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STATE OF NEW HAMPSHIRE
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH SERVICES

Lori A. Shibbinette
 Commissioner

Lisa M. Morris
 Director

29 HAZEN DRIVE, CONCORD, NH 03301
 603-271-4501 1-800-852-3345 Ext. 4501
 Fax: 603-271-4827 TDD Access: 1-800-735-2964
 www.dhhs.nh.gov

March 10, 2021

His Excellency, Governor Christopher T. Sununu
 and the Honorable Council
 State House
 Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the Department of Health and Human Services, Division of Public Health Services, to amend an existing **Sole Source** contract with University of Massachusetts (VC#177576-B008), Worcester, MA for newborn screening laboratory services, by increasing the price limitation by \$1,493,263 from \$6,672,293 to \$8,165,556 and by extending the completion date from June 30, 2021 to June 30, 2022 effective upon Governor and Council approval. 100% Other Funds (Newborn Screening Revolving Fund).

The original contract was approved by Governor and Council on June 24, 2015, item #54. It was subsequently amended with Governor and Council approval on June 20, 2018, item #27, and most recently amended with Governor and Council approval on October 23, 2019, item #13.

Funds are anticipated to be available in State Fiscal Year 2022, upon the availability and continued appropriation of funds in the future operating budget, with the authority to adjust budget line items within the price limitation and encumbrances between state fiscal years through the Budget Office, if needed and justified.

05-95-90-902010-5240 HEALTH AND SOCIAL SERVICES, DEPT OF HEALTH AND HUMAN SVS, HHS: PUBLIC HEALTH DIV, BUREAU OF POPULATION HEALTH AND COMMUNITY SERVICES, NEWBORN SCREENING REVOL FUND

State Fiscal Year	Class/ Account	Class Title	Job Number	Current Budget	Increased (Decreased) Amount	Revised Modified Budget
2016	102-500731	Contracts for Prog Svc	90080013	\$906,341	\$0	\$906,341
2017	102-500731	Contracts for Prog Svc	90080013	\$932,955	\$0	\$932,955
2018	102-500731	Contracts for Prog Svc	90080013	\$960,354	\$0	\$960,354
2019	102-500731	Contracts for Prog Svc	90080013	\$928,054	\$0	\$928,054
2020	102-500731	Contracts for Prog Svc	90080013	\$1,451,326	\$0	\$1,451,326
2021	102-500731	Contracts for Prog Svc	90080013	\$1,493,263	\$0	\$1,493,263
2022	102-500731	Contracts for Prog Svc	90080013	\$0	\$1,493,263	\$1,493,263
			Total:	\$6,672,293	\$1,493,263	\$8,165,556

EXPLANATION

This request is **Sole Source** because the contract was originally approved as sole source and MOP 150 requires any subsequent amendments to be labelled as sole source.

The purpose of this request is to continue providing newborn screening laboratory services. Since the establishment of RSA 132:10a in 1965, the State of New Hampshire has been responsible for the screening of all infants born in the state. The goal of newborn screening is the prevention of disability and untimely death of newborns from undiagnosed genetic disorders. New Hampshire is currently screening all infants born in the state for a panel of thirty-four (34) disorders. The Department is requesting a one year renewal in order to publish a Request for Proposal and have the ability to evaluate the program and potential Contractors.

Approximately 12,000 individuals will be served from July 1, 2021 to June 30, 2022.

The Contractor will continue providing laboratory services for all newborns born in the State of New Hampshire. A few drops of blood are taken from an infant's heel 24-48 hours after birth, in accordance with RSA 132:10a. Families have the option to decline screening.

The Contractor supplies approved filter paper collection kits as required for the collection and identification of blood samples; and for gathering the necessary clinical information. The Contractor coordinates a courier service to all designated birthing facilities in New Hampshire for transporting blood samples to the testing facility including pickup and delivery seven (7) days a week. Once the results are available, the Contractor provides the results to the Department.

The Department will monitor contracted services using the following performance measures:

- At least ninety-eight percent (98%) of Congenital Adrenal Hyperplasia results will be reported to the New Hampshire Newborn Screening Program within three (3) days of the contractor receiving the dried blood specimen.
- At least ninety-five percent (95%) of all initial screening reports will have a report date within seven days of life.

Should the Governor and Executive Council not authorize this request, New Hampshire will be out of compliance with the mandate established in RSA 132:10a, and newborns may be in jeopardy of serious harm, potentially even death.

Area served: Statewide

Source of Funds: 100% Other Funds (Newborn Screening Revolving Fund).

In the event that the Other Funds become no longer available, General Funds will not be requested to support this program.

Respectfully submitted,



Lori A. Shibinette
Commissioner



**New Hampshire Department of Health and Human Services
Newborn Screening Laboratory Services**

**State of New Hampshire
Department of Health and Human Services
Amendment #3 to the Newborn Screening Laboratory Services**

This 3rd Amendment to the Newborn Screening Laboratory Services contract (hereinafter referred to as "Amendment #3") is by and between the State of New Hampshire, Department of Health and Human Services (hereinafter referred to as the "State" or "Department") and University of Massachusetts, (hereinafter referred to as "the Contractor"), with a place of business at 377 Plantation Street, Worcester, MA 01605-2300.

WHEREAS, pursuant to an agreement (the "Contract") approved by the Governor and Executive Council on June 24, 2015, (Item #54), as amended on June 20, 2018 (Item #27), and subsequently amended on October 23, 2019, (Item #13), the Contractor agreed to perform certain services based upon the terms and conditions specified in the Contract as amended and in consideration of certain sums specified; and

WHEREAS, pursuant to Form P-37, General Provisions, Paragraph 18 the Contract may be amended upon written agreement of the parties and approval from the Governor and Executive Council; and

WHEREAS, the parties agree to extend the term of the agreement, increase the price limitation, or modify the scope of services to support continued delivery of these services; and

NOW THEREFORE, in consideration of the foregoing and the mutual covenants and conditions contained in the Contract and set forth herein, the parties hereto agree to amend as follows:

1. Form P-37 General Provisions, Block 1.7, Completion Date, to read:
June 30, 2022.
2. Form P-37, General Provisions, Block 1.8, Price Limitation, to read:
\$8,165,556.
3. Add Exhibit B-5, Amendment #3, Budget Sheet, which is attached hereto and incorporated by reference herein.



**New Hampshire Department of Health and Human Services
Newborn Screening Laboratory Services**

All terms and conditions of the Contract and prior amendments not inconsistent with this Amendment #3 remain in full force and effect. This amendment shall be effective upon the date of Governor and Executive Council approval.

IN WITNESS WHEREOF, the parties have set their hands as of the date written below,

State of New Hampshire
Department of Health and Human Services

3/2/2021

Date

DocuSigned by:

Lisa M. Morris

D938DBFB8CA54A0

Name: Lisa M. Morris

Title: Director, Division of Public Health Svcs.

University of Massachusetts

3/1/2021

Date

DocuSigned by:

Patti A. Onorato

5683B96C81E041E

Name: Patti A. Onorato

Title: Deputy Exec.Vice Chancellor Commonwealth Medicine



**New Hampshire Department of Health and Human Services
Newborn Screening Laboratory Services**

The preceding Amendment, having been reviewed by this office, is approved as to form, substance, and execution.

OFFICE OF THE ATTORNEY GENERAL

3/4/2021

Date

DocuSigned by:

A handwritten signature in black ink, appearing to read "Catherine Pinos".

D5CA9202E32C4AE

Name: Catherine Pinos

Title: Attorney

I hereby certify that the foregoing Amendment was approved by the Governor and Executive Council of the State of New Hampshire at the Meeting on: _____ (date of meeting)

OFFICE OF THE SECRETARY OF STATE

Date

Name:

Title:

Exhibit B-5, Amendment #3

New Hampshire Department of Health and Human Services

Contractor Name: University of Massachusetts
 Budget Request for: Newborn Screening Laboratory Services
 Project Title:
 Budget Period: SFY 2022

Line Item	Total Program Cost			Contractor Share / Match			Funded by DHHS contract share		
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
1. Total Salary/Wages	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2. Employee Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3. Consultants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4. Equipment:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rental	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Repair and Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Purchase/Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5. Supplies:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Educational	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lab	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Pharmacy	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Medical	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6. Travel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7. Occupancy	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8. Current Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Telephone	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Postage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subscriptions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Audit and Legal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Board Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9. Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10. Marketing/Communications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11. Staff Education and Training	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12. Subcontracts/Agreements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13. Other (specify details mandatory):	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Laboratory Testing (@\$111.30 for up to 12,717 babies)	\$ 1,415,402.10	\$ -	\$ 1,415,402.10	\$ -	\$ -	\$ -	\$ 1,415,402.10	\$ -	\$ 1,415,402.10
Specimen Shipping	\$ 77,860.90	\$ -	\$ 77,860.90	\$ -	\$ -	\$ -	\$ 77,860.90	\$ -	\$ 77,860.90
TOTAL	\$ 1,493,263.00	\$ -	\$ 1,493,263.00	\$ -	\$ -	\$ -	\$ 1,493,263.00	\$ -	\$ 1,493,263.00

Indirect As A Percent of Direct 0.0%

Contractor Initials: PKC



Commonwealth of Massachusetts
Department of Revenue
Christopher C. Harding, Commissioner

mass.gov/dor

Letter ID: L0401639488
Notice Date: December 23, 2019
Case ID: 0-000-354-830



CERTIFICATE OF GOOD STANDING AND/OR TAX COMPLIANCE



UNIVERSITY OF MASSACHUSETTS
333 SOUTH ST STE 450
SHREWSBURY MA 01545-4176



Why did I receive this notice?

The Commissioner of Revenue certifies that, as of the date of this certificate, UNIVERSITY OF MASSACHUSETTS is in compliance with its tax obligations under Chapter 62C of the Massachusetts General Laws.

This certificate doesn't certify that the taxpayer is compliant in taxes such as unemployment insurance administered by agencies other than the Department of Revenue, or taxes under any other provisions of law.

This is not a waiver of lien issued under Chapter 62C, section 52 of the Massachusetts General Laws.

What if I have questions?

If you have questions, call us at (617) 887-6400 or toll-free in Massachusetts at (800) 392-6089, Monday through Friday, 8:30 a.m. to 4:30 p.m..

Visit us online!

Visit mass.gov/dor to learn more about Massachusetts tax laws and DOR policies and procedures, including your Taxpayer Bill of Rights, and MassTaxConnect for easy access to your account:

- Review or update your account
- Contact us using e-message
- Sign up for e-billing to save paper
- Make payments or set up autopay

Edward W. Coyle, Jr., Chief
Collections Bureau



Commonwealth of Massachusetts
Department of Revenue
Christopher C. Harding, Commissioner

mass.gov/dor

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Visit us online!

Visit mass.gov/dor to learn more about Massachusetts tax laws and DOR policies and procedures, including your Taxpayer Bill of Rights, and MassTaxConnect for easy access to your account:

- Review or update your account
- Contact us using e-message
- Sign up for e-billing to save paper
- Make payments or set up autopay

Edward W. Coyle, Jr., Chief
Collections Bureau

**EXTRACT FROM THE RECORDS OF
UNIVERSITY OF MASSACHUSETTS**

Granting Authority to Execute Contracts and All Other Instruments

I, Zunilka Barrett, Secretary of the Board of Trustees of the University of Massachusetts, do hereby certify that the following is a true and complete copy of a vote duly adopted by the Board of Trustees of the University of Massachusetts at a meeting duly called and held on the fifth day of February, nineteen hundred and ninety-seven at the University of Massachusetts, Chancellor's Conference Room, Boston, Massachusetts:

“Further, to affirm that, except as to matters governed by the University of Massachusetts Intellectual Property Policy (Doc. T96-040), the Treasurer of the University of Massachusetts or his designee shall be the sole contracting officer of the University with the Authority to execute all contract, grants, restricted gifts (excluding endowments), and amendments thereto for sponsored programs in instruction, research, or public service, unless and until otherwise voted by the Board of Trustees.”

I further certify that the Senior Vice President for Administration & Finance and Treasurer of the University, Lisa A. Calise, has retained the right to remain the sole contracting officer of the University of Massachusetts, but in her absence, she has designated Andrew W. Russell, Senior Assistant Vice President of Operations and Associate Treasurer.

I further certify that effective April 8, 2020, the following is a list of designated individuals authorized in accordance with the afore referenced votes to review and execute all grants and contracts for sponsored programs in instruction, research and public service that are applicable to and received on behalf of the University of Massachusetts for their respective campuses.

Amherst Campus

Kumble R. Subbaswamy, Chancellor, Amherst Campus, Amherst, Massachusetts,
Robert S. Feldman, Deputy Chancellor, Amherst Campus, Amherst, Massachusetts,
Michael Malone, Vice Chancellor, Amherst Campus, Amherst, Massachusetts,
Carol P. Sprague, Director of the Office of Grants and Contracts Administration, Amherst Campus, Amherst, Massachusetts,
Jennifer A. Donais, Director of Research Compliance, Amherst Campus, Amherst, Massachusetts,
Theresa W. Girardi, Assistant Director, Amherst Campus, Amherst, Massachusetts,
Nancy E. Stewart, Assistant Director, Amherst Campus, Amherst, Massachusetts,
James B. Ayres, Assistant Director, Amherst Campus, Amherst, Massachusetts,
Laura J. Howard, Associate Director, Division of Continuing Education, Amherst Campus, Amherst, Massachusetts
Steven D. Goodwin, Deputy Chancellor, Amherst Campus, Amherst, Massachusetts

Boston Campus

Katherine S. Newman, Interim Chancellor, Boston Campus, Boston, Massachusetts,
Kathleen Kirleis, Vice Chancellor for Administration and Finance, Boston Campus, Boston, Massachusetts,
Emily McDermott, Interim Provost & Vice Chancellor for Academic Affairs, Boston Campus, Boston, Massachusetts,

Bala Sundaram, Vice Provost for Research and Strategic Initiatives and Dean of Graduate Studies, Boston Campus, Boston, Massachusetts,
Matthew L. Meyer, Associate Vice Provost for Research and Director of the Office of Research & Sponsored Programs, Boston Campus, Boston, Massachusetts,
Shala A. Bonyun, Assistant Director for the Office of Research and Sponsored Programs, Boston Campus, Boston, Massachusetts,

Dartmouth Campus

Robert E. Johnson, Chancellor, Dartmouth Campus, Dartmouth, Massachusetts,
Mohammad A. Karim, Provost & Executive Vice Chancellor for Academic and Student Affairs & Chief Operating Officer, Dartmouth Campus, Dartmouth, Massachusetts,
Michelle M. Plaud, Manager of Pre and Post Award Administration, Dartmouth Campus, Dartmouth, Massachusetts,
Deborah Dolan, Pre-Award and Subrecipient Manager, Dartmouth Campus, Dartmouth Massachusetts,
Alex Fowler, Associate Provost for Research & Economic Development, Dartmouth Campus, Dartmouth, Massachusetts,
Megan Hennessey-Greene, Director, Office of Research Administration, Dartmouth Campus, Dartmouth Massachusetts,

Lowell Campus

Jacqueline F. Moloney, Chancellor, Lowell Campus, Lowell, Massachusetts,
Michael Vayda, Provost, Lowell Campus, Lowell, Massachusetts,
Steven O'Riordan, Vice Chancellor for Finance and Operations, Lowell Campus, Lowell, Massachusetts,
Susan Puryear, Director, Office of Research Administration, Lowell Campus, Lowell, Massachusetts,
Julie Chen, Vice Chancellor for Research & Innovation, Lowell Campus, Lowell, Massachusetts,
Anne Maglia, Associate Vice Chancellor, Research Administration, Lowell Campus, Lowell, Massachusetts,

President's Office

Eric Heller, Executive Director of the University of Massachusetts Donahue Institute

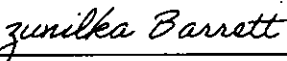
Worcester

Michael F. Collins, M.D., Chancellor, University of Massachusetts Medical School, Worcester, Massachusetts,
James Glasheen, Executive Vice Chancellor Innovation & Business Development, University of Massachusetts Medical School, Worcester, Massachusetts,
John C. Lindstedt, Executive Vice Chancellor for Administration & Finance, University of Massachusetts Medical School, Worcester, Massachusetts,
Katherine Luzuriaga, M.D., Vice Provost for Clinical and Translational Research, University of Massachusetts Medical School, Worcester, Massachusetts,
Janice Lagace, Associate Director Research Funding Services, University of Massachusetts Medical School, Worcester, Massachusetts,
Patti Onorato, Managing Director, Clinical Delivery Solutions, Commonwealth Medicine, University of Massachusetts Medical School, Worcester, Massachusetts,
Terence R. Flotte, M.D., Dean, School of Medicine, Provost and Executive Deputy Chancellor, University of Massachusetts Medical School, Worcester, Massachusetts,

James McNamara, Executive Director, Office of Technology Management, University of Massachusetts Medical School, Worcester, Massachusetts,
Marcy Culverwell, Associate Vice Chancellor for Administration & Finance, University of Massachusetts Medical School, Worcester, Massachusetts,
Amy Miarecki, Assistant Vice Chancellor, Grants and Contracts Administration, University of Massachusetts Medical School, Worcester, Massachusetts,
Danielle Howard, Director Clinical Research Operations, University of Massachusetts Medical School, Worcester Massachusetts;
Melissa Spragens, Director of Sponsored Programs, University of Massachusetts Medical School, Worcester Massachusetts,
Lisa M. Colombo, Executive Vice Chancellor for Commonwealth Medicine, University of Massachusetts Medical School, Worcester Massachusetts,

I further certify that Lisa A. Calise, Andrew W. Russell, Kumble R. Subbaswamy, Robert S. Feldman, Michael Malone, Carol P. Sprague, Jennifer A. Donais, Theresa W. Girardi, Nancy E. Stewart, James B. Ayres, Laura J. Howard, Steven D. Goodwin, Katherine S. Newman, Kathleen Kirleis, Emily McDermott, Bala Sundaram, Matthew L. Meyer, Shala A. Bonyun, Robert E. Johnson, Mohammad A. Karim, Megan Hennessey-Greene, Alex Fowler, Michelle M. Plaud, Deborah Dolan, Jacqueline F. Moloney, Steven O'Riordan, Julie Chen, Michael Vayda, Anne Maglia, Susan Puryear, Eric Heller, Michael F. Collins, MD, James Glasheen, John C. Lindstedt, Katherine Luzuriaga, MD, Janice Lagace, Patti Onorato, Terence R. Flotte, MD, James McNamara, Marcy Culverwell, Amy Miarecki, Danielle Howard, Melissa Spragens, and Lisa M Colombo are members of the University Administration with its principal office located at 333 South Street, Shrewsbury, County of Worcester, in the Commonwealth of Massachusetts.

Date: 2/17/2021



Zunilka Barrett, Secretary to the
Board of Trustees



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
2/23/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Arthur J. Gallagher Risk Management Services, Inc. 470 Atlantic Avenue Boston MA 02210 License#: BR-724491 UNIVOFM-21	CONTACT NAME: PHONE (A/C, No, Ext): 617-261-6700 FAX (A/C, No): 617-646-0400 E-MAIL ADDRESS: _____ INSURER(S) AFFORDING COVERAGE NAIC # INSURER A : Navigators Insurance Company 42307 INSURER B : INSURER C : INSURER D : INSURER E : INSURER F :
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COVERAGES CERTIFICATE NUMBER: 267145932 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR	WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR <hr/> GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER: _____							EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COM/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY							COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$							EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y/N N/A If yes, describe under DESCRIPTION OF OPERATIONS below							PER STATUTE OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Products/Professional Liab.				BO20LEO031706NV	9/10/2020	9/10/2021	\$10,000,000 \$10,000,000 \$100,000 Each Claim Aggregate Deductible

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
 Certificate Holder is Additional Insured per written contract as their interests may appear per policy terms, conditions, exclusions

CERTIFICATE HOLDER State of New Hampshire Department of Health and Human Services 129 Pleasant Street Concord NH 03301 USA	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
--	--

Mission Statements

This contract will be carried out by the New England Newborn Screening Program, which is part of Commonwealth Medicine, a division of the University of Massachusetts Medical School. We provide the mission statements for each of these levels of the organization here.

Of the University of Massachusetts Medical School:

The mission of the University of Massachusetts Medical School is to advance the health and well-being of the people of the commonwealth and the world through pioneering advances in education, research and health care delivery.

Of Commonwealth Medicine:

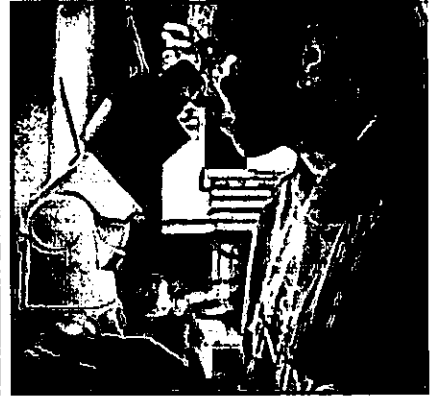
To apply knowledge to improve health outcomes for those served by public health and human service programs.

Of the New England Newborn Screening Program:

We provide timely, low cost, quality laboratory screening, clinical follow-up, and research to prevent disorders that can lead to death, mental retardation, and life compromising conditions in newborns.

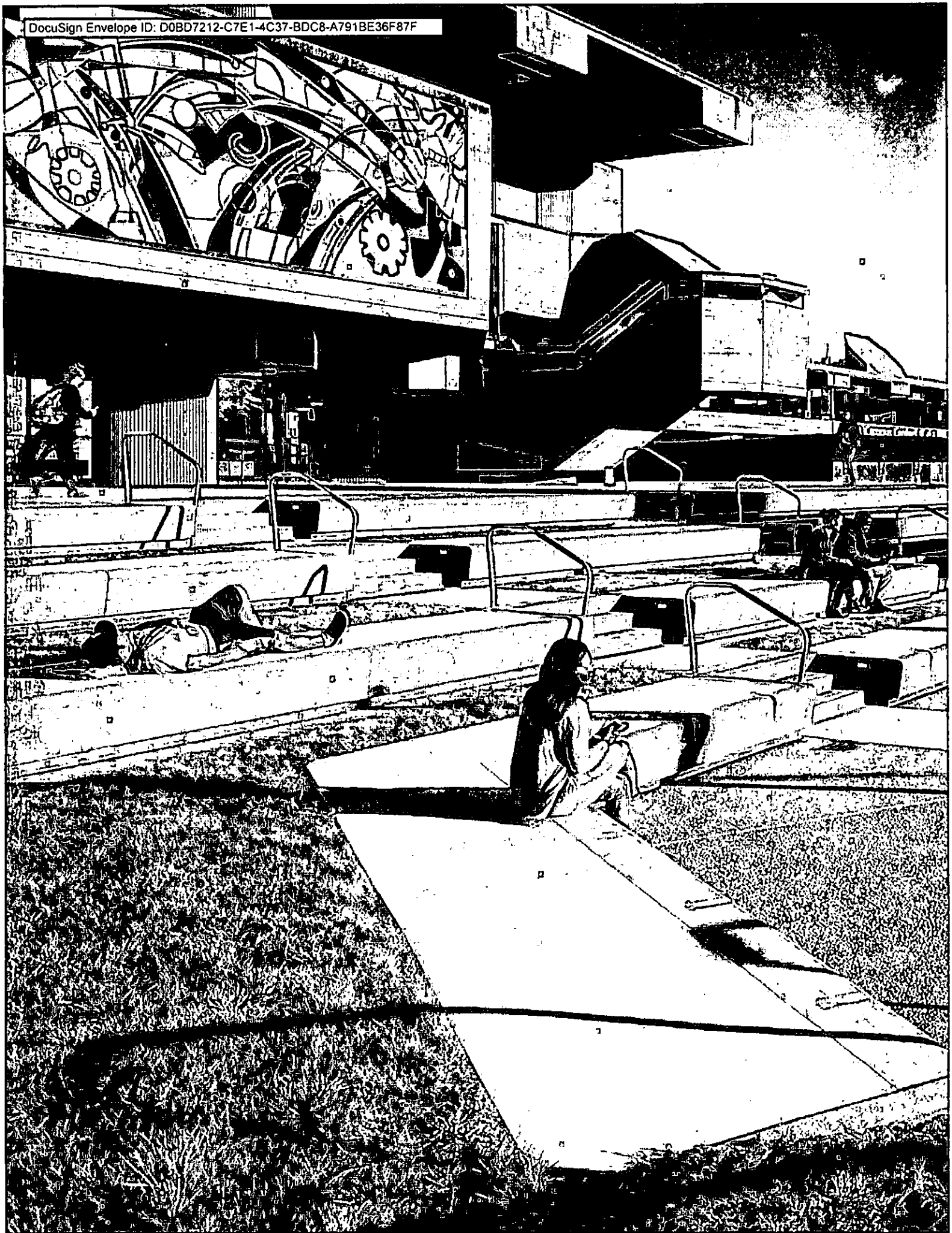
University
of Massachusetts

ANNUAL
FINANCIAL
REPORT
2020



University of Massachusetts

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Schedule of the University's Contributions —
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UNIVERSITY ADMINISTRATION

As of December 2020

BOARD OF TRUSTEES

Robert J. Manning (Chairman)
Swampscott, MA

R. Norman Peters, JD (Vice Chair)
Paxton, MA

Mary L. Burns
Lowell, MA

Ryan P. Callahan
(UMass Lowell Student Trustee,
Non-voting)
Chelmsford, MA

Peter Cruz-Gordillo
(UMass Medical School Student Trustee,
Non-voting)
Worcester, MA

Dakeyla N. Devaughn-Johnson
(UMass Dartmouth Student Trustee,
Non-voting)
Stoughton, MA

Robert Epstein
Boston, MA

Stephen R. Karam
Fall River, MA

Richard M. Kelleher
Duxbury, MA

Robert Lewis, Jr.
Boston, MA

Michael V. O'Brien
Southborough, MA

Noreen C. Okawara, MD
Lowell, MA

Kerri E. Osterhaus-Houle, MD
Hudson, MA

Imari K. Paris Jeffries, MEd; MA
Boston, MA

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Dear Friends,

Enclosed, please find our annual financial report for fiscal year 2020.

This has been a year unlike any other in our lifetimes as our nation faces the worst pandemic in a century, reckons with historic and ongoing struggles against racial justice, and grapples a severely distressed economy. Despite this, the University of Massachusetts (UMass) has been resilient and innovative in advancing the mission of education, research and service to the Commonwealth.

UMass was not immune to the impact of the pandemic as our 24,000 faculty and staff members and 75,000 students were forced to shift to remote learning and working virtually overnight in March. They responded by rapidly preparing themselves to teach, learn and work, resulting in the graduation of nearly 18,000 students. We leveraged our research expertise and our unparalleled commitment to civic engagement in assisting the Commonwealth and our communities in managing the public health response to the pandemic.

Our financial management continues to receive independent validation by the three major independent ratings agencies, with ratings of AA, Aa2, and AA- by Fitch, Moody's and S&P Global, respectively. When reaffirming the University's bond rating in October 2020, Moody's cited, "excellent strategic positioning that incorporates strengthened fiscal oversight" and stated that our strong state support, significant research activity and growing net tuition revenue "will provide UMass with sufficient runway to manage through near-term operating volatility associated with the coronavirus pandemic."

UMass continued to stand out for its excellence and impact.

- UMass was once again ranked as the No. 1 public university in *New England by Times Higher Education*.
- All four undergraduate campuses were again ranked as top-tier National Universities by *U.S. News & World Report*.
- Our research enterprise grew to record-breaking heights, with \$684 million in research activity in our latest research report.
- Our economic contribution to Massachusetts reached \$7.5 billion, including serving as the state's third largest employer and creating 30,000 in private sector jobs.

In FY2020, we once again provided a record-breaking amount of institutional financial aid to students, with \$358 million in university funds dedicated to ensuring that our most deserving students are supported throughout their education. In total, UMass students received \$968 million in total financial aid this past year.

Our collective prudent stewardship, the guidance of our trustees, the outstanding leadership of our chancellors, and the unwavering dedication of our faculty and staff to serving students, give me confidence that UMass will emerge from this difficult time as a stronger institution that will lead the post-pandemic economic recovery of Massachusetts.

Martin T. Meehan
President



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Boston, MA 02111

Independent Auditors' Report

Board of Trustees of the
University of Massachusetts:

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities and aggregate discretely presented component units of the University of Massachusetts (the University), an enterprise fund of the Commonwealth of Massachusetts, as of and for the years ended June 30, 2020 and 2019, and the related notes to the financial statements, which collectively comprise the University's basic financial statements for the years then ended 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 U.S. generally accepted accounting principles; 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 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 discretely presented component units identified in note 1 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 entity'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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the 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, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the aggregate discretely presented component units of the University of Massachusetts, as of June 30, 2020 and 2019, and the respective changes in financial position

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and, where applicable, cash flows thereof for the years then ended in accordance with U.S. generally accepted accounting principles.

Emphasis of Matter

As discussed in Note 1, the financial statements of the University are intended to present the financial position, the changes in financial position and, where applicable, cash flows of only that portion of the business-type activities and the aggregate remaining fund information of the Commonwealth of Massachusetts that is attributable to the transactions of the University. They do not purport to, and do not, present fairly the financial position of the Commonwealth of Massachusetts as of June 30, 2020 and 2019, the changes in its financial position, or where applicable, its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles. Our opinion is not modified with respect to this matter.

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis and required supplementary information, as listed in the table of contents (collectively referred to as RSI) 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 RSI 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 audit 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 our report dated December 10, 2020 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 the University's 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.

KPMG LLP

Boston, Massachusetts
December 10, 2020

Management's Discussion and Analysis (unaudited)

June 30, 2020

Introduction

This Management's Discussion and Analysis provides an overview of the financial position and activities of the University of Massachusetts (the University or UMass) for the fiscal years ended June 30, 2020 and 2019, and should be read in conjunction with the accompanying financial statements and notes. The financial statements, notes and this discussion are the responsibility of management.

The University of Massachusetts was established in 1863 as the Massachusetts Agricultural College, located in Amherst. Since then it has grown into a five-campus system that is nationally and internationally known for the quality of its academic programs and the scope and excellence of its faculty research. From Nobel Prize-winning gene-silencing research to research in such areas as renewable energy, nanotechnology, cybersecurity, life sciences and marine science, the University of Massachusetts is expanding the boundaries of knowledge and opening doors of discovery that benefit the Commonwealth of Massachusetts (Commonwealth), the nation and the world. UMass consistently ranks as one of the best universities in the world and as one of the most innovative.

UMass Amherst is the flagship campus of the University. True to its land-grant roots, UMass Amherst is engaged in research and creative work in all fields and is classified by the Carnegie Foundation for the Advancement of Teaching as a doctoral university with the "highest research activity". Major areas of emphasis include climate science, food science, alternative energy, nano manufacturing, polymer science, computer science and linguistics. Consistently rated as a "Top Producer of Fulbright Students," UMass Amherst is ranked 26th among the nation's top public schools in the 2021 *U.S. News & World Report Best Colleges* rankings.

UMass Boston is nationally recognized as a model of excellence for urban public research universities. Located on Boston Harbor, it is the metropolitan area's only public

research university. UMass Boston's distinguished intellectual contributions span the social sciences, education, health and wellness. With a student population that represents 150 countries, UMass Boston is committed to educating people from modest-income backgrounds, first-generation college students and those from urban areas here and abroad.

UMass Dartmouth distinguishes itself as a vibrant university dedicated to engaged learning and innovative research resulting in personal and lifelong student success. Located on 710 acres on the south coast of Massachusetts, UMass Dartmouth offers students high-quality academic programs through undergraduate majors and professional and doctoral programs, including the state's only public law school.

UMass Law, which is part of UMass Dartmouth and the only public law school in Massachusetts, is committed to providing an excellent, affordable, and accessible legal education that balances legal theory, doctrine, skills, experience, and professionalism. UMass Law prepares students to thrive in a changing profession and advances justice through research, writing, teaching, learning, and practice. UMass Law's July 2019 Massachusetts first-time bar passage rate was 82.6%, the fifth highest passage rate of the Massachusetts law schools.

UMass Lowell is ranked 87th among the nation's top public schools within the 2021 *U.S. News & World Report Best Colleges* rankings, with programs supporting workforce and economic development through innovation, entrepreneurship and public-private partnerships. UMass Lowell prepares students emphasizing experiential learning through cooperative education, service and research.

UMass Medical School (UMMS), founded in 1962 and situated in Worcester, is the Commonwealth's only public medical school and serves as the University's Nobel-prize winning health sciences campus. Ranked 26th for primary care training in the 2021 *U.S. News & World Report Best Medical*

Schools rankings, UMMS has remained true to its founding mission while also becoming globally recognized in biomedical research. UMMS has three graduate schools—the School of Medicine, the Graduate School of Biomedical Sciences and the Graduate School of Nursing. Unique among all medical schools, UMMS is also home to Commonwealth Medicine (CWM), a health care consulting division that partners with states in delivering health services to vulnerable populations, and MassBiologics, the only non-profit, FDA-licensed vaccine manufacturer in the nation.

UMassOnline, the University of Massachusetts' nationally acclaimed online education consortium, which offered approximately 1,500 online and blended courses and had over 83,000 course enrollments in academic year 2019-2020. UMassOnline students can pursue an associate's, bachelor's, master's or doctoral degree in a variety of in-demand subject areas, including liberal arts, education, management, nursing, public health and information technology. Online students learn from the same world-class instructors as students who study on campus, and they receive an identical degree. UMassOnline programs consistently earn high rankings in *U.S. News & World Report* and *GetEducated.com*.

On June 16, 2020, the University announced its intent to form an exclusive partnership between UMass Online and Brandman University to expand educational opportunities for adult learners in Massachusetts and across the nation. The partnership, which is expected to be finalized later this calendar year, will be launched as millions of adults experience an increased need for flexible, high-quality and affordable online education alternatives as they recover from the economic dislocation caused by COVID-19, which has disproportionately impacted communities of color. The partnership will augment UMass Online, which now supports more than 25,000 students, strengthening its technology platform and enhancing tailored student support services for adult learners. In addition to providing new educational opportunities, the initiative will also streamline efforts to build workforce development partnerships with local and national employers, community colleges, other educational partners, non-profits, government agencies, and the U.S. military.



Photos taken prior to COVID-19 social distancing practices.

Financial Management

Accountability Framework

The University has strengthened its long-term fiscal outlook by adopting a framework for financial accountability. The framework is based on four key tenets:

- **Oversight:** independent and objective assurance that analyzes data, processes, policies and controls
- **Internal Controls:** standard processes designed to provide reasonable assurance regarding the achievement of objectives
- **Transparency:** reliable, timely information that is accessible and understandable
- **Risk Management:** systematic approach to identifying, assessing and managing risks across the organization.

Through the accountability framework, the University has made consistent improvement in its financial management in various areas. Some examples include:

- Developing and evaluating multi-year financial forecasts to guide policy and programmatic decisions;
- Implementing a quarterly close process to support accurate and complete reporting of financial results;
- Developing and evaluating quarterly projections to monitor performance and make resulting operational adjustments;
- Tracking student data in real time to quickly observe trends that may impact the bottom line;
- Implementing and tracking creative, high-impact cost containment strategies across the five campuses, including expanding the University's shared services initiative;

UMASS FINANCIAL ACCOUNTABILITY FRAMEWORK



- Creating a reserve policy to mitigate unforeseen events, address deferred maintenance, advance University priorities, and maintain strong credit ratings; and
- Tracking several key financial ratios: operating margin, operating cash flow margin, debt service and financial leverage ratios, to evaluate University performance against peer institutions.

Through the accountability framework, the University has put the proper controls in place to help manage the harsh financial reality the COVID-19 pandemic has created. FY2020 additions to management's accountability framework toolbox include:

- Scenario planning for the various revenue and expense impacts of different operating plans;
- Adding a new metric, operating liquidity, to the suite of key financial ratios tracked regularly;
- Developing a cash-flow forecasting model, with flexibility to forecast based on varying scenarios; and
- Significantly fortifying the University's ERM program, with risk management playing a strong role in the University's response to the pandemic, both in terms of active tracking and information sharing, and in development of a consistent, University-wide approach to response, planning, testing and procurement of PPE.

The University regularly tracks several key financial ratios, to evaluate performance in relation to historical trend and peers. The ratios are analyzed to understand the impact of revenue and expense assumptions and decisions, to effectively communicate with key stakeholders, set goals and assist in decision making. The University added a new metric in 2020, operating liquidity, to reflect our available cash and short-term investments available to support daily operations.

Operating liquidity includes cash and cash equivalents, money market and other investments, fixed income investments, MMDT, and the pooled investment Fund II. The measure excludes the pooled investment Fund I, and cash and cash equivalents for blended component units. Additional details for the various investment vehicles of the University are found in Note 4 of the accompanying financial statements.

The University targets an industry standard for operating liquidity of at least 90 days as a benchmark. Preserving operating liquidity is critical in times of uncertainty. The seasonality of the University's business model creates periods where cash inflows and outflows are mismatched. As a result, maintaining sufficient operating liquidity for at least the benchmark period is imperative.

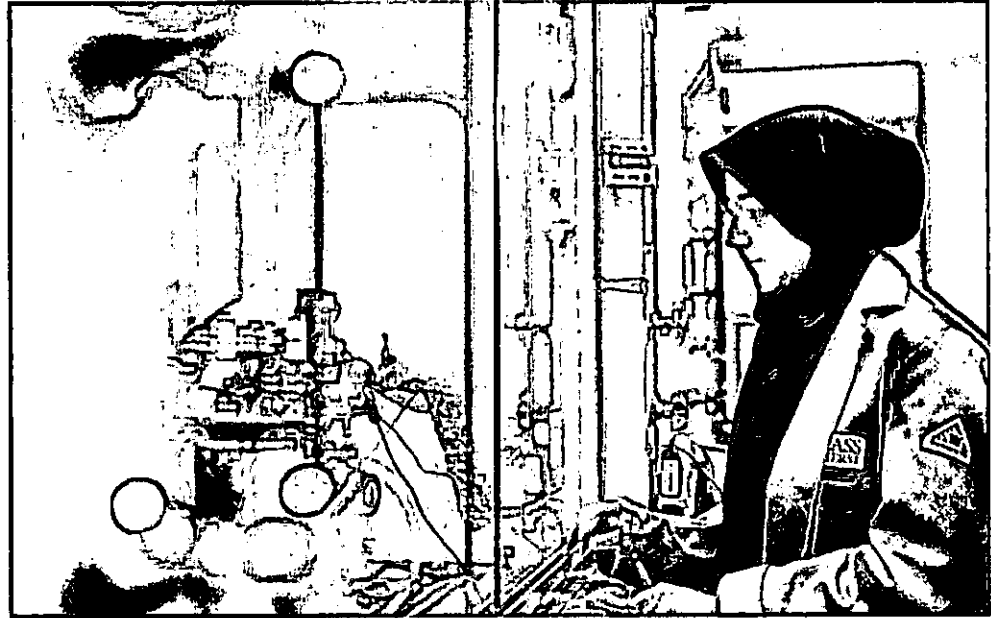
Shared Services Initiatives

At a time of financial challenge for public higher education, the University must continuously push itself to find more efficient ways of doing business. In that spirit, in 2019 President Meehan called for the development and implementation of a shared services model of delivering administration and finance services to the campuses. The resulting plan, developed by a team of subject matter experts that included representatives from each campus, delineated the application of a shared services model for accounts payable and procurement, at an estimated total savings of \$16.5 million. This effort also laid the foundation for the exploration of future efficiencies.

To implement this plan, the University formally kicked off its Unified Procurement Services Team (UPST) in January 2020, led by a new University Chief Procurement Officer. This team of professionals is tasked with providing high-quality services while driving transaction efficiency. UPST supports the campuses in cost optimization through proactive commodity sourcing and contracting with innovative suppliers and partners that support UPST in delivering on its "better, faster, and cheaper" mission. The team manages approximately \$1 billion in third-party spend annually and approximately 30,000 suppliers and partners. The UPST manages this through leveraging optimized technology, data-driven business intelligence, training, and enhanced operational processes.

During FY2020, in its first few months of existence, the UPST achieved \$6.6 million of strategic sourcing savings, \$5.3M annualized savings from other benefits/impact activities with the campuses, and identified an additional \$22.0 million of financial benefit opportunities for the University. The University expects to see further savings, efficiencies, and process improvements from the UPST as it continues to mature and further scale its operations.

Based on the success of the UPST, the University is embarking on a second shared service initiative in FY21 that is related to evaluating payroll services.



Photos taken prior to COVID-19, social distancing practices

Financial Highlights

In March 2020, the World Health Organization declared a pandemic as a result of the novel coronavirus (COVID-19). As cases began to increase in the country and in Massachusetts, in March 2020, the University suspended in-person education and other campus-based activities and provided refunds to students for a portion of their residence and dining fees. The University took significant budget actions across all campuses to address the resulting loss of revenue. These actions included salary freezes, furloughs, and targeted operating and personnel reductions. The University was awarded \$46.0 million of funding under the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), half of which was required to be used to provide emergency financial aid to students. The University distributed \$14.7 million in emergency aid to students. Of the portion to be used by the institution, \$13.9 million was utilized to cover costs related to significant changes to the delivery of instruction due to the coronavirus, and to provide additional aid to students. The remaining unspent funds are expected to be used and corresponding revenue recognized in FY2021. The full extent of the impact of COVID-19 on the University's finances is uncertain and will depend on the duration and depth of the pandemic.

Selected financial highlights for the fiscal year ended June 30, 2020 include:

The University's loss before other revenues, expenses, gains, and losses was (\$88.0 million) for FY2020. Postemployment benefit expenses related to Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than*

Pensions (GASB 75) and GASB 68, Accounting and Reporting for Pensions (GASB 68) contributed significantly to this loss. Excluding the impact of the postemployment expenses, the University's income before other revenues, expenses, gains, and losses was a positive \$34.1 million.

From FY2019 to FY2020, the University's operating revenues decreased by \$27.3 million driven primarily by refunds made to students for housing and dining costs related to the move to remote learning as a result of COVID-19. Operating expenses increased by \$136.1 million primarily driven by increases in post-employment benefit expenses, depreciation and scholarships and fellowships expenses. Non-operating revenues increased \$28.0 million primarily attributed to an increase in state appropriations and funding received under the CARES Act. As a result of the decrease in revenues and increase in expenses, the University's combined net position decreased \$39.6 million from \$2.5 billion in FY 2019 to \$2.4 billion in FY2020.

Using the Annual Financial Report

The University's financial statements are prepared in accordance with U.S. generally accepted accounting principles as prescribed by GASB, which establishes financial reporting standards for public colleges and universities. The University's significant accounting policies are summarized in Note 1 of the accompanying financial statements, including further information on the financial reporting entity.

This report includes the University's Statements of Net Position, Statements of Revenues, Expenses and Changes in Net Position, and the Statements of Cash Flows for the fiscal years ended June 30, 2020 and 2019, as well as certain required supplementary information. The University's net position (the difference between assets, deferred outflows, deferred inflows, and liabilities) is one indicator of the University's financial health. Over time, increases or decreases in net position are indicators of the improvement in or erosion of an institution's financial health when considered together with non-financial factors such as enrollment levels and the condition of facilities.

Statements of Net Position include all assets and liabilities, as well as deferred inflows and outflows of resources of the University. Net position is further broken down into three categories: net investment in capital assets, restricted and unrestricted. Amounts reported in net investment in capital assets represent the historical cost of property and equipment, reduced by the balance of related debt outstanding and depreciation expense charged over the years. Net position is reported as restricted when constraints are imposed by third parties, such as donors or enabling legislation. Restricted net position is either non-expendable, as in the case of endowment gifts to be held in perpetuity, or expendable, as in the case of funds to be spent on



Photos taken prior to COVID-19 social distancing practices.

scholarships and research. All other assets are unrestricted; however, they may be committed for use under contract or designation by the Board of Trustees (the Board). Note 15 to the accompanying financial statements depicts the designations of unrestricted net position at June 30, 2020 and 2019.

Statements of Revenues, Expenses and Changes in Net Position present the revenues earned and expenses incurred during the year. Activities are reported as either operating or non-operating, as prescribed by GASB. According to the GASB definitions, operating revenues and expenses include tuition and fees, grant and contract activity, auxiliary enterprises and activity for the general operations of the institution not including appropriations from state and federal sources. Non-operating revenues include appropriations, capital grants and contracts, gifts, investment income, and non-operating federal grants (such as Pell grants). With a public university's dependency on support from the state, Pell grants, and gifts, it is common for institutions to have operating expenses exceed operating revenues. This is because the financial reporting model prescribed by GASB classifies state and federal appropriations, Pell grants, and gifts as non-operating revenues. Due to the materiality of the state appropriations upon which the University relies, these appropriation amounts are included in certain analyses throughout this MD&A as operating revenue. The utilization of capital assets is reflected in the financial statements as depreciation expense,

which amortizes the cost of a capital asset over its expected useful life. Depreciation expense is considered an operating expense.

Statements of Cash Flows present cash receipts and payments of the University. 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 this management's discussion and analysis, as well as schedules of the University's proportionate share of the Massachusetts State Employees' Retirement System (MSERS) pension liability and Other Postemployment Benefits (OPEB) liability, contributions to the MSERS pension and OPEB plans and related ratios.

Reporting Entity

The financial statements of the University include financial activities of the following blended component units: the University of Massachusetts Building Authority (Building Authority), Worcester City Campus Corporation and Subsidiary (WCCC), the University of Massachusetts Medical School Foundation (UMMSF), and the University of Massachusetts Amherst Foundation (UMAF). The individual financial statements of the Building Authority can be obtained by contacting the Building Authority directly: www.umassba.net.

Separate Statements of Financial Position and Statements of Activities are presented in this report for the University's discretely presented component units, the University of Massachusetts Foundation, Inc. (UMF), and the University of Massachusetts Dartmouth Foundation, Inc. (UMDF). The statements for these entities are presented in accordance with Financial Accounting Standards Board (FASB) standards, which differ from GASB standards in certain areas such as reporting of pledges to endowment and net position. The individual financial statements of each foundation can be obtained by contacting the foundations directly: www.umassfoundation.org for UMF and giving@umassd.edu for UMDF.

University of Massachusetts Foundation, Inc.

UMF was established in 1950 to foster and promote the growth, progress and general welfare of the University, and

to solicit, receive and administer gifts and donations for such purposes. UMF maintains a portion of the University's investment portfolio, predominantly the endowment and the quasi-endowment investments. The total investments held at UMF on behalf of the University at June 30, 2020, 2019 and 2018 were \$923.7 million, \$738.7 million and \$651.4 million, respectively.

University of Massachusetts Dartmouth Foundation, Inc.

UMDF was established in 1973 to raise funds for the development and improvement of the academic and educational environment for students at the Dartmouth campus and the continued engagement of its alumni. In addition to holding investments for the University, UMF holds a significant portion of the UMDF investments. The total investments of UMDF at June 30, 2020, 2019 and 2018 were \$57.8 million, \$60.3 million and \$59.5 million, respectively, of which the majority is invested with UMF.

Net Position

Condensed schedules of net position at June 30, 2020, 2019, and 2018, respectively, are presented on page 12.

Assets totaled \$7.6 billion, \$7.4 billion, and \$7.3 billion at June 30, 2020, 2019, and 2018, respectively. These balances are primarily driven by capital assets, net of accumulated depreciation, which remain stable in the three years presented.

Liabilities totaled \$5.4 billion, \$5.0 billion and \$5.1 billion at June 30, 2020, 2019, and 2018, respectively. The majority of the University's long-term liabilities in all three years are long-term debt and pension and other postemployment benefit (OPEB) liabilities.

Net position represents the difference between total assets and total liabilities, and in addition to capital, includes cash, liquid investments, as well as non-cash items and illiquid investments. Total net position was \$2.4 billion, \$2.5 billion and \$2.4 billion at June 30, 2020, 2019 and 2018, respectively. The largest component of net assets for the University remains the net investment in capital assets which held steady at \$2.3-\$2.4 billion for the three years. Unrestricted net position is negative in all three years, due to large employee postemployment benefits (health and pension) liabilities totaling \$1.3 billion.

Revenues, Expenses, and Changes in Net Position

Condensed schedules of revenues, expenses, and changes in net position for the three years ended June 30, 2020, 2019, and 2018, are presented on page 12.

CONDENSED SCHEDULES OF NET POSITION

As of June 30, 2020, 2019, and 2018 (\$ in thousands)	2020	2019	2018
Assets			
Current assets	\$ 1,156,836	\$ 921,582	\$ 918,685
Noncurrent assets			
Capital assets, net	5,206,569	5,164,200	5,075,476
All other noncurrent assets	1,225,544	1,281,662	1,291,309
Total assets	7,588,949	7,367,444	7,285,470
Deferred outflows of resources	531,271	357,541	341,335
Liabilities			
Current liabilities	680,069	799,310	934,525
Noncurrent liabilities	4,750,458	4,237,383	4,161,911
Total liabilities	5,430,527	5,036,693	5,096,436
Deferred inflows of resources	256,926	215,910	141,485
Net position			
Net investment in capital assets	2,376,333	2,343,872	2,288,599
Restricted:			
Nonexpendable	22,252	28,617	28,022
Expendable	223,803	206,023	222,343
Unrestricted	(189,621)	(106,130)	(150,080)
Total net position	\$ 2,432,767	\$ 2,472,382	\$ 2,388,884

CONDENSED SCHEDULES OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

For the years ended June 30, 2020, 2019, and 2018 (\$ in thousands)	2020	2019	2018
Operating revenues			
Tuition and fees, net of scholarships	\$ 917,876	\$ 894,904	\$ 874,826
Grants and contracts	581,850	593,086	560,990
Auxiliary enterprises	378,314	441,795	416,733
Other operating revenues	547,990	523,569	616,265
Total operating revenues	2,426,030	2,453,354	2,468,814
Operating expenses	3,437,442	3,301,311	3,300,392
Operating loss	(1,011,412)	(847,957)	(831,578)
Nonoperating revenues (expenses)			
Federal appropriations	6,774	7,004	6,688
State appropriations	810,518	780,221	751,894
Interest on indebtedness	(109,186)	(116,217)	(115,851)
Nonoperating federal grants	115,601	84,454	81,590
Other nonoperating income	99,753	140,047	110,062
Total nonoperating revenues (expenses)	923,460	895,509	834,383
Income (loss) before other revenues, expenses, gains and losses	(87,952)	47,552	2,805
Other revenues, expenses, gains and losses			
Capital appropriations, grants and other sources	59,041	38,665	76,169
Other (deductions) additions	(10,704)	(2,719)	(1,388)
Total other revenues, expenses, gains, and losses	48,337	35,946	74,781
Total increase (decrease) in net position	(39,615)	83,498	77,586
Net position			
Net position at the beginning of the year	2,472,382	2,388,884	3,054,280
Cumulative effect of adopting GASB 75	-	-	(742,982)
Net position at the beginning of the year, restated	2,472,382	2,388,884	2,311,298
Net position at the end of the year	\$ 2,432,767	\$ 2,472,382	\$ 2,388,884

Operating Revenues and Expenses

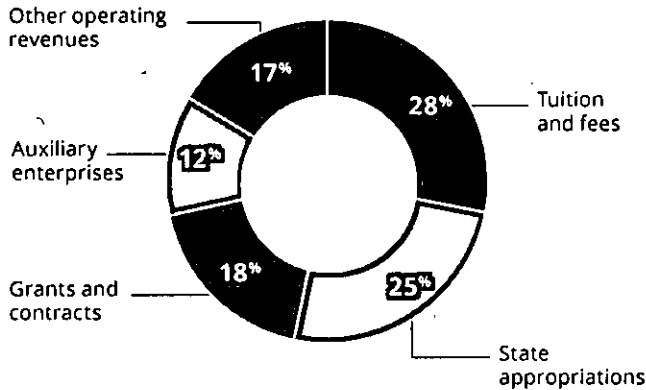
While not classified on the financial statements as operating revenue, state appropriations serve as a primary source for funding the core mission of the University. State appropriations revenue, described in detail below, is used almost exclusively to fund payroll for University employees, and as such is considered to be operating revenue for management's planning and analysis purposes. The University's operating revenue, including state appropriations, remained essentially flat for the three years presented, at \$3.2 billion.

As noted in the FY2020 operating revenues chart below, over 50% of the University's operating revenues were from tuition and fees and state appropriations. Auxiliary enterprises revenue includes housing and dining revenue. When combined with tuition revenue and grants and contracts revenue, 58% of the University's operating revenue comes from our academic core activities.

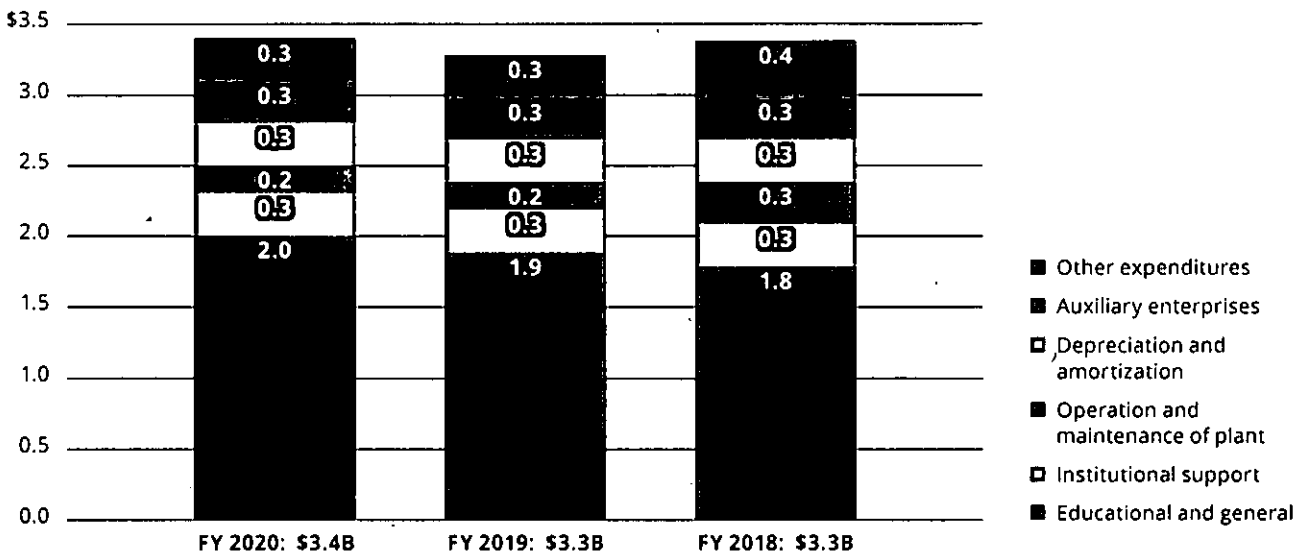
Other operating revenues includes revenues generated from CWM programs. These programs provide public consulting and services in health care financing, administration and policy to federal, state and local agencies and not-for-profit health and policy organizations. In addition to CWM activities, other operating revenues also include revenue earned by UMMS for educational services it provides to its clinical affiliate UMass Memorial Health Care, Inc. (UMass Memorial) as required by the enabling legislation enacted by the Commonwealth in 1997. Grants and contracts revenue includes federal, state and privately sponsored research and other programs.

In FY2020, operating expenses, including depreciation and amortization, totaled \$3.4 billion, as compared to \$3.3 billion in 2019 and 2018. Of the FY2020 total, \$2.0 billion or 59% was used to support the academic core activities of the University, including \$485.8 million in research. The education and general portion of the three-year operating expenses chart below represents expenses in the following functional categories: instruction, research, public service, academic support, student services and scholarships and fellowships. Public service activities expenses, included in education and general, include payments made to the Commonwealth pursuant to requirements of legislation enacted by the State Legislature of Massachusetts.

FISCAL YEAR 2020 OPERATING REVENUES (including State Appropriations)



THREE YEAR OPERATING EXPENSES (\$ In billions)



State Appropriations

In FY2020, state appropriations represented approximately 25% of all operating and non-operating revenues. The level of state support is a key factor influencing the University's overall financial condition. Although the state appropriations are unrestricted revenue, nearly 100% of the state appropriations support payroll and benefits for University employees. In addition to the direct state appropriation there are several smaller appropriations that add to the total state support for the University such as the Star Store lease at the Dartmouth campus and the Springfield Satellite Center, among others. While these smaller line items are in support of campus-specific programs and do not support general University operations, they are included in the state appropriations line in the accompanying financial statements, and in the state appropriations line in the table below.

The Commonwealth pays fringe benefits for University employees paid from state appropriations. Therefore, such fringe benefit support is added to the state appropriations financial statement line item in the accompanying Statements of Revenues, Expenses and Changes in Net Position. The University pays the Commonwealth for the fringe benefit cost of the employees paid from funding sources other than state appropriations. These amounts are not included in state appropriations.

The University's state appropriations including fringe benefits increased in FY2020 by \$30.3 million from FY2019 primarily due to increased collective bargaining costs determined by the State, as well as an increase in the State's fringe benefit rate.

The table below details the state appropriations for the fiscal years ended June 30, 2020, 2019, and 2018.

State Capital Appropriations

The University faces a financial challenge to maintain and upgrade its capital assets including its infrastructure, buildings and grounds. To have a successful capital program, the University must rely on a combination of revenue sources to fund its capital investments. In FY2020, FY2019 and FY2018, the capital support provided to the University through appropriations and grants from the Commonwealth

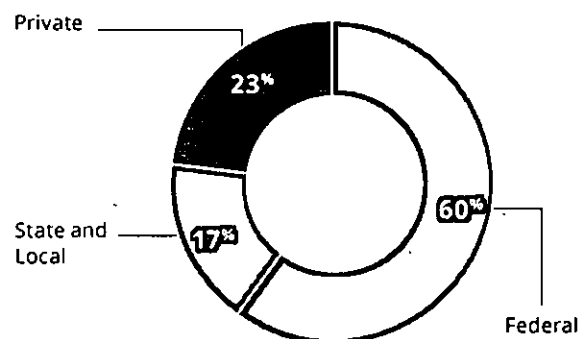
was \$51.5 million, \$25.5 million and \$67.4 million, respectively. Beginning in FY2019, the Commonwealth established a new strategic framework for approving the allocation of state funding for capital projects across higher education. The new framework provides funding in four distinct categories: major projects, critical repairs, critical infrastructure and readiness determination projects.

Grant and Contract Revenue

Among Massachusetts colleges and universities, the University ranks third in research and development expenditures, behind only the Massachusetts Institute of Technology (MIT) and Harvard University. Most research at the University is externally funded, with the federal government providing a majority of the funding through the National Institutes of Health, the National Science Foundation, and other agencies.

Collectively, UMass Amherst and UMass Medical School account for approximately three-quarters of the University's total grants and contracts revenue of \$581.9 million, \$593.1 million and \$561.0 million at June 30, 2020, 2019 and 2018, respectively. The following chart details the University's grant and contract revenues by source for the year ended June 30, 2020.

GRANT AND CONTRACT REVENUE FY2020



STATE APPROPRIATIONS

(\$ in thousands)

	FY2020	FY2019	FY2018
State appropriations	\$ 569,209	\$ 548,879	\$ 528,868
Plus: fringe benefits	241,309	231,342	223,026
Commonwealth support	\$ 810,518	\$ 780,221	\$ 751,894

Tuition And Fees

For academic year 2019–2020, tuition was raised an average of 2.5% for In-state undergraduate students over the prior year. For academic year 2018–2019, tuition was raised on average 2.5% over the prior year. Affordability continues to be a priority of the University and increases in fees are considered in conjunction with State support on an annual basis.

Due to affordability considerations and impacts of the COVID-19 pandemic, in-state undergraduate tuition was frozen for the academic year 2020–2021.

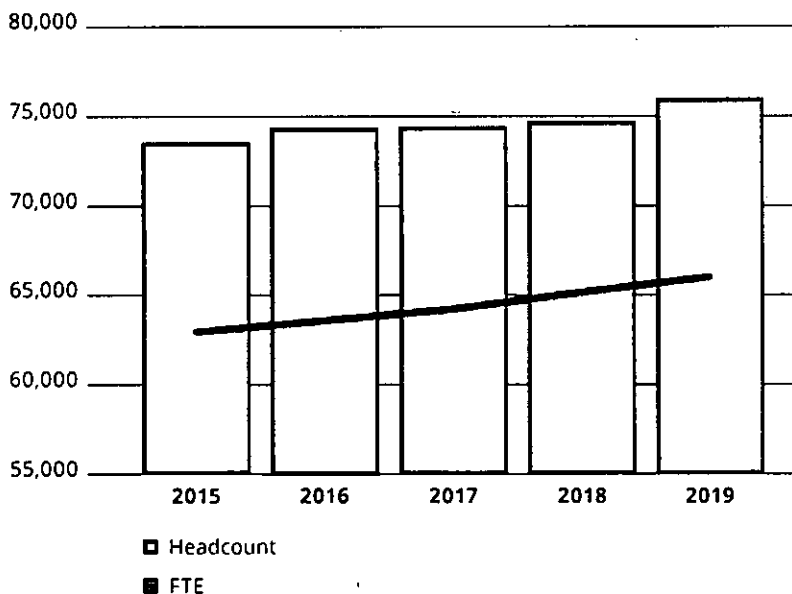
Enrollment

As shown in the table below, total enrollment in the fall of 2019 was 66,010 FTE (75,065 headcount students), an increase of 1.0% over the previous year's enrollment of 65,346 FTE (74,705 headcount students). Enrollment in the fall of 2017 was 64,530 FTE (74,572 headcount students). The five-year enrollment growth of 4.2% from 2015–2019 is meaningful as other institutions of higher education have experienced declining enrollments over this period. This growth is consistent with the University's efforts to increase its reach across the Commonwealth and to recruit non-resident students, and is reflective of the quality of the education provided by the University of Massachusetts.

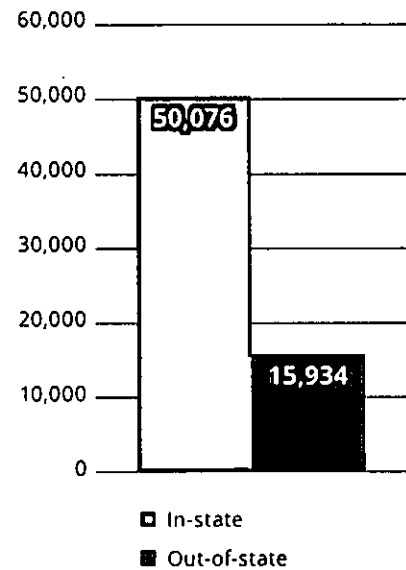
Admission to the University is open to residents of the Commonwealth and non-residents on a competitive basis. For the fall semester, Massachusetts residents accounted for 83.2% and 83.5% of the University's total undergraduate enrollment in Fall 2019 and Fall 2018, respectively.

The online learning consortium of the University, UMassOnline, has shown significant growth in enrollments, course offerings and revenue generation, benefiting the campuses and raising the profile of the University. UMassOnline provides marketing and technology support for campus online offerings that enable students, professionals, and lifelong learners to take courses anywhere, anytime. For FY2020, UMassOnline and the Continuing Education units at the five campuses collaboratively generated tuition revenue of \$120.5 million and supported 83,895 course enrollments, an increase of 3.7% in revenue and an increase of 4.3% in course enrollments as compared to FY2019. For FY2019, UMassOnline generated tuition revenue of \$116.1 million and supported 80,399 course enrollments, an increase of 2.6% in revenue and an increase of 2.5% in course enrollments as compared to FY2018.

FALL TOTAL ENROLLMENT



FALL 2019 ENROLLMENT BY TYPE



Long-term Debt

Long-term debt is the University's largest liability at June 30, 2020, 2019 and 2018. The University had outstanding long-term debt of \$3.2 billion at June 30, 2020, \$3.0 billion at June 30, 2019 and \$3.1 billion at June 30, 2018. The principal issuer of the University's debt is the Building Authority. Additional issuers utilized by the University include Massachusetts Health and Educational Facilities Authority (MHEFA), Massachusetts Development Financing Authority (MDFA), and WCCC.

The debt financed through the Building Authority is being used for construction and renovation of residence halls and general education buildings, replacement of core infrastructure, and construction of academic, laboratory, and research facilities. The proceeds from the UMass MHEFA bonds were used to create an internal revolving loan program and to fund the construction of two new campus centers at the Boston and Lowell campuses (funded jointly with the Commonwealth). For further details on outstanding balances with each issuer, refer to Note 9 of the accompanying financial statements.

University Bond Rating

The University relies on a carefully planned and executed debt strategy to support master and strategic planning at the campuses and for the University as a whole. Bonds issued by the University and the Building Authority are rated AA, Aa2 and AA- as rated by Fitch, Moody's and Standard & Poor's rating agencies, respectively.

Subsequent to FY2020, all three ratings agencies affirmed the University's ratings, citing the University's flagship role in public higher education in Massachusetts, strong fiscal oversight, steady enrollment, positive operating performance, growth in financial resources and solid support from the Commonwealth. The stable outlook for the University from Moody's is also notable because Moody's maintains a negative outlook for the higher education industry, with negative rating actions more likely on average in the higher education sector.

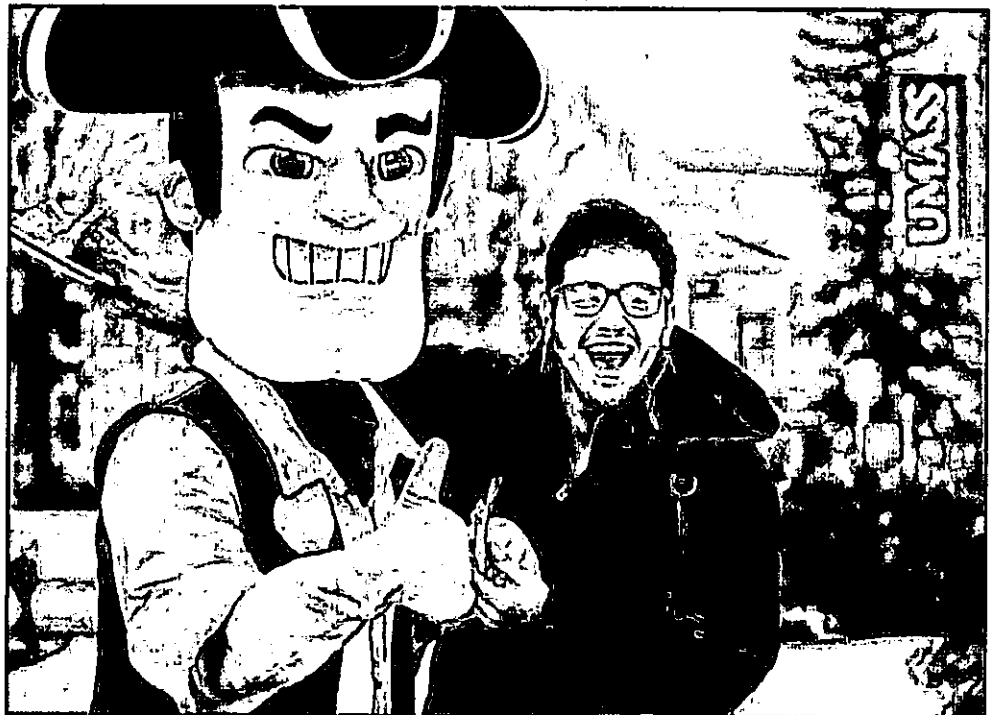
Limitations on Additional Indebtedness

The University may, without limit, issue additional indebtedness or request the Building Authority to issue additional indebtedness on behalf of the University so long as such indebtedness is payable from all available funds of the University. As noted in the Board of Trustee policy, each campus' debt service cannot exceed 8% of its total operating expenditures.

The Building Authority is authorized by its enabling act to issue bonds with the unconditional guarantee of the Commonwealth for the punctual payment of the interest and principal on the guaranteed bonds. The full faith and credit of the Commonwealth are pledged for the performance of its guarantee. The enabling act, as amended, currently limits to \$200.0 million the total principal amount of notes and bonds of the Building Authority that may be Commonwealth guaranteed and outstanding at any one time. The amount of bond obligations guaranteed by the Commonwealth at June 30, 2020, 2019 and 2018 was \$108.9 million, \$111.1 million and \$113.5 million, respectively.

Capital Plan

A majority of the capital spending during FY2020 and FY2019 related to continued investments in deferred maintenance. In September 2018, the University's Board approved an updated five-year capital plan for FY2019–FY2023 totaling \$2.1 billion. The University's capital plan is funded through a combination of University operations, bonds issued by the Building Authority and MHEFA, Commonwealth appropriations, and private fundraising.



Photos taken prior to COVID-19 social distancing practices



Photos taken prior to COVID-19 social distancing practices

The University's five-year capital plan for FY2019–FY2023 includes major projects that were previously approved by the Board in prior-year capital plans. The University's capital approval process provides for a multi-step review process involving the President's Office, the Building Authority and the Board. Additional approvals have been put in place for any capital project seeking alternative funding and/or delivery options.

Due to the COVID-19 pandemic, the capital plan was reassessed, and \$222 million of projects were put on hold in September 2020.

Factors Impacting Future Periods

There are a number of issues of University-wide importance that directly impact the financial operations of the University. By far, the biggest factor that impacted the University's FY2020 and is expected to impact future periods is the COVID-19 pandemic. The full extent of the pandemic's impact on FY2021 and beyond is not yet known, and will depend greatly on the trajectory the virus takes in Massachusetts, the ability of the Commonwealth to fund the University through annual appropriation, and the resulting impact on when the University can bring all students back to the campuses.

Other issues, such as improving academic quality, realizing strong financial results, investing in capital assets, expanding fundraising capacity, operating more efficiently, being the most effective University for students and the Commonwealth given the available resources, and measuring performance are ongoing activities of continuous importance to the Board and University leadership that impact the financial planning each year. Student enrollment, the level of state support, the impact of collectively bargained wage increases, and the ability of student-fee supported activities to meet inflationary pressures determine the limits of program expansion, new initiatives and strategic investments, as well as the ability of the University to meet its core mission and ongoing operational needs.

Contacting The University

This financial report is designed to provide the University, the Commonwealth, the public and other interested parties with an overview of the financial results of the University and an explanation of the University's financial condition. If you have any questions about this report or require additional information, please contact the University Controller, Barbara Cevallos by email at bcevallos@umassp.edu.

STATEMENTS OF NET POSITION

As of June 30, 2020 and 2019 (\$ in thousands)

	2020	2019
Assets		
Current assets		
Cash and cash equivalents	\$ 65,002	\$ 84,986
Cash held by state treasurer	21,474	12,560
Deposits with bond trustees	76,551	.
Accounts receivable, net	326,879	286,028
Short-term investments	620,771	489,907
Other current assets	46,159	48,101
Total current assets	1,156,836	921,582
Noncurrent assets		
Cash held by state treasurer	17,190	8,420
Deposits with bond trustees	282,379	211,926
Accounts receivable, net	50,389	55,123
Long-term investments	748,689	869,663
Other assets	126,897	136,530
Capital assets, net	5,206,569	5,164,200
Total noncurrent assets	6,432,113	6,445,862
Total assets	7,588,949	7,367,444
Deferred outflows of resources	531,271	357,541
Liabilities		
Current liabilities		
Accounts payable and accrued expenses	319,829	325,624
Unearned revenues and advances	96,275	61,340
Long-term debt, current portion	203,408	341,888
Other current liabilities	60,557	70,458
Total current liabilities	680,069	799,310
Noncurrent liabilities		
Unearned revenues and advances	59,529	61,658
Long-term debt	2,992,770	2,700,490
Derivative instruments, interest rate swaps	72,981	55,622
Net pension liability	526,739	409,319
Net other postemployment benefits liability	992,991	895,669
Other long-term liabilities	105,448	114,625
Total noncurrent liabilities	4,750,458	4,237,383
Total liabilities	5,430,527	5,036,693
Deferred inflows of resources	256,926	215,910
Net position		
Net investment in capital assets	2,376,333	2,343,872
Restricted:		
Nonexpendable	22,252	28,617
Expendable	223,803	206,023
Unrestricted	(189,621)	(106,130)
Total net position	\$ 2,432,767	\$ 2,472,382

See accompanying notes to the financial statements.

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

For The Years Ended June 30, 2020 and 2019 (\$ in thousands)	2020	2019
Revenues		
Operating revenues		
Tuition and fees (net of scholarship allowances of \$343,031 at June 30, 2020 and \$328,845 at June 30, 2019)	\$ 917,876	\$ 894,904
Grants and contracts	581,850	593,086
Sales and services, educational activities	31,248	34,984
Auxiliary enterprises	378,314	441,795
Other operating revenues:		
Sales and services, independent operations	62,829	59,893
Sales and services, public service activities	337,709	291,085
Other	116,204	137,607
Total operating revenues	2,426,030	2,453,354
Expenses		
Operating expenses		
Educational and general		
Instruction	960,548	912,415
Research	485,759	490,887
Public service	84,248	86,251
Academic support	200,928	186,502
Student services	157,842	160,751
Institutional support	303,100	274,326
Operation and maintenance of capital assets	241,880	248,581
Depreciation and amortization	288,667	276,638
Scholarships and fellowships	65,469	49,511
Auxiliary enterprises	336,497	340,346
Other expenditures		
Independent operations	56,256	48,282
Public service activities	256,248	226,821
Total operating expenses	3,437,442	3,301,311
Operating loss	(1,011,412)	(847,957)
Nonoperating revenues (expenses)		
Federal appropriations	6,774	7,004
State appropriations	810,518	780,221
Gifts	41,996	43,705
Investment income, net	32,762	48,943
Unrealized gain (loss) on investments	(3,414)	18,082
Endowment return used for operations	28,113	27,741
Interest expense	(109,186)	(116,217)
Nonoperating federal grants	115,601	84,454
Other nonoperating income	296	1,576
Net nonoperating revenues	923,460	895,509
Income (loss) before other revenues, expenses, gains, and losses	(87,952)	47,552
Other revenues, expenses, gains and losses		
Capital appropriations	51,525	25,500
Capital grants, contracts and gifts	7,516	13,165
Endowment return, net of amount used for operations	(2,917)	13,467
Other deductions	(7,787)	(16,186)
Total other revenues, expenses, gains, and losses	48,337	35,946
Total increase (decrease) in net position	(39,615)	83,498
Net position		
Net position at beginning of year	2,472,382	2,388,884
Net position at end of year	\$ 2,432,767	\$ 2,472,382

See accompanying notes to the financial statements.

STATEMENTS OF CASH FLOWS

For The Years Ended June 30, 2020 and 2019 (\$ in thousands)

	2020	2019
Cash flows from operating activities		
Tuition and fees	\$ 1,019,555	\$ 985,147
Grants and contracts	615,384	587,539
Payments to suppliers	(940,286)	(951,973)
Payments to employees	(1,615,385)	(1,602,968)
Payments for benefits	(496,826)	(480,371)
Payments for scholarships and fellowships	(90,488)	(76,825)
Loans issued to students and employees	(11,979)	(8,882)
Collections of loans to students and employees	15,904	17,660
Auxiliary enterprises	377,585	441,563
Sales and services, educational	30,911	35,360
Sales and services, independent operations	62,829	59,893
Sales and services, public service activities	352,748	292,176
Student related fiduciary activities inflows	13,122	12,649
Student related fiduciary activities outflows	(16,299)	(11,429)
Other receipts, net	56,239	191,090
Net cash used for operating activities	(626,986)	(509,371)
Cash flows from noncapital financing activities		
State appropriations	810,518	780,221
Federal appropriations	6,774	7,004
Grants, contracts and gifts for other than capital purposes	45,107	52,308
Nonoperating federal grants	115,601	84,454
Student organization transactions	(619)	(802)
Net cash provided by noncapital financing activities	977,381	923,185
Cash flows from capital and other financing activities		
Proceeds from capital debt	663,061	278,041
Proceeds from premiums received	57,127	47,633
Capital lease payments received	-	4,252
Bond issuance costs paid	(3,596)	(1,430)
Capital appropriations	51,525	25,500
Capital grants, contracts and gifts	4,405	4,562
Purchases of capital assets and construction	(341,247)	(382,048)
Principal paid on capital debt and leases	(549,788)	(358,080)
Interest paid on capital debt and leases	(132,468)	(137,517)
Net cash used for capital financing activities	(250,981)	(519,087)
Cash flows from investing activities		
Proceeds from sales and maturities of investments	1,652,557	1,350,013
Interest on investments	34,383	47,623
Purchases of investments	(1,641,650)	(1,404,860)
Net cash provided by (used for) investing activities	45,290	(7,224)
Net increase (decrease) in cash and cash equivalents	144,704	(112,497)
Cash and cash equivalents - beginning of the year	317,892	430,389
Cash and cash equivalents - end of the year	462,596	317,892

STATEMENTS OF CASH FLOWS

For The Years Ended June 30, 2020 and 2019 (\$ in thousands)	2020	2019
Reconciliation of operating loss to net cash used for operating activities		
Operating loss	(1,011,412)	(847,957)
Adjustments to reconcile loss to net cash used for operating activities:		
Depreciation and amortization expense	288,667	276,638
Changes in assets and liabilities:		
Accounts receivable, net	(36,117)	29,219
Other assets	9,954	(23,761)
Accounts payable and accrued expenses	(2,300)	5,335
Unearned revenues and advances	32,806	(57,315)
Other liabilities	(19,078)	(26,702)
Postemployment benefits liability, net	122,012	60,610
Fiduciary transactions	(780)	(495)
Changes in deferred outflows related to assets	2	(1,782)
Changes in deferred inflows related to future revenues	(10,740)	76,839
Net cash used for operating activities	(626,986)	(509,371)
Supplemental disclosure of noncash activities		
Assets acquired and included in accounts payable and other liabilities	29,669	36,558
Loss on disposals of capital assets	(9,467)	(14,331)
Donated assets	258	1,390

See accompanying notes to the financial statements.



Photos taken prior to COVID-19 social distancing practices.

STATEMENTS OF FINANCIAL POSITION

As of June 30, 2020 and 2019 (\$ in thousands)

	2020	2019
Assets		
Cash	\$ 807	\$ 925
Bequests receivable	3,155	2,311
Pledges receivable, net	26,854	20,417
Investments of the Foundations and held on behalf of the University	1,544,756	1,338,359
Prepaid expenses and other assets	3,374	2,917
Land, property, plant and equipment, net	16,057	16,481
Total assets	1,595,003	1,381,410
Liabilities and net assets		
Liabilities		
Accounts payable and accrued expenses	635	492
Deferred revenue	3,975	944
Obligations to beneficiaries of split-interest agreements	2,649	2,386
Assets held on behalf of others	948,085	762,232
Total liabilities	955,344	766,054
Net assets		
Without donor restrictions	38,417	37,404
With donor restrictions	601,242	577,952
Total net assets	639,659	615,356
Total liabilities and net assets	\$ 1,595,003	\$ 1,381,410

STATEMENT OF ACTIVITIES

For The Year Ended June 30, 2020 (with summarized financial information for the year ended June 30, 2019) (\$ in thousands)

	Without donor restriction	With donor restriction	Total 2020	Total 2019
Support and revenue				
Gifts, bequests and grants	\$ 376	\$ 29,357	\$ 29,733	\$ 21,064
Other contributions	200,585	2,285	202,870	60,873
Total investment income, including net gains (losses) - net of fees	2,936	13,928	16,864	75,323
Investment management fee	10,963	-	10,963	10,935
Other income	-	50	50	271
Net assets released from restrictions	22,926	(22,926)	-	-
Total support and revenue	237,786	22,694	260,480	168,466
Expenses				
Distributions to University	35,682	-	35,682	36,334
Program services	5,415	-	5,415	9,718
Fundraising support	8,005	-	8,005	7,999
Administrative and general	2,292	-	2,292	2,353
Total expenses	51,394	-	51,394	56,404
Excess of support and revenue over expenses	186,392	22,694	209,086	112,062
Less: Fiscal 2020 activity related to assets held on behalf of University	(184,931)	25	(184,906)	(87,384)
Less: Fiscal 2020 activity related to assets held on behalf of Edward M. Kennedy Institute	673	-	673	4,011
Transfers (from) to other funds	(571)	571	-	-
Change in value of split interest agreements	(550)	-	(550)	(388)
Change in net assets	1,013	23,290	24,303	28,301
Net assets, beginning of year	37,404	577,952	615,356	587,055
Net assets, end of year	\$ 38,417	\$ 601,242	\$ 639,659	\$ 615,356

See accompanying notes to the financial statements.

Notes to Financial Statements

1. Summary of Significant Accounting Policies

Reporting entity

The University of Massachusetts (University), a federal land grant institution, is governed by Massachusetts General Laws Chapter 75. Its Board of Trustees (Board or Trustees) consists of nineteen voting members and three non-voting members. The voting members consist of two full-time students, the Secretary of Education of the Commonwealth of Massachusetts (Commonwealth) and sixteen members appointed by the governor. The three non-voting members are student representatives who may only participate in open meetings of the full Board of Trustees.

The University is a business-type activity of the Commonwealth. The financial balances and activities included in these financial statements are, therefore, also included in the Commonwealth's comprehensive annual financial report.

The financial statements of the University include the campuses of Amherst, Boston, Dartmouth (including UMass Law), Lowell, Medical School, UMass Online, and the President's Office of the University, Worcester City Campus Corporation (WCCC), the University of Massachusetts Amherst Foundation (UMAF), University of Massachusetts Medical School Foundation (UMMSF) as well as the University of Massachusetts Building Authority (Building Authority).

The Building Authority is a public instrumentality of the Commonwealth created by Chapter 773 of the Acts of 1960 (referred to as the Enabling Act), whose purpose is to provide dormitories, dining commons, and other buildings and structures for use by the University. WCCC is a tax-exempt organization founded to support research and real property activities for the University. The UMAF was established in 2003 to support private fundraising on behalf of the faculty and students of the Amherst campus. The UMMSF was established in 1991 to support fundraising and philanthropic activities of the Medical School. These component units are blended in the financial statements of the University because of the significance and exclusivity of their financial relationships with the University. Refer to Note 17 for condensed financial information for these blended component units.

The University also includes the financial information of its discretely presented component units, the University of Massachusetts Foundation, Inc. (UMF) and the University of Massachusetts Dartmouth Foundation, Inc. (UMDF). In these financial statements, UMF and UMDF are collectively known as The Foundations. These are related tax-exempt organizations founded to foster and promote the growth, progress and general welfare of the University.

The University of Massachusetts Lowell Applied Research Corporation (UMLARC), a legally separate 501(c)(3) non-profit corporation, was formed on June 24, 2020. The purpose of UMLARC is to promote efficient and effective applied research and development by entering into grants, contracts, and other contractual mechanisms for services, in conjunction with the University Massachusetts Lowell Research Institute and its research partners. UMLARC will also provide analytic and technology solutions to government and non-government entities to extend the impact of the University's technology enterprise. There is no financial activity for the UMLARC included within the financial statements as of June 30, 2020. Because the memorandum of understanding between UMLARC and UMass Lowell is not yet complete, the determination of discrete or blended component unit is pending.

Basis of presentation

The accompanying financial statements have been prepared in accordance with U.S. generally accepted accounting principles (GAAP) as prescribed by the GASB using the economic resources measurement focus and the accrual basis of accounting.

The Foundations' financial statements are prepared in accordance with accounting and reporting requirements prescribed by the Financial Accounting Standards Board (FASB). As such, certain revenue recognition criteria and presentation features are different from GASB revenue recognition criteria and presentation features. No modifications have been made to the Foundations' financial information in the University's annual financial report for these differences.

The University's activities are considered to be a single business-type activity and accordingly, are reported in a single column in the financial statements. Business-type activities are those that are financed in whole or part by funds received from external parties for goods or services.

On the Statements of Revenues, Expenses and Changes in Net Position, the University's operating activities consist of tuition and fees, grants and contracts, sales and services, auxiliary enterprise and other operating revenues. Other operating revenues include sales and services provided by the UMass Medical School (UMMS) under its Commonwealth Medicine (CWM) programs, which provide consulting and services in health care financing, administration and policy to federal, state and local agencies and not-for-profit health and policy organizations. Also included in other operating revenues are payments received by the Medical School for educational services it provides to its clinical affiliate, UMass Memorial Medical Center (UMass Memorial).

Operating expenses include, among other items, payroll, fringe benefits, utilities, supplies and services, depreciation, and amortization. Nonoperating revenues or expenses are those in which the University receives or gives value without directly giving or receiving equal value, such as State and Federal appropriations, CARES Act revenue, Federal Pell grants, private gifts, and investment income.

Revenues for exchange transactions are recognized when earned and expenses are recognized when incurred. Restricted grant revenue is recognized only when all eligibility requirements have been met. The University applies restricted net assets first when an expense or outlay is incurred for purposes for which both restricted and unrestricted net assets are available.

The University receives unconditional promises to give through private donations or pledges from corporations, foundations, alumni and other supporters of the University. Revenue is recognized when a pledge is received and all eligibility requirements, including time and purpose requirements, are met. Endowment pledges are not recorded until paid because the inherent time restriction has not been met until the funds are able to be invested in perpetuity.

Net position

Net position is classified into the following categories:

- **Net investment in capital assets:** Capital assets, at historical cost or fair market value on the date of gift, net of accumulated depreciation and outstanding principal balances of debt attributable to the acquisition, construction or improvement of those assets.
- **Restricted nonexpendable:** Resources subject to externally imposed stipulations that they be maintained permanently by the University.
- **Restricted expendable:** Resources whose use by the University is subject to externally imposed stipulations. Such assets include restricted grants and contracts, the accumulated net gains/losses on true endowment funds, as well as restricted funds loaned to students, restricted gifts and endowment income, and other similar restricted funds.
- **Unrestricted:** The net position that is not subject to externally imposed restrictions governing their use. The University's unrestricted net position may be designated for specific purposes by management or the Board. Substantially all of the University's unrestricted net position is designated to support academic and research initiatives or programs, auxiliary enterprises, quasi-endowments, or commitments to capital construction projects. Note 15 describes these designations in more detail.

Cash and cash equivalents

Cash and cash equivalents include cash balances maintained in checking accounts, overnight repurchase agreements and amounts held in permitted money market mutual funds with an original maturity date of three months or less.

In addition, the University is authorized to invest in the Massachusetts Municipal Depository Trust ("MMDT"), a pooled money market-like fund, established under Massachusetts General Laws, Chapter 29, Section 38A. MMDT is an external investment pool that meets the criteria to report its holdings at amortized cost. As such, the University reports its position in MMDT at amortized

cost which approximates the net asset value of \$1.00 (one dollar) per share. MMDT has a maturity of less than one year and is not rated.

Accounts receivable, net

Accounts receivable consist of receivables for tuition and fees, grants and contracts, student loans, pledges and CWM related activities. The University establishes an allowance for accounts receivable based on management's expectation regarding the collection of the receivables and the University's historical experience for collections.

Investments

Investments are reported at fair value. Short-term investments consist of deposits with original maturities of less than one year and are available for current use. Securities received as gifts are recorded at estimated fair value at the date of the gift. Investment income includes dividends and interest income and is recognized on the accrual basis. In computing realized gains and losses, cost is determined on a specific identification basis.

Endowment

UMF maintains and administers the University's endowment assets and other long-term investments. UMF utilizes the pooled investment concept whereby all invested funds are included in one investment pool, unless otherwise required by the donor.

Pooled investment funds will receive an annual distribution, based on the endowment fund's average market value for the preceding twelve quarters on a one-year lag. Only quarters with funds on deposit are included in the average. In addition, a prudence rule is utilized, limiting spending from a particular endowment fund to be no lower than 93% of its carrying value. The spending rate approved for the years ended June 30, 2020 and 2019 was 4%.

Capital assets

Capital assets are stated at cost on the date of acquisition or, in the case of gifts, fair value upon date of donation. Net interest costs incurred during the construction period for major capital projects are capitalized. Repairs and maintenance costs are expensed as incurred, whereas major improvements that extend the estimated useful lives of the assets are capitalized as additions to capital assets. The University does not capitalize works of art, historical treasures or library books.

The University capitalizes assets with useful lives greater than one year and acquisition costs greater than or equal to \$5,000. The University computes depreciation using the straight-line method over the asset's useful life and applies a half year convention in the year the asset is acquired or placed in service. Land is not depreciated.

Following is the range of useful lives for the University's depreciable assets:

Depreciable asset category	Useful life in years
Land improvements	20
Buildings	20-40
Infrastructure	50
Building improvements	3-20
Equipment, furniture and IT infrastructure	3-15
Software	5

The University leases various facilities and equipment through capital leases. Facilities and equipment under capital leases are recorded at the present value of future minimum lease payments.

Deferred outflows and inflows of resources

The University accounts for certain transactions that result in the consumption or acquisition in one period that are applicable to future periods as deferred outflows and deferred inflows, respectively, to distinguish them from assets and liabilities. Deferred outflows of resources increase net position, similar to assets and deferred inflows of resources decrease net position, similar to liabilities.

The components of deferred outflows and inflows of resources as of June 30, 2020 and 2019 included the following (\$ in thousands):

As of June 30, 2020 and 2019 (\$ in thousands)	2020	2019
Deferred outflows of resources		
Change in fair value of interest rate swap agreements	\$ 52,978	\$ 34,262
Debt refunding	79,648	69,119
Certain asset retirement obligations	1,781	1,782
Impact of assumption changes and investment losses to:		
Pension liability	158,057	113,654
Other postemployment benefits liability	238,807	138,724
	\$ 531,271	\$ 357,541
Deferred inflows of resources		
Sale of future revenues	66,099	76,839
Experience gains for:		
Pension liability	39,778	60,182
Other postemployment benefits liability	151,049	78,889
	\$ 256,926	\$ 215,910

Compensated absences

Employees earn the right to be compensated during absences for annual vacation leave and sick leave. Upon retirement, termination, or death, certain employees are compensated for unused sick and vacation leave, subject to certain limitations, at their current rate of pay. Within the Statements of Net Position, a liability is recorded for vacation and sick leave benefits earned as of the fiscal year-end. The recorded liability is classified as current and noncurrent on the Statements of Net Position based on the amount estimated to be paid to eligible employees in one year and beyond one year, respectively.

Unearned revenue and advances

Unearned revenue consists of amounts billed or received in advance of the University providing goods or services. Unearned revenue is subsequently earned as qualifying expenses are incurred.

Advances include funds advanced to the University by the U.S government under the Federal Perkins Loan Program (the Program). Under federal law, the authority for colleges and universities to make new loans under the Program ended on September 30, 2017, and final distributions were permitted through June 30, 2019. The University's Statements of Net Position include both the notes receivable from students and the related refundable loan liability to the Federal government.

Bond issuance costs

The University incurs certain costs associated with bond issuances. For the years ended June 30, 2020 and 2019, bond issuance costs amounted to \$3.6 million and \$1.4 million, respectively, and were expensed.

Tuition and fees, net of scholarship allowances

Student tuition and fees, housing, dining, and other similar auxiliary revenues are reported net of any related scholarships and fellowships applied to student accounts. However, scholarships and fellowships paid directly to students are separately reported as scholarships and fellowships expense.

Grants and contracts

The University receives grants and contracts for research and other activities including medical service reimbursements from federal and state government agencies. The University records revenue at the point all eligibility requirements (e.g. allowable costs are incurred) are met.

The University records the recovery of indirect costs applicable to research programs and other activities which provide for the full or partial reimbursement of such costs, as revenue. Recovery of indirect costs for the years ended June 30, 2020 and 2019 was \$136.2 million and \$136.8 million, respectively, and is a component of grants and contracts revenue on the Statements of Revenues, Expenses, and Changes in Net Position.

As a result of the COVID-19 pandemic, the University was awarded \$46 million from the Higher Education Emergency Relief Fund (HEERF). \$14.7 million of the funds awarded were used for emergency financial aid grants under the 18004(a)(1) CARES Act and recognized as non-operating federal grants revenue in fiscal 2020. An additional \$13.9 million was used to cover costs related to significant changes to the delivery of instruction due to the coronavirus, and to provide additional financial aid to students, and was also recorded as non-operating federal grant revenue in fiscal 2020. The remaining unused awarded amounts will be recorded in fiscal 2021 as qualifying expenses for students and the University are incurred.

Auxiliary enterprises

An auxiliary enterprise is an activity that exists to furnish a service to students, faculty or staff acting in a personal capacity, and that charges a fee for the use of goods and services. For the University, housing and dining revenues are included in auxiliary enterprises.

Fringe benefits for current employees and postemployment obligations

The University participates in the Commonwealth's fringe benefit programs, including active employee and postemployment health insurance, unemployment compensation, pension, and workers' compensation benefits. Health insurance and pension costs for active employees and retirees are paid through a fringe benefit rate charged to the University by the Commonwealth. Workers' compensation costs are assessed separately based on actual University experience.

Use of estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the dates of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from these estimates. The most significant areas that require management estimates relate to valuation of certain investments and derivative instruments, useful lives and related depreciation of capital assets, and accruals for pension and other postemployment related benefits.

Income tax status

The University is exempt from Federal and state income tax under the doctrine of intergovernmental tax immunity. The University qualifies as a public charity eligible to receive charitable contributions under Section 170(b)(1)(A)(v) of the Internal Revenue Code, as amended (the Code).

WCCC, UMF, UMMSF and UMDF are organizations described in Section 501(c)(3) of the Code, and are generally exempt from income taxes pursuant to Section 501(a) of the Code. WCCC, UMF, UMMSF and UMDF are required to assess uncertain tax positions and have determined that there were no such positions that are material to the financial statements as of June 30, 2020 and 2019, respectively.

Newly implemented accounting standards

Effective for the fiscal year ended June 30, 2020, the University adopted GASB Statement No. 84, *Fiduciary Activities*, ("GASB 84"). This statement establishes criteria for identifying fiduciary activities and requires that fiduciary activities be reported in a Statement of Fiduciary Net Position and a Statement of Changes in Fiduciary Position. GASB 84 permits business-type activities, such as the University, to report activities that would otherwise be considered fiduciary activities in the University's Statement of Net Position and Statement of Cash Flows as operating activities if upon receipt, the funds are normally expected to be held for three months or less. Given the majority of fiduciary activities are custodial amounts held for three months or less, the University did not report these activities within a Statement of Fiduciary Net Position or Statement of Changes in Fiduciary

Position. These fiduciary activities were reclassified to the operating activities portion of the Statement of Cash Flows from noncapital financing activities at June 30, 2020 and 2019, respectively.

Immaterial correction

For the fiscal year ended June 30, 2019 the University reported its proportionate share of activity related to post-employment benefits for its participation in the Commonwealth OPEB plan in accordance with GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefit Plans Other than Pensions*. The GASB 75 schedule of employer and non-employer allocations of the Commonwealth's OPEB Plan that was utilized to report information within the University's fiscal 2019 financial statements in accordance with GASB 75 was subsequently revised. The University recorded an immaterial correction to its previously reported financial statements to properly reflect its revised proportionate share of activity related to post-employment.

The table below presents the effect on the University's previously reported net position as a result of the immaterial correction noted.

\$ in thousands	2019 Financial statement line item as previously reported	Immaterial correction related to GASB statement No.75	2019 Financial statement line item as restated
Statement of net position impact			
Deferred outflows of resources	\$ 356,683	\$ 858	\$ 357,541
Net other postemployment benefits liability	718,955	176,714	895,669
Deferred inflows of resources	361,245	(145,335)	215,910
Net position-unrestricted (deficit)	(75,609)	(30,521)	(106,130)
Statement of revenues, expenses, and changes in net position impact			
Operating expenses			
Instruction	901,235	11,180	912,415
Research	487,725	3,162	490,887
Public service	83,566	2,685	86,251
Academic support	184,462	2,040	186,502
Student services	158,991	1,760	160,751
Institutional support	269,126	5,200	274,326
Operation and maintenance of capital assets	246,725	1,856	248,581
Scholarships and fellowships	49,509	2	49,511
Auxiliary enterprises	338,207	2,139	340,346
Independent operations	47,785	497	48,282
Total operating expenses	\$ 3,270,790	\$ 30,521	\$ 3,301,311

Reclassifications

Certain reclassifications were made in the prior year to conform to current year presentation.

2. Cash Held by State Treasurer

Accounts payable, accrued salaries and outlays for future capital projects to be funded from state-appropriated funds totaled \$38.7 million and \$21.0 million at June 30, 2020 and June 30, 2019, respectively. The University has recorded a comparable amount of cash held by the State Treasurer for the benefit of the University, which will be subsequently utilized to pay for such liabilities. The cash is held in the State Treasurer's pooled cash account. The Commonwealth requires all bank deposits in excess of insurance coverage by the FDIC to be collateralized with a perfected pledge of eligible collateral. Eligible collateral must be pledged in an amount equal to 102% of the amount of the deposits that exceed FDIC insurance. Sufficient collateral to cover total Commonwealth deposits in excess of the FDIC insured amount must be pledged and held in safekeeping by a custodian that is approved by and under the control of the Commonwealth Treasurer and Receiver - General.

3. Deposits with Bond Trustees

Deposits with bond trustees primarily consist of unspent bond proceeds, amounts held for the future payment of debt service on such borrowings and designated funds from the University's pool loan program.

At June 30, 2020 and 2019, deposits with bond trustees consisted of the following (\$ in thousands):

	2020	2019
Cash	\$ 18,410	\$ 10,253
MMDT	330,712	191,988
Repurchase agreements and other investments	5,317	5,318
Permitted money market accounts	4,491	4,367
Total deposits with bond trustees	\$ 358,930	\$ 211,926

At June 30, 2020, amounts restricted by bond trust agreements for capital projects, debt service and other purposes were \$324 million, \$22 million, and \$12.9 million, respectively.

Custodial Credit Risk – The custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. As of June 30, 2020 and 2019, the bank balances of uninsured deposits totaled \$5.5 million and \$3.6 million, respectively.

Interest Rate Risk – Interest rate risk is the extent that changes in interest rates of debt investments will adversely affect the fair value of an investment. These investments include certain short-term cash equivalents, various long-term items and restricted assets by maturity in years. The University minimizes the risk of the fair value of securities falling due to changes in interest rates by ensuring securities have effective maturities of less than a year. MMDT and permitted money market accounts have effective maturities of less than one year, thereby limiting the interest rate risk.

Credit Risk – Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. The risk is measured by the assignment of a rating by a nationally recognized statistical rating organization. MMDT and permitted money market accounts are not rated.

4. Investments

The investment portfolio of the University reflected on the Statements of Net Position for the years ended June 30, 2020 and 2019, respectively, includes the following (\$ in thousands):

	2020	2019
Short-term investments	\$ 620,771	\$ 489,907
Long-term investments	748,689	869,663
Total	\$ 1,369,460	\$ 1,359,570

Investment policies are established by the Board. The goals of these policies are to preserve capital, provide liquidity, and generate investment income. The University has statutory authority under Massachusetts General Laws, Chapter 75 to collect, manage, and disburse trust funds of the University. UMF holds certain investments on behalf of the University. In the table on page 30, these investments are identified as Foundation Agency Funds.

The endowment and similar investment holdings of the University, Foundation Agency Funds, and the Foundations, as of June 30, 2020 and 2019, respectively are summarized below (\$ in thousands):

	University		Foundations	
	2020	2019	2020	2019
Cash and cash equivalents	\$ 40,009	\$ 111,408	\$ 36,318	\$ 31,914
Money market and other investments	128,225	260,000	4,082	4,411
MMDT	117,000	95,000	-	-
Fixed income investments	144,045	139,398	1,558	3,784
Pooled investments - Fund I	-	-	576,092	556,031
Commercial ventures and intellectual property	4,532	1,857	40	-
Annuity life income funds	11,972	13,160	2,989	3,472
	\$ 445,783	\$ 620,823	\$ 621,079	\$ 599,612
Foundation agency funds:				
Pooled investments - Fund I	608,763	415,445	608,763	415,445
Pooled investments - Fund II	314,914	323,302	314,914	323,302
	\$ 1,369,460	\$ 1,359,570	\$ 1,544,756	\$ 1,338,359

Fund I – This fund is the pool of funds that represent the endowment funds held at UMF. These funds include both donor-restricted endowments and quasi-endowments. The portion of the Pooled investments — Fund I under the Foundations column in the above table represents the University's true endowment. The portion of the Pooled investments — Fund I that are noted as Foundation agency funds represent the quasi-endowments. The investment horizon for this portfolio is 5 to 10 years. During fiscal year 2020 the University transferred additional operating cash balances to UMF for longer term investment.

Fund II – This fund represents a portion of the operating cash balances of the University that have been transferred to UMF for investment purposes only. This portfolio is used by the University as an intermediate term investment vehicle. The University Treasurer has the authority to request the return of funds at any time in order to meet the operating needs of the University. In anticipation of future cash needs, particularly in light of COVID-19 uncertainties, the majority of assets of Fund II were converted to cash equivalents in the 4th quarter of fiscal year 2020. These cash equivalent investments are included within short-term investments on the Statement of Net Position at June 30, 2020.

Custodial Credit Risk – Investment securities are exposed to custodial credit risk if they are uninsured or not registered in the name of the University and are held by either the counterparty or the counterparty's trust department or agent but not in the University's name.

The carrying amounts of cash balances with uninsured or uncollateralized deposits were \$86.5 million and \$107.1 million, at June 30, 2020 and 2019, respectively.

The University held non-money market investments with a fair market value of \$729.9 million and \$869.1 million at June 30, 2020 and 2019, respectively. In the event of negligence due to the University's custodian and/or investment manager(s), it is expected that the investment balances would be fully recovered. However, these amounts are subject to both interest rate risk and credit risk.

Concentration of Credit Risk – As of June 30, 2020 and 2019, there is no concentration of investments from one issuer equal to or greater than 5% of the portfolio. Investments issued or guaranteed by the U.S. government, as well as investments in mutual funds and other pooled investments are excluded from consideration when evaluating concentration risk.

Credit Risk – The University's Investment Policy and Guidelines Statement allows each portfolio manager full discretion within the parameters of the investment guidelines specific to that manager. Nationally recognized statistical rating organizations, such as Standards & Poor's (S&P) assign credit ratings to security issues and issuers that indicate a measure of potential credit risk to investors.

The table below presents the rated debt investments, excluding U.S. Treasury funds, at fair value by credit quality of the University's investment portfolio as of June 30, 2020 (\$ in thousands):

	S&P quality ratings							Unrated	Total
	AAA	AA	A	BBB	BB	B	<B		
Debt securities									
Government agency bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 773	\$ 773
Asset backed securities	15,860	-	459	1,689	-	-	-	1,605	19,613
Commercial mortgage-backed securities	11,596	-	-	530	-	-	-	2,078	14,204
Government issued commercial mortgage-backed securities	-	-	-	-	-	-	-	624	624
Government mortgage-backed securities	-	-	-	-	-	-	-	5,902	5,902
Non-government backed collateralized mortgage obligations	1,576	-	-	-	-	-	-	350	1,926
Corporate bonds	-	3,468	29,112	47,113	1,115	511	-	42	81,361
Municipal and provincial bonds	-	1,190	236	347	-	-	-	-	1,773
Index linked government bonds	-	-	-	-	-	-	-	1,523	1,523
Bond funds, including exchange traded funds	270	270	1,063	1,387	380	-	-	-	3,370
Total debt securities	\$29,302	\$ 4,928	\$30,870	\$51,066	\$1,495	\$ 511	\$ -	\$12,897	\$131,069

The table below presents the rated debt investments, excluding U.S. Treasury funds, at fair value by credit quality of the University's investment portfolio as of June 30, 2019 (\$ in thousands):

	S&P quality ratings							Unrated	Total
	AAA	AA	A	BBB	BB	B	<B		
Debt securities									
Government agency bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 582	\$ 582
Asset backed securities	16,374	-	176	569	-	-	-	2,263	19,382
Commercial mortgage-backed securities	8,015	-	-	-	-	-	-	1,103	9,118
Government issued commercial mortgage-backed securities	-	-	-	-	-	-	-	11	11
Government mortgage-backed securities	-	-	-	-	-	-	-	4,539	4,539
Non-government backed CMOs	1,217	-	-	-	-	-	-	114	1,331
Corporate bonds	-	4,390	24,672	33,019	231	-	-	42	62,354
Municipal and provincial bonds	-	1,835	-	402	-	-	-	-	2,237
Bond funds, including exchange traded funds	56,472	16,512	17,318	26,615	7,815	2,351	210	8,781	136,074
Total debt securities	\$82,078	\$22,737	\$42,166	\$60,605	\$8,046	\$2,351	\$210	\$17,435	\$235,628

Interest Rate Risk – The University's Investment Policy and Guidelines Statement establishes targets for the preferred duration of the fixed income component of the investment portfolio by limiting investments through targeted allocations to different asset classes.

The following table presents the fair value of the rated debt investments component of the University's investment portfolio by investment maturity as of June 30, 2020 (\$ in thousands):

Debt securities	Investment maturity (in years)				Total
	Less than 1	1 to 5	6 to 10	More than 10	
U.S. Treasury securities	\$ -	\$ 40,211	\$ 4,842	\$ -	\$ 45,053
Government agency bonds	-	248	525	-	773
Asset backed securities	5,427	12,202	1,984	-	19,613
Commercial mortgage-backed securities	3,758	10,336	110	-	14,204
Government issued commercial mortgage-backed securities	-	-	624	-	624
Government mortgage-backed securities	2,223	3,679	-	-	5,902
Non-government backed CMOs	350	1,576	-	-	1,926
Corporate bonds	13,120	62,946	4,875	420	81,361
Municipal and provincial bonds	1,730	43	-	-	1,773
Index linked government bonds	-	1,209	314	-	1,523
Bond funds, including exchange traded funds	59	1,861	1,421	29	3,370
Total debt securities	\$ 26,667	\$ 134,311	\$ 14,695	\$ 449	\$ 176,122

The following table presents the fair value of the rated debt investments component of the University's investment portfolio by investment maturity as of June 30, 2019 (\$ in thousands):

Debt securities	Investment maturity (in years)				Total
	Less than 1	1 to 5	6 to 10	More than 10	
U.S. Treasury securities	\$ -	\$ 71,340	\$ 5,675	\$ -	\$ 77,015
Government agency bonds	-	78	504	-	582
Asset backed securities	7,879	10,041	1,462	-	19,382
Commercial mortgage-backed securities	1,426	7,250	-	442	9,118
Government issued commercial mortgage-backed securities	11	-	-	-	11
Government mortgage-backed securities	2,211	2,082	246	-	4,539
Non-government backed CMOs	627	704	-	-	1,331
Corporate bonds	8,778	49,604	3,460	512	62,354
Municipal and provincial bonds	2,091	146	-	-	2,237
Bond funds, including exchange traded funds	25,471	80,406	25,615	4,582	136,074
Total debt securities	\$ 48,494	\$ 221,651	\$ 36,962	\$ 5,536	\$ 312,643

Fair Value Measurement – Fair value represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The University categorizes these assets and liabilities measured at fair value using a three-tiered hierarchy based on the valuation methodologies employed. The hierarchy is defined as follows:

Level 1 – Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that are available at the measurement date.

Level 2 – Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 – Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

Unobservable inputs reflect the University's own assumptions about the inputs market participants would use in pricing the asset or liability (including assumption about risk). Unobservable inputs are developed based on the best information available in the circumstances and may include the University's own data.

When available, quoted prices are used to determine fair value. When quoted prices in active markets are available, investments are classified within Level 1 of the fair value hierarchy. The University's Level 1 investments primarily consist of investments in U.S. Treasury obligations, equity securities, and mutual funds. When quoted prices in active markets are not available, fair values are based on evaluated prices received from the University's investment custodian in conjunction with a third-party service provider and are reported within Level 2 of the fair value hierarchy. The inputs for Level 2 include, but are not limited to, pricing models such as benchmarking yields, reported trades, broker-dealer quotes, issuer spreads and benchmarking securities, among others. The University's Level 2 investments primarily consist of investments in U.S. government and agency obligations, asset-backed securities, and corporate debt securities that did not trade on the University's fiscal year end date.

As a practical expedient to estimate the fair value of the University's interests, certain investments in commingled funds and limited partnerships are reported at the net asset value (NAV) determined by the fund managers. Because these investments are not readily marketable, their estimated fair values may differ from the values that would have been assigned had a ready market for such investments existed, and such differences could be material. As of June 30, 2020 and 2019, the University had no plans or intentions to sell such investments at amounts different from NAV.

The following table summarizes the fair value of the University's investments by type as of June 30, 2020 (\$ in thousands):

	Investments measured at NAV	Investments classified in the fair value hierarchy			
		Level 1	Level 2	Level 3	Total
Money market funds	\$ -	\$ 452,044	\$ -	\$ -	\$ 452,044
Debt securities					
U.S. Treasury securities	-	45,053	-	-	45,053
Government agency bonds	-	-	773	-	773
Asset backed securities	-	-	19,613	-	19,613
Commercial mortgage-backed securities	-	-	14,204	-	14,204
Government issued commercial mortgage-backed securities	-	-	624	-	624
Government mortgage-backed securities	-	-	5,902	-	5,902
Non-government backed CMOs	-	-	1,602	324	1,926
Corporate bonds	-	-	81,115	42	81,157
Non US Corporate Bonds	-	-	204	-	204
Municipal and provincial bonds	-	-	1,773	-	1,773
Index linked government Bonds	-	-	1,523	-	1,523
Bond funds, including exchange traded funds	-	3,370	-	-	3,370
Total debt securities	-	48,423	127,333	366	176,122
Equity securities					
Domestic equities	-	68,117	-	1,585	69,702
International equities	-	30,648	-	-	30,648
Total equity securities	-	98,765	-	1,585	100,350
Alternative investments					
Multi-strategy hedge funds					
Equity	181,521	-	-	-	181,521
Long/short	136,270	-	-	-	136,270
Fixed income	32,332	-	-	-	32,332
Absolute return	36,026	-	-	-	36,026
Real assets	12,881	-	-	-	12,881
Private equity and venture capital	32,420	-	-	-	32,420
Private debt	11,148	-	-	-	11,148
Private real estate	8,847	-	-	-	8,847
Total alternative investments	451,445	-	-	-	451,445
Total investments at fair value	451,445	599,232	127,333	1,951	1,179,961
Cash and cash equivalents	-	-	-	-	72,499
MMDT	-	-	-	-	117,000
Total investments at cost	-	-	-	-	189,499
Total investments	\$ 451,445	\$ 599,232	\$ 127,333	\$ 1,951	\$ 1,369,460

The following table presents unfunded commitments, redemption terms, restrictions, and notice period for investments that have been valued using NAV as a practical expedient as of June 30, 2020 (\$ in thousands):

	NAV	Unfunded commitments	Redemption terms	Notice period	Redemption restrictions
Alternative investments					
Multi-strategy hedge funds					
Equity	\$ 181,521	\$ -	Daily to quarterly	01-90 days	Lock-up provisions range from none to 2 years.
Long/short	136,270	-	Quarterly to annual	45-90 days	Lock-up provisions range from none to 3 years.
Fixed income	32,332	-	Quarterly	(2)	Lock-up provisions range from none to 1 year.
Absolute return	36,026	-	Quarterly to annual	45-65 days	No lock-up restrictions
Real assets	12,881	-	Annual	90 days	No lock-up restrictions
Private equity and venture capital	32,420	12,933	Closed end funds	(1)	Not redeemable
Private debt	11,148	13,597	Closed end funds	(1)	Not redeemable
Private real estate	8,847	1,513	Closed end funds	(1)	Not redeemable
Total	\$ 451,445	\$ 28,043			

(1) The University has made commitments to various private equity and venture debt partnerships. The University expects these funds to be called over the next 1-5 years. Liquidity is expected to be received in the next 1-9 years.

(2) Includes fund(s) that restrict redemptions such that redemptions are at the sole discretion of the Fund. Redemption terms require 60 to 90 days notice.



Photos taken prior to COVID-19 social distancing practices

The following table summarizes the fair value of the University's investments by type as of June 30, 2019 (\$ in thousands):

	Investments measured at NAV	Investments classified in the fair value hierarchy			
		Level 1	Level 2	Level 3	Total
Money market funds	\$ -	\$ 284,110	\$ -	\$ -	\$ 284,110
Debt securities					
U.S. Treasury securities	-	77,015	-	-	77,015
Government agency bonds	-	-	582	-	582
Asset backed securities	-	-	19,382	-	19,382
Commercial mortgage-backed securities	-	-	9,118	-	9,118
Government issued commercial mortgage-backed securities	-	-	11	-	11
Government mortgage-backed securities	-	-	4,539	-	4,539
Non-government backed CMOs	-	-	1,331	-	1,331
Corporate bonds	-	-	62,312	42	62,354
Municipal and provincial bonds	-	-	2,237	-	2,237
Bond Funds, including exchange traded funds	-	136,074	-	-	136,074
Total debt securities	-	213,089	99,512	42	312,643
Equity securities					
Domestic equities	-	94,472	-	1,585	96,057
International equities	-	77,612	-	-	77,612
Total equity securities	-	172,084	-	1,585	173,669
Alternative investments					
Multi-strategy hedge funds					
Equity	121,787	-	-	-	121,787
Long/short	87,890	-	-	-	87,890
Fixed income	60,235	-	-	-	60,235
Absolute return	35,238	-	-	-	35,238
Real assets	12,466	-	-	-	12,466
Private equity and venture capital	18,253	-	-	-	18,253
Private debt	18,834	-	-	-	18,834
Private real estate	7,422	-	-	-	7,422
Total alternative investments	362,125	-	-	-	362,125
Other securities	-	20,615	-	-	20,615
Total investments at fair value	362,125	689,898	99,512	1,627	1,153,162
Cash and cash equivalents	-	-	-	-	63,408
Certificates of deposit	-	-	-	-	48,000
MMDT	-	-	-	-	95,000
Total investments at cost	-	-	-	-	206,408
Total investments	\$ 362,125	\$ 689,898	\$ 99,512	\$ 1,627	\$ 1,559,570

The following table presents unfunded commitments, redemption terms, restrictions, and notice period for investments that have been valued using NAV as a practical expedient as of June 30, 2019 (\$ in thousands):

Alternative investments	NAV	Unfunded commitments	Redemption terms	Notice period	Redemption restrictions
Multi-strategy hedge funds					
Equity	\$ 121,787	\$ -	Daily to quarterly	01-60 days	No lock-up restrictions
Long/short	87,890	-	Quarterly to annual	45-80 days	Lock-up provisions range from none to 1 year
Fixed income	60,235	-	Quarterly	(2)	Lock-up provisions range from none to 2 years
Absolute return	35,238	-	Daily to annual	45-65 days	No lock-up restrictions
Real assets	12,466	-	Annual	90 days	No lock-up restrictions
Private equity and venture capital	18,253	14,626	Closed end funds	(1)	Not redeemable
Private debt	18,834	16,942	Closed end funds	(1)	Not redeemable
Private real estate	7,422	2,889	Closed end funds	(1)	Not redeemable
Total	\$362,125	\$ 34,457			

(1) The University has made commitments to various private equity and venture debt partnerships. The University expects these funds to be called over the next 1-5 years. Liquidity is expected to be received in the next 1-9 years.

(2) Includes fund(s) that restrict redemptions such that redemptions are at the sole discretion of the Fund. Redemption terms require 60 to 90 days notice.

5. Accounts Receivable, Net

Accounts receivable as of June 30, 2020 and 2019 are as follows (\$ in thousands):

	2020	2019
Student tuition and fees	\$ 64,299	\$ 56,676
Student loans	43,001	54,403
Pledges	38,694	24,655
Grants and contracts	93,772	102,761
CWM program	62,399	60,322
UMass Memorial	68,070	22,131
Other	43,150	44,457
	413,385	365,405
Less: allowance for doubtful accounts and discount to present value for pledges	(36,117)	(24,254)
Accounts receivable, net	\$ 377,268	\$ 341,151

The receivable from UMass Memorial, which is uncollateralized, represents a potential concentration of credit risk for the University. This receivable represents 17.8% and 6.5% of total accounts receivable for the University at June 30, 2020 and 2019, respectively.

6. UMass Memorial Medical Center

The University has granted UMass Memorial the right to occupy portions of the University's Medical School campus facilities for a period of 99 years, expiring on June 30, 2097. As part of the ongoing agreement entered into on June 24, 1998, UMass Memorial has agreed to share responsibility for various capital and operating expenses relating to the occupied premises. UMass Memorial also contributes to capital improvements to shared facilities.

In addition, UMass Memorial has agreed to make certain payments to the University, including an annual fee of \$12.0 million, adjusted for inflation as necessary, for 99 years as long as the University continues to operate a medical school, and a participation payment based on a percentage of the net operating income of UMass Memorial. The University recognizes revenue when the participation payments are received.

The University is reimbursed by, and reimburses UMass Memorial for shared services, cross-funded employees, and other agreed upon activities provided and purchased. For the years ended June 30, 2020 and 2019, the cash reimbursements received for services provided to UMass Memorial were \$119.0 million and \$177.1 million, respectively. Included in these amounts are payroll paid by the University on behalf of UMass Memorial in an agency capacity in the amount of \$65.1 million and \$109.3 million for the years ended June 30, 2020 and 2019, respectively. As of June 30, 2020 and 2019, the University has recorded a receivable in the amount of \$68.1 million and \$22.1 million, respectively from UMass Memorial which includes \$38.6 million and \$11.7 million, respectively, in payroll and related fringe charges. The University has recorded a payable of \$4.8 million and \$9.5 million at June 30, 2020 and 2019, respectively, primarily for cross-funded payroll.

7. Capital Assets

The following table represents the University's capital assets activity for the years ended June 30, 2020 and 2019 (\$ in thousands):

	As of June 30, 2018	Additions	Retirements/ adjustments	As of June 30, 2019	Additions	Retirements/ adjustments	As of June 30, 2020
Land	\$ 165,368	\$ 1,336	\$ (680)	\$ 166,024	\$ -	\$ -	\$ 166,024
Buildings and improvements	6,498,865	642,801	(35,340)	7,106,326	257,356	(6,578)	7,357,104
Software	113,184	6,747	(5,639)	114,292	5,709	-	120,001
Equipment and furniture	699,893	41,929	(24,779)	717,043	37,102	(41,632)	712,513
Library books	53,574	-	(6,609)	46,965	-	(7,347)	39,618
	7,530,884	692,813	(73,047)	8,150,650	300,167	(55,557)	8,395,260
Accumulated depreciation	(3,076,896)	(276,638)	48,797	(3,304,737)	(288,667)	45,643	(3,547,761)
	4,453,988	416,175	(24,250)	4,845,913	11,500	(9,914)	4,847,499
Construction in progress	621,488	328,232	(631,433)	318,287	213,480	(172,697)	359,070
Total capital assets, net	\$5,075,476	\$ 744,407	\$ (655,683)	\$5,164,200	\$ 224,980	\$ (182,611)	\$5,206,569

The University has capitalized interest on borrowings, net of interest earned on related debt reserve funds, during the construction period of major capital projects. Capitalized interest is added to the cost of the underlying assets being constructed, and is amortized over the useful lives of the assets. For the years ended June 30, 2020 and 2019, the University capitalized net interest costs of \$5.9 million and \$8.7 million, respectively.

8. Public Private Partnerships and Leases

Public Private Partnerships (PPPs)

On November 8, 2016, the Building Authority entered into an agreement whereby sub-leased land on the University of Massachusetts Boston campus to Provident Commonwealth Educational Resources, Inc. (PCER), a Massachusetts not-for-profit corporation, for a term of 40 years. The land is ground-leased to the Building Authority by the Commonwealth. PCER engaged a contractor to construct a 1,082-bed student housing facility on the site (the "Boston Project"). The Boston Project reverts to the Building Authority when the lease terminates. Commencing January 1, 2019, the annual rental amount payable to the Building Authority under the ground lease is \$1.0 million.

The Boston Project was financed with \$130.1 million of revenue bonds issued on October 26, 2016 (Series 2016 Bonds) by the Massachusetts Development Finance Agency ("MassDevelopment") pursuant to a Loan and Trust Agreement between MassDevelopment and PCER. Neither the Building Authority, the University nor UMass Boston have pledged revenues to secure the payment of the Series 2016 bonds or have any obligation with respect to payment of the Series 2016 bonds.

Pursuant to a Dining Facility Sublease dated November 8, 2016 between PCER, as sub-lessor and the Building Authority, as sub-lessee, PCER leased the dining facility, located within the Boston Project, to the Building Authority and the Building Authority shall operate or cause to be operated the dining facility. The University funded the construction costs of the dining facility through debt issued by the Building Authority. This lease only relates to the operations and maintenance of the dining facility. The annual rent payable to PCER by the Building Authority is \$1.00.

On November 14, 2018, the Building Authority entered into an agreement whereby the Building Authority sub-leased land on the University of Massachusetts Dartmouth campus to Provident Commonwealth Educational Resources II, Inc. (PCER II), a Massachusetts not-for-profit corporation, for a term of 45 years. The land is ground-leased to the Building Authority by the Commonwealth. PCER II engaged a contractor to construct a 1,210-bed student housing facility on the site (the "Dartmouth Project"). The Dartmouth Project reverts to the Building Authority when the lease terminates. Commencing approximately one year following the completion of the project, the annual rental amount received by the Building Authority under the ground lease will be \$625.0 thousand, increasing by 3% every five years. The first ground lease payment is anticipated to be received in fiscal 2021.

The Dartmouth Project was financed with \$132.2 million of revenue bonds issued on November 14, 2018 (Series 2018 Bonds) by MassDevelopment pursuant to a Loan and Trust Agreement between MassDevelopment and PCER II. Neither the Building Authority, the University nor UMass Dartmouth have pledged revenues to secure the payment of the Series 2018 bonds or have any obligation with respect to payment of the Series 2018 bonds.



Photos taken prior to COVID-19 social distancing practices

Pursuant to a Dining Facility Sublease dated November 13, 2018 between PCER II, as sub-lessor and the Building Authority, as sub-lessee, PCER II leased the dining facility, located within the Dartmouth Project, to the Building Authority and the Building Authority shall operate or cause to be operated the dining facility. The University funded the construction costs of the dining facility through debt issued by the Building Authority. This lease only relates to the operations and maintenance of the

dining facility. The annual rent payable to PCER II by the Building Authority is \$1.00.

Management evaluated the applicability of relevant GASB guidance (including GASB 14, *The Financial Reporting Entity*, GASB 39, *Determining Whether Certain Organizations Are Component Units*, GASB 60, *Accounting for Financial Reporting for Service Concession Arrangements*, and GASB 61, *The Financial Reporting Entity: Omnibus*) against the underlying Boston and Dartmouth Project agreements and indentures and has concluded that the associated debt should not be recognized on the financial statements of the Building Authority or the University.

Capital leases

On October 27, 2009, the Building Authority entered into an agreement to lease its facility located on Morrissey Boulevard in Dorchester, Massachusetts to the Edward M. Kennedy Institute for the United States Senate ("EMKI"), a charitable corporation registered in the District of Columbia. The lease agreement provides for an initial term of ninety-nine years commencing in October 2009, and thereafter, at the option of EMKI, may be extended for two additional, 99-year periods.

The project was financed with \$74.4 million of revenue bonds.

Rent is equal to the debt service on the outstanding bonds and payable semi-annually through fiscal year 2043.

On October 27, 2009, the Building Authority also entered into an agreement whereby the Building Authority sub-leased land, ground-leased to the Building Authority by the Commonwealth, to EMKI. The sublease agreement provides for an initial term of ninety-nine years commencing in October 2009, and thereafter, at the option of EMKI, may be extended for two additional, 99-year periods. At the time of signing, the Building Authority received payment of \$10.0 thousand in full payment of rent due for the initial term of the sublease.

Other leases

The Building Authority has executed long-term leases with the Commonwealth, acting by and through the Trustees of the Building Authority, covering the land on which facilities owned by the Building Authority are located on the University's campuses. These leases call for nominal annual payments to the Commonwealth. Certain of these leases renew automatically for subsequent five- or ten-year periods unless the Building Authority notifies the University that it does not wish to renew. Other leases require the Building Authority to notify the University of its desire to renew. As of June 30, 2020 and 2019, all leases with the Commonwealth were in good standing and any leases requiring action by the Building Authority during the year to facilitate their renewals were properly renewed.

As provided in the Enabling Act, each of the above-referenced leases also terminates when the Building Authority no longer has any bonds outstanding, at which time all Building Authority property becomes the property of the Commonwealth.

On April 1, 2014, the Building Authority entered into a lease, as lessee, with Massachusetts Mutual Life Insurance Company, as lessor, for space at Tower Square, 1500 Main Street, Springfield, Massachusetts. The initial lease began August 1, 2014 and ends July 31, 2019. In fiscal 2019, the Building Authority exercised its option to extend the lease for a period of five years. The lease now ends on July 31, 2024. Annual rent payments range from \$297.0 thousand to \$320.0 thousand. The Building Authority subleases the space to the University to be used as classroom space for its Springfield Satellite campus.

On July 17, 2014, the Building Authority entered into a lease, as lessee, with One Beacon Street Limited Partnership, as lessor, for space at One Beacon Street, Boston, Massachusetts. The lease ends December 31, 2030. Annual rent payments range from \$2.1 million to \$2.6 million. The Building Authority subleases office and classroom space at One Beacon Street to the University.

The University leases certain equipment and facilities under operating leases with terms exceeding one year, which are cancelable at the University's option with 30-day notice. The rent expense related to these operating leases amounted to \$34.9 million and \$34.6 million for the years ended June 30, 2020 and 2019, respectively. The leases primarily relate to

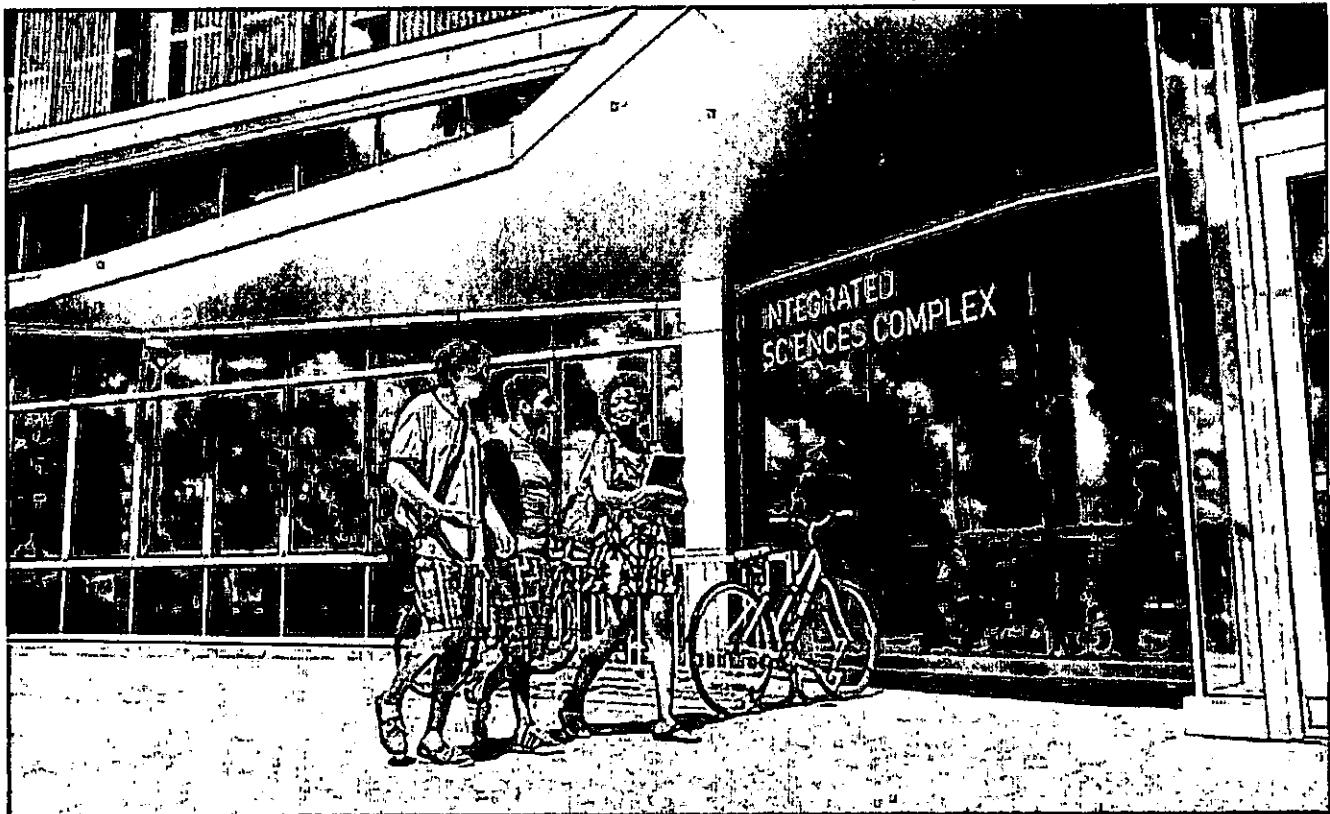


Photos taken prior to COVID-19 social distancing practices

telecommunications, software, and co-generation systems. The University also leases space to third party tenants. During the years ended June 30, 2020 and 2019, the amount reported as rental income was \$24.7 million and \$25.2 million, respectively.

The following presents a schedule of future minimum payments under non-cancelable leases for the next five years and in subsequent five-year periods for the University as of June 30, 2020 (\$ in thousands):

Fiscal year end	Lessor (minimum lease payments to receive)				Lessee (minimum lease payments to pay)
	Direct financing lease	Operating leases		Total	
		PPPs	Other		
2021	\$ 5,066	\$ 1,338	\$ 12,971	\$ 19,375	\$ 23,902
2022	5,072	1,650	11,961	18,683	20,613
2023	5,073	1,650	9,798	16,521	19,469
2024	2,665	1,650	8,520	12,835	17,513
2025	5,002	1,650	8,104	14,756	16,944
2026-2030	25,387	8,334	30,134	63,855	87,268
2031-2035	25,921	8,431	27,443	61,795	40,011
2036-2040	23,695	8,530	452	32,677	82
2041-2045	8,879	8,632	-	17,511	-
2046-2050	-	8,737	-	8,737	-
2051-2055	-	8,846	-	8,846	-
2056-2060	-	5,199	-	5,199	-
2061-2065	-	2,628	-	2,628	-
Total payments	\$ 106,760	\$ 67,275	\$ 109,383	\$ 283,418	\$ 225,802
Less amounts representing interest:		(30,671)			
Net investment in direct financing lease		76,089			



Photos taken prior to COVID-19 social distancing practices

9. Long-Term Debt

The following table represents the outstanding long-term debt as of June 30, 2020, and the related activity during the fiscal year (\$ in thousands):

	Original borrowing	Maturity date	Interest rate	As of June 30, 2019	Additions	Reductions	As of June 30, 2020
Building authority							
Series 2008-A	\$ 26,580	2038	variable	\$ 17,120	\$ -	\$ (1,070)	\$ 16,050
Series 2008-1	232,545	2038	variable	154,480	-	(8,965)	145,515
Series 2009-2	271,855	2039	6.4-6.6%	16,945	-	-	16,945
Series 2009-3	28,570	2039	5.8-6.2%	24,480	-	(655)	23,825
Series 2010-1	118,985	2020	5.0%	31,055	-	(15,155)	15,900
Series 2010-2	430,320	2040	3.8-5.5%	430,320	-	-	430,320
Series 2010-3	3,005	2040	5.8%	2,615	-	(60)	2,555
Series 2011-1	135,040	2034	variable	123,540	-	(1,530)	122,010
Series 2011-2	101,700	2034	variable	93,955	-	(1,155)	92,800
Series 2013-1	212,585	2043	2.0-5.0%	188,675	-	(93,505)	95,170
Series 2013-2	71,970	2043	0.4-4.3%	60,530	-	(2,330)	58,200
Series 2013-3	24,640	2043	4.0-5.0%	24,240	-	(22,860)	1,380
Series 2014-1	293,890	2044	3.0-5.0%	291,890	-	(144,215)	147,675
Series 2014-2	14,085	2019	0.4-2.1%	2,905	-	(2,905)	-
Series 2014-3	67,635	2029	2.0-5.0%	54,555	-	(3,875)	50,680
Series 2014-4	157,855	2025	0.2-3.4%	61,600	-	(31,060)	30,540
Series 2015-1	298,795	2045	4.0-5.0%	298,795	-	-	298,795
Series 2015-2	191,825	2036	3.0-5.0%	186,075	-	(6,270)	179,805
Series 2017-1	165,130	2047	4.0-5.3%	165,130	-	-	165,130
Series 2017-2	19,510	2027	1.6-3.4%	18,065	-	(1,470)	16,595
Series 2017-3	187,680	2038	3.0-5.0%	178,945	-	(18,930)	160,015
Series 2018-1	37,650	2043	2.0-2.9%	37,650	-	-	37,650
Series 2019-1	208,725	2039	5.0%	208,725	-	-	208,725
Series 2020-1	200,840	2050	5.0%	-	200,840	-	200,840
Series 2020-2	129,830	2050	1.8-3.5%	-	129,830	-	129,830
Series 2020-3	319,345	2044	1.7-3.5%	-	319,345	-	319,345
Unamortized bond premium				184,172	57,147	(36,280)	205,039
				2,856,462	707,162	(392,290)	3,171,334
MHEFA/MDFA							
Series A	20,000	2030	variable	20,000	-	-	20,000
Series 2011	29,970	2034	2.5-4.0%	23,795	-	(23,795)	-
Unamortized bond premium				792	-	(792)	-
				44,587	-	(24,587)	20,000
WCCC MHEFA/MDFA							
Series 2005-D	99,325	2029	5.0-5.3%	495	-	(20)	475
Series 2011	10,495	2023	2.0-5.0%	4,995	-	(4,995)	-
Unamortized bond premium				428	-	(403)	25
				5,918	-	(5,418)	500
MDFA							
Clean renewable energy bonds	1,625	2027	3.50%	765	-	(96)	669
Total bonds payable				2,907,732	707,162	(422,391)	3,192,503
Notes and commercial paper				132,810	11,950	(143,274)	1,486
Capital lease obligations				1,836	1,095	(742)	2,189
Total long-term debt				\$3,042,378	\$ 720,207	\$ (566,407)	\$3,196,178

The following table represents the outstanding long-term debt as of June 30, 2019, and the related activity during the fiscal year (\$ in thousands):

	Original borrowing	Maturity date	Interest rate	As of June 30, 2018	Additions	Reductions	As of June 30, 2019
Building authority							
Series 2008-A	\$ 26,580	2038	variable	\$ 18,150	\$ -	\$ (1,030)	\$ 17,120
Series 2008-1	232,545	2038	variable	163,115	-	(8,635)	154,480
Series 2009-1	247,810	2039	3.0-5.0%	15,285	-	(15,285)	-
Series 2009-2	271,855	2039	6.4-6.6%	271,855	-	(254,910)	16,945
Series 2009-3	28,570	2039	5.8-6.2%	25,100	-	(620)	24,480
Series 2010-1	118,985	2020	5.0%	45,485	-	(14,430)	31,055
Series 2010-2	430,320	2040	3.8-5.5%	430,320	-	-	430,320
Series 2010-3	3,005	2040	5.8%	2,675	-	(60)	2,615
Series 2011-1	135,040	2034	variable	124,990	-	(1,450)	123,540
Series 2011-2	101,700	2034	variable	95,055	-	(1,100)	93,955
Series 2013-1	212,585	2043	2.0-5.0%	193,745	-	(5,070)	188,675
Series 2013-2	71,970	2043	0.4-4.3%	62,825	-	(2,295)	60,530
Series 2013-3	24,640	2043	4.0-5.0%	24,640	-	(400)	24,240
Series 2014-1	293,890	2044	3.0-5.0%	292,490	-	(600)	291,890
Series 2014-2	14,085	2019	0.4-2.1%	5,750	-	(2,845)	2,905
Series 2014-3	67,635	2029	2.0-5.0%	58,160	-	(3,605)	54,555
Series 2014-4	157,855	2025	0.2-3.4%	92,095	-	(30,495)	61,600
Series 2015-1	298,795	2045	4.0-5.0%	298,795	-	-	298,795
Series 2015-2	191,825	2036	3.0-5.0%	189,000	-	(2,925)	186,075
Series 2017-1	165,130	2047	4.0-5.3%	165,130	-	-	165,130
Series 2017-2	19,510	2027	1.6-3.4%	19,510	-	(1,445)	18,065
Series 2017-3	187,680	2038	3.0-5.0%	184,760	-	(5,815)	178,945
Series 2018-1	75,000	2043	2.0-2.9%	37,650	-	-	37,650
Series 2019-1	208,725	2039	5.0%	-	208,725	-	208,725
Unamortized bond premium				150,699	47,633	(14,160)	184,172
				2,967,279	256,358	(367,175)	2,856,462
MHEFA/MDFA							
Series A	20,000	2030	variable	20,000	-	-	20,000
Series 2011	29,970	2034	2.5-4.0%	24,880	-	(1,085)	23,795
Unamortized bond premium				817	-	(25)	792
				45,697	-	(1,110)	44,587
WCCC MHEFA/MDFA							
Series 2005-D	99,325	2029	5.0-5.3%	615	-	(120)	495
Series 2011	10,495	2023	2.0-5.0%	5,860	-	(865)	4,995
Unamortized bond premium				526	-	(98)	428
				7,001	-	(1,083)	5,918
MDFA							
Clean renewable energy bonds	1,625	2027	3.50%	860	-	(95)	765
Total bonds payable				3,020,837	256,358	(369,463)	2,907,732
Notes and commercial paper				65,969	,69,061	(2,220)	132,810
Capital lease obligations				2,262	255	(681)	1,836
Total long-term debt				\$3,089,068	\$ 325,674	\$ (372,364)	\$3,042,378

Pledged Revenues – The University is obligated under its contracts for financial assistance, management and services with the Building Authority to collect rates, rents, fees and other charges with respect to such facilities sufficient to pay principal and interest on the Building Authority's bonds and certain other costs such as insurance on such facilities.

The University's spendable cash and investments secures the obligations of the University with respect to the MHEFA/MDFA Series A Bonds. The University is required to certify annually that there are sufficient funds in spendable cash and investments to cover the debt service on the Series A Bonds.

Principal and Interest – Principal and interest, which is estimated using rates in effect at June 30, 2020, on long-term debt for the next five fiscal years and in subsequent five-year periods are as follows (\$ in thousands):

Fiscal year	Bonds			Direct placement bonds		Total
	Principal	Interest	Interest subsidy*	Principal	Interest	
2021	\$ 107,305	\$ 127,922	\$ (7,543)	\$ -	\$ 763	\$ 228,447
2022	102,265	123,848	(7,439)	-	763	219,437
2023	106,530	119,747	(7,224)	-	763	219,816
2024	111,235	115,585	(6,993)	1,655	754	222,236
2025	100,710	111,440	(6,729)	1,690	718	207,829
2026-2030	547,951	487,868	(29,222)	8,480	3,573	1,018,650
2031-2035	582,150	358,774	(20,318)	8,785	3,244	932,635
2036-2040	631,040	216,551	(8,891)	10,175	1,846	850,721
2041-2045	482,035	84,257	(258)	6,865	344	573,243
2046-2050	154,480	19,711	-	-	-	174,191
2051-2055	24,088	507	-	-	-	24,595
Total	\$ 2,949,789	\$ 1,766,210	\$ (94,617)	\$ 37,650	\$ 12,768	\$ 4,671,800

* These interest rate subsidies are provided by the United States Government related to the University's issuance of bonds under the Build America Bond ("BAB") program. Under the BAB program, the Government provides a direct subsidy of the interest rate paid to bondholders up to 35%. For Fiscal Year 2021 through 2041, the estimated subsidy reflected in the table above is 32.9%.

Variable Rate Bonds – The University classifies variable rate bonds subject to remarketing as current, unless supported by liquidity arrangements such as lines of credit or standby bond purchase agreements, which could refinance the debt on a long-term basis. In the event that variable rate bonds are put back to the University by the debt holder, management believes that the University's strong credit rating will ensure the bonds will be remarketed within a reasonable period of time.

The University has standby purchase agreements with Barclays Bank PLC (Barclays) for the 2008-1 and 2008-A bonds which requires Barclays to purchase bonds that are tendered and not remarketed. These agreements were extended until July 6, 2022. Fees incurred under the agreements related to the bonds totaled \$531.8 thousand and \$553.0 thousand for the years ended June 30, 2020 and 2019, respectively.

The University has standby purchase agreement with Wells Fargo Bank, N.A. (Wells) for the 2011-1 bonds which requires Wells to purchase bonds that are tendered and not remarketed. This agreement was extended until July 9, 2022. Fees incurred under the agreements related to the bonds totaled \$421.7 thousand and \$425.7 thousand for the years ended June 30, 2020 and 2019, respectively.

Window Bonds – In fiscal year 2011, the University issued its 2011-2 bonds in a variable rate window bond mode. As with the University's other variable rate bonds, the window bondholders can tender the bonds at any time. However, unlike the University's other variable rate bonds, where the bondholders will receive payment on any tendered bonds 7 days from the tender, window bondholders are not required to receive funds for the tender until after a 30-day remarketing period and an additional 180-day funding window period. Due to this 210-day funding period, the University is not required to obtain any type of liquidity support for the 2011-2 bonds. Window bondholders receive an interest rate on the window bonds at a fixed spread over the Securities Industry and Financial Markets Association Municipal Swap Index™ ("SIFMA"). The initial spread to the SIFMA index is 9 basis points.

Bond Refundings – In FY2020, the University issued \$319.3 of Senior Series 2020-3 bonds, which advance refunded \$22.7 million of Series 2011 and \$4.1 million of Series 2011 bonds. The Series 2020-3 bonds also refunded \$88.3 million of the University's 2013-1 bonds, \$22.4 million of the University's 2013-3 bonds, and \$143.5 million of the University's 2014-1 bonds. These advanced refunded bonds are considered defeased and, accordingly, the liability for the bonds payable and the assets

held to repay the debt are not recorded on the University's financial statements. The total loss on refunding was \$16.4 million with cash flow savings of \$35.5 million.

As of June 30, 2020, approximately \$281 million of bonds outstanding from advance refunding activities is considered defeased.

In FY2019, the University issued \$208.7 million of Refunding Revenue Senior Series 2019-1 Bonds which partially refunded the 2009-2 Senior Series Building America Bonds. This transaction was a current refunding.

Other Current Year Debt Activity – In FY2020, the University issued \$330.67 million of Senior Series 2020-1 and 2020-2 Project Revenue bonds.

Bond Premium – In FY2020, the University received premiums at issuance totaling \$57.1 million. Premiums received are amortized as a reduction of interest expense over the life of the respective bond issue. In FY2019, the University received premiums at issuance totaling \$47.6 million.

Commercial Paper – The maximum aggregate principal amount of commercial paper the University may have outstanding at one time is \$200.0 million. The University's Series 2013-A are secured by standby liquidity facility agreement that expires on August 12, 2022. The Series 2013-B are secured by a standby liquidity facility agreement that expires on August 12, 2022.

During FY2020 and FY2019, the University issued \$10.5 million and \$69.1 million of commercial paper, respectively. As of June 30, 2020 and 2019, the University had an outstanding commercial paper balance of \$0 and \$131.9 million, respectively. The University incurred total fees of \$0.7 million in FY2020 and FY2019, respectively, associated with the use of commercial paper.

Interest Rate Swaps – The University uses derivative instruments to manage the impact of interest rate changes on its cash flows and net position by mitigating its exposure to certain market risks associated with operations, and does not use derivative instruments for trading or speculative purposes.

The University's contracts are evaluated pursuant to GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments* ("GASB No. 53") to determine whether they meet the definition of derivative instruments, and if so, whether they effectively hedge the expected cash flows associated with interest rate risk exposures. The University applies hedge accounting for derivative instruments that are deemed effective hedges and under GASB No. 53 are referred to as hedging derivative instruments. Under hedge accounting, changes in the fair value of a hedging derivative instrument are reported as a deferred inflow or deferred outflow in the Statement of Net Position until the contract is settled or terminated.

All settlement payments or receipts for hedging derivative instruments are recorded as interest expense in the period settled.

Interest rate swap liabilities at June 30, 2020 and 2019 are as follows (\$ in thousands):

	Notional value	As of June 30, 2019	Net change	As of June 30, 2020	Effective date	Term date	Authority pays	Authority receives
Series 2008-1	\$ 145,515	\$ 23,308	\$ 8,760	\$ 32,068	05/01/08	05/01/38	3.39%	70% of 1-Month LIBOR
Series 2008-A	16,050	2,720	1,075	3,795	11/13/08	05/01/38	3.38%	70% of 1-Month LIBOR
Series 2006-1	214,810	29,594	7,524	37,118	04/20/06	11/01/34	3.48%	60% of 3-Month LIBOR + .18%
Total		\$ 55,622	\$ 17,359	\$ 72,981				

Swap Payments and Associated Debt – Using rates as of June 30, 2020, the debt service requirements of the variable-rate debt and net swap payments, assuming current interest rates remain the same for their term, were as follows (\$ in thousands):

Fiscal year ending June 30	Principal	Interest	Interest rate swaps, net	Total
2021	\$ 28,390	\$ 7,000	\$ 11,712	\$ 47,102
2022	29,545	6,453	10,799	46,797
2023	33,915	5,855	9,798	49,568
2024	35,200	5,204	8,710	49,114
2025	28,625	4,602	7,703	40,930
2026–2030	148,230	14,489	24,257	186,976
2031–2035	70,085	3,329	5,574	78,988
2036–2040	2,385	94	158	2,637
Total	\$ 376,375	\$ 47,026	\$ 78,711	\$ 502,112

10. Other Liabilities

The following table shows current and long-term portions of other liabilities as recorded in the Statements of Net Position (\$ in thousands).

	As of June 30, 2019	Current portion as of June 30, 2019	As of June 30, 2020	Current portion as of June 30, 2020
Compensated absences*	\$ 107,398	\$ 81,155	\$ 113,892	\$ 88,722
Workers' compensation*	13,850	2,882	13,256	2,550
Unearned revenues	88,863	54,946	135,816	91,037
Advances and deposits	34,135	6,394	19,988	5,238
Other liabilities	147,872	70,458	170,827	60,557

* The University includes the current portion of compensated absences and workers' compensation liabilities within accounts payable and accrued expenses on the Statements of Net Position.

11. Fringe Benefits

During the years ended June 30, 2020 and 2019, the Commonwealth paid \$383.5 million and \$380.4 million, respectively, for the University's portion of fringe benefit costs which includes pension expense, health insurance for active employees and retirees, and terminal leave. Of this amount, the University reimbursed the Commonwealth \$142.2 million and \$149.1 million during the years ended June 30, 2020 and 2019, respectively. The remaining portion is included in revenue as state appropriations.

12. Benefit Plans

Defined benefit plan

The Massachusetts State Employees' Retirement System (MSERS) is a public employee retirement system (PERS) that administers a cost-sharing multi-employer defined benefit plan covering substantially all employees of the Commonwealth including University employees.

MSERS provides retirement, disability, survivor and death benefits to members and their beneficiaries. Massachusetts General Laws (MGL) establishes uniform benefit and contribution requirements for all contributory PERS. These requirements provide for superannuation retirement allowance benefits up to a maximum of 80% of a member's highest three-year to five-year average annual rate of regular compensation depending on the date of hire. Benefit payments are based upon a member's age,

length of creditable service, and group creditable service, and group classification. The authority for amending these provisions rests with the Legislature.

The MSERS' funding policies were established by Chapter 32 of MGL. The Legislature has the authority to amend these policies. The annuity portion of the MSERS retirement allowance is funded by employees, who contribute a percentage of their regular compensation. Costs of administering the plan are funded out of plan assets.

Member contributions for MSERS vary depending on the most recent date of membership:

Hire date	% of Compensation
Prior to 1975	5% of regular compensation
1975 - 1983	7% of regular compensation
1984 - 6/30/1996	8% of regular compensation
7/1/1996 - present	9% of regular compensation except for State Police which is 12% of regular compensation
1979 - present	An additional 2% of regular compensation in excess of \$30,000

In addition, members within this group who join the system on or after April 2, 2012 will have their withholding rate reduced to 6% after achieving 30 years of creditable service.

The University makes contributions on behalf of the employees through a fringe benefit charge assessed by the Commonwealth. The fringe benefit charge amounted to \$134.8 million and \$125.5 million for the years ended June 30, 2020 and 2019, respectively. Annual covered payroll was 78% and 77.4% of annual total payroll for the University for the years ended June 30, 2020 and 2019, respectively.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows

of Resources Related to Pensions - The net pension liability as of June 30, 2020 was determined based on a measurement date of June 30, 2019 from an actuarial valuation as of January 1, 2019 rolled forward to June 30, 2019. The net pension liability measured as of June 30, 2019 was determined based on a measurement date of June 30, 2018 from an actuarial valuation as of January 1, 2018 rolled forward to June 30, 2018. There are no significant changes known which would impact the total pension liability between the measurement date and the reporting date, other than typical plan experience.

At June 30, 2020 and 2019, the University reported a liability of \$526.7 million and \$409.3 million, respectively, for its proportionate share of MSERS net pension liability, respectively. The University's proportion of the net pension liability was based on a projection of the University's long-term share of contributions to the pension plan relative to the total projected contributions of all participating entities, actuarially determined. The University's proportion of the pension plan at measurement dates of June 30, 2019 and 2018 was 3.60% and 3.09%, respectively.

For the fiscal years ended June 30, 2020 and 2019, the University recognized pension expense of \$93.2 million and \$52.2 million, respectively.

The University reported its proportionate share of MSERS's deferred outflows of resources and deferred inflows of resources related to pensions from the following sources as of June 30, 2020 and 2019 (\$ in thousands):

	2020		2019	
	Deferred outflows of resources	Deferred inflows of resources	Deferred outflows of resources	Deferred inflows of resources
Changes of assumptions	\$ 39,043	\$ -	\$ 41,482	\$ -
Changes in proportion due to internal allocation	59,974	25,043	22,245	37,534
Employer contributions after measurement date	40,617	-	35,843	-
Differences between expected and actual experience	17,493	6,851	12,980	8,342
Net difference between projected and actual investment earnings on pension plan investments	-	7,857	-	14,228
Changes in proportion from Commonwealth	930	27	1,104	78
Total	\$ 158,057	\$ 39,778	\$ 113,654	\$ 60,182

Amounts reported as deferred outflows of resources relating to pension resulting from the University's contributions subsequent to the measurement date will be recognized as a reduction to pension expense in the net pension liability in the year 2021. The remaining difference between the University's balances of deferred outflows and inflows of resources related to pension liability will be recognized in pension expense as follows:

Year ended June 30	
2021	\$ 28,626
2022	8,066
2023	15,870
2024	16,914
2025	8,186
Total	\$ 77,662

Actuarial Assumptions – Significant actuarial assumptions used at each respective measurement date are as follows:

	June 30, 2019	June 30, 2018
Investment rate of return	7.25%	7.35%
Interest rate credited to the annuity savings fund	3.50%	3.50%
Cost of living increases on the first \$13,000 per year	3.00%	3.00%
Salary increases*	4.0% to 9.0%	4.0% to 9.0%
Mortality rates:		
Pre-retirement	RP-2014 Blue Collar Employees Scale MP-2016 **	RP-2014 Blue Collar Employees Scale MP-2016 **
Post-retirement	RP-2014 Blue Collar Healthy Annuitant Scale MP-2016 **	RP-2014 Blue Collar Healthy Annuitant Scale MP-2016 **
Disability	RP-2014 Blue Collar Healthy Annuitant Scale MP-2016 **	RP-2014 Blue Collar Healthy Annuitant Scale MP-2016 **

* Salary increases were based on analysis of past experiences depending on group and length of service

** Set forward one year for females.

Investment Allocation – Investment assets of MSERS are with the Pension Reserves Investment Trust (PRIT) Fund. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage.

Best estimates of geometric rates of return for each major asset class included in the PRIT Fund's target asset allocation as of June 30, 2019 and 2018 are summarized in the following table:

Asset class	June 30, 2019		June 30, 2018	
	Target allocation	Long-term expected real rate of return	Target allocation	Long-term expected real rate of return
Global equity	39.00%	4.90%	39.00%	5.00%
Portfolio completion strategies	11.00%	3.90%	13.00%	3.70%
Core fixed income	15.00%	1.30%	12.00%	0.90%
Private equity	13.00%	8.20%	12.00%	6.60%
Real estate	10.00%	3.60%	10.00%	3.80%
Value added fixed income	8.00%	4.70%	10.00%	3.80%
Timber / natural resources	4.00%	4.10%	4.00%	3.40%
Total	100.00%		100.00%	

Discount Rate – The discount rate used to measure the total pension liability was 7.25% and 7.35% at June 30, 2019 and 2018, respectively. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and the Commonwealth's contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rates. Based on those assumptions, the net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity Analysis – The following illustrates the impact of a 1% change in the discount rate for the net pension liability at June 30, 2020 and 2019 (\$ in thousands):

Fiscal year ended	1% Decrease	Current discount rate	1% Increase
June 30, 2020	\$ 701,230	\$ 526,739	\$ 377,816
June 30, 2019	\$ 551,694	\$ 409,319	\$ 287,666

Defined contribution plan

Non-vested faculty and certain other employees of the University can opt out of MSERS and participate in a defined contribution plan, the Optional Retirement Plan (ORP), administered by the Commonwealth's Department of Higher Education. As of June 30, 2020 and 2019, there were 2,129 and 2,011 participants in the ORP, respectively. Employees contribute at the same rate as members in MSERS and the Commonwealth matches 5% of employee contributions. The Commonwealth contributed \$8.0 million and \$7.8 million in 2020 and 2019, respectively. University employees contributed \$19.3 million and \$18.8 million in 2020 and 2019, respectively.

The MSERS and ORP retirement contributions of employees who become members of MSERS or ORP after January 1, 2011 are subject to a state compensation limit. Effective January 1, 2011, the University established a defined contribution plan, the University of Massachusetts 401(a) Retirement Gap Plan (Gap Plan). Employees with MSERS or ORP membership dates after January 1, 2011 are eligible to participate in for the Gap Plan. Eligible employees begin participation in the Gap Plan when their regular compensation exceeds the state compensation limit in effect for the plan year, at which point their contributions to MSERS or ORP are required to stop for the remainder of the plan year. Employee contributions to the Gap Plan are mandatory and at the same rate as MSERS and ORP; the University contributes 5%. As of June 30, 2020 and 2019, the plan assets of the Gap Plan were \$6.2 million and \$4.7 million, respectively.



Photos taken prior to COVID-19 social distancing practices

13. Other Postemployment Benefits

The Commonwealth administers the State Retirees' Benefit Trust, a single employer defined Postemployment Benefits Other Than Pensions (OPEB) Plan (the Plan). Benefits are managed by the Group Insurance Commission (GIC) and investments are managed by the Pension Reserves Investment Management Board (PRIM).

Benefits Provided – Under Chapter 32A of the MGL the Commonwealth is required to provide certain health care and life insurance benefits for retired employees of the Commonwealth. Substantially all of the Commonwealth's employees may become eligible for these benefits if they reach retirement age while working for the Commonwealth. Eligible retirees are required to contribute a specified percentage of the health care/benefit costs, which are comparable to contributions required from employees.

Employer and employee contribution rates are set in MGL. The Commonwealth recognizes its share of the costs on an actuarial basis. As of June 30, 2020 and 2019, the retirees' share of premium costs is between 0% – 20%, depending on the date of hire.

As noted in Note 1, the University recorded an immaterial correction to its previously reported financial statements to properly reflect its fiscal year 2019 proportionate share of activity related to post-employment benefits in accordance with GASB 75. The below information has been updated to reflect the University's 2019 information as corrected.

OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB – The total OPEB liability as of June 30, 2020 was determined based on a measurement date of June 30, 2019 from an actuarial valuation as of January 1, 2019 rolled forward to June 30, 2019. The total OPEB liability as of June 30, 2019 was determined based on a measurement date of June 30, 2018 from an actuarial valuation as of January 1, 2018 rolled forward to June 30, 2018. There are no significant changes known which would impact the total OPEB liability between the measurement date and the reporting date, other than typical plan experience.

As of June 30, 2020 and 2019, the University reported a liability of \$993.0 million and \$895.7 million, respectively, for its proportionate share of the OPEB liability. The University's proportion of the OPEB liability was based on a projection of the University's long-term share of contributions to the OPEB plan relative to the total projected contributions of all participating entities, actuarially determined. The University's proportion of the OPEB plan at measurement dates of June 30, 2019 and 2018 was 5.43% and 4.82%, respectively.

For the fiscal years ended June 30, 2020 and 2019, the University recognized OPEB expense of \$96.9 million and \$75.1 million, respectively.

The University reported its proportionate share of deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources as of June 30, 2020 and 2019, respectively (\$ in thousands):

	2020		2019	
	Deferred outflows of resources	Deferred inflows of resources	Deferred outflows of resources	Deferred inflows of resources
Changes of assumptions	\$ 764	\$ 149,320	\$ 858	\$ 75,539
Changes in proportion due to internal allocation	174,758	-	100,687	-
Employer contributions after measurement date	21,040	-	26,137	-
Differences between expected and actual experience	39,824	1,272	8,732	1,535
Net difference between projected and actual investment earnings on OPEB plan investments	-	457	-	1,795
Changes in proportion from Commonwealth	2,421	-	2,310	-
Total	\$ 238,807	\$ 151,049	\$ 138,724	\$ 78,869

Amounts reported as deferred outflows of resources relating to OPEB resulting from the University's contributions subsequent to the measurement date will be recognized as a reduction to OPEB expense in the net OPEB liability in the year 2021. The remaining difference between the University's balances of deferred outflows and inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year ended June 30		
2021	\$	2,860
2022		2,860
2023		8,102
2024		25,897
2025		26,999
		\$ 66,718

Actuarial Assumptions – Significant actuarial assumptions used at the 2019 measurement date are as follows:

Long-term rate of return on investment	7.25%
Annual healthcare cost trend rates	
Medical	7.5% decreasing by 0.5% each year to 5.5% in 2023 and 2024 and then decreasing 0.5% each year to an ultimate rate of 4.5% in 2026 for medical and 4.5% for administration costs
Employer group waiver program	5% per year until 2025, then decrease to 4.5% in 2026
Administrative costs	4.5%
Mortality rates	RP-2014 Blue Collar Employees projected with Scale MP-2016 with females set forward one year
Participation rates	100% of all retirees who currently have health care coverage will continue the same coverage, except the following: <ul style="list-style-type: none"> retirees under the age of 65 with POS/PPO coverage switch to Indemnity at age 65 retirees over the age of 65 with POS/PPO coverage switched to HMO Current retirees and spouses - Medicare coverage upon attainment of age 65 Future retirees - Medicare coverage upon attainment of age 65 85% of current and future contingent eligible participants will elect health care benefits at 55 or later Actives, upon retirement, take coverage, and are assumed to have the following coverage:

	Retirement age	
	Under 65	Over 65
Indemnity	25.0%	85.0%
POS/PPO	60.0%	0.0%
HMO	15.0%	15.0%

Significant actuarial assumptions used at the 2018 measurement date are as follows:

Long-term rate of return on investment	7.35%														
Annual healthcare cost trend rates															
Medical	8.0% decreasing by 0.5% each year to an ultimate rate of 5.5% in 2023 and then decreasing 0.25% each year to an ultimate rate of 5.0% in 2025 for medical and 5.0% for administration costs														
Employer group waiver program	5.0%														
Administrative costs	5.0%														
Mortality rates	RP-2014 Blue Collar Employees projected with Scale MP-2016 with females set forward one year														
Participation rates	100% of all retirees who currently have health care coverage will continue the same coverage, except the following: <ul style="list-style-type: none"> • retirees under the age of 65 with POS/PPO coverage switch to Indemnity at age 65 • retirees over the age of 65 with POS/PPO coverage switched to HMO Current retirees and spouses - Medicare coverage upon attainment of age 65 Future retirees - Medicare coverage upon attainment of age 65 80% of current and future contingent eligible participants will elect health care benefits at 55 or later Actives, upon retirement, take coverage, and are assumed to have the following coverage:														
	<table border="1"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">Retirement age</th> </tr> <tr> <th>Under 65</th> <th>Over 65</th> </tr> </thead> <tbody> <tr> <td>Indemnity</td> <td>40.0%</td> <td>85.0%</td> </tr> <tr> <td>POS/PPO</td> <td>50.0%</td> <td>0.0%</td> </tr> <tr> <td>HMO</td> <td>10.0%</td> <td>15.0%</td> </tr> </tbody> </table>		Retirement age		Under 65	Over 65	Indemnity	40.0%	85.0%	POS/PPO	50.0%	0.0%	HMO	10.0%	15.0%
	Retirement age														
	Under 65	Over 65													
Indemnity	40.0%	85.0%													
POS/PPO	50.0%	0.0%													
HMO	10.0%	15.0%													

Investment Allocation – Investment assets of the Plan are with the Pension Reserves Investment Trust (PRIT) Fund. The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage.

Best estimates of geometric rates of return for each major asset class included in the PRIT Fund's target asset allocation as of June 30, 2019 and 2018 are summarized in the following table:

Asset class	June 30, 2019		June 30, 2018	
	Target allocation	Long-term Expected real rate of return	Target allocation	Long-term Expected real rate of return
Global equity	39.00%	4.90%	39.00%	5.00%
Portfolio completion strategies	11.00%	3.90%	13.00%	3.70%
Core fixed income	15.00%	1.30%	12.00%	0.90%
Private equity	13.00%	8.20%	12.00%	6.60%
Real estate	10.00%	3.60%	10.00%	3.80%
Value added fixed income	8.00%	4.70%	10.00%	3.80%
Timber / natural resources	4.00%	4.10%	4.00%	3.40%
Total	100.00%		100.00%	

Discount Rate – The discount rates used to measure the total OPEB liability as of June 30, 2019 and 2018 were 3.63% and 3.95%, respectively. These rates were based on a blend of the Bond Buyer Index rates of 3.51% and 3.87%, respectively, as of the measurement dates June 30, 2019 and 2018 and the long term rate of return on Plan investments of 7.25% and 7.35%, respectively. The Plan's fiduciary net position was not projected to be available to make all projected future benefit payments for current plan members. The projected "depletion date" when projected benefits are not covered by projected assets is 2025. Therefore, the long-term expected rate of return on plan investments was not applied to all periods of projected benefit payments to determine the total OPEB liability as of June 30, 2019 and 2018.

Sensitivity Analysis of Discount – The following presents the net OPEB liability of the Commonwealth calculated using the discount rate, as well as what the net OPEB liability would be if it were calculated using a discount rate that is 1- percentage-point lower or 1-percentage-point higher than the current rate (\$ in thousands):

Fiscal year ended	1% Decrease	Current discount	1% Increase
June 30, 2019	\$ 1,185,311	\$ 992,991	\$ 840,934
June 30, 2018	1,064,665	895,669	761,603

Sensitivity Analysis of Healthcare Cost Trend Rate – The following presents the net OPEB liability of the Commonwealth, as well as what the net OPEB liability would be if it were calculated using a healthcare cost trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rate (\$ in thousands):

Fiscal year ended	1% Decrease	Current rate	1% Increase
June 30, 2019	\$ 818,350	\$ 992,991	\$ 1,223,411
June 30, 2018	757,659	895,669	1,070,136

14. Operating Expenses and Interest

The following table summarizes the University's operating expenses and interest by natural and functional classification for the year ended June 30, 2020 (\$ in thousands):

	Compensation and benefits	Supplies and services	Scholarships and fellowships	Depreciation and amortization	Interest	Total
Educational and general						
Instruction	\$ 839,809	\$ 120,739	\$ -	\$ -	\$ -	\$ 960,548
Research	297,775	187,984	-	-	-	485,759
Public service	72,386	11,862	-	-	-	84,248
Academic support	148,926	52,002	-	-	-	200,928
Student services	124,158	33,684	-	-	-	157,842
Institutional support	199,420	103,680	-	-	-	303,100
Operation and maintenance of plant	127,786	114,094	-	-	-	241,880
Depreciation and amortization	-	-	-	288,667	-	288,667
Scholarships and fellowships	-	-	65,469	-	-	65,469
Auxiliary enterprises	166,297	170,200	-	-	-	336,497
Other expenditures						
Independent operations	25,955	30,301	-	-	-	56,256
Public service activities	87,482	168,766	-	-	-	256,248
Total operating expenses	2,089,994	993,312	65,469	288,667	-	3,437,442
Interest on indebtedness	-	-	-	-	109,186	109,186
Total operating expenses and interest	\$ 2,089,994	\$ 993,312	\$ 65,469	\$ 288,667	\$ 109,186	\$ 3,546,628

The following table summarizes the University's operating expenses and interest by natural and functional classification for the year ended June 30, 2019 (\$ in thousands):

	Compensation and benefits	Supplies and services	Scholarships and fellowships	Depreciation and amortization	Interest	Total
Educational and general						
Instruction	\$ 786,720	\$ 125,695	\$ -	\$ -	\$ -	\$ 912,415
Research	285,202	205,685	-	-	-	490,887
Public service	70,593	15,658	-	-	-	86,251
Academic support	136,738	49,764	-	-	-	186,502
Student services	120,926	39,825	-	-	-	160,751
Institutional support	187,274	87,052	-	-	-	274,326
Operation and maintenance of plant	121,825	126,756	-	-	-	248,581
Depreciation and amortization	-	-	-	276,638	-	276,638
Scholarships and fellowships	-	-	49,511	-	-	49,511
Auxiliary enterprises	156,607	183,739	-	-	-	340,346
Other expenditures						
Independent operations	24,904	23,378	-	-	-	48,282
Public service activities	84,774	142,047	-	-	-	226,821
Total operating expenses	1,975,563	999,599	49,511	276,638	-	3,301,311
Interest on indebtedness	-	-	-	-	116,217	116,217
Total operating expenses and interest	\$ 1,975,563	\$ 999,599	\$ 49,511	\$ 276,638	\$ 116,217	\$ 3,417,528

15. Unrestricted Net Position

According to the University's reserve policy, unrestricted net position is designated for certain purposes. Below are the designations used by the University, as described in the University's policy:

- **Unexpended plant and facilities** – funds designated for capital projects, equipment and the major renovations of all existing buildings including research, education and general, and auxiliary.
- **Auxiliary enterprises** – funds related to self-supporting activities which provide non-instructional support in the form of goods and services to students, faculty, and staff upon payment of a specific user charge or fee.
- **Education and general** – funds designated for operational requirements, academic initiatives, research, faculty recruitment, and University initiatives.
- **Quasi-endowment** – funds related to unrestricted resources invested in the Foundation's pooled endowment fund, intended to be invested for the long-term unless otherwise approved by the Board of Trustees or a designated authority.
- **Stabilization** – funds designated to provide budgetary stabilization for operations due to unforeseen and/or uncontrollable circumstances to ensure responsible long-term financial stability. Funds should be used for an unanticipated one-time disruption in funding or catastrophic event and shall not be used to cover operating shortfalls that could have been anticipated and managed.
- **Other unrestricted** – funds undesignated for a specific use or purpose.

The following table summarizes the University's unrestricted net position as of June 30, 2020 and 2019 (\$ in thousands):

	2020	2019
Unrestricted resources		
Unexpended plant and facilities	\$ 222,495	\$ 255,308
Auxiliary enterprises	67,459	100,154
Education and general	420,012	309,452
Quasi-endowment	355,174	352,743
Stabilization	124,889	114,594
Other unrestricted	(65,957)	(46,720)
Subtotal	1,124,072	1,085,531
Unfunded portion of pension liabilities	(408,460)	(355,847)
Unfunded portion of postretirement benefits other than pension liabilities	(905,233)	(835,814)
Total unrestricted net position	\$ (189,621)	\$ (106,130)

16. Commitments and Contingencies

The Building Authority, University, and WCCC have outstanding purchase commitments under construction contracts and real estate agreements of \$111.9 million and \$200.0 million at June 30, 2020 and 2019, respectively. The University has entered an Energy Performance Contract that is being managed by the Commonwealth's Division of Capital Asset Management and Maintenance (DCAMM) under its Clean Energy Investment Program. This project includes 32 energy conservation measures. The University has a commitment to the Commonwealth for Clean Energy Investment Program Funds used through June 30, 2020 and 2019 of \$42.1 million and \$43.3 million, respectively.

The University, as an agency of the Commonwealth, is self-insured for property loss exposure, subject to appropriation from the state legislature. However, properties owned by the Building Authority located on a campus of the University, such as the Mullins Center, dining commons, and most dormitories, are insured by the Building Authority. The University and its employees are protected against tort claims through sovereign immunity under Chapter 258 of the Massachusetts General Laws. The University maintains certain liability insurance policies, including commercial general liability, leased automotive liability, directors and officers and comprehensive crime policies. Employees of the University are covered for worker's compensation protection under Chapter 152 of the Massachusetts General Laws. The University has recorded a liability for future expected costs of its workers' compensation claims of \$13.3 million and \$13.9 million as of June 30, 2020 and 2019, respectively. Estimated future payments related to such costs have been discounted at a rate of 4%. Refer to Note 10 for further information on worker's compensation balances year over year.

On June 28, 2019, the Authority entered into an agreement to lease property located at 200 Mount Vernon Street in Dorchester, Massachusetts to Bayside Property Owner, LLC ("Bayside"), a Delaware limited liability company. The developer plans to build a mixed-use urban innovation campus at the site. Bayside deposited \$7.0 million into an escrow account on July 2, 2019. In June 2020, Bayside deposited an additional \$1.0 million into an escrow account in order to extend the agreement. These funds will be applied to the initial fixed rent payment at closing. Under the terms of the agreement, the developer, subject to certain contingencies, may enter into a 99-year ground lease for an upfront payment of up to \$235 million, with a minimum lease price of \$192 million. The agreement provides a 60-day inspection period during which the developer could terminate the agreement for any reason. The developer can extend the term of the agreement up to four consecutive periods of six months each. Additionally, the Authority has the ability to terminate the agreement at any time via its default provision.

The University is a defendant in various lawsuits and is subject to various contractual matters; however, University management is of the opinion that the ultimate outcome of all litigation or potential contractual obligations will not have a material effect on the financial position, financial results or cash flows of the University.

17. Blended Component Units

Condensed information for the University's blended component units, the Building Authority and WCCC, is presented below as of June 30, 2020 (\$ in thousands). The UMAF and UMMSF are not material in relation to the other blended component units nor the University as a whole and are therefore not presented in the below condensed information.

	June 30, 2020			
	Building Authority	Eliminations	WCCC	Eliminations
Condensed Information from the Statements of Net Position				
Capital assets, net	\$ 3,721,176	\$ -	\$ 332,596	\$ -
Other assets	752,153	(68,481)	184,611	(2,595)
Deferred outflows	125,965	-	6,660	-
Total assets and deferred outflows	4,599,294	(68,481)	523,867	(2,595)
Debt, including commercial paper	3,171,334	-	331,422	-
Other liabilities	175,480	(4,180)	19,170	(2,595)
Total liabilities	3,346,814	(4,180)	350,592	(2,595)
Total net position	\$ 1,252,480	\$ (64,301)	\$ 173,275	\$ -
Condensed Information from the Statements of Revenues, Expenses, and Changes in Net Position				
Other revenues	\$ 295,892	\$ (126,525)	\$ 78,493	\$ (50,800)
Total revenues	295,892	(126,525)	78,493	(50,800)
Operation and maintenance of capital assets	9,470	(11,404)	27,689	(24,108)
Depreciation	150,808	-	20,350	-
Interest expense	110,990	(86,372)	8,003	-
Other expenses	6,609	(3,100)	16,217	(26,692)
Total expenses	277,877	(100,876)	72,259	(50,800)
Increase in net position	\$ 18,015	\$ (25,649)	\$ 6,234	\$ -
Condensed Information from the Statements of Cash Flows				
Net cash provided by operating activities	\$ 200,605	\$ -	\$ 28,714	\$ -
Net cash provided by (used in) investing activities	3,126	-	(17,418)	-
Net cash (used in) provided by financing activities	(81,154)	-	(9,613)	-
Change in cash and cash equivalents	\$ 122,577	\$ -	\$ 1,683	\$ -

Condensed information for the University's blended component units, the Building Authority and WCCC, is presented below as of June 30, 2019 (\$ in thousands):

	June 30, 2019			
	Building Authority	Eliminations	WCCC	Eliminations
Condensed information from the Statements of Net Position				
Capital assets, net	\$ 3,671,005	\$ -	\$ 332,002	\$ -
Other assets	624,776	(44,329)	96,219	(1,732)
Deferred outflows	95,954	-	7,429	-
Total assets and deferred outflows	4,391,735	(44,329)	435,650	(1,732)
Debt, including commercial paper	2,988,872	(462)	38,472	-
Other liabilities	168,398	(5,215)	230,137	(1,732)
Total liabilities	3,157,270	(5,677)	268,609	(1,732)
Total net position	\$ 1,234,465	\$ (38,652)	\$ 167,041	\$ -
Condensed information from the Statements of Revenues, Expenses, and Changes in Net Position				
Other revenues	\$ 281,311	\$ (99,228)	\$ 82,675	\$ (52,597)
Total revenues	281,311	(99,228)	82,675	(52,597)
Operation and maintenance of capital assets	8,600	(5,004)	28,871	(23,941)
Depreciation	140,771	-	19,857	-
Interest expense	118,213	(89,431)	7,866	-
Other expenses	3,875	(2,688)	17,514	(28,656)
Total expenses	271,459	(97,123)	74,108	(52,597)
Increase in net position	\$ 9,852	\$ (2,105)	\$ 8,567	\$ -
Condensed information from the Statements of Cash Flows				
Net cash provided by operating activities	\$ 201,430	\$ -	\$ 22,340	\$ -
Net cash provided by (used in) investing activities	7,849	-	(11,733)	-
Net cash (used in) provided by financing activities	(299,183)	-	(10,270)	-
Change in cash and cash equivalents	\$ (89,904)	\$ -	\$ 337	\$ -

18. Discretely Presented Component Units

As described in Note 1, UMF and UMDF are discretely presented component units. These Foundations are presented in the aggregate on page 22 of these financial statements. Following is supplemental information on UMF's non-agency investments, which is not included in its entirety elsewhere in these financial statements.

This note excludes agency funds held with the Foundation that are not the University's in the amount of \$24.4 million and \$25.1 million as of June 30, 2020 and 2019. UMF's investment portfolio represents approximately 96.8% of the aggregate discretely presented component units. This note does not include investment information for UMDF given the immaterial nature of UMDF's balances and activities.

Investments – UMF's disclosure regarding investments in debt and equity securities is captured in Note 4. Additional disclosure related to UMF's non-agency investments is as noted below.

Custodial Credit Risk – UMF maintains depository, payroll, disbursement, receipt, and imprest accounts. In addition to bank account deposits, UMF held money market instruments which are classified as investments. Interest bearing and money market accounts carry Federal Deposit Insurance Corporation (FDIC) insurance up to \$250,000 per account. None of the accounts are collateralized above the FDIC insured amounts.

Concentration of Credit Risk – As of June 30, 2020 and 2019, there is no concentration of investments from one issuer equal or greater than 5% of the portfolio. Investments issued or guaranteed by the U.S. government, as well as investments in mutual funds and other pooled investments are excluded from consideration when evaluating concentration risk.

Credit Risk – UMF's investment policy allows each portfolio manager full discretion within the parameters of the investment guidelines specific to that manager. Nationally recognized statistical rating organizations, such as Standards & Poor's (S&P) assign credit ratings to security issues and issuers that indicate a measure of potential credit risk to investors.

The table below presents the unrated debt investments at fair value by credit quality of UMF's non-agency investment portfolio as of June 30, 2020 (\$ in thousands):

	2020	S&P rating
Debt securities		
U.S. Treasury securities	\$ 32,198	AAA
Total debt securities	\$ 32,198	

The table below presents the unrated debt investments at fair value by credit quality of UMF's non-agency investment portfolio as of June 30, 2019 (\$ in thousands):

	2019	S&P rating
Debt securities		
U.S. Treasury securities	\$ 36,422	AAA
Total debt securities	\$ 36,422	

Interest Rate Risk – UMF's Investment Policy and Guidelines Statement establishes targets for the preferred duration of the fixed income component of the investment portfolio by asset class by limiting investments through targeted allocations to different asset classes.

The following table presents the fair value by investment maturity of the unrated debt investments of UMF's non-agency investment portfolio as of June 30, 2020 (\$ in thousands):

	2020	Investment maturity
Debt securities		
U.S. Treasury securities	\$ 32,198	1 to 5 years
Total debt securities	\$ 32,198	

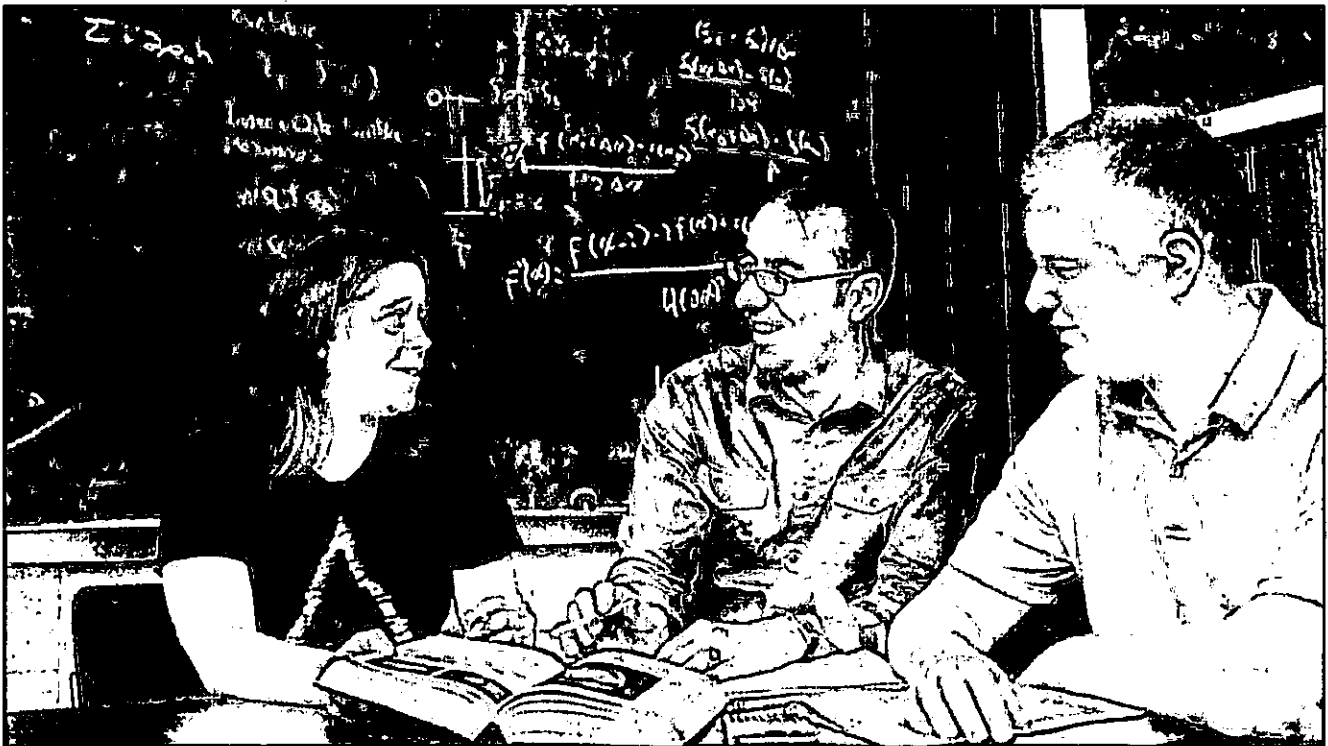
The following table presents the fair value by investment maturity of the unrated debt investments of UMF's non-agency investment portfolio as of June 30, 2019 (\$ in thousands):

	2019	Investment maturity
Debt securities		
U.S. Treasury securities	\$ 36,422	1 to 5 years
Total debt securities	\$ 36,422	

Fair Value Measurement –UMF's fair value measurement disclosure is captured in Note 4. Additional disclosure related to UMF's non-agency investments is as noted below.

The following table summarizes the fair value of UMF's non-agency investments by type as of June 30, 2020 (\$ in thousands):

	Investments measured at NAV	Investments classified in the fair value hierarchy			
		Level 1	Level 2	Level 3	Total
Money market funds	\$ -	\$ 63,877	\$ -	\$ -	\$ 63,877
Debt securities					
U.S. Treasury securities	-	32,198	-	-	32,198
Total debt securities	-	32,198	-	-	32,198
Equity securities					
Domestic equities	-	75,023	-	-	75,023
International equities	-	34,513	-	-	34,513
Total equity securities	-	109,536	-	-	109,536
Alternative investments					
Multi-strategy hedge funds					
Equity	147,388	-	-	-	147,388
Long/short	119,095	-	-	-	119,095
Fixed income	28,061	-	-	-	28,061
Absolute return	25,550	-	-	-	25,550
Real assets	7,679	-	-	-	7,679
Private equity	36,775	-	-	-	36,775
Private debt	11,347	-	-	-	11,347
Private real estate	10,578	-	-	-	10,578
Annuity & Life Income Pooled Funds	2,989	-	-	-	2,989
Total alternative investments	389,462	-	-	-	389,462
Total investments	\$ 389,462	\$ 205,611	\$ -	\$ -	\$ 595,073



Photos taken prior to COVID-19 social distancing practices

The following table summarizes the fair value of UMF's non-agency investments by type as of June 30, 2019 (\$ in thousands):

	Investments measured at NAV	Investments classified in the fair value hierarchy			
		Level 1	Level 2	Level 3	Total
Money market funds	\$ -	\$ 45,865	\$ -	\$ -	\$ 45,865
Debt securities					
U.S. Treasury securities	-	36,422	-	-	36,422
Total debt securities	-	36,422	-	-	36,422
Equity securities					
Domestic equities	-	97,129	-	-	97,129
International equities	-	77,862	-	-	77,862
Total equity securities	-	174,991	-	-	174,991
Alternative investments					
Multi-strategy hedge funds					
Equity	90,962	-	-	-	90,962
Long/short	83,234	-	-	-	83,234
Fixed income	37,601	-	-	-	37,601
Absolute return	26,540	-	-	-	26,540
Real assets	7,807	-	-	-	7,807
Private equity	23,409	-	-	-	23,409
Private debt	18,020	-	-	-	18,020
Private real estate	9,519	-	-	-	9,519
Annuity & Life Income Pooled Funds	3,472	-	-	-	3,472
Total alternative investments	300,564	-	-	-	300,564
Other securities	-	14,669	-	-	14,669
Total investments	\$ 300,564	\$ 271,947	\$ -	\$ -	\$ 572,511

The following table presents unfunded commitments, redemption frequency and notice period for non-agency investments that have been valued using NAV as a practical expedient as of June 30, 2020 (\$ in thousands):

	NAV	Unfunded commitments	Redemption terms	Notice period	Redemption restrictions
Alternative investments					
Multi-strategy hedge funds					
Equity	\$ 147,388	\$ -	daily to quarterly	01-90 days	Lock-up provisions range from none to 2 years
Long/short	119,095	-	quarterly to annual	45-90 days	Lock-up provisions range from none to 3 years
Fixed income	28,061	-	quarterly	(2)	Lock-up provisions range from none to 1 year
Absolute return	25,550	-	quarterly to annual	45-65 days	No lock-up restrictions
Real assets	7,679	-	annual	90 days	No lock-up restrictions
Private equity	36,775	15,464	closed end funds	(1)	Not redeemable
Private debt	11,347	16,131	closed end funds	(1)	Not redeemable
Private real estate	10,578	1,808	closed end funds	(1)	Not redeemable
Annuity & life income pooled funds	2,989	-	daily		No lock-up restrictions
Total	\$ 389,462	\$ 33,403			

(1) UMF has made commitments to various private equity, private debt and private real estate partnerships. UMF expects these funds to be called over the next 1-5 years. Liquidity is expected to be received in the next 1-9 years.

(2) Includes fund(s) that restrict redemptions such that redemptions are at the sole discretion of the Fund. Redemption terms require 60 to 90 days notice.

The following table presents unfunded commitments, redemption frequency and notice period for non-agency investments that have been valued using NAV as a practical expedient as of June 30, 2019 (\$ in thousands):

	NAV	Unfunded commitments	Redemption terms	Notice period	Redemption restrictions
Alternative investments					
Multi-strategy hedge funds					
Equity	\$ 90,962	\$ -	daily to quarterly	01-60 days	No lock-up restrictions
Long/short	83,234	-	quarterly to annual	45-80 days	Lock-up provisions range from none to 1 year
Fixed income	37,601	5,474	quarterly	(2)	Lock-up provisions range from none to 2 years
Absolute return	26,540	-	quarterly to annual	45-65 days	No lock-up restrictions
Real assets	7,807	-	annual	90 days	No lock-up restrictions
Private equity	23,409	18,757	closed end funds	(1)	Not redeemable
Private debt	18,020	21,180	closed end funds	(1)	Not redeemable
Private real estate	9,519	3,705	closed end funds	(1)	Not redeemable
Annuity & life income pooled funds	3,472				
Total	\$ 300,564	\$ 49,116			

(1) UMF has made commitments to various private equity, private debt and private real estate partnerships. UMF expects these funds to be called over the next 1-5 years. Liquidity is expected to be received in the next 1-9 years.

(2) Includes fund(s) that restrict redemptions such that redemptions are at the sole discretion of the Fund. Redemption terms require 60 to 90 days notice.

19. Subsequent Events

On October 28, 2020 the Building Authority issued federally taxable Revenue Refunding Bonds, Series 2020-4, for \$329.9 million in order to refund \$234.0 million of existing debt for Series 2013-1, 2013-2, 2014-1, 2014-3 and 2015-1 and defer the November 2020 principal payment on outstanding debt. Principal and interest payments are due each May 1 and November 1, commencing May 2021, with interest rates varying between 0.43% and 3.01%.

On November 10, 2020, the Governor signed into law a statutory change allowing the University and the Building Authority to borrow up to 8% of the University's total operating budget for the working capital needs of the University.

For purposes of determining the effects of subsequent events on these financial statements, management has evaluated events subsequent to June 30, 2020 and through December 10, 2020, the date on which the financial statements were available to be issued.

Required Supplementary Information (unaudited)

For the last ten years¹ (\$ in thousands)

SCHEDULE OF THE UNIVERSITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM

	Based on the measurement date					
	6/30/19	6/30/18	6/30/17	6/30/16	6/30/15	6/30/14
University's proportion of the net pension liability	3.60%	3.09%	3.28%	3.12%	3.59%	3.49%
University's proportionate share of the net pension liability	\$ 526,739	\$ 409,319	\$ 420,234	\$ 429,871	\$ 408,418	\$ 237,134
University's covered-employee payroll	\$ 1,264,971	\$ 1,242,525	\$ 1,168,661	\$ 1,156,082	\$ 1,139,719	\$ 1,061,132
University's proportionate share of the net pension liability as a percentage of its covered-employee payroll	41.64%	32.94%	35.96%	37.18%	35.83%	22.35%
Plan fiduciary net position as a percentage of total pension liability	66.28%	67.91%	67.21%	63.48%	67.87%	76.32%

SCHEDULE OF THE UNIVERSITY'S CONTRIBUTIONS MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM

	For the fiscal year ended June 30					
	6/30/20	6/30/19	6/30/18	6/30/17	6/30/16	6/30/15
Contractually required contribution	\$ 40,617	\$ 35,843	\$ 28,292	\$ 25,618	\$ 22,386	\$ 22,386
Contributions in relation to the contractually required contribution	(40,617)	(35,843)	(28,292)	(25,618)	(22,386)	(22,386)
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
University's covered-employee payroll	\$ 1,264,971	\$ 1,247,098	\$ 1,242,525	\$ 1,168,661	\$ 1,156,082	\$ 1,139,719
Contributions as a percentage of covered-employee payroll	3.21%	2.87%	2.28%	2.19%	1.94%	1.96%

¹ Until a full ten year trend is compiled, the University is presenting only information for the years for which information is available.

**SCHEDULE OF THE UNIVERSITY'S PROPORTIONATE SHARE OF
THE NET OTHER POSTEMPLOYMENT BENEFITS (OPEB) LIABILITY
STATE RETIREES' BENEFIT TRUST**

	Based on the measurement date		
	6/30/19	6/30/18 (restated)	6/30/17
University's proportion of the net OPEB	5.43%	4.82%	4.67%
University's proportionate share of the net OPEB	\$ 992,991	\$ 895,669	\$ 817,357
University's covered-employee payroll	\$ 1,264,971	\$ 1,242,525	\$ 1,168,661
University's proportionate share of the net OPEB as a percentage of its covered-employee payroll	78.50%	72.08%	69.94%
Plan fiduciary net position as a percentage of total OPEB liability	6.96%	6.01%	4.80%

**SCHEDULE OF THE UNIVERSITY'S CONTRIBUTIONS
STATE RETIREES' BENEFIT TRUST**

	For the fiscal year ended June 30		
	6/30/20	6/30/19	6/30/18
Contractually required contribution	\$ 21,040	\$ 26,137	\$ 21,421
Contributions in relation to the contractually required contribution	(21,040)	(26,137)	(21,421)
Contribution deficiency (excess)	\$ -	\$ -	\$ -
University's covered-employee payroll	\$ 1,264,971	\$ 1,247,098	\$ 1,242,525
Contributions as a percentage of covered-employee payroll	1.66%	2.10%	1.72%

1 Until a full ten year trend is compiled, the University is presenting only information for the years for which information is available.



Photos taken prior to COVID-19 social distancing practices



Photos taken prior to COVID-19 social distancing practices

Respecting practices



University of Massachusetts

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**University of Massachusetts
Board of Trustees**

(as of 5/18/2020)

There are nineteen voting members of the Board. Two members shall be full time students from said institution and seventeen members shall be appointed by the Governor, at least five of whom shall be alumni of said institution, and one of whom shall be a representative of organized labor. Two student Trustees elected by their peers are voting members; the other three elected student representatives are considered ex officio non-voting members of the Board.

<u>Trustees</u>	<u>Principal Affiliation/Title</u>	<u>Hometown</u>
Robert J. Manning (Chair) Appt. 9/1/2006-Exp. 2011 <i>Appointed by Governor Mitt Romney</i> <i>Resigned from the Board 12/8/2010</i> Appt. 8/11/2015-Exp. 2016 <i>Appointed by Governor Charles Baker</i> Re-appt. 11/18/2016-Exp. 2021 <i>Appointed by Governor Charles Baker</i> <i>(UMass Lowell Alumnus-1984)</i>	Chairman and co-CEO MFS Investment Management Boston, MA	Swampscott, MA Male-White
R. Norman Peters, Esq. (Vice Chair) Appt. 9/28/2009-Exp. 2014 <i>Appointed by Governor Deval Patrick</i> Re-appt. 8/11/2014-Exp. 2019 <i>Appointed by Governor Deval Patrick</i>	Partner, Peters & Sowyrda Worcester, MA	Paxton, MA Male-Albanian
Mary L. Burns Appt. 11/18/2016-Exp. 2021 <i>Appointed by Governor Charles Baker</i> <i>(UMass Lowell Alumna-1984)</i>	Principal Splash Media Group Boston, LLC Boston, MA	Lowell, MA Female-Irish-American
Robert Epstein Appt. 9/1/2015-Exp. 2020 <i>Appointed by Governor Charles Baker</i> <i>(UMass Amherst Alumnus-1967)</i>	President & CEO Horizon Beverage Group Norton, MA	Boston, MA Male-White-Jewish
Maria D. Furman Appt. 11/16/2009-Exp. 2014 <i>Appointed by Governor Deval Patrick</i> Re-appt. 8/26/2014-Exp. 2019 <i>Appointed by Governor Deval Patrick</i> <i>(UMass Dartmouth Alumna-1976)</i>	Former Managing Director and Bond Portfolio Manager of Standish, Ayer and Wood Boston, MA (RETIRED)	Boston, MA Female-Portuguese-American
Stephen R. Karam Appt. 9/18/2017-Exp. 2022 <i>Appointed by Governor Charles Baker</i>	Principal, Karam Financial Group Fall River, MA	Fall River, MA Male-White

Trustees

Richard M. Kelleher
 Appt. 4/29/2019-Exp. 2023
*Appointed by Governor Charles Baker
 (UMass Amherst Alumnus-1973)*

Principal Affiliation/Title

Chairman
 Pyramid Group

Hometown

Duxbury, MA
 Male-White

Michael V. O'Brien
 Appt. 11/18/2016-Exp. 2021
*Appointed by Governor Charles Baker
 (UMass Amherst Alumnus-1988)*

Vice President
 WinnCompanies
 Boston, MA

Southborough, MA
 Male-White

Noreen C. Okwara
 Appt. 8/1/2018-Exp 2023
*Appointed by Governor Charles Baker
 (UMass Boston Alumna-2012)
 (UMass Medical School Alumna-2017)*

Internal Medicine Resident
 Brigham and Women's Hospital
 Boston, MA

Lowell, MA
 Female-African
 American

Kerri Osterhaus-Houle, M.D.
 Appt. 9/14/2007-Exp. 2008
*Appointed by Governor Deval Patrick
 Re-appt. 9/1/2008-Exp. 2013
 Appointed by Governor Deval Patrick
 Re-appt. 7/24/2013-Exp. 2018
 Appointed by Governor Deval Patrick
 (UMass Worcester Alumna-1999)*

Partner, Women's Health of Central Mass, PC
 Worcester, MA

Hudson, MA
 Female-White

Imari K. Paris Jeffries
 Appt. 11/18/2016-Exp. 2021
*Appointed by Governor Charles Baker
 (UMass Boston Alumnus-1997, 1999, 2003)*

Executive Director
 King Boston
 Boston, MA

Boston, MA
 Male-African American

James A. Peyser
 Appointed: December 2014
*Ex-officio
 Appointed by Governor Charles D. Baker, Jr.*

Secretary of Education, Commonwealth of Mass.
 Executive Office of Education

Milton, MA
 Male-White

Elizabeth D. Scheibel
 Appt. 11/18/2016-Exp. 2021
Appointed by Governor Charles Baker

Former District Attorney
 Northwestern District
 Northampton, MA
 Principal/Consultant
 Scheibel Associates
 South Hadley, MA

South Hadley, MA
 Female-White

Henry M. Thomas, III
 Appt. 9/14/2007-Exp. 2012
*Appointed by Governor Deval Patrick
 Re-appt. 10/4/2012-Exp. 2017
 Appointed by Governor Deval Patrick*

President, Urban League of Springfield, Inc.
 Springfield, MA

Springfield, MA
 Male-African American

Trustees

Steven A. Tolman
 Appt. 9/2017-Exp. 2022
 (Labor Rep)
*Appointed by Governor Charles Baker
 (UMass Boston Alumnus-1999)*

Title/Principal Affiliation

President, Massachusetts AFL-CIO
 Malden, MA

Hometown

Brighton, MA
 Male-White

Victor Woolridge
 Appt. 11/16/2009-Exp. 2014
*Appointed by Governor Deval Patrick
 Re-appt. 10/21/2014-Exp. 2019
 Appointed by Governor Deval Patrick
 (UMass Amherst Alumnus-1980)*

Vice President
 Barings
 Hartford, CT

Springfield, MA
 Male-African-American

Charles F. Wu
 Appt. 11/18/2016-Exp 2021
Appointed by Governor Charles Baker

Senior Lecturer
 Harvard Business School
 Founding Partner
 Baynorth Capital, LLC
 Boston, MA

Newton, MA
 Male-Asian

STUDENT TRUSTEES:

Jacob S. Binnall
 (Non-Voting)
 Elected 4/2019-Exp. 6/30/2020

University of Massachusetts Amherst

Framingham, MA
 Male-Caucasian

Kush Patel
 (Non-Voting)
 Elected 4/2019-Exp. 6/30/2020

University of Massachusetts Boston

Malborough, MA
 Female-Indian

Amanda Kuffoh
 (Non-Voting)
 Elected 4/2019-Exp. 6/30/2020

University of Massachusetts Dartmouth

Tewksbury, MA
 Female-African

Ryan Callahan
 (Voting)
 Elected 4/2019-Exp. 6/30/2020

University of Massachusetts Lowell

Chelmsford, MA
 Male-Caucasian

Peter Cruz-Gordillo
 (Voting)
 Elected 4/2019-Exp. 6/30/2020

University of Massachusetts Medical School

Worcester, MA
 Male-Hispanic/Latino

CURRICULUM VITAE

ROGER B. EATON, Ph.D.

Director

New England Newborn Screening Program
University of Massachusetts Medical School
377 Plantation Street
Worcester, Massachusetts 01605

TEL: (774) 455-4600
FAX: (774) 455-4657
roger.eaton@umassmed.edu

Education

1976-1981	M.S. and Ph.D.	State University of New York at Buffalo, Buffalo, New York (Department of Microbiology)
1970-1974	B.A.	University of Vermont, Burlington, Vermont.

Appointments

1998-Present	Acting Director, then Director, New England Newborn Screening Program, 305 South Street, Jamaica Plain, MA 02130
	Associate Professor, Department of Pediatrics, University of Massachusetts Medical School, Worcester, MA 01655
1991-Present	Chief of Laboratory-Serology, New England Newborn Screening Program, 305 South Street, Jamaica Plain, MA 02130
1987-1991	Associate in Rheumatology and Immunology, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115
1984-1991	Instructor in Medicine, Harvard Medical School, Department of Rheumatology and Immunology, Boston, MA 02115
1981-1984	Postdoctoral Fellow, Harvard Medical School, and Research Fellow, Brigham and Women's Hospital (joint appointment), Boston, MA 02115

Additional Professional Experience

2016	Invited expert, Quality Indicator Working Group, NewSteps, Association of Public Health Laboratories. National workgroup conference. Feb. 10, 2016, Silver Spring, MD. Association of Public Health Laboratories,
2014 – 2018	Member, Steering Committee for the Newborn Screening Technical assistance and Evaluation Program (NewSTEPs), Association of Public Health Laboratories,

2014-Present	Member, Association of Public Health Laboratories, Health Information Technology Workgroup
2013-2015	Advisory Board Member, HRSA-grant Sickle Cell Disease Newborn Screening Program Advisory Board. (Barry Zuckerman, M.D., Boston Medical Center, Principal Investigator).
2012-2013	Member, Massachusetts Department of Health Critical Congenital Heart Disease (CCHD) Screening Advisory Group
2011	Member of Organizing Committee, APHL Newborn Screening and Genetic Testing Symposium, San Diego, CA (November, 2011)
2010-2016	Member, UMass Medical School Commonwealth Medicine Division Strategic Planning Goal #1 (Quality Improvement) Workgroup
2010-2013	Member, Newborn Screening Translational Research Network (NBSTRN) Newborn Screening Laboratories Workgroup
2010	Member, Health Information Technology Workgroup for the Secretary's Advisory Committee on Heritable Disorders in Newborns and Children (HIT Workgroup for SACHDNC)
2009	NBSTRN participation: a) Participant, NCC Meeting with State Public Health, NBS and Diagnostic Providers, April 6-7, Bethesda, MD b) Participant, NCC NBSTRN Planning Meeting, April 16-17.
2009-2013	Member, National Coordinating Center for the Genetics and Newborn Screening Regional Collaborative Groups (NCC) Emergency Preparedness Workgroup.
2009	Invited Expert: A Stakeholder's Conference - Determine the Feasibility of G6PD Deficiency Identification for Prevention of Severe Neonatal Hyperbilirubinemia. Jointly Sponsored by HRSA and HHS. July 29-29, 2009, Bethesda, MD.
2008	Invited Expert to the National Contingency Planning for Newborn Screening Stakeholders Workgroup Meeting, Sept. 24-26, CDC, Atlanta, GA. A workgroup co-sponsored by CDC and APHL to develop the national newborn screening emergency response plan, which was required by the Newborn Screening Saves Lives Act of 2007 (Public Law 110-204)
2007-Present	Committee Member, Clinical Affairs Committee of the Commonwealth Medicine Division, University of Massachusetts Medical School.
2007-2011	Project Leader, <i>Multicenter Validation of Algorithms to Improve Communications of Positive Newborn Screening Results to the Medical</i>

- Home*. Priority Focus 1 of Region 1, New England Regional Genetics and Newborn Screening Collaborative Grant. HRSA
- 2006-Present Member, Leadership Forum, Commonwealth Medicine Division, University of Massachusetts Medical School.
- 2006 Invited expert to workgroup co-sponsored by APHL, CDC, HRSA, and NNSRG to develop strategy to definitively determine the need for routine second specimens for effective newborn screening in the USA. Washington, D.C.
- 2005-Present Expert Consultant and Presenter, Newborn Screening Advisory Committee to the State of New Hampshire Department of Public Health
- 2004-2015 Expert Consultant and Presenter, Newborn Screening Technical Advisory Committee to the Commonwealth of Pennsylvania Department of Public Health
- 2000-Present Member, International Society of Newborn Screening.
- 1998-Present Expert Consultant and Presenter, Newborn Screening Advisory Committee to the Commissioner of the Massachusetts Department of Public Health.
- 2006 and 2016 Participant, Strategic Planning Workshop Series for Strategic Planning and Development of Commonwealth Medicine Division, University of Massachusetts Medical School.
- 2006 Invited expert to workgroup co-sponsored by APHL, CDC, HRSA, and NNSRG to develop strategy to definitively determine the need for routine second specimens for effective newborn screening in the USA. Washington, D.C.
- 2003-2006 Member, HRSA sponsored National Laboratory Workgroup, for newborn screening Program Evaluation and Assessment Scheme (PEAS) development
- 2003-2006 Member, The Systematic Review On Congenital Toxoplasmosis (SYOCOT) study group (European-based)
- 2001-2003 Principal Investigator, HRSA 6H46MC 00198. *Development of a Multistate Database and Other Materials for Assessing the Validity and Utility of Tandem Mass Spectrometry-based and Cystic Fibrosis Newborn Screening.*
- 2002 Participant, NIH National Workshop "Workshop to Develop Newborn Screening Technology for SCID"
- 2002 Participant, CDC National Workshop "Banking of Newborn Dried Blood-Spots for Public Health"

- 2002 Participant, HRSA National Workshop “Challenges for the Future: Newborn Screening State Policies and Procedures”
- 2001 Participant, HRSA National Workshop “Interfacing MS-MS Outcome Information into Newborn Screening Systems”
- 2001 Participant, CDC National Workshop “Applying Genetic and Public Health Strategies to Primary Immunodeficiency Diseases”
- 1998 Member, Centers for Disease Control, National Workgroup on Toxoplasmosis.

Major National and International Presentations

- 2010 Special Challenges of State Programs that Screen for Other States: Program – to – Program Communications. Issues and Answers Series: Newborn Screening Laboratory Health Information Exchange Bethesda , MD. November 1-2, 2010
- 2010 Hemoglobin Codes: Some Issues Still Requiring Resolution. Issues and Answers Series: Newborn Screening Laboratory Health Information Exchange Bethesda , MD. November 1-2, 2010
- 2008 *Evaluation of State Data on Congenital Hypothyroidism: Massachusetts.* Presentation to a national workshop co-sponsored by the Division of Birth Defects and Developmental Disabilities, CDC: Newborn Screening and Molecular Biology Branch, CDC: Genetics Services Branch, HRSA: National Newborn Screening and Genetics Resource Center. CDC, Atlanta, Georgia. February 2008.
- 2008 *Newborn Screening Systems: Utilizing Partnerships For Follow-up ; New England Newborn Screening Program: Follow-up Activities for Massachusetts and Rhode Island.* Invited Speaker, Secretary’s Advisory Committee on Heritable Disorders and Genetic Diseases in Newborns and Children. Washington, DC. January 2008
- 2007 *Programa de Tamizaje Neonatal UMASS Medical Center.* Plenary Speaker, I Congreso Centro Americano de Neonatología and XX Curso Internacional de Perinatología y Neonatología. Guatemala City, Guatemala. November 2007
- 2007 *Quality Assurance Plan: Making it Work to Improve Laboratory Quality.* Plenary Lecture to 2007 Newborn Screening and Genetic Testing Symposium, Minneapolis, MN.

- 2005 *Panorama del Desarrollo y Evolución de los Programas de Tamiz Neonatal*. Conferencias Magistrales, 35th Congreso Mexicano de Patología Clínica, Monterrey, Mexico.
- 2000 Co-Chairman and Presenter at the session "Focus on Preventive Strategies." *Newborn Screening for Congenital Toxoplasmosis*. European Conference on Congenital Toxoplasmosis, Vienna.
- 1999 *Newborn Screening for Congenital Toxoplasmosis: The Boston Experience*. Presentation at the meeting "Toxoplasmosi Congenita", organized by the National Institute of Health of Italy in Rome, May 24, 1999.
- 1994 *Progress and Problems of Serologic Screening: The New England Experience*. Presented the laboratory aspects of toxoplasmosis screening to the 2nd Annual Meeting of the European Research Network on Congenital Toxoplasmosis, Bonn, Germany.
- 1988 *Pruebas Immunoenzimaticas En Immunologia (Immunoenzymatic Assays in Immunology)*. Delivered lecture to the Simposio de Immunologia Clinica Talleres de Histocompatibilidad y Autoinmunidad, December 1-3, 1988, Bogota, Colombia.

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CONTRACTOR NAME

Key Personnel

Name	Job Title	Salary	% Paid from this Contract	Amount Paid from this Contract
Roger B. Eaton	Director, New England Newborn Screening Program	\$153,963	0	0



Jeffrey A. Meyers
Commissioner

Lisa M. Morris
Director

13 mac

STATE OF NEW HAMPSHIRE
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH SERVICES

29 HAZEN DRIVE, CONCORD, NH 03301
603-271-4501 1-800-852-3345 Ext. 4501
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www.dhhs.nh.gov

October 8, 2019

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the Department of Health and Human Services, Division of Public Health Services, to amend an existing **sole source** agreement with the University of Massachusetts (Vendor #177576-B008), 377 Plantation Street Worcester MA 01605-2300 to provide newborn screening laboratory services by increasing the price limitation by \$1,004,120 from \$5,668,173 to an amount not to exceed \$6,672,293, with no change in the completion date of June 30, 2021 effective upon the date of Governor and Executive Council approval. 100% Other Funds.

This agreement was originally approved by the Governor and Executive Council on June 24, 2015 (Item #54), and subsequently amended on June 20, 2018 (Item #27).

Funds are available in the following account for State Fiscal Years 2020 and 2021, with authority to adjust amounts within the price limitation and adjust encumbrances between State Fiscal Years through the Budget Office, if needed and justified.

**05-95-90-902010-5240 HEALTH AND SOCIAL SERVICES, DEPT OF HEALTH AND HUMAN SVS,
HHS: DIVISION OF PUBLIC HEALTH, BUREAU OF POPULATION HEALTH AND COMMUNITY
SERVICES, NEWBORN SCREENING REVOLVING FUND**

State Fiscal Year	Class/Account	Class Title	Job Number	Current Budget	Increased (Decreased) Amount	Revised Modified Budget
2016	102-500731	Contracts for Prog Svc	90080013	\$906,341	\$0	\$906,341
2017	102-500731	Contracts for Prog Svc	90080013	\$932,955	\$0	\$932,955
2018	102-500731	Contracts for Prog Svc	90080013	\$960,354	\$0	\$960,354
2019	102-500731	Contracts for Prog Svc	90080013	\$928,054	\$0	\$928,054

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
Page 2 of 3

2020	102-500731	Contracts for Prog Svc	90080013	\$955,896	\$495,430	\$1,451,326
2021	102-500731	Contracts for Prog Svc	90080013	\$984,573	\$508,690	\$1,493,263
			Total	\$5,668,173	\$1,004,120	\$6,672,293

EXPLANATION

This request is **sole source** because the University of Massachusetts has been providing newborn screening laboratory services to state of New Hampshire since 1988. Five out of the six New England states currently contract with the University of Massachusetts, increasing its proficiency and ability to adjust and respond to the state's needs. It is also the closest laboratory geographically to New Hampshire that can perform newborn screening tests in a timely manner. Timeliness is of utmost importance with respect to newborn screening.

Funds in this amendment will be used to pay for the addition of Spinal Muscular Atrophy (SMA) to the newborn screening panel as well as a Sunday pick up for Courier services.

Approximately 25,000 individuals will be served from July 1, 2019 through March 31, 2021.

Since the establishment of RSA 132:10a in 1965, the state of New Hampshire has been responsible for the screening of all infants born in the state. The goal of newborn screening is the prevention of disability and untimely death of newborns from undiagnosed genetic disorders. New Hampshire is currently screening all infants born in the state for a panel of thirty-four (34) disorders.

Although some of these disorders are relatively rare, they do need to be identified, early so that treatment and early intervention services can be initiated before the disorder presents clinically. In some cases, this critical timeline for a positive outcome may be as short as one week. In 2018, the New Hampshire Newborn Screening Program (NBS) identified fourteen (14) infants with disorders requiring treatment and ongoing specialty evaluation. In 2017 and 2016, the program identified ten (10) infants with disorders. Newborn screening results in early identification of disorders for which timely diagnosis and treatment can mean a life without disability. The NBS has influenced the lives of these infants and their families in a very positive way.

University of Massachusetts effectiveness in delivering services will be measured through monitoring of the following performance measures the effectiveness of the amendment agreement:

- At least ninety-eight percent (98%) of Congenital Adrenal Hyperplasia results will be reported to the New Hampshire Newborn Screening Program within three (3) days of the contractor receiving the dried blood specimen.
- At least ninety-five percent (95%) of all initial screening reports will have a report date within seven days of life.

Should the Governor and Executive Council not authorize this request, the state of New Hampshire will not be able to conduct newborn screening tests: Spinal Muscular Atrophy as such increasing the risk of such possible genetic disorders being undiagnosed in newborns.

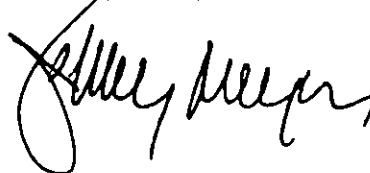
Area served: Statewide.

Source of Funds: 100% Other Funds (Newborn Screening Revolving Fund).

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
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In the event that the Other Funds become no longer available, General Funds will not be requested to support this program.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jeffrey Meyers". The signature is fluid and cursive, with a large initial "J" and "M".

Jeffrey A. Meyers
Commissioner



**New Hampshire Department of Health and Human Services
Newborn Screening Laboratory Services**

**State of New Hampshire
Department of Health and Human Services
Amendment #2 to the Newborn Screening Laboratory Services Contract**

This 2nd Amendment to the Newborn Screening Laboratory Services contract (hereinafter referred to as "Amendment #2") is by and between the State of New Hampshire, Department of Health and Human Services (hereinafter referred to as the "State" or "Department") and the University of Massachusetts, (hereinafter referred to as "the Contractor"), with a place of business at 377 Plantation Street, Worcester MA 01605-2300.

WHEREAS, pursuant to an agreement (the "Contract") approved by the Governor and Executive Council on June 24, 2015, (Item #54) and amended on June 20, 2018 (Item #27), the Contractor agreed to perform certain services based upon the terms and conditions specified in the Contract and in consideration of certain sums specified; and

WHEREAS, the State and the Contractor have agreed to make changes to the scope of work, payment schedules and terms and conditions of the contract; and

WHEREAS, pursuant to Form P-37, General Provisions, Paragraph 18, the State may modify the scope of work and the payment schedule of the contract upon written agreement of the parties and approval from the Governor and Executive Council; and

WHEREAS, the parties agree to modify the scope of work and increase the price limitation to support continued delivery of these services; and

WHEREAS, all terms and conditions of the Contract and prior amendments not inconsistent with this Amendment #2 remain in full force and effect; and

THEREFORE, in consideration of the foregoing and the mutual covenants and conditions contained in the Contract and set forth herein, the parties hereto agree to amend as follows:

1. Form P-37, General Provisions, Block 1.8, Price Limitation, to read:
\$6,672,293.
2. Form P-37, General Provisions, Block 1.9, Contracting Officer for State Agency, to read:
Nathan D. White, Director.
3. Form P-37, General Provisions, Block 1.10, State Agency Telephone Number, to read:
603-271-9631.
4. Delete Exhibit A, Scope of Services and replace in its entirety with Exhibit A, Scope of Services, Amendment #2.
5. Delete Exhibit B-3, Amendment #1, Budget Sheet in its entirety and replace with Exhibit B-3, Amendment #2, Budget Sheet.
6. Delete Exhibit B-4, Amendment #1, Budget Sheet in its entirety and replace with Exhibit B-4, Amendment #2, Budget Sheet.
7. Delete and replace Exhibit C-1, Section 6, Subparagraph (3) a. in its entirety with:
The Business Associate shall notify the Covered Entity's Privacy Officer immediately upon the Business Associate determining Confidential Data may have been exposed or compromised and of any use or disclosure of protected health information not provided



**New Hampshire Department of Health and Human Services
Newborn Screening Laboratory Services**

for by the Agreement including breaches of unsecured protected health information and/or any security incident that may have an impact on the protected health information of the Covered Entity.

8. Delete Exhibit K, Amendment #1, DHHS Information Security Requirements in its entirety and replace with Exhibit K, Amendment #2, DHHS Information Security Requirements.



New Hampshire Department of Health and Human Services
Newborn Screening Laboratory Services

This amendment shall be effective upon the date of Governor and Executive Council approval.

IN WITNESS WHEREOF, the parties have set their hands as of the date written below,

State of New Hampshire
Department of Health and Human Services

9/16/19
Date

[Signature]
Name: Lisa M. Morris
Title: Director

University of Massachusetts

9.13.19
Date

[Signature]
Name: Patricia Ingrato
Title: Deputy Executive Vice Chancellor

Acknowledgement of Contractor's signature:

State of Massachusetts, County of Worcester on 9-13-19, before the undersigned officer, personally appeared the person identified directly above, or satisfactorily proven to be the person whose name is signed above, and acknowledged that s/he executed this document in the capacity indicated above.

[Signature]
Signature of Notary Public or Justice of the Peace

Judith A. Nelson
Name and Title of Notary or Justice of the Peace



JUDITH A. NELSON
Notary Public
Commonwealth of Massachusetts
My Commission Expires July 24, 2020

My Commission Expires: 7-24-20



**New Hampshire Department of Health and Human Services
Newborn Screening Laboratory Services**

The preceding Amendment, having been reviewed by this office, is approved as to form, substance, and execution.

OFFICE OF THE ATTORNEY GENERAL

9/16/19
Date

Catherine Pinos
Name: CATHERINE PINOS
Title: Attorney

I hereby certify that the foregoing Amendment was approved by the Governor and Executive Council of the State of New Hampshire at the Meeting on: _____ (date of meeting)

OFFICE OF THE SECRETARY OF STATE

Date

Name:



New Hampshire Department of Health and Human Services
Newborn Screening Laboratory Services

Exhibit A

SCOPE OF SERVICES

1. Provisions Applicable to All Services

- 1.1. The Contractor shall submit a detailed description of the language assistance services they will provide to persons with limited English proficiency to ensure meaningful access to their programs and/or services within ten (10) days of the contract effective date.
- 1.2. The Contractor agrees that, to the extent future legislative action by the New Hampshire General Court or federal or state court orders may have an impact on the Services described herein, the State Agency has the right to modify Service priorities and expenditure requirements under this Agreement so as to achieve compliance therewith.
- 1.3. For the purposes of this Agreement, the Department has identified the Contractor as a Contractor, in accordance with 2 CFR 200.300.

2. Scope of Services

- 2.1. The Contractor shall provide laboratory screening services for newborn screening of all infants born in New Hampshire. The goal of New Hampshire Department of Health and Human Services (DHHS), Newborn Screening Program (NBSP) is the prevention of disability and untimely death of newborns from undiagnosed genetic disorders.
- 2.2. The Contractor shall ensure when considering clinical or sociological research using clients as subjects must adhere to the legal requirements governing human subjects' research. Contractors must inform the DHHS prior to initiating any research related to this contract.
- 2.3. The contractor shall carry out the laboratory analysis utilizing standardized, approved laboratory methods for the disorders listed on the NH Screening Panel per RSA 132:10-a. Additional disorders shall be added to the newborn screening panel based upon, but not limited to, the following considerations:
 - 2.3.1. The disorder is well defined with a known incidence.
 - 2.3.2. The disorder is associated with significant morbidity and/or mortality.
 - 2.3.3. The disorder can be detected with a screening test that is ethical, safe, accurate, and cost-effective.
 - 2.3.4. Effective treatment exists for the disorder, and that early treatment, meaning before the onset of symptoms, is more effective in improving health and outcomes than later treatment.
- 2.4. The Contractor shall supply approved filter paper collection kits as required for the collection and identification of blood samples, and for gathering the



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- necessary clinical information. A supply of pre-addressed envelopes for mailing repeat specimens to the lab via the US Postal Services will also be provided.
- 2.5. The Contractor shall provide a courier service to all designated birthing centers in New Hampshire for transporting of blood samples to the testing facility to include Sunday through Friday pickup and Monday through Saturday delivery. Adherence to strict turnaround times is critical. The Contractor shall also monitor the courier service for performance and timeliness.
 - 2.6. The Contractor shall report to the Newborn Screening Program all out-of-range test results according to the urgency of the laboratory findings. In addition, the laboratory shall make available to the Newborn Screening Program, condition-specific FACT SHEETS as a resource on the probable significance of the findings and recommendations for appropriate follow-up action.
 - 2.7. The Contractor shall report normal test results to the Newborn Screening Program via a secure web connection in a timely manner.
 - 2.8. The New Hampshire DHHS shall remain in full ownership of all residual screening specimens. Decisions about retention/use of dried blood spots (DBS) are at the sole discretion of DHHS, and must be consistent with the Newborn Screening Program policies. Additional testing of specimens for other disorders is prohibited without express permission from the Newborn Screening Program.
 - 2.9. The Contractor shall maintain storage of New Hampshire's residual screening specimens in an appropriate, climate-controlled, secure facility, in sealed bags of low gas permeability containing a desiccant and humidity indicator at -20C for six months.
 - 2.10. The Contractor shall ensure residual DBS be destroyed six months after the collection date, in a manner consistent with applicable state and federal requirements relating to disposal of human blood and body fluids per OSHA regulations 29 CFR, standard number 1910.1030. In the event that the storage environment of any DBS is found to have deviated from the required conditions described above, such that the stability of the specimen is likely to have been affected, the DBS shall be destroyed and the Newborn Screening Program shall be notified.
 - 2.11. The Contractor shall describe the contingency plan of operations to assure maintenance of screening services in the event of a major disaster or emergency.

3. Compliance and Data Reporting Requirements

3.1. Compliance Requirements



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- 3.1.1. As clarified by Executive Order 13166, Improving Access to Services for persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination on the basis of Limited English Proficiency (LEP). To ensure compliance with the Omnibus Crime Control and Safe Streets Act of 1968 and Title VI of the Civil Rights Act of 1964, the Contractor must submit a detailed description of the language assistance services they will provide to persons with Limited English Proficiency to ensure meaningful access to their programs and/or services, within 10 days of the contract effective date.
- 3.2. Culturally and Linguistically Appropriate Standards of Care
 - 3.2.1. The Contractor shall ensure equal access to quality health services and provide culturally and linguistically appropriate services according to the following guidelines
 - 3.2.2. The Contractor shall assess the ethnic/cultural needs, resources and assets of their community.
 - 3.2.3. The Contractor shall promote the knowledge and skills necessary for staff to work effectively with consumers with respect to their culturally and linguistically diverse environment.
 - 3.2.4. The Contractor shall when feasible and appropriate, provide clients of limited English proficiency (LEP) with interpretation services. Persons of LEP are defined as those who do not speak English as their primary language and whose skills in listening to, speaking, or reading English are such that they are unable to adequately understand and participate in the care or in the services provided to them without language assistance.
 - 3.2.5. The Contractor shall Offer consumers a forum through which clients have the opportunity to provide feedback to providers and organizations regarding cultural and linguistic issues that may deserve response.
 - 3.2.6. The Contractor shall maintain a program policy that sets forth compliance with Title VI, Language Efficiency and Proficiency. The policy shall describe the way in which the items listed above were addressed and shall indicate the circumstances in which interpretation services are provided and the method of providing service (e.g. trained interpreter, staff person who speaks the language of the client or language line).
- 3.3. Data Reporting Requirements
 - 3.3.1. The Contractor shall provide sufficient data, upon request, on the occurrence of disorders not mandated by the State to assist the Newborn Screening Program in making appropriate decisions about what services it offers.



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- 3.3.2. The Contractor shall provide a computerized system of records to show the date each sample be received from New Hampshire birth hospitals and/or community-based health care providers, the date the laboratory tests were performed and the date results of the laboratory analyses were reported to the New Hampshire Newborn Screening Program.
- 3.3.3. The Contractor shall Maintain all newborn laboratory test and result data in a computerized record system accessible to the laboratory performing the services and to the Newborn Screening Program, for a period no less than 21 years from the date of the test.
- 3.3.4. The Contractor shall provide critical data elements necessary to and determined by the New Hampshire Maternal and Child Health Section (MCHS) Data Linkage Project on a daily basis, or other schedule determined by MCHS, to enable the state to match the screening results with the electronic birth certificate (EBC).
- 3.3.5. The Contractor shall comply with minor modifications and/or additions to the proposed activities and report format as requested by MCHS. The MCHS will provide the Contractor with advance notice of such changes and the Contractor is not expected to incur any substantial costs relative to such changes.
- 3.3.6. The Contractor shall provide documentation of current CLIA Laboratory Certification.
- 3.3.7. The Contractor shall provide documentation of participation in the CDC/APHL Newborn Screening Quality Assurance Program or other acceptable proficiency-testing program.
- 3.3.8. The Contractor shall in years when contracts or amendments are not required, the DPHS Budget Form, Budget Justification, Sources of Revenue and program Staff list forms must be completed according to the relevant instructions and submitted as requested by DPHS and, at minimum, by April 30 of each year.
- 3.3.9. The Contractor shall The Sources of Revenue report must be resubmitted at any point when changes in revenue threaten the ability of the agency to carry out the planned program.
- 3.3.10. The Contractor shall agree to participate in DPHS planning, as needed, including planning for Electronic Medical Record (EMR) enhancements and Health Information Exchange (HIE).

4. State and Federal Laws



**New Hampshire Department of Health and Human Services
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- 4.1. The Contractor shall be responsible for compliance with all relevant state and federal laws, with special attention called to the following statutory responsibilities:
- 4.2. The Contractor shall report all cases of communicable diseases according to New Hampshire RSA 141-C and He-P 30, effective 01/05.
- 4.3. Contractor shall ensure persons employed comply with the reporting requirements of New Hampshire RSA 169:C, Child Protection Act; RSA 161:F46, Protective Services to Adults and RSA 631:6, Assault and Related Offenses.

5. Staffing

5.1. Staffing Provisions

- 5.1.1. Maintain a listing of "on call" qualified specialists who are available by beeper response, seven days/week, 24 hours/day to provide medical consultation as needed to the Newborn Screening Program and/or the physician of record.
- 5.1.2. Provide coverage for the Newborn Screening Program staff, upon request, when Newborn Screening Program staff is unavailable, for notifying attending physicians of out-of-range lab results (i.e. after normal work hours, on weekends, holidays, and with advance notice, when there is no staff available to cover the Newborn Screening Program).

5.2. Staffing Changes

- 5.2.1. The Contractor shall notify the DHHS within one month of hire when a new administrator or coordinator or any staff person essential to carrying out this scope of services is hired to work in the program. A resume of the employee shall accompany this notification.
- 5.2.2. The Contractor must notify the DHHS if any of the critical positions required for the delivery of these services are vacant for more than three months.

5.3. Subcontractors

- 5.3.1. If services required to comply with this Exhibit are provided by a subcontracted agency or provider, the DPHS, Maternal and Child Health Section (MCHS) must be notified in writing prior to initiation of the subcontract. In addition, subcontractors must be held responsible to fulfill all relevant requirements included in this Exhibit.

6. Meetings and Trainings



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- 6.1. The Contractor shall Provide assistance to the Newborn Screening Program staff and others, upon request, on issues related to supporting the infrastructure and facilitating the Newborn Screening Program's operations, including the provision of in-services and educational programs to include:
- 6.2. The Contractor shall Technical support for the Newborn Screening Program on computer issues as needed and as related to the interface between the state system and the laboratory-computerized system.
- 6.3. The Contractor shall Technical support and assistance upon request to the state in support of the work of the New Hampshire Newborn Screening Advisory Committee. Either the director or assistant director of the Lab will be available to attend the biannual committee meeting. The program must contact the lab to confirm availability before setting the date for the meeting.
- 6.4. The Contractor shall Technical support for the Newborn Screening Program's management information system on accessing the laboratory results database.

7. On Site Reviews

- 7.1. The Contractor shall allow a team or person authorized by the DHHS to periodically review the contractor's systems of governance, administration, data collection and submission, clinical and financial management in order to assure systems are adequate to provide the contracted services.

8. Publications

- 8.1. The DHHS and/or its funders will retain COPYRIGHT ownership for any and all original materials produced with DHHS contract funding, including, but not limited to, brochures, resource directories, protocols or guidelines, posters, or reports.
- 8.2. All documents (written, video, audio) produced, reproduced or purchased under the contract shall have prior approval from DPHS before printing, production, distribution, or use.
- 8.3. The Contractor shall credit DHHS on all materials produced under this contract following the instructions outlined in Exhibit C-1 (5).

9. Performance Measures

- 9.1. The Contractor shall ensure that following performance measures are annually achieved and monitored monthly to measure the effectiveness of the agreement:
 - 9.1.1. At least ninety-eight (98%) of Congenital Adrenal Hyperplasia results will be reported to the New Hampshire Newborn Screening Program within three (3) days of the contractor receiving the dried blood specimen.



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- 9.1.2. At least ninety- five percent (95%) of all initial screening reports will have a report date within seven days of life.
- 9.2. Annually, the Contractor shall develop and submit to the DHHS, a corrective action plan for any performance measure that was not achieved.

Exhibit B-3, Amendment #2 Budget Sheet

New Hampshire Department of Health and Human Services COMPLETE ONE BUDGET FORM FOR EACH BUDGET PERIOD											
Contractor name: University of Massachusetts											
Budget Request for: Newborn Screening Laboratory Services											
Budget Period: July 1, 2019 - June 30, 2020 SFY 20											
Line Item	Total Program Cost			Contractor Share / Match			Funded by DHHS contract share				
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total		
1. Total Salary/Wages	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2. Employee Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
3. Consultants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
4. Equipment:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Rental	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Repair and Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Purchase/Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
5. Supplies:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Educational	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Lab	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Pharmacy	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Medical	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Office	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
6. Travel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
7. Occupancy	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
8. Current Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Telephone	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Postage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Subscriptions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Audit and Legal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Board Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
9. Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
10. Marketing/Communications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
11. Staff Education and Training	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
12. Subcontracts/Agreements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
13. Other (specify costs mandatory)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Laboratory Testing (@ \$104.90 per each of 13,000 babies including SMA, MPS-I, Pompe, X-ALD)	\$ 1,363,700.00	\$ -	\$ 1,363,700.00	\$ -	\$ -	\$ -	\$ 1,363,700.00	\$ -	\$ 1,363,700.00	\$ -	
Shipping (including Sunday pick-ups):	\$ 87,626.00	\$ -	\$ 87,626.00	\$ -	\$ -	\$ -	\$ 87,626.00	\$ -	\$ 87,626.00	\$ -	
TOTAL	\$ 1,451,326.00	\$ -	\$ 1,451,326.00	\$ -	\$ -	\$ -	\$ 1,451,326.00	\$ -	\$ 1,451,326.00	\$ -	

Indirect As A Percent of Direct 0.0%

Exhibit B-4, Amendment #2 Budget Sheet

New Hampshire Department of Health and Human Services COMPLETE ONE BUDGET FORM FOR EACH BUDGET PERIOD												
Contractor name: University of Massachusetts												
Budget Request for: Newborn Screening Laboratory Services												
Budget Period: July 1, 2020 - June 30, 2021 SFY 21												
Line Item	Total Program Cost			Contractor Share / Match			Funded by DHHS contract share					
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total			
1. Total Salary/Wages	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
2. Employee Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
3. Consultants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
4. Equipment:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Rental	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Repair and Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Purchase/Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
5. Supplies:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Educational	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Lab	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Pharmacy	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Medical	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Office	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
6. Travel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7. Occupancy	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
8. Current Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Telephone	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Postage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Subscriptions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Audit and Legal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Board Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
9. Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
10. Marketing/Communications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
11. Staff Education and Training	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
12. Subcontracts/Agreements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
13. Other (specific details mandatory):	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Laboratory Testing (#) \$108.05 per each of	\$ 1,404,650.00	\$ -	\$ 1,404,650.00	\$ -	\$ -	\$ -	\$ 1,404,650.00	\$ -	\$ 1,404,650.00			
Shipping (including Sunday pick-ups):	\$ 88,613.00	\$ -	\$ 88,613.00	\$ -	\$ -	\$ -	\$ 88,613.00	\$ -	\$ 88,613.00			
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
TOTAL	\$ 1,493,263.00	\$ -	\$ 1,493,263.00	\$ -	\$ -	\$ -	\$ 1,493,263.00	\$ -	\$ 1,493,263.00			

Indirect As A Percent of Direct

0.0%

Contractor Initials
 Date 9.13.19

New Hampshire Department of Health and Human Services
Exhibit K, Amendment #2
DHHS Information Security Requirements



A. Definitions

The following terms may be reflected and have the described meaning in this document:

1. "Breach" means the loss of control, compromise, unauthorized disclosure, unauthorized acquisition, unauthorized access, or any similar term referring to situations where persons other than authorized users and for an other than authorized purpose have access or potential access to personally identifiable information, whether physical or electronic. With regard to Protected Health Information, "Breach" shall have the same meaning as the term "Breach" in section 164.402 of Title 45, Code of Federal Regulations.
2. "Computer Security Incident" shall have the same meaning "Computer Security Incident" in section two (2) of NIST Publication 800-61, Computer Security Incident Handling Guide, National Institute of Standards and Technology, U.S. Department of Commerce.
3. "Confidential Information" or "Confidential Data" means all confidential information disclosed by one party to the other such as all medical, health, financial, public assistance benefits and personal information including without limitation, Substance Abuse Treatment Records, Case Records, Protected Health Information and Personally Identifiable Information.

Confidential Information also includes any and all information owned or managed by the State of NH - created, received from or on behalf of the Department of Health and Human Services (DHHS) or accessed in the course of performing contracted services - of which collection, disclosure, protection, and disposition is governed by state or federal law or regulation. This information includes, but is not limited to Protected Health Information (PHI), Personal Information (PI), Personal Financial Information (PFI), Federal Tax Information (FTI), Social Security Numbers (SSN), Payment Card Industry (PCI), and or other sensitive and confidential information.

4. "End User" means any person or entity (e.g., contractor, contractor's employee, business associate, subcontractor, other downstream user, etc.) that receives DHHS data or derivative data in accordance with the terms of this Contract.
5. "HIPAA" means the Health Insurance Portability and Accountability Act of 1996 and the regulations promulgated thereunder.
6. "Incident" means an act that potentially violates an explicit or implied security policy, which includes successful attempts to gain unauthorized access to a system or its data, unwanted disruption or denial of service, the unauthorized use of a system for the processing or storage of data; and changes to system hardware, firmware, or software characteristics without the owner's knowledge, instruction, or consent. Incidents include the loss of data through theft or device misplacement, loss or misplacement of hardcopy documents, and misrouting of physical or electronic

New Hampshire Department of Health and Human Services

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DHHS Information Security Requirements



mail, all of which may have the potential to put the data at risk of unauthorized access, use, disclosure, modification or destruction.

7. "Open Wireless Network" means any network or segment of a network that is not designated by the State of New Hampshire's Department of Information Technology or delegate as a protected network (designed, tested, and approved, by means of the State, to transmit) will be considered an open network and not adequately secure for the transmission of unencrypted PI, PFI, PHI or confidential DHHS data.
8. "Personal Information" (or "PI") means information which can be used to distinguish or trace an individual's identity, such as their name, social security number, personal information as defined in New Hampshire RSA 359-C:19, biometric records, etc., alone, or when combined with other personal or identifying information which is linked or linkable to a specific individual, such as data and place of birth, mother's maiden name, etc.
9. "Privacy Rule" shall mean the Standards for Privacy of Individually Identifiable Health Information at 45 C.F.R. Parts 160 and 164, promulgated under HIPAA by the United States Department of Health and Human Services.
10. "Protected Health Information" (or "PHI") has the same meaning as provided in the definition of "Protected Health Information" in the HIPAA Privacy Rule at 45 C.F.R. § 160.103.
11. "Security Rule" shall mean the Security Standards for the Protection of Electronic Protected Health Information at 45 C.F.R. Part 164, Subpart C, and amendments thereto.
12. "Unsecured Protected Health Information" means Protected Health Information that is not secured by a technology standard that renders Protected Health Information unusable, unreadable, or indecipherable to unauthorized individuals and is developed or endorsed by a standards developing organization that is accredited by the American National Standards Institute.

I. RESPONSIBILITIES OF DHHS AND THE CONTRACTOR

A. Business Use and Disclosure of Confidential Information.

1. The Contractor must not use, disclose, maintain or transmit Confidential Information except as reasonably necessary as outlined under this Contract. Further, Contractor, including but not limited to all its directors, officers, employees and agents, must not use, disclose, maintain or transmit PHI in any manner that would constitute a violation of the Privacy and Security Rule.
2. The Contractor must not disclose any Confidential Information in response to a

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DHHS Information Security Requirements



request for disclosure on the basis that it is required by law, in response to a subpoena, etc., without first notifying DHHS so that DHHS has an opportunity to consent or object to the disclosure.

3. If DHHS notifies the Contractor that DHHS has agreed to be bound by additional restrictions over and above those uses or disclosures or security safeguards of PHI pursuant to the Privacy and Security Rule, the Contractor must be bound by such additional restrictions and must not disclose PHI in violation of such additional restrictions and must abide by any additional security safeguards.
4. The Contractor agrees that DHHS Data or derivative there from disclosed to an End User must only be used pursuant to the terms of this Contract.
5. The Contractor agrees DHHS Data obtained under this Contract may not be used for any other purposes that are not indicated in this Contract.
6. The Contractor agrees to grant access to the data to the authorized representatives of DHHS for the purpose of inspecting to confirm compliance with the terms of this Contract.

II. METHODS OF SECURE TRANSMISSION OF DATA

1. **Application Encryption.** If End User is transmitting DHHS data containing Confidential Data between applications, the Contractor attests the applications have been evaluated by an expert knowledgeable in cyber security and that said application's encryption capabilities ensure secure transmission via the internet.
2. **Computer Disks and Portable Storage Devices.** End User may not use computer disks or portable storage devices, such as a thumb drive, as a method of transmitting DHHS data.
3. **Encrypted Email.** End User may only employ email to transmit Confidential Data if email is encrypted and being sent to and being received by email addresses of persons authorized to receive such information.
4. **Encrypted Web Site.** If End User is employing the Web to transmit Confidential Data, the secure socket layers (SSL) must be used and the web site must be secure. SSL encrypts data transmitted via a Web site.
5. **File Hosting Services, also known as File Sharing Sites.** End User may not use file hosting services, such as Dropbox or Google Cloud Storage, to transmit Confidential Data.
6. **Ground Mail Service.** End User may only transmit Confidential Data via *certified* ground mail, UPS, or Federal Express (or other commercial carrier) within the continental U.S. and when sent to a named individual.
7. **Laptops and PDA.** If End User is employing portable devices to transmit Confidential Data said devices must be encrypted and password-protected.
8. **Open Wireless Networks.** End User may not transmit Confidential Data via an open

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New Hampshire Department of Health and Human Services

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DHHS Information Security Requirements



wireless network. End User must employ a virtual private network (VPN) when remotely transmitting via an open wireless network.

9. Remote User Communication. If End User is employing remote communication to access or transmit Confidential Data, a virtual private network (VPN) must be installed on the End User's mobile device(s) or laptop from which information will be transmitted or accessed.
10. SSH File Transfer Protocol (SFTP), also known as Secure File Transfer Protocol. If End User is employing an SFTP to transmit Confidential Data, End User will structure the Folder and access privileges to prevent inappropriate disclosure of information. SFTP folders and sub-folders used for transmitting Confidential Data will be coded for 24-hour auto-deletion cycle (i.e. Confidential Data will be deleted every 24 hours).
11. Wireless Devices. If End User is transmitting Confidential Data via wireless devices, all data must be encrypted to prevent inappropriate disclosure of information.

III. RETENTION AND DISPOSITION OF IDENTIFIABLE RECORDS

The Contractor will only retain the Confidential Data and any derivative of the Confidential Data for the duration of this Contract. After such time, the Contractor will have 30 days to destroy the Confidential Data and any Confidential derivative in whatever form it may exist, unless, otherwise required by law or permitted under this Contract. If it is infeasible to return or destroy the Confidential Data, protections pursuant to this Information Security Requirements Exhibit survive this contract. To this end, the parties must:

A. Retention

1. The Contractor agrees it will not store, transfer or process data collected in connection with the services rendered under this Contract outside of the United States. This physical location requirement shall also apply in the implementation of cloud computing, cloud service or cloud storage capabilities, and includes backup data and Disaster Recovery locations.
2. The Contractor agrees to ensure proper security monitoring capabilities are in place to detect potential security events that can impact State of NH systems and/or Department confidential information for contractor provided systems.
3. The Contractor agrees to provide security awareness and education for its End Users in support of protecting Department confidential information.
4. The Contractor agrees to retain all electronic and hard copies of Confidential Data in a secure location and identified in section IV. A.2
5. The Contractor agrees Confidential Data stored in a Cloud must be in a FedRAMP/HITECH compliant solution and comply with all applicable statutes and regulations regarding the privacy and security. All servers and devices must have currently-supported and hardened operating systems, the latest anti-viral, anti-hacker, anti-spam, anti-spyware, and anti-malware utilities. The environment, as a

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New Hampshire Department of Health and Human Services

Exhibit K, Amendment #2

DHHS Information Security Requirements



whole, must have aggressive intrusion-detection and firewall protection.

6. The Contractor agrees to and ensures its complete cooperation with the State's Chief Information Officer in the detection of any security vulnerability of the hosting infrastructure.

B. Disposition

1. If the Contractor will maintain any Confidential Information on its systems (or its sub-contractor systems), the Contractor will maintain a documented process for securely disposing of such data upon request or contract termination; and will obtain written certification for any State of New Hampshire data destroyed by the Contractor or any subcontractors as a part of ongoing, emergency, and or disaster recovery operations. When no longer in use, electronic media containing State of New Hampshire data shall be rendered unrecoverable via a secure wipe program in accordance with industry-accepted standards for secure deletion and media sanitization, or otherwise physically destroying the media (for example, degaussing) as described in NIST Special Publication 800-88, Rev 1, Guidelines for Media Sanitization, National Institute of Standards and Technology, U. S. Department of Commerce. The Contractor will document and certify in writing at time of the data destruction, and will provide written certification to the Department upon request. The written certification will include all details necessary to demonstrate data has been properly destroyed and validated. Where applicable, regulatory and professional standards for retention requirements will be jointly evaluated by the State and Contractor prior to destruction.
2. Unless otherwise specified, within thirty (30) days of the termination of this Contract, Contractor agrees to destroy all hard copies of Confidential Data using a secure method such as shredding.
3. Unless otherwise specified, within thirty (30) days of the termination of this Contract, Contractor agrees to completely destroy all electronic Confidential Data by means of data erasure, also known as secure data wiping.

IV. PROCEDURES FOR SECURITY

- A. Contractor agrees to safeguard the DHHS Data received under this Contract, and any derivative data or files, as follows:

1. The Contractor will maintain proper security controls to protect Department confidential information collected, processed, managed, and/or stored in the delivery of contracted services.
2. The Contractor will maintain policies and procedures to protect Department confidential information throughout the information lifecycle, where applicable, (from creation, transformation, use, storage and secure destruction) regardless of the media used to store the data (i.e., tape, disk, paper, etc.).

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3. The Contractor will maintain appropriate authentication and access controls to contractor systems that collect, transmit, or store Department confidential information where applicable.
4. The Contractor will ensure proper security monitoring capabilities are in place to detect potential security events that can impact State of NH systems and/or Department confidential information for contractor provided systems.
5. The Contractor will provide regular security awareness and education for its End Users in support of protecting Department confidential information.
6. If the Contractor will be sub-contracting any core functions of the engagement supporting the services for State of New Hampshire, the Contractor will maintain a program of an internal process or processes that defines specific security expectations, and monitoring compliance to security requirements that at a minimum match those for the Contractor, including breach notification requirements.
7. The Contractor will work with the Department to sign and comply with all applicable State of New Hampshire and Department system access and authorization policies and procedures, systems access forms, and computer use agreements as part of obtaining and maintaining access to any Department system(s). Agreements will be completed and signed by the Contractor and any applicable sub-contractors prior to system access being authorized.
8. If the Department determines the Contractor is a Business Associate pursuant to 45 CFR 160.103, the Contractor will execute a HIPAA Business Associate Agreement (BAA) with the Department and is responsible for maintaining compliance with the agreement.
9. The Contractor will work with the Department at its request to complete a System Management Survey. The purpose of the survey is to enable the Department and Contractor to monitor for any changes in risks, threats, and vulnerabilities that may occur over the life of the Contractor engagement. The survey will be completed annually, or an alternate time frame at the Departments discretion with agreement by the Contractor, or the Department may request the survey be completed when the scope of the engagement between the Department and the Contractor changes.
10. The Contractor will not store, knowingly or unknowingly, any State of New Hampshire or Department data offshore or outside the boundaries of the United States unless prior express written consent is obtained from the Information Security Office leadership member within the Department.
11. Data Security Breach Liability. In the event of any security breach Contractor shall make efforts to investigate the causes of the breach, promptly take measures to prevent future breach and minimize any damage or loss resulting from the breach. The State shall recover from the Contractor all costs of response and recovery from

New Hampshire Department of Health and Human Services

Exhibit K, Amendment #2

DHHS Information Security Requirements



the breach, including but not limited to: credit monitoring services, mailing costs and costs associated with website and telephonic call center services necessary due to the breach.

12. Contractor must, comply with all applicable statutes and regulations regarding the privacy and security of Confidential Information, and must in all other respects maintain the privacy and security of PI and PHI at a level and scope that is not less than the level and scope of requirements applicable to federal agencies, including, but not limited to, provisions of the Privacy Act of 1974 (5 U.S.C. § 552a), DHHS Privacy Act Regulations (45 C.F.R. §5b), HIPAA Privacy and Security Rules (45 C.F.R. Parts 160 and 164) that govern protections for individually identifiable health information and as applicable under State law.
13. Contractor agrees to establish and maintain appropriate administrative, technical, and physical safeguards to protect the confidentiality of the Confidential Data and to prevent unauthorized use or access to it. The safeguards must provide a level and scope of security that is not less than the level and scope of security requirements set forth in the principles of the latest version of NIST 800-53, as defined by that Federal Standard at a Moderate level.
14. Contractor agrees to maintain a documented breach notification and incident response process. The Contractor will notify the State's Privacy Officer and the State's Security Officer of any security breach immediately, at the email addresses provided in Section VI. This includes a confidential information breach, computer security incident, or suspected breach which affects or includes any State of New Hampshire systems that connect to the State of New Hampshire network.
15. Contractor must restrict access to the Confidential Data obtained under this Contract to only those authorized End Users who need such DHHS Data to perform their official duties in connection with purposes identified in this Contract.
16. The Contractor must ensure that all End Users:
 - a. comply with such safeguards as referenced in Section IV A. above, implemented to protect Confidential Information that is furnished by DHHS under this Contract from loss, theft or inadvertent disclosure.
 - b. safeguard this information at all times.
 - c. ensure that laptops and other electronic devices/media containing PHI, PI, or PFI are encrypted and password-protected.
 - d. send emails containing Confidential Information only if encrypted and being sent to and being received by email addresses of persons authorized to receive such information.

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New Hampshire Department of Health and Human Services

Exhibit K, Amendment #2

DHHS Information Security Requirements



- e. limit disclosure of the Confidential Information to the extent permitted by law.
- f. Confidential Information received under this Contract and individually identifiable data derived from DHHS Data, must be stored in an area that is physically and technologically secure from access by unauthorized persons during duty hours as well as non-duty hours (e.g., door locks, card keys, biometric identifiers, etc.).
- g. only authorized End Users may transmit the Confidential Data, including any derivative files containing personally identifiable information, and in all cases, such data must be encrypted at all times when in transit, at rest, or when stored on portable media as required in section IV above.
- h. in all other instances Confidential Data must be maintained, used and disclosed using appropriate safeguards, as determined by a risk-based assessment of the circumstances involved.
- i. understand that their user credentials (user name and password) must not be shared with anyone. End Users will keep their credential information secure. This applies to credentials used to access the site directly or indirectly through a third party application. The following exceptions apply to this provision "i":
 - 1. In applications where user name and passwords are under the management of a database manager, the authorized DB manager(s) currently have access to user names and passwords. However, the DB manager are not be permitted, by policy, from logging into such applications using other individuals' credentials. Improvements are planned that will eliminate DB manager's access to passwords. This security improvement is expected to be completed by 1/1/2020. Database transactional logs are enabled and logs are retained via file backup.
 - 2. For data programs used for processing long laboratory procedures, the programs are required to maintain continuity across staffing changes. Group usernames and passwords may be utilized to accommodate such analytical needs; such group credentials will be restricted in scope to include only those technicians necessary to complete the analytic processes. Physical access controls exist, allowing only lab personnel access to the equipment to run such tests. Additionally, passwords for group accounts are required to change every 30 days.

Contractor is responsible for oversight and compliance of their End Users. DHHS reserves the right to conduct onsite inspections to monitor compliance with this Contract annually, upon thirty (30) days' notice, including the privacy and security requirements provided in herein, HIPAA, and other applicable laws and Federal regulations until such

New Hampshire Department of Health and Human Services
Exhibit K, Amendment #2
DHHS Information Security Requirements



time the Confidential Data is disposed of in accordance with this Contract. Should a security incident or breach occur the Contractor agrees DHHS may conduct an onsite inspection, without notice, to monitor compliance with this Contract.

V. LOSS REPORTING

The Contractor must notify the State's Privacy Officer and Security Officer, at the email addresses provided in Section VI, of any Security Incidents or Breaches immediately upon the Contractor determining Confidential Data may have been exposed or compromised.

The Contractor must further handle and report Incidents and Breaches involving PHI in accordance with the agency's documented Incident Handling and Breach Notification procedures and in accordance with 42 C.F.R. §§ 431.300 - 306. In addition to, and notwithstanding, Contractor's compliance with all applicable obligations and procedures, Contractor's procedures must also address how the Contractor will:

1. Identify Incidents;
2. Determine if personally identifiable information is involved in Incidents;
3. Report suspected or confirmed Incidents as required in this Exhibit or P-37;
4. Identify and convene a core response group to determine the risk level of Incidents and determine risk-based responses to Incidents; and
5. Determine whether Breach notification is required, and, if so, identify appropriate Breach notification methods, timing, source, and contents from among different options, and bear costs associated with the Breach notice as well as any mitigation measures.

Incidents and/or Breaches that implicate PI must be addressed and reported, as applicable, in accordance with NH RSA 359-C:20.

VI. PERSONS TO CONTACT

A. DHHS Privacy Officer:

DHHSPrivacyOfficer@dhhs.nh.gov

B. DHHS Security Officer:

DHHSInformationSecurityOffice@dhhs.nh.gov

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mcc

Jeffrey A. Meyers
Commissioner

Lisa M. Morris
Director

STATE OF NEW HAMPSHIRE
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH SERVICES

29 HAZEN DRIVE, CONCORD, NH 03301
603-271-4501 1-800-852-3345 Ext. 4501
Fax: 603-271-4827 TDD Access: 1-800-735-2964
www.dbhs.nh.gov

May 15, 2018

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the Department of Health and Human Services, Division of Public Health Services, to exercise a renewal option to amend an existing sole source contract with the University of Massachusetts (Vendor #177576-B008), 305 South Street, Jamaica Plain, MA 02130-3597 for the provision of newborn screening laboratory services by increasing the price limitation by \$2,868,523 from \$2,799,650 to an amount not to exceed \$5,668,173 and extend the completion date from June 30, 2018 to June 30, 2021, effective upon the date of Governor and Executive Council approval. This agreement was originally approved by the Governor and Executive Council on June 24, 2015 (Item #54). 100% Other Funds.

Funds are available in the following account(s) for State Fiscal Year 2019, and are anticipated to be available in State Fiscal Year 2020 and State Fiscal Year 2021, upon the availability and continued appropriation of funds in the future operating budgets, with authority to adjust encumbrances between state fiscal years through the Budget Office without further approval from the Governor and Executive Council, if needed and justified.

**05-95-80-902010-5240 HEALTH AND SOCIAL SERVICES, DEPT OF HEALTH AND HUMAN SVS,
HHS: DIVISION OF PUBLIC HEALTH, BUREAU OF POPULATION HEALTH AND COMMUNITY
SERVICES, NEWBORN SCREENING REVOLVING FUND**

State Fiscal Year	Class / Account	Class Title	Job Number	Current Budget	Increased (Decreased) Amount	Revised Modified Budget
2016	102-500731	Contracts for Prog Svc	90080013	\$906,341	\$0	\$906,341
2017	102-500731	Contracts for Prog Svc	90080013	\$932,955	\$0	\$932,955

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
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2018	102-500731	Contracts for Prog Svc	90080013	\$960,354	\$0	\$960,354
2019	102-500731	Contracts for Prog Svc	90080013	\$0	\$928,054	\$928,054
2020	102-500731	Contracts for Prog Svc	90080013	\$0	\$955,896	\$955,896
2021	102-500731	Contracts for Prog Svc	90080013	\$0	\$984,573	\$984,573
			Total	\$2,799,650	\$2,868,523	\$5,668,173

EXPLANATION

This request is **sole source** because the University of Massachusetts Newborn Screening Laboratory is the closest laboratory that can perform newborn screening tests. Timeliness of receipt of specimens and reporting results is of utmost importance with respect to newborn screening. The University of Massachusetts is nationally recognized for its quality work. Five out of the six New England states currently contract with this laboratory, increasing its proficiency and ability to adjust and respond to the state's needs. The University of Massachusetts has been providing newborn screening laboratory services for New Hampshire since 1988.

Funds in this amendment will be used to pay for the provision of laboratory services for newborn screening for the entire state of New Hampshire.

Since the establishment of RSA 132:10a in 1965, the state of New Hampshire has been responsible for the screening of all infants born in the state. The goal of newborn screening is the prevention of disability and untimely death of newborns from undiagnosed genetic disorders. New Hampshire is currently screening all infants born in the state for a panel of thirty-four (34) disorders.

Although some of these disorders are relatively rare, they do need to be identified and intervention initiated before the disorder presents clinically. In some cases this critical timeline for a positive outcome may be as short as one week. In 2017, the New Hampshire Newborn Screening Program identified ten (10) infants with disorders requiring treatment and ongoing specialty evaluation. In 2016, the program identified ten (10) infants with disorders, and in 2015, the program identified twenty-five (25) infants with disorders. Newborn screening results in early identification of disorders for which timely diagnosis and treatment can mean a life without disability. The lives of these infants and their families have been impacted in a very positive way by timely and accurate screening services.

Notwithstanding any other provision of the Contract to the contrary, no services shall continue after June 30, 2021, and the Department shall not be liable for any payments for services provided after June 30, 2021, unless and until an appropriation for these services has been received from the state legislature and funds encumbered for the SFY 2020-2021 biennium.

As referenced in Exhibit C-1 of this contract, this Agreement has the option to extend for up to three (3) additional years, contingent upon satisfactory delivery of services, available funding,

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
Page 3 of 3

agreement of the parties, and approval of the Governor and Council. The Department is exercising this renewal option.

The Contractor successfully fulfilled and achieved the performance measures (or deliverables) in the original contract, which include:

- At least ninety-eight percent (98%) of Congenital Adrenal Hyperplasia results will be reported to the New Hampshire Newborn Screening Program within three (3) days of the contractor receiving the dried blood specimen.
- At least ninety-five percent (95%) of all initial screening reports will have a report date within seven days of life.

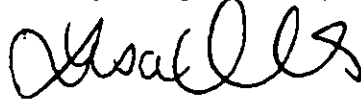
Should the Governor and Executive Council not authorize this request, New Hampshire will be out of compliance with the mandate established in RSA 132:10a, and newborns would be in jeopardy of serious harm, potentially even death.

Area served: Statewide.

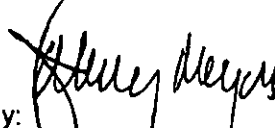
Source of Funds: 100% Other Funds (Newborn Screening Revolving Fund).

In the event that the Other Funds become no longer available, General Funds will not be requested to support this program.

Respectfully submitted,



Lisa Morris, MSSW
Director



Approved by:

Jeffrey A. Meyers
Commissioner



**New Hampshire Department of Health and Human Services
Newborn Screening Laboratory Services**

**State of New Hampshire
Department of Health and Human Services
Amendment #1 to the Newborn Screening Laboratory Services Contract**

This 1st Amendment to the Newborn Screening Laboratory Services contract (hereinafter referred to as "Amendment One") dated this 15th day of May, 2018 is by and between the State of New Hampshire, Department of Health and Human Services (hereinafter referred to as the "State" or "Department") and the University of Massachusetts, (hereinafter referred to as "the Contractor"), with a place of business at 305 South Street, Jamaica Plain, MA 02130-3597.

WHEREAS, pursuant to an agreement (the "Contract") approved by the Governor and Executive Council on June 24, 2015, (Item #54), the Contractor agreed to perform certain services based upon the terms and conditions specified in the Contract and in consideration of certain sums specified; and

WHEREAS, the State and the Contractor have agreed to make changes to the scope of work, payment schedules and terms and conditions of the contract; and

WHEREAS, pursuant to Form P-37, General Provisions, Paragraph 18, and Exhibit C-1, Paragraph 2 (10.6), the Department reserves the right to renew the Contract for up to three (3) additional years; subject to mutual agreement, continued availability of funds, satisfactory performance of service, and approval by the Governor and Executive Council; and

WHEREAS, the parties agree to extend the term of the agreement and increase the price limitation; and
THEREFORE, in consideration of the foregoing and the mutual covenants and conditions contained in the Contract and set forth herein, the parties hereto agree to amend as follows:

1. Form P-37 General Provisions, Block 1.7, Completion Date, to read:
June 30, 2021.
2. Form P-37, General Provisions, Block 1.8, Price Limitation, to read:
\$5,668,173.
3. Form P-37, General Provisions, Block 1.9, Contracting Officer for State Agency, to read:
E. Maria Reinemann, Esq., Director of Contracts and Procurement.
4. Form P-37, General Provisions, Block 1.10, State Agency Telephone Number, to read:
603-271-9330.
5. Exhibit A Newborn Screening Laboratory Services, SCOPE OF SERVICES, Section 1. General Provisions, Subsection 1.1 Required Services, Paragraph 1.1.5, to read:
1.1.5. The Contractor shall provide a courier service to all designated birthing centers in New Hampshire for transporting of blood samples to the testing facility to include Sunday through Friday pickup and Monday through Saturday delivery. Adherence to strict turnaround times is critical. The Contractor shall also monitor the courier service for performance and timeliness
6. Delete and replace Exhibit B Method and Conditions Precedent to Payment with Exhibit B Amendment #1 Method and Conditions Precedent to Payment.
7. Add Exhibit B-2 Budget Form Amendment #1, Budget for State Fiscal Year 2019.
8. Add Exhibit B-3 Budget Form Amendment #1, Budget for State Fiscal Year 2020.
9. Add Exhibit B-4 Budget Form Amendment #1, Budget for State Fiscal Year 2021.
10. Add Exhibit K, DHHS Information Security Requirements.



New Hampshire Department of Health and Human Services
Newborn Screening Laboratory Services

This amendment shall be effective upon the date of Governor and Executive Council approval.
IN WITNESS WHEREOF, the parties have set their hands as of the date written below.

State of New Hampshire
Department of Health and Human Services

5/16/18

Date

Name: Lisa M. Morris
Title: Director

University of Massachusetts

Patti Onorato 5.16.18

Date

Name: Patti Onorato
Title: Associate Vice Chancellor, Operations, CWM

Acknowledgement of Contractor's signature:

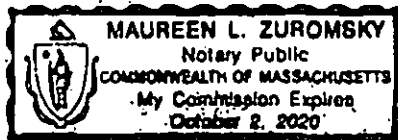
State of Massachusetts County of Worcester on May 16, 2018 before the undersigned officer, personally appeared the person identified directly above, or satisfactorily proven to be the person whose name is signed above, and acknowledged that s/he executed this document in the capacity indicated above.

Signature of Notary Public or Justice of the Peace

MAUREEN L. ZUROMSKY, NOTARY PUBLIC

Name and Title of Notary or Justice of the Peace

My Commission Expires: 10/2/2020





**New Hampshire Department of Health and Human Services
Newborn Screening Laboratory Services**

The preceding Amendment, having been reviewed by this office, is approved as to form, substance, and execution.

OFFICE OF THE ATTORNEY GENERAL

6/5/18
Date

[Signature]
Name: Myron A. Gade
Title: Attorney General

I hereby certify that the foregoing Amendment was approved by the Governor and Executive Council of the State of New Hampshire at the Meeting on: _____ (date of meeting)

OFFICE OF THE SECRETARY OF STATE

Date

Name:
Title:



New Hampshire Department of Health and Human Services
Newborn Screening Laboratory Services

Exhibit B Amendment #1

Method and Conditions Precedent to Payment

1. This contract is funded from 100% other funds from the Newborn Screening Revolving Fund to provide services pursuant to Exhibit A, Scope of Services.
2. The State shall pay the Contractor an amount not to exceed the amount identified in Form P37, General Provisions, Block 1.8; price limitation for the services provided by the Contractor pursuant to Exhibit A, Scope of Services.
3. Payment for expenses shall be on a cost reimbursement basis only for actual expenditures in accordance with the approved line item budgets shown in Exhibits B-1 and B-4.
4. Payment for services shall be made as follows:
 - 4.1. The Contractor shall submit quarterly reports as specified in Exhibit A, Scope of Services, Sections 3, with an invoice for reimbursement of actual expenses incurred during the quarter.
 - 4.2. The State shall make payment to the Contractor within thirty (30) days of receipt of each invoice for Contractor services provided pursuant to this Agreement.
 - 4.3. Invoices and reports identified in Section 4.1 must be submitted to:
NH Department of Health and Human Services
Division of Public Health Services
Email address: DPHcontractbilling@dhhs.state.nh.us
5. Payments may be withheld pending receipt of required reports.
6. A final payment request shall be submitted no later than forty-five (45) days after the contract ends. Failure to submit the invoice and accompanying documentation may result in nonpayment.
7. Notwithstanding anything to the contrary herein, the Contractor agrees that funding under this Contract may be withheld, in whole or in part, in the event of noncompliance with any State or Federal law, rule or regulation applicable to the services provided, or if the said services have not been completed in accordance with the terms and conditions of this Agreement.
8. Notwithstanding paragraph 18 of Form P-37, General Provisions, an amendment limited to adjusting the encumbrances between State fiscal years within the price limitation, may be made by written agreement of both parties without obtaining further approval from the Governor and Executive Council.

Exhibit B-2 Budget Form Amendment #1

New Hampshire Department of Health and Human Services

Bidder/Contractor Name: University of Massachusetts

Budget Request for: Newborn Screening Laboratory Services

Budget Period: SFY 2019

Line Item	Direct Incremental	Indirect Fixed	Total	Allocation Method for Indirect/Fixed Costs
1. Total Salary/Wages	\$ -	\$ -	\$ -	
2. Employee Benefits	\$ -	\$ -	\$ -	
3. Consultants	\$ -	\$ -	\$ -	
4. Equipment:	\$ -	\$ -	\$ -	
Rental	\$ -	\$ -	\$ -	
Repair and Maintenance	\$ -	\$ -	\$ -	
Purchase/Depreciation	\$ -	\$ -	\$ -	
5. Supplies:	\$ -	\$ -	\$ -	
Educational	\$ -	\$ -	\$ -	
Lab	\$ -	\$ -	\$ -	
Pharmacy	\$ -	\$ -	\$ -	
Medical	\$ -	\$ -	\$ -	
Office	\$ -	\$ -	\$ -	
6. Travel	\$ -	\$ -	\$ -	
7. Occupancy	\$ -	\$ -	\$ -	
8. Current Expenses	\$ -	\$ -	\$ -	
Telephone	\$ -	\$ -	\$ -	
Postage	\$ -	\$ -	\$ -	
Subscriptions	\$ -	\$ -	\$ -	
Audit and Legal	\$ -	\$ -	\$ -	
Insurance	\$ -	\$ -	\$ -	
Board Expenses	\$ -	\$ -	\$ -	
9. Software	\$ -	\$ -	\$ -	
10. Marketing/Communications	\$ -	\$ -	\$ -	
11. Staff Education and Training	\$ -	\$ -	\$ -	
12. Subcontracts/Agreements	\$ -	\$ -	\$ -	
13. Other (specific details, mandatory):	\$ -	\$ -	\$ -	
Laboratory Testing (current, @\$68.73)	\$ 893,490.00	\$ -	\$ 893,490.00	
Specimen Shipping	\$ 34,564.00	\$ -	\$ 34,564.00	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTAL	\$ 928,054.00	\$ -	\$ 928,054.00	

Indirect As A Percent of Direct

0.0%

Exhibit B-3 Budget Form Amendment #1

New Hampshire Department of Health and Human Services

Bidder/Contractor Name: University of Massachusetts

Budget Request for: Newborn Screening Laboratory Services

Budget Period: SFY 2020

Line Item	Direct Incremental	Indirect Fixed	Total	Allocation Method for Indirect/Fixed Cost
1. Total Salary/Wages	\$ -	\$ -	\$ -	
2. Employee Benefits	\$ -	\$ -	\$ -	
3. Consultants	\$ -	\$ -	\$ -	
4. Equipment:	\$ -	\$ -	\$ -	
Rental	\$ -	\$ -	\$ -	
Repair and Maintenance	\$ -	\$ -	\$ -	
Purchase/Depreciation	\$ -	\$ -	\$ -	
5. Supplies:	\$ -	\$ -	\$ -	
Educational	\$ -	\$ -	\$ -	
Lab	\$ -	\$ -	\$ -	
Pharmacy	\$ -	\$ -	\$ -	
Medical	\$ -	\$ -	\$ -	
Office	\$ -	\$ -	\$ -	
6. Travel	\$ -	\$ -	\$ -	
7. Occupancy	\$ -	\$ -	\$ -	
8. Current Expenses	\$ -	\$ -	\$ -	
Telephone	\$ -	\$ -	\$ -	
Postage	\$ -	\$ -	\$ -	
Subscriptions	\$ -	\$ -	\$ -	
Audit and Legal	\$ -	\$ -	\$ -	
Insurance	\$ -	\$ -	\$ -	
Board Expenses	\$ -	\$ -	\$ -	
9. Software	\$ -	\$ -	\$ -	
10. Marketing/Communications	\$ -	\$ -	\$ -	
11. Staff Education and Training	\$ -	\$ -	\$ -	
12. Subcontracts/Agreements	\$ -	\$ -	\$ -	
13. Other (specific details mandatory):	\$ -	\$ -	\$ -	
Laboratory Testing (current, @\$70.79)	\$ 920,295.00	\$ -	\$ 920,295.00	
Specimen Shipping	\$ 35,601.00	\$ -	\$ 35,601.00	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTAL	\$ 955,896.00	\$ -	\$ 955,896.00	

Indirect As A Percent of Direct

0.0%

Exhibit B-4 Budget Form Amendment #1

New Hampshire Department of Health and Human Services

Bidder/Contractor Name: University of Massachusetts

Budget Request for: Newborn Screening Laboratory Services

Budget Period: SFY 2021

Line Item	Direct (Incremental)	Indirect (Fixed)	Total	Allocation Method for Indirect/Fixed Costs
1. Total Salary/Wages	\$ -	\$ -	\$ -	
2. Employee Benefits	\$ -	\$ -	\$ -	
3. Consultants	\$ -	\$ -	\$ -	
4. Equipment:	\$ -	\$ -	\$ -	
Rental	\$ -	\$ -	\$ -	
Repair and Maintenance	\$ -	\$ -	\$ -	
Purchase/Depreciation	\$ -	\$ -	\$ -	
5. Supplies:	\$ -	\$ -	\$ -	
Educational	\$ -	\$ -	\$ -	
Lab	\$ -	\$ -	\$ -	
Pharmacy	\$ -	\$ -	\$ -	
Medical	\$ -	\$ -	\$ -	
Office	\$ -	\$ -	\$ -	
6. Travel	\$ -	\$ -	\$ -	
7. Occupancy	\$ -	\$ -	\$ -	
8. Current Expenses	\$ -	\$ -	\$ -	
Telephone	\$ -	\$ -	\$ -	
Postage	\$ -	\$ -	\$ -	
Subscriptions	\$ -	\$ -	\$ -	
Audit and Legal	\$ -	\$ -	\$ -	
Insurance	\$ -	\$ -	\$ -	
Board Expenses	\$ -	\$ -	\$ -	
9. Software	\$ -	\$ -	\$ -	
10. Marketing/Communications	\$ -	\$ -	\$ -	
11. Staff Education and Training	\$ -	\$ -	\$ -	
12. Subcontracts/Agreements	\$ -	\$ -	\$ -	
13. Other (specific details mandatory):	\$ -	\$ -	\$ -	
Laboratory Testing (current, @\$72.92)	\$ 947,904.00	\$ -	\$ 947,904.00	
Specimen Shipping	\$ 36,669.00	\$ -	\$ 36,669.00	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTAL	\$ 984,573.00	\$ -	\$ 984,573.00	

Indirect As A Percent of Direct 0.0%

New Hampshire Department of Health and Human Services

Exhibit K

DHHS Information Security Requirements



A. Definitions

The following terms may be reflected and have the described meaning in this document:

1. "Breach" means the loss of control, compromise, unauthorized disclosure, unauthorized acquisition, unauthorized access, or any similar term referring to situations where persons other than authorized users and for an other than authorized purpose have access or potential access to personally identifiable information, whether physical or electronic. With regard to Protected Health Information, "Breach" shall have the same meaning as the term "Breach" in section 164.402 of Title 45, Code of Federal Regulations.
2. "Computer Security Incident" shall have the same meaning "Computer Security Incident" in section two (2) of NIST Publication 800-61, Computer Security Incident Handling Guide, National Institute of Standards and Technology, U.S. Department of Commerce.
3. "Confidential Information" or "Confidential Data" means all confidential information disclosed by one party to the other such as all medical, health, financial, public assistance benefits and personal information including without limitation, Substance Abuse Treatment Records, Case Records, Protected Health Information and Personally Identifiable Information.

Confidential Information also includes any and all information owned or managed by the State of NH - created, received from or on behalf of the Department of Health and Human Services (DHHS) or accessed in the course of performing contracted services - of which collection, disclosure, protection, and disposition is governed by state or federal law or regulation. This information includes, but is not limited to Protected Health Information (PHI), Personal Information (PI), Personal Financial Information (PFI), Federal Tax Information (FTI), Social Security Numbers (SSN), Payment Card Industry (PCI), and or other sensitive and confidential information.

4. "End User" means any person or entity (e.g., contractor, contractor's employee, business associate, subcontractor, other downstream user, etc.) that receives DHHS data or derivative data in accordance with the terms of this Contract.
5. "HIPAA" means the Health Insurance Portability and Accountability Act of 1996 and the regulations promulgated thereunder.
6. "Incident" means an act that potentially violates an explicit or implied security policy, which includes attempts (successful) to gain unauthorized access to a system or its data, unwanted disruption or denial of service, the unauthorized use of a system for the processing or storage of data; and changes to system hardware, firmware, or software characteristics without the owner's knowledge, instruction, or consent. Incidents include the loss of data through theft or device misplacement, loss or misplacement of hardcopy documents, and misrouting of physical or electronic

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DHHS Information Security Requirements



mail, all of which may have the potential to put the data at risk of unauthorized access, use, disclosure, modification or destruction.

7. "Open Wireless Network" means any network or segment of a network that is not designated by the State of New Hampshire's Department of Information Technology or delegate as a protected network (designed, tested, and approved, by means of the State, to transmit) will be considered an open network and not adequately secure for the transmission of unencrypted PI, PFI, PHI or confidential DHHS data.
8. "Personal Information" (or "PI") means information which can be used to distinguish or trace an individual's identity, such as their name, social security number, personal information as defined in New Hampshire RSA 359-C:19, biometric records, etc., alone, or when combined with other personal or identifying information which is linked or linkable to a specific individual, such as date and place of birth, mother's maiden name, etc.
9. "Privacy Rule" shall mean the Standards for Privacy of Individually Identifiable Health Information at 45 C.F.R. Parts 160 and 164, promulgated under HIPAA by the United States Department of Health and Human Services.
10. "Protected Health Information" (or "PHI") has the same meaning as provided in the definition of "Protected Health Information" in the HIPAA Privacy Rule at 45 C.F.R. § 160.103.
11. "Security Rule" shall mean the Security Standards for the Protection of Electronic Protected Health Information at 45 C.F.R. Part 164, Subpart C, and amendments thereto.
12. "Unsecured Protected Health Information" means Protected Health Information that is not secured by a technology standard that renders Protected Health Information unusable, unreadable, or indecipherable to unauthorized individuals and is developed or endorsed by a standards developing organization that is accredited by the American National Standards Institute.

I. RESPONSIBILITIES OF DHHS AND THE CONTRACTOR

A. Business Use and Disclosure of Confidential Information.

1. The Contractor must not use, disclose, maintain or transmit Confidential Information except as reasonably necessary as outlined under this Contract. Further, Contractor, including but not limited to all its directors, officers, employees and agents, must not use, disclose, maintain or transmit PHI in any manner that would constitute a violation of the Privacy and Security Rule.
2. The Contractor must not disclose any Confidential Information in response to a

New Hampshire Department of Health and Human Services

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request for disclosure on the basis that it is required by law, in response to a subpoena, etc., without first notifying DHHS so that DHHS has an opportunity to consent or object to the disclosure.

3. If DHHS notifies the Contractor that DHHS has agreed to be bound by additional restrictions over and above those uses or disclosures or security safeguards of PHI pursuant to the Privacy and Security Rule, the Contractor must be bound by such additional restrictions and must not disclose PHI in violation of such additional restrictions and must abide by any additional security safeguards.
4. The Contractor agrees that DHHS Data or derivative there from disclosed to an End User must only be used pursuant to the terms of this Contract.
5. The Contractor agrees DHHS Data obtained under this Contract may not be used for any other purposes that are not indicated in this Contract.
6. The Contractor agrees to grant access to the data to the authorized representatives of DHHS for the purpose of inspecting to confirm compliance with the terms of this Contract.

ii. METHODS OF SECURE TRANSMISSION OF DATA

1. Application Encryption. If End User is transmitting DHHS data containing Confidential Data between applications, the Contractor attests the applications have been evaluated by an expert knowledgeable in cyber security and that said application's encryption capabilities ensure secure transmission via the internet.
2. Computer Disks and Portable Storage Devices. End User may not use computer disks or portable storage devices, such as a thumb drive, as a method of transmitting DHHS data.
3. Encrypted Email. End User may only employ email to transmit Confidential Data if email is encrypted and being sent to and being received by email addresses of persons authorized to receive such information.
4. Encrypted Web Site. If End User is employing the Web to transmit Confidential Data, the secure socket layers (SSL) must be used and the web site must be secure. SSL encrypts data transmitted via a Web site.
5. File Hosting Services, also known as File Sharing Sites. End User may not use file hosting services, such as Dropbox or Google Cloud Storage, to transmit Confidential Data.
6. Ground Mail Service. End User may only transmit Confidential Data via *certified* ground mail, UPS or Federal Express within the continental U.S. and when sent to a named individual.
7. Laptops and PDA. If End User is employing portable devices to transmit Confidential Data said devices must be encrypted and password-protected.
8. Open Wireless Networks. End User may not transmit Confidential Data via an open

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wireless network. End User must employ a virtual private network (VPN) when remotely transmitting via an open wireless network.

9. Remote User Communication. If End User is employing remote communication to access or transmit Confidential Data, a virtual private network (VPN) must be installed on the End User's mobile device(s) or laptop from which information will be transmitted or accessed.
10. SSH File Transfer Protocol (SFTP), also known as Secure File Transfer Protocol. If End User is employing an SFTP to transmit Confidential Data, End User will structure the Folder and access privileges to prevent inappropriate disclosure of information. The two UMMS automated NH SFTP jobs running is acceptable to DHHS; One is on a 24 hour cycle and is deleted the next time it is run. The other is a weekly extract. This one sits on the SFTP server for one week and is deleted once per week.
11. Wireless Devices. If End User is transmitting Confidential Data via wireless devices, all data must be encrypted to prevent inappropriate disclosure of information.

III. RETENTION AND DISPOSITION OF IDENTIFIABLE RECORDS

The Contractor will only retain the data and any derivative of the data for the duration of this Contract. After such time, the Contractor will have 30 days to destroy the data and any derivative in whatever form it may exist, unless, otherwise required by law or permitted under this Contract. To this end, the parties must:

A. Retention

1. The Contractor agrees it will not store, transfer or process data collected in connection with the services rendered under this Contract outside of the United States. This physical location requirement shall also apply in the implementation of cloud computing, cloud service or cloud storage capabilities, and includes backup data and Disaster Recovery locations.
2. The Contractor agrees to ensure proper security monitoring capabilities are in place to detect potential security events that can impact State of NH systems and/or Department confidential information for contractor provided systems.
3. The Contractor agrees to provide security awareness and education for its End Users in support of protecting Department confidential information.
4. The Contractor agrees to retain all electronic and hard copies of Confidential Data in a secure location and identified in section IV. A.2
5. The Contractor agrees Confidential Data stored in a Cloud must be in a FedRAMP/HITECH compliant solution and comply with all applicable statutes and regulations regarding the privacy and security. All servers and devices must have currently-supported and hardened operating systems, the latest anti-viral, anti-hacker, anti-spam, anti-spyware, and anti-malware utilities. The environment, as a

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whole, must have aggressive intrusion-detection and firewall protection.

6. The Contractor agrees to and ensures its complete cooperation with the State's Chief Information Officer in the detection of any security vulnerability of the hosting infrastructure.

B. Disposition

1. If the Contractor will maintain any Confidential Information on its systems (or its sub-contractor systems), the Contractor will maintain a documented process for securely disposing of such data upon request or contract termination; and will obtain written certification for any State of New Hampshire data destroyed by the Contractor or any subcontractors as a part of ongoing, emergency, and or disaster recovery operations. When no longer in use, electronic media containing State of New Hampshire data shall be rendered unrecoverable via a secure wipe program in accordance with industry-accepted standards for secure deletion and media sanitization, or otherwise physically destroying the media (for example, degaussing) as described in NIST Special Publication 800-88, Rev 1, Guidelines for Media Sanitization, National Institute of Standards and Technology, U. S. Department of Commerce. The Contractor will document and certify in writing at time of the data destruction, and will provide written certification to the Department upon request. The written certification will include all details necessary to demonstrate data has been properly destroyed and validated. Where applicable, regulatory and professional standards for retention requirements will be jointly evaluated by the State and Contractor prior to destruction.
2. Unless otherwise specified, within thirty (30) days of the termination of this Contract, Contractor agrees to destroy all hard copies of Confidential Data using a secure method such as shredding.
3. Unless otherwise specified, within thirty (30) days of the termination of this Contract, Contractor agrees to completely destroy all electronic Confidential Data by means of data erasure, also known as secure data wiping.

IV. PROCEDURES FOR SECURITY

- A. Contractor agrees to safeguard the DHHS Data received under this Contract, and any derivative data or files, as follows:
 1. The Contractor will maintain proper security controls to protect Department confidential information collected, processed, managed, and/or stored in the delivery of contracted services.
 2. The Contractor will maintain policies and procedures to protect Department confidential information throughout the information lifecycle, where applicable, (from creation, transformation, use, storage and secure destruction) regardless of the media used to store the data (i.e., tape, disk, paper, etc.).

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3. The Contractor will maintain appropriate authentication and access controls to contractor systems that collect, transmit, or store Department confidential information where applicable.
4. The Contractor will ensure proper security monitoring capabilities are in place to detect potential security events that can impact State of NH systems and/or Department confidential information for contractor provided systems.
5. The Contractor will provide regular security awareness and education for its End Users in support of protecting Department confidential information.
6. If the Contractor will be sub-contracting any core functions of the engagement supporting the services for State of New Hampshire, the Contractor will maintain a program of an internal process or processes that defines specific security expectations, and monitoring compliance to security requirements that at a minimum match those for the Contractor, including breach notification requirements.
7. The Contractor will work with the Department to sign and comply with all applicable State of New Hampshire and Department system access and authorization policies and procedures, systems access forms, and computer use agreements as part of obtaining and maintaining access to any Department system(s). Agreements will be completed and signed by the Contractor and any applicable sub-contractors prior to system access being authorized.
8. If the Department determines the Contractor is a Business Associate pursuant to 45 CFR 160.103, the Contractor will execute a HIPAA Business Associate Agreement (BAA) with the Department and is responsible for maintaining compliance with the agreement.
9. The Contractor will work with the Department at its request to complete a System Management Survey. The purpose of the survey is to enable the Department and Contractor to monitor for any changes in risks, threats, and vulnerabilities that may occur over the life of the Contractor engagement. The survey will be completed annually, or an alternate time frame at the Departments discretion with agreement by the Contractor, or the Department may request the survey be completed when the scope of the engagement between the Department and the Contractor changes:
10. The Contractor will not store, knowingly or unknowingly, any State of New Hampshire or Department data offshore or outside the boundaries of the United States unless prior express written consent is obtained from the Information Security Office leadership member within the Department.
11. Data Security Breach Liability. In the event of any security breach Contractor shall make efforts to investigate the causes of the breach, promptly take measures to prevent future breach and minimize any damage or loss resulting from the breach. The State shall recover from the Contractor all costs of response and recovery from

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the breach, including but not limited to: credit monitoring services, mailing costs and costs associated with website and telephone call center services necessary due to the breach.

12. Contractor must, comply with all applicable statutes and regulations regarding the privacy and security of Confidential Information, and must in all other respects maintain the privacy and security of PI and PHI at a level and scope that is not less than the level and scope of requirements applicable to federal agencies, including, but not limited to, provisions of the Privacy Act of 1974 (5 U.S.C. § 552a), DHHS Privacy Act Regulations (45 C.F.R. §5b), HIPAA Privacy and Security Rules (45 C.F.R. Parts 160 and 164) that govern protections for individually identifiable health information and as applicable under State law.
13. Contractor agrees to establish and maintain appropriate administrative, technical, and physical safeguards to protect the confidentiality of the Confidential Data and to prevent unauthorized use or access to it. The safeguards must provide a level and scope of security that is not less than the level and scope of security requirements set forth in the principles of NIST 800-53, as defined by that Federal Standard at a Moderate level.
14. Contractor agrees to maintain a documented breach notification and incident response process. The Contractor will notify the State's Privacy Officer, and additional email addresses provided in this section, of any security breach within three (3) business days of the time that the Contractor learns of its occurrence. This includes a confidential information breach, computer security incident, or suspected breach which affects or includes any State of New Hampshire systems that connect to the State of New Hampshire network.
15. Contractor must restrict access to the Confidential Data obtained under this Contract to only those authorized End Users who need such DHHS Data to perform their official duties in connection with purposes identified in this Contract.
16. The Contractor must ensure that all End Users:
 - a. comply with such safeguards as referenced in Section IV A. above, implemented to protect Confidential Information that is furnished by DHHS under this Contract from loss, theft or inadvertent disclosure.
 - b. safeguard this information at all times.
 - c. ensure that laptops and other electronic devices/media containing PHI, PI, or PFI are encrypted and password-protected.
 - d. send emails containing Confidential Information only if encrypted and being sent to and being received by email addresses of persons authorized to receive such information.

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- e. limit disclosure of the Confidential Information to the extent permitted by law.
- f. Confidential Information received under this Contract and individually identifiable data derived from DHHS Data, must be stored in an area that is physically and technologically secure from access by unauthorized persons during duty hours as well as non-duty hours (e.g., door locks, card keys, biometric identifiers, etc.).
- g. only authorized End Users may transmit the Confidential Data, including any derivative files containing personally identifiable information, and in all cases, such data must be encrypted at all times when in transit, at rest, or when stored on portable media as required in section IV above.
- h. in all other instances Confidential Data must be maintained, used and disclosed using appropriate safeguards, as determined by a risk-based assessment of the circumstances involved.
- i. understand that their user credentials (user name and password) must not be shared with anyone. End Users will keep their credential information secure. This applies to credentials used to access the site directly or indirectly through a third party application.

Contractor is responsible for oversight and compliance of their End Users. DHHS reserves the right to conduct onsite inspections to monitor compliance with this Contract annually, upon thirty (30) days' notice, including the privacy and security requirements provided in herein, HIPAA, and other applicable laws and Federal regulations until such time the Confidential Data is disposed of in accordance with this Contract.

V. LOSS REPORTING

The Contractor must notify the State's Privacy Officer, Information Security Office and Program Manager of any Security Incidents and Breaches within three (3) business days of the time that the Contractor learns of their occurrence.

The Contractor must further handle and report Incidents and Breaches involving PHI in accordance with the agency's documented Incident Handling and Breach Notification procedures and in accordance with 42 C.F.R. §§ 431.300 - 306. In addition to, and notwithstanding, Contractor's compliance with all applicable obligations and procedures, Contractor's procedures must also address how the Contractor will:

1. Identify Incidents;
2. Determine if personally identifiable information is involved in Incidents;
3. Report suspected or confirmed Incidents as required in this Exhibit or P-37;
4. Identify and convene a core response group to determine the risk level of Incidents and determine risk-based responses to Incidents; and

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5. Determine whether Breach notification is required, and, if so, identify appropriate Breach notification methods, timing, source, and contents from among different options, and bear costs associated with the Breach notice as well as any mitigation measures.

Incidents and/or Breaches that implicate PI must be addressed and reported, as applicable, in accordance with NH RSA 359-C:20.

VI. PERSONS TO CONTACT

- A. DHHS contact for Data Management or Data Exchange issues:

DHHSInformationSecurityOffice@dhhs.nh.gov

- B. DHHS contacts for Privacy issues:

DHHSPrivacyOfficer@dhhs.nh.gov

- C. DHHS contact for Information Security Issues:

DHHSInformationSecurityOffice@dhhs.nh.gov

- D. DHHS contact for Breach notifications:

DHHSInformationSecurityOffice@dhhs.nh.gov

DHHSPrivacyOfficer@dhhs.nh.gov



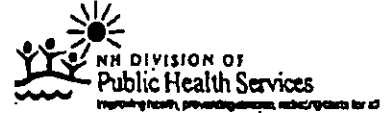
Nicholas A. Toumpas
Commissioner

Marcella Jordan Bobinsky
Acting Director

STATE OF NEW HAMPSHIRE

DEPARTMENT OF HEALTH AND HUMAN SERVICES

29 HAZEN DRIVE, CONCORD, NH. 03301-6527
603-271-4501 1-800-852-3345 Ext. 4501
Fax: 603-271-4827 TDD Access: 1-800-735-2964



May 20, 2015

G&C Approved

Her Excellency, Governor Margaret Wood Hassan
and the Honorable Council
State House
Concord, New Hampshire 03301

Date

Item #

6/24/15
54

REQUESTED ACTION

Authorize the Department of Health and Human Services, Division of Public Health Services, to enter into a sole source agreement with University of Massachusetts (Vendor #177576-B008), 305 South Street, Jamaica Plain, MA 02130-3597, in an amount not to exceed \$2,799,650 to provide newborn screening laboratory services for the state of New Hampshire, to be effective July 1, 2015, or date of Governor and Council approval, whichever is later, through June 30, 2018. 100% Other Funds.

Funds are anticipated to be available in SFY 2016, SFY 2017 and SFY 2018, upon the availability and continued appropriation of funds in the future operating budget, with authority to adjust encumbrances between State Fiscal Years through the Budget Office, without further approval from the Governor and Executive Council, if needed and justified.

05-95-90-902010-5240 HEALTH AND SOCIAL SERVICES, DEPT OF HEALTH AND HUMAN SVS,
HHS: DIVISION OF PUBLIC HEALTH, BUREAU OF POPULATION HEALTH AND COMMUNITY
SERVICES, NEWBORN SCREENING REVOLING FUND

Fiscal Year	Class/Account	Class Title	Job Number	Total Amount
SFY 2016	102-500731	Contracts for Prog Svc	90080013	906,341
SFY 2017	102-500731	Contracts for Prog Svc	90080013	932,955
SFY 2018	102-500731	Contracts for Prog Svc	90080013	960,354
		Total		\$2,799,650

EXPLANATION

This request is sole source because the University of Massachusetts has been providing newborn screening laboratory services to New Hampshire since 1988. Five out of the six New England states currently contract with the University of Massachusetts, increasing its proficiency and ability to adjust and respond to the State's needs. It is also the closest laboratory geographically to New Hampshire that can perform newborn screening tests. Timeliness is of utmost importance with respect to newborn screening. In addition, there has not been another bid in response to a Request for Proposals in more than a decade.

Funds in this agreement will be used to pay for the provision of laboratory services for newborn screening for the entire state of New Hampshire.

Her Excellency, Governor Margaret Wood Hassan
and the Honorable Council
May 20, 2015
Page 2

Since the establishment of RSA 132:10a in 1965, the state of New Hampshire has been responsible for the screening of all infants born in the state. The goal of newborn screening is the prevention of disability and untimely death of newborns from undiagnosed genetic disorders. New Hampshire is currently screening all infants born in the state for a panel of thirty-four (34) disorders.

Although some of these disorders are relatively rare, they do need to be identified and intervention initiated before the disorder presents clinically. In some cases this critical timeline for a positive outcome may be as short as one week. In 2014, the New Hampshire Newborn Screening Program identified eighteen (18) infants with disorders requiring treatment and ongoing specialty evaluation. In 2013 the program identified twenty-six (26) infants with disorders. Newborn screening results in early identification of disorders for which timely diagnosis and treatment can mean a life without disability. Clearly the lives of these infants and their families have been impacted in a very positive way.

Should Governor and Executive Council not authorize this Request, New Hampshire would be out of compliance with the mandate (RSA 132:10a) and newborns would be in jeopardy of serious harm, potentially even death.

This Agreement has the option to extend for three (3) additional year(s), contingent upon satisfactory delivery of services, available funding, agreement of the parties and approval of the Governor and Council.

The following performance measures will be used to measure the effectiveness of the agreement:

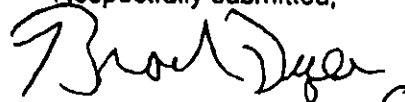
- At least ninety-eight (98%) of Congenital Adrenal Hyperplasia results will be reported to the New Hampshire Newborn Screening Program within three (3) days of the contractor receiving the dried blood specimen.
- At least ninety-five percent (95%) of all initial screening reports will have a report date within seven days of life.

Area served: Statewide.

Source of Funds: 100% Other Funds (Newborn Screening Revolving Fund).

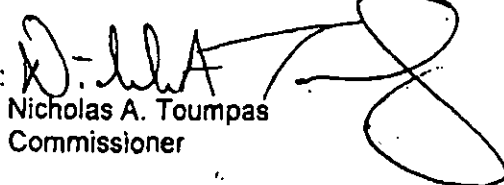
In the event that the Other Funds become no longer available, General Funds will not be requested to support this program.

Respectfully submitted,



Marcella Jordan Bobinsky
Acting Director

Approved by:



Nicholas A. Toumpas
Commissioner

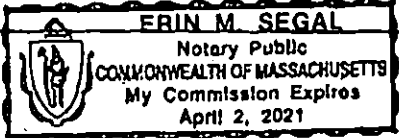
Subject: Newborn Screening Laboratory Services

AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

GENERAL PROVISIONS

1. IDENTIFICATION.

1.1 State Agency Name NH Department of Health and Human Services Division of Public Health Services		1.2 State Agency Address 29 Hazen Drive Concord, NH 03301-6504	
1.3 Contractor Name University of Massachusetts		1.4 Contractor Address 305 South Street Jamaica Plain, Massachusetts 02130	
1.5 Contractor Phone Number 617-983-6300	1.6 Account Number 05-95-90-902010-5240-102-500731	1.7 Completion Date June 30, 2018	1.8 Price Limitation \$2,799,650
1.9 Contracting Officer for State Agency Eric D. Borin, Director Contracts and Procurement Unit		1.10 State Agency Telephone Number 603-271-9558	
1.11 Contractor Signature <i>[Signature]</i>		1.12 Name and Title of Contractor Signatory Joyce A. Murphy, Executive Vice Chancellor Commonwealth's Medicine	
1.13 Acknowledgement: State of <u>MA</u> , County of <u>Worcester</u> On <u>5/15/15</u> before the undersigned officer, personally appeared the person identified in block 1.12, or satisfactorily proven to be the person whose name is signed in block 1.11, and acknowledged that s/he executed this document in the capacity indicated in block 1.12.			
1.13.1 Signature of Notary Public or Justice of the Peace <i>[Signature]</i> [Seal]			
1.13.2 Name and Title of Notary or Justice of the Peace Erin Segal, Notary Public			
1.14 State Agency Signature <i>[Signature]</i>		1.15 Name and Title of State Agency Signatory Brook Dupee, Bureau Chief	
1.16 Approval by the N.H. Department of Administration, Division of Personnel (if applicable) By: _____ Director, On: _____			
1.17 Approval by the Attorney General (Form, Substance and Execution) By: <i>[Signature]</i> Megan A. Yule - Attorney On: <u>6/10/15</u>			
1.18 Approval by the Governor and Executive Council By: _____ On: _____			

2. EMPLOYMENT OF CONTRACTOR/SERVICES TO BE PERFORMED. The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3 ("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT A which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.
3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, this Agreement, and all obligations of the parties hereunder, shall not become effective until the date the Governor and Executive Council approve this Agreement ("Effective Date").
3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed. Contractor must complete all Services by the Completion Date specified in block 1.7.

4. CONDITIONAL NATURE OF AGREEMENT. Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds, and in no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to terminate this Agreement immediately upon giving the Contractor notice of such termination. The State shall not be required to transfer funds from any other account to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

5. CONTRACT PRICE/PRICE LIMITATION/ PAYMENT.
5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT B which is incorporated herein by reference.
5.2 The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete compensation to the Contractor for the Services. The State shall have no liability to the Contractor other than the contract price.
5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.

5.4 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8.

6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/ EQUAL EMPLOYMENT OPPORTUNITY.
6.1 In connection with the performance of the Services, the Contractor shall comply with all statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal opportunity laws. In addition, the Contractor shall comply with all applicable copyright laws.
6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap, sexual orientation, or national origin and will take affirmative action to prevent such discrimination.
6.3 If this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all the provisions of Executive Order No. 11246 ("Equal Employment Opportunity"), as supplemented by the regulations of the United States Department of Labor (41 C.F.R. Part 60), and with any rules, regulations and guidelines as the State of New Hampshire or the United States issue to implement these regulations. The Contractor further agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with all rules, regulations and orders, and the covenants, terms and conditions of this Agreement.

7. PERSONNEL.
7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.
7.2 Unless otherwise authorized in writing, during the term of this Agreement, and for a period of six (6) months after the Completion Date in block 1.7, the Contractor shall not hire, and shall not permit any subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the Services to hire, any person who is a State employee or official, who is materially involved in the procurement, administration or performance of this Agreement. This provision shall survive termination of this Agreement.
7.3 The Contracting Officer specified in block 1.9, or his or her successor, shall be the State's representative. In the event of any dispute concerning the interpretation of this Agreement, the Contracting Officer's decision shall be final for the State.

Contractor Initials:
Date:
(Handwritten signature and date 6/19/11)

8. EVENT OF DEFAULT/REMEDIES.

8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default"):

- 8.1.1 failure to perform the Services satisfactorily or on schedule;
- 8.1.2 failure to submit any report required hereunder; and/or
- 8.1.3 failure to perform any other covenant, term or condition of this Agreement.

8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:

- 8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) days from the date of the notice; and if the Event of Default is not timely remedied, terminate this Agreement, effective two (2) days after giving the Contractor notice of termination;
- 8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;
- 8.2.3 set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or
- 8.2.4 treat the Agreement as breached and pursue any of its remedies at law or in equity, or both.

9. DATA/ACCESS/CONFIDENTIALITY/PRESERVATION.

9.1 As used in this Agreement, the word "data" shall mean all information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.

9.2 All data and any property which has been received from the State or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.

9.3 Confidentiality of data shall be governed by N.H. RSA chapter 91-A or other existing law. Disclosure of data requires prior written approval of the State.

10. **TERMINATION.** In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall deliver to the Contracting Officer, not later than fifteen (15) days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. The form, subject matter, content, and number of copies of the Termination

Report shall be identical to those of any Final Report described in the attached EXHIBIT A.

11. **CONTRACTOR'S RELATION TO THE STATE.** In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

12. **ASSIGNMENT/DELEGATION/SUBCONTRACTS.** The Contractor shall not assign, or otherwise transfer any interest in this Agreement without the prior written consent of the N.H. Department of Administrative Services. None of the Services shall be subcontracted by the Contractor without the prior written consent of the State.

13. **INDEMNIFICATION.** The Contractor shall defend, indemnify and hold harmless the State, its officers and employees, from and against any and all losses suffered by the State, its officers and employees, and any and all claims, liabilities or penalties asserted against the State, its officers and employees, by or on behalf of any person, on account of, based or resulting from, arising out of (or which may be claimed to arise out of) the acts or omissions of the Contractor. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

14. INSURANCE.


14.1 The Contractor shall, at its sole expense, obtain and maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:

14.1.1 comprehensive general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than \$250,000 per claim and \$2,000,000 per occurrence; and

14.1.2 fire and extended coverage insurance covering all property subject to subparagraph 9.2 herein, in an amount not less than 80% of the whole replacement value of the property.

14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or his or her successor, a certificate(s) of insurance for all insurance required under this Agreement. Contractor shall also furnish to the Contracting Officer identified in block 1.9, or his or her successor, certificate(s) of insurance for all renewal(s) of insurance required under this Agreement no later than fifteen (15) days prior to the expiration date of each of the insurance policies. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference. Each

Contractor Initials: 
Date: 5/19/15

certificate(s) of insurance shall contain a clause requiring the insurer to endeavor to provide the Contracting Officer identified in block 1.9, or his or her successor, no less than ten (10) days prior written notice of cancellation or modification of the policy.

15. WORKERS' COMPENSATION.

15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A ("Workers' Compensation").

15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain; and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. Contractor shall furnish the Contracting Officer identified in block 1.9, or his or her successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

16. WAIVER OF BREACH. No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event of Default, or any subsequent Event of Default. No express failure to enforce any Event of Default shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other Event of Default on the part of the Contractor.

17. NOTICE. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

18. AMENDMENT. This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire.

19. CONSTRUCTION OF AGREEMENT AND TERMS. This Agreement shall be construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party.

20. THIRD PARTIES. The parties hereto do not intend to benefit any third parties and this Agreement shall not be construed to confer any such benefit.

21. HEADINGS. The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

22. SPECIAL PROVISIONS. Additional provisions set forth in the attached EXHIBIT C are incorporated herein by reference.

23. SEVERABILITY. In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

24. ENTIRE AGREEMENT. This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire Agreement and understanding between the parties, and supersedes all prior Agreements and understandings relating hereto.

[Handwritten Signature]
5/19/13

New Hampshire Department of Health and Human Services



Exhibit A

SCOPE OF SERVICES

1. General Provisions

1.1. Required Services

- 1.1.1. The University of Massachusetts, hereinafter referred to as the "Contractor", shall provide laboratory screening services for newborn screening of all infants born in New Hampshire. The goal of New Hampshire Department of Health and Human Services (DHHS), Newborn Screening Program (NBSP) is the prevention of disability and untimely death of newborns from undiagnosed genetic disorders. New Hampshire is currently screening all infants born in the state for a panel of thirty-four (34) disorders. Although some of these disorders are relatively rare, they do need to be identified and intervention initiated before the disorder presents clinically.
- 1.1.2. Contractors considering clinical or sociological research using clients as subjects must adhere to the legal requirements governing human subjects' research. Contractors must inform the DHHS prior to initiating any research related to this contract.
- 1.1.3. The contractor shall carry out the laboratory analysis utilizing standardized, approved laboratory methods for the following disorders, for all New Hampshire births for the following mandated panel of disorders:
1. Phenylketonuria (PKU)
 2. Galactosemia (GALT)
 3. Homocystinuria (HCY)
 4. Maple Syrup Urine Disease (MSUD)
 5. Congenital Hypothyroidism (CH)
 6. Congenital Toxoplasmosis (TOXO)
 7. Biotinidase (BIOT)
 8. Congenital Adrenal Hyperplasia (CAH)
 9. Cystic Fibrosis (CF)
 10. Hemoglobinopathies (Hb SS)
 11. Hemoglobinopathies HbS/B β h
 12. Hemoglobinopathies Hb S/C
 13. Medium Chain Acyl CoA Dehydrogenase Deficiency (MCAD)
 14. Argininosuccinic Aciduria (ASA)
 15. Argininemia (ARG)
 16. Carnitine Uptake Defect (CUD)
 17. Carnitine Palmitoyltransferase II Deficiency (CPTII)
 18. Citrullinemia I (ASA Synthetase Def) (CIT)
 19. Cobalamin A, B (Cbl A,B)
 20. Glutaric Aciduria Type I (GAI)
 21. 3-Hydroxy-3-Methylglutaryl-CoA Lysase Deficiency (HMG)
 22. Hyperomithinemia Hyperammoninemia, Homocitrullinemia Syndrome (HHH)
 23. Isovaleric Acidemia (IVA)
 24. Long Chain 3-hydroxyacyl-CoA Dehydrogenase Deficiency (LCHAD)
 25. 3-Methylcrotonyl-CoA Carboxylase Deficiency (3MCC)
 26. Methylmalonic Acidemia (MUT)
 27. Mitochondrial Acetoacetyl-CoA Thiolase Deficiency (BKT)
 28. Multiple Acyl-CoA Dehydrogenase Deficiency (GA2)
 29. Multiple Carboxylase Deficiency (MCD)
 30. Propionic Acidemia (PROP)

Exhibit A – Scope of Services

Contractor Initials


 Date 5/19/15

New Hampshire Department of Health and Human Services



Exhibit A

- 31. Severe Combined Immunodeficiency (SCID)
- 32. Trifunctional Protein Deficiency (TFP)
- 33. Tyrosinemia
- 34. Very Long Chain Acyl-CoA Dehydrogenase Deficiency (VLCAD)
- 1.1.4. The Contractor shall supply approved filter paper collection kits as required for the collection and identification of blood samples, and for gathering the necessary clinical information. A supply of pre-addressed envelopes for mailing repeat specimens to the lab via the US Postal Services will also be provided.
- 1.1.5. The Contractor shall provide a courier service to all designated birthing centers in New Hampshire for transporting of blood samples to the testing facility to include weekend and holiday pick-up. Adherence to strict turnaround times is critical. The Contractor shall also monitor the courier service for performance and timeliness.
- 1.1.6. The Contractor shall report to the Newborn Screening Program all out-of-range test results according to the urgency of the laboratory findings. In addition, the laboratory shall make available to the Newborn Screening Program, condition-specific FACT SHEETS as a resource on the probable significance of the findings and recommendations for appropriate follow-up action.
- 1.1.7. The Contractor shall report normal test results to the Newborn Screening Program via a secure web connection in a timely manner.
- 1.1.8. The New Hampshire DHHS shall remain in full ownership of all residual screening specimens. Decisions about retention/use of dried blood spots (DBS) are at the sole discretion of DHHS, and must be consistent with the Newborn Screening Program policies. Additional testing of specimens for other disorders is prohibited without express permission from the Newborn Screening Program.
- 1.1.9. The Contractor shall maintain storage of New Hampshire's residual screening specimens in an appropriate, climate-controlled, secure facility, in sealed bags of low gas permeability containing a desiccant and humidity indicator at -20C for six months.
- 1.1.10. Residual DBS shall be destroyed six months after the collection date, in a manner consistent with applicable state and federal requirements relating to disposal of human blood and body fluids per OSHA regulations 29 CFR, standard number 1910.1030. In the event that the storage environment of any DBS is found to have deviated from the required conditions described above, such that the stability of the specimen is likely to have been affected, the DBS shall be destroyed and the Newborn Screening Program shall be notified.
- 1.1.11. The Contractor will describe the contingency plan of operations to assure maintenance of screening services in the event of a major disaster or emergency.

2. Compliance and Data Reporting Requirements

- 2.1. Compliance Requirements
 - 2.1.1. The Contractor shall submit a detailed description of the language assistance services they will provide to persons with Limited English Proficiency to ensure meaningful access to their programs and/or services, within 10 days of the contract effective date.
- 2.2. Data Reporting Requirements

The Contractor shall:

 - 2.2.1. Provide sufficient data, upon request, on the occurrence of disorders not mandated by the State to assist the Newborn Screening Program in making appropriate decisions about what services it offers.

Exhibit A – Scope of Services

Contractor Initials

[Handwritten Signature]
Date 5/19/15

New Hampshire Department of Health and Human Services



Exhibit A

- 2.2.2. Provide a computerized system of records to show the date each sample was received from New Hampshire birth hospitals and/or community-based health care providers, the date the laboratory tests were performed and the date results of the laboratory analyses were reported to the New Hampshire Newborn Screening Program.
- 2.2.3. Maintain all newborn laboratory test and result data in a computerized record system accessible to the laboratory performing the services and to the Newborn Screening Program, for a period no less than 21 years from the date of the test.
- 2.2.4. Provide critical data elements necessary to and determined by the New Hampshire Maternal and Child Health Section (MCHS) Data Linkage Project on a daily basis, or other schedule determined by MCHS, to enable the state to match the screening results with the electronic birth certificate (EBC).
- 2.2.5. Comply with minor modifications and/or additions to the proposed activities and report format as requested by MCHS. The MCHS will provide the Contractor with advance notice of such changes and the Contractor is not expected to incur any substantial costs relative to such changes.
- 2.2.6. Provide documentation of current CLIA Laboratory Certification.
- 2.2.7. Provide documentation of participation in the CDC/APHL Newborn Screening Quality Assurance Program or other acceptable proficiency-testing program.
- 2.2.8. In years when contracts or amendments are not required, the DPHS Budget Form, Budget Justification, Sources of Revenue and program Staff list forms must be completed according to the relevant instructions and submitted as requested by DPHS and, at minimum, by April 30 of each year.
- 2.2.9. The Sources of Revenue report must be resubmitted at any point when changes in revenue threaten the ability of the agency to carry out the planned program.
- 2.2.10. The contractor will agree to participate in DPHS planning, as needed, including planning for Electronic Medical Record (EMR) enhancements and Health Information Exchange (HIE).

3. State and Federal Laws

- 3.1. The Contractor is responsible for compliance with all relevant state and federal laws, with special attention called to the following statutory responsibilities:
- 3.2. The Contractor shall report all cases of communicable diseases according to New Hampshire RSA 141-C and He-P 30, effective 01/05.
- 3.3. Persons employed by the Contractor shall comply with the reporting requirements of New Hampshire RSA 169:C, Child Protection Act; RSA 161:F46, Protective Services to Adults and RSA 631:6, Assault and Related Offenses.

4. Staffing

- 4.1. Staffing Provisions
 - 4.1.1. Maintain a listing of "on call" qualified specialists who are available by beeper response, seven days/week, 24 hours/day to provide medical consultation as needed to the Newborn Screening Program and/or the physician of record.
 - 4.1.2. Provide coverage for the Newborn Screening Program staff, upon request, when Newborn Screening Program staff is unavailable, for notifying attending physicians of out-of-range lab results (i.e. after normal work hours, on weekends, holidays, and with advance notice, when there is no staff available to cover the Newborn Screening Program).

Exhibit A - Scope of Services

Contractor Initials

CUDHHS/011414

Page 3 of 5

Date

Date 01/19/15

New Hampshire Department of Health and Human Services



Exhibit A

4.2. Staffing Changes

4.2.1. The Contractor shall notify the DHHS within one month of hire when a new administrator or coordinator or any staff person essential to carrying out this scope of services is hired to work in the program. A resume of the employee shall accompany this notification.

4.2.2. The Contractor must notify the DHHS if any of the critical positions required for the delivery of these services are vacant for more than three months.

4.3. Subcontractors

4.3.1. If services required to comply with this Exhibit are provided by a subcontracted agency or provider, the DPHS, Maternal and Child Health Section (MCHS) must be notified in writing prior to initiation of the subcontract. In addition, subcontractors must be held responsible to fulfill all relevant requirements included in this Exhibit.

5. Meetings and Trainings

The Contractor shall:

Exhibit A - Scope of Services

CU/DHHS/011414

Page 4 of 5

Contractor Initials

Date

[Handwritten Signature]
5/19/15

New Hampshire Department of Health and Human Services



Exhibit A

- 5.1. Provide assistance to the Newborn Screening Program staff and others, upon request, on issues related to supporting the infrastructure and facilitating the Newborn Screening Program's operations, including the provision of in-services and educational programs to include:
 - 5.1.1. Technical support for the Newborn Screening Program on computer issues as needed and as related to the interface between the state system and the laboratory computerized system.
 - 5.1.2. Technical support and assistance upon request to the state in support of the work of the New Hampshire Newborn Screening Advisory Committee.
 - 5.1.3. Technical support for the Newborn Screening Program's management information system on accessing the laboratory results database

6. On Site Reviews

- 6.1. The Contractor shall allow a team or person authorized by the DHHS to periodically review the contractor's systems of governance, administration, data collection and submission, clinical and financial management in order to assure systems are adequate to provide the contracted services.

7. Publications

- 7.1. The DHHS and/or its funders will retain COPYRIGHT ownership for any and all original materials produced with DHHS contract funding, including, but not limited to, brochures, resource directories, protocols or guidelines, posters, or reports.
- 7.2. All documents (written, video, audio) produced, reproduced or purchased under the contract shall have prior approval from DPHS before printing, production, distribution, or use.
- 7.3. The Contractor shall credit DHHS on all materials produced under this contract following the instructions outlined in Exhibit C-1 (5).

8. Performance Measures

- 8.1. The Contractor shall ensure that following performance measures are annually achieved and monitored monthly to measure the effectiveness of the agreement:
 - 8.1.1. At least ninety-eight (98%) of Congenital Adrenal Hyperplasia results will be reported to the New Hampshire Newborn Screening Program within three (3) days of the contractor receiving the dried blood specimen.
 - 8.1.2. At least ninety- five percent (95%) of all initial screening reports will have a report date within seven days of life.
- 8.2. Annually, the Contractor shall develop and submit to the DHHS, a corrective action plan for any performance measure that was not achieved.

[Handwritten Signature]
Date 5/19/15

New Hampshire Department of Health and Human Services



Exhibit B

Method and Conditions Precedent to Payment

1) Funding Sources:

a. ~~\$2,799,650 = 100% Other Funds from the Newborn Screening Revolving Fund, \$906,341 in SFY 2016, \$932,955 in SFY 2017, and \$960,354 in SFY 2018.~~

2) The State shall pay the Contractor an amount not to exceed the Price Limitation, block 1.8, for the services provided by the Contractor pursuant to Exhibit A, Scope of Services.

a. Payment for said services shall be made as follows:

The Contractor will submit an invoice in a form satisfactory to the State by the twentieth working day of each month, which identifies and requests reimbursement for authorized expenses incurred in the prior month. The State shall make payment to the Contractor within thirty (30) days of receipt of each invoice for Contractor services provided pursuant to this Agreement. The final invoice shall be due to the State no later than thirty (30) days after the contract Completion Date.

b. The Invoice must be submitted to:

Department of Health and Human Services
Division of Public Health Services
Email address: DPHScontractbilling@dhhs.state.nh.us

3) This is a cost-reimbursement contract. The Contractor agrees to use and apply all contract funds from the State for direct and indirect costs and expenses including, but not limited to, personnel costs and operating expenses related to the Services, as detailed in Exhibit B-1 Budgets for SFY 2016, SFY 2017, and SFY 2018, and reimbursement shall be made monthly based on actual costs incurred during the previous month. Allowable costs and expenses shall be determined by the State in accordance with applicable state and federal laws and regulations. The Contractor agrees not to use or apply such funds for capital additions or improvements, entertainment costs, or any other costs not approved by the State. DHHS funding may not be used to replace funding for a program already funded from another source.

4) Payment will be made by the State agency subsequent to approval of the submitted invoice and if sufficient funds are available in the Service category budget line items submitted by the Contractor to cover the costs and expenses incurred upon compliance with reporting requirements and performance and utilization review. Contractors will keep detailed records of their activities related to DHHS-funded programs and services.

5) Contractors are accountable to meet the scope of services. Failure to meet the scope of services may jeopardize the funded contractor's current and/or future funding. Corrective action may include actions such as a contract amendment or termination of the contract. The contracted organization shall prepare progress reports, as required.

Exhibit B - Methods and Conditions Precedent to Payment_Contractor Initials

[Handwritten Signature]
Date: 5/9/16



New Hampshire Department of Health and Human Services

Exhibit B

- 6) The Contractor shall have written authorization from the State prior to using contract funds to purchase any equipment with a cost in excess of three hundred dollars (\$300) and with a useful life beyond one year.

- 7) Notwithstanding paragraph 18 of the General Provisions P-37, an amendment limited to adjustments to amounts between and among account numbers, within the price limitation, may be made by written agreement of both parties and may be made without obtaining approval of the Governor and Executive Council.

Exhibit B – Methods and Conditions Precedent to Payment_Contractor Initials



6/19/15

Exhibit B-1 Budget Form

New Hampshire Department of Health and Human Services

Bidder/Contractor Name: University of Massachusetts

Budget Request for: Newborn Screening Laboratory Services
(Name of RFP)

Budget Period: SFY 2016

Line Item	Direct (Incremental)	Indirect (Fixed)	Total	Allocation Method for Indirect/Fixed Cost
1. Total Salary/Wages	\$ -	\$ -	\$ -	
2. Employee Benefits	\$ -	\$ -	\$ -	
3. Consultants	\$ -	\$ -	\$ -	
4. Equipment:	\$ -	\$ -	\$ -	
Rental	\$ -	\$ -	\$ -	
Repair and Maintenance	\$ -	\$ -	\$ -	
Purchase/Depreciation	\$ -	\$ -	\$ -	
5. Supplies:	\$ -	\$ -	\$ -	
Educational	\$ -	\$ -	\$ -	
Lab	\$ -	\$ -	\$ -	
Pharmacy	\$ -	\$ -	\$ -	
Medical	\$ -	\$ -	\$ -	
Office	\$ -	\$ -	\$ -	
6. Travel	\$ -	\$ -	\$ -	
7. Occupancy	\$ -	\$ -	\$ -	
8. Current Expenses	\$ -	\$ -	\$ -	
Telephone	\$ -	\$ -	\$ -	
Postage	\$ -	\$ -	\$ -	
Subscriptions	\$ -	\$ -	\$ -	
Audit and Legal	\$ -	\$ -	\$ -	
Insurance	\$ -	\$ -	\$ -	
Board Expenses	\$ -	\$ -	\$ -	
9. Software	\$ -	\$ -	\$ -	
10. Marketing/Communications	\$ -	\$ -	\$ -	
11. Staff Education and Training	\$ -	\$ -	\$ -	
12. Subcontracts/Agreements	\$ -	\$ -	\$ -	
13. Other (specific details mandatory):	\$ -	\$ -	\$ -	
Laboratory Testing	\$ 848,607.00	\$ -	\$ 848,607.00	
Specimen Shipping	\$ 57,734.00	\$ -	\$ 57,734.00	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTAL	\$ 906,341.00	\$ -	\$ 906,341.00	

Indirect As A Percent of Direct

0.0%

Exhibit B-1 - Budget

Contractor Initials: 

Date: 5/19/15

Exhibit B-1 Budget Form

New Hampshire Department of Health and Human Services

Bidder/Contractor Name: University of Massachusetts

Budget Request for: Newborn Screening Laboratory Services
(Name of RFP)

Budget Period: SFY 2017

Label/Item	Direct (Incremental)	Indirect (Fixed)	Total	Allocation Method for Indirect/Fixed Cost
1. Total Salary/Wages	\$ -	\$ -	\$ -	
2. Employee Benefits	\$ -	\$ -	\$ -	
3. Consultants	\$ -	\$ -	\$ -	
4. Equipment:	\$ -	\$ -	\$ -	
Rental	\$ -	\$ -	\$ -	
Repair and Maintenance	\$ -	\$ -	\$ -	
Purchase/Depreciation	\$ -	\$ -	\$ -	
5. Supplies:	\$ -	\$ -	\$ -	
Educational	\$ -	\$ -	\$ -	
Lab	\$ -	\$ -	\$ -	
Pharmacy	\$ -	\$ -	\$ -	
Medical	\$ -	\$ -	\$ -	
Office	\$ -	\$ -	\$ -	
6. Travel	\$ -	\$ -	\$ -	
7. Occupancy	\$ -	\$ -	\$ -	
8. Current Expenses	\$ -	\$ -	\$ -	
Telephone	\$ -	\$ -	\$ -	
Postage	\$ -	\$ -	\$ -	
Subscriptions	\$ -	\$ -	\$ -	
Audit and Legal	\$ -	\$ -	\$ -	
Insurance	\$ -	\$ -	\$ -	
Board Expenses	\$ -	\$ -	\$ -	
9. Software	\$ -	\$ -	\$ -	
10. Marketing/Communications	\$ -	\$ -	\$ -	
11. Staff Education and Training	\$ -	\$ -	\$ -	
12. Subcontracts/Agreements	\$ -	\$ -	\$ -	
13. Other (specific details mandatory):	\$ -	\$ -	\$ -	
Laboratory Testing	\$ 874,068.00	\$ -	\$ 874,068.00	
Specimen Shipping	\$ 58,889.00	\$ -	\$ 58,889.00	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTAL	\$ 932,955.00	\$ -	\$ 932,955.00	

Indirect As A Percent of Direct

0.0%

Exhibit B-1 - Budget

Contractor Initials: 

Date: 5/19/15

Exhibit B-1 Budget Form

New Hampshire Department of Health and Human Services

Bidder/Contractor Name: University of Massachusetts

Budget Request for: Newborn Screening Laboratory Services
(Name of RFP)

Budget Period: SFY 2018

Line Item	Direct Incremental	Indirect Fixed	Total	Allocation Method to Indirect/Fixed Cost
1. Total Salary/Wages	\$ -	\$ -	\$ -	
2. Employee Benefits	\$ -	\$ -	\$ -	
3. Consultants	\$ -	\$ -	\$ -	
4. Equipment:	\$ -	\$ -	\$ -	
Rental	\$ -	\$ -	\$ -	
Repair and Maintenance	\$ -	\$ -	\$ -	
Purchase/Depreciation	\$ -	\$ -	\$ -	
5. Supplies:	\$ -	\$ -	\$ -	
Educational	\$ -	\$ -	\$ -	
Lab	\$ -	\$ -	\$ -	
Pharmacy	\$ -	\$ -	\$ -	
Medical	\$ -	\$ -	\$ -	
Office	\$ -	\$ -	\$ -	
6. Travel	\$ -	\$ -	\$ -	
7. Occupancy	\$ -	\$ -	\$ -	
8. Current Expenses	\$ -	\$ -	\$ -	
Telephone	\$ -	\$ -	\$ -	
Postage	\$ -	\$ -	\$ -	
Subscriptions	\$ -	\$ -	\$ -	
Audit and Legal	\$ -	\$ -	\$ -	
Insurance	\$ -	\$ -	\$ -	
Board Expenses	\$ -	\$ -	\$ -	
9. Software	\$ -	\$ -	\$ -	
10. Marketing/Communications	\$ -	\$ -	\$ -	
11. Staff Education and Training	\$ -	\$ -	\$ -	
12. Subcontracts/Agreements	\$ -	\$ -	\$ -	
13. Other (specific details mandatory):	\$ -	\$ -	\$ -	
Laboratory Testing	\$ 900,287.00	\$ -	\$ 900,287.00	
Specimen Shipping	\$ 60,067.00	\$ -	\$ 60,067.00	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTAL	\$ 960,354.00	\$ -	\$ 960,354.00	

Indirect As A Percent of Direct

0.0%

Exhibit B-1 - Budget

Contractor Initials: 

Date: 3/19/15

New Hampshire Department of Health and Human Services
Exhibit C



SPECIAL PROVISIONS

Contractors Obligations: The Contractor covenants and agrees that all funds received by the Contractor under the Contract shall be used only as payment to the Contractor for services provided to eligible individuals and, in the furtherance of the aforesaid covenants, the Contractor hereby covenants and agrees as follows:

1. **Compliance with Federal and State Laws:** If the Contractor is permitted to determine the eligibility of individuals such eligibility determination shall be made in accordance with applicable federal and state laws, regulations, orders, guidelines, policies and procedures.
2. **Time and Manner of Determination:** Eligibility determinations shall be made on forms provided by the Department for that purpose and shall be made and remade at such times as are prescribed by the Department.
3. **Documentation:** In addition to the determination forms required by the Department, the Contractor shall maintain a data file on each recipient of services hereunder, which file shall include all information necessary to support an eligibility determination and such other information as the Department requests. The Contractor shall furnish the Department with all forms and documentation regarding eligibility determinations that the Department may request or require.
4. **Fair Hearings:** The Contractor understands that all applicants for services hereunder, as well as individuals declared ineligible have a right to a fair hearing regarding that determination. The Contractor hereby covenants and agrees that all applicants for services shall be permitted to fill out an application form and that each applicant or re-applicant shall be informed of his/her right to a fair hearing in accordance with Department regulations.
5. **Gratuities or Kickbacks:** The Contractor agrees that it is a breach of this Contract to accept or make a payment, gratuity or offer of employment on behalf of the Contractor, any Sub-Contractor or the State in order to influence the performance of the Scope of Work detailed in Exhibit A of this Contract. The State may terminate this Contract and any sub-contract or sub-agreement if it is determined that payments, gratuities or offers of employment of any kind were offered or received by any officials, officers, employees or agents of the Contractor or Sub-Contractor.
6. **Retroactive Payments:** Notwithstanding anything to the contrary contained in the Contract or in any other document, contract or understanding, it is expressly understood and agreed by the parties hereto, that no payments will be made hereunder to reimburse the Contractor for costs incurred for any purpose or for any services provided to any individual prior to the Effective Date of the Contract and no payments shall be made for expenses incurred by the Contractor for any services provided prior to the date on which the individual applies for services or (except as otherwise provided by the federal regulations) prior to a determination that the individual is eligible for such services.
7. **Conditions of Purchase:** Notwithstanding anything to the contrary contained in the Contract, nothing herein contained shall be deemed to obligate or require the Department to purchase services hereunder at a rate which reimburses the Contractor in excess of the Contractors costs, at a rate which exceeds the amounts reasonable and necessary to assure the quality of such service, or at a rate which exceeds the rate charged by the Contractor to ineligible individuals or other third party funders for such service. If at any time during the term of this Contract or after receipt of the Final Expenditure Report hereunder, the Department shall determine that the Contractor has used payments hereunder to reimburse items of expense other than such costs, or has received payment in excess of such costs or in excess of such rates charged by the Contractor to ineligible individuals or other third party funders, the Department may elect to:
 - 7.1. Renegotiate the rates for payment hereunder, in which event new rates shall be established;
 - 7.2. Deduct from any future payment to the Contractor the amount of any prior reimbursement in excess of costs;

Exhibit C – Special Provisions

Contractor Initials

Date 5/9/15

New Hampshire Department of Health and Human Services
Exhibit C



- 7.3. Demand repayment of the excess payment by the Contractor in which event failure to make such repayment shall constitute an Event of Default hereunder. When the Contractor is permitted to determine the eligibility of individuals for services, the Contractor agrees to reimburse the Department for all funds paid by the Department to the Contractor for services provided to any individual who is found by the Department to be ineligible for such services at any time during the period of retention of records established herein.

RECORDS: MAINTENANCE, RETENTION, AUDIT, DISCLOSURE AND CONFIDENTIALITY:

8. **Maintenance of Records:** In addition to the eligibility records specified above, the Contractor covenants and agrees to maintain the following records during the Contract Period:
- 8.1. **Fiscal Records:** books, records, documents and other data evidencing and reflecting all costs and other expenses incurred by the Contractor in the performance of the Contract, and all income received or collected by the Contractor during the Contract Period, said records to be maintained in accordance with accounting procedures and practices which sufficiently and properly reflect all such costs and expenses, and which are acceptable to the Department, and to include, without limitation, all ledgers, books, records, and original evidence of costs such as purchase requisitions and orders, vouchers, requisitions for materials, inventories, valuations of in-kind contributions, labor time cards, payrolls, and other records requested or required by the Department.
 - 8.2. **Statistical Records:** Statistical, enrollment, attendance or visit records for each recipient of services during the Contract Period, which records shall include all records of application and eligibility (including all forms required to determine eligibility for each such recipient), records regarding the provision of services and all invoices submitted to the Department to obtain payment for such services.
 - 8.3. **Medical Records:** Where appropriate and as prescribed by the Department regulations, the Contractor shall retain medical records on each patient/recipient of services.
9. **Audit:** Contractor shall submit an annual audit to the Department within 60 days after the close of the agency fiscal year. It is recommended that the report be prepared in accordance with the provision of Office of Management and Budget Circular A-133, "Audits of States, Local Governments, and Non Profit Organizations" and the provisions of Standards for Audit of Governmental Organizations, Programs, Activities and Functions, issued by the US General Accounting Office (GAO standards) as they pertain to financial compliance audits.
- 9.1. **Audit and Review:** During the term of this Contract and the period for retention hereunder, the Department, the United States Department of Health and Human Services, and any of their designated representatives shall have access to all reports and records maintained pursuant to the Contract for purposes of audit, examination, excerpts and transcripts.
 - 9.2. **Audit Liabilities:** In addition to and not in any way in limitation of obligations of the Contract, it is understood and agreed by the Contractor that the Contractor shall be held liable for any state or federal audit exceptions and shall return to the Department, all payments made under the Contract to which exception has been taken or which have been disallowed because of such an exception.
10. **Confidentiality of Records:** All information, reports, and records maintained hereunder or collected in connection with the performance of the services and the Contract shall be confidential and shall not be disclosed by the Contractor, provided however, that pursuant to state laws and the regulations of the Department regarding the use and disclosure of such information, disclosure may be made to public officials requiring such information in connection with their official duties and for purposes directly connected to the administration of the services and the Contract; and provided further, that the use or disclosure by any party of any information concerning a recipient for any purpose not directly connected with the administration of the Department or the Contractor's responsibilities with respect to purchased services hereunder is prohibited except on written consent of the recipient, his attorney or guardian.


Date 5/19/15

New Hampshire Department of Health and Human Services
Exhibit C



Notwithstanding anything to the contrary contained herein the covenants and conditions contained in the Paragraph shall survive the termination of the Contract for any reason whatsoever.

11. **Reports: Fiscal and Statistical:** The Contractor agrees to submit the following reports at the following times if requested by the Department.
 - 11.1. **Interim Financial Reports:** Written interim financial reports containing a detailed description of all costs and non-allowable expenses incurred by the Contractor to the date of the report and containing such other information as shall be deemed satisfactory by the Department to justify the rate of payment hereunder. Such Financial Reports shall be submitted on the form designated by the Department or deemed satisfactory by the Department.
 - 11.2. **Final Report:** A final report shall be submitted within thirty (30) days after the end of the term of this Contract. The Final Report shall be in a form satisfactory to the Department and shall contain a summary statement of progress toward goals and objectives stated in the Proposal and other information required by the Department.

12. **Completion of Services: Disallowance of Costs:** Upon the purchase by the Department of the maximum number of units provided for in the Contract and upon payment of the price limitation hereunder, the Contract and all the obligations of the parties hereunder (except such obligations as, by the terms of the Contract are to be performed after the end of the term of this Contract and/or survive the termination of the Contract) shall terminate, provided however, that if, upon review of the Final Expenditure Report the Department shall disallow any expenses claimed by the Contractor as costs hereunder the Department shall retain the right, at its discretion, to deduct the amount of such expenses as are disallowed or to recover such sums from the Contractor.

13. **Credits:** All documents, notices, press releases, research reports and other materials prepared during or resulting from the performance of the services of the Contract shall include the following statement:
 - 13.1. The preparation of this (report, document etc.) was financed under a Contract with the State of New Hampshire, Department of Health and Human Services, with funds provided in part by the State of New Hampshire and/or such other funding sources as were available or required, e.g., the United States Department of Health and Human Services.

14. **Prior Approval and Copyright Ownership:** All materials (written, video, audio) produced or purchased under the contract shall have prior approval from DHHS before printing, production, distribution or use. The DHHS will retain copyright ownership for any and all original materials produced, including, but not limited to, brochures, resource directories, protocols or guidelines, posters, or reports. Contractor shall not reproduce any materials produced under the contract without prior written approval from DHHS.

15. **Operation of Facilities: Compliance with Laws and Regulations:** In the operation of any facilities for providing services, the Contractor shall comply with all laws, orders and regulations of federal, state, county and municipal authorities and with any direction of any Public Officer or officers pursuant to laws which shall impose an order or duty upon the contractor with respect to the operation of the facility or the provision of the services at such facility. If any governmental license or permit shall be required for the operation of the said facility or the performance of the said services, the Contractor will procure said license or permit, and will at all times comply with the terms and conditions of each such license or permit. In connection with the foregoing requirements, the Contractor hereby covenants and agrees that, during the term of this Contract the facilities shall comply with all rules, orders, regulations, and requirements of the State Office of the Fire Marshal and the local fire protection agency, and shall be in conformance with local building and zoning codes, by-laws and regulations.

16. **Equal Employment Opportunity Plan (EEO):** The Contractor will provide an Equal Employment Opportunity Plan (EEO) to the Office for Civil Rights, Office of Justice Programs (OCR), if it has received a single award of \$500,000 or more. If the recipient receives \$25,000 or more and has 50 or

Exhibit C - Special Provisions

Contractor Initials

Date 5/19/15

New Hampshire Department of Health and Human Services
Exhibit C



more employees, it will maintain a current EEO on file and submit an EEO Certification Form to the OCR, certifying that its EEO is on file. For recipients receiving less than \$25,000, or public grantees with fewer than 50 employees, regardless of the amount of the award, the recipient will provide an EEO Certification Form to the OCR certifying it is not required to submit or maintain an EEO. Non-profit organizations, Indian Tribes, and medical and educational institutions are exempt from the EEO requirement, but are required to submit a certification form to the OCR to claim the exemption. EEO Certification Forms are available at: <http://www.ojp.usdoj/about/ocr/pdfs/cert.pdf>.

- 17. **Limited English Proficiency (LEP):** As clarified by Executive Order 13166, Improving Access to Services for persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination on the basis of limited English proficiency (LEP). To ensure compliance with the Omnibus Crime Control and Safe Streets Act of 1968 and Title VI of the Civil Rights Act of 1964, Contractors must take reasonable steps to ensure that LEP persons have meaningful access to its programs.
- 18. **Pilot Program for Enhancement of Contractor Employee Whistleblower Protections:** The following shall apply to all contracts that exceed the Simplified Acquisition Threshold as defined in 48 CFR 2.101 (currently, \$150,000)

CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (SEP 2013)

(a) This contract and employees working on this contract will be subject to the whistleblower rights and remedies in the pilot program on Contractor employee whistleblower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub. L. 112-239) and FAR 3.908.

(b) The Contractor shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C. 4712, as described in section 3.908 of the Federal Acquisition Regulation.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in all subcontracts over the simplified acquisition threshold.

- 19. **Subcontractors:** DHHS recognizes that the Contractor may choose to use subcontractors with greater expertise to perform certain health care services or functions for efficiency or convenience, but the Contractor shall retain the responsibility and accountability for the function(s). Prior to subcontracting, the Contractor shall evaluate the subcontractor's ability to perform the delegated function(s). This is accomplished through a written agreement that specifies activities and reporting responsibilities of the subcontractor and provides for revoking the delegation or imposing sanctions if the subcontractor's performance is not adequate. Subcontractors are subject to the same contractual conditions as the Contractor and the Contractor is responsible to ensure subcontractor compliance with those conditions.

When the Contractor delegates a function to a subcontractor, the Contractor shall do the following:

- 19.1. Evaluate the prospective subcontractor's ability to perform the activities, before delegating the function
- 19.2. Have a written agreement with the subcontractor that specifies activities and reporting responsibilities and how sanctions/revocation will be managed if the subcontractor's performance is not adequate
- 19.3. Monitor the subcontractor's performance on an ongoing basis

[Handwritten Signature]
Date 5/19/15

New Hampshire Department of Health and Human Services
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- 19.4. Provide to DHHS an annual schedule identifying all subcontractors, delegated functions and responsibilities, and when the subcontractor's performance will be reviewed
- 19.5. DHHS shall, at its discretion, review and approve all subcontracts.

If the Contractor identifies deficiencies or areas for improvement are identified, the Contractor shall take corrective action.

DEFINITIONS

As used in the Contract, the following terms shall have the following meanings:

COSTS: Shall mean those direct and indirect items of expense determined by the Department to be allowable and reimbursable in accordance with cost and accounting principles established in accordance with state and federal laws, regulations, rules and orders.

DEPARTMENT: NH Department of Health and Human Services.

FINANCIAL MANAGEMENT GUIDELINES: Shall mean that section of the Contractor Manual which is entitled "Financial Management Guidelines" and which contains the regulations governing the financial activities of contractor agencies which have contracted with the State of NH to receive funds.

PROPOSAL: If applicable, shall mean the document submitted by the Contractor on a form or forms required by the Department and containing a description of the Services to be provided to eligible individuals by the Contractor in accordance with the terms and conditions of the Contract and setting forth the total cost and sources of revenue for each service to be provided under the Contract.

UNIT: For each service that the Contractor is to provide to eligible individuals hereunder, shall mean that period of time or that specified activity determined by the Department and specified in Exhibit B of the Contract.

FEDERAL/STATE LAW: Wherever federal or state laws, regulations, rules, orders, and policies, etc. are referred to in the Contract, the said reference shall be deemed to mean all such laws, regulations, etc. as they may be amended or revised from the time to time.

CONTRACTOR MANUAL: Shall mean that document prepared by the NH Department of Administrative Services containing a compilation of all regulations promulgated pursuant to the New Hampshire Administrative Procedures Act, NH RSA Ch 541-A, for the purpose of implementing State of NH and federal regulations promulgated thereunder.

SUPPLANTING OTHER FEDERAL FUNDS: The Contractor guarantees that funds provided under this Contract will not supplant any existing federal funds available for these services.

[Handwritten Signature]
Date 5/19/15

New Hampshire Department of Health and Human Services
Exhibit C-1



ADDITIONAL SPECIAL PROVISIONS

1. Subparagraph 4 of the General Provisions of this contract, Conditional Nature of Agreement, is replaced as follows:

Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including without limitation, the continuance of payments, in whole or in part, under this Agreement are contingent upon continued appropriation or availability of funds, including any subsequent changes to the appropriation or availability of funds affected by any state or federal legislative or executive action that reduces, eliminates, or otherwise modifies the appropriation or availability of funding for this Agreement and the Scope of Services provided in Exhibit A, Scope of Services, in whole or in part. In no event shall the State be liable for any payments hereunder in excess of appropriated or available funds. In the event of a reduction, termination or modification of appropriated or available funds, the State shall provide reasonable written notification to the Contractor and, upon such notification, have the right to withhold payment until such funds become available, if ever. The State, in consultation with the Contractor, shall have the right to reduce, terminate or modify services under this Agreement immediately upon giving the Contractor notice of such reduction, termination or modification. The State shall not be required to transfer funds from any other source or account into the Account(s) identified in block 1.6 of the General Provisions, Account Number, or any other account, in the event funds are reduced or unavailable.

2. Subparagraph 10 of the General Provisions of this contract, Termination, is amended by adding the following language:

- 10.1 The State may terminate the Agreement at any time for any reason, at the sole discretion of the State, ninety (90) days after giving the Contractor written notice that the State is exercising its option to terminate the Agreement.
- 10.2 In the event of early termination, the Contractor shall, within 15 days of notice of early termination, develop and submit to the State a Transition Plan for services under the Agreement, including but not limited to, identifying the present and future needs of clients receiving services under the Agreement and establishes a process to meet those needs.
- 10.3 The Contractor shall fully cooperate with the State and shall promptly provide detailed information to support the Transition Plan including, but not limited to, any information or data requested by the State related to the termination of the Agreement and Transition Plan and shall provide ongoing communication and revisions of the Transition Plan to the State as requested.
- 10.4 In the event that services under the Agreement, including but not limited to clients receiving services under the Agreement are transitioned to having services delivered by another entity including contracted providers or the State, the Contractor shall provide a process for uninterrupted delivery of services in the Transition Plan.
- 10.5 The Contractor shall establish a method of notifying clients and other affected individuals about the transition. The Contractor shall include the proposed communications in its Transition Plan submitted to the State as described above.
- 10.6 The Department reserves the right to renew this Agreement for up to three

[Handwritten Signature]
[Handwritten Date: 5/19/15]

New Hampshire Department of Health and Human Services
Exhibit C-1



(3) additional years, subject to mutual agreement, continued availability of funds, satisfactory performance of services, and approval by the Governor and Executive Council.

- 3. Subparagraph 13 of the General Provisions of this contract, Indemnification, is replaced as follows:

The Contractor shall comply with any and all requirements of this Agreement; in the event that the Contractor fails to comply with any such requirements, including, but not limited, to disclosure of any PHI in violation of this Agreement, the Covered Entity may pursue all available remedies, at law and in equity, including without limitation any damages or losses it suffers from Contractor's breach of this Agreement. The respective rights and obligations of Contractor under this Agreement shall survive termination for this Agreement. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this agreement.

- 4. Subparagraph 14 of the General Provisions of this contract, Insurance, is revised as follows:

Subparagraph 14.1.2 of the General Provisions shall be struck.

Subparagraph 14.3 is replaced as follows:

The Contractor shall furnish to the Contracting Officer identified in block 1.9, or his or her successor, a certificate(s) of insurance for all insurance required under this Agreement. Contractor shall also furnish to the Contracting Officer identified in block 1.9, or his or her successor, certificate(s) of insurance for all renewal(s) of insurance required under this Agreement no later than fifteen (15) days prior to the expiration date of each of the insurance policies. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference. Each certificate(s) of insurance shall contain a clause requiring the insurer to provide notice in accordance with the policy provisions. The Contractor shall provide the Contracting Officer identified in block 1.9, or his or her successor, no less than ten (10) days prior written notice of cancellation or modification of the policy.

- 5. Standard Exhibit C of this contract, Special Provisions, is revised as follows:

The preamble is replaced as follows:

Contractors Obligations: The Contractor covenants and agrees that all funds received by the Contractor under the Contract shall be used only as payment to the Contractor for services provided to the Department and, in the furtherance of the aforesaid covenants, the Contractor hereby covenants and agrees as follows:

Subparagraph 3 – Documentation, is replaced as follows:

3. Documentation: The Contractor shall furnish the Department with all forms and documentation regarding eligibility determinations that the Department may request or require. Contractor shall provide documentation as required for all applicants as described in Exhibit A – Scope of Services.

Subparagraph 6 – Retroactive Payments, shall be struck.

[Handwritten Signature]
Date 5/19/15

New Hampshire Department of Health and Human Services
Exhibit C-1



Subparagraphs 7, 7.1, 7.2, and 7.3 – Conditions of Purchase, shall be struck.

Subparagraph 8.2 – is replaced as follows:

Contractor shall maintain records as specified in Exhibit A – Scope of Services

Subparagraph 8.3 – Medical Records, shall be struck.

6. Standard Exhibit I of this contract, Business Associate Agreement, is revised as follows:

Subparagraph (3) a. is revised as follows:

The Business Associate shall notify the Covered Entity's Privacy Officer without unreasonable delay and in no case later than three (3) business days following the date upon which the Business Associate becomes aware of any use or disclosure of protected health information not provided for by the Agreement including breaches of unsecured protected health information and/or any security incident that may have an impact on the protected health information of the Covered Entity.

The last sentence of Subparagraph (3) b. is revised as follows:

The Business Associate shall complete the risk assessment without unreasonable delay and in no case later than three (3) business days of discovery of the breach and report the findings of the risk assessment in writing to the Covered Entity.

Subparagraph 3(e) is revised as follows:

e. Business Associate shall require all of its business associates that receive, use or have access to PHI under the Agreement, to agree in writing to adhere to the same restrictions and conditions on the use and disclosure of PHI contained herein, including the duty to return or destroy the PHI as provided under Section 3 (l). The Covered Entity shall be considered a direct third party beneficiary of the Contractor's business associate agreements with Contractor's intended business associates, who will be receiving PHI pursuant to this Agreement, with rights of enforcement from such business associates who shall be governed by standard Paragraph #13 of the standard contract provisions (P-37) of this Agreement (as amended) for the purpose of use and disclosure of protected health information.

Subparagraph (6) f. is revised as follows:

Provisions in this Exhibit I regarding the use and disclosure of PHI, return or destruction of PHI, extensions of the protections of the Agreement in section (3) l, the defense provisions of section (3) e (as amended) and Paragraph 13 of the standard terms and conditions (P-37), (as amended) shall survive the termination of the Agreement.

New Hampshire Department of Health and Human Services
Exhibit D



CERTIFICATION REGARDING DRUG-FREE WORKPLACE REQUIREMENTS

The Contractor identified in Section 1.3 of the General Provisions agrees to comply with the provisions of Sections 5151-5160 of the Drug-Free Workplace Act of 1988 (Pub. L. 100-690, Title V, Subtitle D; 41 U.S.C. 701 et seq.), and further agrees to have the Contractor's representative, as identified in Sections 1.11 and 1.12 of the General Provisions execute the following Certification:

ALTERNATIVE I - FOR GRANTEEES OTHER THAN INDIVIDUALS

**US DEPARTMENT OF HEALTH AND HUMAN SERVICES - CONTRACTORS
US DEPARTMENT OF EDUCATION - CONTRACTORS
US DEPARTMENT OF AGRICULTURE - CONTRACTORS**

This certification is required by the regulations implementing Sections 5151-5160 of the Drug-Free Workplace Act of 1988 (Pub. L. 100-690, Title V, Subtitle D; 41 U.S.C. 701 et seq.). The January 31, 1989 regulations were amended and published as Part II of the May 25, 1990 Federal Register (pages 21681-21691), and require certification by grantees (and by inference, sub-grantees and sub-contractors), prior to award, that they will maintain a drug-free workplace. Section 3017.630(c) of the regulation provides that a grantee (and by inference, sub-grantees and sub-contractors) that is a State may elect to make one certification to the Department in each federal fiscal year in lieu of certificates for each grant during the federal fiscal year covered by the certification. The certificate set out below is a material representation of fact upon which reliance is placed when the agency awards the grant. False certification or violation of the certification shall be grounds for suspension of payments, suspension or termination of grants, or government wide suspension or debarment. Contractors using this form should send it to:

Commissioner
NH Department of Health and Human Services
129 Pleasant Street,
Concord, NH 03301-6505

1. The grantee certifies that it will or will continue to provide a drug-free workplace by:
 - 1.1. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
 - 1.2. Establishing an ongoing drug-free awareness program to inform employees about
 - 1.2.1. The dangers of drug abuse in the workplace;
 - 1.2.2. The grantee's policy of maintaining a drug-free workplace;
 - 1.2.3. Any available drug counseling, rehabilitation, and employee assistance programs; and
 - 1.2.4. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
 - 1.3. Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
 - 1.4. Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will
 - 1.4.1. Abide by the terms of the statement; and
 - 1.4.2. Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
 - 1.5. Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph 1.4.2 from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency

Contractor Initials 
Date 5/19/15

New Hampshire Department of Health and Human Services
Exhibit D



has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;

- 1.6. Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph 1.4.2, with respect to any employee who is so convicted
 - 1.6.1. Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - 1.6.2. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- 1.7. Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs 1.1, 1.2, 1.3, 1.4, 1.5, and 1.6.

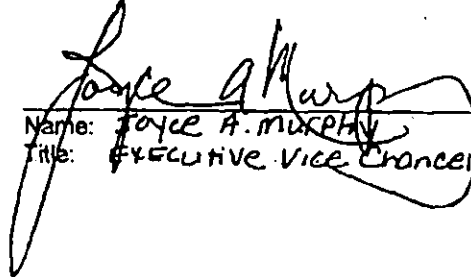
2. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant.


Place of Performance (street address, city, county, state, zip code) (list each location)

Check if there are workplaces on file that are not identified here.

Contractor Name: University of Massachusetts

Date 5/19/15


Name: Joyce A. Murphy
Title: EXECUTIVE VICE CHANCELLOR, CUM

Contractor Initials 
Date 5/19/15

New Hampshire Department of Health and Human Services
Exhibit E



CERTIFICATION REGARDING LOBBYING

The Contractor identified in Section 1.3 of the General Provisions agrees to comply with the provisions of Section 319 of Public Law 101-121, Government wide Guidance for New Restrictions on Lobbying, and 31 U.S.C. 1352, and further agrees to have the Contractor's representative, as identified in Sections 1.11 and 1.12 of the General Provisions execute the following Certification:

US DEPARTMENT OF HEALTH AND HUMAN SERVICES - CONTRACTORS
US DEPARTMENT OF EDUCATION - CONTRACTORS
US DEPARTMENT OF AGRICULTURE - CONTRACTORS

- Programs (indicate applicable program covered):
- *Temporary Assistance to Needy Families under Title IV-A
 - *Child Support Enforcement Program under Title IV-D
 - *Social Services Block Grant Program under Title XX
 - *Medicaid Program under Title XIX
 - *Community Services Block Grant under Title VI
 - *Child Care Development Block Grant under Title IV

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement (and by specific mention sub-grantee or sub-contractor).
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement (and by specific mention sub-grantee or sub-contractor), the undersigned shall complete and submit Standard Form LLL, (Disclosure Form to Report Lobbying, in accordance with its instructions, attached and identified as Standard Exhibit E-1.)
3. The undersigned shall require that the language of this certification be included in the award document for sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Contractor Name: University of Massachusetts

5/19/15
Date

Joyce A. Murphy
Name: Joyce A. Murphy
Title: Executive Vice Chancellor, CVM

Exhibit E - Certification Regarding Lobbying

Contractor Initials

JAM
Date 5/19/15

New Hampshire Department of Health and Human Services
Exhibit F



**CERTIFICATION REGARDING DEBARMENT, SUSPENSION
AND OTHER RESPONSIBILITY MATTERS**

The Contractor identified in Section 1.3 of the General Provisions agrees to comply with the provisions of Executive Office of the President, Executive Order 12549 and 45 CFR Part 76 regarding Debarment, Suspension, and Other Responsibility Matters, and further agrees to have the Contractor's representative, as identified in Sections 1.11 and 1.12 of the General Provisions execute the following Certification:

INSTRUCTIONS FOR CERTIFICATION

1. By signing and submitting this proposal (contract), the prospective primary participant is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. If necessary, the prospective participant shall submit an explanation of why it cannot provide the certification. The certification or explanation will be considered in connection with the NH Department of Health and Human Services' (DHHS) determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when DHHS determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, DHHS may terminate this transaction for cause or default.
4. The prospective primary participant shall provide immediate written notice to the DHHS agency to whom this proposal (contract) is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549: 45 CFR Part 76. See the attached definitions.
6. The prospective primary participant agrees by submitting this proposal (contract) that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by DHHS.
7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions," provided by DHHS, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or involuntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List (of excluded parties).
9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and

Contractor Initials

Date

[Handwritten Signature]
5/19/15

New Hampshire Department of Health and Human Services
Exhibit F



information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

- 10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal government, DHHS may terminate this transaction for cause or default.

PRIMARY COVERED TRANSACTIONS

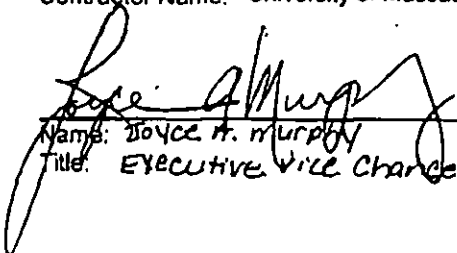
- 11. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - 11.1. are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - 11.2. have not within a three-year period preceding this proposal (contract) been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or a contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - 11.3. are not presently indicted for otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (f)(b) of this certification; and
 - 11.4. have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- 12. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal (contract).

LOWER TIER COVERED TRANSACTIONS

- 13. By signing and submitting this lower tier proposal (contract), the prospective lower tier participant, as defined in 45 CFR Part 76, certifies to the best of its knowledge and belief that it and its principals:
 - 13.1. are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.
 - 13.2. where the prospective lower tier participant is unable to certify to any of the above, such prospective participant shall attach an explanation to this proposal (contract):
- 14. The prospective lower tier participant further agrees by submitting this proposal (contract) that it will include this clause entitled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion - Lower Tier Covered Transactions," without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

Contractor Name: University of Massachusetts

Date 5/19/15


 Name: Joyce H. Murphy
 Title: EXECUTIVE VICE CHANCELLOR, CWM

Contractor Initials: [Signature]
 Date: 5/19/15

New Hampshire Department of Health and Human Services
Exhibit G



**CERTIFICATION OF COMPLIANCE WITH REQUIREMENTS PERTAINING TO
FEDERAL NONDISCRIMINATION, EQUAL TREATMENT OF FAITH-BASED ORGANIZATIONS AND
WHISTLEBLOWER PROTECTIONS**

The Contractor identified in Section 1.3 of the General Provisions agrees by signature of the Contractor's representative as identified in Sections 1.11 and 1.12 of the General Provisions, to execute the following certification:

Contractor will comply, and will require any subgrantees or subcontractors to comply, with any applicable federal nondiscrimination requirements, which may include:

- the Omnibus Crime Control and Safe Streets Act of 1968 (42 U.S.C. Section 3789d) which prohibits recipients of federal funding under this statute from discriminating, either in employment practices or in the delivery of services or benefits, on the basis of race, color, religion, national origin, and sex. The Act requires certain recipients to produce an Equal Employment Opportunity Plan;
- the Juvenile Justice Delinquency Prevention Act of 2002 (42 U.S.C. Section 5672(b)) which adopts by reference, the civil rights obligations of the Safe Streets Act. Recipients of federal funding under this statute are prohibited from discriminating, either in employment practices or in the delivery of services or benefits, on the basis of race, color, religion, national origin, and sex. The Act includes Equal Employment Opportunity Plan requirements;
- the Civil Rights Act of 1964 (42 U.S.C. Section 2000d, which prohibits recipients of federal financial assistance from discriminating on the basis of race, color, or national origin in any program or activity);
- the Rehabilitation Act of 1973 (29 U.S.C. Section 794), which prohibits recipients of Federal financial assistance from discriminating on the basis of disability, in regard to employment and the delivery of services or benefits, in any program or activity;
- the Americans with Disabilities Act of 1990 (42 U.S.C. Sections 12131-34), which prohibits discrimination and ensures equal opportunity for persons with disabilities in employment, State and local government services, public accommodations, commercial facilities, and transportation;
- the Education Amendments of 1972 (20 U.S.C. Sections 1681, 1683, 1685-86), which prohibits discrimination on the basis of sex in federally assisted education programs;
- the Age Discrimination Act of 1975 (42 U.S.C. Sections 6106-07), which prohibits discrimination on the basis of age in programs or activities receiving Federal financial assistance. It does not include employment discrimination;
- 28 C.F.R. pt. 31 (U.S. Department of Justice Regulations – OJJDP Grant Programs); 28 C.F.R. pt. 42 (U.S. Department of Justice Regulations – Nondiscrimination; Equal Employment Opportunity; Policies and Procedures); Executive Order No. 13279 (equal protection of the laws for faith-based and community organizations); Executive Order No. 13559, which provide fundamental principles and policy-making criteria for partnerships with faith-based and neighborhood organizations;
- 28 C.F.R. pt. 38 (U.S. Department of Justice Regulations – Equal Treatment for Faith-Based Organizations); and Whistleblower protections 41 U.S.C. §4712 and The National Defense Authorization Act (NDAA) for Fiscal Year 2013 (Pub. L. 112-239, enacted January 2, 2013) the Pilot Program for Enhancement of Contract Employee Whistleblower Protections, which protects employees against reprisal for certain whistle blowing activities in connection with federal grants and contracts.

The certificate set out below is a material representation of fact upon which reliance is placed when the agency awards the grant. False certification or violation of the certification shall be grounds for suspension of payments, suspension or termination of grants, or government wide suspension or debarment.

Exhibit G

Contractor Initials

Certification of Compliance with requirements pertaining to Federal Nondiscrimination, Equal Treatment of Faith-Based Organizations and Whistleblower protections

Date

[Handwritten Signature]
Date 5/9/15

New Hampshire Department of Health and Human Services
Exhibit G



In the event a Federal or State court or Federal or State administrative agency makes a finding of discrimination after a due process hearing on the grounds of race, color, religion, national origin, or sex against a recipient of funds, the recipient will forward a copy of the finding to the Office for Civil Rights, to the applicable contracting agency or division within the Department of Health and Human Services, and to the Department of Health and Human Services Office of the Ombudsman.

The Contractor identified in Section 1.3 of the General Provisions agrees by signature of the Contractor's representative as identified in Sections 1.11 and 1.12 of the General Provisions, to execute the following certification:

1. By signing and submitting this proposal (contract) the Contractor agrees to comply with the provisions indicated above.

Contractor Name: University of Massachusetts

5/19/15
Date

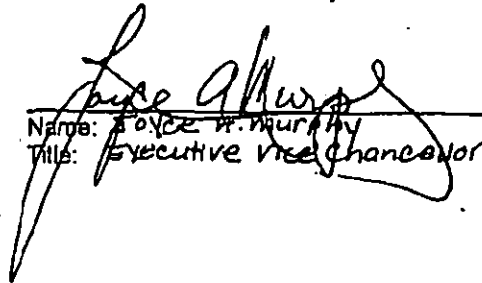


Name: Joyce W. Murphy
Title: Executive Vice Chancellor, CWM

Exhibit G

Certification of Compliance with requirements pertaining to Federal Nondiscrimination, Equal Treatment of Faith-Based Organizations and Whistleblower protections


Contractor Initials
Date 5/19/15

New Hampshire Department of Health and Human Services
Exhibit H



CERTIFICATION REGARDING ENVIRONMENTAL TOBACCO SMOKE

Public Law 103-227, Part C - Environmental Tobacco Smoke, also known as the Pro-Children Act of 1994 (Act), requires that smoking not be permitted in any portion of any indoor facility owned or leased or contracted for by an entity and used routinely or regularly for the provision of health, day care, education, or library services to children under the age of 18, if the services are funded by Federal programs either directly or through State or local governments, by Federal grant, contract, loan, or loan guarantee. The law does not apply to children's services provided in private residences, facilities funded solely by Medicare or Medicaid funds, and portions of facilities used for inpatient drug or alcohol treatment. Failure to comply with the provisions of the law may result in the imposition of a civil monetary penalty of up to \$1000 per day and/or the imposition of an administrative compliance order on the responsible entity.

The Contractor identified in Section 1.3 of the General Provisions agrees, by signature of the Contractor's representative as identified in Section 1.11 and 1.12 of the General Provisions, to execute the following certification:

1. By signing and submitting this contract, the Contractor agrees to make reasonable efforts to comply with all applicable provisions of Public Law 103-227, Part C, known as the Pro-Children Act of 1994.

Contractor Name: University of Massachusetts

5/19/15
Date

[Signature]
Name: Joyce A. Murphy
Title: Executive Vice-Chancellor, CWM

Contractor Initials [Signature]
Date 5/19/15

New Hampshire Department of Health and Human Services



Exhibit I

HEALTH INSURANCE PORTABILITY ACT
BUSINESS ASSOCIATE AGREEMENT

The Contractor identified in Section 1.3 of the General Provisions of the Agreement agrees to comply with the Health Insurance Portability and Accountability Act, Public Law 104-191 and with the Standards for Privacy and Security of Individually Identifiable Health Information, 45 CFR Parts 160 and 164 applicable to business associates. As defined herein, "Business Associate" shall mean the Contractor and subcontractors and agents of the Contractor that receive, use or have access to protected health information under this Agreement and "Covered Entity" shall mean the State of New Hampshire, Department of Health and Human Services.

(1) Definitions.

- a. "Breach" shall have the same meaning as the term "Breach" in section 164.402 of Title 45, Code of Federal Regulations.
- b. "Business Associate" has the meaning given such term in section 160.103 of Title 45, Code of Federal Regulations.
- c. "Covered Entity" has the meaning given such term in section 160.103 of Title 45, Code of Federal Regulations.
- d. "Designated Record Set" shall have the same meaning as the term "designated record set" in 45 CFR Section 164.501.
- e. "Data Aggregation" shall have the same meaning as the term "data aggregation" in 45 CFR Section 164.501.
- f. "Health Care Operations" shall have the same meaning as the term "health care operations" in 45 CFR Section 164.501.
- g. "HITECH Act" means the Health Information Technology for Economic and Clinical Health Act, Title XIII, Subtitle D, Part 1 & 2 of the American Recovery and Reinvestment Act of 2009.
- h. "HIPAA" means the Health Insurance Portability and Accountability Act of 1996, Public Law 104-191 and the Standards for Privacy and Security of Individually Identifiable Health Information, 45 CFR Parts 160, 162 and 164 and amendments thereto.
- i. "Individual" shall have the same meaning as the term "individual" in 45 CFR Section 160.103 and shall include a person who qualifies as a personal representative in accordance with 45 CFR Section 164.501(g).
- j. "Privacy Rule" shall mean the Standards for Privacy of Individually Identifiable Health Information at 45 CFR Parts 160 and 164, promulgated under HIPAA by the United States Department of Health and Human Services.
- k. "Protected Health Information" shall have the same meaning as the term "protected health information" in 45 CFR Section 160.103, limited to the information created or received by Business Associate from or on behalf of Covered Entity.

3/2014

Contractor Initials

Date 5/19/15

New Hampshire Department of Health and Human Services



Exhibit I

- l. "Required by Law" shall have the same meaning as the term "required by law" in 45 CFR Section 164.103.
- m. "Secretary" shall mean the Secretary of the Department of Health and Human Services or his/her designee.
- n. "Security Rule" shall mean the Security Standards for the Protection of Electronic Protected Health Information at 45 CFR Part 164, Subpart C, and amendments thereto.
- o. "Unsecured Protected Health Information" means protected health information that is not secured by a technology standard that renders protected health information unusable, unreadable, or indecipherable to unauthorized individuals and is developed or endorsed by a standards developing organization that is accredited by the American National Standards Institute.
- p. Other Definitions - All terms not otherwise defined herein shall have the meaning established under 45 C.F.R. Parts 160, 162 and 164, as amended from time to time, and the HITECH Act.

(2) Business Associate Use and Disclosure of Protected Health Information.

- a. Business Associate shall not use, disclose, maintain or transmit Protected Health Information (PHI) except as reasonably necessary to provide the services outlined under Exhibit A of the Agreement. Further, Business Associate, including but not limited to all its directors, officers, employees and agents, shall not use, disclose, maintain or transmit PHI in any manner that would constitute a violation of the Privacy and Security Rule.
- b. Business Associate may use or disclose PHI:
 - I. For the proper management and administration of the Business Associate;
 - II. As required by law, pursuant to the terms set forth in paragraph d. below; or
 - III. For data aggregation purposes for the health care operations of Covered Entity.
- c. To the extent Business Associate is permitted under the Agreement to disclose PHI to a third party, Business Associate must obtain, prior to making any such disclosure, (i) reasonable assurances from the third party that such PHI will be held confidentially and used or further disclosed only as required by law or for the purpose for which it was disclosed to the third party; and (ii) an agreement from such third party to notify Business Associate, in accordance with the HIPAA Privacy, Security, and Breach Notification Rules of any breaches of the confidentiality of the PHI, to the extent it has obtained knowledge of such breach.
- d. The Business Associate shall not, unless such disclosure is reasonably necessary to provide services under Exhibit A of the Agreement, disclose any PHI in response to a request for disclosure on the basis that it is required by law, without first notifying Covered Entity so that Covered Entity has an opportunity to object to the disclosure and to seek appropriate relief. If Covered Entity objects to such disclosure, the Business

[Handwritten Signature]
Date 5/19/15

New Hampshire Department of Health and Human Services



Exhibit I

Associate shall refrain from disclosing the PHI until Covered Entity has exhausted all remedies.

- e. If the Covered Entity notifies the Business Associate that Covered Entity has agreed to be bound by additional restrictions over and above those uses or disclosures or security safeguards of PHI pursuant to the Privacy and Security Rule, the Business Associate shall be bound by such additional restrictions and shall not disclose PHI in violation of such additional restrictions and shall abide by any additional security safeguards.

(3) Obligations and Activities of Business Associate.

- a. The Business Associate shall notify the Covered Entity's Privacy Officer immediately after the Business Associate becomes aware of any use or disclosure of protected health information not provided for by the Agreement including breaches of unsecured protected health information and/or any security incident that may have an impact on the protected health information of the Covered Entity.
- b. The Business Associate shall immediately perform a risk assessment when it becomes aware of any of the above situations. The risk assessment shall include, but not be limited to:
 - o The nature and extent of the protected health information involved, including the types of identifiers and the likelihood of re-identification;
 - o The unauthorized person used the protected health information or to whom the disclosure was made;
 - o Whether the protected health information was actually acquired or viewed
 - o The extent to which the risk to the protected health information has been mitigated.

The Business Associate shall complete the risk assessment within 48 hours of the breach and immediately report the findings of the risk assessment in writing to the Covered Entity.

- c. The Business Associate shall comply with all sections of the Privacy, Security, and Breach Notification Rule.
- d. Business Associate shall make available all of its internal policies and procedures, books and records relating to the use and disclosure of PHI received from, or created or received by the Business Associate on behalf of Covered Entity to the Secretary for purposes of determining Covered Entity's compliance with HIPAA and the Privacy and Security Rule.
- e. Business Associate shall require all of its business associates that receive, use or have access to PHI under the Agreement, to agree in writing to adhere to the same restrictions and conditions on the use and disclosure of PHI contained herein, including the duty to return or destroy the PHI as provided under Section 3 (f). The Covered Entity shall be considered a direct third party beneficiary of the Contractor's business associate agreements with Contractor's intended business associates, who will be receiving PHI

[Handwritten Signature]
Date 5/19/15

New Hampshire Department of Health and Human Services



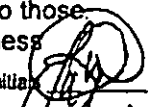
Exhibit I

pursuant to this Agreement, with rights of enforcement and indemnification from such business associates who shall be governed by standard Paragraph #13 of the standard contract provisions (P-37) of this Agreement for the purpose of use and disclosure of protected health information.

- f. Within five (5) business days of receipt of a written request from Covered Entity, Business Associate shall make available during normal business hours at its offices all records, books, agreements, policies and procedures relating to the use and disclosure of PHI to the Covered Entity, for purposes of enabling Covered Entity to determine Business Associate's compliance with the terms of the Agreement.
- g. Within ten (10) business days of receiving a written request from Covered Entity, Business Associate shall provide access to PHI in a Designated Record Set to the Covered Entity, or as directed by Covered Entity, to an individual in order to meet the requirements under 45 CFR Section 164.524.
- h. Within ten (10) business days of receiving a written request from Covered Entity for an amendment of PHI or a record about an individual contained in a Designated Record Set, the Business Associate shall make such PHI available to Covered Entity for amendment and incorporate any such amendment to enable Covered Entity to fulfill its obligations under 45 CFR Section 164.526.
- i. Business Associate shall document such disclosures of PHI and information related to such disclosures as would be required for Covered Entity to respond to a request by an individual for an accounting of disclosures of PHI in accordance with 45 CFR Section 164.528.
- j. Within ten (10) business days of receiving a written request from Covered Entity for a request for an accounting of disclosures of PHI, Business Associate shall make available to Covered Entity such information as Covered Entity may require to fulfill its obligations to provide an accounting of disclosures with respect to PHI in accordance with 45 CFR Section 164.528.
- k. In the event any individual requests access to, amendment of, or accounting of PHI directly from the Business Associate, the Business Associate shall within two (2) business days forward such request to Covered Entity. Covered Entity shall have the responsibility of responding to forwarded requests. However, if forwarding the individual's request to Covered Entity would cause Covered Entity or the Business Associate to violate HIPAA and the Privacy and Security Rule, the Business Associate shall instead respond to the individual's request as required by such law and notify Covered Entity of such response as soon as practicable.
- l. Within ten (10) business days of termination of the Agreement, for any reason, the Business Associate shall return or destroy, as specified by Covered Entity, all PHI received from, or created or received by the Business Associate in connection with the Agreement, and shall not retain any copies or back-up tapes of such PHI. If return or destruction is not feasible, or the disposition of the PHI has been otherwise agreed to in the Agreement, Business Associate shall continue to extend the protections of the Agreement, to such PHI and limit further uses and disclosures of such PHI to those purposes that make the return or destruction infeasible, for so long as Business

3/2014

Contractor Initials


Date 5/19/15

New Hampshire Department of Health and Human Services



Exhibit I

Associate maintains such PHI. If Covered Entity, in its sole discretion, requires that the Business Associate destroy any or all PHI, the Business Associate shall certify to Covered Entity that the PHI has been destroyed.

(4) Obligations of Covered Entity

- a. Covered Entity shall notify Business Associate of any changes or limitation(s) in its Notice of Privacy Practices provided to individuals in accordance with 45 CFR Section 164.520, to the extent that such change or limitation may affect Business Associate's use or disclosure of PHI.
- b. Covered Entity shall promptly notify Business Associate of any changes in, or revocation of permission provided to Covered Entity by individuals whose PHI may be used or disclosed by Business Associate under this Agreement, pursuant to 45 CFR Section 164.506 or 45 CFR Section 164.508.
- c. Covered entity shall promptly notify Business Associate of any restrictions on the use or disclosure of PHI that Covered Entity has agreed to in accordance with 45 CFR 164.522, to the extent that such restriction may affect Business Associate's use or disclosure of PHI.

(5) Termination for Cause

In addition to Paragraph 10 of the standard terms and conditions (P-37) of this Agreement the Covered Entity may immediately terminate the Agreement upon Covered Entity's knowledge of a breach by Business Associate of the Business Associate Agreement set forth herein as Exhibit I. The Covered Entity may either immediately terminate the Agreement or provide an opportunity for Business Associate to cure the alleged breach within a timeframe specified by Covered Entity. If Covered Entity determines that neither termination nor cure is feasible, Covered Entity shall report the violation to the Secretary.

(6) Miscellaneous

- a. Definitions and Regulatory References. All terms used, but not otherwise defined herein, shall have the same meaning as those terms in the Privacy and Security Rule, amended from time to time. A reference in the Agreement, as amended to include this Exhibit I, to a Section in the Privacy and Security Rule means the Section as in effect or as amended.
- b. Amendment. Covered Entity and Business Associate agree to take such action as is necessary to amend the Agreement, from time to time as is necessary for Covered Entity to comply with the changes in the requirements of HIPAA, the Privacy and Security Rule, and applicable federal and state law.
- c. Data Ownership. The Business Associate acknowledges that it has no ownership rights with respect to the PHI provided by or created on behalf of Covered Entity.
- d. Interpretation. The parties agree that any ambiguity in the Agreement shall be resolved to permit Covered Entity to comply with HIPAA, the Privacy and Security Rule

3/2014

Contractor Initials

[Handwritten Signature]
Date 5/7/15

New Hampshire Department of Health and Human Services



Exhibit I

- e. Segregation. If any term or condition of this Exhibit I or the application thereof to any person(s) or circumstance is held invalid, such invalidity shall not affect other terms or conditions which can be given effect without the invalid term or condition; to this end the terms and conditions of this Exhibit I are declared severable.
- f. Survival. Provisions in this Exhibit I regarding the use and disclosure of PHI, return or destruction of PHI, extensions of the protections of the Agreement in section (3) I, the defense and indemnification provisions of section (3) e and Paragraph 13 of the standard terms and conditions (P-37), shall survive the termination of the Agreement.

IN WITNESS WHEREOF, the parties hereto have duly executed this Exhibit I.

Department of Health and Human Services
 The State
Brook Dupee
 Signature of Authorized Representative
 Brook Dupee
 Name of Authorized Representative
 Bureau Chief
 Title of Authorized Representative
5/22/15
 Date

University of Massachusetts
 Name of the Contractor
Joyce A. Murphy
 Signature of Authorized Representative
 Joyce A. Murphy
 Name of Authorized Representative
 Executive Vice Chancellor, CWM
 Title of Authorized Representative
5/19/15
 Date

Contractor Initials JK
5/19/15
 Date