

UNIVERSITY OF COLORADO
FINANCIAL AND COMPLIANCE AUDIT
June 30, 2019 and 2018

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ABBREVIATIONS AND ACRONYMS

18 th Avenue	18 th Avenue, LLC
457	PERA Deferred Compensation Plan
AED	Amortization Equalization Disbursement
AHEC	Auraria Higher Education Center
AIR	Annual Increase Reserve
Altitude West, LLC	Altitude West
AMP	Alternate Medicare Plan
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
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
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
ORP	Optional Retirement Plan
PDPA	Public Deposit Protection Act
PERA	Public Employees' Retirement Association of Colorado
RASEI	Renewable and Sustainable Energy Institute

ABBREVIATIONS AND ACRONYMS

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
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. 83	Certain Asset Retirement Obligations
Statement No. 88	Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements
TABOR	Taxpayer's Bill of Rights
Trust	University of Colorado Health and Welfare Trust
UCCS	University of Colorado Colorado Springs
UCHealth	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, 2019**

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, 2019. 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 2019.

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, 2019. 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, 2019 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, 2019.

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.

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 noted no instances of noncompliance and no internal control deficiencies during these procedures.

UNIVERSITY OF COLORADO
DESCRIPTION OF THE UNIVERSITY OF COLORADO
Year Ended June 30, 2019

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 165 fields of study at the undergraduate level and 277 at the graduate level, offering 364 bachelor and master's degrees, along with 106 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, 2019

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

Fiscal Years	Undergraduate		Graduate*		Total
	Resident	Nonresident	Resident	Nonresident	
2018 – 2019	32,278	14,169	9,539	3,573	59,559
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

Fiscal Years	Instructional Faculty	Other Faculty and Staff	Total
2018 – 2019	6,986	14,495 **	21,481
2017 – 2018	6,420	14,203 **	20,623
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, 2019**

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, 2019, and have issued our report thereon dated November 20, 2019. 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 20, 2019 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. In addition, we did not audit the financial statements of the 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 and Altitude West LLC, blended component units audited by us, were 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.

**UNIVERSITY OF COLORADO
FINANCIAL AND COMPLIANCE AUDIT
FINDINGS AND RECOMMENDATIONS (CONTINUED)
Year Ended June 30, 2019**

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 no instances of noncompliance or internal control deficiencies during these procedures.

Rec. No.	Prior Year Recommendation	Status
1	<p>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 the University of Colorado 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.</p>	Implemented
2	<p>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.</p>	Implemented



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 the 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 years ended June 30, 2019 and 2018, 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 2019 and 2018 financial statements of University of Colorado Medicine (CU Medicine), a blended component unit, which represents approximately 10%, 33%, and 24%, and 9%, 34%, and 24% of the assets, net position, and revenues of the business-type activities of the University for 2019 and 2018, respectively. In addition, we did not audit the 2019 and 2018 financial statements of the University of Colorado Foundation (CU Foundation), which represents 100% of the assets, net position, and revenues of the discretely presented component unit for 2019 and 2018. 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 and the CU Foundation, 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, a discretely presented component unit, and CU Medicine, the University of Colorado Property Corporation and Altitude West LLC, 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 discretely presented component unit of the University of Colorado as of June 30, 2019 and 2018, 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 Matter

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.

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 20, 2019, 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.



CliftonLarsonAllen LLP

Greenwood Village, Colorado
November 20, 2019

UNIVERSITY OF COLORADO
MANAGEMENT'S DISCUSSION AND ANALYSIS
June 30, 2019 and 2018 (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, 2019 and 2018 (Fiscal Year 2019 and 2018, respectively), with comparative information for the year ended June 30, 2017 (Fiscal Year 2017). 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, 2019 and 2018). 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, 2019 and 2018. 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, 2019 and 2018. 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 Colorado Public Employees' Retirement Association (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).

FINANCIAL HIGHLIGHTS

Selected financial highlights for the fiscal year ended June 30, 2019 include:

- University assets total \$7,309,224,000, deferred outflows of resources (reflecting losses on bond refundings and certain changes in the pension and OPEB plans) total \$309,204,000, liabilities total \$4,773,041,000 and deferred inflows of resources total \$765,978,000 (related to the pension and OPEB plans, and other items) resulting in net position of \$2,079,409,000. Of this amount, \$2,087,469,000 is net investment in capital assets, \$48,633,000 is restricted for nonexpendable purposes, meaning only the earnings on the related investments may be used for purposes dictated by the resource provider, and \$604,806,000 is restricted for purposes for which the donor, grantor, or other external party intended.

UNIVERSITY OF COLORADO
MANAGEMENT'S DISCUSSION AND ANALYSIS
June 30, 2019 and 2018 (unaudited)

The remaining unrestricted balance is a negative \$661,499,000. See discussion throughout this Management's Discussion and Analysis (MD&A) regarding the University's negative unrestricted net position.

- The decrease in the University's net pension liability of \$961,983,000 for Fiscal Year 2019 is a result of the changes in underlying actuarial assumptions made by PERA related to the discount rate, driven by legislative changes effective July 2018. See Note 10 for more information.
- In total, operating revenues increased approximately 6.9 percent in Fiscal Year 2019 while operating expenses decreased 7.3 percent. For comparative purposes, operating revenues increased 8.7 percent in Fiscal Year 2018 while operating expenses increased 8.9 percent. The changes in operating expenses are primarily due to changes in PERA funding and assumptions which decreased the net pension liability by 43.6 percent for Fiscal 2019 and increased the liability by 7.7 percent in Fiscal 2018.

STATEMENT OF NET POSITION

Figure 1 illustrates the University's summary of assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position. The mix of assets, liabilities, and net position has remained consistent with the exception of the PERA pension 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 \$309,204,000 in Fiscal Year 2019, \$538,756,000 in Fiscal Year 2018, and \$706,918,000 in Fiscal Year 2017 represent the deferred loss on bond refundings, and items related to the pension and OPEB liabilities. The pension and OPEB liabilities and the related deferred balances fluctuated due to changes in funding, actuarial assumptions, and experience. 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, 2019 and 2018 (unaudited)

Figure 1. Summary of Assets, Deferred Outflows, Liabilities, Deferred Inflows and Net Position

<i>(in thousands)</i>	2019	2018	2017
Assets			
Current assets	\$ 926,738	929,099	838,388
Noncurrent, noncapital assets	2,658,857	2,474,177	2,306,105
Net capital assets	3,723,629	3,603,091	3,530,562
Total Assets	7,309,224	7,006,367	6,675,055
Deferred Outflows			
Loss on bond refundings	49,806	58,727	54,427
Other postemployment benefits-related	48,961	21,079	-
Alternate medicare plan-related	13,154	9,977	11,141
PERA pension-related	196,246	448,973	641,350
Other	1,037	-	-
Total Deferred Outflows	309,204	538,756	706,918
Total Assets and Deferred Outflows	7,618,428	7,545,123	7,381,973
Liabilities			
Current liabilities	743,534	627,182	710,111
Noncurrent liabilities	4,029,507	5,045,249	4,303,732
Total Liabilities	4,773,041	5,672,431	5,013,843
Deferred Inflows			
Other postemployment benefits-related	101,300	117,695	-
Alternate medicare plan-related	5,176	5,863	89
PERA pension-related	657,754	95,564	9,629
Other	1,748	1,729	-
Total Deferred Inflows	765,978	220,851	9,718
Total Liabilities and Deferred Inflows	5,539,019	5,893,282	5,023,561
Net Position			
Net investment in capital assets	2,087,469	1,912,493	1,949,435
Restricted for nonexpendable purposes	48,633	48,618	58,390
Restricted for expendable purposes	604,806	686,109	536,860
Unrestricted	(661,499)	(995,379)	(186,273)
Total Net Position	2,079,409	1,651,841	2,358,412
Total Liabilities, Deferred Inflows and Net Position	\$ 7,618,428	7,545,123	7,381,973

From Fiscal Year 2018 to 2019, the decrease in current assets and the increase in noncurrent assets were caused by rebalancing investments to noncurrent, offset by growth in federal government, patient billing, and other accounts receivable at year-end, as discussed below. 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.

The University's investments were \$2,862,269,000 and \$2,779,799,000 at June 30, 2019 and 2018, respectively, representing an increase of \$82,470,000. The University's investments were \$2,607,441,000 at June 30, 2017, representing an increase of \$172,358,000 at June 30, 2018. 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 increases in net accounts and loans receivable of \$60,167,000 and \$46,010,000 in Fiscal Years 2019 and 2018, respectively, were primarily due to growth in federal government and other accounts receivable, as well as the University of Colorado Medicine's (CU Medicine) growth in patient billing. Federal government receivables increased due to normal fluctuations in the timing and receipt of payments. Patient

UNIVERSITY OF COLORADO
MANAGEMENT'S DISCUSSION AND ANALYSIS
June 30, 2019 and 2018 (unaudited)

receivables increased due to ongoing growth in revenue.

The University's non-debt-related liabilities were \$3,003,079,000, \$3,853,083,000, and \$3,333,647,000, at June 30, 2019, 2018, and 2017, respectively. These liabilities are comprised of amounts categorized in Figure 2.

Figure 2. Composition of Non-debt-related Liabilities (in thousands)

	2019	2018	2017
Accounts payable	\$ 121,192	137,964	129,894
Accrued expenses	128,833	119,711	265,292
Compensated absences	257,876	249,736	226,758
Unearned revenue	181,236	187,551	178,825
Other postemployment benefits	893,196	795,147	343,570
Alternate medicare plan	83,212	73,211	74,723
Net pension liability	1,244,558	2,206,541	2,049,366
Risk financing	32,850	29,225	27,857
Construction contract retainage	13,652	9,609	12,880
Funds held for others	20,980	17,729	16,511
Federal Perkins loan	19,519	19,641	-
Early retirement incentive program	2,544	4,077	4,602
Asset retirement obligation	1,296	-	-
Miscellaneous liabilities	2,135	2,941	3,369
Total Non-debt-related Liabilities	\$ 3,003,079	3,853,083	3,333,647

The four largest categories of non-debt-related liabilities are the net pension liability, OPEB liabilities, compensated absences, and unearned revenue.

As discussed in Note 10, the University participates in the statewide 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 2018 Comprehensive Annual Financial Report (CAFR), PERA's net pension liability for the state division in which the University participates was \$11,378,673,000. The University's proportionate share of the liability based on calendar 2018 contributions was \$1,244,558,000. While the change in the net pension liability impacted total liabilities, unrestricted net position, and pension expense, the associated cash flow out of the University remained fixed by the contribution levels set in State statute (see Figure 6). For PERA's 2017 CAFR, the net pension liability was \$20,017,982,000 and the University's proportionate share of the liability was \$2,206,541,000. The majority of the \$962,000,000 decrease in Fiscal Year 2019 and the \$157,175,000 increase in Fiscal Year 2018 can be attributed to changes in assumptions and contributions, which allowed for a 7.25 percent estimated rate of return in Fiscal Year 2019, yet required using a blended discount rate 4.72 percent in Fiscal Year 2018 .

The University is required to account for and report on OPEB (Note 9). 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. GASB Statement No. 75, *Accounting & Financial Reporting for Postemployment Benefits Other than Pensions* (Statement No. 75), was effective for Fiscal Year 2018 and required the full recognition of the liability to employees for OPEB. In addition, University employees in PERA can elect to participate in the PERACare program for other postretirement benefits so the University

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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 \$893,196,000 and \$795,147,000 in Fiscal Year 2019 and 2018, respectively, \$843,959,000 and \$746,773,000, respectively, from the University’s OPEB plan and \$49,237,000 and \$48,374,000, respectively, from PERA’s OPEB plan. The cumulative impact of adopting the standard for both plans in Fiscal Year 2018 was a \$507,608,000 reduction to unrestricted net position. 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, with annual required contributions of \$74,105,000, offset by pay-as-you-go amounts of approximately \$14,929,000, 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 7). 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 2019, 2018, and 2017, University of Colorado Boulder’s (CU Boulder) Laboratory for Atmospheric and Space Physics (LASP) received an advanced-pay sponsored project of which \$11,000,000, \$23,000,000, and \$47,000,000, respectively, was unearned at year-end.

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 generally accepted accounting principles (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 12).

In Fiscal Year 2019, total restricted for nonexpendable net position increased by \$15,000 due to ongoing additions to existing permanent endowments. 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.

The University’s unrestricted net position is negative due to the PERA and OPEB pension liabilities. 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.

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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 principles related to the implementation of Statement No. 75 and Statement No. 81 *Irrevocable Split-Interest Agreements* (Statement No. 81). In Fiscal Year 2017, the cumulative effect of adoption related 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 (in thousands)

	2019	2018	2017
Operating revenues	\$ 4,097,809	3,833,883	3,528,628
Operating expenses	4,127,398	4,450,302	4,088,052
Operating Loss	(29,589)	(616,419)	(559,424)
Nonoperating revenues, net	411,085	391,002	398,451
Income (Loss) Before Other Revenues	381,496	(225,417)	(160,973)
Other revenues	46,072	28,159	53,838
Change in Net Position before special item	427,568	(197,258)	(107,135)
Special item-Transfer from CUREF	-	-	(808)
Change in Net Position after special item	427,568	(197,258)	(107,943)
Net Position, beginning of year	1,651,841	2,358,412	2,512,995
Cumulative effect of adoption of new accounting principle	-	(509,313)	(46,640)
Net Position, beginning of year, as restated	1,651,841	1,849,099	2,466,355
Net Position, End of Year	\$ 2,079,409	1,651,841	2,358,412

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 13). Appropriated funds are those controlled by Legislature through the general or special appropriation process and are designated for specific purposes. For the last three fiscal years, appropriated funds primarily included student tuition and fees, 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. 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.

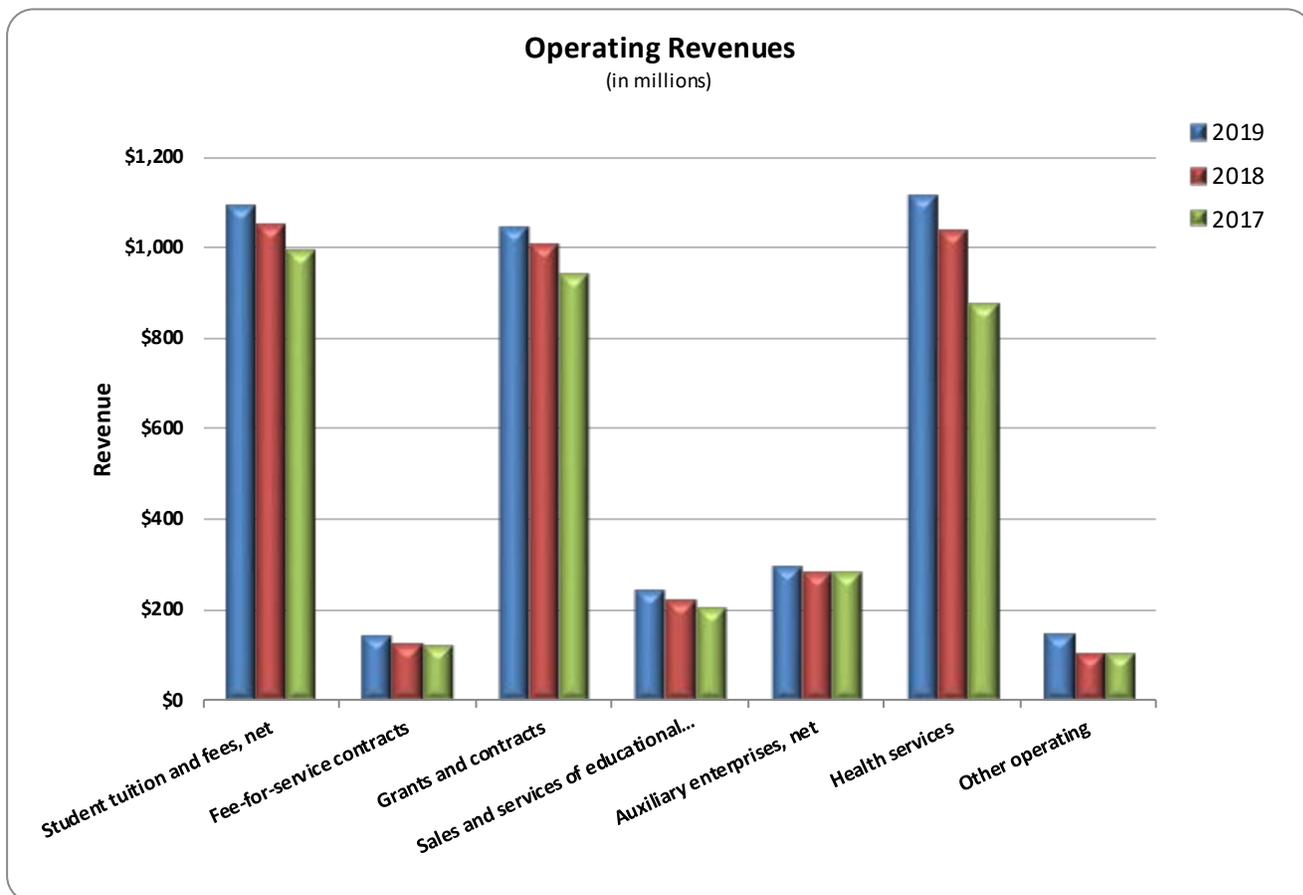
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Further, so long as it is so designated as an enterprise, the institution shall not be subject to any provisions of TABOR. In July 2005, the University's Board of Regents (the Regents) designated the University as a TABOR enterprise pursuant to the statute. During the Fiscal Years ended June 30, 2019, 2018 and 2017, the University believes it has met all requirements of TABOR enterprise status (Note 13). The amount of State grants received by the University was 1.06 percent, 0.59 percent and 1.36 percent of total annual revenues during the Fiscal Years ended June 30, 2019, 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)

<i>(in thousands)</i>	2019	2018	2017
Operating Revenues			
Student tuition and fees, net	\$ 1,096,060	1,049,558	992,594
Fee-for-service contracts	143,443	126,706	121,872
Grants and contracts	1,046,672	1,007,398	943,199
Sales and services of educational departments	244,912	222,618	207,273
Auxiliary enterprises, net	299,259	284,034	283,007
Health services	1,118,365	1,037,529	876,986
Other operating	149,098	106,040	103,697
Total Operating Revenues	4,097,809	3,833,883	3,528,628
Nonoperating Revenues			
Federal Pell Grant	\$ 58,681	57,021	49,957
State appropriations	15,950	15,651	15,325
State support for PERA pension	8,585	-	-
Gifts	206,733	198,386	181,049
Investment income, net	163,344	160,106	206,294
Other nonoperating, net	32,324	31,601	17,041
Total Nonoperating Revenues	485,617	462,765	469,666
Total Noncapital Revenues	\$ 4,583,426	4,296,648	3,998,294

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The University experienced increases in all operating revenue sources in Fiscal Year 2019 and 2018. The increases in tuition and fee revenue for Fiscal Years 2019 and 2018 reflect a combination of changing enrollment and rate increases. In Fiscal Year 2019 and 2018, enrollment increased by 2.5 percent and 3.4 percent, respectively. In Fiscal Year 2019, approved resident undergraduate tuition rates increased 4.7 percent at CU Boulder, 2.8 percent at the University of Colorado Colorado Springs (UCCS), 1.9 percent at the University of Colorado Denver (CU Denver), and 2.8 percent at the University of Colorado Anschutz Medical Campus (CU Anschutz). In Fiscal Year 2018, the increases were 4.9 percent at CU Boulder, 4.0 percent at UCCS, 3.2 percent at CU Denver, and 3.7 percent at CU Anschutz. In accordance with the resident tuition guarantee at CU Boulder, each incoming freshman undergraduate resident student with in-state classification will have no increase in tuition for their next three years.

In Fiscal Years 2019, 2018, and 2017, the University applied \$75,140,000, \$67,612,000, and \$64,661,000, respectively, of COF stipends against student tuition bills (these amounts are included in tuition revenues), with a per credit hour stipend rate of \$85, \$77, and \$75, respectively. Fee-for-service revenue from the State increased \$16,737,000 between Fiscal Year 2019 and 2018, and \$4,834,000 between Fiscal Year 2018 and 2017, 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 75 percent, 73 percent, and 74 percent of total grants and contract revenue for Fiscal Year 2019, 2018, and 2017, respectively. Each grant or contract is restricted in use to the purpose given and limited to the cost principles specified by each sponsor. The

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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 2019, 2018, and 2017, the University received \$213,299,000, \$206,315,000, and \$182,846,000, 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 2019 and 2018 is due to an increase in student body at UCCS affecting housing and Dining and Hospitality Services. At CU Boulder, the increases were due to Housing and 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 7.8 percent and 18.3 percent in Fiscal Year 2019 and 2018, respectively. Patient services revenue contributed the majority of the operating revenue increase which was driven by an 8.3 percent and 7.6 percent growth in clinical volumes and continued efforts to maintain reimbursement rates for commercial insurance in Fiscal Year 2019 and 2018, respectively. The increase 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 \$8,347,000 in Fiscal Year 2019 mainly due to academic support gifts from Children's Hospital Colorado (Children's Colorado) and the University of Colorado Hospital (UCHealth), as well as increased gifts to CU Boulder for the Leeds School of Business expansion, the College of Engineering, and the Biofrontiers Institute. Gifts increased \$17,337,000 in Fiscal Year 2018 mainly due to the School of Medicine (SOM) which received support gifts for various research programs, as well as increased gifts to CU Boulder for Athletics, the Leeds School of Business, the College of Engineering, and the Biofrontiers Institute.

Investment income net of investment expense was \$163,344,000 in Fiscal Year 2019, \$160,106,000 in Fiscal Year 2018, and \$206,294,000 in Fiscal Year 2017. Investment income is subject to inherent variability due to the requirement to record the majority of investments at fair value. In Fiscal Year 2019, the University's unrealized gains on investments (the difference between the investment's fair value and cost basis) increased by \$53,780,000. In Fiscal Year 2018, the University's unrealized gains on investments increased by \$64,992,000.

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

Figure 5. Capital Revenues (in thousands)

		2019	2018	2017
Capital student fee, net	\$	16,086	17,250	10,203
Capital appropriations		15,818	3,643	33,441
Capital grants and gifts		14,154	17,038	10,194
Loss on disposal of capital assets		(3,377)	(2,692)	(3,597)
Total Capital Revenues	\$	42,681	35,239	50,241

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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 to fund the Recreation and Wellness Center, the Family Development Center, and the University Center at UCCS.

The University received capital appropriations from the State of \$15,818,000 in Fiscal Year 2019, compared to \$3,643,000 in Fiscal Year 2018 and \$33,441,000 in Fiscal Year 2017. 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 decreased \$2,844,000 in Fiscal Year 2019 primarily due to the completion of renovation project at CU Denver's Business School event center last year. 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.

The programmatic uses of resources are displayed in Figure 7 and include PERA pension expense. Figure 6 demonstrates the impact of Senate Bill 18-200 to the University's Fiscal Year 2019 financial statements. Pension expense decreased in Fiscal Year 2019 by \$571,259,000, and increased in Fiscal Years 2018 and 2017 by \$81,090,000 and \$312,412,000, respectively. These changes (and corresponding change in net pension liability) should be compared to the required cash contributions for each of the Fiscal Years 2019, 2018, and 2017, of \$63,850,000, \$61,138,000, and \$58,698,000, respectively.

Figure 6. PERA Pension Expense Compared to Required Contributions (in thousands)

		2019	2018	2017
Pension expense	\$	(74,632)	496,627	415,537
Expense increase (decrease) from prior year		(571,259)	81,090	312,412
Required contributions		63,850	61,138	58,698

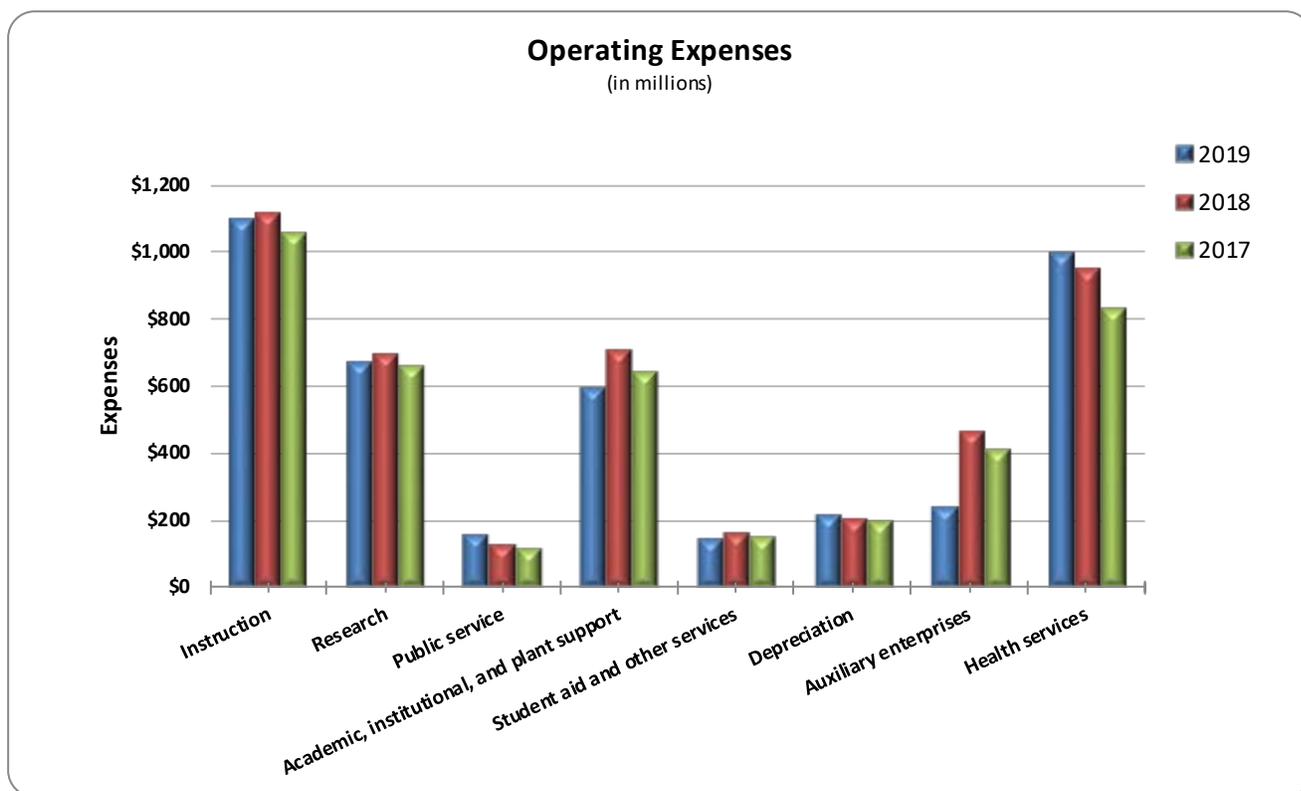
Including the impact of PERA's actuarial valuation changes, as reflected in the audited financial statements and in Figure 7 on the following page, results in total operating expenses decreasing 7.3 percent for the fiscal year ended June 30, 2019, and increasing 19.4 percent and 19.8 percent, for the fiscal years ended June 30, 2018 and 2017, respectively, primarily due to PERA's actuarial valuation changes. Excluding the impact of these changes, operating expenses would have increased 7.9 percent, 7.7 percent, and 9.2 percent for the same time period.

The 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, and demonstrate that the University's focus is basically unchanged over the past three fiscal years. 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 is mainly due to sponsored research expenditures, focused in LASP, Cooperative Institute for Research in Environmental Sciences (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.

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Figure 7. Expense Program Categories (in thousands)

	2019	2018	2017
Instruction	\$ 1,098,320	1,117,230	1,057,097
Research	672,006	700,330	664,476
Public service	157,077	131,790	116,661
Academic, institutional, and plant support	596,601	710,342	646,164
Student aid and other services	146,162	167,016	154,139
Total Education and General	2,670,166	2,826,708	2,638,537
Depreciation	215,348	206,950	202,938
Auxiliary enterprises	240,062	463,862	413,393
Health services	1,001,822	952,782	833,184
Total Operating Expenses	\$ 4,127,398	4,450,302	4,088,052



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 14). The University's scholarship allowance was \$239,358,000, \$222,097,000, and \$200,664,000 in Fiscal Year 2019, 2018, and 2017, 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 \$6,296,102,000, \$5,982,074,000, and \$5,726,536,000 of plant, property, and equipment at June 30, 2019, 2018, and 2017, respectively, offset by accumulated depreciation of \$2,572,473,000,

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\$2,378,983,000, and \$2,195,974,000, respectively. The major categories of plant, property, and equipment at June 30, 2019, 2018, and 2017 are displayed in Figure 8. Related depreciation charges of \$215,348,000, \$206,950,000, and \$202,938,000 were recognized in the Fiscal Years 2019, 2018, and 2017, 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) (in thousands)

	2019	2018	2017
Land	\$ 102,609	85,925	84,964
Construction in progress	425,336	348,937	320,025
Buildings and improvements	4,612,943	4,447,206	4,266,541
Equipment	613,172	574,775	546,890
Software and other intangibles	98,710	97,608	94,565
Library and other collections	443,332	427,623	413,551
Total Capital Assets (gross)	\$ 6,296,102	5,982,074	5,726,536

Figure 9. Current Construction Projects as of June 30, 2019

Campus/Project Description	Financing Sources	Value*
CU Boulder:		
HVAC Upgrades and Controls, Electrical Engineering Center	State Senate Bill 19-267 COP Funding	\$ 6,312
Aerospace Engineering Sciences Building	Campus cash resources and commercial paper	82,546
19th Street Bridge & Trail	Campus cash & FEMA	5,998
Koelbel Business and Engineering School Expansion	Campus cash resources	45,000
Ramaley Biology Addition	Campus cash resources	21,801
Williams Village East Residence Hall	Campus cash resources and commercial paper	96,700
Music-IMIG Addition	Campus cash resources and commercial paper	57,000
Fleming Tower Renovation & System Upgrades	Campus cash resources and commercial paper	13,719
CU Denver Anschutz:		
Fitzsimons Building - 4th Floor Renovation	Campus cash resources	5,624
Business School Infill	Campus cash resources and gift	11,179
Central Utility Plant Boiler and Chiller	Bond proceeds	33,399
Anschutz Health Sciences Building	State, campus cash resources, gift, and debt	242,041
UCCS:		
Hybl Sports Medicine and Performance Center	Bond proceeds	61,425

* Value represents budgeted costs for project in thousands

During Fiscal Year 2019, the University issued \$112,375,000 face value in revenue bonds, of which \$48,015,000 were direct placement bonds, with proceeds used to refund portions of prior obligations, and to pay certain costs related to the issuance of the Series 2008 Bonds.

During Fiscal Year 2018, the University issued \$471,390,000 face value 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 revenue bonds was assumed as part of a newly formed blended component unit, which were refunded with the direct placement bonds noted above in Fiscal Year 2019.

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At June 30, 2019, 2018, and 2017, the University had debt (or similar long-term obligations) of \$1,634,462,000, \$1,778,648,000, and \$1,680,196,000, respectively, in the categories illustrated in Figure 10. More detailed information about the University's debt is included in Note 8.

Figure 10. Debt Categories (in thousands)

	2019	2018	2017
Revenue bonds	\$ 1,610,739	1,755,804	1,655,668
Capital leases	13,207	11,824	13,313
Notes payable	10,516	11,020	11,215
Total Long-term Debt	\$ 1,634,462	1,778,648	1,680,196

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 Colorado Revised Statutes (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 \$200,000,000. This short-term financing has a fixed maturity of less than 270 days from issuance. During Fiscal Year 2018, the University issued \$40,000,000 of commercial paper to fund construction projects at CU Boulder with an initial interest rate of 1.3 percent. In Fiscal Year 2019, the University issued the second through eleventh tranches of commercial paper, totaling \$430,500,000, and retired \$335,000,000, which net to additional new borrowings of \$95,500,000. These borrowings are being used at CU Boulder to fund the Fleming Tower remodel, the Imig Music Center addition and remodel, Aerospace Engineering, and Williams Village East Residence Hall.

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 2020 budget approved by the State Legislature included a \$97,700,000 statewide increase for higher education operations which includes \$28,200,000 additional funding for the University through the higher education allocation model. The budget for the University for Fiscal Year 2020, as approved by the Regents, increased approximately \$236,700,000, or 5.2 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.

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As discussed in previous years' MD&A, the University continues to incur a loss from operations. For Fiscal Year 2019, the operating loss was \$29,589,000, down from a loss of \$616,419,000 in Fiscal Year 2018. The University had a positive change in net position of \$427,568,000, after two consecutive years of negative changes. This is largely due to the Colorado General Assembly passing 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). 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. Prior to that, the University incurred a negative change in net position for two consecutive fiscal years, \$197,258,000 in Fiscal Year 2018 and \$107,943,000 in Fiscal Year 2017 which was directly attributable to the change in assumptions made by PERA in prior years to the state-wide defined-benefit pension plan. 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 remained unchanged in the current fiscal year, but will increase in Fiscal Year 2020. See Note 10 for additional information.

UNIVERSITY OF COLORADO
STATEMENTS OF NET POSITION
June 30, 2019 and 2018 (in thousands)

	<i>2019</i>		<i>2018</i>	
	<i>University</i>	<i>Component Unit</i>	<i>University</i>	<i>Component Unit</i>
Assets				
Current Assets				
Cash and cash equivalents (Note 2)	\$ 179,658	9,272	133,662	29,861
Investments (Note 3)	260,825	-	380,782	-
Accounts and loans receivable, net (Note 4)	450,766	42,511	388,376	28,853
Inventories	22,950	-	21,727	-
Other assets	12,539	590	4,552	724
Total Current Assets	926,738	52,373	929,099	59,438
Noncurrent Assets				
Investments (Note 3)	2,601,444	2,021,979	2,399,017	1,847,550
Assets held under split-interest agreements (Note 3)	-	40,660	-	42,573
Accounts and loans receivable, net (Note 4)	52,952	121,856	55,175	151,080
Other assets	4,461	9,096	19,985	8,406
Capital assets, net (Note 5)	3,723,629	1,333	3,603,091	1,435
Total Noncurrent Assets	6,382,486	2,194,924	6,077,268	2,051,044
Total Assets	\$ 7,309,224	2,247,297	7,006,367	2,110,482
Deferred Outflows				
Loss on bond refundings	\$ 49,806	-	58,727	-
Other postemployment benefits related (Note 9)	48,961	-	21,079	-
Alternate medicare plan-related (Note 10)	13,154	-	9,977	-
PERA pension-related (Note 10)	196,246	-	448,973	-
Other	1,037	-	-	-
Total Deferred Outflows	309,204	-	538,756	-
Total Assets and Deferred Outflows	\$ 7,618,428	2,247,297	7,545,123	2,110,482
Liabilities				
Current Liabilities				
Accounts payable	\$ 121,192	10,161	137,964	5,222
Accrued expenses (Note 6)	128,833	-	119,711	-
Compensated absences (Note 6)	16,865	-	16,155	-
Unearned revenue (Note 7)	172,741	-	178,788	-
Split-interest agreements	-	2,671	-	2,619
Custodial funds	-	17,751	-	16,660
Commercial paper (Note 8)	135,500	-	40,000	-
Bonds, capital leases, and notes payable (Note 8)	112,430	-	85,353	-
Other liabilities (Note 11)	55,973	-	49,211	-
Total Current Liabilities	\$ 743,534	30,583	627,182	24,501

See accompanying notes to basic financial statements

UNIVERSITY OF COLORADO
STATEMENTS OF NET POSITION
June 30, 2019 and 2018 (in thousands)

	2019		2018	
	University	Component Unit	University	Component Unit
Noncurrent Liabilities				
Compensated absences (Note 6)	\$ 241,011	-	233,581	-
Unearned revenue (Note 7)	8,495	-	8,763	-
Split-interest agreements	-	20,489	-	20,319
Custodial funds	-	438,074	-	418,292
Bonds, capital leases, and notes payable (Note 8)	1,522,032	-	1,693,295	-
Other postemployment benefits (Note 9)	893,196	-	795,147	-
Alternate medicare plan (Note 10)	83,212	-	73,211	-
Net pension liability (Note 10)	1,244,558	-	2,206,541	-
Other liabilities (Note 11)	37,003	2,370	34,711	2,293
Total Noncurrent Liabilities	4,029,507	460,933	5,045,249	440,904
Total Liabilities	\$ 4,773,041	491,516	5,672,431	465,405
Deferred Inflows				
Other postemployment benefits related (Note 9)	\$ 101,300	-	117,695	-
Alternate medicare plan-related (Note 10)	5,176	-	5,863	-
PERA pension-related (Note 10)	657,754	-	95,564	-
Other	1,748	-	1,729	-
Total Deferred Inflows	765,978	-	220,851	-
Total Liabilities and Deferred Inflows	\$ 5,539,019	491,516	5,893,282	465,405
Net Position				
Net investment in capital assets	\$ 2,087,469	1,333	1,912,493	1,435
Restricted for nonexpendable purposes (endowments)				
Instruction	-	432,166	-	399,294
Research	21,708	41,524	21,718	38,973
Academic support	14,130	86,211	14,130	70,568
Scholarships and fellowships	11,205	254,427	11,180	236,632
Capital and other	1,590	40,715	1,590	39,461
Total restricted for nonexpendable purposes (Note 12)	48,633	855,043	48,618	784,928
Restricted for expendable purposes				
Instruction	151,238	145,588	133,288	144,104
Research	46,748	115,220	46,699	107,463
Academic support	39,846	319,547	38,863	277,008
Student loans and services	18,749	-	17,388	-
Scholarships and fellowships	46,019	136,704	45,420	136,401
Auxiliary enterprises	193,439	6,649	236,494	5,234
Capital	49,389	62,287	109,054	65,054
Other	59,378	53,675	58,903	56,527
Total restricted for expendable purposes	604,806	839,670	686,109	791,791
Unrestricted (Note 12)	(661,499)	59,735	(995,379)	66,923
Total Net Position	\$ 2,079,409	1,755,781	1,651,841	1,645,077

See accompanying notes to basic financial statements

UNIVERSITY OF COLORADO
STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION
June 30, 2019 and 2018 (in thousands)

	2019		2018	
	University	Component Unit	University	Component Unit
Operating Revenues				
Student tuition (net of scholarship allowances of \$211,345 in 2019 and \$194,754 in 2018; net of bad debt of \$2,535 in 2019 and \$2,579 in 2018; pledged revenues of \$1,010,106 in 2019 and \$959,996 in 2018) (Note 8, 13 and 14)	\$ 1,010,106	-	959,996	-
Student fees (net of scholarship allowances of \$18,609 in 2019 and \$18,345 in 2018; net of bad debt of \$196 in 2019 and \$162 in 2018; pledged revenues of \$1,105 in 2019 and \$662 in 2018) (Note 8, 13 and 14)	85,954	-	89,562	-
Fee-for-service contracts (Note 13)	143,443	-	126,706	-
Federal grants and contracts (pledged revenues of \$186,654 in 2019 and \$177,427 in 2018) (Note 8)	781,145	-	731,884	-
State and local grants and contracts (pledged revenues of \$15,304 in 2019 and \$16,066 in 2018) (Note 8)	70,852	-	69,853	-
Nongovernmental grants and contracts (net of bad debt of \$367 in 2019 and \$82 in 2018) (Note 8)	194,675	-	205,661	-
Sales and services of educational departments (Note 8)	244,912	-	222,618	-
Auxiliary enterprises (net of scholarship allowances of \$5,574 in 2019 and \$5,078 in 2018; net of bad debt of \$993 in 2019 and \$995 in 2018; pledged revenues of \$56,701 in 2019 and \$72,464 in 2018) (Note 8 and 14)	299,259	-	284,034	-
Health services (net of bad debt of \$30,245 in 2019 and \$42,843 in 2018; pledged revenues of \$11,184 in 2019 and \$10,375 in 2018) (Note 8 and 15)	1,118,365	-	1,037,529	-
Contributions (Note 17)	-	198,939	-	248,613
Other operating revenues (net of bad debt of \$1,868 in 2019 and \$1,188 in 2018; pledged revenues of \$7,455 in 2019 and \$5,832 in 2018) (Note 8)	149,098	5,300	106,040	4,186
Total Operating Revenues	4,097,809	204,239	3,833,883	252,799
Operating Expenses				
Education and general				
Instruction	1,098,320	-	1,117,230	-
Research	672,006	-	700,330	-
Public service	157,077	-	131,790	-
Academic support	206,049	-	236,683	-
Student services	123,377	-	137,452	-
Institutional support	250,564	190,759	315,796	193,075
Operation and maintenance of plant	139,988	-	157,863	-
Student aid	22,785	-	29,564	-
Total education and general expenses	2,670,166	190,759	2,826,708	193,075
Depreciation (Note 5)	215,348	123	206,950	148
Auxiliary enterprises	240,062	-	463,862	-
Health services (Note 15)	1,001,822	-	952,782	-
Total Operating Expenses	4,127,398	190,882	4,450,302	193,223
Operating Income (Loss)	\$ (29,589)	13,357	(616,419)	59,576

See accompanying notes to basic financial statements

UNIVERSITY OF COLORADO
STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION
June 30, 2019 and 2018 (in thousands)

	2019		2018	
	University	Component Unit	University	Component Unit
Nonoperating Revenues (Expenses)				
Federal Pell Grant	\$ 58,681	-	57,021	-
State appropriations (Note 13)	15,950	-	15,651	-
State support for PERA pension (Note 10 and 13)	8,585	-	-	-
Gifts	206,733	-	198,386	-
Investment income (net of investment expenses of \$12,254 in 2019 and \$11,743 in 2018)	163,344	97,347	160,106	129,588
Loss on disposal of capital assets (Note 5)	(3,377)	-	(2,692)	-
Interest expense on capital asset-related debt (including amortization of deferred loss of \$8,921 in 2019 and \$9,467 in 2018) (Note 5)	(70,469)	-	(66,721)	-
Bond issuance costs	(686)	-	(2,350)	-
Other nonoperating revenues (pledged revenues of \$2,263 in 2019 and \$2,183 in 2018) (Note 8)	32,324	-	31,601	-
Total Nonoperating Revenues (Expenses)	411,085	97,347	391,002	129,588
Income (Loss) Before Other Revenues	381,496	110,704	(225,417)	189,164
Other Revenues				
Capital student fee (net of scholarship allowance of \$3,830 in 2019 and \$3,920 in 2018; pledged revenue of 16,085 in 2019 and \$17,250 in 2018) (Note 8 and Note 14)	16,086	-	17,250	-
Capital appropriations (Note 13)	15,818	-	3,643	-
Capital grants and gifts	14,154	-	17,038	-
Additions to (transfers of) permanent endowments	14	-	(9,772)	-
Total Other Revenues	46,072	-	28,159	-
Change in net position	427,568	110,704	(197,258)	189,164
Net Position, beginning of year	1,651,841	1,645,077	2,358,412	1,455,913
Cumulative effect of adoption of new accounting principle (Note 1)	-	-	(509,313)	-
Net Position, beginning of year, as restated	1,651,841	1,645,077	1,849,099	1,455,913
Net Position, End of Year	\$ 2,079,409	\$ 1,755,781	1,651,841	1,645,077

See accompanying notes to basic financial statements

UNIVERSITY OF COLORADO
STATEMENTS OF CASH FLOWS
June 30, 2019 and 2018 (in thousands)

	<i>2019</i>	<i>2018</i>
	<i>University</i>	
Cash Flows from Operating Activities		
Tuition and fees	\$ 1,239,361	1,177,113
Grants and contracts	1,000,419	995,884
Sales and services of educational departments	244,912	222,618
Auxiliary enterprise charges	305,540	300,377
Health services	1,104,093	989,732
Other receipts	167,843	144,618
Payments to employees and benefits	(3,237,327)	(3,236,673)
Payments to suppliers	(727,766)	(596,939)
Payments for scholarships and fellowships	(22,785)	(29,564)
Total Cash Flows Provided by (Used for) Operating Activities	74,290	(32,834)
Cash Flows from Noncapital Financing Activities		
Federal Pell Grant	58,681	57,021
State appropriations	15,950	15,651
Gifts and grants for other than capital purposes	206,733	198,386
Endowment additions (transfers)	15	(9,772)
Direct lending receipts	394,751	396,662
Direct lending disbursements	(397,034)	(397,016)
Other student loan receipts	4,601	4,795
Other student loan disbursements	(1,615)	(5,473)
Other loan disbursements	(934)	(1,475)
Other agency transactions	5,534	2,335
Total Cash Flows Provided by Noncapital Financing Activities	286,682	261,114
Cash Flows from Capital and Related Financing Activities		
State capital contributions	15,818	3,643
Capital student fees	16,086	17,250
Proceeds from capital debt and commercial paper	551,301	568,325
Bond issuance costs paid	(686)	(2,350)
Principal paid on capital debt, leases, notes and commercial paper	(589,457)	(418,519)
Interest paid on capital debt, leases and notes	(77,661)	(84,689)
Proceeds from sale of capital assets	9,477	10,004
Purchases and construction of capital assets	(320,177)	(266,983)
Total Cash Flows Used for Capital and Related Financing Activities	(395,299)	(173,319)
Cash Flows from Investing Activities		
Proceeds from sales and maturities of investments	12,164,882	6,091,864
Purchase of investments	(12,193,573)	(6,199,235)
Investment earnings	109,014	96,096
Total Cash Flows Provided by (Used for) Investing Activities	80,323	(11,275)
Net Increase in Cash and Cash Equivalents	45,996	43,686
Cash and cash equivalents, beginning of year	133,662	89,976
Cash and Cash Equivalents, End of Year	\$ 179,658	133,662

See accompanying notes to basic financial statements

UNIVERSITY OF COLORADO
STATEMENTS OF CASH FLOWS
June 30, 2019 and 2018 (in thousands)

	2019	2018
	<i>University</i>	
Reconciliation of Operating Loss to Net Cash Provided by Operating Activities:		
Operating loss	\$ (29,589)	(616,419)
Adjustments to reconcile operating loss to net cash provided by operating activities		
Depreciation expense	215,348	206,950
Items classified as nonoperating revenues	32,324	31,601
State support for PERA pension	8,585	-
Changes in assets, deferred outflows, liabilities, and deferred inflows		
Receivables	(61,650)	(43,870)
Inventories	(1,223)	(440)
Other assets	7,537	3,711
PERA pension-related deferred outflows	252,727	192,377
AMP-related deferred outflows	(3,177)	1,164
OPEB-related deferred outflows	(27,882)	(21,079)
Other deferred outflows	(1,037)	-
Accounts payable	(22,127)	(905)
Accrued expenses	9,694	(145,714)
Compensated absences	8,140	22,978
Unearned revenue	(6,315)	8,726
Other postemployment benefits	98,049	(57,736)
Alternate medicare plan	10,001	(1,512)
Net pension liability	(961,983)	157,175
Other liabilities	1,760	20,755
PERA pension-related deferred inflows	562,190	85,935
AMP-related deferred inflows	(687)	5,774
OPEB-related deferred inflows	(16,395)	117,695
Net Cash Provided by (Used for) Operating Activities	\$ 74,290	(32,834)
Noncash Transactions		
Donations of capital assets	\$ 1,913	1,961
Lease-financed acquisitions	5,010	795
Purchases of capital assets in accounts payable	21,640	22,434
Change in unrealized gains on investments	53,780	64,992
Amortization of premiums and discounts	15,541	12,149
Amortization of deferred loss	(8,921)	(9,467)

See accompanying notes to basic financial statements

UNIVERSITY OF COLORADO
NOTES TO FINANCIAL STATEMENTS
June 30, 2019 and 2018

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 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

UNIVERSITY OF COLORADO
NOTES TO FINANCIAL STATEMENTS
June 30, 2019 and 2018

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 3,600 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 SOM. The members' primary sites of practice are at the University of Colorado Hospital (UCHealth) 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 UCHealth 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.

CU Medicine began participating in a federally funded program available to physicians employed by state-owned medical schools in Fiscal Year 2018. In July 2017, the Centers for Medicare and Medicaid Services (CMS) approved a proposed state Medicaid plan amendment filed by the Colorado Department of Health Care Policy & Financing (HCPF) on behalf of CU Medicine and the SOM. Under the terms of the approved program, CU Medicine received \$68,296,000 and \$62,008,000 in supplemental payments during Fiscal Years 2019 and 2018, respectively. The supplemental funding is 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 non-profit 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.

Campus Village Apartments, LLC (CVA), a Delaware limited liability company, was formed under the laws of the State of Delaware on May 25, 2005. CUPCO is 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.

- **18th Avenue, LLC (18th 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. The University is the sole member. 18th Avenue is organized, operated, and dedicated exclusively to promote 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.

UNIVERSITY OF COLORADO
NOTES TO FINANCIAL STATEMENTS
June 30, 2019 and 2018

18th Avenue provides services exclusively to the University, owns 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. 18th Avenue does not issue standalone financial statements.

- **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 non-profit 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.

- **Altitude West, LLC (Altitude West)**

Altitude West was formed November 9, 2018, by the Regents with the authorization of the Division of Insurance of the Department of Regulatory Agencies of the State. It was formed to operate as a captive insurance company for the benefit of the University. Altitude West provides workers' compensation insurance for the University's self-insured retention layer of \$1,500,000 per claim. The University is the sole member of Altitude West and appoints its board members. The University is financially accountable for Altitude West. Additionally, Altitude West provides benefits solely to the University.

Detailed financial information may be obtained directly from Altitude West at 1800 Grant Street, Suite 700, Denver, Colorado 80203.

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.

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.

UNIVERSITY OF COLORADO
NOTES TO FINANCIAL STATEMENTS
June 30, 2019 and 2018

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.

- University of Colorado Hospital (UCHealth)
- 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. The Regents are 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. 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. 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. The State's CAFR can be obtained from the State of Colorado, Department of Personnel and Administration, Denver, Colorado.

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, 2019 and 2018.

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, 2019 and 2018

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, 2019 and 2018. 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.

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

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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 (in Fiscal Year 2018).

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, and interest incurred during the construction phase was included as part of the value of the construction in progress. Beginning July 1, 2017, interest is no longer capitalized. 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

Asset Class	Years
Buildings	12 – 50 *
Improvements other than buildings	10 – 40
Equipment	2 – 17
Library and other collections	6 – 15
Software	3 – 10
Intangibles	Varies

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

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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

Type of Employee	Days Earned Per Month*	Maximum Accrual
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.

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 incurred usually for the acquisition of buildings, equipment, or capital construction. Bonds are addressed in Note 8.

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.

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 fair 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

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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.

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, if any, based on actuarial valuations. See Note 9 for more information on both plans.

Alternate Medicare Plan is described in Note 10.

Other Liabilities are addressed in Note 11 and consist of risk financing, construction contract retainage, funds held for others, the Federal share of Perkins Loans, the asset retirement obligation, the early retirement incentive plan, 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, losses 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. Asset retirement obligations and split-interest agreements are recorded as other 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. See Note 10 for more information.

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

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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 the Federal Pell Grant and insurance recoveries.

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. See Note 14 for more information.

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Health Services Revenue 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. See Note 15 for more information.

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, 2019 and 2018, 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, 2019 and 2018, there was \$17,325,000 and \$16,111,000, 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.

ADOPTION OF NEW ACCOUNTING STANDARDS

Effective July 1, 2018, the University adopted the provisions of GASB Statement No. 83 *Certain Asset Retirement Obligations* (Statement No. 83). Statement No. 83 establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for Asset Retirement Obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. Changes adopted to conform to the provisions of Statement No. 83 should be applied retroactively by restating financial statements, to the extent practicable, for all prior periods presented. The University did not restate the financial statements as of and for the period ending June 30, 2018, as the impact on the balances is not material.

Effective July 1, 2018, the University adopted the provisions of GASB Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements* (Statement No. 88). Statement No. 88 defines debt for

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purposes of disclosure in note to financial statements and establishes additional financial statement note disclosure requirements related to debt obligations of governments, including direct borrowings and direct placements. The adoption of GASB Statement No. 88 resulted in minor additional financial statement note disclosures.

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 Colorado Public Employees’ Retirement Association (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.

In summary, the adoption of these standards resulted in the following changes to beginning net position:

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

	2018
Beginning net position, as previously reported	\$ 2,358,412
<i>GASB 75 implementation</i>	
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
<i>GASB 81 implementation</i>	
Less related deferred inflow	(1,705)
Cumulative effect of adoption of new accounting standards	(509,313)
Beginning net position, as restated	\$ 1,849,099

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)

	2019	2018
Cash on hand (petty cash and change funds)	\$ 369	352
Deposits with U.S. financial institutions	179,270	133,286
Deposits with foreign financial institutions	19	24
Total Cash and Cash Equivalents – University	\$ 179,658	133,662

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, 2019 and 2018, \$867,000 and \$212,000, 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, 2019 and 2018, all deposits with foreign financial institutions were authorized, and risk exposure was limited to \$19 and \$24, respectively.

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 a portion 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:

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- 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 \$1,911,085,000 and \$1,769,447,000 for the years ended June 30, 2019 and 2018, respectively. The total return on this pool (excluding blended component units) was 5.40 percent and 7.32 percent for the years ended June 30, 2019 and 2018, 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.

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, 2019 and 2018.

The fair value measurements as of June 30, 2019 and June 30, 2018 for the University are included in Table 3.1.

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Table 3.1. Investments - University (in thousands)

Investment Type	Level 1	Level 2	Level 3	Fiscal Year 2019 Total
U.S. government securities	\$ 91,059	225,531	-	316,590
Corporate bonds	4,058	336,897	9	340,964
Corporate equities	5,774	-	-	5,774
Mortgages	10,557	147,017	-	157,574
Municipal bonds	741	14,608	-	15,349
Mutual funds	874,663	-	-	874,663
Certificates of deposit	869	-	-	869
Held at CU Foundation	-	-	447,830	447,830
Asset-backed securities	972	179,605	2,472	183,049
Alternative non-equity securities:				
Real estate	222	6	-	228
	<u>988,915</u>	<u>903,664</u>	<u>450,311</u>	<u>2,342,890</u>
Measured at NAV:				
Equity trusts				234,348
Measured at amortized cost:				
Money market funds				225,799
Measured at cost:				
Private equity securities				2,761
Investments not requiring fair value:				
Repurchase agreements				56,471
Total Investments – University				\$ 2,862,269

Investment Type	Level 1	Level 2	Level 3	2018 Total
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
Held at 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
	<u>1,201,278</u>	<u>673,552</u>	<u>431,664</u>	<u>2,306,494</u>
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
Total Investments – University				\$ 2,779,799

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

Table 3.2. Investments - CU Foundation (in thousands)

Investment Type	2019	2018
Cash equivalents	\$ 22,438	13,961
Equity securities:		
Domestic equities	453,162	410,214
International equities	547,898	484,965
Fixed-income securities	235,285	197,906
Alternative non-equity securities:		
Real estate	69,264	75,668
Private equity	319,688	297,737
Absolute return funds	227,839	257,316
Venture capital	130,513	96,753
Commodities	15,067	12,239
Other	825	791
Total Investments – CU Foundation	\$ 2,021,979	1,847,550

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. At June 30, 2019 and 2018, the \$2,761,000 and \$650,000, respectively, of private equity securities held by ULEHI 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 several 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, 2019 and 2018 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 \$1,480,042,000 of non-debt securities and \$231,482,000 of debt investments that are backed by the full faith and credit of the U.S. government as of June 30, 2019, 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.

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

Investment Type	2019			2018		
	Unrated	Rated	% of Rated	Unrated	Rated	% of Rated
	Fair Value	Fair Value	Value by Credit Rating	Fair Value	Fair Value	Value by Credit Rating
U.S. government securities	\$ 78,898	163,784	100% Aaa/Aa/A	\$ 129,820	106,781	100% Aaa/Aa/A
Bond mutual funds	54,848	-	-	50,221	-	-
Certificates of deposit	869	-	-	240	-	-
Corporate bonds	771	340,193	35% Aaa/Aa/A 65% Baa/Ba/B	44,048	269,339	62% Aaa/Aa/A 37% Baa/Ba/B 1% C/D
Money market mutual funds	-	256,513	100% Aaa	-	246,122	100% Aaa
Municipal bonds	627	14,722	39% Aaa 61% Aa/A	627	14,652	82% Aaa 18% Aa/A
Repurchase agreements	56,471	-	-	-	-	-
Guaranteed investment agreement	-	-	-	-	5,165	100% Aa3
Asset-backed securities	7,132	175,917	93% Aaa 4% Aa/A 2% Baa/Ba/B 1% Caa/Ca	779	82,195	88% Aaa 6% Aa/A 5% Baa/Ba/B 1% Caa/Ca
Total Debt Investments	\$ 199,616	951,129		\$ 225,735	724,254	

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, 2019 and 2018 is shown in Table 3.4. Table 3.4 is a subset of Table 3.1 and does not include \$1,736,555,000 and \$1,662,131,000 of non-debt securities as of June 30, 2019 and 2018, respectively. 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.

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

Investment Type	2019		2018	
<i>University</i>	Amount	Weighted Average Maturity	Amount	Weighted Average Maturity
U.S. government securities	\$ 316,590	11.55	\$ 508,305	6.33
Bond mutual funds	54,848	6.43	50,221	5.34
Certificates of deposit	869	0.96	240	2.34
Corporate bonds	340,964	7.12	313,387	7.96
Municipal bonds	15,349	4.30	15,279	8.92
Repurchase agreements	56,471	1.04	-	0.00
Guaranteed investment agreement	-	-	5,165	0.09
Fixed rate asset-backed securities	151,909	16.99	62,037	5.27
Variable rate asset-backed securities	31,140	15.95	20,937	21.53
Collateralized mortgage obligations	157,574	20.46	142,097	10.55
Total Debt Investments – University	\$ 1,125,714		\$ 1,117,668	

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, 2019 and 2018, as shown in Table 3.5.

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

Type	2019	2018
Assets held in charitable remainder trusts	\$ 36,300	36,339
Assets held in charitable lead trusts	2,632	2,738
Assets held in life interest in real estate	1,565	3,330
Assets held in pooled income funds	163	166
Total Investments Held under Split-interest Agreements	\$ 40,660	42,573

NOTE 4 – ACCOUNTS AND LOANS RECEIVABLE

Table 4.1 segregates receivables as of June 30, 2019 and 2018, by type.

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Table 4.1. Accounts and Loans Receivable (in thousands)

Type of Receivable	2019			
	Gross Receivables	Allowance	Net Receivables	Net Current Portion
<i>University</i>				
Student accounts	\$ 68,045	21,675	46,370	46,370
Federal government	104,178	-	104,178	104,178
Other governments	43,407	-	43,407	43,407
Private sponsors	27,069	-	27,069	27,069
Patient accounts	185,727	18,939	166,787	166,787
CU Foundation	9,854	-	9,854	9,854
Interest	4,167	-	4,167	4,167
Direct financing lease	20,519	-	20,519	749
PAC-12 distribution	3,823	-	3,823	3,823
Other	41,708	1,159	40,549	40,544
Total accounts receivable	508,497	41,774	466,723	446,948
Loans	39,619	2,625	36,995	3,818
Total Receivable – University	\$ 548,116	44,398	503,718	450,766
2018				
Type of Receivable	Gross Receivables	Allowance	Net Receivables	Net Current Portion
<i>University</i>				
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
Total Receivable – University	\$ 488,300	44,749	443,551	388,376

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, 2019 and 2018 is detailed in Table 4.2.

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Table 4.2. CU Medicine Concentration of Credit Risk

Category	2019	2018
Managed care	48.2 %	44.8 %
Medicare	13.8	15.7
Medicaid	13.0	16.7
Other third-party payers	10.6	8.5
Self-pay	14.4	14.3
Total	100.0 %	100.0 %

NOTE 5 – CAPITAL ASSETS

Table 5 presents changes in capital assets and accumulated depreciation by major asset category for the years ended June 30, 2019 and 2018.

The University had insurance recoveries of \$777,000 and \$1,707,000 in the years ended June 30, 2019 and 2018, respectively, which are included in nonoperating revenues.

Table 5. Capital Assets (in thousands)

Category	2018	Additions	Retirements/ Adjustments	Transfers	2019
Nondepreciable capital assets					
Land	\$ 85,925	18,982	(2,298)	-	102,609
Construction in progress	348,937	251,205	(8,553)	(166,253)	425,336
Collections	18,661	1,020	(53)	-	19,628
Total nondepreciable capital assets	453,523	271,207	(10,904)	(166,253)	547,573
Depreciable capital assets					
Buildings	4,145,649	694	527	153,744	4,300,614
Improvements other than buildings	301,557	393	(489)	10,868	312,329
Equipment	574,775	55,477	(18,721)	1,641	613,172
Software	95,698	1,623	(521)	-	96,800
Other intangibles	1,910	-	-	-	1,910
Library and other collections	408,962	19,346	(4,604)	-	423,704
Total depreciable capital assets	5,528,551	77,533	(23,808)	166,253	5,748,529
Less accumulated depreciation					
Buildings	1,434,629	137,538	-	-	1,572,167
Improvements other than buildings	136,984	11,809	-	-	148,793
Equipment	421,724	43,542	(16,810)	-	448,456
Software	85,125	4,042	(492)	-	88,675
Other intangibles	478	76	-	-	554
Library and other collections	300,043	18,341	(4,556)	-	313,828
Total accumulated depreciation	2,378,983	215,348	(21,858)	-	2,572,473
Net depreciable capital assets	3,149,568	(137,815)	(1,950)	166,253	3,176,056
Total Net Capital Assets	\$ 3,603,091	133,392	(12,854)	-	3,723,629

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

Category	2017	Additions	Retirements/ 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
Total Net Capital Assets	\$ 3,530,562	85,223	(12,694)	-	3,603,091

NOTE 6 – ACCRUED EXPENSES AND COMPENSATED ABSENCES

Table 6.1 details the accrued expenses as of June 30, 2019 and 2018 by type.

Table 6.1 Accrued Expenses (in thousands)

Type	2019	2018
Accrued salaries and benefits	\$ 123,691	113,654
Accrued interest payable	3,831	4,403
Other accrued expenses	1,311	1,654
Total Accrued Expenses	\$ 128,833	119,711

Table 6.2 presents changes in compensated absences for the years ended June 30, 2019 and 2018.

Table 6.2 Compensated Absences (in thousands)

	2019	2018
Beginning of year	\$ 249,736	226,758
Additions	409,364	277,138
Reductions	(401,224)	(254,160)
End of year	\$ 257,876	249,736
Current compensated absences	16,865	16,155

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NOTE 7 – UNEARNED REVENUE

As of June 30, 2019 and 2018, the types and amounts of unearned revenue are shown in Table 7.

Table 7. Unearned Revenue (in thousands)

Type	2019		2018	
	Total	Current	Total	Current
Tuition and fees	\$ 39,424	39,424	38,791	38,791
Auxiliary enterprises	35,063	35,039	28,782	28,757
Grants and contracts	74,331	74,331	101,902	101,902
Miscellaneous	32,418	23,947	18,076	9,338
Total Unearned Revenue	\$ 181,236	172,741	187,551	178,788

NOTE 8 – BONDS, CAPITAL LEASES, AND NOTES PAYABLE

As of June 30, 2019 and 2018, the categories of long-term obligations are summarized in Table 8.1.

Table 8.1. Bonds, Capital Leases, and Notes Payable (in thousands)

Type	Interest Rates	Final Maturity	2019	2018
Enterprise system revenue bonds (including premium of \$132,459 in 2019 and \$140,206 in 2018)	1.78% - 5.00%	6/1/48	\$ 1,556,419	1,695,916
Enterprise system revenue bonds from private placement	Variable	6/1/30	48,015	-
CU Medicine fixed-rate bonds	2.30%	11/1/24	6,305	7,481
Colorado Educational & Culture Facilities Authority Student Housing (CUPCO) (including discount of \$633 in 2018)	4.25-5.5%	6/1/38	-	52,407
Total revenue bonds			1,610,739	1,755,804
Capital leases	0.0% -6.0%	Various	13,207	11,824
Notes payable	4.15%	6/1/33	10,516	11,020
Total Bonds, Capital Leases, and Notes Payable			\$ 1,634,462	1,778,648

Table 8.2 presents changes in bonds and capital leases for the years ended June 30, 2019 and 2018.

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Table 8.2. Changes in Bonds, Capital Leases, and Notes Payable (in thousands)

Type	Balance 2018	Additions	Retirements	Balance 2019	Current Portion
<i>University</i>					
Revenue bonds	\$ 1,608,750	64,360	(249,150)	1,423,960	93,495
Plus unamortized premiums	140,206	8,427	(16,174)	132,459	15,085
Less unamortized discounts	(633)	-	633	-	-
Revenue bonds from private placement	7,481	48,015	(1,176)	54,320	1,164
Net revenue bonds	1,755,804	120,802	(265,867)	1,610,739	109,744
Capital leases	11,824	5,010	(3,627)	13,207	2,314
Note payable	11,020	-	(504)	10,516	372
Total Bonds, Capital Leases, and Notes Payable	\$ 1,778,648	125,812	(269,998)	1,634,462	112,430
<i>University</i>					
Revenue bonds	\$ 1,515,645	471,390	(378,285)	1,608,750	65,727
Plus unamortized premiums	132,044	56,715	(48,553)	140,206	15,946
Less unamortized discounts	(678)	-	45	(633)	(45)
Revenue bonds from private placement	8,657	-	(1,176)	7,481	1,164
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
Total Bonds, Capital Leases, and Notes Payable	\$ 1,680,196	529,120	(430,668)	1,778,648	85,353

REVENUE BONDS

A general description of each revenue bond issue, original issuance amount, and the amount outstanding as of June 30, 2019 and 2018 is detailed in Table 8.3.

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Table 8.3. Revenue Bonds Detail (in thousands)

Issuance Description	Original Issuance Amount	Outstanding Balance 2019	Outstanding Balance 2018
Enterprise system revenue bonds:			
Refunding Series 2007A -			
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
Series 2009A -			
Used to fund acquisition and capital improvements at CU Boulder, UCCS and CU Denver	165,635	-	5,235
Series 2009B-2 -			
Used to fund capital improvements at CU Boulder and CU Anschutz	138,130	-	138,130
Series 2009C -			
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	2,270	2,545
Series 2010A -			
Used to fund acquisition and capital improvements at CU Anschutz	35,510	25,060	26,430
Series 2010B -			
Used to refund Enterprise System Revenue Bonds Series 2002A and Enterprise System Revenue Bonds Series 2003A	56,905	15,020	20,790
Series 2010C -			
Used to fund capital improvements at CU Anschutz	4,375	2,540	2,775
Series 2011A -			
Used to fund capital improvements at CU Boulder and UCCS	203,425	29,825	35,060
Series 2011B -			
Used to partially refund Enterprise System Revenue Bonds Series 2002B, 2003A, 2004, and 2005A	52,600	30,585	39,485
Series 2012A-1 -			
Used to partially refund Enterprise System Revenue Bonds Series 2003A, 2004, 2005A, 2005B, 2006A, and 2007B	121,850	114,515	119,125
Series 2012A-2 -			
Used to partially refund Enterprise System Revenue Bonds Series 2004, 2005A, and 2005B	53,000	43,015	43,015
Series 2012A-3 -			
Used to partially refund Enterprise System Revenue Bonds Series 2005A, 2005B, 2006A, and 2007B	47,165	33,935	34,015
Series 2012B -			
Used to fund capital improvements at CU Boulder, CU Denver and UCCS	95,705	16,020	17,940
Series 2013A -			
Used to fund capital improvements at CU Boulder, CU Anschutz and UCCS	142,460	11,075	13,515

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Table 8.3. (continued) Revenue Bonds Detail (in thousands)

Issuance Description	Original Issuance Amount	Outstanding Balance 2019	Outstanding Balance 2018
Series 2013B -			
Used to fund capital improvements at CU Anschutz	\$ 11,245	10,295	10,540
Series 2014A -			
Used to fund capital improvements at CU Boulder	203,485	32,980	38,670
Series 2014B-1 -			
Used to partially refund Enterprise System Revenue Bonds Series 2005B, 2006B, 2007A and 2009	100,440	95,180	97,790
Series 2015A -			
Used to partially refund Enterprise System Revenue Bonds Series 2006A, 2007B, and 2009	102,450	94,860	95,190
Series 2015B -			
Used to partially refund Enterprise System Revenue Bonds Series	3,925	2,800	2,910
Series 2015C -			
Used to partially refund Enterprise System Revenue Bonds Series	71,325	65,135	66,445
Series 2016A -			
Used to fund capital improvements at the CU Denver and UCCS	31,430	30,675	30,885
Series 2016B-1 -			
Used to partially refund Enterprise System Revenue Bonds Series	156,810	154,450	155,245
Series 2017A-1 -			
Used to partially refund Enterprise System Revenue Bonds Series 2007A and 2012B	66,930	51,485	61,505
Series 2017A-2 -			
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	470,155	470,745
Series 2018A - (private placement)			
Used to partially refund Series 2008 Student Housing Revenue Refunding Bonds	48,015	48,015	-
Series 2018B -			
Used to fund capital improvements at UCCS	64,360	64,360	-
Total enterprise system revenue bonds - outstanding principal	2,657,255	1,471,975	1,555,710
Series 2014 - CU Medicine Fixed Rate Bonds (private placement)			
Used to fund capital improvements at CU Medicine	11,695	6,305	7,481
Series 2008 - Colorado Educational & Culture Facilities Authority Student Housing			
Used to fund capital improvements	54,055	-	53,040
Total Other Long Term Obligations	65,750	6,305	60,521
Total Outstanding Revenue Bond Principal		1,478,280	1,616,231
Plus premium		132,459	140,206
Less discount		-	(633)
Total Revenue Bonds		\$ 1,610,739	\$ 1,755,804

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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.

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, 2048. During the years ended June 30, 2019 and 2018, the total principal and interest paid on the University's bonds net of Federal subsidy on the Build America Bonds, excluding refundings, was \$129,235,000 and \$130,017,000, respectively, which is 9.9 percent and 10.3 percent of the total net pledged revenues of \$1,306,858,000 and \$1,262,253,000, respectively. Net pledged revenues are 37 percent and 38 percent of the total specific revenue streams, respectively.

On August 1, 2018, the University issued \$48,015,000 of Tax-Exempt University Enterprise Revenue Refunding Bonds, Series 2018A as a direct placement funding arrangement with RBC Bank. The proceeds were used to advance refund \$53,040,000 par value of the Series 2008 Student Housing Revenue Refunding Bonds. The refunding of Series 2008 resulted in an economic gain of \$48,665,000 and an accounting loss of \$629,000, which is deferred and amortized over the life of the new bonds. The debt service cash flow decreased by \$43,451,000. Series 2018A has a variable interest rate, and the bonds will mature on September 10, 2020.

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 range from 3 percent to 5 percent, and the first interest payment date was December 1, 2018. The final maturity of the bonds is June 1, 2048, with the first principal payment due on June 1, 2020.

On December 12, 2017, the University issued \$471,390,000 of Tax-Exempt University Enterprise Refunding Revenue Bonds, Series 2017A-2. A portion of the proceeds were used to establish escrow accounts for the crossover refunding of Series 2009B, Series 2010A, and Series 2010C. On June 1, 2019, a call was performed on \$117,645,000 par value of escrow that had been established for the crossover refunding of Series 2009B-2. The proceeds were used to redeem \$130,910,000 par value of the Series 2009B-2 bonds. The refunding of Series 2009B-2 resulted in an economic gain of \$10,998,000 and accounting loss of \$4,626,000, which is deferred and amortized over the life of the new bonds. The debt service cash flow decreased by \$14,249,000. The escrow for the crossover refunding of Series 2009B-2 has a 4.5 percent interest rate, and the bonds mature through June 1, 2036.

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

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direct 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 initially carried 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.

Future minimum payments for revenue bonds are detailed in Table 8.4.

Table 8.4. Revenue Bonds Future Minimum Payments (in thousands)

Years Ending	Non-Direct Borrowings			Direct Borrowings		
	Principal	Interest	Total	Principal	Interest	Total
2020	\$ 93,495	60,381	153,876	1,164	1,149	2,313
2021	69,225	57,898	127,123	4,769	1,041	5,810
2022	73,410	54,813	128,223	4,949	932	5,881
2023	73,870	51,632	125,502	5,159	819	5,978
2024	72,005	48,367	120,372	5,589	697	6,286
2025 - 2029	361,450	190,143	551,593	26,290	1,754	28,044
2030 - 2034	318,855	113,816	432,671	6,400	-	6,400
2035 - 2039	218,200	54,735	272,935	-	-	-
2040 - 2044	112,425	18,937	131,362	-	-	-
2045 - 2049	31,025	3,010	34,035	-	-	-
Total	\$ 1,423,960	653,732	2,077,692	54,320	6,392	60,712

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 \$490,175,000 and \$614,125,000 as of June 30, 2019 and 2018, respectively. During the year ended June 30, 2019, debt in the amount of \$183,950,000 was defeased and escrow agent payments were \$307,900,000. During the year ended June 30, 2018, debt in the amount of \$315,505,000 was defeased and there were no escrow agent payments.

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, 2019 and 2018, the University paid base annual rent to AHEC of approximately \$835,000 and \$836,000, respectively.

As of June 30, 2019 and 2018, the University had an outstanding liability for all its capital leases approximating \$13,207,000 and \$11,824,000, respectively, with underlying gross capitalized asset cost approximating \$24,245,000 and \$24,942,000, respectively, with accumulated amortization of \$10,968,000 and \$12,638,000 respectively, resulting in underlying net capitalized assets of \$13,277,000 and \$12,304,000, respectively.

Future minimum payments for all the University's capital lease obligations are detailed in Table 8.5.

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Table 8.5. Capital Leases (*in thousands*)

Years Ending June 30	Principal	Interest	Total
2020	\$ 2,314	598	2,912
2021	2,247	511	2,758
2022	1,920	422	2,342
2023	1,918	333	2,251
2024	997	243	1,240
2025-2029	3,811	427	4,238
Total	\$ 13,207	2,534	15,741

NOTES PAYABLE

18th 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 approximately \$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 8.6.

Table 8.6. Notes Payable Future Minimum Payments (*in thousands*)

Years Ending June 30	Principal	Interest	Total
2020	\$ 372	429	801
2021	387	414	801
2022	404	397	801
2023	421	380	801
2024	439	362	801
2025 – 2029	2,487	1,518	4,005
2030 – 2034	6,006	808	6,814
Total	\$ 10,516	4,308	14,824

COMMERCIAL PAPER

On April 6, 2018, the Regents authorized a commercial paper program for approved capital construction projects with a maximum outstanding amount of \$200,000,000. 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.

In Fiscal Year 2019, the University issued the second through eleventh tranches of commercial paper, totaling \$430,500,000, and retired \$335,000,000, which net to additional new borrowings of \$95,500,000. These borrowings are being used at CU Boulder to fund the Fleming Tower remodel, the Imig Music Center addition and remodel, Aerospace Engineering, and Williams Village East Residence Hall. It is expected that future issuance of commercial paper will be used to fund the balance of these capital construction projects before permanent financing is issued in the fall of 2019. During Fiscal Year 2019, the outstanding balance did not exceed the approved limit of \$200,000,000. The average rate through June 30, 2019 was 1.61 percent. Table 8.7 presents changes in commercial paper for the years ended June 30, 2019 and June 30, 2018. See Note 20 for subsequent event information.

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Table 8.7. Commercial Paper (in thousands)

	2019	2018
Beginning of year	\$ 40,000	-
Additions	430,500	40,000
Retirements	(335,000)	-
End of year	\$ 135,500	40,000

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, 2019, the University had underlying gross capitalized assets at UCCS costing approximately \$17,735,000 with accumulated amortization of \$7,907,000 resulting in an underlying net capitalized asset of \$9,828,000. As of June 30, 2019, the University had underlying gross capitalized assets at CU Boulder costing approximately \$796,000, with accumulated amortization of \$228,000 resulting in an underlying net capitalized asset of \$568,000. As of June 30, 2019, the University had underlying gross capitalized assets at CU Anschutz costing approximately \$188,801,000, with accumulated amortization of \$55,695,000 resulting in an underlying net capitalized asset of \$133,106,000.

On September 26, 2018, the State issued State of Colorado Rural Colorado Certificates of Participation, Series 2018A, with a par value of \$500,000,000 and a premium of \$47,369,000 and a discount of \$526,000. The certificates have interest rates ranging from 1.84 percent to 5.00 percent and mature in December 2037. Annual debt service payments are made by the State and are subject to annual appropriation 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 equipment acquired with the proceeds and any unexpended lease proceeds. Of the proceeds, \$120,000,000 was designated for controlled maintenance projects, \$19,976,000 of which are at the University. There are projects at all the campuses and include upgrading HVAC, fire sprinklers, electrical services, roof replacement, and elevator repairs. The underlying capitalized assets are contributed to the University from the State and are reflected in the accompanying financial statements.

NOTE 9 – 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. The University adopted the provisions of Statement No. 75 in Fiscal Year 2018.

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Funded Status and Funding Progress. There are no assets accumulating in a trust for the University's OPEB plan. The University contributed \$15,163,000 and \$17,211,000 the years ended June 30, 2019 and 2018, respectively.

The actuarial valuation for the fiscal year ending June 30, 2019 had a measurement date of June 30, 2018, and 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. Both valuations were based on the March 1, 2017 participant data, in which 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 \$53,280,000 and \$59,631,000 in OPEB expense for this plan in Fiscal Year 2019 and 2018, respectively. Table 9.1 details the changes in the University's total OPEB plan liability during Fiscal Years 2019 and 2018.

Table 9.1. Reconciliation of University's OPEB Liability (in thousands)

	Fiscal Year Ending June 30	
	2019	2018
Total OPEB liability, beginning of year	\$ 746,773	343,570
Cumulative effect of adoption of new accounting principle	-	476,727
Changes recognized for the fiscal year:		
Service cost	49,754	53,099
Interest on total OPEB liability	28,404	24,648
Differences between expected and actual experience	(1,728)	(87,654)
Changes of assumptions	35,919	(46,406)
Benefit payments	(15,163)	(17,211)
Net changes	97,186	(73,524)
Total OPEB liability, end of year	\$ 843,959	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.

The entry age normal actuarial cost method is used. The discount rate used in the valuation is 3.85 percent as of the June 30, 2018 measurement and, and 3.60 percent as of the June 30, 2017 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 June 30, 2018 measurement date used the PUB-2010 Teachers Classification Table with generational projection using Scale MP-2018. The June 30, 2017 measurement date used 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.

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The valuation reflects the following assumption changes from the June 30, 2017 measurement date to the June 30, 2018 measurement date:

- Interest rate changed from 3.60 percent to 3.85 percent
- Mortality table was updated to reflect the Public Retirement Plans Mortality Tables Report issued by the Society of Actuaries in January 2019. The specific assumption used is the PUB-2010 Teachers Classification Table with generational projection using Scale MP-2018. The impact of this change was an increase in the University's total OPEB liability of about 8 percent

Table 9.2 illustrates the impact of interest rate sensitivity on the University's total OPEB liability for the fiscal year ending June 30, 2019 and 2018.

Table 9.2. Sensitivity of University's Total OPEB Liability (in thousands)

		1% Increase	Discount Rate	1% Decrease
Fiscal Year Ended June 30, 2019		4.85%	3.85%	2.85%
1% decrease in Health Care Trend Rates	\$	603,737	693,531	805,199
Health Care Trend Rates		725,144	843,959	994,103
1% increase in Health Care Trend Rates		882,658	1,042,382	1,247,693
Fiscal Year Ended June 30, 2018		4.60%	3.60%	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

Table 9.3 illustrates the deferred outflows and inflows of resources as of June 30, 2019 and 2018.

Table 9.3. University's OPEB Deferred Outflows of Resources and Deferred Inflows of Resources (in thousands)

		2019		2018	
		Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$	-	65,462	-	75,809
Changes in assumptions		31,131	33,864	-	40,135
Contributions subsequent to the measurement date		15,461	-	19,304	-
Total	\$	46,592	99,326	19,304	115,944

Between the June 30, 2018 and 2017 measurement dates of the University's total OPEB liability and the University's June 30, 2019 and 2018 reporting dates, the University made contributions of \$15,461,000 and \$19,304,000 during Fiscal Year 2018 that impacted the total OPEB liability and were treated as a deferred outflow of resources.

Table 9.4 lists the amortization bases included in the University's OPEB deferred outflows and inflows of resources as of June 30, 2019 and 2018.

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Table 9.4. Amortization of University's OPEB Deferred Outflows of Resources and Deferred Inflows of Resources (in thousands)

Date Established	Type of Base	Period		Balance		Annual Amortization
		Original	Remaining	Original	Remaining	
July 1, 2017	Differences between expected and actual experience	7.4	5.4	\$ (87,654)	(63,964)	(11,845)
July 1, 2017	Changes in assumptions	7.4	5.4	(46,406)	(33,864)	(6,271)
July 1, 2018	Differences between expected and actual experience	7.5	6.5	(1,728)	(1,498)	(230)
July 1, 2018	Changes in assumptions	7.5	6.5	35,919	31,131	4,789
				Total	\$ (68,195)	(13,557)

The \$15,461,000 reported as deferred outflows of resources as of June 30, 2019, resulting from contributions subsequent to the measurement date, will be recognized as a reduction to the University's OPEB liability in the year ended June 30, 2020. The \$19,304,000 reported as deferred outflows of resources as of June 30, 2018, resulting from contributions subsequent to the measurement date, were recognized as a reduction to the University's OPEB liability in the years ended June 30, 2019, respectively. Other amounts reported as deferred inflows related to the University's OPEB liability will be recognized in OPEB expense as summarized in Table 9.5.

Table 9.5. Future Amortization of University's OPEB Deferred Outflows of Resources and Deferred Inflows of Resources (in thousands)

Years ending June 30:	
2020	\$ (13,557)
2021	(13,557)
2022	(13,557)
2023	(13,557)
2024	(13,557)
2025-2026	(410)
Total	\$ (68,195)

PERA HEALTH CARE TRUST FUND

As noted earlier, the University participates in 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.

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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.

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 \$3,136,000 and \$3,345,000 for the years ended June 30, 2019 and 2018, respectively. As of June 30, 2019 and 2018, the University recorded an accounts payable to PERA of \$78,000 and \$76,000, respectively, which was paid during the subsequent month.

At June 30, 2019 and 2018, the University reported a liability of \$49,237,000 and \$48,374,000, respectively, for its proportionate share of the net OPEB liability. The net OPEB liability for the HCTF for Fiscal Year 2019 was measured as of December 31, 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of December 31, 2017. Standard update procedures were used to roll-forward the total OPEB liability to December 31, 2018. The net OPEB liability for the HCTF for Fiscal Year 2018 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

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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 years 2018 and 2017 relative to the total contributions of participating employers to the HCTF.

At December 31, 2018, the University's proportion was 3.62 percent, which was a decrease from 3.72 percent as of December 31, 2017. For the year ended June 30, 2019 and 2018, the University recognized OPEB expense of \$3,630,000 and \$3,602,000, respectively. Table 9.6 details the sources of the University's deferred outflows of resources and deferred inflows of resources related to PERA's OPEB plan.

Table 9.6. PERA's OPEB Deferred Outflows of Resources and Deferred Inflows of Resources (*in thousands*)

	2019		2018	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	\$ 179	75	228	-
Changes of assumptions or other inputs	345	-	-	-
Net difference between projected and actual earnings on OPEB plan investments	283	-	-	809
Changes in proportionate share	-	1,885	-	936
Difference between contributions recognized and proportionate share of contributions	-	14	-	6
Contributions subsequent to the measurement date	1,562	-	1,547	-
Total	\$ 2,369	1,974	1,775	1,751

The \$1,562,000 and \$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, 2020 and 2019, respectively. 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 9.7.

Table 9.7. Future Amortization of PERA's OPEB Deferred Outflows of Resources and Deferred Inflows of Resources (*in thousands*)

Years ending June 30:	
2020	\$ (294)
2021	(294)
2022	(294)
2023	(92)
2024	(186)
2025	(7)
Total	\$ (1,167)

Actuarial assumptions. PERA's total OPEB liability in the December 31, 2017 actuarial valuation was determined using the actuarial cost method, actuarial assumptions and other inputs detailed in Table 9.8.

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Table 9.8. PERA OPEB Actuarial Assumptions - December 31, 2017

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	3.25 percent for 2018, gradually rising to 5.00 percent in 2025

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.

The actuarial assumptions used in the December 31, 2017, 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 discussed below.

In determining the additional liability for PERACare enrollees who are age 65 or older and who are not eligible for premium-free Medicare Part A, the monthly costs/premiums are assumed for 2018 for the PERA Benefit Structure as detailed in Table 9.9.

Table 9.9. Monthly Costs/Premiums for PERACare Enrollees Age 65+

Medicare Plan	Cost for Members	Premiums for Members
	Without Medicare Part A	Without Medicare Part A
Self-Funded Medicare Supplement Plans	\$736	\$367
Kaiser Permanente Medicare Advantage HMO	\$602	\$236
Rocky Mountain Health Plans Medicare HMO	\$611	\$251
United Healthcare Medicare HMO	\$686	\$213

The 2018 Medicare Part A premium is \$422 per month.

In determining the additional liability for PERACare enrollees in the PERA Benefit Structure who are age 65 or older and who are not eligible for premium-free Medicare Part A, the initial expected value of Medicare Part A benefits, age adjusted to age 65 for the year following the valuation date is detailed in Table 9.10.

Table 9.10. Initial Value of Medicare Part A Benefits

Medicare Plan	Cost for Members
	Without Medicare Part A
Self-Funded Medicare Supplement Plans	\$289
Kaiser Permanente Medicare Advantage HMO	\$300
Rocky Mountain Health Plans Medicare HMO	\$270
United Healthcare Medicare HMO	\$400

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All costs are subject to the health care cost trend rates, as discussed below.

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.

The PERA benefit structure health care cost trend rates that were used to measure the total OPEB liability are summarized in Table 9.11.

Table 9.11. PERA's OPEB Health Care Cost Trend Rates

Year	PERACare Medicare Plans	Medicare Part A Premiums
2018	5.00%	3.25%
2019	5.00%	3.50%
2020	5.00%	3.75%
2021	5.00%	4.00%
2022	5.00%	4.25%
2023	5.00%	4.50%
2024	5.00%	4.75%
2025+	5.00%	5.00%

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.

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The following health care costs assumptions were updated and used in the measurement of the obligations for the HCTF:

- 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 2018 plan year.
- 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 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.

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 9.12.

Table 9.12. Target Allocation and Expected Rate of Return

Asset Class	Target Allocation	30 Year Expected Geometric Real Rate of Return
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%
Total	100.00%	

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 9.13 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.

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Table 9.13. Sensitivity of the University's Proportionate Share of PERA's Net OPEB Liability to Changes in the Health Care Cost Trend Rates (*in thousands*)

	1% Decrease in Trend Rates	Current Trend Rates	1% Increase in Trend Rates
PERACare Medicare trend rate	4.00%	5.00%	6.00%
Initial Medicare Part A trend rate	2.25%	3.25%	4.25%
Ultimate Medicare Part A trend rate	4.00%	5.00%	6.00%
Net OPEB Liability at 6/30/2019	\$ 47,878	49,237	50,801
Net OPEB Liability at 6/30/2018	\$ 47,043	48,374	49,977

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.
- 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 9.14 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 9.14. Sensitivity of the University's Proportionate Share of PERA's Net OPEB Liability to Changes in the Discount Rate (*in thousands*)

	1% Decrease 6.25%	Current Rate 7.25%	1% Increase 8.25%
Net OPEB Liability at 6/30/2019	\$ 55,092	49,237	44,232
Net OPEB Liability at 6/30/2018	\$ 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.

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NOTE 10 – 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 University and PERA also offer other voluntary retirement plans. The University offers the Alternate Medical Plan whose benefits are not restricted to healthcare 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 plan 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.

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. A brief description of some of the major changes to plan provisions required by SB 18-200 for the SDTF are listed below. A full copy of the bill can be found online at www.leg.colorado.gov.

- Increases employer contribution rates for the SDTF by 0.25 percent on July 1, 2019.
- Increases employee contribution rates for the SDTF by a total of 2 percent (to be phased in over a period of 3 years starting on July 1, 2019).
- As specified in C.R.S. § 24-51-413, the State is required to contribute \$225,000,000 each year to PERA starting on July 1, 2018. A portion of the direct distribution payment is allocated to the SDTF based on the proportionate amount of annual payroll of the SDTF to the total annual payroll of the SDTF, School Division Trust Fund, Judicial Division Trust Fund, and Denver Public Schools Division Trust Fund.
- Modifies the retirement benefits, including temporarily suspending and reducing the annual increase for all current and future retirees, increases 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.
- Employee 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 certain new members of the State Division hired on or after January 1, 2019, who are classified State College and University employees. 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.

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

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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.

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, 2018. 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, 2018, benefit recipients who elect to receive a lifetime retirement benefit are generally eligible to receive post-retirement cost-of-living adjustments in certain years, referred to as annual increases (AI) in the C.R.S. Pursuant to SB 18-200, there are no AI for 2018 and 2019 for all benefit recipients. Thereafter, benefit recipients under the PERA benefit structure who began eligible employment before January 1, 2007 will receive an annual increase, unless PERA has a negative investment year, in which case the annual increase for the next three years is the lesser of 1.5 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 will receive the lesser of an annual increase of 1.5 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. The automatic adjustment provision may raise or lower the aforementioned AI for a given year by up to one-quarter of 1 percent based on the parameters specified in C.R.S. § 24-51-413.

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 lifetime retirement benefit formula(s) shown above considering a minimum 20 years of service credit, if deemed disabled.

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.

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Contributions provisions as of June 30, 2019. Eligible employees, the University, and the State are required to contribute to the SDTF at a rate set by Colorado statute. The contribution requirements for the SDTF are established under C.R.S. § 24-51-401, *et seq.* and § 24-51-413. From January 1, 2018 through June 30, 2019, eligible employees are required to contribute 8 percent of their PERA-includable salary; and 8.75 percent from July 1, 2019 through June 30, 2020. Table 10.1 summarizes the employer contribution requirements for all employees.

Table 10.1. Employer Contribution Requirements

	1-1-18 to 06-30-19	7-1-19 to 06-31-20
Employer Contribution Rate*	10.15%	10.40%
Amount of Employer Contribution Apportioned to the Health Care Trust Fund as specified in C.R.S. Section 24-51-208(1)(f)	<u>-1.02%</u>	<u>-1.02%</u>
Amount Apportioned to the SDTF	9.13%	9.38%
Amortization Equalization Disbursement (AED) as specified in C.R.S. Section 24-51-411	5.00%	5.00%
Supplemental Amortization Equalization Disbursement (SAED) as specified in C.R.S., Section 24-51-411	5.00%	5.00%
Total Employer Contribution Rate to the SDTF	19.13%	19.38%

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

As specified in C.R.S. § 24-51-413, the State is required to contribute \$225,000,000 each year to PERA starting on July 1, 2018. A portion of the direct distribution payment is allocated to the SDTF based on the proportionate amount of annual payroll of the SDTF to the total annual payroll of the SDTF, School Division Trust Fund, Judicial Division Trust Fund, and Denver Public Schools Division Trust Fund. For the year ended June 30, 2019, the University's proportionate share of the direct distribution allocated to the SDTF was \$8,585,000.

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 \$63,850,000 for the year ended June 30, 2019, and \$61,138,000 for the year ended June 30, 2018. As of June 30, 2019 and 2018, the University recorded an accounts payable to PERA of \$7,617,000 and \$7,391,000, respectively, which was paid during the subsequent month.

The net pension liability for the SDTF 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 2018 and 2017 relative to the total contributions of participating employers and the State as a nonemployer contributing entity to participating employers of the SDTF that are outside of the State's financial reporting entity.

At June 30, 2019 and 2018, the University reported a liability of \$1,244,558,000 and \$2,206,541,000, respectively, for its proportionate share of the net pension liability. At December 31, 2018, the University's proportion was 10.94 percent, which decreased from 11.02 percent at December 31, 2017.

For the year ended June 30, 2019, the University recognized pension expense of \$(74,632,000) and revenue of \$8,585,000 for support from the State as an employer contribution. For the year ended June 30, 2018, the University recognized pension expense of \$496,627,000. Table 10.2 details the sources of the University's deferred outflows of resources and deferred inflows of resources related to pensions at June 30, 2019 and 2018.

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Table 10.2. Deferred Inflows of Resources and Deferred Outflows of Resources Related to Pension (in thousands)

		2019		2018	
		Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	\$	35,590	-	34,405	-
Changes of assumptions or other inputs		65,533	642,671	383,140	-
Net difference between projected and actual earnings on pension plan investments		62,864	-	-	83,106
Changes in proportionate share		-	14,039	-	11,150
Changes in proportionate share of contributions		-	1,044	-	1,308
Contributions subsequent to the measurement date		32,259	-	31,428	-
Total	\$	196,246	657,754	448,973	95,564

The \$32,259,000 reported as deferred outflows of resources related to pensions as of June 30, 2019, resulting from contributions subsequent to the measurement date, will be recognized as a reduction of the net pension liability in Fiscal Year 2020. 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, was recognized as a reduction of net pension liability in Fiscal Year 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions was recognized in pension expense as detailed in Table 10.3.

Table 10.3. Future Amortization of Deferred Outflows of Resources and Deferred Inflows of Resources (in thousands)

Years ending June 30:	
2020	\$ (237,235)
2021	(294,059)
2022	2,909
2023	34,618
Total	\$ (493,767)

Actuarial assumptions. The total pension liability in the December 31, 2017 actuarial valuation was determined using the actuarial cost method, actuarial assumptions and other inputs detailed in Table 10.4.

Table 10.4. Actuarial Assumptions - December 31, 2017

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	4.72 percent
Post-retirement benefit increases:	
PERA benefit structure hired prior to 1/1/07; and DPS benefit structure (automatic)	2.00 percent compounded annually
PERA benefit structure hired after 12/31/06; (ad hoc, substantively automatic)	Financed by the AIR

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The revised assumptions reflected in the rollforward calculation of the total net pension liability from December 31, 2017 to December 31, 2018 are detailed in Table 10.5.

Table 10.5. Actuarial Assumptions - December 31, 2018

Discount rate	7.25 percent
Post-retirement benefit increases:	
PERA benefit structure hired prior to 1/1/07; and DPS benefit structure (automatic)	0% through 2019 and 1.5% compounded annually, thereafter
PERA benefit structure hired after 12/31/06; (ad hoc, substantively automatic)	Financed by the AIR

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 based on 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.

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 10.6.

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Table 10.6. Target Allocation and Expected Rate of Return

Asset Class	Target Allocation	30 Year Expected Geometric Real Rate of Return
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
Total	100.00%	

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, 2018 was 7.25 percent, and 4.72 percent for the December 31, 2017 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 member contribution rates in effect for each year, including scheduled increases in SB 18-200. 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 for each year, including the scheduled increase in SB 18-200. Employer contributions also include current and estimated future Amortization Equalization Distribution (AED) and Supplemental Amortization Equalization Distribution (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.
- As specified in law, the State will provide an annual direct distribution of \$225,000,000 (actual dollars), commencing July 1, 2018, that is proportioned between the State, School, Judicial, and DPS Division Trust Funds based upon the covered payroll of each Division. The annual direct distribution ceases when all Division Trust Funds are fully funded.
- 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.
- 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

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appropriate. 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 available to make all projected future benefit payments of current members. Therefore, the long-term expected rate of return of 7.25 percent on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The discount determination does not use the municipal bond index rate, and therefore, the discount rate is 7.25 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 3.43 percent were used in the discount rate determination resulting in a blended discount rate of 4.72, 2.53 percentage points lower compared to the current measurement date.

Table 10.7 presents the proportionate share of the net pension liability calculated using the discount rate of 7.25 percent for 2019 and 4.72 percent for 2018, 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 10.7. Sensitivity of the University's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate (*in thousands*)

2019			
	1% Decrease	Current Rate	1% Increase
	6.25%	7.25%	8.25%
Proportionate share of the net pension liability	\$ 1,547,200	1,244,558	988,495
2018			
	1% Decrease	Current Rate	1% Increase
	3.72%	4.72%	5.72%
Proportionate share of the net pension liability	\$ 2,745,095	2,206,541	1,764,421

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

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. No stand-alone financial report is issued and the AMP is not included in the report of a public employee retirement system. The AMP provides a monthly cash payment of approximately \$154 for a retiree in both Fiscal Year 2019 and 2018, approximately \$262 for a retiree plus spouse/same gender domestic partner in both Fiscal Year 2019 and 2018, and approximately \$108 for a surviving spouse in both Fiscal Year 2019 and 2018, to offset medical plan costs for non-university Medicare Risk or Medicare-Eligible plans. No retiree contribution is permitted. As the monthly cash payments are not restricted as to use, they are considered a pension rather than a postemployment benefit.

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 \$1,692,000 and \$1,566,000 for the years ended June 30, 2019 and 2018, respectively.

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The actuarial valuation for the fiscal year ending June 30, 2019 had a measurement date of June 30, 2018. 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, 2018 had a measurement date of June 30, 2017, and was also based on the March 1, 2017 census data.

The University recognized \$7,829,000 and \$6,992,000 of AMP expense in Fiscal Year 2019 and 2018, respectively. Table 10.8 details the changes in the AMP liability during Fiscal Years 2019 and 2018.

Table 10.8. Reconciliation of AMP Liability (in thousands)

	Fiscal Year Ending June 30	
	2019	2018
AMP liability, beginning of year	\$ 73,211	74,723
Changes recognized for the fiscal year:		
Service cost	3,985	4,262
Interest on total AMP liability	2,751	2,231
Differences between expected and actual experience	(109)	(3,377)
Changes of assumption	4,940	(3,180)
Estimated benefit payments	(1,566)	(1,448)
Net changes	10,001	(1,512)
AMP liability, end of year	\$ 83,212	73,211

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 3.85 percent as of the June 30, 2018 measurement date, and 3.60 percent as of the June 30, 2017 measurement date, and is based on the Bond Buyer General Obligation 20-Bond Municipal Bond Index. The June 30, 2018 measurement date used the PUB-2010 Teachers Classification Table with generational projection using Scale MP-2018. The June 30, 2017 measurement date used 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, 2017 measurement date to the June 30, 2018 measurement date:

- Interest rate changed from 3.60 percent to 3.85 percent.
- Mortality table was updated to reflect the Public Retirement Plans Mortality Tables Report issued by the Society of Actuaries in January 2019. The specific assumption used is the PUB-2010 Teachers Classification Table with generational projection using Scale MP-2018. The impact of this change was an increase in Total AMP Liability of about 10 percent.

Table 10.9 illustrates the impact of interest rate sensitivity on the AMP liability for the fiscal years ending June 30, 2019 and 2018.

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Table 10.9. Sensitivity of AMP Liability (in thousands)

		1% Decrease	Current Rate	1% Increase
Fiscal Year Ended June 30		2.85%	3.85%	4.85%
2019	\$	99,215	83,212	70,621
		1% Decrease	Current Rate	1% Increase
		2.60%	3.60%	4.60%
2018	\$	86,429	73,211	62,639

Table 10.10 illustrates the deferred outflows and inflows of resources as of June 30, 2019 and 2018.

Table 10.10. AMP Deferred Outflows of Resources and Deferred Inflows of Resources (in thousands)

		2019		2018	
		Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of assumptions	\$	11,462	2,432	8,411	2,806
Differences between expected and actual experience		-	2,744	-	3,057
Contributions subsequent to the measurement date		1,692	-	1,566	-
Total	\$	13,154	5,176	9,977	5,863

Between the June 30, 2018 and 2017 measurement dates of the total AMP liability and the University's June 30, 2019 and 2018 reporting dates, the University made contributions of \$1,692,000 and \$1,566,000 during Fiscal Year 2019 and 2018, respectively, that impacted the total AMP liability and were treated as a deferred outflow of resources.

Table 10.11 lists the amortization bases included in the deferred outflows and inflows of resources as of June 30, 2019 and 2018.

Table 10.11. Amortization of AMP Deferred Outflows of Resources and Deferred Inflows of Resources (in thousands)

Date Established	Type of Base	Period		Balance		Annual Amortization
		Original	Remaining	Original	Remaining	
July 1, 2016	Differences between expected and actual experience	8.5	5.5	\$ (101)	(65)	(12)
July 1, 2016	Changes in assumptions	8.5	5.5	10,999	7,117	1,294
July 1, 2017	Differences between expected and actual experience	8.5	6.5	(3,377)	(2,583)	(397)
July 1, 2017	Changes in assumptions	8.5	6.5	(3,180)	(2,432)	(374)
July 1, 2018	Differences between expected and actual experience	8.3	7.3	(109)	(96)	(13)
July 1, 2018	Changes in assumptions	8.3	7.3	4,940	4,345	595
	Total changes			\$ 6,286		1,093

The deferred outflow from contributions subsequent to the measurement date of \$1,692,000 and \$1,566,000 will be recognized as a reduction to the AMP liability in the year ended June 30, 2020 and 2019, respectively. Other amounts

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reported as deferred outflows and inflows related to the AMP liability will be recognized in AMP expense as summarized in Table 10.12.

**Table 10.12. Future Amortization of AMP
Deferred Outflows of Resources and Deferred
Inflows of Resources (in thousands)**

Years ending June 30:		
2020	\$	1,093
2021		1,093
2022		1,093
2023		1,093
2024		1,093
2025-2027		821
Total	\$	6,286

PERA DEFINED CONTRIBUTION PLANS

Voluntary Investment Program

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.

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 \$4,594,000 and \$4,811,000 for the years ended June 30, 2019 and 2018, respectively.

Defined Contribution Retirement Plan (DC Plan)

Employees of the State of Colorado that were hired on or after January 1, 2006 and employees of certain community colleges that were hired on or after January 1, 2008 which were eligible to participate in the SDTF, a cost-sharing multiple-employer defined benefit pension plan, have the option to participate in the SDTF or the Defined Contribution Retirement Plan (PERA DC Plan). SB 18-200 expands eligibility to participate in the PERA DC Plan to certain new employees hired on or after January 1, 2019, who are classified State College and University employees. The PERA DC Plan is an Internal Revenue Code Section 401(a) governmental profit-sharing defined contribution plan. Title 24, Article 51, Part 15 of the C.R.S., as amended, assigns the authority to establish Plan provisions to the PERA Board of Trustees. The DC Plan is also included in PERA's CAFR as referred to above.

All participating employees in the PERA DC Plan and the University are required to contribute a percentage of the participating employees' PERA-includable salary to the PERA DC Plan. The employee contribution rates for the period January 1, 2018 through June 30, 2019 was 8.00 percent, and 8.75 percent for the period from July 1, 2019 through June 30, 2020. The employer contribution rate for the period January 1, 2018 through June 30, 2019 was 10.15 percent, and 10.40 percent for the period from July 1, 2019 through June 30, 2020. Additionally the employers are required to contribute 5 percent of the employee's salary as defined in C.R.S. § 24-51-101(42) as AED and SAED to the SDTF. Amounts contributed to this plan by the University were not material to the financial statements.

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Contribution requirements are established under Title 24, Article 51, Section 1505 of the C.R.S., as amended. Participating employees of the PERA DC Plan are immediately vested in their own contributions and investment earnings and are immediately 50 percent vested in the amount of employer contributions made on their behalf. For each full year of participation, vesting of employer contributions increases by 10 percent. Forfeitures are used to pay expenses of the PERA DC Plan in accordance with PERA Rule 16.80 as adopted by the PERA Board of Trustees in accordance with Title 24, Article 51, Section 204 of the C.R.S. As a result, forfeitures do not reduce pension expense. Less than 10 employees of the University opted to participate in this plan during the year ended June 30, 2019.

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 2018, 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 \$18,500. Participants who are age 50 and older, and contributing the maximum amount allowable, were allowed to make an additional \$6,000 contribution in 2018 for total contributions of \$24,500. 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, 2018, the 457 plan had 18,479 participants. The University employees' contributions to the 457 plan approximated \$18,570,000 and \$17,725,000 for the years ended June 30, 2019 and 2018, 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, 2019 and 2018, 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 \$154,713,000 and \$152,606,000 during the years ended June 30, 2019 and 2018, respectively. The employees' contribution under the ORP approximated \$77,184,000 and \$76,182,000 during the years ended June 30, 2019 and 2018, 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 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 2018 and 2017, 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. The employees' contributions to this 403(b) plan approximated \$48,048,000 and \$48,640,000 for the years ended 2019 and 2018, respectively. The University does not contribute to this plan.

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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, 2019 and 2018. CU Medicine's contributions for covered payroll to the retirement plan for the years ended June 30, 2019 and 2018, approximated \$1,769,000 and \$2,005,000, respectively.

HEALTH INSURANCE PROGRAMS

The University's contributions to its various health insurance programs approximated \$224,345,000 and \$230,759,000 during the years ended June 30, 2019 and 2018, respectively. See Note 18 for discussion of the Trust.

NOTE 11 – OTHER LIABILITIES

Table 11.1 details other liabilities as of June 30, 2019 and 2018.

Table 11.1. Other Liabilities (in thousands)

Type	2019		2018	
	Total	Current Portion	Total	Current Portion
Risk financing	\$ 32,850	15,981	29,225	16,051
Construction contract retainage	13,652	13,652	9,609	9,607
Funds held for others	20,980	20,980	17,729	17,729
Federal Perkins loan	19,519	3,101	19,641	2,080
Early retirement incentive program	2,544	1,631	4,077	1,686
Asset retirement obligation	1,296	-	-	-
Miscellaneous	2,135	628	3,641	2,058
Total Other Liabilities	\$ 92,976	55,973	83,922	49,211

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, including through Altitude West for workers' compensation. 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, 2019 or 2018 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 (CU Denver | Anschutz) 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.

All self-insurance 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.

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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 \$19,308,000 and the Graduate Medical Student Health Benefits reserve of \$2,832,000 are reported on an undiscounted basis, and the CU Denver | Anschutz Professional Liability reserve of \$10,710,000 is reported at a discount basis using 4 percent. Over the past three years, the plans have collected \$933,518 from the stop-loss insurance carrier for settlements in excess of the individual stop-loss coverage. 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, 2019 and 2018 are presented in Table 11.2.

Table 11.2. Risk Financing-related Liabilities (in thousands)

	Property, General Liability, and Workers' Compensation	Professional Liability	Graduate Medical Student Health Benefits	Total
Balance as of June 30, 2017	\$ 16,120	9,429	2,308	27,857
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)
Balance as of June 30, 2018	\$ 16,769	9,767	2,689	29,225
Fiscal Year 2019:				
Claims and changes in estimates	9,512	4,377	13,855	27,744
Claim payments	(6,973)	(3,434)	(13,712)	(24,119)
Balance as of June 30, 2019	\$ 19,308	10,710	2,832	32,850

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, 2019 and 2018 was \$397,034,000 and \$397,016,000, respectively.

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) has decided not to require an initial distribution of assets from the University's Perkins Fund for the 2018-2019 Award Year while they continue to explore options to reimburse institutions for their Federal Perkins Loan service cancellations. Beginning with the 2019-2020 Award Year and for all subsequent award years, ED will require a capital distribution from the

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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 was required, beginning in Fiscal Year 2018, to reflect the federal share as a liability. Therefore, the University recorded a liability and a related expense of the same amount (included in Nonoperating Revenue, Net on the Statement of Revenues, Expenses and Changes in Net Position) of \$19,641,000 in 2018. The liability balance was \$19,519,000 at June 30, 2019.

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 37 and 40 participants as of June 30, 2019 and 2018, 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, 2019 and 2018 was \$2,544,000 and \$4,077,000, respectively, measured at a discounted present value using a rate of 5 percent. Table 11.3 presents changes in the ERIP for the years ended June 30, 2019 and 2018.

Table 11.3. Early Retirement Incentive Program
(in thousands)

		2019	2018
Beginning of year	\$	4,077	4,602
Additions		220	1,047
Reductions		(1,753)	(1,572)
End of year	\$	2,544	4,077
Current ERIP		1,631	1,686

NOTE 12 - 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 2019, the University received \$15,000 in additional endowments that increased restricted for nonexpendable net position. In Fiscal Year 2018, the University transferred \$9,722,000 endowments from total

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restricted for nonexpendable net position to the CU Foundation pursuant to Regent policy and to promote administrative efficiency in stewarding University funds.

NOTE 13 – 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, 2019 and 2018, 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 1.06 percent and 0.59 percent during the years ended June 30, 2019 and 2018, respectively, as shown in Table 13.

Table 13. TABOR Enterprise State Support Calculation (in thousands)

	2019	2018
Local government grants	\$ 470	810
Tobacco litigation settlement appropriation	15,986	15,651
Capital appropriations	15,818	3,643
State COP annual debt service payments for CU Boulder	815	5,462
State COP annual debt service payments for UCCS	1,641	1,339
State COP annual debt service payments for CU Anschutz	7,925	29
State Support for PERA pension	8,585	-
Total State Support	\$ 51,240	26,934
Total TABOR enterprise revenues	\$ 4,848,564	4,571,393
Ratio of State support to total revenues	1.06%	0.59%

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, 2019 and 2018, the University’s appropriated funds included \$75,140,000 and \$67,612,000, respectively, received for students that qualified for stipends from the College Opportunity Fund (COF) and \$143,443,000 and \$126,706,000, 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, 2019 and 2018, 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 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.

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NOTE 14 – SCHOLARSHIP ALLOWANCES

During the years ended June 30, 2019 and 2018, scholarship allowances were provided by the following funding sources in amounts detailed in Table 14.

Table 14. Scholarship Allowances (in thousands)

Funding Source Description	2019			2018		
	Tuition and Fees	Auxiliary and Enterprise Revenues	Total	Tuition and Fees	Auxiliary and Enterprise Revenues	Total
University general resources	\$ 102,803	2,999	105,802	95,282	2,750	98,032
University auxiliary resources	12,464	390	12,854	12,991	353	13,344
Colorado Commission on Higher Education financial aid program	30,324	377	30,701	25,985	340	26,325
Federal programs, including Federal Pell grants	64,166	1,282	65,448	60,478	1,171	61,649
Other State of Colorado programs	118	3	121	97	3	100
Private programs	415	4	419	371	3	374
Gift fund	23,494	519	24,013	21,815	458	22,273
Total Scholarship Allowances	\$ 233,784	5,574	239,358	217,019	5,078	222,097

NOTE 15 – HEALTH SERVICES REVENUE AND EXPENSE

Health services revenue of \$1,118,365,000 and \$1,037,529,000 is comprised of \$1,116,020,000 and \$1,035,850,000 at CU Anschutz and \$2,344,000 and \$1,679,000 at UCCS for the years ended June 30, 2019 and 2018, respectively. Health services revenue is recorded net of contractual adjustments approximating \$1,459,098,000 and \$1,349,233,000 and net of bad debt expense on uncollectible patient account receivables approximating \$30,048,000 and \$42,778,000 from CU Medicine, \$105,000 and \$65,000 from various departments at CU Anschutz, and \$92,000 and \$0 from UCCS for the years ended June 30, 2019 and 2018, respectively. Charity care provided during the years ended June 30, 2019 and 2018, based on estimated service costs of providing charity care, totaled approximately \$6,448,000 and \$6,549,000, for the years ended June 30, 2019 and 2018, respectively.

NOTE 16 – SEGMENT AND BLENDED COMPONENT UNIT INFORMATION

CU Medicine is a blended component unit of the University and has identifiable activities for which CU Medicine Fixed-Rate bonds approximating \$6,305,000 and \$7,481,000 are outstanding as of June 30, 2019 and 2018, 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, 2019 and 2018.

The University paid CU Medicine rental amounts of \$2,786,000 and \$2,668,000 during the years ended June 30, 2019 and 2018, respectively. As CU Medicine is a blended component unit, these amounts are eliminated.

CVA was also a segment of the University for Fiscal Year 2018. CVA is a wholly owned entity of CUPCO, a blended component unit of the University, provides housing and other services for students of CU Denver, for which \$53,040,000 revenue bonds were outstanding in CVA's name as of June 30, 2018. As discussed in Note 8, the bonds were refunded on August 1, 2018 using proceeds from the University's issuance of \$48,015,000 of Tax-Exempt University Enterprise Revenue Refunding Bonds, Series 2018A. As such, CVA is not considered a segment for Fiscal Year 2019. Table 16.2 presents summary financial information for CVA as of and for the year ended June 30, 2018.

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

As of and for the year ended June 30	2019	2018
Condensed Statements of Net Position		
Assets		
Cash and cash equivalents	\$ 175,610	130,488
Short-term investments	18,154	51,629
Other current assets	171,906	161,226
Total current assets	365,670	343,343
Investments	342,769	255,634
Capital assets, net	35,530	37,670
Other noncurrent assets	4,385	4,325
Total noncurrent assets	382,684	297,629
Total Assets	\$ 748,354	640,972
Liabilities		
Accounts payable and accrued expenses	\$ 58,590	60,073
Accounts payable to University of Colorado	4,021	4,820
Bonds and capital leases payable	1,386	1,282
Total current liabilities	63,997	66,175
Bonds and capital leases payable	5,637	6,488
Total noncurrent liabilities	5,637	6,488
Total Liabilities	\$ 69,634	72,663
Net Position		
Net investment in capital assets	28,507	29,899
Unrestricted	650,213	538,410
Total Net Position	678,720	568,309
Condensed Statements of Revenues, Expenses, and Changes in Net Position		
Operating revenues (expenses)		
Patient revenues	\$ 1,087,056	1,007,542
Depreciation expense	(4,374)	(4,627)
Other operating expenses	(984,421)	(890,128)
Operating income	98,261	112,787
Nonoperating revenues (expenses)		
Investment income	25,482	4,226
Interest expense on capital asset-related debt	(212)	(296)
Other nonoperating expenses	(13,120)	(21,900)
Total nonoperating revenues (expenses)	12,150	(17,970)
Increase in Net Position	110,411	94,817
Net Position, beginning of year	568,309	473,492
Net Position, end of year	\$ 678,720	568,309
Condensed Statements of Cash Flows		
Net cash flows provided by (used for)		
Operating activities	\$ 89,577	80,714
Non-capital financing activities	(13,429)	(20,460)
Capital and related financing activities	(3,194)	(3,176)
Investing activities	(27,832)	(7,647)
Net Increase in Cash and Cash Equivalents	45,122	49,431
Cash and cash equivalents, beginning of year	130,488	81,057
Cash and Cash Equivalents, End of Year	\$ 175,610	130,488

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Table 16.2 Segment Financial Information - CVA (in thousands)

As of and for the year ended June 30	2018
Condensed Statement of Net Position	
Assets	
Current assets	\$ 8,462
Capital assets	29,217
Total Assets	\$ 37,679
Liabilities	
Current liabilities	\$ 1,293
Noncurrent liabilities	51,937
Total Liabilities	\$ 53,230
Net Position	
Net investment in capital assets	\$ (22,281)
Restricted for bond requirements	5,676
Unrestricted	1,054
Total Net Position	\$ (15,551)
Condensed Statement of Revenues, Expenses, and Changes in Net Position	
Operating revenues	\$ 7,015
Operating expenses	(3,514)
Depreciation expense	(1,420)
Net operating income	2,081
Interest expense	(2,946)
Other nonoperating revenue (expense)	(400)
Interest income	272
Net nonoperating expenses	(3,074)
Decrease in Net Position	(993)
Net Position, beginning of year	(14,558)
Net Position, end of year	\$ (15,551)
Condensed Statement of Cash Flows	
Net cash flows provided by (used for)	
Operating activities	\$ 2,017
Non capital financing activities	(400)
Capital and related financing activities	(4,559)
Investing activities	2,574
Net Decrease in Cash and Cash Equivalents	(368)
Cash and cash equivalents, beginning of year	765
Cash and Cash Equivalents, End of Year	\$ 397

NOTE 17 – DISCRETELY PRESENTED COMPONENT UNITS

Summary financial information as of and for the years ended June 30, 2019 and 2018, for the University's CU Foundation are presented in Table 17.

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Table 17. CU Foundation Summary Financial Statements (in thousands)

Condensed Statements of Net Position		
	2019	2018
Assets		
Current assets		
Cash and cash equivalents	\$ 9,272	29,861
Contributions receivable, net	42,511	28,853
Other current assets	590	724
Total current assets	52,373	59,438
Noncurrent assets		
Contributions receivable, net	121,856	151,080
Investments	2,021,979	1,847,550
Assets held under split-interest agreements	40,660	42,573
Beneficial interest in charitable trusts held by others	9,096	8,406
Capital assets, net	1,333	1,435
Total noncurrent assets	2,194,924	2,051,044
Total Assets	\$ 2,247,297	2,110,482
Liabilities		
Current liabilities		
Accounts payable	\$ 307	390
Accounts payable - University	9,854	4,832
Liabilities under split-interest agreements	2,671	2,619
Custodial funds	17,751	16,660
Total current liabilities	30,583	24,501
Noncurrent liabilities		
Funds held in trust for others	2,370	2,293
Liabilities under split-interest agreements	20,489	20,319
Custodial funds	438,074	418,292
Total noncurrent liabilities	460,933	440,904
Total Liabilities	\$ 491,516	465,405
Net Position		
Net investment in capital assets	\$ 1,333	1,435
Restricted for nonexpendable purposes	855,043	784,928
Restricted for expendable purposes	839,670	791,791
Unrestricted	59,735	66,923
Total Net Position	\$ 1,755,781	1,645,077

UNIVERSITY OF COLORADO
NOTES TO FINANCIAL STATEMENTS
June 30, 2019 and 2018

Table 17. (continued) CU Foundation Summary Financial Statements (in thousands)

Statements of Revenues, Expenses, and Changes in Net Position	For the Year Ended June 30	
	2019	2018
Operating revenues		
Contributions	\$ 198,939	248,613
Other revenue	5,300	4,186
Total operating revenues	204,239	252,799
Operating expenses		
Institutional support		
Gifts and income distributed to University	160,759	166,739
Administrative	5,158	4,757
Advancement support to the University	24,842	21,579
Depreciation and amortization	123	148
Total operating expenses	190,882	193,223
Operating Income	13,357	59,576
Nonoperating revenues (expenses)		
Investment income	97,347	129,588
Increase in Net Position	110,704	189,164
Net Position, beginning of year	1,645,077	1,455,913
Net Position, End of Year	\$ 1,755,781	1,645,077
Condensed Statements of Cash Flows		
Net cash flows provided by (used for)		
Operating activities	\$ (8,672)	(9,801)
Capital and related financing activities	(22)	-
Noncapital financing activities	67,745	44,642
Investing activities	(79,640)	(30,993)
Net Increase in Cash and Cash Equivalents	(20,589)	3,848
Cash and cash equivalents, beginning of year	29,861	26,013
Cash and Cash Equivalents, End of Year	\$ 9,272	29,861

UNIVERSITY OF COLORADO FOUNDATION

Distributions made by the CU Foundation to the University were approximately \$160,759,000 and \$166,739,000 during the years ended June 30, 2019 and 2018, 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, 2019 and 2018, respectively, \$239,843,000 and \$222,167,000 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 \$207,988,000 and \$206,143,000 as of June 30, 2019 and 2018, respectively.

The CU Foundation collected a 1.5 percent annual advancement support fee of \$4,900,000 for the year ended June 30, 2019, and a one percent annual advancement support fee of \$3,500,000 for the year ended June 30, 2018. The CU

UNIVERSITY OF COLORADO
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Foundation paid the University \$24,842,000 and \$21,579,000 to help cover development costs for the years ended June 30, 2019 and 2018, respectively, which is reported as other operating revenue.

As of June 30, 2019 and 2018, the University recorded an accounts receivable from the CU Foundation of \$9,854,000 and \$4,832,000, respectively. As of June 30, 2019 and 2018, the University recorded an account payable to the CU Foundation of \$47,000 and \$44,000, respectively.

NOTE 18 – RELATED ORGANIZATIONS AND JOINTLY GOVERNED ORGANIZATIONS

UNIVERSITY OF COLORADO HOSPITAL (UCH)

In accordance with 1991 State legislation, UCH (a related organization) 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 are 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 \$60,633,000 and \$59,100,000 for years ended June 30, 2019 and 2018, respectively. Total payments issued by CU Denver | Anschutz to UCH for the years ended June 30, 2019 and 2018 approximated \$13,966,000 and \$9,587,000, respectively.

For the years ended June 30, 2019 and 2018, UCH distributed approximately \$28,739,000 and \$26,215,000, respectively, reported as gift revenue by the University.

During the years ended June 30, 2019 and 2018, CU Medicine recognized approximately \$105,084,000 and \$94,358,000, respectively, in health services revenue from UCH in support of clinical and academic missions. CU Medicine also received approximately \$41,192,000 and \$35,546,000 during the years ended June 30, 2019 and 2018, 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, 2019 and 2018, the University recorded an accounts receivable from UCH of \$8,880,000 and \$5,983,000, respectively, for various services provided. As of June 30, 2019 and 2018, the University had \$159,000 and \$0 accounts payable owed to UCH, respectively. 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

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June 30, 2019 and 2018

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, 2019 and 2018, the University incurred expenses related to the common facilities approximating \$11,205,000 and \$10,589,000, respectively, for payments to AHEC. CU Denver also collected AHEC mandatory student fees of \$5,798,000 and \$5,746,000 from CU Denver students during the years ended June 30, 2019 and 2018, respectively.

As of June 30, 2019 and 2018, the University recorded an accounts payable to AHEC of \$845,000 and \$917,000, 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, 2019 and 2018, the University had no accounts receivable due from AHEC.

In addition, the University leases space from AHEC. As of June 30, 2019 and 2018, the University has future operating lease payment obligations to AHEC of \$3,884,675 and \$4,151,000. For related party lease transactions, see Note 8.

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 (a jointly governed organization) 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 \$236,244,000 and \$214,640,000 during the years ended June 30, 2019 and 2018, respectively. The University's payments to the Trust were \$224,345,000 and \$230,759,000 for the years ended June 30, 2019 and 2018, respectively, and the employees' payments were \$28,824,000 and \$29,642,000, respectively. As of June 30, 2019 and 2018, the University had accounts receivable owed from the Trust of \$859,000 and \$879,000, respectively, and no accounts payable due to the Trust.

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, 2019 and 2018, total rental expense under these agreements approximated \$17,219,000 and \$16,323,000 for the University, respectively. Future minimum payments for these operating leases are shown in Table 19.

UNIVERSITY OF COLORADO
NOTES TO FINANCIAL STATEMENTS
June 30, 2019 and 2018

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

<u>Years Ending June 30</u>	<u>Minimum Lease</u>
2020	\$ 15,537
2021	13,165
2022	12,264
2023	9,851
2024	8,158
2025-2029	33,298
2030-2034	2,042
Total	\$ 94,315

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 \$404,053,000 and \$309,731,000 as of June 30, 2019 and 2018, 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, 2019 and 2018, the amount of capital construction appropriations authorized from the State for these projects approximated \$44,465,000 and \$5,173,000, 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.

BOND ISSUANCES

On July 9, 2019, the University issued Series 2019A Taxable Enterprise Refunding Revenue Bonds for \$147,980,000 to advance refund portions of the Series 2010B, Series 2011B, Series 2012 A-1, A-2, A-3, and Series

UNIVERSITY OF COLORADO
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June 30, 2019 and 2018

2013B Bonds. Interest rates range from 2.11 percent to 3.17 percent. Final maturity is June 1, 2043. The first interest payment is due December 1, 2019.

On August 21, 2019, the University issued Series 2019A-2 Taxable Enterprise Refunding Revenue Bonds for an additional \$101,885,000 to advance refund portions of the Series 2009C, 2010B, 2011A, 2012A1 & A3, 2014B1, 2015A&B, and 2016A bonds. Interest rates range from 1.68 percent to 2.79 percent. Final maturity is June 1, 2047.

On October 15, 2019, the University issued Series 2019B Tax-exempt Enterprise Revenue and Refunding Bonds for \$79,795,000 to refund Campus Village Apartment direct placement loan of \$48,015,000, and to fund Campus Village Apartments improvements, CU Anschutz central utility project, and the Fleming Tower renovation at CU Boulder. Interest rates range from 3 percent to 5 percent. The first interest payment is due December 1, 2019. Final maturity is June 1, 2049.

The University also issued Series 2019C Tax-exempt Enterprise Revenue and Refunding Bonds (Term Rate Bonds) for \$214,625,000 to fund the First Year Student Housing project at CU Denver, and to refund Commercial Paper used to construct the Aerospace Engineering Building and Williams Village East Residence Hall at CU Boulder. These bonds were designated “Green Bonds” due to the LEEDs certifications of Gold or Platinum for the underlying projects. The interest rate for the 5-year term bond is 2 percent. The bond will mature on December 1, 2024. The first interest payment is due December 1, 2019 and interest only will be paid semi-annually through its initial term.

TRANSFER OF CVA

On August 30, 2019, CUPCO’s board of directors approved the transfer of the CVA and CVA II properties to CU Denver. On September 12, 2019, the University approved the transfer of CVA and CVA II.

TRUST REORGANIZATION

At the June 11, 2019 meeting of the Trust’s board, approval was given to UCHealth to withdraw from the Trust effective July 1, 2020 (fiscal year 2021). As a result, should no other members join, the Trust will become a blended component unit of the University effective that date.

UNIVERSITY OF COLORADO
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2019 and 2018 (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, 2018	10.9376365281%	\$ 1,244,558,000	\$ 305,926,478	406.82%	55.11%
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 PLAN

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, 2019	\$ 63,850,234	\$ 63,850,234	\$ -	\$ 307,466,813	20.77%
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%

NOTE: For information about factors that significantly affect trends in the amounts reported, see PERA's Comprehensive Annual Financial Report (CAFR) for 2013-2018 at www.copera.org/investments/pera-financial-reports.

UNIVERSITY OF COLORADO
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2019 and 2018 (unaudited)

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, 2018	3.6189452649%	\$ 49,237,000	\$ 305,926,478	16.09%	17.03%
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 PLAN

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, 2019	\$ 3,136,152	\$ 3,136,152	\$ -	\$ 307,466,813	1.02%
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) for 2016-2018 at www.copera.org/investments/pera-financial-reports.

UNIVERSITY OF COLORADO
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2019 and 2018 (unaudited)

CHANGES IN ALTERNATE MEDICARE PLAN LIABILITY AND RELATED RATIOS

	Fiscal Year Ending		
	June 30, 2019	June 30, 2018	June 30, 2017
Service cost	\$ 3,985,000	4,262,000	3,194,000
Interest on total AMP liability	2,751,000	2,231,000	2,391,000
Changes in benefit terms	-	-	-
Differences between expected and actual experience	(109,000)	(3,377,000)	(101,000)
Changes of assumptions	4,940,000	(3,180,000)	10,999,000
Benefit payments	(1,566,000)	(1,448,000)	(1,349,000)
Net change in total AMP liability	10,001,000	(1,512,000)	15,134,000
Total AMP liability (beginning)	73,211,000	74,723,000	59,589,000
Total AMP liability (ending)	\$ 83,212,000	73,211,000	74,723,000
Covered-employee payroll	\$ 1,369,276,000	1,187,065,000	942,644,000
Net AMP liability as a % of payroll	6.08%	6.17%	7.93%

CHANGES IN TOTAL UNIVERSITY OPEB LIABILITY AND RELATED RATIOS

University OPEB Plan	Fiscal Year Ending	
	June 30, 2019	June 30, 2018
Service cost	\$ 49,754,000	53,099,000
Interest cost	28,404,000	24,648,000
Changes in benefit terms	-	-
Differences between expected and actual experience	(1,728,000)	(87,654,000)
Changes of assumptions	35,919,000	(46,406,000)
Benefit payments	(15,163,000)	(17,211,000)
Net change in total OPEB liability	97,186,000	(73,524,000)
Total OPEB liability (beginning)	746,773,000	820,297,000
Total OPEB liability (ending)	\$ 843,959,000	746,773,000
Covered-employee payroll	\$ 1,663,010,000	1,475,177,000
Total OPEB liability as a % of payroll	50.75%	50.62%

NOTE: There are no assets accumulated in a trust to pay related benefits for the AMP or University OPEB. The University's actuaries utilized different mortality tables in Fiscal Year 2019.



**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 the 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 years ended June 30, 2019 and 2018, 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 20, 2019. 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), a discretely presented component unit, 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, the University of Colorado Property Corporation and Altitude West LLC, blended component units, and the CU Foundation, a discretely presented component unit, 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. 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 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 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 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.



CliftonLarsonAllen LLP

Greenwood Village, Colorado
November 20, 2019



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, 2019, and have issued our report thereon dated November 20, 2019. 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.

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 and OPEB expense are calculated based on amounts actuarially determined. For net pension liability and net PERA OPEB liability, 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. Management did not identify and we did not notify them of any uncorrected financial statement misstatements.

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.

Members of the Legislative Audit Committee
November 20, 2019

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.

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

CliftonLarsonAllen LLP

Greenwood Village, Colorado
November 20, 2019