



State of
COLORADO

Annual Compensation Report

FY 2019–20





COLORADO
Division of Human Resources
Department of Personnel
& Administration

September 17, 2018

Honorable John Hickenlooper
Governor of Colorado
136 State Capitol Building
Denver, Colorado 80203

Honorable Representative Millie Hamner
Chair, Joint Budget Committee
Colorado General Assembly
200 East 14th Avenue
Denver, Colorado 80203

Dear Governor Hickenlooper and Representative Hamner,

In accordance with C.R.S. 24-50-104(4), the State Personnel Director (Director) is required to submit an Annual Compensation Report regarding the State of Colorado's (State) total compensation package. The Department of Personnel & Administration (Department) utilizes data from private and public organizations to compare the total and component values and costs in the report.

As part of this maintenance year's analysis for FY 2019-20, the State replicated the compensation methodology developed by Arthur J. Gallagher & Co. (Gallagher) for FY 2018-19 to analyze market competitiveness. Gallagher developed a compensation manual describing the compensation study methodology which includes benchmark selection, labor market identification, survey sources, job matching, aging and geographic adjustments, and data compilation processes. Additionally, Gallagher collected market salary data and provided it to the State for the purposes of the FY 2019-20 analysis.

The State's policy is to provide prevailing total compensation, including pay and group benefit plans, in order to recruit, reward, and retain a qualified workforce. The Director's priorities are as follows:

- i. Establish a total compensation package consistent with prevailing practices within the market;
- ii. Move employees in the workforce whose salary is below market toward the prevailing market median level; and
- iii. Reward employees in the workforce who are meeting or exceeding performance expectations.

TOTAL COMPENSATION FINDINGS

When the State's total compensation package is valued, there is a variance of 9.2% below the prevailing market. Currently, on average, base pay accounts for 78.9% of the total compensation package and benefits account for the remaining 21.1%.

Component of Total Compensation	State of Colorado	Prevailing Market
Average Base Salary	\$66,181	\$70,046
Average Incentive Pay*	n/a	\$2,260
Medical	\$9,425 (14.2% of base pay)	\$9,425 (13.5% of base pay)
Dental	\$465 (0.7% of base pay)	\$475 (0.7% of base pay)



Component of Total Compensation	State of Colorado	Prevailing Market
Vision	(Included in medical)	\$0 (0% of base pay)
Retirement	\$7,743 (11.7% of base pay)	\$9,876 (14.1% of base pay)
Long Term Disability**	\$0 (0% of base pay)	\$217 (0.3% of base pay)
Life and AD&D Insurance	\$113 (0.2% of base pay)	\$105 (0.2% of base pay)
Total	\$83,927	\$92,405

TOTAL COMPENSATION ANALYSIS

The Department recognizes the importance of evaluating the overall value of total compensation in order to assess the competitiveness of the State's total compensation package. While the value of the State's total compensation package is competitive with the market, maintenance is required to sustain that acceptable variance.

The individual components of the compensation package evaluated in this year's annual compensation report indicate adjustments of 2% to the State's overall salary range structure, adjustments to actual base salaries to all or priority occupational groups, and projected cost increases to benefits may be considered. These changes will be necessary to continue relative alignment of the total package and to address misalignment of specific components with prevailing levels in the market.

The Department will continue to work closely with the Governor's Office of State Planning and Budgeting to develop a recommendation for the appropriate amount of funding for any annual salary and benefit increases for FY 2019-20. The final recommendation must consider the results of the annual compensation survey, fiscal constraints, and the ability to recruit and retain State employees. The recommendation will be submitted for consideration in the Governor's November 1 Budget Request for FY 2019-20.

Respectfully submitted,



June Taylor
Executive Director of the Colorado Department of Personnel & Administration and
State Personnel Director

cc: Joint Budget Committee Members, Cabinet Members, Higher Education Presidents, John Ziegler, Alfredo Kemm



COLORADO

**Department of Personnel
& Administration**

June Taylor

State Personnel Director and Executive Director

Kara Veitch

Deputy Executive Director

Kim Burgess

Statewide Chief Human Resources Officer

About this Report:

The State of Colorado (State) FY 2019-20 Annual Compensation Report includes survey findings prepared by the Department of Personnel & Administration (Department), Division of Human Resources (Division) with assistance from Arthur J. Gallagher & Co. (Gallagher). Data from private and public organizations is used to compare the **total and component costs, and values of the State's total compensation package.**

Every other year, the Department contracts with a third-party compensation consultant with actuarial experience to perform a comprehensive total compensation study. Last year, the State retained Gallagher to conduct the annual compensation analysis for FY 2018-19 and compare the value of the State's total compensation package. In this maintenance year analysis for FY 2019-20, the State replicated the process followed by Gallagher in FY 2018-19. The State was provided with raw market salary data by Gallagher to create this year's report.

Adjustments to the State's salary structure or components of total compensation are subject to approval and funding by the Governor and General Assembly. Following the legislative process, the State Personnel Director (Director) will announce the final annual compensation adjustments to compensation and benefits for July 1, 2019 implementation.

This analysis is required by statute to compare total and component costs and values of the State's total compensation against similar workforce structures, including private companies and other states. This report includes relevant findings from the State's analysis.

Overall, it was found the State's total compensation package is slightly below the prevailing market. The State's total compensation package is estimated to lag the market by 9.2%.

Base salary accounts for 78.9% of the State's total compensation. When compared to the market, average base salaries of employees are 7% below market median.

Benefits (medical, dental, life, disability, and retirement) account for 21.1% of the State's total compensation, as compared to 21.8% for the prevailing market. Specifically, medical, dental, life, long-term disability benefits, and accidental death and dismemberment insurance account for 11.9% of the State's total compensation. The State's medical benefits are equal to the market median and dental benefits are 3% above the market average contribution. Retirement accounts for 9.2% of the State's total compensation and is 17% lower than market retirement plans as a percent of annual salary, inclusive of Social Security benefits offered by other employers.

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FY 2019-20

Annual Compensation Report

Introduction

State employees are the cornerstone for delivering efficient, effective and elegant service to Coloradoans and visitors. To ensure the State of Colorado is able to recruit and retain a strong workforce, the State Personnel Director is required to provide an annual compensation report that reflects adjustments that may be required to maintain the salary structure, prevailing State contributions for group benefit plans, base salary adjustments, and merit pay for the upcoming fiscal year. The report must be based on an annual study of total compensation in the market that evaluates prevailing total compensation practices, levels, and cost. This report is provided for FY 2019-20 compensation structure and adjustments.

Like the comprehensive study performed for FY 2018-19, this maintenance year study methodology includes:

- Relevant labor market data - public and private employers, local, state, and regional data
- Recent data - no data more than two years old
- Consistent aging and geographical adjustments
- All relevant forms of total compensation for which annual variance is typically measurable
- Five employer matches were made for each benchmark class

Philosophy

Prevailing Total Compensation

The State of Colorado's compensation philosophy is defined in C.R.S. 24-50-104 and requires the State to provide **prevailing total compensation** to ensure that the State is able to recruit, reward, and retain a qualified workforce.

Total compensation is a combination of base salary and all employee benefits. This includes both direct and indirect compensation.

- Direct compensation refers to an employee's annual base salary. It does not include shift differential, overtime pay, or call-back pay. For the purpose of this report, annual base salary is analyzed using the average of *actual* salaries (not salary ranges).
- Indirect compensation refers to compensation that is not paid directly to an employee. Indirect compensation includes medical, dental, disability, life insurance, and accidental death and dismemberment insurance, retirement, as well as additional benefits identified for employees.

Colorado Revised Statute (24-50-104) Job Evaluation and Compensation

C.R.S. 24-50-104

(1) Total compensation philosophy. (a) (I) It is the policy of the state to provide prevailing total compensation to officers and employees in the state personnel system to ensure the recruitment, motivation, and retention of a qualified and competent work force. For purposes of this section, "total compensation" includes, but is not limited to, salary, group benefit plans, retirement benefits, merit pay, incentives, premium pay practices, and leave. For purposes of this section, "group benefit plans" means group benefit coverages as described in section 24-50-603 (9).

Methodology & Data Sources

As part of this maintenance year analysis for FY 2019-20, the State replicated the compensation methodology developed by Gallagher to analyze market competitiveness for FY 2018-19. Gallagher developed a compensation manual describing the compensation study methodology, which includes benchmark selection, labor market identification, survey sources, job matching, aging and geographic adjustments, and data compilation processes.

Survey Benchmarks

For this maintenance year process, Gallagher collected market salary data for the 203 of the 226 benchmark jobs identified in the FY 2018-19 Annual Compensation Report. This information was provided to the State for the purposes of analysis. For the complete list of benchmark jobs, refer to page 1 of the Appendix.

Survey Data Collection & Job Matching

The survey process begins with identifying the core group of jobs within the State's personnel system to be used as benchmarks for conducting salary data comparisons with other employers in the market. Benchmark jobs are State jobs that are comparable to those readily identifiable and commonly found in the marketplace. Benchmark jobs are used to compare the State's salaries in relationship to the market and to validate the State's internal pay structure. They were selected using the following guidelines for benchmark selection:

- Representation of all jobs families and levels throughout the organization
- Highly populated jobs
- Jobs found in most organizations
- Jobs with recruitment and retention problems

Survey data was collected using the following steps:

- Compare benchmark job summaries to comparable job matches from the surveys
- Review State job descriptions and other job documentation to ensure understanding of the duties and responsibilities of benchmark jobs, their level of job functioning, and the reporting relationships to make appropriate job matches from published survey sources

In accordance with standard compensation best practices as outlined by *WorldatWork*, only those jobs that match at least 80% of the duties, responsibilities, and functions as outlined in the benchmark job summary are utilized.

Labor Market

The survey process requires defining the relevant labor market for collecting and comparing prevailing salary and benefits data, market trends, and salary budget planning information. The State's primary labor market, as mandated by C.R.S. 24-50-104(4)(a), includes both public and private sector employers and jobs in areas outside of the Denver metropolitan area. In addition, the State also collects data from employers outside Colorado when insufficient data is available within the state, for those benchmark jobs specific to state government. Gallagher defined the primary labor market for collecting and comparing prevailing salary and benefits data, market trends, and salary budget planning information, including private and public sector employers.

Like previous years, the primary labor market for the FY 2019-20 study is defined to include the complete labor market which represents both public and private (local, state, and regional market) sectors.

Survey Sources

Pursuant to C.R.S. 24-50-104 (4)(a), the annual compensation study is based on an analysis of surveys published by public or private organizations that include a sample of public and private sector employers. The following criteria is used to identify and approve survey sources:

- Surveys are conducted by a reputable salary survey firm
- Survey data is not self-reported
- Surveys are conducted on a continual basis instead of a one-time event
- Survey reports its data sources, the effective date of the data, and was tested to ensure accurate matches and data
- Surveys are less than two years old

For this report, all data was aged to a common effective date using standard aging factors described in the sections below. The updated publications for the following three survey sources are currently unavailable: Mercer Metro Benchmark - South Central, 2016, Towers Watson CSR Technical Support & Production, 2016, and Towers Watson CSR Office and Business Support, 2016. Therefore survey data referencing 2016 was used. 2017 or 2018 surveys were used for all other sources.

Published Surveys Used for Market Salary Comparison

CompData Benchmark Pro - National, 2017
CompData Benchmark Pro - West, 2017
Employers Council Benchmark - Arizona/Colorado/Wyoming, 2018
Employers Council Information Technology, 2018
Mercer IHN - Health Plan Operations, 2017
Mercer IHN - Healthcare Provider Individual Contributors, 2017
Mercer Information Technology, 2017
Mercer Metro Benchmark - South Central, 2016*
NCASG State Governments, 2017
Towers Watson CSR Office and Business Support, 2016*
Towers Watson CSR Technical Support & Production, 2016*
Willis Towers Watson CSR Information Technology, 2017
Willis Towers Watson CSR Professional Administrative & Sales, 2017
Willis Towers Watson CSR Professional Technical & Operations, 2017
Willis Towers Watson CSR Supervisory & Middle Management, 2017
Willis Towers Watson Health Care Admin and Support, 2018
Willis Towers Watson Health Care Clinical and Professional, 2018
Willis Towers Watson Health Care Executive & Management, 2018

**Most recent version of the same survey source currently unavailable. Survey data from 2016 was included.*

Survey Data-Cuts

Often, job matches from published surveys are made up of hundreds to thousands of participating organizations. These organizations are a representative sample across labor markets and the public and private sectors. Participants of the surveys are known by name only. It is not known which organizations matched to each specific benchmark job.

From the most recent published surveys, Gallagher was unable to collect market salary data for 36 data-cuts that were previously identified. This may be attributed to insufficient participant data. Survey organizations require a minimum of 5 participant responses in order to draw reliable statistical conclusions per the Federal Trade Commission and the U.S. Department of Labor guidelines.

Missing local geographic data-cuts were substituted by referencing sub-regional, regional, or national data-cuts. In few instances, broader public sector industry data-cuts were utilized. It is ensured the appropriate data-cut is used for each benchmark job. A detailed list of substitutions for the 36 data-cuts has been provided on page 5 of the Appendix.

Geographical Adjustments & Aging Factors

Because wage and income levels differ across the nation and even within local labor markets, differentials that factor in economic variations are calculated and applied to data collected from employers outside Colorado. Geographic differentials were reviewed and updated to ensure that data is reflective of the State's labor market and economic conditions. Economic Research Institute (ERI) survey data was utilized to identify the appropriate geographic differences. Minor changes were observed in the geographical differentials when compared to FY 2018-19. The State geographically adjusted the raw market salary data to reflect the State of Colorado labor market.

Additionally, not all survey publications utilize the same effective date for their pay rates. In order for all survey data to have a common effective date, all market salary data was aged using the *WorldatWork* prevailing market trend of 3% per year for actual salaries and 2% per year for salary ranges.

Weighting

In accordance with professional standards, appropriate market data for job matches and data-cuts for each benchmark job was collected. This approach allows the weighting to reflect the level, role, and labor market for each benchmark job, and is not solely focused on the survey used. The data was reviewed and adjusted to further mitigate the need for additional weighting:

- ERI was used to geographically adjust the market data to reflect the State's labor market
- Data reflects a common effective date of July 1, 2019
- Benchmark summary matches were reviewed and data was shared with the State to ensure the appropriate scope and level were represented

These adjustments are more statistically valid and defensible than weighting individual surveys.

Data Analysis & Acceptable Variance

For each benchmark comparison, the percentage difference is calculated between the State and the market in terms of actual salary:

- Positive (+) figure indicates that the State of Colorado pays above the market
- Negative (-) figure indicates that the State of Colorado pays below the market

In determining the competitive nature of the current pay structure and the base salaries of State employees, the following industry guidelines were used:

- +/-5% = Highly Competitive
- +/-10% = Competitive
- +/-10-15% = Potential misalignment with market
- >15% = Significant misalignment with market

This scale can be utilized for comparing individual benchmark jobs base salary, overall base salary, and salary structure.

Some of the benchmark jobs that have more than a 15% variance from the market are not necessarily misaligned. Factors such as performance, turnover, and longevity will impact actual salaries and may explain some of the differences between the State and the market actual salaries for individual jobs. For the purposes of this analysis, jobs are reviewed in accordance with industry guidelines to determine competitiveness with the market. Organizational strategy and compensation philosophy may drive target thresholds for measuring competitiveness with the market. In the instance that a classification falls outside of the 15% variance, the State may conduct a system maintenance study to identify trends.

Maintenance Year Updates

In addition to the updated analysis of benchmark jobs for FY 2019-20, below are changes made to this year's report to aid in the analysis of the State's competitiveness to the market. Gallagher conducted a custom survey to determine the value of the State's benefits, including retirement. Additionally, while the State continues to provide incentive pay and premium pay, these values do not vary greatly from year to year. Therefore, a brief summary is provided below and additional data collection and analysis on these types of pay was not completed during this maintenance year.

Custom Survey for Medical Benefits Valuation Analysis

During this maintenance year, Gallagher administered an independent custom survey of the State's labor market. This survey was conducted to gather benefits information, with a focus on medical plans, to calculate the benefits value. The custom survey was sent to roughly 100 large public and private employers in Colorado and surrounding states. A total of 35 employers responded to the survey. Upon further analysis of the responses, it was determined that one respondent did not provide information needed to value their medical plans. Data was analyzed for a total of 34 employers. In cases where respondents did not provide complete data, educated assumptions were made to allow for use of the data. The tables below identify survey participants.

Government Sector Custom Survey Participants

City of Arvada	Mesa County
City of Aurora	Routt County
City of Colorado Springs	State of Colorado
City of Lakewood	State of Kansas
City of Pueblo	State of New Mexico
Colorado Springs Utilities	State of Utah
Colorado State University (CSU)	State of Wyoming
Denver Water	Summit County Government
Jefferson County School District	Weld County RE 1 - Gilcrest
La Plata County	

Private Sector Custom Survey Participants

CoorsTek	National Jewish Health
DCP Midstream	Newmont Mining
DigitalGlobe	TeleTech
EchoStar Corp.	UDR, Inc.
IHS Markit	United Launch Alliance
MDC Holdings/Richmond American Homes	University of Denver
Mercy Housing	Vail Resorts

The focus for this year was to update the value of current medical plans. Other benefits (dental, vision, life, and AD&D and long-term disability) do not tend to change meaningfully from one year to another. In order to account for cost increases in the latter plans, a 3.5% increase to 2017 dental costs was factored in to adjust for dental plan inflation and changes in dental plan cost for 2018. Similarly, a 1.5% adjustment was factored in to the cost of life, AD&D, and long-term disability, since these plans are typically tied to a multiple of salary. Some of these plans cap benefit maximums, while others are provided at a flat dollar amount and independent

of salary. Therefore, it is assumed costs for these plans will go up at a lesser rate than overall compensation inflation.

This year's report includes both average and median data points, as a means to provide some additional perspective, and to allow for comparison with other published data.

Retirement

The State of Colorado provides retirement benefits for employees through the Colorado Public Employees Retirement Association (PERA). Neither the State nor employees contribute to Social Security. Newly hired State employees have the choice between two basic retirement plans: The Colorado PERA Defined Benefit Plan or the Colorado PERA Defined Contribution Plan. See page 8 of the Appendix for details on the methodology for determining retirement plan values.

On June 4, 2018, Governor Hickenlooper signed into law Senate Bill 18-200, Modifications to PERA Public Employees' Retirement Association to Eliminate Unfunded Liability (SB 200). This report considers the changes to the retirement benefits as a result of the new legislation.

With the passage of SB 200, the following adjustments and assumptions have been made in valuing retirement benefits received by the State's employees:

- Mandatory employee contribution rate of 10%
- Annual increase in retirement benefits (COLA) reduced to 1.5%
- The Highest Average Salary calculation increased to five years
- Any legislated change that is being phased-in is considered fully applicable for purposes of this analysis
- All other plans in the market comparison are assumed to have no changes in benefit structure from the prior year

Total Cash and Incentive Pay

Most public sector organizations do not provide short-term incentives or bonuses like the private sector does. However, the State provides two types of incentive programs:

- **The State Employee Cost Savings Program** rewards innovative ideas that result in specific, identifiable cost savings to the State. Under the program, an employee may be eligible to receive 5% of the cost savings, up to \$5,000.
- **The Performance Incentive Program** rewards outstanding employee or team results. The earnings of rewards are measured by pre-defined performance measures or criteria, and are non-base building cash awards such as non-base building sales incentives or other components for certain classes. Most private sector organizations may calculate the performance incentive payout as a percentage of base salary.

The State provides non-base cash incentives for meeting pre-determined performance criteria. Because the State does not have a formal incentive plan with fixed percentages, it is difficult to compare a calculated Total Cash with market Total Cash Value compensation. However, it is necessary for the State to recognize the 2.4% average market incentive present outside of the public sector and the relationship of incentive pay to other elements of total compensation.

	Market 25 th Percentile	Market 50 th Percentile	Market Average	Market 75 th Percentile
Overall Average Market Incentive	2.1%	2.6%	2.4%	3.2%

Premium Pay

The State permits shift differentials and on-call pay for eligible classifications. The State is consistent with the market providing shift differentials for 2nd and 3rd shift for healthcare and non-healthcare groups. Rates for premium pay vary widely in the market.

Total Compensation Value

-9.2%
compared to
market median

Findings & Analysis

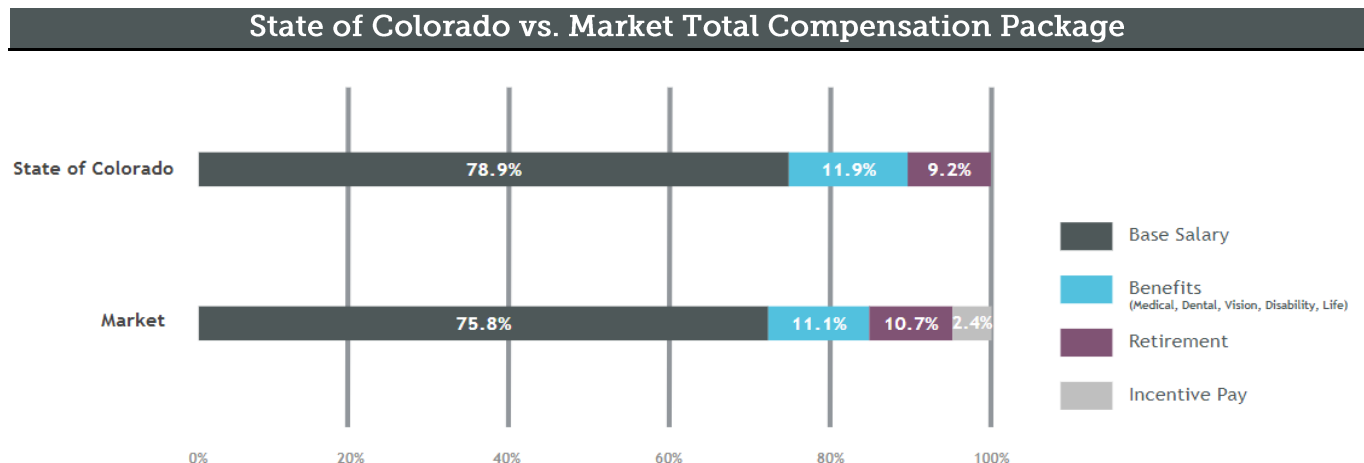
The total compensation package includes base salary, incentives, premium pay, benefits (medical, dental, disability, and life insurance), and retirement. These benefits have a cost to the State and provide value to State employees. The following chart outlines the total compensation amounts provided by the State and the market.

Component of Total Compensation	State of Colorado	Prevailing Market
Average Base Salary	\$66,181	\$70,046
Average Incentive Pay*	n/a	\$2,260
Medical	\$9,425 (14.2% of base pay)	\$9,425 (13.5% of base pay)
Dental	\$465 (0.7% of base pay)	\$475 (0.7% of base pay)
Vision	(Included in medical)	\$0 (0% of base pay)
Retirement	\$7,743 (11.7% of base pay)	\$9,876 (14.1% of base pay)
Long Term Disability**	\$0 (0% of base pay)	\$217 (0.3% of base pay)
Life and AD&D Insurance	\$113 (0.2% of base pay)	\$105 (0.2% of base pay)
Total	\$83,927	\$92,405

*State of Colorado has non-base incentive programs.

**Does not include disability provisions through PERA. Disability is 0% because the State pays for short-term disability with optional long-term disability. Typical practice in the market is to offer long-term disability with optional short-term disability.

The following chart provides a graphical representation of the base salary and benefit components that comprise the overall total compensation package for the State and the market.



In Summary:

- Base salary is 78.9% of total compensation for the State as compared to 75.8% for the prevailing market
- Benefits are 21.1% of total compensation for the State as compared to 21.8% for the prevailing market; specifically, medical, dental, long-term disability, and life and accidental death and dismemberment insurance account for 11.9% and retirement benefits account for 9.2% for the State
- Incentives are provided as non-base rewards by the State. Incentives are 2.4% of total compensation for the prevailing market

Total Compensation Value

The State is -9.2% compared to prevailing market levels for total compensation. According to standard compensation guidelines, the State is competitive with the market total compensation.

-7.0%

compared to
market median

Base Salary

Findings & Analysis

Utilizing published survey sources, Gallagher collected market data for 203 benchmark jobs and provided that data to the State for analysis. All salary data (base pay, total cash compensation) was compiled and adjusted for the State of Colorado labor market using the ERI Geographic Assessor. The following chart represents an aggregate comparison of all benchmark positions and is not a simple average of the benchmark comparisons.

Overall Percentage Difference Between State Average Salary and Market Median Base Salary				
	Market Base 25 th Percentile	Market Base 50 th Percentile	Market Base Average	Market Base 75 th Percentile
Overall Percentage Difference Between State Average Base Salary and Market Average Base Salary	4.0%	-7.0%	-7.9%	-17.2%

Overall, when compared to the market, average base salaries of employees are 7% below market median.

For each benchmark comparison, the percentage difference has been calculated between State average actual (base) salary and the market, excluding the State Trooper classifications. Of the 203 benchmarked classifications (excluding State Trooper classes), approximately 65% (or 130) of the State's benchmark classifications are compensated within +/- 15% of the market median.

Occupational Group Comparison with Market Base Salary

The State's 203 benchmark classifications are categorized into occupational groups defined by the State. The following table compares the State's occupational groups to the market median for the benchmark classifications.

Variations for specific occupation groups are listed below. The chart represents aggregate comparisons of all benchmark positions within occupational groups and is not a simple average of the benchmark comparisons.

State Average Base Salary Comparison with Market Average Actual (Base) Salary		
Occupational Group	% Difference from Market Median	Comparison with Market
Enforcement and Protective Services	12.8%	potential misalignment
Healthcare Services	-11.1%	potential misalignment
Labor, Trades, and Crafts	-10.3%	potential misalignment
Administrative Support and Related	-10.1%	potential misalignment
Professional Services	-9.8%	within competitive range
Physical Science and Engineering	-0.6%	within highly competitive range
Information Technology	-4.7%	within highly competitive range

Overall, the Information Technology and Physical Science and Engineering occupational groups are highly competitive with the market median. The occupational group of Professional Services is competitive with the market median (within +/- 10% range of the market). The occupational groups of Enforcement and Protective

Services, Healthcare Services, Labor, Trades and Crafts, and Administrative Support and Related are potentially misaligned with the market (within +/- 15% variance from the market).

Overall Base Salary Recommendations

Overall, the State is competitive with the market at 7.0% below the market median for classified jobs.

It is recommended that the State review individual benchmark classifications that are misaligned by +/- 15% to ensure appropriate recruitment and retention strategy. In the instance that a classification falls outside of the 15% variance, the State may conduct a system maintenance study to identify trends.

To continue maintaining overall competitiveness with the market, the State should ensure base salary adjustments occur in accordance with the market trends identified on page 18.

Market Salary Increase Projections

3.0%

projected base salary increase

Findings & Analysis

Proposed Increases to Base Salaries

According to *WorldatWork* the base salary increase projection for the market in FY 2019-20 is 3% (median).

Proposed Increases to Salary Structure

According to *WorldatWork*, the projected salary structure increase is 2.1% in 2019-20. Gallagher's custom survey findings indicate the average salary structure adjustment in 2018 is 2% among participant organizations.

It is recommended the State consider two separate adjustments, including both a salary base increase and salary structure increase. The salary structure percentage ensures the structure is moving in alignment with the market.

Best Practice Methods of Delivering Pay to Employees

Similar to prior years, the practice of delivering performance based pay continues to be the prevailing practice for providing base salary increases in the market.

Primary Type of Pay Increase	Market Practice*
Merit increase based on individual performance	53%
Step Progression based on length of service	10%
COLA	20%
Across the board General Increase (not cost of living)	17%

*Percentages do not add up to 100% since many organizations use more than one practice on pay increase.

This method of pay increase meets the Director's goal of rewarding state employees who are meeting or exceeding performance expectations. Market data collected by the custom survey indicates that the primary method of delivering pay increases used in the public sector are based on individual performance (merit increases). However, merit is only one tool available to the State for providing salary adjustments.

The Colorado Constitution established performance based pay for the State Personnel System based on merit and fitness (C.O. Const. art. XII, §13). Pursuant to C.R.S. 24-50-104(1)(c), the Director established a merit pay system for employees in the State Personnel System for the purpose of providing salary increases based on individual employee performance. Awards of merit pay increases are based upon priority groups and are defined in a matrix shown below.

Performance Rating	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Above Quartile 4
Exceptional (level 3)	% increase	% increase	% increase	% increase	% increase
Successful (level 2)	% increase	% increase	% increase	% increase	% increase
Below Expectations (level 1)	0%	0%	0%	0%	0%

The priority groups are determined by an employee's location within the pay range and performance based on the following three performance levels: Exceptional (level 3), Successful (level 2), and Below Expectations (level 1).

Base Salary Recommendations

Provide merit, COLA, or other salary adjustments of 3% in accordance with compensation philosophy and strategy.

According to *WorldatWork* Salary Budget Survey FY 2018-19, the projected merit increase percentage for FY 2019-20 is 3%, while Cost of Living (COLA) increase is projected at 2%. This is in addition to separately increasing salary structure by the projected market trend factor provided by *WorldatWork*.

Market Salary Structure Comparison

-1.7%
compared to
market
range midpoint

Findings & Analysis

The State's overall classified salary structure for the benchmark jobs was compared with the overall market pay grade average at range minimum, midpoint, and maximum. The State is highly competitive with the market average range minimum, midpoint, and maximum.

	Market Average Range Minimum	Market Average Range Midpoint	Market Average Range Maximum
Overall Percentage Difference from Market Average Salary Structure	2.5%	-1.7%	-4.3%

Next, the overall pay range spread of the State's salary structure was compared with the average market range spread for all benchmark classifications. The average market range spread is wider than the average State range spread. Such variation can be attributed to different organizational compensation philosophies that determine the width of the ranges.

	State Range Spread	Market Range Spread
Average Range Spread	47%	62%

It is recommended that the State review benchmark jobs where necessary to assess internal alignment in regards to comparable level of decision making, complexity, and supervisory responsibilities.

Given that some of the State's classifications are broadly defined in terms of functional duties and job level, it is also recommend the State validate market job matches.

Occupational Group Comparison with Market Salary Structure

The following table compares salary structures of the State's occupational groups to the market ranges for benchmark jobs. Variations for the specific occupation groups are listed below.

Salary Structure Market Comparison				
Occupational Group	% Difference from Market Average Range Midpoint	Current Occupational Group Range Spread	Market Range Spread	Comparison with Market
Enforcement and Protective Services	12.3%	52%	80%	potential misalignment
Healthcare Services	-5.9%	47.1%	59.1%	within competitive range
Labor, Trades and Crafts	-0.2%	42.1%	53.3%	within highly competitive range

Salary Structure Market Comparison				
Occupational Group	% Difference from Market Average Range Midpoint	Current Occupational Group Range Spread	Market Range Spread	Comparison with Market
Administrative Support and Related	-10.3%	42.4%	49.7%	potential misalignment
Professional Services	-4.1%	48.8%	63.9%	within highly competitive range
Physical Science and Engineering	4.3%	49.6%	62.4%	within highly competitive range
Information Technology	3.1%	69.5%	65.7%	within highly competitive range

Salary Structure Recommendations

The State is currently highly competitive with the market salary structure at 1.7% below the market. It is recommended the State consider the following practices to remain competitive:

- Adjust the Salary Structure for FY 2019-20 by utilizing the projected *WorldatWork* market trend factor of 2% to ensure the structure continues to remain highly competitive. The salary structure percentage adjustment is separate from the salary budget increases.
- Review individual job classifications where there is significant misalignment with the market in terms of the range minimum, midpoint, maximum, and range spreads for both appropriate internal alignment and validation of the market matches utilized.
- Ensure employees move through the ranges to reduce potential salary compression issues.
- Review pay grades within the occupational groups to resolve issues of overlapping pay grade ranges and ensure appropriate midpoint differentials.
- Review the turnover rate for highly tenured employees. Retaining highly tenured employees should also be reviewed in relationship with the retirement benefits. This will help ensure the State is competitive with the market and is effectively able to attract and retain employees.

State Patrol Trooper

-4.6%
compared to
market median

Methodology

The methodology used to determine and maintain prevailing compensation for the law enforcement officers employed by Colorado State Patrol is provided by C.R.S. 24-50-104. The statute requires the use of methodologies consistent with the other classes to determine and maintain prevailing compensation with one exception. Statutorily, the labor market to be used for adjustments to actual salaries is uniquely defined as the top three law enforcement agencies within Colorado having more than 100 commissioned officers and the highest actual average salary.

The agencies that meet these criteria may change from one year to the next. For the State Trooper classes, individual salary data in the market was summarized by calculating the weighted average of actual salaries (by class size) reported, as required by statute.

Data Sources

In compliance with statute, the State reviewed the classification's job duties and identified comparable matches in the market utilizing published survey sources. Market data was collected for the State Trooper Classes by utilizing the FY 2018-19 Public Employers Compensation Survey published by the Employers Council. The top law enforcement jurisdictions by individual classification were identified in compliance with the statute methodology.

Utilizing the Employers Council Survey, all the participant organizations within the identified job matches by highest annual actual average salary were ranked. Next, the top three law enforcement jurisdictions within Colorado with the highest paid actual average salary having more than 100 commissioned officers were identified.

Data Adjustments

All data was aged to a common effective date of July 1, 2019, using the *WorldatWork* prevailing market trend 3% for salary budget increase. Market data was not adjusted geographically due to the statutorily defined market being within Colorado.

Findings & Analysis

Overall comparison shows the State is 4.6% below the weighted market average (weighted by class size) for the top three law enforcement jurisdictions within the State of Colorado. Using standard compensation guidelines, the State Trooper Classification Series is overall highly competitive (+/- 5% variance with the market) with the market.

The comparison chart on the following page provides the individual State Trooper classification comparison with the market. The State Patrol Supervisor classification is highly competitive with the market (+/- 5% variance from market), while the State Patrol Trooper, State Patrol Admin I, and State Patrol Admin II are competitive with the market (+/- 10% variance from the market). No market data was available for State Patrol Cadet, and State Patrol Trooper III positions.

State vs. Market Top 3 Law Enforcement Agencies									
State FY 2018-19							Market FY 2018-19		
Class	Class Title	OCC	Grade	# of EEs	Current Average Salary	Current Average Monthly	Projected Weighted Mkt Avg	Projected Weighted Mkt Avg@ 99%	% Diff State From Weighted Mkt Avg
A4A3	STATE PATROL TROOPER	S	S02	402	\$84,116	\$7,010	\$7,280	\$7,207	-2.74%
A4A5	STATE PATROL SUPERVISOR	S	S04	98	\$108,168	\$9,014	\$9,382	\$9,288	-2.95%
A4A6	STATE PATROL ADMIN I	S	S05	30	\$122,335	\$10,195	\$11,218	\$11,106	-8.21%
A4A7	STATE PATROL ADMIN II	S	S06	9	\$141,372	\$11,781	\$12,357	\$12,233	-3.69%
A4A1	STATE PATROL CADET	S	S01	61	\$66,996	\$5,583	No Market Data		
A4A4	STATE PATROL TROOPER III	S	S03	209	\$93,979	\$7,832	No Market Data		
		Sum of EEs		809					
Overall Difference from the Market-Weighted Average @ 99%								-4.6%	

Medical Benefits

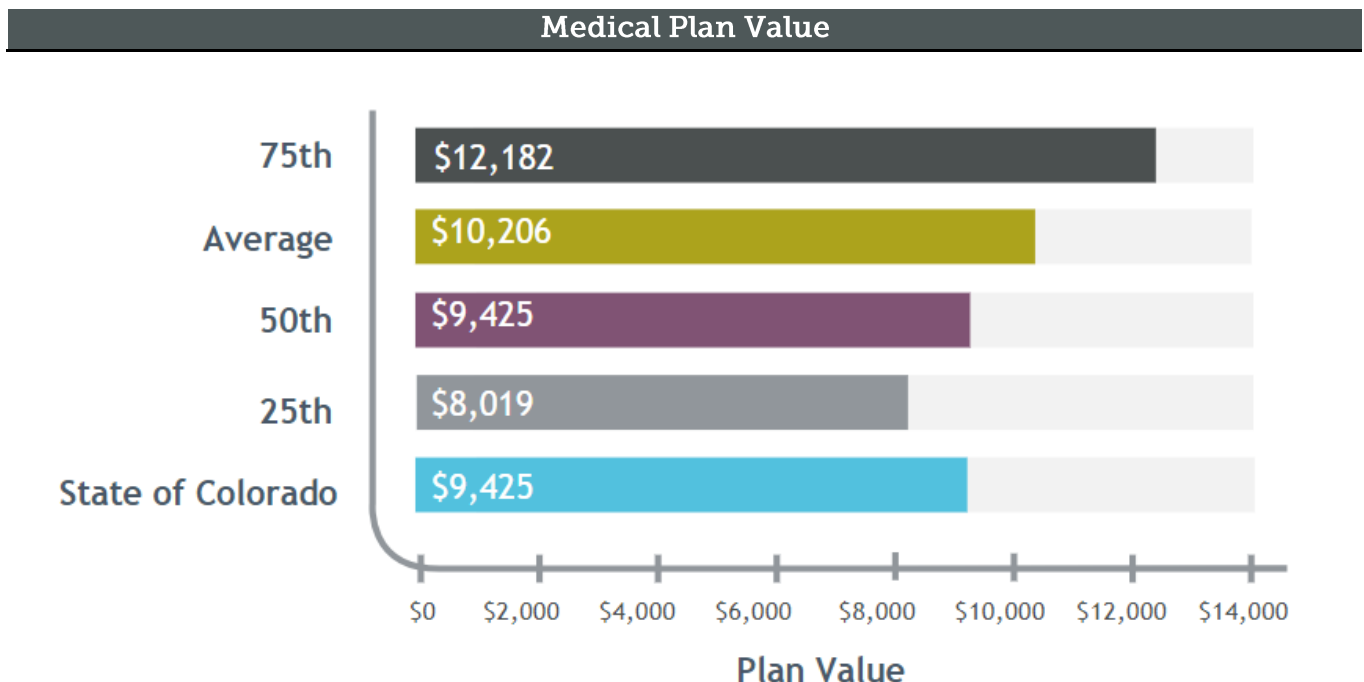
Equal to
market median

The State of Colorado Group Employee Medical Plan offers two plan designs: co-pay and qualified high deductible health plans (HDHPs). Both are offered through Kaiser Permanente and UnitedHealthcare.

Among larger employers, it is common to offer multiple medical plan options. Among survey participants, 91% offered more than one plan, with an average of three plans being observed. Employer strategies and resulting contributions vary. Therefore, it is important to view the overall value of benefits, beyond the most prevalent plan selected by employee.

In order to provide a holistic assessment of the value provided by employers participating in the survey, Gallagher collected enrollment and employer contribution data for all medical plans. Actual enrollment in each plan and tier (i.e., employee only, family, etc.) was multiplied by the employer monthly contribution to determine the total employer contribution, divided this amount by the total number of enrolled employees, and then multiplied this monthly amount by 12 to arrive at a per employee, per year employer contribution.

Gallagher then calculated the relative value of each of the medical plan options offered by employers, using the Centers for Medicare & Medicaid Services (CMS) Minimum Value Calculator, which provides an actuarial value for each of the respective plans. The actuarial value is the best indicator of plan cost, as it represents a normative plan cost (after employee cost share) for every dollar of healthcare. These factors were multiplied by the enrollment in each plan, and then divided by the total enrollment, arriving at a weighted average value of all plans combined. The relative value of each participant relative to the State was then used to adjust the employer contributions to arrive at an adjusted employer contribution, depicting an overall effective employer contribution.



The value of the combined medical offerings by the State was determined to be \$9,425. This figure was equal the median value of all survey respondents, or \$9,425.

Medical Plans Offered by the State of Colorado		
Medical Plans Offered	State of Colorado	Prevailing Market
PPO	Yes	27 organizations
HMO	Yes	11 organizations
POS	No	4 organizations
Indemnity	No	0 organizations
High Deductible with HSA	Yes	25 organizations
High Deductible without HSA	No	0 organizations
Other	No	0 organizations
HSA Contribution	Yes	19 organizations contribute to an HSA account
Amount Employer is Contributing to the HSA	\$720	Average: \$539.45 Median: \$500

Medical Plan Average Costs			
Medical	State of Colorado Average	Prevailing Market Average	Prevailing Market Median
EE Only	Employer Cost: \$500.56	Employer Cost: \$507.63	Employer Cost: \$502.00
	Employee Cost: \$70.89	Employee Cost: \$103.65	Employee Cost: \$89.20
EE + 1, Spouse or Child	Employer Cost: \$938.06	Employer Cost: \$913.05	Employer Cost: \$918.68
	Employee Cost: \$243.96	Employee Cost: \$326.88	Employee Cost: \$272.00
EE + Child(ren)	Employer Cost: \$931.80	Employer Cost: \$853.18	Employer Cost: \$829.44
	Employee Cost: \$143.59	Employee Cost: \$292.80	Employee Cost: \$221.81
EE + Family, EE + 2 or More	Employer Cost: \$1,322.32	Employer Cost: \$1,239.27	Employer Cost: \$1,270.77
	Employee Cost: \$361.56	Employee Cost: \$470.80	Employee Cost: \$399.95

Medical Plan Specific Averages			
Medical	State of Colorado Average	Prevailing Market Average	Prevailing Market Median
Individual deductible	\$1,313	\$1,179	\$1,250
Family deductible	\$2,625	\$2,522	\$2,700
Coinsurance	18%	23%	20%
Individual Out-of-Pocket Maximum	\$3,250	\$3,532	\$3,100
Family Out-of-Pocket Maximum	\$6,500	\$7,411	\$6,850
Office Copay (PCP)	\$30 (KP deductible HMO plan + 10%)	\$27	\$25
Office Coinsurance (PCP)	20% (KP deductible HMO plan + 10%)	18%	20%
Office Copay (Specialty)	\$50 (KP deductible HMO plan + 10%)	\$41	\$40
Office Coinsurance (Specialty)	20%	18%	20%
ER Copay	\$500	\$195	\$150
ER Coinsurance	20%	18%	20%

Medical Plan Specific Averages			
Medical	State of Colorado Average	Prevailing Market Average	Prevailing Market Median
Rx Generic Copay	\$10	\$14	\$10
Rx Generic Coinsurance	--	19%	20%
Rx Preferred Copay	\$30	\$34	\$25
Rx Preferred Coinsurance	--	24%	25%
Rx Non-preferred Copay	\$50 (only includes UHC HDHP & Choice Plus Plan)	\$56	\$50
Rx Non-preferred Coinsurance	--	33%	30%

State Medical Findings

The combined medical plan value of the State's plan is equal to the median of all survey respondents. Plan provisions are generally on par with the market, although vary widely among type of covered benefit service. For those electing a HDHP, the State's contribution to the HSA is more generous than the prevailing market for those electing employee only coverage and less generous for employees electing coverage with dependents.

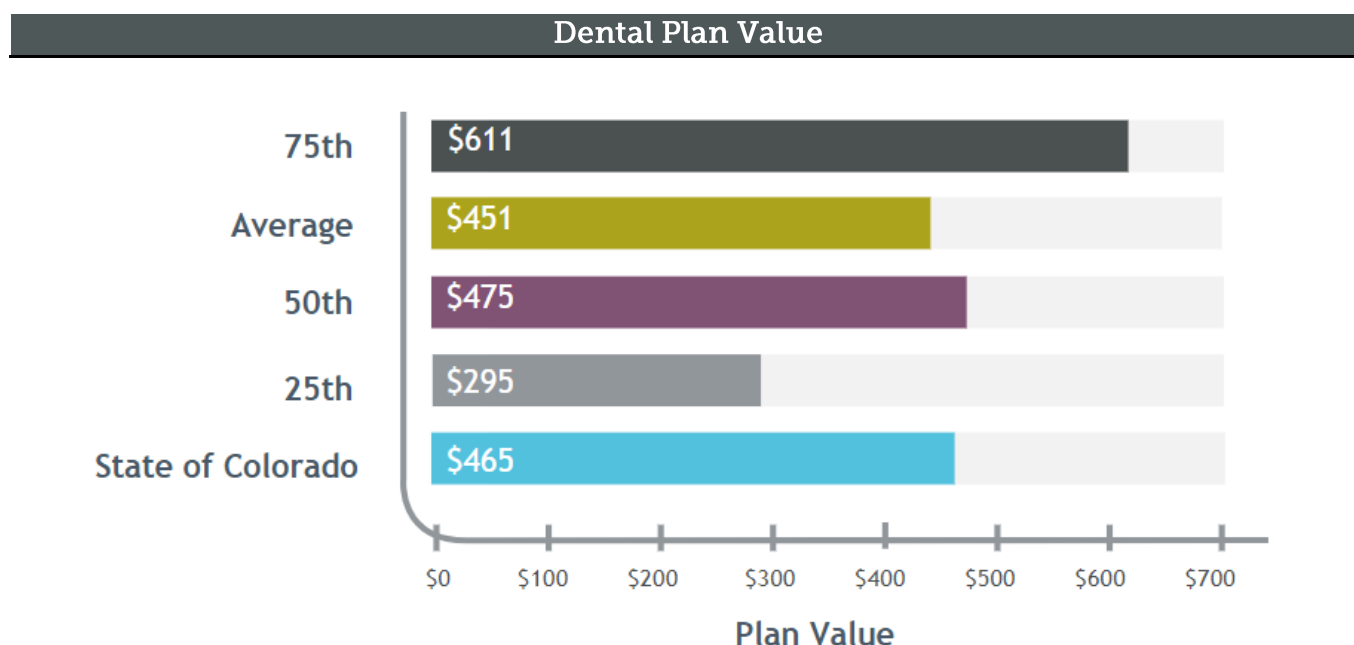
Employee contributions are generally aligned to slightly lower than the prevailing market, particularly when comparing coverage for dependents. Average plan provisions are on par or slightly higher than the market. Offering choice also allows employees to balance desired level of coverage with required contributions.

3.1%

above market
average

Dental Benefits

For purposes of evaluating dental benefits, if an employer offers more than one dental plan, the plan with the highest enrollment is valued. The chart below indicates the employer contribution for the most prevalent dental plan. The State's contribution for dental in the most prevalent plan was valued at approximately the median contribution for survey respondents. The State's contribution for dental in the most prevalent plan was valued at approximately 3.1% above the average contribution for 2017 survey respondents and approximately 2% below the median contribution.



Dental coverage was offered by all 2017 survey respondents, with a dental PPO plan design being the most prevalent among all 2017 survey respondents.

Dental Plans Offered by the State of Colorado		
Dental Plans	State of Colorado	Prevailing Market
Dental Coverage Offered	Yes	28 out of 28 organizations
Dental Plans Offered	State of Colorado	Market Prevalence
Schedule of benefits	No	0 organizations
Comprehensive/Indemnity	No	1 organization
Dental PPO	Yes	27 organizations
DMO	No	0 organizations
Orthodontic benefits offered	Yes	23 out of 28 organizations
Lifetime maximum per person for Ortho	50% coverage (\$3,000 lifetime maximum per person)	Average: \$1,393 Median: \$1,500

Dental Plan Costs			
Dental	State of Colorado Plus Plan	Prevailing Market Average	Prevailing Market Median
EE Only	Employer Cost: \$25.92	Employer Cost: \$24.15	Employer Cost: \$25.92
	Employee Cost: \$18.38	Employee Cost: \$13.41	Employee Cost: \$10.00
EE + Family, EE + 2 or More	Employer Cost: \$62.22	Employer Cost: \$53.15	Employer Cost: \$56.00
	Employee Cost: \$70.80	Employee Cost: \$57.20	Employee Cost: \$50.86

Dental Plans			
Dental	State of Colorado Plus Plan	Prevailing Market Average Individual	Prevailing Market Average Family
Annual deductible	Average Individual: \$50 Average Family: \$150	Average: \$42	Average: \$115
	Median Individual: \$50 Median Family: \$150	Median: \$50	Median: \$150
Annual Maximum	Average: \$3,000	Average: \$1,596	
	Median: \$3,000	Median: \$1,500	
Preventative Services Coinsurance	Average: 80%	Average: 97%	Average: 97%
	Median: 80%	Median: 100%	Median: 100%
Basic Services Coinsurance	Average: 80%	Average: 78%	Average: 78%
	Median: 80%	Median: 80%	Median: 80%
Major Services Coinsurance	Average: 50%	Average: 57%	Average: 57%
	Median: 50%	Median: 50%	Median: 50%

State Dental Findings

The State's contribution for dental is slightly higher than the average and slightly lower than the median of all survey respondents. Most dental plan provisions are on par with the market. However, the State dental plan annual out-of-pocket maximum was much higher at \$3,000 compared to a median of all survey respondents of \$1,500. The State may want to review additional data to see how many members are reaching the annual maximum each year in order to determine if the higher annual maximum is utilized.

Additional Benefits

Vision Benefits

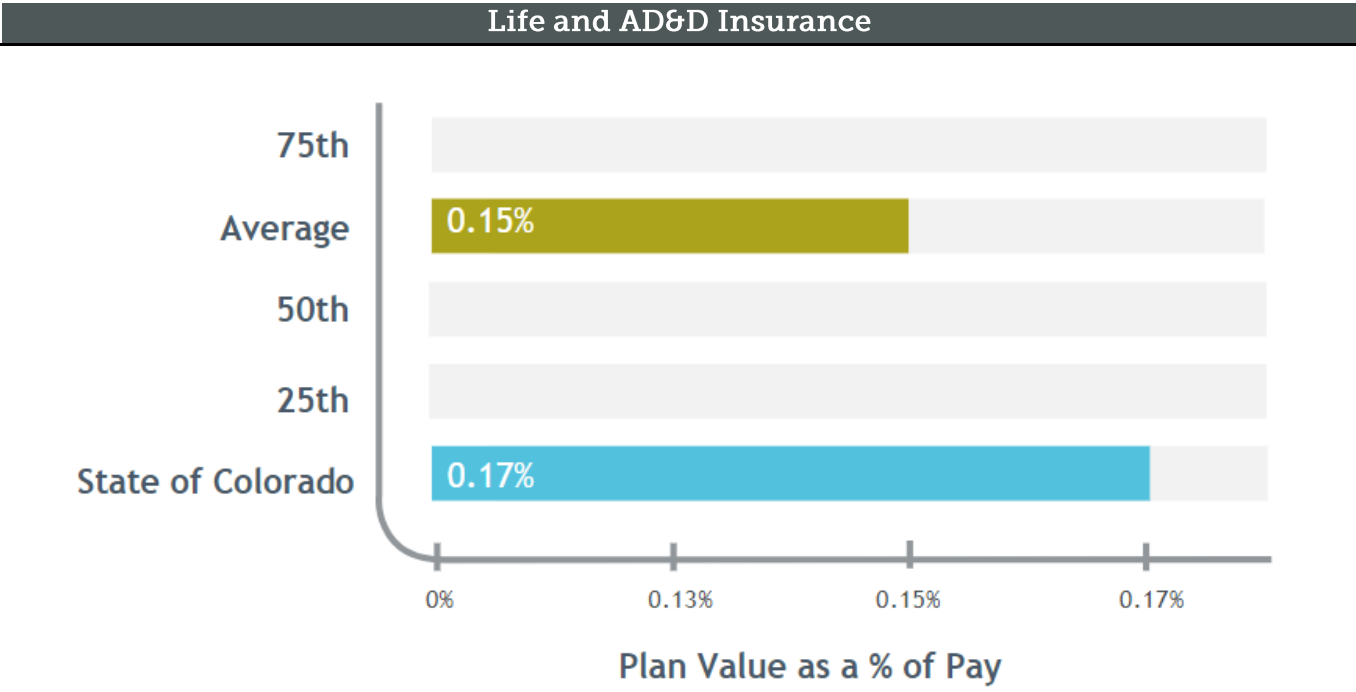
Vision coverage was offered by 93% of all 2017 survey respondents. The State and one other organization offer vision as part of medical enrollment rather than a stand-alone benefit. For the latter, the average employer cost was \$11.03 per month. Twenty of the responding organizations in 2017 offer vision coverage on a voluntary (fully employee paid) basis.

Vision Plans			
Vision	State of Colorado	Prevailing Market	
Vision coverage offered	Yes	26 out of 28 organizations provide vision coverage Vision is bundled with medical plan in 2 organizations	
Vision	State of Colorado	Prevailing Market Average	Prevailing Market Median
Monthly Premium EE Only	Vision bundled with medical plan	Employer Cost: \$0.47	Employer Cost: \$0.00
		Employee Cost: \$7.19	Employee Cost: \$7.52
Monthly Premium EE + Family, EE + 2 or More	Vision bundled with medical plan	Employer Cost: \$1.65	Employer Cost: \$0.00
		Employee Cost: \$21.20	Employee Cost: \$21.49

Life and Accidental Death and Dismemberment (AD&D) Insurance

The employer cost for the State’s life insurance was above the estimated average cost of the market by approximately 10%. Note that life insurance rates are in fair part related to the demographics of the covered employee population. So, in general an employee group that is older would be expected to have a higher life insurance cost.

Similar to the State’s life insurance plan, nearly two-thirds of the prevailing market offer life insurance as a multiple of salary. The remaining 2017 participants provide life insurance on a flat dollar amount of coverage. Some survey respondents offer both types of plan design (multiple of salary and flat dollar amount), depending upon an employee’s classification within the organization.



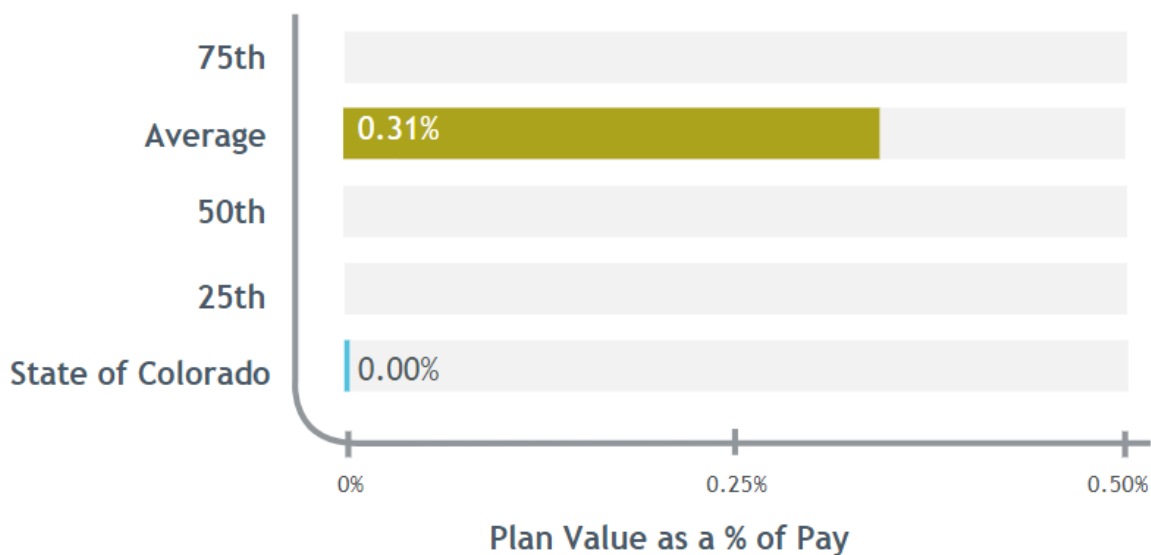
Life and Accidental Death and Dismemberment Insurance		
Life Insurance	State of Colorado	Prevailing Market
Basic group term life insurance offered	Yes	27 out of 28 organizations offer life insurance
Benefit Amount--Flat Dollar Amount	No	Of those that offer Life insurance, 12 organizations offer a flat dollar amount
Benefit Amount--Multiple of Salary	Yes--1 x salary \$50,000 up to \$250,000	Of those that offer Life insurance, 20 organizations offer a multiple of salary

Life and Accidental Death and Dismemberment Insurance		
Life Insurance	State of Colorado	Prevailing Market
AD&D Insurance offered	Yes	26 out of 28 organizations offer AD&D insurance
Voluntary supplemental group term life insurance offered	Yes	24 out of 28 organizations offer supplemental life insurance
Benefit Amount--Flat Dollar Amount	Yes--\$10,000-\$500,000	Of those that offer Vol. Life and AD&D insurance, 11 organizations offer a flat dollar amount ranging from \$10,000 up to \$500,000
Benefit Amount--Multiple of Salary	N/A	Of those that offer voluntary Life and AD&D insurance, 18 organizations offer a multiple of salary ranging from 1-5X annual salary

Disability Benefits

Through the Colorado Public Employees Retirement Association (PERA), the State provides a form of disability benefit as part of the overall retirement benefit. In addition, the State offers a voluntary (fully employee paid) long-term disability (LTD) plan to supplement the disability benefit offered through PERA. Therefore, the State's cost for a stand-alone LTD benefit is \$0. Among 2017 survey respondents, the vast majority offer employer-paid long-term disability coverage. The State offers employer paid short-term disability coverage, which is on par with most of the prevailing market.

Long-Term Disability



Disability		
Long Term Disability	State of Colorado	Prevailing Market
Long Term Disability Offered	Yes	26 organizations responded "yes" for offering LTD plan. 2 organizations did not respond at all.
Employer Paid Benefit (beyond PERA disability benefit)	No	Of the 26 organizations that responded, 20 organizations said this was an employer paid benefit, and 5 said it was not an employer paid benefit.
Elimination Period	180 days	Average: 136.2 days Median: 150 days
Income Replacement Percentage	60%	Average: 60% Median: 60%

Disability		
Long Term Disability	State of Colorado	Prevailing Market
Monthly Maximum Benefit	\$10,000	2 responded less than/equal to \$5,000 8 responded between \$5,001 and \$7,500 7 responded between \$7,501 and \$10,000 1 responded between \$10,001 and \$12,500 4 responded between \$12,501 and \$15,000 3 responded greater than \$15,000 3 did not respond

Disability		
Short Term Disability	State of Colorado	Prevailing Market
Short Term Disability Offered	Yes	21 out of 25 organizations offer a STD benefit (2 did not respond)
Employer Paid	Yes	17 out of 20 organizations that provide STD benefits are employer paid (8 did not respond)
If employee paid, is the benefit post or pre tax	N/A	Of the 3 organizations that do not supply employer paid benefits: 2 Post tax 1 Pre tax
Elimination period	30 days (or until sick leave is exhausted)	11 organizations offer 7 days sick/7 days accident 3 organizations offer 14 days sick/14 days accident elimination period 5 organizations said other 2 organizations said none 7 organizations did not respond
Benefit %	60%	Average: 57% Median: 60%

Sick Leave, Vacation Leave, and Miscellaneous Benefits

The State of Colorado currently offers employees a comprehensive leave program that includes, but is not limited to annual, sick, holiday, family medical, short-term disability and military. Employees earn personal and sick leave at varying accrual rates, based on years of service. Full-time employees begin earning annual leave at an accrual rate of 8 hours per month and sick leave at 6.66 hours per month. Leave for a part-time employee is earned on a pro-rated basis.

Sick Leave			
Sick Leave (By Days)	State of Colorado	Prevailing Market Average	Prevailing Market Median (2017)
1 year of service	10 days	9.4 days	12 days
5 years of service	10 days	9.4 days	12 days
7 years of service	10 days	9.4 days	12 days
10 years of service	10 days	9.4 days	12 days
15 years of service	10 days	9.4 days	12 days
20 years of service	10 days	9.4 days	12 days
25 years of service	10 days	9.4 days	12 days

Vacation Leave			
Vacation Leave (By Days)	State of Colorado	Prevailing Market Average	Prevailing Market Median (2017)
1 year of service	12 days	13.7 days	12 days
5 years of service	12 days	17.7 days	15.5 days
7 years of service	15 days	18.4 days	16 days
10 years of service	15 days	21.1 days	20 days
15 years of service	18 days	22.5 days	21 days
20 years of service	21 days	23.7 days	24 days
25 years of service	21 days	24.0 days	24 days

Miscellaneous Benefits		
Wellness Benefits/Incentive	State of Colorado	Prevailing Market (2017)
Wellness Program offered	Yes	21 out of 28 organizations offer a wellness program
Incentives for participating in the wellness program	Yes	Of those that offer a wellness program, 20 organizations offer some sort of incentive
Cash compensation EE	No	6 organizations
Cash Compensation SP	No	2 organizations
Premium differential EE	\$20	9 organizations
Premium differential SP	No	2 organizations
HRA/HSA Contributions EE	No	5 organizations

Miscellaneous Benefits		
Wellness Benefits/Incentive	State of Colorado	Prevailing Market (2017)
HRA/HSA Contributions SP	No	5 organizations
Time off EE	No	2 organizations
Time off Spouse	No	-
Other EE	-	1 organization offers gift card 1 organization offers participation prizes 1 organization offers free recreation pass

Miscellaneous Benefits		
Benefits for Part-Time Employees	State of Colorado	Prevailing Market (2017)
20 hours or more	Yes	20 out of 28 organizations offer benefits to part-time employees working 20 hours or more
30 hours or more	Yes	26 out of 28 organizations offer benefits to part-time employees working 30 hours or more

State Benefit Findings

Offering a separate, stand-alone vision plan is prevalent practice for the prevailing market among survey participants. Without having claims data available as part of this analysis, it is impossible to value the true cost of the State's vision claims when bundled with the medical plan.

Without more detailed data, it is presumed the State's higher cost of life and accidental death & dismemberment (AD&D) insurance as compared to the prevailing market is likely due to the State having slightly higher demographic and risk factors as compared to the prevailing market. Offering a multiple of salary for life and AD&D is on par with the prevailing practice of the market.

The State offers a voluntary (fully employee paid) longer term disability (LTD) option while prevailing market offers an employer paid LTD program. With a State disability benefit provided through PERA, the apparent lack of an employer paid LTD program is mitigated to a large degree. The State's short term disability (STD) is generally on par with the prevailing market.

The State's sick leave is in line with the prevailing market and falls between the average and the median number of days allowed. Many employers are considering time off from work in a consolidated approach, or one bank of time from which an employee draws time off regardless of the specific reason for the absence.

The State and most employers in the prevailing market offer some type of wellness program, although the type of incentives offered for participation vary widely, with some type of monetary incentive as the most common approach. Spousal surcharges for medical coverage, as well as tobacco surcharges, are uncommon, with both reported by less than 10% of respondents.

-17%

compared to
market median

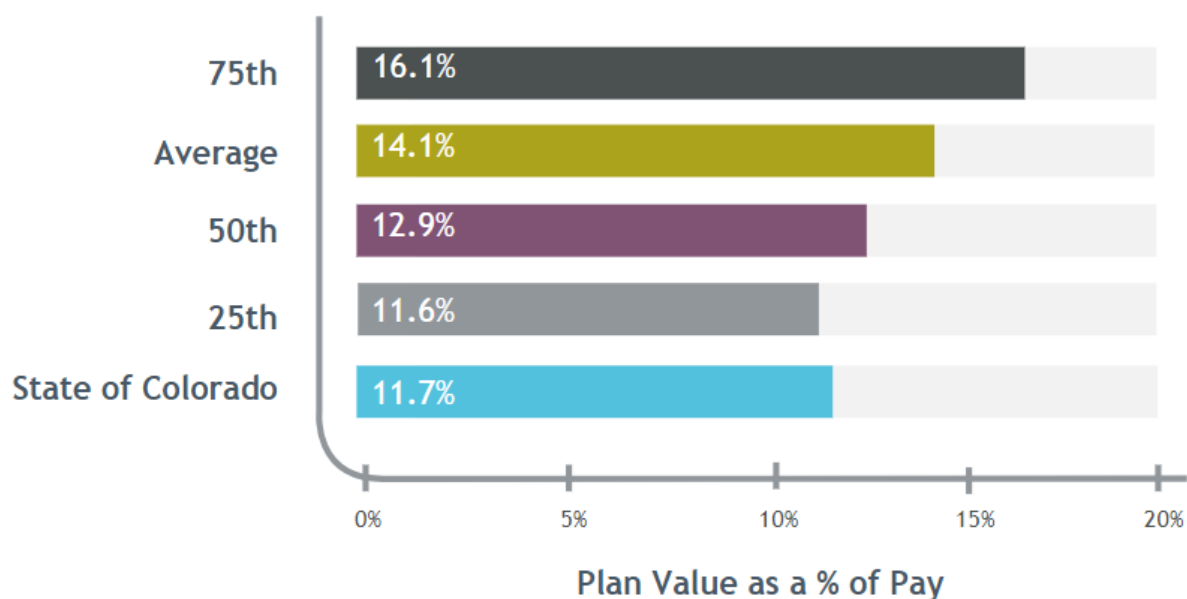
Retirement

A portion of the State contribution to PERA goes to the Health Care Trust Fund to pay healthcare premium subsidies to benefit recipients who participate in the PERACare Health Benefits Program. While this is ultimately of value, it is not taken in to consideration for the purposes of this study.

Also covered by a portion of the contributions to PERA is a form of disability benefit. As with the retiree healthcare subsidy, there is an embedded value to this benefit, but is not considered as a separate benefit (or cost) for purposes of this study.

Social Security is being fully considered for purposes of this study. This means when comparing the State to market organizations, both the benefits and cost of Social Security are being valued when applicable for respective organizations. See page 8 of the Appendix for details on the methodology for determining retirement plan values.

Total Retirement Value Comparison



With the passage of SB-200, adjustments and assumptions were updated to determine the State's retirement value, shown below.

Determining Retirement Value	
Prior to SB-200 (FY 2018-19)	Following SB-200 (FY 2019-20)
Employee Contribution Rate of 8%	Employee Contribution Rate of 10%
Annual increase in COLA of 2.5%	Annual increase in COLA of 1.5%
Final Average Salary period of 3 years	Final Average Salary period of 5 years

Last year's FY 2018-19 analysis showed the State obligation as 15.5% of pay. The passing of SB 200 had the following impacts on the percent of the State's retirement plans as a percent of annual salary:

- Decrease to 13.5% of pay - Due to increasing employee contributions from 8% to 10%. While this does not change the total benefit, it does mean that the additional 2% of employee contributions alleviates 2% of the commitment from the State.
- Decrease to 12.6% of pay - The COLA is now capped at 1.5%, where 2.5% was assumed in the 2017. This lowers the total value of the benefit.
- Decrease to 11.7% of pay - The final average salary averaging period increased from 3 years to 5 years, which decreases final benefits for those who have continual salary increases.

State Retirement Findings

The State's retirement plan is approximately 17.0% lower than the prevailing market retirement plans as a percent of annual salary. Again, this is inclusive of Social Security costs and benefits paid by other employers. It is determined that the State's retirement benefit to employees is approximately 11.7% of annual salary when compared to the market average. The market average is valued at 14.1% of base salary, while the median is 12.9% of base salary.

The passage of SB-200 lowered the State's contribution to employee retirement plans as a percent of annual salary due to increased employee contributions to PERA, lowering the COLA cap and updating the FAS calculation.

FY 2019-20 Cost Projections

The Department used the July 2018 salaries for all classified staff to develop the figures presented in the text and charts below. No cost adjustments are presented for the remaining benefit components (leave, retirement, and short term disability), as the value of these benefits did not vary from prevailing market. The Department will work with the Office of State Planning & Budgeting to develop the final merit matrix for consideration in the Governor's November 1 Budget Request for FY 2019-20.

Salary Structure Adjustments

To continue to accurately align itself with the market, the Department recommends that individual pay ranges be adjusted. To the extent that an individual's salary falls below the range minimum as a result of these adjustments, the State is statutorily required to make up the difference.

For FY 2019-20, the Department estimates that the upward movement of range minimums will cost the State \$4,128,879, which includes all salary related costs for an overall structure adjustment of 2.0%. This estimate does not include any other salary increases. However, if merit pay or across the board salary increases are applied, the overall cost related to a 2.0% structure adjustment drops significantly.

Merit Matrix Adjustments to Base Pay

Historically, the State utilized a combination of merit and across-the-board pay practices. To that end, the Department requests the merit matrix percent adjustments reflect the entirety of the market salary adjustment of 3%. The following merit matrix reflects this request.

Recommended Merit Matrix for FY 2019-20

Performance Rating	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Above Quartile 4
Exceptional (level 3)	3.98%	3.78%	3.58%	3.38%	3.18%
Successful (level 2)	2.98%	2.78%	2.58%	2.38%	2.18%
Below Expectations (level 1)	0%	0%	0%	0%	0%

If the State were to pursue salary increases through merit, the salary adjustments for the merit awards would be base-building for quartiles one through three, with non-base-building awards granted for the fourth quartile and above. For FY 2019-20, the Department estimates that the base-building impact of the requested policy is \$59,384,882 in total funds, the non-base-building impact is \$2,997,560, while the movement to minimum is \$41,398. The total cost of \$62,423,840 includes all salary related costs (movement to minimum and an overall structure adjustment of 2%).

July 2018 Distribution of Classified Employee Salaries by Performance Rating

Performance Rating	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Above Quartile 4	Total
Exceptional (level 3)	2,846	1,518	1,250	644	2	6,260
Successful (level 2)	12,428	4,706	4,615	1,646	36	23,431
Below Expectations (level 1)	91	36	35	13	0	175
Total	15,365	6,260	5,900	2,303	38	29,866

Healthcare Cost Adjustments

The Department will finalize the cost of increases to healthcare, dental and life following the finalization of cost projections in the market. This will be completed in October 2018 in preparation for the Governor's November 1 Budget Request for FY 2019-20.

Appendix

Benchmark Class Titles

Individual Benchmark Class Titles	
ACCOUNTANT I	BUDGET ANALYST I
ACCOUNTANT II	CHAPLAIN I
ACCOUNTANT IV	CHAPLAIN II
ACCOUNTING TECHNICIAN I	CHILD CARE AIDE
ACCOUNTING TECHNICIAN III	CLIENT CARE AIDE II
ACTUARY I	CLINICAL THERAPIST I
ACTUARY II	COLLECTIONS REP II
ADMIN ASSISTANT I	COMM PAROLE SUPV
ADMIN ASSISTANT II	COMMUNITY PAROLE OFF
ADMIN ASSISTANT III	COMMUNITY WORKER II
AIRCRAFT PILOT	COMP INSURANCE SPEC II
ANALYST II	COMP INSURANCE SPEC III
ANALYST III	COMPL INVESTIGATOR II
ANALYST IV	COMPLIANCE SPECIALIST II
APPRAISER I	COMPLIANCE SPECIALIST III
ARCHITECT I	COMPLIANCE SPECIALIST V
ARTS PROFESSIONAL I	COMPUTER OPER SUPV I
ARTS PROFESSIONAL II	COMPUTER OPERATOR II
AUDITOR I	CONTRACT ADMINISTRATOR II
AUDITOR II	CONTRACT ADMINISTRATOR IV
AUDITOR V	CONTRACT ADMINISTRATOR VI
BUDGET & POLICY ANLST IV	CONTROLLER III

Individual Benchmark Class Titles	
CORRL ACCOUNT SALES REP	EMER PREP & COMM SPEC III
CORR SUPP TRADES SUPV I	ENGINEER-IN-TRAINING I
CORR/YTH/CLIN SEC OFF I	ENGR/PHYS SCI ASST II
CORR/YTH/CLN SEC SUPV III	ENGR/PHYS SCI ASST III
CORRECTIONS CASE MGR I	ENGR/PHYS SCI TECH I
CRIMINAL INVESTIGATOR I	ENVIRON PROTECT SPEC II
CRIMINAL INVESTIGATOR II	ENVIRON PROTECT SPEC V
CUST SUPPORT COORD I	EQUIPMENT MECHANIC II
CUSTODIAN I	EQUIPMENT OPERATOR II
CUSTODIAN III	EQUIPMENT OPERATOR IV
DATA ENTRY OPERATOR I	FIN/CREDIT EXAMINER I
DATA ENTRY OPERATOR II	FIN/CREDIT EXAMINER II
DATA MANAGEMENT III	FINGERPRINT EXAMINER I
DENTAL CARE I	FOOD SERV MGR III
DENTAL CARE IV	GENERAL LABOR I
DENTIST I	GRANTS SPECIALIST II
DESIGNER/PLANNER	GROUND & NURSERY I
DIAG PROCED TECHNOL II	HEALTH CARE TECH I
DIETITIAN II	HEALTH PROFESSIONAL II
DIETITIAN III	HEALTH PROFESSIONAL III
DINING SERVICES III	HEALTH PROFESSIONAL IV
DINING SERVICES V	HEALTH PROFESSIONAL V
EARLY CHILDHOOD EDUC I	HEARINGS OFFICER II
ELECTRICAL TRADES II	HUMAN RESOURCES SPEC II
ELECTRICAL TRADES III	HUMAN RESOURCES SPEC III
ELECTRONIC ENGINEER II	HUMAN RESOURCES SPEC IV
ELECTRONIC ENGINEER III	HUMAN RESOURCES SPEC VII
ELECTRONICS SPEC II	INSPECTOR I
ELECTRONICS SPEC IV	IT MANAGER
ENGR/PHYS SCI TECH III	IT PROFESSIONAL

Individual Benchmark Class Titles	
IT SUPERVISOR	PHY SCI RES/SCIENTIST II
IT TECHNICIAN	PHY SCI RES/SCIENTIST III
LABOR/EMPLOYMENT SPEC II	PIPE/MECH TRADES II
LABOR/EMPLOYMENT SPEC V	POLICE COMMUNICATION TECH
LABORATORY SUPPORT I	PRODUCTION I
LABORATORY TECHNOLOGY II	PRODUCTION V
LEGAL ASSISTANT II	PROF LAND SURVEYOR I
LIBRARIAN I	PROFESSIONAL ENGINEER II
LIF/SOC SCI RSRCH/SCI IV	PROFESSIONAL ENGINEER IV
LTC OPERATIONS I	PROGRAM ASSISTANT I
LTC TRAINEE I	PROGRAM ASSISTANT II
MACHINING TRADES II	PROJECT COORDINATOR
MANAGEMENT	PROJECT MANAGER I
MATERIALS HANDLER I	PROJECT PLANNER I
MEDIA SPECIALIST II	PROPERTY TAX SPEC II
MEDIA SPECIALIST V	PSYCHOLOGIST I
MEDICAL RECORDS TECH II	PSYCHOLOGIST II
MID-LEVEL PROVIDER	PUB HLTH MED ADMIN I
MKTG & COMM SPEC III	PURCHASING AGENT II
MKTG & COMM SPEC V	PURCHASING AGENT III
MKTG & COMM SPEC VI	PURCHASING AGENT IV
NURSE I	PURCHASING AGENT VI
NURSE II	RATE/FINANCIAL ANALYST II
NURSE V	RATE/FINANCIAL ANALYST III
OFFICE MANAGER I	RATE/FINANCIAL ANALYST V
PARK MANAGER II	REAL ESTATE SPEC IV
PARK MANAGER IV	REAL ESTATE SPEC VI
PHARMACIST III	RECORDS ADMINISTRATOR I
PHARMACY TECHNICIAN I	REHABILITATION COUNS II
PHY SCI RES/SCIENTIST I	REHABILITATION SUPV I

Individual Benchmark Class Titles	
REHABILITATION SUPV II	UTILITY PLANT OPER I
RETAIL BSNS REP - ENTRY	VETERINARIAN I
SAFETY SECURITY OFF I	WILDLIFE MANAGER I
SAFETY SECURITY OFF III	WILDLIFE MANAGER III
SAFETY SPECIALIST II	WILDLIFE MANAGER V
SAFETY SPECIALIST III	YOUTH SERV COUNSELOR I
SAFETY SPECIALIST IV	
SALES ASSISTANT III	
SCINT PRGMR/ANLST II	
SCINT PRGMR/ANLST IV	
SECURITY I	
SECURITY III	
SOCIAL WORK/COUNSELOR II	
SOCIAL WORK/COUNSELOR III	
STATE TEACHER I	
STATISTICAL ANALYST II	
STRUCTURAL TRADES I	
STRUCTURAL TRADES II	
TECHNICIAN II	
TECHNICIAN III	
TECHNICIAN IV	
THERAPIST II	
THERAPIST III	
THERAPY ASSISTANT II	
THERAPY ASSISTANT IV	
TRAINING SPECIALIST III	
TRAINING SPECIALIST V	
TRANSPORTATION MTC I	
TRANSPORTATION MTC II	

Data Cuts

Survey data cuts no longer available in the most recent survey publication and substitutions

Job Code	Survey Source	Survey Job Title	New Data Cut	Substitution Notes
H1M4	TW-PAS17	Real Estate and Facilities - P3 - Career	Region: South Central	Colorado State not available, used Region: South Central
G3A5	TW-SMM17	Administrative Services Generalist/Multidiscipline - M1 - Supervisor	Sub region: Lower Mountain States	Colorado State not available, used Sub region
H1G3	TW-PAS17	Regulatory Affairs and Compliance - P2 - Intermediate	Sub region: Lower Mountain States	Colorado State not available, used Sub region
H1L3	TW-PTO17	Purchasing Generalist/Multidiscipline - P2 - Intermediate	Sub region: Lower Mountain States	Colorado State not available, used Sub region
H4R2	TW-SMM17	Administrative Services Generalist/Multidiscipline - M1 - Supervisor	Sub region: Lower Mountain States	Colorado State not available, used Sub region
H8G6	TW-SMM17	Financial Analysis - M2 - Manager	Sub region: Lower Mountain States	Colorado State not available, used Sub region
D6C2	COMP-D-BEN-WEST18	HVAC Mechanic	West Region	Colorado State not available, used West Region
D7B2	COMP-D-BEN-WEST18	Driver - Within 100 Miles	West Region	Colorado State not available, used West Region
D8E1	COMP-D-BEN-WEST18	Groundskeeper	West Region	Colorado State not available, used West Region
D8H1	COMP-D-BEN-WEST18	Security Officer - Unarmed (Security Guard)	West Region	Colorado State not available, used West Region
H6L1	COMP-D-BEN-WEST18	Sales Representative - Outside II (Senior) - Non-Commission	West Region	Colorado State not available, used West Region
H6O1	COMP-D-BEN-WEST18	Sales Representative - Inside I -- Non-Commission	West Region	Colorado State not available, used West Region
H2A3	TW-IT17	IT Administration - M1 - Supervisor	Sub region: Lower Mountain States	Combined Statistical Area: Denver-Aurora-Boulder, CO not available, used Sub region

Job Code	Survey Source	Survey Job Title	New Data Cut	Substitution Notes
H4I3	TW-PAS17	Employee Development/Training Generalist/Multidiscipline - P3 - Career	Sub region: Lower Mountain States	Combined Statistical Area: Denver-Aurora-Boulder, CO not available, used sub region
H2A2	TW-IT17	Computer Systems Administration - P2 - Intermediate	United States	Combined Statistical Area: Denver-Aurora-Boulder, CO not available, used United States
H4H2	TW-PAS17	Health and Safety - P1 - Entry	United States	Group: Associations, Foundations, Education and Government not available, used United States
A4C3	TW-SMM17	Security - M1 - Supervisor	Group: Associations, Foundations, Education and Government	Industry: Public Administration/Government not available, used Group, Associations, foundations, educations, gov
H1H6	TW-SMM17	Contract Administration - M2 - Manager	Group: Associations, Foundations, Education and Government	Industry: Public Administration/Government not available, used Group, Associations, foundations, educations, gov
H1L6	TW-SMM17	Purchasing Generalist/Multidiscipline - M2 - Manager	Group: Associations, Foundations, Education and Government	Industry: Public Administration/Government not available, used Group, Associations, foundations, educations, gov
H8E1	TW-PAS17	Budget Analysis - P1 - Entry	Group: Associations, Foundations, Education and Government	Industry: Public Administration/Government not available, used Group, Associations, foundations, educations, gov
H8G6	TW-SMM17	Financial Analysis - M2 - Manager	Group: Associations, Foundations, Education and Government	Industry: Public Administration/Government not available, used Group, Associations, foundations, educations, gov
I3A6	TW-SMM17	Environmental Science - M2 - Manager	United States	Industry: Public Administration/Government not available, used US
A4C1	TW-PAS17	Security - P1 - Entry	United States	Region: South Central not available, used United States
D8C5	TW-SMM17	Food and Beverage Administration - M1 - Supervisor	United States	Region: South Central not available, used United States
D8C5	TW-SMM17	Food Preparation - M1 - Supervisor	United States	Region: South Central not available, used United States
H6M3	TW-SMM17	Food and Beverage Administration - M2 - Manager	NFP; United States	Region: South Central not available, used United States
H8E4	TW-SMM17	Budget Analysis - M2 - Manager	United States	Region: South Central not available, used United States

Job Code	Survey Source	Survey Job Title	New Data Cut	Substitution Notes
H8F2	TW-PAS17	Credit - P1 - Entry	United States	Region: South Central not available, used United States
I3A6	TW-SMM17	Environmental Science - M2 - Manager	Region: South Central	Removed, data-cut no longer available and already used United States
C5J1	TW-HCP18	Recreational Therapist - P1 - Entry	United States	South central not available, used United States
C5L4	TW-HCP18	Physical Therapy Assistant (Licensed) - T3 - Senior	United States	South central not available, used United States
C7C5	TW-HCP18	Clinical Research Scientist - P4 - Specialist	United States	South central not available, used United States
H2A3	EC-IT18	Information Technology Manager - First-Line Supervisor	All Colorado	Southern Colorado not available, used all CO
H6I2	TW-HAS18	Chaplain - P3 - Career	Region: West Coast	Sub region not available, used West Coast
H6L1	TW-PAS17	Direct Sales - Durable Goods Generalist/Multidiscipline - S2 - Intermediate	Region: South Central	Sub region: Lower Mountain States not available, used Region: South Central
H8F2	COMP-D-BEN-WEST18	Credit Analyst I	West Region	West Region 5000+ EE's not available, used west region

Retirement

Methodology for Valuation of Defined Benefit Plans

Survey participants provided the respective benefit formula and key plan provisions for their defined benefit plan. In order to determine and compare the value of such benefits, all plans were valued on a consistent basis outlined below. These characteristics are intended to show the full benefit earned through normal retirement. The compensation of \$55,000 is largely irrelevant, as retirement benefits are compared as a percentage of such compensation.

- For each plan, Gallagher projected retirement benefits for the same sample participant with the following characteristics:
 - Currently earning \$55,000 per year in plan compensation
 - Currently age 45
 - Hired at age 35
 - Retirement age of 65
- Salary increases of 4% annually were assumed. While this may not necessarily be the best assumption for a particular job class, age group, or service level, this assumption is intended to be reasonable overall for benefits comparison purposes.
- Gallagher assumed the form of benefit at retirement age was a life annuity with no survivor benefit.
- If plans provide a cost of living adjustment (COLA) to retirees, a COLA of 2% annually was assumed.
- Gallagher calculated the value of the total benefit earned through age 65, and such value was then converted to a consistent percent of pay throughout the sample participant's career. For these calculations, a 6% interest rate and the 417(e) unisex mortality table for 2016 was used.
- If any employee contributions were required for participation, then such contribution percentage directly decreased the value received by the sample participant as a percentage of pay.
- It was assumed that all plans have the same definition of compensation.
- No ancillary benefits were valued for any plan. This would include, for example, any death, disability or subsidized early retirement benefit provided under a plan.

Methodology for Valuation of Defined Contribution Plans

Survey participants provided the respective benefit formula and key plan provisions for their defined contribution plan. These were typically a flat percentage of pay or a matching contribution. The value provided by each plan was determined as follows:

- If a plan required and/or allowed employee contributions only (no employer contributions), Gallagher considered this to be no value provided to the participant.
- If the employer contributes a flat percentage of pay independent of any employee contribution, such percentage is considered an ongoing value provided by the employer.
- If the employer contributes based on a matching formula dependent on employee contributions, Gallagher considered the maximum attainable match to be the value provided by the employer.