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STATE OF NEW HAMPSHIRE

DEPARTMENT OF HEALTH AND HUMAN SERVICES

29 HAZEN DRIVE, CONCORD, NH 03301-6527
603-271-9563 1-800-852-3345 Ext. 9563
Fax: 603-271-8431 TDD Access: 1-800-735-2964



Jeffrey A. Meyers
Commissioner

Marcella Bobinsky
Acting Director

October 31, 2016

Her Excellency, Governor Margaret Wood Hassan
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 enter into an agreement with Trustees of Dartmouth College, Vendor # 177157-B013, 11 Rope Ferry Road 6210, Box 186, Hanover, NH 03755, in an amount not to exceed \$1,190,940, to operate an incidence-based statewide cancer registry system as required by RSA 141-B, to be effective the date of Governor and Council approval through June 30, 2018. Funds are 79% federal and 21% general.

Funds are available in the following accounts for SFY 2017, and are anticipated to be available in SFY 2018, upon the availability and continued appropriation of funds in the future operating budgets, with authority to adjust amounts within the price limitation and adjust encumbrances between State Fiscal Years through the Budget Office if needed and justified, without approval from the Governor and Executive Council.

05-95-90-900510-8666 HEALTH AND SOCIAL SERVICES, DEPT OF HEALTH AND HUMAN SVS, HHS: DIVISION OF PUBLIC HEALTH, BUREAU OF INFORMATICS, CANCER REGISTRY

Table with 5 columns: Fiscal Year, Class / Account, Class Title, Job Number, Total Amount. Rows include SFY 2017 data for Contracts for Prog Svc and State Fund Match, and a Sub Total of \$351,781.

05-95-90-902010-2215 HEALTH AND SOCIAL SERVICES, DEPT OF HEALTH AND HUMAN SVS, HHS: DIVISION OF PUBLIC HEALTH, BUREAU OF POPULATION HEALTH AND COMMUNITY SERVICES, CDC ORAL HEALTH GRANT

Table with 5 columns: Fiscal Year, Class / Account, Class Title, Job Number, Total Amount. Rows include SFY 2017 data for Contracts for Prog Svc and a Sub Total of \$173,000.

05-95-90-902010-3397 HEALTH AND SOCIAL SERVICES, DEPT OF HEALTH AND HUMAN SVS, HHS: DIVISION OF PUBLIC HEALTH, BUREAU COMMUNITY HEALTH SERVICES, CANCER REGISTRY

Table with 5 columns: Fiscal Year, Class / Account, Class Title, Job Number, Total Amount. Rows include SFY 2018 data for Contracts for Prog Svc and State Fund Match, a Sub Total of \$666,159, and a final TOTAL of \$1,190,940.

EXPLANATION

Funds in this agreement will be used to enter into an agreement with Trustees of Dartmouth College to operate an incidence-based statewide cancer registry system in New Hampshire as required by RFA 141-B. Certain tasks require computer related information to be received and accessed in this contract, specifically technical services to conduct data collection, data processing, quality assurance, and database management activities for the collection of cancer data. The Department of Information Technology has reviewed and approved this contract. The approval letter is attached.

The primary purpose of the New Hampshire State Cancer Registry is to identify all reportable cases of cancer in New Hampshire to provide information on the over-all burden, types, and changing patterns of cancer among residents of the state. New Hampshire RSA 141-B and New Hampshire Administrative Code He-P 304 established reporting requirements for cancer case reporting in New Hampshire. The New Hampshire State Cancer Registry's overall measure of success is to meet the standards for quality, completeness and timeliness of data as defined by the nation's standard setting organization, the North American Association of Central Cancer Registries. The purpose of this agreement is to conduct data collection, data processing, quality assurance and database management activities for the collection of cancer information for the New Hampshire State Cancer Registry in accordance with the New Hampshire Department of Health and Human Services guidelines and standards set by the National Program of Cancer Registries and the North American Association of Central Cancer Registries.

The Department is tasked under RSA 141-B to collect information about almost all cancers diagnosed in New Hampshire. This information furthers our understanding of cancer and is used to develop strategies and policies for its prevention, treatment, and control. The data also help determine where early detection, educational, and other cancer-related programs should be directed. Lastly, cancer registry data are essential to respond to public concerns regarding potential cancer clusters and to conducting investigations into health risks and environmental exposure. Understanding the causes of disease clusters will allow us to prevent future deaths and illness from similar exposures. The availability of data on cancer in the state allows health researchers to analyze demographic and geographic factors that affect cancer risk, early detection, and effective treatment of cancer patients.

The New Hampshire State Cancer Registry is recognized as one of the leading cancer registries in the nation, and has been the cornerstone of a substantial amount of research on cancer in the New Hampshire population. Information held in the cancer registry is strictly confidential, and is protected from unauthorized access by state of the art security systems. To date, the New Hampshire State Cancer Registry has collected detailed information on over 1.3 million cases of cancer among New Hampshire residents diagnosed from 1990 forward, and more than 8,000 new cases are added annually. Every day in New Hampshire, twenty-two (22) of our residents are diagnosed with cancer and seven (7) of our residents die due to cancer. Based on New Hampshire Department of Health and Human Services estimates, the overall cost of cancer in New Hampshire in 2008 was \$1.1 billion. Cancer surveillance helps us understand the magnitude of the cancer problem in New Hampshire, and provides us with critical data to assess the health of our New Hampshire residents and to make informed decisions about how to best direct our health-related resources and activities. This data gives us the fundamental knowledge to guide the assessment, development, and evaluation of health policy, and inform and evaluate the impact of population health programs and interventions as well as personal health decisions. Cancer registries provide a basis for public and private decisions at local, state, and national levels.

Should the Governor and Executive Council not authorize this request, we would not have a high quality cancer registry, and may not have the information necessary to protect and promote the health of New Hampshire's residents, whether it is a cancer cluster response, public education, screening, treatment or policy change. In addition, we may not have the information necessary to inform policy makers and the public to assist with setting health program priorities or the ability to confirm cancer cases through the support of cancer experts to inform the investigation process and provide review and approval related to protecting the privacy and rights of individuals.

Trustees of Dartmouth College were selected for this project through a competitive bid process. A Request for Proposals was posted on the Department of Health and Human Services' web site from July 15, 2016 through September 2, 2016. A bidder's conference was held on August 18, 2016.

The Department received one proposal. The proposal was reviewed and scored by a team of six (6) individuals with program specific knowledge. Their decision followed a thorough discussion of the strengths and weaknesses of the proposal. The final decision was made through consensus scoring. The Bid Summary is attached.

As referenced in the Request for Proposals and in the contract Exhibit C-1, this agreement has the option to renew for two (2) additional years, contingent upon satisfactory delivery of services, available funding, agreement of the parties and approval of the Governor and Executive Council.

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

1. For each incident cancer case defined in Exhibit A, collect all the data variables listed in New Hampshire Administrative Rule He-P 304.2.
2. The database shall be, at a minimum, in accordance with accepted Centers for Disease Control's National Program of Cancer Registries and North American Association of Cancer Registry standards.
3. The data collected is 95% complete within 12 months of date of diagnosis for cases seen in any New Hampshire hospital.
4. The data collected is 90% complete within 15 months of date of diagnosis for all cases among New Hampshire residents, regardless of where they received the cancer care.
5. The data collected is 95% complete within 24 months of date of diagnosis for all cases among New Hampshire residents, with cases identified from death certificate review and follow-up, from physician practices, from non-hospital facilities, and from out-of-state sources.

Area served: Statewide.

Source of Funds: Source of Funds is 79% Federal Funds from the US Centers for Disease Control and Prevention, and 21% General Funds.

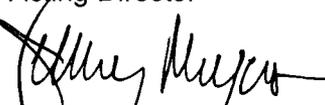
In the event that the Federal Funds become no longer available, General Funds will not be requested to support this program.

Respectfully submitted,



Marcella J. Bobinsky, MPH
Acting Director

Approved by:



Jeffrey A. Meyers
Commissioner



STATE OF NEW HAMPSHIRE
DEPARTMENT OF INFORMATION TECHNOLOGY

27 Hazen Dr., Concord, NH 03301
Fax: 603-271-1516 TDD Access: 1-800-735-2964
www.nh.gov/doit

Denis Goulet
Commissioner

October 24, 2016

Jeffrey A. Meyers, Commissioner
Department of Health and Human Services
State of New Hampshire
129 Pleasant Street
Concord, NH 03301-3857

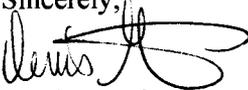
Dear Commissioner Meyers:

This letter represents formal notification that the Department of Information Technology (DoIT) has approved your agency's request to enter into a contract with Trustees of Dartmouth College (Vendor #177157-B013), as described below and referenced as DoIT No. 2016-081. This project is a result of an RFP also referenced as DoIT No. 2016-081.

This request is to enter into a contract with the Trustees of Dartmouth College to operate an incidence-based statewide cancer registry system as required by RSA 141-B. Certain tasks require computer related information to be received and accessed in this contract, specifically technical services to conduct data collection, data processing, quality assurance and database management activities for the collection of cancer information.

The amount of the contract is not to exceed \$1,190,940 effective upon the date of Governor and Executive Council approval through June 30, 2018.

A copy of this letter should accompany the submission to the Governor and Executive Council for approval.

Sincerely,

Denis Goulet

DG/ik
Contract #2016-081

cc: Bobbie Aversa



**New Hampshire Department of Health and Human Services
Office of Business Operations
Contracts & Procurement Unit
Summary Scoring Sheet**

CANCER REGISTRY OPERATIONS

RFP-2017-DPHS-03-CANCE

RFP Name

RFP Number

Reviewer Names

Bidder Name

- 1. Trustees of Dartmouth College
- 2. 0
- 3. 0
- 4. 0

Percent	Maximum Points	Actual Points
88%	640	561
	640	0
	640	0
	640	0

- 1. Monawar Hosain, Program Planner (Tech)
- 2. Karen Paddleford, Program Planner (Tech)
- 3. Whitney Hammond, Administrator (Tech)
- 4. Ellen Chase-Lucard, Financial Administrator (Cost)
- 5. Shelley Swanson, Financial Administrator (Cost)
- 6. PJ Nadeau, Financial Administrator (Cost)

Subject: Cancer Registry Operations - rfp-2017-dphs-03-cance-01, Contract #2016-081

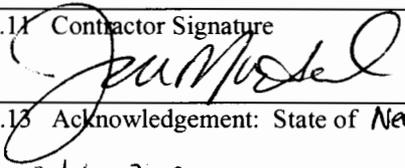
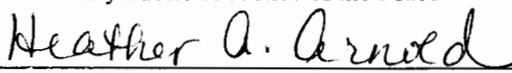
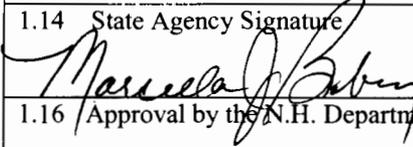
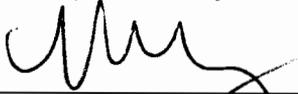
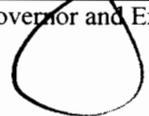
Notice: This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

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		1.2 State Agency Address 129 Pleasant Street Concord, NH 03301-3857	
1.3 Contractor Name Trustees of Dartmouth College		1.4 Contractor Address 11 Rope Ferry Road 6210. Box 186 Hanover, NH 03755	
1.5 Contractor Phone Number 603-653-6620	1.6 Account Number 05-95-90-900510-8666-102-500731, 05-95-90-900510-8666-601-500931, 05-95-90-902010-3397-102-500731, 05-95-90-902010-3397-601-500931	1.7 Completion Date 6/30/2018	1.8 Price Limitation \$1,190,940
1.9 Contracting Officer for State Agency Eric Borrin, Director of Contracts and Procurement		1.10 State Agency Telephone Number 603-271-9558	
1.11 Contractor Signature 		1.12 Name and Title of Contractor Signatory Jill M. Mortali, Director Office of Sponsored Projects	
1.13 Acknowledgement: State of New Hampshire County of Grafton On <u>October 31, 2016</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 [Seal] 			
1.13.2 Name and Title of Notary or Justice of the Peace HEATHER A. ARNOLD, Notary Public My Commission Expires August 24, 2021			
1.14 State Agency Signature 		1.15 Name and Title of State Agency Signatory Marcella J. Bobinsky, MPH Acting Director	
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) (if applicable) By:  On: <u>Megan A. York - Attorney</u> <u>11/1/16</u>			
1.18 Approval by the Governor and Executive Council (if applicable) 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, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement as indicated in block 1.18, unless no such approval is required, in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block 1.14 ("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.

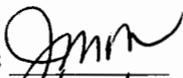
4. CONDITIONAL NATURE OF AGREEMENT. Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds, and in no event 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. This may include the requirement to utilize auxiliary aids and services to ensure that persons with communication disabilities, including vision, hearing and speech, can communicate with, receive information from, and convey information to the Contractor. 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

Contractor Initials 
Date 10/31/14

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.

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 notice and consent of the State. None of the Services shall be subcontracted by the Contractor without the prior written notice and 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 \$1,000,000 per occurrence and \$2,000,000 aggregate ; and

14.1.2 special cause of loss coverage form 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.

Contractor Initials *Jmm*
Date *10/31/16*

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 thirty (30) 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 the Contracting Officer identified in block 1.9, or his or her successor, no less than thirty (30) 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 unless no

such approval is required under the circumstances pursuant to State law, rule or policy.

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.



Scope of Services

1. Provisions Applicable to All Services

- 1.1. 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.
- 1.2. All services to be performed under this contract shall be in accordance with New Hampshire Department of Health and Human Services (DHHS), New Hampshire law RSA 141-B, New Hampshire Administrative rules He-P 304, United States Public Law 102-515, and Centers for Disease Control and Prevention (CDC), National Program of Cancer Registries (NPCR) and North American Association of Central Cancer Registries (NAACCR) standards and guidelines.

2. Required Activities

The Contractor shall:

- 2.1. Present for discussion and proposed modifications, a Work Plan, due within 30 days of the contract effective date. The timeline and work plan shall meet all due dates for deliverables noted in the Deliverables and Key Performance Indicators set forth in Section 14 of this document.
- 2.2. Have all fully qualified staff assigned in support of the New Hampshire State Cancer Registry (NHSCR) contract within 30 days of the contract effective date.
- 2.3. Maintain the NHSCR database from a physical location within a seventy-five (75) mile radius of the DHHS, located in Concord. The rationale for this requirement is that the DHHS provides technical and administrative oversight of the NHSCR operations, which includes on-site visits to the NHSCR contractor. In addition, appropriate contractor personnel are required to attend regular meetings with DHHS staff as well as other meetings as necessary.
- 2.4. Allow full participation of the DHHS in the ongoing, onsite operations of contract activities including interacting directly with contractor staff, viewing abstract processing, participating in customizing registry software selecting edits, aspects of database management, system security, and quality assurance that the DHHS deems necessary.
- 2.5. Provide the DHHS with technical assistance and expertise on matters within the scope of work of the contract.

3. Cancer Registry Operation

- 3.1. Operate an incidence-based statewide cancer registry reporting system in accordance with RSA 141-B and Part He-P 304 of the New Hampshire Administrative Rules, http://www.gencourt.state.nh.us/rules/state_agencies/he-p300.html. Collect information and maintain an electronic database of all incident cancer cases occurring among the New Hampshire population according to the Administrative Rules.
- 3.2. Facilitate and encourage submission of reports for each incident case Facilitate and encourage submission of reports for each incident case defined in RSA 141-B:7 (<http://www.gencourt.state.nh.us/rsa/html/X/141-B/141-B-mrg.htm>), all the data variables listed in administrative rule He-P 304.02 by "health facilities" within an expected time frame as listed

JMN
10/31/16



Exhibit A

in Administrative Rule He-P 304.01(e) and He-P 304.01(l) (http://www.gencourt.state.nh.us/rules/state_agencies/he-p300.html). Facilitation and encouragement may include writing letters, calling by telephone and personal visits to health providers and/or health facility administrators or supervisors. ("Health Facilities" shall be defined according to the Administrative Rules.)

3.3. Inform the DHHS of facilities that remain out of compliance with reporting requirements despite Contractor notification in the following situations:

3.3.1. Denial or lack of access to pathology reports or medical records;

3.3.2. Lack of submission of reports within one month or expected date; and

3.3.3. Lack of response to letter or other formal inquiry within one month.

3.4. Collect additional follow-up data relating to treatment and disease status of Breast and Colorectal cancer cases diagnosed in 2011 for the patient centered outcomes (PCO).

3.5. Adhere to Timetable of Data Deliverables:

3.5.1. The NHSCR data shall meet the following five data quality criteria [National Data Quality Standard (formally known as the 24-Month Standard)]:

i. Data are 95% complete based on observed-to-expected cases as computed by CDC;

ii. There are 3% or fewer death-certificate-only cases;

iii. There is a 1 per 1,000, or fewer, unresolved duplicate rate;

iv. The maximum percent missing for critical data elements are:

- i. 2% age
- ii. 2% sex
- iii. 3% race
- iv. 2% county

v. 99% pass a CDC-prescribed set of standard edits.

3.5.2. The NHSCR data shall meet the following data quality criteria [Advanced National Data Quality Standards (formally known as the 12-Month Standard)]:

i. Data are 90% complete based on observed-to-expected cases as computed by CDC;

ii. There is a 2 per 1,000 or fewer unresolved duplicate rate;

iii. The maximum percent missing for critical data elements are:

- i. 3% age
- ii. 3% sex
- iii. 5% race
- iv. 3% county

iv. 97% pass a CDC-prescribed set of standard edits.

4. Case Ascertainment Activities

4.1. Establish and implement case reporting from any new or existing free-standing radiation oncology facility in the state.

Jmm
10/21/14



Exhibit A

- 4.2. Establish and implement case reporting from any new or existing free-standing medical oncology facility in the state.
- 4.3. Establish and implement case reporting from any new or existing free-standing surgical oncology facility in the state.
- 4.4. Establish and implement electronic case finding from hospital or private pathology labs and from out-of-state pathology laboratories.
- 4.5. Perform death clearance at least annually. Death clearance should be performed by matching records in the NHSCR with New Hampshire mortality data provided by the DHHS and with National Death Index., to determine the level of the NHSCR's record completeness for in-state and out-of state deaths to New Hampshire residents where cancer is identified as a cause of death.
- 4.6. For in-state deaths, the Contractor shall make a determination as to the cause of and appropriate correction for cancer incidents not reported to the NHSCR. This should include contacting the certifier of the death for case follow back as necessary. For deaths of individuals in NHSCR database, the contractor shall electronically update the Vital Status, date of death and cause of death for matching cases.
- 4.7. Operate query systems that cross checks definitive reports, rapid reports, and non-reportable data sources using data linkage processes to ensure maximum case ascertainment.
- 4.8. Create or update the NHSCR operations manual within 30 days of the contract effective date. This manual on NHSCR procedures is for potential distribution to all reporting health providers and health facilities. The manual will provide documentation of the objectives, implementation and operation of the registry. All the contractor staff of the Cancer Registry Operations and DHHS shall be provided with a copy of the manual. This manual shall contain, at a minimum:
 - 4.8.1. Most current reporting laws/regulations;
 - 4.8.2. List of reportable diagnoses;
 - 4.8.3. List of required data items.
 - 4.8.4. Procedures for data processing operations including:
 - i. Procedures for monitoring timeliness of reporting;
 - ii. Procedures for receipt of data;
 - iii. Procedures for database management including a description of the Registry Operating System (software);
 - iv. Procedures for conducting death certificate clearance;
 - v. Procedures for implementing and maintaining the quality assurance/control program:
 - 4.8.4.v.1. Conducting follow-back to reporting facilities on quality issues. These procedures include rules for identifying when action or further investigation is needed;
 - 4.8.4.v.2. Conducting record consolidation;

JMM
10/31/14



Exhibit A

- 4.8.4.v.3. Maintaining detailed documentation of all quality assurance operations;
- 4.8.4.v.4. Procedures for education and training.
- 4.8.5. Procedures for conducting data exchange including a list of states with which case-sharing agreements are in place;
- 4.8.6. Procedures for conducting data linkages.
- 4.8.7. Procedures insuring confidentiality and data security including disaster planning;
- 4.8.8. Procedures for data release including access to and disclosure of information;
- 4.8.9. Procedures for maintaining and updating the operational manual.
- 4.9. Revise the NHSCR operations manual when any changes are made to policies and procedures relating to the NHSCR activities based on contractor need or as requested by the DHHS. The contractor will submit the changes to the DHHS, who will review and seek revision or approve within 30 days.
- 4.10. Review and update existing documents for reporting facilities, including letters, user application forms, reporting requirement document, Webplus user guides, etc., within 30 days of the contract effective date. Determine needed updates in consultation with the DHHS. When updates are needed, develop updated material, obtain approval of the DHHS, and provide to reporting facilities and post them on web for easier access.
- 4.11. Through site visits to New Hampshire hospitals conducted as needed, review discharge, laboratory and pathology reports as well as medical charts to ensure the completeness of case reporting and accuracy for completion.

5. Information Technology Activities

- 5.1. Establish operations within 30 days of the contract start date. This shall include, but not be limited to system set-up, testing, and deployment, as well as business operations to support the State's requirements defined in **Exhibit A-1 Additional Cancer Data Registry Technical Requirements**.
- 5.2. Within 30 days of the contract start date, provide and set up necessary computer hardware, including servers and computers for the NHSCR contractor staff, necessary to maintain the NHSCR database. All hardware and software shall be compatible with NPCR requirements.
- 5.3. Within 30 days of the contract start date, provide connectivity for all reporting facilities to transmit data to the NHCSR.
- 5.4. Maintain secure web access to the NHSCR seven days per week for Web Plus on-line data entry and data file uploading.
- 5.5. Within 30 days of the contract start date, install and utilize the current automated data management system, consistent with national standards and populated with NHSCR data. Train staff in operation of software systems. The contractor shall update all the components of the software, as required and shall participate in the relevant CDC software users group. (The DHHS maintains the discretion to utilize any kind of data management system. There shall be no modifications or upgrades to the software without the approval of the DHHS.)
- 5.6. Within 30 days of the contract execution, discuss with DHHS the feasibility of implementing a WebPlus User's Agreement, the language of such an agreement, and the protocol for phasing it into use. Implement protocol specified by the program team during a mutually agreed

Jmm
10/31/16



Exhibit A

timeframe to restrict reporting via Web Plus data entry or file upload to those reporters who have submitted signed agreements to become Web Plus users.

- 5.7. Within 30 days of the contract start date, develop and implement procedures for the electronic submission and processing of laboratory pathology and cytology reports utilizing NAACCR standards.
- 5.8. Within 30 days of the contract start date, maintain a computerized log of facilities and personnel who report data to NHSCR (in excel or access or any other system) which includes at minimum; facility ID, name and demographic information; names and contact information of personnel (reporters and supervisors), and log of prior facility contacts.
- 5.9. Within 30 days of the contract start date, obtain from the prior NHSCR reports of technical assistance between NHSCR and reporters. Maintain these files or modify or upgrade them with approval of the DHHS.
- 5.10. Within 30 days of the contract start date, maintain a computerized log of all abstracts received from each reporting facility that includes facility ID, number of abstracts received, date received, format of data received and NAACCR version if electronic submission.
- 5.11. Within 30 days of the contract start date, obtain from the prior NHSCR vendor copies of hard copy logs and electronic logs of abstracts submitted to NHSCR. Maintain these files or modify or upgrade them with the approval of DHHS. The DHHS will provide necessary contact information and facilitate this transfer.
- 5.12. Upgrade or replace user software and or hardware and make necessary changes to customize software because of advancing technology and or modifications required by DHHS, NPCR or NAACCR standards. Make further upgrade(s) or replacements(s) during the life of this contract, at an additional negotiated price, if so requested by DHHS and subject to all necessary state approvals.
- 5.13. Within 30 days of the contract start date, provide means for DHHS staff approved by the DHHS to periodically receive data from NHSCR, while maintaining data security.
- 5.14. Develop and implement procedures for granting access to data to approved NHSCR staff.

6. Database Management Activities

- 6.1. Develop and implement procedures for the timely and accurate consolidation of cancer reports within 30 days of the contract effective date;
- 6.2. Consolidate tumor records and treatment information in accordance with standards set forth by NPCR, NAACCR or the SEER.
- 6.3. Perform routine, standard edit checks on all reports received in accordance with NPCR and NAACCR standards. The contractor shall be responsible for the accuracy of the data it codes, edits and consolidates and for maintaining the integrity of the data from year to year. At a minimum, the editing and review of data would include:
 - 6.3.1. Routine visual review of abstracts and error reports;
 - 6.3.2. Installation and use of the most recent standard edit set metafiles as chosen by the DHHS and the Contractor;
 - 6.3.3. Detection of errors during editing, documentation of errors found and corrections of errors detected;

Jmm
10/31/14



Exhibit A

- 6.3.4. Detection and consolidation of multiple abstracts tumor records) received during the contract that match cases reviewed in current or prior years;
 - 6.3.5. Detection and removal of duplicate consolidated cases (that is two or more consolidated records for the same tumor in an individual);
 - 6.3.6. Describe strategy for the routine, continual detection and removal of the duplicates from the NHSCR database –even after current accession year has closed.
- 6.4 Assure that the individual case records in the NHSCR automated database are computer-edited for duplicate records, invalid coding, improbable values, and inconsistencies prior to statistical processing and data compilation for analytical purposes. Areas to be edited include, but are not limited to:
- 1. Data Range Checks;
 - 2. Geographic Coding Assignment;
 - 3. Duplicate Record Checks;;
 - 4. Invalid values
 - 5. Relational items as follows:
 - i. City at diagnosis field must only have values that exactly match legitimate New Hampshire City, town, or village names in list supplied by DHHS.
 - ii. City at diagnosis, the code for county and state of diagnosis must always agree and where city at diagnosis exists, a code for county at diagnosis must be provided.
 - iii. Vital status and cause of death fields must agree and cause of death must be a valid ICD-10 cause of death code or one of the special NAACCR codes.
 - iv. Records should be checked to make sure that the physician's name is correctly entered into first and last name fields.
 - v. Records should be checked to compare sex of patient and the first name of the patient as a guide for determining correct entry of the record.
 - vi. No logical conflicts shall exist between all the treatment diagnosis fields and the related reason for no treatment fields.
 - vii. Apply applicable NPCR and NAACCR Central Registry edits to data fields.
- 6.5 Geocode all cancer reports of New Hampshire residents for address and census tract, for a given year and accurately incorporate new and revised coding into NHSCR database.

7 Penetration Internal Security Testing

- 7.1 The State will perform Penetration Testing of the Internal Security of the Contractor's IT system as defined in the Exhibit A-1 Additional Cancer Data Registry Technical Requirements.
- 7.2 The State and Contractor shall determine a mutually agreed upon date for the Penetration Testing and perform the testing within 90-days of the effective date of the Contract.
- 7.3 The Contractor shall work with the State to negotiate a mutually agreeable remediation plan within 180-days of the Contract effective date.
- 7.4 The contractor shall, as a part of the remediation plan process, fully assess all vulnerabilities identified in the penetration test results. The contractor will acknowledge and accept all

JMM
10/31/14



vulnerabilities and findings of the penetration test and develop an assessment report that describes, for each vulnerability identified, the root cause, the risk level to the Department, the potential adverse impact to the Department, the level of effort required to remediate in man hours, the resource type or skillset required to remediate, and the cost to remediate. The contractor shall remediate all high risk findings as identified by the Department except where the remediation cost to the Contractor is unacceptable, in which case, the Contractor will work with the Department in good faith to identify appropriate means, alternatives, and or compensating controls to address the vulnerabilities identified.

8. Information and System Security Policies and Procedures

- 8.1. Maintain the confidentiality and integrity of information in accordance with the Health Insurance Portability and Accountability Act, Public Law 104-191 (<https://aspe.hhs.gov/report/health-insurance-portability-and-accountability-act-1996>) and with the Standards for Privacy and Security of Individually Identifiable Health Information, 45 CFR Parts 160 and 164 (<http://www.hipaasurvivalguide.com/hipaa-regulations/hipaa-regulations.php>) and those parts of the HITECH Act as applicable (<http://www.hipaasurvivalguide.com/hitech-act-summary.php>). The contractor shall also maintain and protect the confidentiality of the database and information obtained and maintained during this contract in accordance to NH RSA 141-B (<http://www.gencourt.state.nh.us/rsa/html/X/141-B/141-B-mrg.htm>) and NH Administrative Rules He-P 304 (http://www.gencourt.state.nh.us/rules/state_agencies/he-p300.html) and shall acknowledge agreement with the Data Use Policy of the DHHS, which views NHSCR database as DHHS-owned database, with data release subject to restrictions and conditions.
- 8.2. Preserve the confidentiality, integrity, and accessibility of State of New Hampshire data with administrative, technical and physical information security controls and measures that conform to all application, federal, state, and industry standards, such as NIST 800-53v4; which the Contractor applies to its own information processing environment, and ensures the same is applied to any other subcontractor(s) information processing environments utilized to process or store State of New Hampshire protected data.
- 8.3. Maintain the security of the system environment in accordance with the requirements of the Cancer Data Registry Technical Requirements in Appendix F, the United States Commerce Department's National Institute of Standards and Technology (NIST) Special Publication 800-53 and the Open Web Application Security Project (OWASP).
- 8.4. Maintain a system security and integrity manual which includes plans, procedures and protocols for ensuring that the contractor's NHSCR system will be properly secured, maintained and updated throughout the contract term.
- 8.5. Within 14 days after initial contract start date, implement a series of internal procedures to ensure that:
 1. Access to automated information is restricted to authorized persons, on a needed basis, and control is maintained over all the documents that contain sensitive information to ensure that these documents are available only to authorized persons.
 2. Implement full security measures to ensure the security and quality of all the elements in the NHSCR database through procedures that shall include the following:
 - i. Ensure that equipment is protected from theft and accidental or deliberate damage or misuse
 - ii. Ensure that once computer programs and data sets are completed and in routine use, they are protected against tampering. Carefully control access to and

JMM
10/31/14



- maintenance of computer programs and NHSCR database.
 - iii. Ensure that copies of original data submitted are maintained and never altered.
 - iv. Ensure that data are protected against inadvertent or deliberate destruction, modification, or dissemination.
 - v. Ensure procedures for backup, archiving, and disaster recovery for computer programs and NHSCR database.
 - vi. Ensure that password are changed, access denied and other security procedures are in place to protect against ongoing access and sabotage when staff resign, are terminated , or no longer assigned to NHSCR contract.
- 8.6. Maintain the security and integrity of the NHSCR data. Re-process data at no additional cost to the DHHS in accordance with DHHS instructions if the DHHS or contractor finds that contractor has corrupted, altered, tampered with, or improperly coded/processed any data sets during the duration of the Contract.
- 8.7. Immediately report to the DHHS all errors or anomalies in the NHSCR data which could reasonably believe to suggest that security or integrity of the NHSCR or its data may be compromised. The results of any analysis shall be reported to the DHHS and, in addition, the steps it has taken or intends to take to ensure security and integrity of the NHSCR and its data.
- 8.8. Implement appropriate policies, procedures and protocols to identify active breaches or threatened breaches of the NHSCR security integrity.
- 8.9. Report to DHHS any suspected breach to the NHSCR data in accordance with Table 1 - Cancer Data Registry Technical Requirements, A,-7.

9. Training and Education

- 9.1. Provide consultation, technical assistance, and training to assure accurate, timely and complete data from reporters (registrars, medical record personnel, providers and abstractors) at reporting facilities.
- 9.2. The contractor shall provide technical assistance by phone or in person to individual reporting facilities and providers during normal weekday business hours; response time for telephone consultation shall be no longer than one working day after request is received or for onsite consultation, no longer than 10 working days.
- 9.3. The contractor shall assess the training needs of various reporting facilities; develop written guidance, policies and procedures for reporting facilities; and provide technical assistance and training for reporting facilities
- 9.4. Annually, convene state cancer registrars meeting to include educational and technical sessions to cancer registrars of New Hampshire hospitals to foster compliance with reporting requirements as developed by the DHHS.
- 9.5. Provide twice annually, web-based training and education sessions to cancer registrars of New Hampshire hospitals on topics identified by the contractor in consultation with DHHS that will help improve cancer reporting. These may include instruction on proper cancer coding; use of edit sets; new software etc.

10. Quality Control and Assurance (QA/QC) Activities

- 10.1. Carry out quality assurance and control activities to assure appropriate data coding, consolidation and documentation, and assure complete case ascertainment and high quality data from all reporting sources in accordance with NH rules and regulations, NAACCR, and NPCR standards.

Jmm
10/31/16



Exhibit A

- 10.2. Implement, within 30 days of the contract effective date, a QA/QC implementation plan (including timeline) which at minimum includes the following activities and routine operations:
 - 10.2.1. Assignment of qualified individuals to perform QA/QC activities;
 - 10.2.2. A routine schedule for edits and internal management reports;
 - 10.2.3. A routine schedule for internal audits for QA/QC and data security and provision of these reports to DHHS. The plan shall include written procedures for the internal monitoring of quality assurance procedures and written procedures /steps implemented if quality control goals are not met;
 - 10.2.4. Procedures for documenting edits/changes made to data during processing;
 - 10.2.5. Routine training, assessment and professional development of the contractors' staff.
- 10.3. Perform case finding activities utilizing traditional and non-traditional sources to assure timeliness and completeness of cancer reporting.
- 10.4. By October 31st of each year, obtain from each reporting hospital "diagnostic index" for case finding at all hospital reporting facilities. A diagnostic index is a detailed patient listing of all discharges meeting certain definitions in medical records coding. Encourage facilities to submit electronic diagnostic indices.
- 10.5. By October 31st of each year, the contractor shall complete Death Clearance.
- 10.6. For each hospital, as resources allow, the key variables specified by NAACCR and NPCR will be selected for visual editing of 25 cases at least every five (5) years for experienced registrars, but up to 100 annually for less experienced registrars or registrars who have not achieved an error rate of <2%. If, after review and discussion with the hospital registrar, the error rate identified in total from these fields is greater than 2%, then the NHSCR will continue to visually edit cases from that hospital and will work with the hospital registrar to improve abstracting.
- 10.7. Cleanliness of the database shall be, at a minimum, in accordance with accepted NAACCR standards. A 2% error rate threshold shall be the guide for visual editing of hospital registry accuracy.

11. Reporting Activities

- 11.1. Produce quarterly timeliness and completeness reports by hospital to monitor case reporting activities. Supply aggregate timeliness and completeness reports to DHHS on a quarterly basis, stating which hospitals are delinquent in their reporting and the steps taken to improve reporting from delinquent hospitals.
- 11.2. Provide the DHHS with a commentary relating to the annual reports provided by NPCR and NAACCR. Contingent upon receipt of complete death certificate data from New Hampshire Vital Records provide an annual report monitoring completeness estimating the percent of cases with histological verification (HV%). Submit a report to DHHS upon completion of the contract period or reasonable amount of time when the NAACCR and NPCR reports are available.
- 11.3. Prepare and submit to the DHHS staff a semi-annual review of contract progress by January 15 and August 15 of the contract period. Provide an update of progress on all contract items through the routine semi-annual NHSCR progress report or work plan.
- 11.4. Cooperate with any audit of NHSCR for data quality by NPCR or NPCR designated contractor. Submit to DHHS a summary of this audit upon completion.

JMM
10/24/14



Exhibit A

- 11.5. Provide by December 31 of each year of the contract, a finalized data set that has undergone complete QA/QC process. The extract of the data would cover from January 1, 1995 to date.
- 11.6. Provide the DHHS an extract of the complete NHSCR database from Jan 1, 1995 to date upon request.
- 11.7. Upon approval from the DHHS, submit finalized datasets to NAACCR and to NPCR as specified by the NAACCR and NPCR standards and Call for Data requirements. Submit copies of each of these submissions to DHHS.
- 11.8. Provide cancer case data to and receive data from states with which DHHS has a data exchange agreement, in accordance with the terms of the exchange agreement. The data shall be submitted using the agreed upon NAACCR format and will have been edited to the best extent possible. The DHHS currently has exchange agreements with 7 states and additional agreements may be executed by the DHHS during the life of this contract and shall be accommodated by the contractor.
- 11.9. Upon approval of the DHHS, provide selected health researchers, with electronic copies of NHSCR data for certain specific data elements requested and cleared by DHHS.
- 11.10. Upon approval from the DHHS, provide data to the Vermont Breast and Cervical Program for breast and cervical cancer cases among Vermont residents diagnosed in New Hampshire in accordance with the program's approved application for data release by DHHS.
- 11.11. Upon approval from the DHHS, provide colorectal cancer case data to the NH Colorectal Cancer Screening Program in accordance with the program's approved application for data release by DHHS.
- 11.12. Upon approval from the DHHS, provide breast cancer case data to the NH Mammography Network in accordance with the program's approved application for data release by DHHS; receive cancer case data from the NH Mammography Network.
- 11.13. Direct any requests for data or analysis of NHSCR data from researchers, the media or general public to the DHHS within 3 working days of receipt of the request.

12. Other Programmatic Activity

- 12.1. The Contractor shall make available key personnel to meet with appropriate DHHS personnel, as requested, to discuss policies and procedures, ongoing activities, contract deliverables, performance measures, review contract performance and transition to new contractor, etc.
- 12.2. The Contractor may include travel funds for appropriate staff to attend the National Cancer Registrars Association (NCRA) and NAACCR meetings annually for staff development.
- 12.3. Convene annually New Hampshire State Cancer Registry Advisory Panel to assist in building consensus, cooperation, and planning for the registry and to enhance chronic disease program coordination and collaboration. Representation should include key organizations and individuals both within (e.g. representatives from all cancer prevention and control components and chronic disease program) and outside the program (e.g. hospital cancer registrars, the American Cancer Society, American College of Surgeons liaison, clinical-laboratory personnel, pathologists, and clinicians).
- 12.4. Participate as an active member when needed in New Hampshire Comprehensive Cancer Collaboration.

Jmm
10/31/16



Exhibit A

- 12.5. Participate as an active member with DHHS to collaborate in applying for grants that DHHS is interested, regardless as to who receives the actual funding. Both DHHS and contractor agree to consider the others' expenses and needs for operation and program growth when applying for grants and distribution of financial resources when funding is received.
- 12.6. Provide Ad-hoc services related to cancer epidemiology. Working with DHHS staff at DHHS offices, the time spent may be up to 12 hours per week on such tasks, as long as suitably qualified staff is available. These tasks will be mutually agreed upon by the contractor and the DHHS, and supervised by the DHHS staff. Tasks associated with these services may include:
 1. Assist in the preparation of data and narrative for the annual cancer report for New Hampshire;
 2. Assist in the investigation of cancer clusters and response to concerns about the occurrence of cancer clusters in New Hampshire;
 3. Assist with the preparation of manuscripts for publication and develop preparatory materials for professional meetings based on the DHHS needs.
 4. Provide Institutional Review Board (IRB review) for the DHHS cancer registry section (i.e. Cancer cluster investigations).
 5. Enter into agreements with other organizations as needed for processing data according to the NPCR standards, for example, with the National Death Index to obtain death data, and with the Veterans Administration (VA) to obtain VA cancer data.

13. Centers for Disease Control and Prevention (CDC) Cooperative Agreement Activities

- 13.1. Assist in drafting goals and program objectives, progress reports and NHSCR budgets as requested by DHHS for the purposes of the New Hampshire's application for the CDC Continuing Cooperative Agreement for Enhancement of State Cancer Registries.
 - 13.1.1. Provide all contractor-specific documentation and assurances necessary for the application.
 - 13.1.2. The contractor agrees that the application for the CDC Cooperative Agreement will be submitted for and all funding will be awarded to the DHHS;
 - 13.1.3. Identify contractor contributions to the NHSCR effort, not state general funds or federal funds that would be applied to a direct or in-kind match that may be required for application for the CDC cooperative agreement;
 - 13.1.4. Informs the DHHS within one (1) working day of any cooperative agreement related inquiries by CDC project or grants management staff;
 - 13.1.5. Appropriate representatives from the contractor staff shall represent the NHSCR on the NPCR and NAACCR- task force, users group and or committees to learn recent updates, issues and share NH experiences with all other states and will keep DHHS fully informed of all such activities;
 - 13.1.6. Where appropriate, NHSCR will communicate directly with NPCR and NAACCR on technical matters of cancer surveillance, standards and submissions to NPCR and NAACCR and will keep DHHS fully informed of all such activities.



14. Transition Activities

- 14.1. If Contractor is not able to fulfill the terms of this contract and solicitation of a new vendor is necessary, the Contractor shall assist with the transition to a new vendor. Within two (2) months of the end of the contract term, the Contractor shall:
 - 14.1.1. Provide the new vendor with a copy of the latest version of the NHSCR database; the reporters' database; preregistration log; and the original copies of all the backups of the database.
 - 14.1.2. Write up procedures used to purge all NHSCR data from vendor's hardware and send the procedures to DHHS for review and approval. After approval of the procedures by the DHHS, purge all NHSCR data from the hardware of vendor.
 - 14.1.3. Within 30 days before the end of the contract period, train up to four people employed by the new vendor, by means of a reasonable exchange of information on administration of the NHSCR database, including an overview of reporters and data exchange processes with other states. The training is anticipated to involve at least the vendor's database manager and Quality Assurance supervisor for approximately two days.
 - 14.1.4. Provide the DHHS with any: hard copy of abstracts and pathology reports submitted by reporting facilities; electronic diskettes; and all documentation of interaction with reporting facilities.
 - 14.1.5. Provide DHHS with a hard and electronic copy of the latest version of the operation manual; system security and integrity manual; and all other materials developed for the work process of NHSCR during the contract process.
 - 14.1.6. Close the web access for reporting facilities so that facilities can no longer upload data of NHSCR data to the incumbent vendor.

15. Deliverables and Key Performance Indicators

- 15.1. The Contractor shall ensure that following performance indicators in Table 1 are annually achieved and monitored monthly to measure the effectiveness of the agreement.
 - 15.1.1. All date references in Table 1 shall be used for this contract unless otherwise specifically noted in the main body of this contract.
 - 15.1.2. All time periods are calendar days and not business days unless otherwise specifically noted in the main body of this contract.
- 15.2. Annually, the Contractor shall develop and submit to the DHHS, a corrective action plan for any deliverable and/or performance indicator that was not achieved.

Jmm
12/21/16



Exhibit A

TABLE 1

Description of Key Variables	Section Number	Initial Term
Work Plan	2.1	30 days
Fully Qualified Staff	2.2	30 days
Allow DHHS Participation	2.4	Ongoing
Case Reporting	3 - 4	Ongoing
Create/Update operation manual	4.7	30 days & ongoing
IT infrastructure/Webserver	5.6	30 Days
Install Registry Software and prior data	5.7 - 5.8	30 days
Processes for laboratory and pathology reports	4 - 5	30 days
Reporters database	5.9	30 days
Registration log	5.10	30 days
Upgrade/Replace software	5.11	ongoing
DHHS data access	5.12- 5.13	30 days & as needed
Procedures for Consolidation of cases and reports	6.1	30 days
Run edit checks	6.3	Ongoing
Geocoding	6.4.2	Ongoing
System security and policies and procedures	7.2-7.3	14-60 days
Responsibility for consultation/assessment	8.1-8.2	Ongoing
QA/QC Plan	9.2	30 Days
Case Finding and Diagnostic Indices	9.4	October 31 of each year
Death Clearance	9.5	October 31 of each year
Quarterly Facility Reports	10.1	Once in 4 months
Histological Verification Report	10.2	Yearly
Semi Annual progress Report	10.3	January 15 & August 15 of each year
Final Incidence dataset	10.5	January 30 of each year
Extract of Incidence dataset	10.6	Ongoing
NPCR and NAACCR Annual Report	10.7	Yearly
Submit data to NPCR	10.7	November 30 of each year
Submit data to NAACCR	10.7	November 30 of each year
Interstate Data Exchange	10.8	Ongoing
Release of Data to researchers	10.9	Ongoing
Patient Centered Outcomes data	10	With Final Incidence dataset in 2016 and 2017 only, subject to funding
Attend Meetings	11.2	Ongoing
CDC Cooperative Agreement Activities	12	Ongoing
Transition Activities	13	2 months



Exhibit A-1

Additional Cancer Data Registry Technical Requirements

CANCER DATA REGISTRY TECHNICAL REQUIREMENTS	VENDOR RESPONSE	VENDOR COMMENTS
A GENERAL DATA SECURITY AND PRIVACY		
A.1 The Vendor shall be strictly prohibited from releasing or using data or information obtained in its capacity as a collector and processor of the data for any purposes other than those specifically authorized by DHHS. Failure to comply could be a violation of NH laws and rules and may lead to voiding of the Contract.	Yes	
A.2 The Vendor shall conduct an annual security assessment, performed by an independent third-party security vendor, to verify that the Vendor's environment containing the projects data is secure. Broader Vendor-wide assessments that include the project's systems are acceptable. The Vendor shall provide certification of assessment to DHHS.	Yes	<p>The Contractor will conduct an external security assessment within the next 12 months and has agreed to arrange for NHSCR to be specifically examined.</p> <p>The Contractor's Proposal Response to Information Technology questions dated October 3, 2016, providing additional details and specifics of the external security audit and assessments, is hereby incorporated by reference as fully set forth herein.</p> <p>The State and Contractor shall negotiate a mutually agreeable remediation plan within 180 days of the effective date of the Contract.</p>
A.3 As the state's agent, the Vendor must provide certification of compliance with the requirements of the Health Insurance Portability & Accountability Act (HIPAA) and DHHS' standard business associate agreement.	Yes	

JMM
Date 10/31/16



Exhibit A-1

CANCER DATA REGISTRY TECHNICAL REQUIREMENTS	VENDOR RESPONSE	VENDOR COMMENTS
A.4 As the state's agent, the Vendor must provide certification of compliance with the requirements of the United States Commerce Department's National Institute of Standards and Technology (NIST) and the Open Web Application Security Project (OWASP).	Yes	Trustees of Dartmouth College's letter in the Proposal dated August 31, 2016 that covers their WebPlus application (Appendix 2), which is the only public facing component of NHSCR IT operations, is hereby incorporated by reference as fully set forth herein.
A.5 In carrying out the duties of this Contract, the Vendor shall be the agent and business associate of DHHS. As such, it is bound by applicable State and federal laws regarding health care information.	Yes	
A.6 The Vendor shall provide access to the State with a secure FTP or web site to be used by the State for uploading and downloading files.	Yes	
A.7 The Vendor shall notify the State's Project Manager of any security breaches within two (2) hours of the time that the Vendor learns of the occurrence.	Yes	
A.8 The Vendor shall ensure its complete cooperation with the State's Chief Information Officer in the detection of any security vulnerability of the Vendor' hosting infrastructure and/or the application.	Yes	
A.9 The Vendor shall be solely liable for costs associated with any breach of State data housed at their location(s) including but not limited to notification and any damages assessed by the courts.	Yes	As agreed in Exhibit C-1 of the Contract.
B APPLICATION SECURITY REQUIREMENTS	VENDOR RESPONSE	VENDOR COMMENTS
B.1 Verify the identity or authenticate all of the system client applications before allowing use of the system to prevent access to inappropriate or confidential data or services.	Yes	
B.2 Verify the identity or authenticate all of the system's human users before allowing them to use its capabilities to prevent access to inappropriate or confidential data or services.	Yes	
B.3 Enforce unique user names.	Yes	
B.4 Enforce complex non-reusable passwords of ten (10) characters or more that contain at least one upper case, one lower case, one numeric, and one symbol.	Yes	

JMM



Exhibit A-1

CANCER DATA REGISTRY TECHNICAL REQUIREMENTS	VENDOR RESPONSE	VENDOR COMMENTS
B.5 Passwords should be forced to an Administrator reset after three (3) failed attempts.	Yes	The Contractor's Proposal Response to Information Technology questions dated October 3, 2016, providing additional details and specifics of the password multifactor process, is hereby incorporated by reference as fully set forth herein. The State and Contractor shall negotiate a mutually agreeable remediation plan within 180 days of the effective date of the Contract.
B.6 Encrypt passwords in transmission and at rest within the database.	Yes	
B.7 Expire passwords after ninety-days.	Yes	The Contractor's Proposal Response to Information Technology questions dated October 3, 2016, providing additional details and specifics of the password expiration process, is hereby incorporated by reference as fully set forth herein. The State and Contractor shall negotiate a mutually agreeable remediation plan within 180 days of the effective date of the Contract.
B.8 Authorize users and client applications to prevent access to inappropriate or confidential data or services.	Yes	
B.9 Provide the ability to limit the number of people that can grant or change authorizations	Yes	
B.10 Provide the ability to enforce session timeouts during State-defined periods of inactivity.	Yes	

JMM

Date *10/31/16*



Exhibit A-1

CANCER DATA REGISTRY TECHNICAL REQUIREMENTS	VENDOR RESPONSE	VENDOR COMMENTS
<p>B.11 Ensure the application has been tested and hardened to prevent critical application security flaws. (At a minimum, the application shall be tested against all flaws outlined in the Open Web Application Security Project (OWASP) Top Ten (http://www.owasp.org/index.php/OWASP Top Ten Project)</p>	<p>Yes</p>	<p>As described above in A2, we will test for security flaws and address them according to the findings of testing procedures.</p> <p>The State and Contractor shall negotiate a mutually agreeable remediation plan within 180 days of the effective date of the Contract.</p>
<p>B.12 The application shall not store authentication credentials or Sensitive Data in its code.</p>	<p>Yes</p>	
<p>B.13 Audit all attempted accesses that fail or succeed identification, authentication, and authorization requirements</p>	<p>Yes</p>	
<p>B.14 The application shall log all activities to a central server to prevent parties to application transactions from denying that they have taken place. The logs must be kept for six (6) months</p>	<p>Yes</p>	<p>The Contractor's Proposal Response to Information Technology questions dated October 3, 2016, providing additional details and specifics of the logging functionality process, is hereby incorporated by reference as fully set forth herein.</p> <p>The State and Contractor shall negotiate a mutually agreeable remediation plan within 180 days of the effective date of the Contract.</p>
<p>B.15 The application must allow a user to explicitly terminate a session. No remnants of the prior session should then remain.</p>	<p>Yes</p>	
<p>B.16 The Application Data shall be protected from unauthorized use when at rest</p>	<p>Yes</p>	
<p>B.17 Keep any Sensitive Data or communications private from unauthorized individuals and programs.</p>	<p>Yes</p>	
<p>B.18 Subsequent application enhancements or upgrades shall not remove or degrade security requirements</p>	<p>Yes</p>	

Jmm
Date 10/31/18



Exhibit A-1

CANCER DATA REGISTRY TECHNICAL REQUIREMENTS	VENDOR RESPONSE	VENDOR COMMENTS
B.19 Conform to all State and Federal laws and regulations regarding data security	Yes	
B.20 Create change management documentation and procedures	No	NHSCR does not develop nor do software maintenance on user applications, so this item is not applicable.
C HOSTING REQUIREMENTS	VENDOR RESPONSE	VENDOR COMMENTS
C.1 The Vendor shall maintain a secure hosting environment providing all necessary hardware, software, and Internet bandwidth to manage the system and data submitters and the State with permission based logins. • Access will be via Internet Explorer Version 11, or as otherwise agreed to by DHHS.	Yes	
C.2 The Vendor will not be responsible for network connection issues, problems or conditions arising from or related to circumstances outside the control of the Vendor, ex: bandwidth, network outages and /or any other conditions arising on the data submitters internal network or, more generally, outside the Vendor's firewall or any issues that are the responsibility of the data submitters Internet Service Provider. .	Yes	
C.3 Vendor shall provide a secure Tier 3 or 4 Data Center providing equipment, an on-site 24/7 system operator, managed firewall services, and managed backup Services.	Yes, Tier 3	
C.4 The Vendor must monitor the application and all servers.	Yes	
C.5 The Vendor shall manage the databases and services on all servers located at the Vendor's facility.	Yes	
C.6 The Vendor shall install and update all server patches, updates, and other utilities within 60 days of release from the manufacturer.	Yes	
C.7 The Vendor shall monitor System, security, and application logs.	Yes	
C.8 The Vendor shall manage the sharing of data resources.	Yes	
C.9 The Vendor shall manage daily backups, off-site data storage, and restore operations.	Yes	
C.10 The Vendor shall monitor physical hardware.	Yes	
C.11 The Vendor shall provide validation that they have adequate disaster recovery procedures in place.	Yes	
C.12 The Vendor shall have documented disaster recovery plans that address the recovery of lost State data as well as their own. Systems shall be architected to meet the defined recovery needs.	Yes	

Jmm
10/21/14



Exhibit A-1

CANCER DATA REGISTRY TECHNICAL REQUIREMENTS	VENDOR RESPONSE	VENDOR COMMENTS
C.13 The disaster recovery plan shall identify appropriate methods for procuring additional hardware in the event of a component failure. In most instances, systems shall offer a level of redundancy so the loss of a drive or power supply will not be sufficient to terminate services however, these failed components will have to be replaced.	Yes	
C.14 The Vendor shall adhere to a defined and documented back-up schedule and procedure.	Yes	
C.15 Back-up copies of data are made for the purpose of facilitating a restore of the data in the event of data loss or System failure.	Yes	
C.16 Scheduled backups of all servers must be completed weekly.	Yes	
C.17 The minimum acceptable frequency is differential backup daily, and complete backup weekly.	Yes	
C.18 Tapes or other back-up media tapes must be securely transferred from the site to another secure location to avoid complete data loss with the loss of a facility.	Yes	
C.19 If State data is personally identifiable, data must be encrypted in the operation environment and on back up tapes.	Yes	
C.20 Data recovery – In the event that recovery back to the last backup is not sufficient to recover State Data, the Vendor shall employ the use of database logs in addition to backup media in the restoration of the database(s) to afford a much closer to real-time recovery. To do this, logs must be moved off the volume containing the database with a frequency to match the business needs.	Yes	<p>The Contractor's Proposal Response to Information Technology questions dated October 3, 2016, providing additional details and specifics of the data recovery process, is hereby incorporated by reference as fully set forth herein.</p> <p>The State and Contractor shall negotiate a mutually agreeable remediation plan within 180 days of the effective date of the Contract.</p>
D HOSTING REQUIREMENTS – NETWORK ARCHITECTURE	VENDOR RESPONSE	VENDOR COMMENTS
C.21 The Vendor must operate hosting Services on a network offering adequate performance to meet the business requirements for the State application. For the purpose of this RFP, adequate performance is defined as 99.5% uptime, exclusive of the regularly scheduled maintenance window.	Yes	

Contractor Initials *JMM*

Date *10/31/16*



Exhibit A-1

CANCER DATA REGISTRY TECHNICAL REQUIREMENTS	VENDOR RESPONSE	VENDOR COMMENTS
C.22 The Vendor shall provide network redundancy deemed adequate by the State by assuring redundant connections provided by multiple Internet Vendors, so that a failure of one Internet connection will not interrupt access to the State application.	Yes	
C.23 The Vendor' network architecture must include redundancy of routers and switches in the Data Center.	Yes	
C.24 Remote access shall be customized to the State's business application. In instances where the State requires access to the application or server -resources not in the DMZ, the Vendor shall provide remote desktop connection to the server through secure protocols such as a Virtual Private Network (VPN).	No	This is not applicable because there is no relevant state business application.
E HOSTING REQUIREMENTS - SECURITY	VENDOR RESPONSE	VENDOR COMMENTS
C.25 The Vendor shall employ security measures that ensure the State's data is protected.	Yes	
C.26 If State data is hosted on multiple servers, data exchanges between and among servers must be encrypted.	No	This is not applicable as the data are hosted on a single server.
C.27 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 whole, shall have aggressive intrusion-detection and firewall protection.	Yes	
C.28 All components of the infrastructure shall be reviewed and tested to ensure they protect the State's hardware, software, and its related data assets. Tests shall focus on the technical, administrative, and physical security controls that have been designed into the System architecture in order to provide confidentiality, integrity, and availability.	Yes	
C.29 In the development or maintenance of any code, the Vendor shall ensure that the Software is independently verified and validated using a methodology determined appropriate by the State. All software and hardware shall be free of malicious code.	No	This is not applicable as NHSCR does not develop any code that is used in production of an application such as WebPlus. NHSCR does make extensive use of programs written in SAS, SPSS or Excel.
C.30 The Vendor shall authorize the State to perform scheduled and random security audits, including vulnerability assessments, of the Vendor' hosting infrastructure and/or the application upon request.	Yes	

JMM
10/31/14



Exhibit A-1

CANCER DATA REGISTRY TECHNICAL REQUIREMENTS	VENDOR RESPONSE	VENDOR COMMENTS
C.31 The Vendor shall provide fire detection and suppression system, physical security of and infrastructure security of the proposed hosting facility. The environmental support equipment of the Vendor website hosting facility: power conditioning; HVAC; UPS; generator must be acceptable to the State.	Yes	
F HOSTING REQUIREMENTS - SERVICE LEVEL AGREEMENT	VENDOR RESPONSE	VENDOR COMMENTS
C.32 The DHHS and Health Facilities shall have unlimited access, via phone or Email, to the Vendor Help Desk technical support staff between the hours of 8:30am to 5:00pm- Monday thru Friday EST.	Yes	
C.33 The Vendor telephone or e-mail response time for technical support shall be no more than twenty-four (24) hours.	Yes	NHSCR is prepared to respond during normal business hours, 8:00 AM to 4:30 PM, Monday through Friday EST. This has worked well with our reporters.
C.34 The Vendor shall guarantee 99.5% uptime, exclusive of the regularly scheduled maintenance window	Yes	The Applicant, an academic institution, is not in a position to guarantee uptime although in the normal course of business, it approaches 99.5%.
G. ADDITIONAL QUESTIONS	VENDOR RESPONSE	VENDOR COMMENTS
C.35 The Vendor shall provide a written description of the Registry Plus Suite options used by NHSCR.	Yes	<p>The Contractor's Proposal Response to Information Technology questions dated October 3, 2016, providing additional details and specifics of the Registry Plus Suite, is hereby incorporated by reference as fully set forth herein.</p> <p>The State and Contractor shall negotiate a mutually agreeable remediation plan within 90 days of the effective date of the Contract.</p>

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10/31/16



Exhibit A-1

CANCER DATA REGISTRY TECHNICAL REQUIREMENTS	VENDOR RESPONSE	VENDOR COMMENTS
<p>C.36 The technical information from the CDC on the Registry Plus suite indicates that customization to the code is allowed. Does Dartmouth intend to do that or are they providing an "out of box" install? That will impact whether application security is in scope for what Dartmouth provides to the State. The technical specifications for Registry Plus are six (6) years old (http://www.cdc.gov/cancer/npcr/pdf/registryplus/registry_plus_requirements.pdf) so the chances are higher that there is some security concerns about this software. A quick read shows the .Net framework is .Net 1.1 which is obsolete. The Vendor shall provide updated technical specifications.</p>	<p>Yes</p>	<p>See C35. The State and Contractor shall negotiate a mutually agreeable remediation plan within 90 days of the effective date of the Contract.</p>
<p>C.37 The CDC's documentation puts a high level of the security on the infrastructure that runs the system (from requirements, page 7) The security of Web Plus depends mostly on the security of the client computer, the communication channel between the client and the Web server, the Web server, the base operating system, and the configurations of the firewalls on either side of the Web server. It is very important that the hosting agency have a security policy in place and document the users (and their assigned roles) who have access to Web Plus. The hosting agency is responsible for encrypting the Web Plus database if required. Strong passwords are recommended, and account sharing should be prohibited. For further information, visit Web Plus Security Features (http://www.cdc.gov/cancer/npcr/tools/registryplus/wp_security.htm) and Maximizing Data Security in WebPlus (http://www.cdc.gov/cancer/npcr/tools/registryplus/wp_security2.htm).</p>	<p>Yes</p>	<p>The Contractor's Proposal Response to Information Technology questions dated October 3, 2016, providing additional details and specifics of the Cancer Registry Operations security of Web Plus, is hereby incorporated by reference as fully set forth herein. The State and Contractor shall negotiate a mutually agreeable remediation plan within 90 days of the effective date of the Contract.</p>
<p>C.38 Penetration Internal Security Testing. The State will perform Penetration testing, and based on results, work with the Contractor to negotiate a mutually agreeable remediation plan within 180 days of the Contract effective date</p>	<p>Yes</p>	<p>The State and Contractor shall determine a mutually agreed upon date for penetration testing and perform the penetration testing within 90 days of the effective date of the Contract.</p>



Exhibit B

Method and Conditions Precedent to Payment

- 1) The State shall pay the contractor an amount not to exceed the Form P-37, Block 1.8, Price Limitation for the services provided by the Contractor pursuant to Exhibit A, Scope of Services.
 - 1.1. This contract is funded with funds from the following Catalog of Federal Domestic Assistance (CFDA) numbers:
 - 79% federal funds from the US Centers for Disease Control & Prevention, NH Comprehensive Cancer Control Program & Cancer Registry Grant, CFDA #93.752, Federal Award Identification Number (FAIN), NU58DP003930.
 - 21% general funds.
 - 1.2. The Contractor agrees to provide the services in Exhibit A, Scope of Service and Exhibit A-1 Additional Cancer Data Registry Technical Requirements, in compliance with funding requirements. Failure to meet the scope of services may jeopardize the funded contractor's current and/or future funding.
- 2) Payment for said services shall be made monthly as follows:
 - 2.1. Payment shall be on a cost reimbursement basis for actual expenditures incurred in the fulfillment of this agreement, and shall be in accordance with the approved line item.
 - 2.2. 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 invoice must be completed, signed, dated and returned to the Department in order to initiate payment.
 - 2.3. The State shall make payment to the Contractor within thirty (30) days of receipt of each invoice, subsequent to approval of the submitted invoice and if sufficient funds are available. Contractors will keep detailed records of their activities related to DHHS-funded programs and services.
 - 2.4. The final invoice shall be due to the State no later than forty (40) days after the contract Form P-37, Block 1.7 Completion Date.
 - 2.5. In lieu of hard copies, all invoices may be assigned an electronic signature and emailed. Hard copies shall be mailed to:

Department of Health and Human Services
Division of Public Health Services
29 Hazen Drive
Concord, NH 03301
Email address: DPHScontractbilling@dhhs.nh.gov
- 3) Notwithstanding paragraph 18 of the General Provisions P-37, an amendment limited to adjustments to amounts between budget line items, related items, amendments of related budget exhibits within the price limitation, and to adjust encumbrances between State Fiscal Years through the Budget Office if needed and justified, may be made by written agreement of both parties and may be made without obtaining approval of the Governor and Executive Council.

10/31/16

Exhibit B-1 Budget

New Hampshire Department of Health and Human Services

Bidder/Contractor Name: Trustees of Dartmouth College

Budget Request for: Cancer Registry Operations
(Name of RFP)

Budget Period: SFY 2017 (11/1/16 through 6/30/17)

Line Item	Direct Incremental	Indirect Fixed	Total	Required Match	Allocation Method for Indirect/Fixed Cost
1. Total Salary/Wages	\$ 278,690.00	\$ 27,869.00	\$ 306,559.00	\$ -	Dartmouth College is allowing a substantially reduced 10% indirect cost rate from the usual rate of 62%. Geisel School of Medicine provides office space, communications, and
2. Employee Benefits	\$ 81,572.00	\$ 8,157.00	\$ 89,729.00	\$ -	
3. Consultants	\$ 73,471.00	\$ 7,347.00	\$ 80,818.00	\$ -	
4. Equipment:	\$ -	\$ -	\$ -	\$ -	
Rental	\$ -	\$ -	\$ -	\$ -	
Repair and Maintenance	\$ -	\$ -	\$ -	\$ -	
Purchase/Depreciation	\$ 3,560.00	\$ 356.00	\$ 3,916.00	\$ -	
5. Supplies:	\$ -	\$ -	\$ -	\$ -	
Educational	\$ -	\$ -	\$ -	\$ -	
Lab	\$ -	\$ -	\$ -	\$ -	
Pharmacy	\$ -	\$ -	\$ -	\$ -	
Medical	\$ -	\$ -	\$ -	\$ -	
Office	\$ 3,960.00	\$ 396.00	\$ 4,356.00	\$ -	
6. Travel	\$ 21,948.00	\$ 2,195.00	\$ 24,143.00	\$ -	
7. Occupancy	\$ -	\$ -	\$ -	\$ -	
8. Current Expenses	\$ -	\$ -	\$ -	\$ -	
Telephone	\$ -	\$ -	\$ -	\$ -	
Postage	\$ 3,680.00	\$ 368.00	\$ 4,048.00	\$ -	
Subscriptions	\$ -	\$ -	\$ -	\$ -	
Audit and Legal	\$ -	\$ -	\$ -	\$ -	
Insurance	\$ -	\$ -	\$ -	\$ -	
Board Expenses	\$ -	\$ -	\$ -	\$ -	
9. Software	\$ 8,193.00	\$ 819.00	\$ 9,012.00	\$ -	
10. Marketing/Communications	\$ -	\$ -	\$ -	\$ -	
11. Staff Education and Training	\$ 2,000.00	\$ 200.00	\$ 2,200.00	\$ -	
12. Subcontracts/Agreements	\$ -	\$ -	\$ -	\$ -	
13. Other (specific details mandatory):	\$ -	\$ -	\$ -	\$ -	
Membership	\$ -	\$ -	\$ -	\$ -	
Tumor Registry Effort	\$ -	\$ -	\$ -	\$ -	
DC Contribution of Indirect Costs	\$ -	\$ -	\$ -	\$ 55,987.00	
	\$ -	\$ -	\$ -	\$ 106,257.00	
	\$ -	\$ -	\$ -	\$ -	
TOTAL	\$ 477,074.00	\$ 47,707.00	\$ 524,781.00	\$ 162,244.00	

Indirect As A Percent of Direct

10.0%

Contractor Initials:

Jmm
10/31/14

Date:

Exhibit B-2 Budget

New Hampshire Department of Health and Human Services

Bidder/Contractor Name: Trustees of Dartmouth College

Budget Request for: Cancer Registry Operations
(Name of RFP)

Budget Period: SFY 2018 (7/1/17 through 6/30/18)

Line Item	Direct Incremental	Indirect Fixed	Total	Required Match	Allocation Method for Indirect/Fixed Cost
1. Total Salary/Wages	\$410,467	\$ 41,047.00	\$ 451,514.00	\$ -	Dartmouth College is allowing a substantially reduced 10% indirect cost rate from the usual rate of 62%. Geisel School of Medicine provides office space, communications, and administrative
2. Employee Benefits	\$123,141	\$ 12,314.00	\$ 135,455.00	\$ -	
3. Consultants	\$ 4,205.00	\$ 421.00	\$ 4,626.00	\$ -	
4. Equipment:	\$ 4,692.00	\$ 469.00	\$ 5,161.00	\$ -	
Rental	\$ -	\$ -	\$ -	\$ -	
Repair and Maintenance	\$ -	\$ -	\$ -	\$ -	
Purchase/Depreciation	\$ -	\$ -	\$ -	\$ -	
5. Supplies:	\$ -	\$ -	\$ -	\$ -	
Educational	\$ -	\$ -	\$ -	\$ -	
Lab	\$ -	\$ -	\$ -	\$ -	
Pharmacy	\$ -	\$ -	\$ -	\$ -	
Medical	\$ -	\$ -	\$ -	\$ -	
Office	\$ 5,439.00	\$ 544.00	\$ 5,983.00	\$ -	
6. Travel	\$ 30,900.00	\$ 3,090.00	\$ 33,990.00	\$ -	
7. Occupancy	\$ -	\$ -	\$ -	\$ -	
8. Current Expenses	\$ -	\$ -	\$ -	\$ -	
Telephone	\$ -	\$ -	\$ -	\$ -	
Postage	\$ 5,149.00	\$ 515.00	\$ 5,664.00	\$ -	
Subscriptions	\$ 840.00	\$ 84.00	\$ 924.00	\$ -	
Audit and Legal	\$ -	\$ -	\$ -	\$ -	
Insurance	\$ -	\$ -	\$ -	\$ -	
Board Expenses	\$ -	\$ -	\$ -	\$ -	
9. Software	\$ 16,465.00	\$ 1,647.00	\$ 18,112.00	\$ -	
10. Marketing/Communications	\$ -	\$ -	\$ -	\$ -	
11. Staff Education and Training	\$ 3,090.00	\$ 309.00	\$ 3,399.00	\$ -	
12. Subcontracts/Agreements	\$ -	\$ -	\$ -	\$ -	
13. Other (specific details mandatory):	\$ -	\$ -	\$ -	\$ -	
Membership	\$ 1,210.00	\$ 121.00	\$ 1,331.00	\$ -	
Tumor Registry Effort	\$ -	\$ -	\$ -	\$ 87,206.00	
DC Contribution of Indirect Costs	\$ -	\$ -	\$ -	\$ 148,372	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
TOTAL	\$ 605,598.00	\$ 60,561.00	\$ 666,159.00	\$ 235,578.00	

Indirect As A Percent of Direct

10.0%

Contractor Initials:

Jmm

10/31/16



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;

MM
Date *6/31/14*



- 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.

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10/31/16



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

JMM
Date 10/30/14



more employees, it will maintain a current EEOP on file and submit an EEOP Certification Form to the OCR, certifying that its EEOP 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 EEOP Certification Form to the OCR certifying it is not required to submit or maintain an EEOP. Non-profit organizations, Indian Tribes, and medical and educational institutions are exempt from the EEOP requirement, but are required to submit a certification form to the OCR to claim the exemption. EEOP 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

Jmr
Date 10/31/14



- 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.

JMM
10/31/14



Exhibit C-1

REVISIONS TO GENERAL PROVISIONS

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

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, 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 have the right to withhold payment until such funds become available, if ever. The State 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, 30 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.

3. Extension:

This agreement has the option for a potential extension of up to two (2) additional years, contingent upon satisfactory delivery of services, available funding, agreement of the parties and approval of the Governor and Council.

4. Limitation of Liability

4.1. State

Subject to applicable laws and regulations, in no event shall the State be liable for any consequential, special, indirect, incidental, punitive, or exemplary damages. Subject to applicable laws and regulations, the State's liability to Contractor shall not exceed the total Contract price set forth in Contract Agreement – General Provisions, Block 1.8.

Jmm
10/31/16



Exhibit C-1

4.2. Contractor

Subject to applicable laws and regulations, in no event shall Contractor be liable for any consequential, special, indirect, incidental, punitive or exemplary damages and Contractor's liability to the State shall not exceed two times **(2X)** the total Contract price set forth in Contract Agreement – P-37, General Provisions, Block 1.8.

Notwithstanding the foregoing, this limitation of liability shall not apply to Contractor's indemnification obligations set forth in the Contract Agreement-General Provisions Section 13: *Indemnification*.

4.3 State's Immunity

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 shall survive termination or Contract conclusion.

Contractor Initials Jmm
Date 10/24/16



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 *JMM*
Date *10/24/16*



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.

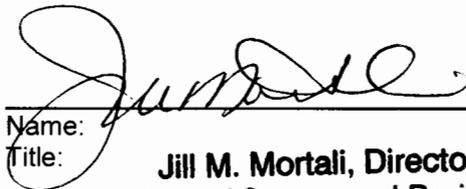
2. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant.

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: Trustees of Dartmouth College

10/31/16
Date


Name: _____
Title: **Jill M. Mortali, Director
Office of Sponsored Projects**



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

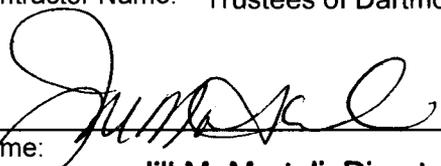
The undersigned certifies, to the best of his or her knowledge and belief, that:

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-I.)
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: Trustees of Dartmouth College

10/31/14
Date


Name: Jill M. Mortali
Title: **Jill M. Mortali, Director
Office of Sponsored Projects**



**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

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10/31/16



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 (I)(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: Trustees of Dartmouth College

10/21/14
Date


Name: **Jill M. Mortali, Director**
Title: **Office of Sponsored Projects**



**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

10/31/16



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: Trustees of Dartmouth College

10/31/14
Date

Jill M. Mortali
Name:
Title:
**Jill M. Mortali, Director
Office of Sponsored Projects**

Exhibit G

Contractor Initials JMM
Date 10/31/14

Certification of Compliance with requirements pertaining to Federal Nondiscrimination, Equal Treatment of Faith-Based Organizations and Whistleblower protections



CERTIFICATION REGARDING ENVIRONMENTAL TOBACCO SMOKE

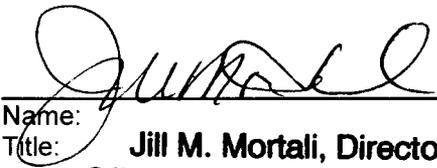
Public Law 103-227, Part C - Environmental Tobacco Smoke, also known as the Pro-Children Act of 1994 (Act), requires that smoking not be permitted in any portion of any indoor facility owned or leased or contracted for by an entity and used routinely or regularly for the provision of health, day care, 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: Trustees of Dartmouth College

10/31/10
Date


Name: **Jill M. Mortali, Director**
Title: **Office of Sponsored Projects**

Contractor Initials JMM
Date 10/31/10



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.



Exhibit I

- i. “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

Jmm
Date 10/31/14



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 (I). 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

JMM
10/31/14



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

JMR
11/31/14



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.

JMM
10/31/14



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

Marcella J. Bobinsky
Signature of Authorized Representative

Marcella J. Bobinsky, MPH

Name of Authorized Representative

Acting Director

Title of Authorized Representative

Date

11/1/16

Trustees of Dartmouth College

Name of the Contractor

Jill M. Mortali
Signature of Authorized Representative

Jill M. Mortali, Director

Office of Sponsored Projects

Name of Authorized Representative

Director
Title of Authorized Representative

Date

10/31/16

JMN
Date *10/31/16*



**CERTIFICATION REGARDING THE FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY
ACT (FFATA) COMPLIANCE**

The Federal Funding Accountability and Transparency Act (FFATA) requires prime awardees of individual Federal grants equal to or greater than \$25,000 and awarded on or after October 1, 2010, to report on data related to executive compensation and associated first-tier sub-grants of \$25,000 or more. If the initial award is below \$25,000 but subsequent grant modifications result in a total award equal to or over \$25,000, the award is subject to the FFATA reporting requirements, as of the date of the award.

In accordance with 2 CFR Part 170 (Reporting Subaward and Executive Compensation Information), the Department of Health and Human Services (DHHS) must report the following information for any subaward or contract award subject to the FFATA reporting requirements:

1. Name of entity
2. Amount of award
3. Funding agency
4. NAICS code for contracts / CFDA program number for grants
5. Program source
6. Award title descriptive of the purpose of the funding action
7. Location of the entity
8. Principle place of performance
9. Unique identifier of the entity (DUNS #)
10. Total compensation and names of the top five executives if:
 - 10.1. More than 80% of annual gross revenues are from the Federal government, and those revenues are greater than \$25M annually and
 - 10.2. Compensation information is not already available through reporting to the SEC.

Prime grant recipients must submit FFATA required data by the end of the month, plus 30 days, in which the award or award amendment is made.

The Contractor identified in Section 1.3 of the General Provisions agrees to comply with the provisions of The Federal Funding Accountability and Transparency Act, Public Law 109-282 and Public Law 110-252, and 2 CFR Part 170 (Reporting Subaward and Executive Compensation Information), 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:

The below named Contractor agrees to provide needed information as outlined above to the NH Department of Health and Human Services and to comply with all applicable provisions of the Federal Financial Accountability and Transparency Act.

Contractor Name: Trustees of Dartmouth College

10/31/14
Date

Jill M. Mortali
Name:
Title:

**Jill M. Mortali, Director
Office of Sponsored Projects**

Jmm
10/31/14



FORM A

As the Contractor identified in Section 1.3 of the General Provisions, I certify that the responses to the below listed questions are true and accurate.

1. The DUNS number for your entity is: 34-102-7822
2. In your business or organization's preceding completed fiscal year, did your business or organization receive (1) 80 percent or more of your annual gross revenue in U.S. federal contracts, subcontracts, loans, grants, sub-grants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?

NO YES

If the answer to #2 above is NO, stop here

If the answer to #2 above is YES, please answer the following:

3. Does the public have access to information about the compensation of the executives in your business or organization through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C.78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?

NO YES

If the answer to #3 above is YES, stop here

If the answer to #3 above is NO, please answer the following:

4. The names and compensation of the five most highly compensated officers in your business or organization are as follows:

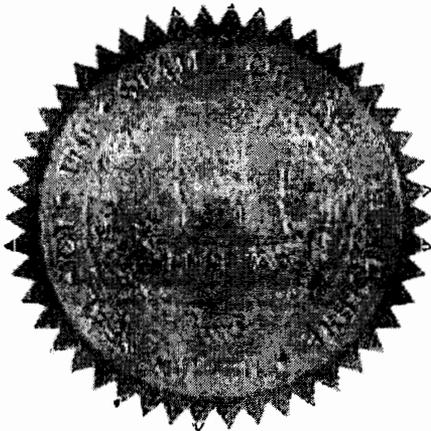
Name: _____	Amount: _____

JMM
10/31/10

State of New Hampshire
Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that our records show that a special corporate charter was granted to the TRUSTEES OF DARTMOUTH COLLEGE by the British Crown on December 13, 1769. I further certify that no fees are required to be paid to this office by this corporation.



IN TESTIMONY WHEREOF, I hereto set my hand and cause to be affixed the Seal of the State of New Hampshire, this 22nd day of April, A.D. 2016

A handwritten signature in cursive script, appearing to read "Wm. Gardner", is written in black ink. The signature is located below the printed text of the date and above the printed name and title.

William M. Gardner
Secretary of State



BOARD OF TRUSTEES

CERTIFICATE

I, Marcia J. Kelly, hereby certify that I am Assistant Clerk of Trustees of Dartmouth College, a corporation created by Royal Charter and existing under the laws of the State of New Hampshire; that as Assistant Clerk I have custody of the records of meetings of the Board of Trustees of said corporation; and that at a meeting of said Board duly called and held on the 9th day of April, 2011 at which a quorum was present and acting throughout, the following vote was adopted:

VOTED: To approve the Signature and Requisition Authority Policy, effective July 1, 2011 or such earlier date as the Executive Vice President/Chief Financial Officer shall determine. The provisions of the Signature and Requisition Authority Policy shall take precedence over any previous inconsistent vote of the Board of Trustees.

I further certify that said Board voted to adopt amendments to the Signature and Requisition Authority Policy on March 3, 2012 (effective January 1, 2012), September 22, 2013, January 2, 2014, March 8, 2014, and November 8, 2014. The document is available on Dartmouth website at: <http://www.dartmouth.edu/~control/policies/signature-authority.html>.

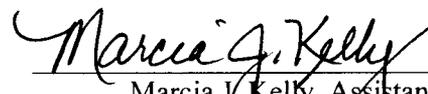
I further certify that said vote remains in full force and effect as of the date hereof and is not contrary to any provision of the Charter of said corporation.

I further certify that attached hereto is a true and correct copy of the Introduction and the Sponsored Activities Administration and Intellectual Property Transactions section (Appendix G) of the said Signature and Requisition Authority Policy.

I further certify that the following persons were appointed to the positions opposite their respective names and continue to serve in said positions as of the dates shown:

Jill Mortali	Director, Office of Sponsored Projects	September 15, 2008
Martin N. Wybourne	Vice Provost for Research	July 1, 2004
Christine Bothe	Associate Director, Office of Sponsored Projects	December 1, 2011
Aarron Clough	Assistant Director, Office of Sponsored Projects	January 1, 2013
Heather A. Arnold	Assistant Director, Office of Sponsored Projects	December 1, 2011

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the corporation this 31 day of October, 2016



Marcia J. Kelly, Assistant Clerk
Trustees of Dartmouth College



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
06/24/2016

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 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 Marsh USA Inc. 1717 Arch Street Philadelphia, PA 19103-2797 J09254-DART-GAWUP-16-17	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS:	FAX (A/C, No):
	INSURER(S) AFFORDING COVERAGE	
INSURED TRUSTEES OF DARTMOUTH COLLEGE ATTN: CATHERINE LARK 53 S. MAIN STREET, SUITE 212 HANOVER, NH 03755	INSURER A: Pinnacle Consortium of Higher Ed VT RRRG	NAIC # 11980
	INSURER B: Zurich American Insurance Company	16535
	INSURER C: N/A	N/A
	INSURER D: N/A	N/A
	INSURER E: N/A	N/A
	INSURER F: N/A	N/A

COVERAGES **CERTIFICATE NUMBER:** CLE-005014700-01 **REVISION NUMBER:** 1

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 INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER			PCHE2016-03	07/01/2016	07/01/2017	EACH OCCURRENCE	\$ 2,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 2,000,000
							MED EXP (Any one person)	\$ 5,000
							PERSONAL & ADV INJURY	\$ 2,000,000
							GENERAL AGGREGATE	\$ 5,000,000
							PRODUCTS COMP/OP AGG	\$ 2,000,000
								\$
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS <input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			BAP 9267272-06 'SELF-INSURED FOR' 'PHYSICAL DAMAGE'	07/01/2016	07/01/2017	COMBINED SINGLE LIMIT (Ea accident)	\$ 2,000,000
							BODILY INJURY (Per person)	\$
							BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
								\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) 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	\$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER The State of New Hampshire Department of Health and Human Services 129 Pleasant Street Concord NH 03301	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 of Marsh USA Inc Manashi Mukherjee <i>Manashi Mukherjee</i>



CERTIFICATE OF LIABILITY INSURANCE

7/1/2016

DATE (MM/DD/YYYY)

7/7/2015

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 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 Lockton Companies 8110 E. Union Avenue Suite 700 Denver CO 80237 (303) 414-6000	CONTACT NAME: _____	
	PHONE (A/C, No, Ext): _____ FAX (A/C, No): _____ E-MAIL ADDRESS: _____	
INSURED 1316233 Dartmouth College 53 South Main Street, Suite 212 Hanover NH 03755	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : American Casualty Company of Reading, PA	20427
	INSURER B : Midwest Employers Casualty Company	23612
	INSURER C : Transportation Insurance Company	20494
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES DARCO02 **CERTIFICATE NUMBER:** 13565662 **REVISION NUMBER:** XXXXXXXX

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 INSD	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 GEN'L AGGREGATE LIMIT APPLIES PER <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER: _____			NOT APPLICABLE			EACH OCCURRENCE \$ XXXXXXXX DAMAGE TO RENTED PREMISES (Ea occurrence) \$ XXXXXXXX MED EXP (Any one person) \$ XXXXXXXX PERSONAL & ADV INJURY \$ XXXXXXXX GENERAL AGGREGATE \$ XXXXXXXX PRODUCTS - COMP/OP AGG \$ XXXXXXXX \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			NOT APPLICABLE			COMBINED SINGLE LIMIT (Ea accident) \$ XXXXXXXX BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED _____ RETENTION \$ _____			NOT APPLICABLE			EACH OCCURRENCE \$ XXXXXXXX AGGREGATE \$ XXXXXXXX \$ XXXXXXXX
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	N/A	2099375438 (AOS) 2099375472 (CA)	7/1/2015 7/1/2015	7/1/2016 7/1/2016	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	Excess Work Comp	N	N	EWC008364	7/1/2015	7/1/2016	WC - Statutory; EL Limit \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

13565662
 NH DHHS
 129 Pleasant St.
 Concord, NH 03301

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

Charles M. McDaniel



Dartmouth College

Office of Sponsored Projects
11 Rope Ferry Road #6210
Hanover, NH 03755-1404

TELEPHONE: (603) 646-3007
FAX: (603) 646-3670
EMAIL: sponsored.projects@dartmouth.edu

Dartmouth College Mission

Dartmouth College educates the most promising students and prepares them for a lifetime of learning and of responsible leadership, through a faculty dedicated to teaching and the creation of knowledge.

Since its founding in 1769 to educate Native students, English youth, and others, Dartmouth has provided an intimate and inspirational setting where talented faculty, students, and staff - diverse in background but united in purpose - contribute to the strength of an exciting academic community that cuts easily across disciplines.

Dartmouth is committed to providing the best undergraduate liberal arts experience and to providing outstanding graduate programs in the Geisel School of Medicine (founded 1797), the Thayer School of Engineering (1867), the Tuck School of Business (1900), and the graduate programs in the Arts and Sciences. Together they constitute an exceptional and rich learning environment. Dartmouth faculty and student research contributes substantially to the expansion of human understanding.

The College provides a comprehensive out-of-classroom experience, including service opportunities, engagement in the arts, and competitive athletic, recreational, and outdoor programs. Pioneering programs in computation and international education are hallmarks of the College. Dartmouth graduates are marked by an understanding of the importance of teamwork, a capacity for leadership, and their keen enjoyment of a vibrant community. Their loyalty to Dartmouth and to each other is legendary and is a sustaining quality of the College.

DARTMOUTH COLLEGE

Financial Statements

2015 - 2016





Report of the Independent Auditors

To the Board and Trustees of Dartmouth College:

We have audited the accompanying consolidated financial statements of Dartmouth College ("Dartmouth"), which comprise the consolidated statements of financial position as of June 30, 2016 and 2015 and the related consolidated statement of activities for the year ended June 30, 2016, and statements of cash flows for the years ended June 30, 2016 and 2015.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on the consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to Dartmouth's preparation and fair presentation of the consolidated 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 Dartmouth'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 consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Dartmouth College at June 30, 2016 and 2015 and the changes in their net assets for the year ended June 30, 2016 and their cash flows for the years ended June 30, 2016 and 2015 in accordance with accounting principles generally accepted in the United States of America.

Other Matter

We previously audited the consolidated statement of financial position as of June 30, 2015, and the related consolidated statements of activities and cash flows for the year then ended (not presented herein), and in our report dated October 19, 2015, we expressed an unmodified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying summarized financial information as of June 30, 2015 and for the year then ended is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

PricewaterhouseCoopers LLP

October 25, 2016

Dartmouth College

Consolidated Statement of Financial Position

As of June 30, 2016, with comparative information as of June 30, 2015
(in thousands)

	2016	2015
Assets		
Cash and cash equivalents	\$ 207,932	\$ 289,137
Receivables and other assets, net	143,976	143,339
Investment related receivables	51,484	9,157
Pledges receivable, net	211,455	164,368
Investments	5,697,656	5,704,691
Land, buildings, equipment, and construction in progress, net	954,922	968,902
Total assets	\$ 7,267,425	\$ 7,279,594
Liabilities		
Accounts payable and other liabilities	\$ 99,860	\$ 66,090
Investment related payables	85,833	30,627
Deferred revenues and deposits	41,048	43,298
Liability for split-interest agreements	49,527	49,894
Pension and other employment related obligations	420,710	451,354
Bonds, mortgages, and notes payable, net	1,247,984	1,098,157
Interest rate swap liabilities, at fair value	250,321	167,417
Conditional asset retirement obligations	24,522	23,804
Government advances for student loans	20,660	20,492
Total liabilities	2,240,465	1,951,133
Net Assets		
Unrestricted	1,104,557	1,312,188
Temporarily restricted	2,570,506	2,772,958
Permanently restricted	1,351,897	1,243,315
Total net assets	5,026,960	5,328,461
Total liabilities and net assets	\$ 7,267,425	\$ 7,279,594

See accompanying notes to the financial statements.

Dartmouth College

Consolidated Statement of Activities

For the year ended June 30, 2016, with summarized financial information for the year ended June 30, 2015
(in thousands)

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total	
				2016	2015
Endowment Activities					
Gifts	\$ 63	\$ 2,327	\$ 68,966	\$ 71,356	\$ 46,029
Net investment return	(23,048)	(76,301)	(200)	(99,549)	349,917
Distributed for spending	(48,243)	(160,335)	(55)	(208,633)	(214,225)
Other changes	(2,195)	1,609	5,382	4,796	814
Amounts transferred (to) from other funds, net	5,758	4,677	32,508	42,943	12,737
Change in net assets from endowment activities	(67,665)	(228,023)	106,601	(189,087)	195,272
Operating Activities					
Revenues					
Tuition and fees	340,979	-	-	340,979	326,580
Student scholarships	(141,713)	-	-	(141,713)	(129,186)
Net tuition and fees	199,266	-	-	199,266	197,394
Sponsored research grants and contracts	183,083	-	-	183,083	182,118
Dartmouth College Fund and other gifts	76,288	10,863	-	87,151	84,833
Distributed endowment investment return	200,640	6,304	-	206,944	212,493
Other operating income	106,825	207	-	107,032	125,064
Auxiliaries	76,089	-	-	76,089	74,345
Net assets released from restrictions	21,331	(21,331)	-	-	-
Total revenues	863,522	(3,957)	-	859,565	876,247
Expenses					
Academic and student programs	592,068	-	-	592,068	568,685
Sponsored programs	133,016	-	-	133,016	136,150
General institutional services	107,229	-	-	107,229	101,125
Auxiliaries	85,798	-	-	85,798	85,468
Subtotal expenses for ongoing operations	918,111	-	-	918,111	891,428
Change in net assets from ongoing operations	(54,589)	(3,957)	-	(58,546)	(15,181)
Restructuring expenses	53,459	-	-	53,459	-
Change in net assets from operating activities	(108,048)	(3,957)	-	(112,005)	(15,181)
Non-operating Activities					
Gifts	-	65,713	416	66,129	86,185
Other non-operating changes, net	(4,746)	3,177	-	(1,569)	(2,543)
Loss on extinguishment of debt	(31,732)	-	-	(31,732)	-
Distributed endowment investment return	371	1,318	-	1,689	1,731
Increase/decrease in outstanding pledges	-	39,179	7,908	47,087	67,110
Pension and postretirement benefit related changes other than net periodic benefit costs	69,052	-	-	69,052	(40,739)
Disposals and non-capitalized expenditures	(6,794)	(386)	-	(7,180)	(5,810)
Change in unrealized gain (loss) related to interest rate swap agreements	(82,904)	-	-	(82,904)	(26,198)
Net assets released from restrictions	34,457	(34,457)	-	-	-
Amounts transferred (to) from endowment, net	(7,463)	(35,480)	-	(42,943)	(12,737)
Net change in split-interest agreements	(2,159)	(9,536)	(6,343)	(18,038)	(10,579)
Change in net assets from non-operating activities	(31,918)	29,528	1,981	(409)	56,420
Change in net assets	(207,631)	(202,452)	108,582	(301,501)	236,511
Net Assets, beginning of year	1,312,188	2,772,958	1,243,315	5,328,461	5,091,950
Net Assets, end of year	\$ 1,104,557	\$ 2,570,506	\$ 1,351,897	\$ 5,026,960	\$ 5,328,461

See accompanying notes to the financial statements.

Dartmouth College

Consolidated Statement of Operating Expenses

For the year ended June 30, 2016, with summarized financial information for the year ended June 30, 2015
(in thousands)

	General Institutional Services					Total Expenses		
	Academic & Student Programs	Sponsored Programs	Administrative Support	Facilities Operation & Maintenance	Development	Auxiliaries	2016	2015
Salaries and wages	\$ 244,537	\$ 60,849	\$ 28,981	\$ 19,140	\$ 22,494	\$ 14,961	\$ 390,962	\$ 382,443
Employee benefits	105,535	15,236	11,461	7,569	8,895	5,917	154,613	135,622
Fellowships and student support	11,709	3,659	-	-	-	553	15,921	15,852
Materials, equipment, and supplies	38,098	9,896	8,247	2,271	2,214	17,292	78,018	74,892
Purchased services	39,656	39,379	5,853	2,546	4,509	10,455	102,398	116,358
Utilities, taxes, and occupancy	-	-	-	37,227	-	8,345	45,572	48,091
Depreciation and amortization	47,214	-	4,247	5,037	292	9,792	66,582	60,546
Lodging, travel, and similar costs	23,028	3,567	997	90	1,882	175	29,739	27,674
Interest	-	-	-	25,704	-	1,414	27,118	24,512
Other expenses	4,707	430	1,301	242	453	55	7,188	5,438
	514,484	133,016	61,087	99,826	40,739	68,959	918,111	891,428
Facilities operation & maintenance	77,584	-	5,313	(99,826)	90	16,839	0	
Total expenses for FY16	\$ 592,068	\$ 133,016	\$ 66,400	\$ -	\$ 40,829	\$ 85,798	\$ 918,111	
Total expenses for FY15	\$ 568,685	\$ 136,150	\$ 61,565	\$ -	\$ 39,560	\$ 85,468	\$ 891,428	

See accompanying notes to the financial statements.

Dartmouth College

Consolidated Statement of Cash Flows

For the year ended June 30, 2016, with comparative information for the year ended June 30, 2015
(in thousands)

	2016	2015
Cash flows from operating activities		
Total change in net assets	\$ (301,501)	\$ 236,511
Adjustments to reconcile total change in net assets to net cash used by operating activities:		
Depreciation and amortization	67,326	60,989
Change in estimated value of interest rate swap agreements	82,904	26,198
Change in estimated pension and post-retirement benefit obligation	(45,198)	56,743
Net change in split-interest liability	(367)	(1,982)
Change in pledges receivable, net	(47,087)	(67,110)
Other non-cash transactions	1,025	(532)
Contributions, investment income, and other changes restricted for long-term investment	(130,870)	(80,390)
Net realized and unrealized (gains) losses	119,262	(330,960)
Changes in operating assets and liabilities:		
Receivables and other assets, net	(1,003)	4,415
Accounts payable and other liabilities	33,072	(5,516)
Deferred revenues and deposits	(2,250)	2,557
Employment related obligations	14,554	4,221
Net cash used in operating activities	<u>(210,133)</u>	<u>(94,856)</u>
Cash flows from investing activities		
Student loans granted	(11,767)	(8,242)
Student loans repaid	11,076	12,902
Purchases of land, buildings, and equipment	(51,888)	(74,518)
Net change in unsettled trades	12,879	13,785
Purchases of investments	(4,861,252)	(5,814,372)
Sales and maturities of investments	4,749,025	5,988,429
Net cash provided by (used in) investing activities	<u>(151,927)</u>	<u>117,984</u>
Cash flows from financing activities		
Proceeds from issuance of debt	642,065	-
Repayment of debt	(492,248)	(15,181)
Contributions, investment income, and other changes restricted for long-term investment in:		
Facilities	47,375	27,473
Endowment, life income, and similar funds	83,495	52,918
Changes in government advances for student loans	168	49
Net cash provided by financing activities	<u>280,855</u>	<u>65,259</u>
Net change in cash and cash equivalents	(81,205)	88,387
Cash and cash equivalents, beginning of year	289,137	200,750
Cash and cash equivalents, end of year	<u>\$ 207,932</u>	<u>\$ 289,137</u>
Supplemental disclosure of cash flow information		
Cash paid for interest	\$ 63,470	\$ 53,273
Accounts payable related building and equipment additions	\$ 1,416	\$ 266
Contributed securities received	\$ 46,055	\$ 52,092

See accompanying notes to the financial statements.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

A. Summary of Significant Accounting Policies

Description of Organization

Dartmouth College (Dartmouth) is a private, nonprofit, co-educational, nonsectarian institution of higher education with approximately 4,300 undergraduate and 2,000 graduate students. Established in 1769, Dartmouth includes the four-year undergraduate college, with graduate schools of business, engineering, and medicine, and several graduate programs in the arts and sciences.

Basis of Presentation

The accompanying consolidated financial statements have been prepared on the accrual basis. Dartmouth's consolidated financial statements include the accounts of its wholly owned subsidiaries and certain affiliated organizations over which it has financial control. The wholly owned subsidiaries and financially controlled entities include real estate corporations, which own real estate in the Hanover, NH area; the Dartmouth Education Loan Corporation (DELCO), which provides scholarships and loans to Dartmouth students who are unable to finance their education through other sources; and various separately incorporated entities which support experiential learning and other activities that enrich the experience of students and the community.

In accordance with U.S. generally accepted accounting principles (GAAP), net assets, revenues, gains, and losses are classified into three categories: unrestricted, temporarily restricted, or permanently restricted. Unrestricted net assets include all resources that are not subject to donor-imposed restrictions and therefore may be used for any purpose in furtherance of Dartmouth's mission. Under the authority of Dartmouth's management and Board of Trustees, in order to support Dartmouth's strategic initiatives, all or a portion of unrestricted net assets may be set aside in segregated Dartmouth-designated reserve accounts and earmarked for use in future years by specific departments, cost centers, or the professional schools, to cover program costs or contingencies. These Dartmouth-designated net assets include funds designated for operating initiatives, facilities, and long-term quasi-endowment. The purposes for which Dartmouth-designated net assets are earmarked may be changed under the authority of Dartmouth's management or Board of Trustees. The use of designated net assets is at the discretion of the responsible department. All expenses are recorded as a reduction of unrestricted net assets.

Temporarily restricted net assets carry donor-imposed restrictions on the expenditure or other use of contributed funds. Temporary restrictions may expire either because of the passage of time or because actions are taken to fulfill the restrictions. Temporarily restricted net assets include unexpended endowment return, unexpended restricted use gifts, term endowment funds, loan funds, certain uncollected pledges, and life income and similar funds. Donor-restricted resources intended for capital projects are released from their temporary restrictions and presented as unrestricted support when the related asset is placed in service. Temporarily restricted endowment distribution and donor-restricted gifts which are received, and either spent or deemed spent within the same fiscal year, are reported as unrestricted.

Permanently restricted net assets are those that are subject to donor-imposed restrictions which will never lapse, thus requiring that the net assets be retained permanently. Based upon a legal interpretation of New Hampshire State Law, Dartmouth has determined that appreciation on restricted endowment funds should be classified as temporarily restricted net assets until such time as the appreciation is appropriated by the Board of Trustees. Investment return from endowment activities that has been appropriated by Dartmouth's Board of Trustees is presented as an increase in operating or non-operating activities according to the unrestricted or temporarily restricted nature of the donor's intended use of the funds. In the case of quasi-endowment funds designated for long-term investment by Dartmouth, investment return that has been appropriated by Dartmouth's Board of Trustees is presented as an increase in unrestricted operating or non-operating activities, depending upon Dartmouth's intended use of the funds. Permanently restricted net assets consist of the original principal of endowment gifts, life income and similar funds, and certain pledges.

Comparative Financial Information

The 2016 consolidated financial statements are presented with certain prior-year comparative information summarized in total but not by net asset class. Such information does not include sufficient detail to constitute a presentation in conformity with GAAP. Accordingly, such information should be read in conjunction with Dartmouth's consolidated financial statements for the year ended June 30, 2015, from which the summarized information was derived. Certain prior year amounts have been reclassified to conform to the fiscal year 2016 presentation.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. The most significant estimates in these consolidated financial statements are the fair value of investments, interest rate swap agreements, pension and postretirement benefit obligations, conditional asset retirement obligations, liabilities for self-insured programs and split-interest agreements, and allowances for uncollectible accounts and pledges receivable. Actual results could differ materially from these estimates, particularly during periods of investment and/or interest rate volatility.

Recent Accounting Pronouncements

In fiscal 2015, Dartmouth adopted ASU 2015-07, Disclosures for Certain Entities That Calculate Net Asset Value per Share (or its Equivalent), which removes the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using net asset value per share as the practical expedient.

In January 2016, the FASB issued ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, which addresses certain aspects of recognition, measurement, presentation and disclosure of financial instruments. The ASU is effective for Dartmouth's fiscal 2020; however, as permitted by the ASU, Dartmouth has chosen to early adopt the provision to eliminate the requirement to disclose the fair value of financial instruments measured at cost (such as the fair value of debt). Dartmouth is evaluating the impact of the remainder of the new guidance on the consolidated financial statements.

The adoption of ASU 2015-07 and the provision of ASU 2016-01 did not have a material effect on Dartmouth's consolidated financial statements.

Consolidated Statement of Activities

Operating activities presented in the consolidated Statement of Activities consist of revenues earned, endowment net investment return appropriated by Dartmouth's Board of Trustees, and expenses incurred in conducting Dartmouth's programs and services. Auxiliary enterprises, primarily the operation of residence halls, dining services, and recreational facilities, are included in operating activities. Expenses such as development, public affairs, and central services and administration are reported as general institutional services. Depreciation and facilities operations and maintenance expenses are allocated to functional classifications of expenses based on the square footage of each building. Amortization expense of capitalized information technology costs is allocated to the functional classification that the technology supports. Interest expense is allocated to functional classifications of expenses based on the use of each building that has been debt financed.

Non-operating activities presented in the consolidated Statement of Activities consist of gifts for facilities projects and gifts whose purpose has not yet been finalized, grants, investment income, other earnings, and endowment investment return appropriated by Dartmouth's Board of Trustees for loan programs and the construction, purchase or sale of capital assets, non-capitalizable construction in progress, net change in life income and similar split-interest agreements, the net change in pledges receivable, the net change in the estimated value of interest rate swap agreements, and postretirement benefit changes other than net periodic benefits costs.

Endowment activities presented in the consolidated Statement of Activities consist of gifts that are restricted by donors to invest in perpetuity, amounts designated by Dartmouth's management and Board of Trustees for long-term investment, the net investment return on these invested funds, and the annual distribution of an amount appropriated by Dartmouth's Board of Trustees to support operating and non-operating activities. Other endowment activities include increases in endowment net assets from certain matured split-interest agreements.

Endowment and non-operating activities also include transfers of net assets that occur when donors change the restrictions on certain gifts or when Dartmouth changes the designation of unrestricted funds.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

Cash and Cash Equivalents

Cash and cash equivalents consist principally of U.S. treasury funds, money market accounts, certificates of deposit, commercial paper, and liquid short-term investments with maturities of 90 days or less at the date of acquisition. Cash and cash equivalents are carried at cost, which approximates fair value and is considered Level 1 in the fair value hierarchy.

Tuition and Fees and Student Scholarships

Tuition and fees revenue is recognized in the fiscal year in which substantially all of the academic program occurs. Tuition and fees revenue from undergraduate enrollment represents approximately 66 percent of tuition and fees revenue for the years ended June 30, 2016 and 2015. Student scholarships provided by Dartmouth are presented in the consolidated Statement of Activities as a reduction in tuition and fees revenue. In addition, Dartmouth acts as an agent for recipients of scholarships from other sponsors in the amounts of \$4,089,000 and \$5,921,000 for the years ended June 30, 2016 and 2015, respectively, which are not presented in the consolidated Statement of Activities.

In fiscal 2016, Dartmouth admitted students to its undergraduate program without regard to financial need. Beginning with the undergraduate class that will matriculate in fiscal 2017, Dartmouth plans to consider the financial need of international students during the admissions process. The financial aid program assists all students with demonstrated need, defined in accordance with a uniform formula, by providing a mix of scholarships, loans and/or employment designed to cover costs of attendance when combined with student and family contributions, based on ability to pay.

Sponsored Research Grants and Contracts

Revenues from government and private sponsored research grants and contracts are recognized when the direct costs associated with the sponsored program are incurred. Revenue from the reimbursement of facilities and administrative costs incurred by Dartmouth on U.S. government grants and contracts is based upon negotiated predetermined cost rates through June 30, 2017. Dartmouth recovered facilities and administrative costs of approximately \$42,354,000 and \$42,121,000 during the years ended June 30, 2016 and 2015, respectively.

Taxes

Dartmouth is exempt from federal income taxes under Section 501(c)(3) of the U.S. Internal Revenue Code (the Code), except with regard to unrelated business income, which is taxed at corporate income tax rates. Dartmouth is also subject to state and local property tax on the value of dormitories and dining and kitchen facilities in excess of \$150,000, as well as on the value of its off-campus rental properties, commercial properties, and other real estate holdings to the extent they are not used or occupied for Dartmouth's tax exempt purposes. Certain Dartmouth real estate entities are exempt from federal income tax under Sections 501(c)(2) and 501(c)(25) of the Code. As of June 30, 2016, tax years ended June 30, 2013 through June 30, 2015 remain open and are subject to federal and state taxing authority examination. Dartmouth believes it has taken no significant uncertain tax positions.

Affiliation with Dartmouth-Hitchcock Medical Center

Dartmouth, through the Geisel School of Medicine (Geisel), is a member of the Dartmouth-Hitchcock Medical Center (DHMC), a confederation of health care organizations intended to coordinate medical education and health care delivery for the residents of New Hampshire and Vermont. DHMC is a nonprofit, tax-exempt corporation organized under New Hampshire State Law. The other members of DHMC are: (i) Mary Hitchcock Memorial Hospital (Hitchcock Hospital), (ii) Dartmouth-Hitchcock Clinic (Clinic), and (iii) Veterans Administration Medical Center of White River Junction, Vermont (VAMC). The staff of the Clinic serves as the primary resource for Geisel clinical faculty, with the Hitchcock Hospital and the VAMC acting as principal sites of clinical instruction for Geisel students. Each member of DHMC is a separately organized, governed, and operated institution, with Dartmouth having no ownership interest in any other member.

Certain costs, including salaries, facilities use (including construction planning and management, and facilities operation and maintenance), and direct and indirect research, incurred by Geisel and the other members of DHMC are shared among the members based on negotiated allocations of the costs on an annual or project specific basis. The members of DHMC, excluding the VAMC, are also parties to a Condominium Ownership Agreement that governs the ownership and operation of the DHMC facilities. During the years ended June 30, 2016 and 2015, Dartmouth paid approximately \$19.3 million and \$25.3 million, respectively, and received approximately \$24.0 million and \$26.5 million, respectively, in connection with these arrangements.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

Insurance

Dartmouth maintains several insurance arrangements with the objective of providing the most cost effective and comprehensive coverage for most insurable risks. Both conventional and alternative insurance coverage approaches, including utilization of appropriate deductible or self-insured retention amounts, are in place to cover trustee errors and omissions and employment practices, crime bond, commercial general and automobile liability, pension trust fiduciary errors and omissions liability, and property losses. Workers' compensation losses are covered by a self-insured retention and excess insurance program. Dartmouth currently participates in two risk retention groups that provide general liability and professional and medical malpractice liability insurance.

Dartmouth's annual premium payments for conventional insurance coverage are included in operating expenses. Estimated liabilities for losses under Dartmouth's deductible and/or self-insurance retention limits are reflected in the consolidated Statement of Financial Position, which includes estimates for known losses and for losses incurred but not yet reported. Insurance reserves are based on actuarial analysis and/or estimates of historical loss experience, and while management believes that the reserves are adequate, the ultimate liabilities may be different than the amounts provided.

Gifts and Pledges Receivable

Total contributions to Dartmouth include gifts that are received and the net change in pledges receivable during a period. Gifts, pledges and pledge payments are recognized as increases in the appropriate category of net assets in the period the gift or pledge is received. The net change in total pledges is recorded as a net increase (decrease) in non-operating activities in the consolidated Statement of Activities. Contributions of capitalizable assets other than cash are recorded at their estimated fair value at the date of gift. Pledges are stated at the estimated present value of future cash flows, net of an allowance for uncollectible amounts. Conditional promises to give are not recognized until the conditions on which they depend are substantially met.

Investments

Investments are reported at fair value in accordance with GAAP. Purchases and sales of securities are recorded on the trade date, and realized gains and losses are determined on the basis of the average cost of securities sold. Cash and cash equivalents designated for investment purposes is included in Investments and may include money market funds, foreign currency held for investment purposes, and U.S. treasury securities with an original or remaining maturity of three months or less when purchased. These investments are valued based on market price or cost which approximates fair value. Advance contributions to commingled fund investments and redemptions receivable from commingled fund investments at June 30, 2016 and June 30, 2015 are included within Investments as presented on the consolidated Statement of Financial Position.

For investments held directly by Dartmouth for which an active market with quoted prices exists, the market price of an identical security is used as fair value. Fair values for shares in listed commingled funds are based on the quoted market value or share prices reported as of the last business day of the fiscal year. Dartmouth's interest in certain other private commingled funds and private partnership interests are reported at the net asset value (NAV) as determined by the external fund manager. As permitted by GAAP, Dartmouth uses NAV as a practical expedient to estimate the fair value of Dartmouth's ownership interest, unless it is probable that all or a portion of the investment will be sold for an amount different from NAV. Dartmouth performs due diligence procedures related to these investments to support recognition at fair value at fiscal year-end. Because many of these investments are not readily marketable, the estimates of fair value involve assumptions and estimation methods which are uncertain, and therefore the estimates could differ from actual results.

Directly held real estate is reflected at fair value in accordance with Dartmouth's valuation policy. The valuation policy includes: the estimated price that would be received from the sale of the asset in an orderly transaction between market participants, prices determined by independent external appraisals for approximately one third of the properties in a given year, or at cost which approximates fair value for properties held for less than a year or which are being actively developed.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

Total investment return (interest, dividends, rents, royalties, and net realized and changes in unrealized gains and losses) earned by Dartmouth's endowment investments is included in endowment activities on the consolidated Statement of Activities, while the net income earned by the non-endowment investments is included in operating or non-operating activities, as appropriate, on the consolidated Statement of Activities. Dividend income is recognized, net of applicable withholding taxes, on the ex-dividend date. Non-cash dividends are recorded at the fair value of the securities received on the date of distribution. Interest income and expenses are recorded net of applicable withholding taxes on the accrual basis of accounting. Dartmouth amortizes bond premiums and accretes bond discounts using the effective yield method. Fees charged by external investment managers are generally based on contractual percentages of the fair value of assets under management or on annual total investment return and are, in most cases, netted against investment return. However, certain expenses paid directly by Dartmouth for investment management and custody services, including certain internal costs, amounted to approximately \$14,263,000 and \$13,136,000 for the years ended June 30, 2016 and 2015, respectively, and have been netted against total investment return and other operating and non-operating income in the accompanying consolidated Statement of Activities.

The asset allocation of Dartmouth's investment portfolio involves exposure to a diverse set of markets. The investments within these markets involve various risks such as price, interest rate, sovereign, currency, liquidity, and credit risks. Additionally, investments in real assets through commingled funds and direct real estate expose Dartmouth to a unique set of risks such as operational, environmental, and political risks. Dartmouth anticipates that the value and composition of its investments may, from time to time, fluctuate substantially in response to any or all of the risks described herein.

Endowment

Dartmouth's endowment consists of gifts restricted by donors and unrestricted net assets designated by management and the Board of Trustees for long-term support of Dartmouth's activities, and the accumulated investment return on these gifts and designated net assets. Accumulated investment return consists of endowment net investment return that has not been appropriated by the Board of Trustees for expenditure to support Dartmouth's operating and non-operating activities. Generally, only a portion of accumulated net investment return is made available for spending each year in accordance with a Board of Trustees-approved endowment utilization policy and New Hampshire State Law. However, certain donor restricted endowment funds do allow for the expenditure of principal, and Dartmouth-designated endowment funds are unrestricted net assets that may be re-designated for authorized expenditures.

Giving consideration to the New Hampshire Uniform Prudent Management of Institutional Funds Act (UPMIFA), Dartmouth classifies as permanently restricted net assets all endowment funds that must be retained permanently in accordance with stipulations imposed by a donor at the time of a gift, plus the original value of assets donated to permanent endowment, along with any investment earnings that are directed by the donor to be reinvested in perpetuity (i.e., historic book value). The remaining portion of the donor-restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure in a manner consistent with the standard of prudence prescribed by UPMIFA and in accordance with purpose designated by the donor.

Unrestricted endowment net assets include Dartmouth funds and certain unrestricted gifts from donors, and any accumulated investment return thereon, which may be expended; however, by trustee or management designation, these net assets may remain invested in the endowment for the long-term support of Dartmouth activities. Investment return on unrestricted endowment net assets and the annual distribution of a portion of accumulated investment return to operating and non-operating activities are presented as changes in unrestricted net assets in the consolidated Statement of Activities. Temporarily restricted endowment net assets include certain expendable endowment gifts, and any retained income and appreciation thereon, which are restricted by the donor to a specific purpose or by law. When the temporary restrictions on these funds have been met, the gifts ordinarily remain in the endowment by trustee designation to continue supporting the same activities as those specified by the donors, but the net assets are reclassified to unrestricted endowment net assets.

Investment return on temporarily and permanently restricted net assets are generally presented as changes in temporarily restricted net assets in the consolidated Statement of Activities.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

Split-Interest Agreements

Certain donors have established irrevocable split-interest agreements with Dartmouth, primarily charitable gift annuities, pooled life income funds, and irrevocable charitable remainder trusts, whereby the donated assets are invested and distributions are made to the donor and/or other beneficiaries in accordance with the agreement for a specified period of time, after which time the remaining assets and future investment return are retained by Dartmouth. At the discretion of the donor, Dartmouth may or may not serve as trustee for the split-interest agreement.

Dartmouth has recorded the estimated fair value of the investments associated with irrevocable split-interest agreements and an estimated liability, using a discount rate of 1.8% and 2.0% for June 30, 2016 and 2015, respectively, for the net present value of the future cash outflows to beneficiaries of the agreements for which Dartmouth serves as trustee. When Dartmouth is not the trustee of the assets associated with a split-interest agreement, a receivable for Dartmouth's beneficial interest is established when Dartmouth is notified of the trust's existence and when the third-party trustee has provided Dartmouth with sufficient reliable information to estimate the value of the receivable, which Dartmouth considers a Level 3 measurement. Dartmouth requests information regularly from third-party trustees for financial reporting purposes; however, these trustees are not obligated to provide Dartmouth with the information necessary to estimate fair value and record the asset. Dartmouth respects the privacy of donors and trustees in these limited instances. Dartmouth reports the net change in split-interest agreements as a non-operating change in net assets in the consolidated Statement of Activities.

Land, Buildings, Equipment, and Construction in Progress

Land, buildings, equipment, and construction in progress are recorded at cost at the date of acquisition or, if acquired by gift, at the estimated fair value as of the date of the gift. Purchases, construction, and renovations of assets which exceed Dartmouth's specified dollar threshold and have a useful life greater than one year are capitalized, while scheduled maintenance and minor renovations of less than that amount are charged to operations.

Land, buildings, and equipment are reflected net of accumulated depreciation calculated on a straight-line basis over the following estimated economic lives.

Buildings and building components	13 - 50 years
Depreciable land improvements	15 - 20 years
Equipment	5 - 20 years

Depreciation expense for facilities that are primarily used for sponsored research is based on the estimated economic lives of each component.

Collections

Dartmouth's collections include works of art, literary works, historical treasures, and artifacts that are maintained in its museum and libraries. These collections are protected and preserved for public exhibition, education, research, and the furtherance of public service. Each of the items is cataloged, preserved, and cared for, and activities verifying their existence and assessing their condition are performed continuously. The collections are subject to a policy that requires proceeds from their sale to be used to acquire other items for collections.

The collections, which were acquired through purchases and contributions since Dartmouth's inception, are not recognized as assets in the consolidated Statement of Financial Position. Purchases of collection items are recorded in the consolidated Statement of Activities as non-operating decreases in unrestricted net assets in the year in which the items are acquired or in temporarily restricted net assets if the assets used to purchase the items are restricted by donors. Contributed collection items are not recorded in the consolidated financial statements.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

B. Receivables and Other Assets

Receivables and other assets consisted of the following at June 30 (in thousands):

	<u>2016</u>	<u>2015</u>
Student accounts	\$ 493	\$ 2,277
Sponsored research grants and contracts	18,048	22,003
Other accounts	41,687	38,277
Notes and student loans	64,831	64,140
Less: allowance for uncollectible accounts	<u>(3,600)</u>	<u>(3,287)</u>
Receivables, net	\$ 121,459	\$ 123,410
Prepaid costs, inventories, and other assets	<u>22,517</u>	<u>19,929</u>
Total receivables and other assets, net	<u>\$ 143,976</u>	<u>\$ 143,339</u>

Federally sponsored student loans with mandated interest rates and repayment terms are subject to significant restrictions as to their transfer and disposition. Amounts received from the Federal government to fund a portion of the Perkins student loans are ultimately refundable to the Federal government and are classified as government advances for student loans in the consolidated Statement of Financial Position. Due to the nature and terms of student loans funded by the Federal government, and restricted and unrestricted Dartmouth funds, it is not practical to estimate the fair value of such loans. All other receivables are carried at estimated net realizable value.

C. Gifts and Pledges Receivable

Gifts and pledge payments received during the years ended June 30 were as follows (in thousands):

	<u>2016</u>	<u>2015</u>
Gifts to support operations	\$ 87,151	\$ 84,833
Gifts for:		
Facilities and student loans	47,375	27,473
Other restricted uses	2,973	38,332
Endowment	71,356	46,029
Split-interest agreements	<u>15,781</u>	<u>20,380</u>
Total gifts and pledge payments	<u>\$ 224,636</u>	<u>\$ 217,047</u>

Unconditional pledges as of June 30 are expected to be realized in the following periods, discounted at rates ranging from 0.7% to 6.2% (in thousands):

	<u>2016</u>	<u>2015</u>
In one year or less	\$ 74,074	\$ 54,510
Between one year and five years	97,385	108,083
Six years and after	<u>49,796</u>	<u>13,183</u>
Gross pledges receivable	\$ 221,255	\$ 175,776
Less: present value discount	(7,955)	(6,915)
Less: allowance for uncollectible pledges	<u>(1,845)</u>	<u>(4,493)</u>
Pledges receivable, net	<u>\$ 211,455</u>	<u>\$ 164,368</u>

The change in net pledges receivable is presented as a non-operating activity in the consolidated Statement of Activities.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

D. Investments

Dartmouth's endowment and other investment portfolios include investments in various asset classes, each with different return expectations, risk characteristics, and liquidity provisions.

Fixed Income includes strategies based on capital preservation and predictable yield as well as more opportunistic strategies focused on generating return through price appreciation. These strategies generally include corporate debt securities, government securities, mortgage backed and asset backed securities and other financial instruments. Exposures to these investments include directly held securities as well as investments through commingled funds and derivatives, including fixed income futures and forwards, and interest rate and credit default swaps.

Global Equity includes investments in directly held equity securities and commingled funds, whose managers primarily invest in global public long-only and long/short equity securities with portfolios that are directionally exposed to the market.

Marketable Alternative Strategies includes investments in commingled funds whose managers employ discrete and blended strategies, including long/short equity, absolute return, market neutral, distressed and credit strategies. Funds with marketable alternative strategies generally hold securities or other financial instruments for which a ready market exists, and may include stocks, bonds, put or call options, swaps, futures, currency hedges, and other financial instruments.

Dartmouth also invests in venture capital, private equity, real estate, other real assets, and other debt-related strategies primarily through private limited partnerships, which are illiquid. These investments often require the estimation of fair value by the general partner in the absence of readily determinable market values. The private portfolio is based primarily in the United States but includes managers who may invest globally. Real Estate investments also include real estate investment trust securities held through publicly traded mutual funds as well as directly held real estate. Other real asset investments include limited partnerships, commingled fund and public index exposure targeting natural resource investments.

Investments at fair value consisted of the following at June 30 (in thousands):

	2016	2015
Endowment investments	\$ 4,538,696	\$ 4,729,487
Split-interest agreement investments	130,237	133,448
Operating and other investments	1,028,723	841,756
Total investments	\$ 5,697,656	\$ 5,704,691

The framework for measuring fair value utilizes a hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The three levels of the fair value hierarchy are as follows:

Level 1 - Quoted prices (unadjusted) in active markets for identical investments as of the reporting date. The type of investment in Level 1 includes cash and cash equivalents, actively listed equities, U.S. treasury securities, and exchange traded and registered funds all held directly by Dartmouth, and excludes listed equities and other securities held indirectly through commingled funds.

Level 2 - Pricing inputs, including broker quotes, are generally those other than exchange quoted prices in active markets, which are either directly or indirectly observable as of the reporting date, and fair value is determined through the use of models or other valuation methodologies. The type of investments in Level 2 includes fixed income securities and derivatives.

Level 3 - Pricing inputs are unobservable for the investment and include situations where there is little, if any, market activity for the investment. The inputs into the determination of fair value require significant management judgment or estimation. The type of investments in Level 3 includes directly held real estate and other illiquid investments.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

The inputs or methodology used to value or classify investments for financial reporting purposes is not necessarily an indication of the risk associated with investing in those investments.

The following Fair Value Leveling table summarizes Dartmouth's investments that are reported at fair value by their fair value hierarchy classification as of June 30, 2016 (in thousands):

	Level 1	Level 2	Level 3	Total
Investments:				
Cash and cash equivalents	\$ 65,410	\$ -	\$ -	\$ 65,410
Fixed income	492,876	222,410	79	715,365
Global equity:				
US equity	481,225	-	523	481,748
International	37,414	-	-	37,414
Emerging markets	40,971	-	-	40,971
Real assets:				
Real estate	18,460	-	199,253	217,713
Other real assets	71,466	-	-	71,466
Other investments	-	128	1,454	1,582
Contributions in advance	95,377	-	-	95,377
Redemption receivable	76,569	-	-	76,569
Total investments	<u>\$ 1,379,768</u>	<u>\$ 222,538</u>	<u>\$ 201,309</u>	<u>\$ 1,803,615</u>

The following Fair Value Leveling table summarizes Dartmouth's investments that are reported at fair value by their fair value hierarchy classification as of June 30, 2015 (in thousands):

	Level 1	Level 2	Level 3	Total
Investments:				
Cash and cash equivalents	\$ 259,514	\$ -	\$ -	\$ 259,514
Fixed income	391,956	204,863	79	596,898
Global equity:				
US equity	521,312	-	523	521,835
International	18,130	-	-	18,130
Emerging markets	83,232	-	-	83,232
Real assets:				
Real estate	15,981	-	199,028	215,009
Other real assets	2	-	-	2
Other investments	-	122	1,728	1,850
Contribution in advance	32,000	-	-	32,000
Redemption receivable	109,301	-	-	109,301
Total investments	<u>\$ 1,431,428</u>	<u>\$ 204,985</u>	<u>\$ 201,358</u>	<u>\$ 1,837,771</u>

The following tables present Dartmouth's activity for the fiscal years ended June 30, 2016 and 2015 for investments measured at fair value in Level 3 (in thousands):

	Fixed Income	US Equity	Real Assets	Other Investments	Total
Balance as of June 30, 2015	\$ 79	\$ 523	\$ 199,028	\$ 1,728	\$ 201,358
Acquisitions / purchases	-	-	667	8	675
Distributions / sales	-	-	(3,769)	(282)	(4,051)
Transfers out	-	-	-	-	-
Realized gain (loss)	-	-	185	-	185
Change in unrealized gain (loss)	-	-	3,142	-	3,142
Balance as of June 30, 2016	<u>\$ 79</u>	<u>\$ 523</u>	<u>\$ 199,253</u>	<u>\$ 1,454</u>	<u>\$ 201,309</u>

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

	Fixed Income	US Equity	Real Assets	Other Investments	Total
Balance as of June 30, 2014	\$ 458	\$ 23	\$ 203,084	\$ 7,683	\$ 211,248
Acquisitions / purchases	-	500	1,062	16	1,578
Distributions/sales			(2,069)	(4,824)	(6,893)
Transfers out	(318)	-	-	-	(318)
Realized gain (loss)	-	-	362	(1,147)	(785)
Change in unrealized gain (loss)	(61)	-	(3,411)	-	(3,472)
Balance as of June 30, 2015	<u>\$ 79</u>	<u>\$ 523</u>	<u>\$ 199,028</u>	<u>\$ 1,728</u>	<u>\$ 201,358</u>

All net realized and unrealized gains (losses) in the table above are reflected in the consolidated Statement of Activities. Unrealized gains (losses) relate to investments held by Dartmouth at June 30, 2016 and 2015. Transfers between levels of the fair value hierarchy are reported at the beginning of the reporting period in which they occur. For fiscal year 2015, transfers from Level 3 to Level 2 are primarily due to the increased observability of pricing inputs for certain securities.

The following table provides quantitative information about the significant unobservable inputs used in the valuation of directly held real estate as of June 30, 2016 and June 30, 2015. Investments in directly held real estate represent the total asset value of each of the underlying property investments. Significant changes in any one third party appraisal input would likely not result in a significant change in fair value measurement to the directly held real estate portfolio, however, actual results could differ materially from these estimates particularly during periods of investment and/or interest rate volatility.

June 30, 2016 (in thousands):

Valuation Technique	Fair Value ¹	Unobservable Inputs	Input Value(s)
Third party appraisal-income approach & comparable sales	\$ 179,878	Capitalization rate	4.00 – 8.50%
Market bid	16,450	Not applicable	Not applicable
Tax assessed value – adjusted annually	2,274	State/Local equalization ratios	.876
Cost	651	Not applicable	Not applicable
Total	<u>\$ 199,253</u>		

¹The fair value may be determined using multiple valuation techniques.

June 30, 2015 (in thousands):

Valuation Technique	Fair Value ¹	Unobservable Inputs	Input Value(s)
Third party appraisal-income approach & comparable sales	\$ 193,964	Capitalization rate	6.50 – 9.00%
Tax assessed value – adjusted annually	4,438	Discount rate	8.00
Cost	626	State/Local equalization ratios	.900 - .983
Total	<u>\$ 199,028</u>	Not applicable	Not applicable

¹The fair value may be determined using multiple valuation techniques.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

The following Fair Value NAV table lists specified investment terms by asset category for Dartmouth's interest in certain commingled funds and private partnership interests that are reported using NAV as the practical expedient to estimate fair value as of June 30, 2016 (in thousands):

	Fair Value	Redemption Terms	Days Notice	Remaining Unfunded Commitment	Remaining Life
Fixed income	\$ 44,094	Monthly	30 - 40	\$ -	Not applicable
Global equity:		Ranges from quarterly			
US equity ¹	637,179	to bi-annual	30 - 90	35,000	Not applicable
International ²	460,033	Ranges from semi-monthly to quarterly	3 - 180	-	Not applicable
Emerging markets ³	219,226	Ranges from daily to quarterly	30 - 180	-	Not applicable
Marketable alternative strategies ⁴	1,155,608	Ranges from quarterly to annually	30 - 90	54,342	Not applicable
Private equity/ Venture capital	874,207	Illiquid	Not applicable	548,887	1 - 12 years
Real assets:					
Real estate	259,974	Illiquid	Not applicable	183,787	1 - 12 years
Other real assets	243,720	Quarterly, Illiquid	30, Not applicable	219,068	1 - 20 years
Total	\$ 3,894,041			\$ 1,041,084	

¹ US equity includes funds that have restrictions on the ability to fully redeem up to three years.

² International includes one fund with partial capital in lockup through December 31, 2016.

³ Emerging markets includes funds that have restrictions on the ability to fully redeem up to three years.

⁴ Marketable alternative strategies includes funds that have restrictions on the ability to fully redeem up to five years, excluding illiquid securities and special investments.

The following Fair Value NAV table lists specified investment terms by asset category for Dartmouth's interest in certain commingled funds and private partnership interests that are reported using NAV as the practical expedient to estimate fair value as of June 30, 2015 (in thousands):

	Fair Value	Redemption Terms	Days Notice	Remaining Unfunded Commitment	Remaining Life
Fixed income	\$ 41,405	Monthly	30 - 40	\$ -	Not applicable
Global equity:		Ranges from quarterly			
US equity ¹	689,016	to bi-annual ¹	30 - 90	35,000	Not applicable
International	335,524	Ranges from monthly to quarterly	3 - 60	-	Not applicable
Emerging markets	151,097	Ranges from daily to annually	30 - 180	-	Not applicable
Marketable alternative strategies ²	1,146,224	Ranges from quarterly to every three years ²	30 - 180	-	Not applicable
Private equity/ Venture capital	999,865	Illiquid	Not applicable	393,297	1 - 12 years
Real assets:					
Real estate	314,892	Illiquid	Not applicable	166,405	1 - 12 years
Other real assets	188,897	Illiquid	Not applicable	196,910	1 - 20 years
Total	\$ 3,866,920			\$ 791,612	

¹ US equity includes funds that have restrictions on the ability to fully redeem up to five years.

² Marketable alternative strategies includes funds that have restrictions on the ability to fully redeem up to five years, excluding illiquid securities and special investments.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

Investments reported in the Fair Value Leveling and Fair Value NAV tables total \$5,697,656,000 and \$5,704,691,000 and are presented on the consolidated Statement of Financial Position as of June 30, 2016 and 2015, respectively.

The following tables set forth the fair value of Dartmouth's derivative instruments for investment purposes by contract type as of June 30, 2016 and 2015 and gains/losses related to derivative activities for the years ended June 30, 2016 and 2015 (in thousands):

June 30, 2016:

	Notional Exposure		Fair Value ¹		Net Gain/(Loss) ²
	Long	Short	Asset	Liability	
Foreign currency forward contracts	\$ 19,182	\$ (11,115)	\$ 143	\$ (464)	\$ 172
Fixed income futures contracts	72,754	(71,487)	1,309	(1,972)	(2,630)
Interest rate swaps	-	-	-	-	(19)
Credit default swaps	9,131	(9,101)	226	(332)	(115)
Total	<u>\$ 101,067</u>	<u>\$ (91,703)</u>	<u>\$ 1,678</u>	<u>\$ (2,768)</u>	<u>\$ (2,592)</u>

June 30, 2015:

	Notional Exposure		Fair Value ¹		Net Gain/(Loss) ²
	Long	Short	Asset	Liability	
Foreign currency forward contracts	\$ 32,408	\$ (16,672)	\$ 248	\$ (99)	\$ 1,868
Fixed income futures contracts	56,277	(81,919)	412	(116)	(880)
Interest rate swaps	-	-	3	(3)	-
Credit default swaps	5,551	(10,421)	203	(728)	(152)
Total	<u>\$ 94,236</u>	<u>\$ (109,012)</u>	<u>\$ 866</u>	<u>\$ (946)</u>	<u>\$ 836</u>

¹The net fair value of these derivative instruments is included in the consolidated Statement of Financial Position as investments at fair value.

²The net gain/(loss) from these derivative instruments is presented in the operating and non-operating sections of the consolidated Statement of Activities as other operating income and other non-operating changes.

Dartmouth enters into foreign currency forward contracts and government bond futures and forwards to efficiently manage portfolio exposures to global currencies and interest rates. These instruments may be used to hedge the portfolio from unwanted currency and interest rate risk, but also to efficiently implement active duration and relative value currency strategies. Dartmouth is obligated to pledge to the appropriate broker cash or securities to be held as collateral, as determined by exchange margin requirements for futures contracts held. These instruments are valued using market-based prices and are included in Level 2 in the Fair Value Leveling table. At June 30, 2016 and 2015, the fair value of Dartmouth's pledged collateral on futures contracts for investment purposes was \$0 and \$312,000 respectively and is included in investments on the consolidated Statement of Financial Position.

Dartmouth enters into swap contracts for investment purposes. Interest rate swap contracts are used to efficiently manage portfolio exposures to interest rates. These instruments may be used to hedge the portfolio from unwanted interest rate risk, but also to efficiently implement active duration strategies. These instruments are valued using market-based prices and are included in Level 2 in the Fair Value Leveling table. The fair value of the contracts is included in the consolidated Statement of Financial Position as investments at fair value. The gain on these contracts is presented in the operating and non-operating sections of the consolidated Statement of Activities.

Credit default swaps are used to simulate long or short positions or to reduce credit risk where exposure exists. The buyer of a credit default swap is obligated to pay to the seller a periodic stream of payments over the term of the contract in return for a contingent payment upon occurrence of a contracted credit event. The seller of a credit default swap bears the obligation to pay the buyer upon occurrence of a contracted credit event in return for a periodic stream of fixed payments from the buyer over the term of the contract. These instruments are valued using market-based prices and are included in Level 2 in the Fair Value Leveling table. The fair value of these credit default swap contracts is included in the consolidated Statement of Financial Position as investments at fair value. The net gain/loss on these credit default swap contracts is presented in the operating and non-operating sections of the consolidated Statement of Activities.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

E. Endowment

The changes in fair value of net assets held in endowment and similar funds for the years ended June 30 were as follows (in thousands):

	<u>Unrestricted</u>	<u>Temporarily Restricted</u>	<u>Permanently Restricted</u>	<u>Total</u>
Endowment net assets, June 30, 2015	\$ 1,075,885	\$ 2,407,876	\$ 1,179,730	\$ 4,663,491
Net investment return:				
Investment income	5,481	17,521	46	23,048
Net appreciation (depreciation)	<u>(28,529)</u>	<u>(93,822)</u>	<u>(246)</u>	<u>(122,597)</u>
Total net investment return	(23,048)	(76,301)	(200)	(99,549)
Gifts	63	2,327	68,966	71,356
Distribution of endowment return to all funds	(48,243)	(160,335)	(55)	(208,633)
Other changes, net	<u>3,563</u>	<u>6,286</u>	<u>37,890</u>	<u>47,739</u>
Endowment net assets, June 30, 2016	<u>\$ 1,008,220</u>	<u>\$ 2,179,853</u>	<u>\$ 1,286,331</u>	<u>\$ 4,474,404</u>

	<u>Unrestricted</u>	<u>Temporarily Restricted</u>	<u>Permanently Restricted</u>	<u>Total</u>
Endowment net assets, June 30, 2014	\$ 1,036,651	\$ 2,307,195	\$ 1,124,373	\$ 4,468,219
Net investment return:				
Investment income	6,634	22,045	56	28,735
Net appreciation (depreciation)	<u>73,410</u>	<u>247,127</u>	<u>645</u>	<u>321,182</u>
Total net investment return	80,044	269,172	701	349,917
Gifts	141	1,929	43,959	46,029
Distribution of endowment return to all funds	(48,942)	(165,235)	(48)	(214,225)
Other changes, net	<u>7,991</u>	<u>(5,185)</u>	<u>10,745</u>	<u>13,551</u>
Endowment net assets, June 30, 2015	<u>\$ 1,075,885</u>	<u>\$ 2,407,876</u>	<u>\$ 1,179,730</u>	<u>\$ 4,663,491</u>

Other changes include additions to the endowment from the maturity of split-interest agreements and net transfers resulting from changes in donor restrictions or Dartmouth designations.

Included in temporarily restricted endowment net assets at the end of the year is the remaining amount of expendable accumulated appreciation on permanent endowment funds of \$1,815,710,000 and \$2,027,492,000 at June 30, 2016 and 2015, respectively.

Endowment net assets consist of the following as of June 30, 2016 (in thousands):

	<u>Unrestricted</u>	<u>Temporarily Restricted</u>	<u>Permanently Restricted</u>	<u>Total</u>
Donor-restricted endowment funds	\$ -	\$ 2,179,853	\$ 1,286,331	\$ 3,466,184
Board-designated endowment funds	<u>1,008,220</u>	<u>-</u>	<u>-</u>	<u>1,008,220</u>
Total endowment net assets	<u>\$ 1,008,220</u>	<u>\$ 2,179,853</u>	<u>\$ 1,286,331</u>	<u>\$ 4,474,404</u>

Endowment net assets consist of the following as of June 30, 2015 (in thousands):

	<u>Unrestricted</u>	<u>Temporarily Restricted</u>	<u>Permanently Restricted</u>	<u>Total</u>
Donor-restricted endowment funds	\$ -	\$ 2,407,876	\$ 1,179,730	\$ 3,587,606
Board-designated endowment funds	<u>1,075,885</u>	<u>-</u>	<u>-</u>	<u>1,075,885</u>
Total endowment net assets	<u>\$ 1,075,885</u>	<u>\$ 2,407,876</u>	<u>\$ 1,179,730</u>	<u>\$ 4,663,491</u>

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

From time to time, the fair values of assets associated with individual donor restricted endowment funds may fall below the level that the donor or UPMIFA requires to retain as a fund of perpetual duration due to market declines. In accordance with GAAP, events of this nature are reported as reductions in unrestricted net assets and were \$897,000 and \$0 as of June 30, 2016 and 2015, respectively. These events were a result of market declines since the endowment funds were established. A Board of Trustees policy limits the distribution from these funds, except in cases where the donor directs otherwise. In order to provide stable funding from the programs supported by the endowment, in fiscal 2017 Dartmouth's Board of Trustees voted to amend the distribution policy to allow spending from a portion of the historic book value on underwater funds provided there are no donor-imposed restrictions that prohibit such spending. No more than 20% of the historic book value may be distributed, except in cases where the donor directs otherwise.

Dartmouth employs a total return endowment utilization policy that establishes the amount of investment return made available for spending each fiscal year. The amount appropriated for expenditure each year is independent of the actual return for the year, but the appropriated amount cannot exceed the total accumulated return in an individual fund at the time of distribution. The Board approves the formula that determines the amount appropriated from endowment each year. The resulting fiscal 2016 endowment distribution of \$208,633,000 represents a 4.5% distribution rate when measured against the previous year's June 30th endowment value. Investment return earned in excess of the amount appropriated annually is reinvested in the funds, but can be appropriated in future years in accordance with the utilization policy. The net appreciation on most of the permanently and temporarily restricted endowment funds is reported together with temporarily restricted net assets until such time as all or a portion of the appreciation is appropriated for spending in accordance with the utilization policy and applicable state law.

The overall investment performance objective for the endowment is to generate real (inflation-adjusted) returns net of investment expenses sufficient to support Dartmouth's current operating needs while maintaining the long-term purchasing power of the endowment. The Investment Committee of the Board of Trustees has determined that a well-diversified mix of assets offers the best opportunity for maximum return with acceptable risk over time. Dartmouth relies on a total return strategy in which investment returns are achieved through both capital appreciation (both realized and unrealized) and current yield (interest and dividends). Investment decisions are made with a view toward maximizing long-term return opportunities while maintaining an acceptable level of investment risk and liquidity.

F. Land, Buildings, Equipment, and Construction in Progress

Land, buildings, equipment, and construction in progress balances at June 30 were as follows (in thousands):

	<u>2016</u>	<u>2015</u>
Land	\$ 19,158	\$ 19,158
Buildings	1,283,309	1,175,416
Land improvements	114,498	112,339
Equipment and software	<u>339,917</u>	<u>315,845</u>
Land, buildings, and equipment	\$ 1,756,882	\$ 1,622,758
Less: accumulated depreciation	(835,201)	(768,809)
Construction in progress	<u>33,241</u>	<u>114,953</u>
Total net book value	<u>\$ 954,922</u>	<u>\$ 968,902</u>

Dartmouth has conditional asset retirement obligations arising from legal obligations to perform certain activities in connection with the retirement, disposal, or abandonment of assets, including asbestos abatement, leasehold improvements, hazardous materials, and equipment disposal and cleanup. The liability was initially recorded at fair value, and is adjusted for accretion expense, and changes in the amount or timing of cash flows. The corresponding asset retirement costs are capitalized as part of the carrying values of the related long-lived assets and depreciated over the useful lives of the assets.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

G. Bonds, Mortgages, and Notes Payable

Indebtedness at June 30 consisted of the following (in thousands):

	<u>Fiscal Year</u> <u>Maturity</u>	<u>2016</u> <u>Interest Rate</u>	<u>2016</u>	<u>2015</u>
New Hampshire Health and Education Facilities Authority (NHHEFA):				
Tax-Exempt Fixed Rate:				
Series 2009	2019 - 2039	5.00% - 5.25%	\$ 52,800	\$ 198,875
Tax-Exempt Variable Rate:				
Series 2002	2032	.01% - .08%	-	101,000
Series 2003	2023	.01% - .43%	61,600	69,200
Series 2007A	2031	.01% - .02%	-	89,665
Series 2007B	2041	.01% - .42%	75,000	75,000
Series 2015AB	2040	.50% - .85%	101,000	-
Series 2015CD	2038	.50% - .85%	89,665	-
Series 2016A	2043	1.14%	<u>165,000</u>	<u>-</u>
Subtotal tax-exempt bonds			\$ 545,065	\$ 533,740
Taxable Bonds:				
NHHEFA Variable Rate:				
Series 2007C	2041	.14% - .16%	-	30,000
Fixed Rate				
Series 2009	2019	4.75%	150,000	250,000
Series 2012A	2042	4.00%	70,000	70,000
Series 2012B	2043	3.76%	150,000	150,000
Series 2016A	2046	3.47%	<u>250,000</u>	<u>-</u>
Subtotal taxable bonds			\$ 620,000	\$ 500,000
Subtotal bonds			\$ 1,165,065	\$ 1,033,740
Mortgages on real estate investments:				
Fixed Rate	2017 - 2037	4.34% - 5.61%	46,065	47,568
Taxable commercial paper note:				
Variable Rate		.14% to .50%	<u>36,300</u>	<u>12,600</u>
Subtotal bonds, mortgages and notes payable			\$ 1,247,430	\$ 1,093,908
Original issue premium, net			<u>554</u>	<u>4,249</u>
Total bonds, mortgages, and notes payable, net			<u>\$ 1,247,984</u>	<u>\$ 1,098,157</u>

In August 2015, Dartmouth College refunded \$101,000,000 NHHEFA Series 2002 and \$89,700,000 NHHEFA Series 2007A variable rate demand bonds and replaced them with a floating rate direct placement of debt with a bank. The \$30,000,000 NHHEFA Series 2007C taxable variable rate demand bonds were also refunded at the same time and replaced with taxable commercial paper notes.

In April 2016, Dartmouth issued New Hampshire Health and Education Facilities Authority (NHHEFA) Revenue Bonds Dartmouth College Issue, Series 2016A (the "Series 2016A Bonds") in the amount of \$165,000,000. The primary purpose of this issue was to refinance \$146,075,000 of the NHHEFA Series 2009 Bonds. The defeasance was achieved through the deposit of \$165,000,000 of the proceeds of the Series 2016A Bonds along with \$3,000,000 of institutional funds directly in a refunding trust and has been accounted for as legal defeasance. Accordingly, the defeased bonds and the assets in the defeasance trust were removed from the consolidated Statement of Financial Position in 2016. Future interest payments due to bondholders totaling \$19,371,000 is included in loss on extinguishment of debt in the consolidated Statement of Activities. Monies in the defeasance trust have been applied to the purchase of noncancelable direct obligations of the United States government. The government obligations, together with the interest thereon, will be sufficient in amount and available when necessary to pay the principal and interest on the defeased Series 2009 Bonds when due or called.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

In April 2016, Dartmouth redeemed \$100,000,000 of the Series 2009 taxable bonds. Dartmouth incurred a \$10,830,000 make-whole call premium on the early redemption, which is included in loss on extinguishment of debt in the consolidated Statement of Activities.

In April 2016, Dartmouth issued \$250,000,000 of fixed rate taxable debt to be used for future strategic initiatives.

Interest expense for the years ended June 30 consists of (in thousands):

	2016	2015
<u>Consolidated Statement of Activities:</u>		
Endowment Activities		
Interest expense on mortgage and debt used to finance endowment-related real estate projects, presented as a reduction in endowment investment return	\$ 2,618	\$ 2,743
Operating Activities (amounts included in "Interest and Amortization" on the consolidated Statement of Operating Expenses)		
Interest expense on debt (including payments on interest rate swap agreements) used to finance facilities projects	25,708	24,603
Interest expense on other operating indebtedness	273	154
Non-Operating Activities (amounts presented as a deduction from other non-operating earnings)		
Interest expense on debt used to finance student loans	1,406	1,406
Interest expense on other non-operating indebtedness	21,533	22,126
Total interest expense on the consolidated Statement of Activities	\$ 51,538	\$ 51,032
<u>Consolidated Statement of Financial Position:</u>		
Interest paid on debt used to finance facilities projects capitalized in connection with various construction projects	\$ 460	\$ 1,214

Scheduled principal payments due for each of the next five years ending June 30 and thereafter are as follows, excluding maturity of commercial paper and unamortized discounts and premiums are (in thousands):

June 30	Principal Due
2017	\$ 27,578
2018	9,854
2019	168,153
2020	10,616
Thereafter	994,929
Total	\$ 1,211,130

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

Principal due after June 30, 2020, includes the following “balloon” payments due on Dartmouth’s indebtedness (in thousands):

June 30	Indebtedness	Payment
2028	NHHEFA Series 2009 bonds	\$ 32,190
2029	NHHEFA Series 2009 bonds	\$ 12,690
2036	NHHEFA Series 2007B bonds	\$ 18,000
2038	2015 Series C&D bonds	\$ 89,665
2040	2015 Series A&B bonds	\$ 101,000
2041	NHHEFA Series 2007B bonds	\$ 57,000
2042	2012 Series A bonds	\$ 70,000
2043	2012 Series B bonds	\$ 150,000
2043	NHHEFA Series 2016A TE bonds	\$ 165,000
2046	2016 Series A bond	\$ 250,000

The NHHEFA bonds are a general obligation collateralized only by Dartmouth’s pledge of full faith and credit and by funds held from time to time by the trustee for the benefit of the holders of the bonds under the respective bond resolutions. Dartmouth has agreed to certain covenants with respect to encumbrance or disposition of its core campus.

During fiscal year 2009, Dartmouth entered into six interest rate swap agreements. Information related to these interest rate swap agreements as of June 30, 2016, including the fixed interest rate paid by Dartmouth and percent of LIBOR BBA (1 month) received on the notional principal, is presented in the table below:

Expiration Date	Notional Amount (in thousands)	Fixed Interest Rate %	% of LIBOR BBA
06/01/2032	\$ 100,000	3.75	67
06/01/2041	\$ 100,000	3.73	70
06/01/2027	\$ 31,910	3.77	72
06/01/2028	\$ 52,585	3.78	72
06/01/2042	\$ 100,000	3.73	70
06/01/2043	\$ 165,000	3.74	70

The fair value of these agreements at June 30, 2016 and 2015 based on various factors contained in the interest rate swap agreements and certain interest rate assumptions, was approximately \$250,321,000 and \$167,417,000, respectively, and is considered a Level 2 measurement. The increase in the liability of \$82,904,000 and \$26,198,000 for the years ended June 30, 2016 and 2015, respectively, is presented as a change in unrealized loss in the non-operating section of the consolidated Statement of Activities. Net payments or receipts under the swap agreements associated with facilities debt are reflected as interest expense. These financial instruments involve counter-party credit exposure.

Commercial paper consists of notes issued in the short-term taxable market, and is sold at a discount from par. The maturities of individual notes are issued in ranges from one day to no more than 270 days, and fall on average in a range of thirty to ninety days. Dartmouth reports commercial paper at carrying value, which closely approximates fair value for those liabilities.

Dartmouth maintains stand-by bond purchase agreements with financial institutions totaling approximately \$136,600,000 to provide alternative liquidity to support its variable rate demand bonds in the event that the bonds cannot be remarketed. Financing obtained through these stand-by credit agreements to fund the repurchase of such bonds would bear interest rates different from those associated with the original bond issues, and mature over a three or a five-year period following repurchase. The agreements have various maturity dates between June 2019 and December 2019. There were no amounts outstanding at June 30, 2016 and 2015 under these agreements.

Dartmouth has a \$100,000,000 line of credit with a maturity date of December 15, 2016. There have been no borrowings under this line of credit.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

H. Pension and Other Employment Related Obligations

Liabilities for retirement and postretirement medical benefits, salaries, wages, and other benefits under employment agreements consisted of the following at June 30 (in thousands):

	2016	2015
Retirement and postretirement benefits	\$ 380,087	\$ 418,113
Compensated absences, severance plans, and other commitments	28,456	21,907
Self-insured benefits	12,167	11,334
Total employment related obligations	\$ 420,710	\$ 451,354

In fiscal year 1998, Dartmouth revised its pension benefit for staff and non-union service employees, giving each participant a one-time option to either remain in the defined benefit plan or enroll in the defined contribution plan effective January 1, 1998. Staff and non-union service employees hired since that date receive retirement benefits under the defined contribution plan. Effective January 1, 2006, all union employees are enrolled in the defined contribution plan.

Dartmouth's postretirement medical benefits consist of medical insurance coverage for retirees. Employees hired prior to July 1, 2009 that are 55 or older and have at least ten continuous years of service in a benefits-eligible position immediately prior to retirement are currently eligible for a subsidy toward the purchase of Retiree Medical Benefits. The subsidy amount was based on the employee's annual salary, age, and years of service as of June 30, 2009. For retirees under the age of 65, the medical insurance options are the same as for active employees. At age 65, the retiree would enroll in the Dartmouth College Medicare Supplement (DCMS) plan. New employees hired on or after July 1, 2009 are eligible to participate in a Retirement Savings Match and are eligible to purchase the retiree group medical insurance at full cost if they qualify at retirement.

Information pertaining to the pension and postretirement benefits at June 30 include (in thousands):

	Pension Benefits		Postretirement Benefits	
	2016	2015	2016	2015
Change in benefit obligation:				
Beginning of year	\$ 132,431	\$ 134,216	\$ 396,179	\$ 336,563
Service cost	2,573	2,785	8,733	8,327
Interest cost	5,579	5,557	19,010	15,633
Benefits paid	(7,736)	(8,100)	(8,072)	(6,568)
Actuarial (gain)/loss	10,852	(2,027)	(62,919)	42,224
End of year	<u>\$ 143,699</u>	<u>\$ 132,431</u>	<u>\$ 352,931</u>	<u>\$ 396,179</u>
Change in estimated fair value of plan assets:				
Beginning of year	\$ 128,317	\$ 127,229	\$ -	\$ -
Actual return on plan assets	16,954	5,188	-	-
Employer contributions	4,000	4,000	8,072	6,568
Benefits paid	(7,736)	(8,100)	(8,072)	(6,568)
End of year	<u>\$ 141,535</u>	<u>\$ 128,317</u>	<u>\$ -</u>	<u>\$ -</u>
Funded status (plan assets less than benefits obligation)	<u>\$ (2,164)</u>	<u>\$ (4,114)</u>	<u>\$ (352,931)</u>	<u>\$ (396,179)</u>
Net periodic benefit (income) cost included the following:				
Service cost	\$ 2,573	\$ 2,785	\$ 8,733	\$ 8,327
Interest cost	5,579	5,557	19,010	15,633
Expected return on assets	(7,086)	(7,170)	-	-
Amortization of prior service cost (credit)	240	240	(3,487)	(7,186)
Recognized net actuarial loss	967	2,293	9,397	6,093
Net periodic benefit cost	<u>\$ 2,273</u>	<u>\$ 3,705</u>	<u>\$ 33,653</u>	<u>\$ 22,867</u>

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

	Pension Benefits		Postretirement Benefits	
	2016	2015	2016	2015
Weighted-average assumptions:				
Discount rate used to determine net periodic benefit cost	4.40%	4.30%	4.85%	4.70%
Expected return on plan assets	6.10%	6.70%	-	-
Rate of compensation increase	3.00%	3.00%	-	-
Discount rate used to determine benefit obligations	3.68%	4.40%	4.15%	4.85%

The decrease in the post-retirement benefit obligation is primarily due to changes in pre-65 claims methodology and utilization assumptions, which are reflected in the 2016 actuarial gain of \$62,919,000.

The increase (decrease) in unrestricted net assets resulting from the change in pension and post-retirement benefit obligations consisted of the following (in thousands):

	Pension Benefits	Postretirement Benefits	Total 2016	Total 2015
Amounts recognized in non-operating activities:				
Net actuarial gain(loss)	\$ (984)	\$ 62,919	\$ 61,935	\$ (42,179)
Amortization of gain	967	9,397	10,364	8,386
Amortization of prior service cost (credit)	<u>240</u>	<u>(3,487)</u>	<u>(3,247)</u>	<u>(6,946)</u>
Total non-operating gain (loss)	223	68,829	69,052	(40,739)
Amounts recognized in operating activities:				
Net periodic benefit cost	<u>(2,273)</u>	<u>(33,653)</u>	<u>(35,926)</u>	<u>(26,571)</u>
Total gain (loss)	<u>\$ (2,050)</u>	<u>\$ 35,176</u>	<u>\$ 33,126</u>	<u>\$ (67,309)</u>

The cumulative amounts in unrestricted net assets that have not yet been recognized as components of net periodic benefit cost are as follows (in thousands):

	Pension Benefits		Postretirement Benefits	
	2016	2015	2016	2015
Prior service cost	\$ -	\$ 240	\$ (4,951)	\$ (8,438)
Net (gain) loss	<u>14,148</u>	<u>14,131</u>	<u>60,047</u>	<u>132,362</u>
Total	<u>\$ 14,148</u>	<u>\$ 14,371</u>	<u>\$ 55,096</u>	<u>\$ 123,924</u>

The estimated costs that will be amortized into net periodic benefit costs in fiscal 2017 are as follows (in thousands):

	Pension Benefits	Postretirement Benefits
Prior service cost	\$ -	\$ (3,486)
Net (gain) loss	<u>1,252</u>	<u>2,073</u>
Total	<u>\$ 1,252</u>	<u>\$ (1,413)</u>

The following table lists specified investment terms by asset category for defined benefit pension plan investments in certain commingled funds and private partnership interests that are reported using NAV as the practical expedient as of June 30, 2016 (in thousands):

	Amount	Redemption Terms	Days Notice	Remaining Unfunded Commitment	Remaining Life
Fixed income	\$ 74,588	Daily	2	\$ -	Not applicable
Global equity	63,337	Daily	2	-	Not applicable
Private equity/ Venture capital	<u>2,433</u>	Illiquid	Not applicable	<u>388</u>	1 – 5 years
Total	<u>\$ 140,358</u>			<u>\$ 388</u>	

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

In addition to the investments disclosed above, the Plan also holds \$1,177,000 in cash and cash equivalents at June 30, 2016, which is classified as a Level 1 investment in the fair value hierarchy.

The following table lists specified investment terms by asset category for defined benefit pension plan investments in certain commingled funds and private partnership interests that are reported using NAV as the practical expedient as of June 30, 2015 (in thousands):

	<u>Amount</u>	<u>Redemption Terms</u>	<u>Days Notice</u>	<u>Remaining Unfunded Commitment</u>	<u>Remaining Life</u>
Fixed income	\$ 54,590	Daily	2	\$ -	Not applicable
Global equity	65,661	Daily	2	-	Not applicable
Private equity/ Venture capital	<u>2,896</u>	Illiquid	Not applicable	<u>463</u>	1 – 5 years
Total	<u>\$ 123,147</u>			<u>\$ 463</u>	

In addition to the investments disclosed above, the Plan also held \$5,170,000 in cash and cash equivalents at June 30, 2015, which is classified as a Level 1 investment in the fair value hierarchy.

The overall investment strategy of the defined benefit pension plan (the Plan) is to utilize an asset mix that is designed to meet the near and longer term benefit payment obligations of the Plan. Over time, the asset mix may include global equity and fixed income exposures. Global equity exposure is designed to capture the equity market performance of developed markets while fixed income exposure provides a predictable yield as well as a hedge against changing interest rates by holding corporate bonds and other financial instruments. Other types of investments may include private equity, venture capital, and other private real asset partnerships that employ different underlying strategies. Outside investment advisors are utilized to manage the Plan assets and are selected based on their investment style, philosophy, and past performance. Dartmouth's investment office is responsible for managing the asset allocation and investment risk management of the Plan.

Dartmouth makes annual contributions to maintain funding for the defined benefit plan on an actuarially recommended basis. Dartmouth currently does not expect to contribute to the defined benefit plan in fiscal year 2017.

Benefit payments, which reflect expected future service, as appropriate, are expected to be paid in each of the next five years ending June 30 and thereafter as follows (in thousands):

	<u>Pension Benefits</u>	<u>Postretirement Benefits</u>
2017	\$ 13,100	\$ 8,500
2018	9,800	9,400
2019	9,800	10,400
2020	9,800	11,500
2021	10,100	12,600
Years 2022 -2026	46,400	76,900

The accumulated benefit obligation (ABO) of the defined benefit plan was \$136,800,000 and \$125,675,000 at June 30, 2016 and 2015, respectively.

Assumed health care cost trend rates have a significant effect on the estimated amounts reported for the postretirement benefit plan. The medical cost trend rates for pre-age 65 and post-age 65 retirees, respectively, are assumed to be 6.75% and 7.5% in year 2016, decrease gradually to 5% and 5% in fiscal year 2023, respectively, and remain level thereafter. Dartmouth's estimate of postretirement benefit expense and obligations also reflects the impact of the Medicare Prescription Drug Improvement and Modernization Act, which provides for tax-free subsidies to employers that offer retiree medical benefit plans with qualifying drug coverage.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

A one percentage point increase (decrease) in assumed health care cost trend rates would have the following effect (in thousands):

Increase (decrease) in total of service and interest cost components	\$ 4,854	\$ (4,173)
Increase (decrease) in postretirement benefit obligation	\$ 61,660	\$ (62,961)

Through June 30, 2016, Dartmouth estimated the service and interest cost components for pension and post-retirement benefits using a single weighted average discount rate derived from the yield curves used to measure the benefit obligation at the beginning of the period. Effective July 1, 2016, Dartmouth will estimate the costs of the service and interest components through a full yield curve approach by applying the specific spot rates along the yield curve used in the determination of the net periodic expense to the relevant present value of projected cash flows. This change is a refinement to the correlation between projected benefit cash flows and the corresponding yield curve spot rates. Dartmouth has accounted for this change as a change in estimate and will account for it prospectively starting in fiscal 2017. The reduction in service and interest costs for fiscal 2017 associated with this change in estimate will be approximately \$630,000 for pension benefits and \$2,800,000 for post-retirement benefits.

Dartmouth also maintains defined contribution retirement plans for its employees. These benefits are individually funded and are subject to various vesting requirements. Under these arrangements, Dartmouth makes contributions to individual self-directed retirement investment accounts for the participants. These contributions for the years ended June 30, 2016 and 2015 were \$26,060,000 and \$25,170,000, respectively. Dartmouth also maintains deferred compensation plans. The liabilities for the plans are included in pension and other employment related obligations in the consolidated Statement of Financial Position.

I. Other Operating Income

The major components of other operating income for the years ended June 30 were as follows (in thousands):

	2016	2015
Medical School clinical services and other support	\$ 43,881	\$ 54,267
Foreign study and continuing education programs	13,214	13,158
Student activities and other program revenues	13,085	11,729
Athletics revenues	4,247	4,526
Hopkins Center and Hood Museum revenues	1,349	1,372
Other revenues	20,354	21,671
Investment income	10,902	18,341
Total other operating income	\$ 107,032	\$ 125,064

J. Net Assets

Additional information pertaining to Dartmouth's net assets at June 30 is presented below (in thousands):

	2016			Total
	Unrestricted	Temporarily Restricted	Permanently Restricted	
Detail of net assets:				
Operating funds	\$ 287,506	\$ 70,938	\$ -	\$ 358,444
Pledges	-	176,780	34,675	211,455
Postretirement and pension benefit obligations	(355,095)	-	-	(355,095)
Third-party charitable trusts	-	7,036	3,375	10,411
Facilities and capital	335,025	50,930	-	385,955
Interest rate swap agreements	(250,321)	-	-	(250,321)
Student loan funds	20,212	23,517	-	43,729
Other non-operating activities	59,010	6,587	-	65,597
Life income, annuity, and similar funds	-	54,865	27,516	82,381
Endowment funds	1,008,220	2,179,853	1,286,331	4,474,404
Total net assets	\$ 1,104,557	\$ 2,570,506	\$ 1,351,897	\$ 5,026,960

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

	2015			Total
	Unrestricted	Temporarily Restricted	Permanently Restricted	
Detail of net assets:				
Operating funds	\$ 356,275	\$ 66,228	\$ -	\$ 422,503
Pledges	-	137,601	26,767	164,368
Postretirement and pension benefit obligations	(400,293)	-	-	(400,293)
Third-party charitable trusts	-	5,674	4,010	9,684
Facilities and capital	347,886	37,613	-	385,499
Interest rate swap agreements	(167,417)	-	-	(167,417)
Student loan funds	20,761	22,754	-	43,515
Other non-operating activities	79,091	44,813	-	123,904
Life income, annuity, and similar funds	-	50,399	32,808	83,207
Endowment funds	1,075,885	2,407,876	1,179,730	4,663,491
Total net assets	<u>\$ 1,312,188</u>	<u>\$ 2,772,958</u>	<u>\$ 1,243,315</u>	<u>\$ 5,328,461</u>

K. Commitments and Contingencies

Outstanding commitments on uncompleted construction contracts total \$24,322,000 at June 30, 2016.

All funds expended by Dartmouth in connection with government sponsored grants and contracts are subject to audit by governmental agencies. The ultimate liability, if any, from such audits, is not expected to have a material adverse effect on Dartmouth's financial position.

In conducting its activities, Dartmouth from time to time is the subject of various claims and also has claims against others. The ultimate resolution of such claims is not expected to have either a material adverse or favorable effect on Dartmouth's financial position.

L. Related Party Transactions

Members of Dartmouth's Board of Trustees and senior management may, from time to time, be associated, either directly or indirectly, with companies doing business with Dartmouth. Dartmouth has a written conflict of interest policy that requires annual reporting by each Trustee, as well as senior management. Additionally, Dartmouth has a policy on Pecuniary Benefit Transactions and Related Party Investments. This policy supplements the Dartmouth College Conflict of Interest Policy with regard to pecuniary benefit transactions, as defined by New Hampshire law, including but not limited to Dartmouth's investment in investment vehicles in which Trustees have a financial interest. These policies include, among other things, that no member of the Board of Trustees can participate in any decision in which he or she (or an immediate family member) has a material financial interest. When such relationships exist, measures are taken to mitigate any actual or perceived conflict, including requiring that such transactions be conducted at arm's length, for good and sufficient consideration, based on terms that are fair and reasonable to and for the benefit of Dartmouth, and in accordance with applicable conflict of interest laws.

M. Restructuring Costs and Liability

During the year ended June 30, 2016, Dartmouth restructured a number of activities at the Geisel School of Medicine (Geisel) to address increasing financial constraints, to improve Geisel's education and research programs, and to align resources and support for these activities. These changes include: creation of a new department of Medical Education, reorganization of the Basic Science departments, and migration of the operations and fiscal responsibility for clinical academic activities from Dartmouth to Dartmouth-Hitchcock Clinic and Mary Hitchcock Memorial Hospital (operating jointly as "Dartmouth-Hitchcock"). Responsibility for the employment, finances, and operational support for clinical research programs, as well as the clinical practice of psychiatry, transferred from Geisel to Dartmouth-Hitchcock on July 1, 2016.

Dartmouth College
Notes to Consolidated Financial Statements
For the years ended June 30, 2016 and 2015

The table below describes the \$53,459,000 in restructuring expense reported in the consolidated Statement of Activities and the \$44,917,000 of accrued liabilities, of which \$36,265,000 is reported in Accounts payable and other liabilities line and \$8,652,000 is reported in the Pension and other employment related obligations line on the consolidated Statement of Financial Position (in thousands):

	<u>Total Restructuring Cost</u>	<u>Paid as of June 30, 2016</u>	<u>Liabilities as of June 30, 2016</u>
Faculty and Staff Termination Benefits	\$ 14,393	\$ 5,741	\$ 8,652
Financial Support ¹	18,273	-	18,273
Occupancy, research administration and other services ²	17,461	-	17,461
Consulting	<u>3,332</u>	<u>2,801</u>	<u>531</u>
Total Restructuring Costs	<u>\$ 53,459</u>	<u>\$ 8,542</u>	<u>\$ 44,917</u>

¹Financial support includes designated departmental reserves, restricted gifts and endowment distributions. Restricted funds are expected to be available to Dartmouth-Hitchcock, for the purpose required by the donor, for the four years ending June 30, 2020.

²Certain of the occupancy and research administration and other support costs will be provided by Geisel to Dartmouth-Hitchcock at no charge during the two years ending June 30, 2018.

N. Subsequent Events

For purposes of determining the effects of other subsequent events on these consolidated financial statements, management has evaluated events subsequent to June 30, 2016 and through October 25, 2016, the date on which the consolidated financial statements were issued, and has concluded that there were no other subsequent events requiring adjustment or disclosure.

Board of Trustees

Emily B. Bakemeir '82	Charter Trustee
Gail K. Boudreaux '82	Charter Trustee
R. William Burgess, Jr. '81	Charter Trustee
James G. Coulter '82	Charter Trustee
Denise M. Dupre '80	Charter Trustee
Gregg L. Engles '79	Charter Trustee
Nathaniel C. Fick '99	Alumni Trustee
Annette Gordon-Reed '81	Charter Trustee
Philip J. Hanlon '77	Past President
Margaret Hassan	Governor of NH
William W. Helman IV '80	<i>Elected Chair 2014</i>
David C. Hodgson '78	Charter Trustee
Jeffrey R. Immelt '78	Charter Trustee
Richard H. Kimball '78	Alumni Trustee
Morton M. Kondracke '60	Alumni Trustee
Mitchell H. Kurz '73	Alumni Trustee
Gregory B. Maffei '82	Charter Trustee
Stephen F. Mandell Jr. '78	Charter Trustee
Sherri C. Oberg '82	Charter Trustee
John B. Replogle '88	Alumni Trustee
John A. Rich '80	Charter Trustee
Laurel J. Richie '81	Charter Trustee
Steven Roth '62 Tuck '63	Charter Trustee
Peggy Epstein Tanner '79	Charter Trustee
Diane L. Taylor '77	Charter Trustee
Benjamin F. Wilson '73	Alumni Trustee

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Rees, Judith

POSITION TITLE: Assistant Professor

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	Completion Date MM/YYYY	FIELD OF STUDY
Oxford University, England	BA	06/85	Physiological Sciences
Oxford University, England	BM,BCh	06/88	Medicine
University of California, Berkeley	MPH	05/96	Epidemiology
University of California, Berkeley	PhD	05/01	Epidemiology

A. Personal Statement

I am a physician-epidemiologist in the Department of Community and Family Medicine and the Department of Epidemiology at the Geisel School of Medicine, Dartmouth College. I graduated in medicine from Oxford University and completed a three-year general practice residency in the United Kingdom, followed by an MPH and PhD in Epidemiology from the University of California, Berkeley. My expertise includes cancer epidemiology and prevention, disease surveillance methodology, and I have been the Director of the New Hampshire State Cancer Registry since 2004.

B. Positions and Honors**Positions and Employment**

1988-1989 Intern, Medicine & Gastroenterology, Northampton General Hospital, UK
 1989 Intern, General Surgery and Urology, Churchill Hospital, Oxford, UK
 1989-1990 Programmer, Welsh Health Services, Cardiff, UK
 1990 Resident, Accident & Emergency Department, St. Helier Hospital, Surrey, UK
 1991-1994 Resident, General Practice (Obstetrics/Gynecology, Pediatrics, Internal Medicine, Rheumatology, Palliative Care, Psychiatry), Northampton General Hospital, UK
 1994 George Herbert Hunt Traveling Scholarship (Oxford University)
 1995-2001 Surveillance Officer, California Emerging Infections Program (CEIP), San Francisco, CA
 1997-1998 Non-Resident Tuition Scholarship (University of California, Berkeley)
 1997-2000 Project Director, Drinking Water Evaluation Trial, (CEIP), Berkeley, CA
 1998-1999 University Fellowship for Graduate Study in Public Health (University of California, Berkeley)
 2002-2004 Research Assistant Professor, Biostatistics and Epidemiology, Dartmouth Medical School, NH
 2004-2008 Cancer Epidemiology and Chemoprevention Research Program member, Norris Cotton Cancer Center, Lebanon, NH
 2004-2008 Director, New Hampshire State Cancer Registry
 2008-2008 Course Director, Biostatistics & Epidemiology (a core course for year 1 medical students)
 2008-2008 Member, American Cancer Society/Norris Cotton Cancer Center Local Institutional Research Grant Committee, Lebanon, NH

Other Experience and Professional Memberships

2005	NH Chronic Disease Conference Planning Committee
2005-2007	NH Advisory Panel on Cancer and Chronic Disease
2006	NH DHHS Evaluation Design of the NH Comprehensive Cancer Collaboration RFP review panel
2006	NH DHHS Comprehensive Cancer Collaboration Management RFP review panel
2005-2008	NH Comprehensive Cancer Collaboration: Steering Committee & Emerging Issues Committee
2005-	NH Comprehensive Cancer Collaboration: Data Use Committee
2007-	NH State Cancer Registry Advisory Panel
2009-	Medical Education Committee, Dartmouth Medical School
2010-	Medical Advisory Board, New Hampshire Colorectal Cancer Screening Program
2010	Prevention Translation Supplement Awards Review Committee, Canadian Cancer Society
2013-	PLOS ONE Editorial Board

C. Contribution to Science

1. Skin cancer epidemiology and multiple malignancies: I have combined my roles as a co-investigator on the study "Non-Melanoma Skin Cancer in New Hampshire" (PI, Karagas), and director of the New Hampshire State Cancer Registry to conduct linkage studies assessing the risk of cancer and death after keratinocyte cancer^{a,b}, and have also examined risk of others cancers after skin cancer in two other collaborative settings^{c,d}. These studies confirm the elevated risk of cancer after keratinocyte cancer^a and after melanoma^{c,d}, and the increased mortality after keratinocyte cancer even with adjustment for the time-dependent occurrence of intervening major cancers. They also highlight differences between basal and squamous cell carcinoma and argue for caution when pooling these two very different cancers during epidemiologic studies.

- a. JR Rees, MS Zens, J Gui, MO Celaya, BL Riddle, MR Karagas. Non melanoma skin cancer and subsequent cancer risk. PLoS ONE. 2014 Jun 17;9(6):e99674.
- b. JR Rees, MS Zens, MO Celaya, BL Riddle, MR Karagas, JL Peacock. Survival after squamous cell and basal cell carcinoma of the skin: A retrospective cohort analysis. Int J Cancer. 2015 Aug 15;137(4):878-84.
- c. A Balamurugan, JR Rees, C Kosary, SH Rim, J Li, SL Stewart. Subsequent primary cancers among men and women with in situ and invasive melanoma of the skin. J Am Acad Dermatol. 2011 Nov;65:S69-77.
- d. TE Robsahm, MR Karagas, JR Rees, A Syse. New malignancies after squamous cell carcinoma and melanomas: a population-based study from Norway. BMC Cancer. 2014 Mar;14:210.

2. Patterns of cancer care in New Hampshire: As Director of the New Hampshire State Cancer Registry, I have used New Hampshire data to examine discrepancies in cancer treatment. We have established that use of conservative management in low risk prostate cancer has increased appropriately in recent years following changes in national treatment guidelines^a; travel distance to mammography centers does not influence breast cancer stage at diagnosis^b; but travel distance for radiation significantly affects treatment choices in early stage breast cancer, especially during cold winter months^c. In addition, a tri-state registry collaboration with Maine and Vermont of patients with colorectal and breast cancer, identified differences between rural and urban patients in age and cancer stage at diagnosis, and in patterns of care such as lymph node sampling during surgical treatment.^d

- a. JP Ingimarsson, MO Celaya, M Laviolette, JR Rees, ES Hyams. Trends in initial management of prostate cancer in New Hampshire – Reasons for optimism? Cancer Causes Control. 2015 Jun; 26(6):923-9.
- b. MO Celaya, EM Berke, TL Onega, J Gui, BL Riddle, SS Cherala, JR Rees. Breast cancer stage at diagnosis and geographic access to mammography screening (New Hampshire, 1998-2004). Rural Remote Health. 2010 Apr-Jun;10(2):1361.
- c. MO Celaya MO, JR Rees, JJ Gibson, BL Riddle, ER Greenberg. Travel distance and season of diagnosis affect treatment choices for women with early-stage breast cancer in a predominantly rural population (United States). Cancer Causes Control. 2006 Aug;17(6):851-6.
- d. A Johnson, JR Rees, M Schwenn, BL Riddle, C Verrill, MO Celaya, et al. Oncology Care in Rural Northern New England. J Oncol Pract. 2010 Mar;6(2): 1-9.

3. Randomized controlled trials: A primary interest stemming from my work in randomized controlled trials is the study of unblinding and bias;^{a,b} this work led to a recent RO3 to assess participants beliefs and perceptions

about study treatments, and their effects on adherence and health outcomes. In August 2014, my RO3 proposal was featured with a researcher profile on the website of the National Cancer Institute Behavioral Research, Cancer Control & Population Sciences; (Participant beliefs and bias in a randomized controlled trial, Rees et al), <http://staffprofiles.cancer.gov/brp/granteeProfile.do?contactId=22545693&grpld=52812> published as an example for other grant writers. I presented the first results from this study at the third International Clinical Trials Methodology Conference in Scotland in November 2015, and this and other papers are pending.

- a. JR Rees, TJ Wade, DA Levy, JM Colford, JH Hilton. Changes in beliefs identify unblinding in randomized controlled trials: A method to meet CONSORT guidelines. *Contemp Clin Trials*. 2005 Feb; 26(1):25-37.
- b. JM Colford, JR Rees, TJ Wade, A Khalakdina, JF Hilton, IJ Ergas, S Burns, A Benker, C Ma, C Bowen, DC Mills, DJ Vugia, DD Juranek, DA Levy. "Participant blinding and gastrointestinal illness in a randomized, controlled trial of an in-home drinking water intervention." *Emerging Infectious Diseases* 2002; 8(1):29-36.
- c. EL Barry, JR Rees, JL Peacock, LA Mott, CI Amos, RM Bostick, JC Figueiredo, DJ Ahnen, RS Bresalier, CA Burke, JA Baron. Genetic Variants in CYP2R1, CYP24A1 and VDR Modify the Efficacy of Vitamin D3 Supplementation for Increasing Serum 25-Hydroxyvitamin D in a Randomized Trial. *J Clin Endocrinol Metab*. 2014 Oct;99(10):E2133-7. doi: 10.1210/jc.2014-1389. Epub 2014 Jul 29
- d. J Baron, E Barry, L Mott, J Rees, R Sandler, D Snover, et al. A Clinical Trial of Calcium and Vitamin D for the Prevention of Colorectal Adenomas. *NEJM* 2015; 373(16):1519-30.

4. Infectious disease epidemiology: My career began^{c-e} in infectious disease epidemiology with studies of the incidence and characteristics of invasive fungal infections and bacterial gastroenteritis, and I continue to pursue infectious disease-related studies. During my clinical trial work, we added a secondary study within the colorectal adenoma chemoprevention trial, showing that 1000 IU vitamin D₃ daily supplementation during the H1N1 influenza pandemic of 2009-10 did not reduce the incidence or duration of upper respiratory tract infection or their component syndromes, colds and influenza-like illness.^a This report was featured on December 3, 2013 in the New York Times (page D6 of the New York edition) with the headline: "Prevention: Hold the Vitamin D and Calcium" and on-line at http://well.blogs.nytimes.com/2013/12/02/vitamin-d-fails-to-ease-winter-coughs-and-colds/?_php=true&_type=blogs&_r=1. In addition, I have participated in multiple studies^{e.g.,b} of infectious prions, the proteins that cause fatal neurodegenerative diseases such as Creutzfeldt-Jakob Disease in humans and scrapie in sheep.

- a. JR Rees, K Hendricks, EL Barry, JL Peacock, LA Mott, RS Sandler, RS Bresalier, M Goodman, RM Bostick, JA Baron (2013) Vitamin D3 Supplementation and Upper Respiratory Tract Infections in a Randomized, Controlled Trial. *Clin Infect Dis*. Advance Access Sept 6, 2013
- b. NR Deleault, BT Harris, JR Rees, S Supattapone. "Formation of Native Prions from Minimal Components In Vitro" *Proceedings of the National Academy of Sciences* 2007; 104; 23; 9741-9746.
- c. JR Rees, MA Pannier, A McNees, S Shallow, FJ Angulo, DJ Vugia. "Persistent diarrhea, arthritis, and other complications of enteric infections: a pilot survey based on California Foodnet surveillance, 1998-1999." *Clinical Infectious Diseases* 2004;38 (Suppl 3): S311-317.
- d. JR Rees, RW Pinner, RA Hajjeh, ME Brandt, AL Reingold. "The epidemiologic features of invasive mycotic infections in the San Francisco Bay Area 1992-1993: results of population-based laboratory active surveillance". *Clinical Infectious Diseases* 1998; 27:1138-47.

Complete List of Published Work in MyBibliography:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/judith.rees.1/bibliography/44014541/public/?sort=date&direction=ascending>

Bruce L. Riddle

Registry Manager

New Hampshire State Cancer Registry

Bruce.L.Riddle@Dartmouth.Edu / 603-653-6620

A Joint Program of Geisel School of Medicine at Dartmouth and the New Hampshire Department of Health and Human Services

Education:

M.A., Economics, Syracuse University, 1985.

Ph.D., International Relations, Syracuse University, 1977.

M.A., International Relations, Syracuse University, 1975.

B.A., Political Science, The Defiance College, 1972.

Honors: Chancellor's Citation for Distinguished Service, Syracuse University, 1992

Professional Experience:

Staff Member, New Hampshire State Cancer Registry, Dartmouth Medical School, November 1999-Present

- Network and Computing Administration, November 1999-present.
- Registry manager, January 2002-present.

Director, Computing and Technology Group, Maxwell School, Syracuse University, January 1994-May 1999.

- Supervised and managed Maxwell School's Computing and Technology Group, 6 professionals providing services to 130 faculty, 90 support staff, 600 graduate students, and 6,000 undergraduates.

Principal staff assistant for the building of Eggers Hall, Syracuse University, 1989-93.

- Created a vision for a new social science building, a \$20 million, 5-year project.

Designated computer staff person for the Maxwell School, Syracuse University, 1991-94

- Designed, implemented and administered a School-based local area network.

Senior Research Associate, Academic Computing Specialist, Metropolitan Studies Program, Maxwell School, Syracuse University, 1984-1992

- Conducted data analysis on public finance and health care in developed and developing countries in support of sponsored research. These projects included.

- James Alm and Roy Bahl, "Evaluations of the Structure of the Jamaica Individual Income Tax," Jamaica Tax Structure Examination Project, Staff Paper No. 15, Metropolitan Studies Program, Syracuse University, December 1984, Revised March 1985.
- Richard M. Bird and Barbara D. Miller, "The Incidence of Indirect Taxes on Low-Income Households in Jamaica," Jamaica Tax Structure Examination

Project, Staff Paper No. 26, Metropolitan Studies Program, Syracuse University, April 1986.

- Jorge Martinez, "Sensitivity Analysis and Evaluation of the Ecuadorian Personal Income Tax," Ecuador Fiscal Administrative Studies, Staff Paper No. 1, Local Revenue Administration Project, Maxwell School, Syracuse University, May 1986.
- Barbara D. Miller and Carl Stone, "Household Expenditures Effects of The Jamaica Food Stamp Programme," Jamaica Tax Structure Examination Project, Staff Paper No. 36, Metropolitan Studies Program, Maxwell School, Syracuse University, August 1987.
- Harvard Medical Practice Study, *Patients, Doctors, and Lawyers: Medical Injury, Malpractice Litigation, and Patient Compensation in New York*. The Report and the Harvard Medical Practice Study to the State of New York, 1990.

Research and Data Analyst, Department of Surgery, State University of New York Upstate Medical Center, 1976-1980.

- Provided computing and data analysis support for a study of burn mortality at the regional burn unit. Results of the work were published in:
 - William R. Clark, M.D., and Barbara S. Fromm, "Burn Mortality: Experience of a Regional Burn Unit and Literature Review," *ACTA Chirurgica Scandinavica Supplementum* 537, Stockholm, 1987.

Professional Consulting, data analysis and statistical programming, 1978-1991

- On a contractual basis performed data analysis for researchers from accounting, finance, human development, political science, law, sociology, and physical, special, and higher education.

Representative Projects Included:

- "The Effects of Repatriation on Chronic Psychiatric Patients," Hutching Psychiatric Center, Syracuse, New York.
- "Determinants of Lay and Lawyer Judicial Behavior," a NSF Grant to D. Marie Provine, Department of Political Science, Maxwell School, Syracuse University.
- "Disproportionality and Disparity in the Charging and Sentencing of Criminal Defendants for Homicide in Georgia," Center for Interdisciplinary Legal Studies, College of Law, Syracuse University.
- "Campus Wide Hazardous Material Inventory," Environmental Health Office, Syracuse University.
- "Study of Adjustments of New York State School Aid Formula to Take Account of Municipal Overburden (Final Report)," a sponsored project to Jerry Miner and Seymour Sacks, Metropolitan Studies Program, Maxwell School, Syracuse University, May 1980.
- "Econometric Analysis of Education Expenditures in Each State and Their Projections to 1990," for the School Finance Project, National Institute of Education, Jerry Miner and Seymour Sacks, Metropolitan Studies Program, Maxwell School, Syracuse University, March 1983.

Computing Consultant and Help Desk Supervisor, 1976-1979.

- Supervised approximately 10 undergraduates and graduate computing consultants, including recruitment and training.

Graduate Assistant and Teaching Assistant, International Relations Program, 1972-1975.

- Development of course materials and teaching of international relations and economics courses.
- Quantitative political and social research including the politics of oil and uses of the sea.

Publications and Papers:

"A Report on 3 State/3 Province Combined Cancer Incidence Rate Study: A Descriptive Epidemiology Study." December 2011.

"Reliability of rapid reporting of cancers in New Hampshire." Celaya MO, Riddle BL, Cherala S, Armenti K, Rees JR *J Registry Management*. 2010 Fall;37(3):107-111.

"Improving the quality of industry and occupation data at a central cancer registry." Armenti KR, Celaya MO, Cherala S, Riddle BL, Schumacher PK, Rees JR. *Am J of Ind Med*. 2010 Oct;5(10):995-1001.

"Breast cancer stage at diagnosis and geographic access to mammography screening (New Hampshire, 1998-2004)." Celaya MO, Berke EM, Onega TL, Gui J, Riddle BL, Cherala SS, Rees JR *Rural Remote Health*. 2010 Apr-Jun;10(2):1361. Epub 2010 Apr 23.

"Oncology care in rural northern New England." Johnson A, Rees JR, Schwenn M, Riddle B, Verrill C, Celaya MO, Nicolaides DA, Cherala S, Feinberg M, Gray A, Rutstein L, Katz MS, Nunnink JC. *J Oncol Pract*. 2010 Mar;6(2):81-89.

"Travel Distance and Season of Diagnosis Affect Treatment Choices for Women with Early-stage Breast Cancer in a Predominantly Rural Population." Celaya MO, Rees JR, Gibson JJ, Riddle BL, Greenberg ER. *Cancer Causes Control*; 17(6): 851-6.

"Event Drive Data Set for Cancer Surveillance." B. Riddle and DK Boeshaar. *Journal of Registry Management*, Vol. 33(2) Summer 2006: 57-63.

"On the Coding and Reporting of Race and Ethnicity in New Hampshire for Purposes of Cancer Reporting," B Riddle. *Ethnicity and Disease*. 2005;15: 324-331.

"A Review of Death Clearance in Central Cancer Registries and Proposal for a New Regime." B. Riddle. *Journal of Registry Management*, Vol. 31 (2). Summer 2004: 67-73.

"The Fiscal Condition of School Districts in Nebraska: Is Small Beautiful?" K Ratcliffe, B Riddle, J Yinger. *Economics of Education Review*, Vol. 9, No. 1 (1990): 81-99.

"Passwords in Use in a University Timesharing Environment." B Riddle, M Miron, J Semo. *Computers & Security*, Vol. 8 (1989): 569-579.

"Who Pays the Nebraska State Personal Income Tax Before and After State Reform?" Nebraska Comprehensive Tax Study Staff Paper No. 4, B Riddle and S Wallace-Moore. Metropolitan Studies Program, Maxwell School, Syracuse University, November 1987.

"Payroll Tax Reform in Jamaica," Jamaica Tax Structure Examination Project, Staff Paper No. 35, B Riddle and M Wasylenko. Metropolitan Studies Program, Maxwell School, Syracuse University, July 1987.

"Final Report: Fire Department Participation in the Identification and Transportation of Victims of Thermal Injury," A Report to the United States Fire Administration, Federal Emergency Management Agency, B Riddle and D Learner, 1981.

Presentations:

"Cancer Surveillance in the Era of Molecular Markers." North American Association of Central Cancer Registries 2013 Annual Meeting, Austin Texas with A Andrew, M Zens, J Rees.

"Security Issues: A Problem Statement." National Program of Cancer Registries Program Directors Conference. May 2008. Atlanta, Georgia. Invited Presentation.

"Electronic Medical Information and Its Impact on Registries." Cancer Registrars Association of New England Annual Meeting, November 2005, Westboro, Massachusetts.

"An Events Driven Data Set for Cancer Surveillance." Rocky Mountain Cancer Data Systems Annual Meeting, September 2005, Arlington, Virginia.

"Cancer Incidence Rates for New Hampshire." NHSCR Spring Education Meeting, April 2005, Concord, New Hampshire.

"Patterns of Morphology Reporting," North American Association of Central Cancer Registries 2004 Annual Meeting, Salt Lake City Utah, June 2004.

"On the Coding and Reporting of Race and Ethnicity in New Hampshire," Presented to North American Association of Central Cancer Registries 2003 Annual Meeting, Honolulu, Hawaii, June 2003.

"Using Out of the Box Software to Protect and Secure Registry Data." Presented at the North American Association of Central Cancer Registries Annual Meeting, June 3-9, 2001, Miami Beach, Florida.

"Supporting the Campus Technology Explosion: Bricks without Straw." Presented to the Eastern Sociology Society, Boston, Massachusetts, March 4, 1999.

Poster Presentations:

"A New Model for Annual Cancer Incidence Reporting." B. Riddle, A. D. Fuld, MD, MS., M. S. Ernstoff, MD, A. Andrew, PhD., M. O. Celaya, MPH., CTR., GM M. Hosain, MB., BS, PhD., J. R. Rees, BM, BCh, PhD. North American Association of Central Cancer Registries 2014 Annual Meeting, Ottawa, Canada.

"Findings From the 2011-2012 NAACCR Death Clearance Evaluation Workgroup Issues Survey." M. Williams, B. Riddle R. Otto, C. Sherman, L. Dickie.

North American Association of Central Cancer Registries 2013 Annual Meeting, Austin Texas.

"Estimating the Costs of a Data Breach: An Exercise at the New Hampshire State Cancer Registry." B. Riddle, S. Nyman, J. Rees. North American Association of Central Cancer Registries 2012 Annual Meeting, Portland, Oregon.

"The Impact of Veterans Affairs Cancer Reporting in New Hampshire." B. Riddle, J. Rees, M. Celaya, S. Cherala. North American Association of Central Cancer Registries 2012 Annual Meeting, Portland, Oregon.

"Cancer and Place of Death: A micro-study about death in New Hampshire." B. Riddle. North American Association of Central Cancer Registries 2010 Annual Meeting, Quebec City, Quebec, Canada, June 2010. Poster won a 3rd Place award.

"Death Certificates and Estimates of Cancer Mortality." B. Riddle and M Celaya. North American Association of Central Cancer Registries 2008 Annual Meeting, Denver, Colorado, June 2008. Poster won a 1st Prize award.

"Event Level Architecture for an Event Driven Data Set for Electronic Cancer Surveillance" B. Riddle. North American Association of Central Cancer Registries 2005 Annual Meeting, Detroit, Michigan, June 2007.

"Event Driven Data Set for Cancer Surveillance." B. Riddle and D.K. Boeshaar, North American Association of Central Cancer Registries 2005 Annual Meeting, Cambridge, Massachusetts, June 2005.

"Questions about Sensitivity and Specificity of NAACCR Hispanic Identification Algorithm in a State with Small Non-White Population." B Riddle, JR Rees. North American Association of Central Cancer Registries 2004 Annual Meeting, Salt Lake City Utah, June 2004.

"Using Windows XP to Secure Laptop Computers to Hold Confidential Information," B. Riddle. North American Association of Central Cancer Registries 2002 Annual Meeting, Toronto, Ontario, Canada, June 2002.

"Looking at Central Sequence Number to Access the Reliability of a Central Registry Data Set," B Riddle. North American Association of Central Cancer Registries 2002 Annual Meeting, Toronto, Ontario, Canada, June 2002.

Professional Courses:

Principles and Practice of Cancer Registration, Surveillance, and Control, Rollins School of Public Health, Emory University, Atlanta, Georgia (March 2001)
Advanced Cancer Registry Training Program, Rollins School of Public Health at Emory University, Atlanta, Georgia (February 2001)

Special Projects:

Consultant to Washington and Lee University, Lexington, Virginia, under a National Science Foundation CAUSE Grant. Conducted a six week workshop for the faculty on social science computing and SPSS. Prepared an introductory manual on job control language for students. Summer 1978.

Maria O. Celaya, MPH, CTR

EDUCATION

<u>Date</u>	<u>Degree</u>	<u>Institution</u>	<u>Field of Study</u>
2004	MPH	University of New Hampshire Dept of Health Management & Policy Manchester, NH	Public Health Policy & Mgt.
2002	BS	University System of New Hampshire Granite State College Lebanon, NH	Management/Info. Technology
1995	AAS	Phoenix College Phoenix, AZ	Health Information Technology

ADDITIONAL COURSEWORK

2010-2011		Professional Development Human Resources, Dartmouth College Hanover, NH	Management Essentials at Dartmouth
Spring 2010		Dartmouth Medical School	DMS Biostatistics & Epidemiology (audit)
1997		State of Arizona Dept. of Administration Phoenix, AZ	Leadership Foundations
1996-1999		Glendale Community College Glendale, AZ	Business/Accounting

PROFESSIONAL EXPERIENCE

2000-present	Assistant Director, Field Operations - Research Scientist New Hampshire State Cancer Registry Geisel School of Medicine at Dartmouth Community and Family Medicine, Section of Biostatistics & Epidemiology Hanover, NH
2013-present	QA Technical Specialist (part-time, remote) Westat Rockville, MD
1999-2000	Data Collections/Editing Section Manager
1997-1999	Administrative Support Supervisor
1995-1997	Cancer Registrar Arizona Cancer Registry - AZ Dept. of Health and Human Services, Division of Public Health Services, Bureau of Public Health Statistics, Office of Health Registries Phoenix, AZ

CANCER REGISTRATION CONSULTING SERVICES

2010 ICF Macro – Bethesda, MD
1999-2000 Valley Lutheran Hospital – Mesa, AZ
1999 Columbia Northwest Medical Center – Tucson, AZ
1998 Tempe St. Luke’s Hospital – Tempe, AZ
1997 Flagstaff Medical Center – Flagstaff, AZ
1997 Boswell Medical Center – Sun City, AZ
1996 Flagstaff Medical Center – Flagstaff, AZ
1994-1996 Columbia Medical Center Phoenix – Phoenix, AZ

PROFESSIONAL CREDENTIALS

1997-present Certified Tumor Registrar (CTR) – National Cancer Registry Association
1995-2010 Registered Health Information Technician (RHIT) – American Health Information Management Association

AFFILIATIONS

2014-2015 Member, Nominating Committee – Cancer Registrars Association of New England
2012-2013 Vice-President – Cancer Registrars Association of New England
2012-2013 Member, Nominating Committee – North American Association of Central Cancer Registries
2005-present Member, Emerging Issues Committee – New Hampshire Comprehensive Cancer Control Initiative
2002-present Member, Registry Operations Committee – North American Association of Central Cancer Registries
1997-present NCRA Member – National Cancer Registry Association
2008-2010 Member, Board of Directors – NH Comprehensive Cancer Collaboration
2007-2009 Chair, By-Laws Committee – Cancer Registrars Association of New England
2007-2008 Member, By-Laws Committee – Cancer Registrars Association of New England
2006-2008 Chair, Nominating Committee – Cancer Registrars Association of New England
2001-2004 Treasurer – North Eastern States Cancer Registry Association

RESEARCH SUPPORT

10/01/2013 – Present
CDC-ICF Macro (#13EDSK0109)
Expanding Data Collection Infrastructure of National Program of Cancer Registries for Patient Centered Outcomes Research (PCOR)

12/01/2010 – 09/30/2013
CDC-ORC Macro (#200-2002-00574)
*Prevention Research Centers Comparative Effectiveness Research Program U48
Enhancing cancer Registry Data for Comparative Effectiveness Research (CER)*

11/10/2003 – 09/30/2004
CDC-ORC Macro (#200-2002-00574)
Assessment of Completeness of Reporting of Melanoma to Central Cancer Registries

PROFESSIONAL AWARDS

2014 NAACCR Achievement Award
2010 NAACCR Merit Award

PEER-REVIEWED PUBLICATIONS

Ingimarsson JP, Celaya MO, Laviolette M, Rees JR, Hyams ES. Trends in initial management of prostate cancer in New Hampshire. *Cancer Causes Control*. 2015 Apr 4. [Epub ahead of print]

Rees JR, Zens MS, Celaya MO, Riddle BL, Karagas MR, Peacock JL. Survival after squamous cell and basal cell carcinoma of the skin: A retrospective cohort analysis. *Int J Cancer*. 2015 Jan 16. doi: 10.1002/ijc.29436. [Epub ahead of print].

Chen VW, Ehemann CR, Johnson CJ, Hernandez MN, Rousseau D, Styles TS, West DW, Hsieh M, Hakenewerth AM, Celaya MO, Rycroft RK, Wike JM, Pearson M, Brockhouse J, Mulvihill LG, Zhang KB. Enhancing Cancer Registry Data for Comparative Effectiveness Research (CER) Project: Overview and Methodology. *J Registry Manag*. 2014 Fall;41(3):103-12.

JR Rees, MS Zens, J Gui, MO Celaya, BL Riddle, MR Karagas. Non melanoma skin cancer and subsequent cancer risk. *PLoS One*. 2014 Jun 17;9(6):e99674.

Wyszynski A, Tanyos SA, Rees JR, Marsit CJ, Kelsey KT, Schned AR, Pendleton EM, Celaya MO, Zens MS, Karagas M, Andrew AS. Body mass and smoking are modifiable risk factors for recurrent bladder cancer. *Cancer*. 2014 Feb 1;120(3):408-14.

Celaya MO, Riddle BL, Cherala S, Armenti K, Rees JR. Reliability of rapid reporting of cancers in New Hampshire. *J Registry Manag*. 2010 Fall;37(3):107-111.

Armenti KR, Celaya MO, Cherala S, Riddle BL, Schumacher PK, Rees JR. Improving the quality of industry and occupation data at a central cancer registry. *Am J of Ind Med*. 2010 Oct;5(10):995-1001.

Celaya MO, Berke EM, Onega TL, Gui J, Riddle BL, Cherala SS, Rees JR. Breast cancer stage at diagnosis and geographic access to mammography screening (New Hampshire, 1998-2004). *Rural Remote Health*. 2010 Apr-Jun;10(2)1361. Epub 2010 Apr 23.

Johnson A, Rees JR, Schwenn M, Riddle B, Verrill C, Celaya MO, Nicolaidis DA, Cherala S, Feinberg M, Gray A, Rutstein L, Katz MS, Nunnink JC. Oncology care in rural northern New England. *J Oncol Pract*. 2010 Mar;6(2):81-89.

Celaya MO, Rees JR, Gibson JJ, Riddle BL, Greenberg ER. Travel distance and season of diagnosis affect treatment choices for women with early-stage breast cancer in a predominantly rural population. *Cancer Causes Control*. 2006 Aug; 17(6): 851-6.

PRESENTATIONS

Celaya MO. NHSCR Update. Cancer Registrars' Association of New England Annual Conference. Framingham, MA; Oct 2015.

Celaya MO. NHSCR Update. Cancer Registrars' Association of New England Annual Conference. Warwick, Rhode Island; Oct 2014.

Celaya MO. Enhancing cancer registry data for Comparative Effectiveness Research. Massachusetts Cancer Registry Annual Meeting. Boston, Massachusetts; December 2011.

Celaya Mo. NHSCR Update. Cancer Registrars' Association of New England Annual Conference. Springfield, Massachusetts; Oct 2011.

Celaya MO. Enhancing cancer registry data for Comparative Effectiveness Research. Cancer Registrars Association of New England 36th Annual Meeting. Springfield, Massachusetts; October 2011.

Rees JR (presenter), Syse A, Riddle BL, Celaya MO, Cherala SS. Cancer trends in the oldest old: a comparative study in New Hampshire and Norway. North American Association of Central Cancer Registries Annual Conference. Louisville, Kentucky; June 2011.

Celaya MO. NHSCR Update. Cancer Registrars' Association of New England Annual Conference. Nashua, New Hampshire; Oct 2010.

Celaya MO, Johnson A, Schwenn M, Rees JR (authors); and Riddle BL, Kachajian J, Schwenn M (presenters). Access to care in rural northern New England. North American Association of Central Cancer Registries Annual Conference. Quebec City, Quebec, Canada; June 2010

POSTERS

Ingimarsson JP, Laviolette M, Celaya MO, Rees JR, Hyams ES. Does distance from a radiation facility impact patient decision-making regarding treatment for prostate cancer? A study of the New Hampshire State Cancer Registry (NHSCR). North American Association of Central Cancer Registries Annual Conference. Charlotte, NC; June 2015.

Ayres CM, Celaya MO, Rees JR. Increasing Non-Hospital Cancer Reporting: The NH Experience. North American Association of Central Cancer Registries Annual Conference. Charlotte, NC; June 2015.

Ingimarsson JP, Laviolette M, Celaya MO, Rees JR, Hyams JR. Trends in initial management of prostate cancer in New Hampshire - Reasons for optimism? North American Association of Central Cancer Registries Annual Conference. Ottawa, Canada; June 2014.

Celaya MO, Gershman ST, Andrew AS, Riddle B, Cherala S, Davis CE, Rees JR. Expanding cancer registry data collection for Comparative Effectiveness Research: Logistical issues. North American Association of Central Cancer Registries Annual Conference. Portland, Oregon; June 2012.

Riddle BL, Celaya MO. Death certificates and estimates of cancer mortality. (1st Place Award) North American Association of Central Cancer Registries Annual Conference. Denver, Colorado; June 2008.

Celaya MO, Rees J, Riddle BL, Armenti K, Cherala S. Evaluation of occupation and industry in the NH State Cancer Registry. (2nd Place Award) North American Association of Central Cancer Registries. 2007 Annual Meeting. Detroit, Michigan; June 2007.

Celaya MO, Colby JP. Radon exposure potential and lung cancer in New Hampshire. North American Association of Central Cancer Registries 2006 Annual Meeting. Regina, Saskatchewan, Canada; June 2006.

Celaya MO, Rees J, Riddle BL. Assessing the reliability of rapid case reporting in a central cancer registry. North American Association of Central Cancer Registries Annual 2004 Meeting. Salt Lake City, Utah; June 2004.

CLAIRE E. DAVIS, BA, CTR
Curriculum Vitae

EDUCATION

<u>Date</u>	<u>Degree</u>	<u>Institution</u>	<u>Field of Study</u>
2001	AS	Northeastern University Boston, Massachusetts	Health Science
1977	BA	Keene State College Keene, NH	Textile Design

PROFESSIONAL COURSES

2001	Certificate	Northeastern University Boston, Massachusetts	Cancer Registry Management
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PROFESSIONAL EXPERIENCE

2006 – Present Senior Registrar
New Hampshire State Cancer Registry – Dartmouth Medical School,
Community & Family Medicine, (Biostatistics & Epidemiology)
Hanover, New Hampshire

Process electronic data transfers from multiple facilities; audit data for accuracy & completeness, merge & consolidate cases; develop & perform death clearance reports; identify & abstract cases from non-hospital sources (path labs, MD office, cancer treatment centers, nursing homes); perform extensive field work at hospital level to identify causes of deficiencies; prepare data for NAACCR call-for-data to ensure compliance with national standards; maintain manuals and forms used for reporting and training purposes; perform recoding audits to determine accuracy rate; review diagnostic indies, path reports, and death certificates to identify potentially missed cases; maintain a network of professional contacts and membership in professional organizations to facilitate and promote quality control activities; edit semi-annual Registry newsletter; provide administrative support.

2001 – 2006 Cancer Registry Coordinator
Cheshire Medical Center
Keene, New Hampshire

Responsible for identification, abstraction and follow-up of cancer cases at 169-bed acute care regional hospital and comprehensive oncology/radiation treatment center; oversight of 100% follow-up for all cancer cases; maintain quality assurance standards for all registry processes; preparation of annual report for medical center cancer program; coordinate and follow-up of institutional Cancer Committee Meetings;
2006 Attained the highest accreditation form the American College of Surgeons Cancer Program Standards survey.

1987-2001 **Correspondence and Billing Clerk**
Cheshire Medical Center
Keene, New Hampshire

Oversight of all external correspondence; submission and reconciliation of bills to all insurance companies; assist with risk management and other legal matters; assist with hospital and clinic audits.

CREDENTIALS

2001 Certified Tumor Registrar (CTR)
National Cancer Registrars Association

PROFESSIONAL AFFILIATIONS

Association of Community Cancer Centers (ACCC)
National Certified Cancer Registrars Association (NCRA)
Cancer Registrars Association of New England (CRANE)
North American Association of Central Cancer Registries (NAACCR)

Pauline M. McGinn

pauline.m.mcgin@dartmouth.edu 603-653-6626

Experience

2014-present New Hampshire State Cancer Registry Dartmouth College,

NH

Senior Cancer Registrar

- Abstracted cancer data for the Patient Centered Outcomes Project including outcomes data
- Central registry data processing, case finding

2007-2013 Exeter Hospital

Exeter, NH

Cancer Registrar

- Abstracted, analyzed and interpreted cancer data in an ACoS approved cancer program
- Managed Cancer Committee operations: preparation of agenda, communications with committee members, recording and distribution of minutes
- Attended cancer conferences and recorded presentation and staging information according to ACoS standards
- Prepared cancer program annual report data for publication and physician presentation
- Prepared reports of cancer data as requested by other hospital departments.

2001-2007 Seacoast Mental Health Center

Portsmouth, NH

Medical Record Coordinator

- Managed medical record departments in two facilities that provide outpatient community mental health services
- Supervised and trained staff members and clients who participate in facility's work adjustment program
- Oversaw daily operation of departments
- Performed release of information activities
- Served as center's Privacy Officer
- Participated in Quality Improvement and Compliance Committees

1988-2001 Hospital of St. Raphael

New Haven, CT

Cancer Registrar

- Abstracted, analyzed and interpreted cancer data in an ACoS approved cancer program
- Participated in Cancer Committee and multi-specialty Tumor Board proceedings and prepared reports of same
- Coded data according to SEER and state reporting requirements
- Managed workflow for Registry
- Served on operations improvement team for streamlining medical record

1980-2000 Connecticut Long Term Care Facilities

Medical Record Consultant

- Reviewed medical records quarterly for compliance with state and federal regulations for medical record services
- Provided in-service sessions for long term care staff
- Served on subcommittee for revision of Medical Record Section of the Connecticut Public Health Code for Long Term Care

1978-1988 Hospital of St. Raphael New Haven, CT

Medical Transcriptionist

- Performed part-time and home transcription of dictated hospital reports

1975-1978 Hospital of St. Raphael New Haven, CT

Transcription Supervisor

- Supervised 12 employees, overseeing transcription and distribution of dictated reports
- Increased staff production, eliminating need for outsourcing
- Prepared section production reports and budgetary recommendations
- Designed medical record forms and maintained forms control inventory

Education

Southern CT State University New Haven, CT

- B.A., Liberal Arts
- AHIMA Independent Study program

Accreditations

1978 – Accredited Record Technician ; 1998 - Certified Tumor Registrar

Professional memberships

American Health Information Management Association, 1976-present.

New Hampshire Health Information Management Association, 2001-present; Secretary 2004-2006.

National Cancer Registrars Association, 1998-present.

Cancer Registrars Association of New England, 2002-present.

Connecticut Health Information Management Association, 1976-2000; Past Chairperson, Bylaw Committee and Long Term Care Committee

Connecticut Tumor Registrars Association, 1988-2000; Secretary 1997-1999; Chairperson, Bylaws Committee, 1994-2000.

Valeria Celaya, BA

EDUCATION

<u>Date</u>	<u>Institution</u>	<u>Degree</u>	<u>Field of Study</u>
May 2015	University of New Hampshire Durham, NH	BA Dual Minor	Anthropology Women's Studies; Race and Ethnic Studies

ADDITIONAL COURSEWORK

Aug 2015- Oct 2015	NCRA-AHIMA Cancer Registry Management Program	Certificate	Anatomy, Physiology and Human Disease
Nov 2015- Feb 2016	NCRA-AHIMA Cancer Registry Management Program	Certificate	Pathophysiology and Pharmacology

PROFESSIONAL EXPERIENCE

Sept 2015 – Present **Cancer Registrar**
New Hampshire State Cancer Registry
Geisel School of Medicine at Dartmouth, Hanover, NH

Review New Hampshire cancer reports to determine their completeness and accuracy in accordance with national and state reporting standards via RMCDS software. Carry out established central registry policies, procedures and quality assurance efforts. Perform extensive field work at local facilities to identify and address causes of deficiencies. Visit New Hampshire hospitals to check reliability of information abstracted from charts; review pathology and patient charts for accuracy and completeness of case finding. Visit pathology laboratories and free-standing radiotherapy and medical oncology centers to review reports in order to monitor case-finding. Collaborate with local hospitals to ensure that patterns of accurate and complete reporting are maintained; address problems of non-reporting and/or untimely reporting of data and poor quality data submission. Assist registrars, manager, director and other researchers in cancer related studies and research projects. Identify, register, and maintain records of all New Hampshire cancer patients through the central tumor registry data system. Participates in local, regional, or national cancer organizations and meetings.

March 2015 – Sept 2015 **Project Assistant**
New Hampshire State Cancer Registry
Geisel School of Medicine at Dartmouth, Hanover, NH

Abstract cancer cases received from physicians reporting, including cancer diagnosis, staging, and treatment, utilizing RMCDS software. Verify accuracy of data entered and correct errors. Perform casefinding audits by reviewing pathology reports and medical record disease indices. Identify reportable cancers in eMaRC Plus. Review cancer cases to ensure complete and accurate reporting from hospital and non-hospital sources. Assist the staff of NHSCR with projects related to central cancer registry operations, including Death Clearance, physician follow-ups, hospital follow-back efforts, and monthly case processing. Assist in the editing and design of cancer registry related poster and oral presentations. Continue training to further my experience in cancer registry data collection, processing, and editing, and increase my knowledge of national standards and registry operations through NCRA coursework and SEER*Educate and Training Modules.

Sept 2014 – Dec 2014 **New Hampshire Program Associate**
Let's Get Ready, Boston, MA

Ensure high quality of LGR programs, including managing relationships with senior administrators at high school, college, and community partners. Train and supervise college student staff (Coaches). Perform administrative and logistical support functions and oversee collection of evaluation data for programs. Play an active role as part of LGR's overall program team in developing best practices, new curriculum, etc.

Sept 2011 – Dec 2014

**Program Coordinator
Office of Multicultural Student Affairs
University of New Hampshire, Durham, NH**

Greet and welcome visitors and perform clerical duties as well as specific tasks. Collaborate with University staff, departments, and organizations to plan and promote events. Contact sponsors, vendors, student organizations, and university departments that are involved with specific events: organize a volunteer schedule and recruit students for volunteering; oversee event planning and technicalities; help with on-site set-up and break-down; provide on-site assistance to volunteers and visiting performers and speakers; distribute and collect evaluations; conduct post-event follow up with vendors and sponsors.

Nov 2012 – May 2014

**Diversity Ambassador
Admissions Office
University of New Hampshire, Durham, NH**

Assist Admissions' staff with the fulfillment of admissions programming, including both on and off-campus programs. Represent the university to prospective student populations, teachers, guidance counselors, and parents and contact prospective students of Color in person, and over the phone, email, or letter. Coordinate the involvement of UNH student volunteers in the admissions process to communicate with prospective students of Color. Represent the University at college fairs and events. Devise an outreach plan for the 2014-15 academic year, to be executed by future Diversity Ambassadors.

May 2012 – Aug 2014

**Administrative Assistant
Office for Diversity and Inclusion
Geisel School of Medicine at Dartmouth, Hanover, NH**

Help organize major recurring department activities including those with related departments, external participants, etc. Coordinate department publicity activity including work in multiple media, such as website content and drafting brochures and newsletters. Administer and track expenditures to ensure accurate records of approved department budgets. Establish and maintain department files and databases to ensure accuracy and accessibility of information.

OTHER EXPERIENCE

Sept 2014

**UNH Safe Zones
University of New Hampshire, Durham, NH**

Engaged in an educational program that enlightens its members about Lesbian, Gay, Bisexual, Transgender, Queer, Ally (LGBTQA) issues within and beyond the UNH community. This program also prepares members on how to be an active Ally and how to approach different issues, aiming to reduce and prevent harassment and discrimination that targets individuals based on sexual orientation, gender identity, and gender expression.

Feb 2011

**Martin Luther King Jr. Leadership Summit
University of New Hampshire, Durham, NH**

Participated in a 3-day intensive retreat in which participants explored different aspects of diversity – including issues related to social inequality – and expanded on multicultural competency needed for exemplary leadership

ADDITIONAL SKILLS

Proficient with Rocky Mountain Cancer Data System
Proficient in Spanish, written and oral
Familiar with Microsoft Office Suite
Proficient in Photoshop

KEY ADMINISTRATIVE PERSONNEL

NH Department of Health and Human Services

Contractor Name: Trustees of Dartmouth College

Name of Program: Cancer Registry Operations

BUDGET PERIOD:		Date of C&C Approval - 6/30/17		
NAME	JOB TITLE	SALARY	PERCENT PAID FROM THIS CONTRACT	AMOUNT PAID FROM THIS CONTRACT
Rees, Judith	Director	129,014	60.00%	\$50,613.00
Riddle, Bruce	Registry Manager	88,006	100.00%	\$57,542.00
Celaya, Maria	Assistant Director	84,710	100.00%	\$55,387.00
Davis, Claire	Senior Registrar	60,235	100.00%	\$39,384.00
McGinn, Pauline	Senior Registrar	58,956	100.00%	\$38,548.00
Valeria Celaya	Registrar	42,098	100.00%	\$27,526.00
Susan Sibulkin	Data clerk	31,200	47.50%	\$9,690.00
TOTAL SALARIES (Not to exceed Total/Salary Wages, Line Item 1 of Budget request)				\$278,690.00

BUDGET PERIOD:		7/1/17 - 6/30/18		
NAME	JOB TITLE	SALARY	PERCENT PAID FROM THIS CONTRACT	AMOUNT PAID FROM THIS CONTRACT
Rees, Judith	Director	132,884	50.00%	\$66,442.00
Riddle, Bruce	Registry Manager	90,646	100.00%	\$90,646.00
Celaya, Maria	Assistant Director	87,256	100.00%	\$87,256.00
Davis, Claire	Senior Registrar	62,046	100.00%	\$62,046.00
McGinn, Pauline	Senior Registrar	60,715	100.00%	\$60,715.00
Valeria Celaya	Registrar	43,362	100.00%	\$43,362.00
TOTAL SALARIES (Not to exceed Total/Salary Wages, Line Item 1 of Budget request)				\$410,467.00