

COLORADO
Department of Personnel \& Administration

September 15, 2020
Honorable Jared Polis
Governor of Colorado
136 State Capitol Building
Denver, Colorado 80203
Honorable Representative Daneya Esgar
Chair, Joint Budget Committee
Colorado General Assembly
200 East 14 tw Avenue
Denver, Colorado 80203
Dear Governor Polis and Representative Esgar,
In accordance with C.R.S. 24-50-104(4), the State Personnel Director (Director) is required to submit an Annual Compensation Report (report) regarding the State of Colorado's (State) total compensation package. The purpose of the annual compensation process is to determine any necessary adjustments to state employee salaries, state contributions for benefits plans, and merit pay. The report is based on the analysis of survey data from private and public organizations and a custom survey to compare the total and component values and costs of the State's total compensation package.

Every other year, the Department of Personnel \& Administration (Department) contracts with a thirdparty compensation consultant with actuarial experience to perform a comprehensive total compensation study. For FY 2020-21, the State retained Gallagher to conduct the annual compensation analysis and compare the value of the State's total compensation package. In this maintenance year, the State replicated the compensation analysis process followed by Gallagher for FY 2020-21 to maintain a sound methodology and approach from year to year. In support of the development of this report, Gallagher provided the State with raw market salary data and conducted a custom survey to determine the value of the State's benefits, including retirement.

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 overall pay, benefits, retirement benefits, incentives, premium pay practices, and leave consistent with prevailing practices in the market;
II. Move fully competent employees in the workforce toward the midpoint, representative of the prevailing rate for this level of employee; 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, the State is estimated to be $16.4 \%$ below the prevailing market. The average base salary is $11.6 \%$ below the prevailing market, medical is equal to the prevailing market and retirement is $19.3 \%$ below the prevailing market.

In regards to composition, on average, base pay accounts for $77.7 \%$ of the State's total compensation package. Benefits account for $13.8 \%$ and the remaining $8.5 \%$ is made up by retirement.

| Component of Total Compensation | State of Colorado | Prevailing Market | Variance between State and Market |
| :---: | :---: | :---: | :---: |
| Average Base Salary* | \$66,033 | \$74,676 | -11.6\% |
| Average Incentive Pay ${ }^{\prime \prime}$ | n/a | \$4,997 | n/a |
| Medical | $\begin{gathered} \$ 11,000 \\ \text { (16.7\% of base } \\ \text { pay) } \end{gathered}$ | $\begin{gathered} \$ 11,000 \\ \text { (14.7\% of base } \\ \text { pay) } \end{gathered}$ | = |
| Dental | \$521 <br> (0.8\% of base pay) | $\begin{gathered} \$ 495 \\ \text { (0.7\% of base } \\ \text { pay) } \end{gathered}$ | 5.0\% |
| Vision | (Included in medical) | $\begin{gathered} \$ 28 \\ \text { (0.04\% of base } \\ \text { pay) } \end{gathered}$ | n/a |
| Retirement | \$7,198 (10.9\% of base pay) | $\begin{gathered} \$ 10,081 \\ \text { (13.5\% of base } \\ \text { pay) } \end{gathered}$ | -19.3\% |
| Short Term*** Disability | $\begin{gathered} \$ 99 \\ \text { (0.15\% of base } \\ \text { pay }) \end{gathered}$ | $\begin{gathered} \$ 0 \\ (0 \% \text { of base pay }) \end{gathered}$ | n/a |
| Long Term Disability ${ }^{\text {* }}$ | $\begin{gathered} \$ 0 \\ (0.0 \% \text { of base pay }) \end{gathered}$ | $\begin{gathered} \$ 224 \\ \text { (0.3\% of base } \\ \text { pay) } \end{gathered}$ | n/a |
| Life and AD\&D Insurance | $\begin{gathered} \$ 86 \\ \text { (0.13\% of base } \\ \text { pay) } \end{gathered}$ | \$119 <br> (0.16\% of base pay) | -18.75\% |
| Total | \$84,937 | \$101,620 | -16.4\% |
| *Average base salary of all benchmark classifications at the State, and prevailing market average base median salary of all benchmark classifications. **State has non-base incentive programs. <br> ${ }^{* * *} A$ value for short term disability has been added to the table because it is a cost to the employer that is a benefit to the employee. There is a prevailing market value as Gallagher has indicated there are too many variables to calculate a prevailing market value. <br> ****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. |  |  |  |

## TOTAL COMPENSATION ANALYSIS

The Director recognizes the importance of evaluating the overall value of total compensation in order to assess the competitiveness of the State's total compensation package. The value of the State's total compensation package is now misaligned with the market. The State has moved out of the competitive range for base salaries. According to standard compensation guidelines, maintenance is required to sustain or move the needle on the acceptable variance. Additionally, research into and monitoring of individual job classes that are not competitive is necessary.

The Director will continue to work closely with the Governor's Office of State Planning and Budgeting, as well as confer with the Colorado Workers for Innovative and New Solutions (Colorado WINS), to develop a recommendation for the appropriate amount of funding for any annual salary and benefit
increases for FY 2021-22. The final recommendations will reflect a consideration of 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 2021-22.

Respectfully submitted,


Kara Veitch
Executive Director, Colorado Department of Personnel \& Administration and State Personnel Director

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# ABOUT THIS 

## REPORT

The State of Colorado (State) FY 2021-22 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). The purpose of this report is to analyze the competitiveness of the State's salary and benefits, as a whole and separately, against the market. Data from private and public organizations is used to compare the total and component costs, and value of the State's total compensation package.

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, 2021 implementation.

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 2020-21 and compare the value of the State's total compensation package. In the subsequent year, known as the maintenance year, the State performs a less exhaustive total compensation study. For FY 2021-22, the State replicated the compensation analysis process followed by Gallagher in FY 2020-21 to maintain a sound methodology and approach from year to year. In support of the development of this report, Gallagher provided the State with raw market salary data and conducted a custom survey to determine the value of the State's benefits, including retirement.

Overall, it was found that the State's total compensation package is significantly misaligned with the prevailing market. The State's total compensation package is estimated to lag the market by $16.4 \% \%$.

Base salary accounts for 77.7\% of the State's total compensation, as compared to $73.5 \%$ for the prevailing market. When compared to the market, if no changes are made to state pay, average base salaries of employees are $11.6 \%$ below market median. The salary structures are $9.1 \%$ below the market median.

Benefits (medical, dental, life, and disability) account for $13.8 \%$ of the State's total compensation, as compared to $11.7 \%$ for the prevailing market. Specifically, medical, dental, life, short-term disability, and accidental death and dismemberment (AD\&D) insurance account for $13.8 \%$ of the State's total compensation. The State's medical benefits are equal to the market median and dental benefits are $5.0 \%$ above the market median contribution. Retirement accounts for $8.5 \%$ of the State's total compensation as compared to $9.9 \%$ for the prevailing market; the State's retirement benefit is estimated to lag the market by $19.3 \%$. It is important to note that this analysis is reflective of the benefits package available to state employees as of January 1, 2020 and not the new benefits package available in FY 2020-21.

# FY 2021-22 ANNUAL COMPENSATION REPORT 

## INTRODUCTION

State employees are the cornerstone for ensuring State government is bold, consistent, joyous and operates with no unforced errors. To ensure the State is able to recruit and retain a strong and diverse workforce, the Director is required by law 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 2021-22 compensation structure and adjustments.

Like the comprehensive study performed for FY 2020-21, 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

(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 workforce. 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).

# METHODOLGY \& DATA SOURCES 

As part of this maintenance year analysis for FY 2021-22, the State replicated the compensation methodology developed by Gallagher 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.

## Survey Benchmarks

For this maintenance year process, data was collected for 233 of the 239 benchmark job classes. Gallagher collected market salary data for the 218 of the 224 benchmark jobs identified in the FY 2020-21 Annual Compensation Report. This information was provided to the State for the purposes of analysis. Additionally, the 15 benchmark jobs from the FY 2020-21 system maintenance study for the Electronic Engineer, Electronic Specialist, and Customer Support Coordinator class series implemented on July 1, 2020 are included in the number of the benchmark jobs matched with market salary data. Jobs added to the benchmark total for FY 2021-22 include:

- Electronic Engineer I
- Electronic Engineer IV
- Electronic Specialist I
- Electronic Specialist III
- Telecommunications Engineer, I, II, III, IV
- Telecommunications Specialist I, II, III, IV
- Systems Monitoring Coordinator I, II, III

This brings the total benchmark jobs up from 224 to 239. Data for six benchmark jobs were not identifiable, bringing the total number of benchmarks for this analysis to 233 of the 239 benchmark job classes identified for FY 2021-22. Please see page 1 in the Appendix for a complete listing of the benchmark job classes included in this total compensation report.

## 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 relation to the market and to validate the State's internal pay structure. They were selected using the following guidelines:

- Representation of all jobs classes 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 both inside and outside of the Denver metropolitan area. Gallagher defined the primary labor market for the purpose of the total compensation study following these requirements. In addition, the State also collects data from employers outside Colorado when insufficient data is available within the state, as those benchmark jobs specific to state government.

Like previous years, the primary labor market for the FY 2021-22 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 following sections. The updated publications for the following seven survey sources are currently unavailable: Willis Towers Watson General Industry Accounting \& Finance, 2018, Willis Towers Watson General Industry Engineering, Design \& Technical Specialty, 2018, Willis Towers Watson General Industry Human Resources, 2018, Willis Towers Watson General Industry Office and Business Support, 2018, Willis Towers and Watson General Industry Professional Administrative \& Sales, 2018, Willis Towers and Watson General Industry Professional Technical \& Operations, 2018, and Willis Towers Watson General Industry Sales, Marketing and Communications, 2018. Therefore survey data referencing 2018 was used. 2019 or 2020 surveys were used for all other sources.

## PUBLISHED SURVEYS USED FOR MARKET SALARY COMPARISON

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CompData Benchmark Pro - National, 2019
CompData Benchmark Pro - West, }201
Employers Council Benchmark - Arizona/Colorado/Utah/Wyoming, 2020
Employers Council Information Technology, 2020
Employers Council Public Employers, }202
Economic Research Institute (ERI)
Mercer IHN Module 5 - Healthcare Provider Individual Contributors, }201
Mercer Information Technology, }201
Mercer Metro Benchmark - South Central, }201
National Compensation Association of State Governments (NCASG), }201
Willis Towers Watson General Industry Accounting & Finance, 2018*
Willis Towers Watson General Industry Engineering, Design & Technical Specialty, 2018*
Willis Towers Watson General Industry Human Resources, 2018*
Willis Towers Watson General Industry Information Technology, }201
Willis Towers Watson General Industry Office and Business Support, 2018*
Willis Towers Watson General Industry Professional Administrative & Sales, 2018*
Willis Towers Watson General Industry Professional Technical & Operations, 2018*
Willis Towers Watson General Industry Professional Sales, Marketing and Communications, 2018*
Willis Towers Watson General Industry Supervisory & Middle Management, }201
Willis Towers Watson Health Care Admin and Support, }201
Willis Towers Watson Health Care Clinical and Professional, }201
Willis Towers Watson Health Care Executive & Management, }201
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*Most recent version of the same survey source is currently unavailable. Gallagher did not purchase the 2019 version of these surveys and the publish date of the 2020 version was pushed to early spring 2021 due to COVID19. Survey data from 2018 was included but is aged to 39.57 months which is outside of the industry standard.

## 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.

For all job matches included in the comprehensive Annual Compensation Report FY 2020-21 and the new benchmark jobs mentioned above, Gallagher collected market salary data referencing previously identified data-cuts. During this study Gallagher identified appropriate data-cuts for each benchmark job using the following guidelines:

- Local (e.g. Denver, Colorado Springs) data cuts for lower level jobs
- Local and public sector data cuts for mid-level jobs
- National and public sector data cuts for senior/management level jobs

From the most recent published surveys, Gallagher was unable to collect market salary data for seven datacuts that were utilized in the FY 2020-21 study. In addition, Gallagher was unable to collect market salary data for four data-cuts previously identified for six additional State jobs. This may be attributed to insufficient participant data. Nonetheless, salary data is only used by survey organizations if there are a minimum of five 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 datacuts. In a 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 11 data-cuts has been provided on page 15 in the Appendix.

## Geographical Adjustments

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. Changes were observed in the geographic differentials compared to FY 2020-21. The State geographically adjusted the raw market salary data to reflect the State of Colorado labor market.

## Aging Adjustments

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 $3 \%$ (median) per year for actual salaries and $2 \%$ (median) per year for salary ranges. The State uses the median because outliers, or extreme values on either the high or low end, have a bigger effect on the mean and less on the median.

## 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, 2021
- Benchmark summary matches were reviewed and data was shared with the State to ensure the appropriate scope and level were represented


## 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 pays above the market
- Negative (-) figure indicates that the State 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 beyond 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 2021-22, below are changes made to this year's maintenance year report to aid in the analysis of the State's competitiveness to the market. This includes Gallagher conducting a full custom survey to determine the value of the State's benefits, including retirement.

## 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 for the benefits plans offered by the State through United Healthcare and Kaiser Permanente as of January 1, 2020. Effective July 1, 2020, state employees have the option to choose between medical plans offered through Cigna and Kaiser Permanente. Therefore the new plans are not represented in this analysis.

The custom survey was sent to roughly 120 large public and private employers in Colorado and surrounding states. A total of 30 employers responded to the survey, with approximately $57 \%$ representing employers who responded to the prior survey. 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 and County of Denver | Pueblo County* |
| City of Arvada* | State of Colorado* |
| City of Colorado Springs* | State of Kansas* $^{*}$ |
| City of Grand Junction | State of Louisiana* |
| City of Greeley | State of North Dakota* |
| City of Lakewood* | State of Utah |
| City of Pueblo* | State of Washington |
| Colorado Springs Utilities* | State of Wisconsin** |
| Denver Public Schools | Weld County RE-1 School District |
| Denver Water* |  |
| El Paso County* |  |

## PRIVATE SECTOR CUSTOM SURVEY PARTICIPANTS

| Arc Thrift Store | National Jewish Health* |
| :---: | :---: |
| Air Methods | Terumo BCT |
| CoorsTek, Inc* | Tri-State Generation and Transmission Association, Inc.* |
| EchoStar** | UDR, Inc. |
| Media News Group | University of Denver* |
| *Denotes that the participant submitted data for the FY 2020-21 report. |  |

The focus for this maintenance year was to update the value of 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. The State's actual costs for these benefits were used to value each benefit this year. In order to account for cost increases in the other plans for the market, a $3.5 \%$ increase to 2019 dental costs was factored in to adjust for dental plan inflation and changes in dental plan cost for 2020. Similarly, a $1.5 \%$ adjustment was factored into 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 increase at a lesser rate than overall compensation inflation.

Average and median data points are provided, as a means to provide some additional perspective, and to allow for comparison with other published data.

## Valuation of Retirement Benefits

The State 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: defined benefit (DB) plan or the defined contribution (DC) plan. See page 22 in the Appendix for details on the methodology for determining retirement plan values.

With the passage of Senate Bill 18-200 (SB 18-200) Modifications to PERA to Eliminate Unfunded Liability, the following adjustments and assumptions have been made in valuing retirement benefits received by the State's employees:

- Employee contribution rate of $10.5 \%$, considering the $0.5 \%$ increase under the Automatic Adjustment Provision
- Annual increase in retirement benefits (COLA) of $1.5 \%$
- The Highest Average Salary calculation based on five years
- Any legislated change that is being phased-in is considered fully applicable for purposes of this analysis

Social Security is fully considered for purposes of this study. This means that, when comparing the State to market organizations, both the benefits and cost of Social Security are being valued when applicable for respective organizations.

## Total Cash and Incentive Pay

Additional data collection and analysis on total cash and incentive pay was not completed during this maintenance year but a brief summary of the overall average market incentive is provided below.

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 predetermined 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 $5.3 \%$ market incentive present outside of the public sector and the relationship of incentive pay to other elements of total compensation.

|  | Market <br> 25 | Market <br> $50^{\text {th }}$ <br> Percentile | Market <br> Percentile | Market <br> Average |
| :---: | :---: | :---: | :---: | :---: |
| Overall Market <br> Incentive | $4.8 \%$ | $5.3 \%$ | $5.8 \%$ | Percentile |

## Premium Pay

Additional data collection and analysis on premium pay was not completed during this maintenance year. 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 in the market paid in the form of flat rate or percentage. Over the next year, the Department will be reviewing the State's utilization and rates of premium pay.

## HISTORICAL

## TRENDS

This year showed swings in the data reported for almost all categories. There are many factors that impact swings in data:

- Market shifts due to low unemployment, competition for talent, high costs of living, supply and demand, etc.
- Stagnant employee pay - i.e., no merit, across-the-board increases, no structure adjustments, employees not progressing through the ranges, etc.
- Outdated job classes or misaligned job classes as well as broad banded classes
- Changes in benchmarks or the addition/removal of benchmarks
- The number of incumbents in a position and the position in the range at which they were hired
- The effective date of reported data in the salary surveys - some industries award increases in January
- Custom survey data versus published survey data

While this report provides an overview of the State's total compensation package value, it is important to look at historical trends and break the data down to smaller parts to get a better understanding of what factors are driving the State's position within the market.

## TOTAL COMPENSATION VALUE

|  | FY 2021-22 <br> (Maintenance <br> Year) | FY 2020-21 <br> (Comprehensive <br> Year) | FY 2019-20 <br> (Maintenance Year) | FY 2018-19 <br> (Comprehensive <br> Year) |
| :---: | :---: | :---: | :---: | :---: |
| Total Compensation <br> Value | $-16.4 \%$ | $-11.5 \%$ | $-9.2 \%$ | $-5.5 \%$ |
| Base Salary | $-11.6 \%$ | $-4.8 \%$ | $-7.0 \%$ | $-6.3 \%$ |
| Market Salary <br> Structure Comparison | $-9.1 \%$ | $-2.5 \%$ | $-1.7 \%$ | $1.1 \%$ |
| State Patrol Trooper | $-9.7 \%$ | $-5.6 \%$ | $-4.6 \%$ | $-6.6 \%$ |
| Medical Benefits | $0.0 \%$ | $-17.0 \%$ | $0.0 \%$ | $-3.0 \%$ |
| Dental Benefits | $5.0 \%$ | $-3.0 \%$ | $3.1 \%$ | $1.0 \%$ |
| Retirement | $-19.3 \%$ | $-20.6 \%$ | $-17.0 \%$ | $9.9 \%$ |

BASE SALARY BY OCCUPATIONAL GROUP

|  | FY 2021-22 <br> (Maintenance <br> Year) | FY 2020-21 <br> (Comprehensive <br> Year) | FY 2019-20 <br> (Maintenance <br> Year) | FY 2018-19 <br> (Comprehensive <br> Year) |
| :--- | ---: | ---: | ---: | ---: |
| Enforcement and <br> Protective Services | $-0.8 \%$ | $-6.1 \%$ | $12.8 \%$ |  |
| Healthcare Services | $-11.4 \%$ | $-4.6 \%$ | $-11.1 \%$ | $13.0 \%$ |


| SALARY STRUCTURE MARKET COMPARISON |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | FY 2021-22 <br> (Maintenance Year) | FY 2020-21 <br> (Comprehensive Year) | FY 2019-20 <br> (Maintenance Year) | FY 2018-19 (Comprehensive Year) |
| Enforcement and Protective Services | -0.2\% | 6.2\% | 12.3\% | 14.7\% |
| Healthcare Services | -7.9\% | -6.7\% | -5.9\% | -1.7\% |
| Labor, Trades and Crafts | -9.0\% | -2.8\% | -0.2\% | -1.4\% |
| Administrative Support and Related | -21.1\% | -6.5\% | -10.3\% | -6.8\% |
| Professional Services | -12.8\% | -5.0\% | -4.1\% | -1.1\% |
| Physical Science and Engineering | -11.6\% | 1.8\% | 4.3\% | 7.8\% |
| Information Technology | -1.0\% | 1.0\% | 3.1\% | 3.8\% |

While there was some gain in market position in a couple of categories from FY 2019-20 to FY 2020-21, especially in the area of base salaries by occupational group, overall the trend in most categories is a continued or increased market lag.

In order to have a comprehensive understanding of the total compensation, it is necessary to break the data down into smaller sections. For example, the Labor, Trades and Crafts occupational group for base salaries changed from $-6.4 \%$ to $-13.9 \%$. This category currently houses hard to fill jobs in the current Colorado labor market as there is a lot of competition. The average State salary for an LTC Trainee I is $\$ 21,386.00$. The prevailing market salary is $\$ 54,305.00$. This increase in market lag is likely attributed to the factors mentioned above.

It is also important to look at historical changes affecting employees that help explain some of the shifts in data this year.

HISTORICAL CHANGES AFFECTING EMPLOYEES

| Fiscal Year | Base Salary Recommendati on \& Market Projections | Salary Increase Funding in November 1 Request | Salary Increase Approved by General Assembly | Average Employee Health Premium \% Change | Average <br> Employee Dental Premium \% Change | PERA <br> Employee Contributions \% Change* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} F Y \\ 2020-21 \end{gathered}$ | 3.00\% | 2\% | 0\% | -25.30\% | -4.10\% | 0.75\% |
| $\begin{gathered} \text { FY } \\ 2019-20 \end{gathered}$ | 3.00\% | 3.0\% Merit | 3\% ATB | 11.60\% | 7.70\% | 0.75\% |
| $\begin{gathered} \text { FY } \\ 2018-19 \end{gathered}$ | 3.00\% | 3.0\% ATB | 3\% ATB | - | - | - |
| $\begin{gathered} F Y \\ 2017-18 \end{gathered}$ | 3.00\% | 2.5\% ATB | 1.75\% ATB, <br> 0.75\% Merit | -5.40\% | - | - |
| $\begin{gathered} F Y \\ 2016-17 \end{gathered}$ | 3.00\% | ${ }^{-}$ | - | - | - | - |
| $\begin{gathered} F Y \\ 2015-16 \end{gathered}$ | 1\% ATB, 1\% Merit | 1\% ATB, 1\% Merit | 1\% ATB, 1\% Merit | 25.50\% | - | - |
| $\begin{gathered} F Y \\ 2014-15 \end{gathered}$ | 3.80\% | $\begin{aligned} & 1.5 \% \text { ATB, } 1.5 \% \\ & \text { Merit } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { 2.5\% ATB, } 1.2 \% \\ & \text { Merit } \end{aligned}$ | - | - | - |
| $\begin{gathered} F Y \\ 2013-14 \end{gathered}$ | $\begin{aligned} & \text { 1.5\% ATB, } \\ & \text { 1.6\% Merit } \end{aligned}$ | - | $\begin{aligned} & \text { 2.0\% ATB, } 1.6 \% \\ & \text { Merit } \end{aligned}$ | -7.00\% | -9.80\% | - |
| $\begin{gathered} F Y \\ 2012-13 \end{gathered}$ | . | - | - | Data not available | Data not available | -2.50\% |
| $\begin{gathered} F Y \\ 2011-12 \\ \hline \end{gathered}$ | - | - | - | Data not available | Data not available | - |

*State Division only (members other than Troopers and Judges).

# TOTAL COMPENSATION VALUE 

## -16.4\%

 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 provide value to State employees and have a cost to the State. The following chart outlines the total compensation amounts provided by the State and the market.

| Component of Total Compensation | State of Colorado | Prevailing Market | Variance Between State and Market |
| :---: | :---: | :---: | :---: |
| Average Base Salary* | \$66,033 | \$74,676 | -11.6\% |
| Average Incentive Pay** | n/a | \$4,997 | n/a |
| Medical | $\begin{gathered} \$ 11,000 \\ (16.7 \% \text { of base pay }) \end{gathered}$ | \$11,000 <br> (14.7\% of base pay) | = |
| Dental | $\$ 521$ $(0.8 \%$ of base pay) | $\$ 495$ ( $0.7 \%$ of base pay) | +5.0\% |
| Vision | (Included in medical) | $\begin{gathered} \$ 28 \\ \text { (0.04\% of base pay) } \end{gathered}$ | n/a |
| Retirement | $\begin{gathered} \$ 7,198 \\ \text { (10.9\% of base pay) } \end{gathered}$ | $\begin{gathered} \$ 10,081 \\ \text { (13.5\% of base pay) } \end{gathered}$ | -19.3\% |
| Short-Term Disability** | $\begin{gathered} \$ 99 \\ \text { (0.15\% of base pay) } \end{gathered}$ | $\begin{gathered} \$ 0 \\ \text { (0\% of base pay) } \end{gathered}$ | n/a |
| Long-Term Disability**** | $\$ 0$ (0.0\% of base pay) | $\begin{gathered} \$ 224 \\ \text { (0.3\% of base pay) } \end{gathered}$ | n/a |
| Life and AD\&D Insurance | $\$ 86$ $(0.13 \%$ of base pay) | $\$ 119$ $(0.16 \%$ of base pay $)$ | -18.75\% |
| Total | \$84,937 | \$101,620 | -16.4\% |

*Average base salary of all benchmark classifications at the State, and prevailing market average base median salary of all benchmark classifications.
**State has non-base incentive programs.
${ }^{* * *} A$ value for short term disability has been added to the table because it is a cost to the employer that is a benefit to the employee. There is not a prevailing market value as Gallagher has indicated there are too many variables to calculate a prevailing market value.
****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. These components are a percentage of total compensation.

STATE OF COLORADO VS. MARKET TOTAL COMPENSATION PACKAGE


In Summary:

- Base salary is $77.7 \%$ of total compensation for the State as compared to $73.5 \%$ for the prevailing market
- Benefits (medical, dental, short-term disability, long-term disability and life and AD\&D insurance) account for $13.8 \%$ of total compensation for the State as compared to $11.7 \%$ for the prevailing market
- Retirement benefits account for $8.5 \%$ for the State as compared to $9.9 \%$ for the prevailing market
- Incentives are provided as non-base rewards by the State. Incentives are $4.9 \% \%$ of total compensation for the prevailing market


## -11.6\%

## COMPARED TO

 MARKET MEDIAN
## Findings \& Analysis

Utilizing published survey sources, Gallagher collected market data for 233 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.
$\left.\begin{array}{|c|c|c|c|c|}\hline \text { OVERALL PERCENTAGE DIFFERENCE BETWEEN STATE AVERAGE SALARY \& MARKET } \\ & \text { MEDIAN BASE SALARY }\end{array}\right]$

Overall, when compared to the market, average base salaries of employees are $11.6 \%$ below market median. This is a significant change compared to last year when the State was $4.8 \%$ below market in this category.

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 233 benchmarked classifications (excluding State Trooper classes), approximately 54\% (or 126) of the State's benchmark classifications are compensated within $+/-15 \%$ of the market median.

## Occupational Group Comparison with Market Base Salary

The State's 233 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 MEDIAN (BASE) SALARY |  |  |
| :---: | :---: | :---: |
| Occupational Group | \% Difference from Market Median | Comparison with Market |
| Enforcement and Protective Services | -0.8\% | within highly competitive range |
| Healthcare Services | -11.4\% | potential misalignment |
| Labor, Trades, and Crafts | -13.9\% | potential misalignment |
| Administrative Support and Related | -14.3\% | potential misalignment |
| Professional Services | -13.7\% | potential misalignment |
| Physical Science and Engineering | -13.7\% | potential misalignment |
| Information Technology | -8.4\% | within competitive range |
| State of Colorado | -11.6\% | potential misalignment |

The State's market position compared to last year has significantly reduced. The State now lags in employee salaries for all occupational categories whereas last year the State was highly competitive or within a competitive range for all groups. The occupational groups with the greatest lag in employee salaries are often the ones with the highest turnover and greatest market competition such as Labor, Trades and Crafts. This is likely attributed to state employee pay remaining stagnant while the market continues to move forward at an average of $3 \%$ each year. This could also be attributed to large numbers of employees being hired at the minimum of the range by the state, especially if employees that were higher in the range last year turned over and the lack of the custom salary survey data that is not collected in a maintenance year.

The State will continue to review individual benchmark classifications to ensure appropriate placement in the pay plan in the event this is contributing to employee pay lagging the market. It will also be important to validate benchmarks to account for any outliers in reported salaries. To continue maintaining the overall competitiveness with the market, the State should ensure base salary adjustments occur in accordance with market trends.

# MARKET SALARY INCREASE PROJECTIONS 

## Findings \& Analysis

Proposed Increases to Base Salaries

According to the WorldatWork 2020-2021 Salary Budget Survey, the base salary increase projection for the market in FY 2021-22 is 3\% (median).

Additionally Gallagher performed a custom survey for Colorado regarding the impact of COVID-19 on general salary increase planning and 11 of the 28 organizations responded that there was no change in salary increases because the organization had already paid or still planned to pay salary increases in 2020.

In May of this year the Employers Council conducted a Coronavirus (COVID-19): Salary Budget Update Survey There were 400 participating organizations across Arizona, Colorado, Utah, Wyoming and Other States. Of the 400 participating organizations, 295 of them were from Colorado. Based on the information collected, the 2020 pay increase projection was at $1.1 \%$ and the 2021 pay increase projection was $1.7 \%$.

## 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 | $43 \%$ |
| Step Progression based on length of service | $18 \%$ |
| Cost of Living Adjustment (COLA) | $11 \%$ |
| Across the board General Increase (not cost of |  |
| living) |  |

*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 <br> Rating | Quartile <br> $\mathbf{1}$ | Quartile <br> $\mathbf{2}$ |  | Quartile <br> $\mathbf{3}$ |  | Quartile <br> $\mathbf{4}$ |  | Above <br> Quartile 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Exceptional (level 3) | \% increase | $\%$ increase | $\%$ increase | $\%$ increase | $\%$ increase |  |  |  |
| Successful (level 2) | $\%$ increase | $\%$ increase | $\%$ increase | $\%$ increase | $\%$ increase |  |  |  |
| Below Expectations <br> (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

To continue to move employees toward a prevailing wage and stay aligned with base salaries in the market, the State should consider a $3 \%$ across-the board base salary adjustment. The Department will work with the Office of State Planning and Budgeting to develop the final pay recommendations for consideration in the Governor's November 1 budget request for FY 2021-22.

# MARKET SALARY STRUCTURE COMPARISON 

## -9.1\%

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 competitive with the market average range minimum, midpoint, and maximum.

|  | Market Average <br> Range Minimum | Market Average <br> Range Midpoint | Market Average <br> Range Maximum |
| :--- | :---: | :---: | :---: |
| Overall Percentage Difference <br> from Market Average Salary <br> Structure | $-1.5 \%$ | $-9.1 \%$ | $-8.5 \%$ |

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 | $47.8 \%$ | $59.2 \%$ |

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

Given that some of the State's classifications are broadly defined in terms of functional duties and job level, it is also recommended that 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 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| OccupationalGroup | \% Difference from <br> Market Average <br> Range Midpoint | Current <br> Occupational <br> Group Range <br> Spread | Market <br> Range <br> Spread | Comparison <br> with Market |
| Enforcement and <br> Protective Services | $-0.2 \%$ | $52.8 \%$ | $68.2 \%$ | within highly <br> competitive <br> range |
| Healthcare <br> Services | $-7.9 \%$ | $48.0 \%$ | $59.2 \%$ | within <br> competitive <br> range |
| Labor, Trades and <br> Crafts | $-9.7 \%$ | $41.7 \%$ | $54.7 \%$ | within <br> competitive <br> range |
| Administrative <br> Support and <br> Related | $-20.2 \%$ | $42.7 \%$ | $53.9 \%$ | misalignment <br> with market |
| Professional <br> Services | $-12.3 \%$ | $49.7 \%$ | $64.7 \%$ | possible <br> misalignment |
| Physical Science <br> and Engineering | $-10.9 \%$ | $49.3 \%$ | $58.3 \%$ | possible <br> misalignment |
| Information <br> Technology | $-1.6 \%$ | $69.5 \%$ | $65.2 \%$ | within highly <br> competitive <br> range |

The State is possibly misaligned or misaligned with three occupational groups. Last year, the State was either highly competitive or within the competitive range of all groups.

The lack of adjusting the salary structure in FY 2020-21 likely played a role in the outcome, but this could also be attributed to changes in benchmarks, fewer reported ranges or changes in the ranges reported without conducting a custom compensation survey to obtain market salary data for the maintenance year, as well as potential outliers in the pay ranges.

For example, the Scientific Programmer Analyst II is in pay grade H14. This job was benchmarked to market data matches of Applications Program Analyst and General IT Applications Development. These jobs are heavily information technology based. The market range median for this match was $\$ 89,155$ compared to the mid $\$ 60,000$ 's that was reported for all other jobs in pay grade H14. This outlier greatly impacted the market position for pay grade H 14 . It also impacts the reported average salaries in the section above. Some other jobs found in pay grade H14 are Accountant I, HR Specialist II and Grants Specialist II. It is possible that the Scientific Programmer Analyst II should not be in pay grade H14.

The following table represents how far average State salaries (by occupational group) move through the salary ranges.

| Occupational Group | Average Range Progression (Percentage in Range) | Quartile Distribution |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quartile $1 \text { \% }$ | Quartile 2 \% | $\begin{gathered} \text { Quartile } \\ 3 \% \end{gathered}$ | Quartile $4+\%$ |
| Enforcement and Protective Services | 37.0\% | 11.8\% | 62.9\% | 17.0\% | 8.3\% |
| Healthcare Services | 33.2\% | 17.7\% | 19.4\% | 57.6\% | 5.3\% |
| Labor, Trades, and Crafts | 29.7\% | 44.9\% | 27.4\% | 17.8\% | 9.9\% |
| Administrative Support and Related | 32.7\% | 66.8\% | 18.5\% | 11.15\% | 3.6\% |
| Professional Services | 37.0\% | 50.4\% | 27.4\% | 15.9\% | 6.3\% |
| Physical Sciences and Engineering | 27.5\% | 35.2\% | 32.6\% | 25.8\% | 6.4\% |
| Information Technology | 36.7\% | 49.5\% | 27.3\% | 19.5\% | 3.7\% |

## Salary Structure Recommendations

According to the WorldatWork 2020-21 Salary Budget Survey, the FY 2021-22 projected salary structure adjustments for all industries is $2.0 \%$ (median) and $1.9 \%$ (mean). The State did not adjust salary structures in FY 2020-21 while most industries did and as a result the salary structure did not keep up with the market.

To assist in accurately aligning the State's salary structure with the market, the State should consider adjusting pay ranges by $2 \%$.

Due to examples such as above, the State needs to review individual job classifications within occupational groups in terms of the range minimum, midpoint and maximum for both appropriate internal alignment and validation of the market matches utilized. This is a lengthy process and the state has developed a multi-year written plan to address job classifications.

## STATE PATROL TROOPER

## -9.7\%

## COMPARED TO

 MARKET MEDIAN
# Findings \& Analysis 

Overall comparison shows the State is $9.7 \%$ 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 competitive ( $+/-10 \%$ 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 competitive with the market ( $+/-10 \%$ 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.

## 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 2020 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, 2021, 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.

| STATE VS. MARKET TOP 3 LAW ENFORCEMENT AGENCIES |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Class Title | OCC | Grade | \# of <br> EEs | Current <br> Average <br> Salary | Current <br> Average <br> Monthly | Projected <br> Weighted <br> Mkt Avg | Projected <br> Weighted <br> Mkt Avge <br> $99 \%$ | State From <br> Weighted <br> Mkt Avg |
| A4A3 | STATE <br> PATROL <br> TROOPER | S | S02 | 406 | $\$ 85,720$ | $\$ 7,143$ | \$7,790 | \$7,712 | -7.37\% |

## TO MARKET <br> MEDIAN

As of January 1, 2020, the State Employee Benefits program offered a choice of four medical plans: two plans with deductibles and copays for most major services and two qualified high deductible health plans (HDHP) (i.e., eligible for health savings accounts). Specifically, a deductible and copay plan and HDHP were offered through Kaiser Permanente, and a deductible and copay plan and HDHP were offered through United Healthcare.

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 employees.

Two factors are considered when valuing medical plans: the employer's contribution and the value of the medical plans offered.

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 medical plan chart below depicts the 2020 total effective cost share. The value of the 2020 combined medical offerings by the State was determined to be $\$ 11,000$. This figure was equal to the median value of all survey respondents, also $\$ 11,000$.

It is important to note that since July 1, 2020, different medical plans are now available to state employees. This total compensation study does not reflect the employer contribution or value of these plans but instead utilize the plans available on January 1, 2020.

MEDICAL PLAN VALUE


The HDHP plan was the most prevalent medical plan design offered, followed by the PPO plan.

| Medical Plans Offered | Prevailing <br> Market |
| :--- | :---: |
| HDHP | $45 \%$ |
| PPO | $38 \%$ |
| HMO | $12 \%$ |
| EPO | $4 \%$ |
| POS | $1 \%$ |

The State is contributing $88 \%$ across all medical plans offered for Employee Only coverage. The median contribution across all medical plans offered for the peer group for Employee Only coverage was 85\%. For Family coverage across all medical plans offered, the State contributes $79 \%$, compared to the peer group, where contributions for Family coverage were $75 \%$.

MEDIAN MONTHLY MEDICAL TOTAL PREMIUM


MEDIAN MONTHLY MEDICAL EMPLOYER CONTRIBUTION



A new question was added to the survey this year in order to determine when employers terminate coverage for Health and Welfare benefits when an employee terminates employment. The vast majority, or 74\% of respondents, terminated coverage at the end of the month in which the employee terminates employment. Below is a chart summarizing the findings.

EMPLOYER TIMING FOR TERMINATING BENEFIT COVERAGE (EXITING EMPLOYEES)*


[^0]Additional comments for the "Other" responses included:

- If hired before February 13,2003 , all benefits end on the final paycheck. If hired on or after February 13, 2003, all benefits end at the end of the first pay period after separation
- If term date occurs on the $1^{t \pi}-1^{n n}$ day of the month, medical, dental and vision benefits terminate at the end of the month of employment. If term date occurs on 15th of the month or later, benefits term at the end of the following month after the date of termination
- End of the month for medical benefits; last day of employment for life insurance
- On the last day of employment for all benefit programs
- End of month of employment for medical, dental but last day of employment for all other benefits
- End of month for medical, dental, vision, and FSA, and date of termination for life and disability

Updated Health Savings Account (HSA) Employer Contribution data with 2020 survey results:

| HEALTH SAVINGS ACCOUNT EMPLOYER CONTRIBUTION |  |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :---: |
|  | 50th <br> \%ile | Average | Count | State of <br> Colorado |  |  |
| Employee Only | $\$ 557$ | $\$ 550$ | 34 | $\$ 720$ |  |  |
| Employee Plus Dependent | $\$ 1,100$ | $\$ 1001$ | 33 | $\$ 720$ |  |  |

## Medical Benefit Findings and Recommendations

The combined medical plan value of the State's plan is equal to the median of all survey respondents. As of January 1, 2020, the State offered a wide variety of plan offerings from which employees may choose. Plan provisions vary widely among types of covered benefit service. Please see page 20 in the Appendix for a full list of medical plan provisions. For those electing a HDHP, the contribution to the HSA is more generous than the market for those electing employee only coverage and less generous for those electing family coverage.

The plan deductibles are slightly higher than the prevailing market. However, out of pocket maximums are slightly lower than the market. Similarly, for those electing copay plans, the copays are slightly higher in some areas as compared to the prevailing market and on par for pharmacy and coinsurance for other services. Employee contributions are generally in line with, or are slightly more favorable, for employees as compared to the prevailing market. Offering choice allows employees to balance desired levels of coverage with required contributions.

It is important to note that last year's report showed a market lag of $17 \%$. This is largely attributable to varied survey respondents each year. In 2019, approximately 44\% of the same employers respond year over year (2018 vs 2019 survey). That said, the composition up of employers in a survey will change from year to year. In 2019 survey results, the make-up of employers contained a large number of employers who have lower employee contributions or lower employee out of pocket (when looking at all medical plan design elements), or a combination of these two factors. This drove the average and median market plan values higher than in years past. The State's overall medical plan value increased by $6.3 \%$ from $2018(\$ 9,425)$ to $2019(\$ 10,015)$, which is consistent with the annual healthcare trend.

When considering these factors over the last four years, the State is on par with the market as shown in the chart below.

| STATE OF COLORADO ANNUAL COMPENSATION REPORT - GALLAGHER MEDICAL TOTAL |
| :--- | :---: | :---: | :---: | :---: |
| EFFECTIVE COST SHARE |

## 5.0\%

ABOVE MARKET
MEDIAN

For purposes of evaluating dental benefits, if an employer offers more than one dental plan, the plan with the highest enrollment is valued. Dental coverage was offered by $97 \%$ of all survey respondents who participated in the custom survey in the FY 2020-21 Annual Compensation Report. 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 $\$ 521$. This figure is approximately $5.0 \%$ above the median value of all survey respondents, for $\$ 495$.

## DENTAL PLAN VALUE



## Dental Benefit Findings and Recommendations

The State's contribution for dental is slightly higher than the median of all survey participants. 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 $\$ 1,500$.

## ADDITIONAL BENEFITS

## VISION BENEFITS

For FY 2020-21, vision coverage was offered by $97 \%$ of all survey respondents, and three organizations indicated their vision plan is bundled with medical. For employers offering vision coverage as a stand-alone benefit, the average employer cost was $\$ 28$ per month. Nineteen of the responding organizations offer vision coverage on a voluntary (fully employee paid) basis.

## Vision Benefits Findings and Recommendations

Gallagher reported that 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.

As of July 1, 2020, the State offers a stand-alone vision plan; therefore, it should be possible to value the true cost for the next annual compensation report.

## LIFE AND ACCIDENTAL DEATH \& DISMEMBERMENT (AD\&D) INSURANCE

The cost for the State's life and AD\&D insurance was lower than the prevailing market due to lower premium rates achieved for 2020. The State's Life and AD\&D insurance is $0.13 \%$ of employee's pay and the market average is $0.16 \%$. Note that life insurance rates are 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.

## LIFE AND AD\&D INSURANCE



As reported in FY 2020-21, nearly 75\% of the prevailing market offers life insurance as a multiple of salary. The remaining 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. Similar practice is also found with AD\&D. Over $69 \%$ of respondents offer AD\&D coverage as a multiple of salary. For both life insurance and AD\&D, 1.5 times salary was the median coverage offered. Offering a multiple of salary for $A D \& D$ is on par with the prevailing market practice.

## Life and AD\&D Insurance Findings

As reported in FY 2020-21, the number of survey respondents is more heavily weighted toward public sector employers, which tend to have older demographics, and therefore associated cost. Gallagher presumes the State's same cost of life and AD\&D insurance as compared to the prevailing market is likely due to the State having similar 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.

## DISABILITY BENEFITS

Through PERA, the State provides a two-tiered disability benefit consisting of short-term disability insurance and disability retirement for eligible employees as part of the overall retirement benefit. In addition, the State offers a voluntary (fully employee paid) long-term disability plan to supplement the disability benefit offered through PERA. Therefore, the State's cost for a stand-alone long-term disability benefit is $\$ 0$. Among survey respondents, the vast majority offer employer paid long-term disability coverage.

The State offers employer paid short-term disability coverage to eligible employees who are (1) not vested in PERA and enrolled in the DB plan, (2) enrolled in the DC plan, and (3) to cover 30 of the 60 day waiting period for employees vested and enrolled in the DB plan. The short-term disability benefit pays $60 \%$ of pre-disability covered compensation, up to a weekly benefit payment of $\$ 3,000$ per week, for up to 150 day. This is following
the 30 calendar day waiting period or until the end of all sick leave, whichever is longer. The State's cost for the short-term disability benefit is $.15 \%$ of pay.

## State Disability Benefit Findings and Recommendations

The State offers a voluntary (fully employee paid) long-term disability option; 78\% of the prevailing market offers an employer paid long-term disability program. With a State disability benefit provided through PERA, the apparent lack of an employer paid long-term disability program is mitigated to a large degree. The State's short-term disability benefit is generally on par with the prevailing market for eligible State employees, although plan provisions vary greatly among employers.

Gallagher calculated the State's short-term disability plan cost by multiplying the 2019 short-term disability plan rate by the State's median annual salary. Based upon the State's short-term disability plan design of $60 \%$ benefit up to $\$ 3,000$ weekly maximum benefit, Gallagher expects the full short-term disability benefit to be available using the State's median annual salary as it is difficult to separately assess the value of the State's short-term disability plan because a portion of the State's cost is embedded within the retirement plan. Given the integration of the portion of the State's short-term disability plan for eligible employees and the fact that the State funded short-term disability plan pays as an offset for the PERA disability benefit for eligible disabled members, it is difficult to find a comparable market value for any similar short-term disability plan. Future surveys will attempt to address the market short-term disability benefit costs.

## SICK LEAVE, ANNUAL (VACATION/PERSONAL) LEAVE, AND OTHER LEAVE TYPES

The State currently offers employees a comprehensive leave program that includes, but is not limited to, annual (vacation), sick, holiday, family medical, short-term disability and military. Employees earn annual 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 prorated basis.

The State's separate leave accrual methodology for annual and sick leave is a traditional system, prevalent in the market, compared to the combined bank, pooled leave systems.

| SICK LEAVE |  |  |  |
| :---: | :---: | :---: | :---: |
| Sick Leave (By Days) | State of Colorado | Prevailing Market Average | Prevailing Market Median (2018) |
| 1 year of service | 10 days | 12 days | 12 days |
| 5 years of service | 10 days | 12 days | 12 days |
| 7 years of service | 10 days | 12 days | 12 days |
| 10 years of service | 10 days | 13 days | 12 days |
| 15 years of service | 10 days | 13 days | 12 days |
| 20 years of service | 10 days | 13 days | 12 days |
| 25 years of service | 10 days | 13 days | 12 days |


| VACATION LEAVE* |  |  |  |
| :---: | :---: | :---: | :---: |
| Vacation Leave (By Days) | State of Colorado | Prevailing Market Average | Prevailing Market Median (2018) |
| 1 year of service | 12 days | 14 days | 12 days |
| 5 years of service | 12 days | 17 days | 15 days |
| 7 years of service | 15 days | 18 days | 16 days |
| 10 years of service | 15 days | 20 days | 19 days |
| 15 years of service | 18 days | 22 days | 21 days |
| 20 years of service | 21 days | 23 days | 24 days |
| 25 years of service | 21 days | 24 days | 24 days |

${ }^{*}$ Reflects prevailing market accrual rates, based on years of service. The State's accrual is based on the following years of service: 1-5 years, 6-10 years, 11-15 years, and 16 years or more.

## Findings and Recommendations

A comprehensive study of leave benefits is not conducted during the maintenance year; however, it's imperative to address three findings and recommendations from the FY 2020-21 Annual Compensation Report. The Director is statutorily required to "prescribe procedures for the types, amounts, and conditions for all leave benefits (nonstatutory) that are typically consistent with prevailing practices." Paid sick leave is excluded from this provision as it is a statutory leave benefit and must be approved by the General Assembly.

1. The State's sick and annual leave accrual rates are below the prevailing market for the number of paid days earned by years of service.

During the 1988 legislative session, the provision that established the State's ten paid sick leave days from 15 with a carryover maximum of 45 days for each fiscal year was passed, enacted and effective July 1, 1988. Given that the number of paid sick leave days were reduced and have been in practice for over 30 years, the Director will continue to study and consider pursuing a statutory amendment in the future to change the number of paid sick leave days to 12 and maximum number of carryover paid sick leave days, to match the prevailing market median and for overall market competitiveness.

| SICK LEAVE <br> (BY DAYS) | FY 2018-2019 <br> ANNUAL COMPENSATION <br> REPORT |  | FY 2020-21 <br> ANNUAL COMPENSATION <br> REPORT |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | State of <br> Colorado | Prevailing <br> Market <br> Average | Prevailing <br> Market <br> Median | Prevailing <br> Market <br> Average | Prevailing <br> Market <br> Median |
| 1 year of <br> service | 10 | 9.4 | 12 | 12 | 12 |
| 5 years of <br> service | 10 | 9.4 | 12 | 12 | 12 |
| 7 years of <br> service | 10 | 9.4 | 12 | 12 | 12 |
| 10 year of <br> service | 10 | 9.4 | 12 | 13 | 12 |
| 15 years <br> of service | 10 | 9.4 | 12 | 13 | 12 |
| 20 years <br> of service | 10 | 9.4 | 12 | 13 | 12 |
| 25 years <br> of service | 10 | 9.4 | 12 | 13 | 12 |

The annual leave accrual rate has been in existence for over 30 years. When an employee begins year 16 of service, they have reached the highest accrual rate of 14 hours per month, 21 days per fiscal year. DHR and the Director will consider increasing the annual leave accrual rates by years of service to match the prevailing market median and for overall market competitiveness.

|  | AL ERSONAL <br> E YS | FY 2018-2019 <br> ANNUAL COMPENSATION REPORT |  | FY 2020-21ANNUAL COMPENSATIONREPORT |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | State of Colorado | Prevailing Market Average | Prevailing Market Median | Prevailing Market Average | Prevailing Market Median |
| 1 year of service | 12 | 13.7 | 12 | 14 | 12 |
| 5 years of service | 12 | 17.7 | 15.5 | 17 | 15 |
| 7 years of service | 15 | 18.4 | 16 | 18 | 16 |
| 10 year of service | 15 | 21.1 | 20 | 20 | 19 |
| 15 years of service | 18 | 22.5 | 21 | 22 | 21 |
| 20 years of service | 21 | 23.7 | 24 | 23 | 24 |
| 25 years of service | 21 | 24 | 24 | 24 | 24 |

2. The State's definition of family members for sick leave purposes did not include other "immediate" household members or grandparents and grandchildren. Of those organizations providing sick days, $81 \%$ indicated that sick leave can be used for employee's parents, child(ren), spouse or other "immediate" household members, and occasionally, for grandparents and grandchildren.

The Director revised and adopted the sick leave rule effective April 1, 2020 to clarify sick leave may be used for the health needs of "the employee or the employee's family members including domestic partners, in-laws and step relatives. Special consideration will also be given to any other person whose association with the employee is similar to a family member."
3. The State does not currently offer paid parental leave and is a future area to be studied. Of those organizations that responded to the survey, $38 \%$ provide paid parental leave.

Parental leave provides partial or fully compensated time away from work for the birth of a child, followed by bonding with a child, and adoption or placement of a child. Paid family leave or paid family medical leave provides for partially or fully compensated time away from work for caring and bonding with a newly arrived child, whether through circumstances such as birth, adoption, or foster placement of a child under 18 years of age, or caring for a family member or person with a significant bond that is like a family relationship that has a serious health condition including domestic abuse, sexual assault or abuse, and stalking, as well as for qualifying events for military exigency.

For FY 2020-21, the Governor's November 1, 2019 Budget Request included the Director's request for spending authority of $\$ 14,994,661$ statewide to cover the backfill costs associated with state employees utilizing 80 hours of paid family medical leave in FY 2020-21 and an additional spending authority of $\$ 15,444,500$ in FY 2021-22 and ongoing.

While the Joint Budget Committee denied the budget request for paid family medical leave, DHR and the Director continue to study and consider other options in implementing paid parental or paid family medical leave in the near future.

## RETIREMENT BENEFITS

-19.3\%
BELOW MARKET
MEDIAN

The State provides retirement benefits for employees through PERA. Neither the State nor employees contribute to Social Security. Newly hired State employees have the choice between two basic retirement plans: the DC plan or the DC plan.

On June 4, 2018, Governor Hickenlooper signed into law Senate Bill 18-200 (SB 18-200), Modifications to PERA Public Employees' Retirement Association to Eliminate Unfunded Liability. This report considers the impact of such new legislation, as we understand it.

The State currently contributes $10.9 \%$ of each employee's salary toward the PERA retirement benefit structure. Employees contribution will increase from 10.0\% to 10.5\% effective July 1, 2021. State Troopers, Correctional Officer I-IV, Firefighters I-VII, and CBI Agents, PERA refers to these groupings as Safety Officers, contributions will increase from $12.0 \%$ to $12.5 \%$ effective July 1, 2021. These changes can be seen below.

| Effective Date <br> DPS Division | Judicial <br> Division1 | Local <br> Government <br> Division | Safety Offices |  |
| :--- | :---: | :---: | :---: | :---: |
| July 1, 2020 | $10.00 \%$ | $15.00 \%$ | $8.50 \%$ | $12.00 \%$ |
| July 1,2021 | $10.50 \%$ | $15.50 \%$ | $8.50 \%$ | $12.50 \%$ |

In addition, statute requires the State, as a PERA employer, to contribute an incremental percentage increase each year toward the Amortization Equalization Disbursement (AED) and the Supplemental Amortization Equalization Disbursement (SAED). C.R.S. 24-51-411 sections 3.5 and 6.5 state that AED and SAED do not increase beyond calendar year 2018; both have reached the maximum of $5 \%$.

With the passing of SB 18-200, we have made the following adjustments/assumptions in valuing retirement benefits received by the State's employees:

- Employee contribution rate of $10.5 \%$, considering the $0.5 \%$ increase under the Automatic Adjustment Provision
- Annual increase in retirement benefits (COLA) of $1.25 \%$
- The Highest Average Salary calculation based on five years
- Any legislated change that is being phased in is considered fully applicable for purposes of this analysis

A portion of the State contribution to PERA goes to the Health Care Trust Fund to pay health care premium subsidies to benefit recipients who participate in the PERACare Health Benefits Program. While this is ultimately of value, we are not segregating and considering this benefit separately for purposes of this study.

Also covered by a portion of the State's contributions to PERA is a form of disability benefit. As with the retiree health care subsidy, there is an embedded value to this benefit, but we are not considering this as a separate benefit (or cost) for purposes of this study.

Social Security is fully being considered for purposes of this study. Meaning, when comparing the State to market organizations, both the benefits and cost of Social Security are being valued when applicable for respective organizations.

This year additional attention was paid to the value of the DC plan exclusively and how it relates to the market.

See page 22 in the Appendix for details on the methodology for determining retirement plan values.

## State Retirement Findings

This study finds that the State's retirement plan is $-19.3 \%$ below the prevailing market. Again, this takes into consideration Social Security costs and benefits paid by other employers. Gallagher determined that the State's retirement value for employees in the DB plan is $10.8 \%$ of annual salary and the State's retirement value for employees in the DC plan is $10.9 \%$ of annual salary.

The market average of all plans combined is valued at $13.8 \%$ of base salary, while the median is $13.5 \%$ of base salary. The overall market value was calculated by taking the market median of all plans (13.5\%), and the value of the DB and DC plan combined ( $10.9 \%$ ) for the State.

## TOTAL RETIREMENT VALUE COMPARISON



## Defined Benefit Findings

The DB alone in the State is valued at $10.8 \%$ of annual salary. When compared to the market value of DB plans only at $15.1 \%$, the State lags the market 28.5\%. Plan provisions that lower the value of the State's DB plan as compared to other DB plans in the market are a five year final average pay, higher employee contributions and the two year wait for a COLA.

## Defined Contribution Findings

The State's retirement DC plan for enrolled employees is $10.9 \%$ of annual salary. When compared to the ten DC plans outlined in the survey responses, the State leads the market $3.8 \%$, as the DC plans were valued at 10.5\%.

Because there were only ten DC plans to analyze, it is beneficial to compare this plan on a national scope. The table below includes all employers, not just large employers, as the breakout for large employers was not available. The chart does not include Social Security benefits, but it could be assumed that the private sector plans contribute 6.2\% of pay. The 50 th percentile for the private sector would be approximately $8.7 \%$ if we include Social Security. PERA's benefits would rank above the 50 n percentile since it is valued at $10.9 \%$. Please note, it is assumed the administrative cost and the cost to fund frozen plans with unfunded benefits would be included in the Bureau of Labor Statistics numbers, but not included in the PERA numbers. Therefore, the PERA benefits would rank higher in an exact comparison.

PENSION BENEFITS AS A PERCENTAGE OF TOTAL SALARY


Source: US Bureau of Labor Statistics

# FY 2021-22 COST PROJECTIONS 

The Department used the July 2020 salaries for all classified staff to develop the figures presented here. 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 the prevailing market. The Department will work with the Office of State Planning \& Budgeting to develop the final pay recommendations for consideration in the Governor's November 1 Budget Request for FY 2021-22.

## Salary Structure Adjustments

Despite the pandemic, according to the WorldatWork 2020-21 Salary Budget Survey, the FY 2020-21 salary structure adjustments for all industries is 2.0\% (median) and 1.9\% (mean) and remains the same for FY 2021-22. The State did not adjust salary structures in FY 2020-21 while most industries did. Therefore, the State's salary structures lag the market and should be adjusted.

To become competitive with the market, the Department recommends the State adjust job class pay ranges by $2 \%$. 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 2021-22, the Department estimates that the upward movement of range minimums will cost the State $\$ 3,152,318$, 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.

## Salary Adjustments

To continue to move employees toward a prevailing wage and stay aligned with base salaries in the market, the State should consider a $3 \%$ across-the-board adjustment. Employees did not receive an across-the-board adjustment in FY 2020-21 and realized a $1.25 \%$ increase in PERA contributions while many organizations moved forward with increases. When state employee pay remains stagnant and the market continues to move forward it leads to retention and recruitment difficulties.

The Department and Director will continue to work with the Office of State Planning and Budgeting to develop the final salary adjustments included in the Governor's November 1 Budget Request.

## Merit Matrix Adjustments to Base Pay

The Department is not recommending merit pay for FY 2021-22.

## Across-the-Board Adjustment

Should the State pursue salary increases through an across-the-board adjustment, employees would receive base-building funding up to the range maximum for their classification. Any amount above the range maximum is annualized and paid as a one-time lump sum adjustment at the beginning of the fiscal year. Estimates indicate that it would cost $\$ 67,675,455$ in total funds to provide a $3 \%$ across-the-board adjustment for classified employees in FY 2021-22, including a 2\% movement in salary structures.

## System Maintenance Studies

The Director is statutorily responsible for maintaining and revising the system of classes covering all positions in the State Personnel System. Such maintenance may include the assignment of appropriate pay grades that reflect prevailing wage as mandated by CRS 24-50-104(1)(a). For FY 2021-22, the Department conducted the IT Professional Deconsolidation system maintenance study. System maintenance studies are implemented on a "dollar-for-dollar" basis where an employee's current salary remains unchanged when a class is moved to a new grade. Individual employee salaries that are below the new grade minimum are adjusted upward to the new grade minimum. If current salaries are above the maximum of the new grade, employees maintain their current salaries for up to three years as authorized by C.R.S. 24-50-104(1)(e). If current salaries are below the minimum of the new grade, employee salaries are increased to the new minimum, which results in cost.

On December 19, 2019, the final Job Evaluation Letter for the IT Professional Deconsolidation system maintenance study was published. The IT Professional class series categorizes IT positions into one of four broad classes with broad pay ranges. This study created multiple individual classes for specific IT professions. At the time of publication it was roughly estimated that the cost impact was $\$ 1,001,322.00$ for FY 2021-22.

In accordance with rules regarding the order of multiple actions on the same effective date, system maintenance studies are implemented first. For this reason, these calculations do not include any annual compensation survey adjustments. The implementation date of July 1, 2021 coincides with the presumed implementation of any annual compensation adjustments.

In response to the current and future economic and budgetary climate, in consultation with State budget staff, agency and institutions of higher education leadership, and DHR, the Director made the difficult decision to suspend the process for implementing the IT Professional Deconsolidation system maintenance study including the cost projections for this report and subsequent budget request for FY 2021-22.

As the State's economy and budget recovers, the Director will continue to monitor the effects of implementing the study and make recommendations accordingly. Prior to making future recommendations, the market data will be updated and reviewed to determine if relevant changes need to be considered.

## 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 2020 in preparation for the Governor's November 1 Budget Request for FY 2021-22.

## APPENDIX

## Benchmark Class Titles

| Benchmark Title | $\begin{aligned} & \text { Includ } \\ & \text { FY 2021-2 } \end{aligned}$ | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Accountant I | X | x | X |
| Accountant II | x | x |  |
| Accountant IV | X | X |  |
| Accounting Technician I | X | x | X |
| Accounting Technician III | X | X | X |
| Actuary 1 | x |  |  |
| Actuary II | X |  |  |
| Admin Assistant I | X | X | X |
| Admin Assistant II | X | x | X |
| Admin Assistant III | X | X | X |
| Aircraft Pilot | x | X |  |
| Analyst II | X |  |  |
| Analyst III | X | X |  |
| Analyst IV | X | x |  |


| Benchmark Title | Included in FY 2021-22 Study | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Animal Care I | X | X |  |
| Appraiser I | X | X |  |
| Architect I | X | X |  |
| Archivist I | X | X |  |
| Arts Professional I | X | X | X |
| Arts Professional II | X | X | X |
| Arts Technician I | X | X |  |
| Auditor I | X | X |  |
| Auditor II | X | X |  |
| Auditor V | X | X |  |
| Barber / Cosmetologist | X | X |  |
| Budget \& Policy Anlst IV | X | X |  |
| Budget Analyst I | X | X | X |
| Chaplain I | X | X |  |
| Chaplain II | X | X |  |
| Child Care Aide | X | X |  |
| Civil Eng Proj Manager I | X | X |  |
| Client Care Aide II | X | X |  |


| Benchmark Title | Included in FY 2021-22 Study | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Clinical Behav Spec II | x | X |  |
| Clinical Therapist I | x | x |  |
| Collections Rep II | X | X | X |
| Community Parole Off | X | x |  |
| Community Parole Supv | X | X |  |
| Community Worker II | X | X |  |
| Comp Insurance Spec II | X | X | X |
| Comp Insurance Spec III | X | X | X |
| Compl Investigator II | X | X |  |
| Compliance Specialist II | X | X | X |
| Compliance Specialist III | X | X | X |
| Compliance Specialist V | X | X |  |
| Computer Oper Supv I | X | x |  |
| Computer Operator II | X | X |  |
| Contract Administrator II | X | X | X |
| Contract Administrator IV | X | X | X |
| Contract Administrator VI | X | X |  |
| Controller III | X | X |  |


| Benchmark Title | Included in FY 2021-22 Study | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Corr Supp Trades Supv 1 | x | X |  |
| Corr/Yth/Clin Sec Off I | x | x |  |
| Corr/Yth/Clin Sec Off II | x |  |  |
| Corr/Yth/Cln Sec Supv III | X | X |  |
| Corrections Case Mgr I | x | X |  |
| Corrl Account Sales Rep | x | x | X |
| Criminal Investigator I | X | X |  |
| Criminal Investigator II | X | X |  |
| Cust Support Coord I | x |  |  |
| Custodian I | X | X |  |
| Custodian III | X | X |  |
| Data Entry Operator I | X | X |  |
| Data Entry Operator II | X | X |  |
| Data Management III | X | X |  |
| Dental Care I | X | X |  |
| Dental Care IV | X | X |  |
| Dentist I | X | X |  |
| Designer/Planner | X | x | x |


| Benchmark Title | Included in FY 2021-22 Study | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Diag Proced Technol II | X | X |  |
| Dietitian II | X | X |  |
| Dietitian III | X | X |  |
| Dining Services III | X | X |  |
| Dining Services V | X | X |  |
| Early Childhood Educ I | X | X |  |
| Electrical Trades II | X | X | X |
| Electrical Trades III | X | X |  |
| Electronic Engineer I | X | X |  |
| Electronic Engineer II | X | X | X |
| Electronic Engineer III | X | X | X |
| Electronic Engineer IV | X | X |  |
| Electronic Specialist I | X | X |  |
| Electronics Spec II | X | X |  |
| Electronic Specialist III |  | X |  |
| Electronics Spec IV | X | X |  |
| Emer Prep \& Comm Spec III | X | X |  |
| Engineer-In-Training I | X | X |  |


| Benchmark Title | Included in FY 2021-22 Study | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Engr/Phys Sci Asst II | X | X | X |
| Engr/Phys Sci Asst III | X | X | X |
| Engr/Phys Sci Tech I | X | X |  |
| Engr/Phys Sci Tech III | X | X |  |
| Environ Protect Spec II | X | X | X |
| Environ Protect Spec V | X | X |  |
| Equipment Mechanic II | X | X | X |
| Equipment Operator II | X | X |  |
| Equipment Operator IV | X | X |  |
| Fin/Credit Examiner I | X | X | X |
| Fin/Credit Examiner II | X | X |  |
| Fingerprint Examiner I | X | X |  |
| Food Serv Mgr III | X | X |  |
| General Labor I | X | X |  |
| Grants Specialist li | X | X |  |
| Grounds \& Nursery I | X | X |  |
| Hcs Trainee I | X |  |  |
| Health Care Tech I | X | X |  |


| Benchmark Title | Included in FY 2021-22 Study | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Health Professional II | X | X |  |
| Health Professional III | X | X |  |
| Health Professional IV | X | X |  |
| Health Professional V | X | X |  |
| Hearings Officer II | X | X |  |
| Human Resources Spec II | X | X | X |
| Human Resources Spec III | X | X | X |
| Human Resources Spec IV | X | X | X |
| Human Resources Spec VII | X | X |  |
| Inspector I | X | X |  |
| Investment Officer III | X | X |  |
| IT Manager | X | X |  |
| IT Professional | X | X |  |
| IT Supervisor | X | X |  |
| IT Technician | X | X |  |
| Labor/Employment Spec II | X | X |  |
| Labor/Employment Spec V | X | X |  |
| Laboratory Support I | X | X |  |


| Benchmark Title | Included in FY 2021-22 Study | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Laboratory Technology II | X | X |  |
| Landscape Architect I | X | X |  |
| Legal Assistant II | X | X | X |
| Librarian I | X | X | X |
| Library Technician I | X | X |  |
| Lif/Soc Sci Rsrch/Sci III | X | X |  |
| Lif/Soc Sci Rsrch/Sci IV | X | X |  |
| LTC Operations I | X | X |  |
| LTC Trainee I | X | X |  |
| Machining Trades II | X | X | X |
| Machining Trades IV | X | X |  |
| Management | X | X |  |
| Materials Handler I | X | X |  |
| Media Specialist II | X | X |  |
| Media Specialist V | X | X |  |
| Medical Records Tech II | X | X |  |
| Mid-Level Provider | X | X |  |
| Mktg \& Comm Spec III | X | X | X |


| Benchmark Title | Included in FY 2021-22 Study | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Mktg \& Comm Spec V | X | X |  |
| Mktg \& Comm Spec VI | X | X |  |
| Museum Guide | X | X |  |
| Nurse Consultant | X | X |  |
| Nurse I | X | X |  |
| Nurse II | X | X |  |
| Nurse V | X | X |  |
| Office Manager I | X | X |  |
| Park Manager II | X | X |  |
| Park Manager IV | X | X |  |
| Pharmacist III | X | X |  |
| Pharmacy Technician I | X | X |  |
| Phy Sci Res/Scientist I | X | X |  |
| Phy Sci Res/Scientist II | X | X |  |
| Phy Sci Res/Scientist III | X | X |  |
| Physician II | X | X |  |
| Pipe/Mech Trades II | X | X |  |
| Pipe/Mech Trades III | X | X |  |


| Benchmark Title | Included in FY 2021-22 Study | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Police Communication Tech | X | X |  |
| Production I | X | X | X |
| Production V | X | X |  |
| Prof Land Surveyor I | X | X |  |
| Professional Engineer II | X | X | X |
| Professional Engineer IV | X | X |  |
| Program Assistant I | X | X |  |
| Program Assistant II | X | X |  |
| Project Coordinator | X | X | X |
| Project Manager I | X | X | X |
| Project Planner I | X | X |  |
| Property Tax Spec II | X | X |  |
| Psychologist I | X | X |  |
| Psychologist II | X | X |  |
| Pub Hlth Med Admin I | X | X |  |
| Purchasing Agent II | X | X | X |
| Purchasing Agent III | X | X | X |
| Purchasing Agent IV | X | X | X |


| Benchmark Title | Included in FY 2021-22 Study | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Purchasing Agent VI | X | X |  |
| Rate/Financial Analyst II | X | X | X |
| Rate/Financial Analyst III | X | X | X |
| Rate/Financial Analyst V | X | X |  |
| Real Estate Spec IV | X | X | X |
| Real Estate Spec VI | X | X |  |
| Records Administrator I | X | X |  |
| Rehabilitation Couns I | X | X |  |
| Rehabilitation Couns II | X | X |  |
| Rehabilitation Supv I | X | X |  |
| Rehabilitation Supv II | X | X |  |
| Retail Bus Rep | X | X |  |
| Safety Security Off I | X | X | X |
| Safety Security Off III | X | X |  |
| Safety Specialist II | X | X | X |
| Safety Specialist III | X | X | X |
| Safety Specialist IV | X | X | X |
| Sales Assistant III | X | X |  |


| Benchmark Title | Included in FY 2021-22 Study | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Sales Manager II | x | x |  |
| Scheduler | X | X |  |
| Scint Prgmr/Analyst II | X | X |  |
| Scint Prgmr/Analyst IV | X | X |  |
| Security I | X | x |  |
| Security III | X | X |  |
| Service Dispatcher | X | x |  |
| Social Work/Counselor II | X | x |  |
| Social Work/Counselor III | x | x |  |
| State Teacher I | X | X |  |
| Statistical Analyst II | x | x |  |
| Statistical Analyst IV | X | X |  |
| Structural Trades I | X | x |  |
| Structural Trades II | X | X | x |
| Systems Monitoring Coordinator I | X | x |  |
| Systems Monitoring Coordinator II | X | X |  |
| Systems Monitoring Coordinator III | X | X |  |


| Benchmark Title | Included in FY 2021-22 Study | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Technician II | X | X | X |
| Technician III | X | X | X |
| Technician IV | X | X | X |
| Telecommunications Engineer I | X | X |  |
| Telecommunications Engineer II | X | X |  |
| Telecommunications Engineer III | X | X |  |
| Telecommunications Engineer IV | X | X |  |
| Telecommunications Specialist I | X | X |  |
| Telecommunications Specialist II | X | X |  |
| Telecommunications Specialist III | X | X |  |
| Telecommunications Specialist IV | X | X |  |
| Therapist II | X | X |  |
| Therapist III | X | X |  |
| Therapy Assistant II | X | X |  |
| Therapy Assistant IV | X | X |  |
| Training Specialist III | X | X | X |
| Training Specialist V | X | X |  |
| Transportation Mtc I | X | X |  |


| Benchmark Title | Included in FY 2021-22 Study | Published Survey Data | Survey Sources Includes Data from 2018* |
| :---: | :---: | :---: | :---: |
| Transportation Mtc II | X | X |  |
| Utility Plant Oper I | X | X | X |
| Veterinarian I | x | X |  |
| Veterinarian II | X | X |  |
| Veterinary Technology I | X | X |  |
| Veterinary Technology II | X | X |  |
| Wildlife Manager I | x | x |  |
| Wildlife Manager III | X | X |  |
| Wildlife Manager V | x | X |  |
| Youth Serv Counselor I | X | x |  |

[^1]
## Job Matching and Survey Data Cuts

Market salary data was collected for each benchmark job using the same job matches identified during the total compensation study in FY 2020-21.

Market salary information was unavailable for the following job matches. In most cases the job match and/or identified career level was unavailable.

| Benchmark Job Code | Benchmark Job | Survey Source | Survey Job Match Title | Comments |
| :---: | :---: | :---: | :---: | :---: |
| H6L1 | Corrl Account Sales Rep | Employers Council Benchmark Arizona/Colorado/Utah/Wyoming, 2020 | Sales <br> Representative <br> II | Job match no longer available |
| H601 | Retail Bus Rep | Employers Council Benchmark Arizona/Colorado/Utah/Wyoming, 2020 | Sales <br> Representative | Job match no longer available |
| H6E4 | Lif/Soc Sci Rsrch/Sci IV | Employers Council Benchmark Arizona/Colorado/Utah/Wyoming, 2020 | Scientist III | Job match no longer available |
| I2C5 | Professional Engineer <br> II | Employers Council Benchmark Arizona/Colorado/Utah/Wyoming, 2020 | Facilities Engineer III | Job match no longer available |
| I2C5 | Professional Engineer <br> II | Employers Council Benchmark Arizona/Colorado/Utah/Wyoming, 2020 | Quality Control Engineer III | Job match no longer available |
| C6S5 | Nurse V | Mercer IHN Module 5 - Healthcare Individual Contributors, 2019 | Nurse Manager (RN) | Job match no longer available |
| C8E3 | Pharmacist III | Mercer IHN Module 5 - Healthcare Individual Contributors, 2019 | Pharmacy Supervisor | Job match no longer available |

Similarly, market salary data was collected for each benchmark job within the six additional job classes using the same job matches identified during 2019.

Market salary information was unavailable for the following job matches. In most cases, the survey job match title was updated in the recent version of the survey while retaining the same job match description.

| Benchmark Job Code | Benchmark Job | Survey Source | Survey Job Match Title | Comments |
| :---: | :---: | :---: | :---: | :---: |
| 15E2 | Electronics Specialist I | Mercer Metro Benchmark South Central, 2019 | Manufacturing <br> Electronic Equipment <br> Technician - Entry Para- <br> Professional (S1) | Job match no longer available. Survey utilizes a new job match title for the same job match description |
| 15E3 | Electronics Specialist II | Mercer Metro Benchmark South Central, 2019 | Manufacturing <br> Electronic Equipment <br> Technician - <br> Experienced Para- <br> Professional (S2) | Job match no longer available. Survey utilizes a new job match title for the same job match description |
| 16A2 | Telecommunications Specialist I | Mercer Metro Benchmark South Central, 2019 | Telecommunications Engineering Technicians - Entry Para-Professional (S1) - Mercer Combined Job | Job match no longer available. Survey utilizes a new job match title for the same job match description |
| 16A3 | Telecommunications Technician II | Mercer Metro Benchmark South Central, 2019 | Telecommunications Engineering Technicians <br> - Experienced Para- <br> Professional (S2) - <br> Mercer Combined Job | Job match no longer available. Survey utilizes a new job match title for the same job match description |
| 16A4 | Telecommunications Technician III | Mercer Metro Benchmark South Central, 2019 | Telecommunications <br> Engineering Technicians <br> - Senior Para- <br> Professional (S3) - <br> Mercer Combined Job | Job match no longer available. Survey utilizes a new job match title for the same job match description |

The FY 2020-21 total compensation study included a custom survey component, which gathered salary information from comparable organizations, including comparable states. To avoid overlap between the custom survey and the NCASG published survey, some of the NCASG matches were removed from the FY 2020-21 study where custom data was received. These matches have been included in the raw market salary data provided in the maintenance year study.

| Job Code | Survey Job Title | Job Code | Survey Job Title |
| :---: | :---: | :---: | :---: |
| A2A2 | Arson Investigator | A1A1 | Offender Classification Specialist |
| A1A1 | Correctional Counselor | C5K2 | Physical Therapist |
| A2A3 | Correctional Investigation Specialist | C6S4 | Physician Assistant |
| A1D2 | Correctional Officer | A1L1 | Prison Industries Supervisor |
| A1D5 | Correctional Sergeant | A3C1 | Probation and Parole Officer |
| A2A2 | Criminal Investigator | A3C3 | Probation And Parole Supervisor |
| C6Q1 | Dental Assistant | C6P2 | Psychiatric Aide |
| C6Q4 | Dental Hygienist | C1K1 | Public Health Programs Administrator (MD) |
| C1H1 | Dentist | C8B2 | Registered Dietitian |
| C7C3 | Health Educator | C6S2 | Registered Nurse |
| C7C3 | Health Services Evaluator | C4L2 | Social Worker |
| C6S4 | Nurse Practitioner | C5K2 | Speech-Language Pathologist |


| C5K2 | Occupational Therapist | C4L2 | Substance Abuse Counselor |
| :--- | :--- | :--- | :--- |

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

| Job Code | Survey <br> Source | Survey Job Title |  | New Data Cut |  | Former Data Cut |
| :---: | :--- | :--- | :--- | :--- | :---: | :---: |
| H8A4 | COMPD-BEN- <br> WEST-JUL19 | Accounting Manager - General | Colorado | Colorado; Number of FTEs: <br> $5,000.0$ and Over |  |  |
| H8C3 | COMPD-BEN- <br> WEST-JUL19 | Controller | Colorado | Colorado Springs/Southern <br> Colorado Area |  |  |
| H6L1 | COMPD-BEN- <br> WEST-JUL19 | Sales Representative - Outside <br> II (Senior) - Commission | West | Colorado |  |  |
| D7B2 | COMPD-BEN- <br> WEST-JUL19 | Driver - Within 100 Miles | Colorado | West; Number of FTEs: 5,000.0 |  |  |
| and Over |  |  |  |  |  |  |


| Job Code | Survey <br> Source | Survey Job Title |  | New Data Cut |  | Former Data Cut |
| :---: | :--- | :--- | :--- | :--- | :---: | :---: |
| 16 A4 | MER-MBC- <br> SC19 | Telecommunications Specialist <br> IIII | Employee Location- <br> Region (in-country): <br> South Central | State: Colorado |  |  |
| 16B1 | COMPD-BEN <br> WEST-JUL19 | Telecommunications Engineer <br> I | Colorado | West; Number of FTEs: 5,000.0 <br> and Over |  |  |
| I6B1 | MER-MBC- <br> SC19 | Telecommunications Engineer <br> I | All Data | Region (in-country): South <br> Central |  |  |

## Medical Plan Provisions

|  | State of Colorado |  |  | All Other Respondents |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Plan Provisions* | Median | Average | Count | Median | Average | Count |
| Medical Plan Individual Deductible | \$1,500 | \$1,313 | 4 | \$1,125 | \$1,279 | 104 |
| Medical Plan Family Deductible | \$3,000 | \$2,625 | 4 | \$2,800 | \$2,747 | 104 |
| Medical Plan Individual Out of Pocket Maximum | \$3,000 | \$3,250 | 4 | \$3,500 | \$3,698 | 105 |
| Medical Plan Family Out of Pocket Maximum | \$6,000 | \$6,500 | 4 | \$8,000 | \$7,695 | 105 |
| PCP Office Visit - copays | \$30 | \$30 | 2 | \$28 | \$29 | 53 |
| Specialist Office Visit - copays | \$50 | \$50 | 2 | \$45 | \$43 | 48 |
| Emergency Room - copays | \$500 | \$500 | 2 | \$250 | \$215 | 38 |
| Coinsurance | 80\% | 80\% | 2 | 80\% | 81\% | 99 |
| Prescription Drug: Generic (Retail) | \$10 | \$10 | 2 | \$10 | \$12 | 73 |
| Prescription Drug: Brand (Retail) | \$30 | \$30 | 2 | \$35 | \$34 | 73 |
| Prescription Drug: Non-Preferred Brand (Retail) | \$50 | \$50 | 1 | \$50 | \$66 | 58 |

## State of Colorado

All Other Respondents

| Major Plan Provisions* | Median | Average | Count | Median | Average | Count |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Prescription Drug: Specialty (Retail) | $\$ 100$ | $\$ 100$ | 2 | $\$ 100$ | $\$ 116$ | 45 |

*Where a range of copays were available, the minimum (or maximum for prescription drugs) copay was used, where specified. Where copays were not part of the plan design, most plans applied deductible and coinsurance.

## Methodology for Valuation of Defined Benefit and Defined Contribution Plans

## Methodology for Valuation of Defined Benefit Plans

Survey participants provided the respective benefit formula and key plan provisions for their DB plan. In order to determine and compare the value of such benefits, all plans were valued on a consistent basis as follows:

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

These characteristics are intended to show the full benefit earned through normal retirement. The compensation of $\$ 55,000$ is largely irrelevant when comparing retirement benefits as a percentage of such compensation.

- Assumed salary increases of $4 \%$ annually, considered both historically and prospectively for the sample employee. 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.
- 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 $1.25 \%$ annually was assumed.
- 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, used a $6 \%$ interest rate and the 417(e) unisex mortality table for 2020.
- 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.
- 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.
- Outside sources: 2019 National Compensation Association of State Governments (NCASG) Survey and United States Bureau of Labor Statistic website (bls.gov)


## Methodology for Valuation of Defined Contribution Plans

Survey participants provided the respective benefit formula and key plan provisions for their DC 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), considered this to be no value provided to the participant.
- If the employer contributes a flat percentage of pay independent of any employee contribution, then such percentage is considered an ongoing value provided by the employer.
- If the employer contributes based on a matching formula dependent on employee contributions, then considered the maximum attainable match to be the value provided by the employer, and disregarded corresponding employee contributions.
- Outside Sources: § 2019 National Compensation Association of State Governments (NCASG) Survey and § United States Bureau of Labor Statistic website (bls.gov)


[^0]:    *does not equal 100\% due to rounding

[^1]:    *WTW General Industry Survey Suite 2018

