DARTMOUTH

Dartmouth's Community Impact

2020

Introduction:

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. In fulfilling its mission as an educational institution, Dartmouth strives to serve its students as well as the Upper Valley community through its role as an employer, collaborator, and innovator. This report illustrates the symbiotic relationship between Dartmouth, the town of Hanover, and the wider Upper Valley in areas including economic impact, research and innovation, education, arts and culture, sustainability and conservation.

Economic impact:

Dartmouth has a substantial financial impact on the local, regional, and state economies of New Hampshire and Vermont.

Taxes & Fees:

Dartmouth is Hanover's largest taxpayer.

Dartmouth pays taxes on all dormitories, dining rooms, and kitchens with values in excess of \$150K. These properties pay \$6.2 million in taxes to Hanover.

Dartmouth also owns commercial properties in Hanover and Lebanon, paying almost \$1million in Hanover and \$85k in Lebanon for taxes on these units.

In addition, Dartmouth pays over \$700k in taxes to Hanover and over \$600k to Lebanon on almost 500 off-campus rental housing units.

Employment:

Dartmouth is New Hampshire's eighth largest service sector employer with 3,741 employees (Dartmouth Hitchcock Medical Center is the largest with 10,000 employees)¹. In FY19 Dartmouth paid \$506M in payroll and employee benefits.

Dartmouth is also a large local spender; spending approximately \$70M in the Upper Valley on goods and services in FY19.

Dartmouth's economic impact extends beyond its direct actions as a local spender and employer. Dartmouth's approximately 4,400 undergraduate and 2,100 graduate students make up a significant portion of Hanover's total population and, as residents and consumers, play a critical role in the local

¹ NH employment data comes from the New Hampshire Book of Lists compiled by the NH Business Review

economy. In addition to its students, Dartmouth annually attracts over 30,000 prospective student visitors, often accompanied by family members, who stimulate Hanover's economy through spending on food, lodging, and other local purchases.

As Dartmouth, its employees and its students participate in the local economy, additional jobs and revenue are created. Though it's difficult to capture the precise magnitude of this ripple effect, a study of NH colleges and universities estimates that the total (indirect and direct) economic impact of higher education in NH is equivalent to approximately \$6.4 billion².

Local Collaborations:

Knowing that its students, faculty, and staff benefit immensely from the resources of the Upper Valley community, Dartmouth partners with the town to support local activities, events, and initiatives. Examples include:

- Dartmouth sponsors and supports activities and events through many local nonprofits, such as Vital Communities and the Prouty.
- In collaboration with Hanover, the Dartmouth Real Estate Office has led development projects improving downtown Hanover. Examples are Currier Place (2010) and the installation of sidewalks on West Street and North College Street (2020).
- Dartmouth is a member of the Upper Valley Business Alliance (UVBA). Dartmouth sponsors and participates in numerous UVBA events throughout the year. Examples are Governor Sununu's "State of the State" lunch, and LebFest, where in 2019 Dartmouth hosted four outreach booths and sponsored a performance by the Rockapellas.
- Dartmouth sponsors an annual United Way campaign for its employees. In 2018-19, Dartmouth employees, retirees, and emeriti contributed a total of \$263K to the United Way campaign. This was the largest campaign in the Upper Valley and one of the top three largest campaigns in New Hampshire. Through a program launched in 2017, Dartmouth employees are encouraged to take one day of paid time off annually to volunteer for United Way-supported non-profit agencies.
- Dartmouth supports local emergency providers by making direct contributions (such as providing a safety boat) as well as offering safety, emergency response, and hazards training courses.
- The Dresden School District includes two schools in Hanover, NH (the Richmond Middle School and Hanover High School). Dartmouth was a partner in the 2004 Tri-Party Agreement that saw the expansion of Hanover High School and the construction of the Richmond Middle School.

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² See the Economic Impact: New Hampshire's Public and Nonprofit Private Colleges and Universities

Research & Innovation

In addition to their work as educators, faculty are involved in cutting-edge research in the arts and sciences, medicine, engineering, and business. Faculty and student research brings federal dollars to New Hampshire and fuels discoveries with local and worldwide impact.

According to the FY18 Higher Education Research and Development Survey (HERD), Dartmouth research spending accounted for 68% of all higher education research spending in New Hampshire, making it the largest research institution in the state.³ Awards to Dartmouth accounted for 76% of all National Institutes of Health and 58% of all National Science Foundation funding to New Hampshire in FY19.⁴

Entrepreneurship and Innovation:

Dartmouth is dedicated to helping students, faculty, staff, and community members translate their ideas into new technologies and start-up companies, which, in the long-term, create jobs, revenue, and societal impact. Dartmouth faculty have founded many companies that have become major employers in the area including Creare, Hypertherm, Adimab, and Solaflect.

To further encourage this kind of entrepreneurial activity, Dartmouth established the Magnuson Center for Entrepreneurship (formerly called the Dartmouth Entrepreneurial Network, or DEN) in 2001 and, in 2004, partnered with key state economic development agencies to create the Dartmouth Regional Technology Center (DRTC). This entrepreneurial support provides resources and programming for early-stage ventures in the Upper Valley. In addition, Dartmouth's technology transfer office helps faculty protect and commercialize their inventions.

The DRTC currently incubates many active ventures including: Argo Research, Avitide, CairnSurgical LLC, Celdera Medical, Clairways LLC, Cypress Creek Renewables, DoseOptics LLC, FirstLight Fiber, FreshAir Sensor LLC, Janvelin Oncology, Lyticon, my Turn, Occulo Bio, Orr & Reno, P.A., Pete and Gerry's Organic Eggs, PreventAGE Health Care, RyTek Medical, Stealth Biologics, LLC, VivCyte, and Websensing.

Like the DRTC, much of the Magnuson Center's programming is open to community members as well as Dartmouth students, faculty, and staff. Furthermore, the Magnuson Center is both a member of and actively supports the NH Business Incubator Network and the state's Live Free and Start initiative.

These efforts contribute to New Hampshire's entrepreneurial ecosystem by creating jobs, attracting venture capital funding, and fostering research and industry collaborations between faculty, students, staff, and community members.

³ Data is calculated using the <u>Higher Education Research Development</u> (HERD) survey conducted by the National Science Foundation. The HERD survey uses Dartmouth's fiscal year, which runs from July 1st to June 30th, and includes federal funding for financial aid.

⁴ Data is calculated using <u>National Institutes of Health</u> (NIH) and <u>National Science Foundation</u> (NSF) funding reports. NSF and NIH calculate this data using the federal fiscal year, which runs from October 1st to September 30th. Because Dartmouth uses a July 1st to June 30th fiscal year, research spending as calculated by Dartmouth differs from federal calculations that use the federal fiscal year.

Education:

Dartmouth Students:

Dartmouth is committed to supporting students regardless of socioeconomic circumstances through need-based financial aid. Over 50% of all undergraduates receive financial aid and tuition is free for those from families with an annual income of \$100,000 or less with typical assets. Of the 67 current Dartmouth students from New Hampshire, 87% receive financial aid. The average award for New Hampshire students was over \$44K in 2017. Of the 34 Dartmouth students from Vermont, 94% receive financial aid. The average award for Vermont students was over \$45K in 2017.

Community:

Dartmouth students are not the sole beneficiaries of the College's educational offerings. Lectures, exhibits, and sports events are open to community members, in many cases free of charge (see the Community Access and Events appendix for more information about Dartmouth's educational, cultural, and athletic offerings) and Dartmouth offers several educational enrichment programs for a range of audiences, including:

- The <u>Special Community Student Program</u> enables local high school students to earn credit for Dartmouth courses for free. Annually, about 80 students from numerous Upper Valley high schools, as well as homeschoolers, enroll in one or more classes. The tuition value of these classes is almost \$700,000 per year.
- <u>Strengthening Educational Access with Dartmouth (SEAD)</u> equips high-potential youth from under-resourced communities in the Upper Valley with the skills needed to thrive in high school and succeed in the best college for them.
- The Osher Lifelong Learning Institute at Dartmouth offers educational programs year-round for Upper Valley residents. In addition to offering 25 to 90 courses each term (fall, winter, spring and summer), Osher organizes social activities, a summer lecture series, Dartmouth library privileges, and art events for its members.
- Dartmouth is a member of edX, a not-for-profit educational consortium that produces open-access "MOOCs" (massive open online courses). These courses are free for lifelong learners, and have proven popular amongst NH educators, working professionals, and retirees. A number of New Hampshire middle and high school teachers have also used content from DartmouthX courses as supplementary material in their classes.

Arts & Culture

Students, faculty, staff, and community members convene under one roof for the various performances, exhibits, lectures, movies, and events sponsored by the <u>Hopkins Center for the Performing Arts</u> and the <u>Hood Museum of Art</u>. Each year the Hood's exhibitions and the Hop's visiting artists and artists-in-residence draw thousands of local and non-local visitors to Hanover.

Many of these events are free and open to the public, including all Hood museum exhibitions and lectures, as well as the HopStop family series and summer events on the Green. Both the Hood and

the Hop collaborate with local schools to bring local K-12 students to Dartmouth for interactive field trips throughout the year.

Sustainability & Conservation

Dartmouth's location, surrounded by the natural beauty of the Upper Valley, is central to its institutional identity. In the areas of energy, waste, water, transportation, and dining services, Dartmouth continues to work towards reducing negative impacts on our local community and engaging students and community members in finding just, effective strategies to improve sustainability.

On Earth Day 2017, President Hanlon adopted an ambitious set of sustainability goals, including reducing greenhouse gas emissions from campus operations 50% by 2025 and 80% by 2050. In 2021, Dartmouth will review and revise the "Our Green Future Report," updating goals to reflect progress and creating a strategy for making progress towards sustainability in the next 5 years.

As a major landowner in New Hampshire, Dartmouth manages more than 30,000 acres in Vermont and New Hampshire, practicing sustainable forest management and working with local stakeholders towards shared conservation goals.

Dartmouth plays an active role in the Sustainable Hanover Committee, the Conservation Commission, and local land trust (a non-profit founded by Dartmouth faculty). In addition, Dartmouth provides land for the Hanover Community Gardens and the Dartmouth Organic Farm is open to the public.

Energy

Dartmouth has ambitious plans to make our energy system more sustainable, since energy consumption is a chief source of greenhouse gas emissions. The college is focused on improving energy efficiency including by shifting from a steam heat distribution system to a hot water system, improving the efficiency of buildings and upgrading systems. Dartmouth plans to transition away from fossil fuel consumption and is actively engaged in planning for new energy systems that use renewable electricity to power campus.

Sustainability in Education

Dartmouth is home to a robust Environmental Studies program. The Office of Sustainability supports student educational activities outside the classroom, offering internships, evening programming and many opportunities for students to learn about and engage in improving Dartmouth's operational sustainability. The Dartmouth Organic Farm is home to a wide variety of student activities and educational programming related to sustainability, food, and agriculture.

Transportation

Dartmouth works collaboratively with the local transportation management association, school districts, major employers, and transit service providers to promote sustainable transportation. Dartmouth provides more than \$500K annually to support local transit and shuttle buses:

- Fare-free public routes across the upper valley (Enfield, Lebanon, Hartford, Norwich, Hanover).
- Dartmouth/Downtown shuttle for public access to points along the Dartmouth campus and the central business district of Hanover.
- Public transit lines that operate along the I-91 and I-89 corridors carrying employees from rural communities to upper valley employers (Stagecoach-89er from Randolph with stops in Bethel, Sharon & WRJ; Stagecoach-River Route from Wells River with stops in Bradford, Fairlee & Thetford; The Current from Bellows Falls with stops in Springfield, Ascutney, Hartland & WRJ.)

Dartmouth also supports or participates other transportation initiatives:

- Student run bike rental and repair program
- Dartmouth employee carpools and vanpools that reduce impact on parking demand and the number of single occupant vehicles traveling to Hanover each day.
- Employee participation in local transportation management associations and transit boards.
- Hosts Zipcars on campus, providing car-sharing opportunities to Dartmouth constituents and the public.

Dining

The <u>Class of 1953 Commons Dining Hall</u> and other dining locations on campus employ various strategies to improve sustainability and minimize impact. Examples include:

- Reusable container program called "Green2Go" for take-out to eliminate unnecessary waste
- Use of "green" cleaning products
- Dining Services is <u>Marine Stewardship Council (MSC)</u> certified, the first college or university in New England to achieve this standard.
- A closed-loop program to manage the delivery, filtration, and eventual recycling of cooking oil for biodiesel production
- More than 100 cubic yards of trash eliminated from the waste stream each week due to aggressive composting
- 100% of pre-consumer food scraps are composted
- Use of paper straws and bleach-free compostable paper napkins.

Dining Services also supports many local and regional farmers and producers in the New England area. In total, Dartmouth sources 18% of its food from local and regional⁵ vendors.

⁵ Dartmouth uses the State of New Hampshire Dept of Agriculture definition of "Within the boundaries of the State of New Hampshire" to indicate local and uses a 250 mile radius from the College to indicate regional.

Conservation

Dartmouth owns about 40,000 acres in New Hampshire and Vermont and maintains nearly 50 miles of trails (including the Appalachian Trail passing through Hanover) and seven lean-to shelters, all open for public use. More than two-thirds of that acreage is located north of Hanover at the Second College Grant and at Moosilauke in Warren and Woodstock. Dartmouth was given the Second College Grant, a township of nearly 27,000 acres, by an act of the New Hampshire legislature in 1807. The Grant is used for timber production, research, educational, and recreational purposes. It has received Green Tag Certification and is a member of the American Tree Farm System. Mount Moosilauke, nearly 4,500 acres, is also used for research, education and recreation.

Since the 1960s Dartmouth has been involved in conservation initiatives including more than 3,000 acres of land. Efforts have ranged from permanent trail easements along the Girl Brook Corridor, financial contributions to support the acquisition on the Mink Brook Nature Preserve, conservation easements along the Connecticut River, and even the conveyance of acreage in Sargent's Purchase on the summit of Mount Washington to the State of New Hampshire. Most recently, Dartmouth sold the 175-acre Hudson Farm in Hanover to the National Park Service, which was added to the Appalachian National Scenic Trail. Facilitated by the Trust for Public Land, the deal protects the property from development and preserves an important recreational resource.

Appendix: Examples of Community Service, Access, and Events by departments and schools

Community Service

- <u>Dartmouth's Center for Social Impact</u> supports over 41,000 hours of service in the local community in a typical year. Much of this service is in critical areas such as youth mentoring.
- Campus-wide data reflects a three-year average of approximately 90,000 hours of service. This service is not exclusively local, but a good portion of it is in the Upper Valley.

Community Religious Activities

- Rollins Chapel: many community spiritual activities take place in Rollins Chapel. Regularly scheduled Ecumenical Christian and Hindu Puja services; the Rev. Dr. Martin Luther King, Jr., and Baccalaureate multi-faith services; and Jewish High Holiday services take place in Rollins.
- The Roth Center for Jewish Life, founded in 1997, provides a home and a sense of family for Dartmouth students and the Upper Valley Jewish Community (UVJC). Dartmouth's Hillel and the UVJC have collaborated successfully on religious and academic programs to the benefit of both communities and continue to build a relationship through various events. The Roth Center is home to a kosher kitchen, which is open to be used by anyone who demonstrates an ability and knowledge to keep it kosher.
- Shanti, the Hindu student organization, was founded in 2002 by student and community members interested in practicing, learning about, and representing the Hindu faith. There is

- a Hindu temple in Rollins Chapel for daily puja. Shanti organizes special events, such as a large community Diwali celebration.
- The <u>Muslim Prayer Room</u> in North Fairbanks Hall is used for various purposes—primarily for congregational prayers, such as Friday Jum'ah prayer services, and 'Ishaa and Fair prayers.

Athletics & Recreation

- Free tickets are given to all youth boys' and girls' sports teams and groups for specific Varsity women's sports games in honor of National Girls and Women in Sports Day.
- Community members may join the <u>Health Fitness Center in Alumni Gym</u>.
- Dartmouth Outing Club offers classes, rents gear, and organizes activities in the outdoors for students and community members.
- The <u>Dartmouth Cross Country Ski Center</u> maintains over twenty-five kilometers of groomed cross-country ski trails on Oak Hill and Garipay Field in Hanover, as well as the ice on Occom Pond for ice skating.
- The <u>Dartmouth Skiway</u> in Lyme provides free season passes to all town residents under the age of 19 or still enrolled in school, even college. In addition, Dartmouth provides over 560 reduced rate passes and skiing to six upper valley schools.

Hood Museum of Art

- Museum exhibitions and lectures are free and accessible to anyone in the community.
- Offers year-round, multiple-visit programs for local school children.
- Tours and programs for local schools serve teachers and several thousand K-12 students.
- Family Days encourage parents and children to explore works of art in the museum together.

Hopkins Center for the Performing Arts

- School Matinee Series for Vermont and New Hampshire public, private, and home-schooled students. Thousands of K-12 students attend Hop performances annually. The HopStop Family Series provides free, hands-on programs to young audiences.
- START Program (Student Teachers in the Arts) pairs Dartmouth student volunteers with local area teachers in public and private schools to share their passion for music, dance, and theater with school children in the Upper Valley.
- Summer Free for All series offers free dance classes, performances on the Green, and films
- Study Guides for New Hampshire and Vermont K-12 school age students and their teachers are provided.
- Assembly Outreach brings free enriching mini-performances and lecture-demonstrations to grades K–12 in Upper Valley schools, enhancing classroom curriculum and connecting students to live performances.
- Community Ticket Program: The Community Ticket Program serves low income and underserved community members through partnerships with nine different community organizations. Partners were given access to all Hopkins Center performances and films and made selections based on the needs and interests of their constituents. Over 500 free

tickets were ordered, and attendees participated in special events in conjunction with the performances.

- Free public previews of each new season.
- Reduced or free tickets to performances for volunteer ushers.

Dartmouth Centers

• Dartmouth operates several centers and institutes plus the Montgomery Fellows program, all of which sponsor major speakers and related events open to the public, for free.

Dartmouth Libraries

- Visitors may browse the open stacks, and use electronic journals and books; newspapers and periodicals; music and videos; microforms; maps; and government documents. The library's catalog is available online to anyone.
- Rauner Special Collections Library houses most of Dartmouth's rare books, manuscripts, and the Archives of the College, and is open to the public.
- With approval from their principal or school librarian, high school students may borrow books for a four-week period once a year for free.

Thayer School of Engineering

- Since 2008, Dartmouth LEGO League has partnered with F.I.R.S.T Lego League to host an all-day LEGO tournament open to teams from local elementary and middle schools around NH and VT.
- Thayer hosts an annual Open House in the spring that draws hundreds of community visitors.
- Thayer students regularly visit local schools to promote engineering.
- Thayer hosts the Formula Hybrid International Competition in NH (founded in 2006).

Tuck School of Business

- Students offer free consulting services to local nonprofit organizations, entrepreneurs, and small businesses.
- Approximately 20 Tuck Revers Fellows students serve as non-voting members on local non-profit boards.
- Every May, students have organized the "Run for Kids," which has raised more than \$250,000 over several decades for three local children's organizations: Child and Family Services - Upper Valley, David's House, and the Children's Hospital at Dartmouth (CHaD).
- All first year Tuck students devote half a day to work for Upper Valley nonprofits.

Guarini School of Graduate and Advanced Studies

The Graduate Student Council Executive Committee develops programming for local impact service opportunities for the graduate student community including weekly Upper Valley Haven dinners, an Annual Day of Service, food drives, and volunteering through the Good Neighbor Health Clinic.

In addition, events coordinated by the Guarini School include:

- Brain Buzz: a monthly science-café style event where graduate students present their
 research in an informal setting to members of the local community, in collaboration with the
 Upper Valley Food Coop (UVFC) in White River Junction and the Vermont Institute of
 Natural Science (VINS) in Quechee, Vermont.
- Guarini is the major sponsor of Science Day, founded by the Graduate Women in Science (GWISE) group, an annual event on campus opening labs, research equipment, and scientists to middle and high school students.
- Science Pubs provide panel conversations to members of the local community in a science café model.
- The Neuroscience Center at Dartmouth and the graduate neuroscience community sponsor an annual brain trivia competition for teenagers called the Upper Valley Brain Bee. Prior to the contest, graduate students visit local high schools to conduct brain boot camps, to encourage participation and to increase awareness. Winners of the regional contest go on to participate in a nationwide event held in Washington D.C.
- Graduate students run Public Observing at the Observatory behind Wilder Hall every Friday evening (weather permitting). http://physics.dartmouth.edu/news-events/public-observing
- Regular contributions to the programming at the Montshire Museum of Science, including participation in their annual Astronomy Day.
- Graduate students across the programs regularly visit local schools and local community groups (local libraries, outdoor organizations, VINS, etc.) to teach lessons, provide context for classroom-based learning, and participate in career panels.
- Many labs across campus encourage visits from schools, and many school groups visit the greenhouses in the Life Sciences Center.
- Among other graduate-run activities and clubs is the Dartmouth Graduate Consulting Group (formerly SocialIQ), a graduate student-run consulting group that provides pro-bono consulting services for small businesses, non-profit organizations and social enterprises in the Upper Valley.

Geisel School of Medicine

- Many Geisel medical students volunteer at the Good Neighbor Health Clinic in White River Junction, Vt.
- The Albert Schweitzer Fellowship is designed to develop "leaders in service": individuals who are dedicated and skilled in addressing the health needs of underserved communities, and whose example influences and inspires others. Fellows must develop and implement a service project that provides at least 200 hours of service and has a significant health impact on local, underserved communities. Well over 100 Dartmouth medical students have been Schweitzer fellows.
- Geisel students take part in many other volunteer activities as well, such as a program created to provide basic health care to migrant farm workers in Vermont.