, whenever possible, to understand their organizational structure and possible classification matches.

In identifying appropriate comparisons for the Association's classifications, we use the same factors and criteria that we analyze when updating the Association's classification plan structure and determining the proper allocation of each position during the classification study process. Factors that we consider include:

- Education and experience requirements;
- Knowledge, abilities, and skills required to perform the work;
- The scope and complexity of the work;
- The authority delegated to make decisions and take action;
- The responsibility for the work of others, program administration, and for budget dollars;
- Problem solving/ingenuity;



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- Contacts with others (both inside and outside of the organization);
- Consequences of action and decisions; and
- Working conditions.

A summary of the results can be found in Appendix I and the salary survey and benefit information can be found in Appendix II. For each surveyed class, there are three (3) information pages:

- Market Base (Top Step) Salary Summary Data
- Benefit Detail (Monthly Equivalent Values)
- Monthly Total Compensation Cost Summary Data

Our analysis includes the mean (average), and median (midpoint), comparator data for each benchmarked classification (assuming we were able to identify at least four (4) matches). Our firm recommends reviewing the median, rather than the average, when evaluating the data. The median is the exact midpoint of all the market data we collected, with 50% of market data below and 50% of market data above. We recommend using the median methodology because it is not skewed by extremely high or low salary values (unlike the mean).

MARKET COMPENSATION FINDINGS

As mentioned above, the salary compensation data can be found in Appendix II of this report. The market base compensation salary findings for each class surveyed are listed below, using the median results, arranged in descending order from the most positive percentile (above market) to the most negative (below market).

The Association expressed an interest in obtaining private sector data for benchmark classifications to evaluate how the private sector values these jobs. Obtaining private sector is very challenging since private organizations are not obligated to provide salary and benefits information; in addition, private sector pay practices are so sufficiently different from public sector practices that direct comparisons on range structures is difficult. Absent the ability to directly survey private organizations, Koff & Associates relies on published data from the Bureau of Labor Statistics to provide that view of private sector pay practices. Narrative on the occupational job matching and BLS methodology is presented in Appendix V.

For those benchmark classifications with comparable BLS data, the lower left quadrant of each top step data sheet contains a section titled "Private Sector Reference"; we have inserted the most comparable BLS match with the reported salary, and identified how that salary compares with the Association's.

All Comparator Agencies

The percentile represents the difference between the Association's current base salary/total compensation for each classification and the median base salary/total compensation of the all comparator agencies.



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| Classification | Top Monthly Salary | Total Monthly Compensation |
|--|-------------------------|----------------------------|
| | % above or below Median | % above or below Median |
| Accountant | 3.3% | 9.9% |
| Accounting Manager | -3.3% | -3.8% |
| Administrative HR Supervisor | -3.6% | 3.8% |
| Administrative/Human Resources Manager | -34.1% | -23.3% |
| Chief Executive Officer | -36.2% | -29.3% |
| Communications Coordinator | -1.3% | 8.4% |
| Compliance Officer | Insufficient Data | Insufficient Data |
| General Counsel | -35.7% | -36.2% |
| Information Systems Programmer Analyst | -12.2% | -2.6% |
| Information Technology Coordinator | 0.0% | -0.9% |
| Information Technology Manager | -33.1% | -26.0% |
| Retirement Services Manager | -6.1% | -1.5% |
| Average | -14.8% | -9.2% |

Base Salaries

Market base salary results show that of the eleven (11) benchmarked current classifications, for which an analysis could be conducted, one (1) is paid above the market by less than 5% and one is right at market.

Nine (9) benchmarked classifications are paid below the market median. Three (3) classes are paid below the market median by less than 5%, one (1) class is paid below the market by more than 5% and less than 10%, and five (5) classes are paid below the market by more than 10%, one (1) more than 10% and less than 20% and (4) more than 30% under market.

Since the Deputy General Counsel is not a current classification, those results do not appear in the above table; however survey results for this classification are presented in Appendix II. There was one (1) classification that had fewer than four matches producing insufficient data to do an analysis.

Generally, we consider a classification falling within 5% of the median to be competitive in the labor market for salary survey purposes because of the differences in compensation policy and actual scope of work and position requirements. However, the Association can adopt a different standard.



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Total Compensation

Market total compensation results show that of the eleven (11) benchmarked current classifications for which an analysis could be conducted, three (3) classifications are paid above the market median. One (1) class is above the market by less than 5% and two (2) classifications are paid above the market by greater than 5% and less than 10%.

Market total compensation results show that eight (8) benchmarked classifications are paid below the market median. Four (4) classes are paid below the market median by less than 5%; three (3) are paid below the market by greater than 20% and less than 30%; and one (1) class is paid below the market by more than 30%.

Overall, these differences between market base salaries and total compensation indicate that the Association's benefits package, in terms of cost, is greater than that of the market. Further analysis indicates that, on average, classifications are 14.8% below the market median when analyzing base salaries, while that figure changes to 9.2% below the market when we evaluate total compensation, which is a 5.6% difference. It should be noted that this total compensation data reflects an increase in the employer's contribution towards medical premiums that will be in effect in 2016. Accordingly, we also collected 2016 medical premiums available at the comparator agencies at the time of data collection.

Benefits

Further analysis of the market benefit data reveals the differences between the Association's benefits versus the comparator agencies:

Retirement

- The Benefit Formula offered by the Association for "classic" member employees is 2%@55. Three (3) comparator agencies offers an equivalent benefit formula; one (1) comparator agency offers a 2%@55 ½; one (1) comparator agency offers a 2.35%@55; one (1) offers a 2.7%@55; one (1) offers of 3%@60; one (1) offers a 2%@61; one (1) offers 2%@61.25; one (1) offers a 2.6%@62; one(1) offers a 2.3%@65; and one (1) offers a 2.43%@65.
- Nine (9) comparators participate in social security.
- Three (3) comparators pay a percentage of the EPMC on behalf of the employee.
- Overall, the combination the enhancements to the pension plan display that the Association offers a retirement benefit that is greater than that of the comparators.

Insurances

- The Insurance benefits provided by the Association, including medical, dental, life, and long term disability, are approximately thirteen percent (13%) greater than those provided by the comparator agencies.



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The Association's benefits package is greater than that of the market due to the higher retirement formula and insurance premiums, and for professional classes, the provision of administrative leave. Since the average difference between base pay and total compensation is significant, salary recommendations were made based on total monthly compensation.

INTERNAL SALARY RELATIONSHIPS

Building from the salary levels established for identified benchmark classes, internal salary relationships were developed and consistently applied in order to develop specific salary recommendations for all non-benchmarked classes. Appendix IV presents the salary recommendations developed for the Association including the internal salary relationship guidelines used.

While analyzing internal relationships, the same factors were considered that we used in constructing the Association's classification plan, allocating positions to specific classifications within the plan, and comparing the Association's current classifications to the labor market during the compensation study.

In addition, when considering an appropriate salary range level, there are certain standard human resources practices that are normally applied, as follows:

- As mentioned above, a salary within 5% of the market average or median is considered to be competitive in the labor market for salary survey purposes because of the differences in compensation policy and actual scope of the position and its requirements. However, a closer standard can be adopted by an agency.
- Certain internal percentages are often applied. Those that are the most common are:
 - ❖ The differential between a trainee and experienced class in a series (I/II or Trainee/Experienced) is generally 10% to 15%;
 - ❖ A lead or advanced journey-level (III or Senior-level) position is generally placed 10% to 15% above the lower experienced level; and
 - ❖ A full supervisory position is normally placed at least 10% to 25% above the highest level supervised, depending upon the breadth and scope of supervision.
- When a market or internal equity adjustment is granted to one class in a series, the other classes in the series are also adjusted accordingly to maintain internal equity.

Internal equity between certain levels of classification is a fundamental factor to be considered when making salary decisions. When conducting a market compensation survey, results can often show that certain classifications that are aligned with each other are not the same in the outside labor market. However, as an organization, careful consideration needs to be given to these alignments because they represent internal value of classifications within job families, as well as across the organization.

There are some classifications which were either not benchmarked for the study, or in one case, there was insufficient data with which to conduct an analysis. For all classifications that were not



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benchmarked, internal alignments with other classifications will need to be considered, either in the same class series or those classifications that have similar scope of work, level of responsibility, and “worth” to the Association. Where it is difficult to ascertain internal relationships due to unique qualifications and responsibilities, reliance can be placed on past internal relationships. It is important for Association management to carefully review these internal relationships and determine if they are still appropriate given the current market data.

It is important to analyze market data and internal relationships within class series as well as across the organization, and make adjustments to salary range placements as necessary based on the needs of the organization.

The Association may want to make other internal equity adjustments as it implements a compensation strategy. This market survey is only a tool to be used by the Association to determine market indexing and salary determination. Detailed information regarding each class' current salary and the percentage difference to the market median is found in Appendix I of this report.

RECOMMENDATIONS

Pay Philosophy

The Association has many options regarding what type of compensation plan it wants to implement. This decision will be based on what the Association's pay philosophy is, at which level it desires to pay its employees compared to the market, whether it is going to consider additional alternative compensation programs, and how great the competition is with other agencies over recruitment of a highly-qualified workforce.

Another consideration will be the cost of the Association's pay philosophy. Bringing all employees to the market median would denote an increase of the Association's payroll expenses and may not be feasible to accomplish with one immediate adjustment.

Proposed Monthly Salary Plan

We are recommending that the Association move to a consistent salary structure, typical of most public agencies, which consists of 5 steps that are 5% apart from each other with a 2.5% differential between each range.

Proposed Salary Range Placements

Appendix IV illustrates the proposed salary range placement for each classification based on the market data and an internal relationship analysis. The spreadsheets also include our rationale for each recommended placement and the projected percentage change. Our recommendation is to use the total compensation median-based results to calculate the recommendations. We made the following calculation: we used the market total compensation median percentages for each surveyed classification, multiplied that with the Association's current top salary step for that classification, and then placed classifications into the proposed monthly salary schedule based



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on those findings, into the salary range whose top step is closest to the market number (we refer to this as the “market placement”).

For all classifications, this primary implementation procedure must be completed only at the initial time of implementation. In the future, if the Association decides to implement annual across-the-board COLA increases, only the salary schedule that we developed needs to be increased by the appropriate percentage and each individual salary range will move up with this adjustment. This will ensure that the internal salary relationships are preserved and the salary schedule remains structured and easily administered.

Options for Implementation

While the Association may be interested in bringing all salaries to the market median, in most cases this goal may not be reached with a single adjustment. In this case, one option is to use a phased implementation approach. Normally, if the compensation implementation program must be carried over months or years, the classes that are farthest from the market median should receive the greatest equity increase (separate from any cost of living increase). If a class falls within five percent (5%) of the market median, it would be logical to make no equity adjustment in the first round of changes. However, if a class is more than 5% (or in this case, more than 20%) below the market median, a higher percentage change may be initially warranted to reduce the disparity.

For example, if the Association decided to implement the recommendations over a three (3) year period, then the following guidelines could be applied for the initial increase of the three-year implementation plan:

| <u>Market Disparity</u> | <u>% Increase</u> |
|-------------------------|-------------------|
| 0 to 4.99% | 0 to 2.49% |
| 5.0% to 10.39% | 2.5% to 4.99% |
| 10.4% to 12.99% | 5.0% to 7.49% |
| 13.0% to 19.99% | 7.5% to 9.99% |
| 20.0% and above | 10.0% |

The initial first year adjustment represents the adjustment needed in order to provide a portion of the equity increase and to place the class into the closest step (but not below) where they are now. Subsequent increases would be spaced on a similar schedule (at annual intervals) based upon the remaining disparity after each adjustment.

Please note that typically, for those classes that had a market disparity of 0 to 4.99%, we recommend a 0% increase in the first year and an adjustment in the second year. Depending upon the Association’s financial situation, which will have to be reviewed before each further adjustment is made, all market disparity adjustments are intended to be completed by the third year. The Association may also consider a similar implementation plan over a longer period of time, like a 5-year implementation plan.



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Contra Costa County Employees' Retirement Association – Unrepresented Classifications

Another option is to move employees into the salary range that is recommended for each class based on this market study and to the step within the new range that is closest to their current compensation. If employees' current salaries are significantly below market so that their current compensation falls below the bottom of the newly recommended range, then larger adjustments would be needed to move those employees at least to the bottom of the new salary range.

The Association may spend additional time to go through a process of deliberation and decision-making as to what compensation philosophy it should implement to attract, motivate, and retain a high-quality workforce. However, it may want to consider adjusting those classifications' salaries that are currently below the market median as soon as possible, assuming that incumbents' performance meets the Association's level of expectation.

We would also recommend that the Association Y-rate all employees that are at a salary above their current market salary range until the market numbers "catch up" with their current salary. To Y-rate an employee means to keep the employee's salary frozen and to provide no salary increases until the employee's current salary is within the recommended salary range. This will result in no immediate loss of income, but will delay any future increases until the incumbent's salary is within the salary range.

Other options to "freezing" a class' salary in place until the market catches up are:

- "Grandfathering" of salary ranges: this means that the salary range for the classification is adjusted down to what the market numbers are. However, current incumbents would continue being paid at the current rate of pay (which would put them outside of the new and adjusted salary range for the class) until they leave the Association or retire. Any new-hires would be paid within the newly established salary range.
- Single-incumbent classes: if a class only has one incumbent, an option would be to wait until the person leaves or retires from the Association and then adjust the salary range for the class according to the market.

Another option, of course, is to actually reduce salaries down to where the market numbers are. However, from employee relations perspective this may not be a viable option.

USING MARKET DATA AND THIS REPORT AS A TOOL

We wish to reiterate that this report and our findings are meant to be a tool for the Association to create and implement an equitable compensation plan. Compensation strategies are designed to attract and retain excellent staff. However, financial realities and the Association's expectations may also come into play when determining appropriate compensation philosophies and strategies. The collected data represents a market survey that will give the Association an instrument to make future compensation decisions.



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Contra Costa County Employees' Retirement Association – Unrepresented
Classifications

It has been a pleasure working with the Contra Costa County Employees' Retirement Association on this critical project. Please do not hesitate to contact us if we can provide any additional information or clarification regarding this report.

Respectfully Submitted,

Koff & Associates

A handwritten signature in purple ink, appearing to read 'Katie Kaneko'.

Katie Kaneko
President



Final Report – Classification and Compensation Study

Contra Costa County Employees' Retirement Association – Unrepresented
Classifications

Appendix I

Results Summary

**Contra Costa Employees' Retirement Association
Results Summary - Unrepresented
November, 2015**

| Classification | Adjusted Top Monthly Salary Data | | | | | Total Monthly Compensation | | | | | # of |
|--|----------------------------------|-------------------|-------------------|-------------------|-------------------|----------------------------|-------------------|-------------------|-------------------|-------------------|---------|
| | Adjusted Top Monthly Salary | Average | % above or below | Median | % above or below | Total Monthly Comp | Average | % above or below | Median | % above or below | Matches |
| Accountant | \$ 6,825 | \$ 6,958 | -1.9% | \$ 6,600 | 3.3% | \$10,416 | \$10,202 | 2.1% | \$9,380 | 9.9% | 12 |
| Accounting Manager | \$10,338 | \$11,070 | -7.1% | \$10,684 | -3.3% | \$14,880 | \$15,548 | -4.5% | \$15,444 | -3.8% | 11 |
| Administrative HR Supervisor (HR Analyst Data) | \$7,899 | \$8,288 | -4.9% | \$8,186 | -3.6% | \$11,920 | \$12,061 | -1.2% | \$11,472 | 3.8% | 12 |
| Administrative/Human Resources Manager (HR Manager Data) | \$8,447 | \$11,141 | -31.9% | \$11,325 | -34.1% | \$12,597 | \$15,724 | -24.8% | \$15,537 | -23.3% | 10 |
| Chief Executive Officer | \$15,925 | \$21,287 | -33.7% | \$21,692 | -36.2% | \$21,366 | \$27,590 | -29.1% | \$27,618 | -29.3% | 8 |
| Communications Coordinator | \$8,127 | \$8,076 | 0.6% | \$8,231 | -1.3% | \$12,150 | \$11,583 | 4.7% | \$11,135 | 8.4% | 9 |
| Compliance Officer | \$10,855 | Insufficient Data | Insufficient Data | Insufficient Data | Insufficient Data | \$15,480 | Insufficient Data | Insufficient Data | Insufficient Data | Insufficient Data | 3 |
| Deputy General Counsel - New Class | Proposed | \$14,625 | | \$14,807 | | N/A | \$19,386 | | \$19,148 | | 10 |
| General Counsel | \$13,736 | \$18,265 | -33.0% | \$18,633 | -35.7% | \$18,825 | \$23,915 | -27.0% | \$25,638 | -36.2% | 7 |
| Information Technology Coordinator | \$6,865 | \$6,955 | -1.3% | \$6,865 | 0.0% | \$10,155 | \$10,204 | -0.5% | \$10,251 | -0.9% | 11 |
| Information Technology Manager | \$9,919 | \$13,492 | -36.0% | \$13,204 | -33.1% | \$14,397 | \$18,572 | -29.0% | \$18,134 | -26.0% | 11 |
| Information Systems Programmer Analyst | \$7,439 | \$8,511 | -14.4% | \$8,344 | -12.2% | \$11,364 | \$12,015 | -5.7% | \$11,654 | -2.6% | 10 |
| Retirement Services Manager | \$10,338 | \$11,147 | -7.8% | \$10,969 | -6.1% | \$14,880 | \$15,066 | -1.2% | \$15,107 | -1.5% | 8 |
| | | Average | -15.6% | Average | -14.8% | | Average | -10.6% | Average | -9.2% | |



Final Report – Classification and Compensation Study

Contra Costa County Employees' Retirement Association – Unrepresented
Classifications

Appendix II

Market Base Salary, Benefits Detail, and Total Compensation Findings

**Contra Costa County Employees' Retirement Association
Top Monthly Salary Data - Unrepresented
November, 2015**

| Accountant | | | | | | | | |
|------------------------------------|--|--------------------------|-------------------------------|----------------|--------------------------|-----------------|----------------------|--------------------------|
| Rank | Comparator Agency | Class Title | Top Monthly Salary | Cost of Labor | Adjusted Top Step Salary | Effective Date | Next Salary Increase | Next Percentage Increase |
| 1 | Contra Costa Water District | Senior Accountant | \$9,459 | | \$ 9,459 | 11/10/2014 | Unknown | Unknown |
| 2 | Central Contra Costa Sanitary District | Accountant | \$8,284 | | \$ 8,284 | 4/18/2015 | 4/18/2016 | 1% - 5% |
| 3 | East Bay Municipal Utility District | Accountant II | \$7,857 | | \$ 7,857 | 4/20/2015 | Unknown | Unknown |
| 4 | Alameda County Employees Retirement Association | Retirement Accountant II | \$7,075 | | \$ 7,075 | 7/5/2015 | Unknown | Unknown |
| 5 | City/County San Francisco Retirement System | Accountant II | \$6,931 | | \$ 6,931 | 10/15/2015 | 7/1/2016 | 2.25% - 3.25% |
| 6 | Contra Costa County Employees' Retirement Association | Accountant | \$6,825 | | \$ 6,825 | 7/1/2015 | | |
| 7 | San Mateo County Employees Retirement Association | Retirement Accountant II | \$6,691 | | \$ 6,691 | 10/11/2015 | 10/19/2016 | 3% |
| 8 | Ventura County Employees Retirement Association | Accounting Officer III | \$6,010 | 8.3% | \$ 6,509 | 8/16/2015 | Unknown | Unknown |
| 9 | Orange County Employees Retirement System | Accountant Auditor II | \$5,971 | 7.2% | \$ 6,401 | 4/14/2014 | Unknown | Unknown |
| 10 | Sacramento County Employees Retirement System | Accountant | \$5,798 | 9.8% | \$ 6,366 | 6/28/2015 | 6/26/2016 | 4% + 1% |
| 11 | San Bernardino County Employees Retirement Association | Accountant | \$5,536 | 11.5% | \$ 6,173 | 7/2/2015 | Unknown | Unknown |
| 12 | San Diego County Employees Retirement Association | Retirement Accountant | \$5,561 | 9.6% | \$ 6,095 | 6/26/2015 | 6/24/2016 | 2% |
| 13 | Contra Costa County | Accountant II | \$5,652 | | \$ 5,652 | 7/1/2015 | Unknown | Unknown |
| PRIVATE SECTOR REFERENCE | | | | | | | | |
| Accountants and Auditors | | | Average of Comparators | | \$ 6,958 | | | |
| | | | % CCCERA Above/Below | 1.3% | -1.9% | | | |
| Average of BLS Private Sector Data | \$7,159 | | Median of Comparators | \$6,351 | \$ 6,600 | | | |
| % CCCERA Above/Below | -4.9% | | % CCCERA Above/Below | 7.0% | 3.3% | | | |
| Median of BLS Private Sector Data | \$6,490 | | Number of Matches | 12 | 12 | | | |
| % CCCERA Above/Below | 4.9% | | | | | | | |

NOTE: All calculations exclude CCCERA

N/C - Non Comparator

**Contra Costa County Employees' Retirement Association
Top Monthly Salary Data - Unrepresented
November, 2015**

| Accounting Manager | | | Top Monthly Salary | Cost of Labor | Adjusted Top Step Salary | Effective Date | Next Salary Increase | Next Percentage Increase |
|---------------------------------------|--|-----------------------------|-------------------------------|----------------------|---------------------------------|-----------------------|-----------------------------|---------------------------------|
| Rank | Comparator Agency | Class Title | | | | | | |
| 1 | Central Contra Costa Sanitary District | Finance Manager | \$13,707 | | \$13,707 | 4/18/2015 | 4/18/2016 | 2% - 5% |
| 2 | Contra Costa Water District | Accounting Manager | \$13,414 | | \$13,414 | 7/29/2014 | Unknown | Unknown |
| 3 | Alameda County Employees Retirement Association | Fiscal Services Officer | \$12,527 | | \$12,527 | Unknown | Unknown | Unknown |
| 4 | City/County San Francisco Retirement System | Manager III | \$11,717 | | \$11,717 | 10/15/2015 | 7/1/2016 | 2.25% - 3.25% |
| 5 | San Bernardino County Employees Retirement Association | Accounting Manager | \$10,228 | 11.5% | \$11,404 | 7/2/2015 | Unknown | Unknown |
| 6 | San Mateo County Employees Retirement Association | Retirement Finance Officer | \$10,684 | | \$10,684 | 10/11/2015 | 10/19/2016 | 3% |
| 7 | Sacramento County Employees Retirement System | Senior Accounting Manager | \$9,593 | 9.8% | \$10,533 | 6/28/2015 | 6/26/2016 | 4% + 1% |
| 8 | Contra Costa County Employees' Retirement Association | Accounting Manager | \$10,338 | | \$10,338 | 7/1/2015 | | |
| 9 | San Diego County Employees Retirement Association | Retirement Services Manager | \$9,232 | 9.6% | \$10,118 | 6/26/2015 | 6/24/2016 | 2% |
| 10 | Orange County Employees Retirement System | Finance Manager | \$9,325 | 7.2% | \$9,996 | 4/14/2014 | Unknown | Unknown |
| 11 | Ventura County Employees Retirement Association | Fiscal Manager I | \$8,328 | 8.3% | \$9,019 | 6/16/2015 | Unknown | Unknown |
| 12 | Contra Costa County | Chief Accountant | \$8,651 | | \$8,651 | 7/1/2015 | Unknown | Unknown |
| 13 | East Bay Municipal Utility District | N/C | | | | 4/20/2015 | Unknown | Unknown |
| PRIVATE SECTOR REFERENCE | | | Average of Comparators | | \$10,673 | | \$11,070 | |
| Financial Managers | | | % CCCERA Above/Below | | -3.2% | | -7.1% | |
| Average of BLS Private Sector Data | | | | | | | | |
| \$13,867 | | | | | | | | |
| % CCCERA Above/Below | | | | | | | | |
| -34.1% | | | Median of Comparators | | \$10,228 | | \$10,684 | |
| Median of BLS Private Sector Data | | | % CCCERA Above/Below | | 1.1% | | -3.3% | |
| \$12,574 | | | | | | | | |
| % CCCERA Above/Below | | | Number of Matches | | 11 | | 11 | |
| -21.6% | | | | | | | | |
| NOTE: All calculations exclude CCCERA | | | | | | | | |

N/C - Non Comparator

**Contra Costa County Employees' Retirement Association
Top Monthly Salary Data - Unrepresented
November, 2015**

| Administrative HR Supervisor (HR Analyst Data) | | | | | | | | |
|---|--|---|-------------------------------|---------------|--------------------------|-----------------|----------------------|--------------------------|
| Rank | Comparator Agency | Class Title | Top Monthly Salary | Cost of Labor | Adjusted Top Step Salary | Effective Date | Next Salary Increase | Next Percentage Increase |
| 1 | Orange County Employees Retirement System | Administrative Manager I | \$8,788 | 7.2% | \$9,421 | 4/14/2014 | Unknown | Unknown |
| 2 | Central Contra Costa Sanitary District | Human Resources Analyst | \$9,379 | | \$9,379 | 4/18/2015 | 4/18/2016 | 1% - 5% |
| 3 | Contra Costa Water District | Human Resources Analyst II | \$8,895 | | \$8,895 | 10/3/2014 | Unknown | Unknown |
| 4 | East Bay Municipal Utility District | Human Resources Analyst II | \$8,889 | | \$8,889 | 4/20/2015 | Unknown | Unknown |
| 5 | San Mateo County Employees Retirement Association | Management Analyst | \$8,786 | | \$8,786 | 10/11/2015 | 10/19/2016 | 3% |
| 6 | Ventura County Employees Retirement Association | Personnel Analyst II | \$7,705 | 8.3% | \$8,345 | 6/16/2015 | Unknown | Unknown |
| 7 | Alameda County Employees Retirement Association | Human Resources Analyst II | \$8,027 | | \$8,027 | Unknown | Unknown | Unknown |
| 8 | San Bernardino County Employees Retirement Association | Human Resources Coordinator | \$7,162 | 11.5% | \$7,986 | 7/2/2015 | Unknown | Unknown |
| 9 | Sacramento County Employees Retirement System | Senior Personnel Analyst | \$7,247 | 9.8% | \$7,957 | 6/28/2015 | 6/26/2016 | 4% + 1% |
| 10 | Contra Costa County Employees' Retirement Association | Administrative HR Supervisor (HR Analyst Data) | \$7,899 | | \$7,899 | 7/1/2015 | | |
| 11 | City/County San Francisco Retirement System | Personnel Analyst | \$7,809 | | \$7,809 | 10/15/2015 | 7/1/2016 | 2.25% - 3.25% |
| 12 | San Diego County Employees Retirement Association | Human Resources Analyst | \$6,644 | 9.6% | \$7,282 | 6/26/2015 | 6/24/2016 | 2% |
| 13 | Contra Costa County | Human Resources Consultant | \$6,684 | | \$6,684 | 7/1/2015 | Unknown | Unknown |
| PRIVATE SECTOR REFERENCE | | | | | | | | |
| Human Resources Specialist | | | Average of Comparators | | \$8,001 | | | \$8,288 |
| Average of BLS Private Sector Data | | | % CCCERA Above/Below | | -1.3% | | | -4.9% |
| % CCCERA Above/Below | | | | | | | | |
| Median of BLS Private Sector Data | | | Median of Comparators | | \$7,918 | | | \$8,186 |
| % CCCERA Above/Below | | | % CCCERA Above/Below | | -0.2% | | | -3.6% |
| Median of BLS Private Sector Data | | | Number of Matches | | 12 | | | 12 |
| % CCCERA Above/Below | | | | | | | | |

NOTE: All calculations exclude CCCERA

N/C - Non Comparator

**Contra Costa County Employees' Retirement Association
Top Monthly Salary Data - Unrepresented
November, 2015**

| Administrative Human Resources Manager (HR Manager Data) | | | Top Monthly Salary | Cost of Labor | Adjusted Top Step Salary | Effective Date | Next Salary Increase | Next Percentage Increase |
|---|--|---|--------------------|---------------|-------------------------------|-----------------|----------------------|--------------------------|
| Rank | Comparator Agency | Class Title | | | | | | |
| 1 | Contra Costa Water District | Human Resources Manager | \$14,082 | | \$14,082 | 7/29/2014 | Unknown | Unknown |
| 2 | Central Contra Costa Sanitary District | Human Resources Manager | \$12,424 | | \$12,424 | 4/18/2015 | 4/18/2016 | 2% - 5% |
| 3 | Alameda County Employees Retirement Association | Human Resources Officer ACERA | \$11,903 | | \$11,903 | Unknown | Unknown | Unknown |
| 4 | City/County San Francisco Retirement System | Manager III | \$11,717 | | \$11,717 | 10/15/2015 | 7/1/2016 | 2.25% - 3.25% |
| 5 | Orange County Employees Retirement System | Administrative Manager II | \$10,927 | 7.2% | \$11,714 | 4/14/2014 | Unknown | Unknown |
| 6 | Ventura County Employees Retirement Association | Program Management Analyst | \$10,099 | 8.3% | \$10,937 | 6/16/2015 | Unknown | Unknown |
| 7 | San Mateo County Employees Retirement Association | Human Resources Manager II | \$10,684 | | \$10,684 | 10/11/2015 | 10/19/2016 | 3% |
| 8 | Sacramento County Employees Retirement System | Human Resources Manager II | \$9,497 | 9.8% | \$10,428 | 6/28/2015 | 6/26/2016 | 4% + 1% |
| 9 | San Diego County Employees Retirement Association | Human Resources Manager | \$8,252 | 9.6% | \$9,044 | 6/26/2015 | 6/24/2016 | 2% |
| 10 | Contra Costa County | Personnel Services Supervisor | \$8,481 | | \$8,481 | 7/1/2015 | Unknown | Unknown |
| 11 | Contra Costa County Employees' Retirement Association | Administrative/Human Resources Manager (HR Manager Data) | \$8,447 | | \$8,447 | 7/1/2015 | | |
| 12 | East Bay Municipal Utility District | N/C | | | | 4/20/2015 | Unknown | Unknown |
| 13 | San Bernardino County Employees Retirement Association | N/C | | | | | | |
| PRIVATE SECTOR REFERENCE | | | | | Average of Comparators | \$10,807 | \$11,141 | |
| Human Resources Manager | | | | | % CCCERA Above/Below | -27.9% | -31.9% | |
| Average of BLS Private Sector Data | | | \$11,781 | | | | | |
| % CCCERA Above/Below | | | -39.5% | | Median of Comparators | \$10,806 | \$11,325 | |
| Median of BLS Private Sector Data | | | \$10,951 | | % CCCERA Above/Below | -27.9% | -34.1% | |
| % CCCERA Above/Below | | | -29.6% | | Number of Matches | 10 | 10 | |

NOTE: All calculations exclude CCCERA

N/C - Non Comparator

**Contra Costa County Employees' Retirement Association
Top Monthly Salary Data - Unrepresented
November, 2015**

| Chief Executive Officer | | | | | | | | |
|---------------------------------------|--|------------------------------------|-------------------------------|---------------|--------------------------|-----------------|----------------------|--------------------------|
| Rank | Comparator Agency | Class Title | Top Monthly Salary | Cost of Labor | Adjusted Top Step Salary | Effective Date | Next Salary Increase | Next Percentage Increase |
| 1 | City/County San Francisco Retirement System | Department Head VI | \$23,669 | | \$23,669 | 10/15/2015 | 7/1/2016 | 2.25% - 3.25% |
| 2 | San Diego County Employees Retirement Association | Retirement Chief Executive Officer | \$21,228 | 9.6% | \$23,266 | 6/26/2015 | 6/24/2016 | 2% |
| 3 | Orange County Employees Retirement System | Chief Executive Officer | \$21,151 | 7.2% | \$22,674 | 4/14/2014 | Unknown | Unknown |
| 4 | Alameda County Employees Retirement Association | Chief Executive Officer | \$21,892 | | \$21,892 | Unknown | Unknown | Unknown |
| 5 | San Bernardino County Employees Retirement Association | Chief Executive Officer | \$19,275 | 11.5% | \$21,492 | 7/2/2015 | Unknown | Unknown |
| 6 | San Mateo County Employees Retirement Association | Chief Executive Officer SAMCERA | \$20,141 | | \$20,141 | 10/11/2015 | 10/19/2016 | 3% |
| 7 | Ventura County Employees Retirement Association | Retirement Administrator | \$18,287 | 8.3% | \$19,805 | 6/16/2015 | Unknown | Unknown |
| 8 | Sacramento County Employees Retirement System | Retirement Administrator | \$15,806 | 9.8% | \$17,355 | 6/28/2015 | 6/26/2016 | 4% + 1% |
| 9 | Contra Costa County Employees' Retirement Association | Chief Executive Officer | \$15,925 | | \$15,925 | 7/1/2015 | | |
| 10 | Central Contra Costa Sanitary District | N/C | | | | | | |
| 11 | Contra Costa County | N/C | | | | | | |
| 12 | Contra Costa Water District | N/C | | | | | | |
| 13 | East Bay Municipal Utility District | N/C | | | | | | |
| PRIVATE SECTOR REFERENCE | | | | | | | | |
| Chief Executives | | | Average of Comparators | | \$20,181 | | | \$21,287 |
| | | | % CCCERA Above/Below | | -26.7% | | | -33.7% |
| Average of BLS Private Sector Data | | | | | \$17,562 | | | |
| % CCCERA Above/Below | | | | | -10.3% | | | |
| Median of BLS Private Sector Data | | | | | \$15,600 | | | |
| % CCCERA Above/Below | | | | | 2.0% | | | |
| | | | Median of Comparators | | \$20,646 | | | \$21,692 |
| | | | % CCCERA Above/Below | | -29.6% | | | -36.2% |
| | | | Number of Matches | | 8 | | | 8 |
| NOTE: All calculations exclude CCCERA | | | | | | | | |

N/C - Non Comparator

**Contra Costa County Employees' Retirement Association
Top Monthly Salary Data - Unrepresented
November, 2015**

| Communications Coordinator | | | | | | | | |
|---------------------------------------|--|--|-------------------------------|---------------|--------------------------|-----------------|----------------------|--------------------------|
| Rank | Comparator Agency | Class Title | Top Monthly Salary | Cost of Labor | Adjusted Top Step Salary | Effective Date | Next Salary Increase | Next Percentage Increase |
| 1 | Sacramento County Employees Retirement System | Communications and Media Officer III | \$8,406 | 9.8% | \$9,230 | 6/28/2015 | 6/26/2016 | 4% + 1% |
| 2 | Orange County Employees Retirement System | Communications Manager | \$8,550 | 7.2% | \$9,166 | 4/14/2014 | Unknown | Unknown |
| 3 | East Bay Municipal Utility District | Public Information Specialist II | \$8,889 | | \$8,889 | 4/20/2015 | Unknown | Unknown |
| 4 | San Mateo County Employees Retirement Association | Retirement Communications Specialist | \$8,493 | | \$8,493 | 10/11/2015 | 10/19/2016 | 3% |
| 5 | City/County San Francisco Retirement System | Public Relations Officer | \$8,231 | | \$8,231 | 10/15/2015 | 7/1/2016 | 2.25% - 3.25% |
| 6 | Contra Costa County Employees' Retirement Association | Communications Coordinator | \$8,127 | | \$8,127 | 7/1/2015 | | |
| 7 | San Bernardino County Employees Retirement Association | Communications Officer | \$7,162 | 11.5% | \$7,986 | 7/2/2015 | Unknown | Unknown |
| 8 | San Diego County Employees Retirement Association | Retirement Senior Communications Officer | \$6,649 | 9.6% | \$7,287 | 6/26/2015 | 6/24/2016 | 2% |
| 9 | Alameda County Employees Retirement Association | Communications Manager | \$7,070 | | \$7,070 | Unknown | Unknown | Unknown |
| 10 | Contra Costa County | Public Information Officer | \$6,336 | | \$6,336 | 7/1/2015 | Unknown | Unknown |
| 11 | Central Contra Costa Sanitary District | N/C | | | | | | |
| 12 | Contra Costa Water District | N/C | | | | | | |
| 13 | Ventura County Employees Retirement Association | N/C | | | | | | |
| PRIVATE SECTOR REFERENCE | | | | | | | | |
| Public Relations Specialist | | | Average of Comparators | | \$7,754 | | | \$8,076 |
| Average of BLS Private Sector Data | | | % CCCERA Above/Below | 4.6% | | | | 0.6% |
| % CCCERA Above/Below | | | | | | | | |
| Median of BLS Private Sector Data | | | Median of Comparators | | \$8,231 | | | \$8,231 |
| % CCCERA Above/Below | | | % CCCERA Above/Below | -1.3% | | | | -1.3% |
| | | | Number of Matches | | 9 | | | 9 |
| NOTE: All calculations exclude CCCERA | | | | | | | | |

N/C - Non Comparator

Contra Costa County Employees' Retirement Association
 Top Monthly Salary Data - Unrepresented
 November, 2015

| Compliance Officer | | | | | | | | |
|--------------------|---|---|---|-------------------|--------------------------|-------------------|----------------------|--------------------------|
| Rank | Comparator Agency | Class Title | Top Monthly Salary | Cost of Labor | Adjusted Top Step Salary | Effective Date | Next Salary Increase | Next Percentage Increase |
| 1 | City/County San Francisco Retirement System | Manager VI | \$14,571 | | \$14,571 | 10/15/2015 | 7/1/2016 | 2.25% - 3.25% |
| 2 | Contra Costa County Employees' Retirement Association | Compliance Officer | \$10,855 | | \$10,855 | 7/1/2015 | | |
| 3 | San Mateo County Employees Retirement Association | Manager, Corporate and HIPAA Compliance | \$10,175 | | \$10,175 | 10/11/2015 | 10/19/2016 | 3% |
| 4 | Contra Costa County Alameda County Employees Retirement Association | Health Plan Director of Compliance and Government Regulations | \$9,537 | | \$9,537 | 7/1/2015 | Unknown | Unknown |
| 5 | | N/C | | | | | | |
| 6 | Central Contra Costa Sanitary District | N/C | | | | | | |
| 7 | Contra Costa Water District | N/C | | | | | | |
| 8 | East Bay Municipal Utility District | N/C | | | | | | |
| 9 | Orange County Employees Retirement System | N/C | | | | | | |
| 10 | Sacramento County Employees Retirement System | N/C | | | | | | |
| 11 | San Bernardino County Employees Retirement Association | N/C | | | | | | |
| 12 | San Diego County Employees Retirement Association | N/C | | | | | | |
| 13 | Ventura County Employees Retirement Association | N/C | | | | | | |
| | | | Average of Comparators % CCCERA Above/Below | Insufficient Data | Insufficient Data | Insufficient Data | Insufficient Data | Insufficient Data |
| | | | Median of Comparators % CCCERA Above/Below | Insufficient Data | Insufficient Data | Insufficient Data | Insufficient Data | Insufficient Data |
| | | | Number of Matches | 3 | 3 | | | |

NOTE: All calculations exclude CCCERA

N/C - Non Comparator

**Contra Costa County Employees' Retirement Association
Top Monthly Salary Data - Unrepresented
November, 2015**

| Deputy General Counsel | | | | | | | | |
|---------------------------------------|--|---|-------------------------------|---------------|--------------------------|-----------------|----------------------|--------------------------|
| Rank | Comparator Agency | Class Title | Top Monthly Salary | Cost of Labor | Adjusted Top Step Salary | Effective Date | Next Salary Increase | Next Percentage Increase |
| 1 | Contra Costa County Employees' Retirement Association | Deputy General Counsel - New Class | Proposed | | | 7/1/2015 | | |
| 2 | San Mateo County Employees Retirement Association | Deputy County Counsel IV | \$17,413 | | \$17,413 | 10/11/2015 | 10/19/2016 | 3% |
| 3 | City/County San Francisco Retirement System | Head Attorney Civil/Criminal | \$16,937 | | \$16,937 | 10/15/2015 | 7/1/2016 | 2.25% - 3.25% |
| 6 | Ventura County Employees Retirement Association | Senior Civil Attorney | \$14,027 | 8.3% | \$15,191 | 6/16/2015 | Unknown | Unknown |
| 7 | San Diego County Employees Retirement Association | Senior Deputy County Counsel | \$13,740 | 9.6% | \$15,059 | 6/26/2015 | 6/24/2016 | 2% |
| 4 | East Bay Municipal Utility District | Attorney III | \$15,021 | | \$15,021 | 4/20/2015 | Unknown | Unknown |
| 5 | Alameda County Employees Retirement Association | Associate Counsel ACERA | \$14,593 | | \$14,593 | Unknown | Unknown | Unknown |
| 9 | San Bernardino County Employees Retirement Association | Senior Staff Counsel | \$12,468 | 11.5% | \$13,902 | 7/2/2015 | Unknown | Unknown |
| 10 | Sacramento County Employees Retirement System | Civil Attorney Level IV Range B | \$12,453 | 9.8% | \$13,673 | 6/28/2015 | 6/26/2016 | 4% + 1% |
| 8 | Contra Costa County | Deputy County Counsel Advanced Exempt | \$12,807 | | \$12,807 | 7/1/2015 | Unknown | Unknown |
| 11 | Orange County Employees Retirement System | Attorney III Retirement | \$10,875 | 7.2% | \$11,658 | 4/14/2014 | Unknown | Unknown |
| 12 | Central Contra Costa Sanitary District | N/C | | | | | | |
| 13 | Contra Costa Water District | N/C | | | | | | |
| PRIVATE SECTOR REFERENCE | | | | | | | | |
| Lawyers | | | Average of Comparators | | \$14,033 | | | |
| Average of BLS Private Sector Data | | | % CCCERA Above/Below | | | \$14,625 | | |
| \$13,504.00 | | | Median of Comparators | | \$13,884 | | | |
| % CCCERA Above/Below | | | % CCCERA Above/Below | | | \$14,807 | | |
| Median of BLS Private Sector Data | | | Number of Matches | | 10 | | | |
| \$12,525.00 | | | % CCCERA Above/Below | | | 10 | | |
| NOTE: All calculations exclude CCCERA | | | | | | | | |

N/C - Non Comparator

**Contra Costa County Employees' Retirement Association
Top Monthly Salary Data - Unrepresented
November, 2015**

| General Counsel | | | | | | | | |
|-------------------------------|--|--------------------------------|---------------------------|----------------------|---------------------------------|-----------------------|-----------------------------|---------------------------------|
| Rank | Comparator Agency | Class Title | Top Monthly Salary | Cost of Labor | Adjusted Top Step Salary | Effective Date | Next Salary Increase | Next Percentage Increase |
| 1 | Orange County Employees Retirement System | Chief Legal Officer | \$20,867 | 7.2% | \$22,369 | 4/14/2014 | Unknown | Unknown |
| 2 | San Bernardino County Employees Retirement Association | Chief Counsel | \$18,528 | 11.5% | \$20,659 | 7/2/2015 | Unknown | Unknown |
| 3 | San Mateo County Employees Retirement Association | Retirement Chief Legal Counsel | \$19,183 | | \$19,183 | 10/11/2015 | 10/19/2016 | 3% |
| 4 | San Diego County Employees Retirement Association | Retirement General Counsel | \$17,001 | 9.6% | \$18,633 | 6/26/2015 | 6/24/2016 | 2% |
| 5 | Alameda County Employees Retirement Association | Chief Counsel | \$17,916 | | \$17,916 | Unknown | Unknown | Unknown |
| 6 | Ventura County Employees Retirement Association | General Counsel Retirement | \$13,990 | 8.3% | \$15,151 | 6/16/2015 | Unknown | Unknown |
| 7 | Sacramento County Employees Retirement System | Retirement General Counsel | \$12,699 | 9.8% | \$13,944 | 6/28/2015 | 6/26/2016 | 4% + 1% |
| 8 | Contra Costa County Employees' Retirement Association | General Counsel | \$13,736 | | \$13,736 | 7/1/2015 | | |
| 9 | Central Contra Costa Sanitary District | N/C | | | | | | |
| 10 | City/County San Francisco Retirement System | N/C | | | | | | |
| 11 | Contra Costa County | N/C | | | | | | |
| 12 | Contra Costa Water District | N/C | | | | | | |
| 13 | East Bay Municipal Utility District | N/C | | | | | | |
| Average of Comparators | | | \$17,169 | | \$18,265 | | | |
| % CCCERA Above/Below | | | -25.0% | | -33.0% | | | |
| Median of Comparators | | | \$17,916 | | \$18,633 | | | |
| % CCCERA Above/Below | | | -30.4% | | -35.7% | | | |
| Number of Matches | | | 7 | | 7 | | | |

NOTE: All calculations exclude CCCERA

N/C - Non Comparator

**Contra Costa County Employees' Retirement Association
Top Monthly Salary Data - Unrepresented
November, 2015**

| Information Technology Coordinator | | | | | | | | |
|---|--|--|-------------------------------|---------------|--------------------------|-----------------|----------------------|--------------------------|
| Rank | Comparator Agency | Class Title | Top Monthly Salary | Cost of Labor | Adjusted Top Step Salary | Effective Date | Next Salary Increase | Next Percentage Increase |
| 1 | Central Contra Costa Sanitary District | Technical Support Analyst | \$7,714 | | \$7,714 | 4/18/2015 | Increase | |
| 2 | Contra Costa Water District | Network Desktop Support Technician I | \$7,500 | | \$7,500 | 7/1/2015 | Unknown | 1% - 5% |
| 3 | City/County San Francisco Retirement System | Information Systems Administrator II | \$7,497 | | \$7,497 | 10/15/2015 | 7/1/2016 | 2.25% - 3.25% |
| 4 | Ventura County Employees Retirement Association | Desktop Support Analyst II | \$6,820 | 8.3% | \$7,386 | 8/16/2015 | Unknown | Unknown |
| 5 | San Mateo County Employees Retirement Association | Information Technology Technician | \$7,289 | | \$7,289 | 10/11/2015 | 10/19/2016 | 3% |
| 6 | Contra Costa County Employees' Retirement Association | Information Technology Coordinator | \$6,865 | | \$6,865 | 7/1/2015 | | |
| 7 | Sacramento County Employees Retirement System | Information Technology Customer Support Specialist | \$6,252 | 9.8% | \$6,865 | 6/28/2015 | 6/26/2016 | 4% + 1% |
| 8 | San Diego County Employees Retirement Association | Retirement Technology Systems Technician | \$6,153 | 9.6% | \$6,744 | 6/26/2015 | 6/24/2016 | 2% |
| 9 | Alameda County Employees Retirement Association | Information Systems Specialist | \$6,621 | | \$6,621 | Unknown | Unknown | Unknown |
| 10 | East Bay Municipal Utility District | Information Systems Specialist III | \$6,609 | | \$6,609 | 4/20/2015 | Unknown | Unknown |
| 11 | Contra Costa County | Information Systems Specialist III | \$6,222 | | \$6,222 | 7/1/2015 | Unknown | Unknown |
| 12 | Orange County Employees Retirement System | Information Systems Technician II | \$5,651 | 7.2% | \$6,058 | 4/14/2014 | Unknown | Unknown |
| 13 | San Bernardino County Employees Retirement Association | N/C | | | | | | |
| PRIVATE SECTOR REFERENCE | | | | | | | | |
| Computer Network Support Specialist | | | Average of Comparators | | \$6,757 | | \$6,955 | |
| Average of BLS Private Sector Data | | | % CCCERA Above/Below | | 1.6% | | -1.3% | |
| % CCCERA Above/Below | | | | | | | | |
| Median of BLS Private Sector Data | | | Median of Comparators | | \$6,621 | | \$6,865 | |
| % CCCERA Above/Below | | | % CCCERA Above/Below | | 3.6% | | 0.0% | |
| % CCCERA Above/Below | | | | | | | | |
| | | | Number of Matches | | 11 | | 11 | |
| NOTE: All calculations exclude CCCERA | | | | | | | | |

N/C - Non Comparator

**Contra Costa County Employees' Retirement Association
Top Monthly Salary Data - Unrepresented
November, 2015**

| Information Technology Manager | | | | | | | | |
|--|--|--|-------------------------------|---------------|--------------------------|-----------------|----------------------|--------------------------|
| Rank | Comparator Agency | Class Title | Top Monthly Salary | Cost of Labor | Adjusted Top Step Salary | Effective Date | Next Salary Increase | Next Percentage Increase |
| 1 | San Bernardino County Employees Retirement Association | Chief of Information Services | \$15,198 | 11.5% | \$16,946 | 7/2/2015 | Unknown | Unknown |
| 2 | Central Contra Costa Sanitary District | Information Technology Manager | \$15,510 | | \$15,510 | 4/18/2015 | 4/18/2016 | 2% - 5% |
| 3 | East Bay Municipal Utility District | Information Systems Division Manager | \$15,400 | | \$15,400 | 4/20/2015 | Unknown | Unknown |
| 4 | City/County San Francisco Retirement System | Manager VI | \$14,571 | | \$14,571 | 10/15/2015 | 7/1/2016 | 2.25% - 3.25% |
| 5 | Contra Costa Water District | Information Systems Manager | \$14,082 | | \$14,082 | 7/29/2014 | Unknown | Unknown |
| 6 | Orange County Employees Retirement System | Director of Information Technology | \$12,317 | 7.2% | \$13,204 | 4/14/2014 | Unknown | Unknown |
| 7 | San Mateo County Employees Retirement Association | Chief Retirement Technology Officer | \$12,820 | | \$12,820 | 10/11/2015 | 10/19/2016 | 3% |
| 8 | San Diego County Employees Retirement Association | Retirement Information Technology Services Manager | \$11,386 | 9.6% | \$12,479 | 6/26/2015 | 6/24/2016 | 2% |
| 9 | Alameda County Employees Retirement Association | Project and Information Services Manager | \$11,903 | | \$11,903 | Unknown | Unknown | Unknown |
| 10 | Sacramento County Employees Retirement System | Information Technology Manager | \$10,370 | 9.8% | \$11,386 | 6/28/2015 | 6/26/2016 | 4% + 1% |
| 11 | Contra Costa County | Information Systems Manager II | \$10,107 | | \$10,107 | 7/1/2015 | Unknown | Unknown |
| 12 | Contra Costa County Employees' Retirement Association | Information Technology Manager | \$9,919 | | \$9,919 | 7/1/2015 | | |
| 13 | Ventura County Employees Retirement Association | N/C | | | | | | |
| PRIVATE SECTOR REFERENCE | | | | | | | | |
| Computer and Information Systems Manager | | | Average of Comparators | | \$13,060 | | | \$13,492 |
| Average of BLS Private Sector Data | | | % CCCERA Above/Below | | -31.7% | | | -36.0% |
| \$14,078 | | | Median of Comparators | | \$12,820 | | | \$13,204 |
| -41.9% | | | % CCCERA Above/Below | | -29.2% | | | -33.1% |
| Median of BLS Private Sector Data | | | Number of Matches | | 11 | | | 11 |
| \$13,298.00 | | | | | | | | |
| -34.1% | | | | | | | | |

NOTE: All calculations exclude CCCERA

N/C - Non Comparator

**Contra Costa County Employees' Retirement Association
Top Monthly Salary Data - Unrepresented
November, 2015**

| Information Systems Programmer Analyst | | | | | | | | |
|---|--|--|-------------------------------|---------------|--------------------------|-----------------|----------------------|--------------------------|
| Rank | Comparator Agency | Class Title | Top Monthly Salary | Cost of Labor | Adjusted Top Step Salary | Effective Date | Next Salary Increase | Next Percentage Increase |
| 1 | Central Contra Costa Sanitary District | Programmer Analyst | \$10,521 | | \$10,521 | 4/18/2015 | 4/18/2016 | 1% - 5% |
| 2 | San Mateo County Employees Retirement Association | Information Technology Analyst | \$9,197 | | \$9,197 | 10/11/2015 | 10/19/2016 | 3% |
| 3 | San Diego County Employees Retirement Association | Retirement Technology Systems Specialist | \$8,043 | 9.6% | \$8,815 | 6/26/2015 | 6/24/2016 | 2% |
| 4 | City/County San Francisco Retirement System | Information Systems Programmer Analyst Senior | \$8,701 | | \$8,701 | 10/15/2015 | 7/1/2016 | 2.25% - 3.25% |
| 5 | East Bay Municipal Utility District | Programmer Analyst II | \$8,459 | | \$8,459 | 4/20/2015 | Unknown | Unknown |
| 6 | Sacramento County Employees Retirement System | Information Technology Analyst II | \$7,494 | 9.8% | \$8,228 | 6/28/2015 | 6/26/2016 | 4% + 1% |
| 7 | Ventura County Employees Retirement Association | Information Systems Analyst | \$7,551 | 8.3% | \$8,178 | 8/16/2015 | Unknown | Unknown |
| 8 | Alameda County Employees Retirement Association | Programmer Analyst | \$8,046 | | \$8,046 | Unknown | Unknown | Unknown |
| 9 | Orange County Employees Retirement System | Information Technology Applications Developer II | \$7,203 | 7.2% | \$7,722 | 4/14/2014 | Unknown | Unknown |
| 10 | Contra Costa County Employees' Retirement Association | Information Systems Programmer Analyst | \$7,439 | | \$7,439 | 7/1/2015 | | |
| 11 | Contra Costa County | Information Systems Programmer Analyst III | \$7,240 | | \$7,240 | 7/1/2015 | Unknown | Unknown |
| 12 | Contra Costa Water District | N/C | | | | | | |
| 13 | San Bernardino County Employees Retirement Association | N/C | | | | | | |
| PRIVATE SECTOR REFERENCE | | | | | | | | |
| Software Developer Applications | | | Average of Comparators | | \$8,246 | | \$8,511 | |
| Average of BLS Private Sector Data | | | % CCCERA Above/Below | | -10.8% | | -14.4% | |
| \$9,890 | | | | | | | | |
| -32.9% | | | Median of Comparators | | \$8,045 | | \$8,344 | |
| Median of BLS Private Sector Data | | | % CCCERA Above/Below | | -8.1% | | -12.2% | |
| \$9,559 | | | | | | | | |
| -28.5% | | | Number of Matches | | 10 | | 10 | |
| | | | | | | | | |

NOTE: All calculations exclude CCCERA

N/C - Non Comparator

**Contra Costa County Employees' Retirement Association
Top Monthly Salary Data - Unrepresented
November, 2015**

| Retirement Services Manager | | | | | | | | |
|------------------------------------|--|------------------------------------|-------------------------------|---------------|--------------------------|-----------------|----------------------|--------------------------|
| Rank | Comparator Agency | Class Title | Top Monthly Salary | Cost of Labor | Adjusted Top Step Salary | Effective Date | Next Salary Increase | Next Percentage Increase |
| 1 | City/County San Francisco Retirement System | Manager V | \$13,563 | | \$13,563 | 10/15/2015 | 7/1/2016 | 2.25% - 3.25% |
| 2 | San Mateo County Employees Retirement Association | Retirement Benefits Manager | \$12,366 | | \$12,366 | 10/11/2015 | 10/19/2016 | 3% |
| 3 | Alameda County Employees Retirement Association | Retirement Benefits Manager | \$11,903 | | \$11,903 | Unknown | Unknown | Unknown |
| 4 | San Bernardino County Employees Retirement Association | Retirement Benefits Officer | \$10,228 | 11.5% | \$11,404 | 7/2/2015 | Unknown | Unknown |
| 5 | Sacramento County Employees Retirement System | Retirement Services Manager | \$9,593 | 9.8% | \$10,533 | 6/28/2015 | 6/26/2016 | 4% + 1% |
| 6 | Contra Costa County Employees' Retirement Association | Retirement Services Manager | \$10,338 | | \$10,338 | 7/1/2015 | | |
| 7 | San Diego County Employees Retirement Association | Retirement Member Services Manager | \$9,232 | 9.6% | \$10,118 | 6/26/2015 | 6/24/2016 | 2% |
| 8 | Orange County Employees Retirement System | Member Services Manager | \$9,325 | 7.2% | \$9,996 | 4/14/2014 | Unknown | Unknown |
| 9 | Ventura County Employees Retirement Association | Staff Services Manager II | \$8,578 | 8.3% | \$9,290 | 6/16/2015 | Unknown | Unknown |
| 10 | Central Contra Costa Sanitary District | N/C | | | | | | |
| 11 | Contra Costa County | N/C | | | | | | |
| 12 | Contra Costa Water District | N/C | | | | | | |
| 13 | East Bay Municipal Utility District | N/C | | | | | | |
| PRIVATE SECTOR REFERENCE | | | | | | | | |
| General and Operations Managers | | | Average of Comparators | | \$10,599 | \$11,147 | | |
| Average of BLS Private Sector Data | | | % CCCERA Above/Below | | -2.5% | -7.8% | | |
| \$11,830 | | | | | | | | |
| -14.4% | | | Median of Comparators | | \$9,911 | \$10,969 | | |
| | | | % CCCERA Above/Below | | 4.1% | -6.1% | | |
| Median of BLS Private Sector Data | | | | | | | | |
| \$10,338 | | | Number of Matches | | 8 | 8 | | |
| 0% | | | | | | | | |
| | | | | | 8 | 8 | | |

NOTE: All calculations exclude CCCERA

N/C - Non Comparator

**Contra Costa County Employees' Retirement Association
Benefits Detail - Unrepresented
November, 2015**

| Accountant Agency | Contra Costa County Employees' Retirement Association | Alameda County Employees Retirement Association | Ventura County Employees Retirement Association | City/County San Francisco Retirement System | Sacramento County Employees Retirement System | Orange County Employees Retirement System | San Bernardino County Employees Retirement Association | San Diego County Employees Retirement Association | San Mateo County Employees Retirement Association | East Bay Municipal Utility District | Contra Costa Water District | Central Contra Costa Sanitary District | Contra Costa County |
|--|---|---|---|---|---|---|--|---|---|-------------------------------------|-----------------------------|--|---------------------|
| Class Title | Accountant | Retirement Accountant II | Accounting Officer III | Accountant II | Accountant | Accountant Auditor II | Accountant | Retirement Accountant | Retirement Accountant II | Accountant II | Senior Accountant | Accountant | Accountant II |
| Top Monthly Salary | \$6,825 | \$7,075 | \$6,509 | \$6,931 | \$6,366 | \$6,401 | \$6,173 | \$6,095 | \$6,691 | \$7,857 | \$9,459 | \$8,284 | \$5,652 |
| Employee Retirement Formula¹ | 2%@55 | 2%@60 | 2%@60 | 2%@60 | 2%@55 | 2.7%@55 | 2%@55 | 3%@60 | 2%@60 | 2%@55 | 2.5%@55 | 2%@55 | 2%@55 |
| PERS | | | | | | \$515 | \$432 | \$274 | | | \$284 | | |
| Enhanced PERS Formula | | -\$216 | -\$199 | -\$243 | | | | \$597 | -\$204 | | \$468 | | |
| 12 Month Highest Salary | \$92 | | | | | | \$83 | \$82 | | \$53 | \$128 | \$112 | \$76 |
| Social Security | \$423 | \$439 | \$404 | \$430 | \$395 | | | \$378 | \$415 | \$487 | \$586 | | \$350 |
| Other | | | | | | | | | | | | | |
| Insurance | | | | | | | | | | | | | |
| Cafeteria | | | | | | | | \$1,188 | | | | \$100 | |
| Health | \$1,941 | \$2,476 | \$644 | \$1,518 | \$1,281 | \$1,006 | \$1,026 | | \$2,258 | \$2,596 | \$2,120 | \$2,361 | \$2,280 |
| Dental | \$169 | \$124 | | \$183 | \$121 | | \$21 | | \$104 | \$224 | \$184 | \$234 | \$98 |
| Vision | | | | | | | | | \$15 | \$24 | \$17 | | |
| EAP | | | | | \$5 | | | | \$2 | \$5 | | \$4 | |
| Life | \$1 | \$4 | | \$4 | \$2 | | | \$1 | \$4 | | \$27 | \$21 | \$1 |
| LTD | | | | | | | | | \$16 | | \$22 | \$28 | |
| STD/SDI | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Leave | | | | | | | | | | | | | |
| Vacation | \$394 | \$408 | \$476 | \$267 | \$367 | \$665 | | \$352 | \$412 | \$453 | \$764 | \$510 | \$326 |
| Holidays | \$263 | \$408 | \$275 | \$400 | \$306 | \$295 | \$332 | \$305 | \$309 | \$453 | \$437 | \$414 | \$217 |
| Administrative | \$308 | | | | | | | | | | \$255 | \$32 | |
| Auto Allowance | | | | | | | | | | | | | |
| Uniform Allowance | | | | | | | | | | | | | |
| Deferred Compensation | | | \$114 | | | | \$31 | | | | \$284 | \$514 | |
| Other | | | | | | | | | | \$75 | | | |
| Longevity | | | | | | | | | | | | | |
| Benefit Cost | \$3,591 | \$3,643 | \$1,713 | \$2,558 | \$2,477 | \$2,482 | \$1,925 | \$3,177 | \$3,331 | \$4,371 | \$5,576 | \$4,329 | \$3,349 |
| Total Monthly Comp. | \$10,416 | \$10,718 | \$8,222 | \$9,489 | \$8,843 | \$8,883 | \$8,098 | \$9,272 | \$10,022 | \$12,228 | \$15,035 | \$12,613 | \$9,001 |

Note: Total Monthly Compensation number may vary slightly from the sum of its components due to cell formulas & rounding.

1- For agencies that participate in the 37 Act retirement programs the actual retirement formulas may differ. For purposes of comparison we have converted each comparator's 37 Act formula to the CalPERS formula that it most closely mirrors.

**Contra Costa County Employees' Retirement Association
Benefits Detail - Unrepresented
November, 2015**

| Accounting Manager | | | | | | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|---|--|--|--|------------------------------------|---|----------------------------|
| Agency | Contra Costa County Employees' Retirement Association | Alameda County Employees Retirement Association | Ventura County Employees Retirement Association | City/County San Francisco Retirement System | Sacramento County Employees Retirement System | Orange County Employees Retirement System | San Bernardino County Employees Retirement Association | San Diego County Employees Retirement Association | San Mateo County Employees Retirement Association | East Bay Municipal Utility District | Contra Costa Water District | Central Contra Costa Sanitary District | Contra Costa County |
| Class Title | Accounting Manager | Fiscal Services Officer | Fiscal Manager I | Manager III | Senior Accounting Manager | Finance Manager | Accounting Manager | Retirement Services Manager | Retirement Finance Officer | N/C | Accounting Manager | Finance Manager | Chief Accountant |
| Top Monthly Salary | \$10,338 | \$12,527 | \$9,019 | \$11,717 | \$10,533 | \$9,996 | \$11,404 | \$10,118 | \$10,684 | | \$13,414 | \$13,707 | \$8,651 |
| Employee Retirement | | | | | | | | | | | | | |
| Formula¹ | 2%@55 | 2%@60 | 2%@60 | 2%@60 | 2%@55 | 2.7%@55 | 2%@55 | 3%@60 | 2%@60 | | 2.5%@55 | 2%@55 | 2%@55 |
| PERS | | | | | | | \$798 | \$455 | \$423 | | \$402 | | |
| Enhanced PERS Formula | | -\$382 | -\$275 | -\$410 | | \$805 | | \$992 | -\$326 | | \$664 | | |
| 12 Month Highest Salary | \$140 | | | | | | \$154 | \$137 | | | \$181 | \$185 | \$117 |
| Social Security | \$612 | \$612 | \$559 | \$726 | \$653 | | | \$627 | \$612 | | \$612 | | \$536 |
| Other | | | | | | | | | | | | | |
| Insurance | | | | | | | | | | | | | |
| Cafeteria | | | | | | | | \$1,250 | | | | \$425 | |
| Health | \$1,941 | \$2,476 | \$644 | \$1,692 | \$1,281 | \$1,006 | \$1,046 | | \$2,258 | | \$2,120 | \$2,361 | \$2,280 |
| Dental | \$169 | \$124 | | \$177 | \$121 | | \$21 | | \$104 | | \$184 | \$234 | \$98 |
| Vision | | | | | | | | | \$15 | | \$17 | | |
| EAP | | | | | \$5 | | | | \$2 | | | \$4 | |
| Life | \$7 | \$4 | \$4 | \$4 | \$5 | | | | \$9 | | \$39 | \$67 | \$7 |
| LTD | \$62 | | \$59 | | | | | | \$14 | | \$32 | | \$51 |
| STD/SDI | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Leave | | | | | | | | | | | | | |
| Vacation | \$596 | \$723 | \$1,249 | \$721 | \$608 | \$1,230 | | \$662 | \$657 | | \$1,083 | \$844 | \$499 |
| Holidays | \$398 | \$723 | \$382 | \$721 | \$506 | \$461 | \$614 | \$506 | \$493 | | \$619 | \$685 | \$333 |
| Administrative | \$467 | | | \$225 | | | \$439 | | \$668 | | \$709 | \$264 | \$391 |
| Auto Allowance | | | | | | | | | | | \$475 | | |
| Uniform Allowance | | | | | | | | | | | | | |
| Deferred Compensation | \$150 | | \$271 | | | | \$969 | | | | \$402 | \$850 | \$150 |
| Other | | | | | | | | | | | | | |
| Longevity | | | | | | | | | | | | | |
| Benefit Cost | \$4,542 | \$4,279 | \$2,891 | \$3,857 | \$3,179 | \$3,503 | \$4,040 | \$4,651 | \$4,931 | N/C | \$7,541 | \$5,919 | \$4,463 |
| Total Monthly Comp. | \$14,880 | \$16,806 | \$11,910 | \$15,574 | \$13,712 | \$13,499 | \$15,444 | \$14,769 | \$15,615 | N/C | \$20,955 | \$19,626 | \$13,114 |

Note: Total Monthly Compensation number may vary slightly from the sum of its components due to cell formulas & rounding.

1- For agencies that participate in the 37 Act retirement programs the actual retirement formulas may differ. For purposes of comparison we have converted each comparator's 37 Act formula to the CalPERS formula that it most closely mirrors.

**Contra Costa County Employees' Retirement Association
Benefits Detail - Unrepresented
November, 2015**

| Administrative HR Supervisor | | | | | | | | | | | | | |
|-------------------------------------|--|--|--|--|--|--|---|--|--|--|------------------------------------|---|-----------------------------------|
| Agency | Contra Costa County Employees' Retirement Association | Alameda County Employees Retirement Association | Ventura County Employees Retirement Association | City/County San Francisco Retirement System | Sacramento County Employees Retirement System | Orange County Employees Retirement System | San Bernardino County Employees Retirement Association | San Diego County Employees Retirement Association | San Mateo County Employees Retirement Association | East Bay Municipal Utility District | Contra Costa Water District | Central Contra Costa Sanitary District | Contra Costa County |
| Class Title | Administrative HR Supervisor | Human Resources Analyst II | Personnel Analyst II | Personnel Analyst | Senior Personnel Analyst | Administrative Manager I | Human Resources Coordinator | Human Resources Analyst | Management Analyst | Human Resources Analyst II | Human Resources Analyst II | Human Resources Analyst | Human Resources Consultant |
| Top Monthly Salary | \$7,899 | \$8,027 | \$8,345 | \$7,809 | \$7,957 | \$9,421 | \$7,986 | \$7,282 | \$8,786 | \$8,889 | \$8,895 | \$9,379 | \$6,684 |
| Employee Retirement | | | | | | | | | | | | | |
| Formula¹ | 2%@55 | 2%@60 | 2%@60 | 2%@60 | 2%@55 | 2.7%@55 | 2%@55 | 3%@60 | 2%@60 | 2%@55 | 2.5%@55 | 2%@55 | 2%@55 |
| PERS | | | | | | \$758 | \$559 | \$328 | \$348 | | \$267 | | |
| Enhanced PERS Formula | | -\$245 | -\$255 | -\$273 | | | | \$714 | -\$268 | | \$440 | | |
| 12 Month Highest Salary | \$107 | | | | | | \$108 | \$98 | | \$60 | \$120 | \$127 | \$90 |
| Social Security | \$490 | \$498 | \$517 | \$484 | \$493 | | | \$451 | \$545 | \$551 | \$551 | | \$414 |
| Other | | | | | | | | | | | | | |
| Insurance | | | | | | | | | | | | | |
| Cafeteria | | | | | | | | \$1,250 | | | | \$220 | |
| Health | \$1,941 | \$2,476 | \$644 | \$1,518 | \$1,281 | \$1,006 | \$1,046 | | \$2,258 | \$2,596 | \$2,120 | \$2,361 | \$2,280 |
| Dental | \$169 | \$124 | | \$183 | \$121 | | \$21 | | \$104 | \$224 | \$184 | \$234 | \$98 |
| Vision | | | | | | | | | \$15 | \$24 | \$17 | | |
| EAP | | | | | \$5 | | | | \$2 | \$5 | | \$4 | |
| Life | \$1 | \$4 | \$4 | \$4 | \$2 | | | \$4 | \$9 | | \$26 | \$31 | \$7 |
| LTD | \$47 | | \$62 | | | | | \$8 | \$14 | | \$19 | \$32 | \$40 |
| STD/SDI | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Leave | | | | | | | | | | | | | |
| Vacation | \$456 | \$463 | \$1,155 | \$300 | \$459 | \$1,160 | | \$476 | \$541 | \$513 | \$718 | \$577 | \$386 |
| Holidays | \$304 | \$463 | \$353 | \$451 | \$383 | \$435 | \$430 | \$364 | \$406 | \$513 | \$411 | \$469 | \$257 |
| Administrative | \$357 | | | | | | \$307 | | \$549 | | \$68 | \$108 | \$302 |
| Auto Allowance | | | | | | | | | | | | | |
| Uniform Allowance | | | | | | | | | | | | | |
| Deferred Compensation | \$150 | | \$250 | | | | \$679 | | | | \$356 | \$581 | \$150 |
| Other | | | | | | | | | | \$75 | | | |
| Longevity | | | | | | | | | | | | | |
| Benefit Cost | \$4,021 | \$3,783 | \$2,731 | \$2,666 | \$2,744 | \$3,359 | \$3,149 | \$3,693 | \$4,523 | \$4,562 | \$5,298 | \$4,744 | \$4,024 |
| Total Monthly Comp. | \$11,920 | \$11,810 | \$11,076 | \$10,475 | \$10,701 | \$12,780 | \$11,135 | \$10,975 | \$13,309 | \$13,451 | \$14,193 | \$14,123 | \$10,708 |

Note: Total Monthly Compensation number may vary slightly from the sum of its components due to cell formulas & rounding.

1- For agencies that participate in the 37 Act retirement programs the actual retirement formulas may differ. For purposes of comparison we have converted each comparator's 37 Act formula to the CalPERS formula that it most closely mirrors.

**Contra Costa County Employees' Retirement Association
Benefits Detail - Unrepresented
November, 2015**

| Administrative/Human Resources Manager | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|---|--|--|--|------------------------------------|---|--------------------------------------|
| Agency | Contra Costa County Employees' Retirement Association | Alameda County Employees Retirement Association | Ventura County Employees Retirement Association | City/County San Francisco Retirement System | Sacramento County Employees Retirement System | Orange County Employees Retirement System | San Bernardino County Employees Retirement Association | San Diego County Employees Retirement Association | San Mateo County Employees Retirement Association | East Bay Municipal Utility District | Contra Costa Water District | Central Contra Costa Sanitary District | Contra Costa County |
| Class Title | Administrative/Human Resources Manager | Human Resources Officer ACERA | Program Management Analyst | Manager III | Human Resources Manager II | Administrative Manager II | N/C | Human Resources Manager | Human Resources Manager II | N/C | Human Resources Manager | Human Resources Manager | Personnel Services Supervisor |
| Top Monthly Salary | \$8,447 | \$11,903 | \$10,937 | \$11,717 | \$10,428 | \$11,714 | | \$9,044 | \$10,684 | | \$14,082 | \$12,424 | \$8,481 |
| Employee Retirement | | | | | | | | | | | | | |
| Formula¹ | 2%@55 | 2%@60 | 2%@60 | 2%@60 | 2%@55 | 2.7%@55 | | 3%@60 | 2%@60 | | 2.5%@55 | 2%@55 | 2%@55 |
| PERS | | | | | | | | \$407 | \$423 | | \$422 | | |
| Enhanced PERS Formula | | -\$363 | -\$334 | -\$410 | | \$943 | | \$886 | -\$326 | | \$697 | | |
| 12 Month Highest Salary | \$114 | | | | | | | \$122 | | | \$190 | \$168 | \$114 |
| Social Security | \$524 | \$612 | \$612 | \$612 | \$647 | | | \$561 | \$612 | | \$612 | | \$526 |
| Other | | | | | | | | | | | | | |
| Insurance | | | | | | | | | | | | | |
| Cafeteria | | | | | | | | \$1,250 | | | | | |
| Health | \$1,941 | \$2,476 | \$644 | \$1,692 | \$1,281 | \$1,006 | | | \$2,258 | | \$2,120 | \$2,361 | \$2,280 |
| Dental | \$169 | \$124 | | \$177 | \$121 | | | | \$104 | | \$184 | \$234 | \$98 |
| Vision | | | | | | | | | \$15 | | \$17 | | |
| EAP | | | | | \$5 | | | | \$2 | | | \$4 | |
| Life | \$7 | \$4 | \$4 | \$4 | \$5 | | | \$5 | \$9 | | \$41 | \$31 | \$7 |
| LTD | \$50 | | \$59 | | | | | \$8 | \$14 | | \$32 | | \$50 |
| STD/SDI | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Leave | | | | | | | | | | | | | |
| Vacation | \$487 | \$687 | \$1,514 | \$721 | \$602 | \$1,442 | | \$591 | \$657 | | \$1,137 | \$765 | \$489 |
| Holidays | \$325 | \$687 | \$463 | \$721 | \$501 | \$541 | | \$452 | \$493 | | \$650 | \$621 | \$326 |
| Administrative | \$382 | | | \$225 | | | | | \$668 | | \$745 | \$239 | \$383 |
| Auto Allowance | | | | | | | | | | | \$475 | | |
| Uniform Allowance | | | | | | | | | | | | | |
| Deferred Compensation | \$150 | | \$328 | | \$104 | | | | | | \$422 | \$770 | \$150 |
| Other | | | | | \$365 | | | | | | | | |
| Longevity | | | | | | | | | | | | | |
| Benefit Cost | \$4,150 | \$4,226 | \$3,290 | \$3,742 | \$3,631 | \$3,932 | N/C | \$4,283 | \$4,931 | N/C | \$7,745 | \$5,618 | \$4,425 |
| Total Monthly Comp. | \$12,597 | \$16,129 | \$14,227 | \$15,459 | \$14,059 | \$15,646 | N/C | \$13,327 | \$15,615 | N/C | \$21,827 | \$18,042 | \$12,906 |

Note: Total Monthly Compensation number may vary slightly from the sum of its components due to cell formulas & rounding.

1- For agencies that participate in the 37 Act retirement programs the actual retirement formulas may differ. For purposes of comparison we have converted each comparator's 37 Act formula to the CalPERS formula that it most closely mirrors.

**Contra Costa County Employees' Retirement Association
Benefits Detail - Unrepresented
November, 2015**

| Chief Executive Officer | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|---|--|--|--|------------------------------------|---|----------------------------|
| Agency | Contra Costa County Employees' Retirement Association | Alameda County Employees Retirement Association | Ventura County Employees Retirement Association | City/County San Francisco Retirement System | Sacramento County Employees Retirement System | Orange County Employees Retirement System | San Bernardino County Employees Retirement Association | San Diego County Employees Retirement Association | San Mateo County Employees Retirement Association | East Bay Municipal Utility District | Contra Costa Water District | Central Contra Costa Sanitary District | Contra Costa County |
| Class Title | Chief Executive Officer | Chief Executive Officer | Retirement Administrator | Department Head VI | Retirement Administrator | Chief Executive Officer | Chief Executive Officer | Retirement Chief Executive Officer | Chief Executive Officer SANCERA | N/C | N/C | N/C | N/C |
| Top Monthly Salary | \$15,925 | \$21,892 | \$19,805 | \$23,669 | \$17,355 | \$22,674 | \$21,492 | \$23,266 | \$20,141 | | | | |
| Employee Retirement Formula¹ | 2%@55 | 2%@60 | 2%@60 | 2%@60 | 2%@55 | 2.7%@55 | 2%@55 | 3%@60 | 2%@60 | | | | |
| PERS Enhanced PERS Formula | | | | | | \$1,825 | \$1,504 | \$1,629 | \$798 | | | | |
| 12 Month Highest Salary | \$215 | -\$668 | -\$604 | -\$828 | | | | \$2,280 | -\$614 | | | | |
| Social Security | \$612 | \$612 | \$612 | \$612 | \$612 | | \$290 | \$314 | \$612 | | | | |
| Other | | | | | | | | | | | | | |
| Insurance | | | | | | | | | | | | | |
| Cafeteria | | | | | | | | \$1,250 | | | | | |
| Health | \$1,941 | \$2,476 | \$644 | \$1,692 | \$1,281 | \$1,006 | \$1,046 | | \$2,258 | | | | |
| Dental | \$169 | \$124 | | \$177 | \$121 | | \$21 | | \$104 | | | | |
| Vision | | | | | | | | | \$15 | | | | |
| EAP | | | | | \$5 | | | | \$2 | | | | |
| Life | \$7 | \$4 | \$4 | \$4 | \$5 | | | \$25 | \$9 | | | | |
| LTD | \$95 | | \$59 | | | | | \$30 | \$14 | | | | |
| STD/SDI | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Leave | | | | | | | | | | | | | |
| Vacation | \$919 | \$1,263 | \$2,742 | \$1,457 | \$1,001 | \$2,791 | | \$1,790 | \$1,239 | | | | |
| Holidays | \$613 | \$1,263 | \$838 | \$1,457 | \$834 | \$1,046 | \$1,157 | \$1,163 | \$930 | | | | |
| Administrative | \$720 | | | \$1,138 | | | \$827 | | \$1,259 | | | | |
| Auto Allowance | | | \$350 | | | | | \$600 | | | | | |
| Uniform Allowance | | | | | | | | | | | | | |
| Deferred Compensation | \$150 | | \$594 | | \$174 | | \$1,934 | | | | | | |
| Other | | | | | \$607 | | | | | | | | |
| Longevity | | | | | | | | | | | | | |
| Benefit Cost | \$5,441 | \$5,074 | \$5,239 | \$5,708 | \$4,641 | \$6,669 | \$6,779 | \$9,693 | \$6,627 | N/C | N/C | N/C | N/C |
| Total Monthly Comp. | \$21,366 | \$26,966 | \$25,044 | \$29,377 | \$21,996 | \$29,343 | \$28,271 | \$32,959 | \$26,768 | N/C | N/C | N/C | N/C |

Note: Total Monthly Compensation number may vary slightly from the sum of its components due to cell formulas & rounding.

1- For agencies that participate in the 37 Act retirement programs the actual retirement formulas may differ. For purposes of comparison we have converted each comparator's 37 Act formula to the CalPERS formula that it most closely mirrors.

**Contra Costa County Employees' Retirement Association
Benefits Detail - Unrepresented
November, 2015**

| Communications Coordinator | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|---|--|--|--|------------------------------------|---|-----------------------------------|
| Agency | Contra Costa County Employees' Retirement Association | Alameda County Employees Retirement Association | Ventura County Employees Retirement Association | City/County San Francisco Retirement System | Sacramento County Employees Retirement System | Orange County Employees Retirement System | San Bernardino County Employees Retirement Association | San Diego County Employees Retirement Association | San Mateo County Employees Retirement Association | East Bay Municipal Utility District | Contra Costa Water District | Central Contra Costa Sanitary District | Contra Costa County |
| Class Title | Communications Coordinator | Communications Manager | N/C | Public Relations Officer | Communications and Media Officer III | Communications Manager | Communications Officer | Retirement Sr Communications Officer | Retirement Comm Specialist | Public Information Specialist II | N/C | N/C | Public Information Officer |
| Top Monthly Salary | \$8,127 | \$7,070 | | \$8,231 | \$9,230 | \$9,166 | \$7,986 | \$7,287 | \$8,493 | \$8,889 | | | \$6,336 |
| Employee Retirement Formula ¹ | 2%@55 | 2%@60 | | 2%@60 | 2%@55 | 2.7%@55 | 2%@55 | 3%@60 | 2%@60 | 2%@55 | | | 2%@55 |
| PERS Enhanced PERS Formula | | | | | | \$738 | \$559 | \$328 | | | | | |
| 12 Month Highest Salary | \$110 | -\$216 | | -\$288 | | | | \$714 | -\$259 | | | | |
| Social Security | \$504 | \$438 | | \$510 | \$572 | | \$108 | \$98 | \$527 | \$60 | | | \$86 |
| Other | | | | | | | | \$452 | | \$551 | | | \$393 |
| Insurance | | | | | | | | | | | | | |
| Cafeteria | | | | | | | | \$1,250 | | | | | |
| Health | \$1,941 | \$2,476 | | \$1,518 | \$1,281 | \$1,006 | \$1,046 | | \$2,258 | \$2,596 | | | \$2,280 |
| Dental | \$169 | \$124 | | \$183 | \$121 | | \$21 | | \$104 | \$224 | | | \$98 |
| Vision | | | | | | | | | \$15 | \$24 | | | |
| EAP | | | | | \$5 | | | | \$2 | \$5 | | | |
| Life | \$1 | \$4 | | \$4 | \$5 | | | | \$4 | | | | \$7 |
| LTD | | | | | | | | \$12 | \$16 | | | | \$38 |
| STD/SDI | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Leave | | | | | | | | | | | | | |
| Vacation | \$469 | \$408 | | \$317 | \$533 | \$1,128 | | \$476 | \$523 | \$513 | | | \$366 |
| Holidays | \$313 | \$408 | | \$475 | \$444 | \$423 | \$430 | \$364 | \$392 | \$513 | | | \$244 |
| Administrative | \$367 | | | | | | \$307 | | | | | | \$286 |
| Auto Allowance | | | | | | | | | | | | | |
| Uniform Allowance | | | | | | | | | | | | | |
| Deferred Compensation | \$150 | | | | | | \$679 | | | | | | \$150 |
| Other | | | | | | | | | | \$75 | | | |
| Longevity | | | | | | | | | | | | | |
| Benefit Cost | \$4,023 | \$3,642 | N/C | \$2,718 | \$2,961 | \$3,295 | \$3,149 | \$3,700 | \$3,582 | \$4,562 | N/C | N/C | \$3,947 |
| Total Monthly Comp. | \$12,150 | \$10,712 | N/C | \$10,949 | \$12,191 | \$12,461 | \$11,135 | \$10,987 | \$12,075 | \$13,451 | N/C | N/C | \$10,283 |

Note: Total Monthly Compensation number may vary slightly from the sum of its components due to cell formulas & rounding.

1- For agencies that participate in the 37 Act retirement programs the actual retirement formulas may differ. For purposes of comparison we have converted each comparator's 37 Act formula to the CalPERS formula that it most closely mirrors.

**Contra Costa County Employees' Retirement Association
Benefits Detail - Unrepresented
November, 2015**

| Compliance Officer | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|---|--|--|--|------------------------------------|---|--|
| Agency | Contra Costa County Employees' Retirement Association | Alameda County Employees Retirement Association | Ventura County Employees Retirement Association | City/County San Francisco Retirement System | Sacramento County Employees Retirement System | Orange County Employees Retirement System | San Bernardino County Employees Retirement Association | San Diego County Employees Retirement Association | San Mateo County Employees Retirement Association | East Bay Municipal Utility District | Contra Costa Water District | Central Contra Costa Sanitary District | Contra Costa County |
| Class Title | Compliance Officer | N/C | N/C | Manager VI | N/C | N/C | N/C | N/C | Manager, Corporate and HIPAA Compliance | N/C | N/C | N/C | Health Plan Dir of Compliance & Govt Regulations |
| Top Monthly Salary | \$10,855 | | | \$14,571 | | | | | \$10,175 | | | | \$9,537 |
| Employee Retirement Formula¹ | 2%@55 | | | 2%@60 | | | | | 2%@60 | | | | 2%@55 |
| PERS Enhanced PERS Formula | | | | -\$510 | | | | | -\$310 | | | | |
| 12 Month Highest Salary | \$147 | | | | | | | | | | | | \$129 |
| Social Security | \$612 | | | \$903 | | | | | \$612 | | | | \$591 |
| Other | | | | | | | | | | | | | |
| Insurance | | | | | | | | | | | | | |
| Cafeteria | | | | | | | | | | | | | |
| Health | \$1,941 | | | \$1,692 | | | | | \$2,258 | | | | \$2,280 |
| Dental | \$169 | | | \$177 | | | | | \$104 | | | | \$98 |
| Vision | | | | | | | | | \$15 | | | | |
| EAP | | | | | | | | | \$2 | | | | |
| Life | \$7 | | | \$4 | | | | | \$9 | | | | \$7 |
| LTD | \$65 | | | | | | | | \$14 | | | | \$57 |
| STD/SDI | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Leave | | | | | | | | | | | | | |
| Vacation | \$626 | | | \$897 | | | | | \$626 | | | | \$550 |
| Holidays | \$418 | | | \$897 | | | | | \$470 | | | | \$367 |
| Administrative | \$491 | | | \$280 | | | | | \$636 | | | | \$431 |
| Auto Allowance | | | | | | | | | | | | | |
| Uniform Allowance | | | | | | | | | | | | | |
| Deferred Compensation | \$150 | | | | | | | | | | | | \$150 |
| Other | | | | | | | | | | | | | |
| Longevity | | | | | | | | | | | | | |
| Benefit Cost | \$4,625 | NC | N/C | \$4,340 | N/C | N/C | N/C | N/C | \$4,840 | N/C | N/C | N/C | \$4,660 |
| Total Monthly Comp. | \$15,480 | N/C | N/C | \$18,911 | N/C | N/C | N/C | N/C | \$15,015 | N/C | N/C | N/C | \$14,197 |

Note: Total Monthly Compensation number may vary slightly from the sum of its components due to cell formulas & rounding.

1- For agencies that participate in the 37 Act retirement programs the actual retirement formulas may differ. For purposes of comparison we have converted each comparator's 37 Act formula to the CalPERS formula that it most closely mirrors.

**Contra Costa County Employees' Retirement Association
Benefits Detail - Unrepresented
November, 2015**

| Deputy General Counsel | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|---|--|--|--|------------------------------------|---|---------------------------------------|
| Agency | Contra Costa County Employees' Retirement Association | Alameda County Employees Retirement Association | Ventura County Employees Retirement Association | City/County San Francisco Retirement System | Sacramento County Employees Retirement System | Orange County Employees Retirement System | San Bernardino County Employees Retirement Association | San Diego County Employees Retirement Association | San Mateo County Employees Retirement Association | East Bay Municipal Utility District | Contra Costa Water District | Central Contra Costa Sanitary District | Contra Costa County |
| Class Title | Deputy General Counsel | Associate Counsel ACERA | Senior Civil Attorney | Head Attorney Civil/Criminal | Civil Attorney Level IV Range B | Attorney III Retirement | Senior Staff Counsel | Senior Deputy County Counsel | Deputy County Counsel IV | Attorney III | N/C | N/C | Deputy County Counsel Advanced Exempt |
| Top Monthly Salary | Proposed | \$14,593 | \$15,191 | \$16,937 | \$13,673 | \$11,658 | \$13,902 | \$15,059 | \$17,413 | \$15,021 | | | \$12,807 |
| Employee Retirement Formula¹ | 2%@55 | 2%@60 | 2%@60 | 2%@60 | 2%@55 | 2.7%@55 | 2%@55 | 3%@60 | 2%@60 | 2%@55 | | | 2%@55 |
| PERS Enhanced PERS Formula | #VALUE! | -\$445 | -\$463 | -\$593 | | \$938 | | \$678 | \$690 | | | | |
| 12 Month Highest Salary | | | | | | | \$188 | \$1,476 | -\$531 | | | | |
| Social Security | | \$612 | \$612 | \$612 | \$612 | | | \$203 | \$612 | \$612 | \$102 | | \$173 |
| Other | | | | | | | | \$612 | \$612 | \$612 | \$612 | | \$612 |
| Insurance | | | | | | | | | | | | | |
| Cafeteria | | | | | | | | \$1,065 | | | | | |
| Health | \$1,941 | \$2,476 | \$644 | \$1,518 | \$1,281 | \$1,006 | \$1,046 | | \$2,258 | \$2,596 | | | \$2,280 |
| Dental | \$169 | \$124 | | \$183 | \$121 | | \$21 | | \$104 | \$224 | | | \$98 |
| Vision | | | | | | | | | \$15 | \$24 | | | |
| EAP | | | | | \$5 | | | | \$2 | \$5 | | | |
| Life | | \$4 | \$4 | \$12 | \$5 | | | \$10 | \$9 | | | | \$7 |
| LTD | #VALUE! | | \$59 | | | | | \$30 | \$14 | | | | \$76 |
| STD/SDI | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Leave | | | | | | | | | | | | | |
| Vacation | | \$842 | \$2,103 | \$977 | \$789 | \$1,435 | | \$985 | \$1,072 | \$867 | | | \$739 |
| Holidays | | \$842 | \$643 | \$1,042 | \$657 | \$538 | \$749 | \$753 | \$804 | \$867 | | | \$493 |
| Administrative | | | | \$326 | | | \$535 | | \$1,088 | \$404 | | | \$579 |
| Auto Allowance | | | | | | | | | | | | | |
| Uniform Allowance | | | | | | | | | | | | | |
| Deferred Compensation | | | \$456 | | | | \$1,182 | | | | | | \$150 |
| Other | | | | | | | | | | \$75 | | | |
| Longevity | | | | | | | | | | | | | |
| Benefit Cost | N/A | \$4,454 | \$4,057 | \$4,077 | \$3,471 | \$3,918 | \$4,692 | \$5,812 | \$6,138 | \$5,776 | N/C | N/C | \$5,207 |
| Total Monthly Comp. | N/A | \$19,047 | \$19,248 | \$21,014 | \$17,144 | \$15,576 | \$18,594 | \$20,871 | \$23,551 | \$20,797 | N/C | N/C | \$18,014 |

Note: Total Monthly Compensation number may vary slightly from the sum of its components due to cell formulas & rounding.

1- For agencies that participate in the 37 Act retirement programs the actual retirement formulas may differ. For purposes of comparison we have converted each comparator's 37 Act formula to the CalPERS formula that it most closely mirrors.

**Contra Costa County Employees' Retirement Association
Benefits Detail - Unrepresented
November, 2015**

| General Counsel | | | | | | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|---|--|--|--|------------------------------------|---|----------------------------|
| Agency | Contra Costa County Employees' Retirement Association | Alameda County Employees Retirement Association | Ventura County Employees Retirement Association | City/County San Francisco Retirement System | Sacramento County Employees Retirement System | Orange County Employees Retirement System | San Bernardino County Employees Retirement Association | San Diego County Employees Retirement Association | San Mateo County Employees Retirement Association | East Bay Municipal Utility District | Contra Costa Water District | Central Contra Costa Sanitary District | Contra Costa County |
| Class Title | General Counsel | Chief Counsel | General Counsel Retirement | N/C | Retirement General Counsel | Chief Legal Officer | Chief Counsel | Retirement General Counsel | Retirement Chief Legal Counsel | N/C | N/C | N/C | N/C |
| Top Monthly Salary | \$13,736 | \$17,916 | \$15,151 | | \$13,944 | \$22,369 | \$20,659 | \$18,633 | \$19,183 | | | | |
| Employee Retirement | | | | | | | | | | | | | |
| Formula¹ | 2%@55 | 2%@60 | 2%@60 | | 2%@55 | 2.7%@55 | 2%@55 | 3%@60 | 2%@60 | | | | |
| PERS | | | | | | | \$1,446 | \$1,304 | \$760 | | | | |
| Enhanced PERS Formula | | -\$546 | -\$462 | | | \$1,801 | | \$1,826 | -\$585 | | | | |
| 12 Month Highest Salary | \$185 | | | | | | \$279 | \$252 | | | | | |
| Social Security | \$612 | \$612 | \$612 | | \$612 | | | \$612 | \$612 | | | | |
| Other | | | | | | | | | | | | | |
| Insurance | | | | | | | | | | | | | |
| Cafeteria | | | | | | | | \$1,250 | | | | | |
| Health | \$1,941 | \$2,476 | \$644 | | \$1,281 | \$1,006 | \$1,046 | | \$2,258 | | | | |
| Dental | \$169 | \$124 | | | \$121 | | \$21 | | \$104 | | | | |
| Vision | | | | | | | | | \$15 | | | | |
| EAP | | | | | \$5 | | | | \$2 | | | | |
| Life | \$7 | \$4 | \$4 | | \$2 | | | \$22 | \$9 | | | | |
| LTD | \$82 | | \$59 | | | | | \$30 | \$14 | | | | |
| STD/SDI | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Leave | | | | | | | | | | | | | |
| Vacation | \$792 | \$1,034 | \$2,098 | | \$804 | \$2,753 | | \$1,433 | \$1,180 | | | | |
| Holidays | \$528 | \$1,034 | \$641 | | \$670 | \$1,032 | \$1,112 | \$932 | \$885 | | | | |
| Administrative | \$621 | | | | | | \$795 | | \$1,199 | | | | |
| Auto Allowance | | | | | | | | | | | | | |
| Uniform Allowance | | | | | | | | | | | | | |
| Deferred Compensation | \$150 | | \$455 | | | | \$1,859 | | | | | | |
| Other | | | | | | | | | | | | | |
| Longevity | | | | | | | | | | | | | |
| Benefit Cost | \$5,089 | \$4,737 | \$4,050 | N/C | \$3,496 | \$6,593 | \$6,558 | \$7,661 | \$6,455 | N/C | N/C | N/C | N/C |
| Total Monthly Comp. | \$18,825 | \$22,653 | \$19,201 | N/C | \$17,440 | \$28,962 | \$27,217 | \$26,294 | \$25,638 | N/C | N/C | N/C | N/C |

Note: Total Monthly Compensation number may vary slightly from the sum of its components due to cell formulas & rounding.

1- For agencies that participate in the 37 Act retirement programs the actual retirement formulas may differ. For purposes of comparison we have converted each comparator's 37 Act formula to the CalPERS formula that it most closely mirrors.

**Contra Costa County Employees' Retirement Association
Benefits Detail - Unrepresented
November, 2015**

| Information Technology Coordinator | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|---|--|--|--|--------------------------------------|---|------------------------------------|
| Agency | Contra Costa County Employees' Retirement Association | Alameda County Employees Retirement Association | Ventura County Employees Retirement Association | City/County San Francisco Retirement System | Sacramento County Employees Retirement System | Orange County Employees Retirement System | San Bernardino County Employees Retirement Association | San Diego County Employees Retirement Association | San Mateo County Employees Retirement Association | East Bay Municipal Utility District | Contra Costa Water District | Central Contra Costa Sanitary District | Contra Costa County |
| Class Title | Information Technology Coordinator | Information Systems Specialist | Desktop Support Analyst II | Information Systems Administrator II | IT Customer Support Specialist | Information Systems Technician II | N/C | Retirement Technology Systems Technician | Information Technology Technician | Information Systems Specialist III | Network Desktop Support Technician I | Technical Support Analyst | Information Systems Specialist III |
| Top Monthly Salary | \$6,865 | \$6,621 | \$7,386 | \$7,497 | \$6,865 | \$6,058 | | \$6,744 | \$7,289 | \$6,609 | \$7,500 | \$7,714 | \$6,222 |
| Employee Retirement Formula¹ | 2%@55 | 2%@60 | 2%@60 | 2%@60 | 2%@55 | 2.7%@55 | | 3%@60 | 2%@60 | 2%@55 | 2.5%@55 | 2%@55 | 2%@55 |
| PERS Enhanced PERS Formula | | | | | | | | \$303 | | | \$75 | | |
| 12 Month Highest Salary | \$93 | -\$202 | -\$225 | -\$262 | | \$488 | | \$661 | -\$222 | | \$371 | | |
| Social Security | \$426 | \$411 | \$458 | \$465 | \$426 | | | \$91 | | \$45 | \$101 | \$104 | \$84 |
| Other | | | | | | | | \$418 | | \$410 | \$465 | | \$386 |
| Insurance | | | | | | | | | | | | | |
| Cafeteria | | | | | | | | \$1,250 | | | | \$100 | |
| Health | \$1,941 | \$2,476 | \$644 | \$1,518 | \$1,281 | \$1,006 | | | \$2,258 | \$2,596 | \$2,120 | \$2,361 | \$2,280 |
| Dental | \$169 | \$124 | | \$183 | \$121 | | | | \$104 | \$224 | \$184 | \$234 | \$98 |
| Vision | | | | | | | | | \$15 | \$24 | \$17 | | |
| EAP | | | | | \$5 | | | | \$2 | \$5 | | \$4 | |
| Life | \$1 | \$4 | | \$4 | \$2 | | | | \$4 | | \$4 | \$21 | \$1 |
| LTD | | | | | | | | \$8 | \$16 | | \$12 | \$26 | |
| STD/SDI | | | | | | | | \$17 | | | | | |
| Other | | | | | | | | | | | | | |
| Leave | | | | | | | | | | | | | |
| Vacation | \$396 | \$382 | \$540 | \$433 | \$396 | \$746 | | \$441 | \$449 | \$381 | \$375 | \$475 | \$359 |
| Holidays | \$264 | \$382 | \$312 | \$461 | \$330 | \$280 | | \$337 | \$336 | \$381 | \$404 | \$386 | \$239 |
| Administrative | | | | | | | | | | | | \$30 | |
| Auto Allowance | | | | | | | | | | | | | |
| Uniform Allowance | | | | | | | | | | | | | |
| Deferred Compensation | | | \$129 | | | | | | | | | \$478 | |
| Other | | | | | | | | | | \$75 | | | |
| Longevity | | | | | | | | | | | | | |
| Benefit Cost | \$3,290 | \$3,576 | \$1,858 | \$2,801 | \$2,561 | \$2,519 | N/C | \$3,527 | \$2,962 | \$4,142 | \$4,128 | \$4,219 | \$3,447 |
| Total Monthly Comp. | \$10,155 | \$10,197 | \$9,244 | \$10,298 | \$9,426 | \$8,577 | N/C | \$10,271 | \$10,251 | \$10,751 | \$11,628 | \$11,933 | \$9,669 |

Note: Total Monthly Compensation number may vary slightly from the sum of its components due to cell formulas & rounding.

1- For agencies that participate in the 37 Act retirement programs the actual retirement formulas may differ. For purposes of comparison we have converted each comparator's 37 Act formula to the CalPERS formula that it most closely mirrors.

**Contra Costa County Employees' Retirement Association
Benefits Detail - Unrepresented
November, 2015**

| Information Technology Manager | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|---|--|--|--|------------------------------------|---|--------------------------------|
| Agency | Contra Costa County Employees' Retirement Association | Alameda County Employees Retirement Association | Ventura County Employees Retirement Association | City/County San Francisco Retirement System | Sacramento County Employees Retirement System | Orange County Employees Retirement System | San Bernardino County Employees Retirement Association | San Diego County Employees Retirement Association | San Mateo County Employees Retirement Association | East Bay Municipal Utility District | Contra Costa Water District | Central Contra Costa Sanitary District | Contra Costa County |
| Class Title | Information Technology Manager | Project and Information Services Manager | N/C | Manager VI | Information Technology Manager | Director of Information Technology | Chief of Information Services | Retirement Information Technology Services Manager | Chief Retirement Technology Officer | Information Systems Division Manager | Information Systems Manager | Information Technology Manager | Information Systems Manager II |
| Top Monthly Salary | \$9,919 | \$11,903 | | \$14,571 | \$11,386 | \$13,204 | \$16,946 | \$12,479 | \$12,820 | \$15,400 | \$14,082 | \$15,510 | \$10,107 |
| Employee Retirement Formula¹ | 2%@55 | 2%@60 | | 2%@60 | 2%@55 | 2.7%@55 | 2%@55 | 3%@60 | 2%@60 | 2%@55 | 2.5%@55 | 2%@55 | 2%@55 |
| PERS Enhanced PERS Formula | | -\$363 | | -\$510 | | \$1,063 | \$1,186 | \$562 | \$508 | | \$422 | | |
| 12 Month Highest Salary | \$134 | | | | | | \$229 | \$1,223 | -\$391 | | \$697 | | |
| Social Security | \$615 | \$612 | | \$612 | \$612 | | | \$168 | \$612 | \$105 | \$190 | \$209 | \$136 |
| Other | | | | | | | | \$612 | | \$612 | \$612 | | \$612 |
| Insurance | | | | | | | | | | | | | |
| Cafeteria | | | | | | | | \$1,250 | | | | \$425 | |
| Health | \$1,941 | \$2,476 | | \$1,692 | \$1,281 | \$1,006 | \$1,046 | | \$2,258 | \$2,596 | \$2,120 | \$2,361 | \$2,280 |
| Dental | \$169 | \$124 | | \$177 | \$121 | | \$21 | | \$104 | \$224 | \$184 | \$234 | \$98 |
| Vision | | | | | | | | | \$15 | \$24 | \$17 | | |
| EAP | | | | | \$5 | | | | \$2 | \$5 | | \$4 | |
| Life | \$7 | \$4 | | \$4 | \$5 | | | \$8 | \$9 | | \$41 | \$76 | \$1 |
| LTD | \$59 | | | | | | | \$31 | \$14 | | \$32 | | |
| STD/SDI | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Leave | | | | | | | | | | | | | |
| Vacation | \$572 | \$687 | | \$897 | \$657 | \$1,625 | | \$816 | \$789 | \$888 | \$1,137 | \$954 | \$583 |
| Holidays | \$382 | \$687 | | \$897 | \$547 | \$609 | \$912 | \$624 | \$592 | \$888 | \$650 | \$776 | \$389 |
| Administrative | \$448 | | | \$280 | | | \$652 | | \$801 | \$415 | \$745 | \$298 | |
| Auto Allowance | | | | | | | | | | | \$475 | | |
| Uniform Allowance | | | | | | | | | | | | | |
| Deferred Compensation | \$150 | | | | | | \$1,440 | | | | \$422 | \$962 | |
| Other | | | | | | | | | | \$75 | | | |
| Longevity | | | | | | | | | | | | | |
| Benefit Cost | \$4,478 | \$4,226 | N/C | \$4,049 | \$3,229 | \$4,304 | \$5,486 | \$5,294 | \$5,314 | \$5,833 | \$7,745 | \$6,300 | \$4,100 |
| Total Monthly Comp. | \$14,397 | \$16,129 | N/C | \$18,620 | \$14,615 | \$17,508 | \$22,432 | \$17,773 | \$18,134 | \$21,233 | \$21,827 | \$21,810 | \$14,207 |

Note: Total Monthly Compensation number may vary slightly from the sum of its components due to cell formulas & rounding.

1- For agencies that participate in the 37 Act retirement programs the actual retirement formulas may differ. For purposes of comparison we have converted each comparator's 37 Act formula to the CalPERS formula that it most closely mirrors.

**Contra Costa County Employees' Retirement Association
Benefits Detail - Unrepresented
November, 2015**

| Information Systems Programmer Analyst | | | | | | | | | | | | | |
|--|--|--|--|--|--|---|---|--|--|--|------------------------------------|---|---|
| Agency | Contra Costa County Employees' Retirement Association | Alameda County Employees Retirement Association | Ventura County Employees Retirement Association | City/County San Francisco Retirement System | Sacramento County Employees Retirement System | Orange County Employees Retirement System | San Bernardino County Employees Retirement Association | San Diego County Employees Retirement Association | San Mateo County Employees Retirement Association | East Bay Municipal Utility District | Contra Costa Water District | Central Contra Costa Sanitary District | Contra Costa County |
| Class Title | Information Systems Programmer Analyst | Programmer Analyst | Information Systems Analyst | Information Systems Programmer Analyst Senior | Information Technology Analyst II | Information Technology Applications Developer II | N/C | Retirement Technology Systems Specialist | Information Technology Analyst | Programmer Analyst II | N/C | Programmer Analyst | Information Systems Programmer Analyst III |
| Top Monthly Salary | \$7,439 | \$8,046 | \$8,178 | \$8,701 | \$8,228 | \$7,722 | | \$8,815 | \$9,197 | \$8,459 | | \$10,521 | \$7,240 |
| Employee Retirement Formula¹ | 2%@55 | 2%@60 | 2%@60 | 2%@60 | 2%@55 | 2.7%@55 | | 3%@60 | 2%@60 | 2%@55 | | 2%@55 | 2%@55 |
| PERS Enhanced PERS Formula | | | | | | | | \$397 | | | | | |
| 12 Month Highest Salary | \$100 | -\$245 | -\$249 | -\$305 | | \$622 | | \$864 | -\$281 | | | \$142 | \$98 |
| Social Security | \$461 | \$499 | \$507 | \$539 | \$510 | | | \$119 | | \$58 | | | \$449 |
| Other | | | | | | | | \$547 | \$570 | \$524 | | | |
| Insurance | | | | | | | | | | | | | |
| Cafeteria | | | | | | | | \$1,250 | | | | \$100 | |
| Health | \$1,941 | \$2,476 | \$644 | \$1,518 | \$1,281 | \$1,006 | | \$2,258 | \$2,596 | | | \$2,361 | \$2,280 |
| Dental | \$169 | \$124 | | \$183 | \$121 | | | \$104 | \$224 | | | \$234 | \$98 |
| Vision | | | | | | | | \$15 | \$24 | | | | |
| EAP | | | | | \$5 | | | \$2 | \$5 | | | \$4 | |
| Life | \$7 | \$4 | | \$4 | \$2 | | | \$8 | \$4 | | | \$21 | \$1 |
| LTD | \$44 | | | | | | | \$22 | \$16 | | | \$36 | |
| STD/SDI | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Leave | | | | | | | | | | | | | |
| Vacation | \$429 | \$464 | \$598 | \$335 | \$475 | \$950 | | \$576 | \$566 | \$488 | | \$647 | \$418 |
| Holidays | \$286 | \$464 | \$346 | \$502 | \$396 | \$356 | | \$441 | \$424 | \$488 | | \$526 | \$278 |
| Administrative | \$336 | | | | | | | | | | | \$40 | |
| Auto Allowance | | | | | | | | | | | | | |
| Uniform Allowance | | | | | | | | | | | | | |
| Deferred Compensation | \$150 | | \$143 | | | | | | | | | \$652 | |
| Other | | | | | | | | | | \$75 | | | |
| Longevity | | | | | | | | | | | | | |
| Benefit Cost | \$3,925 | \$3,785 | \$1,988 | \$2,776 | \$2,790 | \$2,935 | N/C | \$4,223 | \$3,680 | \$4,482 | N/C | \$4,764 | \$3,622 |
| Total Monthly Comp. | \$11,364 | \$11,831 | \$10,166 | \$11,477 | \$11,018 | \$10,657 | N/C | \$13,038 | \$12,877 | \$12,941 | N/C | \$15,285 | \$10,862 |

Note: Total Monthly Compensation number may vary slightly from the sum of its components due to cell formulas & rounding.

1- For agencies that participate in the 37 Act retirement programs the actual retirement formulas may differ. For purposes of comparison we have converted each comparator's 37 Act formula to the CalPERS formula that it most closely mirrors.

**Contra Costa County Employees' Retirement Association
Benefits Detail - Unrepresented
November, 2015**

| Retirement Services Manager | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|---|--|--|--|------------------------------------|---|----------------------------|
| Agency | Contra Costa County Employees' Retirement Association | Alameda County Employees Retirement Association | Ventura County Employees Retirement Association | City/County San Francisco Retirement System | Sacramento County Employees Retirement System | Orange County Employees Retirement System | San Bernardino County Employees Retirement Association | San Diego County Employees Retirement Association | San Mateo County Employees Retirement Association | East Bay Municipal Utility District | Contra Costa Water District | Central Contra Costa Sanitary District | Contra Costa County |
| Class Title | Retirement Services Manager | Retirement Benefits Manager | Staff Services Manager II | Manager V | Retirement Services Manager | Member Services Manager | Retirement Benefits Officer | Retirement Member Services Manager | Retirement Benefits Manager | N/C | N/C | N/C | N/C |
| Top Monthly Salary | \$10,338 | \$11,903 | \$9,290 | \$13,563 | \$10,533 | \$9,996 | \$11,404 | \$10,118 | \$12,366 | | | | |
| Employee Retirement Formula¹ | 2%@55 | 2%@60 | 2%@60 | 2%@60 | 2%@55 | 2.7%@55 | 2%@55 | 3%@60 | 2%@60 | | | | |
| PERS | | | | | | | \$798 | \$455 | \$490 | | | | |
| Enhanced PERS Formula | | -\$363 | -\$283 | -\$475 | | \$805 | | \$992 | -\$377 | | | | |
| 12 Month Highest Salary | \$140 | | | | | | \$154 | \$137 | | | | | |
| Social Security | \$612 | \$612 | \$576 | \$612 | \$653 | | | \$627 | \$612 | | | | |
| Other | | | | | | | | | | | | | |
| Insurance | | | | | | | | | | | | | |
| Cafeteria | | | | | | | | \$1,250 | | | | | |
| Health | \$1,941 | \$2,476 | \$644 | \$1,692 | \$1,281 | \$1,006 | \$1,046 | | \$2,258 | | | | |
| Dental | \$169 | \$124 | | \$177 | \$121 | | \$21 | | \$104 | | | | |
| Vision | | | | | | | | | \$15 | | | | |
| EAP | | | | | \$5 | | | | \$2 | | | | |
| Life | \$7 | \$4 | \$4 | \$4 | \$5 | | | \$6 | \$9 | | | | |
| LTD | \$62 | | \$59 | | | | | \$17 | \$14 | | | | |
| STD/SDI | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Leave | | | | | | | | | | | | | |
| Vacation | \$596 | \$687 | \$1,286 | \$835 | \$608 | \$1,230 | | \$662 | \$761 | | | | |
| Holidays | \$398 | \$687 | \$393 | \$835 | \$506 | \$461 | \$614 | \$506 | \$571 | | | | |
| Administrative | \$467 | | | | | | \$439 | | \$773 | | | | |
| Auto Allowance | | | | | | | | | | | | | |
| Uniform Allowance | | | | | | | | | | | | | |
| Deferred Compensation | \$150 | | \$163 | | | | \$969 | | | | | | |
| Other | | | | | | | | | | | | | |
| Longevity | | | | | | | | | | | | | |
| Benefit Cost | \$4,542 | \$4,226 | \$2,841 | \$3,680 | \$3,179 | \$3,503 | \$4,040 | \$4,651 | \$5,233 | N/C | N/C | N/C | N/C |
| Total Monthly Comp. | \$14,880 | \$16,129 | \$12,131 | \$17,243 | \$13,712 | \$13,499 | \$15,444 | \$14,769 | \$17,599 | N/C | N/C | N/C | N/C |

Note: Total Monthly Compensation number may vary slightly from the sum of its components due to cell formulas & rounding.

1- For agencies that participate in the 37 Act retirement programs the actual retirement formulas may differ. For purposes of comparison we have converted each comparator's 37 Act formula to the CalPERS formula that it most closely mirrors.

**Contra Costa County Employees' Retirement Association
Total Monthly Compensation - Unrepresented
November, 2015**

| Accountant | | | |
|---------------------------------------|--|-------------------------------|---------------------------|
| Rank | Comparator Agency | Class Title | Total Monthly Comp |
| 1 | Contra Costa Water District | Senior Accountant | \$15,035 |
| 2 | Central Contra Costa Sanitary District | Accountant | \$12,613 |
| 3 | East Bay Municipal Utility District | Accountant II | \$12,228 |
| 4 | Alameda County Employees Retirement Association | Retirement Accountant II | \$10,718 |
| 5 | Contra Costa County Employees' Retirement Association | Accountant | \$10,416 |
| 6 | San Mateo County Employees Retirement Association | Retirement Accountant II | \$10,022 |
| 7 | City/County San Francisco Retirement System | Accountant II | \$9,489 |
| 8 | San Diego County Employees Retirement Association | Retirement Accountant | \$9,272 |
| 9 | Contra Costa County | Accountant II | \$9,001 |
| 10 | Orange County Employees Retirement System | Accountant Auditor II | \$8,883 |
| 11 | Sacramento County Employees Retirement System | Accountant | \$8,843 |
| 12 | Ventura County Employees Retirement Association | Accounting Officer III | \$8,222 |
| 13 | San Bernardino County Employees Retirement Association | Accountant | \$8,098 |
| | | Average of Comparators | \$10,202 |
| | | % CCCERA Above/Below | 2.1% |
| | | Median of Comparators | \$9,380 |
| | | % CCCERA Above/Below | 9.9% |
| | | Number of Matches | 12 |
| NOTE: All calculations exclude CCCERA | | | |

- Non Comparator

**Contra Costa County Employees' Retirement Association
Total Monthly Compensation - Unrepresented
November, 2015**

| Accounting Manager | | | |
|---------------------------------------|--|-----------------------------|---------------------------|
| Rank | Comparator Agency | Class Title | Total Monthly Comp |
| 1 | Contra Costa Water District | Accounting Manager | \$20,955 |
| 2 | Central Contra Costa Sanitary District | Finance Manager | \$19,626 |
| 3 | Alameda County Employees Retirement Association | Fiscal Services Officer | \$16,806 |
| 4 | San Mateo County Employees Retirement Association | Retirement Finance Officer | \$15,615 |
| 5 | City/County San Francisco Retirement System | Manager III | \$15,574 |
| 6 | San Bernardino County Employees Retirement Association | Accounting Manager | \$15,444 |
| 7 | Contra Costa County Employees' Retirement Association | Accounting Manager | \$14,880 |
| 8 | San Diego County Employees Retirement Association | Retirement Services Manager | \$14,769 |
| 9 | Sacramento County Employees Retirement System | Senior Accounting Manager | \$13,712 |
| 10 | Orange County Employees Retirement System | Finance Manager | \$13,499 |
| 11 | Contra Costa County | Chief Accountant | \$13,114 |
| 12 | Ventura County Employees Retirement Association | Fiscal Manager I | \$11,910 |
| 13 | East Bay Municipal Utility District | N/C | |
| Average of Comparators | | | \$15,548 |
| % CCCERA Above/Below | | | -4.5% |
| Median of Comparators | | | \$15,444 |
| % CCCERA Above/Below | | | -3.8% |
| Number of Matches | | | 11 |
| NOTE: All calculations exclude CCCERA | | | |

- Non Comparator

**Contra Costa County Employees' Retirement Association
Total Monthly Compensation - Unrepresented
November, 2015**

| Administrative HR Supervisor (HR Analyst Data) | | | |
|---|--|-------------------------------------|---------------------------|
| Rank | Comparator Agency | Class Title | Total Monthly Comp |
| 1 | Contra Costa Water District | Human Resources Analyst II | \$14,193 |
| 2 | Central Contra Costa Sanitary District | Human Resources Analyst | \$14,123 |
| 3 | East Bay Municipal Utility District | Human Resources Analyst II | \$13,451 |
| 4 | San Mateo County Employees Retirement Association | Management Analyst | \$13,309 |
| 5 | Orange County Employees Retirement System | Administrative Manager I | \$12,780 |
| 6 | Contra Costa County Employees' Retirement Association | Administrative HR Supervisor | \$11,920 |
| 7 | Alameda County Employees Retirement Association | Human Resources Analyst II | \$11,810 |
| 8 | San Bernardino County Employees Retirement Association | Human Resources Coordinator | \$11,135 |
| 9 | Ventura County Employees Retirement Association | Personnel Analyst II | \$11,076 |
| 10 | San Diego County Employees Retirement Association | Human Resources Analyst | \$10,975 |
| 11 | Contra Costa County | Human Resources Consultant | \$10,708 |
| 12 | Sacramento County Employees Retirement System | Senior Personnel Analyst | \$10,701 |
| 13 | City/County San Francisco Retirement System | Personnel Analyst | \$10,475 |
| | | Average of Comparators | \$12,061 |
| | | % CCCERA Above/Below | -1.2% |
| | | Median of Comparators | \$11,472 |
| | | % CCCERA Above/Below | 3.8% |
| | | Number of Matches | 12 |
| NOTE: All calculations exclude CCCERA | | | |

- Non Comparator

**Contra Costa County Employees' Retirement Association
Total Monthly Compensation - Unrepresented
November, 2015**

| Administrative Human Resources Manager (HR Manager Data) | | | |
|---|--|---|---------------------------|
| Rank | Comparator Agency | Class Title | Total Monthly Comp |
| 1 | Contra Costa Water District | Human Resources Manager | \$21,827 |
| 2 | Central Contra Costa Sanitary District | Human Resources Manager | \$18,042 |
| 3 | Alameda County Employees Retirement Association | Human Resources Officer ACERA | \$16,129 |
| 4 | Orange County Employees Retirement System | Administrative Manager II | \$15,646 |
| 5 | San Mateo County Employees Retirement Association | Human Resources Manager II | \$15,615 |
| 6 | City/County San Francisco Retirement System | Manager III | \$15,459 |
| 7 | Ventura County Employees Retirement Association | Program Management Analyst | \$14,227 |
| 8 | Sacramento County Employees Retirement System | Human Resources Manager II | \$14,059 |
| 9 | San Diego County Employees Retirement Association | Human Resources Manager | \$13,327 |
| 10 | Contra Costa County | Personnel Services Supervisor | \$12,906 |
| 11 | Contra Costa County Employees' Retirement Association | Administrative/Human Resources Manager | \$12,597 |
| 12 | San Bernardino County Employees Retirement Association | N/C | |
| 13 | East Bay Municipal Utility District | N/C | |
| | | Average of Comparators | \$15,724 |
| | | % CCCERA Above/Below | -24.8% |
| | | Median of Comparators | \$15,537 |
| | | % CCCERA Above/Below | -23.3% |
| | | Number of Matches | 10 |
| NOTE: All calculations exclude CCCERA | | | |

- Non Comparator

**Contra Costa County Employees' Retirement Association
Total Monthly Compensation - Unrepresented
November, 2015**

| Chief Executive Officer | | | |
|---------------------------------------|--|------------------------------------|---------------------------|
| Rank | Comparator Agency | Class Title | Total Monthly Comp |
| 1 | San Diego County Employees Retirement Association | Retirement Chief Executive Officer | \$32,959 |
| 2 | City/County San Francisco Retirement System | Department Head VI | \$29,377 |
| 3 | Orange County Employees Retirement System | Chief Executive Officer | \$29,343 |
| 4 | San Bernardino County Employees Retirement Association | Chief Executive Officer | \$28,271 |
| 5 | Alameda County Employees Retirement Association | Chief Executive Officer | \$26,966 |
| 6 | San Mateo County Employees Retirement Association | Chief Executive Officer SAMCERA | \$26,768 |
| 7 | Ventura County Employees Retirement Association | Retirement Administrator | \$25,044 |
| 8 | Sacramento County Employees Retirement System | Retirement Administrator | \$21,996 |
| 9 | Contra Costa County Employees' Retirement Association | Chief Executive Officer | \$21,366 |
| 10 | East Bay Municipal Utility District | N/C | |
| 11 | Contra Costa Water District | N/C | |
| 12 | Central Contra Costa Sanitary District | N/C | |
| 13 | Contra Costa County | N/C | |
| | | Average of Comparators | \$27,590 |
| | | % CCCERA Above/Below | -29.1% |
| | | Median of Comparators | \$27,618 |
| | | % CCCERA Above/Below | -29.3% |
| | | Number of Matches | 8 |
| NOTE: All calculations exclude CCCERA | | | |

- Non Comparator

**Contra Costa County Employees' Retirement Association
Total Monthly Compensation - Unrepresented
November, 2015**

| Communications Coordinator | | | |
|---------------------------------------|--|--------------------------------------|---------------------------|
| Rank | Comparator Agency | Class Title | Total Monthly Comp |
| 1 | East Bay Municipal Utility District | Public Information Specialist II | \$13,451 |
| 2 | Orange County Employees Retirement System | Communications Manager | \$12,461 |
| 3 | Sacramento County Employees Retirement System | Communications and Media Officer III | \$12,191 |
| 4 | Contra Costa County Employees' Retirement Association | Communications Coordinator | \$12,150 |
| 5 | San Mateo County Employees Retirement Association | Retirement Comm Specialist | \$12,075 |
| 6 | San Bernardino County Employees Retirement Association | Communications Officer | \$11,135 |
| 7 | San Diego County Employees Retirement Association | Retirement Sr Communications Officer | \$10,987 |
| 8 | City/County San Francisco Retirement System | Public Relations Officer | \$10,949 |
| 9 | Alameda County Employees Retirement Association | Communications Manager | \$10,712 |
| 10 | Contra Costa County | Public Information Officer | \$10,283 |
| 11 | Ventura County Employees Retirement Association | N/C | |
| 12 | Contra Costa Water District | N/C | |
| 13 | Central Contra Costa Sanitary District | N/C | |
| | | Average of Comparators | \$11,583 |
| | | % CCCERA Above/Below | 4.7% |
| | | Median of Comparators | \$11,135 |
| | | % CCCERA Above/Below | 8.4% |
| | | Number of Matches | 9 |
| NOTE: All calculations exclude CCCERA | | | |

- Non Comparator

**Contra Costa County Employees' Retirement Association
Total Monthly Compensation - Unrepresented
November, 2015**

| Compliance Officer | | | |
|---------------------------------------|--|--|--|
| Rank | Comparator Agency | Class Title | Total Monthly Comp |
| 1 | City/County San Francisco Retirement System | Manager VI | \$18,911 |
| 2 | Contra Costa County Employees' Retirement Association | Compliance Officer | \$15,480 |
| 3 | San Mateo County Employees Retirement Association | Manager, Corporate and HIPAA Compliance | \$15,015 |
| 4 | Contra Costa County | Health Plan Dir of Compliance & Govt Regulati | \$14,197 |
| 5 | Alameda County Employees Retirement Association | N/C | |
| 6 | Ventura County Employees Retirement Association | N/C | |
| 7 | Sacramento County Employees Retirement System | N/C | |
| 8 | Orange County Employees Retirement System | N/C | |
| 9 | San Bernardino County Employees Retirement Association | N/C | |
| 10 | San Diego County Employees Retirement Association | N/C | |
| 11 | East Bay Municipal Utility District | N/C | |
| 12 | Contra Costa Water District | N/C | |
| 13 | Central Contra Costa Sanitary District | N/C | |
| | | Average of Comparators % CCCERA Above/Below | Insufficient Data Insufficient Data |
| | | Median of Comparators % CCCERA Above/Below | Insufficient Data Insufficient Data |
| | | Number of Matches | 3 |
| NOTE: All calculations exclude CCCERA | | | |

- Non Comparator

**Contra Costa County Employees' Retirement Association
Total Monthly Compensation - Unrepresented
November, 2015**

| Deputy General Counsel | | | |
|---------------------------------------|--|---------------------------------------|---------------------------|
| Rank | Comparator Agency | Class Title | Total Monthly Comp |
| 1 | Contra Costa County Employees' Retirement Association | Deputy General Counsel | Proposed |
| 2 | San Mateo County Employees Retirement Association | Deputy County Counsel IV | \$23,551 |
| 3 | City/County San Francisco Retirement System | Head Attorney Civil/Criminal | \$21,014 |
| 4 | San Diego County Employees Retirement Association | Senior Deputy County Counsel | \$20,871 |
| 5 | East Bay Municipal Utility District | Attorney III | \$20,797 |
| 6 | Ventura County Employees Retirement Association | Senior Civil Attorney | \$19,248 |
| 7 | Alameda County Employees Retirement Association | Associate Counsel ACERA | \$19,047 |
| 8 | San Bernardino County Employees Retirement Association | Senior Staff Counsel | \$18,594 |
| 9 | Contra Costa County | Deputy County Counsel Advanced Exempt | \$18,014 |
| 10 | Sacramento County Employees Retirement System | Civil Attorney Level IV Range B | \$17,144 |
| 11 | Orange County Employees Retirement System | Attorney III Retirement | \$15,576 |
| 12 | Contra Costa Water District | N/C | |
| 13 | Central Contra Costa Sanitary District | N/C | |
| | | Average of Comparators | \$19,386 |
| | | % CCCERA Above/Below | |
| | | Median of Comparators | \$19,148 |
| | | % CCCERA Above/Below | |
| | | Number of Matches | 10 |
| NOTE: All calculations exclude CCCERA | | | |

- Non Comparator

**Contra Costa County Employees' Retirement Association
Total Monthly Compensation - Unrepresented
November, 2015**

| General Counsel | | | |
|---------------------------------------|--|--------------------------------|---------------------------|
| Rank | Comparator Agency | Class Title | Total Monthly Comp |
| 1 | Orange County Employees Retirement System | Chief Legal Officer | \$28,962 |
| 2 | San Bernardino County Employees Retirement Association | Chief Counsel | \$27,217 |
| 3 | San Diego County Employees Retirement Association | Retirement General Counsel | \$26,294 |
| 4 | San Mateo County Employees Retirement Association | Retirement Chief Legal Counsel | \$25,638 |
| 5 | Alameda County Employees Retirement Association | Chief Counsel | \$22,653 |
| 6 | Ventura County Employees Retirement Association | General Counsel Retirement | \$19,201 |
| 7 | Contra Costa County Employees' Retirement Association | General Counsel | \$18,825 |
| 8 | Sacramento County Employees Retirement System | Retirement General Counsel | \$17,440 |
| 9 | City/County San Francisco Retirement System | N/C | |
| 10 | East Bay Municipal Utility District | N/C | |
| 11 | Contra Costa Water District | N/C | |
| 12 | Central Contra Costa Sanitary District | N/C | |
| 13 | Contra Costa County | N/C | |
| Average of Comparators | | | \$23,915 |
| % CCCERA Above/Below | | | -27.0% |
| Median of Comparators | | | \$25,638 |
| % CCCERA Above/Below | | | -36.2% |
| Number of Matches | | | 7 |
| NOTE: All calculations exclude CCCERA | | | |

- Non Comparator

**Contra Costa County Employees' Retirement Association
Total Monthly Compensation - Unrepresented
November, 2015**

| Information Technology Coordinator | | | |
|---|--|---|---------------------------|
| Rank | Comparator Agency | Class Title | Total Monthly Comp |
| 1 | Central Contra Costa Sanitary District | Technical Support Analyst | \$11,933 |
| 2 | Contra Costa Water District | Network Desktop Support Technician I | \$11,628 |
| 3 | East Bay Municipal Utility District | Information Systems Specialist III | \$10,751 |
| 4 | City/County San Francisco Retirement System | Information Systems Administrator II | \$10,298 |
| 5 | San Diego County Employees Retirement Association | Retirement Technology Systems Technician | \$10,271 |
| 6 | San Mateo County Employees Retirement Association | Information Technology Technician | \$10,251 |
| 7 | Alameda County Employees Retirement Association | Information Systems Specialist | \$10,197 |
| 8 | Contra Costa County Employees' Retirement Association | Information Technology Coordinator | \$10,155 |
| 9 | Contra Costa County | Information Systems Specialist III | \$9,669 |
| 10 | Sacramento County Employees Retirement System | IT Customer Support Specialist | \$9,426 |
| 11 | Ventura County Employees Retirement Association | Desktop Support Analyst II | \$9,244 |
| 12 | Orange County Employees Retirement System | Information Systems Technician II | \$8,577 |
| 13 | San Bernardino County Employees Retirement Association | N/C | |
| | | Average of Comparators | \$10,204 |
| | | % CCCERA Above/Below | -0.5% |
| | | Median of Comparators | \$10,251 |
| | | % CCCERA Above/Below | -0.9% |
| | | Number of Matches | 11 |

NOTE: All calculations exclude CCCERA

- Non Comparator

**Contra Costa County Employees' Retirement Association
Total Monthly Compensation - Unrepresented
November, 2015**

| Information Technology Manager | | | |
|---------------------------------------|--|--|---------------------------|
| Rank | Comparator Agency | Class Title | Total Monthly Comp |
| 1 | San Bernardino County Employees Retirement Association | Chief of Information Services | \$22,432 |
| 2 | Contra Costa Water District | Information Systems Manager | \$21,827 |
| 3 | Central Contra Costa Sanitary District | Information Technology Manager | \$21,810 |
| 4 | East Bay Municipal Utility District | Information Systems Division Manager | \$21,233 |
| 5 | City/County San Francisco Retirement System | Manager VI | \$18,620 |
| 6 | San Mateo County Employees Retirement Association | Chief Retirement Technology Officer | \$18,134 |
| 7 | San Diego County Employees Retirement Association | Retirement Information Technology Services Manager | \$17,773 |
| 8 | Orange County Employees Retirement System | Director of Information Technology | \$17,508 |
| 9 | Alameda County Employees Retirement Association | Project and Information Services Manager | \$16,129 |
| 10 | Sacramento County Employees Retirement System | Information Technology Manager | \$14,615 |
| 11 | Contra Costa County Employees' Retirement Association | Information Technology Manager | \$14,397 |
| 12 | Contra Costa County | Information Systems Manager II | \$14,207 |
| 13 | Ventura County Employees Retirement Association | N/C | |
| Average of Comparators | | | \$18,572 |
| % CCCERA Above/Below | | | -29.0% |
| Median of Comparators | | | \$18,134 |
| % CCCERA Above/Below | | | -26.0% |
| Number of Matches | | | 11 |
| NOTE: All calculations exclude CCCERA | | | |

- Non Comparator

**Contra Costa County Employees' Retirement Association
Total Monthly Compensation - Unrepresented
November, 2015**

| Information Systems Programmer Analyst | | | |
|---|--|--|---------------------------|
| Rank | Comparator Agency | Class Title | Total Monthly Comp |
| 1 | Central Contra Costa Sanitary District | Programmer Analyst | \$15,285 |
| 2 | San Diego County Employees Retirement Association | Retirement Technology Systems Specialist | \$13,038 |
| 3 | East Bay Municipal Utility District | Programmer Analyst II | \$12,941 |
| 4 | San Mateo County Employees Retirement Association | Information Technology Analyst | \$12,877 |
| 5 | Alameda County Employees Retirement Association | Programmer Analyst | \$11,831 |
| 6 | City/County San Francisco Retirement System | Information Systems Programmer Analyst Senior | \$11,477 |
| 7 | Contra Costa County Employees' Retirement Association | Information Systems Programmer Analyst | \$11,364 |
| 8 | Sacramento County Employees Retirement System | Information Technology Analyst II | \$11,018 |
| 9 | Contra Costa County | Information Systems Programmer Analyst III | \$10,862 |
| 10 | Orange County Employees Retirement System | Information Technology Applications Developer II | \$10,657 |
| 11 | Ventura County Employees Retirement Association | Information Systems Analyst | \$10,166 |
| 12 | San Bernardino County Employees Retirement Association | N/C | |
| 13 | Contra Costa Water District | N/C | |
| Average of Comparators | | | \$12,015 |
| % CCCERA Above/Below | | | -5.7% |
| Median of Comparators | | | \$11,654 |
| % CCCERA Above/Below | | | -2.6% |
| Number of Matches | | | 10 |
| NOTE: All calculations exclude CCCERA | | | |

- Non Comparator

**Contra Costa County Employees' Retirement Association
Total Monthly Compensation - Unrepresented
November, 2015**

| Retirement Services Manager | | | |
|------------------------------------|--|------------------------------------|---------------------------|
| Rank | Comparator Agency | Class Title | Total Monthly Comp |
| 1 | San Mateo County Employees Retirement Association | Retirement Benefits Manager | \$17,599 |
| 2 | City/County San Francisco Retirement System | Manager V | \$17,243 |
| 3 | Alameda County Employees Retirement Association | Retirement Benefits Manager | \$16,129 |
| 4 | San Bernardino County Employees Retirement Association | Retirement Benefits Officer | \$15,444 |
| 5 | Contra Costa County Employees' Retirement Association | Retirement Services Manager | \$14,880 |
| 6 | San Diego County Employees Retirement Association | Retirement Member Services Manager | \$14,769 |
| 7 | Sacramento County Employees Retirement System | Retirement Services Manager | \$13,712 |
| 8 | Orange County Employees Retirement System | Member Services Manager | \$13,499 |
| 9 | Ventura County Employees Retirement Association | Staff Services Manager II | \$12,131 |
| 10 | East Bay Municipal Utility District | N/C | |
| 11 | Contra Costa Water District | N/C | |
| 12 | Central Contra Costa Sanitary District | N/C | |
| 13 | Contra Costa County | N/C | |
| | | Average of Comparators | \$15,066 |
| | | % CCCERA Above/Below | -1.2% |
| | | Median of Comparators | \$15,107 |
| | | % CCCERA Above/Below | -1.5% |
| | | Number of Matches | 8 |

NOTE: All calculations exclude CCCERA

- Non Comparator



Final Report – Classification and Compensation Study

Contra Costa County Employees' Retirement Association – Unrepresented
Classifications

Appendix III

Proposed Monthly Salary Plan

**Appendix III
Contra Costa County Employee's Retirement Association
Salary Schedule
November 2015**

| Salary Range # | Monthly Salary Range | | | | | Biweekly Salary Range | | | | |
|----------------|----------------------|--------|--------|--------|--------|-----------------------|--------|--------|--------|--------|
| | Step 1 | Step 2 | Step 3 | Step 4 | Step 5 | Step 1 | Step 2 | Step 3 | Step 4 | Step 5 |
| 1 | 3214 | 3375 | 3544 | 3721 | 3907 | 1484 | 1558 | 1636 | 1717 | 1803 |
| 2 | 3293 | 3457 | 3630 | 3812 | 4002 | 1520 | 1596 | 1675 | 1759 | 1847 |
| 3 | 3375 | 3544 | 3721 | 3907 | 4102 | 1558 | 1636 | 1717 | 1803 | 1893 |
| 4 | 3457 | 3630 | 3812 | 4002 | 4202 | 1596 | 1675 | 1759 | 1847 | 1940 |
| 5 | 3544 | 3721 | 3907 | 4102 | 4307 | 1636 | 1717 | 1803 | 1893 | 1988 |
| 6 | 3630 | 3812 | 4002 | 4202 | 4413 | 1675 | 1759 | 1847 | 1940 | 2037 |
| 7 | 3721 | 3907 | 4102 | 4307 | 4523 | 1717 | 1803 | 1893 | 1988 | 2087 |
| 8 | 3812 | 4002 | 4202 | 4413 | 4633 | 1759 | 1847 | 1940 | 2037 | 2138 |
| 9 | 3907 | 4102 | 4307 | 4523 | 4749 | 1803 | 1893 | 1988 | 2087 | 2192 |
| 10 | 4002 | 4202 | 4413 | 4633 | 4865 | 1847 | 1940 | 2037 | 2138 | 2245 |
| 11 | 4102 | 4307 | 4523 | 4749 | 4986 | 1893 | 1988 | 2087 | 2192 | 2301 |
| 12 | 4202 | 4413 | 4633 | 4865 | 5108 | 1940 | 2037 | 2138 | 2245 | 2358 |
| 13 | 4307 | 4523 | 4749 | 4986 | 5236 | 1988 | 2087 | 2192 | 2301 | 2417 |
| 14 | 4413 | 4633 | 4865 | 5108 | 5363 | 2037 | 2138 | 2245 | 2358 | 2475 |
| 15 | 4523 | 4749 | 4986 | 5236 | 5498 | 2087 | 2192 | 2301 | 2417 | 2537 |
| 16 | 4633 | 4865 | 5108 | 5363 | 5632 | 2138 | 2245 | 2358 | 2475 | 2599 |
| 17 | 4749 | 4986 | 5236 | 5498 | 5772 | 2192 | 2301 | 2417 | 2537 | 2664 |
| 18 | 4865 | 5108 | 5363 | 5632 | 5913 | 2245 | 2358 | 2475 | 2599 | 2729 |
| 19 | 4986 | 5236 | 5498 | 5772 | 6061 | 2301 | 2417 | 2537 | 2664 | 2797 |
| 20 | 5108 | 5363 | 5632 | 5913 | 6209 | 2358 | 2475 | 2599 | 2729 | 2866 |
| 21 | 5236 | 5498 | 5772 | 6061 | 6364 | 2417 | 2537 | 2664 | 2797 | 2937 |
| 22 | 5363 | 5632 | 5913 | 6209 | 6519 | 2475 | 2599 | 2729 | 2866 | 3009 |
| 23 | 5498 | 5772 | 6061 | 6364 | 6682 | 2537 | 2664 | 2797 | 2937 | 3084 |
| 24 | 5632 | 5913 | 6209 | 6519 | 6845 | 2599 | 2729 | 2866 | 3009 | 3159 |
| 25 | 5772 | 6061 | 6364 | 6682 | 7016 | 2664 | 2797 | 2937 | 3084 | 3238 |
| 26 | 5913 | 6209 | 6519 | 6845 | 7188 | 2729 | 2866 | 3009 | 3159 | 3317 |
| 27 | 6061 | 6364 | 6682 | 7016 | 7367 | 2797 | 2937 | 3084 | 3238 | 3400 |
| 28 | 6209 | 6519 | 6845 | 7188 | 7547 | 2866 | 3009 | 3159 | 3317 | 3483 |
| 29 | 6364 | 6682 | 7016 | 7367 | 7736 | 2937 | 3084 | 3238 | 3400 | 3570 |
| 30 | 6519 | 6845 | 7188 | 7547 | 7924 | 3009 | 3159 | 3317 | 3483 | 3657 |
| 31 | 6682 | 7016 | 7367 | 7736 | 8122 | 3084 | 3238 | 3400 | 3570 | 3749 |
| 32 | 6845 | 7188 | 7547 | 7924 | 8321 | 3159 | 3317 | 3483 | 3657 | 3840 |
| 33 | 7016 | 7367 | 7736 | 8122 | 8529 | 3238 | 3400 | 3570 | 3749 | 3936 |
| 34 | 7188 | 7547 | 7924 | 8321 | 8737 | 3317 | 3483 | 3657 | 3840 | 4032 |
| 35 | 7367 | 7736 | 8122 | 8529 | 8955 | 3400 | 3570 | 3749 | 3936 | 4133 |
| 36 | 7547 | 7924 | 8321 | 8737 | 9173 | 3483 | 3657 | 3840 | 4032 | 4234 |
| 37 | 7736 | 8122 | 8529 | 8955 | 9403 | 3570 | 3749 | 3936 | 4133 | 4340 |
| 38 | 7924 | 8321 | 8737 | 9173 | 9632 | 3657 | 3840 | 4032 | 4234 | 4446 |
| 39 | 8122 | 8529 | 8955 | 9403 | 9873 | 3749 | 3936 | 4133 | 4340 | 4557 |
| 40 | 8321 | 8737 | 9173 | 9632 | 10114 | 3840 | 4032 | 4234 | 4446 | 4668 |
| 41 | 8529 | 8955 | 9403 | 9873 | 10366 | 3936 | 4133 | 4340 | 4557 | 4785 |
| 42 | 8737 | 9173 | 9632 | 10114 | 10619 | 4032 | 4234 | 4446 | 4668 | 4901 |
| 43 | 8955 | 9403 | 9873 | 10366 | 10885 | 4133 | 4340 | 4557 | 4785 | 5024 |
| 44 | 9173 | 9632 | 10114 | 10619 | 11150 | 4234 | 4446 | 4668 | 4901 | 5146 |
| 45 | 9403 | 9873 | 10366 | 10885 | 11429 | 4340 | 4557 | 4785 | 5024 | 5275 |
| 46 | 9632 | 10114 | 10619 | 11150 | 11708 | 4446 | 4668 | 4901 | 5146 | 5404 |
| 47 | 9873 | 10366 | 10885 | 11429 | 12000 | 4557 | 4785 | 5024 | 5275 | 5539 |
| 48 | 10114 | 10619 | 11150 | 11708 | 12293 | 4668 | 4901 | 5146 | 5404 | 5674 |
| 49 | 10366 | 10885 | 11429 | 12000 | 12601 | 4785 | 5024 | 5275 | 5539 | 5816 |
| 50 | 10619 | 11150 | 11708 | 12293 | 12908 | 4901 | 5146 | 5404 | 5674 | 5957 |
| 51 | 10885 | 11429 | 12000 | 12601 | 13231 | 5024 | 5275 | 5539 | 5816 | 6106 |
| 52 | 11150 | 11708 | 12293 | 12908 | 13553 | 5146 | 5404 | 5674 | 5957 | 6255 |
| 53 | 11429 | 12000 | 12601 | 13231 | 13892 | 5275 | 5539 | 5816 | 6106 | 6412 |
| 54 | 11708 | 12293 | 12908 | 13553 | 14231 | 5404 | 5674 | 5957 | 6255 | 6568 |
| 55 | 12000 | 12601 | 13231 | 13892 | 14587 | 5539 | 5816 | 6106 | 6412 | 6732 |
| 56 | 12293 | 12908 | 13553 | 14231 | 14942 | 5674 | 5957 | 6255 | 6568 | 6897 |
| 57 | 12601 | 13231 | 13892 | 14587 | 15316 | 5816 | 6106 | 6412 | 6732 | 7069 |
| 58 | 12908 | 13553 | 14231 | 14942 | 15690 | 5957 | 6255 | 6568 | 6897 | 7241 |
| 59 | 13231 | 13892 | 14587 | 15316 | 16082 | 6106 | 6412 | 6732 | 7069 | 7422 |
| 60 | 13553 | 14231 | 14942 | 15690 | 16474 | 6255 | 6568 | 6897 | 7241 | 7603 |
| 61 | 13892 | 14587 | 15316 | 16082 | 16886 | 6412 | 6732 | 7069 | 7422 | 7793 |
| 62 | 14231 | 14942 | 15690 | 16474 | 17298 | 6568 | 6897 | 7241 | 7603 | 7984 |
| 63 | 14587 | 15316 | 16082 | 16886 | 17730 | 6732 | 7069 | 7422 | 7793 | 8183 |
| 64 | 14942 | 15690 | 16474 | 17298 | 18163 | 6897 | 7241 | 7603 | 7984 | 8383 |
| 65 | 15316 | 16082 | 16886 | 17730 | 18617 | 7069 | 7422 | 7793 | 8183 | 8592 |
| 66 | 15690 | 16474 | 17298 | 18163 | 19071 | 7241 | 7603 | 7984 | 8383 | 8802 |
| 67 | 16082 | 16886 | 17730 | 18617 | 19548 | 7422 | 7793 | 8183 | 8592 | 9022 |
| 68 | 16474 | 17298 | 18163 | 19071 | 20024 | 7603 | 7984 | 8383 | 8802 | 9242 |
| 69 | 16886 | 17730 | 18617 | 19548 | 20525 | 7793 | 8183 | 8592 | 9022 | 9473 |
| 70 | 17298 | 18163 | 19071 | 20024 | 21026 | 7984 | 8383 | 8802 | 9242 | 9704 |
| 71 | 17730 | 18617 | 19548 | 20525 | 21551 | 8183 | 8592 | 9022 | 9473 | 9947 |
| 72 | 18163 | 19071 | 20024 | 21026 | 22077 | 8383 | 8802 | 9242 | 9704 | 10189 |
| 73 | 18617 | 19548 | 20525 | 21551 | 22629 | 8592 | 9022 | 9473 | 9947 | 10444 |
| 74 | 19071 | 20024 | 21026 | 22077 | 23181 | 8802 | 9242 | 9704 | 10189 | 10699 |



Final Report – Classification and Compensation Study

Contra Costa County Employees' Retirement Association – Unrepresented
Classifications

Appendix IV

Proposed Salary Range Placement

**Volume II Appendix IV
 Contra Costa County Employees' Retirement Association
 Proposed Range Place Recommendations - Unrepresented
 November 2015**

| Class Title | Maximum Monthly Salary | Total Comp Median | Market Placement | Proposed Salary Range | Maximum Monthly Salary | Percent Difference | Rationale |
|---|-------------------------------|--------------------------|-------------------------|------------------------------|-------------------------------|---------------------------|---|
| Chief Executive Officer | \$15,925 | -29.3% | \$20,591 | N/A | N/A | N/A | N/A Separately negotiated. |
| Deputy Chief Executive Officer | \$12,933 | | | 61 | \$16,886 | 30.6% | Internal Alignment: 20% below Chief Executive Officer |
| General Counsel | \$13,736 | -36.2% | \$18,708 | 65 | \$18,617 | 35.5% | Market and range placement |
| Deputy General Counsel | Proposed | N/A | \$14,807 | 56 | \$14,942 | | Market and range placement |
| Compliance Officer | \$10,855 | N/A | N/A | 43 | \$10,885 | 0.3% | Internal Alignment: 5% above the Retirement Services Manager |
| Retirement Services Manager | \$10,338 | -1.5% | \$10,493 | 41 | \$10,366 | 0.3% | Market and range placement |
| Retirement Services Supervisor | \$7,897 | | | 30 | \$7,924 | 0.3% | Internal Alignment: 27.5% below the Retirement Services Manager |
| Member Services Manager | \$10,338 | | | 41 | \$10,366 | 0.3% | Internal Alignment: align with Retirement Services Manager |
| Member Services Supervisor | \$7,897 | | | 30 | \$7,924 | 0.3% | Internal Alignment: 27.5% below the Retirement Services Manager |
| Accounting Manager | \$10,338 | -3.8% | \$10,730 | 42 | \$10,619 | 2.7% | Market and range placement |
| Accounting Supervisor | \$7,663 | | | 30 | \$7,924 | 3.4% | 20% above Accountant |
| Accountant | \$6,825 | 9.9% | \$6,149 | 20 | \$6,209 | -9.0% | Market and range placement: Y-rate |
| Administration/Human Resources Manager | \$8,447 | -23.3% | \$10,415 | 41 | \$10,366 | 22.7% | Market and range placement. |
| Administration/Human Resources Supervisor | \$7,899 | 3.8% | \$7,599 | 30 | \$7,924 | 0.3% | Market and internal alignment: Set 10% above market to accommodate supervisory responsibilities |
| Communications Coordinator | \$8,127 | 8.4% | \$7,444 | 27 | \$7,367 | -9.4% | Market and range placement: Yrate |
| Information Technology Manager | \$9,919 | -26.0% | \$12,498 | 49 | \$12,601 | 27.0% | Market and range placement |
| Information Systems Programmer Analyst | \$7,439 | -2.6% | \$7,632 | 28 | \$7,547 | 1.5% | Market and range placement |
| Information Technology Coordinator | \$6,865 | -0.9% | \$6,927 | 24 | \$6,845 | -0.3% | Market and range placement: Y-rate |



Final Report – Classification and Compensation Study

Contra Costa County Employees' Retirement Association – Unrepresented
Classifications

Appendix V

Bureau of Labor Statistics Definitions and Methodology



Private Sector Data– Classification and Compensation Study

Contra Costa County Employees’ Retirement Association – Unrepresented Classifications

Data Source and Criteria Refinement

The private sector data was obtained from the Bureau of Labor-Occupational Employment Statistics. The data was obtained from the Occupational Employment and Wage Estimates database. The selection criteria utilized the occupational data for the San Francisco-Oakland-Fremont metropolitan area, to most closely replicate the Association’s labor market.

Private Sector data is provided for eleven (11) of the Association’s unrepresented benchmark classes. For the remaining two (2) classifications no private sector data was available. The table below details the classes for which there was private sector data.

| Association Benchmark | BLS Comparator Occupation |
|--|--|
| Accountant | Accountants and Auditors |
| Accounting Manager | Financial Managers |
| Administrative HR Manager | Human Resources Manager |
| Administrative HR Supervisor | Human Resources Specialist |
| Chief Executive Officer | Chief Executives |
| Communications Coordinator | Public Relations Specialist |
| Deputy General Counsel | Lawyers |
| Information Technology Coordinator | Computer Network Support Specialist |
| Information Technology Manager | Computer and Information Systems Manager |
| Information Systems Programmer Analyst | Software Developer Applications |
| Retirement Services Manager | General and Operations Managers |

Attached for your review, are the BLS occupation definitions.

In general, there are challenges in comparing Private and Public Sector compensation data. Public Sector agencies often have structured compensation plans with well-defined class descriptions. Private entities, particularly those of a similar size to the Association, do not need to have the same transparency and



Private Sector Data– Classification and Compensation Study

Contra Costa County Employees' Retirement Association – Unrepresented Classifications

often do not have job descriptions nor strong compensation structure, making it difficult to ensure that the matches are 70% similar. It is also difficult to get industry specific data from the private sector making the use of very general salary surveys or data the primary source of comparison. Additionally, there are not always comparable positions with which to match the public sector to the private sector.

At the same time, it is very common for constituents to request that governing bodies draw a comparison to the private sector when undertaking compensation surveys. Accordingly, we provided private sector data for the Board to use for comparative purposes.



Private Sector Data– Classification and Compensation Study

Contra Costa County Employees' Retirement Association – Unrepresented Classifications

| OES Code | BLS Comparator | Comparator Descriptor |
|----------|---------------------------------|--|
| 13-2011 | Accountants and Auditors | Examine, analyze, and interpret accounting records to prepare financial statements, give advice, or audit and evaluate statements prepared by others. Install or advise on systems of recording costs or other financial and budgetary data. Excludes "Tax Examiners and Collectors, and Revenue Agents" (13-2081). |
| 11-3031 | Financial Managers | Plan, direct, or coordinate accounting, investing, banking, insurance, securities, and other financial activities of a branch, office, or department of an establishment. |
| 11-1021 | General and Operations Managers | Plan, direct, or coordinate the operations of public or private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration, such as personnel, purchasing, or administrative services. Excludes First-Line Supervisors. |
| 11-1011 | Chief Executives | Determine and formulate policies and provide overall direction of companies or private and public sector organizations within guidelines set up by a board of directors or similar governing body. Plan, direct, or coordinate operational activities at the highest level of management with the help of subordinate executives and staff managers. |
| 27-3031 | Public Relations Specialist | Engage in promoting or creating an intended public image for individuals, groups, or organizations. May write or select material for release to various communications media. |
| 23-1011 | Lawyers | Represent clients in criminal and civil litigation and other legal proceedings, draw up legal documents, or manage or advise clients on legal transactions. May specialize in a single area or may practice broadly in many areas of law. |
| 13-1071 | Human Resources Specialist | Perform activities in the human resource area. Includes employment specialists who screen, recruit, interview, and place workers. Excludes "Compensation, Benefits, and Job Analysis Specialists" (13-1141) and "Training and Development Specialists" (13-1151). |



Private Sector Data– Classification and Compensation Study

Contra Costa County Employees' Retirement Association – Unrepresented Classifications

| OES Code | BLS Comparator | Comparator Descriptor |
|----------|--|--|
| 11-3121 | Human Resources Manager | Plan, direct, or coordinate human resources activities and staff of an organization. Excludes managers who primarily focus on compensation and benefits (11-3111) and training and development (11-3131). |
| 11-3021 | Computer and Information Systems Manager | Plan, direct, or coordinate activities in such fields as electronic data processing, information systems, systems analysis, and computer programming. Excludes "Computer Occupations" (15-1111 through 15-1199). |
| 15-1152 | Computer Network Support Specialist | Analyze, test, troubleshoot, and evaluate existing network systems, such as local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. Perform network maintenance to ensure networks operate correctly with minimal interruption. Excludes "Network and Computer Systems Administrators" (15-1142) and "Computer Network Architects" (15-1143). |
| 15-1132 | Software Developer Applications | Develop, create, and modify general computer applications software or specialized utility programs. Analyze user needs and develop software solutions. Design software or customize software for client use with the aim of optimizing operational efficiency. May analyze and design databases within an application area, working individually or coordinating database development as part of a team. May supervise computer programmers. |



MEMORANDUM

Date: December 2, 2015
To: CCCERA Board of Retirement
From: Gail Strohl, Retirement Chief Executive Officer
Subject: Consider and take possible action to adopt Koff and Associates recommended classification and salary adjustments, effective January 1, 2016.

On January 1, 2015, CCCERA became an independent employer. An employer is tasked with conducting the activities of the organization in a manner consistent with its mission. The effective administration of a \$7 billion public pension plan requires a complex, dynamic organization that is prepared to adapt and change in an ever evolving landscape. The challenges confronted by CCCERA make it essential to have a collaborative team, exhibiting strength and fortitude.

The qualification recently added to all job specifications is to have the “ability to demonstrate strict confidentiality, professionalism, integrity and compliance with applicable laws and regulations at all times.” It is not an idealistic notion, it is imperative that it is practiced by qualified and engaged employees. The ability to attract and retain qualified employees is paramount to fulfilling CCCERA’s fiduciary responsibility.

The approval and implementation of recommendations by Koff and Associates will ensure that CCCERA will have fair and competitive classification and compensation structures. In the past few years, CCCERA lost almost all of its management staff. CCCERA has had a higher than normal staff turnover rate, peaking at 21% in 2014 and dropping to 10% so far in 2015. Prior to 2015, the lowest turnover rate was in 2010 at 10%, which is still not optimal. The high levels of turnover not only increase recruitment and training costs, but most importantly, leads to a loss of talent and institutional knowledge. This year, there have been organizational improvements targeted at fully engaging employees and allowing for a positive working environment that is focused on achieving CCCERA’s mission of effectively administering the plan, however it is clear that employees have been leaving CCCERA for more economically advantageous positions at other organizations.



Although the staff turnover rate is currently lower for this year, recruitment for many positions has proved extremely difficult and in some cases unsuccessful due to the less than competitive compensation offered at CCCERA. Implementing Koff and Associates' recommendations will help improve CCCERA's retention rates, decrease the associated costs of high turnover and allow for the successful recruitment of talented employees capable of achieving CCCERA's mission.

Recommendation:

Consider and take possible action to adopt Koff and Associates recommended classification and salary adjustments, effective January 1, 2016.



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**



DECEMBER 2, 2015

Asset allocation study

Contra Costa County Employees' Retirement Association

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VERUSINVESTMENTS.COM

SEATTLE 206-622-3700
LOS ANGELES 310-297-1777

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Plan profile

Plan profile

As of September 30, 2015:

- Total market value of assets = \$7,016,433,248

As of December 31, 2014:

- Average monthly Plan cash flows based on the previous 24 months:
 - Total Contributions = \$27.7 mil
 - Average annual lump sum employer contribution of \$262.6 mil in July
 - Total Benefit Payments & Expenses = \$34.0 mil
 - Benefit Payments = \$30.8 mil
 - Operating Expenses = \$3.2 mil
 - Net Operating Cash *Outflow* = \$5.6 mil
 - Total Interest & Dividends = \$23.2 mil
 - Net Cash *Inflow* = \$17.6 mil

As of December 31, 2014:

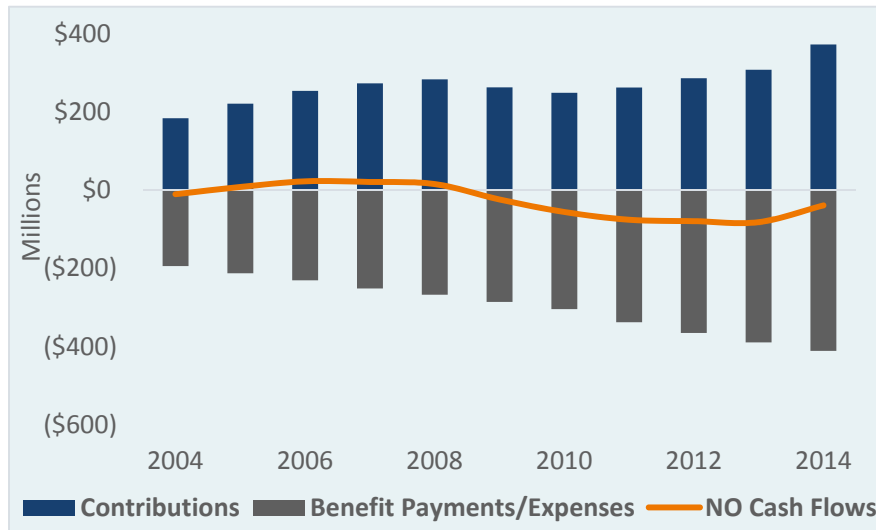
- Open to new participants
- Accrued liability = \$8,104,611,627 (based on interest rate of 7.25%)
- Actuarial assumed rate of return = 7.25%
- Funded ratio = 85.9% (actuarial value of assets) and 86.6% (market value of assets)
- Total participants = 20,677 (9,159 or 44.3% active, 2,647 or 12.8% inactive, 8,871 or 42.9% retired)

Cash flows

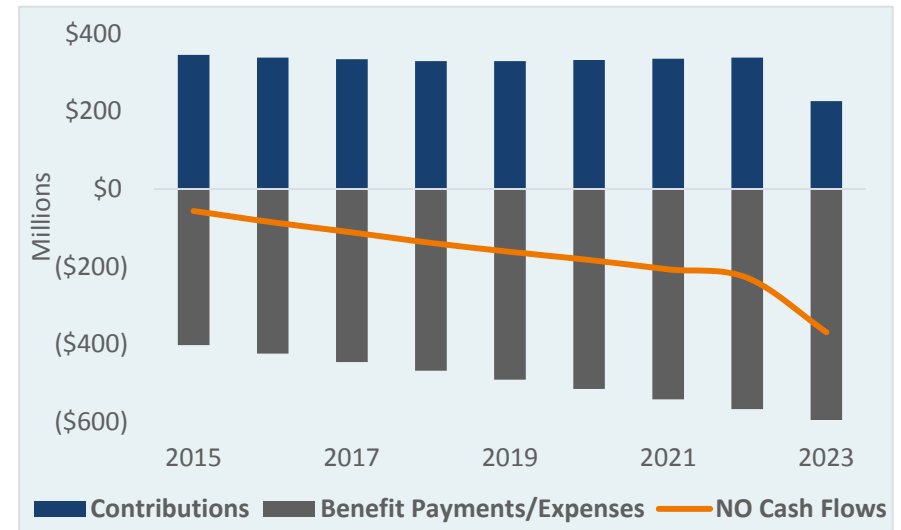
Operating cash flows

- From 2004 to 2014, benefit payments and expenses have increased at an annual rate of 7.8%, while contributions have increased at an annual rate of 7.3%
- From 2015 to 2023, benefit payments and expenses are projected to increase at an annual rate of 5.0%, while contributions are projected to *decrease* at an annual rate of -5.2% (mostly attributable to the decrease in 2023)
- Current projections have net operating cash flows steadily declining to -\$369 mil at the end of 2023

HISTORICAL OPERATING CASH FLOWS



PROJECTED OPERATING CASH FLOWS



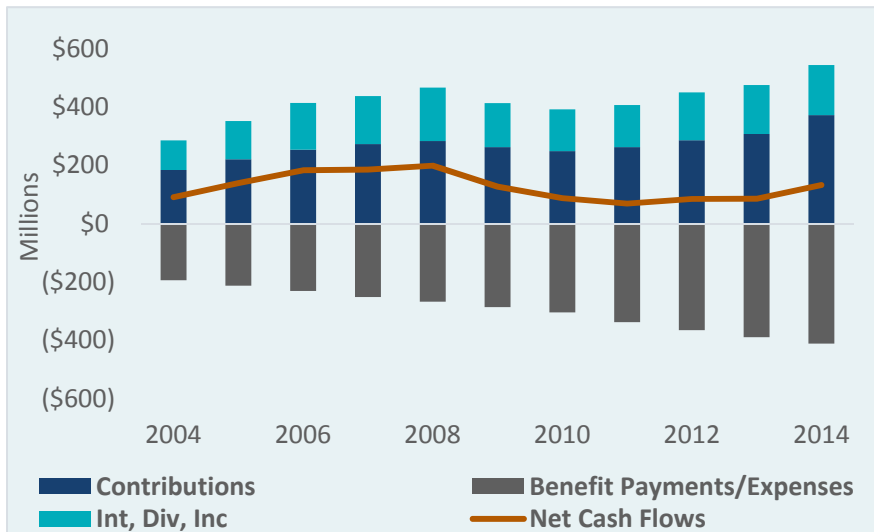
As of December 31, 2014

Sources: CCCERA Comprehensive Annual Financial Reports; Segal Consulting CCCERA GAS 67 Actuarial Valuation Report as of December 31, 2014

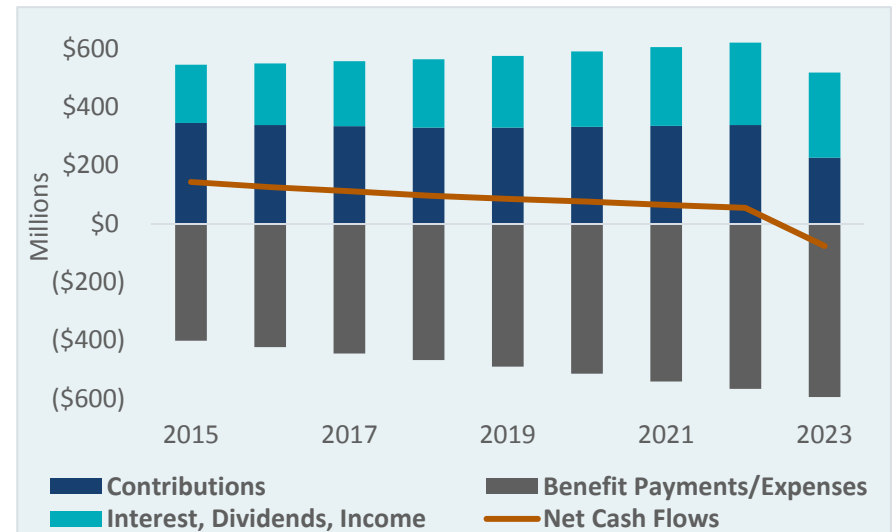
Total cash flows

- Over the last 10 years, net cash flows (taking into account interest, dividends, and real estate income) have remained positive, reaching \$132.1 mil at the end of 2014
- Interest, dividends, and real estate income averaged \$158.3 mil (2.7% of total assets) from 2010 to 2014
- Using 2.7% of total assets as a projection for future interest, dividends, and real estate income, net cash flows are expected to remain positive through 2022

HISTORICAL CASH FLOWS



PROJECTED CASH FLOWS



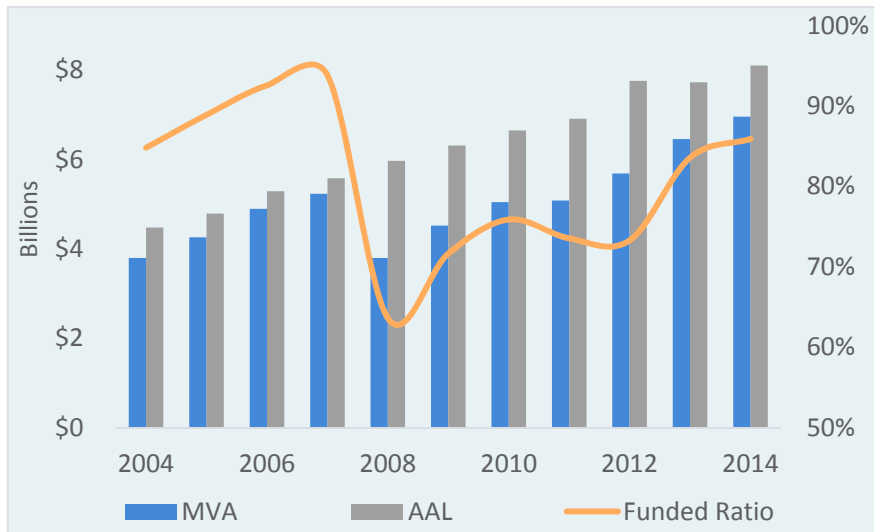
As of December 31, 2014

Sources: CCCERA Comprehensive Annual Financial Reports; Segal Consulting CCCERA GAS 67 Actuarial Valuation Report as of December 31, 2014

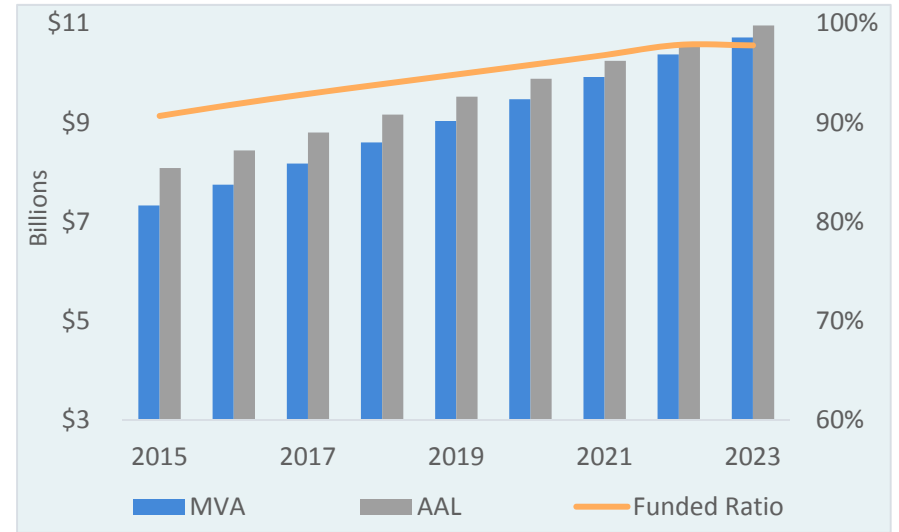
MVA and AAL

- From 2004 to 2014, the market value of assets and actuarial accrued liabilities have grown at an annual rate of 6.1% and 6.2%, respectively
- Based on market value of assets, the Plan's funded ratio at the end of 2014 was 85.9%
- From 2015 to 2023, the actuarial accrued liabilities are projected to grow at an annual rate of 3.9%
- The funded ratio, based on an assumed rate of return of 7.25%, is projected to steadily increase ~1% per year, reaching 97.8% by the end of 2023

HISTORICAL PLAN ASSETS VS. LIABILITIES



PROJECTED PLAN ASSETS VS. LIABILITIES



As of December 31, 2014

Sources: CCCERA Investment Reports, Segal Consulting CCCERA Actuarial Valuation Reports

Benefits & expenses protection

24-month “reserves” model

Assuming annual returns range between 6.0% and 8.5%, 24 month forward projected expenses (as a % of total assets) will range between 10.7% and 12.8% over the next 6 years

| Year End | Projected Expenses | | Total Assets | | | Next 2 Year Expenses (% of Assets) | | |
|----------|--------------------|--------------|--------------|-------------|-------------|------------------------------------|-------------|-------------|
| | Current Year | Next 2 Years | 7.25% Return | 6.0% Return | 8.5% Return | 7.25% Return | 6.0% Return | 8.5% Return |
| 2016 | \$424 | \$914 | \$7,750 | \$7,571 | \$7,939 | 11.79% | 12.07% | 11.51% |
| 2017 | \$446 | \$959 | \$8,174 | \$7,890 | \$8,479 | 11.73% | 12.15% | 11.31% |
| 2018 | \$468 | \$1,006 | \$8,599 | \$8,201 | \$9,037 | 11.70% | 12.27% | 11.13% |
| 2019 | \$491 | \$1,057 | \$9,031 | \$8,507 | \$9,618 | 11.70% | 12.43% | 10.99% |
| 2020 | \$515 | \$1,109 | \$9,471 | \$8,806 | \$10,224 | 11.71% | 12.59% | 10.85% |
| 2021 | \$542 | \$1,162 | \$9,918 | \$9,102 | \$10,860 | 11.72% | 12.77% | 10.70% |
| 2022 | \$567 | | \$10,373 | \$9,390 | \$11,525 | | | |
| 2023 | \$595 | | \$10,715 | \$9,554 | \$12,105 | | | |

(\$ in millions)

As of December 31, 2014

Sources: CCCERA Comprehensive Annual Financial Reports; Segal Consulting CCCERA GAS 67 Actuarial Valuation Report as of December 31, 2014

36-month “reserves” model

Assuming annual returns range between 6.0% and 8.5%, 36 month forward projected expenses (as a % of total assets) will range between 16.7% and 19.4% over the next 5 years

| Year End | Projected Expenses | | Total Assets | | | Next 3 Year Expenses (% of Assets) | | |
|----------|--------------------|--------------|--------------|-------------|-------------|------------------------------------|-------------|-------------|
| | Current Year | Next 3 Years | 7.25% Return | 6.0% Return | 8.5% Return | 7.25% Return | 6.0% Return | 8.5% Return |
| 2016 | \$424 | \$1,405 | \$7,750 | \$7,571 | \$7,939 | 18.13% | 18.56% | 17.70% |
| 2017 | \$446 | \$1,474 | \$8,174 | \$7,890 | \$8,479 | 18.03% | 18.68% | 17.38% |
| 2018 | \$468 | \$1,548 | \$8,599 | \$8,201 | \$9,037 | 18.00% | 18.88% | 17.13% |
| 2019 | \$491 | \$1,624 | \$9,031 | \$8,507 | \$9,618 | 17.98% | 19.09% | 16.89% |
| 2020 | \$515 | \$1,704 | \$9,471 | \$8,806 | \$10,224 | 17.99% | 19.35% | 16.67% |
| 2021 | \$542 | | \$9,918 | \$9,102 | \$10,860 | | | |
| 2022 | \$567 | | \$10,373 | \$9,390 | \$11,525 | | | |
| 2023 | \$595 | | \$10,715 | \$9,554 | \$12,105 | | | |

(\$ in millions)

As of December 31, 2014

Sources: CCCERA Comprehensive Annual Financial Reports; Segal Consulting CCCERA GAS 67 Actuarial Valuation Report as of December 31, 2014

48-month “reserves” model

Assuming annual returns range between 6.0% and 8.5%, 48 month forward projected expenses (as a % of total assets) will range between 23.1% and 26.1% over the next 4 years

| Year End | Projected Expenses | | Total Assets | | | Next 4 Year Expenses (% of Assets) | | |
|----------|--------------------|--------------|--------------|-------------|-------------|------------------------------------|-------------|-------------|
| | Current Year | Next 4 Years | 7.25% Return | 6.0% Return | 8.5% Return | 7.25% Return | 6.0% Return | 8.5% Return |
| 2016 | \$424 | \$1,920 | \$7,750 | \$7,571 | \$7,939 | 24.77% | 25.36% | 24.18% |
| 2017 | \$446 | \$2,016 | \$8,174 | \$7,890 | \$8,479 | 24.66% | 25.55% | 23.78% |
| 2018 | \$468 | \$2,115 | \$8,599 | \$8,201 | \$9,037 | 24.60% | 25.79% | 23.40% |
| 2019 | \$491 | \$2,219 | \$9,031 | \$8,507 | \$9,618 | 24.57% | 26.08% | 23.07% |
| 2020 | \$515 | | \$9,471 | \$8,806 | \$10,224 | | | |
| 2021 | \$542 | | \$9,918 | \$9,102 | \$10,860 | | | |
| 2022 | \$567 | | \$10,373 | \$9,390 | \$11,525 | | | |
| 2023 | \$595 | | \$10,715 | \$9,554 | \$12,105 | | | |

(\$ in millions)

As of December 31, 2014

Sources: CCCERA Comprehensive Annual Financial Reports; Segal Consulting CCCERA GAS 67 Actuarial Valuation Report as of December 31, 2014

Asset allocation

Descriptions of asset allocation approaches

POLICY AND CURRENT PORTFOLIO

- Investment portfolio defined in the investment policy statement

Risk Diversified portfolio

- Model designed to increase risk diversification to the Typical Peer in a way that doesn't markedly increase peer risk
- Does not rely on large allocations to hedge funds or other complex instruments to achieve risk factor diversification

Functionally focused portfolio

- Design based on functional elements, rather than categorizing assets by asset class or risk factors (e.g., liquidity and short term needs, long term growth assets, diversifying strategies)
- By explicitly funding near term benefit payments, additional risk can be assumed throughout the remainder of the portfolio

Asset allocation analysis

| | Policy | FFP (ISD) | Risk Div 50/25/25 | FFP | | | Unconstrained FFP | | | 10-yr Capital Market Assumptions | | |
|--|--------------|--------------|----------------------|--------------|--------------|--------------|-------------------|--------------|--------------|----------------------------------|------|--------|
| | | | | 2-yr | 3-yr | 4-yr | 2'-yr | 3'-yr | 4'-yr | Return | Vol | Sharpe |
| Total Equity | 42.6 | 25.0 | 40.0 | 34.0 | 32.0 | 30.0 | 30.0 | 30.0 | 30.0 | | | |
| Domestic Equity | - | 10.0 | 20.0 | 15.0 | 13.0 | 11.0 | 10.0 | 8.0 | 6.0 | | | |
| Large Cap US Equity | - | 10.0 | 20.0 | 15.0 | 13.0 | 11.0 | 10.0 | 8.0 | 6.0 | 5.7 | 14.7 | 0.25 |
| International Equity | - | 15.0 | 20.0 | 19.0 | 19.0 | 19.0 | 20.0 | 22.0 | 24.0 | | | |
| International Large | - | 10.0 | 15.0 | 14.0 | 13.0 | 12.0 | 10.0 | 10.0 | 10.0 | 9.5 | 18.2 | 0.41 |
| Emerging Markets | - | 5.0 | 5.0 | 5.0 | 6.0 | 7.0 | 10.0 | 12.0 | 14.0 | 11.5 | 23.7 | 0.40 |
| Global Equity | 42.6 | - | - | - | - | - | - | - | - | | | |
| Total Fixed Income | 30.7 | 20.0 | 20.0 | 25.0 | 28.0 | 30.0 | 18.0 | 22.0 | 26.0 | | | |
| Domestic Fixed Income | 28.3 | 20.0 | 15.0 | 25.0 | 28.0 | 30.0 | 18.0 | 22.0 | 26.0 | | | |
| US Core Fixed Income | 19.5 | - | - | - | - | - | - | - | - | 3.1 | 3.2 | 0.31 |
| US Treasury | - | 10.0 | 10.0 | 8.0 | 6.0 | 4.0 | 6.0 | 4.0 | 2.0 | 2.2 | 6.4 | 0.01 |
| Short-Term Govt/Credit | - | 10.0 | - | 12.0 | 18.0 | 24.0 | 12.0 | 18.0 | 24.0 | 2.3 | 1.3 | 0.17 |
| High Yield Fixed Income | 7.4 | - | 5.0 | - | - | - | - | - | - | 3.7 | 10.5 | 0.30 |
| US TIPS | 1.3 | - | - | 5.0 | 4.0 | 2.0 | - | - | - | 2.6 | 6.3 | 0.07 |
| International Fixed Income | 2.4 | - | 5.0 | - | - | - | - | - | - | | | |
| Global Sovereign ex-US | 1.2 | - | - | - | - | - | - | - | - | 2.5 | 7.9 | 0.05 |
| Global Credit | 1.2 | - | - | - | - | - | - | - | - | 1.9 | 7.4 | -0.02 |
| Emerging Market Debt (Hard) | - | - | 5.0 | - | - | - | - | - | - | 5.7 | 8.9 | 0.41 |
| Total Real Assets | 13.8 | 15.0 | 20.0 | 12.0 | 9.0 | 7.0 | 15.0 | 11.0 | 7.0 | | | |
| Commodities | 1.3 | - | - | - | - | - | - | - | - | 4.1 | 18.2 | 0.11 |
| Real Estate | 8.0 | 15.0 | 20.0 | 10.0 | 7.0 | 5.0 | 13.0 | 10.0 | 7.0 | 5.1 | 13.2 | 0.23 |
| REITs | 4.5 | - | - | 2.0 | 2.0 | 2.0 | 2.0 | 1.0 | - | 5.1 | 26.4 | 0.11 |
| Total Alternatives | 12.4 | 35.0 | 20.0 | 28.0 | 30.0 | 32.0 | 36.0 | 36.0 | 36.0 | | | |
| Risk Diversifying Strategies | - | 10.0 | 5.0 | 8.0 | 6.0 | 4.0 | 6.0 | 4.0 | 2.0 | 6.0 | 9.1 | 0.43 |
| Private Equity | 12.4 | 15.0 | 10.0 | 10.0 | 12.0 | 14.0 | 15.0 | 16.0 | 17.0 | 7.7 | 23.7 | 0.24 |
| Private Credit | - | 10.0 | 5.0 | 10.0 | 12.0 | 14.0 | 15.0 | 16.0 | 17.0 | 7.8 | 10.5 | 0.55 |
| Cash | 0.5 | 5.0 | - | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.1 | 0.6 | - |
| Total Allocation | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | | |
| <i>Allocation to Illiquid Strategies</i> | <i>20.4</i> | <i>40.0</i> | <i>35.0</i> | <i>30.0</i> | <i>31.0</i> | <i>33.0</i> | <i>43.0</i> | <i>42.0</i> | <i>41.0</i> | | | |

Note: Policy portfolio utilizes benchmark constituent weights to determine asset allocation weights for equities and fixed income

Asset allocation by functional role

| | Policy | FFP (ISD) | Risk Div 50/25/25 | FFP | | | Unconstrained FFP | | | 10-yr Capital Market Assumptions | | |
|------------------------------|--------------|--------------|----------------------|--------------|--------------|--------------|-------------------|--------------|--------------|----------------------------------|------|--------|
| | | | | 2-yr | 3-yr | 4-yr | 2'-yr | 3'-yr | 4'-yr | Return | Vol | Sharpe |
| Liquidity | 0.5 | 15.0 | - | 13.0 | 19.0 | 25.0 | 13.0 | 19.0 | 25.0 | | | |
| Cash | 0.5 | 5.0 | - | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.1 | 0.6 | - |
| Short-Term Govt/Credit | - | 10.0 | - | 12.0 | 18.0 | 24.0 | 12.0 | 18.0 | 24.0 | 2.3 | 1.3 | 0.17 |
| Diversifying | - | 20.0 | 15.0 | 16.0 | 12.0 | 8.0 | 12.0 | 8.0 | 4.0 | | | |
| US Treasury | - | 10.0 | 10.0 | 8.0 | 6.0 | 4.0 | 6.0 | 4.0 | 2.0 | 2.2 | 6.4 | 0.01 |
| Risk Diversifying Strategies | - | 10.0 | 5.0 | 8.0 | 6.0 | 4.0 | 6.0 | 4.0 | 2.0 | 6.0 | 9.1 | 0.43 |
| Growth | 99.5 | 65.0 | 85.0 | 71.0 | 69.0 | 67.0 | 75.0 | 73.0 | 71.0 | | | |
| Domestic Large Cap Equity | - | 10.0 | 20.0 | 15.0 | 13.0 | 11.0 | 10.0 | 8.0 | 6.0 | | | |
| International Equity | - | 15.0 | 20.0 | 19.0 | 19.0 | 19.0 | 20.0 | 22.0 | 24.0 | | | |
| Developed Markets | - | 10.0 | 15.0 | 14.0 | 13.0 | 12.0 | 10.0 | 10.0 | 10.0 | 9.5 | 18.2 | 0.41 |
| Emerging Markets | - | 5.0 | 5.0 | 5.0 | 6.0 | 7.0 | 10.0 | 12.0 | 14.0 | 11.5 | 23.7 | 0.40 |
| Global Equity | 42.6 | - | - | - | - | - | - | - | - | | | |
| Domestic Fixed Income | 28.2 | - | 5.0 | 5.0 | 4.0 | 2.0 | - | - | - | | | |
| US Core Fixed Income | 19.5 | - | - | - | - | - | - | - | - | 3.1 | 3.2 | 0.31 |
| High Yield Fixed Income | 7.4 | - | 5.0 | - | - | - | - | - | - | 3.7 | 10.5 | 0.30 |
| US TIPS | 1.3 | - | - | 5.0 | 4.0 | 2.0 | - | - | - | 2.6 | 6.3 | 0.07 |
| International Fixed Income | 2.5 | - | 5.0 | - | - | - | - | - | - | | | |
| Global Sovereign ex-US | 1.3 | - | - | - | - | - | - | - | - | 2.5 | 7.9 | 0.05 |
| Global Credit | 1.3 | - | - | - | - | - | - | - | - | 1.9 | 7.4 | -0.02 |
| Emerging Market Debt (Hard) | - | - | 5.0 | - | - | - | - | - | - | 5.7 | 8.9 | 0.41 |
| Commodities | 1.3 | - | - | - | - | - | - | - | - | 4.1 | 18.2 | 0.11 |
| Real Estate | 8.0 | 15.0 | 20.0 | 10.0 | 7.0 | 5.0 | 13.0 | 10.0 | 7.0 | 5.1 | 13.2 | 0.23 |
| REITs | 4.5 | - | - | 2.0 | 2.0 | 2.0 | 2.0 | 1.0 | - | 5.1 | 26.4 | 0.11 |
| Private Equity | 12.4 | 15.0 | 10.0 | 10.0 | 12.0 | 14.0 | 15.0 | 16.0 | 17.0 | 7.7 | 23.7 | 0.24 |
| Private Credit | - | 10.0 | 5.0 | 10.0 | 12.0 | 14.0 | 15.0 | 16.0 | 17.0 | 7.8 | 10.5 | 0.55 |
| Total Allocation | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | | |

Note: Policy portfolio utilizes benchmark constituent weights to determine asset allocation weights for equities and fixed income

Asset allocation analysis

| | Policy | FFP (ISD) | Risk Div 50/25/25 | FFP | | | Unconstrained | | |
|---|------------|--------------|----------------------|------------|------------|------------|---------------|------------|------------|
| | | | | 2-yr | 3-yr | 4-yr | 2'-yr | 3'-yr | 4'-yr |
| Mean Variance Analysis | | | | | | | | | |
| Forecast 10 Year Return | 6.4 | 6.5 | 6.9 | 6.5 | 6.5 | 6.6 | 7.1 | 7.2 | 7.2 |
| Standard Deviation | 12.1 | 9.4 | 11.0 | 9.8 | 9.9 | 9.9 | 10.9 | 10.8 | 10.8 |
| Return/Std. Deviation | 0.5 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| 1st percentile ret. 1 year | -33.0 | -24.4 | -31.0 | -25.6 | -24.8 | -24.4 | -27.6 | -27.1 | -25.9 |
| Sharpe Ratio | 0.41 | 0.51 | 0.49 | 0.49 | 0.49 | 0.50 | 0.51 | 0.52 | 0.52 |
| Verus Economic Scenario Analysis | | | | | | | | | |
| 10 Year Return Forecast | | | | | | | | | |
| Stagflation | 5.7 | 6.5 | 6.1 | 6.1 | 6.0 | 5.9 | 6.5 | 6.3 | 6.2 |
| Weak Economy | 2.3 | 3.0 | 2.5 | 2.6 | 2.8 | 3.0 | 3.2 | 3.2 | 3.3 |
| Base CMA | 6.2 | 6.0 | 6.5 | 6.1 | 6.1 | 6.1 | 6.6 | 6.7 | 6.7 |
| Strong | 9.9 | 9.1 | 10.2 | 9.4 | 9.3 | 9.2 | 9.8 | 9.8 | 9.8 |
| Range of Scenario Forecast | 7.5 | 6.2 | 7.7 | 6.8 | 6.5 | 6.2 | 6.7 | 6.6 | 6.5 |
| Economic Shock (1 year) | -24.6 | -19.4 | -24.2 | -20.9 | -20.7 | -20.6 | -22.5 | -22.8 | -23.1 |

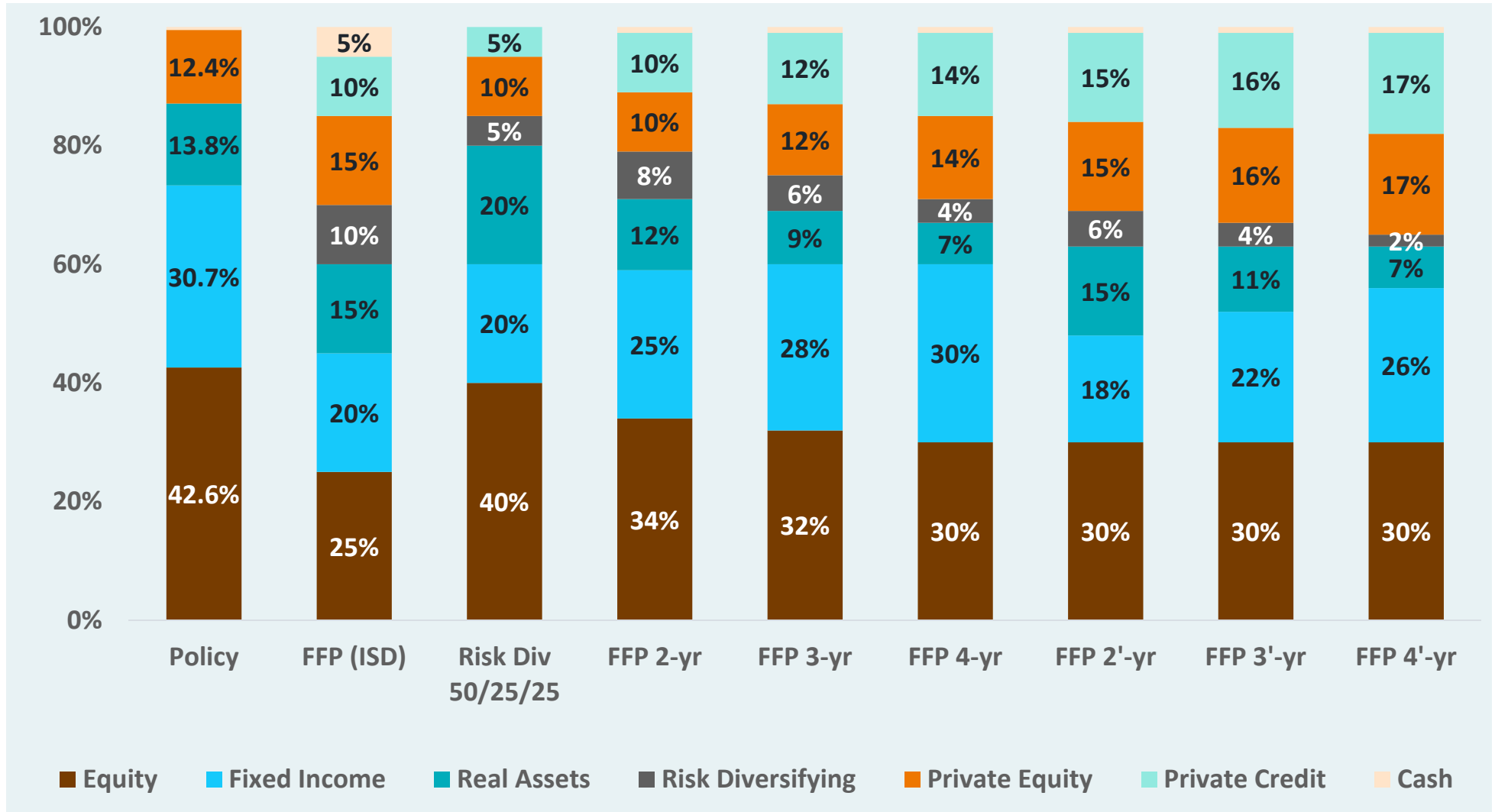
Notes:

- Real Estate capital market assumptions are for core real estate
- Verus' assumed inflation rate is 2.1% over the next 10 years (actuarial assumption is 3.25% over 30 years)

Scenario Analysis utilizes October 2015 Verus Capital Market Assumptions

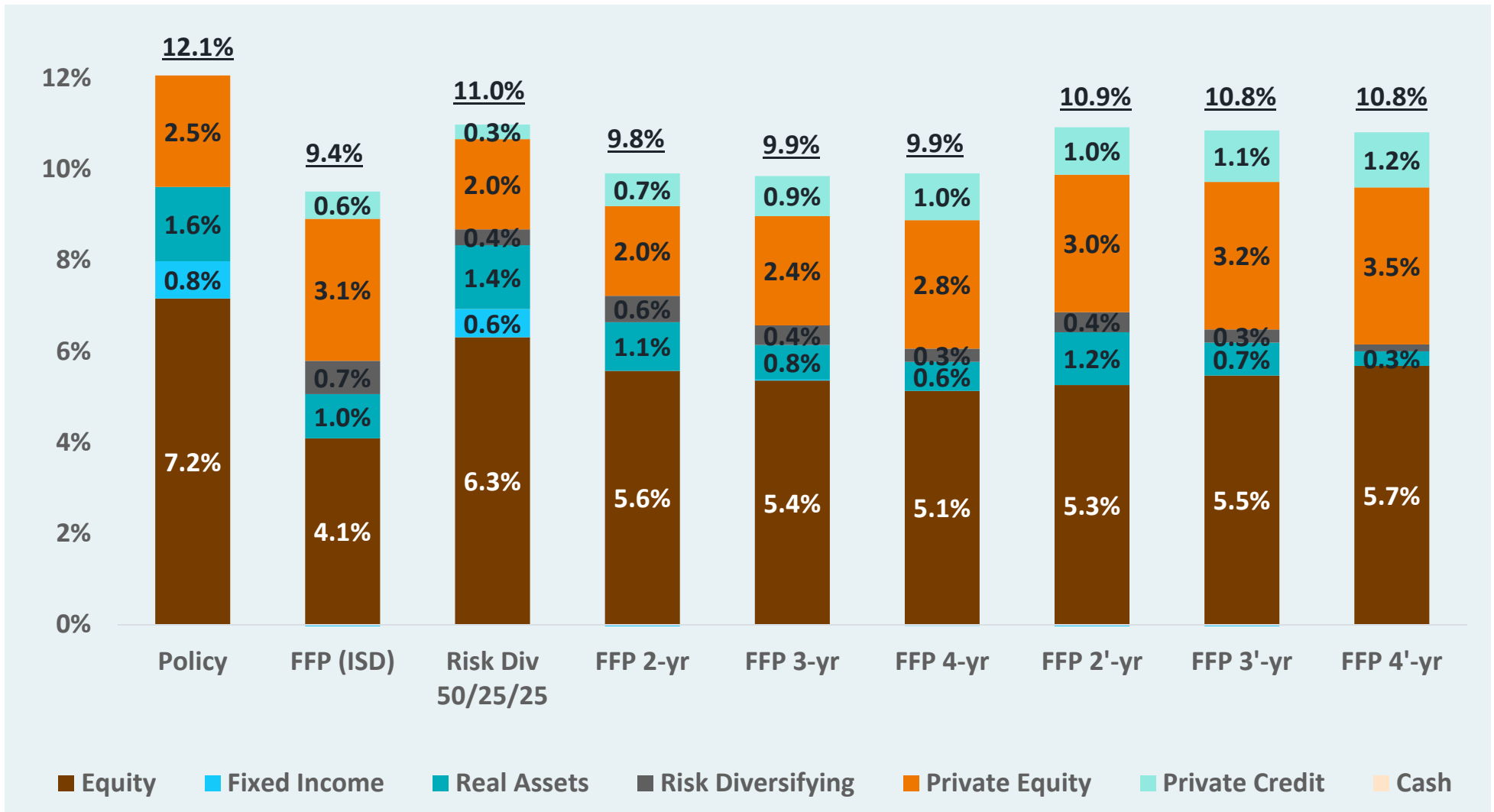
Note: Policy portfolio utilizes benchmark constituent weights to determine asset allocation weights for equities and fixed income

Allocation by asset class



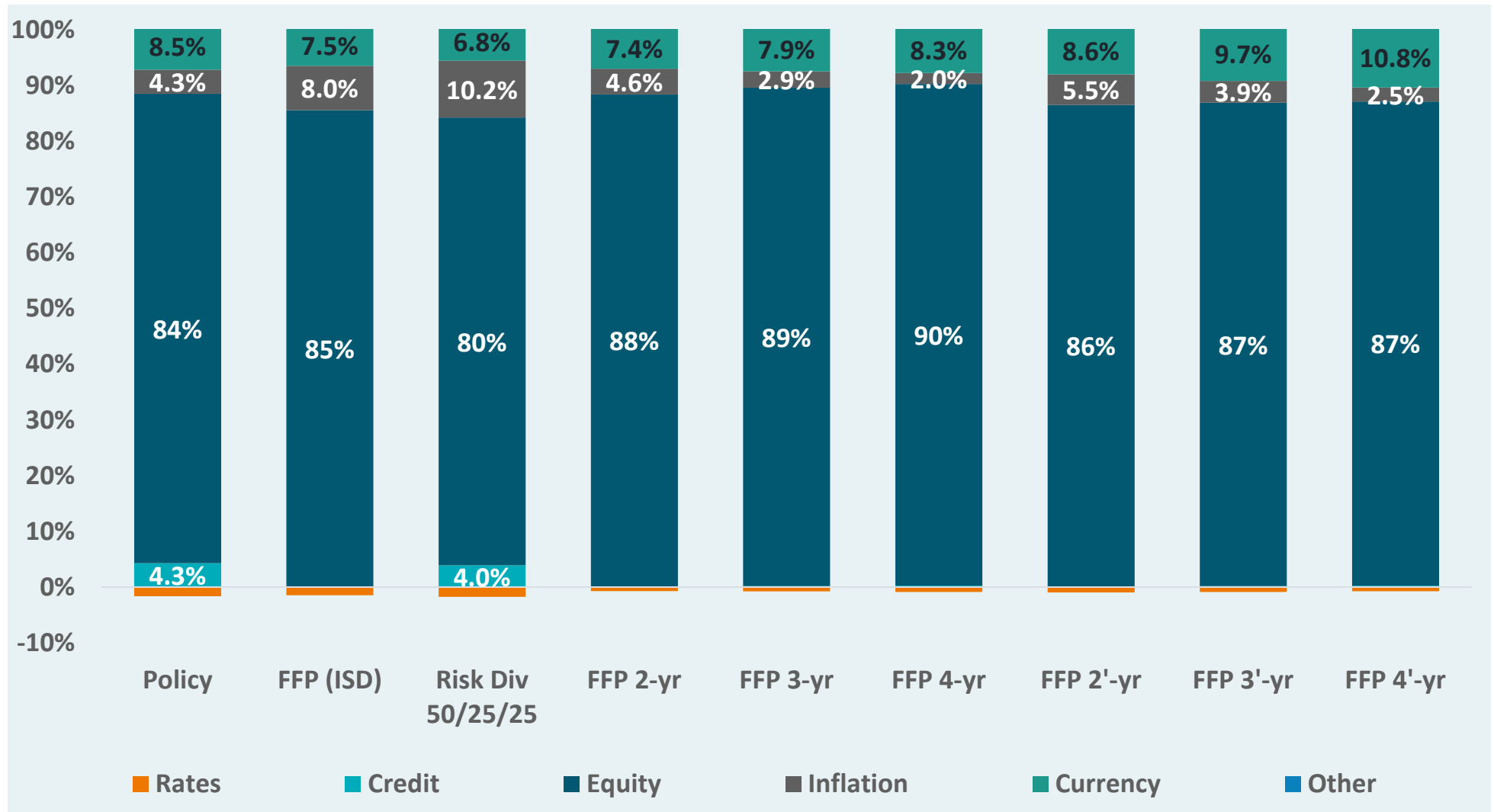
Policy portfolio utilizes benchmark constituent weights to determine asset allocation weights for equities and fixed income

Risk contribution by asset class



Risk contribution based on Verus' Capital Market Assumptions
 Policy portfolio utilizes benchmark constituent weights to determine asset allocation weights for equities and fixed income

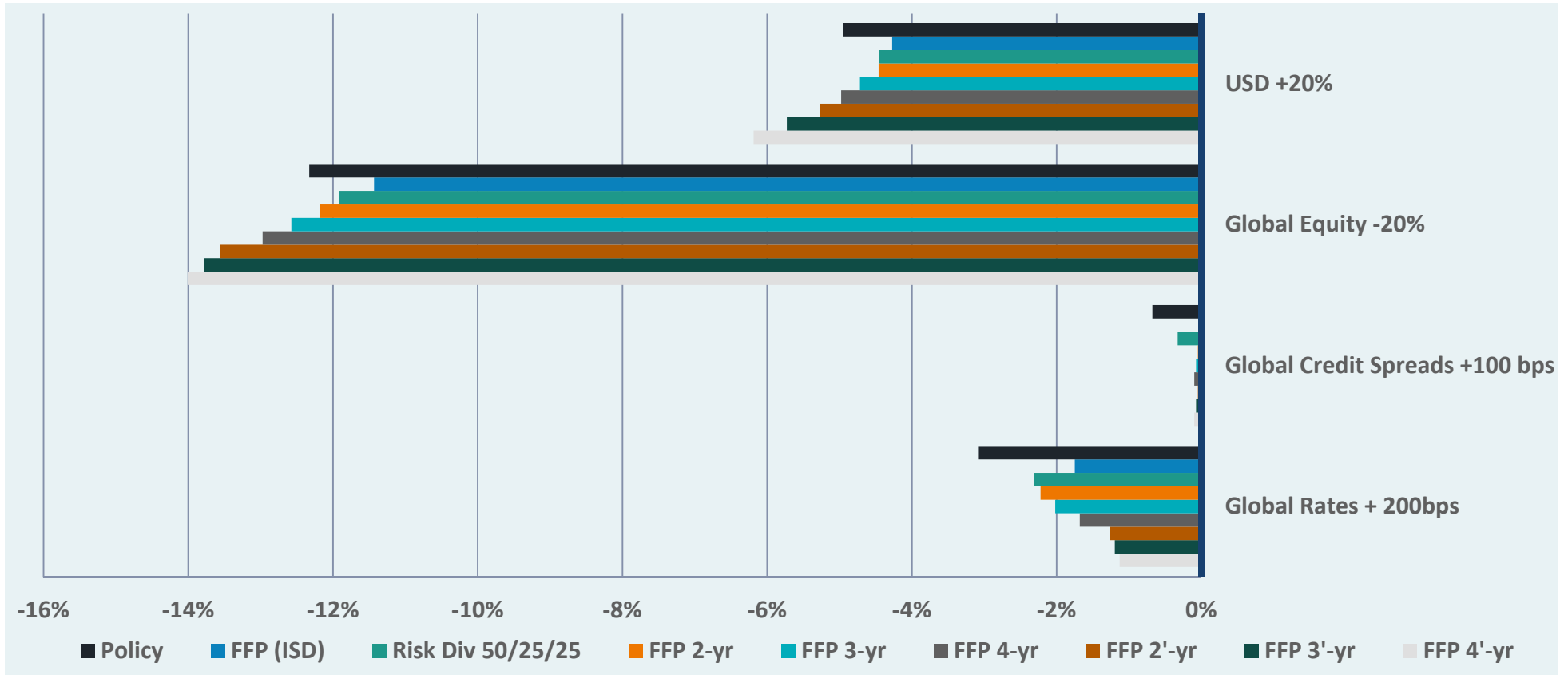
Risk contribution by risk factor



Risk contribution based on BarraOne's Capital Market Assumptions

Stress test

TAIL RISK – STRESS TEST



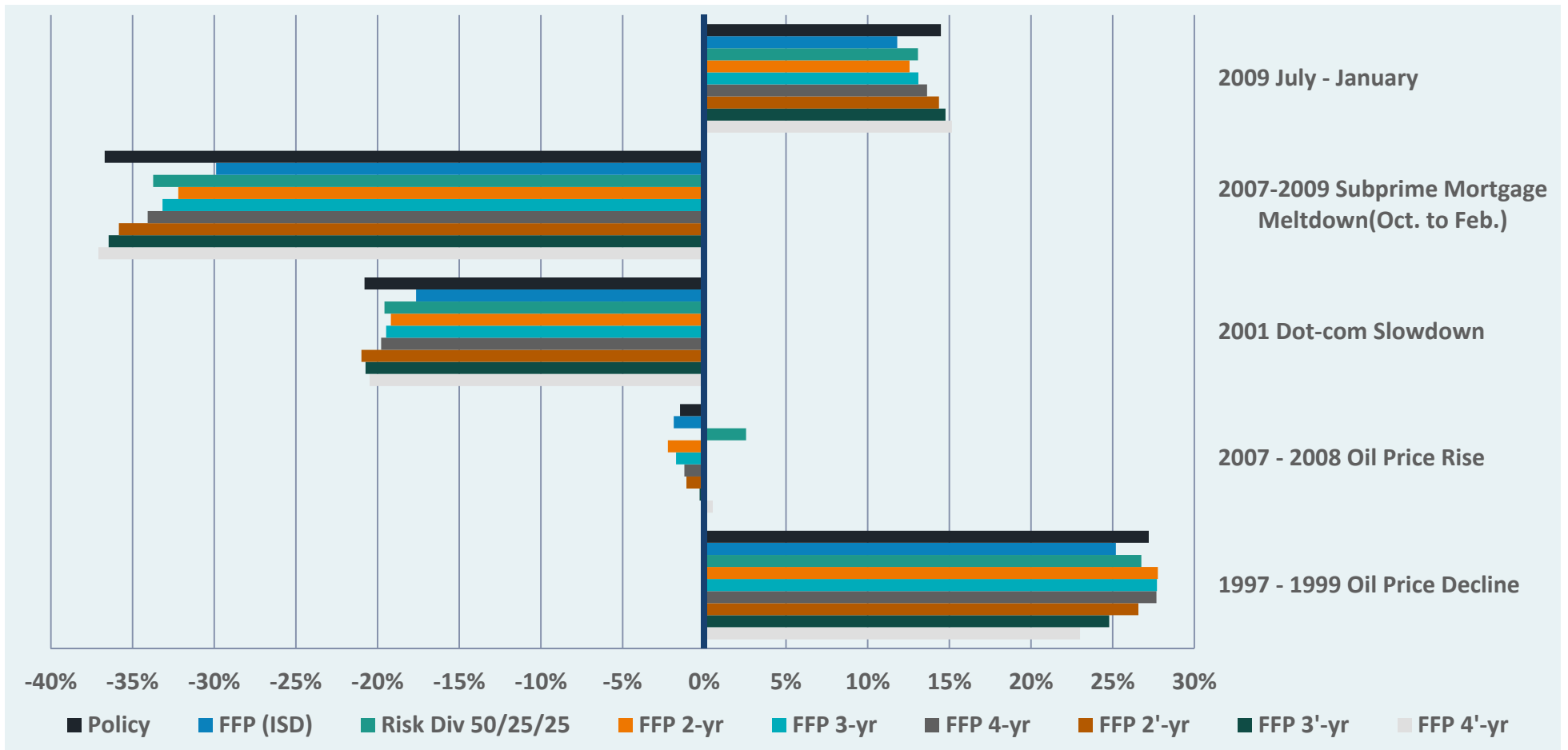
- BarraOne’s risk decomposition analysis can hypothesize how the different portfolios would have performed in certain hypothetical stress tests or historical environments.

- This analysis is based on how the risk factors inherent in the current index holdings reacted in those environments.

Scenario analysis based on risk factors in current policy index and computed as hypothetical scenarios using MSCI BarraOne

Historical scenario analysis

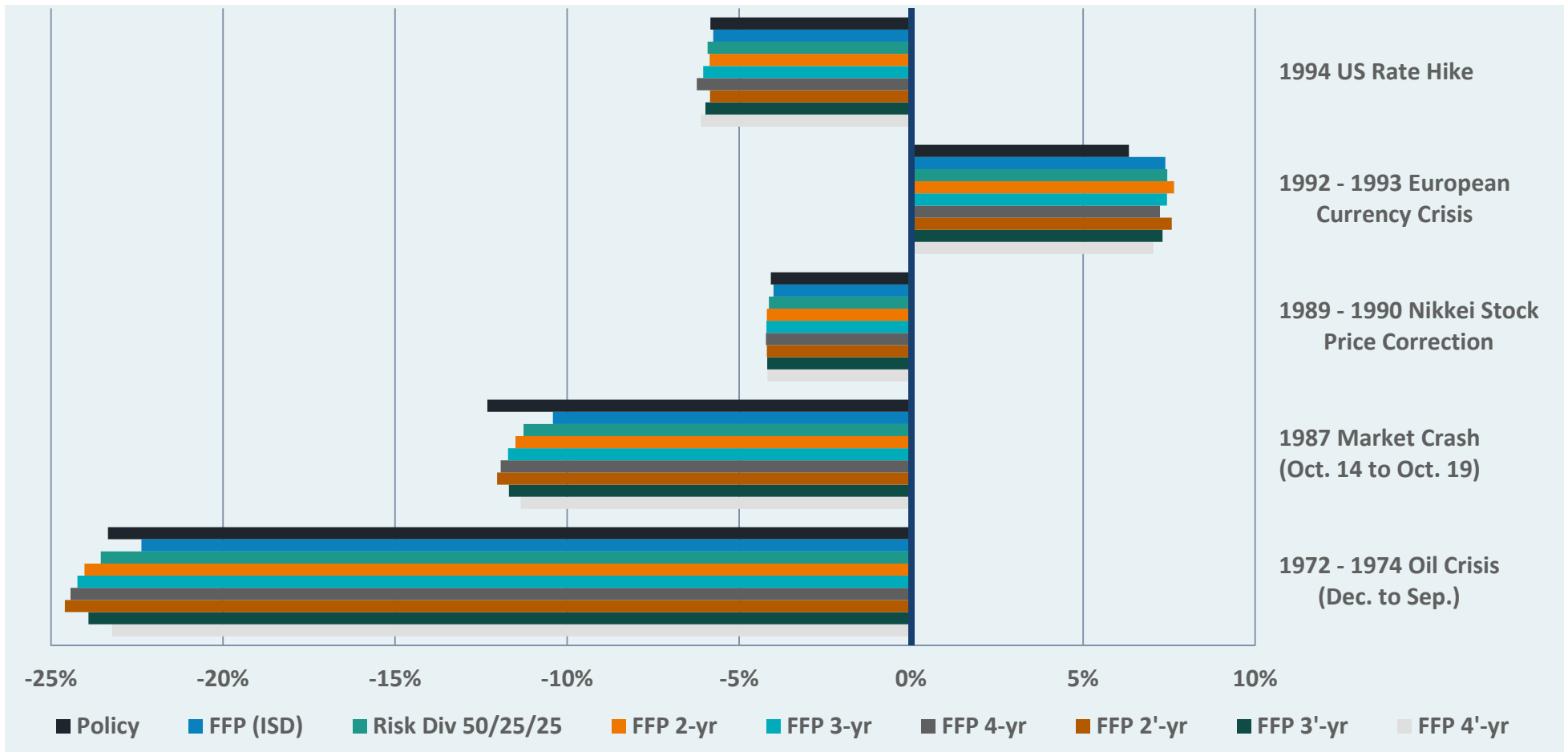
TAIL RISK – SCENARIO ANALYSIS



Scenario analysis based on risk factors in current policy index and computed as hypothetical scenarios using MSCI BarraOne

Historical scenario analysis

TAIL RISK – SCENARIO ANALYSIS



Scenario analysis based on risk factors in current policy index and computed as hypothetical scenarios using MSCI BarraOne

Investment model evaluation summary

| Selection Criteria | Policy | Risk Div | | | | | | | |
|-----------------------------------|---------|-----------|----------|----------|----------|----------|-----------|-----------|-----------|
| | | FFP (ISD) | 50/25/25 | FFP 2-yr | FFP 3-yr | FFP 4-yr | FFP 2'-yr | FFP 3'-yr | FFP 4'-yr |
| Risk/Return Metrics | | | | | | | | | |
| Expected Return | 6.4% | 6.5% | 6.9% | 6.5% | 6.5% | 6.6% | 7.1% | 7.2% | 7.2% |
| Volatility | 12.1% | 9.4% | 11.0% | 9.8% | 9.9% | 9.9% | 10.9% | 10.8% | 10.8% |
| Sharpe Ratio | 0.41 | 0.51 | 0.49 | 0.49 | 0.49 | 0.50 | 0.51 | 0.52 | 0.52 |
| % chance of meeting 7.25% | 42% | 41% | 46% | 41% | 41% | 42% | 49% | 49% | 49% |
| Daily VaR (95% confidence, \$MM) | \$68.1 | \$45.0 | \$58.3 | \$51.9 | \$52.4 | \$53.1 | \$59.7 | \$56.8 | \$54.0 |
| Daily CVaR (95% confidence, \$MM) | \$108.2 | \$81.3 | \$92.9 | \$89.1 | \$89.3 | \$89.1 | \$92.9 | \$92.3 | \$92.0 |
| 2007-2009 Drawdown (Simulation) | -36.7% | -29.9% | -33.7% | -32.2% | -33.2% | -34.1% | -35.8% | -36.5% | -37.1% |
| 1st Percentile (1 Year, MVA) | -33.0% | -24.4% | -31.0% | -25.6% | -24.8% | -24.4% | -27.6% | -27.1% | -25.9% |
| Potential impact on Discount Rate | -0.85% | -0.74% | -0.34% | -0.73% | -0.72% | -0.68% | -0.13% | -0.10% | -0.08% |
| Risk Factors | | | | | | | | | |
| Portfolio Complexity | med | med | high | med | med | med | high | high | high |
| Leverage | med | med | med | med | med | med | med | med | med |
| Peer/Headline Risk | low | high | med | med | med | med | high | high | high |
| Liquidity Risk | med | low | med | low | low | low | low | low | low |
| Tail Risk | high | low | high | med | low | low | med | med | med |
| Equity Risk Allocation | high | med | med | med | med | med | med | med | med |

Appendix

Date horizon of historical scenario analysis

| <u>Scenario</u> | <u>From</u> | <u>To</u> |
|--|-------------------|--------------------|
| 1972 - 1974 Oil Crisis (Dec. to Sep.) | December 1, 1972 | September 30, 1974 |
| 1987 Market Crash (Oct. 14 to Oct. 19) | October 14, 1987 | October 19, 1987 |
| 1989 - 1990 Nikkei Stock Price Correction | December 29, 1989 | March 30, 1990 |
| 1992 - 1993 European Currency Crisis | September 1, 1992 | August 13, 1993 |
| 1994 US Rate Hike | January 31, 1994 | December 13, 1994 |
| 1997 - 1999 Oil Price Decline | January 8, 1997 | February 16, 1999 |
| 2001 Dot-com Slowdown | March 10, 2001 | October 9, 2002 |
| 2007 - 2008 Oil Price Rise | January 18, 2007 | June 27, 2008 |
| 2007-2009 Subprime Mortgage Meltdown(Oct. to Feb.) | October 1, 2007 | February 27, 2009 |
| 2009 July - January | July 1, 2009 | December 31, 2009 |

Source: MSCI BarraOne

10 year return & risk assumptions

| Asset Class | Index Proxy | Ten Year Return Forecast | | Standard Deviation Forecast | Sharpe Ratio Forecast | Ten Year Historical Sharpe Ratio |
|-------------------------------|-------------------------------------|--------------------------|------------|-----------------------------|-----------------------|----------------------------------|
| | | Geometric | Arithmetic | | | |
| Equities | | | | | | |
| US Large | S&P 500 | 5.7% | 6.7% | 14.7% | 0.25 | 0.47 |
| US Small | Russell 2000 | 4.7% | 6.5% | 19.8% | 0.13 | 0.40 |
| International Developed | MSCI EAFE | 9.5% | 11.0% | 18.2% | 0.41 | 0.25 |
| International Small | MSCI EAFE Small Cap | 9.2% | 11.0% | 19.7% | 0.36 | 0.32 |
| Emerging Markets | MSCI EM | 11.5% | 13.9% | 23.7% | 0.40 | 0.40 |
| Private Equity | Cambridge Private Equity | 7.7% | 10.2% | 23.7% | 0.24 | 1.07 |
| Fixed Income | | | | | | |
| Cash | 30 Day T-Bills | 2.1% | 2.1% | 0.6% | - | - |
| US TIPS | Barclays US TIPS 5 - 10 | 2.6% | 2.8% | 6.3% | 0.07 | 0.47 |
| US Treasury | Barclays Treasury 7 - 10 year | 2.2% | 2.4% | 6.4% | 0.01 | 0.65 |
| Global Sovereign ex US | Barclays Global Treasury ex US | 2.5% | 2.8% | 7.9% | 0.05 | 0.18 |
| Core Fixed Income | Barclays US Aggregate Bond | 3.1% | 3.2% | 3.2% | 0.31 | 0.96 |
| Core Plus Fixed Income | Barclays US Corporate IG | 3.8% | 4.0% | 5.9% | 0.29 | 0.67 |
| Short-Term Gov't/Credit | Barclays US Gov't/Credit 1 - 3 year | 2.3% | 2.3% | 1.3% | 0.17 | 1.09 |
| Short-Term Credit | Barclays Credit 1 - 3 year | 2.6% | 2.6% | 2.3% | 0.22 | 0.88 |
| Long-Term Credit | Barclays Long US Corporate | 3.7% | 4.3% | 11.0% | 0.15 | 0.55 |
| High Yield Corp. Credit | Barclays High Yield | 5.2% | 5.8% | 10.5% | 0.30 | 0.61 |
| Bank Loans | S&P/LSTA | 3.7% | 4.1% | 8.7% | 0.19 | 0.44 |
| Global Credit | Barclays Global Credit | 1.9% | 2.2% | 7.4% | -0.02 | 0.49 |
| Emerging Markets Debt (Hard) | JPM EMBI Global Diversified | 5.7% | 6.1% | 8.9% | 0.41 | 0.72 |
| Emerging Markets Debt (Local) | JPM GBI EM Global Diversified | 6.2% | 7.0% | 12.9% | 0.32 | 0.46 |
| Private Credit | High Yield + 200 bps | 7.8% | 8.4% | 10.5% | 0.55 | - |
| Other | | | | | | |
| Commodities | Bloomberg Commodity | 4.1% | 5.7% | 18.2% | 0.11 | -0.10 |
| Hedge Funds | HFRI Fund of Funds | 6.0% | 6.4% | 9.1% | 0.43 | 0.29 |
| Core Real Estate | NCREIF Property | 5.1% | 5.9% | 13.2% | 0.23 | 0.93 |
| REITs | Wilshire REIT | 5.1% | 8.1% | 26.4% | 0.11 | 0.38 |
| Inflation | | 2.1% | - | - | - | - |

Both geometric and arithmetic return forecasts have been included. It is important that users of this information understand how we derived it. Our forecast process involves the use of a wide range of data inputs (of a variety of different types) to create geometric return forecasts for individual asset classes – this is the process described at length in this document. We use an industry standard formula to convert these to arithmetic return forecasts, and provide both for client use.

Investors wishing to produce expected geometric return forecasts for their portfolios should use the arithmetic return forecasts provided here as inputs into that calculation, rather than the single-asset-class geometric return forecasts. This is the industry standard approach, but requires a complex explanation only a heavy quant could love, so we have chosen not to provide further details in this document – we will happily provide those details to any readers of this who are interested.

More broadly, it is important that the user of these forecasts remembers that return forecasts (whoever provides them) are there to provide a guide to the likely future, no more. While we believe that the approach described in this document is an appropriate one to use for those purposes, and that the forecasts resulting from that approach are meaningful and fit for the uses to which they will be put, users of any such forecasts should always bear in mind the fact that the single most difficult thing to predict is the future, and approach that exercise with appropriate skepticism.

Correlation assumptions

| | Cash | US Large | US Small | Developed Large | Developed Small | EM | PE | TIPS | US Treasury | Global Sovereign | US Core | US Core Plus | Short-Term Govt/Credit | Short-Term Credit | Long-Term Credit | US HY | Bank Loans | Global Credit | EMD USD | EMD Local | Commodities | Hedge Funds | Real Estate | REITs | Inflation |
|------------------------|------|----------|----------|-----------------|-----------------|------|------|------|-------------|------------------|---------|--------------|------------------------|-------------------|------------------|-------|------------|---------------|---------|-----------|-------------|-------------|-------------|-------|-----------|
| Cash | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| US Large | -0.1 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| US Small | -0.1 | 0.9 | 1 | | | | | | | | | | | | | | | | | | | | | | |
| Developed Large | 0.0 | 0.9 | 0.8 | 1 | | | | | | | | | | | | | | | | | | | | | |
| Developed Small | 0.0 | 0.8 | 0.8 | 1.0 | 1 | | | | | | | | | | | | | | | | | | | | |
| EM | 0.1 | 0.8 | 0.7 | 0.9 | 0.9 | 1 | | | | | | | | | | | | | | | | | | | |
| PE | -0.2 | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 | 1 | | | | | | | | | | | | | | | | | | |
| TIPS | 0.0 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 1 | | | | | | | | | | | | | | | | | |
| US Treasury | 0.0 | -0.3 | -0.3 | -0.2 | -0.2 | -0.2 | -0.2 | 0.6 | 1 | | | | | | | | | | | | | | | | |
| Global Sovereign | 0.0 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.5 | 1 | | | | | | | | | | | | | | | |
| US Core | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.8 | 0.9 | 0.6 | 1 | | | | | | | | | | | | | | |
| US Core Plus | -0.1 | 0.4 | 0.3 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.5 | 0.5 | 0.8 | 1 | | | | | | | | | | | | | |
| Short-Term Govt/Credit | 0.3 | -0.1 | -0.1 | 0.1 | 0.1 | 0.1 | -0.2 | 0.6 | 0.6 | 0.6 | 0.7 | 0.6 | 1 | | | | | | | | | | | | |
| Short-Term Credit | 0.0 | 0.3 | 0.3 | 0.5 | 0.5 | 0.5 | -0.2 | 0.6 | 0.2 | 0.5 | 0.6 | 0.8 | 0.7 | 1 | | | | | | | | | | | |
| Long-Term Credit | -0.1 | 0.3 | 0.2 | 0.4 | 0.4 | 0.4 | 0.1 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 0.4 | 0.6 | 1 | | | | | | | | | | |
| US HY | -0.1 | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 | 0.6 | 0.4 | -0.2 | 0.3 | 0.2 | 0.6 | 0.1 | 0.6 | 0.5 | 1 | | | | | | | | | |
| Bank Loans | -0.1 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.2 | 0.2 | -0.4 | 0.0 | 0.0 | 0.4 | -0.1 | 0.5 | 0.3 | 0.9 | 1 | | | | | | | | |
| Global Credit | -0.1 | 0.6 | 0.5 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.2 | 0.8 | 0.6 | 0.8 | 0.5 | 0.8 | 0.7 | 0.7 | 0.5 | 1 | | | | | | | |
| EMD USD | -0.1 | 0.6 | 0.5 | 0.7 | 0.7 | 0.7 | 0.5 | 0.7 | 0.3 | 0.5 | 0.6 | 0.8 | 0.4 | 0.7 | 0.7 | 0.8 | 0.6 | 0.8 | 1 | | | | | | |
| EMD Local | 0.1 | 0.7 | 0.6 | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 0.1 | 0.6 | 0.4 | 0.6 | 0.3 | 0.5 | 0.5 | 0.7 | 0.4 | 0.8 | 0.8 | 1 | | | | | |
| Commodities | 0.1 | 0.5 | 0.4 | 0.6 | 0.6 | 0.7 | 0.2 | 0.3 | -0.2 | 0.4 | 0.1 | 0.3 | 0.1 | 0.4 | 0.2 | 0.5 | 0.4 | 0.6 | 0.5 | 0.6 | 1 | | | | |
| Hedge Funds | 0.1 | 0.7 | 0.6 | 0.8 | 0.8 | 0.8 | 0.7 | 0.2 | -0.3 | 0.1 | 0.0 | 0.4 | 0.0 | 0.4 | 0.2 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 0.7 | 1 | | | |
| Real Estate | -0.1 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | -0.1 | 0.1 | 0.0 | 0.2 | -0.1 | -0.1 | 0.1 | 0.2 | 0.0 | 0.2 | 0.2 | 0.3 | 0.0 | 0.3 | 1 | | |
| REITs | 0.0 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.2 | -0.1 | 0.3 | 0.2 | 0.4 | 0.0 | 0.3 | 0.4 | 0.7 | 0.5 | 0.6 | 0.6 | 0.6 | 0.3 | 0.4 | 0.4 | 1 | |
| Inflation | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | -0.3 | 0.0 | -0.3 | -0.2 | -0.2 | 0.0 | -0.3 | 0.2 | 0.4 | 0.0 | 0.0 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 1 |

Note: Correlation assumptions are based on the last ten years. Private Equity and Real Estate correlations are especially difficult to model – we have therefore used BarraOne correlation data to strengthen these correlation estimates.

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