

Testimony

Assembly Ways & Means Committee Hearing on NYS Budget

January 30, 2003

Chairman Farrell, Chairman Schimminger, Chairman Sweeney, Honorable Members of the State Assembly, good morning and thank you for this opportunity to speak with you today. Your topic today – improving the upstate economy – is both timely and imperative. To paraphrase a famous advertising slogan – for Upstate New York, the economy is Job One! Clearly, we have our challenges, some of which you outlined in your call for testimony today. But we also have some unparalleled assets and unique opportunities from which we can, and indeed must, forge a comprehensive strategy to create our own economic boom in Upstate New York.

I speak with you today wearing two hats -- as President of Rochester Institute of Technology and as chair of the Commission on Independent Colleges and Universities, an organization which represents more than 100 independent colleges and universities throughout New York State, seven of which are located here in the Rochester region. Accordingly, I want to focus my remarks today on one of these distinct assets – higher education. Specifically I will address the following themes: What are the dimensions and current impact of this asset on our economy, both for higher education in general, and RIT specifically? How can we do more to capitalize on this resource? And, how far can this asset take us in becoming the community of choice for industries that will be successful in the new economy?

Let me first take this opportunity to thank you for the investments that you have made in RIT over the past several years, particularly in our National Center for Remanufacturing and Resource Recovery. Since 1997, thanks especially to the efforts of Assemblyman Joe Morelle, we have received over \$2.7 million to support the research and industry outreach efforts of this Center. Your support has enabled the Center to be the recognized world leader in remanufacturing, which is the process of restoring used parts and equipment to like new condition. In addition to expressing our appreciation, I want to report to you on the return you are receiving on this investment. To date, these funds have helped to create or retain 1,320 jobs at New York State companies. Moreover, these projects have resulted in over \$29 million in increased sales and/or cost savings at the participating companies. Keeping in mind that the Center's clients are primarily small to medium size companies, this is a good example of one of the bright spots of our economy that offers opportunities for further growth.

One of the questions you asked us to address was about how we can ensure that New York is a viable competitor in the high-tech marketplace. The answer to that question speaks to one of the reasons why higher education is such a key asset – that is, the ability to provide a highly skilled workforce. This is a particularly timely issue as New York looks to the explosive growth potential of the biotechnology industry as one of the foundations of its economic development agenda.

A soon-to-be-released study by the New York Biotechnology Association suggests an important corollary to the refrain “if you build it, they will come,” which is “if you provide the workforce, they will come.” The study asked its members to rank order a dozen issues in order

of importance in considering business location, **and rate New York State's performance** on these issues. The top three categories? They are: scientific staff, senior staff and specialized staff. And how does New York rate in meeting these needs? On a scale of 1 to 5, with one being the lowest, New York's performance rates between 2 and 3, as compared to quality of life, which was fourth in importance and received a 3.5 rating on performance. Interestingly, regulatory and tax environment were further down the list in importance, at 7th and 8th respectively.

What this report tells us, in no uncertain terms, is that the workforce is the top concern of the biotech industry when they are deciding on a location for their business, and that New York falls short on that yardstick. If we want to build the biotech industry, we need to address this issue, and we need to do it quickly. The industry simply needs more people with distinct skill sets. What are the qualifications they are looking for? A recent report by the National Research Council, entitled Building a Workforce for the Information Economy, noted that two-thirds of the biotech workforce positions require a bachelor or master of science degree in technical disciplines, while about 19 percent require a Ph.D. degree. In addition, there must be professional development opportunities to upgrade the skills of the workforce as the technology advances.

Last year, in the Assembly budget plan, you included RIT's proposed Center for Biotechnology Education and Training among your economic development priorities. This proposed facility builds on RIT's long established track record in biotechnology education, which dates back to 1983, and the development of new programs in key areas such as bioinformatics. It will enable us to significantly expand our reach and impact on the

biotechnology industry by increasing the number of graduates and the training and professional development programs that we can offer. The Center will complement, in a unique and synergistic way, the biotechnology research initiative that is underway at the University of Rochester, establishing a cluster of resources that no other community in the nation can offer. The combined strengths and assets of these initiatives will give upstate New York a distinct advantage in recruiting new biotech companies, especially in biomanufacturing, and in fueling the growth and success of companies spawned in our own region.

I want to take this opportunity to thank you for your vision in embracing this initiative when we first discussed it last year, and hope that you will continue to include the Center as a priority in this year's budget. The total project cost of \$15 million includes a new 40,000-square-foot facility on the RIT campus, 14,000 square feet of renovations of existing space in our science building, and 6,000 square feet for renovations and installation of laboratory and instruction space at the Rochester Technology Park.

Turning to more general workforce issues, the Rochester area independent colleges and universities collectively enroll over 30,000 students, and award over 7,000 undergraduate and graduate degrees annually. Two-thirds of these students come from New York, while about one-quarter are from other states, and about 8 percent are international students. An important dimension that RIT adds to this economic impact is its cooperative education program. Last year, over 2,600 RIT students completed nearly 3,800 coop assignments as part of their degree requirements. More than half of these assignments were with Rochester area companies.

One of the areas we need to work on is how to keep more of these students in New York State after graduation. Currently, the percentage of these students overall who stay in New York after graduation is roughly the same as the enrollment percentages. In the high-tech fields, however, a disproportionate percentage leave the State for technology meccas such as the Boston area and California. If we are to realize a competitive advantage, we need to keep a higher percentage of these graduates, particularly in key technology areas such as engineering, information technology and biotechnology. In Rochester, we are collaborating with the Chamber of Commerce and the Industrial Management Council on an initiative called “GR Recruits”, aimed at developing strategies to retain our best and brightest graduates to work for companies in our region. We have also proposed a new state-funded “Engineering Loan Forgiveness Program” that would provide up to 3,000 graduates per year in key fields with an incentive to remain in New York after graduation – the “carrot” is that for each year that they stay, \$5,000 of their student loan debt would be reimbursed by the State, for up to four years of employment. By that time, we believe they will have established roots in their communities, and will be less likely to leave for opportunities elsewhere. The first year implementation cost would be \$13 million, ramping up to about \$44 million when fully phased in.

Another important dimension of higher education’s impact is university/industry partnerships for research and technology transfer. The size, scope and diversity of the higher education community in this region – public as well as independent institutions – provides us with a particularly unique advantage. And we are seeing additional collaboration opportunities throughout the upstate region, for example through the RIT STAR Center, known as the IT Collaboratory, and the Infotonics Center of Excellence. The STAR Center brings together, for

the first time, the outstanding talent and expertise that reside at the University of Buffalo, Alfred University and RIT, and the research and synergy at both of these centers will establish the western New York area as the research and development hub for the integration of Microsystems and photonics technologies. These are critical investments for the future of the upstate economy.

While our traditional manufacturing base in Rochester has shifted, manufacturing is still a key factor in the overall health of the region's economy. RIT's Center for Integrated Manufacturing Studies continues to be at the forefront in helping small and medium size manufacturing firms make the shift from traditional manufacturing to high tech manufacturing. Last year, using some \$300,000 in state funds, CIMS provided manufacturing outreach services and support to 39 companies. These projects resulted in the creation or retention of 229 jobs in one year, as reported by the companies. The companies also reported increased sales and/or cost savings totaling \$28.4 million, which yielded \$2.1 million in additional state tax revenues – a 620 percent return on the State investment. We are currently using the manufacturing outreach funds we received in last year's budget, including \$150,000 that the Assembly provided, to work on additional projects with area companies. Once we have completed these projects, we expect to report similar results to you.

Speaking of high tech manufacturing, the printing industry continues to be an important segment of the manufacturing industry in New York State. At RIT, we are investing in the future of this industry through our partnership with Heidelberg. This collaborative effort involves a 13,000 square foot addition onto our CIMS Building that will house a state-of-the-art web

press, provided by Heidelberg and valued at between \$7-10 million, to be used for educational, training and research purposes.

These examples point to some successful investments in Upstate New York, and the promise of future opportunities. The main message that I would like to leave you with is that higher education is a key part of the solution for the Upstate economy, and we look forward to working in partnership with you to achieve our mutual goals. Much of what I have outlined today relates directly to workforce development, job creation, applied research and technology transfer. Without these elements, economic development cannot be successful. The competition – that is, virtually every other State – knows this as well, and they are aggressive and opportunistic. We need to be likewise. We must showcase our unique assets and strengths, facilitate and support collaboration among our key economic development resources, and continue to invest in programs and initiatives that have proven themselves through results. In addition to the programs that I have mentioned already, I also want to encourage your continued investment in programs such as the Tuition Assistance Program, HEOP and Bundy Aid, all of which you have consistently supported. The first step toward keeping our best and brightest students is to encourage them to attend a New York college or university, and the importance of these programs in developing the future workforce cannot be overlooked.

Can Upstate New York be the community of choice for companies in the new economy? Absolutely! We have many advantages over other communities, including the added value of unparalleled higher education and research resources that offer unique opportunities for partnerships to meet workforce needs. The possibilities are limitless!

Thank you for your time and attention, and I look forward to any questions you may have.