



One Thousand Days: July 1, 2011- March 26, 2014

Nariman Farvardin's Tenure as President of Stevens Institute of Technology:

Strategic Focus, Measurable Objectives, Substantial Progress

When Nariman Farvardin took office as the seventh President of Stevens Institute of Technology on July 1, 2011, his appreciation for Stevens' 140-year history of innovation and impact inspired his vision for the future of the University. An institution founded by America's "first family of inventors," Stevens had produced many graduates whose innovations, business acumen and contributions to society have transformed whole industries and changed lives. He saw in Stevens an impressive past and a promising future.

Unleashing the energy, ambition and pride of the Stevens community, Farvardin empowered faculty, students, alumni and administration to chart the course for the future. A strategic planning process commenced almost immediately. Lasting about nine months and involving more than 300 members of the Stevens community, the effort resulted in a 10-year Strategic Plan entitled *The Future. Ours to Create*. With more than 40 ambitious—yet objective and measurable—goals across all segments of the University, the Strategic Plan describes the Stevens of 2022 with a bold vision statement: ***to become a premier, student-centric technological research university.***

During the first 1,000 days of President Farvardin's tenure, Stevens has made remarkable progress on all fronts: the size and academic caliber of the undergraduate and graduate student populations have increased; faculty research has flourished; new academic programs and centers have been launched in strategic areas; alumni have been re-energized; and fundraising has hit new records. National rankings and awards and placement in prestigious competitions have increased, and reinvestment in strategic initiatives, including campus infrastructure, IT and communications, have all been prioritized. All of these efforts have been accomplished in the context of a fiscally sound and disciplined budgeting process resulting in a dramatically improved financial condition and outlook for the future.

This report summarizes only the most significant milestones and accomplishments of the thousand days following July 1, 2011.

Growth, Academic Profile and Success of Undergraduates on the Rise

Demand for a Stevens education has intensified over the last 1,000 days, resulting in a significant increase in applications, selectivity and the academic profile of our undergraduate student body. Specifically, the number of applications has increased from 3,228 in Fall 2010 to 4,977 in Fall 2013 and is projected to substantially exceed 5,000 in Fall 2014. During the same period, the middle fifty percent SAT score of entering freshmen has improved from 1180-1340 to 1220-1390. Over this same period, the entering freshman cohort of students increased from 566 to 622.

At approximately the mid-point of the Fall 2014 recruiting cycle, data indicates that 2014 promises to be another stellar year in undergraduate admissions, with a larger and academically stronger pool of applicants.

Overall, the headcount of undergraduates has grown from 2,369 in Fall 2010 to 2,691 in Fall 2013. This is due both to increasing cohorts of freshman students and to an increase in the percentage of students who persist toward their degree at Stevens.

This increase in the size and academic profile of the undergraduate student body and improved persistence is occurring without any reduction in standards or rigor of the Stevens education. Stevens remains one of the most rigorous undergraduate curricula in the nation, with the engineering degree requiring 142 credits for graduation, compared to an average of 128 credits for other engineering institutions.

Stevens has made “Student Success” a priority of its Strategic Plan and has put in place an infrastructure to diagnose and improve retention and graduation rates. For example, the first-year retention rate (freshmen who return for their sophomore year) has improved from 93 percent to 96 percent over the last three years—truly remarkable progress. Similar progress is anticipated for six-year graduation of our students by 2017. In fact, for the 2008 freshman cohort, we anticipate a graduation rate of 81% by Fall 2014—two percentage points better than our best performance to date.

Upon graduation, Stevens students do exceedingly well. Ninety-four percent of the Class of 2013 secured post-graduation outcomes as of November 1, 2013. In fact, Stevens ranked **13th in the nation** for career services in The Princeton Review’s 2013 edition of “The Best 377 Colleges.”

As Stevens graduates advance in their careers, they do even better. Stevens ranked **3rd in the nation** for mid-career salary of graduates in PayScale’s 2013-2014 College Salary Report. Stevens ranked **9th in the nation** for the 30-year net return on investment of a Stevens education according to PayScale in 2013. In 2011, Stevens ranked 21st for mid-career salaries of graduates and 33rd for the 30-year net ROI in the same rankings, representing a significant ascent in just two years.

Graduate Admissions Trending Up

From Fall 2011 to Fall 2013, the cohort of newly enrolled full-time graduate students (master's and Ph.D.) grew from 410 to 652, and the number of newly enrolled part-time graduate students declined from 513 to 325, consistent with the Strategic Plan's goals. Overall applications to Stevens' graduate programs increased from 3,342 to 4,322 from Fall 2011 to Fall 2013. Importantly, the number of applications for the Spring 2014 term increased by 46 percent over Spring 2013, and the number of full-time students enrolled in Spring 2014 was up 72 percent over Spring 2013. The new graduate admissions structure is taking root and beginning to deliver strong results.

Faculty Growth Strengthens Education and Research

Currently, the faculty body is at its largest size in history, with 251 full-time faculty members in Fall 2013.

Twelve excellent tenured/tenure-track faculty were hired in Fiscal Year (FY) 14, and 15 searches are underway for FY15.

A new Office of Research has been established, new systems and supports are in place, and these efforts are beginning to demonstrate promising results: the number and dollar value of proposals submitted are on the rise, as are new partnerships and collaborative efforts with the corporate sector and government labs.

A reorganized Office of Innovation and Entrepreneurship was launched to revitalize and broaden innovation and entrepreneurship programming throughout Stevens. Recent activities include the Spring 2014 launch of a two-credit course in entrepreneurship in which 520 freshmen engineering students developed start-up business concepts and presented their funding pitches.

The Strategic Plan identified strategic priorities that build on Stevens capabilities and address complex areas of intense societal need: in healthcare and medicine, sustainable energy, financial systems, defense and security, and STEM education. A number of new centers and initiatives have been created in support of these interdisciplinary research clusters:

- The Center for Complex Systems and Enterprises
- The Center for Healthcare Innovation
- The Financial Systems Center and the Hanlon Financial Lab, enabling students in quantitative finance, business intelligence and analytics, financial engineering and other programs to use Bloomberg terminals in a simulated trading room streaming real-time market and trading data.

Other recent research highlights include:

- \$60 million renewal of the Systems Engineering Research Center
- \$10 million extension of contract with the Federal Aviation Administration
- Award of Stevens' first two National Institutes of Health R01 grants, among the most competitive and prestigious grants awarded
- The Atlantic Center for the Innovative Design and Control of Small Ships (ACCeSS) was renewed at \$4.5 million for five years by the Office of Naval Research

Alumni Engagement Revitalized; Development Soars

A number of new programs and initiatives have commenced to re-engage alumni near and far with their alma mater. Most notably, the Stevens Awards Gala, which originated in the 1930's to recognize alumni and friends of Stevens for significant personal and career accomplishments, was re-launched in 2013 in an opulent and sophisticated format and venue. The event honored 13 of Stevens' brightest stars from across the globe and brought more than 300 members of the Stevens community together for this celebration. The second annual Stevens Awards Gala is planned for April 5, 2014, at The Plaza Hotel in New York and promises to be a spectacular event. Alumni and friends of Stevens are enthusiastically encouraged to register and attend. See: stevens.edu/awardsgala for more details.

In addition, close collaboration with the Stevens Alumni Association has yielded enhanced efforts resulting in new regional clubs, new activities and events designed to increase alumni engagement and participation in Stevens programs and activities. A record number of alumni returned to Castle Point for Alumni Weekend 2013.

Over the past 1,000 days, a total of \$50 million has been raised for Stevens! This represents a new benchmark in fundraising success at Stevens. A record gift of \$10 million from the Gianforte Family Foundation by serial entrepreneur Greg Gianforte '83 and his wife, Susan, toward the new Academic Gateway Complex catalyzed a number of other significant gifts and pledges.

The President's Initiative for Excellence, a three-year, \$30 million fundraising campaign that started on July 1, 2011, achieved its target a full year ahead of schedule. Alumni and friends have supported this era of excellence through remarkable gifts of time, infrastructure support, scholarship support, research support, support for athletics programs and support for a new President's Distinguished Lecture series.

In Fiscal Year (FY) 2011, which concluded one day before President Farvardin took office at Stevens, philanthropic giving to the university totaled approximately \$4.7 million. In FY12, this number jumped to \$13.8 million—nearly tripling—and in FY13 it effectively doubled again, to \$26.3

million. Within the span of two fiscal years, Stevens received more than five times the annual giving the university had been receiving prior to July 2011.

This increased philanthropy is important financially, because these generous gifts help support students' academic and professional dreams, as well as the talented faculty and academic facilities that make them possible.

Awards and Honors Abound

Top achievements in the last 1,000 days include:

In 2013, the Stevens "Ecohabit" team finished second in the nation and fourth worldwide in the prestigious and extremely competitive U.S. Department of Energy Solar Decathlon. The teams' design and engineering work on both Solar Decathlon projects—Empowerhouse in 2011 and Ecohabit in 2013—continue to live on: Empowerhouse has become a permanent residence for a Washington, D.C. family in need through a partnership with Habitat for Humanity; and Ecohabit will be used as a veterans' resource center on the campus of California State University, San Marcos. In February 2014, Stevens was notified that, once again, it has been selected to be one of only 20 universities throughout the U.S. that will compete in the 2015 Solar Decathlon competition.

For the second time in history, Stevens scholar-athletes secured the prestigious Eastern College Athletic Conference Jostens Institution of the Year award in 2013. This is an exceptional honor: the ECAC consists of more than 300 Division I, II and III academic institutions, and the Institution of the Year metric is calculated by a mathematical formula rewarding a combination of outstanding athletic performance on the field and top academic performance in the classroom. Stevens is only the third institution ever to win this award more than once, joining Princeton University and Williams College.

One three-member Senior Design Project team known as Versor was awarded the top prize by the Start Something Challenge, a competition for small business plans organized by the nonprofit Rising Tide Capital, for their innovative design of a novel device to measure spinal motion safely, without the use of X-rays. Another three-member student team authored a medical sales management mobile phone application that won first prize in a pitch competition hosted by Cordis Corporation, a medical device subsidiary of Johnson & Johnson.

The New Jersey Technology Council recognized two members of the Stevens community in the last 1,000 days: President Nariman Farvardin was named CEO of the Year-Non Profit in 2013 and David Dodd, Vice President of Information Technology and Chief Information Officer, was named CIO of the Year-Non Profit in 2014.

In addition, President Farvardin, Provost George Korfiatis and Vice Provost Christos Christodoulatos were inducted into the National Academy of Inventors in 2014.

Other noteworthy accolades and accomplishments during the last 1,000 days include:

- Ranked 7th in the nation among elite universities in percentage of STEM degrees awarded in a 2013 report from U.S. News & World Report
- Ranked 7th in the nation for the number of engineering master's degrees awarded in 2012 by the American Society for Engineering Education (ASEE)
- Won the National Award for Excellence in Academic Leadership of Undergraduate Education Programs in Engineering Management by the American Society for Engineering Management (ASEM) in 2013
- Ranked as the 2nd most innovative college music program in the nation by The Best Colleges in 2013
- Listed among the top 11 schools for insurance and technology talent in Insurance & Technology in 2012
- For the first time, Howe School ranked among the top 100 Business Schools in the U.S. for research—at #78—by the Social Science Research Network, higher than many well-established business schools
- Won the International Distance Learning Award from the United States Distance Learning Association (USDLA) in 2010, 2011 and 2013
- Captured the Collegiate Athletic Administrators Cup, honoring the New Jersey Division III institution with the most athletic success, for the 2010-2011, 2011-2012 and 2012-2013 seasons

Enhanced Reputation, Increased Prestige of Stevens an Institutional Priority

Over the last 1,000 days, Stevens has undertaken a number of important initiatives to generate greater recognition of the critical impact that the University plays in the region and the world:

Launched through the generosity of Stevens alumnus and Rochester Institute of Technology President William Destler '68, the President's Distinguished Lecture Series has welcomed a number

of recognized thought leaders to campus to lead stimulating discussions on topics of regional, national and global import. Former Lockheed Martin CEO Norman Augustine discussed the impact of recent technological advances on defense, aerospace, STEM education and their importance to America's future. Dr. John Holdren, Director of the White House Office of Science and Technology Policy (OSTP) and the President's science and technology adviser, provided a fascinating insider's view of science policy creation and implementation in the Obama administration. MIT professor, former Director of the CIA, and renowned energy expert Dr. John Deutch spoke on the complex technical, economic, geopolitical and environmental aspects of new energy technologies such as hydraulic fracture and the promise and cautions of its widespread implementation on the national economy and foreign policy. And Stevens prepares to welcome former Chairman and CEO of Intel, Dr. Craig Barrett, to address the role of the U.S. research university in economic competitiveness in the twenty-first century on April 23, 2014. Register at: stevens.edu/lecture.

Campus Infrastructure Improvements and Plans To Benefit Students and Faculty

A campus master plan, envisioning the campus over 10 years and beyond to accommodate the growth of the undergraduate and graduate student bodies, the faculty, and associated support services, is being finalized. New academic facilities, residence halls, student life, athletics and recreation facilities all figure into the Stevens of 2022 and beyond.

Currently, several major construction projects are in various stages of development:

- The Virginia and Kevin Ruesterholz Admission Center
- The Gianforte Academic Gateway Complex
- The American Bureau of Shipping Expansion of Davidson Laboratory

These, along with projects in the Howe Center, the S.C. Williams Library, and others, will significantly to improve and optimize current space on campus.

In addition, over the last 1,000 days, 26 classrooms in various academic buildings have been built, remodeled and/or modernized, including Smartboard technologies and collaborative working group environments.

Technology Infrastructure to Restore Stevens' Leadership

One of the tenets of the Strategic Plan, Technology at our Core, is emerging through two pioneering projects funded through a competitive award of \$7.25 million from the State of New Jersey. Supplemented with additional institutional investments, both IT initiatives will dramatically enhance

teaching and learning capabilities at Stevens: the Unified Communications and Collaboration Environment and the Virtualized Learning Environment. The first project will unify all campus communications systems—replacing all networking electronics and installing a new fiber-optic infrastructure and Voice-over-IP. The result will enable voice and video communications to travel over the campus network and the Internet at extremely high speed, providing substantially increased capabilities and access to learning resources to our faculty and students.

The Virtualized Learning Environment will revolutionize education delivery at Stevens and put the University in a position of national leadership in the use of technology for technical education. This project will enable access to course materials and sophisticated design, computation, simulation and visualization tools via computers, smartphones, iPads and other devices, while reducing the need for traditional computer labs scattered across campus. These projects will literally transform Stevens into the campus of the future.

Fiscal Responsibility, Strategic Investments Yield Stability and a Strong Platform for the Future

Fiscal discipline and careful, diligent monitoring have characterized the approach that has resulted in a greatly improved Stevens financial position over the last 1,000 days. Stevens' financial strength continues to improve, while the University continues to make strategic investments that will enhance students' education and outcomes for generations to come: in critical IT infrastructure, classroom and lab renovations, and support and incentives for faculty research.

An Invitation for the Next 1,000 Days

Stevens Institute of Technology has made significant gains over the last 1,000 days: specifically, the creation and adoption of an ambitious Strategic Plan and substantial progress toward specific, measurable benchmarks described within the plan.

As Stevens continues to grow its student and faculty bodies and expand into strategic new areas of education and research, the university welcomes the participation of those both within and beyond the Stevens community.

To learn more about Stevens' plans for the next 1,000 days and beyond, and opportunities to engage and collaborate, please visit stevens.edu/president.