# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>1</td>
</tr>
<tr>
<td>Section I. Introduction</td>
<td>8</td>
</tr>
<tr>
<td>Section II. Overview of Senate Bill 10-001 and Senate Bill 18-200 Reforms</td>
<td>12</td>
</tr>
<tr>
<td>Section III. Comparison of PERA Annual Increases versus Inflation</td>
<td>16</td>
</tr>
<tr>
<td>Section IV. Progress to Date Regarding the Elimination of PERA’s Unfunded Actuarial Accrued Liability</td>
<td>22</td>
</tr>
<tr>
<td>APPENDIX A – Senate Bill 10-001 and Senate Bill 18-200 Legislative Acts</td>
<td>31</td>
</tr>
<tr>
<td>APPENDIX B – Other Pension-Related Legislation Since 2009</td>
<td>121</td>
</tr>
<tr>
<td>APPENDIX C – CPI-W Data and Assumptions Regarding Projection Scenarios</td>
<td>127</td>
</tr>
<tr>
<td>APPENDIX D – Summary of Gain/Loss Information</td>
<td>133</td>
</tr>
<tr>
<td>APPENDIX E – PERA Pension Funding Policy</td>
<td>137</td>
</tr>
</tbody>
</table>
Overview and Background

As part of the changes implemented in Senate Bill 10-001 (SB 1), PERA is required to report to the General Assembly on the effectiveness of SB 1, pursuant to Colorado Revised Statute § 24-51-220.

“The association shall provide a report to the general assembly on January 1, 2016, and every five years thereafter, regarding the economic impact of the 2010 legislative changes to the annual increase provisions on the retirees and benefit recipients as compared to the actual rate of inflation and the progress made toward eliminating the unfunded liabilities of each division of the association.”

The initial report, Colorado PERA Senate Bill 10-001 Report (November 2015), provides a thorough review of the circumstances and issues that resulted in the under-funded situation at the time SB 1 was enacted. At the time, the annual actuarial projections showed PERA’s largest divisions (State and School) were not sustainable. In 2009, the Colorado General Assembly passed legislation requiring PERA to submit a comprehensive plan to ensure PERA achieve full funded status. SB 1 was the result of the efforts of the PERA Board in concert with the supportive and corrective actions of the Colorado General Assembly.

Key Reforms Adopted Since SB 1

Pursuant to the Board’s governance practices, an experience analysis, otherwise known as an actuarial assumption review, is to be performed at least once every five years. Over the recent past, the Board has commissioned an experience analysis every four years. The 2016 analysis resulted in fairly significant adjustments to the actuarial assumptions, particularly with respect to mortality, as well as a decrease in the assumed long-term rate of investment return, also applied as the rate to discount the liabilities of the plan. The adoption of the recommended, more conservative, actuarial assumptions resulted in the expanded timeframe to full funded status for each of the five division trust funds.

The longer projected funding periods indicated a need for additional reforms to ensure the 30-year funding target. The adoption of Senate Bill 18-200 (SB 200), Modifications to PERA Public Employees’ Retirement Association to Eliminate Unfunded Liability, encompassed broad changes necessary to ensure PERA’s continued sustainability and achievement of full funded status, as follows:

• Increased contributions from employers and employees.

• Directed allocations from the State of Colorado (State) of $225 million each year to PERA.

• Modified retirement benefits, including reducing the annual increase (AI) for all current and future retirees as well as raising the retirement age for new members.

• Established an automatic adjustment provision that allows for future changes to contributions and benefits, as necessary (but with certain constraints).

The SB 200 reforms were enacted during 2018 with the majority of the changes first recognized as of the December 31, 2017, actuarial valuation, and a few additional provision changes recognized in the December 31, 2018, actuarial valuation, due to their effective date. See Section II for further detail regarding reforms encompassed in SB 1 and SB 200 and Appendix B for a summary of other pertinent pension-related legislation since 2009.

SB 1 & SB 200 Update

The purpose of this report is to provide an extension of information to the 2015 SB 1 Report, to update all stakeholders on the plan’s progress toward full funding, as well as to gauge the impact to retirees of the major AI reforms by comparing actual annual increases to rates of inflation. Since SB 200 also resulted in meaningful changes, this report update encompasses and reflects the impact of the plan changes adopted under both SB 1 and SB 200.

Probably the most significant change enacted in SB 200 is the adoption of the Automatic Adjustment Provision, often called the AAP. The primary intent of the AAP is to gauge the adequacy of the contributions coming into the pension trust fund against the amount required, and if determined necessary, to initiate automatic changes.

Due to the results of the 2018 AAP assessment, the following changes to contribution and AI provisions applicable to all five division trust funds were reflected in the December 31, 2019, actuarial valuation.

• The member contribution rate for all members increased by 0.50 percent of pay effective July 1, 2020,

• The employer contribution rate for all employers increased by 0.50 percent of pay effective July 1, 2020, and

• The AI “maximum,” or “cap,” decreased from 1.50 percent to 1.25 percent, effective as of July 1, 2020.
EXECUTIVE SUMMARY

As a result of the most recent periodic experience analysis conducted in 2020, significant changes again were recommended by the Board’s actuaries. The newly revised actuarial assumptions were adopted at the November 20, 2020, PERA Board meeting and will be effective with the December 31, 2020, actuarial valuation. The projected funding period for each division trust fund presented in this update reflects the estimated impact of these most recent assumption changes, as indicated.

The diagram in Exhibit 1, below, shows a timeline of the major reforms and actuarial assumptions changes since the enactment of SB 1.

EXHIBIT 1

Timeline from 2010 through 2020

SB 1 and SB 200 Reforms to Ensure PERA Sustainable for Foreseeable Future

The primary objective of the legislation requiring this periodic progress report is to gauge the “...progress made toward eliminating the unfunded liabilities of each division of the association.” To accomplish this objective, this report assesses the impact of the SB 1 and SB 200 reforms and changes to the actuarial assumptions on the projected sustainability of the plan.

Retirees, active and inactive members, and employers were all impacted in the comprehensive program of shared sacrifice embodied in both SB 1 and SB 200. PERA’s unfunded actuarial accrued liabilities (UAAL) were immediately reduced by approximately $8.9 billion attributable to SB 1 reforms adopted in 2010 and reflected in PERA’s December 31, 2009, actuarial valuation. An immediate reduction of $3.9 billion was reflected in PERA’s December 31, 2017, actuarial valuation attributable to SB 200 reforms adopted in 2018. Both sets of reforms also were designed to substantially reduce the costs to provide future pension benefits. In addition, the adoption of the Automatic Adjustment Provisions under SB 200, resulted in an additional reduction in UAAL of $1.5 billion in 2019, attributable to recognition of the AAP adjustments effective July 1, 2020. Please see Appendix D for a complete history of the PERA gain / loss summary since fully funded in 2001 through 2019.

Due to the additional reforms of SB 200 along with favorable investment experience over the five-year period (annualized return of 8.4 percent for this period) the plan has generally withstood the adoption of more conservative economic and growth assumptions as well as better fitting, more appropriate demographic assumptions.

The funding period goal was “reset” as of the adoption of reforms under SB 200, targeted as 30 years from enactment. The best way to gauge the funding progress of the plan is to consider the projected funding period of the School Division Trust Fund, the division which is the largest and the one with the longest projected funding period. Compared to the revised target funded date of 2048, the School Division, currently projected to be fully funded by 2055, is approximately seven years behind target when considering the estimated impact of the recently revised actuarial assumptions.
The projected funding progress for the two largest division trust funds, the State and School Divisions, are presented in Exhibit 2, below. To better illustrate the impact of the recently revised actuarial assumptions, the graphs show a comparison between the expected funding progress under two scenarios considering the results from the December 31, 2019, actuarial valuation under the current and revised actuarial assumptions.

Based on the total results of “All Division Trust Funds” and considering the adoption of the recently revised actuarial assumptions, it is anticipated that the AAP assessment to be performed in June of 2021, reflecting the December 31, 2020, actuarial valuation, likely will result in a triggering of another round of AAP adjustments. Similar to those implemented in 2020, the AAP adjustments, if triggered, will impact employer contributions, member contributions, as well as annual increases for PERA’s annuitants effective July 1, 2022. By design, it is anticipated that these additional measures would assist with the funding of the plan and result in decreased funding periods of each division trust fund. See Section IV for further detail regarding progress made toward full funding.

See Appendix C for detail regarding the actuarial assumptions used to create the funded ratio projection graphs.
EXECUTIVE SUMMARY

Colorado PERA – School Division Trust Fund
Projection of Funded Ratio on Actuarial Asset Value
Based on December 31, 2019 Valuation Results—Current and Revised Actuarial Assumptions

See Appendix C for detail regarding the actuarial assumptions used to create the funded ratio projection graphs.
PERA Annual Increases versus Inflation

Another important objective of this report is to compare “…the economic impact of the 2010 legislative changes to the annual increase provisions on the retirees and benefit recipients…” to the actual annual rates of inflation. Recognizing the significance of the more recent reforms encompassed in SB 200, this analysis also reflects the changes to the annual increase provisions under SB 200, as well as the changes initially made under SB 1.

For the majority of the continuing PERA retirees and benefit recipients — those representing the Tier 1 PERA Benefit Structure¹ — the annual increases tracked fairly closely to inflation with relatively little slippage at the end of the 10-year period.

As illustrated in Exhibit 3, based on an “average increase”, over the 10-year period PERA’s annual increases slipped behind inflation by 0.1 percent. Based on a “cumulative increase”, over the 10-year period PERA’s annual increases slipped behind inflation by 1.3 percent. Therefore the buying power of PERA’s continuing retirees was generally retained but fell slightly behind inflation over the 10-year period.

The AI provisions, in place prior to the enactment of SB 1, would have provided annual increases that are well above the rate of inflation, when comparing average or cumulative increases for continuing retirees. The AI provisions currently in place under reforms of both SB 1 and SB 200 are more in line with actual inflation over the past decade. See Section III for further detail regarding PERA-provided annual increases compared to inflation.

EXHIBIT 3

Summary of AI Provision Increases Compared to National Inflation² — Ten-Year Analysis

<table>
<thead>
<tr>
<th></th>
<th>Increase for 2010</th>
<th>Increase for 2011</th>
<th>Increase for 2012</th>
<th>Increase for 2013</th>
<th>Increase for 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PERA</td>
<td>CPI-W</td>
<td>PERA</td>
<td>CPI-W</td>
<td>PERA</td>
</tr>
<tr>
<td>Applicable Annual Increase</td>
<td>0.0%</td>
<td>-0.7%</td>
<td>2.0%</td>
<td>2.1%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Cumulative Increase</td>
<td>0.0%</td>
<td>-0.7%</td>
<td>2.0%</td>
<td>1.4%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Average Increase</td>
<td>0.0%</td>
<td>-0.7%</td>
<td>1.0%</td>
<td>0.7%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Increase for 2015</th>
<th>Increase for 2016</th>
<th>Increase for 2017</th>
<th>Increase for 2018</th>
<th>Increase for 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PERA</td>
<td>CPI-W</td>
<td>PERA</td>
<td>CPI-W</td>
<td>PERA</td>
</tr>
<tr>
<td>Applicable Annual Increase</td>
<td>2.0%</td>
<td>1.5%</td>
<td>2.0%</td>
<td>-0.4%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Cumulative Increase</td>
<td>10.4%</td>
<td>10.4%</td>
<td>12.6%</td>
<td>9.9%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Average Increase</td>
<td>1.7%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>1.4%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

¹ Individuals in the PERA benefit structure with a membership date prior to July 1, 2005, are referred to as PERA Tier 1 members. See Exhibit 5 for a general description of the benefit tiers referenced in this 2020 SB 1 Report Update.

² The definition of inflation for purposes of these comparisons was aligned with the same metric as referenced in C.R.S. § 24-51-1009(4)(b). The applicable rate of inflation is based on “…the average of the annual increases determined for each month, in the national consumer price index for urban wage earners and clerical workers [CPI-W] during the calendar year preceding the increase in the benefit for the year…” The CPI-W data used to construct this Exhibit is provided in Appendix C.
SECTION I
Introduction
Overview and Background

Colorado was among the first states in the nation to enact meaningful pension reform as a result of the 2008 Great Recession. The intended goal of Senate Bill 10-001 (SB 1), the legislative package enacted in response to the 2008 financial crisis, was to put the Colorado Public Employees’ Retirement Association (PERA) back on track to being fully funded.

As part of the changes implemented in SB 1, PERA is required to report to the General Assembly on the effectiveness of SB 1, pursuant to Colorado Revised Statute § 24-51-220.

“The association shall provide a report to the general assembly on January 1, 2016, and every five years thereafter, regarding the economic impact of the 2010 legislative changes to the annual increase provisions on the retirees and benefit recipients as compared to the actual rate of inflation and the progress made toward eliminating the unfunded liabilities of each division of the association.”

The initial report, Colorado PERA Senate Bill 10-001 Report (November 2015), provides a thorough review of the circumstances and issues that resulted in the under-funded situation at the time SB 1 was enacted. The 2015 SB 1 Report also describes the groundwork for the enactment of SB 1 reflecting the bipartisan effort following the 2008 economic decline. At the time, the annual actuarial projections showed PERA’s largest divisions (State and School) were not sustainable. In 2009, in response to education and notification by the PERA Board of Trustees (the Board), the Colorado General Assembly passed legislation requiring PERA to submit a proposal with specific, comprehensive recommendations to ensure PERA would eventually become and remain fully funded. SB 1 was the result of the efforts of the PERA Board in concert with the supportive and corrective actions of the Colorado General Assembly.

Key Reforms Adopted Since SB 1

Pursuant to the Board’s governance practices, an experience analysis, otherwise known as an actuarial assumption review, is to be performed at least once every five years. Over the recent past, the Board has commissioned an experience analysis every four years. The specific purpose of this type of analysis is to compare the plan’s actual economic and demographic experience to the Board’s adopted actuarial assumptions, to ensure the assumptions continue to be appropriate or, if no longer appropriate, to recommend adjustments as warranted by the detailed analysis. During 2016, the PERA Board contracted their internal actuaries to perform such an analysis, which resulted in fairly significant adjustments to the actuarial assumptions, particularly with respect to mortality, as well as a decrease in the assumed long-term rate of investment return, also applied as the rate to discount the liabilities of the plan. The adoption of the recommended, more conservative, actuarial assumptions resulted in the expanded timeframe to full funded status for each of the five division trust funds.

These projection results based on the revised actuarial assumptions indicated a need for additional reforms to ensure the 30-year funding target. The adoption of Senate Bill 18-200 (SB 200), Modifications to PERA Public Employees’ Retirement Association to Eliminate Unfunded Liability, encompassed broad changes necessary to ensure PERA’s continued sustainability and achievement of full funded status, as follows:

• Increased contributions from employers and employees.
• Directed allocations from the State of Colorado (State) of $225 million each year to PERA.
• Modified retirement benefits, including reducing the AI for all current and future retirees as well as raising the retirement age for new members.
• Established an automatic adjustment provision that allows for future changes to contributions and benefits, as necessary (but with certain constraints).

The SB 200 reforms were enacted during 2018 with the majority of the changes first recognized as of the December 31, 2017, actuarial valuation, and a few additional provision changes recognized in the December 31, 2018, actuarial valuation, due to their effective date. See Section II for further detail regarding reforms encompassed in SB 1 and SB 200 as well as other pertinent pension-related legislation.

SB 1 & SB 200 Update

The purpose of this report is to provide an extension of information to the 2015 SB 1 Report, to update all stakeholders on the plan’s progress toward full funding, as well as to gauge the impact to retirees of the major AI reforms by comparing actual annual increases to rates of inflation. Since SB 200 also resulted in meaningful changes, this report update encompasses and reflects the impact of the plan changes adopted under both SB 1 and SB 200.

Probably the most significant change enacted in SB 200 is the adoption of the Automatic Adjustment Provision, often called the AAP. The primary intent of the AAP is to gauge the adequacy of the contributions coming into the pension trust fund against the amount required, and if determined necessary, to initiate automatic changes to member and employer contribution rates, the AI maximum (referred to as the AI cap), and, under certain circumstances, the direct distribution from the State of Colorado, to better insure achievement of the targeted 30-year funding goal. Pursuant to C.R.S. § 24-51-413, this assessment commenced with the December 31, 2018, actuarial valuation and is performed annually, thereafter.
The AAP assessment compares two blended rates, weighted across all five division trust funds, defined as: the “Blended Total Contribution Amount” (employer contribution rate plus member contribution rate plus direct distribution as a rate of pay) divided by the “Blended Total Required Contribution” (ADC\textsuperscript{3} Rate plus member contribution rate), determining a resulting ratio. If the resulting ratio falls within an acceptable corridor (98 percent to 119 percent), no adjustments are made. If the resulting ratio does not achieve a minimum benchmark (is less than 98 percent) or exceeds a maximum benchmark (is 120 percent or greater), adjustments are applied in an equitable manner of impact.

Due to the results of the 2018 AAP assessment (using the valuation results as of December 31, 2018), the following changes to contribution and AI provisions applicable to all five division trust funds were reflected in the December 31, 2019, actuarial valuation.

- The member contribution rate for all members increased by 0.50 percent of pay effective July 1, 2020,
- The employer contribution rate for all employers increased by 0.50 percent of pay effective July 1, 2020, and
- The AI cap decreased from 1.50 percent to 1.25 percent, effective as of July 1, 2020.

It also should be noted that during 2020, another actuarial experience analysis was conducted on schedule with the Board’s governance practices, to again review actual plan experience and determine if there was a need to recalibrate the actuarial assumptions used to value the liabilities of the plan. Although the assumed long-term rate of investment return was not altered as a result of the 2020 analysis, significant changes were recommended and adopted pertaining to mortality, rates of termination and retirement, and changes to the salary increments. The recently revised actuarial assumptions were adopted at the November 20, 2020, PERA Board meeting and will be effective with the December 31, 2020, actuarial valuation. Although not yet implemented, the projected funding period for each division trust fund presented in this update reflects the estimated impact of these most recent assumption changes, as indicated.

The diagram in Exhibit 4, below, shows a timeline of the major reforms and actuarial assumptions changes since the enactment of SB 1.

---

\textsuperscript{3} The Actuarial Determined Contribution, typically referred to as the ADC, is displayed as a rate of pay and is determined by the Board’s Pension Funding Policy provided in Appendix E.
SECTION II
Overview of Senate Bill 10-001 and Senate Bill 18-200 Reforms
SB 1, the legislative package in response to the 2008 financial crisis, put Colorado PERA back on track to being fully funded. Following recognition of significant changes in actuarial assumptions, also impacting PERA’s UAAL, SB 200 was enacted to ensure Colorado PERA stays on track to achieve full funding status.

Retirees, active and inactive members, and employers were all impacted in the comprehensive program of shared sacrifice embodied in both significant pieces of legislation. Both sets of reforms were designed to substantially reduce PERA’s UAAL as well as reduce the costs to provide future pension benefits. SB 200 took reform an extra step encompassing the ability to annually gauge funding progress and, if necessary, to initiate a mechanism to react without additional legislation.

Directly below are summary descriptions of the key reforms enacted via SB 1 and SB 200.

**Key Reforms Adopted in SB 1**

The following changes to contribution and benefit provisions enacted in 2010 applicable to PERA’s five division trust funds were recognized, to the extent possible, in the actuarial valuation as of December 31, 2009. However, a few of these changes with later effective dates impacted subsequent actuarial valuations commensurate with the effective dates as shown.

SB 1 was signed by former Governor Ritter on February 23, 2010. The major provisions of the bill include the following reforms:

**Annual Increase (AI)**

Reduce the AI to an amount equal to 2.0 percent, unless PERA experiences a negative investment year. If a negative investment year, then the next three years’ AI will equal the lesser of the CPI-W or 2.0 percent. Allows the AI cap to be adjusted based on PERA’s overall year-end funded status, with increases when PERA’s funded status is over 103 percent and decreases when PERA’s funded status subsequently falls below 90 percent.

**Highest Average Salary (HAS)**

Retained a 3-year HAS with a base year, but implemented an 8.0 percent spike cap applicable to new hires and all members not eligible to retire on January 1, 2011.

**Service Retirement Eligibility**

SB 1 implemented the following changes for age and service requirements for retirement eligibility:

- A modified Rule of 85 (total years of age plus service credit required for full service retirement), with a minimum age of 55, for all existing members with less than five years of service credit as of January 1, 2011.
- A modified Rule of 88, with a minimum age of 58, for all new hires between January 1, 2011, and January 1, 2017.
- A modified Rule of 90, with a minimum age of 60, for all new hires on or after January 1, 2017 (with some exceptions).

**Contribution Rates**

SB 1 made many changes to enhance funding to the plan through additional gradual employer and employee contribution increases known as AED and the SAED. The AED/SAED contribution structure for the four PERA divisions was in place prior to the 2008 market decline. The AED and SAED contribution rates were scheduled to reach their 3.0 percent maximums as of 2012 and 2013, respectively. The SB 1 reforms expanded and gradually increased the incremental contribution schedule to higher maximum values in later years.

**State Division:**

- AED is increased by 0.4 percent per year in 2013 through 2017 (from a maximum rate of 3.0 percent to 5.0 percent).
- SAED is increased by 0.5 percent per year in 2014 through 2017 (from a maximum rate of 3.0 percent to 5.0 percent).

**School and DPS Divisions:**

- AED is increased by 0.4 percent per year in 2013 through 2015, and by 0.3 percent in 2016 (from a maximum rate of 3.0 percent to 4.5 percent).
- SAED is increased by 0.5 percent in 2014 through 2018 (from a maximum rate of 3.0 percent to 5.5 percent).

When fully phased-in by 2018, the AED/SAED increments for the State and School Divisions will continue to grow in significance over time as the UAAL is paid off.

The General Assembly chose to phase-in these increases over time in order to minimize the strain on employers’ budgets during the recovery from the Great Recession. See Appendix A for a copy of the complete text of SB 1.

---

4 The AED/SAED contribution impact analysis was not performed for the DPS Division due to the timing of the merger of the Denver Public Schools Retirement System (DPSRS) into Colorado PERA, effective January 1, 2010, and the reflection of AED/SAED reforms in the December 31, 2009, actuarial valuation. The AED/SAED contribution schedules in place prior to SB 1 were not modeled for the DPS Division.
II. OVERVIEW OF SENATE BILL 10-001 AND SENATE BILL 18-200 REFORMS

Key Reforms Adopted in SB 200

The following changes to contribution and benefit provisions enacted in 2018 applicable to PERA’s five division trust funds were recognized, to the extent possible, in the actuarial valuation as of December 31, 2017. However, only a few of these changes, particularly those impacting the amount and timing of the AI, directly affected the results of the December 31, 2017, actuarial valuation. The remainder of the changes listed below impacted subsequent actuarial valuations commensurate with the effective dates as shown.

Following the 2018 legislative session, Governor Hickenlooper signed into law on June 4, 2018, SB 200, which includes the following reforms:

Changes to Contribution Provisions

- Incrementally increases the member contribution percentage a total of 2.00 percent of pay as follows:
  - 0.75 percent on July 1, 2019.
  - 0.75 percent on July 1, 2020.
  - 0.50 percent on July 1, 2021.

- Increase employer contributions 0.25 percent of pay on July 1, 2019, for all divisions except for the Local Government Division.

- PERA will receive an annual direct distribution from the State in the amount of $225 million. The distribution will occur on July 1, 2018, and on July 1 each year thereafter until there are no unfunded actuarial accrued liabilities in the trust fund of any division that receives such distribution. PERA shall allocate the distribution to the trust funds as it would an employer contribution in a manner that is proportionate to the annual payroll of each division except there shall be no allocation to the Local Government Division.

- Beginning January 1, 2021, and every year thereafter, employer contribution rates for the State and Local Government Divisions will be adjusted to include a defined contribution supplement. The defined contribution supplement for these two divisions will be the employer contribution amount paid to defined contribution plan participant accounts that would have otherwise gone to the defined benefit trusts to pay down the UAAL plus any defined benefit investment earnings thereon, expressed as a percentage of salary on which employer contributions have been made.

Changes to Benefit Provisions

- Increase the number of years used in the HAS calculation from three to five years for members, except judges, who do not have five years of service credit on December 31, 2019, and for new members hired on or after January 1, 2020.

- Increase the number of years used in the HAS calculation for the Judicial Division from one to three years for members who do not have five years of service credit on December 31, 2019, and for new members hired on or after January 1, 2020.

- Redefine PERA-includable salary for all members to include payouts of unused sick leave.

- Redefine PERA-includable salary for members hired on or after July 1, 2019, to include contributions to IRC Section 125 and 132 plans.

- Apply the State Trooper contribution rate, retirement age, and benefits to other safety officers, including sheriff deputies and corrections officers hired on or after January 1, 2020.

- For members, other than State Troopers, hired on or after January 1, 2020, age and service for full service retirement is met at:
  - Any age with 35 years.
  - Age 64 with 30 years.
  - Age 65 with 5 years.
II. OVERVIEW OF SENATE BILL 10-001 AND SENATE BILL 18-200 REFORMS

• For members, other than State Troopers, hired on or after January 1, 2020, age and service for reduced service retirement is met at:
  - Age 55 with 25 years.
  - Age 60 with 5 years.

• For State Troopers hired on or after January 1, 2020, age and service for full service retirement is met at:
  - Any age with 35 years.
  - Age 55 with 25 years.
  - Age 65 with 5 years.

• For State Troopers hired on or after January 1, 2020, age and service for reduced service retirement is met at:
  - Age 55 with 20 years.

• Sets AI equal to 0.00 percent for all benefit recipients for years 2018 and 2019.

• Sets the AI cap at 1.5 percent and extends the AI waiting period from one to three years.

Other SB 200 Changes

• Beginning July 1, 2020, and then each year thereafter, member contributions, employer contributions, the direct distribution from the State, and the AI will be adjusted based on certain statutory parameters to keep PERA on path to full funding in 30 years.

• Expand PERAChoice for new members hired on or after January 1, 2019, in the Local Government Division and to new members hired on or after January 1, 2019, who are classified college and university employees in the State Division.

• Increase the cost to disaffiliate for Local Government Division employers by setting the discount rate to equal the long-term assumed rate of return minus 200 basis points.

See Appendix A for a copy of the complete text of SB 1 and SB 200. See Appendix B for a complete list of all additional pension-related legislation adopted since 2009.
SECTION III
Comparison of PERA Annual Increases versus Inflation
### III. COMPARISON OF PERA ANNUAL INCREASES VERSUS INFLATION

**PERA Retirees Keeping Pace With Inflation**

A key objective of this 10-year progress report is to compare “...the economic impact of the 2010 legislative changes to the annual increase provisions on the retirees and benefit recipients...” to the actual annual rates of inflation. Recognizing the significance of the more recent reforms encompassed in SB 200, this analysis also reflects the changes to the annual increase provisions under SB 200, as well as the changes initially made under SB 1.

**Changes to Benefit Provisions Since 2009**

Exhibit 5, below, describes the AI provisions prior to adoption of SB 1 and the AI provisions following the adoption of reforms under both SB 1 and SB 200, as they relate to each benefit structure tier.

---

**EXHIBIT 5**

**Summary of AI Provisions, Prior to and Following the Adoption of SB 1**

<table>
<thead>
<tr>
<th>Description of Membership Group Affected</th>
<th>Annual Increase Prior to SB 1</th>
<th>Annual Increase Pursuant to SB 1</th>
<th>Annual Increase Pursuant to SB 200</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERA Tier 1 and DPS Tier 1</td>
<td>3.50% for the PERA benefit structure and 3.25% for the DPS benefit structure.</td>
<td>AI cap reduced to a fixed 2.00%, therefore, the AI equals 2.00% unless PERA has a negative investment year. If investment return is negative, then for the next three years, the AI is the lesser of: a) 2.00%, and b) the change in CPI-W from the prior calendar year. Al Delay: 12 months</td>
<td>Al cap initially reduced to a fixed 1.50% (now 1.25%), therefore, the AI equals 1.25%. Al Delay: 36 months</td>
</tr>
<tr>
<td>PERA Tier 1A and DPS Tier 2</td>
<td>The lesser of: a) 3.00%, and b) CPI-W.</td>
<td>Al cap reduced to 2.00%, therefore, the AI equals the lesser of: a) 2.00%, and b) CPI-W. Not to exceed an increase representing 10% of the year-end value of the AI reserve. Al Delay: 12 months</td>
<td></td>
</tr>
<tr>
<td>PERA Tier 2</td>
<td>The lesser of: a) 3.00%, and b) CPI-W. Not to exceed an increase representing 10% of the year-end value of the AI reserve.</td>
<td>Al cap reduced to 2.00%, therefore, the AI equals the lesser of: a) 2.00%, and b) CPI-W. Not to exceed an increase representing 10% of the year-end value of the AI reserve. Al Delay: 12 months</td>
<td>Al cap initially reduced to 1.50% (now 1.25%), therefore, the AI equals 1.25%. Al Delay: 36 months</td>
</tr>
</tbody>
</table>

---

1. Adjustments pursuant to the 2018 AAP Assessment, effective as of July 1, 2020, required reduction of the AI cap from 1.50 percent to 1.25 percent.

2. The initial application of CPI-W used for PERA Tier 1A and DPS Tier 2 differed from the definition and application employed in the AI provisions under the reforms of SB 1. Initially, the AI granted during the year reflected the increase in the CPI-W value from the previous December in relationship to the December value from the prior year (two years prior to the year the increase was granted).
The legislated assessment was performed over the 10-year study period (2010 through 2019) comparing the applicable AI provisions, with consideration of the SB 1 and SB 200 reforms, to actual rates of inflation.

Shown below are the results of the analysis for continuing retirees under the PERA Tier 1 benefit structure, representing approximately 90 percent of the PERA retiree population. The first row displays the annual increase, applicable for each year shown, regarding both the PERA increase provisions and the rate of national inflation. The second row shows the cumulative increase, incrementally, considering each additional year from left to right. The third row shows the average increase, considering each additional year from left to right.

As illustrated in Exhibit 6, for the majority of the continuing PERA retirees and benefit recipients, annual increases tracked fairly closely to inflation with relatively little slippage at the end of the 10-year period. Based on an “average increase”, over the 10-year period PERA’s annual increases slipped behind inflation by 0.1 percent. Based on a “cumulative increase”, over the 10-year period PERA’s annual increases slipped behind inflation by 1.3 percent. Therefore the buying power of PERA’s continuing retirees was generally retained but fell slightly behind inflation over the 10-year period.

EXHIBIT 6

<table>
<thead>
<tr>
<th></th>
<th>Increase for 2010</th>
<th>Increase for 2011</th>
<th>Increase for 2012</th>
<th>Increase for 2013</th>
<th>Increase for 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PERA</td>
<td>CPI-W</td>
<td>PERA</td>
<td>CPI-W</td>
<td>PERA</td>
</tr>
<tr>
<td>Applicable Annual Increase</td>
<td>0.0%</td>
<td>-0.7%</td>
<td>2.0%</td>
<td>2.1%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Cumulative Increase</td>
<td>0.0%</td>
<td>-0.7%</td>
<td>2.0%</td>
<td>1.4%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Average Increase</td>
<td>0.0%</td>
<td>-0.7%</td>
<td>1.0%</td>
<td>0.7%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Increase for 2015</th>
<th>Increase for 2016</th>
<th>Increase for 2017</th>
<th>Increase for 2018</th>
<th>Increase for 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PERA</td>
<td>CPI-W</td>
<td>PERA</td>
<td>CPI-W</td>
<td>PERA</td>
</tr>
<tr>
<td>Applicable Annual Increase</td>
<td>2.0%</td>
<td>1.5%</td>
<td>2.0%</td>
<td>-0.4%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Cumulative Increase</td>
<td>10.4%</td>
<td>10.4%</td>
<td>12.6%</td>
<td>9.9%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Average Increase</td>
<td>1.7%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>1.4%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

7 The definition of inflation for purposes of these comparisons was aligned with the same metric as referenced in C.R.S. § 24-51-1009(4)(b). The applicable rate of inflation is based on “...the average of the annual increases determined for each month, ...in the national consumer price index for urban wage earners and clerical workers [CPI-W] during the calendar year preceding the increase in the benefit for the year...” The CPI-W data used to construct this Exhibit is provided in Appendix C.
III. COMPARISON OF PERA ANNUAL INCREASES VERSUS INFLATION

As illustrated below in Exhibit 7, the AI provisions, in place prior to the enactment of SB 1, would have provided annual increases that are well above the rate of inflation, when comparing average or cumulative increases for continuing retirees. This is true if considering the current five-year study period, but is further exacerbated by each additional year reflected in the 10-year study period. For example, the 10-year cumulative annual increase for a member in the PERA Tier 1 benefit structure, would have been 41.1 percent under the pre-SB 1 AI provisions versus 16.2 percent if benefits were indexed to inflation. Considering the actual annual increases under the current AI provisions results in a cumulative benefit increase of 14.9 percent, which although a little low, generally better aligns with current rates of inflation.

The AI provisions currently in place under reforms of both SB 1 and SB 200 are more appropriate when compared to actual inflation.

EXHIBIT 7

Comparison of AI Provisions versus Inflation\(^\text{a}\) Prior to and After Consideration of Reforms—Five and Ten-Year Analysis

<table>
<thead>
<tr>
<th>Membership Group</th>
<th>Prior to Consideration of SB 1 and SB 200 Reforms</th>
<th>After Consideration of SB 1 and SB 200 Reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Increase</td>
<td>Cumulative Increase</td>
</tr>
<tr>
<td></td>
<td>PERA</td>
<td>CPI-W</td>
</tr>
<tr>
<td>PERA Tier 1(^9)</td>
<td>3.5%</td>
<td>1.7%</td>
</tr>
<tr>
<td>5-Year Experience (2010-2014)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-Year Experience (2010-2019)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPS Tier 1(^10)</td>
<td>3.3%</td>
<td>1.7%</td>
</tr>
<tr>
<td>5-Year Experience (2010-2014)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-Year Experience (2010-2019)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) The definition of inflation for purposes of these comparisons was aligned with the same metric as referenced in C.R.S. § 24-51-1009(4)(b). The CPI-W data used to construct this Exhibit is provided in Appendix C.

\(^9\) As of December 31, 2019, PERA Tier 1 comprised approximately 90 percent of PERA’s total retiree and benefit recipient population.

\(^10\) As of December 31, 2019, DPS Tier 1 comprised approximately 5 percent of PERA’s total retiree and benefit recipient population.
Exhibits 6 and 7 show the comparative results when considering actual PERA annual increases versus inflation for continuing retirees. However, certain provisions, first adopted in SB 1 and later expanded in SB 200, will more significantly impact PERA retirees’ ability to maintain purchasing power for those who have commenced benefits in the last few years or will commence benefits in the future.

As described in Section II, AI reforms under SB 1 included a 12-month waiting period from date of retirement, prior to meeting the eligibility for an annual increase. SB 200, extended that delay from a 12-month waiting period to a 36-month waiting period. This expanded provision is effective for any member who retires on or after January 1, 2011 and has not received an annual increase on or before May 1, 2018.

The full effect of this AI delay will be more easily assessed in the 2025 SB 1 Report Update, with five years of actual data. A scenario reflecting a hypothetical PERA member who retired July 1, 2019, is provided below in Exhibit 8 showing the possible PERA annual increases versus estimated inflation. For purposes of this illustration, future inflation is set equal to the valuation inflation assumption, currently 2.3 percent, per annum, effective for the December 31, 2020, actuarial valuation. Note that the 36-month AI delay likely will have an adverse impact on PERA retirees’ ability to retain purchasing power. In addition, any required additional AAP adjustments, further impacting the AI cap, will exacerbate the situation.

### Exhibit 8

**Recently Retired as of July 1, 2019—AI Provision Increases Compared to Estimated Inflation—Five-Year Analysis**

<table>
<thead>
<tr>
<th></th>
<th>Increase for 2020</th>
<th>Increase for 2021</th>
<th>Increase for 2022</th>
<th>Increase for 2023</th>
<th>Increase for 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PERA</td>
<td>CPI-W</td>
<td>PERA</td>
<td>CPI-W</td>
<td>PERA</td>
</tr>
<tr>
<td><strong>Applicable Annual Increase</strong></td>
<td>0.00%</td>
<td>1.7%</td>
<td>0.00%</td>
<td>2.3%</td>
<td>1.25%</td>
</tr>
<tr>
<td><strong>Cumulative Increase</strong></td>
<td>0.00%</td>
<td>1.7%</td>
<td>0.00%</td>
<td>4.0%</td>
<td>1.25%</td>
</tr>
<tr>
<td><strong>Average Increase</strong></td>
<td>0.00%</td>
<td>1.7%</td>
<td>0.00%</td>
<td>2.0%</td>
<td>0.41%</td>
</tr>
</tbody>
</table>

11 For future years, it was assumed the current AI cap of 1.25 percent continues to be in effect.
12 The CPI-W data used for 2020 is provided in Appendix C. For future years, it was assumed CPI-W is equal to the price inflation assumption, currently 2.3 percent, per annum, effective for the December 31, 2020, actuarial valuation.
SECTION IV
Progress to Date Regarding the Elimination of PERA’s Unfunded Actuarial Accrued Liability
IV. PROGRESS TO DATE REGARDING THE ELIMINATION OF PERA’S UNFUNDED ACTUARIAL ACCRUED LIABILITY

SB 1 and SB 200 Reforms to Ensure PERA Sustainable for Foreseeable Future

The primary objective of the legislation requiring this periodic progress report is to gauge the “...progress made toward eliminating the unfunded liabilities of each division of the association.” To accomplish this objective, this report assesses the impact—considering the SB 1 and SB 200 reforms, as well as the changes to the actuarial assumptions—on the projected sustainability and key valuation metrics of the plan.

PERA monitors the amount and degree of changes affecting the sustainability of the plan in a number of ways. Annually PERA receives actuarial valuation results generated by PERA’s actuaries. This annual valuation report contains information pertaining to each of PERA’s five division trust funds, including funded ratio, amortization period (funding period), plan assets and liabilities, and actuarial gains and losses associated with those assets and liabilities. In addition to this annual analysis, the actuaries and other industry experts assist with periodic experience analyses (actuarial assumption reviews) to ensure PERA applies appropriate economic and demographic assumptions within each valuation considering the Board’s risk tolerance, the general long-term economic outlook, and the anticipated behaviors of plan members.

Retirees, active and inactive members, and employers were all impacted in the comprehensive program of shared sacrifice embodied in both SB 1 and SB 200. PERA’s unfunded actuarial accrued liabilities (UAAL) were immediately reduced by approximately $8.9 billion attributable to SB 1 reforms adopted in 2010 and reflected in PERA’s December 31, 2009, actuarial valuation. An immediate reduction of $3.9 billion was reflected in PERA’s December 31, 2017, actuarial valuation attributable to SB 200 reforms adopted in 2018. Both sets of reforms also were designed to substantially reduce the costs to provide future pension benefits.

In addition, the adoption of the Automatic Adjustment Provisions under SB 200, which allows for timely adjustments to contributions and benefits when necessary, was designed to ensure PERA stays on track to full funding. Associated with this particular SB 200 reform, was an additional reduction in UAAL of $1.5 billion in 2019, attributable to recognition of the AAP adjustments effective July 1, 2020.

Exhibit 9, below, illustrates the immediate changes to liabilities or assets of the plan regarding the most impactful legislative actions and economic events since 2008. These notable items include changes in plan provisions—reflecting SB 1 and SB 200, changes to actuarial assumptions—a recalibration of assumptions following each experience analysis, and significant investment and liability gains and losses. For illustrative purposes, this summary shows only those events with a monetary impact of $1.0 billion or greater.

See Appendix D for a complete history of the PERA gain / loss summary since fully funded in 2001 through 2019.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan Provision</td>
<td>$(8,873.2)</td>
<td>$(4,832.3)</td>
<td>$(1,494.3)</td>
<td>$(4,827.5)</td>
<td>$(3,140.3)</td>
<td>$(3,947.3)</td>
<td>$(4,832.3)</td>
<td>$(1,494.3)</td>
<td>$(2,892.5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes</td>
<td>SB 1 Reforms</td>
<td>SB 200 Reforms</td>
<td>AAP Adjust</td>
<td>Investments</td>
<td>Liability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumption Changes</td>
<td>$4,927.5</td>
<td>$3,140.3</td>
<td>$3,947.3</td>
<td>$4,827.5</td>
<td>$3,140.3</td>
<td>$3,947.3</td>
<td>$4,827.5</td>
<td>$3,140.3</td>
<td>$3,947.3</td>
<td>$4,827.5</td>
<td>$3,140.3</td>
<td>$3,947.3</td>
<td>$4,827.5</td>
</tr>
<tr>
<td>Investment (Gain/Loss)</td>
<td>$2,632.8</td>
<td>$2,908.6</td>
<td>$2,806.5</td>
<td>$3,188.9</td>
<td>$(1,062.4)</td>
<td>$(1,139.1)</td>
<td>$(1,176.7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liability (Gain/Loss)</td>
<td>$1,298.013</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1Includes impact of change in actuarial service provider reflecting differences in actuarial valuation software and methods.
IV. PROGRESS TO DATE REGARDING THE ELIMINATION OF PERA’S UNFUNDED ACTUARIAL ACCRUED LIABILITY

Exhibit 11, below, is a summary of the major funding metrics for the State and School Division Trust Funds and also provides a few metrics considering the total of the five division trust funds. If simply considering the funded ratio and/or funding period it does not appear that much progress, if any, has been made toward full funding over the last five-year period since the initial 2015 SB 1 Report. However, due to the additional reforms of SB 200 along with favorable investment experience over the five-year period (annualized return of 8.4 percent for this period) the plan has generally withstood the adoption of more conservative economic and growth assumptions as well as better fitting, more appropriate demographic assumptions.

The five-year period since the initial 2015 SB 1 Report is somewhat unique in that there were two experience analysis studies that occurred. As mentioned previously, the results of these two separate analyses resulted in fairly significant changes, particularly with regard to mortality and recognition of retirement and termination patterns that differed compared to that expected, and notable adjustments to the underlying economic assumptions and salary scales.

The funding period goal was “reset” as of the adoption of reforms under SB 200, targeted as 30 years from enactment.

The best way to gauge the funding progress of the plan is to consider the projected funding period of the School Division Trust Fund, the division which is the largest and the one with the longest projected funding period. Compared to the revised target funded date of 2048, the School Division, currently projected to be fully funded by 2055, is approximately seven years behind target when considering the estimated impact of the recently revised actuarial assumptions.

The projected funding progress for all five division trust funds are presented in Exhibit 10, below. There are six graphs in total. The first graph illustrates the projected funding progress comparing all five division trust funds reflecting the December 31, 2019, actuarial valuation results considering the recently revised actuarial assumptions. The following five graphs are provided to better illustrate the impact the recently revised actuarial assumptions have on the projected funding progress of each individual division trust fund. These five graphs show a comparison between the expected funding progress under two scenarios considering the results from the December 31, 2019, actuarial valuation under the current and revised actuarial assumptions.

See Appendix C for detail regarding the actuarial assumptions used to create the funded ratio projection graphs.
IV. PROGRESS TO DATE REGARDING THE ELIMINATION OF PERA’S UNFUNDED ACTUARIAL ACCRUED LIABILITY

See Appendix C for detail regarding the actuarial assumptions used to create the funded ratio projection graphs.
IV. PROGRESS TO DATE REGARDING THE ELIMINATION OF PERA’S UNFUNDED ACTUARIAL ACCRUED LIABILITY

See Appendix C for detail regarding the actuarial assumptions used to create the funded ratio projection graphs.
IV. PROGRESS TO DATE REGARDING THE ELIMINATION OF PERA’S UNFUNDED ACTUARIAL ACCRUED LIABILITY

See Appendix C for detail regarding the actuarial assumptions used to create the funded ratio projection graphs.
### IV. PROGRESS TO DATE REGARDING THE ELIMINATION OF PERA’S UNFUNDED ACTUARIAL ACCRUED LIABILITY

#### EXHIBIT 11

**Funding Progress and Other Actuarial Metrics from 2014 through 2019 (Dollars in Millions)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State Division</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected Funding Period</td>
<td>37 yrs (2052)</td>
<td>42 yrs (2058)</td>
<td>58 yrs (2075)</td>
<td>27 yrs (2045)</td>
<td>28 yrs (2047)</td>
<td>22 yrs (2042)</td>
<td>33 yrs (2053)</td>
</tr>
<tr>
<td>UAAL</td>
<td>$9,885</td>
<td>$10,203</td>
<td>$11,644</td>
<td>$10,526</td>
<td>$11,206</td>
<td>$10,796</td>
<td>$11,678</td>
</tr>
<tr>
<td>Funded Ratio</td>
<td>57.8%</td>
<td>57.6%</td>
<td>54.6%</td>
<td>57.5%</td>
<td>56.1%</td>
<td>58.0%</td>
<td>56.1%</td>
</tr>
<tr>
<td>ADC</td>
<td>22.31%</td>
<td>22.71%</td>
<td>26.30%</td>
<td>23.28%</td>
<td>23.69%</td>
<td>21.05%</td>
<td>25.08%</td>
</tr>
<tr>
<td><strong>School Division</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected Funding Period</td>
<td>38 yrs (2053)</td>
<td>44 yrs (2060)</td>
<td>78 yrs (2095)</td>
<td>30 yrs (2048)</td>
<td>34 yrs (2053)</td>
<td>24 yrs (2044)</td>
<td>35 yrs (2055)</td>
</tr>
<tr>
<td>UAAL</td>
<td>$14,243</td>
<td>$14,805</td>
<td>$18,090</td>
<td>$16,266</td>
<td>$17,504</td>
<td>$17,013</td>
<td>$18,725</td>
</tr>
<tr>
<td>Funded Ratio</td>
<td>60.9%</td>
<td>60.7%</td>
<td>56.3%</td>
<td>59.4%</td>
<td>57.9%</td>
<td>59.9%</td>
<td>57.6%</td>
</tr>
<tr>
<td>ADC</td>
<td>22.36%</td>
<td>22.54%</td>
<td>26.80%</td>
<td>23.59%</td>
<td>23.37%</td>
<td>20.61%</td>
<td>25.49%</td>
</tr>
<tr>
<td><strong>All Division Trust Funds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UAAL</td>
<td>$25,875</td>
<td>$26,825</td>
<td>$32,242</td>
<td>$28,777</td>
<td>$30,999</td>
<td>$29,810</td>
<td>$32,702</td>
</tr>
<tr>
<td>Funded Ratio</td>
<td>62.3%</td>
<td>62.1%</td>
<td>58.1%</td>
<td>61.3%</td>
<td>59.8%</td>
<td>61.9%</td>
<td>59.7%</td>
</tr>
<tr>
<td>AAP Resulting Ratio</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>93.11%/ 97.8%</td>
<td>102.94%</td>
<td>≈91.00%</td>
</tr>
<tr>
<td>Actual Rate of Investment Return</td>
<td>5.7%</td>
<td>1.5%</td>
<td>7.3%</td>
<td>18.1%</td>
<td>-3.5%</td>
<td>20.3%</td>
<td>not yet known</td>
</tr>
<tr>
<td><strong>Key Actuarial Assumptions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-Term Rate of Return</td>
<td>7.50%</td>
<td>7.50%</td>
<td>7.25%</td>
<td>7.25%</td>
<td>7.25%</td>
<td>7.25%</td>
<td>7.25%</td>
</tr>
<tr>
<td>Payroll Growth</td>
<td>3.90%</td>
<td>3.90%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.00%</td>
</tr>
<tr>
<td>Inflation</td>
<td>2.80%</td>
<td>2.80%</td>
<td>2.40%</td>
<td>2.40%</td>
<td>2.40%</td>
<td>2.40%</td>
<td>2.30%</td>
</tr>
<tr>
<td>Population Growth</td>
<td>1.50%</td>
<td>1.50%</td>
<td>1.25%</td>
<td>1.25%</td>
<td>1.25%</td>
<td>1.25%</td>
<td>0.25%/1.00%</td>
</tr>
</tbody>
</table>

Based on the above total results of “All Division Trust Funds” and considering the adoption of the recently revised actuarial assumptions (final column on the right), it is anticipated that the AAP assessment to be performed in June of 2021, reflecting the December 31, 2020, actuarial valuation, likely will result in a triggering of another round of AAP adjustments. Similar to those implemented in 2020, the AAP adjustments, if triggered, will impact employer contributions, member contributions, as well as annual increases for PERA’s annuitants effective July 1, 2022. By design, it is anticipated that these additional measures would assist with the funding of the plan and result in decreased funding periods of each division trust fund.

---

14The Projected Funding Period, or Amortization Period, is calculated based on an open group projection.
15The Funded Ratio shown in this Exhibit is based on the Actuarial Value of Assets (AVA).
16The ADC displayed is calculated as of the valuation date shown, effective one year following (e.g., the ADC calculated for the State Division as of December 31, 2018, 23.69 percent, is the ADC for the 2020 plan year.)
17The Automatic Adjustment Provisions (AAP) was first implemented in 2018. For the 2018 AAP Assessment, this Exhibit shows the AAP Resulting Ratio before and after adjustments.
SENATE BILL 10-001


CONCERNING MODIFICATIONS TO THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION NECESSARY TO REACH A ONE HUNDRED PERCENT FUNDED RATIO WITHIN THE NEXT THIRTY YEARS.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. 24-51-101 (6.5) and (30), Colorado Revised Statutes, are amended, and the said 24-51-101 is further amended BY THE ADDITION OF A NEW SUBSECTION, to read:

24-51-101. Definitions. As used in this article, unless the context otherwise requires and except as otherwise defined in part 17 of this article:

(6.5) "Base benefit" means the initial benefit for a benefit which becomes effective after March 1, 2000. For a benefit which became effective on or before March 1, 2009,
"base benefit" means the total benefit payable as of February 28, 2001, JUNE 30, 2010, including the sum of the initial benefit, accumulated annual increases, and cost of living increases.

(30) "Member contribution" means the money paid to the association which equals a percentage of the member's salary as determined pursuant to the provisions of section 24-51-401 (1.7). "MEMBER CONTRIBUTION" DOES NOT INCLUDE WORKING RETIREE CONTRIBUTIONS AS DEFINED IN SUBSECTION (53) OF THIS SECTION.

(53) "WORKING RETIREE CONTRIBUTIONS" MEANS AN AMOUNT PAID TO THE ASSOCIATION THAT EQUALS THE PERCENTAGE OF SALARY THAT WOULD BE PAID AS MEMBER CONTRIBUTIONS PURSUANT TO SECTION 24-51-401 (1.7) (a); EXCEPT THAT WORKING RETIREE CONTRIBUTIONS SHALL NOT BE CONSIDERED MEMBER CONTRIBUTIONS AND SHALL NOT BE DEPOSITED IN THE MEMBER CONTRIBUTION ACCOUNT.

SECTION 2. 24-51-101 (25) (b), Colorado Revised Statutes, is amended BY THE ADDITION OF A NEW SUBPARAGRAPH to read:

24-51-101. Definitions. As used in this article, unless the context otherwise requires and except as otherwise defined in part 17 of this article:

(25) (b) (V) NOTWITHSTANDING ANY OTHER PROVISION OF THIS PARAGRAPH (b), IN CALCULATING HIGHEST AVERAGE SALARY FOR A MEMBER OR INACTIVE MEMBER NOT ELIGIBLE FOR SERVICE OR REDUCED SERVICE RETIREMENT ON JANUARY 1, 2011, THE ASSOCIATION SHALL DETERMINE THE HIGHEST ANNUAL SALARIES ASSOCIATED WITH FOUR PERIODS OF TWELVE CONSECUTIVE MONTHS OF SERVICE CREDIT. THE LOWEST OF SUCH ANNUAL SALARIES SHALL BE THE BASE SALARY. THE FIRST ANNUAL SALARY TO BE USED IN THE HIGHEST AVERAGE SALARY CALCULATION SHALL BE THE ACTUAL SALARY REPORTED UP TO ONE HUNDRED EIGHT PERCENT OF THE BASE SALARY. THE SECOND ANNUAL SALARY TO BE USED IN THE HIGHEST AVERAGE SALARY CALCULATION SHALL BE THE ACTUAL SALARY REPORTED UP TO ONE HUNDRED EIGHT PERCENT OF THE FIRST ANNUAL SALARY USED IN THE HIGHEST AVERAGE SALARY CALCULATION. THE THIRD ANNUAL SALARY TO BE USED IN THE HIGHEST AVERAGE SALARY CALCULATION SHALL BE THE ACTUAL SALARY REPORTED UP TO ONE HUNDRED EIGHT PERCENT OF THE SECOND ANNUAL SALARY USED IN THE HIGHEST AVERAGE SALARY CALCULATION. THIS SUBPARAGRAPH (V) SHALL NOT APPLY TO MEMBERS OF
THE JUDICIAL DIVISION, EXCEPT FOR DPS MEMBERS OF THE JUDICIAL DIVISION WHO HAVE EXERCISED PORTABILITY PURSUANT TO SECTION 24-51-1747 AND SELECTED THE DENVER PUBLIC SCHOOLS BENEFIT STRUCTURE. THIS SUBPARAGRAPH (V) SHALL APPLY TO DPS MEMBERS IN ACCORDANCE WITH SECTION 24-51-1702 (17).

SECTION 3. 24-51-204 (7), Colorado Revised Statutes, is amended to read:

24-51-204. Duties of the board. (7) (a) The board or its designated agent shall submit an annual actuarial valuation report to the legislative audit committee and the joint budget committee of the general assembly, together with any recommendations concerning such liabilities that have accrued.

(b) In the annual actuarial valuation, the board shall first determine the total aggregate actuarial funded ratio of the association, apply the adjustments pursuant to section 24-51-1009.5, and then determine the actuarial funded ratio of each division separately.

SECTION 4. Part 2 of article 51 of title 24, Colorado Revised Statutes, is amended BY THE ADDITION OF A NEW SECTION to read:

24-51-211.5. Notice of possible change in benefits - actuarial necessity. The association shall provide written notice to each member, DPS member, and inactive member of the association that the possibility of an actuarial necessity could occur in the future, and the general assembly may modify by bill the benefits allowed to members of the defined benefit plan.

SECTION 5. Part 2 of article 51 of title 24, Colorado Revised Statutes, is amended BY THE ADDITION OF A NEW SECTION to read:

24-51-220. Report to general assembly. The association shall provide a report to the general assembly on January 1, 2016, and every five years thereafter, regarding the economic impact of the 2010 legislative changes to the annual increase provisions on the retirees and benefit recipients as compared to the actual rate of inflation and the progress made toward eliminating the unfunded
LIABILITIES OF EACH DIVISION OF THE ASSOCIATION.

SECTION 6. 24-51-401 (1.7) (a) and (3), Colorado Revised Statutes, are amended to read:

24-51-401. Employer and member contributions. (1.7) (a) Employers shall deliver a contribution report and the full amount of employer and member contributions, AND WORKING RETIREE CONTRIBUTIONS to the association within five days after the date members and retirees are paid. Except as provided in subsection (7) of this section and section 24-51-408.5, such contributions shall be based upon the rates for the appropriate division as set forth in the following table multiplied by the salary, as defined in section 24-51-101 (42), paid to members and retirees for the payroll period:

<table>
<thead>
<tr>
<th>Division</th>
<th>Membership</th>
<th>Employer Rate</th>
<th>Member Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>All Members</td>
<td>10.15%</td>
<td>8.0%</td>
</tr>
<tr>
<td></td>
<td>Except State Troopers</td>
<td>12.85%</td>
<td>10.0%</td>
</tr>
<tr>
<td>School</td>
<td>All Members</td>
<td>10.15%</td>
<td>8.0%</td>
</tr>
<tr>
<td></td>
<td>1/1/2006 through 12/31/2012</td>
<td>10.15%</td>
<td>8.0%</td>
</tr>
<tr>
<td></td>
<td>1/1/2013 and thereafter</td>
<td>10.55%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Local</td>
<td>All Members</td>
<td>10.15%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Government</td>
<td>All Members</td>
<td>10.0%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Judicial</td>
<td>All Members</td>
<td>13.66%</td>
<td>8.0%</td>
</tr>
<tr>
<td>DPS</td>
<td>1/1/2010 through 12/31/2012</td>
<td>13.75%</td>
<td>8.0%</td>
</tr>
<tr>
<td></td>
<td>1/1/2013 and thereafter</td>
<td>14.15%</td>
<td>8.0%</td>
</tr>
<tr>
<td></td>
<td>All Members</td>
<td>13.75%</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

(3) The employer shall be assessed by the association, pursuant to rules adopted by the board, interest on the contributions, INCLUDING WORKING RETIREE CONTRIBUTIONS, if either contributions or member information is not submitted by the date established in subsection (1.7) of
this section.

SECTION 7. 24-51-403, Colorado Revised Statutes, is amended to read:

24-51-403. Contributions assumed and paid by the employer. For purposes of deferring federal income tax imposed on salary, the member contributions AND THE WORKING RETIREE CONTRIBUTIONS assumed and paid for by the employer shall be in lieu of paying such amounts as salary and shall be treated as employer contributions pursuant to the provisions of 26 U.S.C. sec. 414 (h) (2), as amended. For all other purposes of this article, member contributions assumed and paid for by the employer shall be considered member contributions.

SECTION 8. The introductory portion to 24-51-408 (2) and 24-51-408 (4), Colorado Revised Statutes, are amended, and the said 24-51-408 is further amended BY THE ADDITION OF A NEW SUBSECTION, to read:

24-51-408. Matching employer contributions. (2) For members who HAVE FIVE OR MORE YEARS OF EARNED SERVICE CREDIT AND receive a refund prior to sixty-five years of age and prior to meeting the age and service requirements for a service or reduced service retirement benefit, the amount of matching employer contributions paid shall be one-half of an amount equal to the member contribution account less:

(2.5) NOTWITHSTANDING SUBSECTION (2) OF THIS SECTION, FOR A MEMBER WHO HAS LESS THAN FIVE YEARS OF EARNED SERVICE CREDIT AS OF THE DATE OF REFUND AND WHO RECEIVES A REFUND PRIOR TO SIXTY-FIVE YEARS OF AGE AND PRIOR TO MEETING THE AGE AND SERVICE REQUIREMENTS FOR A SERVICE OR REDUCED SERVICE RETIREMENT BENEFIT, THE AMOUNT OF MATCHING EMPLOYER CONTRIBUTIONS PAID SHALL BE ONE-HALF OF AN AMOUNT EQUAL TO THE MEMBER CONTRIBUTION ACCOUNT ACCUMULATED PRIOR TO JANUARY 1, 2011, LESS:

(a) ANY AMOUNTS PAID FOR THE PURCHASE OF SERVICE CREDIT;

(b) ANY PAYMENTS IN LIEU OF MEMBER CONTRIBUTIONS; AND

(c) ANY INTEREST ACCRUED ON THE AMOUNTS SPECIFIED IN PAGE 5-SENATE BILL 10-001
PARAGRAPHS (a) AND (b) OF THIS SUBSECTION (2.5).

(4) The provisions of this section shall not apply to DPS member CONTRIBUTION accounts that exist on December 31, 2009, with regard to past contributions or future contributions. Member CONTRIBUTION accounts in the Denver public schools division created on or after January 1, 2010, shall be governed by this section.

SECTION 9. 24-51-411, Colorado Revised Statutes, is amended to read:

24-51-411. Amortization equalization disbursement.
(1) Beginning January 1, 2006, each employer shall deliver to the association an amortization equalization disbursement and, beginning January 1, 2008, a supplemental amortization equalization disbursement pursuant to the same procedures specified for employer contributions in section 24-51-401 (1.7).

(2) For the calendar year beginning January 1, 2006, the amortization equalization disbursement shall be one-half of one percent of the employer's total payroll. The amortization equalization payment shall increase by one-half of one percent of total payroll on January 1, 2007, and, SUBJECT TO SUBSECTION (4) OF THIS SECTION, shall increase by four-tenths of one percent of total payroll at the start of each of the calendar years following 2007 through 2012. For purposes of this section, the employer's total payroll shall be calculated by applying the definition of salary, pursuant to section 24-51-101 (42), to the payroll for all employees working for the employer who are members of the association, or who were eligible to elect to become members of the association on or after January 1, 2006, including any amounts paid in connection with the employment of a retiree by an employer pursuant to section 24-51-1101 (2). Beginning January 1, 2010, employers of the Denver public schools division shall pay the then-applicable accumulated rate of amortization equalization disbursement and the escalating rate in accordance with the provisions of this section.

(3) FOR THE CALENDAR YEAR BEGINNING JANUARY 1, 2013, FOR EMPLOYERS IN THE SCHOOL AND DENVER PUBLIC SCHOOLS DIVISIONS, THE AMORTIZATION EQUALIZATION DISBURSEMENT PAYMENT SHALL INCREASE BY FOUR-TENTHS OF ONE PERCENT OF TOTAL PAYROLL AT THE START OF EACH OF THE CALENDAR YEARS THROUGH 2015. FOR THE CALENDAR YEAR
2016, for employers in the school and Denver public schools divisions, the amortization equalization disbursement payment shall increase by three-tenths of one percent of total payroll at the start of the 2016 calendar year. For purposes of this section, the employer's total payroll shall be calculated by applying the definition of salary, pursuant to section 24-51-101 (42), to the payroll for all employees working for the employer who are members of the association, or who were eligible to elect to become members of the association on or after January 1, 2006, including any amounts paid in connection with the employment of a retiree by an employer pursuant to section 24-51-1101 (2).

(3.5) For the calendar year beginning January 1, 2013, for employers in the state division, the amortization equalization disbursement payment shall increase by four-tenths of one percent of total payroll at the start of each of the calendar years through 2017. For purposes of this section, the employer's total payroll shall be calculated by applying the definition of salary, pursuant to section 24-51-101 (42), to the payroll for all employees working for the employer who are members of the association, or who were eligible to elect to become members of the association on or after January 1, 2006, including any amounts paid in connection with the employment of a retiree by an employer pursuant to section 24-51-1101 (2).

(4) For employers in the local government division and the judicial division, the amortization equalization disbursement shall not exceed the 2010 calendar year rates unless the rates are required to increase in accordance with subsection (9) of this section.

(3.2) (5) For the calendar year beginning January 1, 2008, the supplemental amortization equalization disbursement shall be one-half of one percent of the employer's total payroll. The supplemental amortization equalization disbursement, subject to subsection (7) of this section, shall increase by one-half of one percent of total payroll on January 1 of each year following 2008 through 2013. For purposes of this section, the employer's total payroll shall be calculated by applying the definition of salary, pursuant to section 24-51-101 (42), to the payroll for all employees working for the employer who are members of the association, or who were
eligible to elect to become members of the association on or after January 1, 2006, including any amounts paid in connection with the employment of a retiree by an employer pursuant to section 24-51-1101 (2). Beginning on January 1, 2010, employers of the Denver public schools division shall pay the then-applicable accumulated rate of supplemental amortization equalization disbursement and the escalating rate in accordance with the provisions of this section.

(6) For the calendar year beginning January 1, 2014, for employers in the school and Denver public schools divisions, the supplemental amortization equalization disbursement payment shall increase by one-half of one percent of total payroll at the start of each of the calendar years through 2018. For purposes of this section, the employer's total payroll shall be calculated by applying the definition of salary, pursuant to section 24-51-101 (42), to the payroll for all employees working for the employer who are members of the association, or who were eligible to elect to become members of the association on or after January 1, 2006, including any amounts paid in connection with the employment of a retiree by an employer pursuant to section 24-51-1101 (2).

(6.5) For the calendar year beginning January 1, 2014, for employers in the state division, the supplemental amortization equalization disbursement payment shall increase by one-half of one percent of total payroll at the start of each of the calendar years through 2017. For purposes of this section, the employer's total payroll shall be calculated by applying the definition of salary, pursuant to section 24-51-101 (42), to the payroll for all employees working for the employer who are members of the association, or who were eligible to elect to become members of the association on or after January 1, 2006, including any amounts paid in connection with the employment of a retiree by an employer pursuant to section 24-51-1101 (2).

(7) For employers in the local government division and the judicial division, the supplemental amortization equalization disbursement shall not exceed the 2010 calendar year rates unless the rates are required to increase in accordance with subsection (9) of this section.
(3.5) (8) The amortization equalization disbursement and the supplemental amortization equalization disbursement payments by all employers in the State, School, and Denver Public Schools divisions shall continue at the rate specified in subsections (3), (3.5), (6), and (6.5) of this section until adjusted pursuant to subsection (3.5). When the actuarial funded ratio of a particular division, based on the actuarial value of assets, is at or above one hundred three percent as determined in the annual actuarial study of the association, the actuary shall determine the amount by which the amortization equalization disbursement and supplemental amortization equalization disbursement shall be reduced, in equal parts, for that particular division and still maintain the actuarial funded ratio of that division at one hundred percent. The amortization equalization disbursement and supplemental amortization equalization disbursement shall be reduced for that division in the amounts determined by the actuary effective January 1 of the following year. At such time as a division is determined in the annual actuarial valuation to have reached a thirty-year or less amortization period of its unfunded liabilities, the board shall cause to be conducted an actuarial study to assess the amortization equalization disbursement and the supplemental amortization equalization disbursement, and the board may make appropriate recommendations to the general assembly.

(9) The amortization equalization disbursement and the supplemental amortization equalization disbursement payments by employers in the Local Government division and Judicial division shall continue at the rate specified in subsections (4) and (7) of this section.
THIS SECTION UNTIL ADJUSTED PURSUANT TO THIS SUBSECTION (9). WHEN
THE ACTUARIAL FUNDED RATIO OF THE LOCAL GOVERNMENT DIVISION OR
JUDICIAL DIVISION OF THE ASSOCIATION, BASED ON THE ACTUARIAL VALUE
OF THE ASSETS, IS AT OR ABOVE ONE HUNDRED THREE PERCENT AS
DETERMINED IN THE ANNUAL ACTUARIAL STUDY OF THE ASSOCIATION, THE
AMOUNT OF THE AMORTIZATION EQUALIZATION DISBURSEMENT AND
SUPPLEMENTAL AMORTIZATION EQUALIZATION DISBURSEMENT SHALL BE
REDUCED FOR EMPLOYERS IN THAT PARTICULAR DIVISION BY ONE-HALF OF
ONE PERCENT EACH. IF THE ACTUARIAL FUNDED RATIO OF THE DIVISION
BASED ON THE ACTUARIAL VALUE OF THE ASSETS REACHES NINETY PERCENT
AND SUBSEQUENTLY THE ACTUARIAL FUNDED RATIO OF THE DIVISION IS
BELOW NINETY PERCENT, THE AMORTIZATION EQUALIZATION DISBURSEMENT
AND SUPPLEMENTAL AMORTIZATION EQUALIZATION DISBURSEMENT SHALL
BE INCREASED BY ONE-HALF OF ONE PERCENT EACH; EXCEPT THAT, AT NO
TIME SHALL THE AMORTIZATION EQUALIZATION DISBURSEMENT OR THE
SUPPLEMENTAL AMORTIZATION EQUALIZATION DISBURSEMENT EXCEED FIVE
PERCENT EACH.

(3.7) (10) For state employers in the state division, for the 2007-08
state fiscal year and for each fiscal year through the 2012-13 2016-17 state
fiscal year, from the amount of changes to state employees’ salaries and any
adjustments to the annual general appropriation act pursuant to section
24-50-104, an amount equal to one-half of one percent of total salary shall
be deducted and such amount shall be utilized by the employer to fund the
supplemental amortization equalization disbursement. For the school, local
government, judicial, and Denver public schools divisions, and the
remaining employers in the state division who are not state employers, the
supplemental amortization equalization disbursement shall, to the extent
permitted by law, be funded by allocation of funds otherwise available for
use as employee compensation increases prior to award as salary or other
compensation to employees.

(4) (11) Any reduction in the amortization equalization disbursement
and in the supplemental amortization equalization disbursement pursuant
to subsection (3.5) of this section shall be irrevocable. If the disbursements
become no longer necessary pursuant to subsection (3.5) of this section,
then the association shall notify the revisor of statutes to repeal this section.
Moneys made available due to any reduction in the supplemental
amortization equalization disbursement pursuant to subsection (3.5)
SUBSECTION (8) OR (9) of this section, WHICHEVER IS APPLICABLE, shall, to
the extent permitted by law, be allocated to employee compensation increases to the extent such source was originally used by an employer to fund the supplemental amortization equalization disbursement.

(5) This section is repealed, effective upon receipt by the revisor of statutes of a notice pursuant to subsection (4) of this section.

SECTION 10. 24-51-501 (1), Colorado Revised Statutes, is amended to read:

24-51-501. Earned service credit. (1) Service credit is earned for periods of employment with an employer during which salary is received by such employee and contributions are made to the association pursuant to the provisions of section 24-51-401 (1.7). No service credit shall be earned in connection with the payment of working retiree contributions.

SECTION 11. 24-51-509, Colorado Revised Statutes, is amended to read:

24-51-509. Combining service credit. Service credit earned by a member during the most recent period of membership shall be combined with the service credit associated with the existing member contribution account of such member. Notwithstanding the provisions of this section, members exercising portability between the Denver public schools division and other association divisions are governed by the provisions of section 24-51-1747, retirees suspending retirement or reduced service retirement benefits are governed by section 24-51-1103 (1), and DPS retirees suspending retirement benefits are governed by section 24-51-1726.5.

SECTION 12. 24-51-602 (1) and (5), Colorado Revised Statutes, are amended, and the said 24-51-602 is further amended BY THE ADDITION OF THE FOLLOWING NEW SUBSECTIONS, to read:

24-51-602. Service retirement eligibility. (1) (a) Members, except state troopers, who have five years of service credit as of January 1, 2011, and who have met the age and service credit requirements stated in the following table shall, upon written application and approval of the board, receive service retirement benefits pursuant to the benefit formula set
forth in section 24-51-603 (1) (a), (2), and (3):

**TABLE B**
SERVICE RETIREMENT ELIGIBILITY

<table>
<thead>
<tr>
<th>Age Requirement (years)</th>
<th>Service Credit Requirement (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>65</td>
<td>5</td>
</tr>
</tbody>
</table>

(a.5) Notwithstanding paragraph (a) of this subsection (1), any person except a state trooper who had five years of service credit as of January 1, 2011, and who was not a member, inactive member, or retiree on June 30, 2005, but was a member, inactive member, or retiree on December 31, 2006, shall, upon written application and approval of the board, receive service retirement benefits pursuant to the benefit formula set forth in section 24-51-603 (1) (a), (2), and (3) if the member has met the age and service credit requirements stated in the following table:

**TABLE B.05**
SERVICE RETIREMENT ELIGIBILITY

<table>
<thead>
<tr>
<th>Age Requirement (years)</th>
<th>Service Credit Requirement (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any age</td>
<td>35</td>
</tr>
<tr>
<td>55</td>
<td>30</td>
</tr>
<tr>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>65</td>
<td>5</td>
</tr>
</tbody>
</table>

(a.7) Notwithstanding paragraphs (a) and (a.5) of this subsection (1), any person except a state trooper who was not a member, inactive member, or retiree on December 31, 2006, or who was a member, inactive member, or retiree on December 31, 2006, but as of January 1, 2011, did not have five years of service credit, or who is a DPS member with less than five years of service credit as of January 1, 2011, shall, upon written application and approval of the board, receive service retirement benefits pursuant to the benefit formula set forth in section 24-51-603 (1) (a), (2), and (3), if the member has met the age and service credit requirements stated in the following table:
TABLE B.07
SERVICE RETIREMENT ELIGIBILITY

<table>
<thead>
<tr>
<th>Age Requirement (years)</th>
<th>Service Credit Requirement (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any age</td>
<td>35</td>
</tr>
<tr>
<td>55</td>
<td>30</td>
</tr>
<tr>
<td>60</td>
<td>25</td>
</tr>
<tr>
<td>65</td>
<td>5</td>
</tr>
</tbody>
</table>

(b) State troopers who have met the age and service credit requirements stated in the following table shall, upon written application and approval of the board, receive service retirement benefits pursuant to the benefit formula set forth in section 24-51-603 (1) and (3):

TABLE B.1
SERVICE RETIREMENT ELIGIBILITY

<table>
<thead>
<tr>
<th>Age Requirement (years)</th>
<th>Service Credit Requirement (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any age</td>
<td>30</td>
</tr>
<tr>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>55</td>
<td>20</td>
</tr>
<tr>
<td>65</td>
<td>5</td>
</tr>
</tbody>
</table>

(c) Members who were members, inactive members, or retirees on December 31, 2006, who had five years of service credit as of January 1, 2011, and who are fifty-five years of age or older shall, upon written application and approval of the board, receive service retirement benefits pursuant to the benefit formula set forth in section 24-51-603, without reduction pursuant to section 24-51-604, if they have at least five years of service credit and if the number of years of their age plus the number of years of their service credit equals eighty years or more.

(d) Members who were not members, inactive members, or retirees on December 31, 2006, but who were members, inactive members, or retirees on December 31, 2010, or members who were members, inactive members, or retirees on December 31, 2006, but as of January 1, 2011, did not have five years of service credit, or DPS members with less than five years of service credit as of January
1, 2011, and who are fifty-five years of age or older shall, upon written application and approval of the board, receive service retirement benefits pursuant to the benefit formula set forth in section 24-51-603, without reduction pursuant to section 24-51-604, if they have at least five years of service credit and if the number of years of their age plus the number of years of their service credit equals eighty-five years or more.

(1.5) (a) Members, except state troopers, who were not members, inactive members, or retirees on December 31, 2010, but who were members, inactive members, or retirees on December 31, 2016, and who have met the age and service requirements stated in the following table shall, upon written application and approval of the board, receive service retirement benefits pursuant to the benefit formula set forth in section 24-51-603:

<table>
<thead>
<tr>
<th>AGE REQUIREMENT</th>
<th>SERVICE CREDIT REQUIREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>(YEARS)</td>
<td>(YEARS)</td>
</tr>
<tr>
<td>ANY AGE</td>
<td>35</td>
</tr>
<tr>
<td>58</td>
<td>30</td>
</tr>
<tr>
<td>65</td>
<td>5</td>
</tr>
</tbody>
</table>

(b) Members who are eligible for a benefit pursuant to this subsection (1.5) and who are fifty-eight years of age or older shall, upon written application and approval of the board, receive service retirement benefits pursuant to the benefit formula set forth in section 24-51-603, without reduction pursuant to section 24-51-604, if they have at least five years of service credit and if the number of years of their age plus the number of years of their service credit equals eighty-eight years or more.

(1.7) (a) Members who were not members, inactive members, or retirees on December 31, 2016, who have met the age and service requirements stated in the following table and who are not eligible for service retirement benefits pursuant to subsection (1.8) of this section shall, upon written application and approval of the board, receive service retirement benefits pursuant to the benefit formula set forth in section 24-51-603:
TABLE B.3
SERVICE RETIREMENT ELIGIBILITY

<table>
<thead>
<tr>
<th>AGE REQUIREMENT (YEARS)</th>
<th>SERVICE CREDIT REQUIREMENT (YEARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANY AGE</td>
<td>35</td>
</tr>
<tr>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>65</td>
<td>5</td>
</tr>
</tbody>
</table>

(b) Members who are eligible for a benefit pursuant to this subsection (1.7) and who are sixty years of age or older shall, upon written application and approval of the Board, receive service retirement benefits pursuant to the benefit formula set forth in section 24-51-603, without reduction pursuant to section 24-51-604, if they have at least five years of service credit and if the number of years of their age plus the number of years of their service credit equals ninety years or more.

(1.8) (a) Members of the school division or Denver public schools division who were not members, inactive members, or retirees on December 31, 2016, who have met the age and service requirements stated in the following table shall, upon written application and approval of the Board, receive service retirement benefits pursuant to the benefit formula set forth in section 24-51-603, provided, however, that at least the most recent ten years of service credit used in meeting the requirements of the table below must be earned in the school or Denver public schools divisions in order for the member to be eligible pursuant to this paragraph (a):

TABLE B.4
SERVICE RETIREMENT ELIGIBILITY

<table>
<thead>
<tr>
<th>AGE REQUIREMENT (YEARS)</th>
<th>SERVICE CREDIT REQUIREMENT (YEARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANY AGE</td>
<td>35</td>
</tr>
<tr>
<td>58</td>
<td>30</td>
</tr>
<tr>
<td>65</td>
<td>5</td>
</tr>
</tbody>
</table>

(b) Members who are eligible for a benefit pursuant to this
SUBSECTION (1.8) AND WHO ARE FIFTY-EIGHT YEARS OF AGE OR OLDER SHALL, UPON WRITTEN APPLICATION AND APPROVAL OF THE BOARD, RECEIVE SERVICE RETIREMENT BENEFITS PURSUANT TO THE BENEFIT FORMULA SET FORTH IN SECTION 24-51-603, WITHOUT REDUCTION PURSUANT TO SECTION 24-51-604, IF THEY HAVE AT LEAST FIVE YEARS OF SERVICE CREDIT AND IF THE NUMBER OF YEARS OF THEIR AGE PLUS THE NUMBER OF YEARS OF THEIR SERVICE CREDIT EQUALS EIGHTY-EIGHT YEARS OR MORE.

(5) Retirement benefits of DPS members shall be governed by the provisions of sections 24-51-1713 to 24-51-1726 and 24-51-1747.

SECTION 13. The introductory portion to 24-51-603 (1) (a) and 24-51-603 (3) (a), Colorado Revised Statutes, are amended to read:

24-51-603. Benefit formula for service retirement. (1) (a) Except as otherwise provided in subsection (2) of this section, effective July 1, 1997, the option 1 benefit OR OPTION A BENEFIT, WHICHEVER IS APPLICABLE, for service retirement for members shall be calculated by multiplying the highest average salary by two and one-half percent times each year and fraction of a year of service credit. The following formula shall be used for this calculation:

(3) (a) Regardless of total years of service credit, the option 1 benefit OR OPTION A BENEFIT, WHICHERER IS APPLICABLE, calculated pursuant to the provisions of this part 6 shall not exceed an amount equal to one hundred percent of the highest average salary, nor shall the option 1 benefit OR OPTION A BENEFIT, WHICHERER IS APPLICABLE, exceed the maximum permitted under federal income tax law.

SECTION 14. The introductory portion to 24-51-604, Colorado Revised Statutes, is amended to read:

24-51-604. Reduced service retirement eligibility. DPS members with less than five years of service credit as of January 1, 2011, and members who have met the age and service credit requirements stated in the following table and who do not meet the requirements of section 24-51-602 shall, upon written application and approval of the board, receive reduced service retirement benefits pursuant to the benefit formula set forth in section 24-51-605:
SECTION 15. 24-51-605 (1) and the introductory portion to 24-51-605 (3), Colorado Revised Statutes, are amended, and the said 24-51-605 is further amended BY THE ADDITION OF A NEW SUBSECTION, to read:

24-51-605. Benefit formula for reduced service retirement.
(1) (a) FOR A MEMBER WHO IS A STATE TROOPER, WHO IS ELIGIBLE TO RETIRE on and after July 1, 1998, for a member who is a state trooper but on or before January 1, 2011, and who retires upon reaching fifty years of age or older but before reaching sixty years of age, a reduced service retirement benefit shall be the option 1 benefit for service retirement, as calculated according to the formula set forth in section 24-51-603, reduced by three percent for each year and a proportional percentage for each fraction of a year from the effective date of reduced service retirement to the date the member would have become eligible for a service retirement pursuant to the provisions of section 24-51-602 (1).

(b) FOR A MEMBER WHO IS NOT A STATE TROOPER, WHO IS ELIGIBLE TO RETIRE on and after July 1, 1998, for a member who is not a state trooper but on or before January 1, 2011, and who retires upon reaching fifty-five years of age or older but before reaching sixty years of age, a reduced service retirement benefit shall be the option 1 benefit for service retirement, as calculated according to the formula set forth in section 24-51-603, reduced by:

(I) Three percent for each year and a proportional percentage for each fraction of a year from the effective date of reduced service retirement to the date the member would have reached sixty years of age, or the date the member would have become eligible for a service retirement pursuant to the provisions of section 24-51-602 (1), if earlier than sixty years of age; and

(II) Four percent for each year and a proportional percentage for each fraction of a year from the date the member reaches sixty years of age to the date the member would have become eligible for a service retirement pursuant to the provisions of section 24-51-602 (1), if on such date the member would have been older than sixty years of age.

(c) FOR A MEMBER WHO IS NOT A STATE TROOPER, WHO IS ELIGIBLE TO RETIRE on and after July 1, 1998, for a member who is not a state trooper
BUT ON OR BEFORE JANUARY 1, 2011, and who retires upon reaching sixty years of age or older but before reaching sixty-five years of age, a reduced service retirement benefit shall be the option 1 benefit for service retirement, as calculated according to the formula set forth in section 24-51-603, reduced by four percent for each year and a proportional percentage for each fraction of a year from the effective date of reduced service retirement to the date the member would have become eligible for a service retirement pursuant to the provisions of section 24-51-602 (1).

(3) Notwithstanding the provisions of subsection (1) of this section, on and after July 1, 1993, for a member who is not a state trooper, WHO IS ELIGIBLE FOR A REDUCED SERVICE RETIREMENT BENEFIT AS OF JANUARY 1, 2011, and who retires upon reaching fifty years of age or older but before reaching fifty-five years of age, a reduced service retirement benefit shall be the option 1 benefit for service retirement, as calculated according to the formula set forth in section 24-51-603, reduced by:

(4) FOR A MEMBER, DPS MEMBER, OR INACTIVE MEMBER WHO IS NOT ELIGIBLE FOR A RETIREMENT BENEFIT AS OF JANUARY 1, 2011, THE FOLLOWING PROVISIONS SHALL APPLY:

(a) FOR A MEMBER OR INACTIVE MEMBER WHO RETIRES PRIOR TO REACHING ELIGIBILITY FOR A FULL SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-602, A REDUCED SERVICE RETIREMENT BENEFIT SHALL BE THE OPTION 1 BENEFIT FOR SERVICE RETIREMENT, AS CALCULATED ACCORDING TO THE FORMULA SET FORTH IN SECTION 24-51-603, REDUCED BY AN ACTUARILY DETERMINED PERCENTAGE TO ENSURE THAT, AS OF THE EFFECTIVE DATE OF RETIREMENT, THE BENEFIT IS THE ACTUARIAL EQUIVALENT OF THE SERVICE RETIREMENT BENEFIT.

(b) FOR A DPS MEMBER WHO RETIRES PRIOR TO REACHING ELIGIBILITY FOR RETIREMENT PURSUANT TO SECTION 24-51-1713 OR 24-51-602, WHICHEVER IS APPLICABLE, A RETIREMENT WITH AN ACTUARIAL REDUCTION SHALL BE THE OPTION A BENEFIT AS CALCULATED ACCORDING TO THE FORMULA SET FORTH IN SECTION 24-51-1715 (1) (a) (I) OR 24-51-603, WHICHEVER IS APPLICABLE, REDUCED BY AN ACTUARILY DETERMINED PERCENTAGE TO ENSURE THAT THE BENEFIT, AS OF THE EFFECTIVE DATE OF RETIREMENT, IS THE ACTUARIAL EQUIVALENT OF THE RETIREMENT BENEFIT WITHOUT AN ACTUARIAL REDUCTION.
SECTION 16. 24-51-606.5, Colorado Revised Statutes, is amended to read:

24-51-606.5. Indexation of benefits for vested inactive members. A vested inactive member who was a member or inactive member on December 31, 2006, who has reached the age and service requirements for a service or reduced service retirement benefit on or before January 1, 2011, and who has at least twenty-five years of service credit prior to terminating membership shall be eligible, upon retirement, for a benefit, as calculated pursuant to the provisions of section 24-51-603 or 24-51-605, which has been increased by the annual increase specified in sections 24-51-1001 to 24-51-1003, from the date of termination of membership or July 1, 1993, whichever is later, to the effective date of retirement.

SECTION 17. 24-51-802 (2), Colorado Revised Statutes, is amended to read:

24-51-802. Change in option or cobeneficiary. (2) The election of an option or the designation of a cobeneficiary may be changed if the retiree returns to membership and thereafter earns one year of service credit; however, a member whose retirement or reduced service retirement benefits are in separate benefit segments pursuant to section 24-51-1103 (1.5) shall elect the same option and designate the same cobeneficiary for all of his or her separate benefit segments.

SECTION 18. 24-51-908 (1), Colorado Revised Statutes, is amended to read:

24-51-908. Survivor benefits. (1) Survivor benefits paid to a cobeneficiary pursuant to the provisions of section 24-51-906 (1) (a) shall be calculated in the same manner as option 3 benefits pursuant to the provisions of section 24-51-910. Survivor benefits paid to a surviving spouse pursuant to the provisions of section 24-51-905 (2) (a) shall be calculated in the same manner as option 3 benefits pursuant to the provisions of section 24-51-910, and if the deceased vested inactive member had at least twenty-five years of service credit and was eligible for a retirement benefit on or before January 1, 2011, such benefits shall be increased by the annual increase specified in sections 24-51-1001

PAGE 19-SENATE BILL 10-001
SECTION 19. 24-51-1001 (1) and (3) (b), Colorado Revised Statutes, are amended, and the said 24-51-1001 (3) is further amended BY THE ADDITION OF A NEW PARAGRAPH, to read:

24-51-1001. Types of benefit increases. (1) For benefit recipients whose benefits are based on the account of a member who was a member, inactive member, or retiree on December 31, 2006, OR FOR BENEFIT RECIPIENTS WHOSE BENEFITS ARE BASED ON THE ACCOUNT OF A DPS MEMBER OR DPS RETIREE, annual increases in retirement benefits and survivor benefits shall occur on March 1 if said benefits have been paid for at least three months preceding March 1. Such increases in benefits shall be calculated in accordance with the provisions of sections 24-51-1002 and 24-51-1003 and shall be paid from the division trust funds. RETIREMENT BENEFITS RESERVE OR THE SURVIVOR BENEFITS RESERVE, AS APPROPRIATE, SO LONG AS THE FOLLOWING REQUIREMENTS ARE SATISFIED:

(a) FOR BENEFIT RECIPIENTS WHOSE BENEFIT IS BASED ON A RETIREE OR DPS RETIREE WHOSE EFFECTIVE DATE OF RETIREMENT IS PRIOR TO JANUARY 1, 2011, OR WHOSE SURVIVOR BENEFITS ARE BASED ON A DATE OF DEATH THAT OCCURRED PRIOR TO JANUARY 1, 2011, THE BENEFITS HAVE BEEN PAID TO THE BENEFIT RECIPIENT FOR AT LEAST SEVEN MONTHS PRECEDING JULY 1.

(b) FOR BENEFIT RECIPIENTS WHOSE BENEFIT IS BASED ON A RETIREE OR DPS RETIREE WHOSE EFFECTIVE DATE OF RETIREMENT IS ON OR AFTER JANUARY 1, 2011, OR WHOSE SURVIVOR BENEFITS ARE BASED ON A DATE OF DEATH THAT IS ON OR AFTER JANUARY 1, 2011, THE BENEFITS HAVE BEEN PAID TO THE BENEFIT RECIPIENT FOR THE TWELVE MONTHS PRIOR TO JULY 1, AND FOR BENEFIT RECIPIENTS WHOSE BENEFIT IS BASED UPON A RETIREE OR DPS RETIREE WHO WAS NOT ELIGIBLE TO RETIRE AS OF JANUARY 1, 2011, THE RETIREE MET THE FOLLOWING REQUIREMENTS:

(I) FOR DPS MEMBERS WITH FIVE OR MORE YEARS OF SERVICE CREDIT AS OF JANUARY 1, 2011, AND FOR MEMBERS WHO BEGAN MEMBERSHIP PRIOR TO JULY 1, 2005, AND HAVE FIVE OR MORE YEARS OF SERVICE CREDIT AS OF JANUARY 1, 2011, THE RETIREE RETIRED WITH A
SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-602 OR 24-51-1713, WHICHEVER IS APPLICABLE, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 OR 24-51-1714, WHICHEVER IS APPLICABLE, BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE AND SERVICE CREDIT YEARS THAT WHEN COMBINED TOTAL AT LEAST EIGHTY YEARS, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE OF SIXTY;

(II) FOR MEMBERS WHO BEGAN MEMBERSHIP ON OR AFTER JULY 1, 2005, BUT PRIOR TO JANUARY 1, 2007, THE RETIREE RETIRED WITH A SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-602, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE AND SERVICE CREDIT YEARS THAT WHEN COMBINED TOTAL AT LEAST EIGHTY-FIVE YEARS, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE OF SIXTY; OR

(III) FOR DPS MEMBERS WITH LESS THAN FIVE YEARS OF SERVICE CREDIT AS OF JANUARY 1, 2011, AND FOR MEMBERS WHOSE MEMBERSHIP BEGAN PRIOR TO JANUARY 1, 2007, WITH LESS THAN FIVE YEARS OF SERVICE CREDIT AS OF JANUARY 1, 2007, THE RETIREE RETIRED WITH A SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-602, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE AND SERVICE CREDIT YEARS THAT WHEN COMBINED TOTAL AT LEAST EIGHTY-FIVE YEARS, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE OF SIXTY.

(c) NO MINIMUM AGE OR SERVICE CREDIT REQUIREMENT SHALL APPLY TO DISABILITY RETIREES OR SURVIVOR BENEFIT RECIPIENTS.

(3) For benefit recipients whose benefits are based on the account of a member who was not a member, inactive member, or retiree on December 31, 2006, annual increases in retirement benefits and survivor benefits, if any, shall be effective with the July benefit in accordance with the provisions of section 24-51-1009 and shall be paid from the retirement benefits reserve or the survivor benefits reserve, as appropriate, so long as the following requirements are satisfied:
(b) (I) For members whose membership began on or after January 1, 2007, but prior to January 1, 2011, the retiree retired with a service retirement benefit pursuant to section 24-51-602, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age and service credit years that when combined total at least eighty-five years, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty; No minimum age or service credit requirement shall apply to disability retirees or survivor benefit recipients.

(II) For members whose membership began on or after January 1, 2011, but prior to January 1, 2017, the retiree retired with a service retirement benefit pursuant to section 24-51-602, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age and service credit years that when combined total at least eighty-eight years, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty; or

(III) Subject to the provisions of subparagraph (IV) of this paragraph (b), for members whose membership began on or after January 1, 2017, the retiree retired with a service retirement benefit pursuant to section 24-51-602, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age and service credit years that when combined total at least ninety years, or the retiree retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty.

(IV) For members whose membership began on or after January 1, 2017, the retiree retired from the School or Denver Public Schools divisions with a reduced service retirement benefit pursuant to section 24-51-604 and the retiree’s most recent ten years of service credit was earned in the school or Denver Public Schools divisions, but, as of January 1, the retiree’s age and total service credit total at least eighty-eight years, or the retiree retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty.
(c) No minimum age or service credit requirement shall apply to disability retirees or survivor benefit recipients.

SECTION 20. 24-51-1002, Colorado Revised Statutes, is REPEALED AND REENACTED, WITH AMENDMENTS, to read:

24-51-1002. Annual percentages to be used. (1) For benefit recipients whose benefits are based on the account of a member who was a member, inactive member, or retiree on December 31, 2006, or for benefit recipients whose benefits are based on the account of a DPS member or DPS retiree, the increase applied to benefits for the year 2010 shall be the lesser of two percent or the average of the annual increases determined for each month, to the nearest one-tenth of a percent, as calculated by the United States Department of Labor, in the National Consumer Price Index for Urban Wage Earners and Clerical Workers for each of the months in the 2009 calendar year.

(2) Beginning in the year 2011, subject to the provisions of section 24-51-1009.5, for benefit recipients whose benefits are based on the account of a member who was a member, inactive member, or retiree on December 31, 2006, or for benefit recipients whose benefits are based on the account of a DPS member or DPS retiree, the increase applied to benefits paid shall be the lesser of two percent or the average of the annual increases determined for each month, to the nearest one-tenth of a percent, as calculated by the United States Department of Labor, in the National Consumer Price Index for Urban Wage Earners and Clerical Workers during the calendar year preceding the increase in the benefit. Notwithstanding the provisions of this subsection (2), the increase shall be the maximum permitted under this subsection (2) and section 24-51-1009.5 unless the Association's annual audited return on investments is negative for the preceding calendar year, at which point the annual increase for the subsequent three years shall be the lesser of two percent or the average of the annual increases determined for each month, to the nearest one-tenth of a percent, as calculated by the United States Department of Labor, in the National Consumer Price Index for Urban Wage Earners and Clerical Workers during the calendar year preceding the increase in the benefit. The increase applied to

PAGE 23-SENATE BILL 10-001
SUCH BENEFITS SHALL BE RECALCULATED ANNUALLY AS OF JULY 1, AND
SHALL BE THE COMPOUNDED ANNUAL PERCENTAGE OF THE ANNUAL
INCREASES APPLIED TO SUCH BENEFITS. IN THE FIRST YEAR THAT THE
BENEFIT RECIPIENT IS ELIGIBLE TO RECEIVE AN ANNUAL INCREASE PURSUANT
TO SECTION 24-51-1001, THE ANNUAL INCREASE SHALL BE PRORATED.

(3) BENEFITS FOR VESTED INACTIVE MEMBERS WITH AT LEAST
TWENTY-FIVE YEARS OF SERVICE CREDIT AND BENEFITS FOR SURVIVORS OF
DECEASED VESTED INACTIVE MEMBERS WHO HAD AT LEAST TWENTY-FIVE
YEARS OF SERVICE CREDIT SHALL BE INCREASED BY THE ANNUAL INCREASE
SPECIFIED IN THIS SECTION AND SECTIONS 24-51-1001 AND 24-51-1003
UNDER PRIOR LAW FROM THE DATE OF TERMINATION OF MEMBERSHIP OR
JULY 1, 1993, WHICHER IS LATER, TO MARCH 1, 2009, OR THE DATE
BENEFITS COMMENCE, WHICHER IS EARLIER. THIS SUBSECTION (3) SHALL
ONLY APPLY TO MEMBERS AND INACTIVE MEMBERS WHO ARE ELIGIBLE TO
RECEIVE A RETIREMENT BENEFIT AS OF JANUARY 1, 2011.

(4) NOTWITHSTANDING THE PROVISIONS OF SUBSECTION (1) OF THIS
SECTION, THE INCREASE, IF ANY, APPLIED TO THE BENEFITS OF PERSONS
WHOSE BENEFITS ARE BASED ON THE ACCOUNT OF A MEMBER WHO WAS NOT
A MEMBER, INACTIVE MEMBER, OR RETIREE ON DECEMBER 31, 2006, WILL BE
CALCULATED AND PAID IN ACCORDANCE WITH SECTION 24-51-1009.

SECTION 21. 24-51-1003, Colorado Revised Statutes, is amended
to read:

24-51-1003. Annual increases in the base benefit. The percentage
recalculated pursuant to the provisions of section 24-51-1002 shall be
multiplied by the base benefit OR RETIREMENT ALLOWANCE AS DEFINED IN
SECTION 24-51-1702 (34), WHICHER IS APPLICABLE, to determine the
increased benefit. In no case shall the benefit paid be less than the base
benefit OR RETIREMENT ALLOWANCE, WHICHER IS APPLICABLE.

SECTION 22. The introductory portion to 24-51-1009 (4) and
24-51-1009 (4) (a) and (4) (b), Colorado Revised Statutes, are amended,
and the said 24-51-1009 is further amended BY THE ADDITION OF A
NEW SUBSECTION, to read:

24-51-1009. Annual increase reserve - creation. (4) An actuarial
valuation shall be conducted each year for the annual increase reserve of
each division for the purposes of this section. The actuarial valuation shall include a determination of the total market value of the assets in the reserve and a calculation of the net present value of the actuarial liabilities associated with providing each of the annual increases described in paragraphs (a), (b), and (c) of this subsection (4). SUBJECT TO SECTION 24-51-1009.5, the maximum annual increase awarded by the board shall be the lesser of the following calculations:

(a) A permanent increase equal to three two percent of current benefits payable to benefit recipients then eligible for an annual increase in accordance with section 24-51-1001 (3);

(b) SUBJECT TO THE PROVISIONS OF SUBSECTION (4.5) OF THIS SECTION, a permanent increase of current benefits payable to benefit recipients then eligible for an annual increase in accordance with section 24-51-1001 (3) that is equal to the actual increase of the average of the annual increases determined for each month, to the nearest one-tenth of a percent, as calculated by the United States department of labor, in the national consumer price index for urban wage earners and clerical workers during the calendar year preceding the increase in the benefit for the year associated with the actuarial valuation of the annual increase reserve; or


SECTION 23. Part 10 of article 51 of title 24, Colorado Revised Statutes, is amended BY THE ADDITION OF A NEW SECTION to read:


SECTION 24. The introductory portion to 24-51-1101 (1) and 24-51-1101 (2), Colorado Revised Statutes, are amended, and the said 24-51-1101 is further amended BY THE ADDITION OF A NEW SUBSECTION, to read:

24-51-1101. Employment after service retirement. (1) Except as otherwise provided in subsection (1.5) or (1.7) of this section or part 17 of this article, a service retiree from any division may be employed by an employer, whether or not in a position subject to membership, and receive a salary without reduction in benefits if the service retiree has not worked for any employer, as defined in section 24-51-101 (20), during the month of the effective date of retirement, and if:

(1.8) (a) A SERVICE RETIREE WHO IS HIRED BY A STATE COLLEGE OR UNIVERSITY OR BY AN EMPLOYER IN THE SCHOOL OR DENVER PUBLIC SCHOOLS DIVISION OF THE ASSOCIATION PURSUANT TO PARAGRAPH (b) OF THIS SUBSECTION (1.8) MAY RECEIVE SALARY WITHOUT REDUCTION IN BENEFITS IF EMPLOYMENT OF MORE THAN FOUR HOURS PER DAY DOES NOT EXCEED ONE HUNDRED FORTY DAYS IN THE CALENDAR YEAR, IF EMPLOYMENT OF FOUR HOURS OR LESS PER DAY DOES NOT EXCEED NINE HUNDRED SIXTEEN HOURS IN THE CALENDAR YEAR, OR IF EMPLOYMENT CONSISTING OF A COMBINATION OF DAILY AND HOURLY EMPLOYMENT DOES NOT EXCEED ONE HUNDRED FORTY DAYS PER CALENDAR YEAR, AND IF THE SERVICE RETIREE HAS NOT WORKED FOR ANY EMPLOYER, AS DEFINED IN SECTION 24-51-101 (20), DURING THE MONTH OF THE EFFECTIVE DATE OF RETIREMENT. A SERVICE RETIREE DESCRIBED IN THIS PARAGRAPH (a) WHO WORKS FOR ANY EMPLOYER, AS DEFINED IN SECTION 24-51-101 (20), DURING THE MONTH OF THE EFFECTIVE DATE OF RETIREMENT SHALL BE SUBJECT TO A REDUCTION IN BENEFITS AS PROVIDED IN SECTION 24-51-1102 (2).

(b) A STATE COLLEGE OR UNIVERSITY OR AN EMPLOYER IN THE SCHOOL OR DENVER PUBLIC SCHOOLS DIVISION MAY HIRE UP TO TEN SERVICE RETIREEs IN AREAS WHERE THE EMPLOYER DETERMINES THAT THERE IS A
CRITICAL SHORTAGE OF QUALIFIED CANDIDATES AND THAT THE SERVICE RETIREE HAS UNIQUE EXPERIENCE, SKILL, OR QUALIFICATIONS THAT WOULD BENEFIT THE EMPLOYER. THE EMPLOYER SHALL NOTIFY THE ASSOCIATION UPON HIRING A SERVICE RETIREE PURSUANT TO THIS SUBSECTION (1.8). A LIST OF ANY AND ALL SERVICE RETIREES EMPLOYED BY THE EMPLOYER SHALL BE PROVIDED TO THE ASSOCIATION AT THE START OF EACH CALENDAR YEAR AND SHALL BE UPDATED PRIOR TO ANY ADDITIONAL HIRINGS DURING THE SAME CALENDAR YEAR.

(c) A STATE COLLEGE OR UNIVERSITY OR AN EMPLOYER IN THE SCHOOL OR DENVER PUBLIC SCHOOLS DIVISION SHALL PROVIDE FULL PAYMENT OF ALL EMPLOYER CONTRIBUTIONS AND ALL DISBURSEMENTS IN ACCORDANCE WITH PART 4 OF THIS ARTICLE, AND ALL WORKING RETIREE CONTRIBUTIONS IN ACCORDANCE WITH PART 11 OF THIS ARTICLE, ON THE SALARY PAID TO THE SERVICE RETIREE DESCRIBED IN PARAGRAPH (a) OF THIS SUBSECTION (1.8).

(d) A SERVICE RETIREE WHO IS EMPLOYED PURSUANT TO THIS SUBSECTION (1.8) SHALL NOT BE REQUIRED TO RESUME MEMBERSHIP. UPON TERMINATION OF SUCH RETIREE’S EMPLOYMENT, THERE SHALL BE NO BENEFIT CALCULATION REFLECTING ADDITIONAL SERVICE CREDIT OR ANY INCREASE IN THE HIGHEST AVERAGE SALARY OF SUCH PERSON.

(e) FOR PURPOSES OF THIS SUBSECTION (1.8), "STATE COLLEGE OR UNIVERSITY" MEANS ANY POSTSECONDARY EDUCATIONAL INSTITUTION, INCLUDING COMMUNITY AND JUNIOR COLLEGES, ESTABLISHED AND EXISTING PURSUANT TO TITLE 23, C.R.S., AS AN AGENCY OF THE STATE OF COLORADO AND SUPPORTED WHOLLY OR IN PART BY TAX REVENUES.

(2) Salary from the employment, engagement, retention, or other use of a service retiree OR DPS RETIREE in an individual capacity or of any entity owned or operated by a service retiree or affiliated party by an employer to perform any service as an employee, contract employee, consultant, independent contractor, or through any other arrangement, shall be subject to employer contributions but shall not be subject to member contributions, except as provided in section 24-51-1103. EFFECTIVE JANUARY 1, 2011, SUCH SALARY SHALL ALSO BE SUBJECT TO WORKING RETIREE CONTRIBUTIONS. Salary from employment by a retiree who is serving in a state elected official’s position shall not be subject to employer contributions OR WORKING RETIREE CONTRIBUTIONS. SALARY FROM
EMPLOYMENT OF A RETIREE WHO IS PARTICIPATING IN AN EDUCATIONAL EMPLOYEES’ OPTIONAL RETIREMENT PLAN PURSUANT TO ARTICLE 54.5 OF THIS TITLE SHALL NOT BE SUBJECT TO WORKING RETIREE CONTRIBUTIONS.

SECTION 25. 24-51-1103 (1) and (3), Colorado Revised Statutes, are amended, and the said 24-51-1103 is further amended BY THE ADDITION OF A NEW SUBSECTION, to read:

24-51-1103. Contributions for a retiree who returns to membership - benefit calculation upon subsequent retirement - survivor benefit rights - disability retirement benefits. (1) Except as otherwise provided in section 24-51-1747, a retiree who returns to work in a position that is subject to membership may voluntarily suspend the service retirement benefits or the reduced service retirement benefits and resume membership. Upon such suspension, employer and member contributions are required to be made pursuant to the provisions of part 4 of this article. Any additional service credit accumulated and any increase in the highest average salary of such person shall be reflected in the benefit calculation upon subsequent termination of membership only after one year of service credit has been earned.

(1.5) A RETIREE WHO, ON OR AFTER JANUARY 1, 2011, SUSPENDS HIS OR HER SERVICE RETIREMENT OR REDUCED SERVICE RETIREMENT BENEFITS SHALL NOT ADD ANY SERVICE CREDIT TO THE BENEFIT SEGMENT FROM WHICH THE RETIREE SUSPENDS HIS OR HER RETIREMENT. SUBJECT TO THE ELECTION SET FORTH BELOW, ANY ADDITIONAL SERVICE CREDIT ACCUMULATED WILL BE REFLECTED IN SEPARATE BENEFIT SEGMENTS UPON SUBSEQUENT TERMINATION OF MEMBERSHIP, BUT ONLY AFTER ONE YEAR OF SERVICE CREDIT HAS BEEN EARNED DURING A PERIOD OF SUSPENSION. THE SERVICE RETIREMENT OR REDUCED SERVICE RETIREMENT BENEFITS FOR EACH QUALIFYING SEPARATE BENEFIT SEGMENT WILL BE CALCULATED PURSUANT TO THE BENEFIT STRUCTURE UNDER WHICH THE RETIREE ORIGINALLY RETIRED. THE BENEFIT FOR EACH SEPARATE BENEFIT SEGMENT RESULTING FROM SUSPENSION SHALL BE DETERMINED USING THE MEMBER’S SALARY AND SERVICE CREDIT ACQUIRED DURING THE PERIOD OF SUSPENSION. THE MEMBER’S AGE AND TOTAL SERVICE CREDIT WITH THE ASSOCIATION UPON RETIREMENT AFTER EACH SUSPENSION SHALL GOVERN WHETHER THE MEMBER SHALL RECEIVE A SERVICE RETIREMENT CALCULATION OR A REDUCED SERVICE RETIREMENT CALCULATION PURSUANT TO SECTION 24-51-605 FOR THAT SEGMENT. PREVIOUS SEPARATE
BENEFIT SEGMENTS SHALL BE SUBJECT TO RECALCULATION ONLY TO REFLECT A CHANGE IN THE SELECTED OPTION OR A DESIGNATED COBENEFICIARY, IF APPLICABLE, AND NO BENEFIT INCREASES PURSUANT TO SECTION 24-51-1001 WILL BE APPLICABLE TO ANY SEPARATE BENEFIT SEGMENT DURING ANY PERIOD OF SUSPENSION. UPON REINSTATEMENT OF THE RETIREMENT BENEFIT ALLOWANCE PAYMENTS, NO INCREASE SHALL BE MADE UNTIL SUCH RESUMED PAYMENTS HAVE BEEN PAID CONTINUOUSLY FOR THE TWELVE MONTHS PRIOR TO JULY 1. UPON RESUMPTION OF RETIREMENT AFTER SUSPENSION, THE ASSOCIATION SHALL REFUND ALL MONEYS CREDITED TO THE MEMBER CONTRIBUTION ACCOUNT DURING THE PERIOD OF SUSPENSION PURSUANT TO SECTION 24-51-405 UNLESS, WITHIN A TIME PERIOD SET BY THE ASSOCIATION, THE RETIREE MAKES WRITTEN ELECTION TO ESTABLISH A SEPARATE BENEFIT SEGMENT CALCULATED AS SET FORTH ABOVE. THE REFUND SHALL BE AN AMOUNT EQUAL TO ALL MONEYS CREDITED TO THE MEMBER CONTRIBUTION ACCOUNT DURING THE PERIOD OF SUSPENSION AND PAYMENT OF MATCHING EMPLOYER CONTRIBUTIONS PURSUANT TO SECTION 24-51-408. THE REQUIREMENT TO HAVE AT LEAST FIVE YEARS OF SERVICE CREDIT TO BE ELIGIBLE FOR THE MATCHING EMPLOYER CONTRIBUTIONS PROVIDED IN SECTION 24-51-408 SHALL NOT APPLY IN THE EVENT OF RETURNING TO RETIREMENT AFTER SUSPENSION. NO REFUND MAY BE ISSUED FOR ANY BENEFIT SEGMENT FROM WHICH A BENEFIT HAS BEEN DRAWN. SUCH REFUND SHALL BE REQUIRED FOR ANY SEPARATE BENEFIT SEGMENT DURING WHICH LESS THAN ONE YEAR OF SERVICE CREDIT HAS BEEN EARNED.

(3) Disability retirement benefits provided for in part 7 of this article shall be available to a retiree after five years of service credit has been earned during the most recent period of membership.

SECTION 26. 24-51-1702 (17) and (34), Colorado Revised Statutes, are amended to read:

24-51-1702. Definitions. As used in this part 17, unless the context otherwise requires:

(17) "Highest average salary" means the average monthly compensation of the thirty-six months of accredited service having the highest rates, multiplied by twelve, or the "career average salary", whichever is greater, and shall be applied to benefits, except for benefits under sections 24-51-1727 to 24-51-1731, attributable to retirement or death
on or after July 1, 1994. For benefits under sections 24-51-1727 to 24-51-1731, "highest average salary" applies to cases where termination of service occurs on or after July 1, 1994. This subsection (17) shall apply only to DPS members eligible for a retirement benefit as of January 1, 2011. For DPS members not eligible for a retirement benefit as of January 1, 2011, the definition of "highest average salary" specified in section 24-51-101 (25) (b) (V) shall apply.

(34) "Retirement allowance" or "total retirement allowance" means the total of pension, annuity, and all postretirement increases. Initial benefit for a benefit that becomes effective on or after January 1, 2010. For a benefit that became effective before January 1, 2010, "retirement allowance" means the total benefit payable as of June 30, 2010, including the sum of the initial benefit, accumulated annual increases, and cost of living increases.

SECTION 27. 24-51-1713, Colorado Revised Statutes, is amended to read:

24-51-1713. Eligibility - retirements without actuarial reduction.
(1) This section shall only apply to DPS members who have five or more years of service credit as of January 1, 2011. For DPS members who have less than five years of service credit as of January 1, 2011, eligibility for retirement without an actuarial reduction shall be governed by section 24-51-602 (1) (a.7) and (1) (d).

(2) Whenever a contributing member or affiliate member pursuant to the DPS plan has completed a period of twenty-five years of active service, of which not less than fifteen years shall have been with the district, and has attained the age of fifty-five years while in the service of the district, said member shall be eligible for retirement for superannuation. Such retirement shall be made upon due application and subject to such rules as may be prescribed by the association.

(3) Whenever a contributing member or affiliate member of the DPS plan has completed a period of five years of active service and has attained the age of sixty-five while in the service of the district, said member shall be eligible for retirement for superannuation. Such retirement shall be made upon due application and subject to such rules as may be
prescribed by the board of trustees.

(3) (4) Whenever a contributing member or affiliate member pursuant to the DPS plan has completed a period of thirty years of active service with the district and has attained the age of fifty years while in the service of the district, said member shall be eligible for retirement for superannuation. Such retirement shall be made upon due application and subject to such rules as may be prescribed by the association.

**SECTION 28.** 24-51-1714, Colorado Revised Statutes, is amended to read:

24-51-1714. Eligibility - retirements requiring actuarial reduction. (1) THIS SECTION SHALL ONLY APPLY TO DPS MEMBERS WHO HAVE FIVE OR MORE YEARS OF SERVICE CREDIT AS OF JANUARY 1, 2011. FOR DPS MEMBERS WHO HAVE LESS THAN FIVE YEARS OF SERVICE CREDIT AS OF JANUARY 1, 2011, ELIGIBILITY FOR RETIREMENT REQUIRING AN ACTUARIAL REDUCTION SHALL BE GOVERNED BY SECTION 24-51-604.

(2) (2) Whenever a contributing member or affiliate member pursuant to the DPS plan has completed a period of twenty-five years of active service with the district but has not attained the age of fifty-five years, said member shall be eligible for retirement for superannuation but with reduced benefits in accordance with the applicable provisions of section 24-51-1715. Any such retirement shall be voluntary and reflect the choice of the member.

(2) (3) Whenever a contributing member or affiliate member pursuant to the DPS plan has completed a period of fifteen years of active service with the district and has attained the age of fifty-five years while in the service of the district, said member shall be eligible for retirement for superannuation but with reduced benefits in accordance with the applicable provisions of section 24-51-1715. Any such retirement shall be voluntary and reflect the choice of the contributing member.

(3) (4) Whenever a contributing member or affiliate member pursuant to the DPS plan has completed a period of thirty years of active service with the district but has not attained the age of fifty years, said contributing member shall nevertheless be eligible for retirement for superannuation but with reduced benefits in accordance with the applicable
provisions of section 24-51-1715. Any such retirement shall be voluntary and reflect the choice of the member.

SECTION 29. 24-51-1715 (1) (a) and (1) (c), Colorado Revised Statutes, are amended to read:

24-51-1715. Benefits. (1) The annual superannuation retirement allowance shall be determined in the following manner:

(a) Subject to the provisions of paragraph (c) of this subsection (1) pertaining to certain members appointed or reappointed on or after July 1, 2005, and for persons who become affiliate members on or after July 1, 2005, the following calculations shall apply:

(I) If said member shall retire pursuant to section 24-51-1713, the highest average salary as defined in section 24-51-1702 (17) shall be multiplied by the primary percentage which shall determine the annual retirement allowance expressed as a single life annuity and known as option A.

(II) If, however, said member shall retire pursuant to section 24-51-1714 (1) 24-51-1714 (2), and if the member HAS REACHED RETIREMENT ELIGIBILITY AS OF JANUARY 1, 2011, AND has attained a minimum age of fifty years, the annual retirement allowance, calculated pursuant to subparagraph (I) of this paragraph (a), shall be reduced by the lesser of four percent for each year that fifty-five exceeds said member's attained age or four percent for each year that thirty exceeds said member's number of years of active service with the district, in either case prorated for a partial year. FOR MEMBERS WHO HAVE NOT REACHED RETIREMENT ELIGIBILITY AS OF JANUARY 1, 2011, THE ANNUAL RETIREMENT ALLOWANCE, CALCULATED PURSUANT TO SUBPARAGRAPH (I) OF THIS PARAGRAPH (a), SHALL BE REDUCED BY AN ACTUARILY DETERMINED PERCENTAGE AS OF THE EFFECTIVE DATE OF RETIREMENT TO ENSURE THAT THE BENEFIT IS THE ACTUARIAL EQUIVALENT OF THE ANNUAL RETIREMENT ALLOWANCE, CALCULATED PURSUANT TO SUBPARAGRAPH (I) OF THIS PARAGRAPH (a).

(III) If said member shall retire pursuant to section 24-51-1714 (1) 24-51-1714 (2), and if the member HAS REACHED RETIREMENT ELIGIBILITY AS OF JANUARY 1, 2011, AND is younger than age fifty, the annual retirement allowance, calculated pursuant to subparagraph (I) of this paragraph (a),
shall be reduced by the greater of four percent for each year that fifty exceeds said member's attained age or four percent for each year that thirty exceeds said member's number of years of active service with the district, in either case prorated for a partial year. For members who have not reached retirement eligibility as of January 1, 2011, the annual retirement allowance, calculated pursuant to subparagraph (I) of this paragraph (a), shall be reduced by an actuarily determined percentage as of the effective date of retirement to ensure that the benefit is the actuarial equivalent of the annual retirement allowance, calculated pursuant to subparagraph (I) of this paragraph (a).

(IV) If said member shall retire pursuant to section 24-51-1714 (2), and the member has reached retirement eligibility as of January 1, 2011, the annual retirement allowance, calculated pursuant to subparagraph (I) of this paragraph (a), shall be reduced by the lesser of four percent for each year that twenty-five exceeds said member's number of years of active service with the district or four percent for each year that sixty-five exceeds said member's age, in either case prorated for a partial year. For members who have not reached retirement eligibility as of January 1, 2011, the annual retirement allowance, calculated pursuant to subparagraph (I) of this paragraph (a), shall be reduced by an actuarily determined percentage as of the effective date of retirement to ensure that the benefit is the actuarial equivalent of the annual retirement allowance, calculated pursuant to subparagraph (I) of this paragraph (a).

(V) If said member shall retire pursuant to section 24-51-1714 (3), 24-51-1714 (4), and if the member has reached retirement eligibility as of January 1, 2011, the annual retirement allowance, calculated pursuant to subparagraph (I) of this paragraph (a), shall be reduced by four percent for each year that fifty exceeds said member's age. For members who have not reached retirement eligibility as of January 1, 2011, the annual retirement allowance, calculated pursuant to subparagraph (I) of this paragraph (a), shall be reduced by an actuarily determined percentage as of the effective date of retirement to ensure that the benefit is the actuarial equivalent of the annual retirement allowance, calculated pursuant to subparagraph (I) of this paragraph (a).
(c) In making the calculation of the annual retirement allowance adjustment for a member who initially was appointed or who became an affiliate member on or after July 1, 2005, AND WHO HAS REACHED RETIREMENT ELIGIBILITY AS OF JANUARY 1, 2011, the reduction percentage provided in paragraph (a) of this subsection (1) shall be changed in each instance from four percent to six percent. This paragraph (c) shall not apply to a member whose contributing or affiliate membership began on or before June 30, 2005, and whose accumulated contribution balance remains continuously on deposit in the Denver public schools division through the effective date of such member's retirement. FOR MEMBERS WHO HAVE NOT REACHED RETIREMENT ELIGIBILITY AS OF JANUARY 1, 2011, THE ANNUAL RETIREMENT ALLOWANCE, CALCULATED PURSUANT TO SUBPARAGRAPH (I) OF PARAGRAPH (a) OF THIS SUBSECTION (1), SHALL BE REDUCED BY AN ACTUARILY DETERMINED PERCENTAGE AS OF THE EFFECTIVE DATE OF RETIREMENT TO ENSURE THAT THE BENEFIT IS THE ACTUARIAL EQUIVALENT OF THE ANNUAL RETIREMENT ALLOWANCE, CALCULATED PURSUANT TO SUBPARAGRAPH (I) OF PARAGRAPH (a) OF THIS SUBSECTION (1).

SECTION 30. Part 17 of article 51 of title 24, Colorado Revised Statutes, is amended BY THE ADDITION OF A NEW SECTION to read:

24-51-1726.5. Contributions for a retiree who returns to membership - benefit calculation upon subsequent retirement - survivor benefit rights. (1) EXCEPT AS OTHERWISE PROVIDED IN SECTION 24-51-1747, A DPS RETIREE WHO RETURNS TO WORK IN A POSITION THAT IS SUBJECT TO MEMBERSHIP MAY VOLUNTARILY SUSPEND HIS OR HER RETIREMENT ALLOWANCE AND RESUME MEMBERSHIP. UPON SUCH SUSPENSION, EMPLOYER AND MEMBER CONTRIBUTIONS ARE REQUIRED TO BE MADE PURSUANT TO THE PROVISIONS OF PART 4 OF THIS ARTICLE.

(2) A DPS RETIREE WHO, ON OR AFTER JANUARY 1, 2011, SUSPENDS HIS OR HER RETIREMENT ALLOWANCE SHALL NOT ADD ANY SERVICE CREDIT TO THE BENEFIT SEGMENT FROM WHICH THE RETIREE SUSPENDS HIS OR HER RETIREMENT. SUBJECT TO THE ELECTION SET FORTH BELOW, ANY ADDITIONAL SERVICE CREDIT ACCUMULATED WILL BE REFLECTED IN SEPARATE BENEFIT SEGMENTS UPON SUBSEQUENT TERMINATION OF MEMBERSHIP, BUT ONLY AFTER ONE YEAR OF SERVICE CREDIT HAS BEEN EARNED DURING A PERIOD OF SUSPENSION. THE RETIREMENT ALLOWANCE FOR EACH QUALIFYING SEPARATE BENEFIT SEGMENT WILL BE CALCULATED PURSUANT TO THE BENEFIT STRUCTURE UNDER WHICH THE RETIREE
ORIGINALLY RETIRED. THE BENEFIT FOR EACH SEPARATE BENEFIT SEGMENT RESULTING FROM SUSPENSION SHALL BE DETERMINED USING THE DPS MEMBER’S SALARY AND SERVICE CREDIT ACQUIRED DURING THE PERIOD OF SUSPENSION. THE DPS MEMBER’S AGE AND TOTAL SERVICE CREDIT WITH THE ASSOCIATION UPON RETIREMENT AFTER EACH SUSPENSION SHALL GOVERN WHETHER THE DPS MEMBER SHALL RECEIVE A RETIREMENT ALLOWANCE PURSUANT TO SECTION 24-51-1713 OR 24-51-1714 FOR THAT SEGMENT. PREVIOUS SEPARATE BENEFIT SEGMENTS SHALL BE SUBJECT TO RECALCULATION ONLY TO REFLECT A CHANGE IN THE SELECTED OPTION OR A DESIGNATED COANNUITANT, IF APPLICABLE, AND NO BENEFIT INCREASES PURSUANT TO SECTION 24-51-1001 WILL BE APPLICABLE TO ANY SEPARATE BENEFIT SEGMENT DURING ANY PERIOD OF SUSPENSION. UPON REINSTATEMENT OF THE RETIREMENT BENEFIT ALLOWANCE PAYMENTS, NO INCREASE SHALL BE MADE UNTIL SUCH RESUMED PAYMENTS HAVE BEEN PAID CONTINUOUSLY FOR THE TWELVE MONTHS PRIOR TO JULY 1. UPON RESUMPTION OF RETIREMENT AFTER SUSPENSION, THE ASSOCIATION SHALL REFUND ALL MONEYS CREDITED TO THE MEMBER CONTRIBUTION ACCOUNT DURING THE PERIOD OF SUSPENSION PURSUANT TO SECTION 24-51-405 UNLESS, WITHIN A TIME SET BY THE ASSOCIATION, THE RETIREE MAKES WRITTEN ELECTION TO ESTABLISH A SEPARATE BENEFIT SEGMENT CALCULATED AS SET FORTH ABOVE. THE REFUND SHALL BE AN AMOUNT EQUAL TO ALL MONEYS CREDITED TO THE MEMBER CONTRIBUTION ACCOUNT DURING THE PERIOD OF SUSPENSION AND PAYMENT OF MATCHING EMPLOYER CONTRIBUTIONS PURSUANT TO SECTION 24-51-1711 OR 24-51-1729 (6) (I), WHICHEVER IS APPLICABLE. NO REFUND CAN ISSUE FOR ANY BENEFIT SEGMENT FROM WHICH A BENEFIT HAS BEEN DRAWN. SUCH REFUND SHALL BE REQUIRED FOR ANY SEPARATE BENEFIT SEGMENT DURING WHICH LESS THAN ONE YEAR OF SERVICE CREDIT HAS BEEN EARNED.

(3) (a) A DPS MEMBER WHOSE RETIREMENT ALLOWANCES ARE IN SEPARATE BENEFIT SEGMENTS PURSUANT TO THIS SECTION MUST ELECT THE SAME OPTION AND DESIGNATE THE SAME COANNUITANT FOR ALL OF HIS OR HER SEPARATE BENEFIT SEGMENTS.

(b) A DPS RETIREE WHO SUSPENDS HIS OR HER RETIREMENT AND ELECTS A SEPARATE BENEFIT SEGMENT PURSUANT TO THIS SECTION MAY CHANGE HIS OR HER ORIGINAL OPTION AND COANNUITANT ELECTION ONLY IF THE ORIGINAL OPTION SELECTED WAS OPTION A, P2, OR P3. DPS RETIREES WHO SELECTED OPTION B, C, D, OR E SHALL NOT BE ALLOWED TO CHANGE THAT ELECTION.
(4) **Survivor benefit rights provided for in this Part 17 shall be available to a DPS retiree who voluntarily suspends the benefits and returns to membership as if such retiree had not retired.**

**SECTION 31.** 24-51-1729 (1) (a) (V), Colorado Revised Statutes, is amended to read:

24-51-1729. **Benefits - deferred members.** (1) In the event the employment of such member with the district terminates on or after July 1, 1962, the deferred retirement allowance, subject to the limitations set forth in section 24-51-1731, shall be computed in the following manner and paid under the following conditions:

(a) The amount of the deferred retirement allowance under option A shall be determined in the same manner and subject to the same conditions as is set forth in section 24-51-1715, if the member was a contributing member or affiliate member at the time that employment was terminated, with the following limitations:

(V) In making the calculation of the deferred retirement allowance for one qualified for deferred benefits, the provisions of section 24-51-1715 (1) (c) changing the reduction percentage from four percent to six percent for certain retirements and section 24-51-1732 basing the annual retirement allowance adjustment on the lesser of three percent or the actual increase, as calculated by the United States department of labor, in the national consumer price index for urban wage earners and clerical workers during the calendar year preceding the increase, but in no case less than zero, shall not apply if the retiree terminated employment on or before June 30, 2005.

**SECTION 32.** 24-51-1732 (1), (2), (3), and (5), Colorado Revised Statutes, are amended to read:

24-51-1732. **Benefit increases - annual retirement allowance adjustment - contributing members - affiliate members - deferred members - survivors (2001 and 2005).** (1) (a) Monthly retirement and survivor benefit payments, including the increases determined under the provisions of the DPS plan document attributable to retirement or death of an eligible employee of the district who retired or died after December 1, 1945, shall be increased as follows: **IN ACCORDANCE WITH PART 10 OF THIS**
ARTICLE.

(a)(I) Subject to section 24-51-1747(13), effective on January 1 of every year, beginning January 1, 2001, the retirement allowance or survivor benefit payment payable on December 31 of the preceding year shall be increased by three and one-quarter percent, provided, however, that increases for contributing members initially appointed on or after July 1, 2005, and for persons who become affiliate members on or after July 1, 2005, or for benefits derived through such members, shall be calculated and shall be effective as follows:

(A) The increase shall be based on the lesser of three percent or the actual increase, as calculated by the United States department of labor, in the national consumer price index for urban wage earners and clerical workers during the calendar year preceding the increase, but in no case less than zero;

(B) The resulting percentage shall be prorated, for the initial increase only, based on the number of months and fractional months that the annuitant was retired or receiving survivor benefits by March 1 of the year following the year of retirement or the date survivor benefits initially became payable; and

(C) The increase shall be effective on March 1 of each year following the year in which the effective date of retirement falls or the year in which survivor benefits become payable.

(II) The increase last stated shall not apply to a member, or for benefits derived through such member, whose contributing or affiliate membership began on or before June 30, 2005, and whose accumulated contribution balance remains continuously on deposit in the Denver public schools division through the effective date of such member's retirement.

(b) Adjusted payments based on survivor benefits that are suspended by reason of the beneficiary not having attained the minimum age requirements provided in sections 24-51-1738 to 24-51-1740 or pursuant to the provisions of the DPS plan document shall not continue to accumulate or accrue during such period of suspension.

(2) Upon attainment of the minimum age requirements and
resumption of such survivor's benefit payments or reinstatement under the provisions of the DPS plan document, no increase shall be made until such resumed payments have been paid continuously for THE TWELVE MONTHS PRIOR TO JULY 1.

(3) Annual retirement allowance adjustments shall be payable to retired employees, survivors, or beneficiaries meeting the above requirements who are eligible to receive monthly benefits under the provisions of the DPS plan document:

(5) PURSUANT TO SECTION 24-51-1726.5, adjusted payments based on benefits that are suspended by reason of the annuitant's having returned to service with the district, AN EMPLOYER AFFILIATED WITH THE ASSOCIATION as a regular employee shall not continue to accumulate or accrue during such period of suspension. Upon reinstatement of the retirement allowance payments, no increase shall be made until such resumed payments have been paid continuously for THE TWELVE MONTHS PRIOR TO JULY 1.

SECTION 33. 24-51-1747 (6) (a), Colorado Revised Statutes, is amended to read:

24-51-1747. Portability between the Denver public schools division and the other four divisions within the association. (6) (a) A person who is a retiree of the Denver public schools retirement system before January 1, 2010, shall not be subject to THE WORKING RETIREE CONTRIBUTIONS OR a benefit reduction due to postretirement employment with an affiliated employer of the association existing before January 1, 2010, as long as the retiree continues to be employed by that same employer. A retiree so situated shall be entitled to a second and entirely separate retirement coverage segment under the PERA benefit structure.

SECTION 34. 24-54.5-105 (2) (a), the introductory portion to 24-54.5-105 (2) (b), and 24-54.5-105 (2) (c) (II), (3) (b) (II), and (5), Colorado Revised Statutes, are amended to read:

24-54.5-105. Participation. (2) (a) Any eligible employee who is not a member, or inactive member, OR RETIREE of the association and who is initially appointed to an eligible position on or after the effective date of the establishment of one or more optional retirement plans at such eligible
employee's employing institution shall participate in an optional retirement plan established by the eligible employee's employing institution pursuant to the provisions of this article.

(b) Any eligible employee who is a member or inactive member of the association with at least one year of service credit OR WHO IS A RETIREE OF THE ASSOCIATION, and is initially appointed to an eligible position on or after the effective date of the establishment of one or more optional retirement plans at such eligible employee's employing institution shall elect, within thirty days after such appointment, either:

(c) Any eligible employee who elects to participate in an optional retirement plan established by such eligible employee's employing institution pursuant to the provisions of paragraph (b) of this subsection (2) shall specify one of the following options:

(II) To terminate membership in the association and to require payment by the association of all employee contributions and any accrued interest on such contributions. Such election shall constitute a waiver of all rights and benefits provided by the association except as otherwise provided by the provisions of this article. Within ninety days after receipt of notice of an election to terminate membership pursuant to the provisions of this subparagraph (II), the association shall pay to the employing institution's retirement plan on behalf of the eligible employee an amount equal to the employee's member contributions plus accrued interest on such contributions at the rate specified in section 24-51-101 (28) (a) through June 30, 1991, and at the rate specified in section 24-51-101 (28) (c) after June 30, 1991. THIS SUBPARAGRAPH (II) IS NOT APPLICABLE TO RETIREES OF THE ASSOCIATION.

(3) (b) Any eligible employee who elects to participate in an optional retirement plan established by such eligible employee's employing institution pursuant to the provisions of paragraph (a) of this subsection (3) shall specify one of the following options:

(II) To terminate membership in the association and to require payment by the association of all employee contributions and any accrued interest on such contributions. Such election shall constitute a waiver of all rights and benefits provided by the association except as otherwise provided by the provisions of this article. Within ninety days after receipt of notice
of an election to terminate membership pursuant to the provisions of this subparagraph (II), the association shall pay to the employing institution's retirement plan on behalf of the eligible employee an amount equal to the employee's retirement contributions plus accrued interest on such contributions at the rate specified in section 24-51-101 (28) (a) through June 30, 1991, and at the rate specified in section 24-51-101 (28) (c) after June 30, 1991. **THIS SUBPARAGRAPH (II) IS NOT APPLICABLE TO RETIREES OF THE ASSOCIATION.**

(5) An election by an eligible employee to participate in an optional retirement plan of the employing institution shall be irrevocable and shall be accompanied by an appropriate application, where required, for the issuance of a contract or contracts under such optional retirement plan. **NOTWITHSTANDING THE PROVISIONS OF THIS SUBSECTION (5), A RETIREE WILL HAVE THE CHOICE PURSUANT TO THIS SUBSECTION (5) EACH TIME THE RETIREE IS EMPLOYED BY THE EMPLOYING INSTITUTION.**

**SECTION 35. Specified effective date.** This act shall take effect January 1, 2011, except that the following sections of this act shall take effect upon passage: Section 24-51-101 (6.5), Colorado Revised Statutes, as contained in section 1 of this act; sections 19, 20, 21, 22, and 23; section 24-51-1702 (34), Colorado Revised Statutes, as contained in section 26 of this act; and sections 32, 35, and 36.

**SECTION 36. Safety clause.** The general assembly hereby finds,
determines, and declares that this act is necessary for the immediate preservation of the public peace, health, and safety.

Brandon C. Shaffer  Terrance D. Carroll
PRESIDENT OF  SPEAKER OF THE HOUSE
THE SENATE  OF REPRESENTATIVES

Karen Goldman  Marilyn Eddins
SECRETARY OF  CHIEF CLERK OF THE HOUSE
THE SENATE  OF REPRESENTATIVES

APPROVED

Bill Ritter, Jr.
GOVERNOR OF THE STATE OF COLORADO
SENATE BILL 18-200

BY SENATOR(S) Tate and Priola, Jahn, Cooke, Coram, Crowder, Gardner, Hill, Holbert, Lambert, Lundberg, Marble, Neville T., Scott, Smallwood, Sonnenberg, Grantham; also REPRESENTATIVE(S) Becker K. and Pabon, Buckner, Coleman, Ginal, Kennedy, Benavidez, Covarrubias, Sias, Van Winkle.

CONCERNING MODIFICATIONS TO THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION HYBRID DEFINED BENEFIT PLAN NECESSARY TO ELIMINATE WITH A HIGH PROBABILITY THE UNFUNDED LIABILITY OF THE PLAN WITHIN THE NEXT THIRTY YEARS.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. Legislative declaration. (1) The general assembly finds and declares that:

(a) The general assembly bears fiduciary responsibility for the association and its long-term financial sustainability;

(b) Providing retirement security and benefits are an important value of the general assembly;

(c) According to its own published reports referencing the
governmental accounting standards board, the public employees' retirement association (association) is underfunded by over fifty billion dollars and has a funded ratio of less than fifty percent;

(d) In its current financial condition, the association is at risk for insolvency in the coming years should certain negative economic events occur that would threaten the retirement security of retired public sector workers;

(e) The sooner the general assembly meaningfully addresses this dire situation, the more likely that the state will be able to meet its obligations to provide retirement security to association participants across economic cycles;

(f) The general assembly bears responsibility to maintain retirement security by acting in the best interests of today's and tomorrow's public sector employees, association beneficiaries, association employers, and the taxpayers who are ultimately responsible for funding the employers and thus the benefits provided to retirees;

(g) Colorado's credit rating was recently placed on a negative outlook by the standard and poors rating agency because of the association's low funded ratios as well as annual contribution rates below the actuarially determined contribution rate;

(h) If Colorado's pension funding ratio continues to decline or if no significant plan is adopted to improve funding of the pension program, the state's credit rating will likely be downgraded; and

(i) A downgrade in the state's credit rating will affect both the state's financial position and operations by increasing the cost of accessing capital markets for both the state and the other institutions that rely on the state's credit rating.

(2) The general assembly further finds and declares that the changes in this act are reasonable and necessary to serve the important public purpose of ensuring the association's long-term financial sustainability.

SECTION 2. In Colorado Revised Statutes, 24-51-101, amend the introductory portion, (25)(a), (25)(b)(V), (42)(a), (42)(b), and (46); and add
(25)(b)(VI) and (25)(b)(VII) as follows:

24-51-101. Definitions. As used in this article, unless the context otherwise requires and except as otherwise defined in part 17 of this article:

(25) (a) "Highest average salary" means:

(I) (A) For a member or inactive member who has five years of service credit on December 31, 2019, or a retiree who was retired on December 31, 2019, one-twelfth of the average of the highest annual salaries upon which contributions were paid, whether earned from one or more employers, that are associated with three periods of twelve consecutive months of service credit;

(B) For a member or inactive member who does not have five years of service credit on December 31, 2019, or a member who was not a member, inactive member, or retiree on December 31, 2019, one-twelfth of the average of the highest annual salaries upon which contributions were paid, whether earned from one or more employers, that are associated with five periods of twelve consecutive months of service credit;

(II) For a member who does not have the requisite three years of service credit, one-twelfth of the average of the total annual salaries earned during membership upon which contributions were paid;

(III) For benefits that become effective on or after January 1, 1982, where the individual earned less than one year of service credit after December 31, 1980, one-twelfth of the average of the highest annual salaries upon which contributions were paid which were associated with five consecutive years of service credit; or

(IV) Notwithstanding any other provision of this paragraph (a) subsection (25)(a) to the contrary, for members of the judicial division who have five years of service credit on December 31, 2019, retiring on or after July 1, 1997, one-twelfth of the highest annual salary upon which contributions were paid for twelve consecutive months; OR

(V) Notwithstanding any other provision of this subsection
(25)(a) TO THE CONTRARY, FOR MEMBERS OF THE JUDICIAL DIVISION WHO DO NOT HAVE FIVE YEARS OF SERVICE CREDIT ON DECEMBER 31, 2019, OR FOR MEMBERS OF THE JUDICIAL DIVISION WHO WERE NOT MEMBERS, INACTIVE MEMBERS, OR RETIREE ON DECEMBER 31, 2019, ONE-TWELFTH OF THE AVERAGE OF THE HIGHEST ANNUAL SALARIES UPON WHICH CONTRIBUTIONS WERE PAID THAT ARE ASSOCIATED WITH THREE PERIODS OF TWELVE CONSECUTIVE MONTHS OF SERVICE CREDIT.

(b) (V) Notwithstanding any other provision of this paragraph (b) SUBSECTION (25)(b), in calculating highest average salary for a member or inactive member not eligible for service or reduced service retirement on January 1, 2011, AND WHO WAS A MEMBER OR INACTIVE MEMBER WITH FIVE YEARS OF SERVICE CREDIT ON DECEMBER 31, 2019, OR A RETIREE ON DECEMBER 31, 2019, the association shall determine the highest annual salaries associated with four periods of twelve consecutive months of service credit. The lowest of such annual salaries shall be the base salary. The first annual salary to be used in the highest average salary calculation shall be the actual salary reported up to one hundred eight percent of the base salary. The second annual salary to be used in the highest average salary calculation shall be the actual salary reported up to one hundred eight percent of the first annual salary used in the highest average salary calculation. The third annual salary to be used in the highest average salary calculation shall be the actual salary reported up to one hundred eight percent of the second annual salary used in the highest average salary calculation. This subparagraph (V) SUBSECTION (25)(b)(V) shall not apply to members of the judicial division, except for DPS members of the judicial division who have exercised portability pursuant to section 24-51-1747 and selected the Denver public schools benefit structure. This subparagraph (V) SUBSECTION (25)(b)(V) shall apply to DPS members in accordance with section 24-51-1702 (17).

(VI) NOTWITHSTANDING ANY OTHER PROVISION OF THIS SUBSECTION (25)(b), IN CALCULATING HIGHEST AVERAGE SALARY FOR A MEMBER OR INACTIVE MEMBER WHO DOES NOT HAVE FIVE YEARS OF SERVICE CREDIT ON DECEMBER 31, 2019, OR WHO WAS NOT A MEMBER, INACTIVE MEMBER, OR RETIREE ON DECEMBER 31, 2019, THE ASSOCIATION SHALL DETERMINE THE HIGHEST ANNUAL SALARIES ASSOCIATED WITH SIX PERIODS OF TWELVE CONSECUTIVE MONTHS OF SERVICE CREDIT. THE LOWEST OF SUCH ANNUAL SALARIES SHALL BE THE BASE SALARY. THE FIRST ANNUAL SALARY TO BE USED IN THE HIGHEST AVERAGE SALARY CALCULATION SHALL BE THE

PAGE 4-SENATE BILL 18-200
APPENDIX A

ACTUAL SALARY REPORTED UP TO ONE HUNDRED EIGHT PERCENT OF THE BASE SALARY. THE SECOND ANNUAL SALARY TO BE USED IN THE HIGHEST AVERAGE SALARY CALCULATION SHALL BE THE ACTUAL SALARY REPORTED UP TO ONE HUNDRED EIGHT PERCENT OF THE FIRST ANNUAL SALARY USED IN THE HIGHEST AVERAGE SALARY CALCULATION. THE THIRD ANNUAL SALARY TO BE USED IN THE HIGHEST AVERAGE SALARY CALCULATION SHALL BE THE ACTUAL SALARY REPORTED UP TO ONE HUNDRED EIGHT PERCENT OF THE SECOND ANNUAL SALARY USED IN THE HIGHEST AVERAGE SALARY CALCULATION. THE FOURTH ANNUAL SALARY TO BE USED IN THE HIGHEST AVERAGE SALARY CALCULATION SHALL BE THE ACTUAL SALARY REPORTED UP TO ONE HUNDRED EIGHT PERCENT OF THE THIRD ANNUAL SALARY USED IN THE HIGHEST AVERAGE SALARY CALCULATION. THE FIFTH ANNUAL SALARY TO BE USED IN THE HIGHEST AVERAGE SALARY CALCULATION SHALL BE THE ACTUAL SALARY REPORTED UP TO ONE HUNDRED EIGHT PERCENT OF THE FOURTH ANNUAL SALARY USED IN THE HIGHEST AVERAGE SALARY CALCULATION. THIS SUBSECTION (25)(b)(VI) DOES NOT APPLY TO MEMBERS OF THE JUDICIAL DIVISION, EXCEPT FOR DPS MEMBERS OF THE JUDICIAL DIVISION WHO HAVE EXERCISED PORTABILITY PURSUANT TO SECTION 24-51-1747 AND SELECTED THE DPS BENEFIT STRUCTURE. THIS SUBSECTION (25)(b)(VI) APPLIES TO DPS MEMBERS IN ACCORDANCE WITH SECTION 24-51-1702 (17).

(VII) NOTWITHSTANDING ANY OTHER PROVISION OF THIS SUBSECTION (25)(b), FOR MEMBERS OF THE JUDICIAL DIVISION WHO DO NOT HAVE FIVE YEARS OF SERVICE CREDIT ON DECEMBER 31, 2019, OR FOR MEMBERS OF THE JUDICIAL DIVISION WHO WERE NOT MEMBERS, INACTIVE MEMBERS, OR RETIREES ON DECEMBER 31, 2019, THE ASSOCIATION SHALL DETERMINE THE HIGHEST ANNUAL SALARIES ASSOCIATED WITH FOUR PERIODS OF TWELVE CONSECUTIVE MONTHS OF SERVICE CREDIT. THE LOWEST OF SUCH ANNUAL SALARIES SHALL BE THE BASE SALARY. THE FIRST ANNUAL SALARY TO BE USED IN THE HIGHEST AVERAGE SALARY CALCULATION SHALL BE THE ACTUAL SALARY REPORTED UP TO ONE HUNDRED EIGHT PERCENT OF THE BASE SALARY. THE SECOND ANNUAL SALARY TO BE USED IN THE HIGHEST AVERAGE SALARY CALCULATION SHALL BE THE ACTUAL SALARY REPORTED UP TO ONE HUNDRED EIGHT PERCENT OF THE FIRST ANNUAL SALARY USED IN THE HIGHEST AVERAGE SALARY CALCULATION. THE THIRD ANNUAL SALARY TO BE USED IN THE HIGHEST AVERAGE SALARY CALCULATION SHALL BE THE ACTUAL SALARY REPORTED UP TO ONE HUNDRED EIGHT PERCENT OF THE SECOND ANNUAL SALARY USED IN THE HIGHEST AVERAGE SALARY CALCULATION.
(42) (a) (I) "Salary" means, for members who were members, inactive members, or retirees of the association on June 30, 2019, compensation for services rendered to an employer and includes: Regular salary or pay; any pay for administrative, sabbatical, annual, sick, vacation, or personal leave and compensation for unused leave converted to cash payments; pay for compensatory time or holidays; payments by an employer from grants; amounts deducted from pay pursuant to tax-sheltered savings or retirement programs; amounts deducted from pay for a health savings account as defined in 26 U.S.C. sec. 223, as amended, or any other type of retirement health savings account program; performance or merit payments, if approved by the board; special pay for work-related injuries paid by the employer prior to termination of membership; and retroactive salary payments pursuant to court orders, arbitration awards, or litigation and grievance settlements.

(b) (II) For members who were members, inactive members, or retirees of the association on June 30, 2019, "salary" does not include: Commissions; compensation for unused sick leave converted at any time to cash payments; compensation for unused sick, annual, vacation, administrative, or other accumulated paid leave contributed to a health savings account as defined in 26 U.S.C. sec. 223, as amended, or a retirement health savings program; housing allowances; uniform allowances; automobile usage; insurance premiums; dependent care assistance; reimbursement for expenses incurred; tuition or any other fringe benefits, regardless of federal taxation; bonuses for services not actually rendered, including, but not limited to, early retirement inducements, Christmas bonuses, cash awards, honorariums and severance pay, damages, except for retroactive salary payments paid pursuant to court orders or arbitration awards or litigation and grievance settlements, or payments beyond the date of a member's death.

(b) (I) "Salary" means, for members who were not members, inactive members, or retirees of the association on June 30, 2019, compensation for services rendered to an employer and includes: regular salary or pay; any pay for administrative, sabbatical, annual, sick, vacation, or personal leave and compensation for unused leave converted to cash payments; pay for compensatory time or holidays; payments by an employer from grants; amounts deducted from pay pursuant to tax-sheltered savings or retirement programs; amounts deducted from pay for a health savings account as defined in 26 U.S.C. sec. 223, as amended, or any other type of retirement health savings account program; performance or merit payments, if approved by the board; special pay for work-related injuries paid by the employer prior to termination of membership; and retroactive salary payments pursuant to court orders, arbitration awards, or litigation and grievance settlements.
SAVINGS ACCOUNT AS DEFINED IN 26 U.S.C. SEC. 223, AS AMENDED, OR ANY OTHER TYPE OF RETIREMENT HEALTH SAVINGS ACCOUNT PROGRAM; AMOUNTS DEDUCTED FROM PAY PURSUANT TO A CAFETERIA PLAN AS DEFINED IN 26 U.S.C. SEC. 125, AS AMENDED; A QUALIFIED TRANSPORTATION FRINGE BENEFIT PLAN AS DEFINED IN 26 U.S.C. SEC. 132, AS AMENDED; PERFORMANCE OR MERIT PAYMENTS, IF APPROVED BY THE BOARD; SPECIAL PAY FOR WORK-RELATED INJURIES PAID BY THE EMPLOYER PRIOR TO TERMINATION OF MEMBERSHIP; AND RETROACTIVE SALARY PAYMENTS PURSUANT TO COURT ORDERS, ARBITRATION AWARDS, OR LITIGATION AND GRIEVANCE SETTLEMENTS.

(II) FOR MEMBERS WHO WERE NOT MEMBERS, INACTIVE MEMBERS, OR RETIREEE OF THE ASSOCIATION ON JUNE 30, 2019, "SALARY" DOES NOT INCLUDE: COMMISSIONS; COMPENSATION FOR UNUSED SICK, ANNUAL, VACATION, ADMINISTRATIVE, OR OTHER ACCUMULATED PAID LEAVE CONTRIBUTED TO A HEALTH SAVINGS ACCOUNT AS DEFINED IN 26 U.S.C. SEC. 223, AS AMENDED, OR A RETIREMENT HEALTH SAVINGS PROGRAM; HOUSING ALLOWANCES; UNIFORM ALLOWANCES; AUTOMOBILE USAGE; INSURANCE PREMIUMS PAID BY EMPLOYERS; REIMBURSEMENT FOR EXPENSES INCURRED; TUITION OR ANY OTHER FRINGE BENEFITS, REGARDLESS OF FEDERAL TAXATION; BONUSES FOR SERVICES NOT ACTUALLY RENDERED, INCLUDING, BUT NOT LIMITED TO, EARLY RETIREMENT INCENTIVES, CHRISTMAS BONUSES, CASH AWARDS, HONORARIA AND SEVERANCE PAY, DAMAGES, EXCEPT FOR RETROACTIVE SALARY PAYMENTS PAID PURSUANT TO COURT ORDERS OR ARBITRATION AWARDS OR LITIGATION AND GRIEVANCE SETTLEMENTS, OR PAYMENTS BEYOND THE DATE OF A MEMBER'S DEATH.

(46) "State trooper" means an employee of the Colorado state patrol, Colorado bureau of investigation, or successors to these agencies, who is vested with the powers of peace officers as provided for in section 24-33.5-409. IN ADDITION, FOR MEMBERS WHO WERE NOT MEMBERS, INACTIVE MEMBERS, OR RETIREES ON DECEMBER 31, 2019, "STATE TROOPER" INCLUDES A COUNTY SHERIFF, UNDERSHERIFF, DEPUTY SHERIFF, NONCERTIFIED DEPUTY SHERIFF, OR DETENTION OFFICER HIRED BY A LOCAL GOVERNMENT DIVISION EMPLOYER ON OR AFTER JANUARY 1, 2020, AND A CORRECTIONS OFFICER CLASSIFIED AS I THROUGH IV HIRED BY A STATE DIVISION EMPLOYER ON OR AFTER JANUARY 1, 2020.

SECTION 3. In Colorado Revised Statutes, 24-51-204, add (7.5) as follows:

PAGE 7-SENATE BILL 18-200
24-51-204. Duties of the board. (7.5) (a) The board or its designated agent shall perform an annual sensitivity analysis to determine when, from an actuarial perspective, model assumptions are meeting targets and achieving sustainability. In furtherance of making this determination, the board or its designated agent shall examine the data that the association currently collects. The board or its designated agent shall deliver an annual report detailing the findings of the analysis to the office of the governor, the joint budget committee, the legislative audit committee, and the finance committees of the senate and the house of representatives, or any successor committees.

(b) For purposes of the analysis required by subsection (7.5)(a) of this section, the association shall provide access to official member information and data under a confidentiality agreement with its designated agent, if applicable.

SECTION 4. In Colorado Revised Statutes, 24-51-213, amend (3) as follows:

24-51-213. Confidentiality. (3) Information regarding real estate, private equity, private debt, timber, and mortgage investments by the association may be kept confidential until the transaction is completed if it is determined by the board that disclosure of such information would jeopardize the value of the investment; except that the association may disclose such information to legislative members of the pension review commission created in article 51.1 of this title 24 while the commission is meeting in executive session. If the association cannot disclose such information without violating confidentiality provisions, then the association shall provide enough information to the legislative members of the commission, while the commission is meeting in executive session, to inform the legislators regarding whether such investments continue to be in the public interest.

SECTION 5. In Colorado Revised Statutes, add 24-51-221 as follows:

24-51-221. Information provided to employer - salary definition. An employer may request information from the association to
DETERMINE WHETHER TO USE "SALARY" AS DEFINED IN SECTION 24-51-101 (42)(a) OR AS DEFINED IN SECTION 24-51-101 (42)(b), WHEN THE EMPLOYER Hires AN EMPLOYEE WHO IS A CURRENT MEMBER OR RETIREE OF THE ASSOCIATION. THE ASSOCIATION SHALL PROVIDE SUCH INFORMATION TO THE EMPLOYER UPON REQUEST.

SECTION 6. In Colorado Revised Statutes, 24-51-313, amend (1) as follows:

24-51-313. Termination of affiliation - employer assigned to local government division - requirements. (1) Any political subdivision within the state of Colorado or any public agency created by such a political subdivision that is an employer affiliated with the association pursuant to the provisions of section 24-51-309 and that is assigned to the local government division may make application to the board to terminate the affiliation of the employer with the association. The application shall be made by submitting to the board an ordinance or resolution that has been adopted by the governing body of the employer and that has been approved by at least sixty-five percent of the employees of the employer who are members. Such employee members of the employer shall be notified in writing of the provisions of section 24-51-321 prior to a vote on an ordinance or resolution to terminate the affiliation of the employer with the association. NOTWITHSTANDING THE PROVISIONS OF THIS SUBSECTION (1), ANY SUCH EMPLOYER THAT CEASES OPERATIONS OR CEASES TO PARTICIPATE IN THE ASSOCIATION FOR ANY REASON SHALL BE DEEMED TO HAVE TERMINATED ITS AFFILIATION WITH THE ASSOCIATION AND MUST COMPLY WITH THE PROVISIONS OF SECTIONS 24-51-315 THROUGH 24-51-319.

SECTION 7. In Colorado Revised Statutes, 24-51-315, amend (1) and (2); and add (5) and (6) as follows:

24-51-315. Termination of affiliation - reserves requirement. (1) The board shall HAS THE AUTHORITY TO determine the amount of reserves required as of the effective date of termination of affiliation to:

(a) Maintain current benefits payable by the association to benefit recipients and to preserve the vested rights of inactive members; The amount of reserves shall be determined by the board utilizing certified actuarial reports prepared by the actuary. The actuarial report shall also certify that the termination of affiliation shall not have an adverse financial
impact on the actuarial soundness of the local government division trust fund. If the actuary determines, in accordance with accepted actuarial principles, that the termination of affiliation shall have an adverse financial impact on the actuarial soundness of the local government division trust fund, the applicant shall not be permitted to terminate affiliation.

(b) FULLY FUND THE LIABILITY FOR BENEFITS PAYABLE BY THE ASSOCIATION FROM THE HEALTH CARE TRUST FUND CREATED BY SECTION 24-51-1201(1) TO CURRENT AND FUTURE BENEFIT RECIPIENTS PURSUANT TO PART 12 OF THIS ARTICLE 51.

(2) THE AMOUNT OF RESERVES REQUIRED UNDER SUBSECTIONS (1)(a) AND (1)(b) OF THIS SECTION SHALL BE DETERMINED BY THE BOARD UTILIZING CERTIFIED ACTUARIAL REPORTS PREPARED BY THE ACTUARY. THE ACTUARIAL STUDY SHALL BE CONDUCTED USING ASSUMPTIONS APPROVED BY THE BOARD. THE ACTUARIAL REPORT SHALL ALSO CERTIFY THAT THE TERMINATION OF AFFILIATION SHALL NOT HAVE AN ADVERSE FINANCIAL IMPACT ON THE ACTUARIAL SOUNDNESS OF THE LOCAL GOVERNMENT DIVISION TRUST FUND. IF THE ACTUARY DETERMINES, IN ACCORDANCE WITH ACCEPTED ACTUARIAL PRINCIPLES, THAT THE TERMINATION OF AFFILIATION SHALL HAVE AN ADVERSE FINANCIAL IMPACT ON THE ACTUARIAL SOUNDNESS OF THE LOCAL GOVERNMENT DIVISION TRUST FUND, THE APPLICANT SHALL NOT BE PERMITTED TO TERMINATE AFFILIATION. ON THE EFFECTIVE DATE OF TERMINATION OF AFFILIATION, THE ACTUARIAL REPORTS PREPARED PERSUANT TO THE PROVISIONS OF SUBSECTION (1) OF THIS SECTION THIS SUBSECTION (2) SHALL BE UPDATED TO FINALIZE THE AMOUNT OF RESERVES REQUIRED FOR THE PURPOSES SPECIFIED IN SUBSECTION (1) OF THIS SECTION. THE EMPLOYER MAKING THE APPLICATION AND THE EMPLOYEES OF SUCH EMPLOYER WHO ARE MEMBERS SHALL NOT BE REQUIRED TO MAKE ANY CONTRIBUTIONS TO THE ASSOCIATION SUBSEQUENT TO THE EFFECTIVE DATE OF TERMINATION.

(5) THE DISCOUNT RATE USED FOR DETERMINING THE AMOUNT OF RESERVES IN SUBSECTION (1) OF THIS SECTION SHALL BE THE ACTUARIAL INVESTMENT ASSUMPTION RATE AS SET BY THE BOARD PURSUANT TO SECTIONS 24-51-101 (2) AND 24-51-204 (5) MINUS TWO HUNDRED BASIS POINTS.

(6) DETERMINATIONS MADE BY THE BOARD IN THIS SECTION AND SECTIONS 24-51-313 AND 24-51-316, SHALL BE APPEALED THROUGH THE ADMINISTRATIVE REVIEW PROCEDURES SET FORTH IN THE BOARD RULES.
Such final decision by the Board shall be subject only to review by proper court action.

**SECTION 8.** In Colorado Revised Statutes, amend 24-51-316 as follows:

**24-51-316. Inadequate reserves - excess reserves - nonpayment.**

(1) (a) In the event that the amount of the reserves required pursuant to the provisions of section 24-51-315 exceeds the amount of the employer's share of the employer contribution reserve in the local government division trust fund as calculated by the actuary, then the employer shall make an additional payment as of the effective date of termination of affiliation in an amount equal to the difference between the amount of reserves required and the amount of reserves on deposit.

(b) In the event that the reserves required pursuant to section 24-51-315 (1)(b) for the health care trust fund created by section 24-51-1201 (1) exceeds the market value of assets attributable to the employer in the health care trust fund, the employer shall make an additional payment as of the effective date of termination of affiliation in an amount equal to the difference between the amount of reserves required and the amount of reserves on deposit.

(c) If the actuary determines, in accordance with accepted actuarial principles, that the termination of affiliation of the employer shall have an adverse financial impact on the funding of the health care trust fund created by section 24-51-1201 (1), the employer shall make any additional payment necessary to ensure that the impact on the funding of the health care trust fund remains unchanged upon the employer's termination of affiliation.

(2) In the event that the amount of the reserves on deposit in the local government division trust fund as calculated by the actuary for the employer requesting termination of affiliation exceeds the amount of reserves required pursuant to the provisions of section 24-51-315, such excess amount and the amount required for the transfer of member contributions as provided in section 24-51-317 shall be transferred by a direct trustee-to-trustee transfer to the alternate pension plan or system required by section 24-51-319 as of the effective date of
termination of affiliation.

(3) If any payment required pursuant to the provisions of subsection (1) or (2) of this section is not made, interest shall be assessed on the amount due at the rate specified for employers in section 24-51-101 (28). INTEREST SHALL BE CALCULATED FROM THE EFFECTIVE DATE OF TERMINATION until such amount is paid in full.

SECTION 9. In Colorado Revised Statutes, amend 24-51-317 as follows:

24-51-317. Termination of affiliation - member contributions.
(1) Members who have less than five years of service credit and are employees of an employer which has terminated its affiliation with the association shall BECOME INACTIVE MEMBERS AS OF THE EFFECTIVE DATE OF TERMINATION OF AFFILIATION. SUCH MEMBERS MAY ELECT TO have their member contributions credited to the alternative pension plan or system required by section 24-51-319. IN THE ABSENCE OF SUCH AN ELECTION, MEMBER CONTRIBUTIONS WILL REMAIN WITH THE ASSOCIATION UNLESS THE MEMBER OTHERWISE ELECTS TO REFUND SUCH CONTRIBUTIONS IN ACCORDANCE WITH SECTION 24-51-405.

(2) Members who have five or more years of service credit and are employees of an employer which has terminated its affiliation with the association may elect that their accounts remain with the association by giving written notice to the association prior to the effective date of termination of affiliation. Members who make such an election shall become inactive members entitled to vested benefits as of the effective date of termination of affiliation. Members who do not make such an election shall have their member contributions credited to the alternative pension plan or system required by section 24-51-319.

SECTION 10. In Colorado Revised Statutes, amend 24-51-319 as follows:

24-51-319. Retirement plan - creation and use. An employer which terminates its affiliation with the association shall utilize an existing, or shall establish an alternative, pension plan or system established pursuant to the provisions of article 54 of this title. FAILURE TO UTILIZE OR ESTABLISH AN ALTERNATIVE PENSION PLAN OR SYSTEM DOES NOT
APPENDIX A

EXCUSE THE EMPLOYER FROM THE ADHERENCE TO THE REMAINDER OF THE TERMINATION OF AFFILIATION PROVISIONS OF THIS PART 3.

SECTION 11. In Colorado Revised Statutes, 24-51-401, amend (1.7)(a); and repeal (1.7)(f) as follows:

24-51-401. Employer and member contributions. (1.7) (a) (I) Employers shall deliver a contribution report and the full amount of employer contributions, member contributions, and working retiree contributions to the association within five days after the date members and retirees are paid. Except as provided in paragraph (f) of this subsection (1.7)(a), subsection (7) of this section, and section 24-51-408.5, such contributions shall be based upon the rates for the appropriate division as set forth in the following table multiplied by the salary, as defined in section 24-51-101 (42), paid to members and retirees for the payroll period:

<table>
<thead>
<tr>
<th>Division</th>
<th>Membership</th>
<th>Employer Rate</th>
<th>Member Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>All Members</td>
<td>10.15%</td>
<td>8.0%</td>
</tr>
<tr>
<td></td>
<td>Except State Troopers</td>
<td>12.85%</td>
<td>10.0%</td>
</tr>
<tr>
<td>School</td>
<td>All Members</td>
<td>10.15%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Local Government</td>
<td>All Members</td>
<td>10.0%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Judicial</td>
<td>All Members</td>
<td>13.66%</td>
<td>8.0%</td>
</tr>
<tr>
<td>DPS</td>
<td>All Members</td>
<td>10.15%</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

(II) EFFECTIVE JULY 1, 2019, SUBJECT TO SECTION 24-51-413, THE EMPLOYER AND MEMBER CONTRIBUTION RATES SHALL BE BASED UPON THE RATES FOR THE APPROPRIATE DIVISION AS SET FORTH IN THE FOLLOWING TABLE MULTIPLIED BY THE SALARY, AS DEFINED IN SECTION 24-51-101 (42), PAID TO MEMBERS AND RETIREES FOR THE PAYROLL PERIOD:

<table>
<thead>
<tr>
<th>Division</th>
<th>Membership</th>
<th>Employer Rate</th>
<th>Member Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAGE 13-SENATE BILL 18-200</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(III) Effective July 1, 2020, subject to section 24-51-413, the employer and member contribution rates shall be based upon the rates for the appropriate division as set forth in the following table multiplied by the salary, as defined in section 24-51-101 (42), paid to members and retirees for the payroll period:

**TABLE C**

<table>
<thead>
<tr>
<th>Division</th>
<th>Membership</th>
<th>Employer Rate</th>
<th>Member Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>All Members</td>
<td>10.4%</td>
<td>9.5%</td>
</tr>
<tr>
<td></td>
<td>Excluding State Troopers</td>
<td>13.1%</td>
<td>11.5%</td>
</tr>
<tr>
<td>School</td>
<td>All Members</td>
<td>10.4%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Local</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governor</td>
<td>All Members</td>
<td>10.0%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Judicial</td>
<td>All Members</td>
<td>13.91%</td>
<td>9.5%</td>
</tr>
<tr>
<td>DPS</td>
<td>All Members</td>
<td>10.4%</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

(IV) Effective July 1, 2021, subject to section 24-51-413, the employer and member contribution rates shall be based upon the rates for the appropriate division as set forth in the following table multiplied by the salary, as defined in section 24-51-101 (42), paid to members and retirees for the payroll period:

**TABLE D**

<table>
<thead>
<tr>
<th>Division</th>
<th>Membership</th>
<th>Employer Rate</th>
<th>Member Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>All Members</td>
<td>10.4%</td>
<td>10.0%</td>
</tr>
<tr>
<td></td>
<td>Excluding State Troopers</td>
<td>10.4%</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

PAGE 14-SENATE BILL 18-200
## APPENDIX A

**APPENDIX A**

**87**

**Colorado PERA Senate Bill 10-001 Report—2020 Update**

<table>
<thead>
<tr>
<th>Division</th>
<th>Membership</th>
<th>Employer Rate</th>
<th>Member Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>All Members</td>
<td>7.65%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Except</td>
<td>State Troopers</td>
<td>10.35%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Judicial</td>
<td>All Members</td>
<td>11.16%</td>
<td>10.5%</td>
</tr>
</tbody>
</table>

*(f) (I)* For the 2010-11 and 2011-12 state fiscal years, except as provided in subsection (7) of this section and section 24-51-408.5, the amount of employer and member contributions for employers and members in the state and judicial divisions of the association shall be based upon the rates for the appropriate division as set forth in the following table multiplied by the salary, as defined in section 24-51-101 (42), paid to members and retirees for the payroll period:

**TABLE A.5**

**CONTRIBUTION RATES**

(H) For the 2010-11 and 2011-12 state fiscal years, the employer and member contribution rates for employers and members in the school, local government, and Denver public schools divisions of the association shall be calculated pursuant to paragraph (a) of this subsection (1.7):

SECTION 12. In Colorado Revised Statutes, add 24-51-413, 24-51-414, and 24-51-415 as follows:

24-51-413. Contribution and annual increase amount changes - definitions. (1) As used in this section, unless the context otherwise requires:

(a) "Blended total contribution amount" means the weighted average of the total amounts paid by the employer and the member to the association for each of the five divisions pursuant to sections 24-51-401 (1.7) and 24-51-411, and the amount

PAGE 15-SENATE BILL 18-200
THE ASSOCIATION RECEIVES PURSUANT TO SECTION 24-51-414, BUT SHALL NOT INCLUDE THE PORTION OF THE EMPLOYER CONTRIBUTION REMITTED TO THE HEALTH CARE TRUST FUND PURSUANT TO SECTION 24-51-208 (1)(f) AND (1)(f.5) AND THE PORTION OF THE EMPLOYER CONTRIBUTION REMITTED TO THE ANNUAL INCREASE RESERVE.

(b) "BLEND TOTAL REQUIRED CONTRIBUTION" MEANS THE WEIGHTED AVERAGE OF THE TOTAL OF THE ASSOCIATION’S REPORTED ACTUARIALY DETERMINED CONTRIBUTION RATES AND MEMBER CONTRIBUTION RATES OF THE FIVE DIVISION TRUST FUNDS.

(c) "WEIGHTED AVERAGE" MEANS THE PROPORTION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY ATTRIBUTABLE TO EACH DIVISION REPORTED AS OF THE MOST RECENT VALUATION DATE.

(2) BEGINNING JULY 1, 2019, AND EACH JULY 1 THEREAFTER, EMPLOYER CONTRIBUTION RATES, MEMBER CONTRIBUTION RATES, ANNUAL INCREASE AMOUNTS, AND THE DIRECT DISTRIBUTION AMOUNT SHALL REMAIN UNCHANGED UNTIL SUCH TIME AS CHANGES ARE REQUIRED PURSUANT TO THIS SECTION.

(3) WHEN THE BLENDED TOTAL CONTRIBUTION AMOUNT IS LESS THAN NINETY-EIGHT PERCENT OF THE BLENDED TOTAL REQUIRED CONTRIBUTION, THE FOLLOWING ADJUSTMENT SHALL OCCUR:

(a) THE ANNUAL INCREASE PERCENTAGE DETERMINED PURSUANT TO SECTIONS 24-51-1002 AND 24-51-1009 (4)(a) SHALL BE REDUCED BY UP TO ONE-QUARTER OF ONE PERCENT, BUT AT NO TIME WILL THE ANNUAL INCREASE PERCENTAGE BE REDUCED TO EQUAL LESS THAN ONE-HALF OF ONE PERCENT, EXCEPT AS PROVIDED IN SECTIONS 24-51-1002 (1.5) AND 24-51-1009 (1.5);

(b) THE EMPLOYER CONTRIBUTION RATE WILL BE INCREASED BY UP TO ONE-HALF OF ONE PERCENT, BUT AT NO TIME WILL THE EMPLOYER CONTRIBUTION RATE BE INCREASED TO EXCEED THE EMPLOYER CONTRIBUTION RATES UNDER SECTION 24-51-401 (1.7)(a)(II), PLUS TWO PERCENT;

(c) THE MEMBER CONTRIBUTION RATE WILL BE INCREASED BY UP TO ONE-HALF OF ONE PERCENT, BUT AT NO TIME WILL THE MEMBER
CONTRIBUTION RATE BE INCREASED TO EXCEED THE MEMBER CONTRIBUTION RATES UNDER SECTION 24-51-401 (1.7)(a)(IV), PLUS TWO PERCENT; AND

(d) The amount of the direct distribution pursuant to section 24-51-414, will be increased by up to twenty million dollars, but at no time will the amount of the direct distribution exceed two hundred twenty-five million dollars in a fiscal year.

(4) The adjustment in subsection (3) of this section shall be determined by the association, shall be equally apportioned among the annual increases, the employer contributions, the member contributions, and, if applicable, the direct distribution amount, and shall be the maximum yearly adjustment allowed unless an adjustment less than the maximum adjustment is sufficient to bring the blended total contribution amount to one hundred and three percent of the blended total required contribution. In no event shall a yearly adjustment cause the blended total contribution amount to exceed one hundred and three percent of the blended total required contribution. The adjustment shall be made once in any calendar year and shall not exceed the maximum yearly amounts indicated in subsections (3)(a), (3)(b), (3)(c), and (3)(d) of this section.

(5) In the event any one of the four component parts of the adjustment as outlined in subsection (3) of this section has reached its total maximum, then no further adjustment shall be made to that component. Only the adjustments to the other three components shall continue as specified in subsections (3) and (4) of this section, even if the fully required adjustment to bring the blended total contribution amount to one hundred and three percent of the blended total required contribution is not achieved.

(6) When the blended total contribution amount is greater than or equal to one hundred and twenty percent of the blended total required contribution, the following adjustment shall occur:

(a) Subject to sections 24-51-1002 (1.5) and 24-51-1009 (1.5), the annual increase percentage determined pursuant to sections
24-51-1002 AND 24-51-1009 (4)(a), SHALL BE INCREASED BY UP TO ONE-QUARTER OF ONE PERCENT, BUT AT NO TIME WILL THE ANNUAL INCREASE PERCENTAGE BE GREATER THAN TWO PERCENT, EXCEPT AS PROVIDED IN SECTION 24-51-1009.5;

(b) THE EMPLOYER CONTRIBUTION RATE WILL BE REDUCED BY UP TO ONE-HALF OF ONE PERCENT, BUT AT NO TIME WILL THE EMPLOYER CONTRIBUTION RATE BE LESS THAN THE EMPLOYER CONTRIBUTION RATES UNDER SECTION 24-51-401 (1.7)(a)(I);

(c) THE MEMBER CONTRIBUTION RATE WILL BE REDUCED BY UP TO ONE-HALF OF ONE PERCENT, BUT AT NO TIME WILL THE MEMBER CONTRIBUTION RATE BE LESS THAN THE MEMBER CONTRIBUTION RATES UNDER SECTION 24-51-401 (1.7)(a)(I); AND

(d) THE AMOUNT OF THE DIRECT DISTRIBUTION PURSUANT TO SECTION 24-51-414 WILL BE REDUCED BY UP TO TWENTY MILLION DOLLARS IN A FISCAL YEAR.

(7) THE ADJUSTMENT IN SUBSECTION (6) OF THIS SECTION SHALL BE DETERMINED BY THE ASSOCIATION, SHALL BE EQUALLY APPORTIONED AMONG THE ANNUAL INCREASES, THE EMPLOYER CONTRIBUTIONS, THE MEMBER CONTRIBUTIONS, AND, IF APPLICABLE, THE DIRECT DISTRIBUTION AMOUNT, AND SHALL BE THE MAXIMUM YEARLY ADJUSTMENT ALLOWED UNLESS AN AMOUNT LOWER THAN THE MAXIMUM ADJUSTMENT IS NECESSARY TO KEEP THE BLENDED TOTAL CONTRIBUTION AMOUNT EQUAL TO ONE HUNDRED AND THREE PERCENT OF THE BLENDED TOTAL REQUIRED CONTRIBUTION. IN NO EVENT SHALL A YEARLY ADJUSTMENT CAUSE THE BLENDED TOTAL CONTRIBUTION AMOUNT TO FALL BELOW ONE HUNDRED AND THREE PERCENT OF THE BLENDED TOTAL REQUIRED CONTRIBUTION. THE ADJUSTMENT SHALL BE MADE ONCE IN ANY CALENDAR YEAR AND SHALL NOT EXCEED THE MAXIMUM YEARLY AMOUNTS SPECIFIED IN SUBSECTIONS (6)(a), (6)(b), (6)(c), AND (6)(d) OF THIS SECTION.

(8) THE ADJUSTMENTS PURSUANT TO THIS SECTION SHALL BE DETERMINED BASED ON THE BLENDED TOTAL CONTRIBUTION AMOUNT AND BLENDED TOTAL REQUIRED CONTRIBUTION AS REPORTED IN THE ANNUAL ACTUARIAL VALUATION REPORT REQUIRED UNDER SECTION 24-51-204 (7), AND SHALL BE EFFECTIVE JULY 1 OF THE NEXT CALENDAR YEAR. THE FIRST ADJUSTMENT PURSUANT TO THIS SECTION SHALL NOT OCCUR BEFORE JULY
24-51-414. Direct distribution. (1) On July 1, 2018, and on July 1 each year thereafter until there are no unfunded actuarial accrued liabilities of any division of the association that receives the distribution pursuant to this section, the state treasurer shall issue a warrant to the association in an amount equal to two hundred twenty-five million dollars. Such amount shall be paid to the association from the general fund, or any other fund, subject to Section 24-51-413.

(2) For the purpose of allocating appropriate indirect, cash funded, or federal costs for the direct distribution pursuant to subsection (1) of this section, the office of state planning and budgeting may include funding sources other than the general fund in the governor's annual budget request for the 2019-20 fiscal year and each fiscal year thereafter to satisfy the funding amounts of the direct distribution.

(3) The distribution pursuant to subsection (1) of this section shall end when there are no unfunded actuarial accrued liabilities of any division of the association that receives such distribution. By September 1, 2019, and by September 1 of each year thereafter, until the distribution pursuant to subsection (1) of this section is no longer required, the board shall determine whether the sum of the employer and member contributions pursuant to Section 24-51-401 (1.7)(a), the contributions pursuant to Section 24-51-411, and the distribution pursuant to subsection (1) of this section, is greater than the amount necessary to eliminate the unfunded actuarial accrued liability of each division of the association that receives the distribution in the next fiscal year. If the board determines that the total amount of the distribution pursuant to subsection (1) of this section will not be required to eliminate the unfunded actuarial accrued liability of each division of the association that receives the distribution, the board shall notify the office of state planning and budgeting and the joint budget committee of the general assembly by September 1 of the applicable year.

(4) The association shall allocate the direct distribution
TO THE TRUST FUNDS OF EACH DIVISION OF THE ASSOCIATION AS IT WOULD AN EMPLOYER CONTRIBUTION, IN A MANNER THAT IS PROPORTIONATE TO THE ANNUAL PAYROLL OF EACH DIVISION AS REPORTED TO THE ASSOCIATION; EXCEPT THAT THE ASSOCIATION SHALL NOT ALLOCATE ANY PORTION OF THE DIRECT DISTRIBUTION AMOUNT TO THE LOCAL GOVERNMENT DIVISION OF THE ASSOCIATION.

(5) BEGINNING WITH THE ANNUAL GENERAL APPROPRIATION ACT FOR THE 2019-20 STATE FISCAL YEAR, AND FOR EACH ANNUAL GENERAL APPROPRIATION ACT THEREAFTER, MONEY DISTRIBUTED TO THE ASSOCIATION PURSUANT TO SUBSECTION (1) OF THIS SECTION SHALL BE INCLUDED FOR INFORMATIONAL PURPOSES IN THE ANNUAL GENERAL APPROPRIATION BILL OR IN SUPPLEMENTAL APPROPRIATION BILLS FOR THE PURPOSE OF COMPLYING WITH THE LIMITATION ON STATE FISCAL YEAR SPENDING IMPOSED BY SECTION 20 OF ARTICLE X OF THE STATE CONSTITUTION AND SECTION 24-77-103. THE INFORMATION INCLUDED IN THE ANNUAL GENERAL APPROPRIATION BILL SHALL INCLUDE AN ESTIMATE OF THE AMOUNT OF THE DISTRIBUTION PURSUANT TO SUBSECTION (1) OF THIS SECTION THAT IS ATTRIBUTABLE TO THE STATE AND THE AMOUNT THAT IS ATTRIBUTABLE TO PUBLIC EDUCATION FROM KINDERGARTEN THROUGH THE TWELFTH GRADE.

24-51-415. Defined contribution supplement. BEGINNING JANUARY 1, 2021, AND EVERY YEAR THEREAFTER, EMPLOYER CONTRIBUTION RATES WILL BE ADJUSTED TO INCLUDE A DEFINED CONTRIBUTION SUPPLEMENT, WHICH WILL BE CALCULATED SEPARATELY FOR THE STATE AND LOCAL GOVERNMENT DIVISIONS, AS APPLICABLE. THE DEFINED CONTRIBUTION SUPPLEMENT FOR EACH DIVISION WILL BE THE EMPLOYER CONTRIBUTION AMOUNT PAID TO DEFINED CONTRIBUTION PLAN PARTICIPANT ACCOUNTS THAT WOULD HAVE OTHERWISE GONE TO THE DEFINED BENEFIT TRUSTS TO PAY DOWN THE UNFUNDED LIABILITY, PLUS ANY DEFINED BENEFIT INVESTMENT EARNINGS THEREON, EXPRESSED AS A PERCENTAGE OF SALARY ON WHICH EMPLOYER CONTRIBUTIONS HAVE BEEN MADE. THE EMPLOYER CONTRIBUTION AMOUNTS IN THE SUM SHALL ONLY INCLUDE CONTRIBUTIONS MADE ON BEHALF OF ELIGIBLE EMPLOYEES, AS DEFINED IN SECTION 24-51-1502, WHO COMMENCE EMPLOYMENT ON OR AFTER JANUARY 1, 2019.

SECTION 13. In Colorado Revised Statutes, 24-51-504, amend (2) as follows:

PAGE 20-SENATE BILL 18-200
24-51-504. Purchase of service credit relating to a paid sabbatical leave. (2) Such member contributions made pursuant to the provisions of subsection (1) of this section may be made concurrently with member contributions on the partial salary paid for such sabbatical leave or after the sabbatical leave has ended at the current applicable rate of member contributions pursuant to section 24-51-401(1.7), plus interest from the date the sabbatical leave began until such purchase is complete.

SECTION 14. In Colorado Revised Statutes, 24-51-602, amend (1.7)(a), (1.8)(a), and (2); and add (1.9) and (2.3) as follows:

24-51-602. Service retirement eligibility. (1.7) (a) Members, except state troopers, who were not members, inactive members, or retirees on December 31, 2016, but who were members, inactive members, or retirees on December 31, 2019, who have met the age and service requirements stated in the following table and who are not eligible for service retirement benefits pursuant to subsection (1.8) of this section shall, upon written application and approval of the board, receive service retirement benefits pursuant to the benefit formula set forth in section 24-51-603:

<table>
<thead>
<tr>
<th>Age Requirement (years)</th>
<th>Service Credit Requirement (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Age</td>
<td>35</td>
</tr>
<tr>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>65</td>
<td>5</td>
</tr>
</tbody>
</table>

(1.8) (a) Members of the school division or Denver public schools division who were not members, inactive members, or retirees on December 31, 2016, but who were members, inactive members, or retirees on December 31, 2019, who have met the age and service requirements stated in the following table shall, upon written application and approval of the board, receive service retirement benefits pursuant to the benefit formula set forth in section 24-51-603; except that at least the most recent ten years of service credit used in meeting the requirements of the table below must be earned in the school or Denver public schools divisions in order for the
member to be eligible pursuant to this paragraph (a) SUBSECTION (1.8)(a):

TABLE B.4
SERVICE RETIREMENT ELIGIBILITY

<table>
<thead>
<tr>
<th>Age Requirement (years)</th>
<th>Service Credit Requirement (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Age</td>
<td>35</td>
</tr>
<tr>
<td>58</td>
<td>30</td>
</tr>
<tr>
<td>65</td>
<td>5</td>
</tr>
</tbody>
</table>

(1.9) (a) MEMBERS, EXCEPT STATE TROOPERS, WHO WERE NOT MEMBERS, INACTIVE MEMBERS, OR RETIREES ON DECEMBER 31, 2019, WHO HAVE MET THE AGE AND SERVICE REQUIREMENTS STATED IN THE FOLLOWING TABLE SHALL, UPON WRITTEN APPLICATION AND APPROVAL OF THE BOARD, RECEIVE SERVICE RETIREMENT BENEFITS PURSUANT TO THE BENEFIT FORMULA SET FORTH IN SECTION 24-51-603 (1), (2), AND (3):

TABLE B.5
SERVICE RETIREMENT ELIGIBILITY

<table>
<thead>
<tr>
<th>AGE REQUIREMENT (YEARS)</th>
<th>SERVICE CREDIT REQUIREMENT (YEARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANY AGE</td>
<td>35</td>
</tr>
<tr>
<td>64</td>
<td>30</td>
</tr>
<tr>
<td>65</td>
<td>5</td>
</tr>
</tbody>
</table>

(b) MEMBERS WHO ARE ELIGIBLE FOR A BENEFIT PURSUANT TO THIS SUBSECTION (1.9) AND WHO ARE SIXTY-FOUR YEARS OF AGE OR OLDER SHALL, UPON WRITTEN APPLICATION AND APPROVAL OF THE BOARD, RECEIVE SERVICE RETIREMENT BENEFITS PURSUANT TO THE BENEFIT FORMULA SET FORTH IN SECTION 24-51-603, WITHOUT REDUCTION PURSUANT TO SECTION 24-51-604, IF THEY HAVE AT LEAST FIVE YEARS OF SERVICE CREDIT AND IF THE NUMBER OF YEARS OF THEIR AGE PLUS THE NUMBER OF YEARS OF THEIR SERVICE CREDIT EQUALS NINETY-FOUR YEARS OR MORE.

(c) THIS SUBSECTION (1.9) DOES NOT CREATE A CONTRACTUAL RIGHT FOR ANY MEMBER TO THE AGE REQUIREMENT SPECIFIED IN TABLE B.5 TO
RECEIVE A FULL SERVICE RETIREMENT BENEFIT.

(2) (a) Members with less than five years of service credit shall be eligible for service retirement benefits pursuant to the provisions of section 24-51-605.5 upon reaching sixty-five years of age if contributions were made for sixty months. State troopers who were not members, inactive members, or retirees on December 31, 2019, who have met the age and service requirements stated in the following table shall, upon written application and approval of the board, receive service retirement benefits pursuant to the benefit formula set forth in Section 24-51-603 (1) and (3):

<table>
<thead>
<tr>
<th>AGE REQUIREMENT (YEARS)</th>
<th>SERVICE CREDIT REQUIREMENT (YEARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Age</td>
<td>35</td>
</tr>
<tr>
<td>55</td>
<td>25</td>
</tr>
<tr>
<td>65</td>
<td>5</td>
</tr>
</tbody>
</table>

(b) State troopers who are eligible for a benefit pursuant to this subsection (2) and who are fifty-five years of age or older shall, upon written application and approval of the board, receive service retirement benefits pursuant to the benefit formula set forth in Section 24-51-603, without reduction pursuant to Section 24-51-604, if they have at least five years of service credit and if the number of years of their age plus the number of years of their service credit equals eighty years or more. This subsection (2) does not create a contractual right for any member to the age requirement specified in Table B.6 to receive a full service retirement benefit.

(2.3) Members with less than five years of service credit shall be eligible for service retirement benefits pursuant to section 24-51-605.5 upon reaching sixty-five years of age if contributions were made for sixty months.

SECTION 15. In Colorado Revised Statutes, amend 24-51-604 as
follows:

24-51-604. Reduced service retirement eligibility. (1) DPS members with less than five years of service credit as of January 1, 2011, and members WHO WERE MEMBERS, INACTIVE MEMBERS, OR RETIREES ON DECEMBER 31, 2019, AND who have met the age and service credit requirements stated in the following table and who do not meet the requirements of section 24-51-602 shall, upon written application and approval of the board, receive reduced service retirement benefits pursuant to the benefit formula set forth in section 24-51-605:

TABLE C
REDUCED SERVICE RETIREMENT ELIGIBILITY

<table>
<thead>
<tr>
<th>Age Requirement (years)</th>
<th>Service Credit Requirement (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>50 State Troopers only</td>
<td>20</td>
</tr>
<tr>
<td>55</td>
<td>20</td>
</tr>
<tr>
<td>60</td>
<td>5</td>
</tr>
</tbody>
</table>

(2) MEMBERS WHO WERE NOT MEMBERS, INACTIVE MEMBERS, OR RETIREES ON DECEMBER 31, 2019, WHO HAVE MET THE AGE AND SERVICE CREDIT REQUIREMENTS STATED IN THE FOLLOWING TABLE AND WHO DO NOT MEET THE REQUIREMENTS OF SECTION 24-51-602 SHALL, UPON WRITTEN APPLICATION AND APPROVAL OF THE BOARD, RECEIVE REDUCED SERVICE RETIREMENT BENEFITS PURSUANT TO THE BENEFIT FORMULA SET FORTH IN SECTION 24-51-605:

TABLE C.1
REDUCED SERVICE RETIREMENT ELIGIBILITY

<table>
<thead>
<tr>
<th>Age Requirement (years)</th>
<th>Service Credit Requirement (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>25</td>
</tr>
<tr>
<td>55 State Troopers only</td>
<td>20</td>
</tr>
<tr>
<td>60</td>
<td>5</td>
</tr>
</tbody>
</table>
SECTION 16. In Colorado Revised Statutes, 24-51-606, amend (1.5) and (2)(b) as follows:

24-51-606. Vested inactive member rights. (1.5) Any member who was not a member, inactive member, or retiree on December 31, 2006, who has earned at least five years of service credit and who terminates membership and does not elect to receive a refund pursuant to the provisions of section 24-51-405 shall be eligible for a benefit to become effective upon written application and approval by the board and upon reaching the age specified in table B.05, B.07, or B.1, B.2, B.3, B.4, B.5, or B.6 of section 24-51-602, as applicable, for a service retirement or in table C or C.1 of section 24-51-604 for a reduced service retirement. Notwithstanding the provisions of this subsection (1.5), for such a member who applies for retirement within ninety days after the member attains age and service eligibility, the effective date of retirement shall be the date the member attains such age and service eligibility.

(2) (b) Direct payments in lieu of member contributions are calculated at the current applicable member contribution rates pursuant to section 24-51-401 (1.7), multiplied by the most recent full-time monthly salary paid for the position previously held by the vested inactive member.

SECTION 17. In Colorado Revised Statutes, amend 24-51-1001 as follows:

24-51-1001. Types of benefit increases. (1) For benefit recipients whose benefits are based on the account of a member who was a member, inactive member, or retiree on December 31, 2006, or for benefit recipients whose benefits are based on the account of a DPS member or DPS retiree, annual increases in retirement benefits and survivor benefits shall be effective with the July benefit. Such increases in benefits shall be calculated in accordance with sections 24-51-1002 and 24-51-1003, subject to section 24-51-413, and shall be paid from the retirement benefits reserve or the survivor benefits reserve, as appropriate, so long as the following requirements are satisfied:

(a) For benefit recipients whose benefit is based on a retiree or DPS retiree whose effective date of retirement is prior to January 1, 2011, or whose survivor benefits are based on a date of death that occurred prior to
January 1, 2011, the benefits have been paid to the benefit recipient for at least seven months preceding July 1.

(b) For benefit recipients whose benefit is based on a retiree or DPS retiree whose effective date of retirement is on or after January 1, 2011, or whose survivor benefits are based on a date of death that is on or after January 1, 2011, AND AN ANNUAL INCREASE HAS BEEN APPLIED TO THE BENEFIT ON OR BEFORE MAY 1, 2018, the benefits have been paid to the benefit recipient for the twelve months prior to July 1, and for benefit recipients whose benefit is based upon a retiree or DPS retiree who was not eligible to retire as of January 1, 2011, THE BENEFITS HAVE BEEN PAID TO THE BENEFIT RECIPIENT FOR THE TWELVE MONTHS PRIOR TO JULY 1 AND AN ANNUAL INCREASE HAS BEEN APPLIED TO THE BENEFIT ON OR BEFORE MAY 1, 2018, the retiree met the following requirements:

(I) For DPS members with five or more years of service credit as of January 1, 2011, and for members WHO ARE NOT STATE TROOPERS who began membership prior to July 1, 2005, and have five or more years of service credit as of January 1, 2011, the retiree retired with a service retirement benefit pursuant to section 24-51-602 or 24-51-1713, whichever is applicable, or retired with a reduced service retirement benefit pursuant to section 24-51-604 or 24-51-1714, whichever is applicable, but has, as of January 1, attained the age and service credit years that when combined total at least eighty years, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty;

(II) For members WHO ARE NOT STATE TROOPERS who began membership on or after July 1, 2005, but prior to January 1, 2007, the retiree retired with a service retirement benefit pursuant to section 24-51-602, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age and service credit years that when combined total at least eighty-five years, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty;

(III) For DPS members with less than five years of service credit as of January 1, 2011, and for members whose membership began prior to January 1, 2007, with less than five years of service credit as of January 1, 2011, the retiree retired with a service retirement benefit pursuant to section
24-51-602, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age and service credit years that when combined total at least eighty-five years, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty; or

(IV) FOR MEMBERS WHO ARE STATE TROOPERS AND WHO WERE MEMBERS, INACTIVE MEMBERS, OR RETIREES ON DECEMBER 31, 2006, THE RETIREE RETIRED WITH A SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-602 OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604, BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE AND SERVICE CREDIT YEARS, WHEN WEIGHTED WITH NON-STATE TROOPER SERVICE CREDIT, THAT COMBINED TOTAL AT LEAST SEVENTY-FIVE YEARS, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE OF FIFTY-FIVE.

(b.5) FOR BENEFIT RECIPIENTS WHOSE BENEFIT IS BASED ON A RETIREE OR DPS RETIREE WHOSE EFFECTIVE DATE OF RETIREMENT IS ON OR AFTER JANUARY 1, 2011, OR WHOSE SURVIVOR BENEFITS ARE BASED ON A DATE OF DEATH THAT IS ON OR AFTER JANUARY 1, 2011, AND AN ANNUAL INCREASE HAS NOT BEEN APPLIED TO THE RETIREMENT OR SURVIVOR BENEFIT ON OR BEFORE MAY 1, 2018, THE BENEFITS HAVE BEEN PAID TO THE BENEFIT RECIPIENT FOR THIRTY-SIX MONTHS TOTAL BEFORE JULY 1, AND BENEFITS HAVE BEEN PAID TO THE BENEFIT RECIPIENT FOR THE TWELVE MONTHS PRIOR TO JULY 1, AND FOR BENEFIT RECIPIENTS WHOSE BENEFIT IS BASED UPON A RETIREE OR DPS RETIREE WHO WAS NOT ELIGIBLE TO RETIRE AS OF JANUARY 1, 2011, THE RETIREE MET THE FOLLOWING REQUIREMENTS:

(I) FOR DPS MEMBERS WITH FIVE OR MORE YEARS OF SERVICE CREDIT AS OF JANUARY 1, 2011, AND FOR MEMBERS WHO ARE NOT STATE TROOPERS WHO BEGAN MEMBERSHIP PRIOR TO JULY 1, 2005, AND HAVE FIVE OR MORE YEARS OF SERVICE CREDIT AS OF JANUARY 1, 2011, THE RETIREE RETIRED WITH A SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-602 OR 24-51-1713, WHICHEVER IS APPLICABLE, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 OR 24-51-1714, WHICHEVER IS APPLICABLE, BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE AND SERVICE CREDIT YEARS THAT WHEN COMBINED TOTAL AT LEAST EIGHTY YEARS, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF
JANUARY 1, ATTAINED THE AGE OF SIXTY;

(II) FOR MEMBERS WHO ARE NOT STATE TROOPERS WHO BEGAN MEMBERSHIP ON OR AFTER JULY 1, 2005, BUT PRIOR TO JANUARY 1, 2007, THE RETIREE RETIRED WITH A SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-602, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE AND SERVICE CREDIT YEARS THAT WHEN COMBINED TOTAL AT LEAST EIGHTY-FIVE YEARS, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE OF SIXTY;

(III) FOR DPS MEMBERS WITH LESS THAN FIVE YEARS OF SERVICE CREDIT AS OF JANUARY 1, 2011, AND FOR MEMBERS WHOSE MEMBERSHIP BEGAN PRIOR TO JANUARY 1, 2007, WITH LESS THAN FIVE YEARS OF SERVICE CREDIT AS OF JANUARY 1, 2011, THE RETIREE RETIRED WITH A SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-602, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE AND SERVICE CREDIT YEARS THAT WHEN COMBINED TOTAL AT LEAST EIGHTY-FIVE YEARS, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE OF SIXTY; OR

(IV) FOR MEMBERS WHO ARE STATE TROOPERS AND WHO WERE MEMBERS, INACTIVE MEMBERS, OR RETIREES ON DECEMBER 31, 2006, THE RETIREE RETIRED WITH A SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-602 OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604, BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE AND SERVICE CREDIT YEARS, WHEN WEIGHTED WITH NON-STATE TROOPER SERVICE CREDIT, THAT COMBINED TOTAL AT LEAST SEVENTY-FIVE YEARS, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE OF FIFTY-FIVE.

(c) No minimum age or service credit requirement shall apply to disability retirees or survivor benefit recipients.

(1.5) and (2) (Deleted by amendment, L. 93, p. 478, § 6, effective March 1, 1994.)
(3) For benefit recipients whose benefits are based on the account of a member who was not a member, inactive member, or retiree on December 31, 2006, annual increases in retirement benefits and survivor benefits, if any, shall be effective with the July benefit in accordance with the provisions of section 24-51-1009, SUBJECT TO SECTION 24-51-413, and shall be paid from the retirement benefits reserve or the survivor benefits reserve, as appropriate, so long as the following requirements are satisfied:

(a) The benefits have been paid to the benefit recipient for the full preceding calendar year AND AN ANNUAL INCREASE HAS BEEN APPLIED TO THE RETIREMENT OR SURVIVOR BENEFIT ON OR BEFORE MAY 1, 2018; and

(b) (I) For members WHO ARE NOT STATE TROOPERS whose membership began on or after January 1, 2007, but prior to January 1, 2011, the retiree retired with a service retirement benefit pursuant to section 24-51-602, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age and service credit years that when combined total at least eighty-five years, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty;

(II) For members WHO ARE NOT STATE TROOPERS whose membership began on or after January 1, 2011, but prior to January 1, 2017, the retiree retired with a service retirement benefit pursuant to section 24-51-602, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age and service credit years that when combined total at least eighty-eight years, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty;

(III) Subject to the provisions of subparagraph (IV) of this paragraph (b) SUBSECTION (3)(b)(IV) OF THIS SECTION, for members WHO ARE NOT STATE TROOPERS whose membership began on or after January 1, 2017, the retiree retired with a service retirement benefit pursuant to section 24-51-602, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age and service credit years that when combined total at least ninety years, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty; or
(IV) For members whose membership began on or after January 1, 2017, the retiree retired from the school or Denver public schools divisions with a reduced service retirement benefit pursuant to section 24-51-604 and the retiree's most recent ten years of service credit was earned in the school or Denver public schools divisions, but, as of January 1, the retiree's age and total service credit total at least eighty-eight years, or the retiree retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty; OR

(V) For members who are state troopers who were not members, inactive members, or retirees on December 31, 2006, the retiree retired with a service retirement benefit pursuant to section 24-51-602 or retired with a reduced service retirement benefit pursuant to section 24-51-604, but has, as of January 1, attained the age and service credit years, when weighted with non-state trooper service credit, that combined total at least seventy-five years, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of fifty-five.

(c) No minimum age or service credit requirement shall apply to disability retirees or survivor benefit recipients.

(3.5) For benefit recipients whose benefits are based on the account of a member who was not a member, inactive member, or retiree on December 31, 2006, annual increases in retirement benefits and survivor benefits, if any, are effective with the July benefit in accordance with section 24-51-1009, subject to section 24-51-413, and shall be paid from the retirement benefits reserve or the survivor benefits reserve, as appropriate, so long as the following requirements are satisfied:

(a) The benefits have been paid to the benefit recipient for thirty-six months total, and benefits have been paid to the benefit recipient for the full preceding calendar year, and an annual increase has not been applied to the retirement or survivor benefit on or before May 1, 2018; and

(b) (I) For members who are not state troopers whose membership began on or after January 1, 2007, but prior to January
1, 2011, the retiree retired with a service retirement benefit pursuant to section 24-51-602, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age and service credit years that when combined total at least eighty-five years, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty;

(II) For members who are not state troopers whose membership began on or after January 1, 2011, but prior to January 1, 2017, the retiree retired with a service retirement benefit pursuant to section 24-51-602, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age and service credit years that when combined total at least eighty-eight years, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty;

(III) Subject to subsection (3.5)(b)(IV) of this section, for members who are not state troopers whose membership began on or after January 1, 2017, the retiree retired with a service retirement benefit pursuant to section 24-51-602, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age and service credit years that when combined total at least ninety years, or retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty;

(IV) For members whose membership began on or after January 1, 2017, the retiree retired from the school or Denver public schools divisions with a reduced service retirement benefit pursuant to section 24-51-604 and the retiree’s most recent ten years of service credit was earned in the school or Denver public schools divisions, but, as of January 1, the retiree’s age and total service credit total at least eighty-eight years, or the retiree retired with a reduced service retirement benefit pursuant to section 24-51-604 but has, as of January 1, attained the age of sixty;

(V) For members who are state troopers who were not
MEMBERS, INACTIVE MEMBERS, OR RETIREES ON DECEMBER 31, 2006, BUT BEFORE DECEMBER 31, 2020, THE RETIREE RETIRED WITH A SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-602 OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604, BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE AND SERVICE CREDIT YEARS, WHEN WEIGHTED WITH NON-STATE TROOPER SERVICE CREDIT, THAT COMBINED TOTAL AT LEAST SEVENTY-FIVE YEARS, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE OF FIFTY-FIVE;

(VI) FOR MEMBERS WHO ARE NOT STATE TROOPERS WHOSE MEMBERSHIP BEGAN ON OR AFTER JANUARY 1, 2020, THE RETIREE RETIRED WITH A SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-602, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE AND SERVICE CREDIT YEARS THAT WHEN COMBINED TOTAL AT LEAST NINETY-FOUR YEARS, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE OF SIXTY-FOUR; OR

(VII) FOR MEMBERS WHO ARE STATE TROOPERS WHOSE MEMBERSHIP BEGAN ON OR AFTER JANUARY 1, 2020, THE RETIREE RETIRED WITH A SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-602, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604, BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE AND SERVICE CREDIT YEARS, WHEN WEIGHTED WITH NON-STATE TROOPER SERVICE CREDIT, THAT COMBINED TOTAL AT LEAST EIGHTY YEARS, OR RETIRED WITH A REDUCED SERVICE RETIREMENT BENEFIT PURSUANT TO SECTION 24-51-604 BUT HAS, AS OF JANUARY 1, ATTAINED THE AGE OF SIXTY.

(c) NO MINIMUM AGE OR SERVICE CREDIT REQUIREMENT SHALL APPLY TO DISABILITY RETIREES OR SURVIVOR BENEFIT RECIPIENTS.

(4) Benefits that are calculated pursuant to part 17 of this article ARTICLE 51 shall be governed by the benefit increase provisions of such part 17.

SECTION 18. In Colorado Revised Statutes, 24-51-1002, amend (2); and add (1.5) as follows:

PAGE 32-SENATE BILL 18-200
24-51-1002. Annual percentages to be used.

(1.5) Notwithstanding any other provision of this section, for the years 2018 and 2019, the annual increase awarded shall be zero percent.

(2) Beginning in the year 2011 on the effective date of this subsection (2), as amended, subject to the provisions of section 24-51-1009.5, for benefit recipients whose benefits are based on the account of a member who was a member, inactive member, or retiree on December 31, 2006, or for benefit recipients whose benefits are based on the account of a DPS member or DPS retiree, the increase applied to benefits paid shall be the lesser of two percent or the average of the annual increases determined for each month, to the nearest one-tenth of a percent, as calculated by the United States Department of Labor, in the National Consumer Price Index for Urban Wage Earners and Clerical Workers during the calendar year preceding the increase in the benefit. Notwithstanding the provisions of this subsection (2), the increase shall be the maximum permitted under this subsection (2) and section 24-51-1009.5 unless the association's annual audited return on investments is negative for the preceding calendar year, at which point the annual increase for the subsequent three years shall be the lesser of two percent or the average of the annual increases determined for each month, to the nearest one-tenth of a percent, as calculated by the United States Department of Labor, in the National Consumer Price Index for Urban Wage Earners and Clerical Workers during the calendar year preceding the increase in the benefit. One and one-half percent unless adjusted pursuant to section 24-51-413. The increase applied to such benefits shall be recalculated annually as of July 1 and shall be the compounded annual percentage of the annual increases applied to such benefits. In the first year that the benefit recipient is eligible to receive an annual increase pursuant to section 24-51-1001, the annual increase shall be prorated.

SECTION 19. In Colorado Revised Statutes, 24-51-1009, amend (4) introductory portion and (4)(a); and add (1.5) as follows:

24-51-1009. Annual increase reserve - creation. (1.5) For the years 2018 and 2019, the annual increase awarded shall be zero percent.

(4) An actuarial valuation shall be conducted each year for the
annual increase reserve of each division for the purposes of this section. The actuarial valuation shall include a determination of the total market value of the assets in the reserve and a calculation of the net present value of the actuarial liabilities associated with providing each of the annual increases described in paragraphs (a), (b), and (c) of this subsection (4) SUBSECTIONS (4)(a), (4)(b), AND (4)(c) OF THIS SECTION. Subject to section 24-51-1009.5, the maximum annual increase awarded by the board shall be the lesser of the following calculations:

(a) SUBJECT TO THE MAXIMUM ANNUAL INCREASE AS ADJUSTED PURSUANT TO SECTION 24-51-413, a permanent increase equal to two percent ONE AND ONE-HALF PERCENT of current benefits payable to benefit recipients then eligible for an annual increase in accordance with section 24-51-1001 (3);

SECTION 20. In Colorado Revised Statutes, amend 24-51-1009.5 as follows:

24-51-1009.5. Annual increase amount changes. When the actuarial funded ratio of the association, based on the actuarial value of assets, is at or above one hundred three percent as determined in the annual actuarial study of the association, the upper limit of the annual increase shall be increased by one-quarter of one percent. If the actuarial funded ratio of the association, based on the actuarial value of assets, reaches one hundred three percent and subsequently any annual actuarial study reflects the actuarial funded ratio of the association, based on the actuarial value of assets, is below ninety percent, the upper limit of the annual increase shall be decreased by one-quarter of one percent. At no time shall the upper limit of the annual increase fall below two percent.

SECTION 21. In Colorado Revised Statutes, add 24-51-1500.2 as follows:

24-51-1500.2. Legislative declaration. THE GENERAL ASSEMBLY FINDS AND DECLARES THAT THE PURPOSE OF THE DEFINED CONTRIBUTION PLAN ESTABLISHED IN THIS PART 15 IS TO PROVIDE ELIGIBLE EMPLOYEES WHO PARTICIPATE IN THE DEFINED CONTRIBUTION PLAN WITH A PATH TOWARD HAVING A SECURE RETIREMENT THROUGH A FOCUS ON LIFETIME RETIREMENT INCOME TO MAINTAIN AN ELIGIBLE EMPLOYEE’S STANDARD OF LIVING FOLLOWING A FULL CAREER OF EMPLOYMENT. THE PROVISIONS OF
THIS PART 15 ARE DESIGNED TO AVOID A NEGATIVE IMPACT ON THE DEFINED BENEFIT TRUSTS IN THIS ARTICLE 51. EMPLOYERS ARE RESPONSIBLE FOR ENSURING THAT THEIR EMPLOYEES UNDERSTAND THE ADVANTAGES AND DISADVANTAGES OF THE DEFINED BENEFIT AND DEFINED CONTRIBUTION PLANS.

SECTION 22. In Colorado Revised Statutes, 24-51-1501, amend (1) and (4) as follows:

24-51-1501. Defined contribution plan - establishment - creation of fund - definitions. (1) The board is hereby authorized to establish and administer a defined contribution plan for eligible state employees as provided in this part 15. The board shall establish the terms and conditions of the association's defined contribution plan offered to eligible state employees. The assets of the plan shall be held in a separate trust fund of the association created for such purpose.

(4) For purposes of this part 15, "employer" means the state, the general assembly, the office of a district attorney in a judicial district, any state department that employs an eligible employee, and any community college governed by the state board for community colleges and occupational education. Effective January 1, 2019, "employer" also includes any employer in the local government division and, to the extent that they employ classified employees in the state personnel system, any state college or university as defined in section 24-54.5-102 (7), any institution under the control of the board of regents of the university of Colorado, or an institution governed pursuant to part 5 of article 21 of title 23. Prior to January 1, 2019, "employer" shall not include any state college or university as defined in section 24-54.5-102 (7), any institution under the control of the board of regents of the university of Colorado, or an institution governed pursuant to part 5 of article 21 of title 23. C.R.S.

SECTION 23. In Colorado Revised Statutes, 24-51-1502, amend (2)(a); and repeal (3) as follows:

24-51-1502. New eligible employees - election - definitions. (2) (a) For purposes of this part 15, "eligible employee" means, effective July 1, 2009, and effective January 1, 2019, for local government division employees and state division employees who are employed
ONLY IN A CLASSIFIED POSITION IN THE STATE PERSONNEL SYSTEM BY A
STATE COLLEGE OR UNIVERSITY, any employee who commences
employment with an employer and who, if not commencing employment in
a state elected official's position, has not been a member of the association's
defined benefit plan or the association's defined contribution plan or an
active participant of the state defined contribution plan established pursuant
to part 2 of article 52 of this title 24, as said part existed prior to its
repeal in 2009, during the twelve months prior to the date that he or she
commenced employment. "Eligible employee" includes a retiree of the
association who is serving in a state elected official's position but does not
include any other retiree of the association or a retiree of the association
who has suspended benefits.

(3) An eligible employee hired by an employer on or after May 2,
2009, is eligible for the election pursuant to subsection (1) of this section.

SECTION 24. In Colorado Revised Statutes, 24-51-1503, amend
(2) as follows:

24-51-1503. Defined contribution plan option. (2) An employee
hired by an employer who has been a member of the association's defined
benefit plan or the association's defined contribution plan during the twelve
months prior to the date that the employee commences employment shall
automatically continue to be a member of such plan upon commencing
employment. IF AUTOMATICALLY CONTINUING IN THE DEFINED
CONTRIBUTION PLAN, THE EMPLOYEE'S INDIVIDUAL PARTICIPATION ACCOUNT
SHALL RECEIVE THE SAME EMPLOYER CONTRIBUTION PURSUANT TO SECTION
24-51-1505 (1), AS PREVIOUSLY ENTITLED. The employee shall be
considered an eligible employee for purposes of section 24-51-1506.

SECTION 25. In Colorado Revised Statutes, 24-51-1505, amend
(1), (2), and (3) as follows:

24-51-1505. Contributions - vesting - definition. (1) Contribution
rates to the association's defined contribution plan by the employer and by
members of the defined contribution plan established pursuant to this part
15 shall be the same as the rates that would be payable by the employer and
the member pursuant to section 24-51-401. THE INDIVIDUAL'S PARTICIPANT
ACCOUNT SHALL RECEIVE THE FULL MEMBER CONTRIBUTION AMOUNT IN
EFFECT UNDER SECTION 24-51-401. THE INDIVIDUAL'S PARTICIPANT
ACCOUNT SHALL RECEIVE A PORTION OF THE EMPLOYER CONTRIBUTION EQUAL TO THE AMOUNT IN TABLE A IN SECTION 24-51-401 (1.7)(a). ANY PORTION OF THE EMPLOYER CONTRIBUTION ABOVE THE AMOUNT IN TABLE A IN 24-51-401 (1.7)(a) SHALL BE PAID TO THE EMPLOYER'S DIVISION TRUST FUND.

(2) Consistent with the provisions of section 24-51-401 (1.7)(b), (1.7)(c), and (1.7)(d), the employer shall deliver all contributions to the defined contribution plan trust fund via the service provider designated by the association within five days after the date members are paid.

(3) Except as otherwise provided in subsection (4) of this section, members of the association's defined contribution plan shall be immediately and fully vested in their own contributions to the plan, together with accumulated investment gains or losses. Members shall be immediately vested in fifty percent of the employer's contribution to the defined contribution plan, together with accumulated investment gains or losses on that vested portion. For each full year of membership in the defined contribution plan, the vesting percentage shall increase by ten percent. The vesting percentage in the employer's contribution, with accumulated earnings or losses, shall be one hundred percent for all members with five or more years of membership in the defined contribution plan. If an individual becomes a member of the defined contribution plan without an existing account balance or after a twelve-month break in service, the individual shall begin a new vesting schedule with regard to future employer contributions in accordance with this subsection (3).

SECTION 26. In Colorado Revised Statutes, 24-51-1702, amend (17) as follows:

24-51-1702. Definitions. As used in this part 17, unless the context otherwise requires:

(17) "Highest average salary" means the average monthly compensation of the thirty-six months of accredited service having the highest rates, multiplied by twelve, or the "career average salary", whichever is greater, and shall be applied to benefits, except for benefits under sections 24-51-1727 to 24-51-1731, attributable to retirement or death on or after July 1, 1994. For benefits under sections 24-51-1727 to 24-51-1731, "highest average salary" applies to cases where termination of
service occurs on or after July 1, 1994. This subsection (17) shall apply only to DPS members eligible for a retirement benefit as of January 1, 2011. For DPS members not eligible for a retirement benefit as of January 1, 2011, the definition of "highest average salary" specified in section 24-51-101 (25)(b)(V) shall apply.

SECTION 27. In Colorado Revised Statutes, add with amended and relocated provisions article 51.1 to title 24 as follows:

ARTICLE 51.1
Pension Review Commission

24-51.1-101. [Formerly 31-31-1001.] Pension review commission. (1) (a) There is hereby created the police officers' and firefighters' pension reform review commission, to be referred to in this section as the "commission". Beginning in the first regular session of the seventy-second general assembly, the commission shall be comprised of five senators, three of whom are appointed by the president of the senate and two of whom are appointed by the minority leader of the senate, and ten five representatives, three of whom are appointed by the speaker of the house of representatives. The party representation shall be in proportion generally to the relative number of members of the two major political parties in each chamber and two of whom are appointed by the minority leader of the house of representatives. The chair shall be designated by the speaker of the house of representatives in odd-numbered years and by the president of the senate in even-numbered years. The vice-chair shall be appointed by the speaker of the house of representatives in even-numbered years and by the president of the senate in odd-numbered years. Members of the commission shall receive the same per diem allowance authorized for other members of the general assembly serving on interim study committees and actual expenses for participation in meetings of the commission. Staff services for the commission and the pension review subcommittee created pursuant to subsection (3) of this section shall be furnished by the state auditor's office, the legislative council, and the office of legislative legal services. The state auditor, with the approval of the commission, may contract for services deemed necessary for the implementation of this part 10 article 51.1.

(b) The terms of the members appointed by the speaker of the house
of representatives and the president of the senate and who are serving on March 22, 2007, shall be extended to and expire on or shall terminate on the convening date of the first regular session of the sixty-seventh general assembly. As soon as practicable after such convening date, the speaker and the president shall appoint or reappoint members in the same manner as provided in paragraph (a) of this subsection (1). Thereafter, the terms of members appointed or reappointed by the speaker, and the minority leader of the house of representatives, the president, and the minority leader of the senate shall expire on the convening date of the first regular session of each general assembly, and all subsequent appointments and reappointments by the speaker and the president shall be made as soon as practicable after such convening date. The person making the original appointment or reappointment shall fill any vacancy by appointment for the remainder of an unexpired term. Members appointed or reappointed by the speaker, and the minority leader of the house of representatives, the president, and the minority leader of the senate shall serve at the pleasure of the appointing authority and shall continue in office until the member's successor is appointed.

(2) The commission shall study and develop proposed legislation relating to funding of police officers' and firefighters' pensions in this state and benefit designs of such pension plans. In addition, the commission shall study and develop proposed legislation relating to the public employees' retirement association. The commission study of police officers' and firefighters' pensions and of the public employees' retirement association shall include a review of, and the proposed legislation may include, among other subjects, the following, as applicable:

(a) Normal retirement age; and compulsory retirement;
(b) Payment of benefits prior to normal retirement age;
(c) Service requirements for eligibility;
(d) Rate of accrual of benefits;
(e) Disability benefits;
(f) Survivors' benefits;

PAGE 39-SENATE BILL 18-200
(g) Vesting of benefits;

(h) Employee AND EMPLOYER contributions;

(i) Postretirement increases;

(j) Creation of an administrative board;

(k) Creation of a consolidated statewide system;

(l) Distribution of state funds;

(m) Coordination of benefits with other programs;

(n) The volunteer firefighter pension system;

(o) The provisions of this article and article 30.5 of this title ARTICLES 30, 30.5, AND 31 OF TITLE 31; AND

(o) The provisions of article 51 of this title 24.

(3) Repealed:

(3) (a) There is hereby created the pension review subcommittee. The subcommittee shall consist of fourteen members appointed as follows:

(I) The speaker of the house of representatives, the minority leader of the house of representatives, the president of the senate, and the minority leader of the senate shall each appoint one legislator who he or she has appointed to serve on the pension reform commission to also serve on the subcommittee;

(II) The speaker of the house of representatives and the president of the senate shall both appoint two people from the community with experience or knowledge of investment management, corporate or public finance, compensation and benefit systems, economics, accounting, pension administration, or actuarial analysis;
(III) The minority leader of the House of Representatives and the minority leader of the Senate shall both appoint two people from the community with experience or knowledge of investment management, corporate or public finance, compensation and benefit systems, economics, accounting, pension administration, or actuarial analysis;

(IV) The governor shall appoint one person from the community with experience or knowledge of investment management, corporate or public finance, compensation and benefit systems, economics, accounting, pension administration, or actuarial analysis; and

(V) The state treasurer shall appoint one person from the community with experience or knowledge of investment management, corporate or public finance, compensation and benefit systems, economics, accounting, pension administration, or actuarial analysis.

(b) The chair of the subcommittee shall be designated by the speaker of the House of Representatives in odd-numbered years and by the president of the Senate in even-numbered years. The vice-chair of the subcommittee shall be appointed by the speaker of the House of Representatives in even-numbered years and by the president of the Senate in odd-numbered years. The chair and vice-chair shall be designated from the legislative members of the subcommittee.

(c) The nonlegislative members of the subcommittee shall serve without compensation from the General Assembly.

(4) (a) The subcommittee shall review the items specified in subsection (2) of this section as they relate to the public employees' retirement association, as applicable. In addition, the subcommittee shall:

(I) Study the provisions of article 51 of this title 24 and make necessary recommendations to the commission or the public employees' retirement association;
(II) Determine the necessity of continuing the direct distribution to the Public Employees’ Retirement Association pursuant to Section 24-51-414;

(III) Suggest to the Public Employees’ Retirement Association enhancements that the Association could make to the annual analysis that it conducts pursuant to Senate Bill 14-214, enacted in 2014, to determine whether the Association’s model assumptions are meeting targets and achieving sustainability;

(IV) Review the annual actuarial valuation of the Public Employees’ Retirement Association and make comments as necessary to the Association regarding the actuarial valuation; and

(V) Make recommendations to the Board of Trustees of the Public Employees’ Retirement Association regarding assumptions, funding policy, reporting practices, or other operational policy.

(b) Review semi-annually the overall financial health of the Public Employees’ Retirement Association, including the levels of benefits, its sources of funding, and its overall financial viability based on both the assumptions of the Association Board of Directors and the requirements of the Governmental Accounting Standards Board. The Subcommittee may request that the Association provide general financial reporting based on assumptions for economic and investment factors, including, but not limited to, inflation, economic growth, employment growth, and rate of return, that differ from Board assumptions. If the Subcommittee determines that the Association’s Board of Directors is using assumptions that are too conservative or too aggressive, the Subcommittee shall request that the Association adjust its assumptions accordingly.

(c) Review annually the calculated normal costs that will cover current pension benefits and the share of contributions going to cover the unfunded liability of the Public Employees’ Retirement Association;

(d) Review semi-annually the planned reduction of the

(e) Annually report in writing to the citizens of Colorado regarding whether or not the public employees’ retirement association is on track to achieve full funding by 2048 and if not, the corrective actions recommended by the subcommittee or the association to the general assembly to rectify the shortfall. Such communication shall be made in a manner that is clear, concise, and accessible to laypeople. This communication shall quantify the net present value of any funding deficit on a per citizen basis. For example, fifty billion dollars on five million five hundred thousand people equals nine thousand ninety dollars per person. The certified annual financial report shall not serve as this communication.

(f) After full funding is achieved, make recommendations to the commission, the joint budget committee, and the general assembly during each legislative session regarding changes to the plan to maintain full funding;

(g) Ensure the public employees’ retirement association board is administering the association as mandated and make recommendations for the association board structure as warranted; and

(h) Every three years, commission an independent review of
THE ECONOMIC AND INVESTMENT ASSUMPTIONS USED TO MODEL THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION FINANCIAL SITUATION. THE SUBCOMMITTEE SHALL USE EXPERTS OTHER THAN THOSE ALREADY WORKING ON BEHALF OF THE ASSOCIATION.

(5) EACH MEMBER OF THE SUBCOMMITTEE SHALL BE REQUIRED TO:

(a) ATTEND AT LEAST ONE MEETING PER YEAR OF THE BOARD OF TRUSTEES OF THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION;

(b) ATTEND THE HEARING OF THE LEGISLATIVE AUDIT COMMITTEE WHEN THE COMMITTEE REVIEWS THE ANNUAL ACTUARIAL VALUATION THAT THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION IS REQUIRED TO SUBMIT TO THE LEGISLATIVE AUDIT COMMITTEE PURSUANT TO SECTION 24-51-204 (7); AND

(c) ATTEND THE "STATE MEASUREMENT FOR ACCOUNTABLE, RESPONSIVE, AND TRANSPARENT (SMART) GOVERNMENT ACT" HEARING OF THE JOINT FINANCE COMMITTEE PURSUANT TO PART 2 OF ARTICLE 7 OF TITLE 2 WHEN THE JOINT FINANCE COMMITTEE REVIEWS THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION.

SECTION 28. In Colorado Revised Statutes, 31-30.5-302, amend (1) as follows:

31-30.5-302. Definitions. As used in this part 3, unless the context otherwise requires:

(1) "Commission" means the police officers' and firefighters' pension reform review commission established pursuant to section 31-31-1001 and section 24-51.1-101.


SECTION 30. In Colorado Revised Statutes, repeal 31-31-1002.

SECTION 31. Appropriation. For the 2018-19 state fiscal year, $200,000 is appropriated to the legislative department for use by the legislative council. This appropriation is from the general fund. To
implement this act, the legislative council may use this appropriation for independent review of PERA assumptions pursuant to section 24-51.1-101(4)(h), C.R.S.

SECTION 32. Safety clause. The general assembly hereby finds, determines, and declares that this act is necessary for the immediate preservation of the public peace, health, and safety.

Kevin J. Grantham    Crisanta Duran
PRESIDENT OF THE SENATE    SPEAKER OF THE HOUSE

Effie Ameen    Marilyn Eddins
SECRETARY OF THE SENATE    CHIEF CLERK OF THE HOUSE

Page 45 - Senate Bill 18-200
HB 10-1425: DPS Postretirement Employment Limit

HB 1425, passed into law on May 27, 2010, exempts PERA retirees from the 110-day working after retirement limit if they were working as hourly employees for the Denver Public Schools (DPS) before January 1, 2010, and continue to hold those same positions.

SB 10-003: Higher Education Flexibility

SB 3, passed into law on June 9, 2010, included a minor provision regarding working after retirement. The bill adds 30 days to the 110-day limit for working after retirement in a calendar year without penalty for up to 10 service retirees per employer in the school districts and higher education institutions, provided all employer and member contributions are paid. Each year the employer can designate up to 10 retirees who are subject to the 140-day limit.

SB 10-146: Modify Contribution Rates to PERA for State and Judicial Division Employers

SB 146, passed into law on March 31, 2010, was a Joint Budget Committee-sponsored bill that modified contribution measures applicable to the State’s fiscal year 2010-11 only. This bill decreased the employer contribution rate for employers in the State and Judicial Divisions by 2.5 percent and increased the member contribution rate for employees in the State and Judicial Divisions by 2.5 percent.

SB 11-076: Extend Modified Contribution Rates to PERA for State and Judicial Division Employers

SB 076, passed into law on May 23, 2011, was a Joint Budget Committee-sponsored bill that extended the contribution measures of SB 146 for the State’s fiscal year 2011-12 only. This bill continued the 2.5 percent reduction in the employer contribution rate for employers in the State and Judicial Divisions and continued the 2.5 percent increase in the member contribution rate for employees in the State and Judicial Divisions.

SB 14-214: PERA Studies Conducted by Actuarial Firm(s)

SB 214, passed into law on June 4, 2014, was a Joint Budget Committee-sponsored bill that created three separate studies related to pensions and/or benefits:

- The first study changed the State’s annual total compensation survey process performed by the Department of Personnel and Administration to incorporate retirement benefits by January 15, 2015, and to perform the study again including retirement benefits every eighth year thereafter.
- The second study directs the State Auditor’s Office, with input from PERA, to contract with an actuarial firm to perform a comprehensive study of the current PERA plan design compared to other alternative retirement plan designs.
- The third study directs the State Auditor’s Office, with input from PERA, to contract with an actuarial firm to perform a sensitivity analysis of actual assumptions.

HB 15-1391: PERA and Denver Public Schools Five-Year True-up for DPS Division

HB 1391, passed into law on June 3, 2015, reduced the base employer contribution rate for the DPS Division from 13.75 percent to 10.15 percent, effective January 1, 2015. The 2009 legislation that authorized the merger of the Denver Public Schools Retirement System with PERA requires a determination every fifth year as to if the DPS base employer contribution rate should be adjusted. The adjustment is intended to ensure that 30 years after the merger, the funding status of the DPS and School Divisions are equalized.

HB 17-1176: PERA Retirees Employed By Rural School Districts

HB 1176, passed into law on June 6, 2017, modifies the current PERA working after retirement provisions for certain retirees hired by an employer in the School Division if the following conditions are met:

- The employer qualifies as a rural school district as determined by the Department of Education,
- The school district determines that there is a critical shortage of qualified teachers, school bus drivers, or school food services cooks, and,
- The school district hires the PERA retiree to provide either classroom instruction, school bus transportation, or school food services.

The PERA retiree meeting these criteria would be designated under these critical shortage provisions, allowed to return to work for a limited period of time, and to receive a salary without reduction in benefits. The bill also requires the employer and member to make full payment of PERA contributions, without refund or additional benefit accruals. These provisions are scheduled to sunset effective July 1, 2023.
APPENDIX B

**HB 17-1265: PERA Judicial Division Total Employer Contributions**

HB 1265, passed into law on May 25, 2017, increases the Amortization Equalization Disbursement (AED) and Supplemental Amortization Equalization Disbursement (SAED) for the Judicial Division. While the State, School, and DPS Divisions had AED and SAED increases after the passage of SB 1, the Judicial Division was exempt. For the calendar year beginning in 2019, the bill increases both the Judicial Division’s AED and SAED to 3.40 percent of total payroll and requires both the AED and SAED payment to increase by 0.40 percent of total payroll at the start of each of the following four calendar years through 2023.

**HB 19-1217: PERA Local Government Division Member Contribution Rate**

HB 1217, passed into law on May 20, 2019, requires the member contribution rate for the general members of the Local Government Division to remain at 8.0 percent. Member contribution rates will not increase over time as required by SB 200.

**HB 20-1127: Extend PERA Retiree Work After Retirement Limit for Retirees Employed by a Board of Cooperative Services (BOCES) After Retirement**

HB 1127, passed into law on July 13, 2020, extends PERA’s existing critical shortage provisions (applicable to rural school districts) to retirees employed by a BOCES after retirement. This legislative action allows certain designated retirees to return to work for a limited period of time and to receive a salary without reduction in benefits.

**HB 20-1379: Suspend Direct Distribution to PERA for the 2020-21 State Fiscal Year**

SB 200 requires that a direct distribution of $225 million from State funds be paid annually to PERA, allocated to the State, School, Judicial, and DPS Divisions. This direct distribution payment is to continue annually until the unfunded liabilities for each division receiving the payments are paid down. HB 1379, passed into law June 29, 2020, suspends the July 1, 2020, $225 million direct distribution payment from the State to PERA for the 2020-21 State fiscal year. This one-year suspension means PERA will not receive a direct distribution until the payment scheduled July 1, 2021.

**HB 20-1394: Modify Contribution Rates to PERA for Identified Judicial Division Employers for Certain Fiscal Years**

HB 1394, passed into law June 29, 2020, is applicable to the State’s fiscal years 2020-21 and 2021-22 only. This bill decreases the employer contribution rate for employers in the Judicial Division by 5.0 percent and increases the member contribution rate for employees in the Judicial Division by 5.0 percent. These provisions do not apply to the employer or member contribution rates for judges employed by the Denver County Court. The contribution rates for the Judicial Division will continue to be subject to the AAP in PERA law.
The table below provides a quick summary to indicate which division trust fund is impacted by the pension-related legislation passed since 2009.

### Legislative Pension Reforms—Divisions Impacted by Legislative Action Since 2009

<table>
<thead>
<tr>
<th>Legislation</th>
<th>Legislation Since 2009 that Impacted the Division Trust Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State Division</td>
</tr>
<tr>
<td>SB 2010-001</td>
<td>×</td>
</tr>
<tr>
<td>HB 2010-1425</td>
<td></td>
</tr>
<tr>
<td>SB 2010-003</td>
<td>×</td>
</tr>
<tr>
<td>SB 2010-146</td>
<td>×</td>
</tr>
<tr>
<td>SB 2011-076</td>
<td>×</td>
</tr>
<tr>
<td>SB 2014-214</td>
<td>×</td>
</tr>
<tr>
<td>HB 2015-1391</td>
<td></td>
</tr>
<tr>
<td>HB 2017-1176</td>
<td></td>
</tr>
<tr>
<td>HB 2017-1265</td>
<td></td>
</tr>
<tr>
<td>SB 2018-200</td>
<td>×</td>
</tr>
<tr>
<td>HB 2019-1217</td>
<td></td>
</tr>
<tr>
<td>HB 2020-1127</td>
<td></td>
</tr>
<tr>
<td>HB 2020-1379</td>
<td>×</td>
</tr>
<tr>
<td>HB 2020-1394</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

- × = Favorable impact on funding efforts.
- = Neutral or unfavorable impact on funding efforts.

*Applicable only for employers of Higher Education.*
APPENDIX C
CPI-W Data and Assumptions Regarding Projection Scenarios
Consumer Price Index Data

The table below provides a summary of all data regarding the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) obtained directly from the Bureau of Labor Statistics website (bls.gov) for years 2009 through 2019. These data were used in the development of Exhibits 3, 6, 7 and 8 to determine the applicable rate of inflation in comparison to the PERA AI for each year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Annual</th>
<th>Annual Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>205.700</td>
<td>206.708</td>
<td>207.218</td>
<td>207.925</td>
<td>208.774</td>
<td>210.972</td>
<td>210.526</td>
<td>211.156</td>
<td>211.322</td>
<td>211.549</td>
<td>212.003</td>
<td>211.703</td>
<td>209.630</td>
<td>-0.7%</td>
</tr>
<tr>
<td>2011</td>
<td>216.400</td>
<td>217.535</td>
<td>220.024</td>
<td>221.743</td>
<td>222.954</td>
<td>222.522</td>
<td>222.686</td>
<td>223.326</td>
<td>223.688</td>
<td>223.043</td>
<td>222.813</td>
<td>222.166</td>
<td>221.575</td>
<td>3.6%</td>
</tr>
<tr>
<td>2013</td>
<td>226.520</td>
<td>228.677</td>
<td>229.323</td>
<td>228.949</td>
<td>229.399</td>
<td>230.002</td>
<td>230.084</td>
<td>230.359</td>
<td>230.537</td>
<td>229.735</td>
<td>229.133</td>
<td>229.174</td>
<td>229.324</td>
<td>1.4%</td>
</tr>
<tr>
<td>2015</td>
<td>228.294</td>
<td>229.421</td>
<td>231.055</td>
<td>231.520</td>
<td>232.908</td>
<td>233.804</td>
<td>233.806</td>
<td>233.366</td>
<td>232.661</td>
<td>232.373</td>
<td>231.721</td>
<td>230.791</td>
<td>231.810</td>
<td>-0.4%</td>
</tr>
<tr>
<td>2017</td>
<td>236.854</td>
<td>237.477</td>
<td>237.656</td>
<td>238.432</td>
<td>238.609</td>
<td>238.813</td>
<td>238.617</td>
<td>239.448</td>
<td>240.939</td>
<td>240.573</td>
<td>240.666</td>
<td>240.526</td>
<td>239.051</td>
<td>2.1%</td>
</tr>
<tr>
<td>2018</td>
<td>241.919</td>
<td>242.988</td>
<td>243.463</td>
<td>244.607</td>
<td>245.770</td>
<td>246.196</td>
<td>246.155</td>
<td>246.336</td>
<td>246.565</td>
<td>247.038</td>
<td>245.933</td>
<td>244.786</td>
<td>245.146</td>
<td>2.5%</td>
</tr>
<tr>
<td>2019</td>
<td>245.133</td>
<td>246.218</td>
<td>247.768</td>
<td>249.332</td>
<td>249.871</td>
<td>249.747</td>
<td>250.236</td>
<td>250.112</td>
<td>250.251</td>
<td>250.894</td>
<td>250.644</td>
<td>250.452</td>
<td>249.222</td>
<td>1.7%</td>
</tr>
</tbody>
</table>
Assumptions Regarding Projection Scenarios

The projection illustrations included in Exhibit 2 and Exhibit 10 regarding the funding progress toward the elimination of PERA’s UAAL, reflect two separate sets of actuarial assumptions used to determine pension liabilities and other actuarial funding metrics, as follows:

- Actuarial assumptions adopted November 18, 2016, effective for the December 31, 2016, through the December 31, 2019, funding actuarial valuations for the division trust funds, and

- Actuarial assumptions adopted November 20, 2020, first effective for the December 31, 2020, funding actuarial valuation for the division trust funds.

A complete set of actuarial assumptions used for the December 31, 2019, funding actuarial valuation for the division trust funds can be found in the report titled, Public Employees’ Retirement Association of Colorado, Actuarial Valuation and Review as of December 31, 2019, June 29, 2020.

In October 2020 the Board’s actuarial service provider completed the experience analysis scheduled to take place in 2020. As a result of that analysis, the Board adopted revised actuarial assumptions on November 20, 2020, to be effective for the December 31, 2020, funding actuarial valuation. Although the 2020 actuarial valuation has not yet been performed, a complete summary of the revised actuarial assumptions that will be implemented for the 2020 annual report is available within the October 2020 experience analysis report, titled, Public Employees’ Retirement Association of Colorado, Actuarial Experience Review, Analysis of Actuarial Experience during the Period January 1, 2016 through December 31, 2019, October 28, 2020.

Since the recalibrated actuarial assumptions adopted in November 2020 are expected to have a fairly significant impact on the pension liabilities and funding metrics of the division trust funds, PERA staff believed it to be pertinent to include within this 2020 SB 1 Report Update, estimated funding projections based on these revised actuarial assumptions. Below is a table summarizing the major differences between the economic and demographic actuarial assumptions used for the 2019 actuarial valuation and funding projections versus the revised actuarial assumptions to be used for the 2020 actuarial valuation and funding projections.

Summary of Major Actuarial Assumptions

Economic Actuarial Assumptions

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Effective for 2019 Actuarial Valuation</th>
<th>Effective for 2020 Actuarial Valuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation</td>
<td>2.40%</td>
<td>2.30%</td>
</tr>
<tr>
<td>Investment Return</td>
<td>7.25%</td>
<td>No change.</td>
</tr>
<tr>
<td>Active Membership Growth</td>
<td>State Division</td>
<td>State Division</td>
</tr>
<tr>
<td></td>
<td>School Division</td>
<td>School Division</td>
</tr>
<tr>
<td></td>
<td>Local Government Division</td>
<td>Local Government Division</td>
</tr>
<tr>
<td></td>
<td>Judicial Division</td>
<td>Judicial Division</td>
</tr>
<tr>
<td></td>
<td>DPS Division</td>
<td>DPS Division</td>
</tr>
<tr>
<td>Salary Scale</td>
<td>Merit/seniority rates (including productivity) based on age plus inflation.</td>
<td>Increases to the merit and seniority (and productivity) portion of individual salary increases based on age plus the revised inflation assumption. Judicial salary increases based on service.</td>
</tr>
<tr>
<td>Payroll Growth</td>
<td>3.50%</td>
<td>3.00%</td>
</tr>
<tr>
<td>Assumption</td>
<td>Effective for 2019 Actuarial Valuation (Static Mortality)</td>
<td>Effective for 2020 Actuarial Valuation (Generational Mortality)</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Healthy Post-Retirement Mortality—Retirees</td>
<td>State and Local Government Divisions: RP-2014 Healthy Annuitant Mortality Table with adjustments for credibility and gender. For males the adjustments are a 73% factor applied to the rates for ages below 80 and a 108% factor applied to the rates for ages 80 and above, projected to 2018 using the MP-2015 projection scale. For females the adjustments are a 78% factor applied to the rates for ages below 80 and a 109% factor applied to the rates for ages 80 and above, projected to 2020 using the MP-2015 projection scale. School, Judicial and DPS Divisions: RP-2014 White Collar Healthy Annuitant Mortality Table with adjustments for credibility and gender. For males the adjustments are a 93% factor applied to the rates for ages below 80 and a 113% factor applied to the rates for ages 80 and above, projected to 2018 using the MP-2015 projection scale. For females the adjustments are a 68% factor applied to the rates for ages below 80 and a 106% factor applied to the rates for ages 80 and above, projected to 2020 using the MP-2015 projection scale.</td>
<td>State and Local Government Divisions (Non-Troopers): PubG-2010 Retired Lives Table for males using 94% of the rates prior to age 80 and 90% of the rates for ages 80 and older. For females, the PubG-2010 Retired Lives Table using 87% of the rates prior to age 80 and 107% of the rates for ages 80 and older. State and Local Government Divisions (Troopers): PubS-2010 Retired Lives Table. School and DPS Divisions: PubT-2010 Retired Lives Table for males using 112% of the rates prior to age 80 and 94% of the rates for ages 80 and older. For females, the PubT-2010 Retired Lives Table using 83% of the rates prior to age 80 and 106% of the rates for ages 80 and older. Judicial Division: PubG-2010 Above Median Retired Lives Table. All Divisions: Update the mortality projection scale to MP-2019 and apply mortality improvement on a generational basis.</td>
</tr>
<tr>
<td>Healthy Post-Retirement Mortality—Beneficiaries</td>
<td>Same as Retirees mortality above.</td>
<td>All Divisions: Pub-2010 Contingent Survivor Table for males using 97% of the rates for all ages. For females, 105% of the female rates for all ages. Generational projection using scale MP-2019.</td>
</tr>
</tbody>
</table>
### Demographic Actuarial Assumptions (continued)

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Effective for 2019 Actuarial Valuation</th>
<th>Effective for 2020 Actuarial Valuation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active Retirement</strong></td>
<td>All Divisions: Gender distinct age-based rates based upon eligibility unreduced and reduced benefits except for State (Troopers) and Judicial Divisions, where rates for reduced benefits are unisex and age-based.</td>
<td>In aggregate, there were slightly more reduced retirements than expected and fewer unreduced retirements than expected, while for certain groups/genders, the opposite was true in each category. Recommended modifications to rates at several ages across most divisions. Added additional rates of retirement for the first five years of eligibility for unreduced retirement to active members whose first eligibility for unreduced retirement is between age 55 and 64.</td>
</tr>
<tr>
<td><strong>Inactive Retirement</strong></td>
<td>All Divisions: 100% of inactive members who terminate employment with less than five years of service elect to withdraw their contributions. Current inactive members who are assumed to leave their contributions in the plan in order to be eligible for a benefit at their retirement date are assumed to retire at the following ages with an unreduced pension benefit: • PERA Benefit Structure – Age 62 • DPS Benefit Structure – Age 65</td>
<td>No changes.</td>
</tr>
<tr>
<td><strong>Termination</strong></td>
<td>Select and Ultimate Tables for the State Division (Non-Troopers), School and DPS Divisions (PERA Benefit Structure), and Local Government Division. DPS Benefit Structure member assumptions are based on age only. Age-based rates for Troopers. Rates vary by gender. School and DPS Divisions use the same rates of termination.</td>
<td>Changes (primarily decreases) in rates of termination. The current select period is retained and select termination rates are decreased, adopting unisex rates. Sex-distinct rates are retained regarding ultimate rates, also generally decreased. Separate rates are established for School and DPS Divisions.</td>
</tr>
<tr>
<td><strong>Refunds of Contributions</strong></td>
<td>All Divisions except Judicial: 35% of the vested members who terminate elect to withdraw their contributions and matching employer contributions; while the remaining 65% elect to leave their contributions in the plan in order to be eligible for a benefit at their retirement date. Judicial Division: 100% of the vested members who terminate elect to leave their contribution in the plan in order to be eligible for a benefit at their retirement date.</td>
<td>No changes.</td>
</tr>
<tr>
<td><strong>Disability Retirement</strong></td>
<td>Rates are based on age and are unisex for all divisions. The State and Local Government Divisions have similar disability rates, with minor differences. School and DPS Divisions (PERA Benefit Structure) have different disability rates than the Judicial Division or members under the DPS Benefit Structure.</td>
<td>State and Local Government Divisions (Non-Troopers): combined for developing a new assumption and a uniform decrease of 19% is applied to the current composite disability retirement rates. School, DPS and Judicial Divisions: combined for developing a new assumption and a uniform decrease of 19% is applied to the current composite disability retirement rates. Troopers: no changes.</td>
</tr>
<tr>
<td><strong>Spouse Information</strong></td>
<td>100% of members are married (80% for DPS Division). Male spouses are two years older than female spouses. 100% of spouses are of the opposite gender.</td>
<td>No changes.</td>
</tr>
</tbody>
</table>
## Summary of Gain/Loss Information
### By Source for Years 2001 through 2019

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UAAL beginning of year</strong></td>
<td>($1,459.7)</td>
<td>$431.8</td>
<td>$4,041.6</td>
<td>$9,895.4</td>
<td>$12,814.9</td>
<td>$12,479.1</td>
<td>$12,803.6</td>
<td>$13,043.6</td>
<td>$16,813.0</td>
<td>$16,937.6</td>
</tr>
<tr>
<td><strong>Experience (gains) and losses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age and service retirements</td>
<td>178.4</td>
<td>557.4</td>
<td>435.7</td>
<td>436.3</td>
<td>32.4</td>
<td>60.7</td>
<td>56.9</td>
<td>47.1</td>
<td>18.7</td>
<td>4.2</td>
</tr>
<tr>
<td>Disability retirements</td>
<td>(0.1)</td>
<td>3.1</td>
<td>19.7</td>
<td>0.7</td>
<td>5.8</td>
<td>(24.3)</td>
<td>(26.6)</td>
<td>(29.1)</td>
<td>(31.2)</td>
<td>(9.1)</td>
</tr>
<tr>
<td>Deaths</td>
<td>(11.5)</td>
<td>(5.9)</td>
<td>26.0</td>
<td>50.7</td>
<td>(130.7)</td>
<td>(0.3)</td>
<td>(9.4)</td>
<td>79.1</td>
<td>91.2</td>
<td>59.7</td>
</tr>
<tr>
<td>Withdrawal from employment</td>
<td>(0.6)</td>
<td>20.4</td>
<td>(18.1)</td>
<td>(13.0)</td>
<td>(104.1)</td>
<td>88.9</td>
<td>107.7</td>
<td>113.0</td>
<td>139.7</td>
<td>16.3</td>
</tr>
<tr>
<td>New members</td>
<td>41.0</td>
<td>68.6</td>
<td>110.7</td>
<td>66.3</td>
<td>129.1</td>
<td>136.2</td>
<td>113.5</td>
<td>100.6</td>
<td>105.5</td>
<td>139.7</td>
</tr>
<tr>
<td>Pay increases</td>
<td>495.5</td>
<td>182.7</td>
<td>(716.4)</td>
<td>(97.4)</td>
<td>332.1</td>
<td>(59.6)</td>
<td>221.3</td>
<td>147.9</td>
<td>(407.1)</td>
<td>(727.1)</td>
</tr>
<tr>
<td>Investment income</td>
<td>780.1</td>
<td>2,710.8</td>
<td>2,612.1</td>
<td>(1,697.7)</td>
<td>(89.4)</td>
<td>(682.7)</td>
<td>(833.3)</td>
<td>2,632.8</td>
<td>2,908.6</td>
<td>2,806.5</td>
</tr>
<tr>
<td>Administrative expense and other</td>
<td>(5.7)</td>
<td>323.9</td>
<td>753.1</td>
<td>23.0</td>
<td>(70.3)</td>
<td>(46.3)</td>
<td>(157.6)</td>
<td>97.1</td>
<td>368.6</td>
<td>(230.2)</td>
</tr>
<tr>
<td><strong>Experience (gain)/loss during year</strong></td>
<td>1,4771.1</td>
<td>3,861.0</td>
<td>3,222.8</td>
<td>2,164.3</td>
<td>104.9</td>
<td>(527.4)</td>
<td>(527.5)</td>
<td>3,188.5</td>
<td>3,194.0</td>
<td>2,060.0</td>
</tr>
<tr>
<td><strong>Non-recurring items</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in plan provisions</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>(275.6)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Change in plan assumptions and methods</td>
<td>572.6</td>
<td>0.0</td>
<td>981.3</td>
<td>0.0</td>
<td>(1,534.4)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>4,827.5</td>
</tr>
<tr>
<td>Purchase of noncovered service</td>
<td>0.0</td>
<td>0.0</td>
<td>1,241.6</td>
<td>215.0</td>
<td>73.2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>DPSRS UAAL transfer</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>386.8</td>
</tr>
<tr>
<td><strong>Non-recurring items</strong></td>
<td>572.6</td>
<td>0.0</td>
<td>2,222.9</td>
<td>(60.6)</td>
<td>(1,461.2)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>4,045.7</td>
</tr>
<tr>
<td><strong>Contribution deficiency</strong></td>
<td>0.0</td>
<td>0.0</td>
<td>246.6</td>
<td>473.2</td>
<td>576.8</td>
<td>380.6</td>
<td>461.2</td>
<td>377.1</td>
<td>468.5</td>
<td>469.1</td>
</tr>
<tr>
<td><strong>Expected change in UAAL</strong></td>
<td>(158.2)</td>
<td>(251.2)</td>
<td>161.5</td>
<td>342.6</td>
<td>443.7</td>
<td>471.3</td>
<td>306.3</td>
<td>335.2</td>
<td>507.8</td>
<td>255.3</td>
</tr>
<tr>
<td><strong>Total (gain)/loss for year</strong></td>
<td>1,891.5</td>
<td>3,609.8</td>
<td>5,853.8</td>
<td>2,919.5</td>
<td>(335.8)</td>
<td>324.5</td>
<td>240.0</td>
<td>3,769.4</td>
<td>124.6</td>
<td>3,171.2</td>
</tr>
<tr>
<td><strong>UAAL end of year</strong></td>
<td>$431.8</td>
<td>$4,041.6</td>
<td>$9,895.4</td>
<td>$12,814.9</td>
<td>$12,479.1</td>
<td>$12,803.6</td>
<td>$13,043.6</td>
<td>$16,813.0</td>
<td>$16,937.6</td>
<td>$20,108.8</td>
</tr>
</tbody>
</table>

1 The required amortization period was 40 years prior to 2006 and 30 years for 2006 forward.

2 The determination of the contribution deficiency values shown on this schedule considers interest at the assumed rate of investment return. These deficiency values differ from the information required to be shown under Government Accounting Standards Board Statement No. 67 (GASB 67), Required Supplementary Information, Schedule of Employer Contributions [paragraph 32(c)], which is determined with no adjustment for interest.

3 Corrected values based on 2009 and 2010 Actuarial Valuation Reports.

4 The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.
### Summary of Gain/Loss Information
#### By Source for Years 2001 through 2019 (continued)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UAAL beginning of year</strong></td>
<td>$20,108.8</td>
<td>$23,549.6</td>
<td>$22,711.2</td>
<td>$25,798.0</td>
<td>$25,874.6</td>
<td>$26,824.9</td>
<td>$32,241.8</td>
<td>$28,777.1</td>
<td>$30,999.3</td>
<td>($1,459.7)</td>
</tr>
<tr>
<td><strong>Experience (gains) and losses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age and service retirements</td>
<td>(1.7)</td>
<td>49.0</td>
<td>32.7</td>
<td>180.4</td>
<td>132.1</td>
<td>211.4</td>
<td>177.5</td>
<td>95.4</td>
<td>2,843.6</td>
<td></td>
</tr>
<tr>
<td>Disability retirements</td>
<td>(9.2)</td>
<td>(9.9)</td>
<td>24.2</td>
<td>23.9</td>
<td>22.7</td>
<td>22.3</td>
<td>22.9</td>
<td>13.3</td>
<td>28.6</td>
<td></td>
</tr>
<tr>
<td>Deaths</td>
<td>33.8</td>
<td>5.2</td>
<td>70.4</td>
<td>67.1</td>
<td>68.5</td>
<td>79.9</td>
<td>(21.0)</td>
<td>118.0</td>
<td>4.7</td>
<td>575.5</td>
</tr>
<tr>
<td>Withdrawal from employment</td>
<td>154.1</td>
<td>(44.1)</td>
<td>122.4</td>
<td>204.1</td>
<td>172.7</td>
<td>205.9</td>
<td>251.2</td>
<td>(5.2)</td>
<td>150.1</td>
<td>1,561.4</td>
</tr>
<tr>
<td>New members</td>
<td>147.1</td>
<td>160.0</td>
<td>215.3</td>
<td>176.0</td>
<td>149.9</td>
<td>213.0</td>
<td>238.3</td>
<td>231.4</td>
<td>213.4</td>
<td>2,755.6</td>
</tr>
<tr>
<td>Pay increases</td>
<td>(901.0)</td>
<td>(385.3)</td>
<td>(230.2)</td>
<td>(52.6)</td>
<td>(64.4)</td>
<td>(275.0)</td>
<td>(214.3)</td>
<td>162.0</td>
<td>391.6</td>
<td>(2,197.3)</td>
</tr>
<tr>
<td>Investment income</td>
<td>3,188.9</td>
<td>(1,062.4)</td>
<td>(1,139.1)</td>
<td>(579.1)</td>
<td>(418.0)</td>
<td>236.3</td>
<td>(175.5)</td>
<td>580.4</td>
<td>(1,176.7)</td>
<td>13,998.0</td>
</tr>
<tr>
<td>Administrative expense and other</td>
<td>(18.3)</td>
<td>68.6</td>
<td>(11.4)</td>
<td>(52.0)</td>
<td>(35.7)</td>
<td>68.2</td>
<td>61.2</td>
<td>511.0</td>
<td>47.5</td>
<td>1,694.7</td>
</tr>
<tr>
<td>Experience (gain)/loss during year</td>
<td>2,593.7</td>
<td>(1,218.9)</td>
<td>(915.7)</td>
<td>(32.2)</td>
<td>27.8</td>
<td>689.6</td>
<td>374.2</td>
<td>1,788.4</td>
<td>(264.5)</td>
<td>21,260.1</td>
</tr>
<tr>
<td><strong>Non-recurring items</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in plan provisions</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>(4,832.3)</td>
<td>(5.6)</td>
<td>(1,494.3)</td>
<td>(15,612.4)</td>
</tr>
<tr>
<td>Change in plan assumptions and methods</td>
<td>0.0</td>
<td>(663.7)</td>
<td>3,140.3</td>
<td>(636.9)</td>
<td>0.0</td>
<td>3,947.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>10,634.0</td>
</tr>
<tr>
<td>Purchase of noncovered service</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1,529.8</td>
</tr>
<tr>
<td>DPSRS UAAL transfer</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>386.8</td>
</tr>
<tr>
<td>Non-recurring items</td>
<td>0.0</td>
<td>(663.7)</td>
<td>3,140.3</td>
<td>(636.9)</td>
<td>0.0</td>
<td>3,947.3</td>
<td>(4,832.3)</td>
<td>(5.6)</td>
<td>(1,494.3)</td>
<td>(3,061.8)</td>
</tr>
<tr>
<td><strong>Contribution deficiency</strong></td>
<td>125.8</td>
<td>175.3</td>
<td>301.7</td>
<td>55.3</td>
<td>380.9</td>
<td>249.6</td>
<td>195.2</td>
<td>450.0</td>
<td>132.9</td>
<td>5,501.8</td>
</tr>
<tr>
<td><strong>Expected change in UAAL</strong></td>
<td>721.3</td>
<td>886.9</td>
<td>560.5</td>
<td>690.4</td>
<td>541.6</td>
<td>530.4</td>
<td>798.2</td>
<td>(10.6)</td>
<td>436.4</td>
<td>7,569.4</td>
</tr>
<tr>
<td><strong>Total (gain)/loss for year</strong></td>
<td>3,440.8</td>
<td>(838.4)</td>
<td>3,086.8</td>
<td>76.6</td>
<td>950.3</td>
<td>5,416.9</td>
<td>(4,667.4)</td>
<td>2,222.2</td>
<td>(1,189.5)</td>
<td>31,269.5</td>
</tr>
<tr>
<td><strong>UAAL end of year</strong></td>
<td>$23,549.6</td>
<td>$22,711.2</td>
<td>$25,798.0</td>
<td>$25,874.6</td>
<td>$26,824.9</td>
<td>$32,241.8</td>
<td>$28,777.1</td>
<td>$30,999.3</td>
<td>$29,809.8</td>
<td>$29,809.8</td>
</tr>
</tbody>
</table>

1. The required amortization period was 40 years prior to 2006 and 30 years for 2006 forward.
2. The determination of the contribution deficiency values shown on this schedule considers interest at the assumed rate of investment return. These deficiency values differ from the information required to be shown under GASB 67, Required Supplementary Information, Schedule of Employer Contributions [paragraph 32(c)], which is determined with no adjustment for interest.
3. Corrected values based on 2009 and 2010 Actuarial Valuation Reports.
4. The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.
5. Predominantly attributable to the change in actuarial service provider and valuation software.
COLORADO PERA DEFINED BENEFIT PENSION PLAN

FUNDING POLICY

ADOPTED MARCH 20, 2015,
LAST AMENDED NOVEMBER 16, 2018
CONTENTS

I. Introduction ........................................... 1
II. Background .......................................... 1
III. Funding Goals ........................................ 2
IV. Annual Actuarial Metrics ...................... 3
V. Funding Valuation Elements ................. 3
VI. Governance Policy/Processes ............. 5
VII. Glossary of Funding Policy Terms ........ 6
I. INTRODUCTION
The Colorado Public Employees’ Retirement Association (PERA) maintains five pre-funded, hybrid defined benefit pension plans [i.e., State Division Trust Fund, School Division Trust Fund, Local Government Division Trust Fund, Judicial Division Trust Fund, and Denver Public Schools (DPS) Division Trust Fund]. Each defined benefit pension plan is funded through PERA-affiliated employer contributions, member contributions, and the investment earnings resulting from those contributions. The fixed contribution rate at which each division’s employers and members contribute is determined by the Colorado General Assembly and defined within the statutes governing PERA.

The purposes of this funding policy are to state the overall funding goals and annual actuarial metrics and to guide the PERA Board of Trustees (Board) when considering whether to pursue or support proposed contribution and benefit legislation. The policy also includes a brief list of governance responsibilities regarding the commissioning, collection, and review of actuarial information, as described in the Board’s Governance Manual.

PERA also maintains two pre-funded defined benefit retiree health care subsidy plans (i.e., Health Care Trust Fund and DPS Health Care Trust Fund), classified as other postemployment benefit (OPEB) plans. On January 19, 2018, the Board approved a separate OPEB funding policy with regard to these plans recognizing the adoption and implementation of the Governmental Accounting Standards Board (GASB) Statement No. 74, applicable to OPEB.

It is the intention of the Board that this funding policy be considered a working document, reviewed periodically and, as necessary, altered in the future through formal action of the Board. The final page of this document contains the review and revision/adoption history pertaining to the funding policy of the PERA defined benefit pension plans.

II. BACKGROUND
In response to the unfavorable investment market of 2008, and in addition to the funding policy adopted in November 2007, the Board set the following guiding principles in 2009 in the development of a comprehensive package to maintain long-term sustainability of the pension plans:

» Shared responsibility among members, retirees, and employers;
» Intergenerational equity;
» Preservation of the defined benefit plan;
» Preservation of portability through the maintenance of existing benefit structures for the different divisions; and
» Development of recommendations that would have little-to-no short-term impact on member behavior.

In 2009 and 2010, these guiding principles benefited the Board and all the stakeholders associated with the pension plan as solutions to the immediate funding situation were explored. The Board constructed a series of plan provision changes, enlisting the philosophy of the guiding principles—under the umbrella of shared responsibility—and communicated their recommendations to the General Assembly. Senate Bill 10-001 was the culmination of all the provisional and contribution changes that were to set PERA’s course toward sustainability. Senate Bill 10-001 also contained the following funding and annual increase requirements, which now are embedded in Colorado Statute and will be implemented regardless of the Board’s pension funding policy:

» Per C.R.S. § 24-51-411(8), and § 24-51-411(9), the AED and the SAED are adjusted based on the year-end actuarial funded ratio within a particular division;
  • If a division trust fund’s actuarial funded ratio;
    – Reaches 103 percent, a decrease in the AED and SAED is mandated, and,
    – Subsequently falls below 90 percent, an increase is mandated.
• For the Local Government and Judicial Divisions, if the actuarial funded ratio reaches 90 percent and subsequently falls below 90 percent, an increase in the AED and SAED is mandated.
• Increases in AED and SAED cannot exceed the statutory maximum allowable limitation.
  » Per C.R.S. § 24–51-1009.5, if the combined pension divisions’ trust fund actuarial funded ratio;
  • Reaches 103 percent, the upper limit of the annual increase shall be increased by one-quarter of one percent, and,
  • Subsequently falls below 90 percent, the upper limit of the annual increase shall be decreased by one-quarter of one percent.

These statutory elements, in addition to the current schedule of employer contribution rates, assist in the ongoing balance of shared responsibility. It is not the intention of this Board, through the development of this funding policy, to undermine or circumvent the work accomplished by Senate Bill 10-001, but rather to ensure continued fiduciary commitment through sound governance practices and recognition of these statutory funding policies.

The combined funding policy regarding PERA’s pension and OPEB plans, adopted by the Board in November 2007, was in force with regard to the pension plans through December 30, 2014. On March 20, 2015, the Board approved a separate pension funding policy with regard to these plans, which reflects the guiding principles listed above. This pension funding policy is effective with the December 31, 2014 actuarial valuation, recognizes the adoption and implementation of the GASB Statement No. 67, applicable to pensions, and has been adopted and updated as indicated on the last page of the document.

This document is revised as of November 16, 2018, to reflect the Board’s funding plan coming out of the September 2017 planning meeting with the intent to 1) propose pension reforms that would fully fund each of the five division trust funds within a 30-year period from first recognition, and 2) reset the 30-year closed amortization period for purposes of determining the Actuarially Determined Contribution (ADC) to mirror the funding period of the proposed changes, contingent on the passage of pension reform legislation. Given the June 4, 2018, enactment of Senate Bill 18–200, the Board was unable to affect the reinitialization of the 30-year period prior to finalization of the December 31, 2017, funding actuarial valuation results. Thus, as of the December 31, 2018, funding actuarial valuation, the 30-year closed amortization period is effective for amortizing the total unfunded actuarial accrued liability (UAAL) for each division trust fund as of December 31, 2017, in alignment with the initial recognition of the Senate Bill 18–200 pension forms. This action allows for a more accurate analysis of the “statutory contribution rate versus ADC rate” necessary to determine if the auto-adjust mechanism, also enacted through Senate Bill 18–200, is triggered for the following period.

III. FUNDING GOALS

» Preservation of the defined benefit plan structure of providing lifetime retirement benefits to the employees of PERA-affiliated employers, reflecting the fact that PERA members are not covered under Social Security.

» Demonstration of transparency and accountability through the continued maintenance of a defined benefit pension plan funding policy for the stakeholders of PERA.

» Achievement of a combined divisions’ trust fund actuarial funded ratio greater than or equal to 110%. Once the 110% combined funded ratio is achieved, following (1) the complete discontinuance of AED and SAED contributions, and (2) the restoration of the annual increase to pre-2010 levels pursuant to C.R.S. § 24–51–1009.5, the Board will consider and/or support the following actions, as ordered, as long as the funded ratio, either combined or individual by division, does not fall below 100% after consideration of the proposed change:
  • Examination and possible action of de-risking the total trust fund, including all divisions
  • Reduction in the base contribution rate(s)
  • Adoption of a benefit enhancement, beyond restoration of the annual increase as described above.
If the 110% combined funded ratio benchmark is attained through the assistance of certain funding arrangements where assets, outside of statutory contributions, are added to the plans, and results in additional tax-payer obligation, the payment method and duration of this debt should be considered prior to any supportive action taken regarding benefit enhancements.

» Dedication to the balance between:
  • Contribution rate stability—keeping contributions relatively stable over time, and
  • Intergenerational equity—allocating costs over the members’ period of active service.

» Dedication to the systematic reduction of the UAAL, subject to the required action by the state legislature as described in C.R.S. § 24-51-411(8), § 24-51-411(9), and § 24-51-1009.5, and as briefly summarized above in Section II.

» Recognition that within a multiple-employer cost-sharing defined benefit plan there are beneficial elements of pooled risk, both in the accrual of plan liabilities, recognizing actuarial gains and loss by division, rather than by employer; and in the accumulation of plan assets through the engagement of an appropriate level of asset risk management.

**IV. ANNUAL ACTUARIAL METRICS**

Below is a list of actuarial metrics to be assessed on an annual basis as of the actuarial valuation date. The Board recognizes that a single year’s results may not be indicative of long-term trends and projected results.

» Funded ratios—Calculate and review by division:
  • The actuarial funded ratio based on the actuarial value of plan assets divided by the defined benefit pension plan’s actuarial accrued liability (AAL), and
  • The market value funded ratio based on the market value of plan assets divided by the defined benefit pension plan’s AAL.

» Funding period—To be determined for each division with respect to the applicable contribution rates. A funding period is the amortization period required to pay off that division’s UAAL considering the resources available. Funding periods for each division will be determined in the annual actuarial valuation in relationship to both
  • Statutory contribution rates, and
  • ADC rates.

» Contribution rate comparison—
  • Calculate and review by division.

» Actuarial Projections—
  • Perform and review, by division, – Actuarial projections considering appropriate benefit provisions, salary and demographic data, actuarial assumptions, membership growth, and statutory contribution rates in order to determine the sustainability of each division under their benefit provisions and statutory contribution rate structure.
  – Projection modeling that allows for the testing of projection results under various economic and demographic stress conditions.

**V. FUNDING VALUATION ELEMENTS**

Annually, the Board’s actuary will perform an actuarial valuation for funding purposes, and calculate ADC rates against which to compare contribution rates mandated under State statute. The ADC will be the sum of a payment based on normal cost and a payment on the UAAL. The normal cost and the amount of payment on the UAAL are determined by the following three major components of a funding valuation:

» Actuarial Cost Method: This component determines the attribution method upon which the cost/liability of the retirement benefits are allocated to a given period, defining the normal cost or annual accrual rate associated with the projected benefits.
• The Entry Age Normal Cost Method (EAN), as is used for PERA’s annual actuarial valuation purposes, is to be used for the determination of the normal cost rate and the actuarial accrued liability for purposes of calculating the ADC.

• Under this method, normal cost is calculated using benefits based on projected service and salary at retirement and is allocated over an individual’s career as a level percent of payroll. Because EAN normal cost rates are level for each participant, the normal cost pattern for the entire plan under EAN is more stable in the face of demographic shifts in the workforce. It is this normal cost stability that makes the EAN method the preferred funding method for the majority of public defined benefit pension plans.

ASSET VALUATION METHOD

» Asset Valuation Method: This component dictates the method by which the asset value, used in the determination of the UAAL, is determined, which could be a market value or a smoothed actuarial value of trust assets.

• Because investment markets are volatile and defined benefit pension plans typically have long investment horizons, application of an asset-smoothing technique can be an effective tool to manage contribution volatility and provide a more consistent measure of funding over time. Asset-smoothing methods reduce the effect of short-term market volatility on contributions, while still tracking the overall movement of the market value of plan assets, by recognizing the effects of investment gains and losses over a period of years.

• The asset valuation method to be used shall be a four-year smoothed market value of assets. The difference between actual market value investment returns and the expected actuarial investment returns is recognized equally over a four-year period.

» Amortization Method: This component prescribes, in terms of duration and pattern, the systematic manner in which the difference between the actuarial accrued liability and the actuarial value of assets is reduced.

• Once established for any component of the UAAL, the amortization period for that component will be closed and will decrease by one year annually.

• The amortization payment will be determined on a level percentage of pay basis.

• The length of the amortization periods will be as follows:
  – Existing UAAL on December 31, 2017—30 years.
  – Any increase (or decrease) in the UAAL existing as of December 31, 2017—remaining period of the initial 30-year period from the date of the valuation.
  – Annual future actuarial experience gains and losses—30 years from the date of the valuation.
  – Future assumption changes—30 years from the date of the valuation.
  – Future benefit enhancements/reductions—the number of years, as determined by the Board, to represent the anticipated duration of payment of the enhancement or, if a reduction, duration of the benefit to the plan. This determination will be based on the nature of the benefit change and the demographics of the membership group affected by the change, not to exceed 25 years from the date of the valuation.

• If any future annual actuarial valuation indicates a division has a negative UAAL, the ADC shall be set equal to the Normal Cost until such time as the funded ratio equals or exceed 120%. At that time, the ADC shall be equal to the Normal Cost less an amount equal to 15 year amortization of the portion of the negative UAAL above the 120% funded ratio.

• The target amortization period noted above regarding new UAAL will be applied for funding benchmark and RSI reporting purposes. Alternative ADCs will be determined by division, by applying the layered amortization methodology as described above, using a 25-year closed period, a 20-year closed period, and a 15-year closed period, in lieu of the 30-year period, for amortization of new UAAL. These comparatives are to appear in the Comprehensive Annual Financial Report (CAFR) as a demonstration of the transparency and accountability funding goal delineated in Section III of this document.
VI. GOVERNANCE POLICY/PROCESSES

As delineated in the PERA Governance Manual, below is a list of specific actuarial and/or funding-related studies, the frequency at which they should be commissioned/requested by the Board, and additional responsibilities relating to the studies:

» **Actuarial Valuation** (perform annually)—The Board is responsible for reviewing PERA’s annual actuarial valuation report; and submitting a summary report to the Legislative Audit Committee and the Joint Budget Committee of the General Assembly, together with any recommendations concerning such liabilities that have accrued. In addition, the Board, in consultation with the their retained actuary, will provide recommendations to the Colorado General Assembly regarding any necessary adjustments to the statutory employer and member contribution rates.

» **Experience Analysis** (perform periodically, historically performed approximately every four years)—The Board is responsible for ensuring that an experience analysis is performed as prescribed, for reviewing the results of that study, and for approving the actuarial assumptions and methodologies to be used for all actuarial purposes relating to the defined benefit pension and OPEB plans.

» **Actuarial Audit** (perform every five years, or the appointment of a new actuarial firm will satisfy requirement)—The Board is responsible for ensuring that an actuarial audit is performed as prescribed and for reviewing the results of that audit.

» **Asset Liability Study** (perform at least every three to five years, or more frequently if necessary)—The Board is responsible for ensuring that a study of the relationship between the defined benefit trust assets and liabilities is performed as prescribed and for reviewing the results of that study.

» **Review of the Defined Benefit Pension Plan Funding Policy and the Defined Benefit OPEB Plan Funding Policy** (perform periodically)—The Board is responsible for the periodic review of the funding policies applicable to the defined benefit pension and OPEB plans, as is deemed necessary.
VII. GLOSSARY OF FUNDING POLICY TERMS

» Actuarial Accrued Liability (AAL): The AAL is the value at a particular point in time of all past normal costs. This is the amount of assets the plan would have today if the current plan provisions, actuarial assumptions, and participant data had always been in effect, contributions equal to the normal cost had been made, and all actuarial assumptions had been met. For each of the PERA defined benefit plans, the AAL includes the balance in the affiliated annual increase reserve.

» Actuarial Cost Method: The actuarial cost method allocates a portion of the total cost (present value of benefits) to each year of service, both past service and future service.

» Annual Increase Reserve (AIR): As of January 1, 2007, an AIR was created for each division trust fund for the purpose of funding annual increases for PERA benefit structure members hired on or after January 1, 2007. A portion of the employer contribution, equal to one percent of the salaries of affected members, is accumulated in the AIR to be paid out in annual increases each July 1, to the extent affordable. Although invested with the affiliated division assets, the reserve balances are accounted for separately.

» Asset Values: For each of the PERA defined benefit plans, the actuarial and market asset values include the balance in the affiliated AIR.

- Actuarial Value of Assets (AVA): The AVA is the market value of assets less the deferred investment gains or losses not yet recognized by the asset smoothing method.

- Market Value of Assets (MVA): The MVA is the fair value of assets of the plan as reported in the plan’s audited financial statements.

» Entry Age Normal Actuarial Cost Method (EAN): The EAN actuarial cost method is a funding method that calculates the normal cost as a level percentage of pay or level dollar amount over the working lifetime of the plan’s members.

» Funded Ratio: The funded ratio is the ratio of the plan assets to the plan’s actuarial accrued liabilities.

- Actuarial Value Funded Ratio: is the ratio of the AVA to the AAL.

- Market Value Funded Ratio: is the ratio of the MVA to the AAL.

» Normal Cost: The normal cost is the cost allocated under the actuarial cost method to each year of active member service.

» Present Value of Benefits (PVB) or total cost: The PVB is the value at a particular point in time of all projected future benefit payments for current plan members, plus the balance in the affiliated AIR. The future benefit payments and the value of those payments are determined using actuarial assumptions regarding future events. Examples of these assumptions are estimates of retirement and termination patterns, salary increases, investment returns, etc.

» Surplus: A surplus refers to the positive difference, if any, between the AVA and the AAL.

» Unfunded Actuarial Accrued Liability (UAAL): The UAAL is the portion of the AAL that is not currently covered by the AVA. It is the positive difference between the AAL and the AVA.

» Valuation Date: The valuation date is the annual date upon which an actuarial valuation is performed; meaning that the trust assets and liabilities of the plan are valued as of that date. PERA’s annual valuation date is December 31st.

Adopted: March 20, 2015
Amended: January 19, 2018
Amended: November 16, 2018