

**UNIVERSITY OF COLORADO**  
**FINANCIAL AND COMPLIANCE AUDIT**  
**June 30, 2018 and 2017**

# LEGISLATIVE AUDIT COMMITTEE

Senator Tim Neville – Chair

Senator Nancy Todd – Vice-Chair

Senator Rhonda Fields

Representative Kim Ransom

Representative Tracy Kraft-Tharp

Representative Lori Saine

Representative Dafna Michaelson Jenet

Senator Jim Smallwood

# OFFICE OF THE STATE AUDITOR

Dianne E. Ray

State Auditor

Kerri Hunter

Deputy State Auditor

Jarrett Ellis

Contract Monitor

CliftonLarsonAllen LLP

Contractor

AN ELECTRONIC VERSION OF THIS REPORT IS AVAILABLE AT

**[WWW.COLORADO.GOV/AUDITOR](http://WWW.COLORADO.GOV/AUDITOR)**

A BOUND REPORT MAY BE OBTAINED BY CALLING THE

OFFICE OF THE STATE AUDITOR

**303.869.2800**

PLEASE REFER TO REPORT NUMBER 1805F WHEN REQUESTING THIS REPORT

## TABLE OF CONTENTS

|                                                                              | PAGE      |
|------------------------------------------------------------------------------|-----------|
| <b>CONTENTS</b>                                                              |           |
| <b>Abbreviations and Acronyms .....</b>                                      | <b>1</b>  |
| <b>Report Summary .....</b>                                                  | <b>3</b>  |
| <b>Recommendation Locator .....</b>                                          | <b>5</b>  |
| <b>Financial and Compliance Audit Report</b>                                 |           |
| <b>Description of the University of Colorado .....</b>                       | <b>6</b>  |
| <b>Findings and Recommendations .....</b>                                    | <b>8</b>  |
| <b>Disposition of Prior Audit Findings and Recommendations .....</b>         | <b>13</b> |
| <b>Independent Auditors' Report .....</b>                                    | <b>14</b> |
| <b>Management's Discussion and Analysis (Unaudited) .....</b>                | <b>17</b> |
| <b>Basic Financial Statements</b>                                            |           |
| Statements of Net Position .....                                             | 30        |
| Statements of Revenues, Expenses, and Changes in Net Position .....          | 32        |
| Statements of Cash Flows .....                                               | 34        |
| Notes to Financial Statements .....                                          | 36        |
| <b>Required Supplementary Information</b>                                    |           |
| Schedule of University's Proportionate Share of PERA Pension Liability ..... | 102       |
| Schedule of University's Contributions to PERA Pension .....                 | 102       |
| Schedule of University's Proportionate Share of OPEB Pension Liability ..... | 102       |
| Schedule of University's Contributions to PERA OPEB Plan .....               | 102       |
| Changes in Alternate Medicare Plan Liability and Related Ratios .....        | 103       |
| Changes in Total OPEB Liability and Related Ratios – University Plan .....   | 103       |

|                                                                                                                                                                                                                                                                                                                                                              |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| <b>Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i></b> .....                                                                                                                       | 104 |
| <b>Required Communications to the Legislative Audit Committee</b> .....                                                                                                                                                                                                                                                                                      | 106 |
| <b>Summary of Uncorrected and Corrected Misstatement</b> .....                                                                                                                                                                                                                                                                                               | 110 |
| <b>State-Funded Student Financial Assistance Programs</b>                                                                                                                                                                                                                                                                                                    |     |
| Introduction .....                                                                                                                                                                                                                                                                                                                                           | 111 |
| Report Summary .....                                                                                                                                                                                                                                                                                                                                         | 112 |
| <b>Independent Auditors' Report on the Statement of Appropriations, Expenditures, Transfers, and Reversions of the State of Colorado State-Funded Student Assistance Programs</b> .....                                                                                                                                                                      | 113 |
| Statement of Appropriations, Expenditures, Transfers, and Reversions .....                                                                                                                                                                                                                                                                                   | 116 |
| Notes to Statement of Appropriations, Expenditures, Transfers, and Reversions .....                                                                                                                                                                                                                                                                          | 117 |
| Schedule of Appropriations, Expenditures, Transfers, and Reversions by Campus.....                                                                                                                                                                                                                                                                           | 118 |
| Audit Comments and Recommendations.....                                                                                                                                                                                                                                                                                                                      | 119 |
| <b>Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of the Statement of Appropriations, Expenditures, Transfers, and Reversions of the State of Colorado State-Funded Student Assistance Programs Performed in Accordance with <i>Government Auditing Standards</i></b> ..... | 120 |

## ABBREVIATIONS AND ACRONYMS

|                         |                                                                        |
|-------------------------|------------------------------------------------------------------------|
| 18 <sup>th</sup> Avenue | 18 <sup>th</sup> Avenue, LLC                                           |
| 457                     | PERA Deferred Compensation Plan                                        |
| AED                     | Amortization Equalization Disbursement                                 |
| AHEC                    | Auraria Higher Education Center                                        |
| AIR                     | Annual Increase Reserve                                                |
| Altitude West           | Altitude West, LLC                                                     |
| AMP                     | Alternate Medicare Plan                                                |
| ARC                     | Annual Required Contribution                                           |
| Authority               | Colorado Educational and Cultural Facilities Authority                 |
| CAFR                    | Comprehensive Annual Financial Report                                  |
| Children's Colorado     | Children's Hospital Colorado                                           |
| CIRES                   | Cooperative Institute for Research in Environmental Sciences & Physics |
| CMS                     | Centers for Medicare and Medicaid Services                             |
| COF                     | College Opportunity Fund                                               |
| CPI-W                   | Consumer Price Index for Urban Wage Earners and Clerical Workers       |
| C.R.S.                  | Colorado Revised Statutes                                              |
| CU Anschutz             | University of Colorado Anschutz Medical Campus                         |
| CU Boulder              | University of Colorado Boulder                                         |
| CU Denver               | University of Colorado Denver                                          |
| CU Denver   Anschutz    | University of Colorado Denver   Anschutz Medical Campus                |
| CU Foundation           | University of Colorado Foundation                                      |
| CU Medicine             | University of Colorado Medicine                                        |
| CUPCO                   | University of Colorado Property Corporation, Inc.                      |
| CUREF                   | University of Colorado Real Estate Foundation                          |
| CVA                     | Campus Village Apartments, LLC                                         |
| DPCU                    | Discretely Presented Component Units                                   |
| ERIP                    | Early Retirement Incentive Program                                     |
| ERISA                   | Employee Retirement Income Security Act                                |
| GAAP                    | Generally Accepted Accounting Principles                               |
| GASB                    | Governmental Accounting Standards Board                                |
| HCPF                    | Colorado Department of Health Care Policy and Financing                |
| HCTF                    | Health Care Trust Fund                                                 |
| HDS                     | Housing and Dining Services                                            |
| JILA                    | Joint Institute for Laboratory Physics                                 |
| LASP                    | Laboratory for Atmospheric and Space Physics                           |
| LOC                     | Letter of Credit                                                       |
| MD&A                    | Management's Discussion and Analysis                                   |
| NASA                    | National Aeronautics and Space Administration                          |
| NAV                     | Net Asset Value                                                        |
| NIH                     | National Institute of Health                                           |
| NIST                    | National Institute of Standards and Technology                         |
| OPEB                    | Other Postemployment Benefits                                          |

## ABBREVIATIONS AND ACRONYMS

|                  |                                                                                                                                    |
|------------------|------------------------------------------------------------------------------------------------------------------------------------|
| ORP              | Optional Retirement Plan                                                                                                           |
| PDPA             | Public Deposit Protection Act                                                                                                      |
| PERA             | Public Employees' Retirement Association of Colorado                                                                               |
| RASEI            | Renewable and Sustainable Energy Institute                                                                                         |
| Regents          | Board of Regents                                                                                                                   |
| RSI              | Required Supplementary Information                                                                                                 |
| S&P              | Standard and Poor's                                                                                                                |
| SAED             | Supplemental Amortization Equalization Disbursement                                                                                |
| SB               | Senate Bill                                                                                                                        |
| SDTF             | State Division Trust Fund                                                                                                          |
| SEC              | Securities and Exchange Commission                                                                                                 |
| SEIR             | Single Equivalent Interest Rate                                                                                                    |
| SOM              | School of Medicine                                                                                                                 |
| State            | State of Colorado                                                                                                                  |
| Statement No. 68 | Accounting & Financial Reporting for Pensions (as amended)                                                                         |
| Statement No. 69 | Government Combinations & Disposals of Government Operations                                                                       |
| Statement No. 72 | Fair Value Measurement & Application                                                                                               |
| Statement No. 73 | Accounting & Financial Reporting for Pension and Related Assets that are not within the Scope of GASB Statement No. 68, as Amended |
| Statement No. 75 | Accounting & Financial Reporting for Postemployment Benefits Other than Pensions                                                   |
| Statement No. 81 | Irrevocable Split-Interest Agreements                                                                                              |
| Statement No. 89 | Accounting for Interest Cost Incurred Before the End of a Construction Period                                                      |
| Surgery Center   | Children's North Surgery Center, LLC                                                                                               |
| TABOR            | Taxpayer's Bill of Rights                                                                                                          |
| TriWest          | TriWest Healthcare Alliance Corp.                                                                                                  |
| Trust            | University of Colorado Health and Welfare Trust                                                                                    |
| UAAL             | Unfunded Actuarial Accrued Liability                                                                                               |
| UCCS             | University of Colorado Colorado Springs                                                                                            |
| UCH              | University of Colorado Hospital                                                                                                    |
| ULEHI            | University License Equity Holding, Inc.                                                                                            |
| University       | University of Colorado                                                                                                             |
| UPL              | Upper Payment Limit                                                                                                                |

**UNIVERSITY OF COLORADO**  
**REPORT SUMMARY**  
**Year Ended June 30, 2018**

**Purpose and Scope of Audit**

***Authority, Purpose and Scope***

The Office of the State Auditor, State of Colorado, engaged CliftonLarsonAllen LLP (CLA) to conduct a financial and compliance audit of the University of Colorado (the University) for the fiscal year ended June 30, 2018. CLA conducted the audit in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards* issued by the Comptroller General of the United States of America. We conducted the related fieldwork from May to October 2018.

The purpose and scope of our audit were to:

- Express an opinion on the basic financial statements of the University as of and for the year ended June 30, 2018. Our independent auditors' report refers to a report on internal control over financial reporting and compliance as required by auditing standards generally accepted in the United States of America and *Government Auditing Standards*.
- Evaluate compliance with laws, regulations, contracts, and grants governing the expenditure of federal and state funds.

The University's schedule of expenditures of federal awards and applicable opinions thereon by the Office of the State Auditor, State of Colorado, are included in the Fiscal Year Ended June 30, 2018 Statewide Single Audit Report issued under separate cover.

**Audit Opinions and Reports**

We expressed an unmodified opinion on the University's basic financial statements as of and for the year ended June 30, 2018.

We issued a report on the University's compliance and internal control over financial reporting based on an audit of the basic financial statements performed in accordance with *Government Auditing Standards*. A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency or a combination of deficiencies in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

We noted no matters involving the internal control over financial reporting and its operation that we consider to be material weaknesses. We did identify a certain deficiency in internal control described in this report that we consider to be a significant deficiency.

In addition to issuing a report on the University's compliance and internal control over financial reporting, we also performed procedures in accordance with Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, over major federal programs as determined by the Office of the State Auditor. The purpose of our procedures was not to issue an opinion over the University's compliance with the federal programs tested, but rather report any noncompliance and internal control deficiencies noted during our testing to the Office of the State Auditor for inclusion in the Statewide Single Audit report. We did identify one instance of a significant deficiency in internal control over compliance, which is discussed on the following pages.

**UNIVERSITY OF COLORADO**  
**REPORT SUMMARY**  
**Year Ended June 30, 2018**

**Summary of Findings**

***Internal Control over Financial Reporting – Cash***

During our testing of cash balances, we identified that one of the University's 13 bank accounts was overstated by approximately \$5,960,000 due to a lack of clear communication regarding the responsibility for reconciling this particular account in the University's general ledger.

***Internal Control over Compliance and Other Matters – Enrollment Reporting***

The federal U.S Department of Education (USDE) requires all institutions of higher education participating in the Federal Student Financial Aid (SFA) programs to report student enrollment data within specified timeframes to the USDE through its central database for student aid, the National Student Loan Data System (NSLDS), via an enrollment roster file. Specifically, at least every 60 days, institutions must update the roster for changes in student statuses, report the date the enrollment statuses were effective, enter the new anticipated graduation dates, and submit the changes electronically through the NSLDS website. Any students listed on an enrollment report who are not listed on the subsequent enrollment report are considered by the USDE to have withdrawn from the University. The University must then submit a separate file through the NSLDS to the USDE containing a listing of graduated students for the semester.

During our testing, we found that three students (out of a sample of 40) were inaccurately reported to the NSLDS due to a change in protocol regarding required data layouts in the files received by the National Student Clearinghouse, a third party utilized by the University.

**Recommendations and the University's Responses**

A summary of the recommendations for the above findings is included in the Recommendation Locator on page 5. The Recommendation Locator also shows the University's responses to the audit recommendations. A discussion of the audit comments and recommendations is contained in the findings and recommendations section of our report.

**UNIVERSITY OF COLORADO  
RECOMMENDATION LOCATOR  
Year Ended June 30, 2018**

| <b>Rec.<br/>No.</b> | <b>Page<br/>No.</b> | <b>Recommendation Summary</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Agency<br/>Addressed</b>  | <b>University<br/>Response</b> | <b>Implementation<br/>Date</b> |
|---------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------------------|--------------------------------|
| 1                   | 9-10                | The University of Colorado should strengthen internal controls over cash reporting by ensuring that all bank accounts are reconciled in a timely manner. When a new bank account is established, the Office of the University Controller should clearly communicate to CU Boulder the responsibility for reconciling the account to ensure reconciling items are properly identified and resolved and that cash balances are properly reflected on the general ledger and financial statements.                                                                                                                                                                | University<br>of<br>Colorado | Agree                          | October 2018                   |
| 2                   | 10-12               | The University of Colorado should ensure it complies with federal Student Financial Aid enrollment reporting requirements by requiring CU Denver   Anschutz to monitor changes in protocol at the National Student Clearinghouse (Clearinghouse) and to institute alternate processes for submitting student statuses to the Clearinghouse in the event of a full or partial rejection of a submission. Such processes may include manual updating of students' statuses or submitting alternate file formats that the Clearinghouse will accept and that will ensure that enrollment information is reported to the federal government timely and accurately. | University<br>of<br>Colorado | Agree                          | September 2018                 |

**UNIVERSITY OF COLORADO**  
**DESCRIPTION OF THE UNIVERSITY OF COLORADO**  
**Year Ended June 30, 2018**

**Organization and Administration**

The University of Colorado (the University) was established on November 7, 1861 by an Act of the Territorial Government. Upon the admission of Colorado into the Union in 1876, the University was declared an institution of the State of Colorado (the State) and the Board of Regents was established under the State Constitution as its governing authority.

The University consists of the System office and the following three accredited campuses:

- University of Colorado Boulder
- University of Colorado Denver | Anschutz Medical Campus
- University of Colorado Colorado Springs

The three campuses comprise 26 schools and colleges, which offer 163 fields of study at the undergraduate level and 264 at the graduate level, offering 360 bachelor and master's degrees, along with 107 doctorates.

The Board of Regents is charged constitutionally with the general supervision of the University and the exclusive control and direction of all funds of and appropriations to the University, unless otherwise provided by law. The Board of Regents consists of nine members serving staggered six-year terms, one elected from each of the State's seven congressional districts and two elected from the State at large.

The Board of Regents appoints the President of the University. The President is the chief executive officer of the University. The President is responsible for the administration of the University and for compliance of all University matters with applicable Regent laws and policies and state and federal constitutions, laws, and regulations. The President is the chief academic officer of the University, responsible for providing academic leadership for the University in meeting the needs of the State, and shall maintain and advance the academic policies of the University. The President is also the chief spokesperson for the University and interpreter of University policy and represents and interprets the roles, goals, and needs of the University throughout the State and elsewhere, as appropriate. The Chancellors are the chief academic and administrative officers at the campus level, responsible to the President for the conduct of the affairs of their respective campuses in accordance with the policies of the Board of Regents.

**UNIVERSITY OF COLORADO**  
**DESCRIPTION OF THE UNIVERSITY OF COLORADO**  
**Year Ended June 30, 2018**

Enrollment, tuition, and faculty and staff information is presented below. The information was obtained from the Budget Data Book for the respective fiscal years, prepared by the University for the Colorado Department of Higher Education (CDHE).

**Full-Time Equivalent (FTE) Student Enrollment**

| <b>Fiscal Years</b> | <b>Undergraduate</b> |                    | <b>Graduate*</b> |                    | <b>Total</b> |
|---------------------|----------------------|--------------------|------------------|--------------------|--------------|
|                     | <b>Resident</b>      | <b>Nonresident</b> | <b>Resident</b>  | <b>Nonresident</b> |              |
| 2017 – 2018         | 31,600               | 13,571             | 9,659            | 3,483              | 58,313       |
| 2016 – 2017         | 30,945               | 12,846             | 9,497            | 3,260              | 56,548       |
| 2015 – 2016         | 29,990               | 11,923             | 9,069            | 3,226              | 54,208       |
| 2014 – 2015         | 29,589               | 11,455             | 9,166            | 2,986              | 53,196       |
| 2013 – 2014         | 29,158               | 10,752             | 9,141            | 2,718              | 51,769       |
| 2012 – 2013         | 28,890               | 10,417             | 9,387            | 2,639              | 51,333       |
| 2011 – 2012         | 29,051               | 10,262             | 9,766            | 2,479              | 51,558       |
| 2010 – 2011         | 29,320               | 9,714              | 9,781            | 2,444              | 51,259       |
| 2009 – 2010         | 29,544               | 9,551              | 9,454            | 2,316              | 50,865       |

\*The graduate enrollment columns have been revised using the State's new FTE calculation (24 credit hours, from 30 credit hours).

**FTE Faculty and Staff**

| <b>Fiscal Years</b> | <b>Instructional Faculty</b> | <b>Other Faculty and Staff</b> | <b>Total</b> |
|---------------------|------------------------------|--------------------------------|--------------|
| 2017 – 2018         | 6,420                        | 13,750**                       | 20,170       |
| 2016 – 2017         | 6,450                        | 13,201**                       | 19,651       |
| 2015 – 2016         | 5,930                        | 12,199**                       | 18,129       |
| 2014 – 2015         | 5,668                        | 11,929**                       | 17,597       |
| 2013 – 2014         | 5,457                        | 11,542**                       | 16,999       |
| 2012 – 2013         | 5,244                        | 10,056                         | 15,300       |
| 2011 – 2012         | 5,309                        | 9,632                          | 14,941       |
| 2010 – 2011         | 4,767                        | 9,465                          | 14,232       |
| 2009 – 2010         | 4,562                        | 8,748                          | 13,310       |

\*\*Beginning in Fiscal Year 2014, medical residents were included in the FTE for Other Faculty and Staff.

**UNIVERSITY OF COLORADO  
FINANCIAL AND COMPLIANCE AUDIT  
FINDINGS AND RECOMMENDATIONS  
Year Ended June 30, 2018**

We have audited the financial statements of the business-type activities and discretely presented component unit of the University of Colorado (the University), an institution of higher education of the State of Colorado, as of and for the year ended June 30, 2018, and have issued our report thereon dated November 14, 2018. In planning and performing our audit of the financial statements, in accordance with auditing standards generally accepted in the United States of America, we considered the University's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we do not express an opinion on the University's internal control. In addition, in accordance with *Government Auditing Standards*, issued by the Comptroller General of the United States, we also have issued our report dated November 14, 2018 on our consideration of the University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grants. We have not considered internal control since the date of that report. We did not audit the financial statements of the University of Colorado Foundation (CU Foundation), a discretely presented component unit, or the University of Colorado Real Estate Foundation (CUREF), a discretely presented component unit for the year ended June 30, 2017. In addition, we did not audit the financial statements of University of Colorado Medicine (CU Medicine), a blended component unit. Those financial statements were audited by other auditors and were not audited in accordance with *Government Auditing Standards*. The University of Colorado Property Corporation, a blended component unit audited by us, was also not audited in accordance with *Government Auditing Standards*.

The maintenance of adequate internal control designed to fulfill control objectives is the responsibility of management. Because of inherent limitations in internal control, errors or fraud may nevertheless occur and not be detected. Also, controls found to be functioning at a point in time may later be found deficient because of the performance of those responsible for applying them and there can be no assurance that controls currently in existence will prove to be adequate in the future as changes take place in the organization.

*A deficiency in internal control exists* when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis.

*A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the University's financial statements will not be prevented, or detected and corrected on a timely basis.

*A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described above and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses and, therefore, significant deficiencies or material weaknesses may exist that have not been identified. We did identify one instance of a significant deficiency in internal control over financial reporting, which is outlined on the following pages.

**UNIVERSITY OF COLORADO  
FINANCIAL AND COMPLIANCE AUDIT  
FINDINGS AND RECOMMENDATIONS (CONTINUED)  
Year Ended June 30, 2018**

In addition to issuing a report on the University's compliance and internal control over financial reporting, we also performed procedures in accordance with Title 2 U.S. *Code of Federal Regulations* (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance), over major federal programs as determined by the Office of the State Auditor. The purpose of our procedures was not to issue an opinion over the University's compliance with the federal programs tested, but rather report any noncompliance and internal control deficiencies noted during our testing to the Office of the State Auditor for inclusion in the Statewide Single Audit report. We noted the instance of a significant deficiency in internal control over compliance, above, which is outlined below.

**Internal Control over Financial Reporting – Cash**

The University of Colorado (the University) is comprised of four campuses. Each of the four campuses, along with the System Office, holds cash deposit balances at various financial institutions. For example, each of the campuses maintains cash accounts for all cash activity relating to the University's Title IV Student Financial Aid program (Title IV bank account). The individual campuses are each responsible for reconciling their individual campus cash balances while the Office of the University Controller and the University Treasury Department are responsible for reconciling various system-wide accounts. In addition, the Office of the University Controller and the University Treasury Department are responsible for establishing internal controls surrounding cash balances in order to present accurate information for financial reporting.

The University reported total cash balances, including campus balances, at June 30, 2018 of \$133,662,152.

**What was the purpose of the audit work and what work was performed?** The purpose of the audit work was to test the accuracy of the University's reported June 30, 2018 cash balance. In performing such work, we tested all of the University's bank reconciliations as of June 30, 2018, including the University of Colorado Boulder's (CU Boulder's) Title IV bank account reconciliation. As part of our testing, we reperformed and recalculated each reconciliation, compared the reconciliations to bank records and the general ledger, and verified that reconciling differences between the two balances were proper. Typical proper reconciling items include outstanding checks or deposits in transit. For other reconciling items, we tested to ensure management identified, researched and resolved the reconciling items.

**How were the results of the audit work measured?**

The University has established policies for reconciling cash accounts on a monthly basis. In general, University policies require staff within each respective department of the University (each campus, University Controller's Office, and the University's Treasury Department) to prepare reconciliations, and further require that someone separate from the preparer review each reconciliation. Policy then requires that staff within the Office of the University Controller conduct an additional review of each reconciliation.

**What problem did the audit work identify?**

We found that the CU Boulder campus' Title IV cash balance was overstated at June 30, 2018 by approximately \$5,960,000. We specifically determined that six incorrect automated entries made in the general ledger system in 2017 created the difference; however, neither CU Boulder nor the University Controller's Office staff identified the errors.

**UNIVERSITY OF COLORADO  
FINANCIAL AND COMPLIANCE AUDIT  
FINDINGS AND RECOMMENDATIONS (CONTINUED)  
Year Ended June 30, 2018**

**Why did the problem occur?**

There was a lack of clear communication between the University Controller's Office and CU Boulder regarding responsibility for reconciling CU Boulder's Title IV bank account, which was opened in July 2016, so neither CU Boulder nor the University Controller's Office were performing monthly reconciliations of the bank account.

**Why does this problem matter?**

Effective internal controls, which include error detection and correction, are important to the financial reporting process to ensure the University is providing accurate financial information to its Board of Regents and outside users of the financial statements. Bank reconciliations are one such key internal control. The bank reconciliation, if performed properly and timely, will ensure that the University's general ledger reports the proper cash balance and will also help to identify any errors or irregularities in the bank's records.

**Recommendation No. 1:**

The University of Colorado should strengthen internal controls over cash reporting by ensuring that all bank accounts are reconciled in a timely manner. When a new bank account is established, the Office of the University Controller should clearly communicate to CU Boulder the responsibility for reconciling the account to ensure reconciling items are properly identified and resolved and that cash balances are properly reflected on the general ledger and financial statements.

**University of Colorado Response:**

Agree. Implementation Date: October 2018

This one bank account, out of the University's 13 bank accounts, was not appropriately reconciled. Each campus set up an individual Title IV bank account in 2016 as a result of new federal regulations. Previously, this activity was included in the University's main operating checking account and followed routine reconciliation procedures. The University's material bank accounts are reconciled either in the Treasury Department or in the Office of University Controller. A limited number of accounts are reconciled by campus-based personnel. The Office of University Controller did not clearly communicate to CU Boulder that reconciliation of their Title IV bank account was to be reconciled at the campus level. While the bank account was not reconciled, the activity in the general ledger clearing account was reconciled. After being notified by the external auditors, the CU Boulder Title IV bank account was fully reconciled within one week. No erroneous or fraudulent activity was uncovered. The University remediated the finding prior to issuance of the financial statements and the bank account is now being reconciled on a timely basis and reviewed for accuracy.

**Internal Controls over Compliance – Student Financial Aid Enrollment Reporting**

The federal U.S Department of Education (USDE) requires all institutions of higher education participating in the Federal Student Financial Aid (SFA) programs to report student enrollment data within specified timeframes to the USDE through its central database for student aid, the National Student Loan Data System (NSLDS), via an enrollment roster file. Specifically, at least every 60 days, institutions must update the roster for changes in student statuses, report the date the enrollment statuses were effective, enter the new anticipated graduation dates, and submit the changes electronically through the NSLDS website. Any students listed on an enrollment report who are not listed on the subsequent enrollment report are considered by the USDE to have withdrawn from the University. The University must then submit a separate file through the NSLDS to the USDE containing a listing of graduated students for the semester.

**UNIVERSITY OF COLORADO  
FINANCIAL AND COMPLIANCE AUDIT  
FINDINGS AND RECOMMENDATIONS (CONTINUED)  
Year Ended June 30, 2018**

Most institutions of higher education, including the University, utilize the National Student Clearinghouse (Clearinghouse), a third-party service provider, to assist with enrollment reporting. Enrollment reporting, including submission of “roster files” and enrollment status changes, assists the federal government in management of the Pell and Direct Loan programs, which are programs within the Student Financial Aid Cluster.

The testing of the compliance requirement outlined above at the CU Denver | Anschutz campus identified an issue with enrollment reporting, outlined below, pertaining to inaccurate status change reporting to the NSDLS. We did not identify any exceptions through our testing at the CU Boulder campus.

**What was the purpose of the audit work and what work was performed?**

The purpose of the audit work was to determine whether the University complied with enrollment reporting requirements regarding student attendance status changes for the federal Pell and Direct Loan programs during Fiscal Year 2018.

We tested a sample of 40 students (20 at CU Boulder and 20 at CU Denver | Anschutz) who had a reduction or increase in attendance levels, graduated from, withdrew, dropped out of, and/or enrolled but never attended the University during Fiscal Year 2018 to determine whether the University reported the student’s change in enrollment status accurately within 60 days of the change in status.

**How were the results of the audit work measured?**

Federal regulations [Section 34 Code of Federal Regulations (C.F.R.) 685.309], require that enrollment status changes for students be reported to the NSLDS within 30 days, or 60 days if the student with the status change will be reported on a scheduled transmission within that timeframe. Regulations also require that the report include an accurate effective date of the change in status.

**What problem did the audit work identify?**

We identified three instances, out of a sample of 40 students (approximately 8 percent), in which CU Denver | Anschutz staff failed to properly report students’ accurate enrollment status to the USDE. The students were erroneously reported to USDE as withdrawn rather than graduated. While the institution had separately submitted a graduated student enrollment file to the NSLDS, the file was rejected and the information was, therefore, not relayed accurately.

**Why did this problem occur?**

The University failed to ensure that CU Denver | Anschutz staff monitored changes in Clearinghouse data layout requirements for its graduated student enrollment file, resulting in a subset of the institution’s graduated students’ statuses not being updated accurately at the Clearinghouse and, ultimately, USDE. Further, the University did not ensure that the CU Denver | Anschutz campus had alternate processes for submitting student statuses to the Clearinghouse when submissions are rejected, such as a process to manually update students’ statuses or a process to submit alternate file formats to the Clearinghouse.

**UNIVERSITY OF COLORADO  
FINANCIAL AND COMPLIANCE AUDIT  
FINDINGS AND RECOMMENDATIONS (CONTINUED)  
Year Ended June 30, 2018**

**Why does this problem matter?**

Failure to properly report and correct information to the USDE increases the University's risk of material noncompliance with federal SFA program requirements. Further, a student's enrollment status determines eligibility for in-school status, deferment, and grace periods, as well as for the payment of interest subsidies to loan program holders by USDE; consequently, this could negatively impact a student's obligation to pay back amounts on loans depending on the specific change to their enrollment status.

**Total known federal questioned costs:** None

**Recommendation No. 2:**

The University of Colorado should ensure it complies with federal Student Financial Aid enrollment reporting requirements by requiring CU Denver | Anschutz to monitor changes in protocol at the National Student Clearinghouse (Clearinghouse) and to institute alternate processes for submitting student statuses to the Clearinghouse in the event of a full or partial rejection of a submission. Such processes may include manual updating of students' statuses or submitting alternate file formats that the Clearinghouse will accept and that will ensure that enrollment information is reported to the federal government timely and accurately.

**University of Colorado Response:**

Agree. Implementation Date: September 2018

The University Information Services (UIS) office developed an automated solution, which entailed sending a separate "Graduates Only" file to the NSC to correctly update the students with a graduated status. The automated solution has been implemented and is in production and all of the students impacted have the correct status of graduated. The issue was isolated to students reported in Spring 2018.

**UNIVERSITY OF COLORADO  
DISPOSITION OF PRIOR AUDIT FINDINGS AND RECOMMENDATIONS  
Year Ended June 30, 2018**

There were no prior year recommendations and dispositions.

## INDEPENDENT AUDITORS' REPORT

Members of the Legislative Audit Committee

### Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities and aggregate discretely presented component units of the University of Colorado (the University), an institution of higher education of the State of Colorado, as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the University's basic financial statements as listed in the table of contents.

### *Management's Responsibility for the Financial Statements*

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### *Auditors' Responsibility*

Our responsibility is to express opinions on these financial statements based on our audits. We did not audit the 2018 and 2017 financial statements of University of Colorado Medicine (CU Medicine), a blended component unit, which represents approximately 9%, 34%, and 24%, and 8%, 20%, and 21% of the assets, net position, and revenues of the business-type activities of the University for 2018 and 2017, respectively. In addition, we did not audit the 2018 and 2017 financial statements of the University of Colorado Foundation (CU Foundation) or the University of Colorado Real Estate Foundation (CUREF), which represents 100% of the assets, net position, and revenues of the aggregate discretely presented component units for 2018 and 100% and -0-%, respectively, of the assets, 100% and -0-%, respectively, of the net position, and 96% and 4%, respectively, of the revenues in 2017. Those financial statements were audited by other auditors whose reports have been furnished to us, and our opinions, insofar as it relates to the amounts included for CU Medicine, the CU Foundation and CUREF, are based solely on the reports of the other auditors. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. The financial statements of the CU Foundation and CUREF, discretely presented component units, and CU Medicine and the University of Colorado Property Corporation, blended component units, were not audited in accordance with *Government Auditing Standards*.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the University's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

### **Opinions**

In our opinion, based on our audits and the reports of other auditors, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the aggregate discretely presented component units of the University of Colorado as of June 30, 2018 and 2017, and the respective changes in financial position and, where applicable, cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

### **Emphasis of Matters**

As discussed in Note 1, the financial statements of the University, an institution of higher education of the State of Colorado, are intended to present the financial position, the changes in financial position and cash flows of the business-type activities of only the University. Financial results for the State of Colorado are presented in separate state-wide financial statements prepared by the Office of the State Controller and audited by the Office of the State Auditor. Complete financial information for the State of Colorado is available in these state-wide financial statements. Our opinion is not modified with respect to this matter.

During fiscal year ended June 30, 2018, the University adopted GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, GASB Statement No. 81, *Irrevocable Split-Interest Agreements*, and GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*. As a result of the implementation of GASB Statements No. 75 and 81, the University reported a restatement for the change in accounting principle (see Note 1). As of July 1, 2017, the University's net position was restated to reflect the impact of this adoption. The provisions of GASB Statement No. 89 were applied prospectively. Fiscal year 2017 was not restated for these changes in accounting principle due to the fact that information was not available to the University to restate net position as of July 1, 2016. Our opinions were not modified with respect to the restatement.

### **Other Matters**

#### ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the schedule of the University's proportionate share of the PERA pension liability, the schedule of University's Proportionate Share of the PERA OPEB Liability, the schedule of the University's Contributions to the PERA pension plan, the schedule of University's Contributions to the PERA OPEB Plan, and the schedules of changes in the University's Alternate Medicare Plan liability and related ratios, and total OPEB liability – University Plan and related ratios, as listed in the table of contents, be presented to supplement the basic financial statements.

Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context.

We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### **Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued a report dated November 14, 2018, on our consideration of the University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control over financial reporting and compliance.

A handwritten signature in cursive script that reads "CliftonLarsonAllen LLP".

**CliftonLarsonAllen LLP**

Greenwood Village, Colorado  
November 14, 2018

**UNIVERSITY OF COLORADO**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2018 and 2017 (unaudited)**

Management is pleased to present this financial discussion and analysis of the University of Colorado (the University). It is intended to make the University's financial statements easier to understand and communicate our financial situation in an open, accountable, and transparent manner. It provides an analysis of the University's net position and results of operations for the years ended June 30, 2018 and 2017 (Fiscal Year 2018 and 2017, respectively), with comparative information for the year ended June 30, 2016 (Fiscal Year 2016). University management is responsible for the completeness and fairness of this discussion and analysis and the financial statements.

### ***UNDERSTANDING THE FINANCIAL STATEMENTS***

***Statements of Net Position*** present the assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position of the University at a point in time (June 30, 2018 and 2017). Their purpose is to present a financial snapshot of the University. They aid readers in determining the assets available to continue the University's operations; how much the University owes to employees, vendors, and lenders, and a picture of net position.

***Statements of Revenues, Expenses, and Changes in Net Position*** present the total revenues and expenses of the University for operating, nonoperating, and other undertakings during the fiscal years ended June 30, 2018 and 2017. Their purpose is to assess the University's operating and nonoperating activities.

***Statements of Cash Flows*** present cash receipts and payments of the University during the fiscal years ended June 30, 2018 and 2017. Their purpose is to present the sources of cash coming into the University, how that cash was expended, and the change in the cash balance during the year.

***Notes to the Financial Statements*** present additional information to support the financial statements. Their purpose is to clarify and expand on the information in the financial statements.

***Required Supplementary Information (RSI)*** presents additional information that differs from the basic financial statements in that the auditor applies certain limited procedures in reviewing the information. In this report, RSI includes schedules of the University's proportionate share of the Public Employee's Retirement Association of Colorado (PERA) pension liability and Other Postemployment Benefits (OPEB) liability, contributions to the PERA pension and OPEB plans, the changes in the Alternate Medicare Plan (AMP) liability and the OPEB liability and related ratios, and this management's discussion and analysis.

Nonfinancial indicators are also available to assess the overall state of the University. Examples of nonfinancial indicators include trend and quality of applicants, freshman class size, student retention, building condition, and campus safety. Information about nonfinancial indicators is not included in this analysis but may be obtained from the University's Budget and Finance Office (see [www.cu.edu/budgetpolicy/accountability-data-center](http://www.cu.edu/budgetpolicy/accountability-data-center)).

### ***FINANCIAL HIGHLIGHTS***

Selected financial highlights for the fiscal year ended June 30, 2018 include:

- University assets total \$7,006,367,000, deferred outflows of resources (reflecting loss on bond refundings, and certain changes in the PERA pension, AMP and OPEB plans) total \$538,756,000, liabilities total \$5,672,431,000 and deferred inflows total \$220,851,000 (related to the PERA and AMP pensions, OPEB, and other items) resulting in net position of \$1,651,841,000. Of this amount, \$1,912,493,000 is net investment in capital assets, \$48,618,000 is restricted for nonexpendable purposes, meaning only the earnings on the related investments may be used for purposes dictated by the resource provider, and \$686,109,000 is restricted for purposes for which the donor, grantor, or other external party intended. The remaining unrestricted balance is a negative \$995,379,000. See discussion throughout this Management's Discussion and Analysis (MD&A) regarding the University's negative unrestricted net position.

**UNIVERSITY OF COLORADO**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2018 and 2017 (unaudited)**

- As discussed in Note 1, the University adopted the provisions of Governmental Accounting Standards Board (GASB) Statement No. 75 *Accounting and Financial Reports for Postemployment Benefits Other Than Pensions* (Statement No. 75) effective July 1, 2017 which was the first day of Fiscal Year 2018. The University elected to adopt this standard as a cumulative effect in the Fiscal Year 2018 column as information required from PERA for their cost-sharing plan was not available for periods before June 30, 2017. As a result, Fiscal Year 2017 balances reported in this document were not impacted.
- The increase in the University's net pension liability for Fiscal Year 2018 is a result of the increase in the state-wide net pension liability, due to changes in underlying actuarial assumptions made by PERA related to the discount rate.
- In total, operating revenues increased approximately 8.7 percent in Fiscal Year 2018 while operating expenses increased 8.9 percent. For comparative purposes, operating revenues increased 8.5 percent in Fiscal Year 2017 while operating expenses increased 18.1 percent. The increase in operating expenses is primarily due to changes in PERA assumptions which increased the net pension liability by 7.7 percent for Fiscal 2018 and 74.3 percent for Fiscal 2017.

**STATEMENT OF NET POSITION**

Figure 1 illustrates the University's summary of assets, deferred outflows, liabilities, deferred inflows and net position. The mix of assets, liabilities, and net position has remained consistent with the exception of the PERA pension, AMP, and OPEB liabilities. Deferred outflows and inflows of resources and the related liability experienced changes from the prior year. The deferred outflows of resources of \$538,756,000 in Fiscal Year 2018, \$706,918,000 in Fiscal Year 2017, and \$198,126,000 in Fiscal Year 2016 represent the deferred loss on bond refundings, and items related to the PERA pension, AMP, and OPEB liabilities. These balances fluctuated due to changes in actuarial assumptions made by PERA and the University's actuary. Analysis of the University's capital assets and related debt is included in the section Capital Asset and Debt Management, whereas this section provides analysis of the University's noncapital assets and other liabilities.

**UNIVERSITY OF COLORADO**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2018 and 2017 (unaudited)**

**Figure 1. Summary of Assets, Deferred Outflows, Liabilities, Deferred Inflows and Net Position as of June 30, 2018, 2017, and 2016 (in thousands)**

|                                                                | 2018                | 2017             | 2016             |
|----------------------------------------------------------------|---------------------|------------------|------------------|
| <b>Assets</b>                                                  |                     |                  |                  |
| Current assets                                                 | \$ 929,099          | 838,388          | 808,547          |
| Noncurrent, noncapital assets                                  | 2,474,177           | 2,306,105        | 2,137,091        |
| Net capital assets                                             | 3,603,091           | 3,530,562        | 3,358,591        |
| <b>Total Assets</b>                                            | <b>7,006,367</b>    | <b>6,675,055</b> | <b>6,304,229</b> |
| <b>Deferred Outflows</b>                                       |                     |                  |                  |
| Loss on bond refundings                                        | 58,727              | 54,427           | 62,577           |
| PERA pension-related                                           | 448,973             | 641,350          | 135,549          |
| Alternate medicare plan-related                                | 9,977               | 11,141           | -                |
| Other postemployment benefits-related                          | 21,079              | -                | -                |
| <b>Total Deferred Outflows</b>                                 | <b>538,756</b>      | <b>706,918</b>   | <b>198,126</b>   |
| <b>Total Assets and Deferred Outflows</b>                      | <b>7,545,123</b>    | <b>7,381,973</b> | <b>6,502,355</b> |
| <b>Liabilities</b>                                             |                     |                  |                  |
| Current liabilities                                            | 627,182             | 710,111          | 654,264          |
| Noncurrent liabilities                                         | 5,045,249           | 4,303,732        | 3,311,266        |
| <b>Total Liabilities</b>                                       | <b>5,672,431</b>    | <b>5,013,843</b> | <b>3,965,530</b> |
| <b>Deferred Inflows</b>                                        |                     |                  |                  |
| PERA pension-related                                           | 95,564              | 9,629            | 23,830           |
| Alternate medicare plan-related                                | 5,863               | 89               | -                |
| Other postemployment benefits-related                          | 117,695             | -                | -                |
| Other                                                          | 1,729               | -                | -                |
| <b>Total Deferred Inflows</b>                                  | <b>220,851</b>      | <b>9,718</b>     | <b>23,830</b>    |
| <b>Total Liabilities and Deferred Inflows</b>                  | <b>5,893,282</b>    | <b>5,023,561</b> | <b>3,989,360</b> |
| <b>Net Position</b>                                            |                     |                  |                  |
| Net investment in capital assets                               | 1,912,493           | 1,949,435        | 1,821,752        |
| Restricted for nonexpendable purposes                          | 48,618              | 58,390           | 58,390           |
| Restricted for expendable purposes                             | 686,109             | 536,860          | 484,706          |
| Unrestricted                                                   | (995,379)           | (186,273)        | 148,147          |
| <b>Total Net Position</b>                                      | <b>1,651,841</b>    | <b>2,358,412</b> | <b>2,512,995</b> |
| <b>Total Net Position and Liabilities and Deferred Inflows</b> | <b>\$ 7,545,123</b> | <b>7,381,973</b> | <b>6,502,355</b> |

Increases from Fiscal Year 2017 to 2018 in both current assets and noncurrent assets were primarily due to increases in investments and in accounts and loan receivables. From Fiscal Year 2016 to 2017, increases in current and noncurrent assets were caused by increases in investments offset by a decrease in accounts and loans receivable.

The University's investments were \$2,779,799,000 and \$2,607,441,000 at June 30, 2018 and 2017, respectively, representing an increase of \$172,358,000. The University's investments were \$2,607,441,000 and \$2,361,851,000 at June 30, 2017 and 2016, respectively, representing an increase of \$245,590,000. The increases in investments for both years was primarily due to fair value increases and the issuance of new bonds offset by bond proceeds being liquidated and used for projects.

The increase in net accounts and loans receivable from Fiscal Year 2017 to 2018 of \$46,010,000 was primarily due to the University of Colorado Medicine's (CU Medicine) growth in patient billing. The decrease in net accounts and loans receivable from Fiscal Year 2016 to 2017 of \$61,854,000 was primarily due to improvements in the process of sponsored project billing and the related letter of credit (LOC) draws as the University more fully utilized its new finance system.

The University's non-debt-related liabilities were \$3,853,783,000, \$3,333,647,000, and \$2,274,484,000 at

**UNIVERSITY OF COLORADO**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2018 and 2017 (unaudited)**

June 30, 2018, 2017 and 2016, respectively. These liabilities are comprised of amounts categorized in Figure 2.

**Figure 2. Composition of Non-debt-related Liabilities as of June 2018, 2017, and 2016**

| <i>(in thousands)</i>                     |           | <b>2018</b>      | <b>2017</b>      | <b>2016</b>      |
|-------------------------------------------|-----------|------------------|------------------|------------------|
| Accounts payable                          | \$        | 137,964          | 129,894          | 103,591          |
| Accrued expenses                          |           | 119,711          | 265,292          | 243,474          |
| Compensated absences                      |           | 249,736          | 226,758          | 204,028          |
| Unearned revenue                          |           | 187,551          | 178,825          | 169,507          |
| Early retirement incentive program        |           | 4,077            | 4,602            | 7,222            |
| Other postemployment benefits             |           | 795,147          | 343,570          | 289,133          |
| Alternate medicare plan                   |           | 73,211           | 74,723           | 11,600           |
| Net pension liability                     |           | 2,206,541        | 2,049,366        | 1,175,591        |
| Risk financing                            |           | 29,225           | 27,857           | 29,862           |
| Construction contract retainage           |           | 9,609            | 12,880           | 19,821           |
| Funds held for others                     |           | 17,729           | 16,511           | 16,757           |
| Federal Perkins loan                      |           | 20,341           | -                | -                |
| Miscellaneous liabilities                 |           | 2,941            | 3,369            | 3,898            |
| <b>Total Non-debt-related Liabilities</b> | <b>\$</b> | <b>3,853,783</b> | <b>3,333,647</b> | <b>2,274,484</b> |

The largest categories of non-debt-related liabilities are the net pension liability, other postemployment benefits (OPEB) liabilities, compensated absences, and unearned revenue.

As discussed in Note 15, the University participates in the state-wide PERA cost-sharing defined benefit pension plan. Statement No. 68 *Accounting and Financial Reporting for Pensions* (Statement No. 68) requires the University to record its “proportionate share” of PERA’s net pension liability. The University has no legal requirement to pay this liability in the event of PERA’s insolvency nor does it have the ability to determine the employer or employee annual contributions. The liability cannot be prepaid. Per PERA’s Fiscal Year 2017 Comprehensive Annual Financial Report (CAFR), PERA's net pension liability for the state division in which the University participates is \$20,017,982,000. The University's proportionate share of the liability based on calendar 2017 contributions is \$2,206,541,000. While the net pension liability increases total liabilities, decreases unrestricted net position, and increases pension expense, associated cash flow out of the University remains fixed by the contribution levels set in State statute (see Figure 7). For PERA's 2016 CAFR, the net pension liability was \$18,368,131,000 and the University's proportionate share of the liability was \$2,049,366,000. The majority of the \$1.6 billion increase can be attributed to a change in assumptions, which required using a blended discount rate 4.72 percent in Fiscal Year 2018 and 5.26 percent in Fiscal Year 2017, instead of the 7.25 percent estimated rate of return.

The University is required to account for and report on OPEB (Note 7). Such benefits include health insurance benefits for University retirees and their dependents. The University has chosen to fund this liability on a pay-as-you-go basis; therefore there are no assets held in trust to pay future benefits which have been earned by employees. Statement No. 75 is effective for Fiscal Year 2018 and requires the full recognition of the liability to employees for OPEB. Therefore, the existence and amount of this balance should be considered in determining future resource demands on the University. In addition, University employees in PERA can elect to participate in the PERACare program for other postretirement benefits, so the University is required to record its proportionate share of PERA’s net OPEB liability. As noted in Figure 2, the liability required to be reported in the financial statements totaled \$795,147,000 in Fiscal Year 2018, \$746,773,000 from the University’s OPEB plan and \$48,374,000 from PERA’s OPEB plan. The cumulative impact of adopting the standard for both plans was a \$507,608,000 reduction to unrestricted net position (see Note 1). In Fiscal Year 2017, the University followed the provisions of GASB Statement No. 45 *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, as amended* (Statement No. 45). The liability for OPEB totaled \$343,570,000 in Fiscal Year 2017, an increase of \$54,437,000 from Fiscal Year 2016. This increase is primarily due to the annual required contributions of \$74,105,000 and \$65,667,000 in Fiscal Year 2017 and 2016, respectively, offset by pay-

**UNIVERSITY OF COLORADO**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2018 and 2017 (unaudited)**

as-you-go amounts of approximately \$14,929,000 and \$14,350,000 for Fiscal Year 2017 and 2016, respectively, which were the reporting requirements under Statement No. 45.

Compensated absences estimate the amount payable to employees in the future for their vested rights under the University's various leave programs. This estimate is based on personnel policies that define the amount of vacation and sick leave to which each employee may be entitled (Note 1). Compensated absences typically increase year-over-year as employees accrue additional vacation days and salaries change.

Unearned revenue represents amounts paid by students, auxiliary enterprise customers, grantors, and contractors for which the University has not met all of its requirements for revenue recognition (Note 8). These amounts will be recognized as revenue in future periods after all conditions have been satisfied. The unearned revenue balance fluctuates from year to year depending on factors such as the timing of the first day of classes and the rate of spending on grants and contracts for which payment has been received in advance. In Fiscal Years 2018, 2017 and 2016, University of Colorado Boulder's (CU Boulder) Laboratory for Atmospheric and Space Physics (LASP) received an advanced-pay sponsored project of which \$23 million, \$47 million and \$39 million, respectively, was unearned at year-end.

Accrued expenses in Fiscal Year 2017 and Fiscal Year 2016 include the year-end accruals of the University's June payroll, which was not paid until July due to State law. The decrease in the liability in Fiscal Year 2018 is due to a change in interpretation in State law resulting in Higher Education institutions paying June 30 monthly payroll on the normal schedule.

As permitted by GAAP, the University historically recorded the federal share of the Perkins Fund in restricted net position. With the expiration of the Perkins Loan Program, the University is required, beginning in Fiscal Year 2018, to reflect the federal share as a liability. Therefore, the University recorded a liability of \$20,341,000 and a related expense of the same amount in the Fiscal Year 2018 financial statements (see Note 10).

The University's net position may have restrictions imposed by external parties, such as donors, or include items that, by their nature are invested in capital assets (property, plant, and equipment) and are therefore not available for expenditure or debt repayment. To help understand these restrictions, the University's net position is shown in four categories, as displayed in Figure 1.

A portion of net position is restricted for either expendable or nonexpendable purposes. This portion is then more specifically delineated by programmatic restrictions. The programmatic category of the restriction is shown on the statement of net position. A nonexpendable restriction requires the original principal to be set aside for perpetual investment (as an endowment). The majority of the endowment assets benefiting the University are held by the University of Colorado Foundation (CU Foundation), which is a discretely presented component unit (Note 17) and not included in the above amounts. An expendable restriction allows the University to spend the full amount, but only for the purposes identified by the entity providing the money. Unrestricted net position, as defined by GAAP, is available for spending for any lawful purpose under the full discretion of management. However, the University has placed internal limitations on future use by designating unrestricted net position for certain purposes in keeping with management's plans to manage resources (Note 11).

In Fiscal Year 2018 total restricted for nonexpendable net position decreased by \$9,722,000 due to several endowments being transferred to the CU Foundation pursuant to Regent policy and to promote administrative efficiency in stewarding University funds.

As noted earlier, due to the PERA and OPEB pension liabilities, the University's unrestricted net position is negative. This means the University's total liabilities and deferred inflows of resources are greater than its assets and deferred outflows of resources. See "Economic Factors That Will Affect the Future" for further discussion.

**UNIVERSITY OF COLORADO**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2018 and 2017 (unaudited)**

**STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION**

Figure 3 illustrates the University's summary of revenues, expenses, and changes in net position. A key component of this summary is the differentiation of operating and nonoperating activities. Operating revenues are received for providing goods and services to the various customers and constituencies of the University. Operating expenses are paid to acquire or produce goods and services provided in return for operating revenues and to carry out the mission of the University. Nonoperating revenues/expenses include items determined not to fall in the operating category.

The special item in Fiscal Year 2017 is due to the transfer of operations from the University of Colorado Real Estate Foundation (CUREF) to the University and to the University of Colorado Property Corporation (CUPCO), a blended component unit of the University, in accordance with GASB Statement No. 69 *Government Combinations and Disposals of Government Operations* (Statement No. 69).

In Fiscal Year 2018, the cumulative effect of adoption of new accounting principle relates to the implementation of Statement No. 75 and Statement No. 81 *Irrevocable Split-Interest Agreements* (Statement No. 81). See Note 1 for further detail. In Fiscal Year 2017, the cumulative effect of adoption relates to the implementation of GASB Statement No. 73 *Accounting and Financial Reporting for Pension and Related Assets that are not within the Scope of GASB Statement No. 68, as amended* (Statement No. 73).

**Figure 3. Summary of Revenues, Expenses, and Changes in Net Position for Years Ended**

| <b>June 30, 2018, 2017, and 2016 (in thousands)</b>       | <b>2018</b>         | <b>2017</b>      | <b>2016</b>      |
|-----------------------------------------------------------|---------------------|------------------|------------------|
| Operating revenues                                        | \$ 3,833,883        | 3,528,628        | 3,253,072        |
| Operating expenses                                        | 4,450,302           | 4,088,052        | 3,462,449        |
| <b>Operating Loss</b>                                     | <b>(616,419)</b>    | <b>(559,424)</b> | <b>(209,377)</b> |
| Nonoperating revenues, net                                | 391,002             | 398,451          | 202,406          |
| <b>Income Before Other Revenues</b>                       | <b>(225,417)</b>    | <b>(160,973)</b> | <b>(6,971)</b>   |
| Other revenues                                            | 28,159              | 53,838           | 46,943           |
| <b>Change in Net Position before special item</b>         | <b>(197,258)</b>    | <b>(107,135)</b> | <b>39,972</b>    |
| Special item-Transfer from CUREF                          | -                   | (808)            | -                |
| <b>Change in Net Position after special item</b>          | <b>(197,258)</b>    | <b>(107,943)</b> | <b>39,972</b>    |
| Net Position, beginning of year                           | 2,358,412           | 2,512,995        | 2,473,023        |
| Cumulative effect of adoption of new accounting principle | (509,313)           | (46,640)         | -                |
| Net Position, beginning of year, as restated              | 1,849,099           | 2,466,355        | 2,473,023        |
| <b>Net Position, End of Year</b>                          | <b>\$ 1,651,841</b> | <b>2,358,412</b> | <b>2,512,995</b> |

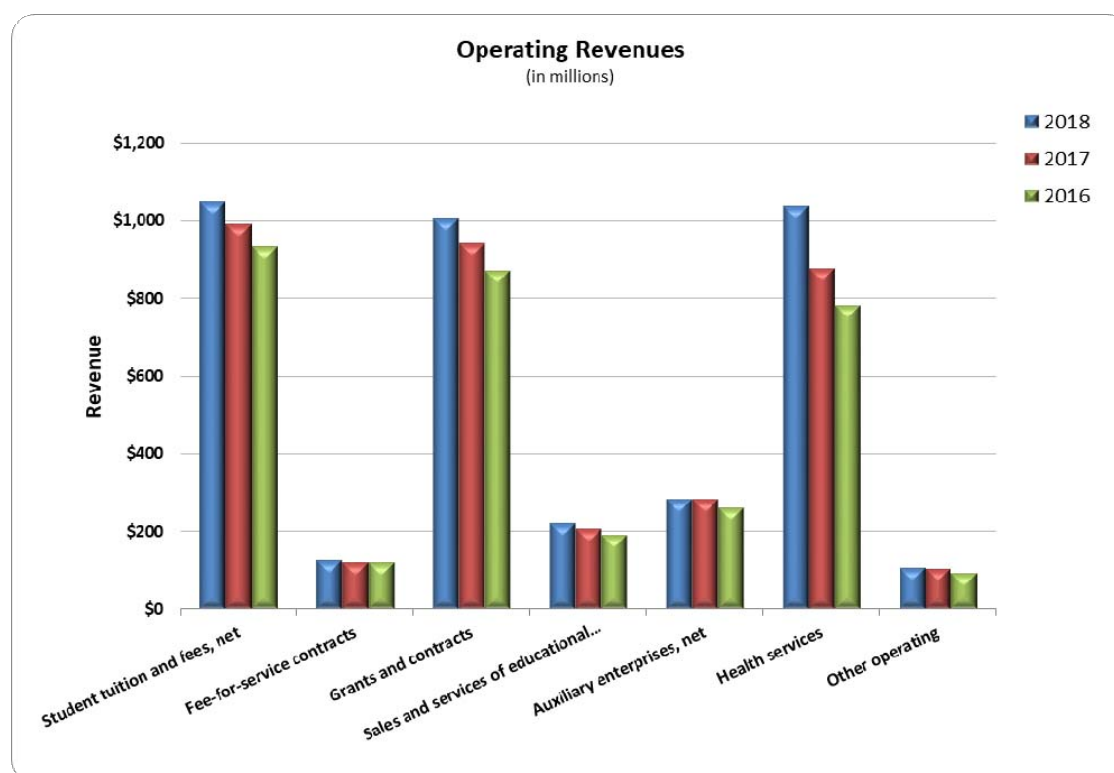
Figure 4 provides an illustration of operating and nonoperating revenues by major sources excluding capital-related revenues. These sources include both State-appropriated and non-appropriated funds (Note 12). Appropriated funds are those controlled by Legislature through the general or special appropriation process and are designated for specific purposes. In Fiscal Year 2018, appropriated funds primarily included State of Colorado (State) stipends, fee-for-service contract revenues, and tobacco litigation settlement monies. The College Opportunity Fund (COF) provides stipends to qualified undergraduate students; the receiving students then use the stipends to pay a portion of their tuition. The Fiscal Year 2016 State budgets specifically excluded student tuition and fees from appropriated funds, however, in Fiscal Year 2017 and 2018 student tuition was included in the State's Long Bill. In November 1992, Colorado voters passed Section 20, Article X of the Colorado Constitution, commonly known as the Taxpayer's Bill of Rights (TABOR). TABOR contains revenue, spending, tax, and debt limitations that apply to all the local governments and the State, including the University. In Fiscal Year 2005, the Colorado State Legislature determined in Section 23-5-101.7 of the Colorado Revised Statutes that an institution of higher education may be designated as an "enterprise" for the purposes of TABOR so long as the institution's governing board retains authority to issue revenue bonds on its behalf and the institution receives less than 10 percent of its total annual revenue in grants as defined by TABOR. Further, so long as it is so designated

**UNIVERSITY OF COLORADO**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2018 and 2017 (unaudited)**

as an enterprise, the institution shall not be subject to any provisions of TABOR. In July 2005, the University's Board of Regents (the Regents) designated the University as a TABOR enterprise pursuant to the statute. During the Fiscal Years ended June 30, 2018 and 2017, the University believes it has met all requirements of TABOR enterprise status (Note 12). The amount of State grants received by the University was 0.58 percent and 1.36 percent of total annual revenues during the Fiscal Years ended June 30, 2018 and 2017, respectively. The ability of the Regents to increase tuition rates is limited by the State, although the University's operations no longer impact the State's TABOR spending limits due to the University's enterprise status.

**Figure 4. Operating and Nonoperating Revenues (Excluding Capital) for Years Ended June 30, 2018, 2017, and 2016 (in thousands)**

|                                               | 2018                | 2017             | 2016             |
|-----------------------------------------------|---------------------|------------------|------------------|
| <b>Operating Revenues</b>                     |                     |                  |                  |
| Student tuition and fees, net                 | \$ 1,049,558        | 992,594          | 932,656          |
| Fee-for-service contracts                     | 126,706             | 121,872          | 121,440          |
| Grants and contracts                          | 1,007,398           | 943,199          | 872,665          |
| Sales and services of educational departments | 222,618             | 207,273          | 191,590          |
| Auxiliary enterprises, net                    | 284,034             | 283,007          | 259,826          |
| Health services                               | 1,037,529           | 876,986          | 781,257          |
| Other operating                               | 106,040             | 103,697          | 93,638           |
| <b>Total Operating Revenues</b>               | <b>3,833,883</b>    | <b>3,528,628</b> | <b>3,253,072</b> |
| <b>Nonoperating Revenues</b>                  |                     |                  |                  |
| Federal Pell Grant                            | \$ 57,021           | 49,957           | 48,383           |
| State appropriations                          | 15,651              | 15,325           | 12,249           |
| Gifts                                         | 198,386             | 181,049          | 174,926          |
| Investment income, net                        | 160,106             | 206,294          | 18,516           |
| Other nonoperating, net                       | 31,601              | 17,041           | 10,273           |
| <b>Total Nonoperating Revenues</b>            | <b>462,765</b>      | <b>469,666</b>   | <b>264,347</b>   |
| <b>Total Noncapital Revenues</b>              | <b>\$ 4,296,648</b> | <b>3,998,294</b> | <b>3,517,419</b> |



**UNIVERSITY OF COLORADO**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2018 and 2017 (unaudited)**

The University experienced increases in all operating revenue sources in Fiscal Year 2018. The increases in tuition and fee revenue for Fiscal Years 2018 and 2017 reflect a combination of changing enrollment and rate increases. In Fiscal Year 2018 and 2017, enrollment increased by 3.4 percent and 3.6 percent, respectively. In Fiscal Year 2018, approved tuition rates increased 4.9 percent at CU Boulder, 4.0 percent at the University of Colorado Colorado Springs (UCCS), and 3.2 percent at the University of Colorado Denver (CU Denver). In Fiscal Year 2017, the increases were 4.9 percent, 3.8 percent, and 3.6 percent, respectively. At the University of Colorado Anschutz Medical Campus (CU Anschutz), tuition rates increased 3.7 percent in Fiscal Year 2018 and the rate increased 5.1 percent in Fiscal Year 2017.

In Fiscal Years 2018, 2017 and 2016, the University applied \$67,612,000, \$64,661,000, and \$63,175,000, respectively, of COF stipends against student tuition bills (these amounts are included in tuition revenues). Fee-for-service revenue from the State increased \$4,834,000 between Fiscal Year 2018 and 2017, and \$432,000 between Fiscal Year 2017 and 2016, due to the State budget.

Consistent with the University's goal to increase its focus and national role as a comprehensive research institution, one of the three largest sources of revenue for the University continues to be grants and contracts revenue, which includes funding from federal, state, and local governments, and private sources. Grants and contracts revenue from the federal government represents 73 percent, 74 percent and 77 percent of total grants and contract revenue for Fiscal Year 2018, 2017 and 2016, respectively. Each grant or contract is restricted in use to the purpose given and limited to the cost principles specified by each sponsor. The increase in recent years is due to the addition of several sponsored project awards from federal sponsors such as the National Aeronautics and Space Administration (NASA), National Institute of Standards and Technology (NIST) and National Institutes of Health (NIH). These grants also provide necessary funding for the administrative functions and facilities that support the grants through the facilities and administrative reimbursement. In Fiscal Years 2018, 2017 and 2016, the University received \$206,315,000, \$182,846,000 and \$180,353,000, respectively, of such administrative and facility overhead cost reimbursements. The University pledges portions of this reimbursement revenue and other auxiliary revenues to satisfy its bond obligations, which are commonly referred to as pledged revenues, thus creating a reliance on continued federal research funding.

The increase to auxiliary enterprise revenues in Fiscal Year 2018 and Fiscal Year 2017 is due to an increase in student body, affecting housing, dining, and food services at UCCS, where the food service is not outsourced. At CU Boulder, the increases were due to Housing & Dining Services (HDS) room and board and meal revenue, bookstore revenue, and athletics revenue.

The majority of health services revenue includes medical practice plan revenues earned through CU Medicine (Notes 1 and 16), which has experienced growth in operating revenue of 18.7 percent in Fiscal Year 2018 and 12.6 percent in Fiscal Year 2017. Patient services revenue contributed the majority of the operating revenue increase which was driven by a 7.6 percent in Fiscal Year 2018 and 8.5 percent in Fiscal Year 2017 growth in clinical volumes and ongoing efforts to maximize reimbursement rates for commercial insurance. The increase in Fiscal Year 2018 was also driven by participation in the Upper Payment Limit (UPL) program which allows for appropriations for specialty education services provided by CU Anschutz to be used for Medicaid reimbursement.

Gifts increased \$17,337,000 between Fiscal Year 2018 and 2017 mainly due to the School of Medicine which received support gifts for various research programs as well as increased gifts to CU Boulder for Leeds School of Business, Athletics, College of Engineering, and Biofrontiers Institute. Gifts increased \$6,123,000 between Fiscal Year 2017 and 2016 mainly due to supporting Transformational Research funding and the National Behavior Health Innovation Center at CU Anschutz.

**UNIVERSITY OF COLORADO**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2018 and 2017 (unaudited)**

Investment income net of investment expense was \$160,106,000 in Fiscal Year 2018, \$206,294,000 in Fiscal Year 2017, and \$18,516,000 in Fiscal Year 2016. Investment income is subject to inherent variability due to the requirement to record the majority of investments at fair value. In Fiscal Year 2018, the University's unrealized gains on investments (the difference between the investment's fair value and cost basis) increased by \$64,992,000. In Fiscal Year 2017, the University's unrealized gains on investments increased by \$125,538,000.

In addition to operating and nonoperating revenues, the University had capital revenues in the amounts depicted in Figure 5.

**Figure 5. Capital Revenues for Years Ended June 30, 2018, 2017, and 2016**

| <i>(in thousands)</i>              |           | <b>2018</b>   | <b>2017</b>   | <b>2016</b>   |
|------------------------------------|-----------|---------------|---------------|---------------|
| Capital student fee, net           | \$        | 17,250        | 10,203        | 11,612        |
| Capital appropriations             |           | 3,643         | 33,441        | 24,860        |
| Capital grants and gifts           |           | 17,038        | 10,194        | 10,471        |
| Loss on disposal of capital assets |           | (2,692)       | (3,597)       | (5,858)       |
| <b>Total Capital Revenues</b>      | <b>\$</b> | <b>35,239</b> | <b>50,241</b> | <b>41,085</b> |

The capital student fee is used to fund construction or renovation projects on student facility buildings at CU Boulder, to fund the Student Wellness Center at CU Denver, and in Fiscal Year 2018, to fund the Recreation and Wellness Center, the Family Development Center, and the University Center at UCCS.

The University received appropriations from the State of \$3,643,000 in Fiscal Year 2018 compared to \$33,441,000 in Fiscal Year 2017 and \$24,860,000 in Fiscal Year 2016. These monies are used for various controlled maintenance and other capital construction activity and fluctuate year to year based on the State budget.

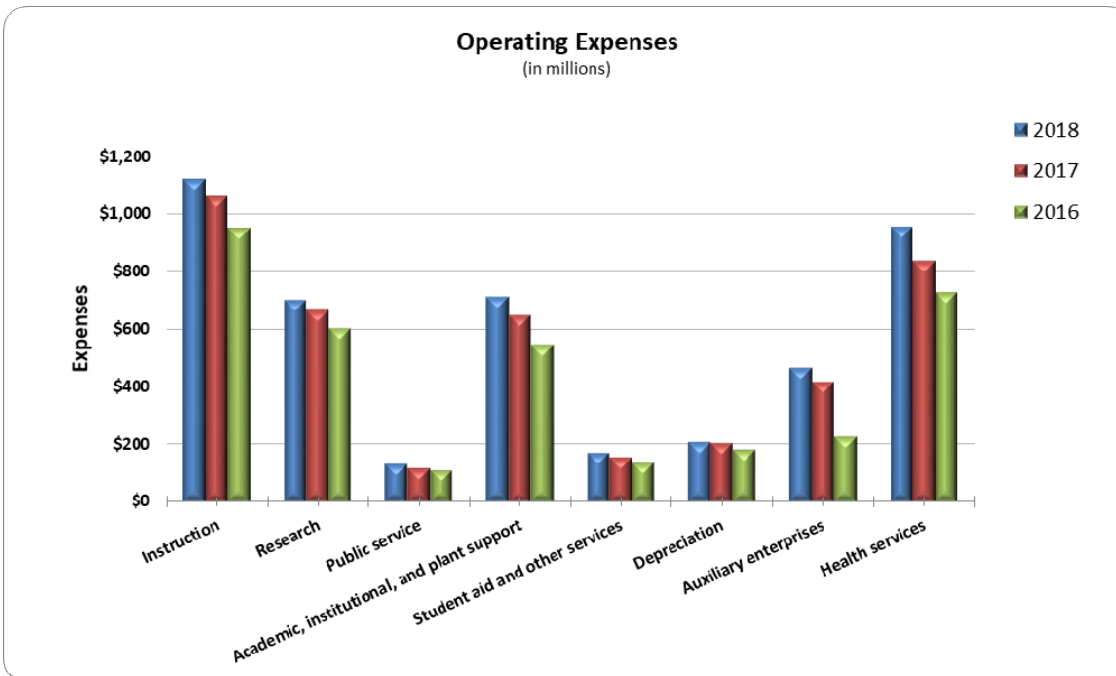
Capital grants and gifts increased \$6,844,000 in Fiscal Year 2018 primarily due to gifts for supporting construction costs of the Student Wellness Center and the Jake Jabs Event Center in the Business School building at CU Denver, and a gift for the construction of the 5th wing of CU Boulder's Jennie Smoly Caruthers Biotechnology Building. Capital grants and gifts were consistent from Fiscal Year 2016 to Fiscal Year 2017.

The programmatic uses of resources are displayed in Figure 6 and demonstrate that the focus is basically unchanged over the past three fiscal years. Total educational and general programs overall have grown by 7.1 percent and 13.1 percent in Fiscal Year 2018 and 2017, respectively. The increase in academic, institutional, and plant support is related to the increases in instruction. The increase in instruction is partly due to the increased number of students and general increases in the cost of education. The increase in research expenditures in Fiscal Year 2018 is mainly due to sponsored research expenditures, focused in Laboratory in Atmospheric Space Physics (LASP), Cooperative Institute for Research in Environmental Sciences and Physics (CIRES), Joint Institute for Laboratory Astrophysics (JILA), and Renewable and Sustainable Energy Institute (RASEI) at CU Boulder and the NIH at the CU Anschutz as well as private projects for clinical trials. The Fiscal Year 2017 increase in research expenditures related to increased nongovernmental grants and contracts within LASP. In addition, pension expense increased \$81,090,000 and \$312,412,000 in Fiscal Year 2018 and Fiscal Year 2017, respectively, which was allocated across the various expense program categories based on the related payroll.

**UNIVERSITY OF COLORADO**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2018 and 2017 (unaudited)**

**Figure 6. Expense Program Categories for Years Ended June 30, 2018, 2017, and 2016**  
*(in thousands)*

|                                            | 2018                | 2017             | 2016             |
|--------------------------------------------|---------------------|------------------|------------------|
| Instruction                                | \$ 1,117,230        | 1,057,097        | 949,007          |
| Research                                   | 700,330             | 664,476          | 601,354          |
| Public service                             | 131,790             | 116,661          | 106,366          |
| Academic, institutional, and plant support | 710,342             | 646,164          | 542,808          |
| Student aid and other services             | 167,016             | 154,139          | 132,876          |
| <b>Total Education and General</b>         | <b>2,826,708</b>    | <b>2,638,537</b> | <b>2,332,411</b> |
| Depreciation                               | 206,950             | 202,938          | 181,191          |
| Auxiliary enterprises                      | 463,862             | 413,393          | 224,523          |
| Health services                            | 952,782             | 833,184          | 724,324          |
| <b>Total Operating Expenses</b>            | <b>\$ 4,450,302</b> | <b>4,088,052</b> | <b>3,462,449</b> |



The expense totals in Figure 6 above include PERA pension expense. Figure 7 demonstrates the impact of the changes made to PERA's actuarial assumptions to the University's Fiscal Year 2017 and 2018 financial statements. As can be seen in the chart below, pension expense increased \$20,645,000 in Fiscal Year 2016, prior to the changes made by PERA to its actuarial assumptions. In Fiscal Year 2017, pension increased by \$312,412,000, and in fiscal year 2018, pension expense increased \$81,090,000. These increases (and corresponding increase in net pension liability) should be compared to the required cash contributions for each of the Fiscal Years 2016, 2017, and 2018 of \$54,561,000, \$58,698,000, and \$61,138,000 respectively.

**Figure 7. PERA Pension Expense Compared to Required Contributions**  
*(in thousands)*

|                                  | 2018       | 2017    | 2016    |
|----------------------------------|------------|---------|---------|
| Pension expense                  | \$ 496,627 | 415,537 | 103,125 |
| Expense increase from prior year | 81,090     | 312,412 | 20,645  |
| Required contributions           | 61,138     | 58,698  | 54,561  |

**UNIVERSITY OF COLORADO**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2018 and 2017 (unaudited)**

Including the impact of PERA's actuarial valuation changes, as reflected in the audited financial statements, results in total operating expenses increasing 19.4 percent, 19.8 percent, and 10.2 percent for the fiscal years ended June 30, 2018, 2017, and 2016, with the increase from Fiscal Year 2016 to 2017 due to PERA's actuarial valuation changes. Excluding the impact of these changes, operating expenses would have increased 7.7 percent, 9.2 percent, and 8.6 percent for the same time period. These increases, excluding the impact of PERA changes, are in line with expectations of a growing student population, increases in research and development activity, and salary increases.

The amounts shown for student aid do not reflect the actual resources dedicated to student aid. The majority of the University's student aid resources are netted against tuition, fee, and auxiliary revenue as a scholarship allowance (Note 13). The University's scholarship allowance was \$222,097,000, \$200,664,000 and \$187,250,000 in Fiscal Year 2018, 2017 and 2016, respectively.

Increases in expenses related to health services, which are primarily related to CU Medicine, are consistent with the associated increases in health services revenue discussed earlier in this section.

### ***CAPITAL ASSETS AND DEBT MANAGEMENT***

The University had \$5,982,074,000, \$5,726,536,000 and \$5,352,014,000 of plant, property, and equipment at June 30, 2018, 2017 and 2016, respectively, offset by accumulated depreciation of \$2,378,983,000, \$2,195,974,000 and \$1,993,423,000, respectively. The major categories of plant, property, and equipment at June 30, 2018, 2017 and 2016 are displayed in Figure 8. Related depreciation charges of \$206,950,000, \$202,938,000 and \$181,191,000 were recognized in the Fiscal Years 2018, 2017 and 2016, respectively. Detailed financial activity related to the changes in capital assets is presented in Note 5. Figure 9 details the University's current construction commitments.

**Figure 8. Capital Asset Categories (before depreciation) as of June 30, 2018, 2017, and 2016 (in thousands)**

|                                     |           | <b>2018</b>      | <b>2017</b>      | <b>2016</b>      |
|-------------------------------------|-----------|------------------|------------------|------------------|
| Land                                | \$        | 85,925           | 84,964           | 65,374           |
| Construction in progress            |           | 348,937          | 320,025          | 274,770          |
| Buildings and improvements          |           | 4,447,206        | 4,266,541        | 4,018,668        |
| Equipment                           |           | 574,775          | 546,890          | 504,054          |
| Software and other intangibles      |           | 97,608           | 94,565           | 92,712           |
| Library and other collections       |           | 427,623          | 413,551          | 396,436          |
| <b>Total Capital Assets (gross)</b> | <b>\$</b> | <b>5,982,074</b> | <b>5,726,536</b> | <b>5,352,014</b> |

**UNIVERSITY OF COLORADO**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2018 and 2017 (unaudited)**

**Figure 9. Current Construction Projects as of June 30, 2018**

| <b>Campus/Project Description</b>                              | <b>Financing Sources</b>                                      | <b>Value*</b> |
|----------------------------------------------------------------|---------------------------------------------------------------|---------------|
| <b>CU Boulder:</b>                                             |                                                               |               |
| Engineering Center Complex Renovation                          | Campus cash resources                                         | \$ 28,348     |
| Aerospace Engineering Sciences Bldg                            | Campus cash resources                                         | 82,546        |
| Euclid Autopark Addition (Center for Academic Success)         | Campus cash resources                                         | 52,956        |
| Jennie Smoly Caruthers Biotech Bldg (5th Wing)                 | State appropriation and campus cash resources                 | 43,170        |
| Ramaley Biology Addition                                       | Campus cash resources                                         | 21,801        |
| WillVill East Residence Hall                                   | Campus cash resources                                         | 96,700        |
| Music-IMIG Addition                                            | Campus cash resources                                         | 57,000        |
| Fleming Tower Renovation & System Upgrades                     | Campus cash resources                                         | 13,719        |
| North Wing Addition to Aerospace Engineering Sciences Building | Campus cash resources                                         | 18,653        |
| <b>CU Denver   Anschutz:</b>                                   |                                                               |               |
| Building 500 - 4th Floor Renovation                            | Campus cash resources                                         | 5,624         |
| Business School Infill                                         | Campus cash resources and gift                                | 11,179        |
| Campus Support Building Renovation                             | Campus cash resources                                         | 8,085         |
| Central Utility Plant Boiler and Chiller                       | Bond proceeds                                                 | 33,399        |
| Colorado Center for Personalized Medicine & Behavioral Health  | State, campus cash resources, gift, and debt                  | 242,041       |
| North Classroom Building Renovation                            | Campus cash resources                                         | 38,401        |
| Parking Structure 2 and Police Building                        | Bond proceeds                                                 | 71,447        |
| Denver Wellness Center                                         | Bond proceeds, capital student fee, and campus cash resources | 44,339        |
| <b>UCCS:</b>                                                   |                                                               |               |
| ENT Center for the Arts                                        | State, gift, and campus cash resources                        | 59,968        |
| Sports Medicine and Performance Center                         | Bond proceeds                                                 | 61,425        |
| Indoor Practice Field                                          | Bond proceeds, campus cash, gift                              | 13,300        |
| North Nevada Infrastructure                                    | Campus cash resources/System cash resources/gift              | 20,000        |

\* Value represents budgeted costs for project in thousands

During Fiscal Year 2018, the University issued \$471,390,000 in revenue bonds with proceeds used to refund portions of prior obligations, to pay certain costs related to the issuance, and to establish escrow accounts for the cross-over funding of Series 2009B, 2010A, and 2010C.

During Fiscal Year 2017, the University issued \$66,930,000 in revenue bonds with proceeds being allocated to refunding a portion of certain outstanding obligations and paying costs relating to the issuance of the Series 2017A Bonds. In addition, \$53,735,000 of bonds was assumed as part of a newly formed blended component unit.

At June 30, 2018, 2017 and 2016, the University had debt (or similar long-term obligations) of \$1,778,648,000, \$1,680,196,000 and \$1,691,046,000, respectively, in the categories illustrated in Figure 10. More detailed information about the University's debt is included in Note 9.

**Figure 10. Debt Categories as of June 30, 2018, 2017, and 2016**

| <b>(in thousands)</b>       | <b>2018</b>         | <b>2017</b>      | <b>2016</b>      |
|-----------------------------|---------------------|------------------|------------------|
| Revenue bonds               | \$ 1,755,804        | 1,655,668        | 1,675,644        |
| Capital leases              | 11,824              | 13,313           | 15,402           |
| Notes payable               | 11,020              | 11,215           | -                |
| <b>Total Long-term Debt</b> | <b>\$ 1,778,648</b> | <b>1,680,196</b> | <b>1,691,046</b> |

**UNIVERSITY OF COLORADO**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2018 and 2017 (unaudited)**

The Regents have adopted a debt management policy that includes limitations on the use of external debt. The University Treasurer will report to the Regents, prior to the issuance of new debt, the effect that the new debt will have on the University's debt capacity ratio to ensure the 7 percent debt ratio limit currently established by the Regents is not exceeded. The ratio is calculated as maximum annual debt service as a percentage of the University's unrestricted current fund expenditures plus mandatory transfers. State statute sets the maximum for this ratio at 10 percent in C.R.S. 23-20-129.5. A component of this policy is debt capacity, which is the calculated ratio of the University's debt service requirement as compared to certain unrestricted revenues. The University maintained its debt capacity limits.

In addition, during Fiscal Year 2018 the Regents authorized a commercial paper program for approved capital construction projects with a maximum outstanding amount of \$200 million. This short-term financing has a fixed maturity of less than 270 days from issuance. During Fiscal Year 2018, the University issued \$40 million of commercial paper to fund construction projects at CU Boulder with an initial interest rate of 1.3 percent.

The University minimizes financing costs by monitoring current market conditions and by maintaining a bond rating of Aa1 and AA+ and commercial paper ratings of P-1 and F1+ (Moody's and Fitch, respectively).

***ECONOMIC FACTORS THAT WILL AFFECT THE FUTURE***

The Fiscal Year 2019 budget approved by the State Legislature included a \$59.1 million statewide increase for higher education operations which includes \$18.9 million additional funding for the University through the higher education allocation model. The budget for the University for Fiscal Year 2019, as approved by the Regents, increased approximately \$228,250,000, or 5.3 percent.

Due to the nature of funding for public institutions of higher education, operating losses are normal. Colorado is unique in that the majority of funding from the state comes in the form of stipends paid directly to students and from fee-for-service agreements in which the state pays its public higher education institutions for providing certain agreed-upon educational activities. Unlike regular state appropriations, stipends and fee-for-service revenues are included in operating revenue. This difference in funding models between Colorado and the remainder of the country is a consideration when comparing results between the University and out-of-state peers.

As discussed in previous years' MD&A, the University's operating loss continues to increase. For Fiscal Year 2018, the operating loss was \$616,419,000, up from a loss of \$559,424,000 in Fiscal Year 2017. For the second consecutive Fiscal Year, the University incurred a negative change in net position of \$197,258,000 (prior to the impact of the adoption of Statement No. 75) compared to a negative change in net position of \$107,943,000 in Fiscal Year 2017. The cause of the operating losses, negative change in net position, and the increases in both are directly attributable to the change in assumptions made by PERA in prior years to the state-wide defined-benefit pension plan. These changes added approximately \$81,090,000 and \$312,412,000 to operating expense in Fiscal Years 2018 and 2017. It is important to note that the changes in assumptions made by PERA do not have an impact on the University's cash flows, as contribution rates for employers and members remained unchanged.

As discussed in Note 15 to the financial statements, *Retirement Plans and Insurance Programs*, the Colorado General Assembly passed pension reform through Senate Bill 18-200 *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* (the Bill). The Bill was signed into law by Governor Hickenlooper on June 4, 2018. The Bill makes changes to the plans administered by PERA with the goal of eliminating the unfunded actuarial accrued liability and thereby reach a 100 percent funded ratio within the next 30 years.

**UNIVERSITY OF COLORADO**  
**STATEMENTS OF NET POSITION**  
**June 30, 2018 and 2017 (in thousands)**

|                                                      | 2018                |                  | 2017             |                  |
|------------------------------------------------------|---------------------|------------------|------------------|------------------|
|                                                      | University          | Component Unit   | University       | Component Unit   |
| <b>Assets</b>                                        |                     |                  |                  |                  |
| <b>Current Assets</b>                                |                     |                  |                  |                  |
| Cash and cash equivalents (Note 2)                   | \$ 133,662          | 29,861           | 89,976           | 26,013           |
| Investments (Note 3)                                 | 380,782             | -                | 367,818          | -                |
| Accounts and loans receivable, net (Note 4)          | 388,376             | 28,853           | 354,661          | 31,934           |
| Inventories                                          | 21,727              | -                | 21,287           | -                |
| Other assets                                         | 4,552               | 724              | 4,646            | 539              |
| <b>Total Current Assets</b>                          | <b>929,099</b>      | <b>59,438</b>    | <b>838,388</b>   | <b>58,486</b>    |
| <b>Noncurrent Assets</b>                             |                     |                  |                  |                  |
| Investments (Note 3)                                 | 2,399,017           | 1,847,550        | 2,239,623        | 1,689,100        |
| Assets held under split-interest agreements (Note 3) | -                   | 42,573           | -                | 42,750           |
| Accounts and loans receivable, net (Note 4)          | 55,175              | 151,080          | 42,880           | 90,994           |
| Other assets                                         | 19,985              | 8,406            | 23,602           | 8,017            |
| Capital assets, net (Note 5)                         | 3,603,091           | 1,435            | 3,530,562        | 1,583            |
| <b>Total Noncurrent Assets</b>                       | <b>6,077,268</b>    | <b>2,051,044</b> | <b>5,836,667</b> | <b>1,832,444</b> |
| <b>Total Assets</b>                                  | <b>\$ 7,006,367</b> | <b>2,110,482</b> | <b>6,675,055</b> | <b>1,890,930</b> |
| <b>Deferred Outflows</b>                             |                     |                  |                  |                  |
| Loss on bond refundings                              | \$ 58,727           | -                | 54,427           | -                |
| PERA pension-related (Note 15)                       | 448,973             | -                | 641,350          | -                |
| Alternate medicare plan-related (Note 15)            | 9,977               | -                | 11,141           | -                |
| Other postemployment benefits related (Note 7)       | 21,079              | -                | -                | -                |
| <b>Total Deferred Outflows</b>                       | <b>538,756</b>      | <b>-</b>         | <b>706,918</b>   | <b>-</b>         |
| <b>Total Assets and Deferred Outflows</b>            | <b>\$ 7,545,123</b> | <b>2,110,482</b> | <b>7,381,973</b> | <b>1,890,930</b> |
| <b>Liabilities</b>                                   |                     |                  |                  |                  |
| <b>Current Liabilities</b>                           |                     |                  |                  |                  |
| Accounts payable                                     | \$ 137,964          | 5,222            | 129,894          | 13,775           |
| Accrued expenses (Note 6)                            | 119,711             | -                | 265,292          | -                |
| Compensated absences (Note 6)                        | 16,155              | -                | 16,483           | -                |
| Unearned revenue (Note 8)                            | 178,788             | -                | 169,497          | -                |
| Early retirement incentive program (Note 15)         | 1,686               | -                | 1,624            | -                |
| Split-interest agreements                            | -                   | 2,619            | -                | 2,604            |
| Custodial funds                                      | -                   | 16,660           | -                | 15,719           |
| Commercial paper (Note 9)                            | 40,000              | -                | -                | -                |
| Bonds, capital leases, and notes payable (Note 9)    | 85,353              | -                | 80,746           | -                |
| Other liabilities (Note 10)                          | 47,525              | -                | 46,575           | -                |
| <b>Total Current Liabilities</b>                     | <b>\$ 627,182</b>   | <b>24,501</b>    | <b>710,111</b>   | <b>32,098</b>    |

See accompanying notes to basic financial statements

**UNIVERSITY OF COLORADO**  
**STATEMENTS OF NET POSITION**  
**June 30, 2018 and 2017 (in thousands)**

|                                                              | 2018                |                  | 2017             |                  |
|--------------------------------------------------------------|---------------------|------------------|------------------|------------------|
|                                                              | University          | Component Unit   | University       | Component Unit   |
| <b>Noncurrent Liabilities</b>                                |                     |                  |                  |                  |
| Compensated absences (Note 6)                                | \$ 233,581          | -                | 210,275          | -                |
| Unearned revenue (Note 8)                                    | 8,763               | -                | 9,328            | -                |
| Early retirement incentive program (Note 15)                 | 2,391               | -                | 2,978            | -                |
| Split-interest agreements                                    | -                   | 20,319           | -                | 21,060           |
| Custodial funds                                              | -                   | 418,292          | -                | 379,744          |
| Bonds, capital leases, and notes payable (Note 9)            | 1,693,295           | -                | 1,599,450        | -                |
| Other postemployment benefits (Note 7)                       | 795,147             | -                | 343,570          | -                |
| Alternate medicare plan (Note 15)                            | 73,211              | -                | 74,723           | -                |
| Net pension liability (Note 15)                              | 2,206,541           | -                | 2,049,366        | -                |
| Other liabilities (Note 10)                                  | 32,320              | 2,293            | 14,042           | 2,115            |
| <b>Total Noncurrent Liabilities</b>                          | <b>5,045,249</b>    | <b>440,904</b>   | <b>4,303,732</b> | <b>402,919</b>   |
| <b>Total Liabilities</b>                                     | <b>\$ 5,672,431</b> | <b>465,405</b>   | <b>5,013,843</b> | <b>435,017</b>   |
| <b>Deferred Inflows</b>                                      |                     |                  |                  |                  |
| PERA pension-related (Note 15)                               | \$ 95,564           | -                | 9,629            | -                |
| Alternate medicare plan-related (Note 15)                    | 5,863               | -                | 89               | -                |
| Other postemployment benefits related (Note 7)               | 117,695             | -                | -                | -                |
| Other                                                        | 1,729               | -                | -                | -                |
| <b>Total Deferred Inflows</b>                                | <b>220,851</b>      | <b>-</b>         | <b>9,718</b>     | <b>-</b>         |
| <b>Total Liabilities and Deferred Inflows</b>                | <b>\$ 5,893,282</b> | <b>465,405</b>   | <b>5,023,561</b> | <b>435,017</b>   |
| <b>Net Position</b>                                          |                     |                  |                  |                  |
| Net investment in capital assets                             | \$ 1,912,493        | 1,435            | 1,949,435        | 1,583            |
| Restricted for nonexpendable purposes (endowments)           |                     |                  |                  |                  |
| Instruction                                                  | -                   | 294,036          | -                | 258,263          |
| Research                                                     | 21,718              | 32,921           | 22,180           | 31,175           |
| Academic support                                             | 14,130              | 62,420           | 21,169           | 54,832           |
| Scholarships and fellowships                                 | 11,180              | 186,173          | 13,883           | 172,818          |
| Capital and other                                            | 1,590               | 30,862           | 1,158            | 29,734           |
| <b>Total restricted for nonexpendable purposes (Note 11)</b> | <b>48,618</b>       | <b>606,412</b>   | <b>58,390</b>    | <b>546,822</b>   |
| Restricted for expendable purposes                           |                     |                  |                  |                  |
| Instruction                                                  | 133,288             | 249,689          | 102,065          | 215,468          |
| Research                                                     | 46,699              | 113,574          | 42,543           | 95,475           |
| Academic support                                             | 38,863              | 307,480          | 41,193           | 235,019          |
| Student loans and services                                   | 17,388              | -                | 37,370           | -                |
| Scholarships and fellowships                                 | 45,420              | 186,527          | 42,155           | 164,248          |
| Auxiliary enterprises                                        | 236,494             | -                | 169,020          | -                |
| Capital                                                      | 109,054             | 45,263           | 42,416           | 50,155           |
| Other                                                        | 58,903              | 67,774           | 60,098           | 87,246           |
| <b>Total restricted for expendable purposes</b>              | <b>686,109</b>      | <b>970,307</b>   | <b>536,860</b>   | <b>847,611</b>   |
| Unrestricted (Note 11)                                       | (995,379)           | 66,923           | (186,273)        | 59,897           |
| <b>Total Net Position</b>                                    | <b>\$ 1,651,841</b> | <b>1,645,077</b> | <b>2,358,412</b> | <b>1,455,913</b> |

See accompanying notes to basic financial statements

**UNIVERSITY OF COLORADO**  
**STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION**  
**Years ended June 30, 2018 and 2017 (in thousands)**

|                                                                                                                                                                                                                                     | 2018                |                | 2017             |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------|------------------|-----------------|
|                                                                                                                                                                                                                                     | University          | Component Unit | University       | Component Units |
| <b>Operating Revenues</b>                                                                                                                                                                                                           |                     |                |                  |                 |
| Student tuition (net of scholarship allowances of \$194,754 in 2018 and \$176,419 in 2017; net of bad debt of \$2,579 in 2018 and \$3,251 in 2017; pledged revenues of \$959,996 in 2018 and \$901,918 in 2017) (Note 9, 12 and 13) | \$ 959,996          | -              | 901,918          | -               |
| Student fees (net of scholarship allowances of \$18,345 in 2018 and \$18,026 in 2017; net of bad debt of \$162 in 2018 and \$154 in 2017; pledged revenues of \$7,932 in 2018 and \$662 in 2017) (Note 9, 12 and 13)                | 89,562              | -              | 90,676           | -               |
| Fee-for-service contracts (Note 12)                                                                                                                                                                                                 | 126,706             | -              | 121,872          | -               |
| Federal grants and contracts (pledged revenues of \$177,426 in 2018 and \$156,270 in 2017) (Note 9)                                                                                                                                 | 731,884             | -              | 695,067          | -               |
| State and local grants and contracts (pledged revenues of \$16,066 in 2018 and \$13,268 in 2017) (Note 9)                                                                                                                           | 69,853              | -              | 60,309           | -               |
| Nongovernmental grants and contracts                                                                                                                                                                                                | 205,661             | -              | 187,823          | -               |
| Sales and services of educational departments (net of bad debt of \$40 in 2018 and \$67 in 2017) (Note 9)                                                                                                                           | 222,618             | -              | 207,273          | -               |
| Auxiliary enterprises (net of scholarship allowances of \$5,078 in 2018 and \$4,244 in 2017; net of bad debt of \$661 in 2018 and \$986 in 2017; pledged revenues of \$72,463 in 2018 and \$74,832 in 2017) (Note 9 and 13)         | 284,034             | -              | 283,007          | -               |
| Health services (net of bad debt of \$42,843 in 2018 and \$30,685 in 2017; pledged revenues of \$10,375 in 2018 and \$8,770 in 2017) (Note 9 and 14)                                                                                | 1,037,529           | -              | 876,986          | -               |
| Contributions (Note 17)                                                                                                                                                                                                             | -                   | 248,613        | -                | 186,603         |
| Other operating revenues (net of bad debt of \$1,188 in 2018 and \$2,472 in 2017; pledged revenues of \$5,185 in 2018 and \$5,832 in 2017) (Note 9)                                                                                 | 106,040             | 4,186          | 103,697          | 13,250          |
| <b>Total Operating Revenues</b>                                                                                                                                                                                                     | <b>3,833,883</b>    | <b>252,799</b> | <b>3,528,628</b> | <b>199,853</b>  |
| <b>Operating Expenses</b>                                                                                                                                                                                                           |                     |                |                  |                 |
| Education and general                                                                                                                                                                                                               |                     |                |                  |                 |
| Instruction                                                                                                                                                                                                                         | 1,117,230           | -              | 1,057,097        | -               |
| Research                                                                                                                                                                                                                            | 700,330             | -              | 664,476          | -               |
| Public service                                                                                                                                                                                                                      | 131,790             | -              | 116,661          | -               |
| Academic support                                                                                                                                                                                                                    | 236,683             | -              | 209,320          | -               |
| Student services                                                                                                                                                                                                                    | 137,452             | -              | 132,451          | -               |
| Institutional support                                                                                                                                                                                                               | 315,796             | 193,075        | 277,667          | 171,183         |
| Operation and maintenance of plant                                                                                                                                                                                                  | 157,863             | -              | 159,177          | -               |
| Student aid                                                                                                                                                                                                                         | 29,564              | -              | 21,688           | -               |
| <b>Total education and general expenses</b>                                                                                                                                                                                         | <b>2,826,708</b>    | <b>193,075</b> | <b>2,638,537</b> | <b>171,183</b>  |
| Depreciation (Note 5)                                                                                                                                                                                                               | 206,950             | 148            | 202,938          | 933             |
| Auxiliary enterprises                                                                                                                                                                                                               | 463,862             | -              | 413,393          | -               |
| Health services (Note 14)                                                                                                                                                                                                           | 952,782             | -              | 833,184          | -               |
| <b>Total Operating Expenses</b>                                                                                                                                                                                                     | <b>4,450,302</b>    | <b>193,223</b> | <b>4,088,052</b> | <b>172,116</b>  |
| <b>Operating Income (Loss)</b>                                                                                                                                                                                                      | <b>\$ (616,419)</b> | <b>59,576</b>  | <b>(559,424)</b> | <b>27,737</b>   |

See accompanying notes to basic financial statements

**UNIVERSITY OF COLORADO**  
**STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION**  
**Years ended June 30, 2018 and 2017 (in thousands)**

|                                                                                                                                                                          | 2018                |                  | 2017             |                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------|------------------|------------------|
|                                                                                                                                                                          | University          | Component Unit   | University       | Component Unit   |
| <b>Nonoperating Revenues (Expenses)</b>                                                                                                                                  |                     |                  |                  |                  |
| Federal Pell Grant                                                                                                                                                       | \$ 57,021           | -                | 49,957           | -                |
| State appropriations (Note 12)                                                                                                                                           | 15,651              | -                | 15,325           | -                |
| Gifts                                                                                                                                                                    | 198,386             | -                | 181,049          | -                |
| Investment income (net of investment expenses of \$13,400 in 2018 and \$9,905 in 2017)                                                                                   | 160,106             | 129,588          | 206,294          | 156,572          |
| Loss on disposal of capital assets                                                                                                                                       | (2,692)             | -                | (3,597)          | -                |
| Interest expense on capital asset-related debt (including amortization of deferred loss of \$9,467 in 2018 and \$9,878 in 2017 (Note 5))                                 | (66,721)            | -                | (67,039)         | -                |
| Bond issuance costs                                                                                                                                                      | (2,350)             | -                | (579)            | -                |
| Other nonoperating revenues (pledged revenues of \$2,183 in 2018 and \$1,704 in 2017) (Note 9)                                                                           | 31,601              | -                | 17,041           | -                |
| <b>Total Nonoperating Revenues (Expenses)</b>                                                                                                                            | <b>391,002</b>      | <b>129,588</b>   | <b>398,451</b>   | <b>156,572</b>   |
| <b>Income (Loss) Before Other Revenues</b>                                                                                                                               | <b>(225,417)</b>    | <b>189,164</b>   | <b>(160,973)</b> | <b>184,309</b>   |
| <b>Other Revenues</b>                                                                                                                                                    |                     |                  |                  |                  |
| Capital student fee (net of scholarship allowance of \$3,920 in 2018 and \$1,975 in 2017; pledged revenue of \$17,250 in 2018 and \$10,203 in 2017) (Note 9 and Note 13) | 17,250              | -                | 10,203           | -                |
| Capital appropriations (Note 12)                                                                                                                                         | 3,643               | -                | 33,441           | -                |
| Capital grants and gifts                                                                                                                                                 | 17,038              | -                | 10,194           | -                |
| Transfers of permanent endowments                                                                                                                                        | (9,772)             | -                | -                | -                |
| <b>Total Other Revenues</b>                                                                                                                                              | <b>28,159</b>       | <b>-</b>         | <b>53,838</b>    | <b>-</b>         |
| <b>Change in net position before special item</b>                                                                                                                        | <b>(197,258)</b>    | <b>189,164</b>   | <b>(107,135)</b> | <b>184,309</b>   |
| Special Item - Transfer from CUREF                                                                                                                                       | -                   | -                | (808)            | -                |
| <b>Change in net position after special item</b>                                                                                                                         | <b>(197,258)</b>    | <b>189,164</b>   | <b>(107,943)</b> | <b>184,309</b>   |
| Net Position, beginning of year                                                                                                                                          | 2,358,412           | 1,455,913        | 2,512,995        | 1,271,604        |
| Cumulative effect of adoption of new accounting principle (Note 1)                                                                                                       | (509,313)           | -                | (46,640)         | -                |
| <b>Net Position, beginning of year, as restated</b>                                                                                                                      | <b>1,849,099</b>    | <b>1,455,913</b> | <b>2,466,355</b> | <b>1,271,604</b> |
| <b>Net Position, End of Year</b>                                                                                                                                         | <b>\$ 1,651,841</b> | <b>1,645,077</b> | <b>2,358,412</b> | <b>1,455,913</b> |

See accompanying notes to basic financial statements

**UNIVERSITY OF COLORADO**  
**STATEMENTS OF CASH FLOWS**  
**Years ended June 30, 2018 and 2017 (in thousands)**

|                                                                           | 2018              | 2017             |
|---------------------------------------------------------------------------|-------------------|------------------|
|                                                                           | <i>University</i> |                  |
| <b>Cash Flows from Operating Activities</b>                               |                   |                  |
| Tuition and fees                                                          | \$ 1,177,113      | 1,120,424        |
| Grants and contracts                                                      | 995,884           | 997,650          |
| Sales and services of educational departments                             | 222,618           | 207,273          |
| Auxiliary enterprise charges                                              | 300,377           | 276,669          |
| Health services                                                           | 989,732           | 862,086          |
| Other receipts                                                            | 144,618           | 122,206          |
| Payments to employees and benefits                                        | (3,236,673)       | (2,830,463)      |
| Payments to suppliers                                                     | (596,939)         | (575,428)        |
| Payments for scholarships and fellowships                                 | (29,564)          | (21,688)         |
| <b>Total Cash Flows Provided by (Used for ) Operating Activities</b>      | <b>(32,834)</b>   | <b>158,729</b>   |
| <b>Cash Flows from Noncapital Financing Activities</b>                    |                   |                  |
| Federal Pell Grant                                                        | 57,021            | 49,957           |
| State appropriations                                                      | 15,651            | 15,325           |
| Gifts and grants for other than capital purposes                          | 198,386           | 181,049          |
| Endowment transfers                                                       | (9,772)           | -                |
| Agency transactions                                                       | 182               | 31,237           |
| Direct lending receipts                                                   | 396,662           | 385,474          |
| Direct lending disbursements                                              | (397,016)         | (386,128)        |
| <b>Total Cash Flows Provided by Noncapital Financing Activities</b>       | <b>261,114</b>    | <b>276,914</b>   |
| <b>Cash Flows from Capital and Related Financing Activities</b>           |                   |                  |
| State capital contributions                                               | 3,643             | 33,441           |
| Capital student fees                                                      | 17,250            | 10,203           |
| Proceeds from capital debt                                                | 568,325           | 141,437          |
| Bond issuance costs paid                                                  | (2,350)           | (579)            |
| Principal paid on capital debt, leases and notes                          | (382,160)         | (136,563)        |
| Interest paid on capital debt, leases and notes                           | (121,048)         | (77,601)         |
| Proceeds from sale of capital assets                                      | 10,004            | 28,049           |
| Purchases and construction of capital assets                              | (266,983)         | (391,659)        |
| <b>Total Cash Flows Used for Capital and Related Financing Activities</b> | <b>(173,319)</b>  | <b>(393,272)</b> |
| <b>Cash Flows from Investing Activities</b>                               |                   |                  |
| Proceeds from sales and maturities of investments                         | 6,091,864         | 4,526,658        |
| Purchase of investments                                                   | (6,199,235)       | (4,647,517)      |
| Investment earnings                                                       | 96,096            | 80,459           |
| <b>Total Cash Flows Used for Investing Activities</b>                     | <b>(11,275)</b>   | <b>(40,400)</b>  |
| <b>Net Increase in Cash and Cash Equivalents</b>                          | <b>43,686</b>     | <b>1,971</b>     |
| Cash and cash equivalents, beginning of year                              | 89,976            | 88,005           |
| <b>Cash and Cash Equivalents, End of Year</b>                             | <b>\$ 133,662</b> | <b>89,976</b>    |

See accompanying notes to basic financial statements

**UNIVERSITY OF COLORADO**  
**STATEMENTS OF CASH FLOWS**  
**Years ended June 30, 2018 and 2017 (in thousands)**

|                                                                                       | <b>2018</b>        | <b>2017</b>    |
|---------------------------------------------------------------------------------------|--------------------|----------------|
|                                                                                       | <b>University</b>  |                |
| <b>Reconciliation of Operating Loss to Net Cash Provided by Operating Activities:</b> |                    |                |
| Operating loss                                                                        | \$ (616,419)       | (559,424)      |
| Adjustments to reconcile operating loss to net cash provided by operating activities  |                    |                |
| Depreciation expense                                                                  | 206,950            | 202,938        |
| Receipts of items classified as nonoperating revenues                                 | 31,601             | 17,041         |
| Changes in assets, deferred outflows, liabilities, and deferred inflows               |                    |                |
| Receivables                                                                           | (43,870)           | 31,321         |
| Inventories                                                                           | (440)              | (382)          |
| Other assets                                                                          | 3,711              | (12,766)       |
| PERA pension, AMP, and OPEB-related deferred outflows                                 | 190,960            | (516,942)      |
| Accounts payable                                                                      | (905)              | 17,724         |
| Accrued expenses                                                                      | (145,714)          | 21,742         |
| Unearned revenue                                                                      | 8,725              | 9,318          |
| Compensated absences and other postemployment benefits                                | (51,551)           | 77,167         |
| Net pension liability                                                                 | 157,175            | 873,775        |
| Alternate medicare plan and early retirement incentive plan                           | (2,037)            | 13,863         |
| Other liabilities                                                                     | 21,280             | (2,534)        |
| PERA pension, AMP, and OPEB-related deferred inflows                                  | 207,700            | (14,112)       |
| <b>Net Cash Provided by (Used for) Operating Activities</b>                           | <b>\$ (32,834)</b> | <b>158,729</b> |
| <b>Noncash Transactions</b>                                                           |                    |                |
| Donations of capital assets                                                           | \$ 1,961           | 2,126          |
| Lease-financed acquisitions                                                           | 795                | 295            |
| Change in unrealized gains on investments                                             | (64,992)           | 125,538        |
| Amortization of premiums                                                              | 48,553             | 16,042         |
| Amortization of deferred loss                                                         | (9,467)            | (8,150)        |

See accompanying notes to basic financial statements

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

***NOTE 1 – BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES***

**GOVERNANCE**

The University of Colorado (the University) is a comprehensive degree-granting research university in the State of Colorado (the State). It is governed by a nine-member Board of Regents (the Regents) elected by popular vote in the State's general elections. Serving staggered six-year terms, one member is elected from each of the State's seven congressional districts with two Regents elected from the State at large. The University comprises the system office and the following three accredited campuses, each with its unique mission as detailed below:

- **University of Colorado Boulder (CU Boulder)**

Established in 1861, CU Boulder is a comprehensive graduate research university (with selective admission standards) offering a comprehensive array of undergraduate, master's, and doctoral degree programs.

- **University of Colorado Denver | Anschutz Medical Campus (CU Denver | Anschutz)**

Originally operated as two separate campuses, the Health Sciences Center and the Denver campus were established in 1883 and 1974, respectively. In 2004, the two campuses were institutionally merged into the University of Colorado Denver. The consolidated institution is an urban comprehensive research university offering a full range of undergraduate, graduate, and professional degree programs in life sciences, professional programs, and liberal arts. The campuses are currently referred to collectively as CU Denver | Anschutz and separately as the University of Colorado Denver (CU Denver) and the University of Colorado Anschutz Medical Campus (CU Anschutz).

- **University of Colorado Colorado Springs (UCCS)**

Established as a separate campus in 1965, UCCS is a comprehensive graduate research university (with selective admission standards) offering a comprehensive array of undergraduate, master's, and doctoral degree programs.

To accomplish its mission, the University has over 7,200 instructional faculty serving over 65,000 students through 467 degree programs in 26 schools and colleges.

**BASIS OF PRESENTATION AND FINANCIAL REPORTING ENTITY**

**Blended Component Units**

The University's financial reporting entity includes the operations of the University and all related entities for which the University is financially accountable. Financial accountability may stem from the University's ability to appoint a majority of the governing board of the related organization, its ability to impose its will on the related organization, its ability to access assets, or its responsibility for debts of the related organization. Blended component units generally include those entities (1) that provide services entirely to the University, (2) in which there is a financial benefit or burden relationship, or (3) in which management of the University has operational responsibility. The University has the following blended component units:

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

- **University License Equity Holding, Inc. (ULEHI)**

Originally established in 1992, with a significant reorganization in 2001, ULEHI facilitates certain licensing activities for the University. ULEHI is a nonprofit entity under Section 501(c)(3) of the Internal Revenue Code. The University appoints a voting majority of ULEHI's governing body, is able to impose its will on the organization, and the organization provides services entirely to the University.

Detailed financial information may be obtained directly from ULEHI at 12635 East Montview Boulevard, Aurora, Colorado 80045.

- **University of Colorado Medicine (CU Medicine)**

University Physicians, Inc. d/b/a CU Medicine, is a Colorado non-profit corporation under Section 501(c)(3) of the Internal Revenue Code, organized to perform the billing, collection, and disbursement functions for professional services rendered for CU Anschutz as authorized in Section 23-20-114 of the Colorado Revised Statutes (C.R.S.). CU Medicine is the School of Medicine's (SOM) faculty practice plan with approximately 3,300 member providers. CU Medicine does not employ physicians or practice medicine directly; it provides the business and administrative support for the clinical faculty employed by the School of Medicine (SOM). The members' primary sites of practice are at the UCH Health University of Colorado Hospital (UCH) and Children's Hospital Colorado (Children's Colorado), but members also provide limited clinical services at multiple hospital and clinic sites throughout the region, including other UCH Health locations, the National Jewish Medical and Research Center, the Veterans Administration Medical Center, and Denver Health and Hospital Authority. The majority of patients cared for reside within the Denver metropolitan area.

The University appoints a majority of CU Medicine's governing body, and is able to impose its will. Additionally, CU Medicine exclusively benefits the University by providing the services described above.

Beginning in fiscal year 2018, CU Medicine participated in a federally funded program available to physicians employed by state-owned medical schools. The Colorado Department of Health Care Policy & Financing (HCPF) filed a proposed state Medicaid plan amendment with the Centers for Medicare and Medicaid Services (CMS) on behalf of CU Medicine and the SOM to secure access to this program. The supplemental payment program is designed to expand patient access by providing enhanced payments to physicians and other qualifying providers. In July 2017, HCPF's filing was approved by CMS and under the terms of the approved program, CU Medicine received \$62.0 million in supplemental payments during Fiscal Year 2018. The supplemental funding will be used to maintain and increase patient access to CU Medicine's services and for other programs defined in collaboration with HCPF, and is included in health services revenue in the University's financial statements.

Detailed financial information may be obtained directly from CU Medicine at P.O. Box 111719, Aurora, Colorado 80042-1719.

- **University of Colorado Property Corporation, Inc. (CUPCO)**

Incorporated in 2015 with operations starting in Fiscal Year 2017, CUPCO receives, holds, invests, and administers real and personal property for the benefit of the University. CUPCO carries out its real estate investing activities through direct ownership, management, and operation of certain real estate assets. CUPCO is a nonprofit entity under Section 501(c)(3) of the Internal Revenue Code. The University appoints CUPCO's governing body, is able to impose its will on the organization, and the organization provides services entirely to the University.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

Under transfer agreements effective July 1 and July 13, 2016 between CUPCO and Land Holding Venture, LLC, an entity formerly wholly owned by the University of Colorado Real Estate Foundation (CUREF), a discretely presented component unit of the University in Fiscal Year 2017, CUPCO obtained ownership of various vacant land holdings, a residential home, and an option agreement to purchase vacant land. On December 12, 2016, CUREF agreed to transfer ownership of Campus Village Apartments, LLC (CVA), to CUPCO, which included property and land, other assets, and the obligation of the Series 2008 Student Housing Revenue Bonds associated with CVA. The transfer of CVA occurred on December 31, 2016.

CVA, a Delaware limited liability company, was formed under the laws of the State of Delaware on May 25, 2005, with CUREF as the sole member. CVA is organized, operated, and dedicated exclusively to the charitable purposes of promoting the general welfare, development, growth, and well-being of the University, and specifically for the primary purpose of acquiring, constructing, improving, equipping, and operating a student housing facility located in Denver, Colorado, as well as improvements and amenities related to this facility.

Detailed financial information may be obtained directly from CUPCO at 1800 Grant Street, Suite 725, Denver, Colorado 80203.

- **18<sup>th</sup> Avenue, LLC (18<sup>th</sup> Avenue)**

18th Avenue, LLC (18th Avenue), a Colorado limited liability company, was formed under the laws of the State of Colorado on April 26, 2006, with CUREF as the sole member. 18th Avenue was organized, operated, and dedicated exclusively to promoting CUREF's charitable purposes and to promoting the general welfare, development, growth, and well-being of the University, and specifically for the primary purpose of acquiring, owning, operating, and maintaining real property consisting of an office building in Denver, Colorado.

Under a transfer agreement between the University and CUREF, the University was assigned the sole membership interest in 18th Avenue, which owns the real property, including the office building and related improvements, located at 1800 Grant Street (which houses the CU System offices), along with the existing loan encumbering the property. The transfer of 18th Avenue occurred on July 31, 2016.

### **Discretely Presented Component Unit**

The University's financial statements include a supporting organization as a discretely presented component unit (DPCU) of the University. The majority of the resources, or income thereon that the supporting organization holds and invests, are restricted to the activities of the University by the donors.

Because these restricted resources held by the supporting organization can only be used by, or for the benefit of, the University, the following supporting organization is considered a DPCU of the University (see Note 17 for additional information):

- **University of Colorado Foundation (CU Foundation)**

Established in 1967, the CU Foundation solicits, receives, holds, invests, and transfers funds for the benefit of the University. The CU Foundation, a nonprofit entity under Section 501(c)(3) of the Internal Revenue Code, has a 15-member board of directors, of which a member of the Regents, the president of the University, and another University designee serve as ex-officio non-voting members. The board of directors elects its own members, other than those serving as ex-officio non-voting members. The CU Foundation, as a not-for-profit entity, follows Financial Accounting Standards Board guidance in the preparation of its financial statements, which are then modified to match the University's financial reporting format.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

Under an agreement between the CU Foundation and the University, the CU Foundation provides certain development and investment services to the University in exchange for a fee.

Detailed financial information may be obtained directly from the CU Foundation at 1800 Grant Street, Suite 725, Denver, Colorado 80203.

**Joint Ventures and Related Organizations**

The University has associations with the following organizations for which it is not financially accountable nor has primary access to the resources. Accordingly, these organizations have not been included in the University's financial statements. Information regarding the nature of the relationships is included in Note 18.

- UCHealth University of Colorado Hospital (UCH)
- Auraria Higher Education Center (AHEC)
- University of Colorado Health and Welfare Trust (the Trust)

**Relationship to State of Colorado**

Article VIII, Section 5 of the Colorado Constitution declares the University to be a state institution. The Regents of the University are elected by popular vote of the citizens of the State. Therefore, the Board of the University is entirely different from the governing board of the State. Management of the University is completely separate and distinct from management of the State. The services provided by the University benefit the citizens of the State, rather than serving the State government. The services include provisions of undergraduate and graduate education to the citizens of the State, and conducting extensive amounts of federally and other funded research for the benefit of the citizens of the State, the nation and the world. Additionally, the University offers more than 200 public outreach programs serving Coloradans and their communities. All outstanding debt of the University is expected to be repaid entirely with resources generated by the University. No State funds are used to repay any debt issued by the University.

**TAX-EXEMPT STATUS**

The income generated by the University, as an instrumentality of the State, is generally excluded from federal income taxes under Section 115(1) of the Internal Revenue Code. The University also has a determination letter from the Internal Revenue Service stating it is exempt under Section 501(a) of the Internal Revenue Code as an organization described in Section 501(c)(3). Income generated from activities unrelated to the University's exempt purpose is subject to tax under Internal Revenue Code Section 511(a)(2)(B). There was no tax liability related to income generated from activities unrelated to the University's exempt purpose as of June 30, 2018 and 2017.

**BASIS OF ACCOUNTING**

For financial reporting purposes, the University is considered a special-purpose government engaged only in business-type activities. Accordingly, the University's financial statements have been prepared using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned, and expenses are recorded when an obligation is incurred.

The University applies all applicable Governmental Accounting Standards Board (GASB) pronouncements.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**ACCOUNTING POLICIES**

**Cash and Cash Equivalents** are defined for the purposes of reporting cash flows as cash on hand and deposit accounts. Investments in mutual funds and money market funds and securities are presented as investments. CU Medicine and the CU Foundation consider money market funds and securities with a maturity, when acquired, of three months or less to be cash equivalents.

**Investments** are reported in the financial statements at fair value, which is determined primarily based on quoted market prices as of June 30, 2018 and 2017. Contract value is used for the guaranteed investment agreement and amortized costs (which approximate fair value) are used for money market investments. These money market accounts are held with Securities and Exchange Commission (SEC) registered investment companies under Rule 2a7 of the Investment Company Act of 1940.

The classification of investments as current or noncurrent is based on the underlying nature and restricted use of the asset. Current investments are those without restrictions imposed by third parties that can be used to pay current obligations of the University. Noncurrent investments include investments with a maturity in excess of one year, restricted investments (which includes unspent bond proceeds), and those investments designated to be used for long-term obligations.

The University's investment policies permit investments in fixed-income and equity securities and alternative strategies. These policies are implemented using individual securities, mutual funds, commingled funds, and alternative investments for the endowments. All of the University's alternative investments are held at the CU Foundation and follow its valuation methods.

Investments of the CU Foundation include those held as agency funds for the University. The CU Foundation records investment purchases and contributions at the fair values of the investment received at the date of contribution. Investments in equity securities with readily determinable fair values and all investments in debt securities are stated at their fair values. The fair values of alternative investments not publicly traded on national security exchanges represent the CU Foundation's pro-rata interest in the net assets of each investment and are based on financial information determined and reported by investment managers, subject to review, evaluation, and adjustment by the management of the CU Foundation. Because of inherent uncertainties in the valuation of alternative investments, those estimated fair values may differ significantly from the values that would have been used had a ready market for the investments existed. Included in the investments portfolio are real estate and note receivable assets. These assets are stated at cost and present value, respectively.

Endowments and similar gift instruments owned by the University and the CU Foundation are primarily recorded as investments in the accompanying financial statements. Endowment funds are subject to the restrictions of donor gift instruments requiring the principal to be invested in perpetuity. Life income funds are used to account for cash or other property contributed to the University subject to the requirement that the University periodically pay the income earned on such assets to a designated beneficiary. The assets of life income funds become the property of the University or the CU Foundation upon the death of the designated beneficiary. Annuity funds are used to account for property contributed to the University or the CU Foundation in exchange for a promise to pay a fixed amount to the donor for a specified period of time. In addition, certain funds have been established by the Regents to function as endowment funds until the restrictions are lifted by the Regents. Gifts-in-kind are recorded at the fair market value as of the date of donation.

**Accounts, Contributions, and Loans Receivable** are recorded net of estimated uncollectible amounts, approximating anticipated losses.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

Contributions receivable for the CU Foundation are unconditional promises to give that are recorded at their estimated net realizable value, discounted using risk-free interest rates effective at the date of the promise to give, if expected to be collected within one year and at the present value of their expected future cash flows if expected to be collected in more than one year. Subsequent to the initial recording of the contribution receivable, the CU Foundation uses the allowance method to record amounts estimated to be uncollectible. The allowance is based on the historical collectability of contributions promised to the CU Foundation and on management's analysis of specific promises outstanding.

For all other receivables, individual accounts are written off against the allowance when collection of the account appears doubtful. Bad debts substantially consist of write-offs for uncollectible balances on self-pay patients and contributions receivable.

**Inventories** are primarily accounted for using the consumption method and are stated at the lower of cost or market. Cost is determined using either first-in, first-out, average cost, or retail method.

**Other Assets** consists of prepaid expenses, travel advances, and an option to purchase land.

**Capital Assets** are stated at cost at the date of acquisition or at acquisition value at the date of donation. For equipment, the capitalization policy includes all items with a value of \$5,000 or more, and an estimated useful life of greater than one year.

Intangibles and renovations to buildings and other improvements that significantly increase the value or extend the useful life of the structure are capitalized. For intangibles and renovations and improvements, the capitalization policy includes items with a value of \$75,000 or more. Routine repairs and maintenance are charged to operating expense. Major outlays for capital assets and improvements are capitalized as construction in progress throughout the building project. Interest incurred during the construction phase is included as part of the value of the construction in progress. Beginning July 1, 2017, interest was no longer capitalized (see *Adoption of New Accounting Standards* section of Note 1). Software, both externally purchased and internally developed, with a value of \$5,000 or more is capitalized.

All collections, such as works of art and historical artifacts, have been capitalized at cost at the date of acquisition or acquisition value at the date of donation. The nature of certain collections is such that the value and usefulness of the collections does not decrease over time. These collections have not been depreciated in the accompanying financial statements.

Assets under capital leases are recorded at the present value of future minimum lease payments and are amortized using the straight-line method over the shorter of the lease term or the estimated useful life. Such amortization is included as depreciation expense in the accompanying financial statements.

Depreciation is computed using the straight-line method and monthly convention over the estimated useful lives of the assets as displayed in Table 1.1.

**Table 1.1. Asset Useful Lives**

| <b>Asset Class</b>                | <b>Years</b> |
|-----------------------------------|--------------|
| Buildings                         | 20 – 40 *    |
| Improvements other than buildings | 10 – 40      |
| Equipment                         | 3 – 20       |
| Library and other collections     | 6 – 15       |
| Software                          | 5 – 10       |
| Intangibles                       | Varies       |

\* Certain buildings are componentized and the components may have useful lives similar to improvements or equipment.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Compensated Absences** and related personnel expenses are recognized based on estimated balances due to employees upon termination or retirement. The limitations on such payments are defined by the rules associated with the personnel systems at the University. Employees accrue and vest in vacation and sick leave earnings based on their hire date and length of service. Professional exempt and 12-month faculty employees accrue sick leave with pay at the rate of 10 hours per month with a maximum accrual of 960 hours while classified employees earn 6.67 hours per month with a maximum accrual of 360 hours for employees hired after June 30, 1988. Employees hired before June 30, 1988, can accrue up to 360 hours in excess of amount of sick leave earned as of June 30, 1988. Employees earn and accrue vacation leave per the rates in Table 1.2. Vacation accruals are paid in full upon separation, whereas only a portion of sick leave is paid upon specific types of separation, such as retirement.

**Table 1.2. Compensated Absence Accrual Rates for Vacation**

| <b>Type of Employee</b>                                | <b>Days Earned<br/>Per Month*</b> | <b>Maximum<br/>Accrual</b> |
|--------------------------------------------------------|-----------------------------------|----------------------------|
| Classified employees hired on or after January 1, 1968 | 1-1.75 days                       | 24 – 42 days               |
| Professional exempt and 12-month faculty employees     | 1.83 days                         | 44 days**                  |

\* Rates are for full-time employees; part-time employees earn at pro-rata based on percentage of appointment.

\*\* Vacation accrual in excess of 44 days, is deducted to meet the 44 day limit.

The liability for compensated absences is expected to be funded by various sources of revenue that are available in future years when the liability is paid.

**Other postemployment benefits (OPEB)** consist of post-retirement healthcare and life insurance benefits for retired employees. Substantially all University employees may become eligible for those benefits if they reach normal retirement age while working for the University. The University participates in both a single-employer plan as well as a cost-sharing plan. The University's contributions to the single-employer plan are made on a pay-as-you-go basis, and are set by statute for the cost-sharing plan. The University's liability is measured as the portion of the present value of projected benefit payments to be provided to active and inactive employees that is attributable to those employees' past period of service, less the amount of the plan's fiduciary net position, based on actuarial valuations. See Note 7 for more information on both plans.

**Unearned Revenue** consists of amounts received for the provision of education, research, auxiliary goods and services, and royalties that have not yet been earned.

**Bonds, Leases, and Notes Payable** are debt by borrowing or financing usually for the acquisition of buildings, equipment, or capital construction. Bonds are addressed in Note 9.

Capital leases consist of various lease-purchase contracts and other lease agreements. Such contracts provide that any commitments beyond the current year are contingent upon funds being appropriated for such purposes by the Regents. It is reasonably assured that such leases will be renewed in the normal course of business and, therefore, are treated as non-cancelable for financial reporting purposes.

**Split-interest Agreements** are beneficial interests in various agreements which include gift annuities, charitable remainder annuity trusts and unitrusts, and a pooled income fund. The CU Foundation typically serves as trustee, although certain trusts are administered by outside trustees.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

For trusts administered by the CU Foundation, specified earnings are typically paid to a named beneficiary. After termination of the trusts, the assets revert to the CU Foundation to create an endowment to support University activities or to be temporarily restricted for other purposes at the University. Assets received under such agreements are typically marketable equity and fixed-income securities, are recorded at their market value, and are included in investments in the accompanying financial statements. The estimated net present value of the obligation to named beneficiaries is recorded as a liability under split-interest agreements. A risk-free rate, using U.S. Treasury bonds at the date of the gift, is used in conjunction with actuarially determined life expectancies to calculate present values. The fair value of assets received in excess of the obligation is recognized as contribution revenue at the date of the gift. Changes in the value of the investments are combined with the changes in the estimated liability and are recorded in the accompanying financial statements.

In cases where a split-interest agreement is administered by an outside trustee, the CU Foundation records the estimated fair value of future cash flows from the trust as a contribution receivable from charitable remainder trusts at the point at which the CU Foundation becomes aware of its interest in the trust. Under certain circumstances, the CU Foundation accepts and manages trust funds for which the University or the CU Foundation has beneficial interest but is not the sole beneficiary of the trust. Funds received for which the University or the CU Foundation is not the ultimate beneficiary are included as other liabilities in the accompanying financial statements and are not included in contributions revenue.

**Custodial Funds** consist of funds held by the CU Foundation for endowments legally owned by other entities, including the University.

**Alternate Medicare Plan** is described in Note 15.

**Early Retirement Incentive Plan** is described in Note 15.

**Other Liabilities** are addressed in Note 10 and consist of risk financing, construction contract retainage, funds held for others, the Federal share of Perkins Loans, and miscellaneous.

Certain loans to students are administered by the University with funding primarily supported by the federal government. The University's statement of net position includes both the loans receivable and the related federal refundable loan liability representing federal capital contributions owed upon termination of the program.

**Deferred Outflows of Resources and Deferred Inflows of Resources.** Deferred outflows of resources represent consumption of net position that is applicable to a future period. Deferred inflows of resources represent acquisition of net position that is applicable to a future period. For the University, refunds related to debt defeasance are included in deferred outflows of resources. The deferred amount will be amortized over the remaining life of the debt refunded. Changes in net pension liability not included in pension expense, and changes in net OPEB liability not included in OPEB expense, are reported as deferred outflows of resources or deferred inflows of resources. Employer contributions subsequent to the measurement date are reported as deferred outflows of resources.

**Net Pension Liability** is the liability of the University, the employer, to employees for the PERA defined-benefit pension plan, which is measured as the portion of the present value of projected benefit payments to be provided through the pension plan to current active and inactive employees that is attributed to those employees' past periods of service (total pension liability), less the amount of the pension plan's fiduciary net position.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Net Position** is classified in the accompanying financial statements as follows:

*Net investment in capital assets* represents the total investment in capital assets, net of outstanding debt obligations related to those capital assets. To the extent debt has been incurred but not yet expended for capital assets, such amounts are not included as a component of net investment in capital assets.

*Restricted for nonexpendable purposes* consists of endowments and similar instruments in which donors or other outside sources have stipulated, as a condition of the gift instrument, that the principal is to be maintained inviolate and in perpetuity, and invested for the purpose of producing present and future income, which may either be expended or added to principal.

*Restricted for expendable purposes* represents net resources in which the University or the DPCU is legally or contractually obligated to spend resources in accordance with restrictions imposed by external third parties.

*Unrestricted net position* represents net resources derived from student tuition and fees, fee-for-service contracts, and sales and services of educational departments. These resources are used for transactions relating to the educational and general operations of the University and may be used at the discretion of the Regents to meet current expenses for any purpose. These resources also include those from auxiliary enterprises, which are substantially self-supporting activities that provide services for students, faculty, and staff.

**Internal Transactions** occur between University operating units, including its formal self-funded internal service units and blended component units. Examples of self-funded operating units are telecommunications, cogeneration, and storerooms. Transactions include the recognition of revenues, expenses, receivables, and payables in the appropriate accounts of the operating units. To accommodate external financial reporting, the internal revenues and receivables are netted against expenses and payables, respectively, and are eliminated at year end.

**Classification of Revenues and Expenses** in the accompanying financial statements has been made according to the following criteria:

*Operating revenues* are derived from activities associated with providing goods and services for instruction, research, public service, health services, or related support to entities separate from the University and that are exchange transactions. Examples include student tuition and fees, fee-for-service contracts, sales and services of auxiliary enterprises, healthcare and patient services, grants, and contracts. Tuition and fee revenue for sessions that are conducted over two fiscal years are allocated on a pro-rata basis. Operating revenues of the DPCU also include contributions, which are derived from their fundraising mission.

*Other operating revenues* include rental income, charges for services, transcript and diploma fees, other miscellaneous fees, and miscellaneous revenues from CU Medicine.

*Operating expenses* are paid to acquire or produce goods and services provided in return for operating revenues and to carry out the mission of the University.

*Nonoperating revenues and expenses* include all revenues and related expenses that do not meet the definition of operating revenues, capital revenues, or endowment additions. They are primarily derived from activities that are non-exchange transactions (e.g., gifts, including those from the CU Foundation), from activities defined as such by the GASB cash flow standards (e.g., investment income) and also federal funds allocated to state governments, such as the Pell Grant, and insurance recoveries.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Scholarship Allowances** are the difference between the stated charge for the goods and services provided by the University and the amount that is paid by the students or by other third parties making payments on the students' behalf. Tuition and fee revenue and certain other auxiliary enterprise revenues are reported net of scholarship allowance in the accompanying financial statements. Certain grants from external governmental and private programs are recorded as either operating or nonoperating revenues in the accompanying financial statements. To the extent that such grant revenues are used to satisfy tuition and fees and other student charges, the University records scholarship allowances. The student aid line under operating expenses represents the amount of financial aid disbursed to students net of the aid applied to the student's account to pay for tuition and fees.

**Health Services Revenue from Contractual Arrangements** is recognized by CU Medicine as a result of providing care to patients covered under various third parties such as Medicare and Medicaid, private insurance companies, and managed care programs, primarily from fixed-rate agreements. The federal and state governments annually update fixed-rate agreements for Medicare and Medicaid, respectively. In addition to the standard Medicaid program, CU Medicine provides substantial care to Medicaid patients under the Colorado Access program. Contractual arrangements with insurance companies and managed care plans are negotiated periodically for future years.

Health services revenue is reported at the estimated net realizable amounts due from third-party payers and others for services rendered. Net patient services revenue includes care provided to patients who meet certain criteria under CU Medicine's medically indigent care policy as reimbursed with funds provided by the State processed by UCH, and co-payments made by care recipients. In accordance with CU Medicine's mission and philosophy, CU Medicine members annually provide substantial levels of charity care to patients who meet certain defined criteria. Charity care relates to services rendered for which no payment is expected.

**Donor Restricted Endowment** disbursements of the net appreciation (realized and unrealized) of investments of endowment gifts are permitted by state law, except where a donor has specified otherwise. The amount of earnings and net appreciation available for spending by the University and the CU Foundation is based on a spending rate set by the CU Foundation board on an annual basis. For the years ended June 30, 2018 and 2017, the authorized spending rate was equal to 4 percent of the endowment's trailing 36-month average fair market value as of December 31 for the year preceding the distribution.

Earnings in excess of the amount authorized for spending are available in future years and are included in the value of the related investment. Earnings authorized to be spent are recognized in the University's financial statements as investment or gift revenue for University or CU Foundation-owned endowments, respectively. As of June 30, 2018 and 2017, there was \$16,111,000 and \$15,045,000, respectively, in net appreciation of investments available for authorization for expenditure as reported in restricted expendable net position.

**Application of Restricted and Unrestricted Resources** is made on a case-by-case basis by management depending on overall program resources.

**Use of Estimates** is made in order to prepare financial statements in conformity with accounting principles generally accepted in the United States of America. Management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expense during the reporting period. Actual results could differ significantly from those estimates.

**Reclassifications** of certain prior year balances have been made to conform to the current year's financial statement presentation.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**ADOPTION OF NEW ACCOUNTING STANDARDS**

Effective July 1, 2017, the University adopted the provisions of GASB Statement No. 75 *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (Statement No. 75). Statement No. 75 replaces the requirements of GASB Statement No. 45 *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, as amended* (Statement No. 45). Statement No. 75 addresses accounting and financial reporting for OPEB and establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense.

The University participates in two types of OPEB plans – a single employer plan and a cost-sharing plan administered by the Public Employees' Retirement Association of Colorado (PERA). Statement No. 75 requires the liability of employers for defined benefit (net OPEB liability) to be actuarially measured as the portion of the present value of projected benefit payments to be provided to active and inactive employees that is attributable to those employees' past period of service (total OPEB liability), less the amount of the OPEB plan's fiduciary net position. The University does not maintain assets in a trust for the single-employer plan so the total OPEB liability and net OPEB liability are equal.

As of June 30, 2017 (Fiscal Year 2017), the University recorded an OPEB liability of \$343,570,000 for its single-employer plan based on the guidance prescribed in Statement No. 45. The adoption of Statement No. 75 increased the estimated OPEB liability for the single employer plan at July 1, 2017 to \$820,297,000. The increase in the OPEB liability and corresponding decrease in unrestricted net position offset by contributions made after the measurement date has been recorded as a cumulative effect adjustment in Fiscal Year 2018 of \$459,516,000. Statement No. 75 was not implemented retroactively as information required from PERA for the cost-sharing plan was not available.

As noted above, the University also participates in PERA's postemployment benefit plan referred to as PERACare, which is a cost-sharing multiple-employer defined benefit plan. As such, the University is now required to record its proportionate share of the unfunded liability for this plan. As of July 1, 2017, the net OPEB liability for PERACare per PERA was \$1,297,000,000. The University's proportionate share, based on its contributions to the plan in relation to total plan contributions was \$49,379,000. PERA's fiscal year end is December 31 and contributions subsequent to that date are considered a deferred outflow for financial reporting purposes. The University's deferred outflow related to PERACare at July 1, 2017 was \$1,287,000, resulting in a decrease to beginning unrestricted net position of \$48,092,000, which is reported as part of the cumulative effect of adoption of Statement No. 75.

The University also adopted the provisions of GASB Statement No. 81 *Irrevocable Split-Interest Agreements* (Statement No. 81) effective July 1, 2017. Statement No. 81 requires a government that receives resources pursuant to an irrevocable split-interest agreement recognize assets, liabilities, and deferred inflows of resources at the inception of the agreement. Furthermore, Statement No. 81 requires a government recognize assets representing its beneficial interests in irrevocable split-interest agreements that are administered by a third party. The impact of adoption of Statement No. 81 was a decrease of \$1,705,000 to beginning net position restricted for nonexpendable purposes. Fiscal Year 2017 was not adjusted for the adoption of Statement No. 81 as the amount is not considered material to the University's financial statements.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

In summary, the adoption of these standards resulted in the following changes to beginning net position, OPEB liability, and deferred outflows and inflows of resources:

**Table 1.3. Impact of New Accounting Statements (in thousands)**

|                                                           |                     |
|-----------------------------------------------------------|---------------------|
| Beginning net position, as previously reported            | \$ 2,358,412        |
| <b>GASB 75 implementation</b>                             |                     |
| Reversal of OPEB under GASB 45                            | 343,570             |
| Less: beginning balance of University OPEB plan           | (820,297)           |
| Less: beginning balance of PERACare                       | (49,379)            |
| Plus related deferred outflows                            | 18,498              |
| <b>GASB 81 implementation</b>                             |                     |
| Less: related deferred inflow                             | (1,705)             |
| Cumulative effect of adoption of new accounting standards | (509,313)           |
| <b>Beginning net position, as restated</b>                | <b>\$ 1,849,099</b> |

Effective July 1, 2017, the University early-implemented the provisions of GASB Statement No. 89 *Accounting for Interest Cost Incurred before the End of a Construction Period* (Statement No. 89). Statement No. 89 requires interest costs incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset. Statement No. 89 is to be applied prospectively so there is no prior period adjustment. Approximately \$10,198,000 of interest cost that would have been capitalized under previous guidance was expensed in Fiscal Year 2018.

**NOTE 2 – CASH AND CASH EQUIVALENTS**

The University's cash and cash equivalents are detailed in Table 2, Cash and Cash Equivalents.

**Table 2. Cash and Cash Equivalents (in thousands)**

|                                                     | <b>2018</b>       | <b>2017</b>   |
|-----------------------------------------------------|-------------------|---------------|
| Cash on hand (petty cash and change funds)          | \$ 352            | 370           |
| Deposits with U.S. financial institutions           | 133,286           | 89,534        |
| Deposits with foreign financial institutions        | 24                | 72            |
| <b>Total Cash and Cash Equivalents – University</b> | <b>\$ 133,662</b> | <b>89,976</b> |

Custodial credit risk for deposits is the risk that in the event of a bank failure, the University's deposits may not be returned to it. To manage custodial credit risk, deposits with U.S. and foreign financial institutions are made in accordance with University and State policy, including the Public Deposit Protection Act (PDPA). PDPA requires all eligible depositories holding public deposits to pledge designated eligible collateral having market value equal to at least 102 percent of the deposits exceeding those amounts insured by federal depository insurance. Deposits collateralized under the PDPA are considered to be collateralized with securities held by the pledging institution in the University's name. As of June 30, 2018 and 2017, \$212,000 and \$688,000, respectively, of the cash held by CUPCO was uninsured and uncollateralized. Deposits with foreign financial institutions are not PDPA-eligible deposits and thus are exposed to custodial credit risk and require separate authorization as depositories by the State. During the years ended June 30, 2018 and 2017, all deposits with foreign financial institutions were authorized.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**NOTE 3 – INVESTMENTS**

The University's investments generally include direct obligations of the U.S. government and its agencies, money market funds, municipal and corporate bonds, asset-backed securities, mutual funds, collective investment trust funds, repurchase agreements, corporate equities and alternative non-equity securities. CU Foundation investments are similar to the University's but also include alternative non-equity securities in hedge funds and commodities. Endowments are pooled to the extent possible under gift agreements. The CU Foundation manages certain of these endowments for the University in accordance with its investment policy.

To the extent permitted, and excluding the University's blended entities, the University pools cash balances for investment purposes. An investment policy statement approved by the Regents directs the Treasurer of the University to meet the following investment objectives:

- liquidity for daily operations,
- protection of the nominal value of assets, and
- generation of distributable earnings at a level commensurate with the time horizon of the investments.

For financial statement purposes, investment income (loss) is reported on a total return basis and is allocated among operational units based on average daily balances, using amortized costs. Average daily balances, based on amortized costs, approximated \$1,769,447,000 and \$1,718,163,000 for the years ended June 30, 2018 and 2017, respectively. The total return on this pool (excluding blended component units) was 7.32 percent and 9.99 percent for the years ended June 30, 2018 and 2017, respectively.

**FAIR VALUE MEASUREMENTS**

The University categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles (GAAP). Under Statement No. 72 *Fair Value Measurement and Application* (Statement No. 72) fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction. In determining this amount, three valuation techniques are available:

- Market approach – This technique uses prices generated for identical or similar assets or liabilities. The most common example is an investment in public security traded in an active exchange such as the New York Stock Exchange.
- Cost approach – The cost approach determines the amount required to replace the current asset and may be ideal for valuing donations of capital assets or historical treasures.
- Income approach – This technique converts future amounts (such as cash flows) into a current discounted amount.

Each of these valuation techniques requires inputs to calculate a fair value. Observable inputs should be maximized in fair value measures, and unobservable inputs should be minimized.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

Statement No. 72 establishes a hierarchy of inputs to the valuation techniques above. This hierarchy has three levels:

- Level 1 – Quoted prices in active markets for identical assets or liabilities. Example: ownership in shares of a mutual fund company that is publicly traded.
- Level 2 – Quoted market prices for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or other-than-quoted prices that are not observable. Example: ownership of a corporate bond that trades on an exchange that is not active.
- Level 3 – Unobservable inputs. Example: ownership in a private hedge fund that does not trade on a public exchange.

The University owns an interest in two collective investment trust funds. These trust funds own investment assets, but the University owns an interest in the private trust itself rather than an interest in each underlying asset. Therefore, the unit of account is the University's ownership interest in the trust, rather than a percentage in individual assets held by the trust. The assets could be sold at an amount different than the Net Asset Value (NAV) per share (or its equivalent) due to the liquidation policies in each of the respective trusts' agreements with the investors. Redemption frequencies for these funds range from one to 30 days and there were no unfunded commitments as of June 30, 2018 and 2017.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

The fair value measurements as of June 30, 2018 and June 30, 2017 for the University are included in Table 3.1.

**Table 3.1. Investments - University (in thousands)**

| <b>Investment Type</b>                |    | <b>Level 1</b> | <b>Level 2</b> | <b>Level 3</b> | <b>2018 Total</b>   |
|---------------------------------------|----|----------------|----------------|----------------|---------------------|
| U.S. government securities            | \$ | 262,537        | 243,653        | 2,115          | 508,305             |
| Corporate bonds                       |    | 74,977         | 238,208        | 202            | 313,387             |
| Corporate equities                    |    | 5,526          | -              | -              | 5,526               |
| Mortgages                             |    | 47,696         | 94,401         | -              | 142,097             |
| Municipal bonds                       |    | 108            | 15,171         | -              | 15,279              |
| Mutual funds                          |    | 808,441        | 1,269          | 214            | 809,924             |
| Certificates of deposit               |    | 240            | -              | -              | 240                 |
| CU Foundation                         |    | -              | -              | 428,310        | 428,310             |
| Asset-backed securities               |    | 1,356          | 80,804         | 814            | 82,974              |
| Alternative non-equity securities:    |    |                |                |                |                     |
| Real estate                           |    | 397            | 46             | 9              | 452                 |
|                                       |    | 1,201,278      | 673,552        | 431,664        | 2,306,494           |
| Measured at NAV:                      |    |                |                |                |                     |
| Equity trusts                         |    |                |                |                | 244,379             |
| Measured at amortized cost:           |    |                |                |                |                     |
| Money market funds                    |    |                |                |                | 223,111             |
| Measured at cost:                     |    |                |                |                |                     |
| Private equity securities             |    |                |                |                | 650                 |
| Measured at contract value:           |    |                |                |                |                     |
| Guaranteed investment agreement       |    |                |                |                | 5,165               |
| <b>Total Investments – University</b> |    |                |                |                | <b>\$ 2,779,799</b> |
| <b>Investment Type</b>                |    | <b>Level 1</b> | <b>Level 2</b> | <b>Level 3</b> | <b>2017 Total</b>   |
| U.S. government securities            | \$ | 218,024        | 81,210         | -              | 299,234             |
| Corporate bonds                       |    | 59,508         | 223,336        | -              | 282,844             |
| Corporate equities                    |    | 3,410          | -              | -              | 3,410               |
| Mortgages                             |    | 31,391         | 67,913         | -              | 99,304              |
| Municipal bonds                       |    | -              | 16,238         | -              | 16,238              |
| Mutual funds                          |    | 626,557        | 164            | 166            | 626,887             |
| CU Foundation                         |    | -              | -              | 391,721        | 391,721             |
| Asset-backed securities               |    | 1,675          | 107,907        | 906            | 110,488             |
| Alternative non-equity securities:    |    |                |                |                |                     |
| Absolute return fund                  |    | 105            | 31             | -              | 136                 |
| Real estate                           |    | 319            | -              | 5              | 324                 |
| Other                                 |    | -              | -              | 10             | 10                  |
|                                       |    | 940,989        | 496,799        | 392,808        | 1,830,596           |
| Measured at NAV:                      |    |                |                |                |                     |
| Fixed income trusts                   |    |                |                |                | 42,923              |
| Equity trusts                         |    |                |                |                | 346,474             |
| Measured at amortized cost:           |    |                |                |                |                     |
| Money market funds                    |    |                |                |                | 362,057             |
| Measured at contract value:           |    |                |                |                |                     |
| Guaranteed investment agreement       |    |                |                |                | 5,165               |
| Investments not requiring fair value: |    |                |                |                |                     |
| Repurchase agreements                 |    |                |                |                | 20,226              |
| <b>Total Investments – University</b> |    |                |                |                | <b>\$ 2,607,441</b> |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

Details of investments by type for the CU Foundation are included in Table 3.2.

**Table 3.2. Investments - CU Foundation (in thousands)**

| <b>Investment Type</b>                   | <b>2018</b>         | <b>2017</b>      |
|------------------------------------------|---------------------|------------------|
| Cash equivalents                         | \$ 12,286           | 31,069           |
| Equity securities:                       |                     |                  |
| Domestic                                 | 359,814             | 354,928          |
| International                            | 484,965             | 443,189          |
| Fixed-income securities                  | 199,581             | 205,382          |
| Alternative non-equity securities:       |                     |                  |
| Real estate                              | 70,343              | 70,818           |
| Private equity                           | 348,137             | 283,742          |
| Hedge funds                              | -                   | 23,789           |
| Absolute return funds                    | 257,316             | 176,029          |
| Venture capital                          | 96,753              | 67,477           |
| Commodities                              | 12,239              | 30,424           |
| Other                                    | 6,116               | 2,253            |
| <b>Total Investments – CU Foundation</b> | <b>\$ 1,847,550</b> | <b>1,689,100</b> |

### **CUSTODIAL CREDIT RISK**

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty, the University will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Therefore, exposure arises if the securities are uninsured, not registered in the University's name, and are held by either the counterparty to the investment purchase or the counterparty's trust department or agent but not in the University's name. Open-ended mutual funds and certain other investments are not subject to custodial risk because ownership of the investment is not evidenced by a security. The private equity securities held by ULEHI of \$650,000 are exposed to custodial credit risk. None of the University's other investments are subject to custodial risk.

### **CREDIT QUALITY RISK**

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Credit risk only applies to debt investments. This risk is assessed by national rating agencies, which assign a credit quality rating for many investments. The University's investment policies for the Treasury pool do not permit investments in debt securities that are below investment grade at the time the security is purchased. University policy allows no more than 20 percent of investments to be rated below Baa (Moody's) or BBB (Standard & Poor's (S&P) and Fitch) at the time of purchase. There are two other investment policies tailored to non-pooled investments. Those policies do not restrict investments to a particular credit quality standard. Credit quality ratings are not required for obligations of the U.S. government or obligations explicitly guaranteed by the U.S. Government. The CU Foundation does not have a policy concerning credit quality risk. A summary of the University's debt investments and credit quality risk as of June 30, 2018, and 2017 is shown in Table 3.3. The University, which includes CU Medicine, obtains ratings from both Moody's and S&P, and primarily reflects the Moody's ratings in Table 3.3 unless S&P is lower. Table 3.3 is a subset of Table 3.1 and does not include \$1,416,009,000 of non-debt securities and \$413,801,000 of debt investments that are backed by the full faith and credit of the U.S. government as of June 30, 2018, and does not include \$1,269,221,000 of non-debt securities and \$211,857,000 of debt investments that are backed by the full faith and credit of the U.S. government as of June 30, 2017.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 3.3. Debt Investments and Credit Quality Risk - University (in thousands)**

| Investment Type                 | 2018              |                |                                                | 2017              |                |                                                 |
|---------------------------------|-------------------|----------------|------------------------------------------------|-------------------|----------------|-------------------------------------------------|
|                                 | Unrated           | Rated          |                                                | Unrated           | Rated          |                                                 |
|                                 | Fair Value        | Fair Value     | % of Rated Value by Credit Rating              | Fair Value        | Fair Value     | % of Rated Value by Credit Rating               |
| U.S. government securities      | \$ 129,820        | 106,781        | 100% Aaa/Aa                                    | \$ 77,348         | 109,333        | 100% Aaa                                        |
| Bond mutual funds               | 50,221            | -              | -                                              | 133,189           | -              | -                                               |
| Certificates of deposit         | 240               | -              | -                                              | -                 | -              | -                                               |
| Corporate bonds                 | 44,048            | 269,339        | 62% Aaa/Aa/A<br>37% Baa/Ba/B<br>1% C/D         | 51,732            | 231,112        | 57% Aaa/Aa/A<br>42% Baa/Ba/B<br>1% C/D          |
| Money market mutual funds       | -                 | 246,122        | 100% Aaa                                       | -                 | 371,532        | 100% Aaa                                        |
| Municipal bonds                 | 627               | 14,652         | 82% Aaa<br>18% Aa/A                            | 429               | 15,809         | 76% Aaa<br>24% Aa/A                             |
| Repurchase agreements           | -                 | -              | -                                              | 20,226            | -              | -                                               |
| Guaranteed investment agreement | -                 | 5,165          | 100% Aa3                                       | -                 | 5,165          | 100% Aa3                                        |
| Asset-backed securities         | 779               | 82,195         | 88% Aaa<br>6% Aa/A<br>5% Baa/Ba/B<br>1% Caa/Ca | 725               | 109,763        | 70% Aaa<br>25% Aa/A<br>4% Baa/Ba/B<br>1% Caa/Ca |
| <b>Total Debt Investments</b>   | <b>\$ 225,735</b> | <b>724,254</b> |                                                | <b>\$ 283,649</b> | <b>842,714</b> |                                                 |

## INTEREST RATE RISK

Interest rate risk is the risk that changes in the market rate of interest will adversely affect the value of an investment. Interest rate risk only applies to debt investments. The University manages interest rate risk using weighted average maturity. Weighted average maturity is a measure of the time to maturity in years that has been weighted to reflect the dollar size of the individual investment within an investment type. The University's investment policy mitigates interest rate risk through the use of maturity limits for each of the investment segment pools.

A summary of the fair value of the University's debt investments and interest rate risk as of June 30, 2018 and 2017 is shown in Table 3.4. Table 3.4 is a subset of Table 3.1 and does not include \$1,662,131,000 of non-debt securities as of June 30, 2018, and does not include \$1,640,754,000 of non-debt securities as of June 30, 2017. The main difference in the amount of non-debt securities excluded in Table 3.3 and Table 3.4 is that money-market mutual funds are included in Table 3.3 as they have credit risk but they are excluded from Table 3.4 as they do not have interest rate risk. Also, U.S. government securities are not subject to credit risks but are subject to interest rate risks and are included here but not in the credit quality risk section.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 3.4. Debt Investments and Interest Rate Risk *(in thousands and years)***

| Investment Type                            | 2018                |                                 | 2017              |                                 |
|--------------------------------------------|---------------------|---------------------------------|-------------------|---------------------------------|
| <i>University</i>                          | Amount              | Weighted<br>Average<br>Maturity | Amount            | Weighted<br>Average<br>Maturity |
| U.S. government securities                 | \$ 508,304          | 6.33                            | \$ 299,233        | 9.71                            |
| Bond mutual funds                          | 50,221              | 5.34                            | 133,189           | 3.51                            |
| Certificates of deposit                    | 240                 | 2.34                            | -                 | -                               |
| Corporate bonds                            | 313,387             | 7.96                            | 282,844           | 8.36                            |
| Municipal bonds                            | 15,279              | 8.92                            | 16,238            | 9.31                            |
| Repurchase agreements                      | -                   | -                               | 20,226            | 1.50                            |
| Guaranteed investment agreement            | 5,165               | 0.09                            | 5,165             | 20.93                           |
| Fixed rate asset-backed securities         | 62,037              | 5.27                            | 94,278            | 5.20                            |
| Variable rate asset-backed securities      | 20,937              | 21.53                           | 16,210            | 21.68                           |
| Collateralized mortgage obligations        | 142,098             | 10.55                           | 99,305            | 13.67                           |
| <b>Total Debt Investments – University</b> | <b>\$ 1,117,668</b> |                                 | <b>\$ 966,688</b> |                                 |

The University has investments in asset-backed securities, which consist mainly of mortgages, home equity loans, student loans, automobile loans, equipment trusts, and credit card receivables. These securities are based on cash flows from principal and interest payments on the underlying securities. An asset-backed security has repayments that are expected to significantly vary with interest rate changes. The variance may present itself in terms of variable repayment amounts and uncertain early or extended repayments.

#### **CONCENTRATION OF CREDIT RISK**

Concentration of credit risk is the risk of loss attributed to magnitude of an entity's investment in a single issuer other than the federal government. The University's policy is that exposure of the portfolio to any one issuer, other than securities of the U.S. government or agencies, or government-sponsored corporations, shall not exceed 10 percent of the market value of the fixed income portfolio. The University had no investments exceeding 5 percent and is therefore not subject to concentration of credit risk.

#### **SPLIT-INTEREST AGREEMENTS**

Assets held by the CU Foundation under split-interest agreements are included in investments and consisted of the following as of June 30, 2018 and 2017, as shown in Table 3.5.

**Table 3.5. CU Foundation Investments Held under Split-interest Agreements *(in thousands)***

| Type                                                          | 2018             | 2017          |
|---------------------------------------------------------------|------------------|---------------|
| Assets held in charitable remainder trusts                    | \$ 36,339        | 36,198        |
| Assets held in charitable lead trusts                         | 2,738            | 3,054         |
| Assets held in life interest in real estate                   | 3,330            | 3,330         |
| Assets held in pooled income funds                            | 166              | 168           |
| <b>Total Investments Held under Split-interest Agreements</b> | <b>\$ 42,573</b> | <b>42,750</b> |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**NOTE 4 – ACCOUNTS AND LOANS RECEIVABLE**

Table 4.1 segregates receivables as of June 30, 2018 and 2017, by type.

**Table 4.1. Accounts and Loans Receivable (in thousands)**

| Type of Receivable                   | 2018              |               |                 |                     |
|--------------------------------------|-------------------|---------------|-----------------|---------------------|
|                                      | Gross Receivables | Allowance     | Net Receivables | Net Current Portion |
| <b>University</b>                    |                   |               |                 |                     |
| Student accounts                     | \$ 69,436         | 23,751        | 45,685          | 45,593              |
| Federal government                   | 43,434            |               | 43,434          | 43,434              |
| Other governments                    | 53,969            |               | 53,969          | 53,969              |
| Private sponsors                     | 60,013            |               | 60,013          | 60,013              |
| Patient accounts                     | 169,453           | 16,937        | 152,516         | 152,516             |
| CU Foundation                        | 4,832             | -             | 4,832           | 4,832               |
| Interest                             | 3,598             | -             | 3,598           | 3,598               |
| Direct financing lease               | 20,460            | -             | 20,460          | 17,952              |
| PAC-12 distribution                  | 3,763             | -             | 3,763           | 3,763               |
| Other                                | 17,400            | 1,165         | 16,235          | 264                 |
| Total accounts receivable            | 446,358           | 41,853        | 404,505         | 385,934             |
| Loans                                | 41,942            | 2,896         | 39,046          | 2,442               |
| <b>Total Receivable – University</b> | <b>\$ 488,300</b> | <b>44,749</b> | <b>443,551</b>  | <b>388,376</b>      |
| Type of Receivable                   | 2017              |               |                 |                     |
|                                      | Gross Receivables | Allowance     | Net Receivables | Net Current Portion |
| <b>University</b>                    |                   |               |                 |                     |
| Student accounts                     | \$ 70,129         | 25,849        | 44,280          | 44,280              |
| Federal government                   | 67,114            | -             | 67,114          | 67,114              |
| Other governments                    | 31,137            | -             | 31,137          | 31,137              |
| Private sponsors                     | 49,955            | -             | 49,955          | 49,938              |
| Patient accounts                     | 112,198           | 7,480         | 104,718         | 104,717             |
| CU Foundation                        | 13,295            | -             | 13,295          | 13,295              |
| Interest                             | 2,851             | -             | 2,851           | 2,851               |
| Direct financing lease               | 21,500            | -             | 21,500          | 751                 |
| PAC-12 distribution                  | 4,276             | -             | 4,276           | 4,276               |
| Other                                | 21,918            | 1,158         | 20,760          | 20,760              |
| Total accounts receivable            | 394,373           | 34,487        | 359,886         | 339,119             |
| Loans                                | 40,949            | 3,294         | 37,655          | 15,542              |
| <b>Total Receivable – University</b> | <b>\$ 435,322</b> | <b>37,781</b> | <b>397,541</b>  | <b>354,661</b>      |

**CONCENTRATION OF CREDIT RISK – PATIENT ACCOUNTS**

CU Medicine grants credit without collateral to its patients. The mix of gross receivables from patients and third-party payers as of June 30, 2018 and 2017 is detailed in Table 4.2.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 4.2. CU Medicine Concentration of Credit Risk**

| <b>Category</b>          | <b>2018</b>    | <b>2017</b>    |
|--------------------------|----------------|----------------|
| Managed care             | 44.8 %         | 49.3 %         |
| Medicare                 | 15.7           | 13.8           |
| Medicaid                 | 16.7           | 26.5           |
| Other third-party payers | 8.5            | 6.5            |
| Self-pay                 | 14.3           | 3.9            |
| <b>Total</b>             | <b>100.0 %</b> | <b>100.0 %</b> |

**NOTE 5 – CAPITAL ASSETS**

Table 5 presents changes in capital assets and accumulated depreciation by major asset category for the years ended June 30, 2018 and 2017.

Interest expense related to capital asset debt incurred by the University during the years ended June 30, 2018 and 2017 approximated \$66,721,000 and \$69,808,000, respectively. Of this amount, approximately \$2,769,000 was capitalized as part of the value of construction in progress in Fiscal Year 2017, prior to the adoption of Statement No. 89 in Fiscal Year 2018.

The University had insurance recoveries of \$1,707,000 and \$1,930,000 in the years ended June 30, 2018 and 2017, respectively, which are included in nonoperating revenues.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 5. Capital Assets (*in thousands*)**

| Category                            | 2017                | Additions     | Retirements/<br>Adjustments | Transfers | 2018             |
|-------------------------------------|---------------------|---------------|-----------------------------|-----------|------------------|
| Nondepreciable capital assets       |                     |               |                             |           |                  |
| Land                                | \$ 84,964           | 1,561         | 600                         | -         | 85,925           |
| Construction in progress            | 320,025             | 224,648       | 9,022                       | (186,714) | 348,937          |
| Collections                         | 17,672              | 989           |                             | -         | 18,661           |
| Total nondepreciable capital assets | 422,661             | 227,198       | 9,622                       | (186,714) | 453,523          |
| Depreciable capital assets          |                     |               |                             |           |                  |
| Buildings                           | 4,007,406           | 1,359         | 462                         | 137,346   | 4,145,649        |
| Improvements other than buildings   | 259,135             | 19            | 870                         | 43,273    | 301,557          |
| Equipment                           | 546,890             | 44,280        | 22,490                      | 6,095     | 574,775          |
| Software                            | 92,655              | 3,556         | 513                         | -         | 95,698           |
| Other intangibles                   | 1,910               | -             | -                           | -         | 1,910            |
| Library and other collections       | 395,879             | 15,761        | 2,678                       | -         | 408,962          |
| Total depreciable capital assets    | 5,303,875           | 64,975        | 27,013                      | 186,714   | 5,528,551        |
| Less accumulated depreciation       |                     |               |                             |           |                  |
| Buildings                           | 1,303,510           | 131,308       | 189                         | -         | 1,434,629        |
| Improvements other than buildings   | 125,961             | 11,846        | 823                         | -         | 136,984          |
| Equipment                           | 400,165             | 41,672        | 20,113                      | -         | 421,724          |
| Software                            | 81,008              | 4,255         | 138                         | -         | 85,125           |
| Other intangibles                   | 402                 | 76            | -                           | -         | 478              |
| Library and other collections       | 284,928             | 17,793        | 2,678                       | -         | 300,043          |
| Total accumulated depreciation      | 2,195,974           | 206,950       | 23,941                      | -         | 2,378,983        |
| Net depreciable capital assets      | 3,107,901           | (141,975)     | 3,072                       | 186,714   | 3,149,568        |
| <b>Total Net Capital Assets</b>     | <b>\$ 3,530,562</b> | <b>85,223</b> | <b>12,694</b>               | <b>-</b>  | <b>3,603,091</b> |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 5. Capital Assets (in thousands)**

| Category                            | 2016                | Additions      | Retirements/<br>Adjustments | Transfers | 2017             |
|-------------------------------------|---------------------|----------------|-----------------------------|-----------|------------------|
| Nondepreciable capital assets       |                     |                |                             |           |                  |
| Land                                | \$ 65,374           | 19,634         | 44                          | -         | 84,964           |
| Construction in progress            | 274,770             | 252,872        | 7,764                       | (199,853) | 320,025          |
| Collections                         | 17,281              | 598            | 207                         | -         | 17,672           |
| Total nondepreciable capital assets | 357,425             | 273,104        | 8,015                       | (199,853) | 422,661          |
| Depreciable capital assets          |                     |                |                             |           |                  |
| Buildings                           | 3,766,705           | 57,191         | 11                          | 183,521   | 4,007,406        |
| Improvements other than buildings   | 251,963             | 975            | 5,020                       | 11,217    | 259,135          |
| Equipment                           | 504,054             | 54,141         | 16,420                      | 5,115     | 546,890          |
| Software                            | 90,802              | 1,853          | -                           | -         | 92,655           |
| Other intangibles                   | 1,910               | -              | -                           | -         | 1,910            |
| Library and other collections       | 379,155             | 19,289         | 2,565                       | -         | 395,879          |
| Total depreciable capital assets    | 4,994,589           | 133,449        | 24,016                      | 199,853   | 5,303,875        |
| Less accumulated depreciation       |                     |                |                             |           |                  |
| Buildings                           | 1,158,302           | 128,609        | (15,164)                    | 1,435     | 1,303,510        |
| Improvements other than buildings   | 116,768             | 12,720         | 2,092                       | (1,435)   | 125,961          |
| Equipment                           | 371,419             | 39,504         | 10,758                      | -         | 400,165          |
| Software                            | 76,816              | 4,165          | (27)                        | -         | 81,008           |
| Other intangibles                   | 324                 | -              | (78)                        | -         | 402              |
| Library and other collections       | 269,794             | 17,940         | 2,806                       | -         | 284,928          |
| Total accumulated depreciation      | 1,993,423           | 202,938        | 387                         | -         | 2,195,974        |
| Net depreciable capital assets      | 3,001,166           | (69,489)       | 23,629                      | 199,853   | 3,107,901        |
| <b>Total Net Capital Assets</b>     | <b>\$ 3,358,591</b> | <b>203,615</b> | <b>31,644</b>               | <b>-</b>  | <b>3,530,562</b> |

**NOTE 6 – ACCRUED EXPENSES AND COMPENSATED ABSENCES**

Table 6.1 details the accrued expenses as of June 30, 2018 and 2017 by type.

**Table 6.1 Accrued Expenses (in thousands)**

| Type                          | 2018              | 2017           |
|-------------------------------|-------------------|----------------|
| <i>University</i>             |                   |                |
| Accrued salaries and benefits | \$ 113,654        | 259,583        |
| Accrued interest payable      | 4,403             | 4,270          |
| Other accrued expenses        | 1,654             | 1,439          |
| <b>Total Accrued Expenses</b> | <b>\$ 119,711</b> | <b>265,292</b> |

Table 6.2 presents changes in compensated absences for the years ended June 30, 2018 and 2017.

**Table 6.2 Compensated Absences (in thousands)**

|                              | 2018              | 2017           |
|------------------------------|-------------------|----------------|
| Beginning of year            | \$ 226,758        | 204,028        |
| Additions                    | 277,138           | 226,573        |
| Reductions                   | (254,160)         | (203,843)      |
| <b>End of year</b>           | <b>\$ 249,736</b> | <b>226,758</b> |
| Current compensated absences | 16,155            | 16,483         |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**NOTE 7 – OTHER POSTEMPLOYMENT BENEFITS (OPEB)**

The University participates in two types of OPEB plans – a single employer plan and a cost-sharing plan administered by PERA.

The University-administered single-employer postemployment benefit (non-pension) program, was established by the Regents who have the authority to amend the program provisions. Under this program, the University subsidizes a portion of healthcare and life insurance premiums for retirees on a pay-as-you-go basis. This program does not issue a separate financial report. As mentioned in Note 1, the University adopted the provisions of Statement No. 75 in Fiscal Year 2018.

**Funded Status and Funding Progress.** There are no assets accumulating in a trust for the University's OPEB plan. The University contributed \$19,304,000 and \$17,211,000 for the years ended June 30, 2018 and 2017, respectively.

The actuarial valuation for the fiscal year ending June 30, 2018 had a measurement date of June 30, 2017. All employees are eligible based on age and years of service. Based on the March 1, 2017 participant data, there were 19,146 participants in the medical/dental plan, with 17,143 active employees and 2,003 retirees and beneficiaries, and 23,984 participants in the life insurance plan, with 20,315 active employees and 3,669 retirees and beneficiaries.

The University recognized \$59,631,000 in OPEB expense for this plan in Fiscal Year 2018. Table 7.1 provides the details regarding the University's total OPEB plan liability from June 30, 2017 to June 30, 2018.

**Table 7.1. Reconciliation of University's OPEB Liability (*in thousands*)**

|                                                           | <b>Total OPEB Liability</b> |
|-----------------------------------------------------------|-----------------------------|
| <b>Balance recognized at June 30, 2017</b>                | \$ 343,570                  |
| Cumulative effect of adoption of new accounting principle | 476,727                     |
| <b>Changes recognized for the fiscal year:</b>            |                             |
| Service cost                                              | 53,099                      |
| Interest on total OPEB liability                          | 24,648                      |
| Differences between expected and actual experience        | (87,654)                    |
| Changes of assumption                                     | (46,406)                    |
| Benefit payments                                          | (17,211)                    |
| Net changes                                               | (73,524)                    |
| <b>Balance recognized at June 30, 2018</b>                |                             |
| (based on June 30, 2017 measurement date)                 | \$ 746,773                  |

**Actuarial Methods and Assumptions.** Actuarial valuations of an ongoing program involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Projections of benefits for financial reporting purposes are based on the substantive program (the program as understood by the employer and the program members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and program members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

The entry age normal actuarial cost method is used. The discount rate used in the valuation is 3.60 percent as of the June 30, 2017 measurement date, and 2.85 percent as of the June 30, 2016 measurement date, and is based on the Bond Buyer General Obligation 20-Bond Municipal Bond Index. The healthcare trend assumption reflects healthcare cost inflation expected to impact the plan based on forecast information in published papers from industry experts (actuaries, health economists, etc.). This research suggests a 7.00 percent long-term average increase for medical benefits, and an 11 percent increase for prescriptions, both trending down to a 4.50 percent increase for 2027 and later years. The dental trend rate is 4.00 percent, and the administrative expenses trend rate is 3.00 percent. The RP-2014 Healthy Annuitant Mortality Table with adjustments for credibility and gender adjustments of a 73 percent factor applied to the rates for ages below 80 and a 108 percent factors applied to the rates for ages 80 and above, projected to 2018 using the MP-2015 projection scale for males, and a 78 percent factor applied to the rates for ages below 80 and a 109 percent factor applied to the rates for ages 80 and above, projected to 2020 using the MP-2015 projection scale for females.

The valuation reflects the following assumption changes from the June 30, 2016 measurement date to the June 30, 2017 measurement date:

- Interest rate changed from 2.85 percent to 3.60 percent
- Health care trend rates were changed as noted above and detailed in the actuarial report
- Spouse age differential changed from zero years for males and females to spouses two years younger for males and one year older for females
- Spouse coverage assumption changed from 54 percent for males and 22 percent for females to 60 percent for males and 40 percent for females for PERA participants
- The following assumptions were updated based on the December 31, 2015 Colorado PERA assumption study:
  - Mortality rates
  - Withdrawal rates
  - Retirement rates (apply to PERA participants only)

Table 7.2 illustrates the impact of interest rate sensitivity on the University's total OPEB liability for the fiscal year ending June 30, 2018.

**Table 7.2. Sensitivity of University's Total OPEB Liability (*in thousands*)**

|                                        |    | 1% Increase<br>(4.60%) | Discount Rate<br>(3.60%) | 1% Decrease<br>(2.60%) |
|----------------------------------------|----|------------------------|--------------------------|------------------------|
| 1% decrease in Health Care Trend Rates | \$ | 552,706                | 630,561                  | 725,579                |
| Health Care Trend Rates                |    | 647,343                | 746,773                  | 869,745                |
| 1% increase in Health Care Trend Rates |    | 767,054                | 895,755                  | 1,057,191              |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

Table 7.3 illustrates the deferred outflows and inflows of resources as of June 30, 2018.

**Table 7.3. University's OPEB Deferred Outflows and Inflows (*in thousands*)**

|                                                    |           | 2018              |                  |
|----------------------------------------------------|-----------|-------------------|------------------|
|                                                    |           | Deferred Outflows | Deferred Inflows |
| Differences between expected and actual experience | \$        | -                 | 75,809           |
| Changes in assumptions                             |           | -                 | 40,135           |
| Contributions subsequent to the measurement date   |           | 19,304            | -                |
| <b>Total</b>                                       | <b>\$</b> | <b>19,304</b>     | <b>115,944</b>   |

Between the June 30, 2017 measurement date of the University's total OPEB liability and the University's June 30, 2018 reporting date, the University made contributions of \$19,304,000 during Fiscal Year 2018 that impacted the total OPEB liability and were treated as a deferred outflow of resources.

Table 7.4 lists the amortization bases included in the University's OPEB deferred outflows and inflows of resources as of June 30, 2018.

**Table 7.4. Amortization of University's OPEB Deferred Outflows and Inflows (*in thousands*)**

| Date         | Type of Base                                       | Period   |           | Balance             |                  | Annual          |
|--------------|----------------------------------------------------|----------|-----------|---------------------|------------------|-----------------|
|              |                                                    | Original | Remaining | Original            | Remaining        | Amortization    |
| July 1, 2017 | Differences between expected and actual experience | 7.4      | 6.4       | \$ (87,654)         | (75,809)         | (11,845)        |
| July 1, 2017 | Changes in assumptions                             | 7.4      | 6.4       | (46,406)            | (40,135)         | (6,271)         |
|              | <b>Total</b>                                       |          |           | <b>\$ (134,060)</b> | <b>(115,944)</b> | <b>(18,116)</b> |

The deferred outflow from contributions subsequent to the measurement date of \$19,304,000 will be recognized as a reduction to the University's OPEB liability in the year ended June 30, 2019. Other amounts reported as deferred inflows related to the University's OPEB liability will be recognized in OPEB expense as summarized in Table 7.5.

**Table 7.5. Future Amortization of University's OPEB Deferred Inflows (*in thousands*)**

| Years ending June 30: |                     |
|-----------------------|---------------------|
| 2019                  | \$ (18,116)         |
| 2020                  | (18,116)            |
| 2021                  | (18,116)            |
| 2022                  | (18,116)            |
| 2023                  | (18,116)            |
| 2024-2025             | (25,364)            |
| <b>Total</b>          | <b>\$ (115,944)</b> |

Prior to the adoption of Statement No. 75, the University only recorded a liability for the annual required contribution (ARC) not funded under Statement No. 45. As of June 30, 2017, based on the July 1, 2016 actuarial valuation, the unfunded actuarial accrued liability was \$625,035,000. For the year ended June 30, 2017, the annual OPEB cost was \$69,366,000. The University contributed \$14,929,000, which was 21.5 percent of the annual OPEB cost. The net OPEB obligation was \$343,570,000. The actuarial method used was the projected unit credit cost method and the discount rate used was 4.5 percent. The Unfunded Actuarial Accrued Liability (UAAL) was being amortized straight-line over a closed period of 30 years. Table 7.6 presents changes in the University's OPEB plan for the year ended June 30, 2017.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 7.6. University's OPEB (in thousands)**

|                                    | <b>2017</b>       |
|------------------------------------|-------------------|
| Annual required contribution (ARC) | \$ 74,105         |
| Interest on net obligation         | 13,011            |
| Adjustment to ARC                  | (17,750)          |
| Annual OPEB expense                | 69,366            |
| Estimated benefit payments         | (14,929)          |
| Increase in OPEB                   | 54,437            |
| Beginning of year                  | 289,133           |
| <b>End of year</b>                 | <b>\$ 343,570</b> |

**PERA HEALTH CARE TRUST FUND**

As noted earlier, the University contributes to the Health Care Trust Fund (HCTF), a cost-sharing multiple-employer defined benefit OPEB fund administered by PERA. The net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, OPEB expense, information about the fiduciary net position and additions to/deductions from the fiduciary net position of the HCTF have been determined using the economic resources measurement focus and the accrual basis of accounting. For this purpose, benefits paid on behalf of health care participants are recognized when due and/or payable in accordance with the benefit terms. Investments are reported at fair value.

**Plan description.** The HCTF is established under Title 24, Article 51, Part 12 of the C.R.S., as amended. Colorado State law provisions may be amended from time to time by the Colorado General Assembly. Title 24, Article 51, Part 12 of the C.R.S., as amended, sets forth a framework that grants authority to the PERA Board to contract, self-insure, and authorize disbursements necessary in order to carry out the purposes of the PERACare program, including the administration of the premium subsidies. Colorado State law provisions may be amended from time to time by the Colorado General Assembly. PERA issues a publicly available comprehensive annual financial report that can be obtained at [www.copera.org/investments/pera-financial-reports](http://www.copera.org/investments/pera-financial-reports).

**Benefits provided.** The HCTF provides a health care premium subsidy to eligible participating PERA benefit recipients and retirees who choose to enroll in one of the PERA health care plans, however, the subsidy is not available if only enrolled in the dental and/or vision plan(s). The health care premium subsidy is based upon the benefit structure under which the member retires and the member's years of service credit. The basis for the amount of the premium subsidy funded by each trust fund is the percentage of the member contribution account balance from each division as it relates to the total member contribution account balance from which the retirement benefit is paid.

C.R.S. § 24-51-1202 et seq. specifies the eligibility for enrollment in the health care plans offered by PERA and the amount of the premium subsidy. The law governing a benefit recipient's eligibility for the subsidy and the amount of the subsidy differs slightly depending under which benefit structure the benefits are calculated. All benefit recipients under the PERA benefit structure are eligible for a premium subsidy, if enrolled in a health care plan under PERACare.

Enrollment in the PERACare is voluntary and is available to benefit recipients and their eligible dependents, certain surviving spouses, and divorced spouses and guardians, among others. Eligible benefit recipients may enroll into the program upon retirement, upon the occurrence of certain life events, or on an annual basis during an open enrollment period.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**PERA Benefit Structure.** The maximum service-based premium subsidy is \$230 per month for benefit recipients who are under 65 years of age and who are not entitled to Medicare; the maximum service-based subsidy is \$115 per month for benefit recipients who are 65 years of age or older or who are under 65 years of age and entitled to Medicare. The basis for the maximum service-based subsidy, in each case, is for benefit recipients with retirement benefits based on 20 or more years of service credit. There is a 5 percent reduction in the subsidy for each year of service less than 20. The benefit recipient pays the remaining portion of the premium to the extent the subsidy does not cover the entire amount.

For benefit recipients who have not participated in Social Security and who are not otherwise eligible for premium-free Medicare Part A for hospital-related services, C.R.S. § 24-51-1206(4) provides an additional subsidy. According to the statute, PERA cannot charge premiums to benefit recipients without Medicare Part A that are greater than premiums charged to benefit recipients with Part A for the same plan option, coverage level, and service credit. Currently, for each individual PERACare enrollee, the total premium for Medicare coverage is determined assuming plan participants have both Medicare Part A and Part B and the difference in premium cost is paid by the HCTF on behalf of benefit recipients not covered by Medicare Part A.

**Contributions.** Pursuant to Title 24, Article 51, Section 208(1)(f) of the C.R.S., as amended, certain contributions are apportioned to the HCTF. PERA-affiliated employers of the State, School, Local Government, and Judicial Divisions are required to contribute at a rate of 1.02 percent of PERA-includable salary into the HCTF.

Employer contributions are recognized by the HCTF in the period in which the compensation becomes payable to the member and the University is statutorily committed to pay the contributions. Employer contributions recognized by the HCTF from the University were \$3,345,000 for the year ended June 30, 2018.

At June 30, 2018, the University reported a liability of \$48,374,000 for its proportionate share of the net OPEB liability. The net OPEB liability for the HCTF was measured as of December 31, 2017, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of December 31, 2016. Standard update procedures were used to roll-forward the total OPEB liability to December 31, 2017. The University's proportion of the net OPEB liability was based on the University's contributions to the HCTF for the calendar year 2017 relative to the total contributions of participating employers to the HCTF.

At December 31, 2017, the University's proportion was 3.72 percent, which was a decrease from 3.81 percent as of December 31, 2016. For the year ended June 30, 2018, the University recognized OPEB expense of \$3,602,000. Table 7.7 details the sources of the University's deferred outflows of resources and deferred inflows of resources related to PERA's OPEB plan.

**Table 7.7. PERA's OPEB Deferred Outflows and Inflows (*in thousands*)**

|                                                                                      | 2018              |                  |
|--------------------------------------------------------------------------------------|-------------------|------------------|
|                                                                                      | Deferred Outflows | Deferred Inflows |
| Difference between expected and actual experience                                    | \$ 228            | -                |
| Net difference between projected and actual earnings on OPEB plan investments        | -                 | 809              |
| Changes in proportion share                                                          | -                 | 936              |
| Difference between contributions recognized and proportionate share of contributions | -                 | 6                |
| Contributions subsequent to the measurement date                                     | 1,547             | -                |
| <b>Total</b>                                                                         | <b>\$ 1,775</b>   | <b>1,751</b>     |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

\$1,547,000 reported as deferred outflows of resources related to OPEB, resulting from contributions subsequent to the measurement date, will be recognized as a reduction of the net OPEB liability in the year ended June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to PERA's OPEB that will be recognized in OPEB expense are summarized in Table 7.8.

**Table 7.8. Future Amortization of PERA's OPEB**  
**Deferred Outflows and Inflows (in thousands)**

| <b>Years ending June 30:</b> |                   |
|------------------------------|-------------------|
| 2019                         | \$ (342)          |
| 2020                         | (342)             |
| 2021                         | (342)             |
| 2022                         | (342)             |
| 2023                         | (142)             |
| 2024                         | (13)              |
| <b>Total</b>                 | <b>\$ (1,523)</b> |

**Actuarial assumptions.** PERA's total OPEB liability in the December 31, 2016 actuarial valuation was determined using the actuarial cost method, actuarial assumptions and other inputs detailed in Table 7.9.

**Table 7.9. PERA OPEB Actuarial Assumptions - December 31, 2016**

|                                                                                                      |                                                                 |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Actuarial cost method                                                                                | Entry age                                                       |
| Price inflation                                                                                      | 2.40 percent                                                    |
| Real wage growth                                                                                     | 1.10 percent                                                    |
| Wage inflation                                                                                       | 3.50 percent                                                    |
| Salary increases, including wage inflation                                                           | 3.50 percent in aggregate                                       |
| Long-term investment rate of return, net of OPEB plan investment expenses, including price inflation | 7.25 percent                                                    |
| Discount rate                                                                                        | 7.25 percent                                                    |
| Health care cost trend rates:                                                                        |                                                                 |
| Service-based premium subsidy                                                                        | 0.00 percent                                                    |
| PERACare Medicare plans                                                                              | 5.00 percent                                                    |
| Medicare Part A premiums                                                                             | 3.00 percent for 2017, gradually rising to 4.25 percent in 2023 |

Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each actuarial valuation and on the pattern of sharing of costs between employers of each fund to that point.

Health care cost trend rates reflect the change in per capita health costs over time due to factors such as medical inflation, utilization, plan design, and technology improvements. For the PERA benefit structure, health care cost trend rates are needed to project the future costs associated with providing benefits to those PERACare enrollees not eligible for premium-free Medicare Part A.

Health care cost trend rates for the PERA benefit structure are based on published annual health care inflation surveys in conjunction with actual plan experience (if credible), building block models and heuristics developed by health plan actuaries and administrators, and projected trends for the Federal Hospital Insurance Trust Fund (Medicare Part A premiums) provided by the Centers for Medicare & Medicaid Services. Effective December 31, 2016, the health care cost trend rates for Medicare Part A premiums were revised to reflect the current expectation of future increases in rates of inflation applicable to Medicare Part A premiums.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

The PERA benefit structure health care cost trend rates that were used to measure the total OPEB liability are summarized in Table 7.10.

**Table 7.10. PERA's OPEB Health Care Cost Trend Rates**

| Year  | PERACare       | Medicare Part A |
|-------|----------------|-----------------|
|       | Medicare Plans | Premiums        |
| 2017  | 5.00%          | 3.00%           |
| 2018  | 5.00%          | 3.25%           |
| 2019  | 5.00%          | 3.50%           |
| 2020  | 5.00%          | 3.75%           |
| 2021  | 5.00%          | 4.00%           |
| 2022  | 5.00%          | 4.00%           |
| 2023  | 5.00%          | 4.25%           |
| 2024+ | 5.00%          | 4.25%           |

Mortality assumptions for the determination of the total pension liability for each of the Division Trust Funds as shown below are applied, as applicable, in the determination of the total OPEB liability for the HCTF. Affiliated employers of the State, School, Local Government, and Judicial Divisions participate in the HCTF.

Healthy mortality assumptions for active members were based on the RP-2014 White Collar Employee Mortality Table, a table specifically developed for actively working people. To allow for an appropriate margin of improved mortality prospectively, the mortality rates incorporate a 70 percent factor applied to male rates and a 55 percent factor applied to female rates.

Healthy, post-retirement mortality assumptions for the State and Local Government Divisions were based on the RP-2014 Healthy Annuitant Mortality Table, adjusted as follows:

- **Males:** Mortality improvement projected to 2018 using the MP-2015 projection scale, a 73 percent factor applied to rates for ages less than 80, a 108 percent factor applied to rates for ages 80 and above, and further adjustments for credibility.
- **Females:** Mortality improvement projected to 2020 using the MP-2015 projection scale, a 78 percent factor applied to rates for ages less than 80, a 109 percent factor applied to rates for ages 80 and above, and further adjustments for credibility.

For disabled retirees, the mortality assumption was based on 90 percent of the RP-2014 Disabled Retiree Mortality Table.

The following economic and demographic assumptions were specifically developed for, and used in, the measurement of the obligations for the HCTF:

- The assumed rates of PERACare participation were revised to reflect more closely actual experience.
- Initial per capita health care costs for those PERACare enrollees under the PERA benefit structure who are expected to attain age 65 and older ages and are not eligible for premium-free Medicare Part A benefits were updated to reflect the change in costs for the 2017 plan year.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

- The percentages of PERACare enrollees who will attain age 65 and older ages and are assumed to not qualify for premium-free Medicare Part A coverage were revised to more closely reflect actual experience.
- The percentage of disabled PERACare enrollees who are assumed to not qualify for premium-free Medicare Part A coverage were revised to reflect more closely actual experience.
- Assumed election rates for the PERACare coverage options that would be available to future PERACare enrollees who will qualify for the “No Part A Subsidy” when they retire were revised to more closely reflect actual experience.
- Assumed election rates for the PERACare coverage options that will be available to those current PERACare enrollees, who qualify for the “No Part A Subsidy” but have not reached age 65, were revised to more closely reflect actual experience.
- The health care cost trend rates for Medicare Part A premiums were revised to reflect the then-current expectation of future increases in rates of inflation applicable to Medicare Part A premiums.
- The rates of PERACare coverage election for spouses of eligible inactive members and future retirees were revised to more closely reflect actual experience.
- The assumed age differences between future retirees and their participating spouses were revised to reflect more closely actual experience.

The actuarial assumptions used in the December 31, 2016, valuations were based on the results of the 2016 experience analysis for the periods January 1, 2012, through December 31, 2015, as well as, the October 28, 2016, actuarial assumptions workshop and were adopted by the PERA Board during the November 18, 2016, Board meeting. In addition, certain actuarial assumptions pertaining to per capita health care costs and their related trends are analyzed and reviewed by PERA’s actuary, as needed.

The long-term expected return on plan assets is reviewed as part of regular experience studies prepared every four or five years for PERA. Recently, this assumption has been reviewed more frequently. The most recent analyses were outlined in presentations to PERA’s Board on October 28, 2016.

Several factors were considered in evaluating the long-term rate of return assumption for the HCTF, including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

As of the most recent adoption of the long-term expected rate of return by the PERA Board, the target asset allocation and best estimates of geometric real rates of return for each major asset class are summarized in Table 7.11.

**Table 7.11. Target Allocation and Expected Rate of Return**

| <b>Asset Class</b>                | <b>Target Allocation</b> | <b>30 Year Expected Geometric Real Rate of Return</b> |
|-----------------------------------|--------------------------|-------------------------------------------------------|
| U.S. Equity - Large Cap           | 21.20%                   | 4.30%                                                 |
| U.S. Equity - Small Cap           | 7.42                     | 4.80                                                  |
| Non U.S. Equity - Developed       | 18.55                    | 5.20                                                  |
| Non U.S. Equity - Emerging        | 5.83                     | 5.40                                                  |
| Core Fixed Income                 | 19.32                    | 1.20                                                  |
| High Yield                        | 1.38                     | 4.30                                                  |
| Non U.S. Fixed Income - Developed | 1.84                     | 0.60                                                  |
| Emerging Market Debt              | 0.46                     | 3.90                                                  |
| Core Real Estate                  | 8.50                     | 4.90                                                  |
| Opportunity Fund                  | 6.00                     | 3.80                                                  |
| Private Equity                    | 8.50                     | 6.60                                                  |
| Cash                              | 1.00                     | 0.20                                                  |
| <b>Total</b>                      | <b>100.00%</b>           |                                                       |

In setting the long-term expected rate of return, projections employed to model future returns provide a range of expected long-term returns that, including expected inflation, ultimately support a long-term expected rate of return assumption of 7.25 percent.

Table 7.12 presents the net OPEB liability using the current health care cost trend rates applicable to the PERA benefit structure, as well as if it were calculated using health care cost trend rates that are one percentage point lower or one percentage point higher than the current rates.

**Table 7.12. Sensitivity of the University's Proportionate Share of PERA's Net OPEB Liability to Changes in the Health Care Cost Trend Rates (*in thousands*)**

| <b>2018</b>                         |                                   |                            |                                   |
|-------------------------------------|-----------------------------------|----------------------------|-----------------------------------|
|                                     | <b>1% Decrease in Trend Rates</b> | <b>Current Trend Rates</b> | <b>1% Increase in Trend Rates</b> |
| PERACare Medicare trend rate        | 4.00%                             | 5.00%                      | 6.00%                             |
| Initial Medicare Part A trend rate  | 2.00%                             | 3.00%                      | 4.00%                             |
| Ultimate Medicare Part A trend rate | 3.25%                             | 4.25%                      | 5.25%                             |
| <b>Net OPEB Liability</b>           | <b>\$ 47,043</b>                  | <b>48,374</b>              | <b>49,977</b>                     |

**Discount rate.** The discount rate used to measure the total OPEB liability was 7.25 percent. The projection of cash flows used to determine the discount rate applied the actuarial cost method and assumptions shown above. In addition, the following methods and assumptions were used in the projection of cash flows:

- Updated health care cost trend rates for Medicare Part A premiums as of the December 31, 2017, measurement date.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

- Total covered payroll for the initial projection year consists of the covered payroll of the active membership present on the valuation date and the covered payroll of future plan members assumed to be hired during the year. In subsequent projection years, total covered payroll was assumed to increase annually at a rate of 3.50 percent.
- Employer contributions were assumed to be made at rates equal to the fixed statutory rates specified in law and effective as of the measurement date. For future plan members, employer contributions were reduced by the estimated amount of total service costs for future plan members.
- Employer contributions and the amount of total service costs for future plan members were based upon a process used by the plan to estimate future actuarially determined contributions assuming an analogous future plan member growth rate.
- Transfers of a portion of purchase service agreements intended to cover the costs associated with OPEB benefits were estimated and included in the projections.
- Benefit payments and contributions were assumed to be made at the end of the month.

Based on the above assumptions and methods, the projection test indicates the HCTF's fiduciary net position was projected to make all projected future benefit payments of current members. Therefore, the long-term expected rate of return of 7.25 percent on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability. The discount rate determination does not use the municipal bond index rate, and therefore, the discount rate is 7.25 percent.

Table 7.13 presents the proportionate share of the net OPEB liability calculated using the discount rate of 7.25 percent, as well as what the proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25 percent) or 1-percentage-point higher (8.25 percent) than the current rate.

**Table 7.13. Sensitivity of the University's Proportionate Share of PERA's Net OPEB Liability to Changes in the Discount Rate (*in thousands*)**

| 2018               |                        |                                  |                        |
|--------------------|------------------------|----------------------------------|------------------------|
|                    | 1% Decrease<br>(6.25%) | Current Discount<br>Rate (7.25%) | 1% Increase<br>(8.25%) |
| Net OPEB Liability | \$ 54,387              | 48,374                           | 43,241                 |

**OPEB plan fiduciary net position.** Detailed information about the HCTF's fiduciary net position is available in PERA's comprehensive annual financial report which can be obtained at [www.copera.org/investments/pera-financial-reports](http://www.copera.org/investments/pera-financial-reports).

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**NOTE 8 – UNEARNED REVENUE**

As of June 30, 2018 and 2017, the types and amounts of Unearned revenue are shown in Table 8.

**Table 8. Unearned Revenue (in thousands)**

| Type                          | 2018              |                | 2017           |                |
|-------------------------------|-------------------|----------------|----------------|----------------|
|                               | Total             | Current        | Total          | Current        |
| <b>University</b>             |                   |                |                |                |
| Tuition and fees              | \$ 38,791         | 38,791         | 36,628         | 36,628         |
| Auxiliary enterprises         | 28,782            | 28,757         | 12,440         | 10,993         |
| Grants and contracts          | 101,902           | 101,902        | 104,206        | 104,206        |
| Miscellaneous                 | 18,076            | 9,338          | 25,551         | 17,670         |
| <b>Total Unearned Revenue</b> | <b>\$ 187,551</b> | <b>178,788</b> | <b>178,825</b> | <b>169,497</b> |

**NOTE 9 – BONDS, CAPITAL LEASES, AND NOTES PAYABLE**

As of June 30, 2018 and 2017, the categories of long-term obligations are summarized in Table 9.1.

**Table 9.1. Bonds, Capital Leases, and Notes Payable (in thousands)**

| Type                                                                                                                                | Interest Rates | Final<br>Maturity | 2018                | 2017             |
|-------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------|---------------------|------------------|
| Enterprise system revenue bonds (including premium of \$140,206 in 2018 and \$132,044 in 2017)                                      | 0.76-6.26%     | 6/1/47            | \$ 1,695,916        | 1,594,249        |
| CU Medicine fixed-rate bonds                                                                                                        | 2.8%           | 11/1/24           | 7,481               | 8,657            |
| Colorado Educational & Culture Facilities Authority Student Housing (CUPCO) (including discount of \$633 in 2018 and \$678 in 2017) | 4.25-5.5%      | 6/1/38            | 52,407              | 52,762           |
| Total revenue bonds                                                                                                                 |                |                   | 1,755,804           | 1,655,668        |
| Capital leases                                                                                                                      | 0.0%-6.0%      | Various           | 11,824              | 13,313           |
| Notes payable                                                                                                                       | 1.96-4.15%     | 6/1/33            | 11,020              | 11,215           |
| <b>Total Bonds, Capital Leases, and Notes Payable</b>                                                                               |                |                   | <b>\$ 1,778,648</b> | <b>1,680,196</b> |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

Table 9.2 presents changes in bonds and capital leases for the years ended June 30, 2018 and 2017.

**Table 9.2. Changes in Bonds, Capital Leases, and Notes Payable (in thousands)**

| Type                                                                   |           | Balance<br>2017  | Additions      | Retirements    | Balance<br>2018  | Current<br>Portion |
|------------------------------------------------------------------------|-----------|------------------|----------------|----------------|------------------|--------------------|
| <b>University</b>                                                      |           |                  |                |                |                  |                    |
| Revenue bonds                                                          | \$        | 1,524,302        | 471,390        | 379,461        | 1,616,231        | 66,891             |
| Plus unamortized premiums                                              |           | 132,044          | 56,715         | 48,553         | 140,206          | 15,946             |
| Less unamortized discounts                                             |           | (678)            | -              | (45)           | (633)            | (45)               |
| Net revenue bonds                                                      |           | 1,655,668        | 528,105        | 427,969        | 1,755,804        | 82,792             |
| Capital leases                                                         |           | 13,313           | 795            | 2,284          | 11,824           | 2,058              |
| Note payable                                                           |           | 11,215           | 220            | 415            | 11,020           | 503                |
| <b>Total Bonds, Capital Leases, and<br/>Notes Payable</b>              | <b>\$</b> | <b>1,680,196</b> | <b>529,120</b> | <b>430,668</b> | <b>1,778,648</b> | <b>85,353</b>      |
| Type                                                                   |           | Balance<br>2016  | Additions      | Retirements    | Balance<br>2017  | Current<br>Portion |
| <b>University</b>                                                      |           |                  |                |                |                  |                    |
| Revenue bonds                                                          | \$        | 1,537,623        | 120,665        | 133,986        | 1,524,302        | 63,311             |
| Plus unamortized premiums                                              |           | 138,021          | 10,065         | 16,042         | 132,044          | 15,149             |
| Less unamortized discounts                                             |           | -                | (701)          | (23)           | (678)            | (46)               |
| Net revenue bonds                                                      |           | 1,675,644        | 130,029        | 150,005        | 1,655,668        | 78,414             |
| Capital leases                                                         |           | 15,402           | 295            | 2,384          | 13,313           | 1,990              |
| Note payable                                                           |           | -                | 11,408         | 193            | 11,215           | 342                |
| <b>Total Bonds, Capital Leases, and<br/>Notes Payable - Univeristy</b> | <b>\$</b> | <b>1,691,046</b> | <b>141,732</b> | <b>152,582</b> | <b>1,680,196</b> | <b>80,746</b>      |

## REVENUE BONDS

A general description of each revenue bond issue, original issuance amount, and the amount outstanding as of June 30, 2018 and 2017 is detailed in Table 9.3.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 9.3. Revenue Bonds Detail (in thousands)**

| <b>Issuance Description</b>                                                                                                                                                                                                                  | <b>Original<br/>Issuance<br/>Amount</b> | <b>Outstanding<br/>Balance<br/>2018</b> | <b>Outstanding<br/>Balance<br/>2017</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|
| <b>Enterprise system revenue bonds:</b>                                                                                                                                                                                                      |                                         |                                         |                                         |
| <b>Refunding Series 2007A -</b>                                                                                                                                                                                                              |                                         |                                         |                                         |
| Used to refund all of the revenue bond Refunding Series 1999A and Certificates of Participation Series 2003A and 2003B and a portion of revenue bond Refunding Series 1995A, Refunding and Improvement Series 2001B, Series 2002A, and 2002B | \$ 184,180                              | 27,725                                  | 27,725                                  |
| <b>Series 2009A -</b>                                                                                                                                                                                                                        |                                         |                                         |                                         |
| Used to fund acquisition and capital improvements at CU Boulder, UCCS and CU Denver                                                                                                                                                          | 165,635                                 | 5,235                                   | 10,025                                  |
| <b>Series 2009B-1 -</b>                                                                                                                                                                                                                      |                                         |                                         |                                         |
| Used to fund capital improvements at CU Boulder and CU Anschutz                                                                                                                                                                              | 76,725                                  | -                                       | 6,900                                   |
| <b>Series 2009B-2 -</b>                                                                                                                                                                                                                      |                                         |                                         |                                         |
| Used to fund capital improvements at CU Boulder and CU Anschutz                                                                                                                                                                              | 138,130                                 | 138,130                                 | 138,130                                 |
| <b>Series 2009C -</b>                                                                                                                                                                                                                        |                                         |                                         |                                         |
| Used to refund Enterprise System Refund Series 1997, Enterprise System Revenue Refund Bonds Series 2001A for years 2012 through 2026, and Enterprise System Revenue Bonds Series 2002A for years 2014 through 2018                           | 24,510                                  | 2,545                                   | 7,030                                   |
| <b>Series 2010A -</b>                                                                                                                                                                                                                        |                                         |                                         |                                         |
| Used to fund acquisition and capital improvements at CU Anschutz                                                                                                                                                                             | 35,510                                  | 26,430                                  | 27,765                                  |
| <b>Series 2010B -</b>                                                                                                                                                                                                                        |                                         |                                         |                                         |
| Used to refund Enterprise System Revenue Bonds Series 2002A and Enterprise System Revenue Bonds Series 2003A                                                                                                                                 | 56,905                                  | 20,790                                  | 26,345                                  |
| <b>Series 2010C -</b>                                                                                                                                                                                                                        |                                         |                                         |                                         |
| Used to fund capital improvements at CU Anschutz                                                                                                                                                                                             | 4,375                                   | 2,775                                   | 3,015                                   |
| <b>Series 2011A -</b>                                                                                                                                                                                                                        |                                         |                                         |                                         |
| Used to fund capital improvements at CU Boulder and UCCS                                                                                                                                                                                     | 203,425                                 | 35,060                                  | 40,085                                  |
| <b>Series 2011B -</b>                                                                                                                                                                                                                        |                                         |                                         |                                         |
| Used to partially refund Enterprise System Revenue Bonds Series 2002B, 2003A, 2004, and 2005A                                                                                                                                                | 52,600                                  | 39,485                                  | 47,965                                  |
| <b>Series 2012A-1 -</b>                                                                                                                                                                                                                      |                                         |                                         |                                         |
| Used to partially refund Enterprise System Revenue Bonds Series 2003A, 2004, 2005A, 2005B, 2006A, and 2007B                                                                                                                                  | 121,850                                 | 119,125                                 | 119,200                                 |
| <b>Series 2012A-2 -</b>                                                                                                                                                                                                                      |                                         |                                         |                                         |
| Used to partially refund Enterprise System Revenue Bonds Series 2004, 2005A, and 2005B                                                                                                                                                       | 53,000                                  | 43,015                                  | 43,785                                  |
| <b>Series 2012A-3 -</b>                                                                                                                                                                                                                      |                                         |                                         |                                         |
| Used to partially refund Enterprise System Revenue Bonds Series 2005A, 2005B, 2006A, and 2007B                                                                                                                                               | 47,165                                  | 34,015                                  | 37,570                                  |
| <b>Series 2012B -</b>                                                                                                                                                                                                                        |                                         |                                         |                                         |
| Used to fund capital improvements at CU Boulder, CU Denver and UCCS                                                                                                                                                                          | 95,705                                  | 17,940                                  | 60,690                                  |
| <b>Series 2013A -</b>                                                                                                                                                                                                                        |                                         |                                         |                                         |
| Used to fund capital improvements at CU Boulder, CU Anschutz and UCCS                                                                                                                                                                        | 142,460                                 | 13,515                                  | 136,190                                 |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 9.3. (continued) Revenue Bonds Detail (in thousands)**

| <b>Issuance Description</b>                                                                                                                                                           | <b>Original<br/>Issuance<br/>Amount</b> | <b>Outstanding<br/>Balance<br/>2018</b> | <b>Outstanding<br/>Balance<br/>2017</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|
| <b>Series 2013B -</b>                                                                                                                                                                 |                                         |                                         |                                         |
| Used to fund capital improvements at CU Anschutz                                                                                                                                      | 11,245                                  | 10,540                                  | 10,780                                  |
| <b>Series 2014A -</b>                                                                                                                                                                 |                                         |                                         |                                         |
| Used to fund capital improvements at CU Boulder                                                                                                                                       | 203,485                                 | 38,670                                  | 198,330                                 |
| <b>Series 2014B-1 -</b>                                                                                                                                                               |                                         |                                         |                                         |
| Used to partially refund Enterprise System Revenue Bonds Series 2005B, 2006B, 2007A and 2009                                                                                          | 100,440                                 | 97,790                                  | 98,105                                  |
| <b>Series 2015A -</b>                                                                                                                                                                 |                                         |                                         |                                         |
| Used to partially refund Enterprise System Revenue Bonds Series 2006A, 2007B, and 2009                                                                                                | 102,450                                 | 95,190                                  | 97,545                                  |
| <b>Series 2015B -</b>                                                                                                                                                                 |                                         |                                         |                                         |
| Used to partially refund Enterprise System Revenue Bonds Series 2005A                                                                                                                 | 3,925                                   | 2,910                                   | 3,020                                   |
| <b>Series 2015C -</b>                                                                                                                                                                 |                                         |                                         |                                         |
| Used to partially refund Enterprise System Revenue Bonds Series 2007A                                                                                                                 | 71,325                                  | 66,445                                  | 67,740                                  |
| <b>Series 2016A -</b>                                                                                                                                                                 |                                         |                                         |                                         |
| Used to fund capital improvements at the CU Denver and UCCS                                                                                                                           | 31,430                                  | 30,885                                  | 31,310                                  |
| <b>Series 2016B-1 -</b>                                                                                                                                                               |                                         |                                         |                                         |
| Used to partially refund Enterprise System Revenue Bonds Series 2011A                                                                                                                 | 156,810                                 | 155,245                                 | 156,025                                 |
| <b>Series 2017A-1 -</b>                                                                                                                                                               |                                         |                                         |                                         |
| Used to partially refund Enterprise System Revenue Bonds Series 2007A and 2012B                                                                                                       | 66,930                                  | 61,505                                  | 66,930                                  |
| <b>Series 2017A-2 -</b>                                                                                                                                                               |                                         |                                         |                                         |
| Used to partially refund Enterprise System Revenue Bonds Series 2012B, 2013A and 2014A and to establish escrow accounts for the cross-over refunding of Series 2009B, 2010A and 2010C | 471,390                                 | 470,745                                 | -                                       |
| <b>Total enterprise system revenue bonds - outstanding principal</b>                                                                                                                  | <b>2,621,605</b>                        | <b>1,555,710</b>                        | <b>1,462,205</b>                        |
| <b>Series 2014 - CU Medicine Fixed Rate Bonds</b>                                                                                                                                     |                                         |                                         |                                         |
| Used to fund capital improvements at CU Medicine                                                                                                                                      | 11,695                                  | 7,481                                   | 8,657                                   |
| <b>Series 2008-Colorado Educational &amp; Culture Facilities Authority Student Housing</b>                                                                                            |                                         |                                         |                                         |
| Used to fund capital improvements                                                                                                                                                     | 54,055                                  | 53,040                                  | 53,440                                  |
| <b>Total Other Long Term Obligations</b>                                                                                                                                              | <b>65,750</b>                           | <b>60,521</b>                           | <b>62,097</b>                           |
| Total Outstanding Revenue Bond Principal                                                                                                                                              |                                         | 1,616,231                               | 1,524,302                               |
| Plus premium                                                                                                                                                                          |                                         | 140,206                                 | 132,044                                 |
| Less discount                                                                                                                                                                         |                                         | (633)                                   | (678)                                   |
| <b>Total Revenue Bonds</b>                                                                                                                                                            |                                         | <b>\$ 1,755,804</b>                     | <b>\$ 1,655,668</b>                     |

The University's revenue bonds are payable semiannually, have serial and term maturities, and contain optional redemption provisions. The optional redemption provisions allow the University to redeem, at various dates, portions of the outstanding revenue bonds at prices varying from 100 to 101 percent of the principal amount of the revenue bonds redeemed.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

The Enterprise System Revenue Bonds are secured by a pledge of all net revenues of auxiliary services, student fees, other self-funded services, research services, and certain other operating and nonoperating revenues, in addition to 100 percent of the University's tuition, 100 percent of the University's capital student fees, and 100 percent of the University's indirect cost recoveries. All University revenue bonds are special limited obligations of the Regents and are payable solely from the pledged revenues (or the net income of the facilities as defined in the bond resolution). The revenue bonds are not secured by any encumbrance, mortgage, or other pledge of property, except pledged revenues, and do not constitute general obligations of the Regents.

The University's bonds are payable through June 1, 2047. During the years ended June 30, 2018 and 2017, the total principal and interest paid on the University's bonds net of Federal subsidy on the Build America Bonds was \$133,110,000 and \$127,708,000, respectively, which is 10.5 percent and 10.8 percent of the total net pledged revenues of \$1,262,253,000 and \$1,180,082,000, respectively. Net pledged revenues are 38 percent and 39 percent of the total specific revenue streams, respectively.

On December 12, 2017, the University issued \$471,390,000 of Tax-Exempt University Enterprise Refunding Revenue Bonds, Series 2017A-2. The proceeds were used to partially advance refund \$40,905,000 par value of the Series 2012B bonds, \$120,350,000 par value of the Series 2013A bonds, and \$154,250,000 par value of the Series 2014A, to cover certain costs related to the issuance, and to establish escrow accounts for the crossover refunding of Series 2009B, Series 2010A, and Series 2010C. The refunding of Series 2012B resulted in an economic gain of \$3,782,000 and accounting gain of \$1,289,000, which is deferred and amortized over the life of the new bonds. The debt service cash flow decreased by \$5,375,000. The refunding of Series 2013A resulted in an economic gain of \$9,059,000 and accounting loss of \$11,285,000, which is deferred and amortized over the life of the new bonds. The debt service cash flow decreased by \$12,951,000. The refunding of Series 2014A resulted in an economic gain of \$10,458,000 and accounting loss of \$3,772,000, which is deferred and amortized over the life of the new bonds. The debt service cash flow decreased by \$15,545,000. Series 2017A-2 has an interest rate ranging from 3.0 percent to 5.0 percent, and the bonds mature through June 1, 2046.

The University's revenue bonds contain provisions to establish and maintain reasonable fees, rates, and other charges to ensure gross revenues are sufficient for debt service coverage. The University is also required to comply with various other covenants while the bonds are outstanding. These covenants, among other things, restrict the disposition of certain assets, require the Regents to maintain adequate insurance, and require the Regents to continue to operate the underlying programs. Management believes the University has met all debt service coverage ratios and has complied with all bond covenants.

In December 2002, CU Medicine entered into a loan agreement with the Fitzsimons Redevelopment Authority to issue variable-rate bonds, Series 2002, in the amount of \$20,500,000. Proceeds from the sale of these bonds were used to fund the development, construction, and equipping of CU Medicine's administrative office building. In October 2014, CU Medicine refinanced its variable-rate debt with a fixed-rate bank-direct purchase obligation. The borrowing, funded by US Bank, included a \$3,500,000 reduction in principal to a net amount outstanding at the time of the refinance of \$11,695,000. The obligation is amortizable over 10 years and carries a fixed rate of 2.3 percent. As a result of the Tax Cuts and Jobs Act, signed into law in December 2017, US Bank increased the interest rate on CU Medicine's borrowing to 2.8 percent. The US Bank financing is subject to the same financial covenants as those included in the original variable-rate obligation, the most significant of which are the maintenance of 60 days' cash on hand (defined as unrestricted cash plus readily marketable securities) and a debt service coverage ratio of 1.25. CU Medicine management believes it is in compliance with its debt service requirements and financial covenants.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

In August 2008, the Colorado Educational and Cultural Facilities Authority (the Authority) issued \$54,055,000 of Series 2008 Student Housing Revenue Refunding Bonds (the Series 2008 Bonds). The Authority then loaned the proceeds of the bonds to CVA to refund the 2005 Bonds (\$50,365,000), fund a portion of a debt service reserve fund, and pay certain costs of issuance. The Series 2008 Bonds are special, limited obligations of the Authority and are payable solely out of the amounts received by the Authority from CVA pursuant to the terms and provisions of the indenture, the loan agreement, and the lease vacancy agreement. The Series 2008 Bonds are 30 year serial bonds maturing on June 1, 2038, with fixed interest rates ranging from 4.25 percent to 5.5 percent, and contain certain provisions for early redemption. Interest is payable semi-annually on June 1 and December 1. The bonds are secured by the property owned by CVA as well as CVA's accounts and rents. See Note 1.

Future minimum payments for revenue bonds are detailed in Table 9.4.

**Table 9.4. Revenue Bonds Future Minimum Payments (*in thousands*)**

| Years Ending June 30 | University          |                |                  |
|----------------------|---------------------|----------------|------------------|
|                      | Principal           | Interest       | Total            |
| 2019                 | \$ 66,891           | 69,563         | 136,454          |
| 2020                 | 74,504              | 61,399         | 135,903          |
| 2021                 | 78,089              | 59,158         | 137,247          |
| 2022                 | 82,654              | 56,000         | 138,654          |
| 2023                 | 83,499              | 52,732         | 136,231          |
| 2024 - 2028          | 422,654             | 210,697        | 633,351          |
| 2029 - 2033          | 381,260             | 127,826        | 509,086          |
| 2034 - 2038          | 281,440             | 59,380         | 340,820          |
| 2039 - 2043          | 122,330             | 17,772         | 140,102          |
| 2044 - 2048          | 22,910              | 2,006          | 24,916           |
| <b>Total</b>         | <b>\$ 1,616,231</b> | <b>716,533</b> | <b>2,332,764</b> |

## EXTINGUISHMENT OF DEBT

Previous revenue bond issues considered to be extinguished through in-substance defeasance under GAAP, are not included in the accompanying financial statements. The amount of debt in this category, covered by assets placed in trust to be used solely for future payments, amounted to approximately \$614,125,000 and \$298,620,000 as of June 30, 2018 and 2017, respectively. As of June 30, 2018, the amount of debt defeased totaled \$315,505,000, and there were no escrow agent payments. As of June 30, 2017, the amount of debt defeased totaled \$28,910,000, and escrow agent payments were \$110,765,000.

## CAPITAL LEASES

The University's capital leases are primarily for equipment. The University also has a capital lease with a related party. During the year ended June 30, 2009, CU Denver entered into a \$10,272,000 site lease agreement with AHEC associated with the build-out of educational space for CU Denver. As of June 30, 2018 and 2017, the University paid base rent to AHEC of approximately \$836,000 and \$836,000, respectively, annually for each year. Amortization expense is included in depreciation expense.

As of June 30, 2018 and 2017, the University had an outstanding liability for all its capital leases approximating \$11,824,000 and \$13,313,000, respectively, with underlying gross capitalized asset cost approximating \$24,942,000 and \$24,969,000, respectively, with accumulated amortization of \$12,638,000 and \$12,041,000 respectively, resulting in underlying net capitalized assets of \$12,304,000 and \$12,928,000, respectively.

Future minimum payments for all the University's capital lease obligations are detailed in Table 9.5.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 9.5. Capital Leases (*in thousands*)**

| <b>Years Ending June 30</b> |           | <b>Principal</b> | <b>Interest</b> | <b>Total</b>  |
|-----------------------------|-----------|------------------|-----------------|---------------|
| 2019                        | \$        | 2,058            | 528             | 2,586         |
| 2020                        |           | 1,914            | 456             | 2,370         |
| 2021                        |           | 1,163            | 388             | 1,551         |
| 2022                        |           | 993              | 340             | 1,333         |
| 2023                        |           | 969              | 292             | 1,261         |
| 2024 – 2028                 |           | 4,727            | 670             | 5,397         |
| <b>Total</b>                | <b>\$</b> | <b>11,824</b>    | <b>2,674</b>    | <b>14,498</b> |

**NOTES PAYABLE**

18<sup>th</sup> Avenue has a 20-year mortgage on the property at 1800 Grant Street. The original amount borrowed was \$12,450,000 at an interest rate of 4.15 percent with monthly principal and interest payments of \$67,000. There is a balloon payment of \$3,678,000 due on June 1, 2033.

Future minimum payments for the University's note payable are detailed in Table 9.6.

**Table 9.6. Notes Payable Future Minimum Payments (*in thousands*)**

| <b>Years Ending June 30</b> |           | <b>Principal</b> | <b>Interest</b> | <b>Total</b>  |
|-----------------------------|-----------|------------------|-----------------|---------------|
| 2019                        | \$        | 503              | 445             | 948           |
| 2020                        |           | 372              | 429             | 801           |
| 2021                        |           | 387              | 414             | 801           |
| 2022                        |           | 404              | 397             | 801           |
| 2023                        |           | 2,290            | 1,716           | 4,006         |
| 2024 – 2028                 |           | 2,817            | 1,189           | 4,006         |
| 2029 – 2033                 |           | 4,247            | 164             | 4,411         |
| <b>Total</b>                | <b>\$</b> | <b>11,020</b>    | <b>4,754</b>    | <b>15,774</b> |

**COMMERCIAL PAPER**

On April 6, 2018 the Regents authorized a commercial paper program for approved capital construction projects with a maximum outstanding amount of \$200 million. Each commercial paper note has a fixed maturity date of between 1 and 270 days from issuance and is either taken out at maturity by another commercial paper issuance, retired by permanent financing authorized by the Regents for that purpose, or retired by the University. On June 5, 2018, the University issued the first tranche of Commercial Paper in the amount of \$40,000,000 with a maturity of September 6, 2018. The initial issuance of commercial paper is being used to fund the construction of Williams Village East Housing and the Aerospace Engineering Building at the CU Boulder. The initial rate was 1.30 percent. It is expected that future issuance of commercial paper will be used to fund the balance of these two CU Boulder capital construction projects before permanent financing is issued in the summer of 2019. Table 9.7 presents changes in commercial paper for the year ended June 30, 2018.

**Table 9.7. Commercial Paper (*in thousands*)**

|                   | <b>2018</b> |
|-------------------|-------------|
| Beginning of year | \$ -        |
| Additions         | 40,000      |
| Retirements       | -           |
| End of year       | \$ 40,000   |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**STATE OF COLORADO CERTIFICATES OF PARTICIPATION**

On October 23, 2008, the State issued State of Colorado Higher Education Capital Construction Lease Purchase Financing Program Certificates of Participation, Series 2008, with a par value of \$230,845,000, at a net premium of \$181,000. The certificates have interest rates ranging from 3.0 to 5.5 percent and mature in November 2027. Annual lease payments are made by the State and are subject to annual appropriations by the Legislature. As a result, this liability is recognized by the State and not included in the University's financial statements.

The certificates are secured by the buildings or equipment acquired with the lease proceeds and any unexpended lease proceeds. The proceeds were used to fund various capital projects for the benefit of certain State-supported institutions of higher education in Colorado, including UCCS and CU Boulder. The underlying capitalized assets are contributed to the University from the State. As of June 30, 2018, the University had underlying gross capitalized assets at UCCS costing approximately \$17,735,000 with accumulated amortization of \$7,020,000 resulting in an underlying net capitalized asset of \$10,715,000. As of June 30, 2017, the University had underlying gross capitalized assets at CU Boulder costing approximately \$796,000, with accumulated amortization of \$178,000 resulting in an underlying net capitalized asset of \$618,000. As of June 30, 2017, the University had underlying gross capitalized assets at CU Anschutz costing approximately \$188,801,000, with accumulated amortization of \$50,972,000 resulting in an underlying net capitalized asset of \$137,829,000.

**NOTE 10 – OTHER LIABILITIES**

Table 10.1 details other liabilities as of June 30, 2018 and 2017.

**Table 10.1. Other Liabilities (in thousands)**

| Type                            | 2018             |               | 2017          |               |
|---------------------------------|------------------|---------------|---------------|---------------|
|                                 | Total            | Current       | Total         | Current       |
| Risk financing                  | \$ 29,225        | 16,051        | 27,857        | 15,354        |
| Construction contract retainage | 9,609            | 9,607         | 12,880        | 12,880        |
| Funds held for others           | 17,729           | 17,729        | 16,511        | 16,511        |
| Federal Perkins loan            | 20,341           | 2,781         | -             | -             |
| Miscellaneous                   | 2,941            | 1,357         | 3,369         | 1,830         |
| <b>Total Other Liabilities</b>  | <b>\$ 79,845</b> | <b>47,525</b> | <b>60,617</b> | <b>46,575</b> |

**RISK FINANCING-RELATED LIABILITIES**

The University is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; medical malpractice; employee occupational injuries; graduate medical students' health; and natural disasters. The University finances these risks through various self-insurance programs. The University finances the cost and risks associated with employee health benefit programs through the Trust, a related organization as discussed in Note 18 to the financial statements. Under the terms of the Trust, the University is self-insured for medical claims beginning July 1, 2010. However, the risk of loss has been transferred to the Trust. Therefore, no liability was reported as of June 30, 2018 or 2017 for unpaid claims.

The University utilizes a protected self-insurance program for its property, liability, and workers' compensation risks. The University has established a separate self-insurance program for the purpose of providing professional liability coverage for the CU Denver | Anschutz Medical Campus and UCH. A separate self-insurance program has also been established to provide health insurance for graduate medical students and eligible dependents at CU Anschutz.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

All self-insurance programs other than employee health benefit programs, assume losses up to certain limits and purchase a defined amount of excess insurance for losses over those limits. These limits range from \$325,000 to \$1,500,000 per occurrence.

Reserves for unpaid claims under these programs are actuarially reviewed and evaluated for adequacy each year. The Property, General Liability, and Workers' Compensation reserve of \$16,769,000 and the Graduate Medical Student Health Benefits reserve of \$2,689,000 are reported on an undiscounted basis, and the CU Denver | Anschutz Medical Campus Professional Liability reserve of \$9,767,000 is reported at a discount basis using 4 percent. Settlements have not exceeded coverages for each of the past three fiscal years. There were no significant reductions or changes in insurance coverage from the prior year.

The amount recorded as risk financing-related liabilities represents reserves based upon the annual actuarial valuation and includes reserves for incurred but not reported claims. Such liabilities depend on many factors, including claims history, inflation, damage awards, investment return, and changes in legal doctrine. Accordingly, computation of the claims liabilities requires an annual estimation process. Claims liabilities are reevaluated on a periodic basis and take into consideration recently settled claims, frequency of claims, and other relevant factors.

Changes in the balances of risk financing-related liabilities for the years ended June 30, 2018 and 2017 are presented in Table 10.2.

**Table 10.2. Risk Financing-related Liabilities (*in thousands*)**

|                                    |           | Property, General<br>Liability, and<br>Workers'<br>Compensation | Professional<br>Liability | Graduate Medical<br>Student Health<br>Benefits | Total         |
|------------------------------------|-----------|-----------------------------------------------------------------|---------------------------|------------------------------------------------|---------------|
| <b>University</b>                  |           |                                                                 |                           |                                                |               |
| <b>Balance as of June 30, 2016</b> | <b>\$</b> | <b>16,727</b>                                                   | <b>11,469</b>             | <b>1,666</b>                                   | <b>29,862</b> |
| Fiscal Year 2017:                  |           |                                                                 |                           |                                                |               |
| Claims and changes in estimates    |           | 7,389                                                           | 1,006                     | 10,356                                         | 18,751        |
| Claim payments                     |           | (7,996)                                                         | (3,046)                   | (9,714)                                        | (20,756)      |
| <b>Balance as of June 30, 2017</b> | <b>\$</b> | <b>16,120</b>                                                   | <b>9,429</b>              | <b>2,308</b>                                   | <b>27,857</b> |
| Fiscal Year 2018:                  |           |                                                                 |                           |                                                |               |
| Claims and changes in estimates    |           | 7,912                                                           | 1,450                     | 13,013                                         | 22,375        |
| Claim payments                     |           | (7,263)                                                         | (1,112)                   | (12,632)                                       | (21,007)      |
| <b>Balance as of June 30, 2018</b> | <b>\$</b> | <b>16,769</b>                                                   | <b>9,767</b>              | <b>2,689</b>                                   | <b>29,225</b> |

## **DIRECT LENDING**

The University participates in two student lending programs operated by the federal government, Direct Student Loan and the State School as Lender. These programs enable eligible students or parents to obtain a loan to pay for the student's cost of attendance directly through the University rather than through a private lender. The University is responsible for handling the complete loan process, including funds management as well as promissory note functions.

For the Direct Lending program, the University is not responsible for collection of these loans or for defaults by borrowers; therefore, these loans are not recognized as receivables in the accompanying financial statements. Direct lending activity during the years ended June 30, 2018 and 2017 was \$397,016,000 and \$386,128,000, respectively.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**FEDERAL PERKINS LOANS**

The Federal Perkins Loan program, which provided low-interest loans to college students with exceptional financial need, expired on September 30, 2017. The United States Department of Education (ED) will require an initial distribution of assets from the University's Perkins Fund for the 2018-2019 Award Year. Beginning with the 2019-2020 Award Year and for all subsequent award years, ED will require a capital distribution from the University's Perkins Fund on an annual basis for institutions that continue participating in the Perkins Loan Program. Institutions, such as the University, must return to ED the federal share of the institution's Perkins Fund.

As permitted by GAAP, the University historically recorded the federal share of the Perkins Fund in restricted net position. With the expiration of the Perkins Loan Program, the University is required, beginning in Fiscal Year 2018, to reflect the federal share as a liability. Therefore, the University recorded a liability of \$20,341,000 and a related expense of the same amount (included in Nonoperating Revenue, Net on the Statement of Revenues, Expenses and Changes in Net Position) in the Fiscal Year 2018 financial statements.

***NOTE 11 – NET POSITION***

While on a system-wide basis the University has negative unrestricted net position, certain departments within the University maintain a positive unrestricted net position. Unrestricted net position is one component of the University's financial statements, which represents the net position held by the collective units of the University as of June 30. Balances fluctuate throughout the year and are reported as of a point-in-time. The University designates unrestricted net position by their intended purpose. Unobligated funds are generally available for campus use or support of schools, colleges, departments, or units. These funds are generated by nonrecurring revenue surpluses (such as departmental share unspent indirect cost recoveries) or year-end balances resulting from lower than expected spending levels (such as vacancy savings from an unfilled position). Campus leadership holds these funds in general categories based on internal policy or intended use. Their designation may change in accordance with directives from leadership, including Regent directives. Obligated Funds are unrestricted net position that are obligated to specific projects or are held for contractual payments (such as faculty start-up).

University policy requires each campus provide the Regents prior to December 31 a detailed report on designated net position. This report enhances clarity and frequency of internal communications and provides context for Regent decisions on key budget items. These reports are available on the Regents' website.

In Fiscal Year 2018, the University transferred \$9,722,000 endowments from total restricted for nonexpendable net position to the CU Foundation pursuant to Regent policy and to promote administrative efficiency in stewarding University funds.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**NOTE 12 – SPENDING LIMITATIONS**

In November 1992, the Colorado voters passed Section 20, Article X of the Colorado Constitution, commonly known as the Taxpayer’s Bill of Rights (TABOR). TABOR contains revenue, spending, tax, and debt limitations that apply to all local governments and the State, including the University. During the year ended June 30, 2005, the Colorado State Legislature determined in Section 23-5-101.7 of the C.R.S. that an institution of higher education may be designated as an enterprise for the purposes of TABOR so long as the institution’s governing board retains authority to issue revenue bonds on its behalf and the institution receives less than 10 percent of its total annual revenues in grants as defined by TABOR. Further, so long as it is so designated as an enterprise, the institution shall not be subject to any of the provisions of TABOR.

In July 2005, the Regents designated the University as a TABOR enterprise pursuant to the statute. During the years ended June 30, 2018 and 2017, the University believes it has met all requirements of TABOR enterprise status. Specifically, the Regents retain the authority to issue revenue bonds and the amount of State grants received by the University was 0.58 percent and 1.36 percent during the years ended June 30, 2018 and 2017, respectively, as shown in Table 12.

**Table 12. TABOR Enterprise State Support Calculation *(in thousands)***

|                                                        | <b>2018</b>      | <b>2017</b>   |
|--------------------------------------------------------|------------------|---------------|
| Local government grants                                | \$ 810           | 793           |
| Capital appropriations                                 | 3,446            | 33,441        |
| Tobacco Litigation Settlement Appropriation            | 15,651           | 15,325        |
| State COP annual debt service payments for CU Anschutz | 29               | 7,249         |
| State COP annual debt service payments for UCCS        | 1,339            | 1,010         |
| State COP annual debt service payments for CU Boulder  | 5,462            | 22            |
| <b>Total State Support</b>                             | <b>\$ 26,737</b> | <b>57,840</b> |
| Total TABOR enterprise revenues                        | \$ 4,571,195     | 4,251,026     |
| Ratio of State support to total revenues               | 0.58%            | 1.36%         |

A portion of the University is subject to revenue and expense limitations imposed by the Colorado State Legislature through the annual appropriation process. For the years ended June 30, 2018 and 2017, the University’s appropriated funds included \$67,612,00 and \$64,661,000, respectively, received for students that qualified for stipends from the College Opportunity Fund (COF) and \$126,706,000 and \$121,872,000, respectively, as fee-for-service contract revenue, as well as certain cash funds as specified in the State’s annual appropriations bill.

Appropriated cash funds include the student-paid portion of tuition, mandatory student fees, and certain other revenue sources, which are recognized in various revenue lines, as appropriate, in the accompanying financial statements. For the years ended June 30, 2018 and 2017, expenses were within the appropriated spending authority.

Non-appropriated funds include certain grants and contracts, gifts, indirect cost recoveries, certain auxiliary revenues, in addition to mandatory student fees, and certain other revenue sources. All other revenues and expenses reported by the University represent non-appropriated funds and are excluded from the annual appropriations bill.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**NOTE 13 – SCHOLARSHIP ALLOWANCES**

During the years ended June 30, 2018 and 2017, scholarship allowances were provided by the following funding sources in amounts detailed in Table 13.

**Table 13. Scholarship Allowances (in thousands)**

| For years ended June 30                                       | 2018              |                               |                | 2017             |                               |                |
|---------------------------------------------------------------|-------------------|-------------------------------|----------------|------------------|-------------------------------|----------------|
|                                                               | Tuition and Fees  | Auxiliary Enterprise Revenues | Total          | Tuition and Fees | Auxiliary Enterprise Revenues | Total          |
| <b>Funding Source Description</b>                             |                   |                               |                |                  |                               |                |
| University general resources                                  | \$ 95,282         | 2,750                         | 98,032         | 87,780           | 2,319                         | 90,099         |
| University auxiliary resources                                | 12,991            | 353                           | 13,344         | 12,276           | 342                           | 12,618         |
| Colorado Commission on Higher Education financial aid program | 25,985            | 340                           | 26,325         | 22,789           | 263                           | 23,052         |
| Federal programs, including Federal Pell grants               | 60,478            | 1,171                         | 61,649         | 54,662           | 954                           | 55,616         |
| Other State of Colorado programs                              | 97                | 3                             | 100            | 118              | 2                             | 120            |
| Private programs                                              | 371               | 3                             | 374            | 194              | 1                             | 195            |
| Gift fund                                                     | 21,815            | 458                           | 22,273         | 18,601           | 363                           | 18,964         |
| <b>Total Scholarship Allowances</b>                           | <b>\$ 217,019</b> | <b>5,078</b>                  | <b>222,097</b> | <b>196,420</b>   | <b>4,244</b>                  | <b>200,664</b> |

**NOTE 14 – HEALTH SERVICES REVENUE**

Health services revenue of \$1,037,529,000 and \$876,986,000 is recorded net of contractual adjustments approximating \$1,349,233,000 and \$1,230,615,000 and bad debt expense on uncollectible patient account receivables approximating \$42,778,000 and \$30,617,000 from CU Medicine and \$65,000 and \$68,000 from various departments at CU Anschutz for the years ended June 30, 2018 and 2017, respectively. Charity care provided during the years ended June 30, 2018 and 2017, based on estimated service costs of providing charity care, totaled approximately \$6,549,000 and \$6,894,000, for the years ended June 30, 2018 and 2017, respectively.

**NOTE 15 – RETIREMENT PLANS AND INSURANCE PROGRAMS**

Employees of the University eligible for retirement benefits participate in one of four retirement plans. Eligible student employees participate in a student retirement plan that is funded solely by contributions from the student employees. The student retirement plan is a defined contribution plan administered by a consortium of higher educational institutions in the State. All other eligible employees of the University participate in one of the three additional plans, PERA plan, the University's optional retirement plan, and CU Medicine's retirement plan.

**PERA DEFINED BENEFIT PENSION PLAN**

**Significant Accounting Policies.** The University participates in the State Division Trust Fund (SDTF), a cost-sharing multiple-employer defined benefit pension fund administered by PERA. The net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, pension expense, information about the fiduciary net position and additions to/deductions from the fiduciary net position of the SDTF have been determined using the economic resources measurement focus and the accrual basis of accounting. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Plan description.** Eligible employees of the University are provided with pensions through the SDTF. Plan benefits are specified in Title 24, Article 51 of the C.R.S., administrative rules set forth at 8 C.C.R. 1502-1, and applicable provisions of the federal Internal Revenue Code. Colorado State law provisions may be amended from time to time by the Colorado General Assembly. PERA issues a publicly available comprehensive annual financial report that can be obtained at [www.copera.org/investments/pera-financial-reports](http://www.copera.org/investments/pera-financial-reports).

The University of Colorado has both classified and non-classified employees. All classified employees participate in PERA. Prior to legislation passed during the 2006 session, higher education employees had the option to participate in social security, PERA's defined benefit plan, or the institution's optional retirement plan. Currently, the University's employees, except classified employees, are required to participate in their institution's optional plan, if available, and social security unless they are active or inactive members of PERA with at least one year of service credit. In that case, they may elect either PERA or their institution's optional plan.

**Benefits provided as of December 31, 2017.** PERA provides retirement, disability, and survivor benefits. Retirement benefits are determined by the amount of service credit earned and/or purchased, highest average salary, the benefit structure(s) under which the member retires, the benefit option selected at retirement, and age at retirement. Retirement eligibility is specified in tables set forth at C.R.S. § 24-51-602, 604, 1713, and 1714.

The lifetime retirement benefit for all eligible retiring employees under the PERA benefit structure is the greater of the:

- Highest average salary multiplied by 2.5 percent and then multiplied by years of service credit.
- The value of the retiring employee's member contribution account plus a 100 percent match on eligible amounts as of the retirement date. This amount is then annuitized into a monthly benefit based on life expectancy and other actuarial factors.

In all cases the service retirement benefit is limited to 100 percent of highest average salary and also cannot exceed the maximum benefit allowed by the federal Internal Revenue Code.

Members may elect to withdraw their member contribution accounts upon termination of employment with all PERA employers; waiving rights to any lifetime retirement benefits earned. If eligible, the member may receive a match of either 50 percent or 100 percent on eligible amounts depending on when contributions were remitted to PERA, the date employment was terminated, whether 5 years of service credit has been obtained and the benefit structure under which contributions were made.

As of December 31, 2017, benefit recipients who elect to receive a lifetime retirement benefit are generally eligible to receive post-retirement cost-of-living adjustments, referred to as annual increases in the C.R.S. Benefit recipients under the PERA benefit structure who began eligible employment before January 1, 2007 receive an annual increase of 2 percent, unless PERA has a negative investment year, in which case the annual increase for the next three years is the lesser of 2 percent or the average of the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) for the prior calendar year. Benefit recipients under the PERA benefit structure who began eligible employment after January 1, 2007 receive an annual increase of the lesser of 2 percent or the average CPI-W for the prior calendar year, not to exceed 10 percent of PERA's Annual Increase Reserve (AIR) for the SDTF.

Disability benefits are available for eligible employees once they reach five years of earned service credit and are determined to meet the definition of disability. The disability benefit amount is based on the retirement benefit formula shown above considering a minimum 20 years of service credit, if deemed disabled.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

Survivor benefits are determined by several factors, which include the amount of earned service credit, highest average salary of the deceased, the benefit structure(s) under which service credit was obtained, and the qualified survivor(s) who will receive the benefits.

**Contributions as of June 30, 2018.** Eligible employees and the University are required to contribute to the SDTF at a rate set by Colorado statute. The contribution requirements are established under C.R.S. § 24-51-401, et seq. Eligible employees are required to contribute 8 percent of their PERA-includable salary. Table 15.1 summarizes the employer contribution requirements for all employees.

**Table 15.1. Employer Contribution Requirements**

|                                                                                                                          | <b>2018</b>           | <b>2017</b>          |                       |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------|-----------------------|
|                                                                                                                          | 1-1-17 to<br>06-30-18 | 1-1-17 to 6<br>30-17 | 7-1-16 to<br>12-31-16 |
| Employer Contribution Rate*                                                                                              | 10.15%                | 10.15%               | 10.15%                |
| Amount of Employer Contribution Apportioned to the Health Care Trust Fund as specified in C.R.S. Section 24-51-208(1)(f) | -1.02%                | -1.02%               | -1.02%                |
| Amount Apportioned to the SDTF                                                                                           | 9.13%                 | 9.13%                | 9.13%                 |
| Amortization Equalization Disbursement (AED) as specified in C.R.S. Section 24-51-411                                    | 5.00%                 | 5.00%                | 4.60%                 |
| Supplemental Amortization Equalization Disbursement (SAED) as specified in C.R.S., Section 24-51-411                     | 5.00%                 | 5.00%                | 4.50%                 |
| <b>Total Employer Contribution Rate to the SDTF</b>                                                                      | <b>19.13%</b>         | <b>19.13%</b>        | <b>18.23%</b>         |

\*Rates are expressed as a percentage of salary as defined in C.R.S. §24-51-101(42).

Employer contributions are recognized by the SDTF in the period in which the compensation becomes payable to the member and the University is statutorily committed to pay the contributions to the SDTF. Employer contributions recognized by the SDTF from the University were \$61,138,000 for the year ended June 30, 2018 and \$58,698,000 for the year ended June 30, 2017.

As of June 30, 2018 and 2017, the University reported a liability of \$2,206,541,000 and \$2,049,366,000, respectively, for its proportionate share of the net pension liability. The net pension liability for Fiscal Year 2018 was measured as of December 31, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2016. Standard update procedures were used to roll forward the total pension liability to December 31, 2017. The University's proportion of the net pension liability was based on the University's contributions to the SDTF for the calendar year 2017 and 2016 relative to the total contributions of participating employers to the SDTF. At December 31, 2017, the University's proportion was 11.02 percent, which decreased from 11.16 percent at December 31, 2016.

For the years ended June 30, 2018 and 2017, the University recognized pension expense of \$496,627,000 and \$415,537,000. Table 15.2 details the sources of the University's deferred outflows of resources and deferred inflows of resources related to pensions at June 30, 2018 and 2017.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 15.2. Deferred Inflows and Deferred Outflows of Resources Related to Pension (in**

|                                                                                  |           | 2018                           |                               | 2017                           |                               |
|----------------------------------------------------------------------------------|-----------|--------------------------------|-------------------------------|--------------------------------|-------------------------------|
|                                                                                  |           | Deferred Outflows of Resources | Deferred Inflows of Resources | Deferred Outflows of Resources | Deferred Inflows of Resources |
| Difference between expected and actual experience                                | \$        | 34,405                         | -                             | 20,371                         | -                             |
| Changes of assumptions or other inputs                                           |           | 383,140                        | -                             | 521,372                        | 6,308                         |
| Net difference between projected and actual earnings on pension plan investments |           | -                              | 83,106                        | 67,937                         | -                             |
| Changes in proportionate share                                                   |           | -                              | 11,150                        | -                              | 3,321                         |
| Changes in proportionate share of contributions                                  |           | -                              | 1,308                         | -                              | -                             |
| Contributions subsequent to the measurement date                                 |           | 31,428                         | -                             | 31,670                         | -                             |
| <b>Total</b>                                                                     | <b>\$</b> | <b>448,973</b>                 | <b>95,564</b>                 | <b>641,350</b>                 | <b>9,629</b>                  |

The \$31,428,000 reported as a deferred outflow of resources related to pensions as of June 30, 2018, resulting from contributions subsequent to the measurement date, will be recognized as a reduction of net pension liability in Fiscal Year 2019. The \$31,670,000 reported as deferred outflows of resources related to pensions as of June 30, 2017, resulting from contributions subsequent to the measurement date, was recognized as a reduction of the net pension liability in Fiscal Year 2018. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as detailed in Table 15.3.

**Table 15.3. Future Amortization of Deferred Outflows and Deferred Inflows (in thousands)**

| Years ending June 30: |           |                |
|-----------------------|-----------|----------------|
| 2019                  | \$        | 325,778        |
| 2020                  |           | 58,906         |
| 2021                  |           | (30,995)       |
| 2022                  |           | (31,708)       |
| <b>Total</b>          | <b>\$</b> | <b>321,981</b> |

**Actuarial assumptions.** The total pension liability in the December 31, 2016 actuarial valuation was determined using the actuarial cost method, actuarial assumptions and other inputs detailed in Table 15.4.

**Table 15.4. Actuarial Assumptions - December 31, 2016**

|                                                                                                         |                     |
|---------------------------------------------------------------------------------------------------------|---------------------|
| Actuarial cost method                                                                                   | Entry age           |
| Price inflation                                                                                         | 2.40 percent        |
| Real wage growth                                                                                        | 1.10 percent        |
| Wage inflation                                                                                          | 3.50 percent        |
| Salary increases, including wage inflation                                                              | 3.50 - 9.17 percent |
| Long-term investment rate of return, net of pension plan investment expenses, including price inflation | 7.25 percent        |
| Discount rate                                                                                           | 5.26 percent        |
| Post-retirement benefit increases:                                                                      |                     |
| PERA benefit structure hired prior to 1/1/07; and DPS benefit structure (automatic)                     | 2.00 percent        |
| PERA benefit structure hired after 12/31/06; (ad hoc, substantively automatic)                          | Financed by the AIR |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

A discount rate of 4.72 percent was used in the rollforward calculation of the total pension liability to the measurement date of December 31, 2017. The discount rate of 5.26 percent was used for the measurement date of December 31, 2016.

Healthy mortality assumptions for active members reflect the RP-2014 White Collar Employee Mortality Table, a table specifically developed for actively working people. To allow for an appropriate margin of improved mortality prospectively, the mortality rates incorporate a 70 percent factor applied to male rates and a 55 percent factor applied to female rates.

Healthy, post-retirement mortality assumptions reflect the RP-2014 Healthy Annuitant Mortality Table, adjusted as follows:

- **Males:** Mortality improvement projected to 2018 using the MP-2015 projection scale, a 73 percent factor applied to rates for ages less than 80, a 108 percent factor applied to rates for ages 80 and above, and further adjustments for credibility.
- **Females:** Mortality improvement projected to 2020 using the MP-2015 projection scale, a 78 percent factor applied to rates for ages less than 80, a 109 percent factor applied to rates for ages 80 and above, and further adjustments for credibility.

For disabled retirees, the mortality assumption was changed to reflect 90 percent of the RP-2014 Disabled Retiree Mortality Table.

The actuarial assumptions used in the December 31, 2016 valuations were based on the results of the 2016 experience analysis for the periods January 1, 2012 through December 31, 2015 as well as the October 28, 2016 actuarial assumptions workshop and were adopted by the PERA Board during the November 18, 2016 Board meeting.

The long-term expected return on plan assets is reviewed as part of regular experience studies prepared every four or five years for PERA. Recently, this assumption has been reviewed more frequently. The most recent analyses were outlined in presentations to PERA's Board on October 28, 2016.

Several factors were considered in evaluating the long-term rate of return assumption for the SDTF, including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed by the investment consultant for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

As of the most recent adoption of the long-term expected rate of return by the PERA Board, the target allocation and best estimates of geometric real rates of return for each major asset class are summarized in Table 15.5.

**Table 15.5. Target Allocation and Expected Rate of Return**

| <b>Asset Class</b>                | <b>Target Allocation</b> | <b>30 Year Expected Geometric Real Rate of Return</b> |
|-----------------------------------|--------------------------|-------------------------------------------------------|
| U.S. Equity - Large Cap           | 21.20%                   | 4.30%                                                 |
| U.S. Equity - Small Cap           | 7.42                     | 4.80                                                  |
| Non U.S. Equity - Developed       | 18.55                    | 5.20                                                  |
| Non U.S. Equity - Emerging        | 5.83                     | 5.40                                                  |
| Core Fixed Income                 | 19.32                    | 1.20                                                  |
| High Yield                        | 1.38                     | 4.30                                                  |
| Non U.S. Fixed Income - Developed | 1.84                     | 0.60                                                  |
| Emerging Market Debt              | 0.46                     | 3.90                                                  |
| Core Real Estate                  | 8.50                     | 4.90                                                  |
| Opportunity Fund                  | 6.00                     | 3.80                                                  |
| Private Equity                    | 8.50                     | 6.60                                                  |
| Cash                              | 1.00                     | 0.20                                                  |
| <b>Total</b>                      | <b>100.00%</b>           |                                                       |

In setting the longer term expected rate of return, projections employed to model future returns provide a range of expected long-term returns that, including expected inflation, ultimately support a long-term expected rate of return assumption of 7.25 percent.

**Discount rate.** Per PERA, the discount rate used to measure the total pension liability at December 31, 2017 was 4.72 percent, and 5.26 percent for the December 31, 2016 valuation. The projection of cash flows used to determine the discount rate applied the actuarial cost method and assumptions shown above. In addition, the following methods and assumptions were used in the projection of cash flows:

- Total covered payroll for the initial projection year consists of the covered payroll of the active membership present on the valuation date and the covered payroll of future plan members assumed to be hired during the year. In subsequent projection years, total covered payroll was assumed to increase annually at a rate of 3.50 percent.
- Employee contributions were assumed to be made at the current member contribution rate. Employee contributions for future plan members were used to reduce the estimated amount of total service costs for future plan members.
- Employer contributions were assumed to be made at rates equal to the fixed statutory rates specified in law and effective as of the measurement date, including current and estimated future AED and SAED, until the actuarial value funding ratio reaches 103 percent, at which point, the AED and SAED will each drop 0.50 percent every year until they are zero. Additionally, estimated employer contributions included reductions for the funding of the AIR and retiree health care benefits. For future plan members, employer contributions were further reduced by the estimated amount of total service costs for future plan members not financed by their member contributions.
- Employer contributions and the amount of total service costs for future plan members were based upon a process used by the plan to estimate future actuarially determined contributions assuming an analogous future plan member growth rate.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

- The AIR balance was excluded from the initial fiduciary net position, as, per statute, AIR amounts cannot be used to pay benefits until transferred to either the retirement benefits reserve or the survivor benefits reserve, as appropriate. As the ad hoc post-retirement benefit increases financed by the AIR are defined to have a present value at the long-term expected rate of return on plan investments equal to the amount transferred for their future payment, AIR transfers to the fiduciary net position and the subsequent AIR benefit payments have no impact on the Single Equivalent Interest Rate (SEIR) determination process when the timing of AIR cash flows is not a factor (i.e., the plan's fiduciary net position is not projected to be depleted). When AIR cash flow timing is a factor in the SEIR determination process (i.e., the plan's fiduciary net position is projected to be depleted), AIR transfers to the fiduciary net position and the subsequent AIR benefit payments were estimated and included in the projections.
- Benefit payments and contributions were assumed to be made at the end of the month.

Based on the above assumptions and methods, the projection test indicates the SDTF's fiduciary net position was projected to be depleted in 2038 and, as a result, the municipal bond index rate was used in the determination of the discount rate. The long-term expected rate of return of 7.25 percent on pension plan investments was applied to periods through 2038 and the municipal bond index rate, the December average of the Bond Buyer General Obligation 20-year Municipal Bond Index published weekly by the Bond Buyer, was applied to periods on and after 2038 to develop the discount rate. For the measurement date, the municipal bond index rate was 3.43 percent, resulting in a blended discount rate of 4.72 percent.

As of the prior measurement date, the long-term expected rate of return on plan investments of 7.25 percent and the municipal bond index rate of 3.86 percent were used in the discount rate determination resulting in a discount rate of 5.26, 0.54 percent higher compared to the current measurement date.

Table 15.6 presents the proportionate share of the net pension liability calculated using the discount rate of 4.72 percent for 2018 and 5.26 percent for 2017, as well as what the proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than those rates.

**Table 15.6. Sensitivity of the University's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate (in thousands)**

| <b>2018</b>                                      |                    |                         |                    |
|--------------------------------------------------|--------------------|-------------------------|--------------------|
|                                                  | <b>1% Decrease</b> | <b>Current Discount</b> | <b>1% Increase</b> |
| Proportionate share of the net pension liability | \$ 2,745,095       | 2,206,541               | 1,764,421          |
| <b>2017</b>                                      |                    |                         |                    |
|                                                  | <b>1% Decrease</b> | <b>Current Discount</b> | <b>1% Increase</b> |
| Proportionate share of the net pension liability | \$ 2,538,266       | 2,049,366               | 1,647,227          |

Detailed information about the SDTF's fiduciary net position is available in PERA's comprehensive annual financial report which can be obtained at [www.copera.org/investments/pera-financial-reports](http://www.copera.org/investments/pera-financial-reports).

#### **LEGISLATIVE CHANGES TO PERA'S DEFINED BENEFIT PLAN**

During the 2018 legislative session, the Colorado General Assembly passed significant pension reform through Senate Bill (SB) 18-200: *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*. The bill was signed into law by Governor Hickenlooper on June 4, 2018. SB 18-200 makes changes to the plans administered by PERA with the goal of eliminating the unfunded actuarial accrued liability of the Division Trust Funds and thereby reach a 100 percent funded ratio for each division within the next 30 years.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

A brief description of some of the major changes to plan provisions required by SB 18-200 are listed below. A full copy of the bill can be found online at [www.leg.colorado.gov](http://www.leg.colorado.gov).

- Increases employer contribution rates by 0.25 percent on July 1, 2019.
- Increases employee contribution rates by a total of 2 percent (to be phased in over a period of 3 years starting on July 1, 2019).
- Directs the state to allocate \$225 million each year to PERA starting on July 1, 2018. A portion of the direct distribution will be allocated to the SDTF based on the proportionate amount of annual payroll of the SDTF to the other divisions eligible for the direct distribution.
- Modifies the retirement benefits, including temporarily suspending and reducing the annual increase for all current and future retirees, modifying the highest average salary for employees with less than five years of service credit on December 31, 2019 and raises the retirement age for new employees.
- Member contributions, employer contributions, the direct distribution from the state, and the annual increases will be adjusted based on certain statutory parameters beginning July 1, 2020, and then each year thereafter, to help keep PERA on path to full funding in 30 years.
- Expands eligibility to participate in the PERA DC Plan to new members hired on or after January 1, 2019, who are classified college and university employees in the State Division. Beginning January 1, 2021, and every year thereafter, employer contribution rates for the SDTF will be adjusted to include a defined contribution supplement based on 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.

At June 30, 2018, the University reported a liability of \$2,206,541,000 for its proportionate share of the net pension liability which was measured using the plan provisions in effect as of the pension plan's year-end based on a discount rate of 4.72 percent. For comparative purposes, the following schedule presents an estimate of what the University's proportionate share of the net pension liability and associated discount rate would have been had the provisions of SB 18-200, applicable to the SDTF, become law on December 31, 2017. This pro forma information was prepared using the fiduciary net position of the SDTF as of December 31, 2017. Future net pension liabilities reported could be materially different based on changes in investment markets, actuarial assumptions, plan experience and other factors. Table 15.7 depicts the impact of this new legislation.

**Table 15.7. Impact of Legislative Changes in PERA (in thousands )**

| Estimated Discount Rate<br>Calculated<br>Using Plan Provisions<br>(pro forma) | Proportionate Share of the Estimated<br>Net Position Liability Calculated Using Plan<br>Provisions Required by SP 18-200<br>(pro forma) |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 7.25%                                                                         | \$1,046,326                                                                                                                             |

Recognizing that the changes in contribution and benefit provisions also affect the determination of the discount rate used to calculate proportionate share of the net pension liability, approximately \$984,654,000 of the estimated reduction is attributable to the use of a 7.25 percent discount rate.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**PERA DEFINED CONTRIBUTION PLAN**

Employees of the University that are also members of the SDTF may voluntarily contribute to the Voluntary Investment Program, an Internal Revenue Code Section 401(k) defined contribution plan administered by PERA. Title 24, Article 51, Part 14 of the C.R.S., as amended, assigns the authority to establish the Plan provisions to the PERA Board of Trustees. PERA issues a publicly available comprehensive annual financial report for the Program. That report can be obtained at [www.copera.org/investments/pera-financial-reports](http://www.copera.org/investments/pera-financial-reports). The Voluntary Investment Program is funded by voluntary member contributions up to the maximum limits set by the Internal Revenue Service, as established under Title 24, Article 51, Section 1402 of the C.R.S., as amended. The employees' contributions to this 401(k) plan approximated \$4,811,000 and \$4,506,000 for the years ended June 30, 2018 and 2017, respectively.

**PERA DEFERRED COMPENSATION PLAN**

The PERA Deferred Compensation Plan (457) was established July 1, 2009, as a continuation of the State's deferred compensation plan, which was established for state and local government employees in 1981. At July 1, 2009, the State's administrative functions for the 457 plan were transferred to PERA, where all costs of administration and funding are borne by the plan participants. In calendar year 2017, participants were allowed to make contributions of up to 100 percent of their annual gross salary (reduced by their 8 percent PERA contribution) to a maximum of \$18,000. Participants who are age 50 and older, and contributing the maximum amount allowable, were allowed to make an additional \$6,000 contribution in 2017 for total contributions of \$24,000. Participants are also eligible for the special 457 plan catch-up beginning the last three years immediately preceding the participant's normal retirement age. Contributions and earnings made by CU employees are tax deferred, although the 457 plan does permit a Roth option. At December 31, 2017, the plan had 18,211 participants. The employees' contributions to the 457 plan approximated \$17,725,000 and \$14,457,000 for the years ended June 30, 2018 and 2017, respectively.

**UNIVERSITY OPTIONAL RETIREMENT PLAN**

Under the University's optional retirement plan (ORP), certain members of the University are required to participate in a defined contribution retirement plan administered by the University for the benefit of full-time faculty and exempt staff members. The State constitution assigns the authority to establish and amend plan provisions to the Regents. The contribution requirements of plan members and the University are established and may be amended by the Regents. Generally, employees are eligible for participation in the ORP upon hire and are vested immediately upon participation.

For the years ended June 30, 2018 and 2017, the University's contribution to the defined contribution retirement plan was equal to 10 percent of covered payroll, and the employee contribution was equal to 5 percent of covered payroll. The University's contribution under the ORP approximated \$152,606,000 and \$128,523,000 during the years ended June 30, 2018 and 2017, respectively. The employees' contribution under the ORP approximated \$76,182,000 and \$64,107,000 during the years ended June 30, 2018 and 2017, respectively.

Participants in the University's ORP choose to invest all contributions with one or more of three designated vendors. In addition, participants in the University's ORP are covered under federal Social Security. Federal Social Security regulations require both the employer and employee to contribute a percentage of covered payroll to Social Security.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**UNIVERSITY VOLUNTARY RETIREMENT SAVINGS PLAN**

The University provides a voluntary retirement savings plan to most employees referred to as a 403(b) plan. Employee salary deferrals into the 403(b) plan are made before income tax is paid and allowed to grow tax-deferred until the money is taxed as income when withdrawn from the plan. For calendar year 2017 and 2016, the plan had a contribution limit of \$18,000. In addition, the plan allowed catch-up contributions of \$6,000. The plan is administered by the University and the benefit terms are established and can be amended under the Employee Retirement Income Security Act (ERISA). The employees' contributions to this 403(b) plan approximated \$48,640,000 and \$40,551,000 for the years ended 2018 and 2017, respectively.

**ALTERNATE MEDICARE PLAN**

The University provides an Alternate Medicare Plan (AMP) to retirees aged 65 and over. The AMP was established by the University who also administers and has the authority to amend benefits. The AMP is available to the employee and eligible spouse/same gender domestic partner. Coverage is not provided for dependent children. The AMP is a single-employer defined benefit pension plan. The AMP provides a monthly cash payment of approximately \$154 for a retiree in both Fiscal Year 2018 and 2017, approximately \$262 for a retiree plus spouse/same gender domestic partner in both Fiscal Year 2018 and 2017, and approximately \$108 for a surviving spouse in both Fiscal Year 2018 and 2017, to offset medical plan costs for non-university Medicare Risk or Medicare-Eligible plan. No retiree contribution is permitted. As these monthly cash payments are not restricted as to use, they are considered a pension rather than a postemployment benefit. The University adopted the provisions of Statement No. 73 in Fiscal Year 2017.

**Funded Status and Funding Progress.** There are no assets accumulating in a trust for the AMP as the University funds this program on a pay-as-you-go basis. The University contributed \$1,566,000 and \$1,436,000 for the years ended June 30, 2018 and 2017, respectively.

The actuarial valuation for the fiscal year ending June 30, 2018 had a measurement date of June 30, 2017. Based on March 1, 2017 census data, there were 12,410 participants in the AMP plan, with 11,833 active employees and 577 retirees. In addition to the retirees in payment status, there were 204 retirees receiving benefits through the OPEB plan who are eligible for AMP benefit upon reaching Medicare eligibility.

The actuarial valuation for the fiscal year ending June 30, 2017 had a measurement date of June 30, 2016. Based on March 1, 2015 census data, there were 11,690 participants in the AMP plan, with 11,183 active employees and 507 retirees. In addition to the retirees in payment status, there were 175 retirees receiving benefits through the OPEB plan who are eligible for AMP benefit upon reaching Medicare eligibility.

The University recognized \$5,426,000 and \$5,431,000 of AMP expense in Fiscal Year 2018 and 2017, respectively. Table 15.8 details the changes in the AMP liability during Fiscal Years 2018 and 2017.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 15.8. Reconciliation of AMP Liability (*in thousands*)**

|                                                           | <b>Fiscal Year Ending June 30</b> |               |
|-----------------------------------------------------------|-----------------------------------|---------------|
|                                                           | <b>2018</b>                       | <b>2017</b>   |
| <b>AMP liability, beginning of year</b>                   | \$ 74,723                         | 11,600        |
| Cumulative effect of adoption of new accounting principle | -                                 | 46,640        |
| Contributions made subsequent to the measurement date     | -                                 | 1,349         |
| <b>Changes recognized for the fiscal year:</b>            |                                   |               |
| Service cost                                              | 4,262                             | 3,194         |
| Interest on total AMP liability                           | 2,231                             | 2,391         |
| Differences between expected and actual experience        | (3,377)                           | (101)         |
| Changes of assumption                                     | (3,180)                           | 10,999        |
| Estimated benefit payments                                | (1,448)                           | (1,349)       |
| <b>Net changes</b>                                        | <b>(1,512)</b>                    | <b>15,134</b> |
| <b>AMP liability, end of year</b>                         | <b>\$ 73,211</b>                  | <b>74,723</b> |

**Actuarial Methods and Assumptions.** Actuarial valuations of an ongoing program involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about retirement rates, withdrawal rates, mortality rates, and participation rates. The entry age normal actuarial cost method is used. The discount rate used in the valuation is 3.60 percent as of the June 30, 2017 measurement date, and 2.85 percent as of the June 30, 2016 measurement date, and is based on the Bond Buyer General Obligation 20-Bond Municipal Bond Index. The RP-2014 Healthy Annuitant Mortality Table with adjustments for credibility and gender adjustments of a 73 percent factor applied to the rates for ages below 80 and a 108 percent factors applied to the rates for ages 80 and above, projected to 2018 using the MP-2015 projection scale for males, and a 78 percent factor applied to the rates for ages below 80 and a 109 percent factor applied to the rates for ages 80 and above, projected to 2020 using the MP-2015 projection scale for females.

The valuation reflects the following assumption changes from the June 30, 2016 measurement date to the June 30, 2017 measurement date:

- Interest rate changed from 2.85 percent to 3.60 percent
- Spouse age differential changed from zero years for males and females to spouses two years younger for males and one year older for females
- Spouse coverage assumption changed from 54 percent for males and 22 percent for females to 60 percent for males and 40 percent for females
- The following assumptions were updated based on the December 31, 2015 Colorado PERA assumption study:
  - Mortality rates
  - Withdrawal rates

Table 15.9 illustrates the impact of interest rate sensitivity on the AMP liability for the fiscal years ending June 30, 2018 and 2017.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 15.9. Sensitivity of AMP Liability (*in thousands*)**

| Fiscal Year Ended June 30 |    | 1% Increase<br>(4.60%) | Current Rate<br>(3.60%) | 1% Decrease<br>(2.60%) |
|---------------------------|----|------------------------|-------------------------|------------------------|
| 2018                      | \$ | 62,639                 | 73,211                  | 86,429                 |
|                           |    | 1% Increase<br>(3.85%) | Current Rate<br>(2.85%) | 1% Decrease<br>(1.85%) |
| 2017                      | \$ | 63,725                 | 74,723                  | 88,499                 |

Table 15.10 illustrates the deferred outflows and inflows of resources as of June 30, 2018 and 2017.

**Table 15.10. AMP Deferred Outflows and Inflows (*in thousands*)**

|                                                    |           | 2018              |                  | 2017              |                  |
|----------------------------------------------------|-----------|-------------------|------------------|-------------------|------------------|
|                                                    |           | Deferred Outflows | Deferred Inflows | Deferred Outflows | Deferred Inflows |
| Changes in assumptions                             | \$        | 8,411             | 2,806            | 9,705             | -                |
| Differences between expected and actual experience |           | -                 | 3,057            | -                 | 89               |
| Contributions subsequent to the measurement date   |           | 1,566             | -                | 1,436             | -                |
| <b>Total</b>                                       | <b>\$</b> | <b>9,977</b>      | <b>5,863</b>     | <b>11,141</b>     | <b>89</b>        |

Between the June 30, 2017 and 2016 measurement dates of the total AMP liability and the University's June 30, 2018 and 2017 reporting dates, the University made contributions of \$1,566,000 and \$1,436,000 during Fiscal Year 2018 and 2017, respectively, that impacted the total AMP liability and were treated as a deferred outflow of resources.

Table 15.11 lists the amortization bases included in the deferred outflows and inflows of resources as of June 30, 2018 and 2017.

**Table 15.11. Amortization of AMP Deferred Outflows and Inflows (*in thousands*)**

| Date                 | Type of Base                                       | Period   |           | Balance         |              | Annual Amortization |
|----------------------|----------------------------------------------------|----------|-----------|-----------------|--------------|---------------------|
|                      |                                                    | Original | Remaining | Original        | Remaining    |                     |
| July 1, 2016         | Differences between expected and actual experience | 8.5      | 6.5       | \$ (101)        | (77)         | (12)                |
| July 1, 2016         | Changes in assumptions                             | 8.5      | 6.5       | 10,999          | 8,411        | 1,294               |
| July 1, 2017         | Differences between expected and actual experience | 8.5      | 7.5       | (3,377)         | (2,980)      | (397)               |
| July 1, 2017         | Changes in assumptions                             | 8.5      | 7.5       | (3,180)         | (2,806)      | (374)               |
| <b>Total changes</b> |                                                    |          |           | <b>\$ 4,341</b> | <b>2,548</b> | <b>511</b>          |

The deferred outflow from contributions subsequent to the measurement date of \$1,566,000 and \$1,436,000 will be recognized as a reduction to the AMP liability in the year ended June 30, 2019 and 2018, respectively. Other amounts reported as deferred outflows and inflows related to the AMP liability will be recognized in AMP expense as summarized in Table 15.12.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 15.12. Future Amortization of AMP**  
**Deferred Outflows and Inflows (*in thousands*)**

| <b>Years ending June 30:</b> |           |              |
|------------------------------|-----------|--------------|
| 2019                         | \$        | 511          |
| 2020                         |           | 511          |
| 2021                         |           | 511          |
| 2022                         |           | 511          |
| 2023                         |           | 511          |
| 2024-2024                    |           | (7)          |
| <b>Total</b>                 | <b>\$</b> | <b>2,548</b> |

**EARLY RETIREMENT INCENTIVE PROGRAM**

The University provides an early retirement incentive program (ERIP) to tenured professors who are at least 55 years of age and whose age and years of service total at least 70. These professors must also be participants in the University's ORP. The ERIP provides eligible participants with an incentive equal to twice the professor's base salary and supplemental pay. In return, the participants will retire and relinquish tenure immediately. There were 40 and 70 participants as of June 30, 2018 and 2017, respectively. Benefits under the ERIP are payable over a five-year period. Participation in this program does not impact the Optional Retirement Plan or OPEB. The liability as of June 30, 2018 and 2017 was \$4,077,000 and \$4,602,000, respectively, measured at a discounted present value using a rate of 5 percent. Table 15.13 presents changes in the ERIP for the years ended June 30, 2018 and 2017.

**Table 15.13. Early Retirement Incentive Program**  
**(*in thousands*)**

|                    | <b>2018</b>     | <b>2017</b>  |
|--------------------|-----------------|--------------|
| Beginning of year  | \$ 4,602        | 7,222        |
| Additions          | 1,047           | -            |
| Reductions         | (1,572)         | (2,620)      |
| <b>End of year</b> | <b>\$ 4,077</b> | <b>4,602</b> |
| Current ERIP       | 1,686           | 1,624        |

**CU MEDICINE RETIREMENT PLAN**

CU Medicine sponsors a defined contribution retirement plan for its permanent employees that is administered by the Teachers Insurance Annuities Association's College Retirement Equities Fund. The board of directors for CU Medicine has the authority to amend plan provisions. Employees are eligible for participation in the plan after completing one year of service. On behalf of eligible employees, CU Medicine contributed an amount equal to 7 percent of eligible employees' salaries for the years ended June 30, 2018 and 2017. CU Medicine's contributions for covered payroll to the retirement plan for the years ended June 30, 2018 and 2017, approximated \$2,005,000 and \$1,983,000, respectively.

**HEALTH INSURANCE PROGRAMS**

The University's contributions to its various health insurance programs approximated \$230,759,000 and \$191,461,000 during the years ended June 30, 2018 and 2017, respectively. See Note 18 for discussion of the Trust.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

***NOTE 16 – SEGMENT AND BLENDED COMPONENT UNIT INFORMATION***

The University has two segments, CU Medicine and CVA.

CU Medicine is a blended component unit of the University and has identifiable activities for which CU Medicine Fixed-Rate bonds approximating \$7,481,000 and \$8,657,000 are outstanding as of June 30, 2018 and 2017, respectively. The activities of this segment include all the SOM's faculty practice plan. Table 16.1 presents summary financial information as of and for the years ended June 30, 2018 and 2017.

The University paid CU Medicine rental amounts of \$2,668,000 and \$2,510,000 during the years ended June 30, 2018 and 2017, respectively. As CU Medicine is a blended component unit, these amounts are eliminated.

CVA is also a segment of the University. CVA is a wholly owned entity of CUPCO, a blended component unit of the University, for which \$53,040,000 and \$53,440,000 revenue bonds are outstanding as of June 30, 2018 and 2017, respectively. CVA provides housing and other services for students of CU Denver. Table 16.2 presents summary financial information as of and for the years ended June 30, 2018 and from January 1, 2017 through June 30, 2017, the period of time after which CVA assets were transferred to CUPCO.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 16.1 Segment Financial Information - CU Medicine (in thousands)**

| <b>As of and for the year ended June 30</b>                                   | <b>2018</b>       | <b>2017</b>    |
|-------------------------------------------------------------------------------|-------------------|----------------|
| <b>Condensed Statement of Net Position</b>                                    |                   |                |
| <b>Assets</b>                                                                 |                   |                |
| Cash and cash equivalents                                                     | \$ 130,488        | 81,057         |
| Short-term investments                                                        | 51,629            | 59,657         |
| Other current assets                                                          | 161,226           | 104,952        |
| Total current assets                                                          | 343,343           | 245,666        |
| Investments                                                                   | \$ 255,634        | 235,760        |
| Capital assets, net                                                           | 37,670            | 40,649         |
| Other noncurrent assets                                                       | 4,325             | 7,776          |
| Total noncurrent assets                                                       | 297,629           | 284,185        |
| <b>Total Assets</b>                                                           | <b>\$ 640,972</b> | <b>529,851</b> |
| <b>Liabilities</b>                                                            |                   |                |
| Accounts payable and accrued expenses                                         | \$ 60,073         | 46,670         |
| Accounts payable to University of Colorado                                    | 4,820             | 739            |
| Bonds, leases, and notes payable                                              | 1,282             | 1,297          |
| Total current liabilities                                                     | 66,175            | 48,706         |
| Bonds, leases, and notes payable                                              | 6,488             | 7,653          |
| Total noncurrent liabilities                                                  | 6,488             | 7,653          |
| <b>Total Liabilities</b>                                                      | <b>\$ 72,663</b>  | <b>56,359</b>  |
| <b>Net Position</b>                                                           |                   |                |
| Net investment in capital assets                                              | 29,899            | 31,699         |
| Unrestricted                                                                  | 538,410           | 441,793        |
| <b>Total Net Position</b>                                                     | <b>568,309</b>    | <b>473,492</b> |
| <b>Condensed Statement of Revenues, Expenses, and Changes in Net Position</b> |                   |                |
| <b>Operating revenues (expenses)</b>                                          |                   |                |
| Patient revenues                                                              | \$ 1,007,542      | 848,898        |
| Depreciation expense                                                          | (4,627)           | (4,722)        |
| Other operating expenses                                                      | (890,128)         | (789,969)      |
| Operating income                                                              | 112,787           | 54,207         |
| <b>Nonoperating revenues (expenses)</b>                                       |                   |                |
| Investment income                                                             | \$ 4,226          | 3,310          |
| Interest expense on capital asset-related debt                                | (296)             | (220)          |
| Other nonoperating expenses                                                   | (21,900)          | (11,498)       |
| Total nonoperating revenues (expenses)                                        | (17,970)          | (8,408)        |
| <b>Increase in Net Position</b>                                               | <b>94,817</b>     | <b>45,799</b>  |
| Net Position, beginning of year                                               | 473,492           | 427,693        |
| <b>Net Position, end of year</b>                                              | <b>\$ 568,309</b> | <b>473,492</b> |
| <b>Condensed Statement of Cash Flows</b>                                      |                   |                |
| <b>Net cash flows provided by (used for)</b>                                  |                   |                |
| Operating activities                                                          | \$ 80,714         | 39,038         |
| Non-capital financing activities                                              | (20,460)          | (11,533)       |
| Capital and related financing activities                                      | (3,176)           | (3,757)        |
| Investing activities                                                          | (7,647)           | (27,268)       |
| <b>Net Increase (Decrease) in Cash and Cash Equivalents</b>                   | <b>49,431</b>     | <b>(3,520)</b> |
| Cash and cash equivalents, beginning of year                                  | 81,057            | 84,577         |
| <b>Cash and Cash Equivalents, End of Year</b>                                 | <b>\$ 130,488</b> | <b>81,057</b>  |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 16.2 Segment Financial Information - CVA (in thousands)**

| <b>As of and for the year ended June 30</b>                                   | <b>2018</b>        | <b>2017</b>     |
|-------------------------------------------------------------------------------|--------------------|-----------------|
| <b>Condensed Statement of Net Position</b>                                    |                    |                 |
| <b>Assets</b>                                                                 |                    |                 |
| Current assets                                                                | \$ 8,462           | 5,003           |
| Capital assets                                                                | 29,217             | 29,379          |
| Other noncurrent assets                                                       | -                  | 5,165           |
| <b>Total Assets</b>                                                           | <b>\$ 37,679</b>   | <b>39,547</b>   |
| <b>Liabilities</b>                                                            |                    |                 |
| Current liabilities                                                           | 1,293              | 1,698           |
| Noncurrent liabilities                                                        | 51,937             | 52,407          |
| <b>Total Liabilities</b>                                                      | <b>\$ 53,230</b>   | <b>54,105</b>   |
| <b>Net Position</b>                                                           |                    |                 |
| Net investment in capital assets                                              | \$ (22,281)        | (22,473)        |
| Restricted for bond requirements                                              | 5,676              | 7,977           |
| Unrestricted                                                                  | 1,054              | (62)            |
| <b>Total Net Position</b>                                                     | <b>(15,551)</b>    | <b>(14,558)</b> |
| <b>Condensed Statement of Revenues, Expenses, and Changes in Net Position</b> |                    |                 |
| Operating revenues                                                            | \$ 7,015           | 3,227           |
| Operating expenses                                                            | (3,514)            | (1,623)         |
| Depreciation expense                                                          | (1,420)            | (673)           |
| Net operating income                                                          | 2,081              | 931             |
| Interest expense                                                              | (2,946)            | (1,480)         |
| Gifts                                                                         | -                  | 895             |
| Other nonoperating revenue (expense)                                          | (400)              | -               |
| Interest income                                                               | 272                | 124             |
| Net nonoperating expenses                                                     | (3,074)            | (461)           |
| <b>Increase (Decrease) in Net Position prior to Special Item</b>              | <b>(993)</b>       | <b>470</b>      |
| Special Item                                                                  | -                  | (15,028)        |
| Net Position, beginning of year                                               | (14,558)           | -               |
| <b>Net Position, end of year</b>                                              | <b>\$ (15,551)</b> | <b>(14,558)</b> |
| <b>Condensed Statement of Cash Flows</b>                                      |                    |                 |
| Net cash flows provided by (used for)                                         |                    |                 |
| Operating activities                                                          | \$ 2,017           | 1,176           |
| Non-capital financing activities                                              | (400)              | (1,759)         |
| Capital and related financing activities                                      | (4,559)            | (484)           |
| Investing activities                                                          | 2,574              | 895             |
| <b>Net Decrease in Cash and Cash Equivalents</b>                              | <b>(368)</b>       | <b>(172)</b>    |
| Cash and cash equivalents, beginning of year                                  | 765                | 937             |
| <b>Cash and Cash Equivalents, End of Year</b>                                 | <b>\$ 397</b>      | <b>765</b>      |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**NOTE 17 – DISCRETELY PRESENTED COMPONENT UNIT**

Summary financial information as of and for the years ended June 30, 2018 and 2017, for the University's CU Foundation are presented in Table 17.1.

**Table 17.1 CU Foundation Summary Financial Statements (in thousands)**

| <b>Condensed Statement of Net Position</b>              |           |                  |                  |
|---------------------------------------------------------|-----------|------------------|------------------|
|                                                         |           | <b>2018</b>      | <b>2017</b>      |
| <b>Assets</b>                                           |           |                  |                  |
| Current assets                                          |           |                  |                  |
| Cash and cash equivalents                               | \$        | 29,861           | 26,013           |
| Contributions receivable, net                           |           | 28,853           | 31,934           |
| Other current assets                                    |           | 724              | 539              |
| Total current assets                                    |           | 59,438           | 58,486           |
| Noncurrent assets                                       |           |                  |                  |
| Investments                                             |           | 1,847,550        | 1,689,100        |
| Assets held under split-interest agreements             |           | 42,573           | 42,750           |
| Contributions receivable, net                           |           | 151,080          | 90,994           |
| Beneficial interest in charitable trusts held by others |           | 8,406            | 8,017            |
| Capital assets, net                                     |           | 1,435            | 1,583            |
| Total noncurrent assets                                 |           | 2,051,044        | 1,832,444        |
| <b>Total Assets</b>                                     | <b>\$</b> | <b>2,110,482</b> | <b>1,890,930</b> |
| <b>Liabilities</b>                                      |           |                  |                  |
| Current liabilities                                     |           |                  |                  |
| Accounts payable                                        | \$        | 390              | 480              |
| Accounts payable - University                           |           | 4,832            | 13,295           |
| Liabilities under split-interest agreements             |           | 2,619            | 2,604            |
| Custodial funds                                         |           | 16,660           | 15,719           |
| Total current liabilities                               |           | 24,501           | 32,098           |
| Noncurrent liabilities                                  |           |                  |                  |
| Liabilities under split-interest agreements             |           | 20,319           | 21,060           |
| Custodial funds                                         |           | 418,292          | 379,744          |
| Funds held in trust for others                          |           | 2,293            | 2,115            |
| Total noncurrent liabilities                            |           | 440,904          | 402,919          |
| <b>Total Liabilities</b>                                | <b>\$</b> | <b>465,405</b>   | <b>435,017</b>   |
| <b>Net Position</b>                                     |           |                  |                  |
| Net investment in capital assets                        | \$        | 1,435            | 1,583            |
| Restricted for nonexpendable purposes                   |           | 606,413          | 546,822          |
| Restricted for expendable purposes                      |           | 970,306          | 847,611          |
| Unrestricted                                            |           | 66,923           | 59,897           |
| <b>Total Net Position</b>                               | <b>\$</b> | <b>1,645,077</b> | <b>1,455,913</b> |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 17.1 (continued) CU Foundation Summary Financial Statements (*in thousands*)**

| <b>Statement of Revenues, Expenses, and Changes in Net Position</b> |           | <b>For the Year Ended June 30</b> |                  |
|---------------------------------------------------------------------|-----------|-----------------------------------|------------------|
|                                                                     |           | <b>2018</b>                       | <b>2017</b>      |
| Operating revenues                                                  |           |                                   |                  |
| Contributions                                                       | \$        | 248,613                           | 188,221          |
| Other revenue                                                       |           | 4,186                             | 3,779            |
| Total operating revenues                                            |           | 252,799                           | 192,000          |
| Operating expenses                                                  |           |                                   |                  |
| Institutional support                                               |           |                                   |                  |
| Gifts and income distributed to University                          |           | 166,739                           | 139,451          |
| Administrative                                                      |           | 4,757                             | 4,229            |
| Advancement support to the University                               |           | 21,579                            | 20,749           |
| Depreciation and amortization                                       |           | 148                               | 158              |
| Total operating expenses                                            |           | 193,223                           | 164,587          |
| <b>Operating Income</b>                                             |           | <b>59,576</b>                     | <b>27,413</b>    |
| Nonoperating revenues (expenses)                                    |           |                                   |                  |
| Investment income                                                   |           | 129,588                           | 156,572          |
| <b>Increase in Net Position</b>                                     |           | <b>189,164</b>                    | <b>183,985</b>   |
| Net Position, beginning of year                                     |           | 1,455,913                         | 1,271,928        |
| <b>Net Position, End of Year</b>                                    | <b>\$</b> | <b>1,645,077</b>                  | <b>1,455,913</b> |
| <b>Condensed Statement of Cash Flows</b>                            |           |                                   |                  |
| Net cash flows provided by (used for)                               |           |                                   |                  |
| Operating activities                                                | \$        | (9,801)                           | 37,545           |
| Non-capital financing activities                                    |           | 44,642                            | 37,114           |
| Investing activities                                                |           | (30,993)                          | (83,339)         |
| <b>Net Increase (Decrease) in Cash and Cash Equivalents</b>         |           | <b>3,848</b>                      | <b>(8,680)</b>   |
| Cash and cash equivalents, beginning of year                        |           | 26,013                            | 34,693           |
| <b>Cash and Cash Equivalents, End of Year</b>                       | <b>\$</b> | <b>29,861</b>                     | <b>26,013</b>    |

During Fiscal Year 2017 CUREF was dissolved and its assets were transferred to CUPCO and the CU Foundation and the remaining activity is shown in Table 17.2. CUREF was a discretely presented component unit of the University, and CUPCO is a blended component unit of the University.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**Table 17.2 CUREF Summary Financial Statement (in thousands )**

| <b>Statement of Revenues, Expenses, and Changes in Net Position</b> |                |
|---------------------------------------------------------------------|----------------|
| <b>For the Year Ended June 30, 2017</b>                             |                |
| Operating revenues                                                  |                |
| Other revenue                                                       | 7,853          |
| Total operating revenues                                            | 7,853          |
| Operating expenses                                                  |                |
| Institutional support                                               |                |
| Gifts and income distributed to University                          | 3,489          |
| Support services                                                    | 3,265          |
| Depreciation and amortization                                       | 775            |
| Total operating expenses                                            | 7,529          |
| <b>Operating Income</b>                                             | <b>324</b>     |
| <b>Increase in Net Position</b>                                     | <b>324</b>     |
| Net Position, beginning of year                                     | (324)          |
| <b>Net Position, End of Year</b>                                    | <b>-</b>       |
| <b>Condensed Statement of Cash Flows</b>                            |                |
| Net cash flows used for                                             |                |
| Operating activities                                                | (4,890)        |
| <b>Net Increase (Decrease) in Cash and Cash Equivalents</b>         | <b>(4,890)</b> |
| Cash and cash equivalents, beginning of year                        | 4,890          |
| <b>Cash and Cash Equivalents, End of Year</b>                       | <b>-</b>       |

**UNIVERSITY OF COLORADO FOUNDATION**

Distributions made by the CU Foundation to the University were approximately \$166,739,000 and \$139,451,000 during the years ended June 30, 2018 and 2017, respectively. This amount has been recorded as University grant or gift revenue and the CU Foundation operating expense in the accompanying financial statements and does not include undistributed income on University endowments.

Since July 1, 2007, the University has contracted with the CU Foundation to manage a portion of its investments. As of June 30, 2018 and 2017, respectively, \$222,167,000 and \$195,394,000 of non-endowed investments are being managed by the CU Foundation.

The University is the ultimate beneficiary of substantially all restricted and trust funds held by the CU Foundation and is income beneficiary of a significant portion of endowment funds held by the CU Foundation. In addition, the University contracts with the CU Foundation to manage its endowments. The University has endowments and other assets held by the CU Foundation approximating \$206,143,000 and \$196,327,000 as of June 30, 2018 and 2017, respectively.

The CU Foundation collected a one percent annual advancement support fee of \$3,500,000 for both years ended June 30, 2018 and 2017. The CU Foundation paid the University \$21,579,000 and \$20,749,000 to help cover development costs for the years ended June 30, 2018 and 2017, respectively, which is reported as other operating revenue.

As of June 30, 2018 and 2017, the University recorded an accounts receivable from the CU Foundation of \$4,832,000 and \$13,295,000, respectively. As of June 30, 2018 and 2017, the University recorded an account payable to the CU Foundation of \$44,000 and \$1,249,000, respectively.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

***NOTE 18 – RELATED ORGANIZATIONS AND JOINTLY GOVERNED ORGANIZATIONS***

**UNIVERSITY OF COLORADO HOSPITAL (UCH)**

In accordance with 1991 State legislation, UCH was established as a separate and distinct entity. Requests for additional information should be addressed to UCH, Chief Financial Officer, Mail Stop F-417, P.O. Box 6510, Aurora, Colorado 80045.

CU Denver | Anschutz and CU Medicine have several types of financial transactions with UCH. On an annual basis, CU Denver | Anschutz or CU Medicine and UCH enter into agreements specifying the fees to be charged for services and the allocation of expenses between the two organizations. In certain circumstances, CU Denver | Anschutz may bear the entire cost of certain services in exchange for educational or other services provided by UCH. In some instances, the fee charged by CU Denver | Anschutz, CU Medicine, or UCH is a set amount for specific services to be provided. In other circumstances, the fee charged is based upon the amount or type of services requested by either CU Denver | Anschutz or UCH.

Examples of services provided by CU Denver | Anschutz to UCH include telecommunications services, rental of office space, and resident doctors. Examples of services provided by UCH to CU Denver | Anschutz and patient services for sponsored research projects. In general, amounts receivable from, or payable to, UCH are settled within the following calendar quarter.

Total payments issued by UCH to CU Denver | Anschutz approximated \$59,100,000 and \$59,638,000 for years ended June 30, 2018 and 2017, respectively. Total payments issued by CU Denver | Anschutz to UCH for the years ended June 30, 2018 and 2017 approximated \$9,587,000 and \$10,344,000, respectively.

For the years ended June 30, 2018 and 2017, UCH distributed approximately \$26,215,000 and \$26,672,000, respectively, reported as gift revenue by the University.

During the years ended June 30, 2018 and 2017, CU Medicine recognized approximately \$94,358,000 and \$65,798,000, respectively, in health services revenue from UCH in support of clinical and academic missions. CU Medicine also received approximately \$35,546,000 and \$42,343,000 during the years ended June 30, 2018 and 2017, respectively, from UCH for amounts earned for services performed by CU Medicine faculty members but required to be processed through UCH (such as the State medically indigent program, Ryan White, and other miscellaneous programs).

As of June 30, 2018 and 2017, the University recorded an accounts receivable from UCH of \$5,983,000 and \$4,233,000, respectively, for various services provided. As of June 30, 2018 and 2017, the University had no accounts payable owed to UCH. Generally, amounts due are paid during the current or subsequent month.

**AURARIA HIGHER EDUCATION CENTER**

AHEC, established by legislation in 1974, is jointly governed and utilized by CU Denver, the Community College of Denver, and Metropolitan State University of Denver. The institutions share the costs of operating common educational, library, and other auxiliary facilities. Costs of the common facilities are shared in accordance with an operating agreement between AHEC and the respective institutions. During the years ended June 30, 2018 and 2017, the University incurred expenses related to the common facilities approximating \$10,589,000 and \$11,035,000, respectively, for payments to AHEC.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

As of June 30, 2018 and 2017, the University recorded an accounts payable to AHEC of \$917,000 and \$1,432,000, respectively, for services rendered but not yet paid, and for fees collected for the spring end of term but not yet paid. As of June 30, 2018 and 2017, the University had no accounts receivable due from AHEC.

In addition, the University leases space from AHEC. As of June 30, 2018 and 2017, the University has future operating lease payment obligations to AHEC of \$4,151,000 and \$2,244,000. For related party lease transactions, see Note 9.

Detailed financial information may be obtained directly from AHEC at 1201 5th Street Suite 370, Denver, Colorado 80217-336.

**UNIVERSITY OF COLORADO HEALTH AND WELFARE TRUST**

The Trust was formed June 28, 2010. Trust members are the University, UCH, and CU Medicine. The purpose of the Trust is to provide healthcare benefits to the employees of the Trust members on a self-insured basis. The University does not have financial accountability over the Trust. Self-insured risks are transferred to the pool.

The Trust paid medical claims on behalf of the University of \$214,640,000 and \$197,066,000 during the fiscal years ended June 30, 2018 and 2017, respectively. The University's payments to the Trust were \$230,759,000 and \$191,461,000 for the years ended June 30, 2018 and 2017, respectively, and the employees' payments were \$29,642,000 and \$25,189,000, respectively. As of June 30, 2018 and 2017, the University had accounts receivable owed from the Trust of \$879,000 and \$830,000, respectively, and accounts payable due to the Trust of \$0 and \$6,987,000, respectively.

Detailed financial information may be obtained directly from the Trust at 1999 Broadway, Suite 820, Denver, Colorado 80202.

**NOTE 19 – COMMITMENTS AND CONTINGENCIES**

The University leases various buildings and equipment under operating lease rental agreements. Operating leases do not give rise to property rights or meet other capital lease criteria and, therefore, the related assets and liabilities are not recorded in the accompanying financial statements. For the years ended June 30, 2018 and 2017, total rental expense under these agreements approximated \$12,323,000 and \$16,745,000 for the University, respectively. Future minimum payments for these operating leases are shown in Table 19.

**Table 19. Operating Leases Minimum Lease Obligations (in thousands)**

| <b>Years Ending June 30</b> | <b>Minimum</b>   |
|-----------------------------|------------------|
| 2019                        | \$ 13,872        |
| 2020                        | 11,766           |
| 2021                        | 9,935            |
| 2022                        | 9,531            |
| 2023                        | 6,972            |
| 2024 – 2028                 | 23,504           |
| 2025 – 2029                 | 10,853           |
| <b>Total</b>                | <b>\$ 86,433</b> |

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

Contracts have been entered into for the purpose of planning, acquiring, constructing, and equipping certain building additions and other projects with outstanding amounts totaling approximately \$309,731,000 and \$99,971,000 as of June 30, 2018 and 2017, respectively. These additions will be funded or financed by donor contributions, appropriations from the State, issuance of revenue bonds, and other financings. As of June 30, 2018 and 2017, the amount of capital construction appropriations authorized from the State for these projects approximated \$5,173,000 and \$35,106,000, respectively.

Substantial amounts are received and expended by the University under federal and state grants and contracts, and are subject to audit by cognizant governmental agencies. This funding relates to research, student aid, and other programs. University management believes that any liabilities arising from such audits will not have a material effect on the University's financial position or operations.

CU Medicine, as a member of the healthcare industry, is subject to numerous laws and regulations of federal, state, and local governments. These laws and regulations include, but are not necessarily limited to, matters such as licensure, accreditation, and government healthcare program participation requirements; reimbursement for patient services; and Medicare and Medicaid fraud and abuse. Government activity has continued to increase with respect to investigations and allegations concerning possible violations of fraud and abuse statutes and regulations by healthcare providers. Violations of these laws and regulations could result in expulsion from government healthcare programs, together with the imposition of significant fines and penalties, as well as significant repayments for patient services previously billed. CU Medicine management believes that CU Medicine is in substantial compliance with fraud and abuse statutes as well as other applicable government laws and regulations. While no regulatory inquiries have been made, compliance with such laws and regulations can be subject to future government review and interpretation as well as regulatory actions unknown or unasserted at this time.

The University is a defendant in a number of legal actions. While the final outcome of many of these legal actions cannot be determined at this time, management is of the opinion that the ultimate liability not covered by insurance, if any, for these legal actions will not have a material effect on the University's financial position or operations.

## ***NOTE 20 – SUBSEQUENT EVENTS***

The University has evaluated all subsequent events through the auditors' report date, and noted the following material subsequent events that required disclosure in these financial statements.

### **CVA BOND REDEMPTION**

On August 1, 2018, CVA directed the trustee of the Series 2008 Student Housing Revenue Refunding Bonds to redeem all of the outstanding bonds and any accrued interest (2018 Redemption). The 2018 Redemption consisted of \$53,040,000 in outstanding principal and \$481,000 in accrued interest. The 2018 Redemption was funded with \$48,015,000 in proceeds from the issuance on August 1, 2018 of the Series 2018A University Enterprise Revenue Bonds (Series 2018A) by the University, a debt service fund of \$481,000 maintained by CVA, and \$5,205,000 in proceeds from the August 1, 2018 maturity of the Guaranteed Investment Agreement and its accrued interest. The balance of the funding was used to pay for costs of issuance of the Series 2018A estimated at \$180,000. Additionally, during the year ended June 30, 2018, the board of directors of CUPCO adopted a resolution to designate CVA a "facility" under the University's Master Bond Resolution and to pledge all net revenues generated by CVA to repayment of the Series 2018A. For Fiscal Year 2019 and forward, the board of directors of CUPCO pledged that any net proceeds generated through any sale or long-term lease of CVA be promptly available for distribution to the University.

**UNIVERSITY OF COLORADO**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2018 and 2017**

**BOND ISSUANCE**

On October 17, 2018, the University issued \$64,360,000 of University Enterprise Revenue Bonds, Series 2018B to fund the construction of four projects at UCCS. Interest rates on the bonds ranged from 3 percent to 5 percent, and the first interest payment date is December 1, 2018. The final maturity of the bonds is June 1, 2048, with the first principal payment due on June 1, 2020.

**COMMERCIAL PAPER**

During the year ended June 30, 2018, the Regents authorized up to \$200 million of commercial paper to fund capital projects during their construction. As of June 30, 2018, the University had issued \$40 million of commercial paper (see Note 9). On September 9, 2018 the University issued an additional \$30 million of commercial paper to continue funding construction projects at CU-Boulder, bringing the total outstanding to \$70 million. The University anticipates additional issuance of commercial paper in this program during Fiscal Year 2019.

**ALTITUDE WEST**

The University has formed as a Colorado limited liability company named Altitude West, LLC. (Altitude West), a captive insurance company. The purpose of Altitude West is to insure property/casualty/workers' compensation exposures of the University, for the benefit of the University and to pursue any other lawful purpose for which a captive insurance company issued a certificate of authority in the state and operating as a limited liability company may be organized under Colorado law. The filing of the Articles of Organization was effective August 20, 2018, with the office of Colorado's Secretary of State and captive operations began with an effective date of October 1, 2018, with an initial contribution from the University of \$2.5 million.

**UNIVERSITY OF COLORADO**  
**REQUIRED SUPPLEMENTARY INFORMATION**  
**June 30, 2018 and 2017 (unaudited)**

**SCHEDULE OF UNIVERSITY'S PROPORTIONATE SHARE OF PERA PENSION LIABILITY**

| MEASUREMENT DATE  | PROPORTION OF COLLECTIVE NET PENSION LIABILITY (A) | PROPORTIONATE SHARE OF COLLECTIVE NET PENSION LIABILITY (B) | COVERED PAYROLL (C) | PROPORTIONATE SHARE OF COLLECTIVE NPL AS A PERCENTAGE OF COVERED PAYROLL (B/C) | PLAN'S FIDUCIARY NET POSITION AS A PERCENTAGE OF TOTAL PENSION LIABILITY |
|-------------------|----------------------------------------------------|-------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| DECEMBER 31, 2017 | 11.0227933269%                                     | \$ 2,206,541,000                                            | \$ 302,484,000      | 729.47%                                                                        | 43.20%                                                                   |
| DECEMBER 31, 2016 | 11.1571798445%                                     | \$ 2,049,366,000                                            | \$ 300,390,000      | 682.24%                                                                        | 42.59%                                                                   |
| DECEMBER 31, 2015 | 11.1631105031%                                     | \$ 1,175,591,000                                            | \$ 296,983,000      | 395.84%                                                                        | 56.11%                                                                   |
| DECEMBER 31, 2014 | 11.2723667751%                                     | \$ 1,060,337,000                                            | \$ 292,225,000      | 362.85%                                                                        | 59.84%                                                                   |
| DECEMBER 31, 2013 | 11.3970757002%                                     | \$ 1,015,248,000                                            | \$ 284,977,000      | 356.26%                                                                        | 61.08%                                                                   |

**SCHEDULE OF UNIVERSITY'S CONTRIBUTIONS TO PERA PENSION**

| FISCAL YEAR-END | STATUTORILY REQUIRED CONTRIBUTION (A) | CONTRIBUTIONS IN RELATION TO STATUTORILY REQUIRED CONTRIBUTION (B) | CONTRIBUTION DEFICIENCY (EXCESS) (A-B) | COVERED PAYROLL (C) | CONTRIBUTIONS AS A PERCENTAGE OF COVERED PAYROLL (B/C) |
|-----------------|---------------------------------------|--------------------------------------------------------------------|----------------------------------------|---------------------|--------------------------------------------------------|
| JUNE 30, 2018   | \$ 61,138,000                         | \$ 61,138,000                                                      | \$ -                                   | \$ 327,981,000      | 18.64%                                                 |
| JUNE 30, 2017   | \$ 58,698,000                         | \$ 58,698,000                                                      | \$ -                                   | \$ 300,673,000      | 19.52%                                                 |
| JUNE 30, 2016   | \$ 54,561,000                         | \$ 54,561,000                                                      | \$ -                                   | \$ 299,112,000      | 18.24%                                                 |
| JUNE 30, 2015   | \$ 50,696,000                         | \$ 50,696,000                                                      | \$ -                                   | \$ 295,357,000      | 17.16%                                                 |
| JUNE 30, 2014   | \$ 46,824,000                         | \$ 46,824,000                                                      | \$ -                                   | \$ 288,904,000      | 16.21%                                                 |
| JUNE 30, 2013   | \$ 40,368,000                         | \$ 40,368,000                                                      | \$ -                                   | \$ 279,476,000      | 14.44%                                                 |
| JUNE 30, 2012   | \$ 30,527,000                         | \$ 30,527,000                                                      | \$ -                                   | \$ 279,810,000      | 10.91%                                                 |
| JUNE 30, 2011   | \$ 27,243,000                         | \$ 27,243,000                                                      | \$ -                                   | \$ 278,497,000      | 9.78%                                                  |
| JUNE 30, 2010   | \$ 34,551,000                         | \$ 34,551,000                                                      | \$ -                                   | \$ 279,135,000      | 12.38%                                                 |
| JUNE 30, 2009   | \$ 31,863,000                         | \$ 31,863,000                                                      | \$ -                                   | \$ 277,523,000      | 11.48%                                                 |

**SCHEDULE OF UNIVERSITY'S PROPORTIONATE SHARE OF PERA OPEB LIABILITY**

| MEASUREMENT DATE  | PROPORTION OF COLLECTIVE NET OPEB LIABILITY (A) | PROPORTIONATE SHARE OF COLLECTIVE NET OPEB LIABILITY (B) | COVERED PAYROLL (C) | PROPORTIONATE SHARE OF COLLECTIVE NET OPEB LIABILITY AS A PERCENTAGE OF COVERED PAYROLL (B/C) | PLAN'S FIDUCIARY NET POSITION AS A PERCENTAGE OF TOTAL OPEB LIABILITY |
|-------------------|-------------------------------------------------|----------------------------------------------------------|---------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| DECEMBER 31, 2017 | 3.7222136080%                                   | \$ 48,374,000                                            | \$ 302,484,000      | 15.99%                                                                                        | 17.53%                                                                |
| DECEMBER 31, 2016 | 3.8085462272%                                   | \$ 49,379,000                                            | \$ 300,390,000      | 16.44%                                                                                        | 16.72%                                                                |

**SCHEDULE OF UNIVERSITY'S CONTRIBUTIONS TO PERA OPEB**

| FISCAL YEAR-END | STATUTORILY REQUIRED CONTRIBUTION (A) | CONTRIBUTIONS IN RELATION TO STATUTORILY REQUIRED CONTRIBUTION (B) | CONTRIBUTION DEFICIENCY (EXCESS) (A-B) | COVERED PAYROLL (C) | CONTRIBUTIONS AS A PERCENTAGE OF COVERED PAYROLL (B/C) |
|-----------------|---------------------------------------|--------------------------------------------------------------------|----------------------------------------|---------------------|--------------------------------------------------------|
| JUNE 30, 2018   | \$ 3,345,000                          | \$ 3,345,000                                                       | \$ -                                   | \$ 327,981,000      | 1.02%                                                  |
| JUNE 30, 2017   | \$ 3,067,000                          | \$ 3,067,000                                                       | \$ -                                   | \$ 300,673,000      | 1.02%                                                  |

**NOTE:** For information about factors that significantly affect trends in the amounts reported, see PERA's Comprehensive Annual Financial Report (CAFR).

**UNIVERSITY OF COLORADO**  
**REQUIRED SUPPLEMENTARY INFORMATION**  
**June 30, 2018 and 2017 (unaudited)**

**CHANGES IN ALTERNATE MEDICARE PLAN LIABILITY AND RELATED RATIOS**

|                                                    |    | <b>Fiscal Year Ending</b> |                      |
|----------------------------------------------------|----|---------------------------|----------------------|
|                                                    |    | <b>June 30, 2018</b>      | <b>June 30, 2017</b> |
| Service cost                                       | \$ | 4,262,000                 | 3,194,000            |
| Interest on total AMP liability                    |    | 2,231,000                 | 2,391,000            |
| Changes in benefit terms                           |    | -                         | -                    |
| Differences between expected and actual experience |    | (3,377,000)               | (101,000)            |
| Changes of assumption                              |    | (3,180,000)               | 10,999,000           |
| Benefit payments                                   |    | (1,448,000)               | (1,349,000)          |
| Net change in total AMP liability                  |    | (1,512,000)               | 15,134,000           |
| Total AMP liability (beginning)                    |    | 74,723,000                | 59,589,000           |
| Total AMP liability (ending)                       | \$ | 73,211,000                | 74,723,000           |

**Plan Fiduciary Net Position**

|                                           |    |               |             |
|-------------------------------------------|----|---------------|-------------|
| Contributions                             | \$ | 1,448,000     | 1,349,000   |
| Net investment income                     |    | -             | -           |
| Benefit payments                          |    | (1,448,000)   | (1,349,000) |
| Administrative expense                    |    | -             | -           |
| Net change in plan fiduciary net position |    | -             | -           |
| Plan fiduciary net position (beginning)   |    | -             | -           |
| Plan fiduciary net position (ending)      |    | -             | -           |
| Net AMP liability (ending)                | \$ | 73,211,000    | 74,723,000  |
| Net position as a % of AMP liability      |    | 0.00%         | 0.00%       |
| Covered-employee payroll                  | \$ | 1,187,065,000 | 942,644,000 |
| Net AMP liability as a % of payroll       |    | 6.17%         | 7.93%       |

**CHANGES IN TOTAL OPEB LIABILITY AND RELATED RATIOS**

| <b>University OPEB Plan</b>                        |    | <b>Fiscal Year Ending</b> |
|----------------------------------------------------|----|---------------------------|
|                                                    |    | <b>June 30, 2018</b>      |
| Service cost                                       | \$ | 53,099,000                |
| Interest cost                                      |    | 24,648,000                |
| Changes in benefit terms                           |    | -                         |
| Differences between expected and actual experience |    | (87,654,000)              |
| Changes of assumptions                             |    | (46,406,000)              |
| Benefit payments                                   |    | (17,211,000)              |
| Net change in total OPEB liability                 |    | (73,524,000)              |
| Total OPEB liability (beginning)                   |    | 820,297,000               |
| Total OPEB liability (ending)                      | \$ | 746,773,000               |

**Plan Fiduciary Net Position**

|                                           |    |               |
|-------------------------------------------|----|---------------|
| Contributions                             | \$ | 17,211,000    |
| Net investment income                     |    | -             |
| Benefit payments                          |    | (17,211,000)  |
| Administrative expense                    |    | -             |
| Net change in plan fiduciary net position |    | -             |
| Plan fiduciary net position (beginning)   |    | -             |
| Plan fiduciary net position (ending)      |    | -             |
| Total OPEB liability (ending)             | \$ | 746,773,000   |
| Net position as a % of OPEB liability     |    | 0.00%         |
| Covered-employee payroll                  | \$ | 1,475,177,000 |
| Total OPEB liability as a % of payroll    |    | 50.62%        |

**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL  
OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER  
MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED  
IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

Members of the Legislative Audit Committee:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the business-type activities and aggregate discretely presented component units of the University of Colorado (the University), an institution of higher education of the State of Colorado, as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the University's basic financial statements, and have issued our report thereon dated November 14, 2018. Our report includes a reference to other auditors who audited the financial statements of University of Colorado Medicine (CU Medicine), a blended component unit, and the University of Colorado Foundation (CU Foundation) and University of Colorado Real Estate Foundation (CUREF), discretely presented component units, as described in our report on the University's financial statements. This report does not include the results of the other auditors' testing of internal control over financial reporting or compliance and other matters that are reported on separately by those auditors. The financial statements of CU Medicine and the University of Colorado Property Corporation, blended component units, and the CU Foundation and CUREF, discretely presented component units, were not audited in accordance with *Government Auditing Standards*.

**Internal Control over Financial Reporting**

In planning and performing our audits of the financial statements, we considered the University's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we do not express an opinion on the effectiveness of the University's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and, therefore, material weaknesses or significant deficiencies may exist that have not been identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify a certain deficiency in internal control, described earlier in this report, that we consider to be a significant deficiency.

### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the University's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed one instance of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

### **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

A handwritten signature in cursive script that reads "CliftonLarsonAllen LLP".

### **CliftonLarsonAllen LLP**

Greenwood Village, Colorado  
November 14, 2018

## Required Communications to the Legislative Audit Committee

We have audited the financial statements of the business-type activities and the discretely presented component unit of the University of Colorado (the University) as of and for the year ended June 30, 2018, and have issued our report thereon dated November 14, 2018. We have previously communicated to you information about our responsibilities under auditing standards generally accepted in the United States of America and *Government Auditing Standards*, as well as certain information related to the planned scope and timing of our audit. Professional standards also require that we communicate to you the following information related to our audit.

### Significant audit findings

#### ***Qualitative aspects of accounting practices***

##### *Accounting policies*

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the University are described in Note 1 to the financial statements.

As described in Note 1, the University implemented GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* which is effective for financial statement periods beginning after June 15, 2017. GASB Statement No. 75 requires recognition and disclosure of liabilities, deferred outflows of resources, and deferred inflows of resources related to the University's Other Postemployment Benefit (OPEB) Plans. The adoption this Statement resulted in a cumulative effect entry as of the beginning of Fiscal Year 2018 of \$507,608,000, which increased the OPEB liability and decreased unrestricted net position.

In addition, as described in Note 1, the University implemented GASB Statement No. 81, *Irrevocable Split-Interest Agreements* which is effective for financial statement periods beginning after December 15, 2016. GASB Statement No. 81 requires recognition and disclosure of assets, liabilities, and deferred inflows of resources at the inception of the University's agreements. The adoption of this Statement resulted in a cumulative effect entry as of the beginning of Fiscal Year 2018 of \$1,705,000, which decreased restricted net position.

The University elected to early implement GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period* during the year ended June 30, 2018. This statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will no longer be capitalized and included in the historical cost of a capital asset for the University beginning in fiscal year 2018.

We noted no transactions entered into by the University during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the financial statements and the University management's description of the processes utilized in forming these were:

- Accounts and loans receivable are recorded net of estimated uncollectible amounts, approximating anticipated losses. Individual accounts are written off against the allowance when collection of the account appears doubtful.
- Capital assets are depreciated using the straight-line method and monthly convention over the estimated useful lives of the assets. Estimated useful lives range from 3 to 40 years.
- Reserves for unpaid claims under the University's self-insurance programs (Property General Liability, Workers' Compensation, Professional Liability, And Graduate Medical Student Health Benefits) are actuarially reviewed and evaluated for adequacy each year and are reported on an undiscounted basis.
- The net pension, OPEB and Alternate Medicare Plan (AMP) liabilities and related deferred outflows of resources and deferred inflows of resources related to each and pension expense are calculated based on amounts actuarially determined. For net pension liability and PERA OPEB program, the University's proportionate share of the liabilities is based on percent of contributions to PERA.
- Compensated absences and related personnel expenses are recognized based on estimated balances due to employees upon termination or retirement. The limitations on such payments are defined by the rules associated with the personnel systems at the University. Employees accrue and vest in vacation and sick leave earnings based on their hire date and length of service.
- Health service revenue from contractual arrangements is recognized by CU Medicine as a result of providing care to patients covered under various third parties such as Medicare and Medicaid, private insurance companies, and managed care programs, primarily from fixed-rate agreements. Health services revenue is reported at the estimated net realizable amounts due from third-party payers and others for services rendered.
- Congress did not renew the Perkins Loan Program after September 30, 2017. As a result, no loan disbursements to students were permitted after June 30, 2018. The lack of renewal also means that the federal portion of the revolving loan program must be repaid to the Department of Education (ED) as by students repay loans to the school. As such, the Perkins Program Loan Liability is based upon the percentage of the federal capital contribution (reported annually on the FISAP) applied to the Perkins Loans Fund asset balance. This is the University's best estimate of the amount of funds that will be repaid to the ED as loans are collected from student.

We evaluated the key factors and assumptions used to develop the above estimates in determining that they are reasonable in relation to the financial statements taken as a whole. For the health service revenue, we relied on the report of other auditors.

*Financial statement disclosures*

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. There were no particularly sensitive financial statement disclosures.

The financial statement disclosures are neutral, consistent, and clear.

***Difficulties encountered in performing the audit***

We encountered no significant difficulties in dealing with management in performing and completing our audit.

***Uncorrected misstatement***

Professional standards require us to accumulate all misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. The schedule on page 110 summarizes the uncorrected misstatement identified during the audit.

***Corrected misstatements***

Management did not notify us and we did not identify any misstatements during our audit that were corrected by management.

***Disagreements with management***

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditors' report. No such disagreements arose during our audit.

***Management representations***

We have requested and received certain representations from management.

***Management consultations with other independent accountants***

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the entity's financial statements or a determination of the type of auditors' opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

***Significant issues discussed with management prior to engagement***

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to engagement as the entity's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our engagement.

***Audits of group financial statements***

We noted no matters related to the group audit that we consider to be significant to the responsibilities of those charged with governance of the group.

***Quality of component auditors' work***

There were no instances in which our evaluation of the work of a component auditor gave rise to a concern about the quality of that auditor's work.

***Limitations on the group audit***

There were no restrictions on our access to information of components or other limitations on the group audit.

**Other information in documents containing audited financial statements**

With respect to the required supplementary information (RSI) accompanying the financial statements, we made certain inquiries of management about the methods of preparing the RSI, including whether the RSI has been measured and presented in accordance with prescribed guidelines, whether the methods of measurement and preparation have been changed from the prior period and the reasons for any such changes, and whether there were any significant assumptions or interpretations underlying the measurement or presentation of the RSI. We compared the RSI for consistency with management's responses to the foregoing inquiries, the basic financial statements, and other knowledge obtained during the audit of the basic financial statements. Because these limited procedures do not provide sufficient evidence, we did not express an opinion or provide any assurance on the RSI.

Our auditors' opinion, the audited financial statements, and the notes to financial statements should only be used in their entirety. Inclusion of the audited financial statements in a document you prepare, such as an annual report, should be done only with our prior approval and review of the document.

This communication is intended solely for the information and use of the State of Colorado Legislative Audit Committee, the Office of the State Auditor, the Board of Regents and management of the University and is not intended to be, and should not be, used by anyone other than these specified parties. However, upon release by the Legislative Audit Committee, this report is a public document.



**CliftonLarsonAllen LLP**

Greenwood Village, Colorado  
November 14, 2018

**UNIVERSITY OF COLORADO**  
**SUMMARY OF UNCORRECTED MISSTATEMENT**  
Year Ended June 30, 2018

**UNCORRECTED MISSTATEMENT**

| <u>Adj. No.</u> | <u>Financial Statement Caption/Description</u>                                           | <u>Amount</u>  |
|-----------------|------------------------------------------------------------------------------------------|----------------|
| 1               | Intergovernmental Receivable – General                                                   | \$ 5,960,700   |
|                 | Interest Expense                                                                         | \$ 552         |
|                 | Cash                                                                                     | \$ (5,961,252) |
|                 | To adjust the cash balance at year-end due to uncorrected errors in bank reconciliation. |                |

Amounts are shown as debits and (credits) to note the adjustment made or the effect on the account balance for the uncorrected misstatement.

**UNIVERSITY OF COLORADO**  
**STATE-FUNDED STUDENT FINANCIAL ASSISTANCE PROGRAMS**  
**INTRODUCTION**  
**Year Ended June 30, 2018**

The University of Colorado (the University) is governed by the University of Colorado Board of Regents. The University is a state-supported institution of higher education comprised of the system office and the following three accredited campuses, all of which receive state-funded financial aid:

- University of Colorado Boulder
- University of Colorado Denver | Anschutz Medical Campus
- University of Colorado Colorado Springs

Our financial and compliance examination of the various state-funded student financial assistance programs at the University for the year ended June 30, 2018 was directed toward the objectives and criteria set forth in the 2017-18 Audit Guide for State and Private Non-Profit Institutions of Higher Education, Colorado Funded Student Aid issued by the Colorado Department of Higher Education (CDHE) and in accordance with the policies and procedures for State-Funded Student Financial Assistance Programs established by the Board of Regents of the University of Colorado. The State-Funded Student Financial Assistance Programs were examined simultaneously with the federal financial aid programs for the year ended June 30, 2018.

**State-Funded Student Financial Assistance Programs**

The University's various state-funded student financial assistance programs include the following:

- Colorado Need-Based Grants
- Colorado Graduate Grant
- Colorado Work-Study
- Colorado Merit Aid

The total state-funded student financial assistance programs expenditures made by the University were approximately \$33.5 million during the year ended June 30, 2018.

The director of financial aid at each campus is responsible for administration of these programs. This responsibility includes application processing, eligibility determination, and financial aid packaging, as well as ensuring compliance with regulations governing the participation of the University in federal and state-funded student financial aid programs. The campus controller's office at each campus is responsible for the programs' financial management, general ledger accounting, payments, and collections.

Authorizations and expenditures for state-funded student financial programs assistance are detailed by program in the accompanying statement of appropriations, expenditures, transfers, and reversions for the year ended June 30, 2018. The University also obtained authorizations for federal student financial aid funds as follows:

|                                                                     |               |
|---------------------------------------------------------------------|---------------|
| Pell Grants                                                         | \$ 57,018,105 |
| Direct Lending                                                      | 397,016,423   |
| Supplemental Educational Opportunity Grant                          | 1,980,161     |
| College Work-Study                                                  | 3,463,518     |
| Gear Up Grant                                                       | 179,068       |
| Teacher Education Assistance for College and Higher Education Grant | 42,762        |
| Health Professions Student Loans                                    | 2,300,833     |
| Nursing Student Loans                                               | 3,028,204     |
| Nursing Faculty Loan Program (NFLP)                                 | 945,997       |

**UNIVERSITY OF COLORADO**  
**STATE OF COLORADO STATE-FUNDED STUDENT ASSISTANCE PROGRAMS**  
**REPORT SUMMARY**  
**Year Ended June 30, 2018**

## **Report Summary**

### **Purpose and Scope of Audit**

Our audit of the state-funded student assistance programs was performed in accordance with the financial compliance elements of *Government Auditing Standards* issued by the Comptroller General of the United States. The purpose of the audit was to formulate an opinion on the statement of student aid program allocations, expenditures, and reversions for the fiscal year ending June 30, 2018 and to determine if these programs were administered in accordance with applicable laws, regulations, terms of agreements, and Governing Board directives which were set forth in the State-Funded Student Assistance Programs handbook.

Our examination included:

- Expressing an opinion on the statement of student aid program allocations, expenditures and reversions.
- Evaluation of the policies, procedures, and practices used to administer these programs.
- Determination of compliance with applicable sections of Colorado Revised Statutes 23-3.3 et. seq. and approved Governing Board policies.

### **Summary of Current Year Comments**

The audit covered the period July 1, 2017 through June 30, 2018 and field work was performed during the period June 2018 through October 2018, at the campus Business and Student Financial Aid offices.

The audit report for the year ended June 30, 2018, contained no findings or recommendations related to state-funded assistance programs.

### **Summary of Progress in Implementing Prior Comments**

The prior audit report for the year ended June 30, 2016, contained no findings or recommendations related to state-funded assistance programs.

**INDEPENDENT AUDITORS' REPORT ON THE STATEMENT OF  
APPROPRIATIONS, EXPENDITURES, TRANSFERS, AND REVERSIONS OF THE  
STATE OF COLORADO STATE-FUNDED STUDENT ASSISTANCE PROGRAMS**

Members of the Legislative Audit Committee:

***Report on the Statement***

We have audited the accompanying statement of appropriations, expenditures, transfers, and reversions of the state-funded student financial assistance programs (the Statement) of the University of Colorado (the University), an institution of higher education of the State of Colorado, for the year ended June 30, 2018, and the related notes to the Statement.

***Management's Responsibility for the Statement***

Management is responsible for the preparation and fair presentation of the Statement. The Statement was prepared in accordance with the format as set forth in the *2017-2018 Audit Guide for State and Private Non-Profit Institutions of Higher Education, Colorado-Funded Student Aid* issued by the Colorado Department of Higher Education (CDHE) and in accordance with the policies and procedures for State-Funded Student Financial Assistance Programs established by the governing board of the University; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the Statement that is free from material misstatement, whether due to fraud or error.

***Auditors' Responsibility***

Our responsibility is to express an opinion on the Statement based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Statement. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the Statement, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the Statement in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the Statement.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## **Opinion**

In our opinion, the Statement referred to above presents fairly, in all material respects, the respective appropriations, expenditures, transfers, and reversions of the state-funded student financial assistance programs of the University for the year ended June 30, 2018, in accordance with the format as set forth in the *2017-18 Audit Guide for State and Private Non-Profit Institutions of Higher Education, Colorado-Funded Student Aid* issued by the CDHE, and in accordance with the policies and procedures for State-Funded Student Financial Assistance Programs established by the Board of Regents of the University described in Note 1 to the Statement.

## **Basis of Accounting**

As described in Note 2 to the Statement, the Statement prepared by the University was prepared in accordance with the *2017-2018 Audit Guide for State and Private Non-Profit Institutions of Higher Education, Colorado-Funded Student Aid* issued by the Colorado Department of Higher Education, and in conformity with the policies and procedures for State-Funded Student Financial Assistance Programs established by the Board of Regents of the University. As described in Note 2 to the Statement, the Statement is a summary of cash activity of the state-funded student financial assistance programs with the exception of the Colorado Work-Study programs, and does not present certain transactions that would be included in the statement of state-funded student assistance programs if it was presented on the accrual basis of accounting, as prescribed by generally accepted accounting principles. In addition, the accompanying Statement is not intended to, and does not present the financial position, changes in financial position, or cash flows of the University in conformity with accounting principles generally accepted in the United States of America.

## **Other Information**

Our audit was conducted for the purpose of forming an opinion on the Statement in accordance with the format as set forth in the *2017-2018 Audit Guide for State and Private Non-Profit Institutions of Higher Education, Colorado-Funded Student Aid* issued by the Colorado Department of Higher Education (CDHE) and in accordance with the policies and procedures for State-Funded Student Financial Assistance Programs established by the governing board of the University. The accompanying schedules of appropriations, expenditures, transfers, and reversions of the University by campus (the Schedules) are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the Statement. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the Statement or to the Statement itself, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedules are fairly stated, in all material respects, in relation to the Statement as a whole.

**Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued our report dated November 14, 2018 on our consideration of the University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control over financial reporting and compliance.

**Restriction on Use**

This report is intended solely for the information and use of the Legislative Audit Committee, the Board of Regents, management of the University of Colorado, the Department of Education and the Colorado Department of Higher Education and is not intended to be, and should not be used by anyone other than these specified parties. However upon realize by the Legislative Audit Committee, this report is a public document.

A handwritten signature in cursive script that reads "CliftonLarsonAllen LLP".**CliftonLarsonAllen LLP**

Greenwood Village, Colorado  
November 14, 2018

**UNIVERSITY OF COLORADO**  
**STATE-FUNDED STUDENT FINANCIAL ASSISTANCE PROGRAMS**  
**STATEMENT OF APPROPRIATIONS, EXPENDITURES, TRANSFERS, AND REVERSIONS**  
**Year Ended June 30, 2018**

|                                     | <i><b>Total<br/>Financial<br/>Aid</b></i> | <i><b>Colorado<br/>Need-Based<br/>Grant</b></i> | <i><b>Colorado<br/>Graduate<br/>Grant</b></i> | <i><b>Colorado<br/>Work-<br/>Study</b></i> | <i><b>Colorado<br/>Merit</b></i> | <i><b>Loan<br/>Match</b></i> |
|-------------------------------------|-------------------------------------------|-------------------------------------------------|-----------------------------------------------|--------------------------------------------|----------------------------------|------------------------------|
| <b>Consolidated</b>                 |                                           |                                                 |                                               |                                            |                                  |                              |
| Appropriations:                     |                                           |                                                 |                                               |                                            |                                  |                              |
| Original Official Allocation Notice | \$ 33,115,113                             | 22,438,659                                      | 5,937,986                                     | 3,644,553                                  | 1,059,432                        | 34,483                       |
| Additional Funds Allocated by CCHE  | 348,457                                   | 200,000                                         | -                                             | 100,000                                    | 48,457                           | -                            |
| Funds Released to CCHE              | -                                         | -                                               | -                                             | -                                          | -                                | -                            |
| Total Appropriations                | <u><u>\$ 33,463,570</u></u>               | <u><u>22,638,659</u></u>                        | <u><u>5,937,986</u></u>                       | <u><u>3,744,553</u></u>                    | <u><u>1,107,889</u></u>          | <u><u>34,483</u></u>         |
| Total Expenditures                  | 33,463,570                                | 22,638,659                                      | 5,937,986                                     | 3,744,553                                  | 1,107,889                        | 34,483                       |
| Reversions                          | <u><u>\$ -</u></u>                        | <u><u>-</u></u>                                 | <u><u>-</u></u>                               | <u><u>-</u></u>                            | <u><u>-</u></u>                  | <u><u>-</u></u>              |

**UNIVERSITY OF COLORADO**  
**STATE-FUNDED STUDENT FINANCIAL ASSISTANCE PROGRAMS**  
**NOTES TO STATEMENT OF APPROPRIATIONS, EXPENDITURES,**  
**TRANSFERS, AND REVERSIONS**  
**Year Ended June 30, 2018**

**(1) Basis of Presentation**

The University of Colorado (the University) is governed by the University's Board of Regents. The University comprises the system office and the following three accredited campuses:

- University of Colorado Boulder
- University of Colorado Denver | Anschutz Medical Campus
- University of Colorado Colorado Springs

The accompanying statement of appropriations, expenditures, transfers, and reversions of state-funded student financial assistance programs (the Statement) has been prepared in accordance with the format as set forth in the *2017-2018 Audit Guide for State and Private Non-Profit Institutions of Higher Education, Colorado Funded Student Aid* issued by the Colorado Department of Higher Education (CDHE) and in accordance with the policies and procedures for State-Funded Student Financial Assistance Programs established by the Board of Regents of the University of Colorado. The purpose of the Statement is to present, in summary form, the state-funded student financial assistance activities of the University's three accredited campuses for the year ended June 30, 2018.

Because the Statement presents only a selected portion of the activities of the University, it is not intended to and does not present either the financial position or changes in financial position of the University in conformity with U.S. generally accepted accounting principles.

**(2) Basis of Accounting**

All state-funded student financial assistance is expensed on a cash basis, except for the Colorado Work-Study program. Colorado Work-Study wages are recorded on the accrual basis recognizing expenses when the services are performed.

The University's various state-funded student financial assistance programs include the following: the Colorado Need-Based Grant, the Colorado Graduate Grant, Colorado Work-Study, Colorado Merit Aid, and a Loan Match component.

**UNIVERSITY OF COLORADO**  
**STATE-FUNDED STUDENT FINANCIAL ASSISTANCE PROGRAMS**  
**SCHEDULE OF APPROPRIATIONS, EXPENDITURES, TRANSFERS, AND REVERSIONS BY CAMPUS**  
**Year Ended June 30, 2018**

|                                     | <i><b>Total<br/>Financial<br/>Aid</b></i> | <i><b>Colorado<br/>Need-Based<br/>Grant</b></i> | <i><b>Colorado<br/>Graduate<br/>Grant</b></i> | <i><b>Colorado<br/>Work-<br/>Study</b></i> | <i><b>Colorado<br/>Merit</b></i> | <i><b>Loan<br/>Match</b></i> |
|-------------------------------------|-------------------------------------------|-------------------------------------------------|-----------------------------------------------|--------------------------------------------|----------------------------------|------------------------------|
| <b>Boulder</b>                      |                                           |                                                 |                                               |                                            |                                  |                              |
| Appropriations:                     |                                           |                                                 |                                               |                                            |                                  |                              |
| Original Official Allocation Notice | \$ 10,709,014                             | 7,807,765                                       | 554,874                                       | 1,861,797                                  | 484,578                          | -                            |
| Additional Funds Allocated by CCHE  | 348,457                                   | 200,000                                         | -                                             | 100,000                                    | 48,457                           | -                            |
| Funds Released to CCHE              | -                                         | -                                               | -                                             | -                                          | -                                | -                            |
| Total Appropriations                | <u>\$ 11,057,471</u>                      | <u>8,007,765</u>                                | <u>554,874</u>                                | <u>1,961,797</u>                           | <u>533,035</u>                   | <u>-</u>                     |
| Total Expenditures                  | 11,057,471                                | 8,007,765                                       | 554,874                                       | 1,961,797                                  | 533,035                          | -                            |
| Reversions                          | <u>\$ -</u>                               | <u>-</u>                                        | <u>-</u>                                      | <u>-</u>                                   | <u>-</u>                         | <u>-</u>                     |
| <b>Denver   Anschutz</b>            |                                           |                                                 |                                               |                                            |                                  |                              |
| Appropriations:                     |                                           |                                                 |                                               |                                            |                                  |                              |
| Original Official Allocation Notice | \$ 14,897,751                             | 8,262,890                                       | 5,294,692                                     | 997,705                                    | 307,981                          | 34,483                       |
| Additional Funds Allocated by CCHE  | -                                         | -                                               | -                                             | -                                          | -                                | -                            |
| Funds Released to CCHE              | -                                         | -                                               | -                                             | -                                          | -                                | -                            |
| Total Appropriations                | <u>\$ 14,897,751</u>                      | <u>8,262,890</u>                                | <u>5,294,692</u>                              | <u>997,705</u>                             | <u>307,981</u>                   | <u>34,483</u>                |
| Total Expenditures                  | 14,897,751                                | 8,262,890                                       | 5,294,692                                     | 997,705                                    | 307,981                          | 34,483                       |
| Reversions                          | <u>\$ -</u>                               | <u>-</u>                                        | <u>-</u>                                      | <u>-</u>                                   | <u>-</u>                         | <u>-</u>                     |
| <b>Colorado Springs</b>             |                                           |                                                 |                                               |                                            |                                  |                              |
| Appropriations:                     |                                           |                                                 |                                               |                                            |                                  |                              |
| Original Official Allocation Notice | \$ 7,508,348                              | 6,368,004                                       | 88,420                                        | 785,051                                    | 266,873                          | -                            |
| Additional Funds Allocated by CCHE  | -                                         | -                                               | -                                             | -                                          | -                                | -                            |
| Funds Released to CCHE              | -                                         | -                                               | -                                             | -                                          | -                                | -                            |
| Total Appropriations                | <u>\$ 7,508,348</u>                       | <u>6,368,004</u>                                | <u>88,420</u>                                 | <u>785,051</u>                             | <u>266,873</u>                   | <u>-</u>                     |
| Total Expenditures                  | 7,508,348                                 | 6,368,004                                       | 88,420                                        | 785,051                                    | 266,873                          | -                            |
| Reversions                          | <u>\$ -</u>                               | <u>-</u>                                        | <u>-</u>                                      | <u>-</u>                                   | <u>-</u>                         | <u>-</u>                     |

**UNIVERSITY OF COLORADO**  
**STATE-FUNDED STUDENT FINANCIAL ASSISTANCE PROGRAMS**  
**AUDIT COMMENTS AND RECOMMENDATIONS**  
**Year Ended June 30, 2018**

There are no audit comments and recommendations related to the state-funded student financial assistance programs.

**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER  
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS  
BASED ON AN AUDIT OF THE STATEMENT OF APPROPRIATIONS,  
EXPENDITURES, TRANSFERS, AND REVERSIONS OF THE STATE OF  
COLORADO STATE-FUNDED STUDENT ASSISTANCE PROGRAMS  
PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

Members of the Legislative Audit Committee:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the statement of appropriations, expenditures, transfers, and reversions of the State-Funded Student Assistance Programs (the Statement) of the University of Colorado (the University), an institution of higher education of the State of Colorado, for the year ended June 30, 2018, and the related notes to the Statement, and have issued our report thereon dated November 14, 2018.

**Internal Control over Financial Reporting**

In planning and performing our audit of the Statement, we considered the University's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the Statement, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we do not express an opinion on the effectiveness of the University's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's Statement will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

**Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the University's Statement is free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of Statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

**Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the University's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control and compliance. Accordingly, this communication is not suitable for any other purpose. However, upon release by the Legislative Audit Committee, this report is a public document.

A handwritten signature in black ink that reads "CliftonLarsonAllen LLP". The signature is written in a cursive, flowing style.**CliftonLarsonAllen LLP**

Greenwood Village, Colorado  
November 14, 2018