

Strategic Investments

Rensselaer Polytechnic Institute has made strategic investments for the future, guided by the *Rensselaer Plan*, with the full support and approval of the Board of Trustees. By realizing our vision of The New Polytechnic, we will advance science and technology in areas critical to global health and well-being, and we will deliver a transformational educational experience to the world's future innovators, problem-solvers and leaders.

With a relatively modest resource base, we invested upfront in a “once-in-a-generation” institutional transformation because we were, and continue to be, confident that the *Rensselaer Plan* and its execution represents the best investment in Rensselaer and its future. Our belief that we were making the right investments in Rensselaer has never wavered and we persevered through difficult and tumultuous economic times.

As a result of our strategic focus, we have made significant strides toward the full realization of the *Rensselaer Plan*:

1. We have more students on our campus than ever before, with the largest incoming freshman class in FY '17 (1,691 students). We enrolled our second largest incoming class in FY '18, with 1,663 students. Enrollment exceeded our goals. Undergraduate applications have grown by over 300 percent in 10 years, from just over 5,500 applications in the fall of 2006 to just over 19,505 applications this past fall. The average SAT score of the incoming class is 1400 out of 1600. Demand and interest in Rensselaer continues to grow and we will break a new record for applications by receiving more than 20,000 freshmen applications for the FY'19 class.
2. We have added 22 new academic degree programs since 1999.
3. Through Clustered Learning, Advocacy, and Support for Students (CLASS), we have transformed the student experience and have a 94 percent average freshman retention rate.
4. We have grown research expenditures by 176 percent - from \$37 million in 1999 to over \$102 million in 2016.
5. We have formed five multidisciplinary platforms and initiatives through which we are advancing science and technology, business, humanities and social sciences, and architecture, in areas critical to global health, national and global security, energy security, and climate and environmental stewardship. We are delivering a transformational educational experience to the world's future innovators, problem-solvers, and leaders - our students.

I. Center for Biotechnology and Interdisciplinary Studies (CBIS)

II. Rensselaer Institute for Data Exploration and Applications (IDEA)

III. Cognitive and Immersive Systems Laboratory (CISL)

IV. Center for Computational Innovations (CCI)

V. Center for Materials, Devices, and Integrated Systems (CMDIS)

6. We have formed and expanded research partnerships with numerous global companies and foundations including the Bill & Melinda Gates Foundation, The Boeing Company, Corning, Disney Imagineering, GlobalFoundries, IBM, Icahn School of Medicine at Mount Sinai, Medtronic, Mitre Corporation, Optum Labs, and Tokyo Electron America.
7. We have been recognized and ranked as a top university. This year U.S. News & World Report ranked Rensselaer at 42nd among national research universities. Rensselaer has been ranked as one of the top 50 national universities by U.S. News & World Report for the past 17 years. Our graduate program in Nuclear Engineering program is ranked 12th and our undergraduate program in Mechanical Engineering is ranked 19th and by U.S. News & World Report. Our Engineering program is ranked 6th in the nation by *USA Today*. Our Information Technology and Web Science program is ranked 1st in the nation by College Choice; our Games and Simulation Arts and Sciences program is 10th on the Animation Career Review list of top game design

programs in the United States; our School of Architecture has been ranked the 13th best undergraduate program in the nation by *Design Intelligence*; and CNBC ranked Rensselaer #9 for the U.S. colleges whose students go on to earn the most money.

8. We have upgraded existing structures and expanded the campus to accommodate our growth. We have transformed the campus landscape and physical plant with facilities such as the Center for Biotechnology and Interdisciplinary Studies (CBIS), Experimental Media and Performing Arts Center (EMPAC), and East Campus Athletic Village (ECAV), which were built between 2004 and 2009. Our students live, learn, and socialize in these state-of-the-art venues.
9. Our capital and operating leases are ongoing investments in student housing and economic investment in Troy and the surrounding area. Through partnerships with private developers, Rensselaer has built off campus housing, including the Howard N. Blitman, P.E. '50 Residence Commons for undergraduates, and the College Suites complex for married, graduate, and undergraduate students. The downtown commercial real estate market has benefited from the relocation of roughly 85,000 square feet of administrative space off campus. From 2001 to 2009, Rensselaer spent more than \$10 million in streetscape and utility work as well as homebuyer incentive and renovation grants.
10. In fall 2017, we launched a multi-year, comprehensive fundraising campaign designed to raise more than \$1 billion in cash. We have added \$100 million in designated gifts to the endowment over the last five years, thanks to the generosity of our donors, most of whom are alumni/ae. The successful conclusion of this campaign will enhance Rensselaer's standing as a world-class technological research Institute with global reach and global impact by 2024.

We are proud of the strategic investments we have made in our faculty, staff, students, and campus facilities, and have delivered these results under strong economic headwinds. We have balanced our cash operating budget for the last 18 years, and are well-positioned to consolidate and strengthen our balance sheet. Our finances are fundamentally sound, and we have strategies in place to further enhance the fiscal health of the Institute.

We remain focused on reducing our long term debt. The debt was issued to invest in Rensselaer's transformation and to make significant contributions to our legacy defined benefit pension plan. Since 1999, Rensselaer has made contributions over \$215 million to the Defined Benefit Retirement plan. During the 15 years prior to 1999, Rensselaer contributed less than \$15 million to the plan. We continue to accelerate paying down our debt, while increasing our endowment, including unrestricted endowment. Through continued stringent financial management and our comprehensive fundraising campaign, we will soon reach the crossover where the valuation of our endowment is higher than our debt.

Our annual performance planning, capital project planning, and budgeting processes are linked to the Rensselaer Plan. We will continue to focus expenditures on creating programs and research capabilities that will benefit not only the campus community and our vast alumni base, but the world at large.

Response to specific Renew Rensselaer statement related to Legacy Pension Plan

We remain focused on reducing our long term debt. The debt was issued to invest in Rensselaer's transformation and to make significant contributions to our legacy defined benefit pension plan. It appears that the analysis by this group was based on accounting measures that were used in the preparation of our financial statement. However, the Defined Benefit Retirement plan's funded status is based on the Internal Revenue Service (IRS) funding relief measures. More importantly, the Rensselaer Defined Benefit plan was funded at 95.2% as of July 1, 2016; and 90.4% as of July 1, 2017. Since 1999, Rensselaer has made contributions over \$215 million to the Defined Benefit Retirement plan. During the 15 years prior to 1999, Rensselaer contributed less than \$15 million to the plan.

Responses to specific Renew Rensselaer statements related to Research

"RESEARCH REVENUES; CARNEGIE RATING LOWERED FROM R1 TO R2

The primary strategy of both the original Rensselaer Plan and updated Rensselaer Plan 2024 is to grow research activity and, presuming success, this should lead to the Institute gaining greater prestige, drawing higher quality students, improving its rankings, and attracting greater financial resources. In dollar terms, the declared goal of The Rensselaer Plan was to increase research expenditures to \$100 million within five years. The Rensselaer Plan 2024 targets annual research expenditures of \$250 million.

After showing initial strong growth from \$48.5 million in 2000, research revenue peaked at \$98.5 million in 2013, before slowly declining to \$74.7 million in 2017. Therefore, from fiscal year 2000 through fiscal year 2017, research revenue has grown at a compounded rate of only 2.6% (including inflation), from \$48.5 million to \$74.7 million."

Rensselaer Response: This analysis mixes various sets of data, and in terms of actual dollars, the numbers are not what are officially provided to the federal government. Rensselaer, as with all federally-funded research institutions, provides annual research expenditure data to the National Science Foundation Higher Education Research and Development (HERD) database. Research expenditures in 2007 was \$77.7M, in 2013 it was \$92.6M and in 2016 (last year of the available data) it was \$102.8M. The expenditures for FY17 will be slightly higher than FY16. It is worth noting that the increase of \$10M from FY13-17 took place during a time when federal research funding had dropped.

"As a percentage of total revenue, research revenue in 2017 was lower than it was in 2000 (18.0% vs. 18.4%). The following chart displays research as a percentage of total revenue from fiscal year 1998 to 2017 (see Historical Revenue, Balance Sheet, and Selected Data):"

Rensselaer Response: This metric is irrelevant. Indeed, virtually no analysis of research funding correlates to the university total revenue. The denominator (total revenue) in private universities is driven by the undergraduate tuition revenue, and as Rensselaer UG student numbers increase, and the discount rate drops, the denominator increases.

"During 2016, RPI's Carnegie Rating—a 3-tier ranking metric for research universities—was lowered from the highest level of R1 to the mid-level of R2, whereas nine other schools in New York remained at R1: Columbia, Cornell, CUNY Graduate Center, NYU, Stony Brook, SUNY Albany, Syracuse, SUNY Buffalo, and Rochester."

Rensselaer Response: The Carnegie Classification (it is not a rating) takes into account several factors that make it difficult for largely STEM institutions to score well. Specifically, a major classification is the research expenditures and Ph.D. degrees awarded in non-science and engineering (non-S&E) disciplines. The Rensselaer School of Humanities, Arts, and Social Sciences (HASS) and Lally School of Management are small, and as a result, the non-S&E expenditures are low. The S&E expenditures, both overall and per-faculty, are in the middle of the Tier-1 institutions. To give you an example of how the STEM-based nature hurts such schools, Rockefeller University also fell from Tier-1 to Tier-2, despite being the #1 rated S&E per capita institution in the nation. It is important to note that the other nine schools listed by Renew Rensselaer are NOT primarily STEM-based institutions.

"Furthermore, the outlook for Federal funding of STEM research, which is the source of roughly 80% of RPI's research funding, continues to be weak (see the Boston University research article entitled "Who Picks up the Tab for Science?")."

Rensselaer Response: The outlook for Federal funding overall is under pressure, not just STEM research. For this reason, we have focused on diversifying our funding base, such that while our overall research expenditures have increased, our percentage of federal funding has decreased to approximately 72 percent and our industry funding has increased to over 13 percent, a higher percentage than nearly all peer and aspirant universities.

Freedom of Speech and the Student Union

On October 13, Rensselaer hosted hundreds of community members and guests attending events at multiple locations across campus, including the area of EMPAC and Folsom Library. In accordance with our policies, we worked closely with Rensselaer Public Safety to ensure these events, and the pedestrian traffic accompanying them, were not disrupted. Some of the safety concerns included: fireworks, which require a specific perimeter to ensure safety; ensuring access and safety for those with mobility challenges; and maintaining the required egress for emergency vehicles.

We support freedom of speech and the students' right to demonstrate. There was one request for peaceful demonstration submitted for October 13. Those with expertise in event management and security determined that a demonstration would pose significant disruption of already-planned events and raised concerns for the safety of attendees; therefore, after careful review, that specific request was denied.

The Dean of Students invited the applicant for the demonstration to meet to discuss alternative dates, times, and locations for the demonstration. The applicant declined to meet and subsequently requested to discontinue the application.

The administration has made no attempt to take control of the Rensselaer Student Union from student leadership. There are a number of communication channels being utilized between students, student leaders and the administration. There are highly productive communications with the Grand Marshal and President of the Union occurring on a regular basis.

Here are four important key facts about the student union:

1. The student union is part of the university and always has been.
2. The student union runs its activities, clubs, and programs and fully administers its budget.
3. The Director of the Union has always been a Rensselaer employee.
4. The Director of the Union is hired according to the standard university processes and procedures, with critical input from the students.

Board Resolution

In September 2017, the Executive Committee of the Board adopted a resolution confirming the authority the President has, and has always had. This resolution expressed the Board's expectation that the Union "will continue to run and thrive as it has for many decades."

RESOLUTION OF THE EXECUTIVE COMMITTEE OF THE BOARD OF TRUSTEES OF RENSSELAER POLYTECHNIC INSTITUTE

WHEREAS, the Board of Trustees of Rensselaer Polytechnic Institute ("Board") recognizes that a misunderstanding has developed regarding the hiring of a Director of the Rensselaer Union, which is a result, at least in part, from provisions in the Rensselaer Union Constitution;

WHEREAS, Article XIII, Section 10 of the Bylaws of Rensselaer Polytechnic Institute authorizes the Executive Committee of the Board to act for the Board of Trustees in all matters requiring action between meetings of the full Board, subject to certain exceptions not applicable to this Resolution;

WHEREAS, the Rensselaer Union is not a separate legal entity, but is an organization that is encompassed within Rensselaer Polytechnic Institute ("Institute"), and the Director of the Union is, formally and legally, an employee of the Institute;

WHEREAS, the Board, as the paramount governing authority of the Institute with responsibility to exercise all powers prescribed by the Act of Incorporation of the Institute and other applicable law, has adopted Bylaws that constitute the overarching governing document for the Institute;

WHEREAS, Article VIII of the Bylaws mandates that the "President shall, as educational and administrative head of the Institute, exercise a general superintendence over all the affairs of the institution, and bring such matters to the attention of the Board as are appropriate to keep the Board fully informed in meeting its responsibilities";

WHEREAS, a critical aspect of the general superintendence authority of the President is to make employment decisions on behalf of the Institute and to otherwise comply with all laws and regulations necessary to govern and operate the Institute;

NOW, THEREFORE, the Executive Committee of the Rensselaer Board of Trustees makes the following confirmatory declarations:

Any provision in the bylaws, constitution, charter, or other such rules, regulations, or governing documents of any Rensselaer-affiliated group that conflict with the Bylaws of the Institute are deemed unapproved by the Board and are superseded by the Bylaws to the extent they so conflict;

In accordance with the general superintendence authority over all affairs of the Institute delegated by the Board to the President of the Institute, any decisions on the hiring, formal reporting line, removal, and other terms and conditions of employment of the Director of the Union are to be made by the Institute under the authority of the President;

To avoid continued misunderstanding, the governing body of the Rensselaer Union is hereby requested to take appropriate action to ensure the Rensselaer Union Constitution, and any other documents governing the affairs of the Rensselaer Union, are brought into conformance with the declarations of this Resolution;

It is the Board's expectation that the Rensselaer Union will continue to run and thrive as it has for many decades: through the leadership and ingenuity of the students with advice and support of the Director of the Union and other members of Institute management team.