Institutional Self-Study 2013

Prepared for the 2013 Comprehensive Evaluation
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Standards Working Group Membership:

**Standard 1: Mission and Purposes**
- **Michael Baenen**, Chief of Staff, Office of the President, Chair
- **Joyce Barsam**, Trustee Emerita
- **Ira Herman**, Professor of Molecular Physiology and Pharmacology, School of Medicine
- **Mary R. Jeka**, Senior Vice President, University Relations
- **Dawn Geronimo Terkla**, Associate Provost of Institutional Research, Assessment, & Evaluation

**Standard 2: Planning and Evaluation**
- **Marsha Semuels**, Executive Administrative Dean, School of Medicine, Chair
- **Sarah Booth**, Associate Director, Human Nutrition Research Center on Aging
- **Martha Pokras**, Executive Director of Planning & Administration, Office of the Executive Vice President
- **Scott Sahagian**, Executive Associate Dean, School of Engineering
- **Jessica Sharkness**, Assistant Director, Office of Institutional Research and Evaluation
- **Christopher Simoneau**, Senior Director, Central Development Programs, Office of University Advancement
- **Lois Stanley**, Director of University Space Management and Planning, Office of the Vice President of Operations

**Standard 3: Organization and Governance**
- **Roger Tobin**, Professor and Chair of the Department of Physics and Astronomy, Arts & Sciences, Chair
- **Marcia Boumil**, Associate Professor of Public Health and Community Medicine, School of Medicine
- **Tomas Garcia**, Student A12, Former President of the Tufts Community Union Senate
- **David M. Gute**, Associate Professor of Civil and Environmental Engineering, School of Engineering
- **Michelle Hinkle**, Administrative Director, Boards of Advisors
- **Bonnie Lipton**, Research Analyst, Office of Institutional Research and Evaluation
- **William R. O’Reilly**, Trustee, Tufts University Board of Trustees
- **Gary Roberts**, Assistant Provost, Office of the Provost
- **Linda Tickle-Degnen**, Professor and Chair of Occupational Therapy, School of Arts & Sciences
- **Paul Tringale**, Secretary of the Corporation, Office of the Trustees

**Standard 4: The Academic Program**
- **Harry Bernheim**, Associate Professor of Biology, Arts and Sciences, Co-Chair
- **Naomi Rosenberg**, Dean, Sackler School of Graduate Biomedical Sciences, Co-Chair
- **Lauren Conoscenti**, Research Analyst, Office of Institutional Research and Evaluation
- **Lewis Edgers**, Professor of Civil and Environmental Engineering and Associate Dean, School of Engineering
- **James Glaser**, Dean of Academic Affairs, Professor of Political Science, Arts and Sciences
- **Robin Olinsky**, Assistant Director, Academic Resource Center, Arts, Sciences, and Engineering
- **Lynne Pepall**, Dean, Graduate School of Arts and Sciences
- **Laura Rogers**, Lecturer of Education, Arts and Sciences
- **Tracy Rusch**, Special Assistant to the Dean of Arts & Sciences, Arts and Sciences
- **Edward Saltzman**, Associate Professor and Chair of Nutrition Sciences, Friedman School of Nutrition Science and Policy
- **Mary Jane Shultz**, Professor of Chemistry, Arts and Sciences
- **Bernard Simonin**, Professor of Marketing and International Business, The Fletcher School of Law and Diplomacy
<table>
<thead>
<tr>
<th>Standard 5: Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boris Hasselblatt, Professor and Chair of Mathematics, Arts and Sciences, Co-Chair</td>
</tr>
<tr>
<td>Mary Y. Lee, Associate Provost, Office of the Provost, Co-Chair</td>
</tr>
<tr>
<td>Lauren Conoscent, Research Analyst, Office of Institutional Research and Evaluation</td>
</tr>
<tr>
<td>Margery Davies, Director Diversity Education &amp; Development, Arts, Sciences, and Engineering</td>
</tr>
<tr>
<td>Jillian Dubman, Secretary of the Faculty for Arts, Sciences, and Engineering, Office of the Provost</td>
</tr>
<tr>
<td>Laura Liscum, Professor of Molecular Physiology and Pharmacology, School of Medicine</td>
</tr>
<tr>
<td>Andrew McClellan, Dean of Academic Affairs, Professor of Art History, Arts and Sciences</td>
</tr>
<tr>
<td>Chris Swan, Associate Professor of Civil and Environmental Engineering, School of Engineering</td>
</tr>
<tr>
<td>Elizabeth Remick, Associate Professor of Political Science, Arts and Sciences</td>
</tr>
<tr>
<td>Peter Uvin, Academic Dean, The Fletcher School of Law and Diplomacy</td>
</tr>
<tr>
<td>Patrick Webb, Academic Dean, Friedman School of Nutrition Science and Policy</td>
</tr>
<tr>
<td>Robert White, Associate Professor of Mechanical Engineering, School of Engineering</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard 6: Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peter Uvin, Academic Dean, The Fletcher School of Law and Diplomacy, Chair</td>
</tr>
<tr>
<td>John Barker, Dean of Undergraduate and Graduate Students, Arts, Sciences, and Engineering</td>
</tr>
<tr>
<td>Yvette Dalton-McCoy, Associate Director of Graduate Diversity Programs, Office of the Provost</td>
</tr>
<tr>
<td>Laura Doane, Program Director of Advising and Scholarship, Office of the Dean of Undergraduate Education</td>
</tr>
<tr>
<td>David Garman, Associate Professor of Economics, Arts and Sciences</td>
</tr>
<tr>
<td>Stacey Herman, Associate Dean of Student Affairs, Friedman School of Nutrition Science and Policy</td>
</tr>
<tr>
<td>Robert Kasberg, Associate Dean of Admissions and Student Affairs, School of Dental Medicine</td>
</tr>
<tr>
<td>Bruce Reitman, Dean of Student Affairs, Arts, Sciences, and Engineering</td>
</tr>
<tr>
<td>Peeyush Rohela, Student GE13, Graduate Student Council</td>
</tr>
<tr>
<td>Samuel Ruth, Assistant Director of Student Registration and Records, School of Dental Medicine</td>
</tr>
<tr>
<td>Jessica Sharkness, Assistant Director, Office of Institutional Research and Evaluation</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard 7: Library and Other Information Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeff Kosokoff, Director, Ginn Library and Information Technology, The Fletcher School of Law and Diplomacy, Chair</td>
</tr>
<tr>
<td>Ralph Aarons, Assistant Professor of Pediatrics, School of Medicine</td>
</tr>
<tr>
<td>Eric Albright, Director, Hirsh Health Sciences Library, School of Medicine</td>
</tr>
<tr>
<td>Christina Butler, Research Analyst, Office of Institutional Research &amp; Evaluation</td>
</tr>
<tr>
<td>Joseph DeBold, Professor of Psychology, Arts and Sciences</td>
</tr>
<tr>
<td>Paul Giguere, Senior Director of Academic Initiatives, Friedman School of Nutrition Science and Policy</td>
</tr>
<tr>
<td>Janice Mathews, Director of Information Technology, School of Medicine</td>
</tr>
<tr>
<td>Michael Reed, Professor of Biology, Arts and Sciences</td>
</tr>
<tr>
<td>Anne Sauer, Director and University Archivist, Digital Collections &amp; Archives</td>
</tr>
<tr>
<td>Gina Siesing, Director, Educational Technology and Scholarly Technology Services, University Information Technology</td>
</tr>
<tr>
<td>Laura Walters, Associate Director for Teaching, Research, and Information Resources, Tisch Library</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard 8: Physical and Technological Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Kahle, Vice President Information Technology and Chief Information Officer, Co-Chair</td>
</tr>
<tr>
<td>Richard Reynolds, Vice President for Operations, Co-Chair</td>
</tr>
<tr>
<td>Christina Butler, Research Analyst, Office of Institutional Research and Evaluation</td>
</tr>
<tr>
<td>David Damassa, Professor and Dean for Information Technology, School of Medicine</td>
</tr>
<tr>
<td>Yolanda King, Director of Residence Life, Residence Life Office</td>
</tr>
<tr>
<td>Chris Rogers, Professor of Mechanical Engineering, School of Engineering</td>
</tr>
<tr>
<td>Steven Rowell, Assistant Professor and Director of TVETS, Cummings School of Veterinary Medicine</td>
</tr>
<tr>
<td>Scott Sahagian, Executive Associate Dean, School of Engineering</td>
</tr>
<tr>
<td>Jeffrey Zabel, Professor of Economics, Arts and Sciences</td>
</tr>
</tbody>
</table>
Standard 9: Financial Resources
Sue Leverone, Senior Director of Finance and Planning, Chair
Joseph P. McManus, Executive Associate Dean, Cummings School of Veterinary Medicine
Eric Miller, Professor of Electrical and Computer Engineering, Associate Dean of Research, School of Engineering
Katia Miller, Research Analyst, Office of Institutional Research and Evaluation
Leah Rosovsky, Executive Administrative Dean, Arts & Sciences
Gerard F. Sheehan, Executive Associate Dean, The Fletcher School of Law and Diplomacy
Jeffrey Taliaferro, Associate Professor of Political Science, Arts & Sciences

Standard 10: Public Disclosure
Joseph Auner, Professor and Chair of Music, Arts and Sciences, Chair
Susan Ardizzoni, Director of Admissions, Arts, Sciences, and Engineering
Jean Ayers, Director of the Office of Web Communications, University Relations
Geoffrey Bartlett, Director of Emergency Management, Public Safety
Anne Fishman, Director of Communications, Arts and Sciences
Richard Lerner, Professor of Child Development, Arts and Sciences
Katia Miller, Research Analyst, Office of Institutional Research and Evaluation
Kimberly Thurler, Director of Public Relations, University Relations

Standard 11: Integrity
Carmen Lowe, Dean of Academic Advising & Undergraduate Studies, Arts & Sciences and Engineering, Chair
Carol Baffi-Dugan, Associate Dean of Undergraduate Education, Arts & Sciences
Jeffrey Berry, Professor of Political Science, Arts & Sciences
Mark Cronin-Golomb, Professor of Biomedical Engineering, School of Engineering
Richard Glickman-Simon, Assistant Professor of Public Health & Community Medicine, School of Medicine
Brian H. Kavoogian, Trustee, Tufts University
Bonnie Lipton, Research Analyst, Office of Institutional Research and Evaluation
Dickens Mathieu, Senior Legal Counsel, Office of University Relations
Yvonne Wakeford, Institute Administrator, Institute for Global Leadership
Institutional Characteristics Form

Date: January 10, 2013

1. Corporate name of institution: Tufts University
2. Date institution was chartered or authorized: 1852
3. Date institution enrolled first students in degree programs: 1854
4. Date institution awarded first degrees: 1857
5. Type of control:
   - [ ] Public
   - [x] Private
     □ State
     □ City
     □ Other: (Specify) ________________
   - [ ] Independent, not-for-profit
   - [ ] Religious Group (Name of Church):
   - [ ] Proprietary
   - [ ] Other: (Specify) ________________

6. By what agency is the institution legally authorized to provide a program of education beyond high school, and what degrees is it authorized to grant?
   - General Court of Massachusetts
   - See item 7 below for degrees Tufts is authorized to grant

7. Level of postsecondary offering (check all that apply)
   - [ ] Less than one year of work
   - [ ] At least one but less than two years professional degree
   - [ ] Diploma or certificate programs of at least two but less than four years (e.g., Specialist in Education)
   - [ ] Associate degree granting program of at least two years
   - [x] Four- or five-year baccalaureate degree granting program
   - [ ] Other (Specify)
   - [x] First professional degree: MD, DMD, DVM
   - [ ] Master’s and/or work beyond the first professional degree
   - [ ] Work beyond the master’s level but not at the doctoral level
   - [ ] A doctor of philosophy or equivalent degree
   - [ ] Other doctoral programs: OTD

8. Type of undergraduate programs (check all that apply)
   - [ ] Occupational training at the crafts/clerical level (certificate or diploma)
   - [ ] Occupational training at the technical or semi-professional level (degree)
   - [ ] Two-year programs designed for full transfer to a baccalaureate degree
   - [x] Liberal arts and general
   - [ ] Teacher preparatory
   - [ ] Professional
   - [ ] Other: Bachelor of Fine Arts Engineering

9. The calendar system at the institution is:
   - [x] Semester
   - [ ] Quarter
   - [ ] Trimester
   - [ ] Other: ________________

10. What constitutes the credit hour load for a full-time equivalent (FTE) student each semester?
   a) Undergraduate: 4 courses (16 credit hours)
   b) Graduate: 3 courses (12 credit hours)
c) Professional:

Dental:
First Year 11 total courses for the academic year
Second year 14 total courses for the academic year

Medical:
First year 17 total courses for the academic year
Second year 13 total courses for the academic year

Veterinary:
First year 15 total courses for the academic year
Second year 24 total courses for the academic year

11. Student population:

a) Degree-seeking students:

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate</th>
<th>Graduate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time student headcount</td>
<td>5166</td>
<td>4800</td>
<td>9966</td>
</tr>
<tr>
<td>Part-time student headcount</td>
<td>38</td>
<td>477</td>
<td>515</td>
</tr>
<tr>
<td>FTE</td>
<td>5185</td>
<td>5038.5</td>
<td>10223.5</td>
</tr>
</tbody>
</table>

b) Number of students (headcount) in non-credit, short-term courses: 0

12. List all programs accredited by a nationally recognized, specialized accrediting agency.

<table>
<thead>
<tr>
<th>Program</th>
<th>Agency</th>
<th>Accredited Since</th>
<th>Last Reviewed</th>
<th>Next Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.S. Chemical Engineering</td>
<td>Accreditation Board for Engineering and Technology (ABET)</td>
<td>1952</td>
<td>Fall 2011</td>
<td>AY17-18</td>
</tr>
<tr>
<td>B.S. Civil Engineering</td>
<td>ABET</td>
<td>1936</td>
<td>Fall 2011</td>
<td>AY17-18</td>
</tr>
<tr>
<td>B.S. Computer Engineering</td>
<td>ABET</td>
<td>1982</td>
<td>Fall 2011</td>
<td>AY17-18</td>
</tr>
<tr>
<td>B.S. Electrical Engineering</td>
<td>ABET</td>
<td>1936</td>
<td>Fall 2011</td>
<td>AY17-18</td>
</tr>
<tr>
<td>B.S. Environmental Engineering</td>
<td>ABET</td>
<td>1995</td>
<td>Fall 2011</td>
<td>AY17-18</td>
</tr>
<tr>
<td>B.S. Mechanical Engineering</td>
<td>ABET</td>
<td>1936</td>
<td>Fall 2011</td>
<td>AY17-18</td>
</tr>
<tr>
<td>B.S. Computer Science/Engineering</td>
<td>ABET – Computing Accreditation Commission</td>
<td>2004</td>
<td>Fall 2011</td>
<td>AY17-18</td>
</tr>
<tr>
<td>M.A. and Ed.S. in School Psychology</td>
<td>National Association of School Psychologists (NASP) and the Massachusetts Department of Elementary and Secondary Education</td>
<td>1992</td>
<td>Fall 2010</td>
<td>Fall 2017</td>
</tr>
<tr>
<td>B.S. Elementary Education</td>
<td>Massachusetts Department of Elementary and Secondary Education</td>
<td>2003</td>
<td>Spring 2003</td>
<td>Anticipated in 2014</td>
</tr>
<tr>
<td>M.A. in German with Teacher Licensure</td>
<td>Massachusetts Department of Elementary and Secondary Education</td>
<td>1994</td>
<td>Spring 2003</td>
<td>Anticipated in 2014</td>
</tr>
<tr>
<td>M.A.T. Middle and High School</td>
<td>Massachusetts Department of Elementary and Secondary Education</td>
<td>1994</td>
<td>Spring 2003</td>
<td>Anticipated in 2014</td>
</tr>
<tr>
<td>BFA, MFA (offered with the School of)</td>
<td>National Association of Schools of Art and Design's (NASAD) Commission on</td>
<td>2004</td>
<td>October 2004</td>
<td>AY13-14</td>
</tr>
</tbody>
</table>

Prior to 1994, teacher education programs were "registered" by the Commonwealth. In 1994, the Massachusetts Department of Education initiated a program review process and approval for Teacher Education programs. That was the first time Tufts submitted programs for approval.
the Museum of Fine Arts, Boston) Accreditation

Professional Entry Level Master’s Degree in Occupational Therapy Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA) 1938 August 2005 AY14-15

M.A. Urban and Environmental Policy and Planning Planning and Accreditation Board (PAB) 2004 2011 2018

Dental Education Commission on Dental Accreditation of the American Dental Association (CODA) 1945 2008 2015

Medical Education Liaison Committee on Medical Education (LCME) of the American Medical Association (AMA) and the Association of American Medical Colleges (AAMC) 1942 2006 AY13-14


Physician Assistant Program (Master of Medical Science) Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) 2012 Spring 2012 Anticipated in 2014

Doctor of Veterinary Medicine American Veterinary Medical Association (AVMA) 1983 March 2012 AY18-19

13. Off-campus Locations: List all instructional locations other than the main campus. For each site, indicate whether the location offers full-degree programs or 50% or more of one or more degree programs. Record the full-time equivalent enrollment (FTE) for the most recent year. Add more rows as needed.

<table>
<thead>
<tr>
<th>A. In-state Locations</th>
<th>Full degree</th>
<th>50%-99%</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston (School of Medicine, Sackler School of Graduate Biomedical Sciences, Friedman School of Nutrition Science and Policy, School of Dental Medicine)</td>
<td>X</td>
<td></td>
<td>2426.5</td>
</tr>
<tr>
<td>Grafton (Cummings School of Veterinary Medicine)</td>
<td>X</td>
<td></td>
<td>404</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Out-of-state Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
</tr>
</tbody>
</table>

14. International Locations: For each overseas instructional location, indicate the name of the program, the location, and the headcount of students enrolled for the most recent year. An overseas instructional location is defined as “any overseas location of an institution, other than the main campus, at which the institution matriculates students to whom it offers any portion of a degree program or offers on-site instruction or instructional support for students enrolled in a predominantly or totally on-line program.” Do not include study abroad locations.

<table>
<thead>
<tr>
<th>Name of program(s)</th>
<th>Location</th>
<th>Headcount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ras al Khaimah - Master of Nutrition Science and Policy</td>
<td>Ras Al Khaimah, UAE</td>
<td>17</td>
</tr>
<tr>
<td>Tufts in Taillores</td>
<td>Taillores, France</td>
<td>106</td>
</tr>
</tbody>
</table>

15. Degrees and certificates offered 50% or more electronically: For each degree or Title IV-eligible certificate, indicate the level (certificate, associate’s, baccalaureate, master’s, professional, doctoral), the percentage of credits that may be completed on-line, and the FTE of matriculated students for the most recent year. Enter more rows as needed.

<table>
<thead>
<tr>
<th>Name of program</th>
<th>Degree level</th>
<th>% on-line</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Master of Arts Program (GMAP)</td>
<td>Master’s</td>
<td>52%: this is an average across the degree’s 8</td>
<td>67</td>
</tr>
</tbody>
</table>
### Dental Distance Master’s Program

<table>
<thead>
<tr>
<th>courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s</td>
</tr>
</tbody>
</table>

16. **Instruction offered through contractual relationships**: For each contractual relationship through which instruction is offered for a Title IV-eligible degree or certificate, indicate the name of the contractor, the location of instruction, the program name, and degree or certificate, and the number of credits that may be completed through the contractual relationship. Enter more rows as needed.

<table>
<thead>
<tr>
<th>Name of contractor</th>
<th>Location</th>
<th>Name of program</th>
<th>Degree or certificate</th>
<th># of credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

17. List by name and title the chief administrative officers of the institution. (Use the table on the following page.)

18. Supply a table of organization for the institution. While the organization of any institution will depend on its purpose, size and scope of operation, institutional organization usually includes four areas. Although every institution may not have a major administrative division for these areas, the following outline may be helpful in charting and describing the overall administrative organization:

- a) **Organization of academic affairs**, showing a line of responsibility to president for each department, school division, library, admissions office, and other units assigned to this area;
- b) **Organization of student affairs**, including health services, student government, intercollegiate activities, and other units assigned to this area;
- c) **Organization of finances and business management**, including plant operations and maintenance, non-academic personnel administration, IT, auxiliary enterprises, and other units assigned to this area;
- d) **Organization of institutional advancement**, including fund development, public relations, alumni office and other units assigned to this area.

See Appendix B

19. Record briefly the central elements in the history of the institution:

1852 Charter issued to Trustees of Tufts College, representing the Universalist Church’s first venture into higher education. Tufts was the 163rd institution of higher education chartered in the U.S.

1853 Hosea Ballou II agreed to serve as Tufts’ 1st President. Cornerstone laid for the college building on 20 acres of land donated by Charles Tufts.

1854 Tufts College opened with 7 students and 4 professors.

1857 First Commencement, with 3 students graduating.

1861 Hosea Ballou II died. Enrollment totaled 53; library had 6,000 volumes.

1862 Alonzo Ames Miner elected as 2nd President.

1865 Three-year program in Civil Engineering introduced, adding emphasis on mathematics and engineering to a liberal arts curriculum. Charter restriction on granting medical degrees removed.

1869 With a bequest from Mr. Packard, a Divinity School started.

1874 President Miner resigned.

1875 Elmer Hewitt Capen elected as 3rd President. Enrollment totals 56, exclusive of the Divinity School.
1876 Earned Master’s degrees offered for minimum one-year study in two departments. By 1886, 20 Master’s degrees conferred; 1886–1896, 40; 1896–1906, 80.

1883 Electrical Engineering program started. Master of Mechanic Arts offered with similar requirements to Master’s in Letters.

1884 Barnum Museum for Natural History constructed.

1893 The Medical School of Tufts College opened with a student body of 80.

1899 The Boston Dental College became Tufts College Dental School and was given the right to confer a Doctorate of Dental Medicine. The first mention of research was made with a plea for project funding.

1901 A new three-story medical/dental facility opened on the corner of Huntington Avenue and Bryant Street.

1903 Medical School had 384 students and 103 faculty (largest in New England, 7th in the U.S.).

1905 President Capen died; Frederick William Hamilton served as Acting President. At its 50th anniversary, Tufts had 1,000 students and 175 instructional staff, and was 38th in size in the U.S.

1906 Frederick William Hamilton became President. Continued concern with admissions numbers and quality.

1908 New library, named for Rev. Charles Eaton at request of Mrs. Carnegie, ready but unopened for two years for lack of operating funds.

1909 The Graduate School of Arts and Sciences was established.

1910 Charter change created separate Jackson College for Women, opened with 54 students from the College of Letters, and 6 transfer, 2 special, and 23 new students. Separate classes from men, except with small numbers or inadequate lab space. Women offered choice of Jackson College or Tufts degrees.

1912 President Hamilton resigned; Professor William L. Hooper (Engineering) named Acting President. Coeducation resumed, though Jackson College continued as legal entity.

1913 Dean Harold Williams retired as head of Medical and Dental Schools. In 1917 separate deans were appointed for the first time.

1914 Hermon Cary Bumpus elected as 5th President.

1918 President Bumpus resigned; John Albert Cousens named Acting President, and President in 1920. Enrollments were Jackson, 174; Engineering and Letters, 521; Medical, Dental, and Pre-med programs, 900. The size and reputation of the health–related programs made many outsiders think of Tufts only as a medical/dental college.

1923 Major bequest from Board Chairman Fletcher intended to found School of Law and Diplomacy. It took four years to settle the estate, but five professorships in related liberal arts areas were endowed immediately.

1927 Stratton Hall Dormitory for Women opened. About 51% of Liberal Arts students, 29% of Jackson and 62% of Engineering lived off campus. No graduate, medical, or dental students lived on campus. Operating budget exceeded $1,000,000.

1929 Tufts first accredited by the New England Association of Schools and Colleges (NEASC).

1930 The New England Medical Center, linking Tufts Medical School, Boston Dispensary, and the Boston Floating Hospital, was chartered by the Massachusetts General Court. In 1931, a new building was constructed for the Floating Hospital.

1931–1932 Gymnasium built, later named for President Cousens. The Fletcher School of Law and Diplomacy was founded and administered by Tufts College and Harvard University.

1933 The Fletcher School opened with 21 students. Degrees of MA and MA in Law and Diplomacy authorized; PhD was added later. Fletcher’s Edwin Ginn Library received several major collections.

1934 Discussions with Harvard over administrative difficulties resulted in a new agreement giving Tufts “entire control” of Fletcher, to be run “with the cooperation of Harvard University.”

1937 President Cousens died; Dean George S. Miller named Acting President.
1938 Leonard Carmichael elected President.

1940 Trustees adopted a formal statement of academic freedom and tenure proposed in 1938 by American Association of University Professors (AAUP) and Association of American Colleges.

1945 In 1939–40, 80% of the Hill students came from within 50 miles of Medford; by 1945 every state was represented. Affiliation established with School of the Museum of Fine Arts and Boston School of Occupational Therapy.

1946 Previous enrollment of 2,369 with 307 veterans rises to 3,385 with 2,125 veterans. In 1946–47, 80% of enrollees in Liberal Arts and Engineering were veterans.

1947 PhD programs reauthorized in Arts and Sciences.

1948 Farnsworth Building added to New England Center Hospital, transforming diagnostic clinic to general hospital for adults. Overcrowding in Eaton Library, as collection grew past 150,000 volumes.

1950–1952 At the conclusion of its first century, Tufts had an enrollment of 3,356, operating budget that exceeded $5,000,000, and endowment of $11,000,000.

1953 President Carmichael resigned. Professor Nils Yngve Wessell named President.

1954 Posner Hall, the first dorm in Boston, opened. Funds from the Lincoln Filene Foundation established the Civic Education Center.

1955 Name changed from Tufts College to Tufts University, retaining corporate identity of Trustees of Tufts College. Undergraduate divisions were renamed colleges and graduate divisions, schools. The Dental School officially became Tufts University School of Dental Medicine (TUSDM).

1959 Boston School of Occupational Therapy merged with Tufts as a department in College of Special Studies.

1960 Formal adoption of brown and blue colors used informally, but without definition of shade, since 1878.

1962 Tufts University Program for $7,550,000 successfully completed. Objectives included $1,875,000 for faculty salaries; $905,000 for financial aid; $100,000 for improving campus grounds. The Wessell Library; Dana Laboratory; Michael Laboratories; Lincoln Filene Center; Eaton Library conversion; Patten Auditorium; and TU–BSOT headquarters also resulted.

1960–1965 The hey-day of graduate school expansion came in the 1960s. In the 7 years ending in 1964, the number of annual applications rose from 219 to 759; actual graduate student registration went from 220 to 465 (including part-time); master’s programs rose from 21 to 31; and doctoral programs rose from 8 to 20. There were 121 PhD candidates enrolled in 1964, and in 1966 there were the equivalent of 404 full-time students of whom 260 were actually enrolled full-time. The maximum of 300 full-time equivalents set by the Trustees in 1959 was reached in 1964, and in 1965 the idea of setting numerical limit on enrollment was abandoned.

1961 Major revision of undergraduate curriculum. New England Medical Center became Tufts–New England Medical Center (T–NEMC), a tax–exempt unincorporated alliance.

1962 Inauguration of overseas program with Tufts-in-Italy.

1963 Eliot-Pearson School for Early Childhood Education merged with Tufts University as the Eliot-Pearson Department of Child Study.

1964 Creation of the Experimental College within the Faculty of Arts and Sciences.

1965 The Boston Dispensary, Floating Hospital, and Pratt Clinic–New England Center Hospital merged to form the New England Medical Center Hospitals, as the clinical unit of the T–NEMC. Phasing out of non-degree programs in College of Special Studies.

1966 President Wessell resigned; Professor Leonard C. Mead named Acting President.

1967 Burton Crosby Hallowell elected President.

1968 Termination of Tufts-in-Italy; introduction of Tufts-in-London. Trustee action terminated Crane Theological School in its 99th year.
1973 Construction of Dental Health Sciences Tower and Proger Building for the New England Medical Center Hospital to form an operating unit as the first block of a new health center.

1975 Barnum fire resulting in loss of Jumbo, Tufts’ elephant mascot, donated by P.T. Barnum, an original Trustee, in 1880s.

1976 President Hallowell resigned; Jean Mayer elected President. Nutrition Institute inaugurated.

1977–1978 Agreement on cross-registration and a five-year music degree with New England Conservatory of Music established.

1978–1979 School of Veterinary Medicine accepted its first class. Gift of Priory at Talloires, France and inception of special programs.

1980–1983 The Sackler School of Graduate Biomedical Sciences was created. The School of Nutrition was created, absorbing the Nutrition Institute and Graduate Department of Nutrition. The Cabot Intercultural Center in Medford and the Large Animal Hospital in Grafton opened. The Human Nutrition Research Center on Aging (HNRCA) and the new Floating Hospital of the New England Medical Center opened.

1985 The Mayer Campus Center opened. Successful completion of five-year $140,000,000+ Capital Campaign. The Foster Hospital for Small Animals opened in Grafton.

1986 The Arthur M. Sackler Center for Health Communications opened in Boston.

1989 With the granting of 50 PhD degrees, Tufts became eligible for Research Category I.

1990 Tufts’ endowment reached $155,600,000. The campaign raised $42,900,000, the highest amount in Tufts’ history. The Science and Technology Center in Medford was completed.

1991–1992 President Mayer announced his retirement effective July 1992 to become the first Tufts’ chancellor. The Olin Building for Language and Culture Studies, the Aidekman Center for the Arts, and South Hall dormitory were dedicated. The New Campaign for Tufts successfully completed, raising $251 million. John DiBiaggio became Tufts’ 11th President.


1993–1994 TUSDM celebrated its 125th year. School of Medicine celebrated its 100th year. The Loew Veterinary Medical Education building in Grafton was dedicated. College of Engineering celebrated its centennial. The HNCRCA was renamed in honor of Jean Mayer. Tufts was recognized as a Research I Institution by the Carnegie Foundation.

1995 The School of Nutrition was renamed the School of Nutrition Science and Policy. Tufts was included among the top 25 research universities in the country by U.S. News and World Report.

1996–1997 Dedication of Tisch Library. Tufts moved up to 22 in the ranking of the country’s top research universities by U.S. News and World Report. Study abroad programs launched in Ghana and Chile. The Department of Public Safety received the Jeanne Clery Award for excellence in campus security.

1998 Urban and Environmental Policy celebrated its 25th year.

1999 The Gantcher Family Sports and Convocation Center opened on the Medford/Somerville campus. The first candidates for the MA in Humanitarian Assistance, a joint degree offered by The Fletcher School and the School of Nutrition Science and Policy, graduated.

2000 The Student Services Center in Dowling Hall opened to Arts, Sciences & Engineering students (and some services to Nutrition and Fletcher students). The Fletcher School launched the Global Master’s Program (GMAP)—a combined residency and online graduate program. The College of Engineering became the School of Engineering.

2001 President John DiBiaggio resigned. Lawrence S. Bacow was elected as Tufts’ 12th president.

2002 After 21 years, Sol Gittleman stepped down as Provost. Jamshed Bharucha became Tufts’ new provost and senior vice president. The School of Medicine’s Graduate Programs in Public Health received accreditation
from the Council on Education for Public Health. The Jaharis Family Center for Biomedical and Nutrition Sciences was dedicated. The Tufts Tomorrow Campaign successfully raised $600 million.

2004 The Cummings Foundation committed to investing $50 million in the veterinary school over 15 years and it was renamed Cummings School of Veterinary Medicine at Tufts University (TCSVM) in 2005. The Peace Corps ranked Tufts in the top 5 of the Top Producing Small Colleges and Universities. Tufts entered into a historic partnership with Medford and Somerville, that included providing financial support to the cities, working together on economic development projects, guaranteeing student financial assistance, and continuing many existing collaborations. Bello Field, a new synthetic turf field located opposite Cousens Gym, was completed. The Tower Café opened in the Drazenet Tower of Tisch Library.

2005 Tufts launched OpenCourseWare. Nearly 50 Tulane University students, displaced by Hurricane Katrina, spent the fall semester at Tufts. Pierre and Pam Omidyar, both graduates of Tufts, invested $100 million in international microfinance initiatives, the largest single gift in Tufts' history, as well as the largest private allocation of capital to microfinance by an individual or family, through a unique partnership with Tufts. The Omidyars also committed a $25 million challenge grant to expand the undergraduate scholarship numbers. TCSVM was awarded a $15 million grant from the National Institutes of Health to build a state-of-the-art, regional biosafety laboratory.

2006 Tufts endowment grew from $657 million to $1.2 billion. Jonathan Tisch made a landmark $40 million gift to name the Jonathan M. Tisch College of Citizenship and Public Service. Delta Dental of Massachusetts awarded $5 million and Nobel Biocare AB, of Sweden, awarded $4 million to TUSDM. Tufts held its 150th commencement. Sophia Gordon Hall, the Medford/Somerville campus’s first residence hall since 1991, opened. A 137-space student parking garage opened. TCSVM’s small animal clinic was completed, and an addition was built at the Large Animal Hospital.

2007 Steve Tisch (A71) made a commitment of $10 million to support Tufts’ planned $30 million athletics and fitness facilities expansion and renovation. Steven Jaharis, M.D. (M87) and his father, Michael Jaharis, made a commitment of $15 million from the Jaharis Family Foundation for new facilities at the School of Medicine. The Perry and Marty Granoff Music Center opened.

2008 The Fletcher School celebrated its 75th anniversary. The Leonard Carmichael Society (LCS), the largest student-run organization on campus, celebrated its 50th anniversary. The Tufts Asian American Center 25th anniversary was celebrated. Tufts announced the establishment of a Loan Repayment Assistance Program to help its graduates working in public service pay a portion of their annual educational loan bills, the first university-wide program of its kind in the U.S. The philanthropy of the late Frank C. Doble, Class of 1911, resulted in a gift of $136 million. T-NEMC was renamed Tufts Medical Center and with Tufts University won a prestigious $20 million federal grant to streamline the process of turning laboratory research discoveries into real world treatments for patients. Tufts became the state's first university to sign an agreement with Massachusetts Technology Collaborative to join “Clean Energy Choice-On Campus.” A sky-breaking ceremony was held to celebrate the vertical expansion of TUSDM’s 10-story tower. The medical school opened a Clinical Skills and Simulation Center. TCSVM's Agnes Varis Campus Center was dedicated and construction of its New England Regional Biosafety Laboratory completed. TCSVM opened a new ambulatory clinic in Woodstock, CT.

2009 The Tufts University Police Department earned accreditation for the second time from the Massachusetts Police Accreditation Commission, making it one of just 28 police agencies out of 400 across the state to achieve this status. Tufts Medical Center won approval as a major adult trauma center from the American College of Surgeons and the Massachusetts Department of Public Health, a designation that will help improve service to the local community, raise the standard of care throughout the hospital, enhance student and resident training, and generate more referrals. The Corporation for National and Community Service named Tufts to the President’s Higher Education Community Service Honor Roll with Distinction, the highest federal designation a college can achieve for its commitment to civic engagement. TCSVM received a $185 million USAID grant, with other institutions, to study pandemics. Tufts works with the University of Minnesota and others on the RESPOND portion of the grant, which involves outbreak sources and developing responses.

2010 President Lawrence S. Bacow and Provost and Senior Vice President Jamshed Bharucha announced that they would resign in summer 2011. Trustee Emeritus Edward H. Merrin, A50, and his wife, committed $30 million to establish the Merrin-Bacow Fellows Scholarship Fund to support financial aid and honor President Bacow. A new doctoral program in water diplomacy received $4.2 million from the National Science
Foundation's Integrative Graduate Education and Research Traineeship (IGERT) grant program. The Tufts student radio station celebrated its centennial.

2011 The Board of Trustees appointed Anthony P. Monaco, the pro-vice-chancellor for planning and resources at the University of Oxford and the neuroscientist who identified the first gene specifically involved in human speech and language, as Tufts' 13th president.

2012 David R. Harris became Tufts’ Provost and Senior Vice President.
## CHIEF INSTITUTIONAL OFFICERS

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<th>Function or Office</th>
<th>Name</th>
<th>Exact Title</th>
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<td>Dawn Geronimo Terkla</td>
<td>Associate Provost of Institutional Research, Assessment, and Evaluation</td>
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</table>

## Deans of Schools

| School of Arts and Sciences   | Joanne Berger-Sweeney       | Dean                                                                       | 2010                |
| Graduate School of Arts and Sciences | Lynne Pepall | Dean                                                                       | 2006                |
| School of Engineering         | Linda Abriola               | Dean                                                                       | 2003                |
| Cummings School of Veterinary Medicine | Deborah Kochevar | Dean                                                                       | 2006                |
| The Fletcher School of Law and Diplomacy | Stephen Bosworth | Dean                                                                       | 2001                |
| Friedman School of Nutrition Science and Policy | Robin Kanarek | Interim Dean                                                               | 2011                |
| School of Dental Medicine     | Huw Thomas                  | Dean                                                                       | 2011                |
| School of Medicine            | Harris Berman               | Dean                                                                       | 2009                |
| Sackler School of Graduate Biomedical Sciences | Naomi Rosenberg | Dean                                                                       | 2004                |
| Tisch College of Citizenship & Public Service | Nancy Wilson | Interim Dean                                                               | 2011                |

## Academic Affairs

<p>| A&amp;S                           | James Glaser               | Dean of Academic Affairs                                                  | 2010                |
|                               | Nancy Bauer                | Dean of Academic Affairs                                                  | 2012                |
| GSAS                          | Lynne Pepall               | Dean                                                                       | 2006                |
| SOE                           | Elena Naumova              | Associate Dean for Research                                               | 2012                |
|                               | Sameer Sonkusale           | Associate Dean for Graduate Education                                     | 2012                |
|                               | Chris Swan                 | Associate Dean for Undergraduate Curriculum Development                  | 2012                |
| TCSVM                         | Angie Warner               | Associate Dean for Academic Affairs                                       | 2003                |
| Fletcher                      | Peter Uvin                 | Academic Dean                                                             | 2007                |
| Friedman                      | Patrick Webb               | Dean for Academic Affairs                                                 | 2005                |</p>
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<td>Lynne Pepall</td>
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<td>SOEGP</td>
<td>Sameer Sonkusale</td>
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<td>TCSVM</td>
<td>Rebecca Russo</td>
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<td>Fletcher</td>
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<td>Friedman</td>
<td>Stacey Herman</td>
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<td>2010</td>
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<td>Robert Kasberg</td>
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<td>Jo-Ann Jack</td>
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<td>Carol Duffey</td>
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<td>Patricia Reilly</td>
<td>Director, Financial Aid &amp; Co-Manager Student Financial Services</td>
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<td>Mary Y. Lee</td>
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<td>Gary Roberts</td>
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<td>Date of CIHE letter</td>
<td>Detailed actions, items of special attention, or concerns</td>
<td>Cited CIHE Standard(^2)</td>
<td>Self-Study page</td>
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<tr>
<td>04/24/08</td>
<td>Give emphasis to the institution’s success in achieving the strategic planning goals of both the institution and the individual schools.</td>
<td>2.2 2.3 2.4 2.8</td>
<td>3, 4, 5, 6, 7, 16, 29, 32, 40, 41, 70, 76, 77, 85</td>
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<tr>
<td>04/24/08</td>
<td>Give emphasis to the institution’s success in clarifying the role and status of research, including progress in enhancing outside funding and institutional support for faculty research.</td>
<td>5.21 5.22 5.24</td>
<td>xxi, 2, 3, 4, 6, 7, 12, 15, 17, 20, 23, 26, 36-48, 71, 72, 82, 84, 87, 88, 89, 95</td>
</tr>
<tr>
<td>04/24/08</td>
<td>Give emphasis to the institution’s success in measuring student achievement and success in graduate and professional programs in addition to what is being done for undergraduate programs; and using such data to effect programmatic change and improvement.</td>
<td>4.48 4.49 4.52 4.55</td>
<td>19-33, 55-59, 63-66</td>
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<tr>
<td>11/2/10</td>
<td>Update the Commission on the university’s success in implementing the program in Ras Al Khaimah (RAK), with particular emphasis on ensuring its financial stability.</td>
<td>N/A</td>
<td>17, 51</td>
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\(^2\) Standards cited are the revised 2011 Standards for Accreditation most comparable to standards cited in the 2008 CIHE letter.
Introduction

Preparations for the 2013 Comprehensive Evaluation began in 2008 shortly after the university received the Commission on Institutions of Higher Education letter outlining three areas in which the evaluation should place emphasis:

1. Achieving the strategic planning goals of both the institution and the individual schools;
2. Clarifying the role and status of research, including progress in enhancing outside funding and institutional support for faculty research;
3. Measuring student achievement and success in graduate and professional programs in addition to what is being done for undergraduate programs; and using such data to effect programmatic change and improvement.

- Letter to President Bacow, April 24, 2008

Throughout the self-study, evidence of this work is documented. Early in 2011, President Larry Bacow appointed Dawn Geronimo Terkla, Associate Provost of Institutional Research, Assessment, and Evaluation and Accreditation Liaison Officer, as the Steering Committee Chair and the working groups and steering committee members were identified in consultation with the Provost’s Executive Committee. Care was taken to ensure broad representation from across the university.

In all, eleven university-wide working groups were formed to address each accreditation standard. Nearly 100 faculty, staff, administrators, students, trustees, and alumni were involved in these groups, gathering information, sharing their personal knowledge and experience, and providing analyses of the effectiveness of the university. Working group members directly solicited information and data from approximately 200 members of the Tufts community. In addition to the working group chairs who formed the core of the Steering Committee, the committee is comprised of the executive vice president, provost, and other school-based leaders, ensuring a committee that provided an institutional perspective, as well as school-based expertise.

The Office of Institutional Research and Evaluation’s Associate Director and representatives from each of the schools began work on the Data First Forms in 2010.

A kick-off event for the self-study process was held in September 2011 and working groups began meeting shortly thereafter. As working groups completed their work, standard narratives were submitted to the Steering Committee for their review. They discussed the narratives, as well as reviewed each in context with other standards. Throughout spring and summer 2012, the narrative draft, Data First forms, and E and S forms were continuously updated. In July 2012, feedback on the draft was requested from the deans at all of the schools and in September 2012, the narrative was shared with the larger Tufts community for feedback. In fall 2012, final data was collected for the Data First forms and Tufts’ Board of Trustees approved the report at their November 2012 meeting.
Institutional Overview

As a small Very High Research Activity University (RU/VH), Tufts University has joined the ranks of a distinct group of private universities that have a college imbedded in the central core, surrounded by highly distinctive professional schools in a broad range of disciplines. In an intimate atmosphere, programs in the arts, humanities, social sciences, mathematics, natural sciences, international affairs, engineering, and the health professions provide students with opportunities to work at the frontiers of their disciplines.

The last three accreditation self-studies began during a presidential transition. In 1992, President Jean Mayer had already announced his retirement when the self-study process began and President John DiBiagio informed the community in fall 2000 that he would be stepping down just as the re-accreditation process had begun. In 2010, both President Lawrence Bacow and Provost Jamshed Bharucha announced they would step down in summer 2011, just as the accreditation working groups were actively engaging in the self-study process.

The past five years have been challenging for many universities. Tufts was not immune to the recent economic downturn, however its solid financial practices and strong leadership kept the university on course to maintain its financial stability and continue the work of its research and teaching mission.

Tufts completed its $1.2 billion Beyond Boundaries capital campaign in June 2011, the largest fundraising effort in its history. The goal was achieved during the most challenging economic environment in decades. Beyond Boundaries garnered the six largest gifts in Tufts’ history, including two donations exceeding $100 million. The campaign added $609 million to the university’s endowment.

Increasingly, institutions are challenged to find additional resources for financial aid in order to maintain a diverse student body. Prospective students are forced to carefully analyze financial aid packages from schools. Beyond Boundaries enabled Tufts to create innovative financial aid programs including: scholarships for needy undergraduates to attend summer school; the elimination of loans for students from families with modest incomes; paid summer internships at nonprofits; and a university-wide loan repayment assistance program that helps alumni working in public service or nonprofit jobs repay a portion of their education loans.

The campaign made possible the creation of 23 new named professorships that have helped Tufts retain world-class researchers and attract new talent. Many faculty have benefitted from development and research funds raised during the campaign.

In the past five years, Tufts has invested significant efforts in the development of comprehensive assessment programs to improve and ensure the delivery of quality academic programs and student learning. Outcomes assessment committees have worked to identify program and student learning outcomes and academic leaders support efforts to increase the effectiveness of programs using the data gleaned from assessment.

The 2013 self-study, written in President Anthony Monaco’s first year, demonstrates Tufts’ significant successes made over the past ten years, as well as the challenges it surmounted or continues to face. The self-study has come at a time when critical reflection on missions, goals, and achievements is occurring in order to inform both strategic and capital campaign planning under the new leadership of President Monaco and Provost David Harris. Major self-study themes, including the challenges associated with increasing the diversity of students and faculty; balancing faculty research and teaching; sustaining comprehensive systems of assessment of student learning; offering sufficient financial aid to attract the best students, limit their educational debt, and attract an economically and racially diverse student body; encouraging active citizenship; promoting interdisciplinarity and collaboration in research, teaching, and administration in an environment that is decentralized; and increasing sustainability efforts on a campus more than 150 years old, will likely serve as priorities in the next university-wide strategic plan. Already President Monaco has established councils and thematic working groups to further explore the aspirations expressed by students, faculty, staff, trustees, and alumni as he embraced the Tufts community throughout his first year. The upcoming years will prove to be another opportunity for improvement and discovery as Tufts continues on this trajectory.
Tufts College and Tufts University: A Tale of Several Presidents

It should be no surprise that the first four Presidents of Tufts College were Universalist ministers. Like most of the higher education institutions in the United States in 1852, Tufts was founded by a religious order for the exclusive education of its parishioners, children, and clergy. The seminary arrived in 1869. But, Universalism represented a unique Protestant tradition, and that difference permanently characterized Tufts. Other denominational colleges were established by faiths that promised salvation only for themselves and had no tolerance for other forms of worship; when the Quaker woman Mary Dyer was hanged on the Boston Common in 1660, there were Harvard College graduates on hand ready with the noose. The genial Universalists preached universal salvation: the doctrine was inclusive, tolerant, and welcoming to all comers.

Welcoming as they might have been, these clergy knew little about running an institution, and well into the 20th century, the college on a hill in Medford and Somerville survived on tuition and a shoestring. Along the way, it added a medical school, dental school, and an engineering program, none of which had sufficient resources and always had difficulty in gaining professional accreditation. When the Flexner Report on Medical Education appeared in 1910, it recommended that Tufts cease medical education. The College had staggered through the financial panics of 1873 and 1907, then the Depression of the 1930s, selling off land to survive. The undergraduate college, however, remained a congenial and accessible place for local students, many of whom commuted. The first non-clergy President, appointed in 1915, was Herman Carey Bumpus; he was a different breed, possessing “the new German research degree”, the PhD, which he earned from Clark University in 1891. Bumpus was a scientist, like earlier presidents at Johns Hopkins, Columbia, and Harvard, where new research initiatives were being pursued. Bumpus pushed at Tufts College, and got nowhere. He stayed four years and left for a research position at the University of Wisconsin.

His successor, John Albert Cousens, who became President in 1919 and died in office in 1937, did make changes, but none that challenged the comfortable complacency of the little college on Walnut Hill. President Cousens took his lead from Harvard’s Abbot Lawrence Lowell, who, in the wake of the Sacco-Vanzetti arrests, trial, and execution between 1920 and 1927, decided that the immigrant populations storming the gates to Harvard Yard were a threat to the institution. President Cousens presided over Tufts at a time when ethnic quotas became the unwritten law of New England higher education, Tufts included. During the Cousens presidency Tufts remained a pleasant place to spend four years; it was friendly, homogeneous, and generally mediocre.

The next two Presidents carried the sleepy New England college with underachieving professional schools, enormous financial problems, and little ambition, into “The Golden Age of Boston Higher Education.” Both had roots in the University of Rochester, both were ambitious academic psychologists with earned doctorates who wanted to move the institution beyond the vision of a satisfied faculty and contented student body. Leonard Carmichael (1938-1952) hoped to shake the Tufts community out of its tranquility, survived financial crises by eagerly embracing the Navy V-12 program that brought hundreds of new students and their tuitions to the campus during WWII, and left in his mid-50s to pursue another career at the Smithsonian Museum in Washington, DC. His hand-picked successor, Nils Yngve Wessell, was determined to make Tufts more than it had been or wanted to be. He sought faculty with PhDs, advocated research as part of the faculty’s mission, changed the institutional name to Tufts University, and urged the faculty to begin doctoral programs. Without resources and fundraising, the programs were at best hollow and viewed with suspicion by the accrediting agencies. In 1966 he resigned while still in his early 50s to become head of the Alfred P. Sloan Foundation. He had done what he could to break down the walls of parochialism: during his presidency, the first non-Harvard PhD was hired in the English Department; he also saw the hiring of the English Department’s first Catholic and Jew. The History Department appointed its first non-Protestant, a Greek Orthodox! But, as President of a fledgling university with 20 new PhD programs and a library smaller than Bowdoin’s, Wessell realized that he had gone as far as he could with a senior faculty reluctant to undertake research initiatives, who believed that there was a fundamental conflict between teaching and research. Wessell could not afford to hire research faculty. He hoped that his successor might build on his accomplishments; but that was not to be.

Tufts had found its 9th President in 1967. Burton Hallowell had come from Wesleyan and looked forward to a productive tenure at Tufts. Instead, he got the 1960s and early 1970s when the university fell on him. He inherited a budget deficit that left Tufts financially crippled for the first years of his presidency; then came anti-war demonstrations, building occupations, sexual liberation, and anything else that angry students could blame on the university. Burt Hallowell threw in the towel in 1975, barely 60 years old. He went on to a
successful career managing the Keystone Funds. He left Tufts with a balanced budget, few resources, no tradition of successful fundraising, and a self-study report that pointed to five difficult years, followed by a decade of even greater peril for the institution. One education historian actually questioned Tufts’ viability to survive. The College was accepting one out of every two applicants; the professional schools were underfunded. Tufts was in a downward spiral, and no one knew how to stop it. Then, in 1976 the gods smiled on Walnut Hill.

Nothing in Tufts history had prepared the community for the arrival of Jean Mayer. He was French-born, a graduate of the Sorbonne, spent his youth fighting Nazis in his native France, got a PhD in Physiology from Yale, and became one of America’s leading academic nutritionists, a field that was of little interest to mainstream medical doctors. He landed at Harvard’s School of Public Health, worked the hallways of Washington, DC to make nutrition policy for a reluctant nation, and wanted to be a President of a university in Boston that had a medical school. He had little hope at Harvard, failed to compete at Boston University when John Silber was president who, when he assumed office, became arguably the most reputed research scholar on the department of Agriculture to put $10 million in its budget for a,...

Woolf thanked the Board, waited a week, and then accepted the Directorship of the Institute for Advanced Study at Princeton, leaving Tufts without a first or second choice. An emergency meeting was set up with the third choice, and Jean Mayer became the 10th President of Tufts University, by accident. By the time he retired 16 years later in 1992, he had transformed the institution. Mayer led two fundraising campaigns that raised $400 million, an unbelievable amount for this sleepy school with a history of not asking alumni for money. He also raised another $100 million of federal money for Tufts by going directly to the Congressional delegation. Mayer as a nutritionist knew that the medical doctors and clinicians who ran the NIH study panels were not interested in wellness or prevention; they were interested in disease, and nutrition got short shrift. The Tufts President met with Speaker of the House Tip O’Neill and convinced him that older Americans needed nutritional evaluation. O’Neill ordered the Department of Agriculture to put $10 million in its budget for a nutrition center at Tufts University, without peer review. Thirty years later, two MIT economists wrote the following in The National Bureau of Economics Working Papers: “The birth of academic earmarks can be traced to the 1970s, when Jean Mayer, President of Tufts University...secured funding for an aging and nutrition center.” President Mayer had invented the academic “pork barrel.” He got another $10 million for a veterinary school, and Tufts was on its way, because of a failed presidential search and the candidate whom no one wanted. In Mayer’s second year as President, the Tufts Admissions model broke down when 300 additional students accepted the offer of admissions; the university quickly rented the Sheraton Commander Hotel in Harvard Square to accommodate the overflow. One unsuccessful presidential search had produced a leader who transformed Tufts University into an institution that would have been unrecognizable before his arrival. All the fear, anxiety, and timidity of the pre-Mayer years had disappeared. Yet, the civility remained, even with more research-oriented faculty. When Jean Mayer stepped down in 1992, he left an institution financially stable, with strong bond ratings, and an academic reputation as a superb small research university with a powerful teaching mission.

The 11th Tufts President, John DiBiaggio, was the only Tufts President in its history who had been President of another institution, in this case, two. Neither the University of Connecticut nor Michigan State University bore any resemblance to Tufts. Again, this proved to be a failed search from which Tufts benefited. The Chairman of the Board, seeking Mayer’s successor, was unhappy with the three finalists and went out himself to seek a candidate. He found John DiBiaggio, who embraced the new fundraising capacity and inaugurated one $450 million campaign that met its goals so quickly that it was raised to $600 before he stepped down in 2001. Tufts had raised $1 billion in 25 years, a figure which would have left all previous Tufts presidents, boards of trustees, and alumni in total disbelief.

When Lawrence Bacow became the 12th Tufts President in 2001, the university was ready for an explosion of academic achievement. If Jean Mayer had been the transformer of a gray, impoverished New England college into a dynamic small research university, Larry Bacow was the operator of a supercharged elevator who took the institution on a whirlwind ride upwards toward a more universal excellence in research, interdisciplinary clustering of faculty interests, and the building of bridges within and across schools. He was aware, as well, that fundraising never stops, took on one enormous $1.2 billion campaign, and handed the university over to Anthony Monaco, the 13th President, in 2011. He is a first for Tufts: the first MD, the first neuroscientist, the first President who, when he assumed office, became arguably the most reputed research scholar on the faculty, a world-class scientific investigator.
The past 45 years have produced the metamorphosis. Tufts, led by its most recent four presidents, has achieved an excellence unlike that of the traditional American research university, which averages 500 to 800 doctorates annually led by a faculty charged to win the Nobel Prize. Tufts, while pursuing ardently a research agenda for all its schools, has remained true to its teaching mission at both the undergraduate and graduate levels. We are, in every sense, a teaching university where everyone does research.

Sol Gittleman
University Professor
Standard 1: Mission and Purposes

DESCRIPTION

For more than 140 years, Tufts University operated without a formal mission statement. Tufts’ current formal mission is a Vision Statement, adopted by the Board of Trustees in 1994 and consistent with the Tufts’ charter:

<table>
<thead>
<tr>
<th>University Vision Statement</th>
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<tbody>
<tr>
<td>As we shape our future, quality will be the pole star that guides us. We will seek quality in our teaching and research and in the services that support our academic enterprise. Our programs will be those that meet our own high standards, which augment each other, and that are worthy of the respect of our students and of scholars, educators, and the larger community.</td>
</tr>
<tr>
<td>For students, our search for quality will mean opportunities both in and beyond the classroom to become well educated, well-rounded individuals, professionals, and scholars. For faculty and staff, it will mean opportunities to realize their talents in the service of Tufts’ goals.</td>
</tr>
<tr>
<td>Fulfilling our vision of quality will mean choices. No University can do everything for everyone, and we will seek to do those things in which we can excel. Nor is quality static, and we will therefore welcome change and innovation, continually improving quality in every aspect of the University.</td>
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<tr>
<td>Learning: Knowledge is important but alone is not enough. Learning must be lifelong. We will teach our students how to obtain, evaluate, and use information. We will provide them to use historical perspective and to be receptive to new ideas. Our students will be sensitive to ethical issues and able to confront them.</td>
</tr>
<tr>
<td>Teaching and The Search for Knowledge: As a teaching University, we will honor and promote effective teaching, both inside and outside the classroom. We will seek an environment in which faculty and students are mutually engaged in the search for knowledge.</td>
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<tr>
<td>We value research and scholarly activities independently from their contribution to teaching, but they will never become so important that we forget our commitment to educating our students.</td>
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<tr>
<td>We believe technology can help us to enhance our educational programs and the services that support them. We will seek opportunities to use it effectively.</td>
</tr>
<tr>
<td>Citizenship: As an institution, we are committed to improving the human condition through education and discovery. Beyond this commitment, we will strive to be a model for society at large.</td>
</tr>
<tr>
<td>We want to foster an attitude of “giving back;” an understanding that active citizen participation is essential to freedom and democracy; and a desire to make the world a better place.</td>
</tr>
<tr>
<td>Diversity: We value a diverse community of women and men—of different races, religions, geographic origins, socio-economic backgrounds, sexual orientations, personal characteristics, and interests—where differences are understood and respected.</td>
</tr>
<tr>
<td>Global Orientation: We will cultivate in our students an understanding of the citizens and cultures of the world, realizing this goal through our curriculum, study abroad, and students who come to Tufts from abroad.</td>
</tr>
<tr>
<td>We will strive to contribute to global intellectual capital, harmony, and wellbeing.</td>
</tr>
<tr>
<td>Fiscal Responsibility: Fulfilling the University’s mission and its obligations to its students, faculty, staff, and other constituencies requires that we pursue policies that ensure fiscal soundness, now and in the future. To accomplish this, we will seek out new resources as well as using those we have as efficiently and effectively as possible.</td>
</tr>
</tbody>
</table>

Tufts ensures that new initiatives and continuing programs support its fundamental mission. The themes of the Vision Statement are reflected in the schools’ mission statements. Friedman’s mission, for instance, is “to improve the nutritional well-being of people worldwide through the creation of new knowledge, the application and dissemination of evidence-based information, and the education and training of future leaders in the field.” School-strategic plans supported by the Beyond Boundaries capital campaign likewise supported Tufts’ mission. While the Vision Statement does not necessarily serve as a frequent point of reference, Tufts’ mission and purposes are accepted and understood by trustees, faculty, administrators, staff, and students.

APPRAISAL

While there is broad consensus at Tufts about the mission of the university and its schools, there is also widespread sentiment that we would benefit from a clearer and more concise formal statement of its mission than the one adopted in 1994. It has been argued that the current Vision Statement does not articulate clearly the distinction between the university’s mission and its institutional values or enabling strategies. Additionally,
given Tufts’ status as RU/VH, some community members have suggested that research deserves a more prominent place in the mission.

Since joining Tufts in summer 2011, President Anthony Monaco has often spoken of the university’s mission as fundamentally tripartite, comprising teaching and learning, research and scholarship, and a demonstrable positive impact on society, which may take forms such as entrepreneurship and technology transfer as well as active citizenship and public service.

President Monaco has made clear his intention to ensure that Tufts remains an exceptional place to learn, teach, work, and pursue research and scholarship. He also shares a deep commitment to the university’s tradition of civic engagement. As he pointed out in his Inaugural Address, “From its founding, Tufts has viewed learning as a step towards active citizenship in the world.” Only a few weeks after arriving on campus, the president noted that it had already become clear to him that the Tufts community was truly passionate about its commitments to both diversity and sustainability. Announcing plans to launch university-wide councils to make recommendations for action in both areas, he said, “Those are commitments I share, and it is up to all of us to work together to sustain our momentum.” In line with the president’s belief that focusing on shared goals and integrating activities across schools offered an opportunity to greatly amplify Tufts’ impact on society, his first year also saw significant discussion of how best to advance interdisciplinary research and graduate education within the university.

PROJECT

The development of Tufts itself, the changing and in many respects challenging external environment, and the arrival of a new president and provost all combine to set the stage for a reassessment of university priorities and strategies. Fall 2012 will see the launch of a university-wide strategic planning process whose goal will be to enable Tufts to advance and sustain its mission focused on transformative change for the 21st century. Within this strategic and consultative visioning process driven by President Monaco and Provost Harris will be the crafting of a forward-looking mission statement aligned with university initiatives. In anticipation of this process, the Council on Diversity has already been asked to make recommendations on the role diversity should play in a future revision of the university’s formal mission statement. The new formal statement of the university’s mission will be presented for adoption by the board, most likely in the second half of 2013.

INSTITUTIONAL EFFECTIVENESS

The schools of Tufts University regularly review their missions to ensure their programs and services are in alignment. As school-based strategic plans and budgets are developed, missions are considered. At the university level, a vision or value statement has served as Tufts’ mission statement for almost 20 years. It is anticipated that a new mission statement will be developed that more accurately represents the current work of the university and will be used to guide overall planning and resource allocation and enhance institutional effectiveness.
Standard 2: Planning and Evaluation

Introduction
After a decade of stable leadership, Tufts is undergoing a period of change. Tufts named its new leader, President Anthony Monaco, in spring 2011, allowing a period of transition before President Lawrence (Larry) Bacow and Provost Jamshed Bharucha stepped down in summer 2011. During the same period, several deans retired or left Tufts, providing an opportunity to build on the past decade’s accomplishments with new leadership and vision. The strategic plan in the beginning stages of development under President Monaco will build upon successes while also infusing fresh energy and ideas from incoming leadership.

Tufts operates under a confederated governance model with planning, decisions, and evaluations made at the lowest appropriate organizational level. Planning and evaluation are shared responsibilities of the president, provost, administrative leadership, and deans. The Board of Trustees provides oversight to the university and Boards of Advisors support the schools. Continuous improvement occurs through regular assessment. The provost and the Academic and Administrative councils ensure that decisions are acted upon at the central and local levels.3

Tufts successfully completed a $1.2 billion capital campaign supporting the academic plans developed in AY05-06. This campaign, Beyond Boundaries, enabled Tufts to focus on cross-cutting themes, highlighting its strengths in the life sciences, active citizenship, and international research and education, and supported the goal of making a Tufts education a possibility for academically qualified applicants.

Academic Planning
Planning occurs in accordance with Tufts’ mission, assuring alignment with the goals of rigorous teaching and learning, cutting-edge research, active citizenship, diversity, and commitment to a global perspective. Plans and programs developed by academic units drive the administrative processes and structures to support them. Multiple levels of short- and long-term planning and evaluation are continually integrated within schools, departments, and central administration.

Upon his arrival in 2001, President Bacow launched a series of initiatives to identify Tufts’ competitive advantages. After interviewing faculty, staff, and alumni and meeting with external leaders, President Bacow presented his vision in a document entitled “A University Poised.” Within this framework, he outlined the elements of a great university, including quality students and faculty, diversity, interdisciplinarity, integration of teaching and research, and resources to sustain the vision. He also outlined Tufts’ core strengths (commitment to the international perspective, providing a nurturing environment for students, supporting active citizenship, and the importance of the life sciences) to be built upon and sustained.

Following “A University Poised,” Provost Bharucha launched a strategic planning process. Deans, with the involvement of faculty and senior staff, were asked to envision the academic and research programs required to sustain Tufts as an outstanding university and to evaluate the school-level resources required to achieve this vision. The provost’s office evaluated projected resource needs to form the basis for a university-wide agenda and the Beyond Boundaries campaign.

At $1.2 billion, Beyond Boundaries doubled the goal of the previous campaign and brought to fruition the priorities in strategic plans. The campaign raised $12 million in excess of the goal, with $435 million in support of financial aid and $386 million devoted to faculty, research, and academic programs. Over $137 million was earmarked for the construction of student centers at TUSM and TCSVM, a five floor expansion of TUSDM, and improved laboratory spaces on all campuses.

Annual Budget Process
Tufts maintains a rigorous financial planning process that relies on continuous interaction between the schools and the central finance office. The annual budget process requires three-year and annual planning and continuous analysis of quarterly expenses and revenues. The strength of this process was tested during the financial crisis (2008-2010). Fortunately, the transparency and collaboration that are standard to the budgetary planning process enabled Tufts to place faculty and students first, continue funding priorities such

3 See Standard 3 for more information about governing councils.
as student financial aid, and sustain staff and services. Prudent financial management has long been a staple at Tufts, and accumulated financial reserves accompanied by careful planning enabled the university to avoid some of the severe consequences faced by peer institutions.

**New Academic Programs**
Since the last CIHE review, the provost’s office has implemented a comprehensive process for reviewing new degree and certificate programs. First, a faculty committee must develop a mission statement that defines the educational and societal goals of the program. The guidelines specify 12 areas that must be addressed, including: how the new program advances the university’s goals of academic excellence and leadership; its relationship to the school’s strategic direction; how it is based on a coherent body of knowledge with sufficient depth and breadth to justify advanced study; whether faculty expertise exists; the sufficiency of academic resources; and accrediting requirements. A master’s degree leading to physician assistant certification and a new doctoral degree in public health are two recent programs approved under this rubric.

**Curricular Enhancements**
As a university that prides itself on student-centered education, ensuring that the curriculum is fresh, cutting-edge, and attuned to a changing world is of primary importance. In 2010, TUSM implemented a new curriculum after a two-year educational strategic planning process that involved faculty, students, and administrators. The new curriculum integrates basic and clinical sciences throughout all four years. Students begin their clinical rotations earlier, giving them more time to explore core and elective clerkships. To ensure the curriculum meets planned goals, external reviews are conducted for first- and second-year courses. Additionally, every course and clerkship is evaluated, including review of the course director and student feedback. The Curriculum Committee (CC) chair, vice chair, and academic leadership study results and make recommendations for changes. TUSM’s academic dean is working with TUSDM in its curriculum reform efforts, a collaboration that will allow TUSDM to build on best practices and to avoid challenges encountered by TUSM.

**Administrative Planning**
Administrative planning directly supports schools’ academic plans. Financial, human resource, facilities and operations departments; implementation of a system to address student and staff safety, natural disasters, and systems continuity; new sustainability initiatives; and improved internal communications.

The plan’s implementation has achieved several results, including the launch of a highly-rated leadership development program for academic and administrative leaders and more training and development options for staff; a plan for information technology; redesign of the student information system (SIS); restructuring of the facilities and operations departments; implementation of a system to address student and staff safety, natural disasters, and systems continuity; new sustainability initiatives; and improved internal communications.

Another specific outcome is the appointment of Tufts’ first campus planner and the creation of the university planning department. In collaboration with school leaders, Planning developed guiding principles for more efficient and productive space use on the Boston campus. Future growth will be directed toward existing clusters of similar-use spaces to make better use of common building infrastructure, promote research collaboration, and enhance the student experience.

**Evaluation**
The Office of Institutional Research and Evaluation (OIRE) is involved extensively in university evaluation efforts. In response to requests from departments, programs, and schools, OIRE develops survey instruments and evaluation plans, collects relevant data, analyzes results, and generates reports for primary stakeholders. These efforts provide a system of continual assessment of academic and administrative effectiveness and are integral to CCs, administrators, and planners. To understand more about students’ opinions, attitudes, and choice processes, OIRE annually administers surveys to matriculating and nonmatriculating accepted
OIRE constantly evaluates its work through direct customer feedback and reflection on the efficacy of prior projects. OIRE takes an active role in assessment, and its staff participates in school-based outcomes assessment committees (OACs). OIRE staff provides guidance regarding the development of appropriate evaluation plans and the analysis of evidence, and ensures that efforts align with the expectations of accreditors. Schools and programs with professional accreditation have developed and/or use a number of systems for continued assessment and improvement of academic programs, faculty, and student services. OIRE staff also participate on major committees including Information Stewardship, SIS Steering Committee, University Committee on Teaching and Faculty Development, and many more.

**Department and Program Reviews**

Academic departments and programs are routinely evaluated to ensure that scholarship and pedagogical goals are achieved. In AY06-07, A&S began external reviews of departments. Based on an internal assessment of need and priority, four departments are chosen for annual review. The academic deans coordinate the reviews that begin with a self-study based on perceived strengths in scholarship and teaching, opportunities for growth, and priorities for future hires. The reviews provide valuable perspective about strengths, weaknesses, and opportunities as well as a road map for future curriculum development, research, and potential hires. Beginning in AY12-13, interdisciplinary programs and curricular areas will become part of the review process.

External review and strategic planning at Friedman occur at the request of the dean or university officials. The last external review occurred in 2005, in which a simultaneously coordinated strategic planning process was conducted. In response to reviewers’ observation that the multiple academic programs tended to fractionate the school, two broader departments were formed. This review also led to strengthening faculty with expertise in particular academic areas to enhance scholarship and the quality of student training.

Sackler conducts reviews of all doctoral programs every five years. The Committee on Programs and Faculty conducts reviews and makes recommendations to Sackler’s Executive Council. Each program is required to prepare detailed information about strengths and weaknesses, immediate and long-term plans and goals, and implemented recommendations from the previous review.

Each TCSVM program is reviewed internally annually and externally every five years. Changes in the PhD program have also been made in response to assessments from students and faculty. The graduate programs have recently begun to focus on writing detailed learning objectives. After review by faculty and students, the metrics developed will be included in the annual review forms and Graduate Student Handbook for AY12-13.

Tisch College created its first strategic plan in 2004 when it was still University College of Citizenship and Public Service. The plan was updated in 2007 and lays out 6 strategic goal areas and incorporates 11 student civic learning outcomes, of which 5 receive priority focus. Activities under each area are updated annually.

**Annual Reports**

Academic and administrative departments write annual reports describing the prior year’s achievements and gauging progress on local and institutional priorities. Some schools use these as communication vehicles with alumni, faculty and staff. The provost collects academic unit reports while those on administrative units are sent to the president. The synthesized document is presented annually to the trustees.

**Dashboard**

To better provide data for the trustees, a set of metrics was developed to monitor Tufts’ overall performance. The resulting dashboard aligns with Tufts’ strategic objectives; for example, increasing the quality of undergraduate students is monitored through annual data on entering class average SAT scores. The

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4 For more information on surveys conducted and data requests submitted by OIRE is available in the Workroom.
5 See Standards 4, 5, and 6 for more information on internal assessment processes. See the Institutional Characteristics form for a list of programs accredited by external agencies and the Workroom for corresponding accreditation reports and documents.
6 Every school has completed NEASC’s E1A and E1B forms for their programs.
7 These documents are available in the Workroom.
dashboard and its metrics, maintained by the OIRE, are updated three times per year and presented at each trustee meeting, catalyzing discussions on institutional strategy.

**Risk Register**
A “risk register” to assess, evaluate, and mitigate risks across all campuses is under development, based on previous work by the Administrative Council and risks identified by a task force of senior administrators. The notion of a register was presented to trustees in May 2012, and in AY12-13 it will be used to engage university and school leadership in developing plans to monitor and mitigate identified risks under their responsibility.

**APPRAISAL**

Tufts benefits from strong planning and evaluation processes. School plans coalesce around similar themes such as recent faculty efforts to reach across disciplines to plan collaborations for research and education. Since the submission of its 5th-Year Interim Report, Tufts has developed an innovative Plan for Administrative Excellence and is in the midst of formulating a master plan for the Boston campus. These efforts evoke Tufts’ localized governance model with a central administration that provides oversight and centralized services. Plans are tied to the budget process to ensure funds are appropriate to realize goals and support missions.

**Strategic Planning**
Strategic planning has reflected the university’s decentralized model, and plans have generally united around capital campaigns. There have not been templates for planning nor have there been uniform standards that specify timespan, process, and other criteria. While this “bottom-up” approach has served Tufts well, a more unified system could be constructive, particularly to enhance collaboration and best use of resources. Provost Harris is implementing a strategic planning process whose foundation began during President Monaco’s first year.

**Global Perspectives**
Tufts has a longstanding prominence in global affairs through Fletcher, Friedman, and other graduate schools, as well as undergraduate programs and study abroad opportunities. The International Board of Advisors was established in 2004, with the goal of improving and expanding Tufts’ international reputation and reach. With the provost, the international board cultivates important relationships within nations of strategic importance. More recently, the university has established the Global Health Council, a vehicle for bringing together global health faculty and administrators. Among the projects underway is a Web site that catalogs ongoing geographical initiatives and measures to ensure student safety during abroad experiences.

**Supporting Research**
Building Tufts’ research strength played a prominent role in the school-strategic plans. Considerable progress has been charted. The growth in federal and non-federal research support in the past five years, from $136 million to $167 million (Figure 2.1), demonstrates these accomplishments. Key faculty appointments also demonstrate the success of careful planning. TUSM’s 2005 Strategic Plan called for an investment in neuroscience. This plan was actualized in 2008 with the recruitment of a highly-regarded chair of neuroscience, who immediately began building the department. As a result, this department rose from #34 in the country in NIH funding to #10 over just two years. This strong presence in neuroscience has led to multiple collaborations across the university, including A&S, SOE, Friedman, and the HNRCA, as well as the establishment of the Tufts University Neuroscience Institute, a multidisciplinary initiative that capitalizes on multiple strengths in the schools.

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8 See Standards 4 and 5 for more information on cross-school collaboration.
Interdisciplinarity and Collaboration

Tufts has long (if unevenly) supported and nurtured interdisciplinary education and has many strong programs that foster intellectual creativity and innovation. “Knitting the schools together” was a signature concept of Provost Bharucha, who in 2011 delivered a white paper entitled “Collaboration at Tufts.” This paper formed the groundwork for increased interaction and was embraced by deans at a provost-led retreat. In January 2012 the vice provost’s office sponsored a symposium, “Science at Tufts for the 21st Century,” organized by a faculty committee with the goal of identifying “ways to support and advance innovative research programs at Tufts by building on the momentum generated by existing and developing collaborative, interdisciplinary research teams.” Participants brainstormed how to address funding challenges by drawing upon university-wide resources and disciplines’ technologies. President Monaco also shared his perspective on science at Tufts.

Collaborations are embedded within school planning processes. “University Seminars” were launched in AY07-08 to bring faculty and students together to address large-scale, cross-cutting topics. The provost’s office has taken the lead on providing collaboration and innovation grants to faculty, particularly in multidisciplinary fields. Research Days bring together faculty on various research topics to encourage collaboration in the Tufts community and potential industry partners. Previous topics include: sustainability; global health and infectious disease; cancer research; transnational research; drug discovery and development; environmental scholarship; cardiovascular disease, obesity, and diabetes; and infectious disease and pathogens. Departments and programs are increasingly partnering to secure large research grants, such as the partnerships for the RESPOND grant (global infectious diseases) and the CTSI award (translational biomedical research). A&S “cluster hires” address important research and educational themes.11 Tisch College created a Faculty Fellows program in 2002, engaging 74 faculty from across the university in an interdisciplinary peer group committed to developing the civic dimensions of their research and teaching. One outcome was the creation of the Tufts Community Research Center (TCRC) to provide seed grants for community engaged research. Three seed grant projects have attracted major national grants, all with faculty from multiple departments and/or schools.

Access

During the past decade, increasing financial aid has been a high priority. The objective of this growth was to move Tufts from “need-sensitive” to “need-blind” admissions. Working collaboratively between A&S, SOE, and the finance office, the financial aid budget grew from approximately $38 million in 2007 to over $57 million in 2011, a 50% growth over five years. This partnership has enabled the university to attract some of the most talented and diversified students in Tufts’ history. At the same time, declining economic conditions contributed to increased need across the university’s applicant pool, so Tufts has not yet been able to achieve its goal of becoming “need-blind.” The plan to move to need-blind admissions continues to be a priority for the university, as does reducing indebtedness for professional school graduates.

Evaluation

In the area of evaluation, OIRE generates multiple survey instruments that enable the units to gauge the effectiveness of their efforts. Schools with separate accreditation processes employ extensive processes for assessing learning outcomes. It is standard practice in the professional schools for their CCs to review course evaluations and to use this feedback to improve faculty teaching and revise the curriculum. A&S hired a consultant in 2011 who worked intensively with undergraduate and graduate departments to help them articulate their assessment system, including the development of learning outcomes that align with the curriculum, data collection, assessment administration, and rubric development.12

To facilitate the planning, management, and communication of the multiple projects to achieve the goals of the 2008 Information Technology (IT) Strategic Plan, a complementary tactical plan was developed in 2009 for use as a key component of the annual budget planning process. From FY09 to FY11, University Information Technology (UIT) completed 56 out of 60 tactical projects that had been scheduled for completion during this time period, a 93% completion rate. Tufts’ 2009 Administrative Excellence Plan named 17 discreet goals for UIT, with 12 of those goals complete, 4 in progress, and 1 ongoing as of January 2012.13

PROJECTION

With new executive leadership, Tufts is well poised to capitalize on the exceptional strengths built over the past decade. Tufts has raised its visibility as an outstanding university for teaching and scholarship, leading-edge

11 See Standard 5 for more information on cluster hires.
12 For more information about assessment see Standard 4.
13 More information regarding the evaluation of technology resources can be found in Standard 8.
research, commitment to active and engaged citizenship, and a well-defined global perspective. Work has begun to develop a university plan that knits together the assets of the individual schools, departments, and institutes. This planning began with two major initiatives: the establishment of working groups on specific themes and the development of detailed “strategic profiles” by senior leaders at the schools. The product of the working groups and the strategic profiles were intended as the precursor to the fall 2012 launch of a large-scale strategic planning process that will outline priorities and initiatives for the next decade. To further support this process and academic planning across the schools, a new position of Associate Provost of Academic Planning was created and filled in fall 2012. This Associate Provost is responsible for spearheading the strategic planning effort from the Provost’s Office and will be working directly with the core committees and the working groups on developing the plan over the course of AY 12-13. Once completed, the plan will form the basis for the university’s next fundraising campaign, most likely to be launched in FY15.

To engage stakeholders across the university on areas of high priority, President Monaco has initiated a number of working groups and councils to develop plans that would move the university forward on a range of cross-cutting themes. Already underway are deliberations on interdisciplinary graduate education, research and teaching in the neurosciences, campus diversity and inclusion, and campus sustainability. These committees involve students, faculty, administrators, and trustees. To signify his strong support for collaborative engagement on these important issues, President Monaco is chairing the groups on diversity and sustainability. In addition to those mentioned above, among the themes to be addressed in interdisciplinary working groups on research and teaching are infectious disease and nutrition, language and cognition, child development, race and ethnicity, and technology. The outcome will be the identification of strengths and opportunities for collaborative scholarship. Under President Monaco’s leadership, Tufts will continue to focus on great students and great faculty, with an eye toward emerging societal challenges. Tufts expects the result to be increased collaboration across inter- and multi-disciplinary lines, bridging Tufts’ unique strengths across the three campuses. Faculty and students are anxious to begin this process and to move Tufts further along in its trajectory.

INSTITUTIONAL EFFECTIVENESS

Tufts University regularly reviews its planning and evaluation processes to ensure that they are effective in realizing school and university missions.
Standard 3: Organization and Governance

**DESCRIPTION**

**Trustees**

Tufts College was chartered by The Commonwealth of Massachusetts in 1852. The legal corporate name is “Trustees of Tufts College.” The management and execution of business affairs are conducted under the auspices of the trustees, whose powers and duties are set forth in the bylaws. The board is responsible for the institution’s quality and integrity, holds its property and assets in trust, and has the authority to achieve institutional purposes by periodically reviewing and approving the university’s mission and purposes. The board has final authority and responsibility for all policy and strategy.

The board consists of no more than 41 members - up to 30 board-elected Charter Trustees and 10 Alumni Trustees elected by and from the alumni - and generally operates at or near that number. Each trustee is elected for a five-year term, may serve a maximum of two consecutive terms, and may then be reelected after a one-year hiatus. The chair, vice chairs, and members of standing committees and subcommittees are elected annually, serving for one year or until successors are elected. The chair and vice chairs may be reelected for one-year terms without hiatus. The Committee on Trusteeship reviews the board’s composition annually to ensure that it reflects the backgrounds and expertise needed to govern Tufts, including representation of public interest. New trustees are mentored to ensure that they understand, accept, and fulfill responsibilities as fiduciaries, acting honestly and in good faith to realize Tufts’ mission and purposes. All trustees complete a conflict of interest statement annually. Potential conflicts are reported to the Audit Committee and external auditing firm. No trustee (except the president) receives financial remuneration for service.

The full board meets three times each year; the Executive Committee, five times; and other committees meet periodically on a set schedule and as needed. The Executive Committee acts on behalf of the board between meetings. Each board meeting includes an executive session without the president and staff and another with the president but no other senior officers, to provide for frank discussion. So all trustees are informed on a wide range of issues, they receive meeting materials in advance, and each committee reports regularly to the full board. The president is an ex officio member of each standing committee except the Audit Committee. Members of the administration report regularly to appropriate committees, and the Academic Affairs Committee acts as a conduit through which academic leadership communicates with the trustees.

The Board of Trustees also supervises the Boards of Advisors, a group of 10 volunteer boards that act in advisory, ambassador, and advancement roles for Tufts’ schools and major programs. The Boards of Advisors are coordinated by the Council of the Boards of Advisors, including each board chair and the school dean or program director. Many trustees serve as advisors. The trustees’ Executive Committee approves or is notified of all advisors’ membership and approves all minutes of advisors’ meetings.

**Administration**

Tufts administration is vested in the president and the administrative officers reporting to him. Pursuant to the bylaws, the president is the university’s leader of educational policy and chief executive officer. The president reports annually to the trustees on Tufts’ general condition and is responsible for the management of operating revenues and expenditures associated with educational, purchasing, and plant activities and for collection of income, insurance, and taxes relating to institutional real estate. He is further responsible for preparing the annual budget and establishing an adequate system of budget control.

The senior staff reporting directly to the president include the provost and senior vice president (VP), the chief academic officer responsible with the president for setting the institutional and budgetary priorities that advance Tufts’ academic mission; executive VP, handling business, administrative, infrastructure, and financial matters; senior VP for University Relations (UR), responsible for all communications, government and community relations, and legal counsel; VP for University Advancement (UA), responsible for all fundraising, alumni relations, advancement communications, and advancement services; and chief of staff, managing the president’s office and overseeing presidential initiatives.

The VPs bear primary operational responsibility. The vice provost oversees offices dealing with research, administration, grant proposals, intellectual property, research on humans and animals, and compliance with policies on conflict of interest and research misconduct. The president meets regularly with the Academic Council, composed of the senior staff, deans, and other academic leaders. In addition, the executive VP chairs
monthly meetings of an Administrative Council including the provost and senior VP; senior VP of UR; vice provost; VPs for UA, Finance, Human Resources (HR), IT, and Operations; and other administrative officers.

Each school has, as academic leader, a dean who reports directly to the provost and serves on the Academic and Provost’s councils. The deans provide overall direction and leadership for their schools, and additional deans in each school have specific responsibilities (e.g., admissions, student affairs, faculty affairs) and report to the dean. Sackler within TUSM, and GSAS and the College of Special Studies within A&S, are considered “schools within a school.” They administer degree programs and have their own faculty bylaws, governance structure, and a degree of operational independence, but they do not have independent budgets, and their deans report to the deans of the primary schools.

**Faculty**
Each school has a faculty governance structure that provides for faculty input into policies, procedures, and operations. The faculty exerts direct control over curricular matters, including the approval of new courses and programs, while serving an important advisory and supervisory function in other areas such as tenure and promotion, admissions, facilities, and finances. The curricula offered through TUSM, TUSDM, TCSVM, and, in some cases, SOE, are also governed by their respective external accrediting bodies. Online or hybrid learning courses and classes offered at remote locations are reviewed and approved by the appropriate faculties through the same procedures as conventional courses, ensuring that all such instruction is consistent with the school’s overall educational goals and meets the same standards of content and instructional quality as other courses. Details of each school’s governance structure are in its bylaws. As the largest of the schools, AS&E has the most extensive and complex governance structure, with 30 Bylaw and 10 Non-bylaw committees.

In each school there is an executive committee or similar body that provides for communication and consultation between faculty and administration and oversees academic governance. The AS&E Executive Committee, for example, meets regularly with the deans of A&S and SOE, and with the provost and president, to plan faculty meeting agendas. It has no voting representatives to key faculty committees as well as Academic Affairs, Administration and Finance, and UA committees of the board. At TUSM, the Executive Council, general faculty, and faculty senate represent the constituencies and are advisory to the dean.

Routine matters are handled through the committee structure; however, other important issues at both the school and university level are often considered by ad hoc task forces whose membership is generally selected by the administration in consultation with the faculty. In recent years such groups have considered and made recommendations regarding freedom of expression, work-life balance, and Africana studies. Department chairs and program directors also play an important governance role through day-to-day administration, long-range planning, and as a conduit for information, concerns, and advice between faculty and administration.

In 2011, by-laws and faculty structure were approved by Provost Bharucha for the non-degree granting Tisch College. The inaugural faculty group was admitted in 2012. All are secondary, non-compensated appointments at the same rank as their primary Tufts affiliation. Tisch College faculty has 34 members from 6 schools, 5 of whom serve as the Executive Committee. Faculty provide advice to the dean on matters of research, teaching, and terms of service.

**Students**
Students have a significant and influential voice. Each school has a representative student organization, the largest being the Tufts Community Union (TCU) Senate, representing the undergraduate student body. Each of the three major committees of the Board of Trustees has two nonvoting student representatives, one from the TCU Senate and one from a graduate or professional school. Faculty committees include student representation where appropriate. Students are respected members, usually with voting privileges. Students are often included in important hiring decisions, serving on search committees for new faculty and deans.

The Tufts University Alumni Association (TUAA), established in 1860, now includes more than 100,000 Tufts graduates. TUAA strives to promote Tufts’ spirit, tradition, and collegiality and to strengthen the links among members and their alma mater. Graduates from any school or program are automatically lifelong members, free of charge, of TUAA. The Tufts Alumni Council is the governing body of TUAA. The Alumni Council has more than 300 term, transitional, and emeritus members representing all Tufts schools. Nine new members are elected each year to a 10-year term. At the end of their initial term, members may be offered additional terms. Alumni who have served at least two 10-year terms may be offered emeritus membership. Each year the senior

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14 Additional details for student government are described in Standard 6.
class elects four “Transitional Members” to a five-year term to ensure that young graduates are represented in TUAA leadership. Alumni elected to the council are expected to provide significant leadership and support to Tufts and its alumni. They contribute by directing programs, services and benefits for all graduates and implement important initiatives through the following standing committees: Executive, Alumni Resources, Alumni Weekend, Awards, Career Services, Communications, Continuing Education, Development, Financial Resources, Homecoming, Nominating, Regional Programs, Shared Interest Groups, Student Issues and Young Alumni, and Traditions. In addition to developing and sponsoring programs and services for alumni, the Council also organizes the annual alumni elections to elect alumni to the Board of Trustees and the Alumni Council.

**APPRAISAL**

Tufts has strong, inclusive, and effective governance structure and processes in managing the routine business of the university, planning and executing long term changes, and responding to crisis. There is open communication and broad trust that enables students, faculty, administration, and trustees to work together effectively and productively. Institutional structures and practices of self-examination allow the systems to evolve to meet changing needs and circumstances.

**Effective Governance Structures**

The Board of Trustees undergoes regular self-review and adjusts its policies/procedures as needed. Following each of the board meetings, trustees evaluate the meeting and suggest improvements, as well as future discussion topics. With member input, the chair annually reviews the president’s performance and shares results with the board. The chair’s performance is reviewed annually by the board. Occasionally, the board reflects on its structure and performance, often with the guidance of a professional facilitator specializing in higher education and/or corporate governance. The board’s adoption in 2008 of procedures for the selection of the chair to ensure transparency and consultation with the entire board exemplifies this process of self-reflection. The board adopted the procedures at a time when no transition was imminent. In 2011, recognizing the specific skills required to manage investments and real estate and land holdings, the board modified its bylaws to grant voting privileges to the limited number of nontrustees on the relevant subcommittees.

Performances of the president, provost, and deans are reviewed periodically with input from faculty and often with assistance of an outside consultant. Each school has its own process for soliciting faculty input for reviews of the administration. For example, the AS&E Faculty Advisory Board for Administration, elected from the tenured faculty, participates in the review of the A&S and SOE deans, as well as president and provost reviews.

Faculty have oversight over faculty governance structure and administration of their respective schools. The AS&E Executive Committee meets annually with standing committees chairs to assess effectiveness and any issues. The Executive Committee facilitates changes to committees’ composition or responsibilities. In 2011, for example, the Athletics Committee’s bylaw description was modified to reflect current responsibilities. TUSM and Fletcher are both currently engaged in reviews of faculty governance and considering bylaw revisions.

The following examples illustrate the effective operation of the governance system in responding to crisis, planning and executing long term changes, and managing the ongoing governance of the university.

**The Financial Crisis**

Tufts’ management of the financial crisis is described in Standard 9. While all schools had to make cuts, each had autonomy to allocate resources according to its own priorities. The guiding principles and policies were communicated to the entire Tufts community through mechanisms including open forums personally hosted by the president. At the trustees’ meeting in November 2008, student and faculty representatives to the Administration and Finance Committee were invited to remain during the executive session to provide additional transparency and confidence. Thanks to this openness, there was broad understanding of, and support for, Tufts’ handling of the crisis, so that morale remained high among faculty, staff, and students.

**The Student Information System Project**

The SIS project exemplifies Tufts’ flexible, comprehensive, inclusive, and forward-looking approach to an impending problem with institutional ramifications. Recognizing the wide-ranging implications of the change for Tufts’ academic and business practices, the administration modified the usually decentralized systems of governance and administration. A university-wide team reached out to all affected constituencies and brought together key administrative staff from all schools to share, discuss, review, and coordinate their needs, and to adopt new technology and best practices. Because of the cost ($30 million) and academic impact, both the Administration and Finance and the Academic Affairs committees of the trustees were involved in approving
the project. In its early stages, the reengineering project focused on business practices and IT infrastructure. As the system’s outlines became clear, students, faculty, and staff were consulted, and design ideas to enhance user experience were incorporated. Progress reports have been shared at faculty meetings. While the process’ effectiveness cannot be fully judged until the new system is implemented and tested, Tufts has moved in a timely, thoughtful, and flexible fashion to design and produce an improved university-wide system.

**Selection of a New President**

The selection of the president is the most important responsibility of the trustees. The board took up this task in February 2010, beginning with a reflective retreat to discuss Tufts’ vision and decide on a search process consistent with institutional norms of transparency and inclusiveness. It formed a Presidential Search Committee comprised of trustees, administrators, faculty, and students. In shaping the position description, the committee held more than a dozen public meetings, opened an online site for comments and suggestions, and conducted numerous individual interviews to gather input from faculty, staff, students, alumni, and donors. While the candidates’ names were kept in strict confidence, the board and the Tufts community were kept informed. This process concluded successfully with the selection of Anthony Monaco.

Through its ongoing processes of self-evaluation and review, Tufts has identified challenges and areas of concern that will be addressed over the next several years, including the following:

**Interdisciplinarity**

Tufts’ unique combination of schools conveys strategic advantages in addressing many exciting opportunities in research, scholarship, and teaching that demand a multidisciplinary approach. Successful interdisciplinary programs have been created, such as those in neuroscience and water, and policies have been introduced to encourage more collaborations. Nevertheless, the traditional structure of schools and departments and the geographic dispersal of the schools can be an impediment. Taking full advantage of interdisciplinary opportunities without diluting existing strengths will require careful adjustments to policies, procedures, and organizational structures.

As an example of hard-wired interdisciplinarity, Tisch College is charged with carrying the active citizenship message to all students across the university. Since 2002, Tisch College has engaged 73 faculty members in eight classes of Faculty Fellows. Out of these multi-school and multi-departmental groupings, many interdisciplinary research projects have emerged. This group has also raised the question of how interdisciplinarity and research with social impact are recognized and rewarded.

In May 2011, a white paper, “Collaboration at Tufts,” that emerged from a provost retreat was released. The deans identified a set of essential steps, including: developing a faculty appointment process to advance a culture of collaboration; supporting governance that readily adapts to innovations and collaborations; facilitating student and post-doctoral fellow access to Tufts’ range of research and learning opportunities; and coordinating central administration, school senior staff, deans, and faculty to devise innovative business and administrative solutions that support cross-school sharing and exchange of resources. Turning these general goals into specific policies and practices will be a challenge to the organization and governance structures of Tufts in coming years.

**Diversity**

Tufts struggles to match its genuine commitment to the ideals of diversity with the actual performance of the institution. One aspect of that challenge is the creation of effective organizational and governance structures and procedures. Among the many entities with responsibilities in this area are the Office of Institutional Diversity (OID), including the Office of Equal Opportunity and Affirmative Action (OEO); the AS&E Diversity Council; the AS&E Committee on Equal Educational Opportunity; and many other offices, committees, task forces, and programs across the schools. Despite the commitment and diligent efforts of these groups, however, progress remains disappointingly slow. Over the past 10 years, for example, the percentage of black or African-American faculty and staff has barely changed, from 5.9% to 6.1%. Undergraduate students of color are more likely to perceive racism on campus as a significant problem than White students, and there has been only slight improvement in that perception over the past decade. The directorship of the OID has been vacant since December 2009. In a message to the Tufts community in September 2011, President Monaco made clear that enhancing a climate of inclusion and diversity is one of his highest priorities, and in March 2012 he named a university-wide Council on Diversity to propose a more effective and coordinated approach.

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15 Source: senior survey.
Faculty Participation
Faculty participation in governance depends on the ability and willingness of faculty to devote time and energy to the task. However, there is a concern, particularly in AS&E, that an increasing emphasis on scholarly productivity, combined with the increased professionalization of many administrative processes, has led to diminished faculty involvement. There is a perception that fewer faculty, especially younger faculty, attend faculty meetings or serve on committees, and that the existing incentive structure for faculty discourages such participation. Members of some committees find that their area of responsibility is almost entirely in the purview of professional staff. A preliminary study by the AS&E Executive Committee found that all committees are fully staffed and that at any given time roughly half of AS&E faculty members are on at least one committee, but about a fourth are not serving, for no clear reason. The Executive Committee will continue to monitor the situation to ensure continued effective faculty governance. The other schools, with smaller faculties and fewer committees, report fewer problems, but at TUSM and Fletcher, faculty concerns have led to a reexamination currently in process of the role of faculty in governance.

PROJECTION
This review comes at a time of administrative transition at Tufts. President Anthony Monaco assumed his position on August 1, 2011; Eric C. Johnson was appointed as VP of UA effective April 1, 2012; and Provost David Harris joined Tufts on July 1, 2012. In addition, the deans of A&S and TUSDM are both relatively new. As of this writing, a number of key posts are filled by interim leaders, including the deans of Friedman and Tisch College. These mission-critical positions will be filled expeditiously and systematically within the next few years through careful and inclusive processes to ensure that the best available candidates are selected.

It is safe to assume that the new leadership, in consultation with the university community, will institute changes to address the challenges identified above. President Monaco’s Council on Diversity was named in March 2012 and will make recommendations to the trustees by December 2012. New approaches, designed to facilitate real, measureable, and sustainable progress in this critical area, will be instituted. Strategic planning underway in the provost’s office will lead to new policies and procedures for creating interdisciplinary centers within the next few years. The faculty will continue its ongoing study and discussion of the challenges and opportunities of online and other nontraditional modes of instruction and the incentives and disincentives for faculty participation in governance, and will adopt changes as needed to address those issues. Faculty and administrators are aware of the challenges that may be posed by a generally productive and valuable tradition of decision-making at the lowest appropriate organizational level. Tufts’ priority will be to ensure that the system of organization and governance remains consistent with its commitments to inclusiveness and transparency in the pursuit of world-class education, scholarship, and public service.

INSTITUTIONAL EFFECTIVENESS
Tufts’ organizational structure and governance system is reviewed periodically at the school level to determine alignment with individual missions to ensure effectiveness. As an institution that values local control, challenges to effectiveness are present; however, faculty and administrators are committed to removing the barriers decentralization can pose.
Standard 4: The Academic Program

DESCRIPTION

Tufts provides an intellectually stimulating environment in an intimate RU/VH university where students are exposed to disciplinary historical foundations and cutting-edge discoveries. Embracing the values of active citizenship, interdisciplinarity, and diversity, academic programs stress faculty teaching and research, creating educational experiences that prepare students as successful professionals.

Tufts offers approximately 400 programs at bachelor’s, master’s, and doctoral levels. School processes follow conventional models: new programs are developed through faculty participation and school CCs. New degrees are approved by the Academic Affairs Committee of the trustees following review by the provost’s office.

Academic Standing and Graduation Rates

Tufts’ schools support students’ progress towards degree completion. Faculty and administrators regularly review students’ status to make decisions about advancement, probation, and withdrawals based on explicit guidelines. The majority of degree programs achieve very high graduation rates. Completion rates are usually over 80% and very often over 90%. Requirements for graduation and other policies are clearly outlined (Table 4.1) and communicated to students.

Each school has policies, services, and personnel that monitor student progress and provide assistance for those experiencing academic difficulty. For example, Friedman’s Office of Student Affairs (OSA) and its Faculty Curriculum and Degrees Committee (FCDC) monitor students’ performance, alerting the student and his or her faculty advisor when curriculum requirements and GPA standards are not met, so as to arrange tutoring or other appropriate support. For undergraduates, the Academic Resource Center (ARC) provides tutoring, time management training, and other support. ARC reaches out to undergraduate and graduate students with information before students matriculate, during orientation, and frequently throughout the year. Students who are identified as struggling are strongly urged to use the ARC.

Academic Integrity

Each school has its own honor code or academic integrity policy. AS&E publishes three codes for the undergraduate residential college: “The Code of General Behavior and Citizenship Expectations” and “The Code for Ethical Standards and the Responsible Use of the University's Electronic Resources,” found in the Student Judicial Process Handbook, and “The Code for Academic Integrity Related to Coursework.” Before 2004 there were 40 to 45 cases of academic dishonesty per year. In 2004, after finding many incoming AS&E students did not attend academic honesty programming, ARC designed a tutorial that must be taken at or near matriculation and its effectiveness will be monitored in the years ahead. Since 2006, AS&E instructors have been able to vet student work via Turnitin.com, and are required to report dishonesty to ensure violations are handled consistently with commensurate penalties. Dishonesty incidents have decreased nearly 50% since the 2006 tutorial implementation and Turnitin.com’s availability. TUSM, TUSDM, and TCSVM have published codes of ethical, academic, and professional conduct for high academic and behavioral standards, including standards established by their respective accrediting agencies highlighting rights of patients, patient record confidentiality, and quality care.

Instructional Quality and Course Evaluations

Tufts invests in several programs to help faculty assess their pedagogy and help leadership consider the future of academic programs so that strategic investments can be made. These programs are mostly sponsored by the provost’s office. A University Committee on Teaching and Faculty Development (UCTFD) meets monthly and coordinates/oversees many programs, including: the yearly university-wide teaching conference (with themes such as teaching ethics and assessment), several annual Teaching with Technology workshops, and the Center

Table 4.1 Bulletins

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17 For more information on Tufts’ Undergraduate Retention Task Force and graduation rates, refer to Standard 6 and Data First forms.

18 For more information regarding graduation rates, student services policies, and services available to students, refer to Standard 6.

19 More information on academic honesty and integrity can be found in Standard 11.
for the Enhancement of Learning and Teaching (CELT). The CELT semester-long teaching seminar is not intended as a remedial course but rather brings faculty together to help assess and improve pedagogy by sharing best practices. CELT offers workshops on various topics (e.g., teaching with primary sources, plagiarism, student diversity) and provides one-on-one faculty consultations and assistance in creating cross-school collaborations. Several UCTFD grant programs support innovative cross-school teaching initiatives. Academic Technology provides support as faculty incorporate new technology into their courses.20

Evaluations of AS&E undergraduate courses and instructors are conducted during the semester’s last class period, a paper-based evaluation process that has remained the same for decades. In AY11-12 AS&E Educational Policy Committee (EPC) conducted a study of policy questions in order to move evaluations online. Online course evaluations were first offered in fall 2012. Additional improvements to the tool are anticipated, such as department- or program-specific questions in order to improve the quality of information gathered and more effectively assess faculty, courses, and pedagogy. Other schools use an online system through TUSK.21

Diversity
Tufts has a long history of commitment to diversity and inclusion, yet more can be done. Soon after President Monaco’s inauguration, conversations with the campus community illustrated a shared desire to make further progress by more clearly defining the place of diversity in Tufts’ mission and strengthening cultural understanding and awareness. In March 2012, he launched a university-wide Council on Diversity. Chaired by the president, with the dean of A&S as vice chair, the council will renew Tufts’ commitment to diversity, review accomplishments, and identify new approaches, developing strategic recommendations to advance diversity and inclusion.22

Interdisciplinarity and Collaboration
The president has articulated a vision for increased interdisciplinarity and collaboration. Tufts has a plethora of experience and expertise, and offering interdisciplinary programming and conducting interdisciplinary research will provide for bigger impact on students and the whole of society. Interdisciplinary programs and research have increased over the past two years. In spring 2011, the provost’s office produced a white paper, “Collaboration,” to stimulate discussion and solutions, recognizing the difficulties of teaching and research across disciplines and schools. A&S has sought to address this through interdisciplinary faculty hires.23

The Institute for Global Leadership (IGL) is a cross-school program that enhances the interdisciplinary quality of a Tufts education, while helping students understand and engage in global issues. IGL stresses critical thinking, problem-solving, and an interdisciplinary approach to learning through more than 25 programs and opportunities for global research and internships.24 The international symposium, organized by IGL’s Education for Public Inquiry and International Citizenship (EPIIC), is an annual event featuring international experts. With “Conflict in the 21st Century” as the theme in 2012, students shared their research and experiences in countries including Oman, Tunisia, and Uganda. The theme of 2013 will be “Global Health.”

In spring 2012 A&S conducted an external review of its interdisciplinary programs and the main administrative institution supporting them, the Center for Interdisciplinary Studies (CIS). In May of 2012, building upon the CIS self-study and the external reviewers’ report, more than 100 A&S faculty and administrators met off-campus for a full-day retreat to discuss ways to better support and enhance A&S interdisciplinary programming. A working group of CIS faculty continued this work in fall 2012, and A&S administration is now redesigning the organizational structure of and administrative support for these programs.25

Fletcher committed to enhance its interdisciplinary PhD program in its 2005 Strategic Plan and has revised curriculum, clarified standards, and improved governance. More improvements are needed in course numbers and quality, as well as student stipends. There have been conversations with A&S to create joint PhDs in economics and political science. Resource limits have been prohibitive, even more so since the financial crisis.

The topic of nutrition, encompassing disciplines spanning molecular biology through human organisms to food systems and global policy, is one of Tufts’ signature strengths. The nutrition policy course required of all MS students that facilitates interactive teamwork across the breadth of its programs illustrates Friedman’s

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20 For more information on faculty support and academic technology, see Standards 5 and 7.
21 For more information on evaluations, see Standards 2 and 5.
22 Additional information regarding diversity and services available to help students in their academic programs is available in Standard 6.
23 “Cluster hires” are described more fully in Standard 5 “Faculty.” See workroom for a listing of interdisciplinary majors and degrees.
24 Source: http://www.tuftsgloballeadership.org/about.
25 For more information regarding interdisciplinary program enrollment, refer to the Standard 4 Data First forms (“Headcount by Major”).
multidisciplinary nature. Friedman offers dual degree programs with three other schools and is exploring the potential to expand its undergraduate teaching. A joint A&S/Friedman university seminar, “Global Food For All: Ecology, Biotechnology, and Sustainability,” was also developed.26

Active Citizenship

Tisch College intends to serve all students across schools through curricular and co-curricular opportunities, preparing them to be lifelong active citizens by developing their knowledge, skills, and values and enabling them to work with communities in identifying and implementing solutions to complex social problems. Undergraduates may select from Tisch College’s growing list of active citizenship courses offered through AS&E. During AY11-12, 84 such courses in 31 departments enrolled 2,987 individual students (59% of undergraduates).27 Co-curricular opportunities include Active Citizenship Summer (ACS) International, which supports groups of undergraduate or graduate students working abroad on self-designed citizenship projects.

To inform program development and evaluate effectiveness, Tisch College conducts research on the civic development of students. The multi-year longitudinal outcomes study followed students who were sampled according to their level of civic engagement prior to coming to Tufts (high or low) and their status as the Tisch Public Service and Citizenship Scholars. The study involved a comprehensive survey of civic-related constructs, such as civic attitudes, understanding sociopolitical contexts, and leadership at and outside of Tufts. Interim results will be available in 2013, with final results in 2015, and used to improve Tisch College’s programs.

Active citizenship in academics is a defining quality of Tufts. Tisch College is designed as a champion and facilitator for civic engagement and development opportunities across campus, although active citizenship is not limited to Tisch College. Many students are involved in the Community Music Program, instructing over 500 underserved children and families each year. TUSM students complete 50 hours of service learning, with preparation modules and reflection process designed with Tisch College. TUSDM students participate in a 5-week “externship” at one of 25 facilities across the country. Many Friedman students intern in public service agencies and all are required to take a public policy course. TCSVM students serve through numerous programs including a clinic for low-income patients, a required clinical rotation for all fourth year students. In addition, a common reading book with a civic theme is sent to all incoming freshmen and medical students. AS&E and TUSM organize orientation and fall programming in support of those (separate) books.

Beyond Boundaries Campaign

The Beyond Boundaries campaign had a multitude of effects on Tufts’ academic and research programs. Through its philanthropy, 425 undergraduate student/faculty pairs were funded to conduct research, the number of endowed TUSM scholarships increased from 110 to 154, and Sackler received an endowed gift that provides stipend support for two students engaged in cancer research. Solicited gifts were instrumental in creating the Center for the Humanities at Tufts (CHAT), significantly raising the visibility of the humanities, and expanding areas such as the Institute for Applied Research in Youth Development (IARYD) of the Eliot-Pearson Department of Child Development and IGL. Other research programs received significant funding including: Center for Emerging Market Enterprises (CEME); John Hancock Center for Physical Activity, Nutrition, and Obesity Prevention (JHRC); Jebsen Center for Counter Terrorism Studies’ New Entry Sustainable Farming Project (NESFP); Cultural Change Initiative; and Goldberg Civic Engagement Initiative. New programs received boosts as well, including a minor in leadership studies, the Master of International Business (Fletcher), Master in Conservation Medicine (TCSVM), and Friedman’s partnership with Ras Al Khaimah (RAK).28

APPRAISAL

Awarding Academic Credit

In 2008, then-President Bacow believed students who attended multiple schools within Tufts should receive all transcripts with one request and receive a unified transcript. The “OneTranscript” project began with all school registrars coming together for the first time to explore commonalities in format, policies, and practices to develop a unified process. This exploration included a review of Carnegie-unit equivalents for Tufts credits. As a result, schools have maintained their traditional transcript and use the “OneTranscript” to fulfill individual student requests.

26 For more information on interdisciplinarity and collaboration, see Standard 5.
27 Degree- and nondegree-seeking students on campus (excludes those studying abroad). For more on Tisch College, see Standard 5.
28 The below-expected enrollment in the program has prompted the RAK government to end the program at expiration of the contract in August 2013. Courses necessary for existing students to complete the degree will be offered. The hybrid learning degree program developed through that contract will be offered from the Boston campus.
Tufts feels confident that the undergraduate credits required to graduate represent a reasonable number of courses to earn a degree; courses taken towards degrees are meaningful and offer experiences that provide the skills, knowledge, and dispositions required. Tufts’ system assigns one credit to each course, rather than variable credit or semester hours (a few courses in physical education and the performing arts receive half-credit). For A&S students, 34 credits are needed to graduate, and in SOE, 38, although more than half of SOE and about two-thirds of A&S students exceed the required credits.\(^{29}\) This accounting also allows for simpler requirement tracking by students, faculty, and staff.

The renewed focus on and revision of NEASC’s Policy on Credits and Degrees and the creation and implementation of assessment programs has encouraged schools to look more closely at students’ experiences. A&S administration conducted a study to measure how many out-of-class hours per course faculty expect from students. AS&E student responses to sophomore and senior surveys regarding out-of-class time spent on course-related activities were also reviewed, and some concerns were identified. To be proactive, in spring 2012 administrators reeducated faculty on the out-of-class work guideline, and language was added to the AS&E Faculty Handbook reflecting the same. Tufts is confident that its students are spending time in and out of classrooms in a manner consistent with other institutions. A Consortium on Financing Higher Education (COFHE) survey compared impressions of students’ educational experiences among peer institutions. On the 2010 survey, regarding hours spent in scheduled classes/labs and hours spent studying or doing research outside of class, respondents confirmed that Tufts students were attending classes and studying in amounts of time that align with comparison groups. GSAS administration also reviewed class hours for courses as well as the number of courses required for master’s degrees. Of its 38 master’s degree programs, 25 require 10 or more courses. The remaining 13 programs require either 8 or 9 courses and often include noncredit requirements such as comprehensive exams, foreign language, and quantitative and laboratory training.\(^{30}\)

Students may transfer credits to Tufts, but must petition the appropriate department and provide a course description. Undergraduate courses taken online at another institution after matriculation at Tufts cannot be transferred. Pre-matriculation (e.g., advanced placement) credits are capped at five to ensure a rich academic experience for A&S students. Graduate students may transfer up to two courses. Tufts has cross-registration arrangements with Boston College, Boston University, and Brandeis University.

**ePortfolios**

Since 2005 UIT Educational & Scholarly Technology Services Group has been working with CELT, OIRE, A&S Learning OAC, program leaders, and peer institutions to understand Tufts’ ePortfolio-related goals, design a service model, and implement a platform to facilitate these goals. The ePortfolio pilots and partnerships over the past seven years led to technology investigations, support for cultural practices of assessment, and views about staffing models to support ePortfolio adoption. These ultimately led to UIT’s capital investment in the Trunk-based portfolio system.\(^{31}\) The 2012 implementation phase has involved: 1) Providing opportunities for the community of interest to learn about ePortfolios by bringing in experts; 2) Facilitating ePortfolio pilots; and 3) Developing the service model for, configuring, and actually deploying ePortfolios. Considered to be an asset of the health sciences programs, TUSK – an electronic learning, teaching, and assessment tool that contains modules for professional education – also provides a portfolio feature for TUSM, TUSDM, and TCSVM students.

**Undergraduate School of Arts and Sciences**

**Overview**

The A&S mission statement states, “The creation of new knowledge in traditional and emerging disciplines, a dedication to globalism and active citizenship, a commitment to humanitarianism and diversity in its many forms, and a belief that intellectual discourse and discovery serve the common good are deeply held ideals.” Academic programs available to students reflect this mission. The A&S CC oversees the creation of courses and the establishment of new majors and minors. There were 4,233 full-time matriculated students enrolled in A&S during AY11-12, representing approximately 83% of all full-time undergraduates.\(^{32}\)

The Experimental College (ExCollege) is a center for academic innovation where efforts between students and faculty shape new courses and programs. With over 50 credit-bearing undergraduate electives, the ExCollege

\(^{29}\) A chart of the number of students and credits completed at graduation is available in the Workroom.

\(^{30}\) See the Workroom for a list of degrees and credit requirements.

\(^{31}\) See the Workroom for descriptions of ePortfolio pilot programs.

\(^{32}\) Source: Tufts University Fact Book 2011-2012.
enrolls more than 1,200 students annually in courses representing a range of subjects intended to enrich the traditional curriculum. Instructors with special expertise in particular disciplines teach the majority of courses.

Requirements
For most undergraduates the major is the intellectual and academic home, and Tufts has devoted a great deal of effort and energy to making its majors rich, vibrant, and coherent. Undergraduates complete a major with 10 or more courses in at least one discipline. Students can choose a major from 59 interdisciplinary and departmental programs. Five disciplines – biomedical sciences, community health, environmental studies, biotechnology, and biotechnology engineering – can only be taken as second majors. Figure 4.1 presents the typical distribution of A&S student majors.

Courses needed to earn a bachelor’s degree are divided into foundation requirements (college writing and quantitative reasoning, a foreign language sequence, a “World Civilizations” course introducing students to non-Western thinking) and distribution requirements (two courses each in the following areas: mathematics, science/technology, social sciences, humanities, and arts). This broad exposure to disciplines is part of the A&S’s definition of an “educated person.”

All A&S undergraduate students are required to achieve proficiency (both oral and written) in a language other than English. Students must successfully complete a three-course sequence in a foreign language, followed by either an additional three courses of advanced study in that language or a second three-course sequence in another language or three courses in cultural studies. Given that the expectation that all students will learn to use a foreign language does not place an equal burden on all students, A&S has a policy for allowing students to request exemption from the foreign language requirement if they have a documented learning disability. In cases of students with a language disability, culture courses may substitute for the language courses. A&S does not currently have foreign language instruction programs designed to make language learning accessible to students who experience significant difficulty with language learning but who do not have an identified learning disability, or students with a learning disability who wish to succeed in a course of foreign language.

Improving Success in the Introductory Natural Science Courses
In fall 2008, after researching student performance in introductory biology, it was determined that underrepresented African-American and Latino students were overrepresented in the C through F and withdrawal grades. Also captured in this group presumably would have been first-generation college goers or students from low-income households. This performance negatively impacted their GPAs, and many left the sciences to pursue other majors. Efforts to increase retention and success rates (i.e., earning grades of B- or higher) were developed by the biology and chemistry departments, ARC, and The Center for STEM Diversity.

The program originally involved inviting students who scored poorly on the first exam to join small tutor-led study groups that met twice weekly, supervised by biology and chemistry faculty members. In subsequent years, students in Introductory Biology were invited to form study groups before the first exam. This was shown that inviting only students who fail the first exam to join study groups had a more positive impact on success and retention than inviting the entire class. The reason could be that students who do not understand the material are intimidated in study group situations with

33 Approximately one third of A&S undergraduates choose to major in two disciplines, while less than 1% chooses to major in three disciplines. Approximately 20% of A&S undergraduates pursue a minor in addition to a major.
34 The number of students graduating with a particular major each year ranges from 0 to 239.
35 Most students can take a large number of unrestricted electives because they may be exempted from some requirements through AP or international baccalaureate tests, or because double-counting is permitted between general education and major requirements.
36 For more information on the assessment of foundation and distribution requirements, see “Assessment of Student Learning.”
37 There are approximately five students with documented learning disabilities each year exempted from the foreign language requirement.
38 A pilot program is under development (see Projection section).
39 There were pilot programs in physics and mathematics but they only existed for one semester.
higher-level students. Though more data analysis is needed, it can be stated that students who fail the first exam can pass the course (even earn a B+ or A-) if they regularly attend the study groups. Until this program’s formation, ARC’s model for science courses was entirely one-on-one, and many students were not seeking help. The study group program has changed this: ARC tutors are seeing more struggling students of all backgrounds taking advantage of ARC services and having a bigger impact on more students.

**Student Research, Internships, and Theses**

Approximately 500 to 600 students (more than 10% of the AS&E undergraduate student body), annually engage in original research activity. These experiences include senior theses and involve working with faculty from all AS&E divisions and the health sciences schools and hospitals, often resulting in joint publications.

Since 2003, the Summer Scholars Program has provided a superb experience for many students and faculty and has led to conference participation and even co-authored publications. Summer Scholars have gone on to win Fulbright, Beinecke, Goldwater, and Truman Scholarships. Funding has been provided by the provost’s office and endowed funds, as well as Tufts’ professional schools and affiliated hospitals. Roughly 100 students each year apply for approximately 50 slots (57 were selected in 2011, and 50 in 2012).

The Thesis Honors Program allows students to pursue independent study, usually leading to a senior thesis, with special emphasis on the development of self-reliance, initiative, critical analysis habits, and knowledge correlation. The number of students completing senior honors theses rose from 72 in 2002 to 157 in 2012 due to: 1) launching the Summer Scholars Program, incentivizing an early start to the thesis; 2) reducing the number of faculty on senior thesis committees from three to two, making it easier to find available professors; 3) developing programs to help prepare first- and second-year students who plan on studying abroad junior year; and 4) developing seminars that broke the isolation of thesis writing and created peer support and pressure on writers, helping students finish theses.

Since 1999 all AS&E students who have been engaged in research during the year are encouraged to participate in the Undergraduate Research and Scholarship Symposium (URSS). Averaging 100 annually, the students can present a poster or seminar to an audience of students and faculty.  

**Study Abroad Programs**

During AY11-12, 187 undergraduate students were involved for the semester or academic year in Tufts study abroad programs (Chile, China, Ghana, Hong Kong, Japan, London, Madrid, Oxford, Paris, and Tübingen), while another 390 participated in non-Tufts study abroad programs. These students represented approximately 44% of the junior class. In addition, students taking part in summer study at the Tufts European Center in Talloires, France, numbered 98, for a total of 675 undergraduate students abroad from summer 2011 through AY11-12.

**Assessment of Student Learning**

A school-based, formalized approach to assessment began with a focus on distribution requirements. In 2003 the Task Force on the Undergraduate Experience articulated the goals associated with a “Tufts Education,” including learning outcomes for general education. In 2007, to gain a better understanding of student achievement, A&S created an ad hoc committee charged with developing an assessment program. After interviewing department heads and program directors, the committee produced a proposal recommending:

- Developing a formal list of learning objectives for each discipline;
- Listing on syllabi the learning objectives emphasized during a course;
- Establishing or identifying an already existing curricular experience(s) for all seniors (e.g., advanced courses, seminars or laboratories, internships, thesis projects, performances, etc.) for each discipline;
- Creating discipline-specific review processes to assess student achievement;
- Creating a standing A&S committee on learning outcomes assessment that reviews all assessment information (both direct and indirect) and acts as a conduit between the faculty and the administration;
- Hiring an individual to oversee the assessment process.

As of spring 2012, all six of the A&S ad hoc committee’s proposal goals had been met to variable extents. In January 2011, a limited-term assessment specialist was hired to work with A&S faculty members to conduct annual assessments providing insight into the quality of learning relative to program objectives. This was an extensive undertaking with every department/major identifying objectives, assessing outcomes, analyzing results, and making associated modifications. In addition, a pilot program to assess achievement in the

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40 A complete listing of 2012 URSS presentations is available in the Workroom.
general education (i.e., distribution) requirements was initiated by a subcommittee of the Learning Outcomes Assessment Committee (LOAC). In summer 2011, five working groups of faculty members who represented the five areas of distribution (arts, humanities, mathematics, natural sciences, and social sciences) and who taught courses often taken to satisfy a distribution requirement met to develop a core list of learning objectives for all courses that fulfill a requirement for each distribution area and a plan for assessing learning. During AY11-12, faculty representatives assessed achievement on final exams, papers, labs, and/or performances using their area’s objectives, and submitted them for review by the LOAC subcommittee. During summer 2012, a mostly new faculty cohort met to discuss assessing achievement in courses that many students take to satisfy distribution requirements. The first year results were reviewed and it is anticipated that faculty will use the information to improve objectives, methods of assessment, and models for using results to inform instruction. After the pilot is completed in spring 2013, the distribution learning objectives, as well as the assessment strategies and instructional and curricular modification models, will be released to all departments.

A&S administration has taken the lead in creating a culture of assessment. Many faculty were initially skeptical about assessment, fearing infringement on autonomy and academic freedom. As the efforts came to be seen as reasonable, initial faculty resistance evolved into compliance. As these efforts are systematized, many faculty have come to see the process’ potential to improve pedagogy and the overall program. Additionally, the dean of A&S has created a permanent position whose responsibilities will include coordinating the curriculum and assessment efforts of the undergraduate and graduate departments, LOAC, CELT, and OIRE.

Tufts’ E1A forms show that undergraduate programs have identified learning objectives, listed them on a Web site, established both indirect (e.g., surveys) and direct (e.g., evaluation of performance) assessments, created and carried out a process for interpreting assessment data, and, in some cases, implemented data-based changes in programs. Biochemistry and International Relations are examples of current assessment processes.

Biochemistry: The Senior Capstones, oral and written literature-based research projects, were used for direct assessment, while the senior survey was used for indirect assessment. A rubric was used to the grade projects and quality of literature-based research. Results were applied to a separate evaluation rubric. A faculty representative from biology and chemistry interpreted the AY10-11 data that indicated when given a biochemistry problem to solve, students had difficulty evaluating the merits of experimental techniques and choosing the best option for solving the problem. In order to help students develop better skills for evaluating and choosing options, biochemistry will be modifying the curriculum to include more tasks that require biochemical/molecular knowledge to analyze multiple courses of action and to design a course of action to solve a given problem. Biochemistry will refine the capstone research project so that students are challenged in ways that develop their understanding of biochemical methodology, their skills for using literature to support assertions, and their skills for oral and visual information presentation.

International Relations (IR): Senior research projects were used for direct assessment, while the department senior survey and Focus Group Conversations and OIRE senior survey were used for indirect assessment. Based on AY10-11 assessment data analysis, the IR program leader and Executive Committee identified action steps including: adding a sophomore level interdisciplinary methods course; holding special events such as a career panel with Fletcher students, a UN career panel, and an online forum to connect IR students with alumni; initiating a project to develop an IR internship database; developing a process to emphasize language immersion and cultural awareness development as the key study abroad learning experience in place of the focus on satisfying IR course requirements; offering an annual event to provide course information and strategies for using ePortfolios; and creating intellectual community-building programs including a weekly Core Forum Conversation, senior thesis seminar, and social events.

**Student Satisfaction**

Every year the A&S and SOE sophomore and senior classes are surveyed by OIRE.\(^{41}\) From 2003 to 2011 seniors reported consistently high levels of satisfaction with their undergraduate education. There were only small differences in degree of satisfaction among genders and races. From 2003 to 2012 students on average found their experience to be academically rigorous, with an increase in the mean level of perceived rigor. There were no differences among students of different races, but females tended to report Tufts to be more rigorous than male classmates. On average, seniors have consistently reported that expectations about their Tufts experience have been “somewhat” or “to a great extent” met. From 2003 to 2012, the majority of seniors indicated they “definitely” or “probably” would choose Tufts again if given the chance to relive their experience.

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\(^{41}\) This section on surveys includes combined data from students in AS&E.
Females were more likely than males to report they would choose Tufts again, while white students were slightly more likely to report they would do so compared to students of color, though the gap between whites and others has been increasing since 2007. The survey at one point indicated that students were not entirely satisfied with the Tufts Career Center (TCC) (formerly Office of Career Services). However, after directing more resources toward its improvement, satisfaction with TCC rose from 55% to 73% between 2001 and 2012.\textsuperscript{42}

For the 2010 and 2012 graduating classes, the COFHE survey was administered with the senior survey. Its results show that 87% of A&S\&E students in 2010 and 88% in 2012 were satisfied with their education, as compared to 90.4% of students at non-Ivy League schools in 2010 and 2012 and 89.4% (2010) and 90% (2012) at Ivy League schools. Satisfaction with Tufts’ classroom, laboratory, athletic facilities, and employment programs was ranked low compared to other schools, while satisfaction with food services, foreign language program, and counseling and health services ranked in the top 10. Between 2010 and 2012 mean satisfaction with campus services and facilities increased in every category except employment programs.

\textbf{Figure 4.2 HEDS Consortium Alumni Survey Results (2008)}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart1.png}
\caption{HEDS Consortium Alumni Survey Results (2008)}
\end{figure}

\textbf{Bridge Program in Arts and Sciences}

A program for A\&S students, Bridge to Liberal Arts Success at Tufts (BLAST), has been developed for the class of 2016 (offered in 2012) to increase the success rate of students who are bright and full of potential as evidenced by their high school achievement, but who may not have had the same socioeconomic and educational opportunities as others. BLAST is a summer residential experience in which nominated students take two courses for credit (mathematics and humanities) and participate in academic and college-life workshops that assist incoming freshmen transition to college. BLAST Scholars are given conditional acceptance based on program participation. In the fall semester, BLAST Scholars enroll in an advising seminar, take a similar course schedule as the other BLAST Scholars, continue to meet weekly for academic and college-life talks, receive mentoring from A\&S students, and build a strong cohort of peers for support and encouragement. The BLAST Educational Enrichment Fund, available to BLAST Scholars in good standing, is used to defray educational expenses such as the purchase of computer equipment, specialized software, printing, and tuition for LSAT, MCAT, GRE and other preparatory courses. Because socioeconomic disparities and educational inequities in the US follow historical patterns of racial and ethnic disenfranchisement, many (but not all) of the BLAST Scholars will be students of color and first-generation college students. Assessment of the academic success of the BLAST Scholars will be carried out while these students are attending Tufts.\textsuperscript{43}

\textbf{School of Engineering – Undergraduate and Graduate Programs}

\textbf{Overview}

SOE’s size and educational philosophy support a distinctive sense of community, diverse perspectives, and student-centric learning environment. Curricula across a wide spectrum of majors emphasize project-based learning, nurturing of leadership skills, and cultivation of creativity through innovative design. There were 767 full-time matriculated undergraduate students enrolled in AY11-12, representing approximately 15% of all

\textsuperscript{42} For more information regarding career services, see Standard 6.

\textsuperscript{43} For more information on BLAST, see Standard 6 “Students.”
undergraduates. The number of doctoral students rose from 142 in AY06-07 to 207 in AY11-12, while the number of full-time students enrolled in nondoctoral programs (MS, MSEM, MEng) rose from 214 to 327 during the same period. The number of doctoral degrees awarded increased from 9 in 2006 to 25 in 2011, due to a more research-active faculty, increase in external funding, provost and deans fellows initiatives, and the attraction of a high-quality pool of graduate applicants through marketing, outreach, and reputation.

SOE programs are characterized by technical rigor, breadth, interdisciplinary nature, and engagement of graduate and undergraduate students in world-class research opportunities. Close partnerships with Tufts’ other schools and a long tradition of collaboration, provide a strong platform for interdisciplinary education and scholarship. SOE focuses on building core strength and visibility in three strategic engineering areas: human health (e.g., biomedical imaging, waterborne disease), sustainability (e.g., water and diplomacy, climate change mitigation), and human/technology interface (e.g., robotics and cognition, human factors engineering).

SOE offers 14 undergraduate degrees: 7 are accredited by the Engineering Accreditation Commission (EAC) of ABET and 1 by the Computing Accreditation Commission of ABET. Degree requirements include introductory (math and science courses fundamental to all areas of engineering); foundation (a bridge between math and basic sciences and engineering); concentration (discipline-specific knowledge and skills); and humanities, arts, and social studies (breadth encouraging social awareness and leadership qualities, including written and oral communication) requirements. A combined BS/master’s degree program offers students the option of pursuing a combined degree programs: a BS and MS or a BS and Master of Engineering (MEng) degree.

Through its six departments and the Tufts Gordon Institute, SOE offers a MS; a MEng that is especially well-suited for part-time, practicing engineers; and a PhD in selected areas of research excellence. Tuition scholarships, assistantships, and research assistantships are awarded on a competitive basis to graduate admissions candidates. SOE graduate programs are not accredited by ABET. Deans and provost fellowships are used to supplement graduate assistantships in order to attract the very best candidates. Over the last five years, SOE graduate programs have seen an increase in the level of externally supported (federal and nonfederal) sponsored research from approximately $7 million in 2007 to over $13 million in 2011. During this period, the number of graduate students supported as research assistants through endowments, gifts, grants, operations, and start-up funds increased from 125 in 2007 to 173 in 2011 (represented in FTEs).

Assessment of Student Learning
Academic progress is monitored by a well-established advising system from matriculation through graduation. By March of their first year, all students are required to declare a major and assigned an advisor. The faculty work closely with their advisees to foster relationships that enhance academic performance, encourage participation in research or internships, and support endeavors in admission to graduate school or gaining employment. SOE has developed a number of processes for assessing and evaluating the extent to which student outcomes and program educational objectives are being met. Program objectives are broad statements that describe what graduates are expected to attain within a few years of graduation, measured by exit survey data on future plans and 2-, 5-, and 10-year alumni surveys querying position levels and responsibilities. The OAC, OIRE, SOE CC, and Curriculum Task Force (CTF) all review undergraduate and graduate programs. OAC coordinates and integrates SOE assessment and evaluation processes. OIRE works with OAC to develop and interpret the instruments of assessment, including first-year, sophomore, senior, and graduate student exit surveys. OAC has worked with OIRE to develop alumni and employer surveys that provide data used for assessing and evaluating at what level program objectives are being met. The results of all of these surveys and documents are maintained on the OAC wiki site. SOECC reviews all changes to, or considerations for, courses or programs by SOE faculty. The CTF considers broad curriculum issues and makes recommendations for change to the SOECC. In addition, SOE’s professional programs are periodically reviewed by the EAC and Computing Accreditation Commission of ABET, with its most recent review in AY11-12.

Information gleaned from course evaluations and faculty task force discussions suggested that the existing first-year curriculum could provide more exposure to problem solving, as well as an increased exposure to the breadth of engineering disciplines and professions. To be considered for AY12-13, proposals for curricular changes were submitted in December 2011, and the goal of creating six new or expanded courses was met.

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45 Tufts Gordon Institute is the first school dedicated to teaching engineering leadership and offers programs that focus on engineering management and entrepreneurship.
Another example of learning assessment and feedback is the SOE revision of the required undergraduate calculus courses. Surveys in 2007 and 2008 indicated that approximately 75% of incoming students placed out of the first calculus course.\textsuperscript{46} In response in 2009, the SOECC and CTF working with the Mathematics Department developed a new first course (Math 50) that includes some review of single variable calculus and recitations with engineering applications, offered as a pilot. Follow-up assessment of student performance revealed that students taking the new course did as well in their engineering courses as those taking the traditional two course calculus sequence. In 2011, 17% of students who took Math 50 described the course’s material as new and not covered in high school and 83% stated 75% of the material was new and not covered in high school math; 83% of those students described the repeated parts of the program as useful.\textsuperscript{47} Based upon this assessment, effective fall 2012, first-year engineering students are required to take Math 50 instead of Math 11 and 12, except for the few who have no high school calculus or those who AP out of Math 12.

\textit{Bridge Program in Engineering}

A program, Bridge to Engineering Success at Tufts (BEST), was established in 2010 to increase the enrollment and retention of underrepresented students. BEST has successfully retained two cohorts of first-generation, low-income, and ethnic minority engineers and consists of a six-week summer residential program focused on introducing students to the rigors of college academics and college life management. Students take two summer STEM courses for credit (Math 11 and Geology 5 during summer 2010 or Math 11 and Physics 11 in summer 2011 and 2012) as well as a noncredit writing workshop. Students are also expected to participate in weekly meetings with co-curricular support services and weekly workshops with faculty.

BEST’s eight students from summer 2010 performed well academically and continued to do well during their first year. Six placed on the SOE Dean’s List (GPA>3.2) and all returned for sophomore year. Their average freshman GPA was 3.01, none being placed on academic probation, and 2.88 in their sophomore year (several difficult courses contributed to this lower GPA). One student placed on the fall 2011 Dean’s List. Since the 11 students in the 2011 program enrolled in Physics 11, they had a more difficult summer course load than those in the 2010 program. Students who withdrew from physics and/or math matriculated during fall 2011, remained part of BEST, and repeated courses dropped during AY11-12. The average BEST freshman GPA for fall 2011 was 2.99 with four students making the Dean’s List. One student switched to A&S, but remained in BEST, indicating the program’s strength and the bond that students make with each other. BEST has had an positive impact on diversity and retention of at-risk students. SOE is committed to its continuation, especially in light of recent donor funding that will completely pay for the summer program for the next five years.

\textit{Graduate School of Arts and Sciences}

\textit{Overview}

GSAS mentors and trains future scholars, professionals, and leaders, who, through the research and practice-based skills developed in their graduate education, go on to enjoy highly productive careers. These students strengthen Tufts’ intellectual community and scholarly activities. They are invaluable as teaching assistants (TAs) and fellows, integrating the A&S faculty’s teaching mission and undergraduates’ learning outcomes. This is especially true in research settings where graduate and undergraduate students interact with mutual benefit.

Numbers of doctoral students rose from 296 in 2006 to 359 in 2011, while those in non-PhD graduate programs rose from 731 to 765 during the same period. This growth occurred largely because GSAS hired more research-intensive faculty and their additional resources for existing programs. There are usually approximately 25 to 30 students enrolled in certificate programs. Approximately 15% of current students come from countries outside the US, and approximately 14% are from underrepresented groups. Over the past five years, GSAS awarded between 40 and 50 PhDs and an average of 350 master’s degrees annually.\textsuperscript{48}

GSAS offers 12 doctoral degree programs; 34 master’s degree programs; 4 combined or dual master’s degree programs; and 8 certificate programs. Each program is administered through an A&S academic department. Graduate training is program-specific and begins with course-based instruction, followed by a research thesis phase or practicum-based experience leading to licensure. GSAS faculty includes all full-time AS&E faculty members. GSAS graduate degree programs are generally small, allowing for more faculty-student mentoring.

\textsuperscript{46} Source: First Year Engineering Experience Surveys 2007 and 2008.

\textsuperscript{47} Source: First Year Engineering Experience Survey 2011.

Master’s degree programs have a core of course-based instruction, and many have research or thesis tracks where students complete a research project and present results to a thesis committee. Most master’s degrees must be completed within five years, though some take only one or two years.

Doctoral programs require at least three years of full-time study and successful submission of a dissertation. Publishing peer-reviewed papers is expected outside of the humanities, although the scope varies by discipline. In the humanities, peer-reviewed conference presentations are expected. Most programs emphasize teaching and original research. The students’ most important mentor is the dissertation advisor.

GSAS offers eight certificate programs that are practice-oriented and designed to meet evolving professional demands. The certificate courses (typically four or five) may be transferred to Tufts graduate degree programs.

Courses designed for graduate students are numbered 200 and above, though many advanced 100-level courses are open to them, since interaction between advanced undergraduates and early-year graduate students can be mutually beneficial. In those courses, faculty normally require advanced work from graduate students in order to receive graduate credit. The GSAS Policy and Programs Committee (PPC) approves courses. Credits from other institutions taken concurrently with GSAS studies are generally approved prior to registration. Students who cross-register during regular semesters with Boston College, Boston University, and/or Brandeis University through The Boston Consortium for Higher Education do not need prior approval to transfer credit. The GSAS Executive Committee approves all credit transfers for programs.49

**Assessment of Student Learning**

Learning objectives and program requirements are listed on the Web site of the department administering the program. The PPC initiates and reviews assessment initiatives. In 2010 GSAS created a [program review Web site](#) to store data for program review and assessment, including program-specific information on admissions, enrollment, exit surveys and trends, assessment plans, National Research Council (NRC) data, and accreditation information. Each program has identified a regular assessment cycle to review student learning and achievement quality. The cycle includes direct and indirect assessment of objectives, review of results, identification of strengths and challenges illuminated via the assessment projects, sharing results with faculty, and implementation of action steps to address challenges. In AY10-11 GSAS used the NRC Assessment of Research Doctoral Programs, specifically the quality measures and weights, to review and evaluate each of the doctoral programs and a set of peer programs. An analysis of NRC methodology and results of peer analysis were presented to faculty at department meetings. The quality of research has always been assessed by reviewing the dissertation. More recently, the prestige of the publication disseminating the research has been an important factor, and the weight of publications in dissertation research varies across programs. The dissertation advisor and an examining committee of four members (three from the student’s program and one expert from outside Tufts) perform the review. The quality in a master’s degree program with a research track is assessed by review of the thesis. The examining committee is made up of three faculty members.

The English department, as an example of the current assessment program, seeks to ensure that its PhD candidates acquire broad knowledge of English, Anglophone, and American literature. For indirect assessment, students are surveyed after taking the oral comprehensive exam. In AY11-12, 11 of 13 students responded. Aggregated data was reviewed to determine learning trends. For direct assessment, students’ performance on the exam was assessed in fall 2011 and spring 2012. Examining committee members completed a three-question rubric and then reviewed the aggregated data. While many students found the exam’s breadth challenging, they also found it very valuable; they were able to realize new connections and felt prepared to teach courses, from surveys to specialized classes. Most students performed between adequately and very well; the newly redesigned program, allowing students to finish more quickly, seemed as effective as the older, longer one. Students learned to work independently, without the guidance of a course. Students received some preparation for the oral interviews for an academic position, and some mentioned that the oral exam was particularly valuable. Some students desired more professorial guidance while others had unclear expectations, possibly affecting their performance. Clarifying expectations, providing more guidance without undermining the independent study experience, and determining how to rectify any (rare) examiner disagreement are targeted challenges. Improvement strategies include adding a session on exams (expectations and strategies) to the pro-seminar and collecting written evaluations of performance in courses, using them to share feedback after the first year and prior to the exams. Examiners will be asked to stay for at least one half-hour after the exam to allow for discussion of students’ outcomes.

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49 GSAS degree requirements and programs can be found [online](#) and at specific department websites.
Mentoring and Professional Development Programs
Exit surveys indicated that students required more training and support as TAs.\textsuperscript{50} This led to several initiatives including TA skills workshops complementing program level training and support. In 2010 GSAS created the Graduate Resources and Development (GRAD) program to provide mentoring and professional and leadership skills workshops. Subsequent surveys have shown that approximately 55\% were satisfied with training programs.\textsuperscript{51} As an additional resource, the Associate Dean (position created in fall 2012) is responsible for creating, implementing, and evaluating programs that support students’ professional development.

GSAS holds an annual research symposium for students to present their original research to colleagues and faculty. In 2011 there were 48 presentations in STEM, arts and humanities, and social sciences tracks and a plenary session at which three students presented talks on the theme of “Planning for a Changing World.”

Career Development
In 2010 GSAS collected data to review how many graduates pursued careers in academia, industry, nonprofits, and/or government service. For PhD recipients from 2005 through 2010, approximately 19\% were in post-doctoral positions, 40\% in academia, 15\% in business or industry, 7\% in government or nonprofit, and 18\% were unknown. Data on career plans was used to understand career aspirations and outcomes. An analysis of results was presented to faculty, and data is used to plan programs on career development for doctoral students. For example, faculty offer preparing future scholars workshops to those seeking to enter academia, and the alumni base offers programs for those seeking to enter the government, nonprofit, or private sectors.

The Fletcher School of Law and Diplomacy
Overview
Fletcher is a professional graduate school of international affairs, ranked in the top five of such schools globally.\textsuperscript{52} It offers doctoral and master’s degrees that prepare students for international careers. Fletcher has programs in 19 fields including diplomacy, development, security, environment, humanitarianism, international law and organization, human security, and international economics, allowing students to design an education that is scholarly, cutting-edge, professionally relevant, and tailored to their career paths. Graduates enter hundreds of different careers in intergovernmental agencies, private businesses, nonprofits, and US and foreign governments. There were 649 students enrolled in Fletcher’s graduate programs during AY11-12.\textsuperscript{53}

Fletcher’s five master’s programs include the: two-year Master of Arts in Law and Diplomacy (MALD), the school’s oldest program that enrolls approximately 70\% of its student body; Master of Arts (MA), a one-year version of the MALD for those advanced in their careers whose employers (mostly ministries of foreign countries) support only one year of study; Global Master of Arts Program (GMAP), a combined residential/online degree; Master in International Business (MIB), designed for students planning on entering the private sector; and Master of Law (LLM), a one-year degree designed for lawyers wanting additional training in international law and related areas. Programs require foreign language exams and a thesis.

The doctoral program in international relations admits between 8 and 10 students annually, the majority “internal admits” (students who finished the MALD) who, upon admission, need to take one more semester of coursework. Students then take written and oral comprehensive exams, write a dissertation proposal, conduct field research, and write, submit, and defend their dissertation.

Assessment of Student Learning
The extreme flexibility of Fletcher degrees makes it difficult to develop a robust assessment system, since there are no fixed core courses, no fixed course sequences, and no uniform goals. Among its alumni, Fletcher has hundreds of ambassadors, generals, CEOs, and leaders in other areas. Fletcher generally does not use tools beyond course grades, course evaluations, exit surveys, and theses to evaluate achievement of individual degree goals. Learning outcomes in courses tend to be expressed as a section in syllabi regarding “course objectives” and are assessed through tests/exams/performance assessment/surveys; course evaluations partly assess whether or not class objectives were achieved. The general level of satisfaction among graduating students is very high: 85\% agree that if they “had a chance to do it over” they would attend Fletcher.
and “do this all over again” and 90% would recommend a friend to attend Fletcher. Approximately 91% of students are satisfied with their Fletcher experience.  

**Friedman School of Nutrition Science and Policy**

**Overview**

Friedman is committed to advancing the nutritional well-being of people worldwide through excellence in research and teaching and shaping of public policy. It offers graduate degrees and online certificate programs and participates in joint degree programs with other Tufts schools. Friedman was placed at or near the top of all US nutrition programs by the NRC’s 2010 Assessment of Research Doctorate Programs. Its nutrition research and outreach also generates a large share of Tufts’ footprint in the media and local communities. In fall 2011, 165 students were enrolled in master’s programs and 53 in doctoral programs. There were 55 enrollees in nondegree programs in AY11-12.

Friedman is committed to combining top tier research with innovative training in the fields of nutrition science and policy and to promoting the application of new knowledge to real world problems. Friedman offers masters’ degrees through six programs: food policy and applied nutrition; agriculture, food, and environment; nutrition communications; biochemical and molecular nutrition; nutritional epidemiology; and the MS in nutrition-dietetic internship. Doctoral degrees are offered through four programs: food policy and applied nutrition; agriculture, food, and environment; biochemical and molecular nutrition; and nutritional epidemiology. Other degrees include an MA in humanitarian assistance and a hybrid master of nutrition science and policy.

**Assessment of Student Learning**

Friedman programs conduct annual self-assessments led by graduate program directors and department chairs and includes students, faculty, administration, and FCDC. Assessment is based on faculty and student input via program meetings, course evaluations, and outcome measures. Recommendations for changes are prepared by the director, reviewed with the department chair and Academic Affairs dean, and submitted for approval to the FCDC. School-wide issues are addressed by the Academic Affairs dean with assistance from faculty, directors, and chairs. A review of PhD qualifying examination procedures was conducted to determine how similar rigor in the exam could be maintained across the school despite differences in disciplines, resulting in recommendations to form a committee to review proposed topics for the written exam, as well as the topics representing the range that students are responsible for in the oral exam. Enrollment data are reviewed annually. Decreased enrollment trends in the nutrition communication and nutritional epidemiology programs have resulted in ongoing assessment regarding the causes and discussion regarding their future.

**School of Dental Medicine**

**Overview**

TUSDM prepares pre-doctoral and postdoctoral students to practice dentistry with knowledge of patient populations, dental specialties, and settings in a professional environment in which patients receive quality dental care. DMD accreditation is awarded by the Commission on Dental Accreditation (CODA), and curriculum and practical training meets its standards. In 2011, 736 pre-doctoral students were enrolled in the DMD program, and 170 postdoctoral students were enrolled in specialty programs, including 42 in MS programs.

TUSDM offers a combined DMD/MS and an MS in dental research. These programs include MS-specific coursework, research, and a thesis. The Dental Distance Education MS Program enrolls a limited number of students with extensive dental clinical experience. The thesis is mentored through web-based communication, onsite interaction, and teleconferencing. TUSDM partners with the TUSM’s PHPD unit to offer a combined DMD-MPH degree. Trainees receiving the dual degree complete requirements for both degrees.

**Assessment of Student Learning**

To maintain quality, the CC reviews all programs and approves changes, considering course evaluations, clinical faculty evaluations, and faculty peer evaluations. The OAC sets and reviews department and program goals. Academic planning occurs in meetings with chairs and/or course directors as part of the annual scheduling process. Student class representatives and student class liaisons routinely meet with the associate dean for students, Academic Affairs dean, and Student Promotions Committee chair to discuss issues to facilitate improvement before course end. A mid-year evaluation can verify improvement from a previous year. The academic dean meets with course directors as needed.

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54 Source: Fletcher Exiting Student Survey 2012.
55 Source: Standard 4 Data First Form.
56 Source: Standard 4 Data First Form.
School of Medicine

Overview

TUSM trains physicians as competent, ethical, compassionate, lifelong learners who strive to attend to all aspects of the health care continuum, including disease management, prevention, health promotion and maintenance, and palliative care. The PHPD programs, within TUSM, promote human health through training practitioners of public health, health communication, pain research, education and policy, and biomedical science. PHPD dual degree programs seek to strengthen linkages across traditional disciplinary and practice boundaries. The MD program enrolled 800 trainees and PHPD programs enrolled 360 in 2011.57

Requirements of MD programs, per the Liaison Committee on Medical Education (LCME), the accrediting body of US medical schools, include 130 weeks of instruction in basic sciences and clinical experiences. All students must successfully complete pre-clerkship courses, first- and second-year clinical experiences, core and advanced clerkships, and basic and advanced electives. Clinical experiences occur at more than 12 teaching affiliates and hundreds of community-based private practices, providing sufficient capacity to allow students to complete requirements. In accordance with LCME, the curriculum is developed and evaluated by TUSM’s CC, which also develops evaluation methods with faculty, the Office of Educational Affairs (OEA), and the OSA.

The MPH program is accredited by the Council on Education for Public Health. The MPH and the MS in pain research, education, and policy and the MS in biomedical sciences have a two-year curriculum and include a capstone experience, either as an applied capstone experience or a thesis. The applied learning experience is conducted in lieu of a thesis in areas where the training emphasizes developing practitioners of the discipline.

PHPD partners with several other Tufts schools and nearby universities to offer training leading to combined degrees. These programs include the MD-MPH, DVM-MPH, DMD-MPH, JD-MPH (with Northeastern University School of Law), MS-nutrition-MPH, bachelor’s-MPH, MS-biomedical sciences-MPH, MD-MBA (with Brandeis University Heller School of Social Policy and Management), and MS-biomedical sciences-MBA (with Brandeis). Trainees completing these programs fulfill the requirements for each of the individual degrees.

Assessment of Student Learning in the MD Program

TUSM’s MD program is overseen by its CC with input from students, faculty, and administration, using student surveys, questionnaires, and meetings for feedback. Additional assessments include a comprehensive system of course and clerkship evaluation using TUSK, including mandatory student evaluations, annual evaluation of courses and core clerkships by the Educational Affairs dean and Evaluation and Assessment director, and peer review of courses and clerkships by a subcommittee of the CC. Monitoring of scores on standardized national exams and residency placements are other metrics. These assessments have been used to adjust curriculum. For example, review of the survey of PGY-1 graduates indicated that they felt they did not receive as much training in procedures when compared to peers from other schools. TUSM created a Simulation Curriculum Committee that has now provided a simulation curriculum to be rolled out over the next two years. Review of the AAMC Graduation Questionnaire suggested graduates thought they were not getting enough background in health care financing and medical jurisprudence. As a result, the social and behavioral medicine course and ethics and professionalism course were modified to increase the coverage of these areas. In the eyes of students, the course evaluation system has also helped improve the curriculum overall. In the four years that this system has been in place, the average course rating increased from ~3.8 (1-5 scale) to > 4.0 in AY11-12.

The TUSM CC and faculty recently completed a thorough assessment and revision of the MD curriculum. The process began in 2006 and culminated in AY09-10 with the implementation of a curriculum that integrates basic and clinical sciences and focuses on providing trainees with the knowledge and professionalism required of today’s physicians. Evaluation of the new curriculum is ongoing; however, based on student feedback from the first iteration of the new MedFoundations I Unit and analyses conducted by faculty peer reviews and the OEA, the CC mandated further reductions in first-year lecture time and content, with further expansion in clinical correlation. As a result, class of 2014 student ratings increased significantly compared to those of a year earlier. In response to identified needs, three new courses were introduced as part of the revised curriculum: Introduction to Clinical Reasoning (ICR), Dermatology, and the competency-based Apprenticeship in Primary Care (CAP). The students rated all three courses well above average.

57 Source: Standard 4 Data First Form.
Assessment of Student Learning in the PHPD Programs

The PHPD programs are overseen by the dean for PHPD with input from the Program Directors Committee that sets academic policies, reviews academic issues common across two or more programs impacting the student learning experience, and makes recommendations to the dean. Academic oversight is the purview of individual programs. Faculty also assesses the curriculum and student learning experience. The Academic Affairs Committee oversees the public health and health communication programs; the Steering Committee is responsible for the program in pain research, education, and policy; and the CC is responsible for the biomedical sciences program. A recent strategic planning process recommended bringing the three public health-related programs more closely together through a review of their committee structures. It also resulted in goals to establish a DrPH program designed to enhance the level of scholarship conducted by PHPD students and faculty. This program was developed with faculty input and approved to enroll students, with the first class matriculating in AY13-14.

In preparation for the first five-year review of the MS in biomedical sciences (MBS), a self-study process was established in consultation with the program director and the MBS Steering Committee. Internal assessment in collaboration with TUSM also led the faculty to establish a physician assistant training program. The program has achieved Provisional Accreditation status from the Accreditation Review Commission on Education for Physician Assistants, and a self-study process was established in consultation with the program director and the Physician Assistant Steering Committee in preparation for the first three-year review of the Master of Medical Science (MMS) conferred to students in that program.

Sackler School of Graduate Biomedical Sciences

Overview

Sackler trains biomedical scientists to be future leaders in research, teaching, biotechnology, and other science-based careers with emphases on interdisciplinary training that integrates state-of-the-art approaches to basic and clinical sciences and on research training directed toward solving disease- and health-related problems. Sackler integrates faculty from across the schools to address these issues. Student research makes major contributions to the overall research mission of the biomedical scientists with whom they train. There were 200 degree-seeking students enrolled in AY11-12. 58

Sacker’s basic science division offers training in eight basic science disciplines (biochemistry; cell, molecular and developmental biology; cellular and molecular physiology; genetics; immunology; molecular microbiology; neuroscience; pharmacology; and experimental therapeutics) leading to the doctoral degree. Students who complete significant training but elect not to finish the PhD may be awarded an MS. MD-PhD trainees complete the PhD portion of their training in one of the basic science division programs. The clinical research division offers doctoral and Master of Science degrees and a certificate in clinical and translational science.

Each program is reviewed every five years under the oversight of the faculty-elected Programs and Faculty Committee (PFC). The reviewers, including two experts from outside of Tufts, assess all program aspects, including the quality of students, student outcomes, curriculum, and faculty. A written report is submitted to the PFC and Executive Council, the body who votes on the recommendations and sets school policy. Programs address any concerns raised by the review and describe how any changes will be implemented. The PFC also reviews courses proposed by programs, and its recommendations are brought to the Executive Council. 59

Assessment of Student Learning

Academic planning begins both at the grass-roots level of program faculty and at the executive council level. These groups, with input from the dean, assess programs and make recommendations for adjustments. Ad hoc committees representing the Executive Council and other faculty and staff work on specific issues. For example, a recent initiative focusing on strengthening the course evaluation system began in response to comments from program reviews and an assessment showing that some courses (journal clubs, seminars) were not being evaluated. Some assessments are made directly by faculty. For example, in response to faculty awareness that students were reluctant to use quantitative statistical approaches to data analysis, a relevant course was developed and became a requirement in the first-year curriculum for several programs.

The registrar worked to establish a strong relationship with each program coordinator and director, resulting in faculty understanding the academic credit award process, and the establishment of a routine process for course and contact hours reviews, making adjustments as needed. This work ensured that accurate syllabi are

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58 Source: Standard 4 Data First Form. This number includes certificate programs.
59 Examples of these reports can be found in the Workroom.
reviewed each semester for integrity of credit and revealed areas where major course revisions require review by the PFC and Executive Council. This initiative also aided the registrar in working with faculty to ensure that regular updates of the online catalog occur in a timely fashion.

Sackler’s staff have worked with faculty to ensure that students have information related to career outcomes. This information is being used to determine if the current curriculum meets the needs of all students given the wide range of careers available to biomedical science PhDs. In addition, Sackler recently conducted a survey assessing how frequently students publish first-author research papers, an important milestone toward a biomedical science PhD. The data was shared with program directors and faculty and formed the basis for discussion and planning related to steps that might be taken to increase productivity.

**Tisch College of Citizenship & Public Service**

**Overview**

Without its own teaching faculty or degree programs, Tisch College nevertheless seeks to enable students to achieve five civic learning outcomes, through combinations of curricular and co-curricular opportunities. Tisch publishes lists of courses that include one or more of these outcomes, and developed a nationally unique Latin honors program, *Honors Civicus*, for students demonstrating they have achieved these outcomes. TUSM has developed and TUSDM is developing similar programs related to their curricula and civic learning objectives.

**Assessment of Student Learning**

Tisch College has been conducting a longitudinal study of civic and political activities and attitudes since spring 2004. In addition, with support from one federal grant and two foundation grants, Tisch College has been conducting assessment of various programs on student civic development and psychosocial wellbeing (flourishing). Results of these studies are being used to redesign programs and to contribute to national literature on civic development.

**Cummings School of Veterinary Medicine**

**Overview**

Through excellence and innovation in clinical service, research, and teaching, TCSVM students will improve the health and well-being of animals, people, and their environment. The DVM program prepares graduates for entry-level practice for the major domestic species and provides students the flexibility to pursue nonpractice or nontraditional practice careers (e.g. public health, wildlife, international veterinary medicine, and biomedical research). The curriculum nurtures students to become lifelong learners and leaders in developing the science, technology, and ethics to shape future veterinary practice. Through MS programs, TCSVM provides specialized training required to broaden trainees’ perspective and provide skills to contribute to their training’s overall mission associated. A PhD program trains students to focus on research relating to areas of unmet need in veterinary bioscience. In AY11-12, there were 365 full-time DVM students, and 31 MS and PhD students.60

**Assessment of Student Learning**

The DVM program is accredited by the AVMA Council on Education (COE). Its CC oversees the educational plan, and its OAC ensures that appropriate faculty, employee, and student feedback and evaluations are considered. The OAC oversees the ongoing direct and indirect outcomes assessment programs of the DVM program, including developing assessment tools, collecting and analyzing data, communicating results, and using data to improve TCSVM’s overall teaching mission. Each graduate program submits an annual review to the Advanced Education Committee (AEC) with data on admission criteria, enrollment, attrition, program outcomes, and career placement. Learning goals have been developed for all courses and clinical rotations in the DVM and graduate programs and are clearly articulated in course syllabi and on TUSK. The OAC analyzes outcomes data in accordance with guidelines from the AVMA COE. In conjunction with program leadership and faculty, the AEC plays a similar role for the graduate programs through collection of annual program reports and five-year program evaluations.

The TCSVM CC conducted an extensive review of the DVM curriculum in AY10-11. This review included benchmarking against other veterinary schools and led to a series of recommendations for curricular improvement that is now being implemented. A curricular weakness identified through outcomes assessment was sub-optimal opportunity for surgery experience prior to graduation. This issue has been addressed by opening a spay-neuter clinic on campus in conjunction with a group of 20 local animal shelters. The Luke and Lily Lerner Spay-Neuter Clinic offers students enhanced opportunities for routine surgical experience. Off-

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60 Source: Standard 4 Data First Form.
campus surgical opportunities with shelters and large animal practices have also been identified. It is estimated that these opportunities have at least tripled the average hands-on surgical experience of students. Another area that was strengthened involved small animal primary care. While students have good exposure to small and large animal primary care cases through core rotations, including a practice environment rotation in a for-profit hospital, it was felt that more could be done. TCSVM recently entered into an innovative partnership with a vocational high school to establish a student-run primary care practice serving low-income clients. Officially opened in April 2012, TUFTS at TECH Community Veterinary Clinic provides low-cost preventative and primary care for greater Worcester’s underserved companion animals. The clinic is staffed by veterinary assistant students from the high school, veterinary technician students from local colleges, and veterinary professional students from TCSVM. Students are supervised by their respective programs, and the practice is run by an experienced DVM general practitioner. Elective rotations were initially offered in late April 2012, and, since several rotations have already occurred, evaluation began in June 2012.

**PROJECTION**

**Online Education**

In addition to current offerings, schools are exploring online courses at the undergraduate and graduate levels. The summer session program’s director hopes to add four to eight additional online offerings in the coming years. The A&S&E faculty will continue its ongoing study and discussion of the challenges and opportunities of online instruction and the advantages and challenges presented to students, faculty, and academic programs, and will adopt changes as needed to address those issues. University-wide, the priority will be to ensure that the system of organization and governance for online programming remains consistent with Tufts’ mission, that online courses or programs are offered with the same level of integrity offered with face to face academic experiences, and that the nine hallmarks of quality for distance education are followed as outlined in NEASC’s *Guidelines for the Evaluation of Distance Education (Online Learning) Policy.*

**ePortfolios**

Schools and programs that have recently expressed interest in ePortfolios for learning, assessment, and professional development include Tisch Library and the First-Year Writing Program for research process portfolios; the classics department; GIFT; the Master’s in Lab Animal Medicine; several of Friedman’s programs; and A&S for program assessment, learning/reflection, interdisciplinary synthesis, and qualitative assessment for affective areas of General Education requirements. They are also interested in a self-provisioning, customizable option for student and faculty ePortfolios. It is anticipated that by December 2012, the infrastructure will be deployed, staff will be trained to manage and work with the system, and an initial service model for designing, developing, and supporting Trunk portfolio sites will be defined. Part of defining that service model will entail figuring out how many ePortfolio projects Tufts has the capacity to support in any given year. There will likely be a call for proposals each year and a process for selecting projects that promise broad, sustainable impact across a distribution of Tufts contexts.

**Diversity**

The Council on Diversity’s recommendations will include how it can ensure effective implementation and measurement. Its work will complement activity already underway. The council will share draft recommendations for comment with the community before a final report is issued, likely in March 2013.

Tufts is in the process of developing two significant academic initiatives related to race and diversity. A&S is establishing an undergraduate interdisciplinary Africana Studies major to study all people of African descent in the global diaspora and plumb the historical, political, social, economic, and cultural experiences of the global African diaspora including, but not limited to, black America, the Caribbean, Africa, and Europe. Second, Tufts will establish a Center for the Study of Race and Democracy. Both initiatives are motivated by a self-assessed need to improve curricular offerings in race and diversity and increase research efforts in these areas.

**Interdisciplinarity and Collaboration**

It is expected that the external review of interdisciplinary A&S undergraduate programs, conducted in spring 2012, will result in recommendations to be reviewed and acted upon in AY12-13 and beyond. A solution for addressing the challenges presented by Tufts’ efforts to become increasingly interdisciplinary, especially across schools, has yet to be found. It is likely that no one solution will be relevant to all initiatives, considering the varying missions of schools and localized budgets.

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61 For more information regarding online academic programs, refer to Standards 3 and 11.
In January 2012, President Monaco created a high-level Graduate Education Working Group, tasked with setting forth actionable proposals for interdisciplinary collaboration in doctoral education and research, seeking to remove obstacles that currently exist for interschool collaboration. The report was submitted to the president and provost in November 2012 and is currently being used to inform Strategic Planning.

Assessment Programs
The assessment programs in undergraduate A&S need to be self-sustaining. To ensure this, the academic deans, in cooperation with the LOAC, will take responsibility for overseeing the assessment processes. It is envisioned that the assessment programs developed over the last five years will become more robust and information-rich so that faculty and students will benefit. For example, developing and using rubrics to a greater extent would enrich the quality of writing in the introductory English composition courses.

It is anticipated there will be an increase in the scope and effectiveness of GSAS assessment programs in order to produce higher quality student experiences. As part of this process, it is envisioned that the review of student achievement in GSAS’ individual programs will be continued, including tracking the publishing success of dissertations and procurement of jobs by alumni suitable to their academic achievements.

TUSDM plans to continue using the approaches in place to ensure program quality. One effort that will receive special attention involves engaging students in research through small scholarships and enhanced enrichment activities. Determining if these measures influence the career outcomes of students is a future goal. Linked to this goal will be assessment of the newly established DMD-MS and DMD-MPH combined degree programs.

Based on assessments by its OSA, TUSM will monitor the faculty-student advising process to determine if it is supporting training aligned with the well-being of emerging physicians. The complexity and dynamic nature of advising suggest a committee be formed through the OSA to work on this as a long-term project. An outcome of the Educational Strategic Planning Process was the creation of Key Themes Working Groups. Key themes include: professionalism and ethics; communication skills, life cycles, compassionate care, physician (medical student) well-being, and culturally competent care; evidence-based medicine/information mastery; community service and citizenship; population medicine; and health care systems. The new curriculum began with the class that matriculated in fall 2009. Many key themes were incorporated into their two years. The committees are working on strategically positioning and integrating the themes into the four years of the curriculum.

PHPD is home to several new programs, including the physician assistant program, slated for launch in January 2013, and the DrPH program. A key element of assessment will be to determine the effectiveness of these programs and to monitor faculty and student concerns. The DrPH program will be accredited by the Council on Education for Public Health (CEPH) as part of the public health program. CEPH may ask for early review based on TUSM’s submission of a substantive changes report.

TC SVM graduate programs are relatively small and have been in place for less than 15 years. Assessing mechanisms to grow the census in these programs is important to promote student interchange and create a vibrant student environment. A system for ongoing curricular review and assessment of topic integration, time allotment, and effectiveness of teaching methods in the DVM program is being implemented through the CC and will be reviewed to ensure effectiveness. AY12-13 will be the first year the detailed learning objectives and related metrics for graduate programs will be included in annual reviews. A process for reviewing the outcome data and subsequent action will be developed in AY12-13 and implemented going forward.

Curricular Changes
There will be a more detailed analysis in A&S of the learning outcomes associated with foundation and distribution academic requirements, as well as an analysis of the types of courses taken to fulfill these requirements. It is expected that in fall 2013, all A&S faculty will be asked to approve the learning objectives for general education and to use them to assess student learning and improve instruction and curriculum in courses used to fulfill distribution requirements. Student achievement in the introductory science classes will be further analyzed to develop programs (or alter existing ones) that increase student success.

Students must be highly skilled in using library electronic media to be competitive academically and professionally. To that end, Tufts anticipates enhancing the existing library literacy programs for entering first-year students enrolled in introductory writing courses and seniors involved in research. Tisch Library’s research and instruction department will be piloting an assessment program for information literacy and library research skills in AY12-13. The pilot hopes to provide the opportunity to assist students and advisors/instructors, while
understanding students’ information-seeking behavior and research skills in an English 1-4 course, another
course in the General Education curriculum, or in their culminating research theses/projects.62

In order to address the lack of modified instruction in foreign languages for AS&E students with documented
learning disabilities, a program funded by an innovation grant through the provost’s office is being developed
for a three-course sequence of study in Spanish, designed to promote successful learning for a diverse cohort
of students. The new curriculum will include detailed instructional strategies and recommendations for
adaptation using formative assessment of student progress. There will also be a plan for assessing the
learning outcomes and comparing these outcomes to those following the current Spanish language program.

In SOE, proposals for curricular changes based on course evaluations and faculty task force discussions were
submitted in December 2011. Six new or expanded first-year engineering courses that provide increased
exposure to problem solving and the breadth of disciplines and professions will be offered in AY12-13. Math
50 has been offered on a pilot basis since 2009. Students taking it do as well in their engineering courses as
students taking the traditional Math 11 and 12 sequence. Therefore, it is anticipated that in the near future
first-year engineering students will be required to take Math 50 instead of Math 11 and 12.

Several GSAS initiatives were started based on exit surveys indicating that students required more training and
support as TAs, beginning with the creation of TA skills workshops that complement program level training and
support. The success of these courses will be assessed in the years ahead. Additionally, GSAS has been begun
working with CELT to offer programming aimed at supporting TAs. The continuation of this work is dependent
upon the new leadership and board of directors of CELT, who will begin strategic planning in AY12-13.63 In the
meantime GSAS is working on developing a program in which novice TAs will “shadow” more experienced ones.

Fletcher’s CC is currently conducting an in-depth assessment of the curriculum’s professional relevance. It
identified 26 typical careers, and, for each group, alumni (divided into two groups – less than and more than
five years after graduation), companies/agencies that frequently hire Fletcher students, and those that do not.
Each group will be given a questionnaire that focuses on the analytical knowledge and professional skills
required for entry into the career and for promotion. The results will be discussed with faculty and will help set
future curricular priorities.

At Fletcher, theses are intended to focus students’ interests on particular issues and improve their research
and writing skills, as well as to provide a professional product that can advance their careers. However, many
students and faculty see the thesis as the curricular element that is least satisfactory; it involves an enormous
amount of work that adds little to students’ intellectual experiences and to their toolboxes of professional skills.
As a result, Fletcher is currently discussing reform of the thesis component of its degrees to accommodate
more diverse interests and needs of students, and it should bring a proposal to a faculty vote during AY12-13.

TUSDM has made a great effort through faculty development programs (both school and university-wide) to
enhance and update the faculty’s teaching methods. Nationwide, schools are integrating more of the pre-
doctoral dental curriculum. A major goal of the current curriculum revision is to integrate all of the basic
sciences courses and to integrate pre-clinical courses. This change will promote student learning and the
successful care of patients. Other curriculum revision goals include enhancing programs in interprofessional
education, increasing technology in teaching and dentistry, better classroom design and use, and
enhancements to clinical requirements such as using ePortfolios.

TUSM is beginning preparation for an LCME accreditation visit in 2014 and will be working with faculty
committees to conduct a complete assessment of its programs in preparation for this visit.

Sackler’s Executive Council and faculty will be assessing how it should respond to the changing landscape of
career options for biomedical doctoral students. Effective modalities that prepare students for the full scope of
biomedical career opportunities, including those in the pharmaceutical industry, biotechnology industry,
technology transfer, scientific writing, and other areas, will be considered. Some of these discussions may lead
to modification or introduction of new courses.

**External Reviews of Departments and Programs**

Departmental and program reviews in A&S will be continued so that eventually all will undergo this process on
a regular rotating schedule. There is a possibility that related departments/programs will be reviewed in

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62 See Standard 7 for more information on the research skills pilot. A full description of the pilot is available in the Workroom.
63 See Standard 5 “Faculty” for more information on CELT.
clusters to assure that synergies can be identified and capitalized upon and to accelerate the review process. Reviews will continue to the administration’s inform resource and faculty allocation decisions. In AY12-13, the departments of Romance Languages; German, Russian & Asian Languages and Literatures (GRALL); Education; and possibly one other department will be reviewed.

The most substantive changes initiated at Fletcher in the last 40 years are the creation of the low-residency GMAP with the majority of its instruction online, and two new residential master’s degrees (MIB and LLM). Years of planning preceded these changes, including numerous discussions among faculty and meetings with the Provost and Trustees. In the future these programs should be assessed for their value and effectiveness; Fletcher’s faculty and leadership are committed to engage in such a review over the next few years. To date, Fletcher has not conducted external reviews, but decided at the last faculty retreat to initiate them. The process and resources for this system will be determined in AY12-13.

Friedman’s MSNP program was accredited in March 2010 after a rigorous review by the CIHE. Friedman will continue to offer this quality program in the U.S. and maintain the degree structure.

**Career Preparation**

GSAS is reviewing professional skill development for graduate students pursuing nonacademic careers. As part of Tufts’ Graduate Education Working Group, the dean of GSAS is leading a subcommittee charged with identifying ways to provide and implement university-wide professional development to ensure students will excel in their chosen field. GSAS plans first to focus on programming for communication and presentation skills.

Friedman is tracking its students’ career preparation through increasingly close communication with alumni, using online networking and in-person events to provide informal feedback about curriculum content. More formal alumni surveys will be undertaken at periodic intervals to inform MS and PhD program design.

Another area to receive increasing attention in the PHPD programs involves support for career exploration. Because the public health programs have a practice-oriented practicum, career services will work with students as they identify their sites and undertake this final project. Determining how effective these efforts are in terms of student satisfaction and employment success will be an important metric to assess the effectiveness of these programs.

**INSTITUTIONAL EFFECTIVENESS**

Tufts University has placed an increased emphasis on the assessment of its academic programs as evidenced by the establishment of school-based outcomes assessment committees. Systematic assessment of student learning and the quality and effectiveness of academic programs has been incorporated into every school to varying degrees. Evaluation results have been used to improve student outcomes and academic programs.
Standard 5: Faculty

DESCRIPTION

In its “core business” of undergraduate education, Tufts maintains the touch and feel of a small liberal arts college while providing access to an intense research enterprise largely driven by a set of world-class graduate and professional schools. Tufts is also known for a good faculty-student ratio as well as strong faculty-publication output. While Tufts and its faculties are quite heterogeneous, core values pervade all schools: commitment to combine excellence in teaching and research, international and civic engagement, and diversity. Several of these aspirations are supported by university-wide programs thoroughly integrated into the schools. The practice of the last decade to collaborate across schools is not new. Interdisciplinary work has grown because of strong support from Tufts administration and a culture of collaboration and cooperation emerging from a recurring need to do more with less – qualities that have become an institutional strength and hallmark among faculty, students, and staff.

Role and Status of Faculty

Tufts is complex. It is a federation of schools, and as such the roles, responsibilities, and types of faculty vary across the schools as defined in their respective faculty handbooks and bylaws (see Table 5.1).64 Each school’s faculty ranks and promotions tracks are tailored to its needs in order to recruit and retain the best faculty. As a result, each school is composed of faculty holding a variety of titles and ranks and serving in a number of roles. Likewise, each faculty has a governance structure that provides voting rights and identifies standing committees, including those for appointments, promotion, and tenure.

Table 5.1 Faculty Handbooks and Bylaws

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<thead>
<tr>
<th>School</th>
<th>Handbook</th>
<th>Other Faculty-Related Documents</th>
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<tbody>
<tr>
<td>AS&amp;E</td>
<td>Faculty Handbook</td>
<td>AS&amp;E Bylaws, LAU Bylaws, SOE Bylaws, GSAS Bylaws, College of Special Studies, AS&amp;E Grievance Panel Procedures</td>
</tr>
<tr>
<td>Fletcher</td>
<td><a href="https://intranet.fletcher.tufts.edu/faculty/index.shtml">https://intranet.fletcher.tufts.edu/faculty/index.shtml</a></td>
<td></td>
</tr>
<tr>
<td>Friedman</td>
<td>Faculty Handbook</td>
<td>Faculty Bylaws: Appointments, Tenure, and Promotions Manual</td>
</tr>
<tr>
<td>TUSDM</td>
<td></td>
<td>Policies and Procedures for Faculty Appointments, Promotions, and Tenure</td>
</tr>
<tr>
<td>TUSM</td>
<td>Faculty Handbook</td>
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</tr>
<tr>
<td>Sackler</td>
<td>N/A</td>
<td>Sackler Faculty Bylaws</td>
</tr>
<tr>
<td>Tisch</td>
<td></td>
<td>Bylaws: Appointments and Responsibilities</td>
</tr>
<tr>
<td>TCSVM</td>
<td>Faculty Handbook</td>
<td>Faculty Bylaws</td>
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standardized number of courses connected to their fields; and advising pre-major students, undergraduate majors and, in most departments, master’s and doctoral students.67

At Fletcher, tenure-stream faculty and some contingent faculty (those half-time or more with multiple-year contracts) participate in governance committees. In AY11-12, there were 35 and 25, respectively.68 In AY09-10, Fletcher adopted its first-ever policy on “contingent appointments” detailing criteria for nontenure-track positions and hiring, promoting, and contract termination process and governance, while providing the highest possible levels of collegiality and career quality to contingent faculty. Fletcher created six categories (all existed before, but usage was ad hoc and governance unclear): adjunct professors (all levels), visiting professors (all levels), research professors (all levels), professors of the practice (POPs), lecturers (two levels), and postdoctoral scholars.

In 2011, Friedman had 17 full- and 61 part-time faculty, plus 4 professors emeriti.69 Faculty earned PhDs in 18 disciplines. This cadre of faculty is supported by 95 associated faculty of all levels, bringing the overall

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64 The faculty numbers presented in this standard’s narrative reflect AY11-12. See the Data First forms for AY12-13 information.
65 A&S and SOE faculty are described as a group (AS&E) in this standard, but where there are differences, they are described separately.
66 The term “tenure-stream” is used to denote both tenured and tenure-track faculty.
68 Includes administrators with faculty appointments.
69 Includes faculty drawing salary not directly from Friedman. As of summer 2012, an additional three full-time faculty searches were ongoing.
complement to 179. In 2001, there were only 32 staff, and in 2011 full- and part-time faculty were supported by 82 staff, reflecting significant growth in externally funded research. Friedman increased its students in 2008, leading to an increase in faculty and adjuncts. Trustees voted in 2006 to give Friedman the right to support tenure to help attract top-level scholars who already had tenure and would only consider a horizontal shift if they could get tenure at Tufts. Since then, four new pre-tenure hires were made, and one senior faculty member was hired with tenure. Current nontenured faculty are not expected to attempt tenure. During 2010, the Appointments, Tenure, and Promotions Committee (ATP) finalized the process for tenure track new hires (see ATP Manual). Friedman is reviewing the potential role for postdoctoral scholars and POPs.

TUSM and TUSDM employ full- and part-time faculty as well as a large number of affiliated clinical faculty, almost all of whom serve in a volunteer capacity. These include: 100 full-time and 9 part-time basic science faculty and 33 full-time and 27 part-time clinical faculty employed by TUSM, and 1,551 full-time and 2,965 part-time clinical faculty who are employed by affiliated hospitals. TUSDM has 123 full-time and 45 part-time, benefits-eligible faculty and approximately 200 faculty members who are volunteers or paid an honorarium.

TCSVM is made up of 113 full-time faculty: 93 are veterinarians, while the remaining 20 hold doctorates in related fields. TCSVM’s 152 adjunct faculty are used as a temporary measure, usually where they have unique expertise. Tenured appointments are not available; faculty are appointed as either “continuous term” (multi-year renewable contracts) or “fixed term” (annual renewable contracts) at the rank of instructor, assistant professor, associate professor, or professor. Adjunct faculty are typically used as a temporary measure or may be called upon to teach electives in specialty areas that would not justify hiring a full-time faculty member.

Sackler does not directly recruit faculty but draws its faculty from those with appointments as assistant professor or higher at another Tufts school. As such, Sackler does not have adjunct faculty. Any Tufts faculty member with a demonstrated interest in a biomedical research program can seek appointment to the Sackler faculty. Currently, 185 faculty hold appointments at Sackler, the majority of whom are from TUSM.

Tisch College also does not directly recruit faculty, but any faculty whose research and/or teaching are connected to Tisch College’s mission may apply for affiliation. Faculty can also include staff whose work is closely connected to the Tisch College mission. The newly established Tisch Faculty has 34 members, including a 5-person Executive Committee, with mandated representation of 2 from A&S, 1 from SOE and 2 from the remaining schools. Appointments at Tisch College are at the same rank as the primary appointment.

Outside of traditional tenure-stream ranks, some schools have expanded to include nontraditional faculty. In A&S, limited-term research professorships (teaching not required) for researchers holding external grant funding are available upon department request. There are currently 11 in A&S and this position’s growth reflects increased research. In Fletcher, there are four research professors, a category created only three years ago. Another innovation since 2005 is the creation of POPs, designed to bring credentialed practitioners into fields where professional experience is relevant and significantly enhances learning by bringing wisdom and real-world experience to the classroom. As of spring 2012 there were 2 in A&S, 15 in SOE, and 5 in Fletcher.

In applied fields and for some fundamental teaching of foreign languages, writing, critical thinking, mathematics, and the fine arts, A&S employs full-time, nontenure-stream lecturers who are not responsible for research and consequently have higher teaching and/or advising loads. Lecturers often draw on their professional experience and provide valuable student advising. Part- and full-time SOE lecturers are especially prevalent in its Gordon Institute. In recent years, schools have sought to hire more full-time lecturers and to proportionately reduce dependence on part-time instructors in the belief that full-time faculty, though more expensive than part-timers or adjuncts, contribute more to the academic community.

Degrees
Tufts has 856 full-time faculty, 790 (92%) of whom have a doctoral or other terminal degrees in their fields (PhD, EdD, MFA, JD, MD, DVM, etc.). Of all 1,320 instructional faculty members (full and part-time), 1,092 (83%) have a doctoral or other terminal degree. Most nontenure-stream and affiliated faculty hold terminal degrees as well. In SOE, 100% of tenure-stream faculty hold a PhD or ScD. In Friedman, all faculty, both tenure-stream and nontenure-stream, as well as most associated faculty, hold a PhD or DS. At Fletcher, law professors hold JDS; all other tenure-stream faculty and the majority of affiliated faculty hold PhDs. In A&S, 93% of tenure-

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71 In A&S, “adjunct” faculty refers to a Tufts faculty member whose primary appointment is outside of the individual school.
72 Source: Standard 5 Data First Form.
stream professors hold doctorates, and approximately 50% of nontenure-track faculty (including part- and full-time lecturers, POPs, and research faculty) hold a PhD or ScD. Most TUSDM and TUSM faculty hold current licensure in their fields. Those who do not have a PhD or master’s in their area of expertise. Additionally, 42% of TCSVM are board-certified in their clinical specialty. At TUSM, 83% of the clinical and affiliated faculty from Tufts’ core teaching hospital, Tufts Medical Center, are board-certified with most of the balance board-eligible.

**Faculty Contracts and Performance Evaluations**

Faculty contracts and appointment letters detail appointment dates and essential duties. Tufts has a statement of expectations and processes to ensure faculty act responsibly and ethically, observe established conditions of employment, and function in consistently with Tufts’ mission and purposes. References to OEO’s “Policies and Procedures” brochure are included in contracts, and key policies reviewed during school-based orientation for new full-time, tenure-stream faculty each academic year. Contracts feature links to online policies and benefit information. Tufts monitors the market for part- and full-time positions and adjusts salaries and incentives (research, computer, and moving funds) in order to attract and retain the best possible faculty.

AS&E faculty are reviewed regularly to ensure satisfactory performance in scholarship, teaching, and service. In preparation for annual reviews, full-time faculty complete self-evaluations covering research, grant activity, teaching, advising, service, and diversity and civic engagement initiatives. Annual reviews of faculty from Fletcher, Friedman, TUSDM, and TCSVM include teaching performance as determined by course evaluations and student performance in clinical competencies and licensing exams. TUSM uses some, but not all, of these metrics, and those related to scholarship and research. Contracts for pre-tenure faculty are only renewed upon successful review. Schools’ bylaws and/or faculty handbooks contain specific policies and guidelines that govern appointment, promotion, tenure, and notification deadlines of nonrenewal. Excellence in scholarship, teaching, and service (clinical service as applicable) are important criteria for appointments/promotions. A standard expectation is research feeds teaching and students have research opportunities.

**Teaching, Advising, Scholarship, and Research**

In November 2010, the trustees approved a revision of the Policy on Academic Freedom, Tenure and Retirement, All faculty handbooks reference this and some provide specific guidance related to school mission. According to the policy, “The teacher is entitled to full freedom in research and in the publication of the results, subject to the adequate performance of his or her other academic duties, but no regular activity for pecuniary return shall be engaged in without the approval of the university. The teacher is entitled to freedom in the classroom in discussing his or her subject, but the teacher should be careful not to introduce into his or her teaching controversial matter with no relation to the subject.”

Tufts offers training in the ethical conduct of research, and all investigators conducting human or animal research are required to remain up to date with Institutional Review Board (IRB) education requirements. Tufts operates two IRBs: the IRB at Tufts Medical Center and Tufts Health Sciences (TUHS) and the IRB for Social, Behavioral, and Educational Research, Medford campus.

**Arts, Sciences, and Engineering**

A&S tenure-stream faculty annual loads are typically two courses per semester. SOE tenure-stream faculty annual load is three courses, including at least one undergraduate course. AS&E faculty work within departments and interdisciplinary programs to collectively define, revise, and fulfill the undergraduate and graduate curricular goals. All full-time faculty are expected to advise undergraduates (pre-majors, majors, and minors) and, where appropriate, graduate students.

Research and scholarship are at the heart of AS&E’s mission. Pre-tenure faculty are hired on the basis of scholarly promise, and success at tenure review and promotion hinges greatly on a positive scholarship evaluation. All tenure-stream faculty are expected to generate new knowledge through research and publication. Research support is offered to tenure-stream faculty through start-up packages commensurate with needs and relative to fields of inquiry, as well as annual supplements to research funds, pre-tenure leaves (one year of paid leave in A&S and a semester of paid leave in SOE), regular sabbaticals, department travel funds for conference participation, merit raises for scholarly productivity, competitive proposal funding, and course reductions for categories of service to Tufts. A&S considers matching salary and benefit levels for tenure-stream faculty leaves funded by prestigious external grants. Internal research semester leaves (generally two per year) are awarded on a competitive basis to AS&E faculty by the Faculty Research Awards

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73 More information on academic freedom and the Declaration on the Freedom of Expression at Tufts University is in Standard 11.
74 See Standard 11 for more information regarding IRB requirements and ethical behavior.
Committee. To compensate for research time lost to major service commitments, A&S provides generous compensation packages for department chairs and program directors that include reduced annual teaching loads, a research semester after three years of service, and an annual research stipend of $5,000. The SOE provides similar support to its chairs, including course load reductions and one month of summer salary. In the last five years, A&S has also implemented a formal course buy-out policy. Faculty may reduce their annual teaching load by one course through external grant funding at 20% of their annual salary. A similar policy has been in place in SOE for a number of years with a 15% annual salary funding level for a course reduction.

One measure of AS&E’s commitment to research and improved research productivity is its increased grant activity and extramural funding. At the close of AY04-05, 424 grants were submitted, and 213 were awarded for a total of $22,980,458. In AY10-11, 599 grants were submitted, and 286 were awarded for a total of $40,304,917 (see Figures 5.1 and 5.2). Annual research expenditures in the SOE have increased by 245% over this same period (from $5.39 million to $13.2 million). The increase in volume reflects enhanced faculty effort, facilitated by strategic investments made by both schools in added grants administration personnel.

Advising is highly valued and required of all tenure-stream faculty and full-time lecturers. At the undergraduate level most faculty participate on a rotating basis in pre-major advising. Major advising falls mostly to tenure-stream faculty through departments and programs. A&S students are free to choose major advisors, though efforts are made to ensure balance. In SOE, the associate dean for undergraduate education assigns major advisors with input from department chairs. All faculty are encouraged to engage students in their research, and many supervise honors theses and independent studies. Entering graduate students are either advised in the first year by the director of graduate studies in their program or matched to their research advisor.

The Fletcher School of Law and Diplomacy
All Fletcher tenure-stream faculty engage in research. Research excellence can mean tenure achievement with criteria including two published books in the case of social sciences faculty, and multiple articles in top peer-reviewed law and economics journals for others. Many affiliated faculty have research agendas, but many also have careers as practicing professionals. Tenure-stream faculty (and many adjunct faculty at a lower level) receive an annual allowance of $8,600. The standard annual load is 3.5 courses. Four years ago, Fletcher began offering lightened teaching loads for newly hired pre-tenure faculty (two courses in the first year and three courses in the second), semester leave in year three or four, and guaranteed summer research support for the first three years. Subsequently, Fletcher increased its capacity to attract top faculty and create an environment favorable to research and teaching success. Competitive summer support, for four of the last five years, has been offered to tenured faculty. Sabbaticals are awarded to tenure-stream and some long-term affiliated faculty. The allowances, research assistants, environment, sabbaticals, and flexible time buy-out policies all support high research output.

All tenure-stream and most affiliated faculty advise 6 to 12 students, but many advise more. Advising is intense, and exit surveys rate it highly. In the 2011 exit survey, 95% of the students were satisfied with the accessibility of faculty, while 83% rated with the same scores the helpfulness of their thesis advisors.

Friedman School of Nutrition Science and Policy
Friedman’s research funding has increased significantly in the past five years, with nearly all faculty directly engaged in externally funded research. The majority of resources for undertaking research derive from grant-funded proposals. It is expected that full-time faculty raise at least 50% of salary support from external funding sources while teaching one to three graduate courses per year, advising, and serving on school committees, as well as doctoral exam and thesis committees. A policy on sabbaticals was defined and approved in 2006.
Friedman’s full-time and some associated faculty advise students and are typically assigned between 3 and 10 advisees. Friedman seeks to match advisee interests to faculty expertise. Since many students change the direction of their interests while at school, it is typical for multiple faculty to help individual students. Advising is not limited to a formal advisee-advisor pairing but is seen as a school-wide responsibility.

**School of Dental Medicine**
The principal duties of full-time and benefits-eligible part-time faculty include teaching, service, and, where indicated, research. Advising is part of teaching. Faculty are also expected to serve on committees, participate in faculty development programs, and accept other assignments at the request of their department chair and/or dean. Assignments are based on department and faculty member needs and reviewed/adjusted periodically. Full-time faculty devote four days per week to TUSDM’s programs and may spend a fifth day in intra- or extramural practice or other professional pursuit. Policy states at least one-half day per week be available for research for full-time faculty. Participation in research is strongly encouraged and supported, but not mandatory for full-time contract or part-time faculty. Faculty also support students through a mentoring program. Mentoring groups meet monthly and faculty offer advice outside of the formal school environment. This program, while being developed and improved, has begun to impact students’ perception of their time at Tufts. In the AY10-11 dental alumni satisfaction measure, 62% of 2009 responders reported being mentored.

**School of Medicine**
Most of TUSM’s 4,500 clinical faculty are employed by the affiliated hospitals. These faculty play an essential role in TUSM’s teaching mission and its research. Paid clinical faculty paid are part of the Department of Public Health and Community Medicine and are required to cover 100% of their salaries through extramural funds, teaching, and service. Department chairs and division chiefs across multiple clinical teaching sites determine teaching loads that allow TUSM to flexibly achieve its mission and faculty to achieve scholarly and pedagogic goals. Approximately 100 TUSM nontenured clinical faculty members conduct scholarly research in addition to teaching and administrative duties. All TUSM clinical faculty, at all ranks, are expected to teach TUSM, Sackler, or PHPD students at least 50 hours per year. In addition to teaching, basic science faculty are expected to raise 60% of their salary through grant support. The OSA is responsible for coordinating students’ academic support and advising in conjunction with faculty course directors and staff in the OEA. Each first-year student is assigned to one of four “learning communities,” paired with a faculty advisor, and becomes part of a group consisting of 14 first- and second-year students. Advisory groups gather to discuss issues regarding the medical practice in the 21st century.

**Sackler School of Graduate Biomedical Sciences**
Sackler policies are specifically constructed to ensure that students and faculty have the support and resources to conduct research. Faculty retain their primary academic appointment and contractual relationship through one of Tufts’ schools in an academic department. This relationship includes academic promotion, salary adjustments, and other matters related to employment. Sackler does not employ graduate Tas. All faculty are expected to maintain active participation (teaching, research, and mentoring) in their appointed programs. They also participate in all aspects of teaching, student mentoring, academic planning, policy making, and curriculum development. The majority of training involves mentorship in developing an independent, biomedically-focused research program, thereby contributing new knowledge to the student’s chosen discipline. Students are also guided by a thesis committee that ensures input from several faculty.

**Cumming’s School of Veterinary Medicine**
Full-time faculty are expected to participate in teaching, advising, scholarship, and service, including department and university committees. The proportion of time and energy devoted to each varies based on department needs and individual faculty strengths. Research faculty focus on research. First-year DVM students are assigned to faculty who advise and provide career mentoring. After the first year, they seek career area mentors from among faculty and practicing DVMs. Students in thesis programs are assigned to an advisory committee that provides advice and mentorship throughout the program. TCSVM Faculty Productivity Report data show that in 2010 faculty produced 197 peer-reviewed publications, 21 abstracts, and 92 book chapters. In 2011 faculty produced 165 peer-reviewed publications, 45 abstracts, and 19 book chapters.

**Role of Graduate Students in Teaching**
Most Tufts schools do not rely on graduate assistants for teaching. Nonetheless, qualified students have opportunities to earn or supplement income and complement portfolios by serving as TAs in varying capacities. TAs are carefully selected, oriented, trained, mentored, and monitored. TCSVM PhD students who also hold a DVM may supplement their income by facilitating weekly problem-based learning groups. Fletcher’s policy is
not to allow students to teach except in extraordinary circumstances where PhD students have the appropriate professional experience to qualify as POPs (e.g., former CEO of a corporation, former US general). SOE TAs assist faculty in courses and laboratory sections. A&S departments with graduate programs have TAs to support teaching or assist by holding office hours and students discussion sections, grading papers and problems, and assisting in the laboratory. Doctoral students in English may apply to serve as TAs. Over the past 7 years, the size of the tenure-stream faculty has increased by 34, a net increase of 34.

Responses from 2006 and 2007 surveys revealed that GSAS students did not feel adequately trained for teaching, resulting in the creation of the Graduate Institute for Teaching (GIFT) in AY07-08. GIFT provides a standard environment for faculty and administrators to mentor doctoral and postdoctoral fellows across Tufts in pedagogy and academic leadership through four weeks of daily workshops led by Tufts’ most talented tenure-stream faculty and administrators, including the president and provost, with sessions on presentation skills; leading discussions; teaching lectures; teaching with technology; lesson planning; and assessing and grading learning outcomes. Evaluation feedback from participants averages an overall 4.8 out of 5 and is reviewed annually to improve the program. For example, based on needs assessment, an exercise in which fellows are asked to lead spontaneous group discussions on current event topics was introduced. GSAS plans to evaluate the experiences of GIFT alumni currently in college teaching positions to assess whether the program impacts time to degree, transition to career placement, and overall job performance. This program was institutionalized in fall 2012 with the creation of a new associate dean position filled by the director of the GIFT program.

**APPRAISAL**

**Role and Status of Faculty**

**Faculty Size**

Increasing faculty size is crucial to elevating Tufts’ research activity and academic reputation. More research leaves and expansion of graduate programs bring about a shift in teaching and advising responsibilities. Increasing overall faculty numbers is necessary to maintain a full curriculum and healthy student/faculty ratio at all levels. Since 2001, the undergraduate student-to-faculty ratio has wavered between 7:1 and 8:1 but for the last two years has held at 9:1. That increase is highly driven by an increase of enrolled undergraduates, and, although good, this ratio puts Tufts in the bottom half of its 11 peer schools (see Table 5.2).

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In its 2005 strategic plan, A&S set a goal to increase the size of the tenure-stream faculty by 60 within 10 years. As of AY11-12, it was halfway to that target. In AY05-06, A&S had 259 tenure-stream faculty; by AY11-12, the number had risen to 293, a net increase of 34. In addition to revitalizing faculty with new hires at the entry level, A&S has also increased recruitment of tenured professors in a strategic effort to add leadership and distinguished scholarship. Of the 92 new A&S faculty hired between 2005 and 2012, 21 have been at the senior level. SOE’s 2005 strategic plan called for the addition of tenure-stream faculty to build critical mass in strategic areas of bioengineering and sustainability (environment/energy). Over the past 7 years, SOE tenure-

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75 Source: Tufts University Fact Book 2011-2012, p. 100.
stream faculty size has grown substantially (from 58 to 77), with new hires across its six departments. The number of endowed professorships has also grown significantly in this period, increasing from one to seven.

Fletcher’s 2005 strategic plan committed it to six additional faculty, achieved by AY10-11. During the last 13 years, the tenure-track faculty has increased by 57% (from 21 to 33), full-time contingent faculty by 133% (3 to 7), half-time contingent faculty by 160% (5 to 13), and one-course adjuncts by 24% (from 21 to 26). Adjuncts are mostly hired to bring to the curriculum specific professional competencies that regular academic faculty cannot provide. Hence, contingent faculty numbers have continued to rise. To the extent possible, Fletcher has strengthened its relations with contingent faculty by awarding more of them multi-year contracts and consolidating them into half-time contracts with benefits. As a result, the number of contingent faculty on long-term, 50%-or-more contracts has almost quintupled over the last decade, whereas the number of short-term, one-course adjuncts has increased very little. This is a switch towards a faculty with more long-term stake and experience in the school. Still, the growth in faculty has not kept up with growth in students. Fletcher must grow the faculty, especially in the areas of business and law, where programs are overly dependent on adjunct faculty. Fletcher currently does not have the financial resources or the physical plant to do so.

TUSM’s strategic plan of 2006 envisaged a faculty contingent of 100 through the addition of 30 new faculty. The new vision is to support a core faculty of approximately 70 to 75, with centers of excellence in specific areas, such as neuroscience and infectious disease, with a number of new recruitments in these fields. At this point, two new chairs and eight new faculty have been recruited in these two departments.

Some schools have developed clear policies regarding nontenure-track faculty. A&S reduced dependence on part-time instructors by creating more full-time lecturer positions, especially in the languages and applied programs, and by increasing the annual load of full-time lecturers from four to six courses. This added some capacity to departments and allowed the tenure-stream faculty to concentrate more on teaching related to their areas of research. It is also a benefit to students to be taught by committed full-time faculty rather than by peripatetic part-timers. In the SOE, the educational model has evolved in the past few years to include an important educational role for non-tenure track POPs, who are providing leadership in the engineering design curricula and a direct connection to industry and engineering practice. The number of POPs has grown to 15 across the SOE (including 6 POPs serving as core faculty in Tufts Gordon Institute). Until recently, more than half of Fletcher’s tenure-track faculty consisted of tenured full professors and a deliberate attempt was made to increase the number of lower-level positions. Of the last 10 hires, four were assistant professors and two were untenured associate professors.

**Faculty Handbooks**

Several schools, including TUSM, TUSDM, TCSVM, Friedman, and AS&E, routinely publish faculty handbooks. These handbooks outline policies and procedures for faculty members, including (but not limited to): descriptions of the criteria for appointment and promotion, policies concerning sexual harassment, expectations for ethical and responsible action, information regarding faculty development, academic freedom policies, and grievance procedures. Faculty handbooks are periodically revised to accommodate policy changes within each school. Revisions of handbooks are approved through school-based committees (e.g., TUSDM and TUSM), at faculty meetings (e.g., Friedman), and by administration (AS&E). Friedman incorporated major revisions to its faculty handbook in 2011, and AS&E published a new handbook in 2012. Friedman’s major revisions accommodated new tenure policies and institutional changes at the school. Fletcher created its first contingent faculty policy in 2011, now part of its faculty handbook. TUSM is in the process of reviewing and revising its Bylaws and Faculty Handbooks, with expected completion by 2013.

The AS&E Faculty Handbook was extensively revised beginning in 2005 when it was converted to an electronic document. Between 2007 and 2009 deans and administrators convened to evaluate content; in AY10-11 content was again revised to reflect SOE policies/practices, and revisions were published during AY11-12. Grievance procedures, not revised since 1994, underwent a complete review to ensure compliance with federal and state law, and changes to the procedures were voted on by faculty in March 2012. The administration of both schools will continue to annually evaluate the efficacy of the handbook. Major changes to the handbook, representing a significant self-evaluation of the structure, as well as of the integrity of policies and procedures, include: 1) Consolidation of separate handbooks into one document that applies to all AS&E faculty, regardless of rank, full-time equivalent (FTE), or school-affiliation (between A&S or SOE); 2) Addition of

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76 Refer to Table 5.1 for links to faculty handbooks and other faculty-related documents.
a policy on the privacy of student academic records; and 3) Removal of policies administered by other offices and units and inclusion of links to other Tufts policies that apply to faculty.

Compensation
Based on the College and University Personnel Analysis (CUPA), Tufts faculty salaries by discipline are comparable to other private research universities. Tufts' goal is to ensure that opportunities for faculty in teaching, research, and service are well-supported and that faculty successes are recognized and rewarded.

Salaries are reviewed periodically to ensure they are neither below nor exceed a typical range for faculty at the same level across the school and Tufts, and in relation to benchmark schools. Faculty can, and have, made formal requests for compensation review. The only school that does not have salary or promotion policies is the school (being treated like any other faculty). Friedman's compensation was found to be in the middle of the range but was slightly increased nonetheless since there had been no increase in rates for the past decade.

Until three years ago, schools in the Association of Professional Schools of International Affairs (APSIA) shared aggregate salary data, and Fletcher usually held the first position for assistant and associate professors. However, Fletcher faces severe limitations in maintaining its competitiveness as faculty move up the academic ladder, especially if they are highly successful. The school has a fair number of faculty who are world-class authorities in their fields and are at risk of being hired away. Especially in the fields of law and business, top schools can pay far more than Fletcher does in salaries and research support.

Salaries for contingent faculty are generally very high compared to other schools. Fletcher mostly employs contingent faculty not as a means to save money, but as a way to increase the professional content of the school.

TUSDM is requiring more of its new full-time faculty hires to raise external funds to support their salaries. Part-time faculty are not expected to generate a portion of their salary on external support. In the case of researchers, there is often a percentage expected to be covered by grants that is specified in their offer letter, differing from person to person; however, TUSDM does not contractually require researchers to cover a portion of their salary. Junior research faculty may not be hired unless a significant portion of their salary can be covered on a grant. Principal investigators (PIs) generally support 30%-40% of their salary through grants.

Recently, in offer letters the dean outlined that faculty will need to support a percentage of their salary (from 30% to 50%) on grants after an initial startup period.

TUSM salaries were adjusted to the 75% percentile of a selected group of research-intensive medical schools following a comprehensive review of basic science faculty salaries in 2001. To absorb the cost, faculty agreed to adjust the proportion of their salaries paid through grants from 50% to 60%. It is the practice of TUSM to review salaries annually, based on time in rank and research funding. Equity adjustments occur when salaries fall below the median for these indicators. Faculty have requested another comprehensive review of salaries with respect to peer institutions and this work is commencing under the guidance of representatives from the faculty senate and the dean's office.

Salaries among TCSVM departments vary and vary among faculty within them. The chair of the environmental and population health department indicated that the goal is for the collective faculty to bring in 50% of their salary from extramural sources. For clinical faculty, that includes income from clinical service, but basic scientists are expected to generate between 50% and 100% of their salary. International field research faculty are expected to generate 50% of their salary. In the biomedical science department, academic faculty are encouraged to bring in 50% of their salary from external sources. For individual faculty members, salary support ranges from 5%-100%, and salary offset averages 36% from external sources. There are nine research faculty members expected to obtain 100% of their salary from external sources. In short, the expectation is roughly 50%, with extensive variation depending on individual talents and circumstances. There is no perception that the variance in external support is inequitable. TCSVM’s flexibility accommodates the reality that there is less federal funding for veterinary research.

Evaluation of Faculty
A wide range of approaches are applied to instruction across Tufts. Course content and pedagogical methods are evaluated on an ongoing basis through individual school mechanisms such as curriculum committees and
student course evaluations. In addition, a system of external reviews, some voluntary and others mandated, provides valuable input about the health of Tufts departments and programs. Accrediting agencies for these involve extensive self-studies, including review of faculty.\textsuperscript{77}

Systematic assessment of the quality of teaching and learning is determined by the schools and, for tenure-stream faculty, is an integral piece of piece of tenure and promotion. Most schools require an annual self-evaluation dealing with all aspects of teaching, research, and service followed by a conversation with the chair, program director, and/or dean. All AS&E courses undergo student course evaluations. Since AY08-09, all new Fletcher faculty have been encouraged to use a confidential mid-course evaluation that serves to improve teaching; in 2011, the faculty adopted a policy recommending that all professors teaching new courses and faculty whose teaching evaluation ratings for the last semester fell to below three out of five (i.e., approximately the 10\% worst evaluated classes) use the same mid-course evaluation. At TUSM, feedback on teaching is provided through student evaluations distributed to all course and clerkship directors and department chairs, supplemented by a comprehensive peer-review process conducted by the OEA and CC.

In practice, course evaluations are the only source of systematic data about teaching effectiveness used for tenure, promotion, and merit raises. Finding other mechanisms and criteria for evaluating teaching (including advising and mentoring of students) is a challenge. Objective and comparable data on teaching and advising loads is lacking, and hence some faculty have not felt that there was a strong relation between their classroom performance and subsequent salaries. Aside from self-evaluations and student course evaluations, there are no other university-wide systems in place to evaluate the quality of teaching and learning, such as mentoring and reviewing of in-class performance by other faculty; such mechanisms, if offered, are implemented at the school, department, and program level.

Center for the Enhancement of Learning and Teaching

Tufts encourages and provides ample opportunities for the professional growth of the full-time faculty throughout their careers. The university-wide Committee on Teaching and Faculty Development (UCTFD) was created by academic/education deans and faculty with support from the provost’s office in 1994 to share ideas and innovations among schools and to sponsor events and programs such as the annual University Conference on Teaching and Learning that highlights new teaching innovations. New measures and programs have been developed to further enhance faculty teaching, including the founding of the Center for the Enhancement of Learning and Teaching (CELT), a resource for faculty to refine and improve their pedagogy and to support their academic growth and development. Widely used by faculty from all of the schools, CELT provides school- and department-based as well as one-on-one confidential consultation for faculty on teaching, curriculum and syllabus development, and grant proposal preparation.

A new director for CELT, hired in January 2012, quickly determined the need for a faculty advisory board with the purpose of creating a community of practice to engage faculty in their own development and in which they feel ownership for the types of services offered. CELT invited members to join the CELT Faculty Advisory Board in spring 2012, striving for a representative board from all schools and levels of faculty rank to ensure comprehensive services. The board meets regularly to provide strategic direction, guide programming choices, and serve as CELT ambassadors, and a survey will be conducted to determine new directions for support.

Since 2005, the Office of HR and Organizational Development and Training (ODT), CELT, and the provost’s office have partnered to coordinate the Academic Leadership and Development Program (ALD) that provides faculty leaders (actual and potential academic deans, department chairs, program directors) with the tools and skills to navigate the myriad issues that arise with leadership roles at Tufts. More than 100 individuals from all of Tufts’ schools have participated in this program. Informal networking has resulted in cross-school research, symposia, projects, and additional peer support for their day-to-day work.

Balancing Research, Teaching, and Advising

Faculty who engage in research as part of their job are expected to integrate excellent teaching, advising, and cutting-edge scholarship in their respective fields. However, not all schools have an established distribution standard for these elements; SOE and TUSM have established such a system, and other schools are investigating the adoption of school-specific criteria. Although faculty are dedicated, the growing number and intensity of competing demands for their time represent a major challenge in seeking a balance among research, teaching, and other aspects of university life.

\textsuperscript{77} For additional information regarding course evaluations and accreditations, see Standard 4.
Additionally, success in winning grants carries its own stresses since the workload demands often increase unpredictably. Many schools focus on international issues; therefore, research funding typically requires substantial foreign travel. For example, of Friedman’s active grant portfolio of $49 million in 2012, more than 57% is related to international work. The cyclical predicament of success in winning external funding often generates more opportunities to secure such funds, bringing more travel, administration of grants, and supervision of grant-funded employees, as well as less time for teaching, advising, and service to the school.

As the A&S faculty’s research profile improves and greater emphasis is placed on scholarship and graduate education, it will challenging to maintain the high quality of undergraduate instruction and advising. A&S aims to guard against an increased faculty hierarchization in which research-active faculty do less teaching and receive higher remuneration while instruction is relegated to nontenure-track and research-inactive faculty.

In September 2011, Fletcher’s academic dean created a table calculating teaching and advising loads, showing as much as a 6:1 ratio between the lowest and highest loads caused by, among others, great differences in involvement in the PhD program. This realization may lead (but has not yet) to a discussion about the adoption of a “point system” that allows for redistribution of loads and/or rewarding faculty differently based on workload. Initial discussion shows that many faculty believe that such a system amounts to an unnecessary and stifling form of bureaucratization that will never manage to measure adequately individual faculty members’ contributions. This same dilemma is faced in A&S. Although how to address faculty workloads is unclear, it is clear that there needs to be a better balance of research, teaching, and advising.

Teaching at Friedman carries significant time demands, especially since the student intake was purposely increased from roughly 75 to over 100 per year as of 2008. Faculty teaching required classes are faced with the larger classes; teachers of electives are often fortunate to have small classes. This represents a heavy load, especially for tenure-stream faculty seeking to develop their research portfolio and get published. Additionally, some senior faculty serve as department chairs or program directors. An attempt is made by the deans and chairs to balance faculty workloads as fairly as possible. New assignments are carefully assessed in terms of existing workload, duration of commitment, and degree of fit with faculty interests and contributions. As far as possible, ad hoc committee assignments, pan-university initiatives, and high-level-effort activities that were not planned ahead of time are directed away from pre-tenure faculty to protect their research time. However, valuable opportunities for additional engagement within and outside the school may be offered to pre-tenure faculty, and where it is thought they would benefit professionally, engagement is encouraged.

Work/Life Balance
To protect faculty time for research, AS&E administration is anticipating making changes in its leave policies for child and family care. Since the mid-1990s, Tufts’ peer institutions have been placing emphasis on creating work/life supports to help faculty and staff manage the demands of career and personal life. Such supports include elder care counseling, childcare, and housing assistance programs; and policies such as those around maternity and primary caregiver leave, tenure clock stoppage, flexible career options, and family caregiving leave. Unlike most of its peers, Tufts historically has not given these matters sustained attention or made them a focus of an administrator’s portfolio. In spring 2010, a faculty-initiated AS&E Task Force on Work/Life Balance was empanelled to investigate faculty work/life issues and make data-driven recommendations for improving policies and practices. The task force issued its report and recommendations to President Monaco in February 2012. In light of this report, the dean of A&S has taken the key step of making faculty work/life matters part of the portfolio of the dean for Academic Affairs with responsibility for faculty development, and the deans of A&S are working to update relevant faculty policies.

Interdisciplinarity and Collaboration
Interdisciplinary programs, faculty appointments, and research have increased over the past two years. In spring 2011, the provost’s office produced a white paper, “Collaboration,” to stimulate discussion and brainstorm solutions. Tufts recognizes the difficulties of teaching and research across disciplines and schools, including evaluation for promotion and tenure, funding across schools, and infrastructure and policy issues.

To encourage interdisciplinarity across schools, the provost’s office created “Tufts Collaborates!” to fund collaborative research likely to result in competitive proposals to federal and foundation granting agencies. In 2010, the provost’s office and UCTFD started “Tufts Innovates!” a seed grant program seeking to promote ideas to enhance teaching and learning, including interdisciplinary approaches. Proposals are expected to catalyze sustainable initiatives and have led to other internally-funded programs such as “University Seminars,” trans-disciplinary courses enhancing the interface between research and teaching on global issues.
In spring 2012, A&S conducted an external review to assess the effectiveness of its interdisciplinary programs and structures. A faculty retreat was devoted to discussing the report, paving the way for an internal review of interdisciplinary programs (AY12-13). Other A&S interdisciplinary initiatives include a cooperative venture to grant lecturers in the A&S community health program professorial appointments at TUSM, enhancing their status as PIs on external research grant applications, and a new “cluster hire” initiative with tenured-track faculty slots designed to seed innovative research and teaching in interdisciplinary programs. The first “cluster” was in the area of environmental studies (AY11-12); the next will be in race and ethnicity (AY12-13).

Over the past seven years the SOE has sought to provide policies and incentives to support interdisciplinary faculty recruitment, research, and education. Examples include cluster hiring (sustainable energy), external members on faculty search committees, dean’s discretionary support of seed grants for interdisciplinary research and course development, establishment of faculty development funds supporting SOE PIs and SOE project co-PIs in other schools, and SOE support of release time in A&S departments to assist in development of cross-disciplinary courses. In addition, efforts are planned to refine the Tenure and Promotion process (with A&S) to adequately review and value interdisciplinary scholarship and educational efforts.

The interdisciplinary Pierrot Project, celebrating the centennial of Schoenberg’s masterwork and organized by A&S’s music department chair and a faculty pianist, included a team-taught course in spring 2012; concert by faculty performers and guest artists; student-curated gallery exhibit and program book; new compositions by Tufts composers; and guest lectures by an A&S drama and dance professor, romance languages professor, and New England Conservatory faculty. A&S faculty have collaborated with SOE faculty to create a music engineering minor that launched in fall 2011, leading to important curricular and research directions including a new course on musical applications for the iPad taught by SOE computer science faculty, and a cross-listed music and engineering course for designing electronic musical interfaces, taught by the music department.

CHAT, established in 2007, promotes innovative study in the humanities and arts and encourages conversations beyond a given discipline’s borders. Its annual activities include: a yearlong faculty, postdoctoral fellow, and graduate student seminar; a lecture series; and a symposium. CHAT supports four Mellon Postdoctoral Fellows, three Faculty Fellows, and two Graduate Dissertation Fellows. CHAT has brought to campus internationally distinguished scholars and writers including Nobel and Pulitzer Prize winners. CHAT supports new research and creative work through events with all 11 departments in the humanities and with Aidekman Center for the Arts, Tufts Institute for the Environment, Tisch College, Tufts Hillel, Fares Center for Eastern Mediterranean Studies, Wellesley Center for the Humanities, and Transnational Studies Group.

A future challenge, particularly in A&S, will be to determine whether too many programs are offered, thereby unnecessarily diluting institutional strengths and increasing costs and faculty numbers. Current processes for approval of new programs include review available resources (financial, faculty, library, etc.), but there has been little review of existing programs. Reviews will need to be conducted to determine the programs’ cost-benefits and whether faculty are effectively utilized. Although Tufts intends to be thoughtful throughout this process and avoid alarming faculty who could be impacted, it is likely there are redundancies. This may also be addressed as part of university-wide strategic planning to examine sustainability and impact of programs.78

Diversity

Tufts aims to create a diverse faculty, appropriately reflective of its student body and society at large. For many years faculty search procedures have included oversight by the deans and resources to help departments build a diverse pool of applicants. Over the last five years the administration has taken an even more active role in encouraging diversity and enforcing consistent quality standards through closer monitoring of statistics, framing of job advertisements, outreach mechanisms, and meetings with search committees to agree on search strategies and goals. Despite concerted efforts, more work still needs to be done. As demonstrated by Figure 5.3, the

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78 See Standards 1 and 2.
majority of full-time faculty members (all professor ranks, instructors, and lecturers) identify themselves as white, and only slight increases have been achieved since 2009. In fact, less than 20% of the faculty identifies themselves as faculty of color (FOC).

Of the 92 new A&S tenure-track faculty hired between 2005 and 2011, 23% were FOC and 43% were female, but overall percentages in these two categories remained much the same; in other words, no significant gains were made. IN SOE, the faculty hiring process has contributed to the ethnic and gender diversity of the faculty. In AY03-04, the SOE had 54 tenure-stream faculty (and 4 unfilled positions), of whom 8 were female and 9 were ethnic minorities. By AY12-13, the size of the tenure stream faculty had increased to 77, of whom 18 are female and 16 are ethnic minorities. While at Fletcher significant international diversity exists with professors from Europe, the Middle East and Asia, there is very little US diversity, and 90% of the tenured faculty are male. In the last five years, the provost’s office has developed proactive policies to reach out to women and minorities in order to bring a diverse pool of faculty candidates to campus. This has paid off in Fletcher: 4 out of the 5 most recently hired assistant professors were women, as were 3 out of 4 untenured associate professors. Women are more represented among its non tenure-stream faculty; nonetheless, there is a long way to go before the power structures of Fletcher become more diverse. At Friedman there is a good gender balance across the faculty, but nationality mix is limited despite efforts to recruit widely; the demographics of the faculty are, however, similar to Tufts’ faculty at large. See Table 5.3 for faculty gender distribution across schools.

In 2009, TUSM appointed a dean for Multicultural Affairs and Global Health to coordinate school-wide programs and activities relating to diversity and inclusion. The creation of this position underscored TUSM’s commitment to a diverse learning community that promotes excellence and health professionals’ skills for the 21st century. Participating faculty teach, advise, and mentor students in established programs in India, Panama, Ghana, and Haiti that are expanding to meet the growing interest among students in the graduate and professional degree programs.

TCSVM’s faculty has achieved good gender diversity and solid international diversity. By maintaining a high-profile international program of primarily boarded faculty, TCSVM attracts international faculty candidates to affiliate with the school. However, TCSVM has not had the same success recruiting under-represented minority faculty despite concerted efforts to develop diverse applicant pools.

### Table 5.3 Faculty Gender

<table>
<thead>
<tr>
<th>School</th>
<th>AY09-10</th>
<th>AY10-11</th>
<th>AY11-12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>A&amp;S</td>
<td>304</td>
<td>275</td>
<td>292</td>
</tr>
<tr>
<td>SOE</td>
<td>27</td>
<td>90</td>
<td>30</td>
</tr>
<tr>
<td>Fletcher</td>
<td>12</td>
<td>44</td>
<td>12</td>
</tr>
<tr>
<td>Friedman</td>
<td>8</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>TUSDM</td>
<td>76</td>
<td>124</td>
<td>75</td>
</tr>
<tr>
<td>TUSM</td>
<td>58</td>
<td>98</td>
<td>59</td>
</tr>
<tr>
<td>TCSVM</td>
<td>36</td>
<td>45</td>
<td>35</td>
</tr>
<tr>
<td>TUFTS TOTAL</td>
<td>521</td>
<td>681</td>
<td>515</td>
</tr>
</tbody>
</table>

PROJECTION

Tufts has high-level and high-impact issues to address, particularly in the areas of: a) Formally evaluating thesis advising; b) Developing a better mentoring system for new faculty as they teach and advise; c) Linking annual pay increases more explicitly to teaching and advising performance; d) Growing the size of the faculty; e) Increasing faculty diversity; and f) Promoting interdisciplinary and inter-school collaboration.

### Role and Status of Faculty

A&S will continue to increase the size and quality of its tenure-stream faculty, aiming to reach if not exceed the 2005 Strategic Report target goals listed. A larger faculty is needed to raise Tufts’ profile as a research university and to compensate for earned research leaves. To the extent possible, A&S will also incrementally replace part-time faculty with full-time faculty (especially in service areas such as language, writing, and basic mathematics instruction) to better serve students.

Although its faculty size has increased by more than 25% in the past seven years, the SOE is still among the smallest engineering schools in the country. Over the next eight years, SOE plans to continue to pursue modest growth (with a goal of 90 T/TT positions by 2020), as well as replace retiring faculty members (approximately 20% are currently eligible for retirement). To improve graduate program rankings, it will be important to hire accomplished senior faculty members. Endowed professorships will be key to attracting such faculty.

In October 2012 the AS&E Budget and University Priorities Committee agreed to begin working with the A&S administration regarding better linking of pay increases to productivity. The plan is to begin developing
productivity measures that can be used to analyze the current relationship between pay and performance and improve the specification of the longstanding, annual “regression study” of AS&E faculty salaries.

Fletcher’s Tenure and Promotion Committee (TPC) is currently working to reform the system, seeking to clarify the criteria used and provide better guidance to pre-tenure faculty. It is likely that a profound reform of the tenure and promotion system will be adopted by the faculty during AY12-13. While it is impossible to state exactly what the form of the new system will be, it will likely include: 1) More explicit statements about the level of excellence required in teaching and research; 2) Better definition of the options that qualify under research, teaching, and service; 3) Increased interaction between faculty and TPC to clarify expectations, achievements, and challenges; and 4) Better systems of mentoring pre-tenure faculty.

Friedman will continue to monitor market and competitor pay rates for skilled adjuncts and, where possible, at least match such rates. Since Friedman continues to increase its faculty cadre, one aim is to progressively use in-house faculty to teach as many core courses as possible, hence decreasing reliance on adjuncts.

Tufts also seeks to identify and implement best practices in faculty reviews. SOE and TUSDM have effective processes to which other schools aspire. Best practices are addressed in ALD programs, but implementation across schools is not consistent. An area of particular focus will be evaluation post-tenure, after which there is little to no feedback addressing teaching quality and effectiveness.

**Center for the Enhancement of Learning and Teaching**

Tufts has greatly increased faculty development resources from CELT andUCTFD since the last NEASC visit. To strengthen retention, scholarly productivity, teaching excellence, and leadership skills development in higher education’s changing environment, CELT is piloting Mutual Mentoring Grants with TCSVM and PHPD faculty. These grants (up to six) are specifically targeted to provide assistant and associate level faculty the opportunity to develop mentoring relationships and find connections for research and teaching beyond their school. Evaluated by progress toward the grants’ goals and permanence of the mentoring network, results will be compared with the existing faculty mentoring programs. CELT is currently partnering with UIT to launch the new “Teaching at Tufts” Web site. This online faculty resource will include information, suggestions for teaching challenges, and an array of the best literature on teaching and learning. ALD is effectively creating institutional peer networks and supporting faculty as academic leaders. Once the results of the needs assessment are evaluated, CELT’s Faculty Advisory Board will identify new programs.

**Balancing Research, Teaching, and Advising**

Tufts has not established a university-wide distribution standard for research, teaching, and advising, and solutions will likely be found at the school level. Undergraduate A&S student populations are remaining stable but faculty have increased, indicating a healthier workload is possible. SOE has established such a system, and other schools are investigating the adoption of school-specific criteria. A&S, Fletcher, and Friedman deans have visited other research universities to explore systems to balance these competing demands, without comprising quality of student services and advising. This investigation will likely continue through AY12-13.

**Interdisciplinarity and Collaboration**

The spring 2012 review of interdisciplinary A&S programs has resulted in recommendations to be acted on in AY12-13. A&S will continue to allocate new faculty lines to “cluster hires” to foster greater interdisciplinarity. A&S will need to monitor and likely modify its pre-tenure and tenure review procedures to account for scholarship production at the boundaries of disciplinary fields. In spring 2012, President Monaco created a Graduate Education Council to propose actionable recommendations for interdisciplinary collaboration in doctoral education and research and removing obstacles to interschool collaboration. Solutions for addressing challenges presented by increased interdisciplinary have yet to be found. With varying school missions and localized budgets, it is likely that no one solution will apply to all initiatives. A report was submitted to the president in fall 2012 and is being used to support strategic planning.

**Diversity**

Tufts is developing two significant initiatives related to race and diversity. First, it is establishing an undergraduate A&S Africana Studies major. Second, Tufts will establish a Center for the Study of Race and Democracy. Both initiatives are motivated by a self-assessed need to increase research and improve curricular offerings in race and diversity. The center is intended to encourage historically informed discussions on democracy, identity, and citizenship around the world. Research will focus on three areas: exploring race and institutions globally, exploring race and democracy internationally, and promoting a campus-wide global research-driven conversation about race and democracy. Faculty/staff support will come from many
departments and programs, including A&S, Fletcher, Tisch College, TUSM, and IGL. To add capacity, an interdisciplinary “cluster hire” will be in race and ethnicity.

In AY12-13 it is expected that the A&S Task Force on Race and Ethnicity’s recommendations will result in expanded curricular offerings, programs, and research across many departments and that the diversity among new faculty hires in AY11-12 will continue.

Recruiting and retaining a diverse faculty is a priority but has proven challenging, emerging as a focus area for Council on Diversity tasked with recommending how Tufts can create a more diverse and inclusive academic community. Its administrative structures and policies working group will address how Tufts can strengthen the recruitment, retention, and professional advancement of a diverse faculty/staff, as well as foster the multicultural competence needed to teach and work effectively in a diverse academic community, and accountability for advancing its commitment to diversity and inclusion. Data assessment, benchmarking, and best-practice research began in summer 2012; preliminary recommendations are anticipated during fall 2012.

Work/Life Balance
The Task Force on Work/Life Balance issued its report/recommendations to President Monaco in February 2012. Faculty were invited to comment during spring 2012 so that Tufts’ administration could assess its recommendations following the end of the academic year. HR is currently considering issues under its purview.

INSTITUTIONAL EFFECTIVENESS
The schools at Tufts University regularly review their needs for faculty and the levels of support offered to faculty. New faculty positions – in quantity and role – have been added to better serve the schools’ missions and meet the needs of students. While some schools have well-established systems for evaluating the effectiveness of their faculty in teaching and advising, scholarship, and service, others are making progress towards establishing a more comprehensive system.
Standard 6: Students

DESCRIPTION

Every student has access to the range of services one would expect from a traditional campus. However, because student populations differ in terms of geographic location, age, experience, course of study, professional interests, and research interests, the admissions requirements and rates, retention and graduation rates, student services, and student activities offered vary by school.

Admissions

All schools adhere to Tufts’ policies of equal opportunity and equal treatment of every prospective student. In addition, schools commit to policies that do not discriminate on the basis of race, color, national or ethnic origin, age, religion, disability, sex, sexual orientation, gender identity and expression, or status as a veteran.

Each school aims to enroll from the pool of qualified applicants a diverse student body not only in terms of gender and race/ethnicity but also in terms of geography, culture, socioeconomic status, interests, special talents, and international experience. Very few programs target specific groups of students with the goal of increasing their numbers of applications and admittances; one exception to this is Fletcher, which aims to have a significant proportion of its student body (40% or more) hail from overseas.79

Tufts’ schools maintain individual admissions Web sites (see Table 6.1). Many schools have blogs and presences on Facebook, Twitter, and other online social networks where students can learn more about each school’s “feel.” Qualified and trained members (including faculty) of schools’ admissions committees review applications, seeking to determine academic ability, degree program compatibility, and potential for success.

The number of applications received by each school has remained steady or increased over the past five years.80 Acceptance rates range by program, from a low of approximately 8% in the medical (MD) and dental (DMD) programs, to a high of around 50% in Friedman and PHPD programs. Between 30% and 50% of accepted applicants enroll.

Table 6.1 Admissions Information and Requirements

<table>
<thead>
<tr>
<th>School</th>
<th>Admissions site</th>
<th>Requirements for Application</th>
<th>Other online Information for prospective students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergrad</td>
<td>Admissions</td>
<td>Requirements for students are online.</td>
<td>Facebook, Twitter, YouTube, Admissions Magazine, virtual tours, and blogs.</td>
</tr>
<tr>
<td>GSAS SOEGP</td>
<td>Admissions</td>
<td>Graduate Studies Application (for GSAS and SOEGP). All programs require a bachelor’s degree; some have specific requirements.</td>
<td>Degrees offered on GSAS and SOEGP sites. GSAS uses blog, Flickr, LinkedIn, Twitter. SOEGP has an online pamphlet and a Web site highlighting active areas of research. Shared monthly e-newsletter.</td>
</tr>
<tr>
<td>Fletcher</td>
<td>Admissions</td>
<td>Preparation and Prerequisites as well as admissions standards and process are online.</td>
<td>Degree comparison chart for selecting a degree. Admissions blog, online office hours, Facebook; FAQs, Viewbook</td>
</tr>
<tr>
<td>Friedman</td>
<td>Admissions</td>
<td>Requirements in Handbook; some program-specific prerequisites. Online application.</td>
<td>Why Friedman? FAQs: Viewbook</td>
</tr>
<tr>
<td>TUSDM</td>
<td>Admissions</td>
<td>Admissions policies are available on the Web site and in the online Student Handbook.</td>
<td>Combined degree programs information available online</td>
</tr>
<tr>
<td>TUSM-MD</td>
<td>Admissions</td>
<td>Admission policies are available on the Web site and in the online Student Handbook.</td>
<td></td>
</tr>
<tr>
<td>PHPD</td>
<td>Admissions</td>
<td>Each of PHPD’s 10+ programs has distinct requirements for admission.</td>
<td>FAQs</td>
</tr>
<tr>
<td>Sackler</td>
<td>Admissions</td>
<td>Requirements on Web sites for PhD programs, MS in CTS, MS in Surgical Anatomy.</td>
<td></td>
</tr>
<tr>
<td>TCSVM</td>
<td>Admissions</td>
<td>Admissions Criteria and “essential functions” communicated at interview invitation. Required coursework online.</td>
<td>Profiles of admitted DVM students; DVM Web site; PhD Web site; MAPP Web site; MCM Web site; List of all programs, including combined degrees.</td>
</tr>
</tbody>
</table>

The academic and demographic characteristics of entering classes typically reflect the achievement of schools’ diversity goals (Table 6.2). However, Tufts continually struggles to enroll students with lower socioeconomic status due to financial aid budgets that do not allow for packages generous enough for all who need it. In addition, many programs’ efforts to enroll a more diverse student body from a relatively homogeneous applicant pool are restricted.

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79 International students must demonstrate English language capability. Conditional admission may be offered for those few students whose level of English proficiency falls just below standard, requiring attendance in an intensive English course prior to enrollment.

80 See the 2011-2012 Fact Book, “Admissions Statistics” pages, for historical admissions figures.
Retention & Graduation

All schools are concerned with student progress towards and completion of a degree. In almost all programs, Tufts achieves very high graduation and retention rates. Although it is difficult to compare across programs due to varying degree requirements, most retention rates from year one to two (when applicable) are over 90%, and graduation and completion rates are usually over 80% and very often over 90% (Table 6.3). Students are routinely informed of the requirements for advancement and graduation by their school via various channels; these and other policies are outlined in school bulletins and handbooks (Table 6.4).

<table>
<thead>
<tr>
<th>Degree</th>
<th>Retention Rates, Year 1 to 2</th>
<th>Degree Completion Rates</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS&amp;E</td>
<td>BA, BS, BE</td>
<td>95%-97%81</td>
<td>100% time: 84%-87%82</td>
</tr>
<tr>
<td></td>
<td></td>
<td>150% time: 89%-92%</td>
<td>150% time = 6 years</td>
</tr>
<tr>
<td>GSAS</td>
<td>Master’s</td>
<td>N/A</td>
<td>150% time: 85%</td>
</tr>
<tr>
<td></td>
<td>PhD</td>
<td>N/A</td>
<td>100% time: 36%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8-year rate: 54%</td>
<td></td>
</tr>
<tr>
<td>SOEGP</td>
<td>Master’s</td>
<td>N/A</td>
<td>100% time: 66%</td>
</tr>
<tr>
<td></td>
<td>PhD</td>
<td>N/A</td>
<td>150% time: 82%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8-year rate: 53%</td>
<td></td>
</tr>
<tr>
<td>Fletcher</td>
<td>Master’s</td>
<td>MA, LLM, GMAP = N/A</td>
<td>150% time: 1 year for MA, LLM, GMAP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MIB and MALD =</td>
<td></td>
</tr>
</tbody>
</table>

81 Average score is provided unless otherwise noted. The GRE was revised after 08/01/2011; scores reflect tests taken prior to that date.
83 Source: http://admissions.tufts.edu/apply/accepted-student-profile/.
84 Source: IPEDS 2011-2012 Enrollment File. Includes students who identified with multiple race/ethnicities, which may include “White.”
85 Source: IPEDS 2011-2012 Enrollment File. Does not include students enrolling in certificate programs. Includes students who self-identified with multiple race/ethnicities, one of which may have included “White.”
86 GPA data for graduate programs reference undergraduate GPAs.
87 Source: http://dental.tufts.edu/1186496760237/TUSDMD-Page-dental2w_1186496760283.html. Includes only DMD students.
88 Source: http://md.tufts.edu/About-Us/Class-Profile.
89 Source: http://publichealth.tufts.edu/About-Us/PHPD-Facts.
90 Source: http://sackler.tufts.edu/About-Us/Sackler-Facts.
91 Source: http://www.tufts.edu/vet/admissions/faq/dvm_program.html.
92 Source: S-Forms, 2013 Comprehensive Evaluation. Reported time to degree is dependent upon individual program requirements.
93 About half of students who leave do so because they have transferred to another institution.
94 The four-year graduation rate of 87% for the 2007 cohort was the highest of the past decade.
95 At the graduate level, the first- to second-year retention rate is not as meaningful a metric as it is for undergraduate. The effort required to calculate the rate is time-intensive. Given the implementation of the new SIS and the need to reallocate staffing for this project, retention data for GSAS and SOEGP are not available at this time.
96 This is comparable to national averages. There is a wide range of graduation rates amongst the various GSAS doctoral degree programs.
97 2% switched to the PhD program by the end of the second year; 2% switched to the PhD program by the end of the third year.
Each school has services and personnel providing assistance for those experiencing difficulty. For AS&E undergraduate and graduate students, ARC provides tutoring, time management skills training, and other programs. Students identified as struggling are urged to use ARC. Tutoring is offered in locations across campus on weekdays, weekends, and evenings. Tutors visit classes to explain resources. Students may evaluate each tutoring session via a confidential online survey.

Table 6.4 Bulletins and Handbooks

<table>
<thead>
<tr>
<th>School</th>
<th>Bulletin</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS&amp;E</td>
<td>The Bulletin</td>
</tr>
<tr>
<td>GSAS, SOEGP</td>
<td>Student Handbook</td>
</tr>
<tr>
<td>Fletcher</td>
<td>Student Handbook</td>
</tr>
<tr>
<td>Friedman</td>
<td>Policy and Procedure Handbook</td>
</tr>
<tr>
<td>TUSDM</td>
<td>Student Handbook</td>
</tr>
<tr>
<td>TUSM</td>
<td>Student Handbook</td>
</tr>
<tr>
<td>PHPD</td>
<td>Student Handbook</td>
</tr>
<tr>
<td>Sackler</td>
<td>Student Handbook</td>
</tr>
<tr>
<td>TCSVM</td>
<td>Student Handbook</td>
</tr>
</tbody>
</table>

Student Services and Co-Curricular Activities

Tufts provides co-curricular programs, services, and opportunities to help students become well-rounded, independent thinkers and effective leaders. Student services offices (Table 6.5) are committed to advocating for students, encouraging self-governance, involvement, responsibility, empowerment, and accountability.

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98 The lowest graduation rate is in the GMAP mixed residential/distance learning degree because of difficulty combining the program workload with a (near) full-time professional workload.
99 First-to-second-year retention rate is not applicable for the one-year MA program.
100 Many students attend on a part-time basis and therefore would not yet have been expected to graduate. It is anticipated that by August 2013 (end of RAK contract) the graduation rate will be greater than 90%.
101 Over 97% go on to internship/residency. Flexibility to pursue research concentrations resulted in 18% taking five years to complete.
102 The calendar years will vary annually until the program has three to five years to complete.
103 Rates calculated using students who complete Year 2 and enroll in Year 3 (does not include students who do not return after Year 2).
104 A small percentage of students who leave repeat the year and join the next class.
105 Because of the small number of students enrolled, one student on extended leave of absence contributed to the 25% variance.
106 Because of the small number of students enrolled, one student on extended leave of absence contributed to the 11% variance.
provide access to programs that provide support for all qualified students to achieve their academic potential fairly and equitably, and provide reasonable accommodations in accordance with applicable federal and state law. Accommodations for physical and learning disabilities require an application and appropriate documentation. The Medford campus is challenging for students with physical disabilities - hilly, with busy streets and hazardous intersections, winter weather, and many buildings with limited or no accessibility.108

**Student Governance**

The Tufts Community Union (TCU) Senate, representing undergraduates, consists of 7 elected members from each class and 4 representatives from the Africana, Latino, LGBT, and Asian American centers. The TCU Senate allocates funds from student activities fees, advocates for undergraduate interests, and lobbies administration. It is responsible for appointing 3 student representatives to the 3 primary trustees committees and 12 faculty committees dealing with student issues. AS&E graduate students are represented by the Graduate Student Council (GSC), composed of an Officers Board and 4 working groups. Like TCU, the GSC designates representatives to the 3 trustees committees and several of the faculty committees. The GSC works on an array of academic, career, and student life issues including research support, housing, and health care.

Fletcher, Friedman, TUSDM, TUSM, and Sackler students have elected student representation who sit on most governance and/or standing faculty committees. Most schools have elected student councils or senates. TUSDM does not have a council but rather class officers who receive student feedback and communicate it to administration. TCSVM implemented a Graduate Programs Student Council (GPSC) in fall 2012.

**Orientation**

All schools provide incoming student orientations; some are mandatory (undergraduate, GSAS, SOEGP, Fletcher, Friedman, TUSM, TUSDM, Sackler) and others optional (TCSVM). Each orientation is designed to provide the information and resources needed to be successful at Tufts. Typical services introduced include those relating to registration, financial aid, health, counseling, dining, athletics, campus safety, academic support, library, career services, and student organizations. At most schools, students meet with program directors and/or assigned academic advisors during orientation. Academic expectations are typically described during orientation, and at all orientations students are provided with their school’s bulletin or handbook (see Table 6.4). In these, expectations, rights, responsibilities, procedures, and other important information are codified for easy reference. Undergraduate AS&E and TUSM also offer optional pre-orientation programs.

Four optional pre-orientation programs take place prior to undergraduate orientation and are designed to allow students to develop friendships with a small group of classmates, meet upper-class student leaders and mentors, gain leadership skills, and meet others with similar interests. Approximately 60% (700-800) of the incoming class participates in one of the pre-orientations managed by the undergraduate orientation office. Program cost is the same for each; financial assistance is available and based on a student’s financial aid.

The mandatory six-day undergraduate orientation for all incoming students (first-year and transfers) consists of required and optional educational programs. Programming includes an introduction to pre-major advising groups; opportunities to explore specialized interests; mandatory programs in diversity, sexual violence awareness, safety, alcohol education, and mental health awareness; and academic information presented by the associate deans. Orientation also includes social and co-curricular activities.

107 Most services for AS&E are shared among undergraduates and graduates. This number includes health and mental health services and Office of Graduate Studies (OGS) student services personnel. Academic Support is school-based for AS&E graduate programs and therefore this FTE excludes the Office of Undergraduate Studies and Academic Advising (ARC and advising services) and Student Affairs (Resident Life and Campus Life).

108 See Standard 8 for Tufts’ plans to address Medford’s accessibility issues.
Since 2008, the Offices of Undergraduate Education and Admissions have worked to identify freshmen likely to need additional support, and establish mentoring and advising programs. Students who are the first in the family to attend college or with a history of overcoming significant obstacles (e.g., trauma, homelessness, health issues) are matched to the most supportive and experienced pre-major advisors and participate in a program to promote success through support resources, strategic choices, and peer and mentor connections.

Advising
Advisors assist students with personal and academic issues, though the form of the advising varies based on the school. A two-phase process serves varying needs for undergraduates; those who have not yet declared a major are advised by faculty/staff pre-major advisors, and those with declared majors are advised by that major’s faculty members. Students select from five pre-major advising options and are advised by a pre-major advisor until the end of their first (engineering) or second year (liberal arts), when they declare a major.

Fletcher, Friedman, PHPD, and Sacell faculty advise students, often based on similar interests, serving as students’ primary support. Advisors inform students of policies and procedures and discuss courses, learning objectives, career goals, internships, research, and cultural and personal adaptation in individual and group meetings. Friedman, PHPD, and TCSVM pair incoming students with advanced students as additional support.

TUSM, TUSDM, and TCSVM student services staff work with faculty to best support students. TUSDM’s OSA sponsors a faculty mentoring initiative, intended to facilitate faculty-student interactions, promote academic achievement, and provide a forum for career guidance. The OSA maintains an “open door” policy to help students whenever possible. TCSVM assigns students to faculty mentors but does so in groups of five to create “mentor groups.” At TUSM, a robust program enhances faculty/student interaction, generating feedback and assessment. Learning and advising communities exist to promote mentoring; advisors and OSA members of the learning communities provide support to students, especially during first and second years.

Student Privacy
Student handbooks/bulletins (Table 6.4) provide details about student records, rights, and privacy practices under FERPA; the disposition of records; and contact information to report suspected violations of these policies. All schools are responsible for the security of applicant data and must ensure that information is properly stored and transmitted to program faculty. Policies on the security, privacy, and retention of student records conform to the appropriate federal requirements, and each school and department is responsible for ensuring that management practices are compliant. While IT organizations have an important role to play in providing services and technologies that can be used to protect data, offices and departments have the responsibility for making sure that such tools and services are used effectively within their local contexts. Tufts disposes of confidential materials in accordance with federal regulations and AACRAO guidelines.109

APPRAISAL

Admissions
All schools meet or exceed their annual admissions targets relative to numbers of students. The schools have alumni networks that engage prospective students through one-on-one discussions and attendance at recruitment events around the country.

Selectivity and Quality
Table 6.6 AS&E Undergraduate Admissions Data, Focus on Applicant Qualifications110

<table>
<thead>
<tr>
<th>Year of Graduation</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications</td>
<td>15,368</td>
<td>15,642</td>
<td>15,042</td>
<td>15,433</td>
<td>17,180</td>
</tr>
<tr>
<td>Acceptances</td>
<td>4,229</td>
<td>3,988</td>
<td>3,995</td>
<td>3,757</td>
<td>3,744</td>
</tr>
<tr>
<td>Accepted (%)</td>
<td>28%</td>
<td>25%</td>
<td>27%</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>Enrolled</td>
<td>1,373</td>
<td>1,300</td>
<td>1,314</td>
<td>1,316</td>
<td>1,317</td>
</tr>
<tr>
<td>Yield</td>
<td>32%</td>
<td>33%</td>
<td>33%</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>SAT-V (Mean)</td>
<td>704</td>
<td>707</td>
<td>708</td>
<td>705</td>
<td>707</td>
</tr>
<tr>
<td>SAT-M (Mean)</td>
<td>701</td>
<td>708</td>
<td>712</td>
<td>711</td>
<td>716</td>
</tr>
<tr>
<td>SAT Composite (Mean)</td>
<td>1405</td>
<td>1415</td>
<td>1420</td>
<td>1416</td>
<td>1423</td>
</tr>
<tr>
<td>SAT-W (Mean)</td>
<td>701</td>
<td>709</td>
<td>714</td>
<td>714</td>
<td>715</td>
</tr>
</tbody>
</table>

A positive trend in admitting increasingly qualified applicants has been identified. AS&E undergraduate applications increased and acceptances decreased, allowing admission of students from the top 5% of their high school class. Verbal GREs average 582 and quantitative GREs average 719 for admitted GSAS doctoral students. Verbal GREs average 585 and quantitative GREs average 667 for enrolled master’s students.

110 Source: Tufts University Fact Book.
Schools maintained a level of selectivity appropriate to their mission. The number of SOE graduate applicants has increased over the past 5 years by just over 400 (see Figure 6.1), while the percentage of applicants accepted has slightly decreased (from 54% to 44%) for the past 5 years and the percentage of accepted students who enroll has slightly increased (from 44% to 48%). Friedman enrollment in the past 3 years has increased by 33%, and the application pool has increased by 66%, maintaining the quality of students during this growth.

Sackler's basic science division programs enroll between 30 and 40 new students each year, out of about 600 applicants. Those numbers have remained stable for the past five years and provide a pool of qualified individuals. About half the applicants are US citizens or permanent residents. While the pool indicates a broad interest in Sackler’s programs, surveys indicate that virtually all accepted applicants receive acceptance offers from other biomedical graduate schools. On average, only 50% of accepted applicants choose to attend, indicating that Sackler is not always first choice. Factors affecting applicant choice include options for research laboratories, personal needs and preferences related to Sackler’s geographic location, and the perceived prestige of Tufts. Working to improve the percentage of accepted applicants that matriculate is an important goal. It is also difficult to attract and matriculate well-qualified international students (see section on “Diversity”).

Although Tufts attracts well-qualified applicants, it is not always able to enroll them due to lack of scholarships, teaching assistantships, and Boston’s high cost of living. For Fletcher, location is also a challenge: top competitor schools are all in NY and DC, where internship opportunities abound. Graduate and professional students are increasingly troubled by undergraduate debt, and the addition of graduate debt is often overwhelming. Adding to the dilemma, the federal graduate Stafford Loan will no longer be subsidized, therefore, no subsidized student loans will be available for graduate students. These compounding factors make it difficult to attract and matriculate qualified students, some who must choose based on affordability.

**Diversity**

Consistent with Tufts’ commitment to fostering diversity on its campuses, schools have identified the need to increase recruitment and matriculation of underrepresented minorities. GSAS’ yield across master’s programs is roughly 45%, and classes are typically 70% women, 17% foreign, and 15% domestic minorities. In its doctoral programs, 12% of applicants are minorities, and only 5% of students intending to enroll are minority. Table 6.7 demonstrates the difficulty of making steady progress toward a more diverse student body.

<table>
<thead>
<tr>
<th>Year of Graduation</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>49%</td>
<td>46%</td>
<td>49%</td>
<td>51%</td>
<td>50%</td>
</tr>
<tr>
<td>Women</td>
<td>51%</td>
<td>54%</td>
<td>51%</td>
<td>49%</td>
<td>50%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>13%</td>
<td>14%</td>
<td>12%</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Black</td>
<td>7%</td>
<td>5%</td>
<td>4%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6%</td>
<td>6%</td>
<td>5%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Native American</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Multiracial</td>
<td>16%</td>
<td>16%</td>
<td>11%</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>Foreign Citizens</td>
<td>5%</td>
<td>6%</td>
<td>7%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Grant Recipient (any)</td>
<td>41%</td>
<td>39%</td>
<td>37%</td>
<td>39%</td>
<td>NYR11</td>
</tr>
<tr>
<td>Pell Grant</td>
<td>12%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>NYR11</td>
</tr>
</tbody>
</table>

TUSDM makes great efforts to assemble a class rich in experiences and backgrounds. Over 71% of the class of 2015 matriculated from outside of New England. TUSDM is among the top 10 dental schools in the US for enrollment of African-American/black and Hispanic/Latino students. Nearly half of the incoming class identifies as Asian (45%), and 49% of the class is female.115 TUSDM struggles to identify and recruit black and Hispanic students, and the surge of applicants from 2008 to 2012 did not result in an accompanying improvement in the percentages of these populations.

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111 NYR: Not Yet Reported.
112 Data reflects first-time, full-time first-year students. No transfer students are included.
Tufts has worked to improve graduate student diversity through the Graduate and Professional Student Admissions Recruitment Committee (GAPSARC), founded in 2004. GAPSARC brings together school representatives and develops practices to admit diverse groups, coordinating Tufts representation at national recruiting events hosting a large number of minorities. GAPSARC has initiated outreach to minority-serving undergraduate institutions, hosting students interested in attending Tufts. GAPSARC has also developed literature about Tufts' commitment to diversity and instituted an application fee waiver policy for applicants from underserved groups. Tracking impact of GAPSARC efforts is an ongoing priority.

In AY11-12, 26 of Sackler’s 180 basic science division students self-identified as members of a group underserved in biomedical sciences as defined by the NIH, an increase from 5 in 1995 and 12 in 2003. This number indicates that efforts to increase diversity, including a 10-week summer program for minority undergraduates and the Post-Baccalaureate Research Education Program (which employs talented minority graduates as laboratory research assistants and provides opportunities to enroll in coursework), are having an impact on the student population. Sackler is currently assessing retention and time to graduation in these groups and plans to use this information to guide recruiting and support services in the coming years.

TUSM has many programs to increase diversity. For example, it participates in the HRSA-funded Health Careers Opportunity Program (HCOP), a federally funded educational program designed to help students from educationally and economically disadvantaged backgrounds to advance into health and public health careers. At this time, no formalized tracking of applicants or admitted students as a result of these recruitment activities occurs. Significant scholarship support is available to students who are in financial need, have evidenced qualities of active citizenship or leadership, or have overcome socioeconomic or personal adversity.

Typically, students come to Fletcher from more than 70 countries, bringing great cultural, political, and professional diversity. However, it is far harder to achieve solid socioeconomic diversity among those students, especially those from developing countries: Fletcher is not in a position to offer more than a handful of the full scholarships plus stipends required to make that possible. The situation is much the same as far as domestic diversity is concerned: while in 2012, 29% of the US students were minorities, it is very difficult for people from socioeconomically disadvantaged backgrounds to enroll, given the very high cost. For both foreign and national students, special fellowships from external sources are the prime way to bring such people here, but the trend, whether from private or government sources, has been declining in recent years.

Enrolling classes that meet the AS&E’s goals for academic potential and diversity is constrained by a financial aid budget that is small relative to the budgets of Tufts’ peer institutions. Undergraduate financial aid policy provides packages of grants, loans, and work-study to meet the financial need of admitted students. Although the financial aid budget has grown at twice the rate of the overall AS&E budget, it remains insufficient to allow all undergraduate admission decisions to be made on a “need-blind” basis.

**Retention and Graduation**

**Undergraduate Retention and Graduation**

Figure 6.2. AS&E Six-Year Graduation Rates by Race (US Citizens Only)\(^{117}\)

![Graduation Rates by Race](image)

In 2006, the dean of Undergraduate Education convened a Task Force on Retention to examine how to improve retention rates, identify ways to close the graduation gap between white students and students of color, and develop resources and programs to support low-income and first-generation college students. The task force released its report in 2008. Most of its recommendations – including hiring a retention coordinator, tutor-led study groups in the sciences, institutional financial support for a health-careers advising program for underrepresented students, summer financial aid, pre-orientation program financial aid, and funds for low-income students with suspected but undiagnosed learning disabilities - were implemented over the next two years. In addition, two bridge programs were launched: BEST and BLAST.\(^{118}\)

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116 Includes students from ethnic and racial groups, from economically disadvantaged backgrounds, or requiring disability services.
117 Date represents the year students entered (cohort year).
118 See Standard 4 for additional information on the bridge programs.
In spite of these efforts, sophomore retention and six-year graduation rates remain slightly lower for nonmajority students, including students of color; first-generation college-goers; and Pell grant recipients. However, the data (Figure 6.2) shows convergence of graduation rates by race, and Tufts’ rates fare quite well, compared to the national average of 65% for private nonprofit institutions.119

Graduate Retention and Graduation
Tufts is committed to retaining and graduating students at a high rate. Sackler has implemented a policy change to improve tracking of academic progress and strengthening of policies specifically impacting time to degree. For many years Sackler policy stated that trainees who require more than seven years to complete the PhD must apply for an extension. However, clear guidelines were not in place nor was the policy consistently followed. In 2007, new measures were put in place that require all students who need an extension to develop a clear plan of work and timeline required to complete the thesis. Students, advisors, and program directors are notified and briefed on these policies at least one year prior to the need for an extension. Students may be granted an extension once by filing a plan approved by the thesis advisor, program director, and associate dean, but if a second extension is needed, Sackler’s Executive Council must review the request. This change and enhanced academic support provided by the process have decreased the number of students remaining beyond seven years. Between 1998 and 2005, 16 of 219 graduates required eight years or longer to complete the PhD. From 2005 through 2011, none of the 190 graduates have required eight years.

Friedman’s retention and graduation rates (Table 6.) are high for all programs except the hybrid MNISP. Lower graduation rates are due to students’ part-time enrollment in addition to full-time employment, while working on a thesis. Once coursework is finished, most students make more rapid progress on the thesis. Based on this experience, Friedman is modifying the form of the thesis and method of instruction as the program moves its residencies to Boston. The TCSVM MAPP Program (a year-long program that runs September through August) culminates in a capstone research project. Many students do not complete their research project over the summer as planned. In the last few years, TCSVM has adjusted the curriculum to engage in the project in the beginning of the program, an action that has resulted in a 35% increase in the on-time completion rate.

A top priority of GSAS is to have significantly higher completion rates in doctoral programs. In 2011 GSAS used NRC’s 2010 Assessment of Research Doctorate Programs to investigate the relationship between completion and program size. Data suggest an advantage in terms of completion to being a small scale graduate program.

One response to the high cost of attrition in doctoral programs is to put more emphasis on refining selection criteria. However, this puts undue emphasis on the student lacking “what it takes,” taking focus away from institutional responsibility for leadership and mentoring as students develop skills to become independent scholars. GSAS aspires to achieve distinction in doctoral mentoring. TCSVM student feedback has also indicated that earlier contact with a mentor would be helpful in the context of on-time program completion.

Student Services and Co-Curricular Activities

Student Information System
Improving the student experience is a hallmark of implementing Tufts’ new SIS (ISIS). Benefits directly or indirectly impacting students include the following: 1) simplified sign-on process for many students; 2) requesting transcripts easier for students and many alumni; 3) many schools will offer a self-service advising tool to enhance students’ one-on-one time with advisors; 4) access to a feature that helps plan student schedules, semesters or years in advance; and 5) students will be able to receive refunds electronically.

Beyond these, ISIS allows for customization that will develop as technology and user expectations change. Academic advising will be supported by a new advising module that is integrated with the registration process, though schools will vary in the extent of their use of this module.120

Financial Aid
School financial aid offices (FAO) administer all aspects of financial aid programs. FAOs host information sessions on financial aid, communicate information about awards and eligibility, and provide aid counseling sessions to individuals. Financial aid packages are available from federal, state, institutional, and private

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120 See Standards 2 and 8 for more information on ISIS planning and implementation.
sources and can include full tuition scholarship, a stipend to defray living expenses, and an HMO-based health insurance plan. Some FAOs offer loan forgiveness programs and/or small programs of emergency loans.\(^{121}\)

All information regarding costs, types of funding, how to apply, a step-by-step process of what to expect when applying for aid, an estimated timeline, and frequently asked questions are available online. Briefings are routinely provided to students, and information regarding scholarship and other financial aid opportunities is regularly communicated by email. When offered their financial aid plans, students are provided with clear information about likely debt levels and receive further counseling as additional borrowing is considered.

Tufts launched a program in 2011 through American Student Assistance (ASA) called “SALT,” offering free individualized online debt management tools and phone support regarding loan repayment and loan portfolios to students, including those who graduated with loans in the past three years.

While the high cost of a Tufts education is a concern to prospective students, the Tufts Loan Repayment Assistance Program (LRAP) is a university-wide program started in April 2008 to help selected graduates working in public service repay a portion of their annual Tufts-incurred education loan debt. Believed to be the first university-wide program of this kind in the US, the purpose of LRAP is to encourage and enable graduates to pursue careers in public service and reduce the extent to which their debt is a barrier to working in comparatively low-salaried jobs in the public and nonprofit sectors. LRAP is financed by the Omidyar Tufts Microfinance Fund and the Hargens Loan Repayment Assistance Fund. From the 2008 to 2011 award years, LRAP provided alumni with 1,168 awards totaling approximately $1.9 million.\(^{122}\)

The provost’s office has provided additional support in matriculating the best PhD students. Established in 2004, the Provost Fellows program is intended to recognize and recruit the best incoming doctoral students by providing a supplemental stipend of $5,000 per year for the first two years of the student’s program. The goal of the award is to augment aid packages so that financial considerations are not a barrier to pursuing a Tufts degree. Since the fellowship’s creation, the program has benefitted 95 outstanding doctoral students.

**Beyond Boundaries Campaign**

Student support was a centerpiece of the Beyond Boundaries campaign. University-wide, over $435 million was contributed on behalf of improving the student experience, including undergraduate scholarships, graduate fellowships, athletic programs, and others. The campaign saw the creation of 281 endowed scholarships and 354 term scholarships. Annual giving, which grew at 5.3% CAGR, continued to be a vital source of funding to meet growing demand for financial aid. During the economic crisis, support for student aid came to the fore, and alumni, parents, friends, students, and other donors rallied impressively to the cause.

**Academic and Career Advising**

Each school offers advising and career services tailored to student populations and school missions. AS&E students are surveyed regularly about satisfaction with various academic services and their associate deans. Those deans, in particular, have received high rates of satisfaction from students.\(^{123}\) In 2007 Tufts moved from a class-dean model to an “alpha”-dean model in which a student remains with an assigned dean for his or her entire time at Tufts. In fact, an additional “alpha” dean was hired in 2012 to reduce the caseload for each dean and offer specialized support to students in the BLAST program. The 2008 implementation of Degree Audit Reporting system (DARS) for full graduation requirements, including individual majors, has allowed students to answer many logistical questions themselves and seek advising for more qualitative conversations regarding goals and aspirations. A monthly newsletter update and bi-annual development workshops (campus writing resources, counseling and mental health services, etc.) for pre-major A&S advisors were implemented in 2009. Advisor training was revamped in 2011 to emphasize current student needs.

The Tufts Career Center (TCC), serving AS&E undergrads, graduates and alumni, and Fletcher’s Office of Career Services offer comprehensive services including career coaching, workshops and seminars, recruiting programs, internships and fellowship opportunities, site visits to employers, networking with alumni, online resources, and skills-based seminars such as job search, interviewing skills, or business etiquette programs. The major purpose of these is to provide students with a framework for exploring career paths, defining their career interests, and attaining their career goals. Examples of career services activities in other colleges include lunchtime conferences and presentations by career specialty interest groups, career workshops, career

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\(^{121}\) See Standard 9 for more information about financial aid.

\(^{122}\) 1,168 = total number of awards disbursed over the past four years. Some alumni have received awards in multiple years.

\(^{123}\) Source: Senior Surveys (2007-2012).
specialty fairs, and panel discussions on clinical specialties. There are several searchable databases for jobs, internships, and post graduate opportunities including TUSK which provides information for students and alumni in the medical fields, with categories including listings of preclinical “selectives,” clinical year electives, summer research and employment offerings, and post-graduate opportunities such as internships, residencies, and employment and JUMBO JOBS which provides thousands of internships, fellowships, entry level, and experienced level jobs for AS&E students and alumni.

The Tufts Career Advisory Network (Tufts CAN), a new university-wide networking resource, was launched in 2012 after two years of development. Part of the UA database, this online resource allows students and alumni from all Tufts colleges to connect with more than 9,000 alumni “mentors” who have volunteered to offer career and graduate school advice, professional contacts, and geographic information. Students and alumni can network with alumni with similar interests and experiences, such as active citizenship, entrepreneurship, athletic programs, and extra-curricular activities.

During the last two years, the undergraduate TCC has been on the leading edge in terms of assessing programs and services and comparing these to student learning outcomes. Incorporating recommendations from the Council on the Advancement of Standards in Higher Education (CAS), TCC piloted an assessment and evaluation process in 2011 focusing on satisfaction ratings and self-reported learning outcomes in the areas of career counseling services, programs, and events. Results for Year 1 include:

- 98% of students rated the quality of career counseling received as “excellent” (88%) or “good” (10%).
- Learning outcomes ranged from job search skills to personal growth and development of values, interests, and career goals.
- Evaluation of programs and events resulted in a 96% satisfaction rate.
- Students frequently commented on improved confidence as a result of attending programs such as “Sophomore Career Seminar,” “Wall Street Crash Course,” and “Business Etiquette Lunch.”

This assessment-improvement model has helped shape career services to meet better the needs of the millennial generation and increase student satisfaction. TCC has shifted many standard workshops to an online format and created additional live/in-person skills-based programming on topics such as networking skills, professional etiquette, and using social media in a job search. To confirm students’ self-reported learning outcomes, TCC surveyed employers about how well Tufts graduates are prepared for the job search as compared to candidates from other schools. Employers recently gave comparatively high grades to Tufts students on three criteria: 65% of the 40 employers rated the quality of Tufts students’ resumes better, 50% thought Tufts students were better prepared for job fairs, and 42% agreed that Tufts students’ work and internship experiences surpassed those of students from competing institutions.

Fletcher’s Admissions and FAO and TCC survey students each year about student services. Faculty and staff consistently receive high marks on surveys for their accessibility. In 2012, 99% of students were satisfied with staff accessibility and 93% were satisfied with faculty accessibility. Fletcher is working to improve the quality of TCC services. Satisfaction with career services quality increased from 70% in 2010 to 77% in 2012.124

Friedman’s OSA consistently gets high marks for student services on the annual exit interview for graduates. The OSA prides itself on an individual approach to handling problems and resolving them in a timely manner. There has been a significant increase in enrollment over the past four years, increasing the workload for OSA staff and the need for faculty to provide academic and career guidance. Students have requested more career and professional advancement offerings; services integrated with other student services and provided through OSA; and faculty advising, professional development workshops, networking events, and alumni relations.

In 2002 TUSDM introduced a mentoring program in which incoming students are given the opportunity to join a faculty mentoring group. This program, while still being developed and improved, has begun to make an impact in students’ perception of their time at Tufts. In the AY10-11 Dental Alumni Survey, 62% of graduates reported being mentored by a faculty or staff member. Additionally, the survey included several questions regarding retention and student success, and responses demonstrate TUSDM’s success in supporting students.125

TUSM provides student services to help diminish stress and positively shape the overall experience. The 2005 LCME Student Self-Study highlighted TUSM’s strengths in academic support, access to counseling, and

124 Source: Fletcher Exiting Student Surveys, 2010 and 2012.
125 A copy of the full version of the 2010-11 Dental Alumni Survey responses can be found in the Workroom.
guidance via the residency application process. In the annual AAMC Questionnaire (2011), students reported extremely high satisfaction with support services provided by TUSM, especially in educational and student affairs. Deans, senior administrators, and staff are viewed as highly accessible and supportive. Feedback by the students through the questionnaire consistently places TUSM support services above the national average, with services encompassing academic, personal, and career counseling; financial aid; and mentoring.

With changes in the student population from largely part-time to about 80% full-time (nonresidential), the PHPD programs found that students and alumni required more career guidance to find jobs, internships, and capstone placement sites. As a result of this rapid growth, the PHPD determined more staff were needed. Two new positions, director of Career Services and Student Services coordinator, were recently added.

Sackler tracks job placements for graduates, following their career trajectories. Over 90% of its graduates are finding positions directly related to their area of study. For those that graduated 5 and 10 years ago, over 85% remain in the scientific workforce. Nonetheless, students are increasingly interested in training that provides preparation for a broader spectrum of science-related careers that include scientific writing, business development in the biotechnology industry, and technology licensing. Sackler is seeking ways to address some of these issues without diminishing the quality of science training or lengthening time to degree.

In 2007, a survey examining the academic climate at TCSVM was administered to DVM students in Year 2 to determine their stress level and its causes during Year 1. Not surprisingly, all students reported that their academic experience was somewhat stressful, with 33% finding it extremely stressful. In response, several changes were made including increasing the availability of seminars on dealing with stress, distributing the Year 1 anatomy and physiology courses over a greater number of weeks, modifying the advising system, opening an exercise facility in the new Agnes Varis Campus Center, and increasing the evening hours of the campus mental health advisor. An outdoor athletic field with basketball and tennis courts opened and is well-utilized. These initiatives have had positive impacts on students undergoing a stressful academic program.

**Undergraduate Pre-Orientation and Orientation**

Most preparatory materials needed by students are available through Connections, the online gateway to Tufts, through which incoming undergraduates apply for pre-orientation programs, complete housing forms, make advising choices, get ID photos, take surveys, and more. While most paper mailings have been eliminated and students primarily use Connections throughout the summer, some departments still send individual mailings. Currently there is not a central system of coordinating mailings and information to freshmen and parents.

Students consistently give pre-orientation high ratings. Over 90% are satisfied with their experience. Over 80% feel their participation in pre-orientation was important to their overall orientation experience. However, more needs to be done in the areas of safety, security, and risk management. While each program has many set standards, effective policies, advisors, and student coordinators, more needs to be done to make sure each is operating in the best interest of Tufts while protecting student leaders and student participants. There needs to be more consistency among programs in the area of administrator advisement and management and student coordinator guidelines, including salaries, work schedules, hiring practices, and position responsibilities.

Each year approximately 50% of the students who did not participate in pre-orientation report that not participating had an impact on their general orientation experience. More needs to be done to gather data on why students do not participate in pre-orientation and how nonparticipation impacts their orientation and first-year experiences. At the same time, pre-orientation programs currently run at capacity. If future data demonstrates a need to accommodate additional students, a capacity-building plan must be developed.

In annual surveys approximately 75%-80% of the incoming class is satisfied with their orientation experience. Social and co-curricular activities are a very strong part of undergraduate orientation. The kick-off event on the President’s Lawn is always one of the most highly rated events on the annual orientation survey. Several special social events are hosted throughout the week, and many upper-class students arrive early to participate in various leadership opportunities prior to and during orientation.

The three administrators coordinating the program have other positions, and this responsibility is added to their jobs. Given the depth and breadth and the ever-increasing demands of undergraduate orientation and its pre-orientation programs, dedicated staff in the department is warranted.

**Student Groups and Activities**

All schools provide opportunities for students to join and form student-led groups. For undergraduates, the Office for Campus Life provides support for new and existing organizations via the Student Organization
Resource Guide. The TUSDM OSA recognizes and sponsors 29 student groups. Fletcher supports over 40 groups. Friedman’s OSA recognizes over 10 student groups and offers a wide variety of co-curricular activities. TUSM and its student council support 64 groups, and PHPD supports involvement in four student groups and extracurricular activities. TCSVM students can become involved in more than 25 organizations on its campus. Their Student Chapter of the AVMA (SCAVMA) serves as the “parent” to the other student organizations.

Extensive training is provided for AS&E student employees and leaders through retreats, one-day conferences, workshops, and a required “Executive Summit.” Organizations and student leaders are taught fiscal responsibility through training and collaboration with the campus life financial office. An annual one-day Developing Leaders Conference is offered for students emerging as campus leaders. However, there is little student commitment to a formalized leadership program and a lack of a common leadership experience due to over-involvement, busy schedules, and the variety of opportunities available. Frequent turnover in student leadership and organizations leads to ebb and flow of successful clubs and groups.

Undergraduate Fraternities and Sororities
The Office of Fraternity and Sorority Life (OFSL) resides in the AS&E Division of Student Affairs. There are 13 active fraternities and sororities at Tufts, 12 of which have residential houses, with 1,023 student members, or approximately 20% of the undergraduate population. OFSL advises three Greek governing councils that provide a self-governance system to promote common policies, purposes, and procedures. OFSL plays an active role in educating members and promoting congruence with the core values of the organizations and Tufts, including brotherhood/sisterhood, intellectual growth, philanthropy, and service. OFSL lacked consistent direction between 2006 and 2011 due to frequent turnover in the position of OFSL director. The director appointed in 2011 has made progress in showing the Greek community the benefits of creating clear expectations and strengthening the role of the councils. The fraternities and sororities are involved in charitable and community service projects, and members maintain a high overall level of academic performance.

The opportunity to reside together in a fraternity or sorority house is a central part of the Greek experience and supported by Tufts policy, allowing sophomores to fulfill their living requirements in these houses and have oversight over all of the houses. However, younger members fill a disproportionate number of the housing spots, and the ideal mixture of ages is not attained. Additionally, the behavior of members who live in privately-owned houses and its impact on their relationship with Tufts and the surrounding community is a challenge. Currently, the overall level of education being provided to the fraternity and sorority community is adequate but could be improved. Similarly, the actions of some of the organizations have strayed from their professed values and need to be redirected. Organizations that violate policies and procedures are held accountable by a Peer Fraternity/Sorority Judicial Board, the AS&E Office of Judicial Affairs, and OFSL. The peer judicial board is valuable when it serves as a mechanism for peers to hold each other accountable; however, in recent years it has been infrequently utilized and its benefits unrealized. If applied more frequently and consistently, clear and specific sanctions by the OFSL and judicial affairs office would be more effective in addressing these challenges.

Codes of Conduct and Grievance Procedures
The University Code of Conduct articulates the rights and responsibilities of all Tufts community members and is augmented by several other policies regarding academic integrity, sexual misconduct, responsible use of the electronic resources of the community, alcohol and other drugs, and threatening behavior. Some schools have elaborated on this code to provide additional expectations (i.e., in the context of working with patients). Consequences for infractions have been codified and each school has published policies and procedures for addressing these violations. The university code was established three years ago by the faculties in response to concerns that individual faculty members or academic departments responded very differently in these situations. Tufts also adopted the use of an anti-plagiarism program (TurnItIn.com). There was an initial spike in the number of reported cases shortly after its implementation; however, the number has leveled off at a lower rate of infractions than before the use of the program. About 150 A&S faculty members now require student assignments and exams to be submitted routinely through the program.

The handling of sexual misconduct on campus has undergone significant change. Three years ago, spurred by concerns about how sexual assault cases were handled in AS&E (i.e., like other alleged infractions of the code, including a hearing before one’s peers, face-to-face confrontations, and direct questioning of the parties by one another), the Sexual Misconduct Adjudication Policy for AS&E was adopted following a task force review of best practices being used by peer institutions. The new process utilizes a neutral fact finder and eliminates many aspects of the previous model that were criticized as being hostile and unfair to victims of sexual assault.
 Alcohol and substance abuse continues to be a concern. In AY09-10, following several years of increasing problems due to dangerous use of alcohol on the Medford campus and at off-campus events, AS&E’s dean of OSA created a student, faculty, and staff Task Force on Alcohol and Substance Use on Campus. The task force was charged with developing an intervention strategy that would address alcohol use at campus events, the role of alcohol in campus programming, alcohol and other drug education, and the campus alcohol policy. In spring 2010, the task force, in conjunction with a resolution from the TCU Senate, made recommendations for a modification to the campus alcohol policy that would focus on encouraging students to call for medical assistance (TEMS) for friends who needed assistance and to seek the services of the Tufts Alcohol Educator. The policy is enforced by residential staff, Tufts University Police, and other university officials and is part of the AS&E Student Handbook. Student welfare and safety is central to Tufts’ policies on alcohol and other drugs. Although community members must adhere to federal and state law regarding substance use, the alcohol policy focuses more attention on dangerous drinking, even those that do not violate Commonwealth laws.

New regulations from the US Department of Education and decisions by its Office for Civil Rights (OCR) have created ambiguity regarding how to respond to students with mental health problems, with some pundits suggesting that schools may remove students from the campus only when they pose a danger to others, but that those students who are at elevated risk of suicide or other forms of self-harm must be considered to have a disability that has to be “accommodated.” Such an interpretation of the law minimizes the impact of depression and suicide on the community. Tufts is engaged in active conversation with consultants and peer institutions about how best to proceed in this complex balance. At the advice of legal counsel, Tufts will provide a therapeutic environment that can safely and prudently include students who pose a threat of self-harm, but will also take the necessary steps to ameliorate or negate the deleterious consequences of self-harm to others.

Health Services and Insurance
The Commonwealth and Tufts require health insurance coverage for students enrolled in a three-quarter to full-time program. Students may enroll in the insurance plan offered by Tufts or maintain private coverage as long as it meets or exceeds the minimum state requirements. The health insurance plan is only available to full- and part-time matriculated students and their eligible dependent(s). Coverage includes primary and emergency care, major medical coverage, a prescription plan, eye care, mental health benefits, and many other services.

Tufts University Health Service is a medical practice serving the acute and chronic medical needs of undergraduate and graduate students on the Medford campus. Students access the health service for a range of needs, including general sick visits, women’s health, travel medicine, allergy injections, and orthopedic care. The service model focuses on treatment and health promotion and prevention through education and awareness. Student input and feedback is core to its mission. Over 93% of 2012 graduates reported using the service during their time at Tufts, and approximately 79% of those were satisfied with the services provided.126

Unlike the Medford campus, the Boston campus does not have its own health center. Rather, students are enrolled in an insurance plan and may choose their provider from the plan’s network. The Student Advisory and Health Administration (SAHA) office on the Boston campus oversees the student health and disability insurance plans, collects and maintains immunization documentation, and provides short-term counseling and referrals for long-term therapy or psychiatric evaluation. Tufts Medical Center provides immunizations; students may seek emergency care at any of the affiliated hospitals where they are based for their clerkships. SAHA also services TCSVM in Grafton where the counseling office provides students with listings of nearly 40 area therapists, as well as contact information for several mental health and crisis hotlines. Also available is a master’s-level mental health counselor and a psychiatrist. In addition, the counseling program provides relaxation, yoga, study skills, and stress management workshops.

Academic Resource Center
In accordance with its mission statement, the ARC provides extensive academic support services for AS&E students, including tutoring, time management skills development, public speaking, writing, and academic accommodations for students with disabilities. Students are informed of these services before matriculation, during orientation, and frequently throughout the year. Students identified as struggling are strongly urged to use these resources. Beyond the constant evaluation of individual tutors, student satisfaction with the ARC and Disability Services is included in the sophomore survey and senior survey, and satisfaction is consistently high.

126 Source: 2011 senior survey.
AS&E graduate students may consult graduate-level tutors for writing, public speaking, and time management. ARC also sponsors two “dissertation writing boot camps” for AS&E graduate students each year. Fletcher has a peer tutoring writing program. The academic services provided reflect students’ needs in various degree programs; however, the Boston campus should consider creating a shared writing resource that can support nonnative English speakers as they write for coursework and publication.

**Athletics**

Athletic facilities on the Medford campus are available to all students by showing a valid Tufts ID. All athletics and recreational programs operate under the core values and operating principles of the New England Small College Athletic Conference (NESCAC). It is a NESCAC core value that “institutions should provide a comprehensive athletic program available to the entire student body, not just varsity athletes, and which emphasizes participation and the educational values of athletics.” It is a NESCAC operating principle that “intercollegiate athletic policy at each institution reflects the primacy of our academic mission.” This mission for undergraduate athletics is satisfied through a large variety of athletics and recreational programs: 30 varsity sports (900 participants), club sports (500 participants), intramural sports (1,050 participants), physical education and activity classes (1,400 participants), and the FIT pre-orientation program (150 participants). The unique programs serving students, staff, and faculty are: the Personalized Performance Program (1,300 individual training sessions offered), President’s Marathon Challenge Team, and Trek to Talloires. Graduate students on the Medford and Boston campuses are active participants in intramural programs and are frequent users of Tufts’ athletic and personal fitness facilities. Graduate schools offer no formal sports programs, but do sponsor student-initiated recreational sports teams.

Athletics funding is modest for such a wide array of offerings, requiring efficient management of resources. With current staffing, facilities and budgets, it is difficult to meet the needs and ever-increasing expectations of students. Facilities have been significantly upgraded over the last 20 years with the additions of Bello Field, the Gantcher Center, and the Shoemaker Boathouse. The most recent improvements are the Cousens Gym upgrade of 2010-11 and the construction of the Steve Tisch Fitness and Athletics Center, which opened in September 2012. These projects have been crucial to supporting existing programs and allowing more access. The most urgent unmet facility needs are an appropriately-sized quality pool for recreational and competition use, regulation-size squash courses, and Title IX regulations-compliant locker rooms. Providing varsity and recreational athletics at the level and quality of Tufts’ peers will also require increased staffing levels and salaries. Attaining these goals is dependent on increased budgets and successful fundraising.

All Boston campus students may use the new Tauber Fitness Center, a 2,500 sq. ft. exercise facility in the Sackler Center with aerobic and strength-training equipment, an exercise studio, and locker rooms and showers. A range of classes, such as yoga and aerobics, are offered at the center. The Posner dormitory also contains a fitness room with exercise equipment, free weights, and a shower. To supplement greater fitness needs, membership to the Wang YMCA is subsidized, and students can take advantage of an array of amenities, including a pool, basketball courts, a large number of classes, and a wider variety of equipment.

**Facilities for Student Activities and Residential Life**

The management of undergraduate student housing does not follow a “cost center” model, dividing the responsibilities between AS&E and Tufts’ central departments, most notably Facilities Services. As a result, the residential life office does not make decisions about dorm improvements, capital repairs, and renovations, which have lagged during the last decade despite a new 126-bed dorm. Most dorms are in need of capital improvements, and housing annually receives the lowest satisfaction rate of all campus services. The numbers of empty beds will likely increase as more juniors and seniors opt for off-campus housing, challenging the undergraduate and graduate students deans’ goal of generating enthusiasm in the residential experience in support of a living and learning environment. A more coordinated approach to the management of residential life and facilities could provide for a “swing” dorm, so a hall can be taken off-line for a year, allowing sufficient time to do the extensive type of rehab that will support themed living and living/learning environments.

The Mayer Campus Center is a 22,000 sq. ft. facility on the Medford campus. Open 118 hours per week for students to meet, eat, study, and socialize, it provides meeting and conference rooms, student organization offices and mailboxes, the bookstore, and dining options. The space is continuously upgraded, yet despite recent renovations, few opportunities exist to expand service due to lack of space and out-of-date facilities. There is no large multipurpose space in the campus center for student programs. In order to partially compensate, a church was purchased by Tufts in 2007 and renovated as a multipurpose function space.
Coming to the Boston area can be intimidating for many students who often do not have the means to make the trip to find housing. Tufts offers on-campus graduate housing to only 5% of the full-time graduate population and does not offer on-campus graduate family housing, but does offer housing referral services to make the transition easier. It is highly unlikely that Tufts will add housing space in Boston; the market is volatile and Tufts feels strongly that its resources are better invested in research facilities and learning spaces.

TUSDM recently added a five-story expansion to its building, providing a state-of-the-art suite for the OSA and Academic Affairs. Three years ago, TUSM completed renovations of the Sackler Center, a 133,787 sq. ft. facility that serves as its primary teaching space and contains learning communities for students. The Sackler Center’s social spaces and library/lounge serve as the student center for the Boston campus. The new Clinical Skills and Simulation Center (CSSC) is a recently renovated 9,000 sq. ft. training facility used for clinical skills training in interviewing, communication, physical diagnosis, team work, and medical procedures.

It should be noted that the Boston campus is very compact, and all of the Boston-based schools are facing similar needs in regards to a shortage of classroom and study space. Tufts is completing an audit to determine space utilization, with one goal of identifying space that can be converted to additional classrooms.127

**PROJECTION**

**Admissions**
Tufts schools will take actions to increase the diversity of the student body while maintaining a highly qualified applicant pool. This will likely be done by increasing the total applicant pools, but it will also involve targeted action. With guidance from the president’s Council on Diversity, schools will be charged with developing plans to strengthen their recruitment efforts relating to increased diversity of applicant pools and matriculating students. Plans will include the development and implementation of a system to track the success of specific recruitment activities, as well as a system to track these students and their progress through the programs.

The challenge of continual recruitment of diverse populations will remain a priority for PHPD Admissions. With the help of OIRE, the TCSVM DVM Admission Committee initiated a new survey of nonenrolling students in summer 2012. The survey was mailed to applicants accepted into the DVM program but who elected to go elsewhere. The data is currently being analyzed by the Admissions Committee and shared with administration. Additional changes to be considered over the coming year include use of the Educational Testing Service Personal Potential Index to replace letters of recommendation currently used in the admission process.

Tufts believes that it offers a great product worth its cost, but nonetheless more funds for scholarships and financial aid must be raised. This has been a development priority for the past decade, and, with the development of a new strategic plan, will likely continue to be the case.

**Retention and Graduation**
Although retention and degree completion metrics are close to 90% in undergraduate programs, ensuring that students receive the services and support to reach their goals is a priority. Retention of minority students is lower than those from other backgrounds, and time to degree is longer for them as well. Understanding the contributory factors in these differences and finding approaches to address them is a priority.

The graduate and professional programs have identified that mentoring is an effective means of increasing retention and graduation rates. In 2011 GSAS pioneered two foundational workshops on faculty mentoring of doctoral students. The participants were a mix of junior and senior faculty who role-played simulations and case studies in eight topics ranging from dealing with a student in crisis to mentoring styles. GSAS is planning to introduce additional workshops that correspond to developmental phases of doctoral research.

TUSDM recognizes that providing students with opportunities to create personal connections with faculty is an important measure of success. It is committed to expanding its mentoring program by increasing participation rates, typically hovering around 50%, by incorporating information about the program into materials provided to admitted students, thereby raising awareness of the program and giving students a chance to sign up prior to arriving on campus.

Sackler has noted an increase in students who experience at least one period of academic difficulty, and this trend appears to be linked to increased attrition during the first and second year. While continuing to study the data, Sackler also plans to mine the data in admissions files to determine if predictors alerting faculty to

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127 See Standard 8 for more information regarding facilities and plans for renovations and new space for students.
students likely to have difficulty performing at the graduate level can be identified. Because of relatively small enrollment, Sackler plans to extend this study beyond standard metrics such as undergraduate GPA and GRE test scores and to include an assessment of prior research experience, gaps in academic performance, and problems that may be evident in letters of recommendation. The study is planned to begin in AY12-13 and will assess trainees who completed their degrees in the past five years. The results will be shared with the Executive Council and faculty, as well as admissions.

TCSVM’s DVM program is expanding its mentoring program to include more faculty mentors and more frequent meetings between mentors and first-year student groups. TCSVM will assess the success of these changes through a student survey. Plans over the next two years include identifying project mentors and pairing them with students earlier in their program to further increase the on-time completion rate.

**Student Services and Co-Curricular Activities**

**Student Information System**

Transparency in degree requirements and progress can be aided by better record systems that contain all of the indicators needed to monitor student progress. Tufts is implementing iSIS to better manage and retain student data, and enthusiasm is high for new and better defined processes to track student progression through programs. This project started in July 2011 and will be implemented in phases through fall 2013.

**Financial Aid**

Student borrowing and subsequent debt loads remain a serious concern. Tufts is launching a university-wide program in conjunction with ASA, to provide various debt management services to students. These services are being offered even though the most recent federal Cohort Default Rate for Tufts graduates was 1.1% versus the national average of 8.8%. This very low default rate is an indication that Tufts financial aid awards and packaging policies allow students to graduate with manageable debt levels.

In the graduate and professional schools, stipends, health insurance, and fees are supported by federal grants and institutional funds. At the undergraduate level, Tufts wants to move to “need-blind” admissions and increase its financial aid budgets. Although Tufts has benefitted from an increase in federal and nonfederal research dollars, it is working to identify new revenue sources to increase financial support for students.

**Academic and Career Advising**

The Division of Undergraduate and Graduate Services (DUGS) is gathering feedback from department chairs and advisors to craft targeted evaluative measures. Training is now required for all new A&S pre-major advisors, and plans are underway to incorporate campus partners such as the Intercultural and Social Identity Program. A reassessment of the current advising model is planned for AY12-13, with a focus on students’ experience taking a course with their advisor. Systemic adjustments should commence in summer 2013. It is also anticipated that iSIS will have a positive impact on consistency and accuracy in academic advising. With OGS now part of DUGS, the TCC will provide a more integrated service model that will allow for increased services for graduate students.

Fletcher has been developing improved systems for monitoring the demands of the job market and providing adequate responses to these in order to maintain quality, relevance, and market position. Fletcher began piloting this system in AY11-12, continuing in AY 12-13, and it will be a core project in the years to come.

**Undergraduate First-Year Experience**

AS&E is in the process of moving to a novel First-Year Experience Program (FYE) with a core mission of increasing student engagement, creating a seamless transition into college curricular and co-curricular experiences, and enhancing undergraduate educational achievement. FYE will be a campus-wide, collaborative effort to give students the resources and support needed to attain these goals, with particular emphasis on encouraging connections between academic and co-curricular acculturation. Student survey data, student focus groups reports, and conversations with faculty and staff have made it clear that the current approach to orientation is inadequate. Current orientation provides information on important services and programs but does not promote student engagement with them. Aspects of FYE will begin in fall 2012.

The program will begin with a pre-orientation, and the orientation phase will continue through the first six weeks of the academic year. Orientation leaders, primarily tasked with seeing to new students’ initial social adjustment, will also be charged with continuing to assist them to identify and access Tufts resources throughout the year. Continued orientation group meetings will be encouraged.
First-year students will live together in communities dedicated to helping them transition to college life and establishing a foundation for academic success. Student staff – resident assistants (RA) and academic and community engagement fellows (ACE Fellows) – will live among students and work to assist in the transition by ensuring they learn about Tufts’ academic and nonacademic opportunities, resources, and values, and to support integration into the broader community. ACE Fellows will enhance existing academic programming while serving as a liaison resource to complement efforts of resident assistants, resident head tutors, and faculty scholars-in-residence. The ACE Fellow Program will be co-sponsored by Tisch College and responsible for educating first-year students about civic engagement.

Attention will be given to addressing issues most common to first-year students, including short-term problems (e.g., navigating campus), medium-term problems (e.g., college-level coursework), and long-term problems (e.g., finding a social and personal balance leading to graduation). Tufts wants students to make connections among themselves and with returning undergraduates, instructors, advisors, and administrators. Students who feel connected and involved in experiences related to their concerns are more likely to succeed in the face of setbacks. The FYE Program is based upon six central themes that relate to important learning and skill outcomes: 1) Academic success and transition; 2) Community standards and civility; 3) Internationalization; 4) Safety, wellness, and health; 5) Active citizenship; and 6) Intercultural and social identities and diversity.\(^\text{128}\)

**Student Groups and Activities**

AS&E needs to develop more formalized leadership programs, including programs that offer more in the areas of annual leadership turnover and successful organizational transitions to new leaders. Tufts needs to consider better systems for gathering information on student organizations, membership, and operations. Finally, students need a way to record their co-curricular involvement and create a co-curricular transcript.

**Undergraduate Fraternities and Sororities**

Over the next few years, the director of the OFSL will focus on increasing educational efforts in problem areas, revising the general relationship statements between the organizations and Tufts, producing a new relationship statement for housing, developing an accountability plan that makes effective use of the peer judicial board, and providing assistance in developing a self-governing community.

**Codes of Conduct and Grievance Procedures**

Tufts must continue to work with consultants and peer institutions to clarify federal expectations and legal requirements in the areas of involuntary leave and the adjudication of cases of sexual misconduct. At the same time, Tufts must develop new initiatives in active bystander education, providing community members with the awareness of situations that require intervention for the safety of others, as well as the skills to make these interventions. This is proactive work that has the ability to create climate change. Several institutions have developed poster campaigns and peer educator groups for this work, and Tufts will engage in similar efforts.

In the area of alcohol and substance abuse for undergraduate AS&E students, active bystander education can create climate change, shifting the focus from getting medical attention for intoxicated friends to creating an environment of responsible, if not legal, drinking. Tufts will also use “social norming” to change the drinking culture. Students will be surveyed to determine the true extent of their alcohol use. The hypothesis is that students actually drink less than “myths” and prevailing attitudes suggest. If shown, the results will be shared with students to prove it is not necessary to drink to have a social life or be successful. It will also be useful to demonstrate with the credibility of local data that binge drinking is the exception rather than the rule. Toward this end, the dean of OSA has worked collaboratively with the deans of the other NESCAC colleges to survey students across campuses to gather a large sampling of drinking trends of students at those institutions.

In spring 2013 Tufts will develop a model to assess threat levels of staff, faculty and students whose behavior suggests they may pose a danger to others. A firm led by a professor from Virginia Tech has been engaged to help in this work.

**Health Services**

The health sciences schools will engage in efforts to promote well-being to supplement the psychological and health needs of students. TUSDM plans to develop a comprehensive student wellness program. This process will begin with forums held by wellness experts, designed to foster discussion among students, faculty, and staff about issues such as professional conduct, “burn-out,” ramifications of pass/fail grading, and general student wellness. This process will culminate in the creation of a holistic student wellness plan by the OSA.

\(^{128}\) See the Appendix for the outcomes for these themes.
In AY11-12, TUSM implemented a new Physician (Medical Student) Well-Being Curriculum. The curriculum, developed by the Physician (Medical Student) Well-Being Key Theme Committee, will be delivered to first- and second-year students during fall 2012. Additionally, TUSM will reassess the faculty-student advising process to promote the well-being of the emerging physician. The complexity and dynamic nature of advising suggests a standing committee be formed through the dean of OSA to work on this as a long-term project.

**Athletics**

Tufts’ aspiration for varsity athletics is that it regularly achieves excellence with student-athletes who perform at the same academic level as the overall student body, who reflect its value of active citizenship, and who contribute in a significant and positive way to the overall experience of all students.

Tufts’ aspiration for recreational athletics is that it offers a robust program, with dedicated administrative support and varied opportunities for the community to pursue health and fitness. This program would include improved support for club sports, intramural opportunities, and health and fitness programming, as well as more access to more facilities. For example, it would be desirable to have a general purpose athletic field with an artificial surface that could be dedicated to use by those who are not participating in varsity sports.

**INSTITUTIONAL EFFECTIVENESS**

The schools of Tufts University regularly review the policies and criteria regarding admission and retention of students. School-based student services are regularly evaluated to ensure they provide services appropriate to school missions and student populations through a multitude of surveys. Information obtained through these surveys is used to revise goals for admissions, retention, and graduation, as well as the services offered to increase student achievement and satisfaction.
Standard 7: Library and Other Information Resources

DESCRIPTION

Most major library and other information resource infrastructure and collections are managed centrally and universally available; however, library and other information resource services are substantially funded, supported, and provided in a decentralized fashion. The libraries cooperatively develop and maintain a shared collection of electronic resources and a centralized library catalog, but each campus has one or more dedicated libraries with local administration, providing excellent and customized services to their communities. The libraries are each funded directly by the school or schools they primarily serve (see Figure 7.1):129

Library-specific space includes 834 total seats, 305 in study rooms, 115 soft-seating, 63 carrels, 79 workstations, and 60 seats in the café near the circulation/reference desk. HHSL also contains two classrooms seating 99 and 59, with another 60 seat classroom to be added in FY13 and two computer classrooms seating 13 and 20.

The Medford campus is served by four libraries:

- **Tisch Library (Tisch)** is Tufts’ largest library and provides services and collections to meet AS&E’s needs. Tisch’s seating capacity exceeds 1,000 in individual and collaborative work areas, including individual study carrels, group study rooms, quiet study rooms, and a large late-night study room. Additional facilities include student and faculty lockers, a media classroom, a training room for library instruction, five classrooms, the Digital Design Studio, the GIS Center, and a café.
- **Digital Collections and Archives (DCA)**, administratively central but housed within Tisch, assists departments, faculty, and staff in managing records and other assets. DCA provides public space for 6 researchers and its two suites accommodate a variety of other activities: arrangement and preservation of physical materials, digital collection, and electronic records management. With most of its collections consisting of unique materials, priority is given to spaces that enhance security and preservation.
- **Lilly Music Library (Lilly)** serves the music department with locations to support study, A/V, and computing.
- **Edwin Ginn Library (Ginn)** primarily serves the needs of Fletcher. Ginn has a capacity of 272, including one group study room, a lounge, and one open group study area with a workstation and tables equipped with monitors for laptop use. All Ginn library workstations are equipped with the same software as found in Fletcher’s Mugar computer lab, a space that is used for courses, library instruction, and as an open lab.

First-level IT support, management, and training are provided to the community through a campus or unit-based IT organization and through university-wide IT services. Most students, faculty, and staff receive at least

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some IT services from at least two service providers. Various support organizations are responsible for user support and training.\textsuperscript{130} Except for UIT, these organizations are funded by schools or through service fees:

- Medford Information Technology Services (ITS) supports the majority of users in AS&E and Fletcher. Student support in Medford is shared between ITS and UIT.
- Users at TCSVM are served by Grafton ITS, Webster, and Grafton Educational Media.
- Central administration relies on UIT for support. UIT also provides university-wide services around instructional and research technology, training, and support for many systems and services.
- Dental IT supports all IT needs of the academic and clinical units for TUSDM, including all dental facilities.
- The Scientific Computing unit at HNRCA supports its research community.
- HHSL provides computing support to clinical affiliates and all Boston campus students, as well as access to electronic databases for all users.
- TUSM’s Office of Information Technology (OIT) manages and supports IT needs for academic and research units at TUSM and Sackler and provides contract support to other schools and units. OIT’s IT Support unit provides desktop support for Friedman and a full range of services (desktop, applications, servers, Web) for TUSM and Sackler. The Web and Infrastructure units service the Tufts-CTSI, Fletcher, TUSDM, and HHSL. Educational Media provides classroom presentation and recording technology and video conferencing in Boston, as well as university-wide audio/video production and streaming services.
- Friedman’s Office of Academic Initiatives (OAI) develops and supports its instructional technology.
- The Office of Technology for Learning in the Health Sciences (TLHS) provides the health sciences schools with educational technology support, including training/support for video lecture capture and TUSK.

\textbf{Governance and Structure}

In operation since 1990, the University Library Council (ULC) reports to the provost and is the decision-making body for operational and strategic issues that affect all libraries. Members include the five library directors, director of University Library Technology Services (ULTS), director of Educational and Scholarly Technology Services (ESTS), and associate provost. ULC works to advance libraries’ operations for the benefit of the Tufts community, recommend items that affect all libraries, and develop long-term plans and strategies. The ULC has created and oversees teams consisting of staff from all libraries and some IT units to enhance collaboration in the use of shared systems and services, create policy, and implement strategic objectives (see Figure 7.2).\textsuperscript{131}

\textit{Figure 7.2 University Library Council Organizational Chart}

\begin{figure}[h]
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\includegraphics[width=\textwidth]{figure72.png}
\caption{University Library Council Organizational Chart}
\end{figure}

AS&E has many committees and working groups, including the Faculty IT Committee, Tisch Library Advisory Committee, Staff Assistant Feedback Committee, and department administrators groups that meet to discuss libraries, technology, support, and services. HHSL has a student advisory group, and TUSM’s IT is coordinated through the IT Executive Board. Fletcher’s faculty library/IT committee includes students, faculty, administration, and library staff.

\textbf{Collaboration and Coordination}

Tufts has a strong focus on staff development. In UIT, career ladders are being established, and there is a new directorate focused on organizational effectiveness that works to invest in professional training and

\begin{itemize}
\item See Frontline Support Provider spreadsheet in the Workroom for a more detailed listing of support units.
\item For information about IT governance and structure, see Standard 8.
\end{itemize}

\textsuperscript{130} See Frontline Support Provider spreadsheet in the Workroom for a more detailed listing of support units.
\textsuperscript{131} For information about IT governance and structure, see Standard 8.
development for IT staff. To strengthen the leadership skills of IT professionals, in 2011 UIT partnered with Tufts’ Gordon Institute to offer a graduate-level leadership course to 22 IT professionals representing multiple support organizations. The alumni continue to meet weekly to build relationships and find new ways for IT staff from different groups to work together more effectively to achieve shared goals and objectives. ULC’s Staff Development Team provides learning opportunities for staff on skill development, including an annual Staff Development Day, and each library has a professional development budget.

The libraries share one Integrated Library System (ILS): Innovative Interfaces’ Millennium. The online catalog provides access information to physical and electronic resources: over 57,000 electronic journals, 60,000 electronic books, and over 300 electronic databases. The libraries collaborate on the development and funding of the electronic resources collection, with nearly all available on a 24/7 basis. ULC’s Collections and Licensing Team (CLT) analyzes use, discusses university-wide teaching and research needs, and jointly purchases materials. Each library also has an extensive outreach program to faculty and graduate students to help determine collection needs, and Tisch has run several focus groups on this topic. The CLT is also charged with maximizing fiscal resources, and Tufts participates heavily in purchasing agreements with the North East Research Libraries Consortium, the Boston Library Consortium, and Lyrasis.

In collaboration with ESTS, DCA provides management services for digital assets. DCA and ESTS develop tools to support research, curricular, administrative, and legal needs. To plan for and address emerging needs, ESTS staff serve on several ULC teams, and cross-university ad hoc teams consisting of librarians and IT staff.

The Tufts Distance Learning Consortium was co-founded by UIT and Friedman’s OAI in 2007 and is a core group for distance and blended learning services. It provides expertise on blended and distance learning and facilitates information sharing across programs and organizations, experimenting with remote collaboration.

Support Services and Curricular Integration
Libraries and IT units provide general information and support for users, as well as formal and informal integration into curriculum and research. In addition, the libraries and ESTS are represented on UCTFD, charged with improving teaching. All libraries have representation on their schools’ CCs. UIT and school-based IT units offer numerous workshops to faculty and staff on various software packages and provide curricular support to faculty. Through local and university-wide IT and libraries, all community members have access to a full range of group and individual instruction, support, and consultation in support of their teaching, learning, and research. To meet the needs of the community, libraries also provide a circulating technology collection that includes notebook computers and other items.

Information literacy principles are incorporated into increasingly sophisticated learning objectives designed by AS&E academic departments and librarians. AS&E departments collaborate with Tisch Library, where there is also a stand-alone, credit-bearing senior capstone research skills course. Tisch librarians work with courses throughout the curriculum, including 85% of all first-year writing classes. Ginn reference librarians are integrated into the teaching, learning, and research activities of Fletcher through instruction in sections of various courses including finance, Fletcher’s thesis module, and a methods course in legal research.

The DCA provides instruction on primary sources in research, tailored to needs of particular courses/projects. For example, each semester an undergraduate history department professor brings students in her seminar on girlhood in the 20th century to the archives to discover records relating to Tufts’ female students’ experience.

Librarians at HHSL and Webster are highly integrated into the curriculum through the Problem-Based Learning (PBL) and other curricula. In Grafton, library staff uses a case-based approach and small-group training with the Year 1 students. HHSL librarians actively participate in providing library skills workshops for all medical students during their required PBL and EBM courses.

ESTS provides instructional design consulting for faculty, academic programs, and schools; training opportunities for faculty, students, and staff; design, development, and integration of new tools for teaching, learning, and research; and improvement of resources designed to encourage use of instructional and research technologies. UIT has numerous academic technology partnerships with faculty, and students. For example, the provost’s office sponsors interdisciplinary teaching and research initiatives for which UIT provides educational technology support.

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In FY10, strategic planning, focused on learning management systems, resulted in the creation of a unanimously endorsed set of recommendations for implementing Tufts’ next-generation learning, teaching, and collaboration platform, as well as a coordinated service and support model. Sakai was chosen and customized as Trunk and is now in production. Phase 1 brought Medford courses into Trunk and provided collaborative project sites. Continuing in FY13, phase 2 will integrate Friedman with Trunk and deliver online course evaluations. Planning for the phase 3 integration of TUSK functionality with Trunk is in progress. IT and library professionals collaborate with faculty on the development of online learning environments via formal content integration, help in identifying content, or provision of technical assistance.

Appropriate information management is of increasing importance, in terms of protecting personal information and respecting copyright. The libraries and IT are working to ensure that the necessary training and support to access, use, and manage information appropriately is received through programs such as security and stewardship programs. Additionally, ULC’s Scholarly Communication Team (SCT) conducts outreach to faculty and students around managing their rights as authors and provides guidance on copyright and fair use of others’ work. The team also provides advocacy around open access to scholarly and research materials.

Assessment Activities
In FY11 Tisch Library completed its five-year strategic plan, a collaborative process including faculty and student input. Tisch conducts continuous assessment and improvement through its Data Assessment Team and biannual user satisfaction survey followed by qualitative research in off-survey years that includes focus groups, ethnographic studies, or interviews. Tisch assesses activities related to library research skills, including pre- and post-test surveys, to measure impact of the library instruction program. Ginn helps doctoral students through workshops and management of the formatting and final submission of dissertations. Student learning evaluations during the problem-based learning courses in TUSM and TCSVM include assessment of information mastery skills. Additional annual surveys review the quality of service, collections, and space.

In 2009, Friedman launched a survey of faculty and staff who currently receive support from OIT at TUSM. Satisfaction with various aspects of computer support ranged from 60-85%. OIT has since instituted routine tracking of customer satisfaction. In AY11, average satisfaction scores across various measures for supported groups ranged from 94 to 98%. HHSL uses an end-of-the-year assessment tool for all students. Ginn does an annual library/IT survey of faculty, students, and staff. DCA uses its statistics and tracking to plan digitization activities, prioritize proposals to public and private funders, and schedule server downtime.

UIT’s Faculty IT Liaison Program gathers feedback on the awareness and use of particular services, and meets regularly with advisory boards and representatives from schools to ascertain where UIT can enhance services and support more effective use of services for education, research, and productivity. Through UIT, Tufts participates in the EDUCAUSE Center for Applied Research (ECAR) Study of Undergraduates and IT.

APPRAISAL

Library collections and IT resources/services are becoming more centralized. Balancing potential efficiencies of increased reliance on centralized services with the needs of local communities will continue to be a challenge. Library and IT localized funding allows great autonomy and can strengthen customized services, but may hinder the development of, and participation in, new broad-based and resource-intensive initiatives.

The libraries’ structure is based on adaptation rather than priorities. DCA and ULTS as two central library units in the context of localized funding present challenges. Although ULC has achieved a remarkable level of collaboration, it is aware of the limitations of its structure and open to other models. Disparity of the libraries’ size and budgets may also pose challenges to participation, decision-making, and service symmetry.

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133 The set of strategy recommendations is available online.
134 See Standards 8 and 11 for more information regarding information security and stewardship.
135 The Tisch Library 5-Year Strategic Plan is available online.
136 Tisch Undergraduate Focus Groups Overview, Tisch Library Ethnographic Study, and Graduate Student Focus Group Results are available in the Workroom.
137 The Friedman survey report is available in the Workroom, as is a broad statistical summary of user feedback about OIT support.
138 The HHSL assessment tool report is available in the Workroom.
139 The Fletcher Library/IT Annual Community Survey is available in the Workroom.
140 Benchmarking data comparing Tufts undergraduates’ use of technology, and their perception of technology used by faculty and in their courses, with students at peer institutions is available in the Workroom.
141 The Library Expenditures Report is available online.
In FY09, Tisch Library collaborated with UIT-Academic Technology and DCA on a study in which 40 AS&E faculty were interviewed on research and teaching needs.\textsuperscript{142} Faculty were chosen in consultation with deans, and results used to identify areas needing support. Three major areas were identified: a Digital Design Studio (DDS) to support production of multimedia projects, a strong digital asset management infrastructure for knowledge created by faculty and students, and enhanced support for classroom technology. In response to the first need, A&S supported the creation of DDS with a full-time digital media technologist. In response to the second area, a team of cross-library staff and UIT is developing recommendations for digital asset management.

Classroom technology assistance is not consistently effective, robust, or timely. Dedicated classroom technology support in Medford was nonexistent until 2001 when one staff position was created. In 2001, there were approximately 40 technology-equipped classrooms; with over 100 by 2010, another full-time position was created. Faculty on all campuses report that classroom support is still insufficient, especially in Medford and Grafton, and many see the lack of timely support as a significant deterrent to using technology in teaching.

Because IT support is decentralized, and not all services are adequately advertised, identifying whom to contact to make requests and resolve issues can be challenging, and redundancy exists between the various IT groups. Problems can take longer to fix when support groups must negotiate responsibility for an issue. Users do not always internalize the communication they receive about services. It is clear that increased demand for IT services combined with the current decentralized approach to delivering support does present challenges.

In some areas, the model for end-user IT services is often more reactive than proactive. IT staff in many areas are over-committed. Faculty and staff often report frustration with the time it takes to resolve issues. In December 2011, the IT community implemented TechConnect, a new IT Service Management (ITSM) solution allowing IT groups to use one system to automate common requests while enhancing collaboration and improving customer service. It includes self-service for users to report problems and check on the status of reported issues. This project represents a significant step forward in cross-organizational partnership and coordination among IT departments to improve support. Tools such as TechConnect are being used to more effectively provide self-help components for users and facilitate integration across all IT groups. Increased use of tools like LANDesk and virtualization promises to increase support staff efficiency by allowing centralized management of software updates and remote access to systems for troubleshooting and problem resolution.

While needs for more classroom and group study space is not library-specific, library space meets a unique and important need. Library spaces are highly valued and used heavily. The libraries are continually looking to adapt spaces for emerging needs. Satisfaction with spaces and services is high and information gathered from feedback mechanisms is used to adapt spaces to meet emerging needs, including making changes to study space, hours, scanning/printing services, and number and location of deployed public computers. For example:

- Tisch is accommodating increasing demand for digital services and group study space.
- In response to student demand and high occupancy during midterms and finals, Ginn has modernized seating, and while still crowded, capacity has been increased by 20% since 2008.
- A 2007 survey revealed that sound containment is a problem in Webster because of its openness. A sound audit was performed with recommendations for enclosing parts of the upper level, but funding is not yet available. Webster is collecting student comments regarding furniture and computer resources needs.
- Demands for space at HHSL and reduced need for print collections have led to removal of stacks and conversion of offices and stack space to multipurpose seating and study rooms over the past four years.
- DCA’s collections have outgrown its onsite space, resulting in new collections being sent to offsite storage. DCA also has limited space to accommodate incoming collections. These materials cannot be sent offsite until they have been reviewed and described, resulting in an overflow into staff offices.

While the libraries have strong instruction programs heavily integrated into their school’s curriculum, measuring direct learning outcomes has been a challenge. The libraries are currently working with the school OACs. Tisch, for instance, is collaborating with A&S to pilot direct assessment activities in AY12-13.

Responses to Ginn’s annual survey express very high levels of satisfaction with services, collections, and facilities. Results have been used when studying changes to library and IT services, computer lab configuration, available software, adequacy of the library instruction program, and quality of wireless network. The Ginn Library director sits on the student council, and student input in that context has resulted in extension of library hours, modification of signage, and new communication strategies.

\textsuperscript{142} This report, entitled “Faculty Research and Teaching Study Report,” is available in the Workroom.
PROJECTION

Two of Tufts’ top priorities are the expansion of cross-school, interdisciplinary work and augmentation of its research profile. These pose challenges for the libraries and IT. IT departments are challenged in terms of staffing for outreach, consulting, and training on research technology. Some challenges include funding and provision of large scale research data storage and management facilities and improving computational resources and user training/support. Efforts to improve availability, support, and training in the use of technology for teaching need to continue and expand. Libraries need to continue building a stronger collection of high-level primary source materials. These all areas present challenges due to Tufts’ distributed support and funding model. The libraries are working to identify a more modern and useful digital asset system.

TUSM IT goals are determined by its IT Executive Board (ITEB) in conjunction with the health science schools. Short-term goals include formation of an HHSL IT Help Desk, online examination and question-banking service implementation, migration of Boston’s EMS room scheduling system to university-wide, improved tracking of clinical faculty, and implementing a researcher networking service (Profiles). Future phases of the Trunk project include integration with programs that currently employ TUSK and implementation of ePortfolios.

Planning for a Medford-integrated IT service began in FY12. A ULC task force formed to define the data reporting landscape, evaluate practices’ strengths/limitations, recommend structural/organizational changes to improve data gathering/reporting, and propose a model for ongoing data gathering/reporting and oversight.

Relationships continue to be forged in the IT community. TechConnect and Trunk used collaborative models that contribute to strong relationships as new, integrated, and better services are developed. As library and academic technology service providers continue to partner, there is increasing value in addressing common challenges with current cross-unit groups. These approaches continue to pay dividends on high impact projects such as faculty information management, the new SIS, coordinated AV service requests, identity management, desktop/application virtualization, and LANDesk optimization.

Acknowledging the challenges presented by limited physical resources, the libraries are hopeful that significant changes to space will not preclude enhancements over the coming years.

- The Boston campus’ construction project, to be completed in summer 2013, is a result of input via focus groups, interviews, and space studies, to add another classroom and convert offices into study rooms.
- Fletcher is working with Tufts’ space planner and an architect to explore opportunities for expansion in order to accommodate additional study space, and improving computing/library proximities.
- A two-summer project to overhaul Tisch’s HVAC system began in 2012. Tisch is working with Tufts’ space planner, and a firm has been engaged to consider repurposing space, including on the library’s main level, to implement a “learning commons,” potentially revising service delivery points, expanding seating, adjusting seating types and locations, and enhancing collaborations with IT and writing services.

ULC began strategic planning in 2011. ULC members agree it is essential for library leaders to assess local and shared services focusing on emerging needs and aspirations of the university and schools.

The libraries are facing an essential environmental shift. The libraries’ roles have expanded from supporting commercially-produced materials to include management and dissemination of knowledge created at the university. The shift from print to electronic resources continues to accelerate. Both require solid infrastructure for digital asset management, preservation, and delivery. In response, Tufts has formed a Data & Metadata Management & Solutions working group from UIT, ULTS, DCA, Tisch, and Webster to develop a proposal articulating needs around digital resource stewardship and discovery for teaching, learning, and research. The group is proposing that Tufts leverage and expand existing infrastructure and expertise from information stewards. It is hoped that this expanded service will eventually support stewardship, education, and research use of a broader array of licensed digital resources and locally-created materials such as datasets, multimedia productions, technological reports, conference proceedings, and open access articles and books.

INSTITUTIONAL EFFECTIVENESS

Each Tufts library and/or IT organization regularly evaluates effectiveness based on their needs and in accordance with their missions. Tufts’ information services providers continue to adjust to ongoing changes in the environment, including the proliferation of electronic media. As change happens, local and central units work together to improve the effectiveness of instructional technology and information resources and services.
Standard 8: Physical and Technological Resources

PHYSICAL RESOURCES DESCRIPTION

Overview
The facilities services department’s primary role is to be a service provider to various university constituencies. With a total staff of 160, including 84 licensed tradespeople, 25 grounds workers, and 9 construction project managers, Facilities provides property and construction management services for all campuses totaling over 4.3 million square feet. Maintaining this portfolio required the facilities management personnel to respond to a total of 50,184 work order requests and interdepartmental requisitions (IDR) for FY11.

Facilities Services Organization
It was determined in early 2010 that facilities management and construction groups needed to fully integrate to recognize their work as a continuum from the planning of new projects, to design and pricing, construction, and longer term management of new or renovated facilities. A new director of Facilities Services was hired, and several supervisory positions newly staffed. The culture changed from being reactive to more proactive.

Tufts has a Building and Grounds Committee, a group of 10 to 12 alumni with experience in the real estate industry who meet three times annually to provide feedback on new construction projects. Their involvement has expanded over the past year to include review and feedback on the overall facilities services activities.

New Construction and Deferred Maintenance
While the financial downturn limited new construction, Tufts focused on incremental additions, including:
- The Medford campus Steve Tisch Fitness and Athletics Center.
- TCSVM’s Regional Biosafety Lab, Agnes Varis Campus Center, and Equine Isolation Ward.
- Biomedical Research and Public Health building façade reconstruction and many floors renovated into state-of-the-art labs; five floors added to TUSM’s building; and renovation of the Sackler building.

With diverse uses of properties from 10 to 150 years old, Tufts must focus on deferred and preventative maintenance and updating energy, life safety, and ADA compliance to assure facilities provide adequate space.

PHYSICAL RESOURCES APPRAISAL

Overview
Tufts’ decentralized model for control of space limits its ability to improve efficiency in using existing spaces. This needs improvement, given financial limitations on building new space. Exacerbating this has been the use of different room reservation systems (R25 in Medford and EMS on the Boston campus); tendency for schools to limit access to their space to others, even when vacant; and historic lack of valid/reliable data on usage. The SIS project recommended a single reservation system to improve the inclusiveness of space on all campuses.

As a partial solution to financial limitations, some growth requirements have been satisfied by leasing space. At 200 Boston Avenue, space was leased for HR, SOE growth needs, and expansion of the biology department. In Boston, several administrative functions have moved to 75 Kneeland Street to provide growth space in buildings for direct research activities. It is likely that this leased space will continue to be used to provide “swing” space as master planning efforts unfold. Despite these efforts, Tufts requires updating of laboratory spaces on all campuses to provide state-of-the-art facilities to satisfy its educational and research missions.

Deferred Maintenance
In 2010 Tufts engaged VFA, Inc. to update its Facility Condition Index (FCI). This new study examined every building on the Medford/Somerville and Boston campuses and included two-year-old information for TCSVM, in order to determine the cost of deferred maintenance in building envelopes as well as mechanical, electrical, and plumbing systems. The study indicated that as of July 2010, Tufts had a backlog of $106 million and a five-year FCI projection of $214 million, equating to an FCI barely within the acceptable range. The director of Deferred Maintenance has incorporated the information with his knowledge of specific building maintenance issues and requests from the users to develop a three-year program of deferred maintenance projects.

New Construction
New space is designed and constructed in accordance with local, state, and federal requirements and includes state-of-the-art design/engineering for energy and water conservation. However, with constantly changing legal
requirements, Tufts faces difficulties retrofitting its portfolio. In a recent memorandum of understanding (MOU) between Tufts’ Facilities and Office of General Counsel and the Massachusetts Architectural Access Board (MAAB) regarding residences difficult to retrofit, Tufts agreed to make 5% of residence rooms fully accessible in exchange for MAAB waivers for dorms where retrofitting would be very costly. It is Tufts’ understanding that this innovative agreement is being considered by MAAB as a template for work with other institutions.

Construction standards to enable future architect/engineering teams to design to specific, consistent requirements were recently completed. All deferred maintenance projects include elements to improve sustainability, including low-flow toilets, movement sensor lighting, dual-glazed window systems, and recycling waste services. Deferred maintenance and renovation planning also considers user needs for collaboration, including coordination with IT on state-of-the-art technical services. Master planning efforts will focus on better integration and collaboration of various academic disciplines.

Space Management
In 2010 Tufts hired its first director of University Space Management and Planning, who is now pursuing areas that will allow Tufts to proactively provide appropriate facilities. Tufts is improving technology and content of the space management database, to be built on laser-measured volumetric information and enable better decision-making for utilization. All design and engineering will be electronic to better maintain the database.

Tufts is updating the Medford campus master plan, to be coordinated with the VFA report and programmatic priorities, including an integrated science and engineering building and a new “swing space” residence hall to take older halls off-line for major renovations. This will allow the director of Planning and the facilities services team to prepare a list of alternative feasible scenarios to meet physical and financial programmatic needs.

Interaction with Facilities Services
In 2011, Tufts upgraded the work order system, enabling anyone in the community to electronically request facilities assistance and enabling Facilities to better track work order completion. Further, Tufts expects to incorporate iPad use by Tufts’ tradespeople to reduce paperwork and improve staff productivity.

PHYSICAL RESOURCES PROJECTION

Coordination and Flexibility
Tufts strives to integrate the supply (physical) master plan with the demand master plan of user constituents, both as to amount and type of need. To that end, Tufts is working towards a more robust capital demand planning model that will more closely coordinate the needs of schools with the central planning team.

Design of new spaces and renovations of existing spaces need to be flexible to enable changes in use over time. For example, in addition to the “holistic” approach to Tisch Library’s HVAC upgrades, the director of Planning and library staff are creating a “learning commons” reorganization of existing space.

Space assignment coordination is critical in improving use efficiency under financial constraints. Open communication between Facilities and the community is critical to avoid mistakes that can take years to overcome. Recognizing the need for increased deferred maintenance funding, Tufts expects to increase spending on deferred maintenance for FY13, 14, and 15 to $30 million plus, from prior levels of $16-$18 million. In FY13, master planning efforts will provide alternative scenarios for future programmatic needs.

Data Collection
Lack of consistent and reliable historic information on space utilization has limited Tufts’ ability to improve efficient space use. Tufts has begun to improve information collection through a single reservation system.

Improving Efficiency of Space Utilization
Given the reality of financial constraints, Tufts will have to rely on more efficient use of existing space to meet its programmatic space requirements. Over the next two to three years, integration of better space management data systems, a university-wide room reservation system, and coordination of renovations and program needs by Planning with schools will lead to a more efficient use of space.

Sustainability
President Monaco established a Sustainability Council to look for additional ways to improve actions regarding energy, waste, and water. Tufts is currently investigating “beta” tests for geothermal and solar energy sources and anticipates utilizing these and other state-of-the-art technologies in future construction. Tufts has already
accomplished a great deal in sustainable rethinking (including achieving its goal for emission reduction under the Kyoto Agreement), but will continue to seek more effective solutions.

TECHNOLOGICAL RESOURCES DESCRIPTION

Overview
Underlying Tufts’ approach to the planning and management of IT services and resources is an appreciation for the critical role technology serves in supporting academic and administrative programs, as well as the transformative potential that technology holds for education and research. IT strategy is focused on supporting local and global communities of practice through the use of technology. The community now enjoys access to a wide range of technology services consistent with Tufts’ broad academic and service agenda.

Table 8.1 Representative IT Support Organizations

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<th>IT Organization</th>
<th>Primary Client</th>
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<tr>
<td>Central</td>
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<tr>
<td>University Information Technology</td>
<td>Tufts</td>
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<tr>
<td>University Library Tech Services</td>
<td>Tufts</td>
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<tr>
<td>Distributed Central IT Groups</td>
<td>Tufts</td>
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<tr>
<td>Boston</td>
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<td>Office of the Dean of IT</td>
<td>TUSM</td>
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<tr>
<td>Health Sciences Library IT</td>
<td>Health Sciences</td>
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<tr>
<td>Dental IT Support Services</td>
<td>TUSDM</td>
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<tr>
<td>HNRCA IT Services</td>
<td>HNRCA</td>
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<td>Grafton</td>
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<tr>
<td>Information Technology Services</td>
<td>TCSVM</td>
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<tr>
<td>Cummins Library IT Services</td>
<td>TCSVM</td>
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<tr>
<td>Medford</td>
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<tr>
<td>Information Technology Services</td>
<td>Medford</td>
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<td>Tisch Library IT Services</td>
<td>Tisch Library</td>
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<tr>
<td>SIS Support – Medford</td>
<td>Student Services</td>
</tr>
</tbody>
</table>

IT services are provided via a distributed support model dating from the late 1990s that involves a central IT organization (UIT) and approximately 19 local IT organizations accountable to their respective deans, VPs, or directors (see Table 8.1). IT staffing levels and budgets, along with related-service scope and responsibilities, vary among these groups. With the exception of UIT, which has enterprise-wide IT service and support responsibilities, local IT groups may service a subset of departments, a single administrative unit, or a school. Just as the scope of IT varies by local unit, so do approaches to resource planning and funding. There are approximately 300 experienced IT professionals, with UIT accounting for approximately 45% of this total, who assist the community in realizing their academic, administrative, and service objectives through application development, IT operations management, consultation, training, and support. School and university-wide IT governance and planning processes set local and enterprise priorities and assess the effectiveness and quality of current services. Innovative uses of computation and digital media in the classroom and lab, along with quality online programs that reach new audiences, reflect Tufts’ ability to leverage technology to support its mission.

Technology-Enhanced Research and Scholarship
Approximately 90% of classrooms are technology-enhanced, providing, at a minimum, network access and support for multimedia presentations. In addition, many facilities (including TUSM’s CSSC, TUSDM’s pre-clinical simulation lab, the DDS, and TCSVM’s anatomy lab) provide advanced IT capabilities to enable research, collaboration, and instructional methods. Management of classroom spaces and technologies resides within schools, fostering the development of specialized learning environments. In contrast, several online tools and services, such as Trunk, reflect university-wide planning and coordination that support broader applications and learning environments.

Tufts has developed a partnership model for delivering research technology services between IT professionals and academic departments. For example, the Geographic Information Systems (GIS) program consists of academic courses, consulting services, and advanced technologies coordinated through a single unit. Tools ranging from video conferencing to remote lecture delivery is available to allow individuals at multiple locations to interact and share applications. Tufts has been developing open source software, including TUSK, the Visual Understanding Environment (VUE) for graphically mapping digital resources, and the Perseus Digital Library.

Tufts has made significant strategic investments to upgrade the IT infrastructure and enterprise applications, including data network upgrades, universal wireless, video conferencing, enterprise email and calendaring, learning management system, identity management, and the student information system. In 2011 Tufts completed a project to expand the High Performance Computing (HPC) Cluster and provide additional research data storage. As a university-wide resource, the cluster is shared by many groups and provides scalable computing capacity. Enabling this computationally intensive research focus is Tufts’ network, supporting nearly 90,000 unique devices carrying over five TBs of traffic daily. In addition, a 10 GB connection to Internet2 supports the ever-increasing bandwidth needs of research faculty. To further improve connectivity and resiliency, the network core has been expanded to a commercial hosting facility at the largest data center and
telecom facility in New England. This facility also provides Tufts with additional data center resources to accommodate future growth and provide improved business continuity options.

Planning and Governance
Following a comprehensive process involving stakeholders from all schools and administration, Tufts published its first IT Strategic Plan in 2008. Continued strategic planning, coordination, and collaboration around shared IT goals remains critical, so in 2009, as part of implementing the plan, two new university-wide IT advisory bodies were convened: the IT Advisory Committee (ITAC), focused on strategic direction and policy related to IT; and the IT Leaders Forum (ITLF), bringing together the heads of all IT units to focus on information sharing and coordinated planning. The IT Support Advisory Team (IT-SAT) has long supported Tufts professionals and was re-energized as a group reporting to ITLF. In AY10-11, UIT also engaged in strategic visioning and redesign, including elements of structural change, process improvement, technology refresh, and staff development. Coordinated investment and project planning has enabled Tufts to implement high-quality enterprise systems and services. Tufts was one of the first educational institutions to broadly deploy Microsoft Exchange 2010 for integrated calendaring and communications, replacing a collection of aging stand-alone systems. Wireless technologies, once dependent upon local funding sources, are now universally available and managed through the central network budget. The effort to choose a new online learning and collaboration system involved the active participation of deans, faculty, students, and technologists from across Tufts.

Information Security
Tufts works to ensure reliability of systems and protect its information in accordance with applicable laws and ethical standards. To that end, Tufts instituted a university-wide information stewardship program and continuing education for information security. Part of that program is the Information Stewardship Committee (ISC), which advises on matters concerning records, data supporting teaching and research, and associated information systems. Tufts also created an Information Security Group and hired a chief information security officer and three risk consultants. UIT collaborates with Tufts’ Audit Management and Advisory Services, external auditors, general counsel, the Office of the Executive VP, and the Compliance Committee to ensure that policies and guidelines keep pace with changes in business processes and systems. In 2011, an IT policy framework was created outlining actions community members are expected to follow and provides a structure and syntax to develop additional policies governing the management and use of specific data and systems.

Data Management
Community members are continually finding innovative ways to make use of collected data and enterprise applications. Enterprise applications supporting HR management, financial operations, and regulatory compliance are available, and additional services are under development. OIRE uses advanced survey tools to improve programming areas; the Operations Division uses the PeopleSoft HR system to cull occupancy and departmental data for space usage analysis; the Finance Division develops financial models to project enrollment, tuition, endowment growth rates, and return on investments; and UA uses Advance – Tufts’ donor, prospect, and event management tool – to manage fundraising activities to increase giving. Tufts’ Data Warehouse (TDW) contains student, research administration, financial, and advancement data, with approximately 300 users executing reports on a regular basis, and serves as the data repository for other systems, including the libraries, public safety, housing, and financial aid.

TECHNOLOGICAL RESOURCES APPRAISAL

Distributed Support and Funding Models
The decentralized IT support model introduces significant challenges to providing access to common services. The increasing convergence and interdependence of technologies and growing prominence of interdisciplinary research and scholarship are stressing the effectiveness of the current IT funding and support model. At times the distributed nature of IT resource planning and management results in duplication of services and creates confusion about how basic services are provided, accessed, and maintained. Likewise, fluid collaboration across schools can be hindered by technical and organizational complexity. Boston schools have implemented a shared services model for classroom technology planning and support, adopting standardized configurations, technologies, and supports for classrooms and video conferencing facilities, but not all schools have similar support levels. Lacking a standardized approach to the funding and management of common IT services, consistent support for classroom and personal computing technologies cannot be guaranteed. The distributed model also impacts the delivery of enterprise services. For example, in response to increasing demands for video conferencing services from schools, Tufts has invested in a centralized video conferencing infrastructure.
However, in some instances commensurate school-level investment has been lacking, impeding remote collaboration among schools and affiliates.

Tufts’ annual budgeting process is an effective mechanism for large-scale, enterprise-wide initiatives. However, accommodating the more dynamic, specialized services involving emerging technologies can be a challenge. When such needs cannot be met quickly, departments may implement their own solutions, resulting in an IT environment that is more complex, redundant, and costly. To address these concerns, in 2012 UIT and ISC published guidelines on cloud-based services and refined processes regarding acquisitions, aiming to increase awareness of how local needs may be met by existing services, to protect institutional data through the careful review of service contracts, and increase visibility of local expenditures. Tufts gathers benchmark data to assess levels of service and investment. Increased awareness and coordination of local investments will provide senior management with a better picture of overall university expenditures and support university-wide strategic planning.

**Governance and Security**

To facilitate the planning, management, and communication of the multiple projects and activities designed to realize the IT Strategic Plan’s vision, a complementary tactical plan was developed by UIT in 2009. A key component of the annual budget planning process, the UIT Tactical Plan is reviewed by the IT advisory committees, published online, and updated quarterly throughout the year. From FY09 to FY11, UIT completed 56 out of 60 tactical projects (93%) that had been scheduled for completion during this time period.

The Tufts Information Security Program has significantly improved understanding of IT policies, security practices, and problem detection and forensics. It has also automated manual processes and provided consulting and risk mitigation to many departments. Capital funds have been earmarked to improve data security, and a number of technical solutions have been implemented, including laptop encryption, an upgraded remote desktop system, and a central logging and analysis system. Yet increased threats from cybercrime continue to escalate, and requirements to secure personally identifiable information (PII) and report data breaches to law enforcement have become codified in Massachusetts’s General Laws. Tufts’ new information policy framework provides the foundation for defining roles and responsibilities related to the appropriate use and management of technology and information. Despite continued IT policy and security progress, the open nature of the computing environment means that there is still some risk to Tufts’ data, highlighting the need for improved policies and practices and increased awareness around security and privacy.

**IT Investments**

Within the past two years, operating and capital expenditures in the central IT organization increased by roughly 15%. Tufts’ new IT governance structure and planning approach have provided increased transparency to the planning processes and have heightened awareness of the practical value of technologies for advancing education, research, and administration. Input provided by community members through focus groups, the IT Strategic and Administrative Excellence Planning processes, and individual conversations and small meetings held by the VP for IT and CIO identified a number of gaps in services and infrastructure. Major enterprise applications, such as email, learning management, and the student information system, were no longer meeting the needs of the community, and maintenance of Tufts’ network infrastructure and data center had lapsed. As a result, Tufts has made a substantial investment in refreshing critical IT infrastructure and applications and in introducing new technologies to maximize resources for more strategic purposes. These investments have brought the technical infrastructure, applications, and services in line with peer institutions. A notable example is Tufts’ current project to replace its mainframe-based SIS. Recognizing the critical importance of this large-scale system, Tufts has committed the necessary resources and established a dedicated cross-university team of student services and technology specialists to modernize this enterprise application and streamline related business processes.

Tufts has also made recent investments to automate processes and bring administrative services online. Services of initial focus include financial management and performance management. Underlying many of these is TDW that allows managers to view information in context multi-dimensionally rather than from a single, one-dimensional source. Tufts is working toward better leveraging the TDW in order to comprehensively support business intelligence, decision-making, and academic analytics.

**Support for Research**

As the demand for research technologies expands, so too has the need for research support and tools that facilitate sharing and management of large data sets to support interdisciplinary research and cross-school
collaboration. Over the past five years, Tufts created its first central directorate dedicated to supporting its research mission. Still, limited availability of professional staff experienced in computational and statistical applications hinders the ability of some researchers to take full advantage of existing resources. In 2011 Tufts began a project to create a comprehensive research administration system that will provide tools for Tufts’ researchers and administrators to develop and track grant proposals and to manage post-award resources.

TECHNOLOGICAL RESOURCES PROJECTION

Standards and Coordination
Steps have been taken to improve coordination and planning, simplify access to technologies and support, and implement common practices and standards to address limitations of the current model. Initiatives reflect an understanding that information technology is a strategic investment critical to advancing interdisciplinary research and discovery, exploring innovative instruction approaches, and engaging new and diverse audiences.

In 2012 the CIO launched a major effort to create an integrated IT service and support model for the Medford campus by forming a partnership between UIT and Information Technology Services (ITS), the local IT group supporting A&S, SOE, and Fletcher. Bringing these groups together allows for increased coordination, communication, and resource sharing and should enable the university to better leverage its IT funding and resources. Although this effort is focused initially on the two largest IT organizations, the opportunity for participation from other IT groups is open. In addition, a shared services operations and planning group, comprised of IT directors from central and school-based organizations, will also be convened in fall 2012. To further increase awareness, a process has been created to collect IT project plans from all IT groups to identify interdependencies and synergies and to leverage opportunities for integrated planning and collaboration. Fletcher hopes to follow up on the UIT/ITS planning with its own IT strategic planning process.

Opportunities have been identified to address inconsistencies in classroom support and technologies, as well as develop university-wide technology standards. In Medford, a Classroom Committee will convene in 2012 to identify and address gaps in service, technology, and resources. UIT, in collaboration with Facilities Services, is constructing dedicated video conferencing spaces on all campuses and purchasing additional mobile conferencing units to distribute technology resources more broadly. Implementing security and architectural reviews for all proposed IT acquisitions would further improve security and simplify Tufts’ computing support environment. Additional technology standards and administrative guidelines will be developed.

Financial Planning and Investments
While comprehensive planning processes exist, the university could benefit from a more coordinated approach to IT financial planning. As a first step, UIT, in cooperation with school budget officers, will undertake a major effort to identify and assess IT spending. In addition, the funding model for IT needs to be more flexible in order to adapt quickly to dynamic demand. Toward that end, Tufts has started to explore alternative funding models more adaptable to a diverse and dynamic environment, including rate recovery, effective at other institutions.

Sustained investment in the network and data center infrastructure is essential to ensure high availability of services and sufficient computing capacity. Plans are underway to develop an enhanced optical network deployed over dark fiber assets to meet future demands of the community and to enable Tufts to take advantage of cloud-based IT services and other emerging technologies. Central to this strategy are addressing accumulated deferred maintenance of the primary data center and continuing the development of off-campus data center facilities to augment business continuity and disaster recovery capabilities. Building a strong IT foundation will allow the exploration of new modes of teaching, learning, and research. University-wide strategic planning initiatives recently launched by the president and provost will help to identify and prioritize future IT investments in support of interdisciplinary research programs. Likewise, internal grant programs, such as “Tufts Innovates!,” “Tufts Collaborates!,” Tufts Community Research Center (TCRC), and “Extreme Course Makeover,” are fostering the development of new instructional models and cutting-edge work, including new scholarship, creative works, and methods of research.

INSTITUTIONAL EFFECTIVENESS

Tufts University continually evaluates its physical and technological resources guided by school-based missions as current needs are addressed and future plans are developed. These evaluations are used to assist in realistic planning and budget allocation, balancing the tension between addressing immediate needs and establishing sustainable infrastructure.
Standard 9: Financial Resources

DESCRIPTION

Despite the extraordinary challenges to financial markets since FY09, Tufts demonstrated strong financial performance and stability over the last decade. Tufts’ conservative policies and practices, prudent expenditure measures, entrepreneurial revenue enhancements, and alumni generosity allowed the university to remain focused on fulfilling its mission and its strategic goals of meeting student financial aid need, enhancing its academic program, and investing in facilities. Policies and procedures continue to be enhanced and maintained on university and school Web sites and, along with other information, are accessible by students, faculty, parents, alumni, trustees, and the public at large.

Financial Position

Total assets grew at a 10-year compound annual rate of 7.0% from $1.4 to $2.7 billion, absorbing a 24.5% loss in investment assets in FY09. This positive outcome promoted Tufts’ goals as supported by: ongoing strong operating performance, diversified revenue base and investment portfolio, prudent spending policy and liquidity measures, successful capital campaign achievement, commitment to preserving and renewing physical resources, and sound financial management.

Operations

Tufts recorded consistently positive operating results over the last decade. The change in net assets from operations ranged from $12 million in 2010 to $34 million in 2008. During the challenging 2009–2010 period, net asset increases were $13 million and $12 million, respectively (see Figure 9.1).

In 2011, revenues totaled $712 million, a 5.7% compound annual growth rate compared to $410 million in 2001. While a diversified revenue base was maintained, there were shifts among many sources of income, notably in net tuition, grants, substantial endowment gifts, and clinical and other revenue (Figure 9.2).

Tuition and Fees Net of Financial Aid: Tuition revenue net of financial aid posted a compound annual growth of 5.4% since 2001. Tuition dollars averaged a 6.2% increase, representing additional enrollment and increases in undergraduate total student charges. Degree program expansion was widespread. New degree programs featured Fletcher’s MIB and LLM, TUSM’s Master in Biomedical Sciences (MBS), and TCSVM’s DVM-LAM degree. A number of specialty degree programs were created or significantly expanded. Core degree program

NOTE: All year descriptions in this chapter denote fiscal year (FY).
enrollment increases were planned and executed in GSAS, SOE graduate programs, and in the MALD, MD, DMD, and DVM programs.144

Investments in financial aid averaged 8.8%, representing an ongoing commitment to increase resources, particularly for undergraduate students. Commitments of unrestricted university and school resources were augmented by substantial capital campaign achievement.

Undergraduate financial aid experienced significant growth during the past decade. Since 2002, the undergraduate aid budget increased from $28 million to $57.4 million in 2012, with resources dedicated to the first-year class rising 120% percent. Although the goal of establishing “need-blind” admission practices was suspended in 2008 due to the economic recession, the university maintained its steadfast commitment to need-based aid, as well as its commitment to meeting the full, demonstrated need of each student offered admission. For the incoming class of 2016, 39% are financial aid recipients, and 34% received a need-based grant from Tufts with a mean of $32,100, the highest on record. In 2006, the university adopted a loan replacement plan for students from families earning $40,000 or less, tying the initiative to socioeconomic access and Pell Grant eligibility. In 2010 Tufts adopted the need assessment methodology known as “568” as a means of strengthening awards to middle-class families.

As an integral part of the A&S goal of overall improvement in academic quality, GSAS made a focused effort in the last five years to strengthen the quality of its graduate students and improve their experiences. To support this, GSAS made a strong commitment to increasing financial aid for students. Since 2007 GSAS increased funding for teaching assistantships and fellowships in its doctoral programs by 55%. The total doctoral student population increased by 20% over the same time period, indicating sizeable increases in per-student funding across doctoral programs. In 2010, GSAS began covering health insurance and fees for all PhD students. This represented an additional commitment of approximately $0.7 million per year in financial aid.

Friedman does not yet cover health insurance costs for its students. Friedman’s highest fund-raising priority is to increase financial aid for that purpose, to raise stipend levels for PhD students, and to expand tuition remission for the most qualified master’s degree students.

Despite some recent successes, scholarship aid remains the highest fundraising priority at Fletcher. Viewed globally, Fletcher is at the very top of the list of high-cost institutions. For the over 40% of its population who are non-US citizens with little to no access to educational loans, the high cost of a Fletcher education is a major concern. Additionally, the amount of loan indebtedness for domestic students continues to grow. In recent years, Fletcher was able to keep the annual tuition increase at a low rate of 3%. At the same time, the total scholarship aid budget for MALD, MA, and PhD students has nearly doubled since 2007, with the mean student award rising from approximately $7,300 to $12,300. Over 95% of scholarship aid requestors receive a partial scholarship. The significant increase in scholarship aid is the result of an expendable scholarship aid gift made by Fletcher’s board. This gift has provided an additional $1.3-$1.5 million in scholarship aid annually and has had a substantial impact on yield, resulting in a boost to the overall quality and diversity of students. Board scholars typically receive an award in the range of one-half to full tuition.

Increasing scholarship aid has been TUSM’s top budget priority. Between 2008 and 2013, its unrestricted budget for scholarships rose from $0.2 million to $3.1 million, with the average award size climbing from $8,000 to $13,000-$27,000. TUSM achieved its goal of offering one-quarter scholarships to one-quarter of students, with some receiving half scholarships. The number receiving aid has risen from 25 third- and fourth-year students to 200 students in all classes. Through a fundraising match, TUSM successfully raised $15 million toward scholarship gifts. As a result, average indebtedness declined for the first time in 2012.

At TUSDM, reducing student indebtedness remains a high priority. While Tufts and government-sponsored low-interest loans and scholarship support increased 41% from 2003 to 2011, average student indebtedness increased 26% from $150,251 to $189,851. This positive trend belies rapidly increasing percentages and levels of indebtedness among those mostly likely to borrow. The median indebtedness figure for the DMD class

Table 9.1 Tuition Increase Trends

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate*</td>
<td>4.1%</td>
<td>4.7%</td>
<td>4.7%</td>
<td>3.0%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Fletcher MALD</td>
<td>5.1%</td>
<td>4.8%</td>
<td>4.5%</td>
<td>3.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Friedman MS, PhD</td>
<td>3.0%</td>
<td>2.8%</td>
<td>5.0%</td>
<td>5.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Medical MD</td>
<td>4.5%</td>
<td>3.7%</td>
<td>4.0%</td>
<td>3.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Dental DMD</td>
<td>6.0%</td>
<td>5.0%</td>
<td>5.8%</td>
<td>5.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Cummings DVM</td>
<td>2.8%</td>
<td>3.9%</td>
<td>3.8%</td>
<td>4.0%</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

*Tuition, room, Board, and mandatory fees. Five-year figures are average annual compound growth rates.

144 See Standard 6 for more information on undergraduate and graduate enrollment.
of 2011 was $223,384, a 45% increase from $154,158 in 2003. TUSDM targeted scholarship support to merit-worthy students and those with significant need, placing even more emphasis on the latter in the last few years. Despite best efforts, TUSDM’s ability to provide a larger percentage of students’ cost in the form of scholarships, grants, and low-interest loans has remained virtually unchanged in the last 10 years. To counter this trend, next year’s tuition is moderated to a 4% growth compared a 10-year compound average of 5.4%.

Affordability of a veterinary education continues to be a challenge. Grant aid awarded to TCSVM students increased by 24% over the last 10 years. This has not kept pace with the 41% increase in tuition over that time, due to reductions in state appropriations targeted to student aid. Current practice is to increase unsponsored aid proportionally by any growth in class size and the rate of tuition increase. Annual fundraising for financial aid and financial aid endowment have been important priorities, and financial aid to DVM students from these latter sources grew 403% over the last 10 years.

Grants, Contracts and Contributions: Grant and contribution revenue increased an average annual 4.1% since 2001. Reflecting success of faculty grant awards and federal stimulus program appropriations, federal grants and contracts averaged a 5.1% growth. The TCSVM state appropriation fell from $5.3 to $2.3 million due to state funding reductions. The annual fund posted sizeable gains through 2007, but 2011 achievement remained virtually flat at the 2007 level.

Clinical and Other Educational Activities Revenue: Comprising revenue from TSDM and TCSVM patient fees, patents and licenses, publications, rent and fee for service activities, clinical and other revenue of $104.6 million in 2011 more than doubled the 2001 amount, rising an average annual 8.6%. Significant dental and veterinary patient caseload expansion and a new fee for service activities added net revenue to support schools’ missions.

Investment Return Utilized: Totaling $62 million in 2011, investment return used for operations rebounded from the prior year by 25% and realized a 10-year compound annual rate of 5.5%. This revenue line includes investment income distributed per Tufts’ spending rule applied to the Total Return Pool (TRP), effectively representing the amount of income planned for, and included in, the operating budget. In FY11, tiered spending was adopted for reduced distributions of income from underwater endowments; however, underwater endowment funds totaled a modest $1.4 million. Most endowments emerged from underwater as financial markets improved.

As a percent of total revenue, this funding source fell from 8.9% in 2001 to 7.3% in 2010, recovering to 8.7% in 2011. Market events in 2008 and 2009 affected the revenue source’s availability.

Expenses rose from $390 million in 2001 to $683 million in 2011 at a compound annual rate of 5.8%. Responding to revenue compression, Tufts tightly managed expense growth to 2% in 2009 and 2010 each.

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Table 9.2 Mission-Related Expenses

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2-year</th>
<th>5-year</th>
<th>10-year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction</td>
<td>$198</td>
<td>1.6%</td>
<td>4.2%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Research</td>
<td>$145</td>
<td>4.2%</td>
<td>5.1%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Clinical and Other Activities</td>
<td>$120</td>
<td>2.6%</td>
<td>6.3%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Total Mission Related</td>
<td>$463</td>
<td>2.7%</td>
<td>5.0%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

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145 The spending rule is described in the Financial Planning and Management section under Investment Management.
in graduate student stipends, and in academic programs including the direct costs for new degree programs and clinical patient activity.146

**Technology, Libraries, and Administration**: A 5.4% ten-year compound annual increase in administration, information technology, advancement, libraries, and student services outpaced the last two years’ growth average of 0.8%. Featured in the overall growth are: new degree program costs; library acquisitions; infrastructure for Beyond Boundaries; grants, contracts, and technology transfer staffing; disaster recovery and security and compliance measures; administrative computing; creation of the investment office; operating costs of renovations and new and leased space; merit increases; and health care costs.

### Table 9.3 Technology, Libraries, and Administration

<table>
<thead>
<tr>
<th>Compound Average Change</th>
<th>2011</th>
<th>2-year</th>
<th>5-year</th>
<th>10-year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Support and Student Services</td>
<td>$97</td>
<td>3.5%</td>
<td>5.3%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Auxiliary Enterprises 2</td>
<td>$50</td>
<td>1.1%</td>
<td>3.7%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Institutional Support 3</td>
<td>$73</td>
<td>-2.6%</td>
<td>4.4%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Technology, Libraries, Administration, Student Services</td>
<td>$220</td>
<td>0.8%</td>
<td>4.6%</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

1Libraries, academic computing, academic administration, admissions, student services
2Dining, residence halls, health services, bookstore
3Central administration, administrative computing

In the economic downturn, significant cost reductions were employed to balance the budget, including no or reduced merit increases, nonessential vacancies left unfilled, elimination of discretionary expenditures, severe travel curtailment, energy savings, and efficiencies in administrative functions. As Tufts’ financial position regained health beginning in 2011, merit increases were restored, selective vacant positions were filled, and other strategic investments resumed.

**Investments**

As of June 30, 2011, long term investments totaled $1.76 billion, achieving an 8.3% compound average annual increase since 2001. The majority of these assets belongs to endowment funds totaling just under $1.45 billion and rising by a 10-year compound average annual rate of 10.1%. Endowment funds are established by individual donors, with each fund supporting a specific purpose. The remaining funds are earmarked for operating, student loan, and capital purposes.

**Asset Allocation**: Each year the Investment Committee establishes a policy portfolio for the TRP comprised of assets that respond differently to various economic conditions. This policy portfolio measures what performance would be if the Total Return Portfolio was invested in the exact market index for each asset class. The targeted asset allocation for the TRP for 2012 is 35% public equity, 11% private equity, 10% US TIPS, 10% real estate, 6% commodities/private energy, 2.5% timber, 25% absolute return, and 0.5% cash.

**Performance**: On an annualized basis over the last 10 years ending June 30, 2011, the TRP has provided a return of 5.61% versus the policy benchmark of 6.87%. For the fiscal year that ended June 30, 2011, the TRP produced a return of 18.33% versus the policy benchmark of 17.14%.

**Physical Plant**

Tufts is committed to preserving and renewing its physical resources, adding to and securing them with sound financing. As of June 30, 2011, physical plant assets had a book value of $721 million, realizing a 10-year compound growth rate of 7.1%. This past year, total capital expenditures amounted to $50 million, with the completion of major renovations at the Arnold Building; 520 Boston Avenue; the Tufts Administration Building; and Hill Hall dormitory.

To address Tufts’ capital renewal, a long-term deferred maintenance plan was adopted in 1996. Tufts spent $17 million in 2011, a cumulative $183 million since inception, and $136 million since 2001. To address a growing backlog of critical needs, funding grew to $30 million in 2012.147

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146 Refer to Standard 5 for more information on faculty hires and Standard 6 for graduate student stipends.
147 See Standard 8 for more information on new construction, renovations, and deferred maintenance.
**Indebtedness**
Debt advances academic priorities by financing research facilities, constructing new buildings, and purchasing strategic properties. With no new borrowing in fiscal year 2011, Tufts’ outstanding debt totaled $410 million and represented an increase of $165 million over 10 years.

In March 2012, Tufts issued $250 million of “century” bonds (i.e., bonds with 100-year maturity). Tufts elected to issue at taxable rates rather than tax-exempt, as the spread between taxable and tax-exempt rates was at historic lows. Moody’s reaffirmed Tufts’ Aa2 credit rating citing the university’s “solid market position,...consistent operating surpluses, and diversified revenue base.”

Tufts’ credit rating stands at the AA status. The rating is based on selective undergraduate demand indicators; strong financial operations, evidenced by revenue diversity and continuing trend of operating surpluses; and solid growth in balance sheet resources, bolstered by accelerated fundraising efforts. Tufts employs a fairly conservative debt strategy, utilizing capacity growth relative to balance sheet asset expansion while setting a ceiling for the impact of debt service on operations. To retain its excellent rating, Tufts must maintain fiscal discipline by generating operating surpluses, increasing liquidity, and maintaining strong student demand.

As an issuer of tax-exempt bonds, it is Tufts’ policy to comply with all laws and regulations governing the issuance of tax-exempt debt and post-issuance requirements, as well as with Tufts’ bylaws and all pertinent policies.

**Capital Campaign**
Tufts closed out its most successful fundraising campaign, *Beyond Boundaries: The Campaign for Tufts University*, in FY11. The campaign exceeded its goal of $1.2 billion by over $12 million, finishing on time, under budget, and over goal. Campaign achievement represented twice the achievement of the previous initiative.

*Beyond Boundaries* was not only successful in achieving its financial goals but also in expanding the donor population. Over 140,000 alumni, parents, friends, students, faculty, corporations, and foundations made a gift to Tufts, and approximately 50% of all living alumni were donors. Tufts has achieved a diversity of supporters, a key characteristic of the best fundraising organizations in higher education.

The campaign was also successful in strengthening the financial position of the university. Over $609 million in achievement was dedicated to the endowment, with $522 million in expendable resources and over $137 million dedicated to supporting the physical infrastructure on Tufts’ campuses. Of the $1.21 billion total, $435 million went to the support of students, including the creation of 281 endowed scholarships and 354 term scholarships. Faculty benefited from $386 million, including 22 endowed professorships, support for research projects, and startup packages.

Leadership from the Board of Trustees was instrumental in the campaign’s success, providing almost $460 million of the campaign total. Several gifts were transforming, including an unrestricted $100 million gift from Pierre and Pam Omidyar, $50 million from Bill and Joyce Cummings, and $40 million from Jonathan Tisch. All three of these leadership gifts were budget-relieving to Tufts and strengthened its finances overall. Additional examples of the campaign’s impact are described throughout the self-study.

**Financial Planning and Management**
In a highly decentralized environment, Tufts manages its resources conservatively. Prudent management practices allow the university to protect its assets; identify opportunities, challenges, and risks early on; assess performance and institute corrective action; and set a course of action in support of mission-driven strategic goals and strategies.

With a distributed financial management structure, deans manage their school’s operating and capital resources, enabling entrepreneurial behavior that drives strategic investments, positive operating performance, and prudent use of resources and long-term plans. By Tufts policy, schools are required to balance budgets; surpluses are retained by each school to invest in future capital needs, and deficits are required to be approved by the Executive Budget Committee and accompanied by plans to restore financial

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149 Over the course of the nine-year campaign.

150 For additional information regarding planning, see Standard 2.

151 The president, provost, executive VP, VP for Finance, and treasurer form the Executive Budget Committee.
balance. The Executive Budget Committee also manages the resources of central departments and other financial activity. Resources in excess of plans are directed to a reserve and established to invest in academic priorities including financial aid, faculty recruitment and research, and to fund approved school deficits.

Tufts deploys a comprehensive set of planning and forecasting tools to manage its long-term financial viability. The GAAP-based operating budget enables trustees and external constituents to measure operating performance based on audited financial statements. The operating budget, capital budget, cash flow forecast, and 10-year integrated resource model form a comprehensive toolkit to review and plan for long-term financial viability, test the reasonableness of assumptions, stress-test the impact of potential changes in the external environment, and measure performance against financial goals: 1) Maintain reserves at a minimum level equivalent to 2% of annual operating revenue; 2) Maintain the Facility Condition Index (FCI) in a range of 10%-15%; 3) Growth in total wealth is equivalent to inflation; and 4) Maintain Tufts’ credit ratings of Aa2 and AA-.

Ensuring that resources are aligned with strategic priorities and allocated to support Tufts’ mission, the Executive Budget Committee approves all operating and capital budgets, strategic investments and use of university reserves, and all proposed new academic programs. The Trustee Administration and Finance (A&F) Committee and Board of Trustees approve the new-year operating and capital budgets, tuitions, fees, and student enrollments. The A&F Committee also approves any individual capital project costing $1 million and above and any planned design costing $0.25 million and above. The Trustee Academic Affairs Committee approves all new degree programs.

**Operating Budget**

Tufts undergoes extensive multi-year operating budget efforts. Systems for budget and financial control, as well as the budget and monitoring processes, have been enhanced significantly; they are linked to ensure that plans meet targets and to refresh long-term planning strategies.

Deans and their financial staff are responsible for the development and execution of mission-based multi-year plans and balanced budgets. Detailed estimates of revenue and other expense budgets represent academic goals and projections of financial activity based on external market and economic conditions. Also incorporated are centralized planning estimates such as nonfaculty compensation, fringe benefits, endowment spending, debt retirement and occupancy costs for existing and planned space, deferred maintenance funding, and others. If estimated expenses exceed revenue targets, deans must balance budgets while maintaining long-term goals. To identify risks and ensure a balanced position and alignment with Tufts’ strategies and goals, school budgets are reviewed centrally by Finance for consistency with plans, market conditions, and historical activity patterns and approved by the Executive Budget Committee and trustees.

A particular focus of planning and monitoring is placed on undergraduate enrollment and financial aid. A school-based enrollment team periodically reviews trends, using the results to predict and manage the level of entering first-year students and transfers needed to maintain the budgeted total undergraduate enrollment. Additionally, to predict the budget levels required to meet strategic goals, a financial aid model is used to measure historical average awards, the number of students aided, and the amount of external fundraising for aid. The modeling outcome supports decision-making by the deans and the Executive Budget Committee.

With respect to school budget processes, the following provide examples of schools’ inclusionary budget processes that provide appropriate consultation with relevant constituencies:

- **A&S and SOE:** Comprising students, faculty, and administrators, the Committee on Budget and University Priorities makes recommendations on spending against projections and upcoming budget plans to the A&S and SOE deans; reviews and makes budgetary recommendations on proposals for new programs, reductions in existing programs, or major changes in spending priorities; monitors the relationship between the budgets of the associated schools and the university; represents the faculty of the associated schools in school and university discussions of faculty salaries and benefits; and keeps faculty and students informed of its work, conclusions, and recommendations. In performing these functions, the committee shall have the authority to receive information on spending against budget projections and upcoming budget plans and to consult with associated school and university officials on matters having budgetary impact.

- **Fletcher:** The Budget and Prioritization (B&P) Committee is organized to improve faculty understanding of, and buy-in to, the strategic goals and the budget formulation process and to advise the dean on key budget matters. Committee membership includes the academic dean (chair), three or more faculty members, the executive associate dean, the director of Finance and Administration, and Fletcher's
Advancement director. The committee works with the dean to determine how funds available for instruction, academic support, and student services should be prioritized and budgeted in accordance with the school’s strategic plans and financial means.

- **TUSM**: The school’s priorities are set by the dean’s team (executive members of the school’s administration) and are used to evaluate budget requests and make revisions in consultation with each department. In a separate meeting, the TUSM dean, dean of Sackler, and the executive administrative dean meet individually with the chairs of each basic science department to discuss each faculty member’s funding, grants in process, and publications, as well as teaching and service contributions and bridge funding support. The Faculty Advisory Committee, an entity that includes faculty and several department chairs, advises the dean on major financial policy matters.

- **TUSDM**: At the conclusion of department budget requests and review by the Office of Finance and Administration, the dean completes a review of budget components and requests for additional funding that is then shared with the Steering Committee. The Steering Committee is comprised of the EAD, director of Finance and Administration, associate deans, and select department chairs. The group works to establish priorities for spending based on the strategic initiatives and available funds. Once final decisions have been made, the dean shares with his senior leadership team, and then the Office of Finance and Administration meets with departments to review what was agreed upon for the upcoming fiscal year.

Tufts budget is monitored extensively. During the fiscal year, periodic projections are prepared by each department, school, and division and are centrally reviewed to identify significant changes from budget and action steps to meet planned targets. Each school and division works with Finance to resolve issues. Operating results, projections, corrective actions, and impact on future plans are reported periodically to the Executive Budget Committee and the Trustee Administration and Finance Committee. At year’s end, fiscal officers and Finance are responsible for closing the books, thereby linking plans and projections with actual performance.

**Capital Planning and Budget**

As part of its annual budgeting process, Tufts prepares a five-year comprehensive capital program that identifies capital maintenance, renovation, modernization, equipment acquisitions, and facilities expansion and assesses needs, priorities, and funding sources. This process is school-driven and centrally reviewed. Each significant project requires a business plan and identifying funding sources for the initial project and its ongoing operating costs, and is linked to capital campaign goals and achievement and to the operating budget for operating and financing costs. The capital budget is developed with a comprehensive cash flow analysis of the three-year operating budget period. The decision to proceed with any project is made after a careful assessment of available resources.152

**Other Planning and Evaluation Tools**

Tufts monitors key financial goals and measurements including operating surpluses, reserve levels, overall wealth in relation to inflation, credit ratings, and deferred maintenance. Financial performance is reviewed periodically with the Trustee A&F Committee. Through modeling techniques, Finance performs long-range projections of key balance sheet components, affording effective management of Tufts’ financial position. Incorporated are operating budgets, capital project and fundraising planning efforts, and investment, cash flow, and other projections. Financial and other statistics are compiled and updated periodically, allowing comparative analyses of Tufts’ key ratios to those of peers.

**Advancement**

Critical to the success of the capital campaign was the alignment of the University Advancement office with the provost and the VP for Finance. In partnership with the provost, all fundraising plans were developed in direct support of the academic strategic plan, and progress towards these academic goals was measured through monthly meetings with the provost. Additionally, partnerships with the Finance office ensured consistent gift receipt and acceptance policies were adhered to, and any questions were resolved in monthly meetings of the Gift Liaison Committee with representatives of Finance and University Advancement.

Internal policies and procedures with regard to gifts and pledges are documented and circulated widely to all those involved in gifts and grants. A broad-based stewardship program ensures that restricted gifts are expended in accordance with the donor’s designations.

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152 Refer to Standard 2 for more information on planning and Standard 8 for capital projects.
**Investment Management**

**Assets:** Long-term investment assets are invested in a variety of strategies. The Total Return Pool (TRP) is by far the largest of the investment pools and provides the major source of cash for income distributions. Other investments include a short-intermediate fixed income pool, various internal and external separately managed accounts, and the Omidyar Tufts Microfinance Fund (OTMF). In keeping with its charter, OTMF has placed funds mainly in the private equity of financial institutions in emerging markets, where per capita annual income is lower than in more developed economies. This pool is more concentrated than the larger, more diversified pool of endowment and operating assets and will therefore be more volatile.

**Objectives and Strategy:** Chief among endowment and investment goals is to provide intergenerational equity, meaning that future generations of students will enjoy the same level of support as the current generation. To achieve this, the endowment must maintain its purchasing power by earning a long-term return that covers current budget support and keeps up with inflation.

**Spending Rule:** The trustees have established investment objectives for the endowment. To achieve these objectives, all funds by policy are pooled for investment in the TRP. Approximately 5% of the value of the pooled endowment funds is spent annually to support donors’ purposes. The board assumes a long-term university inflation rate of 3%-4%. These returns are measured over long periods, so that over any 10- to 20-year period, the university endeavors to earn at least an 8%-9% annualized return. Tufts strives to earn as much as possible, given market conditions and the university’s risk tolerance.

These are long-term objectives and are unlikely to change from year to year or even decade to decade. However, the board, Investment Committee, and investment staff regularly review portfolio strategy in light of changing needs and evolving risk tolerance. This year the discussions at the Investment Committee and board level have focused on the importance of achieving a balance between risk and return, especially when compared to peers. Comparison of absolute performance across institutions can be misleading given differing levels of risk tolerance. As a strong and well-managed institution that typically “runs lean,” Tufts’ risk tolerance is moderate compared to many institutions.

**Asset Allocation:** A strategic asset allocation plan targets a mix of equities and fixed-income securities. A diversification of managers in both stocks and bonds, and allocations to international stocks and alternative investments are part of the strategy designed to enhance returns while controlling risk. Tufts hires professional money managers to invest these specialized portfolios.

The vehicle through which investment objectives are achieved is a broadly diversified portfolio invested in multiple asset classes that respond differently to various economic conditions. The policy portfolio measures what the performance would be if the TRP were invested exactly in the market index for each asset class. The performance of this policy portfolio is a second baseline (in addition to the 8-9% target) against which the actual performance of the TRP is measured over all periods. This allocation is reviewed periodically to ensure that it continues to meet the university’s needs.

**Audit**

Tufts’ external auditor (Deloitte and Touche from 2002 to 2006, and PricewaterhouseCoopers beginning with the 2007 audit) reviews financial statements, and Tufts’ annual financial report includes the auditor’s opinion on the fair representation of our financial position. The auditors also provide senior university officials and the Trustee Audit Committee with their views on the university’s finance policies, procedures, internal controls, and risks.

To assist with evaluating internal policies and procedures designed to ensure an effective internal control environment, the university also maintains an internal audit department that reports to the executive VP and the Trustee Audit Committee. This office conducts periodic financial and operational audits and assesses compliance with certain external regulations. Internal Audit annually develops its audit plan based on input from the university’s senior management and the external auditor. To complement these consultations, areas described in the university’s recently completed “risk register,” along with regulatory matters scrutinized by federal auditors at institutions of higher education, are considered in establishing the audit plan.

Following the enactment of the Sarbanes-Oxley Act of 2002, the Trustee Audit Committee adopted a number of best practices. The committee administers the conflict-of-interest disclosures on behalf of the trustees, approved the adoption of an anonymous reporting system for employee misconduct, and updated its charter to reflect its current responsibilities. These responsibilities include oversight and appointment of the external...
auditor, annual review of the IRS Form-990, and maintaining an understanding of management's systems for monitoring compliance with laws and regulations and how management addresses fraudulent acts or noncompliance. The Audit Committee approved the addition of a third meeting to enable more frequent interaction with senior management and the opportunity to be briefed on any management issues or concerns.

**University Risk Register**

Under the direction of the executive VP and with the assistance of a Risk Committee comprised of key administrators, Tufts recently established a "risk register." The “risk register” is used to identify and periodically update the strategic, financial, compliance, operational, and reputational inherent risks that could affect the university's ability to effectively fulfill its mission. The committee ranks these inherent risks in terms of their impact and velocity (how quickly the impact would be detected). After considering the effectiveness of management’s activities to mitigate these risks through inquiry and the use of metrics, the committee considers the magnitude of the associated residual risks and, where feasible, directs actions to realize further risk reductions.

**APPRAISAL**

**Financial Position**

In the last 10 years Tufts' strong financial position was maintained and enhanced with balanced budgets, solid operating results, growing reserves, extraordinary campaign achievement, strong investment performance, and preservation and enhancement of physical resources. Tufts emerged from the economic disruption and anemic recovery with balanced budgets and sustaining student demand, quality, and diversity. Steadfast in its commitment to articulated priorities of maintaining financial aid to current students, Tufts continues progressing toward excellence through strong in faculty recruiting and moderation in tuition increases. The successful conclusion in 2011 of the capital campaign culminated in $1.2 billion in support of endowment growth and financial aid. The issuance in March 2012 of $250 million taxable “century” bonds for strategic capital project investments is the most recent demonstration of Tufts' academic and financial reputations.

Despite its successes, Tufts continues to face significant challenges in balancing budgets. Tuition is the largest source of revenue. The economy and the public perception that higher education has become too expensive require moderate tuition increases. To make a Tufts education accessible to students who cannot afford the cost, Tufts has steadily increased financial aid. As Tufts competes with universities with much larger per-student endowment, it devotes a higher percent of its operating budget to financial aid, placing added pressure on challenged budgets. In recent years, all of the professional schools added to class size and reached the capacity of facilities to accommodate students in traditional teaching settings. Low interest rates and volatile markets mean that income from investments is not providing real growth. The environment for attracting research support is increasingly competitive and, to be successful, will require innovation, investment, and excellence.

While revenue is constrained, the energy and enthusiasm for new programs and services continue to grow. To remain competitive and support expectations for research, teaching, and modern business processes, Tufts has extensive needs in the area of technology infrastructure. Resources to support development and implementation of critical systems such as SIS and the Research Administration System are placing a strain on the budget. The physical plant is also in need of extensive investment to maintain an acceptable FCI to protect physical assets, create comfortable environments, and work to conserve energy. Ever-increasing regulation and service expectations require additions to administration to assure compliance and safety. These mandated needs are critical but are only a part of the picture. There are increasing needs to support the core mission by providing additional financial aid to recruit the most talented students and provide new facilities and start-up packages to attract the highest caliber faculty.

All schools are acutely aware of the university’s financial position and are challenged to balance the desire to advance strategic priorities and the need for infrastructure investments against the demand for lowering educational costs. The 2013 budgets are considerably constrained as most schools lowered tuition increases and increased infrastructure expenses while facing a highly competitive federal grant arena and an uncertain economic climate; the resulting belt-tightening followed budgets that were already reduced in the aftermath of the recent recession. These circumstances prevented schools in 2013 from meaningfully increasing financial

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153 Refer to Standard 5 for more information on faculty recruitment efforts, Standard 6 for student financial aid and admissions, and Standard 8 for campus planning.
aid, hiring new faculty at desired levels, investing in new facilities, or growing deferred maintenance funding. School and university leadership recognizes the need to comprehensively examine operations and to deploy economizing measures that do not compromise academic missions.

Financial Planning and Management
The successes achieved by Tufts required effective financial planning and management. These practices proved highly valuable in its response to the economic contraction. Despite the sudden loss of investment income, Tufts invested strategically in financial aid and faculty, maintained appropriate liquidity and cash flow, issued debt responsibly while maintaining its AA credit ratings, and grew its physical assets. Effective oversight by the Executive Budget Committee was supported with sophisticated strategic tools, processes, policies, procedures, and management practices. All schools and administrative divisions actively participated in managing expenses to match the reduced revenue and garnered new revenue sources to provide further diversification, thereby further protecting robust operations from volatility in any single revenue stream.

PROJECTION

Strategic Planning
President Monaco plans to ensure that Tufts remains an exceptional place to pursue research and scholarship and to engage widely as active citizens. He and his senior leadership team are laying the groundwork for the development of a university-wide strategic plan that will drive budget priorities. Tufts will develop strategies allowing it to have the greatest possible impact on 21st century challenges through its teaching, research, and active citizenship. Tufts has identified particular thematic areas where interdisciplinary research and graduate education will position it for continued academic excellence and international leadership. Working groups have begun to map activities and assess the most promising opportunities for future exploration.

Operating Budget
In 2013 Tufts will critically examine all opportunities to control administrative costs. While comparisons with peers have shown that Tufts is leanly staffed, it must look for ways to control cost so that resources can be directed to priorities of financial aid and faculty, and the facilities, staffing, and infrastructure to support them. Tufts has had success in finding new and innovative programs that meet important needs, resonate with its values, and add return to the financial bottom line. TUSM’s recently established MBS degree generated substantial new tuition revenue and its PA program is expected to do the same. The addition of a team of proposal-development specialists in the vice provost’s office increased Tufts’ ability to compete for external funding in the face of growing competition. An in-house capacity will be created to assist schools in developing the business and technology sides of offering new programs. A&S and SOE have been increasing the number of tuition-paying students in their master’s degree programs, and TCSVM is working to maximize revenue from the animal hospitals. As the multiple thematic area working groups and strategic planning process are launched, Tufts will explore how best to position itself to succeed in competing for grants, faculty, and students by capitalizing on its unique combination of expertise.

Capital Planning
President Monaco initiated an extensive capital planning exercise that will refresh master plans and identify the major capital investments needed to support academic agendas. All schools are identifying their strategic priorities to be integrated with the university’s strategic plan.

In the next five years, almost $400 million in capital expenditures have been identified to address needs for deferred maintenance; research and laboratory space and equipment for faculty; technology systems and infrastructure; classroom, clinical, and academic space; and student dining, housing, and athletics renovations. Deferred maintenance funding is planned to rise to $64 million by 2021, resulting in a cumulative $388 million in disbursements with a 10-year compound average annual growth of 14%. “Century” bond proceeds and excess operating cash flow are planned to address significant deferred maintenance needs on all campuses and strategic capital investments identified in the academic strategic planning effort.

Systems
In the next three years, financial and human resource administrative management support systems are scheduled to be upgraded, transitioned to a more cost-efficient hardware platform, and implemented. The capabilities and capacity of the TDW will deliver reporting and other tools that will provide more efficient and effective reporting and enhance financial management. Also planned are a research administration system to
provide efficiencies for faculty and advanced reporting, a data asset management infrastructure, and electronic forms for more efficient and accurate recording of human resource and financial information.

**Indebtedness**

While the “century” bond issue consumes Tufts’ debt capacity as an AA-rated institution in the next five years, the proceeds provide a large degree of flexibility since unspent proceeds can be retained for longer periods than tax-exempt proceeds. All proceeds will eventually be drawn for capital projects. Over time, Tufts will develop capital plans in conjunction with academic planning and, if necessary, delay projects until economic or programmatic circumstances improve. Over the next five years, Tufts plans on no additional debt and expects to retire approximately $46 million of debt.

**Capital Campaign**

Planning for a post-campaign fundraising strategy began in 2010. With a change in leadership during 2012, a plan focused on financial aid and student support will launch in 2013 and continue through 2014, followed by the launch of a full campaign. Preliminary feasibility studies and staffing estimates are already underway.

**INSTITUTIONAL EFFECTIVENESS**

Tufts University uses appropriate internal and external mechanisms to evaluate its fiscal condition and financial management. Despite the economic downturn, these mechanisms have allowed Tufts to maintain its financial integrity.
Standard 10: Public Disclosure

DESCRIPTION

Tufts communications across all media — publications, Web sites, and social media — are centralized within UR and, in turn, decentralized at the school level. Since 2003, Tufts has improved and changed efforts at the central and school levels to communicate consistently and accurately to multiple audiences. In 2003, then-President Bacow created UR to bring together communications, community and government relations, and legal counsel under the leadership of a VP. In 2004, UR undertook a brand initiative and launched Tufts’ new brand, logo, and visual identity. In 2005, the division added the Offices of Web Communications and University Photography, reflecting an increased need to unify and strengthen Tufts’ visual brand and online presence.

Print and Online Publications

General Information
The Fact Book by OIRE includes history, programs, students, staff, and facilities. The 2011-2012 edition and those for the past four years are available. Finance publishes an annual report and other statements for university finances, credit rating, enrollment, faculty, facilities, and operations. Schools publish their own annual reports. Tufts meets regulatory requirements by publishing crime and fire statistics, safety policies, and access to an emergency notification system, and the Department of Public Safety distributes timely warnings of crime via email, posters, and on its Web site.

The Tufts home page is a gateway to school Web sites, providing information to prospective and current students, featuring stories and links to pages with information on mission and strategy, university leadership, campus life, diversity, admissions, and research. There are also links to an events calendar, directions, athletics, and the university’s news site, Tufts Now. Approximately 300 Web sites are under the auspices of A&S, SOE, and GSAS, only four at the school-level; the remainder represents departments, centers, labs, and offices, each responsible for its own site. Professional schools maintain their own sites and print material, with information about their departments, admissions, alumni, patient care, hospitals, research, and student life. Students in Friedman and Fletcher’s hybrid and campus-based programs have the same access to information.

Tufts is open about its accreditation process and status; previous self-studies are posted online. In compliance with CIHE’s Policy and Procedures on Public Comments, an online draft of this self-study was made available in fall 2012. An email to all Tufts users included links to the self-study and an online survey soliciting comments; other feedback channels included announcements by deans notifying faculty and staff of its availability and invitation to respond, and announcements in Tufts Daily and Tufts Life.

Recruitment
The Office of Undergraduate Admissions publishes information for prospective students about the curricular and co-curricular experience, financial aid, and application instructions. Professional schools and Tisch College support marketing efforts with print and online materials that inform prospective students about admission and financial aid, curricula, and unique opportunities. GSAS uses print and online materials including a viewbook, program descriptions, and an inquiry brochure.

Advancement & Alumni Relations
Advancement Communications manages print and electronic communications for fundraising, donor relations, and alumni outreach, including case statements, annual fund letters, and stewardship. Its main Web site provides news, giving opportunities, and philanthropic impact; its other Web site provides information to alumni. Many schools reach out through their own newsletters and social media.

Tufts Magazine, the university’s flagship publication, reaches more than 92,000 nationally and internationally. Individual magazines are the primary print vehicles for the graduate and professional schools to communicate. For example, Fletcher News is published twice per year, and issues are available online.

Course Information
The annual course bulletin is the academic contract for undergraduate students. It includes program descriptions, financial aid information, and course requirements. The Bulletin for the Schools of Arts, Sciences

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154 See the Standard 10 Data First Form for details.
155 Copies are available in the workroom.
& Engineering is available in print and online. Undergraduate course catalogs, a combination of a schedule of classes and bulletin, are published twice per year.

The graduate schools handle course listing differently and publish handbooks in lieu of course bulletins to serve as the academic contract. Curricula exist in some programs/schools instead of a bulletin. For example, TUSDM does not publish a bulletin but has an established and highly scripted curriculum described on its Web site. Fletcher publishes a bulletin available in print and online. Sackler has an online catalog and publishes a course listing on its Web site. Course listings and descriptions for all schools are on the Web.

News
Tufts Now, managed by UR, is a one-stop resource for news/information and promotes the university's themes, ideas, and achievements. Launched in February 2011, it replaced the Tufts Journal and E-News.

Public Relations
The Office of Public Relations (PR) is responsible for most external communications. In August 2011, PR was consolidated under a single director, enhancing consistency in communication accuracy and integrity policies. PR works closely with school- and program-based staff, faculty, and UR colleagues to produce news releases. Press releases and selected news coverage of Tufts appear on Tufts Now and may be linked to the home page.

Social Media
The Office of Web Communications manages the main social networking channels, including Facebook, Twitter, Foursquare, and YouTube. Each school manages its own social media, and dedicated channels for alumni exist on Facebook, Twitter, YouTube, and LinkedIn. Facebook is maintained by UA; LinkedIn is maintained by a volunteer but promoted by UA. TCSVM, Sackler, and TUSM have active Facebook pages. Fletcher staff and students blog and use LinkedIn as part of recruitment. GSAS has four active channels.

APPRAISAL

Tufts’ organizational structure makes coordinating communications and ensuring consistency in public disclosure challenging, although great strides have been made. The creation of UR has equipped Tufts to communicate to key audiences with greater impact, consistency, and accuracy. Tufts readily synthesizes community and government relations perspectives, the legal and regulatory system, and communications. A culture of transparency, fostered by institutional leadership, enables Tufts to speak openly about issues such as alcohol abuse, campus safety, and sexual harassment. All communications staff coordinates efforts and strives to convey consistent information and messages across multiple channels.

The senior VP of UR develops annual strategic goals, and, in turn, each department develops supporting plans. UR staff annually reviews objectives, meeting quarterly to check progress. As stewards of Tufts’ image and reputation, UR maintains the visual identity system and branding guidelines. To ensure compliance, UR works closely with school communications staff and advises clients. Centralization has helped strengthen Tufts' identity and messaging. It is important to recognize that each school, as well as some offices, centers, and programs, manage their own communications. Although each has some form of staff support, this management varies widely, and consequently communications needs, structures, and approaches also vary.

Within A&S and GSAS, for example, administrative offices, academic departments, and centers and labs create materials themselves or engage their own communications support. Compared with liberal arts colleges of approximately the same size, or compared to other such schools within peer universities, Tufts schools' communications needs are inadequately supported. Functions are often performed by staff who do not have communications training. A communications manager and director were hired (in 2000 and 2008, respectively) and have made great strides in improving editorial and graphic quality and accuracy, working closely with UR staff, and applying university- and school-wide visual identity standards. However, there continues to be a culture of decentralized messaging and information creation, making ensuring quality a challenge. The impact of this varies, depending upon a number of factors, including the size of the school.

Print and Online Publications
General Information
A university-wide template was implemented for central divisions, offices, and centers and for the schools’ primary Web sites; however, templates for secondary sites, such as academic departments or school-based administrative offices, were never applied. Most schools adopted the template; however, there has been continually shifting technical support. The result of this is particularly apparent in A&S/GSAS where academic
department sites vary and often bear no resemblance to other A&S sites. Navigation can be difficult, searching is clumsy, and information – potentially out-of-date – is inconsistent among sites. There is an AS&E Web site development project underway. Having completed the research and discovery process, the project team is evaluating constituency needs with an eye to purchasing a new content management system (CMS) and creating a team to support Web, mobile, and print content creation and on-going Web site management. If this project moves forward, it will require an unprecedented, first-time investment in school-level communications.

UR maintains digital signage that conveys Tufts-related news and information across the campuses and that is currently undergoing a complete overhaul in order to provide more flexibility for communications managers to show location-relevant content and eliminate the reliance on central administration for maintenance.

Recruitment
OIRE surveys accepted applicants about their admissions experience, informing planning for future admissions cycles. Graduate and professional students and, increasingly, prospective undergraduates are using the Web sites of academic departments, individual faculty, and student services/affairs offices as part of their searches. However, individual departments use their own “homegrown” materials that fall outside of school and university branding. This presents a challenge in ensuring accuracy and information consistency.

Course Information
Each school is currently managing differently its disclosure of the schedule of classes and course information. With the current development and implementation of a new SIS, all schools’ course catalogs will be maintained in iSIS and may no longer be printed. With the exception of TUSM, iSIS is expected to be the main system of record for the course catalogs and class schedules. The degree to which TUSM will integrate with iSIS is still being considered.

News
Having a single online news source like Tufts Now makes it easier for all audiences to connect with Tufts. UR runs a biweekly news editorial meeting with contributors from across Tufts to discuss the editorial calendar for Tufts Now and to ensure that each school/area is fairly represented. Tufts Now receives nearly 30,000 visitors monthly, several times the number of its predecessor sites. Roughly 26% of visitors come from within Tufts, meaning that a significant number come from outside the Tufts domain.

Public Relations
Information in news releases and other communications targeting news media is routinely vetted for accuracy by appropriate academic and administrative resources prior to dissemination, and care is taken to be conservative in any claims made. Since the last accreditation, PR has begun systematically tracking and analyzing its media coverage based on coverage tracked by an outside service. Between FY08 and FY11, total volume of news coverage increased from 17,572 to 27,741 stories (see Figure 10.1). More than 90% of coverage is positive. PR also compares coverage to that of representative peers. While the volume of coverage is lower than peers’, when institutional resources as measured by endowment are taken into account, Tufts often delivers more coverage per dollar of endowment. For example, in FY11, Tufts delivered almost five times as much media coverage per endowment dollar as Yale, almost twice as much as the University of Pennsylvania and Cornell, and over 30% more than Brown. It also often garners higher percentages of coverage in “top-tier” news media with the greatest number of readers. In FY11, such coverage was higher than that of Brown, Cornell and Duke, without any adjustment for institutional size or resources.

Social Media
Social media presence has grown significantly over the past 12 months. The university Facebook page now has 10,571 fans, a 31% increase from January 2011, and Twitter followers are up to 10,810, a 69% increase from last year. There are dozens of other social media channels managed by different groups across Tufts. This can make tracking and coordinating Tufts in social media a challenge. As a way to organize these, the Office of Web Communications launched Tufts’ social media hub in 2010. Web Communications also chairs a social media working group where social media practitioners discuss best practices and create policies and guidelines. GSAS has created a vibrant presence, supporting a LinkedIn group which has grown to over 1,100 members in 18 months. GSAS on Twitter has grown from 0 to 339 followers in less than one year.
Tufts has a Policy on the Use of Tufts University Name and Insignias. This policy appears on the Office of University Counsel Web page and can also be accessed via the FAQ portion of the PR page, as well as the “Policies for Faculty and Staff” Web page. However, recognizing that this is a fast-changing arena replete with ambiguities and conflicts of interest, Tufts is reviewing its policies to see if clarifications are in order. Guidelines for effective and appropriate use of social media, including use of Tufts’ name by individuals, appear on the Web Communications page. While it is impossible to ensure complete compliance, Tufts’ Social Media Working Group is responsible for the creation, distribution, and general oversight of the guidelines.

**PROJECTION**

UR is developing a strategic plan to support the strategic goals of Tufts and its schools, focused on its internal organization. In addition, UR, in partnership with UIT, is exploring ways to improve and streamline various university-wide Web services. UR and UIT offer limited CMS services to clients not covered under school sites. UR and UIT will provide documentation and training for those ready to begin using these tools and applications.

Due to increased demand for social media support, A&S departments are working to create interdisciplinary Twitter feeds governed by a group of moderators overseen by communications staff. This approach meets A&S’s overarching goal of bringing together common academic interests and creating social media presences that breed vibrant conversation, while ensuring consistent generation of accurate information and stewardship of the Tufts brand. The first feed, focused on the arts, launched in late May 2012 and is slowly building a following. This model may guide the development of social media in other schools.

The implementation of iSIS and the expectation that it will be the main system of record for the course catalogs and class schedules for all but one school has the potential to increase the consistency and accuracy of information; it could also restrict the flexibility of departments in how they convey course information.

*Tufts Magazine* and professional school magazines will launch redesigns by July 2012. A CMS will make them easier to maintain while facilitating content distribution to the Tufts home page and news and school sites.

AS&E and GSAS are in the discovery and research phase of a communications assessment. Among its most important findings is that information regarding courses, majors and minors, and scheduling may be out-of-date or inconsistent among Web sites and course bulletin. This issue was identified by faculty and student services personnel and brought to the attention of the deans, who are discussing implementation of recommendations.

**INSTITUTIONAL EFFECTIVENESS**

The schools and divisions of Tufts University have established systematic processes of review for its print and electronic publications to ensure they are complete, accurate, available, and current. Review results are used for improvement in actual publications, as well as the policies and procedures regarding their production.
Standard 11: Integrity

DESCRIPTION

Tufts fosters an atmosphere of integrity and openness and is responsive to ethical challenges. There are clear policies establishing integrity, procedures for enforcing compliance, and mechanisms for addressing breaches of integrity. While most policies are university-wide, some policies governing integrity in scholarship, student behavior, and faculty research vary by school. Policies on fairness and nondiscrimination in staff employment are governed by HR, published in a widely-accessible handbook, and implemented and enforced university-wide. Policies governing fairness and nondiscrimination in faculty employment exist in school handbooks and are enforced at the school level. Grievances alleging discrimination are governed centrally by the OEO. Diversity also has a university-wide emphasis, but specific issues and challenges vary among the campuses.

To protect and uphold integrity, Tufts subscribes to EthicsPoint Anonymous Reporting Hotline to provide a university-wide mechanism for staff, faculty, and students to anonymously report “financial irregularities, noncompliance with policies and regulations, safety issues, and instances of discrimination or sexual harassment.” Although everyone is encouraged to report an ethics violation to the appropriate dean or supervisor, Tufts realizes that in some cases fear of retaliation may prevent reporting. In fall 2007, through an investigation initiated by an EthicsPoint complaint, Tufts discovered that two employees of the AS&E Office of Student Activities had stolen almost $1 million from the student government. These individuals were terminated, convicted of their crimes, and served prison terms. Tufts restructured the office where these individuals worked and implemented controls to prevent future misconduct. The president and the AS&E dean of OSA periodically informed the community about the thefts and actions taken as a result. The Office of Audit and Management Advisory Services provided training to new staff on proper financial processes. Tufts sends an annual communication to all employees, informing them of EthicsPoint’s purpose and how to report.

The Business Conduct Policy establishes university-wide general policies about behavioral expectations and conflict of interest. The policy stipulates that faculty and staff are expected to avoid activities, agreements, business investments or interests, or other situations that materially conflict or appear to conflict with Tufts’ interests or that interfere with their duty to loyally serve the university to the best of their abilities.

The full Conflict of Interest (COI) policy is described in a publication sent to all new staff employees; managers, directors, and senior leaders are sent an annual reminder and are required to review it through an online compliance mechanism. In addition to this general policy, schools have developed their own policies specific to the type of research conducted and the various interactions with business and government that research may initiate. At TUSM, the Policy on Industry Conflicts of Interest, revised spring 2010, applies to all TUSM faculty, administrators, and students, focusing specifically on relationships with the health care industry. An Advisory Committee on Industry Conflicts of Interest is charged with regularly reviewing the COI policy, updating it as necessary and defining standards for COI disclosure and management.

Tufts’ policies governing research ethics address school-specific needs. There are two IRBs (Boston and Medford) responsible for reviewing research that involves human participants and ensuring that the safety, rights, and welfare of the subjects are protected, in accordance with federal regulations and Tufts policy. The Health Sciences Institutional Animal Care and Use Committee (IACUC) (Boston and Grafton) and the Medford IACUC are responsible for reviewing research involving animals to ensure proper care and appropriate use, in accordance with federal regulations and Tufts policy. The policies and procedures for both IRBs were updated in 2011; those for the health sciences were updated in 2010 and for Medford in 2011.

Each school has its own students honor code or academic integrity policy.156 The codes of conduct are published online or in handbooks and distributed to all students. Because AS&E includes the undergraduate residential college, requiring additional behavioral guidance, its OSA publishes three honor codes: “The Code of General Behavior and Citizenship Expectations” and “The Code for Ethical Standards and the Responsible Use of the University’s Electronic Resources,” both found in the Student Judicial Process Handbook, and “The Code for Academic Integrity Related to Coursework.” In addition, TUSM, TUSDM, and TCVM have published codes of ethical, academic, and professional conduct. As in undergraduate programs, these codes hold students to high academic and behavioral standards; however, they include particular focus on professional standards,

156 The terms “honor code” and “code of conduct” are used interchangeably in this report.
generally mirroring the standards established by their respective accrediting agencies and highlighting the rights of patients, confidentiality of patient records, and quality care.

In 2006, AS&E faculty voted to approve a new policy requiring instructors to report all instances of student cheating, plagiarism, and other violations of academic integrity (or suspected violations) to the dean of OSA. The policy implemented a tiered system of grading consequences tied to disciplinary action. Further, without guidance from the dean of OSA or acknowledgement of the student’s rights guaranteed by the Student Judicial Process, individual professors and departments could no longer decide how to penalize a student believed to have committed academic dishonesty. AS&E has placed a strong emphasis on teaching students about academic integrity. Since 2004, all first-year students are required to attend an Academic Integrity Workshop during orientation. Since September 2011, AS&E has required all incoming students (graduate and undergraduate) to complete a Web-based Academic Integrity Tutorial to learn about ethical decision-making, peer pressure, and community standards of academic integrity.

In AS&E, there were 20 to 60 incidents (undergraduate and graduate) of academic dishonesty each year from 2003 through 2010. Prior to the institution of the Academic Integrity Workshops, there were 40 to 45 cases per year. There was a large increase of up to 60 cases of academic dishonesty in 2006, when reporting by faculty was made mandatory and use of Turnitin.com instituted. This increase was anticipated because it meant that with increased faculty awareness of their obligation to report, more cases were reported, and that students did not yet realize how careful they must be when submitting work. Since 2007, there have been 25 to 30 cases per year, and most were for minor incidents (one student copying another’s homework, an unattributed paragraph in a paper that is otherwise original work by the student); major forms of dishonesty (such as cheating on an exam) are rare, with only two or three incidents per year. Since 2007, several students have been suspended for cheating and only one has been expelled (for multiple acts of academic dishonesty). In all, reported incidents of academic dishonesty have declined nearly 50% since the 2006 increase.

APPRAISAL

Challenge 1: Responsible Use of Technology

Technology poses an on-going challenge to privacy, copyright, and intellectual property. Tufts is responsive and pro-active in its efforts to protect student and employee privacy and intellectual property from illegal activity conducted through technology misuse. In 2005, the AS&E OSA took steps to reduce illegal downloading of copyrighted materials using university computing resources. A computing ethics code (“Responsible Use of the University’s Electronic Resources”) was added to the student handbook, alternative services for legally downloading music were provided, and technology consultants were made available so students could cleanse their computers of programs that could share files over the internet. After several years in which numerous students were sued by the recording industry, the problem of illegal downloading seems to have largely abated.

Prior to 2005, social security numbers were used as student IDs, creating an unneeded vulnerability. This practice was changed, and education to promote awareness of privacy and security was implemented. When senior leadership discovered that the AS&E SIS allowed all professors access to view all transcripts, faculty voted to reprogram SIS so that only deans and registrar staff have access to all transcripts, while faculty may view their advisees’ transcripts. In 2010, in response to state law requiring employers and universities to protect personally identifiable information (such as SSNs), Tufts developed and implemented the Information Security Program (ISP) to ensure compliance by assessing risks associated with confidential information, evaluating policies and procedures, and developing additional safeguards to minimize risks. In September 2011, as part of the ISP and in support of compliance with a broad range of information management and protection requirements and regulations (e.g. FERPA), policies specific to Information Stewardship, the Use of Institutional Systems, Information Classification and Handling, and Information Roles and Responsibilities were adopted; although sponsored by UIT, they live in every business and academic unit of Tufts.\textsuperscript{158}

It is anticipated that the next ethical challenge posed by technology will be maintaining the integrity of online courses. While Tufts offers no degree-granting program in a completely online format, Friedman offers online graduate courses toward a certificate program. Other schools (Fletcher and SOE) are interested in exploring online graduate courses, and several undergraduate courses have been offered during summer session. Before Tufts can expand online offerings, the question of how to maintain their integrity needs to be resolved.

\textsuperscript{157} In this section, ethical challenges recently faced by Tufts are presented with an appraisal of its response.\n
\textsuperscript{158} See Standard 8 for more information on the Information Security Program.
Challenge 2: Diversity and Inclusion
Tufts has a strong commitment to diversity and fosters an atmosphere of inclusion. Recently, Tufts expanded the categories of individuals and groups protected by its nondiscrimination statement. All supervisors are regularly trained about workplace policies regarding sexual harassment, discrimination, and disability. In addition to enforcing the student code of conduct, Tufts offers a system of reporting, tracking, and publicly airing campus “bias incidents.” Incidents can be reported to a resident assistant, peer leader, or the AS&E OSA, and through a Web portal that tracks and publishes incidents so students are aware of their existence. The associate dean of OSA runs Students Promoting Equality, Acceptance, and Compassion (SPEAC), a group that educates students about the impact of bias. Directors of the Africana, Asian American, International, Latino, LGBT, and Women’s centers host a series of workshops for students, faculty, and administrators on social justice leadership. The campus climate is one in which many professors, administrators, and students are dedicated to creating an atmosphere of respect, understanding, and inclusiveness.

Despite these efforts, some students feel strongly that Tufts does not go far enough to change deep-rooted prejudices and structural inequalities. Annual senior survey results (2003 through 2012) indicate that the majority of seniors believes that homophobia, racism, or sexual harassment are not campus problems. The extent to which they agreed that sexual harassment and racism are campus problems increased slightly in 2012, while agreement that homophobia is a campus problem continued to decline. However, over those ten years, females and students of color consistently agreed more strongly that sexual harassment, racism, and homophobia are campus problems, compared to males and white students, respectively. This disparity – between students who do not perceive racism, homophobia, or gender bias on campus and those who have experienced or witnessed it in the classroom or residence halls – is an ongoing tension resulting in at least one incident of intolerance or bigotry per year that provokes student outrage, followed by protests, community forums, and student demands for administrative action. One can argue that the openness of the Tufts community and students’ strong feeling that they can speak out, protest, and debate exemplify values of openness, transparency, and active citizenship. Conversely, student frustration is at an all-time high, especially among those who feel that they have been burdened with the task of pointing out bias and intolerance as such and educating other students about issues of color-blindness and white privilege. What these activists articulated throughout AY10-11 was their perception of a lack of leadership by Tufts’ administration to counter structural racism; further, they perceived a gap in undergraduate education that does not require students to take a course about race, privilege, color-blindness, or social justice.

The perceived lack of leadership stemmed in part from a vacancy in the OID. During AY06-07, the OID, reporting to the president, was created to address issues of diversity on all campuses. Its director resigned shortly before President Bacow announced his resignation, and this position was left vacant until the new president could determine its future. Shortly after his arrival, President Monaco announced that diversity would be a main pillar of his presidency, assembling a Council on Diversity to examine schools’ challenges in creating and maintaining diversity, to ensure accountability for advancing diversity, to promote faculty and staff multicultural competency, to educate students to interact successfully with peers in a multicultural environment, to support the multiple identities held by individual students, and to educate students and train professionals for success in a diverse society. Overall, Tufts acknowledges the challenges it faces in aspiring to create an ever more diverse faculty and student body as essential to its striving for excellence.159

Challenge 3: Promoting Academic Freedom and an Atmosphere of Respect
Tufts adheres to values of openness, striving to create a safe and respectful atmosphere free from violence, harassment, intimidation, and hostility. Usually, the atmosphere serves to promote academic freedom and free expression of ideas; however, an individual’s or group’s use of this freedom is occasionally perceived as hostile or intimidating, provoking debate, conversation, and reflection for the community.

In November 2009, the trustees approved a Declaration of Freedom of Expression at Tufts University. The declaration underscores the importance of freedom of expression and inquiry in a rigorous academic environment, simultaneously stressing that such freedom is not absolute and that community members will be held responsible for speech that discriminates against or harasses others in a manner that obstructs their ability to learn and achieve their individual potential.

The declaration was based on the recommendations of a task force appointed in response to the controversy arising from items published in a 2006 student publication that involved commentary concerning black and

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159 See Standards 5 and 6 for more information on Tufts’ efforts to promote diversity.
Muslim students, and ignited a debate pitting freedom of expression against Tufts’ nonharassment policy. This declaration provided the framework for Tufts’ response to an incident in 2011 in which a local psychiatrist and TUSM adjunct faculty member made controversial comments about transgender issues. The president and senior leaders responded promptly via letters to the community and general public clarifying that the adjunct faculty member was free to express his personal opinion without penalty, but this expression was not the opinion of Tufts nor reflective of its clinical practices or community, which welcomes transgender individuals and does not discriminate based on gender expression. The incidents are indicative of the inevitable conflict between upholding freedom of expression and providing a nondiscriminatory environment. The declaration illustrates Tufts’ commitment to providing an environment that encourages academic freedom and vigorous exchange of ideas, while ensuring that community members are safe and not subject to discrimination.

When AS&E students violate the community code of behavior and integrity, their status is determined by the schools’ Student Judicial Process, including the hearing process, alternative dispute resolution, and various options for students. Lawyers are no longer permitted to be involved in writing students’ complaints or appeals or in speaking for them during the process, reducing disparities between students who can afford attorneys and those who cannot. Students may consult a trained peer judicial advocate as a guide through the process. In 2009, in response to a suggestion from the TCU Senate, a three-person committee (including one student and two staff members) was created to determine whether enough evidence existed for the Judicial Affairs officer to make a decision about disciplinary action or whether lack of evidence or reasonable doubt would require an evidentiary hearing before a panel of faculty and peers.

AS&E’s Student Judicial Process allows for transparency, the chance for the accused to question the accuser, and student-faculty deliberation. Unfortunately, in cases of alleged sexual misconduct, including sexual assault, such practices may be so traumatic that victims could be deterred from coming forward or participating in the process. In 2009, two student forums discussed the ways in which the process could be improved to address instances of sexual assault and other forms of violence better. Subsequently, a student-faculty task force was convened and, based on its recommendations, the AS&E’s OSA implemented a Fact-Finding Adjudication Process specifically for allegations of sexual assault and other forms of sexual misconduct by students. An impartial and professional fact-finder investigates the allegations, interviews, and accesses confidential records in order to make recommendations to the OSA. The accused and accuser are allowed to review and respond to relevant documents. The OSA dean then renders a decision based on the preponderance of evidence. This new and less traumatic process allows for transparency and fairness while protecting student rights and makes it easier to report underreported crimes.

**Challenge 4: Communicating Policies**

The review and publication of policies is an important step toward transparency, consistency, and fairness. University-wide policies and handbooks governing students are revisited and published annually. Likewise, HR annually updates and publishes a handbook on policies governing staff; however, the general policies governing faculty are not regularly updated. A revision of the AS&E Faculty Handbook was released by the deans of A&S and SOE in spring 2012. The internet allows for interim revisions, yet the ongoing publication of revisions in the electronic document raises problems as it adds more moving parts to a multi-faceted process.

There is neither a single administrative body in charge of policies or handbooks, nor one process through which new or revised policies are vetted. Policies are formulated in various parts of the university, but there is concern with the process by which they are integrated into handbooks. Changes in the AS&E Faculty Handbook are posted by the secretary of the faculty, who keeps a log of when each new change is put into effect. However, the secretary is not empowered to ensure that policies utilized by constituent parts of the colleges match those in the handbook. An administrator in the provost’s office does have some responsibility for identifying policies in the various faculty handbooks that should be identical across schools. This individual is “currently building a process” so that he is in touch on an ongoing basis with faculty affairs officers at each school. In addition to faculty handbooks, the process for issuing new or updating existing policies is typically informal, localized, and ad hoc. There is also inadequate coordination of university-wide policies across the school handbooks.

The management and communication of policies that exist outside of school, student, and faculty handbooks are also challenges. These include version control management (occasionally multiple versions of policies can be found on Tufts websites); policy history (identifying previous versions of policies, e.g. for the purposes of adjudicating a disciplinary case or other disputes); locating policies (there is not one actively managed policy portal or other tool to help people find policies, as university-wide policies exist on the website of the
department, office, or division that creates the policy; lack of standard policy document structure (policies sometimes published without essential supporting documentation such as the policy manager/enforcer, approving entities, effective dates, and scope); and policy process (processes for developing and approving new or updated policies is ad hoc, especially in areas not governed by faculty or Trustee bylaws).

PROJECTION

Assessing and Communicating Academic Integrity Policies and Outcomes
Despite changes to AS&E policies governing academic dishonesty, those changes need to be communicated to faculty more effectively. Many faculty are unaware of the changes or do not know where to find the policy. Further, professors who report a violation by a student feel unsupported by the judicial process. While the process is described to students, the role and expectation for faculty in the academic integrity policy and judicial process are not clearly described in the student publications, and guidance will need to be developed.

As part of its efforts to prevent plagiarism, Tufts subscribes to Turnitin.com. Although it allows students to screen their writing to avoid unintentional plagiarism, Tufts’ license does not include this feature. UIT is in the process of reviewing what it would take to integrate Turnitin.com with Trunk. UIT met with AS&E’s OSA to discuss this shift to university-wide integration with Trunk and change in policies to allow students to pre-screen their own work before submitting, requiring a faculty decision in AS&E.

The majority of undergraduates, surveyed annually, do not believe that academic dishonesty is a problem on campus. That perception has decreased since 2003, yet the question remains whether it is an accurate perception. Do students perceive that academic dishonesty is “not a problem” because they do not care about cheating or do not fully understand what constitutes cheating and plagiarism? Or do they believe that it is not a problem because so few Tufts students cheat? Going forward, it would be beneficial to track and assess the effectiveness of academic integrity policies and prevention efforts.

Fact Finding Adjudication Process for Student Sexual Misconduct
Tufts considers the Fact Finding Adjudication Process for allegations of student sexual assault and sexual misconduct to be a model process. This process is now being expanded beyond AS&E to Tufts’ other schools.

Criminal Offender Record Information
Currently, Tufts does not have a consistent university-wide policy of conducting background checks on students, staff, and nonclinical faculty who function in settings with direct and unmonitored contact with children, elderly, disabled, or other at-risk populations. In 2009, a task force recommended the establishment of a Criminal Offender Record Information (CORI) office to process all required CORI checks. At the time, there were two CORI officers, one in the child development department and one in HR. This recommendation was not implemented due to lack of funds. However, following the 2011 child sexual abuse scandal at Penn State, Tufts’ Office of Legal Counsel is reconsidering this recommendation as well as a university-wide policy for running background checks on faculty who, through their research or other activities, interact with children.

Campus Climate
In 2011, AS&E established an Intercultural Social Identities Program to create a vehicle for community conversations, events, and co-curricular programs dedicated to issues of social identity, diversity, social justice, and inclusion. At the moment, this program is only beginning its efforts to foster an improved campus climate, but some means of assessing its effectiveness should be established.

Risk Register
One of President Monaco’s initial emphases is to focus on assessing risks and acting upon the assessment. The risk of ethical breaches is covered in several existing “risk register” risks, such as “Tone at the Top,” board/trustee performance and stewardship, regulatory compliance, work culture, and fraud/unethical activities. As the “risk register” is more fully implemented and university and school leadership develops monitoring and mitigation plans, the effectiveness of the register will be evaluated.

INSTITUTIONAL EFFECTIVENESS

Tufts seeks integrity in all areas at the university and school and program levels. Policies, procedures, and events are evaluated regularly and as-needed in order to ensure integrity in academics and services, reflecting the high ethical standards established by the schools.