
Memorandum of Understanding

**State University of New York College
of Environmental Science and Forestry**

and the

State University of New York

November 2006

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1.0 Campus Role and Distinctiveness

The State University of New York College of Environmental Science and Forestry (SUNY ESF), founded in 1911 and located adjacent to Syracuse University, is the only college in the country with academic programs focused exclusively on the environment. As is appropriate to its focused mission, the College itself is small, but it benefits from its special relationship with Syracuse University. Since the institution's inception, SUNY ESF students have been able to enjoy the best of two kinds of undergraduate education – the intensity and intimacy of a small specialized institution and the breadth of educational opportunities offered by a large comprehensive campus.

The mission of SUNY ESF is to advance knowledge and skills and to promote the leadership necessary for the stewardship of natural and designed environments. New York State Education Law directs SUNY ESF's primary effort in "teaching in the science and practice of environmental science and forestry, including landscape architecture, environmental design, environmental and resource engineering, environmental and resource management, wildlife studies, biology, chemistry and ecology, the manufacture and marketing of forest products, and the technologies appropriate to these branches of environmental science and forestry."

2.0 National Context: Peer Institutions

Comparisons to other, similar institutions provide useful benchmarks for campuses, reinforce an institution's confidence in existing practices, and can lead to new ideas for improvement. Because of its highly focused mission, SUNY ESF finds it difficult to identify direct peers. However, there are a few relatively small, public universities with focused technical missions that might be used for comparison, including the Colorado School of Mines, the University of Missouri at Rolla, and Clarkson University. In addition, although comparisons to large comprehensive universities can be misleading, SUNY ESF does benchmark itself against several such institutions for specific measures including academic credentials of entering freshmen and student retention and graduation rates. These institutions include Cornell University, North Carolina State University at Raleigh, Virginia Polytechnic Institution, and Syracuse University.

Table 1 below summarizes comparative data for SUNY ESF and its current and aspirational peers.

Table 1
SUNY ESF Peer Analysis Table

	SUNY College of Environmental Science and Forestry	Current Peer Institutions						Aspirational Peer Institutions				
		Colorado School of Mines	Michigan Tech University	University of Missouri at Rolla	Clarkson University	Syracuse University	University of Vermont	Cornell University	Rensselaer Polytechnic Institute	University of Rochester	N. C. State University at Raleigh	Virginia Polytechnic Institute
Total Headcount Enrollment (IPEDS)	2,016	4,050	6,550	5,459	3,105	18,639	10,967	19,620	7,236	8,466	29,854	27,755
Full-Time Headcount Enrollment (IPEDS)	1,502	3,065	5,527	4,518	3,045	15,551	8,746	19,579	6,385	7,166	22,587	24,812
Percent of Enrollment which is Full-Time (IPEDS)	74.5%	75.7%	84.4%	82.8%	98.1%	83.4%	79.7%	99.8%	88.2%	84.6%	75.7%	89.4%
Total Degrees/Certificates Awarded (IPEDS)	437	772	1,250	1,228	821	4,955	2,093	5,839	2,296	2,367	6,377	6,662
% Course Sections with < 20 Students (College Board) ¹	73.4%	43.4%	40.9%	56.3%	36.9%	65.8%	49.1%	43.7%	38.1%	67.5%	32.2%	24.0%
% Course Sections with > 50 Students (College Board) ¹	6.9%	7.3%	10.1%	5.4%	24.4%	7.5%	9.6%	22.8%	11.4%	8.9%	16.0%	21.9%
Total Faculty Headcount (IPEDS) ²	139	354	449	474	192	1,426	1,340	1,940	445	1,879	1,792	2,669
% Full-Time Faculty (IPEDS) ²	80.6%	66.9%	86.6%	77.4%	88.0%	65.1%	85.4%	90.7%	98.9%	92.8%	96.2%	97.7%
% Full-Time Faculty with PhD/Terminal Degrees (College Board) ³	88.8%	92.0%	89.0%	91.4%	90.5%	86.7%	85.5%	91.3%	95.0%	89.1%	91.0%	89.5%
% Full-Time Faculty with Tenure (IPEDS)	75.0%	53.2%	65.6%	47.1%	58.6%	64.4%	36.6%	63.1%	65.7%	28.7%	67.5%	39.8%
Faculty Rank Distribution												
% Full Professor	40.2%	39.7%	29.8%	28.3%	32.5%	38.7%	25.1%	34.1%	49.5%	20.2%	40.6%	30.6%
% Associate Professor	35.7%	32.8%	38.1%	22.9%	29.6%	30.7%	27.5%	15.8%	21.6%	19.9%	25.5%	23.6%
% Assistant Professor	17.0%	14.8%	23.9%	27.2%	32.5%	27.3%	33.3%	13.5%	28.6%	20.2%	19.4%	16.1%
% Instructor	3.6%	10.1%	0.6%	3.8%	5.3%	2.0%	4.0%	0.6%	0.0%	1.2%	0.7%	7.5%
% Lecturer/Other	3.6%	2.6%	7.7%	5.4%	0.0%	1.0%	10.2%	10.1%	0.2%	38.4%	6.7%	22.1%
% No Rank (IPEDS)	0.0%	0.0%	0.0%	12.3%	0.0%	0.3%	0.0%	25.9%	0.0%	0.0%	7.0%	0.0%
Student/Faculty Ratios and % Adjunct (IPEDS)												
Student FTE/Total Faculty FTE	13.6	12.6	15.6	11.7	17.3	14.5	8.5	7.1	16.1	4.2	16.0	13.4
Student FTE/Total Faculty Headcount	12.1	10.2	14.5	10.2	16.0	11.6	7.8	6.7	16.0	4.0	15.7	13.2
Student FTE/FT Faculty Headcount	15.1	15.6	16.7	13.2	18.1	17.9	9.2	7.5	16.1	4.4	16.3	13.6
Student FTE/Tenure Track Faculty	16.2	20.6	18.1	18.2	19.8	19.7	15.6	9.4	18.1	7.9	18.0	20.5
% Adjunct Faculty	19.6%	35.0%	10.9%	22.6%	NA	33.7%	14.0%	6.0%	1.2%	7.2%	2.8%	2.1%
First-Year Retention (2003 Cohort, IPEDS)	93%	84%	81%	84%	86%	93%	84%	96%	91%	93%	90%	87%
% First-Time, Full-Time Students Graduating Within Six Years (IPEDS)	68.5%	66.1%	59.9%	60.3%	63.9%	81.0%	70.0%	91.9%	80.5%	78.1%	62.8%	74.1%
SAT Scores 25 th and 75 th Percentiles (IPEDS IC04)	1030/1240	1140/1340	1070/1260	1110/1340	1090/1290	1120/1320	1060/1250	1290/1490	1220/1420	1230/1410	1100/1300	1100/1290
% Freshmen with a High School G.P.A. > 3.0 (College Board) ⁴	81.0%	99.0%	88.0%	85.0%	89.0%	93.0%	NA	NA	NA	93.0%	99.0%	99.0%
Freshman Acceptance Rate (IPEDS IC04)	63.8%	79.4%	92.9%	93.0%	85.6%	59.1%	76.4%	29.4%	74.6%	46.1%	62.0%	71.6%
Research Expenditures (NSF)												
Total R & D (in 000s)	\$26,783	\$29,162	\$30,264	\$35,999	\$7,466	\$48,846	\$104,994	\$554,760	\$50,777	\$285,768	\$286,025	\$247,807
(Rank)	(199)	(190)	(188)	(174)	(288)	(152)	(113)	(10)	(150)	(46)	(45)	(55)
Federal R & D (in 000s)	\$5,177	\$16,314	\$17,667	\$18,142	\$4,833	\$34,559	\$70,832	\$320,868	\$32,295	\$208,148	\$96,157	\$98,143
(Rank)	(272)	(193)	(187)	(184)	(278)	(145)	(108)	(16)	(150)	(33)	(82)	(80)
Federal R & D per FT Faculty (in 000's)	\$46.2	\$68.8	\$45.4	\$49.4	\$28.6	\$37.2	\$61.9	\$182.3	\$73.4	\$119.4	\$55.8	\$37.6
Faculty Scholarship (ISI) ⁵												
Publications/FT Faculty '98-01	1.7	2.7	2.0	2.0	3.3	2.0	2.2	4.5	3.7	3.0	3.3	2.1
Publications/FT Tenure Fac '98-01	1.9	3.5	2.3	2.7	3.6	2.2	3.8	6.0	4.1	5.5	3.7	3.2
Citations/FT Faculty '98-01	1.4	2.7	2.8	2.3	5.5	2.4	4.4	12.0	5.4	8.0	5.8	2.3
Citations/FT Tenure Faculty '98-01	1.6	3.5	3.1	3.2	6.0	2.6	7.6	16.0	6.0	14.6	6.5	3.6
Expenditure Profile (IPEDS 2003) ⁶												
Total E & G/Student FTE	\$28,971	\$25,507	\$22,145	\$23,871	\$23,278	\$23,328	\$34,525	\$61,556	\$38,408	\$75,936	\$28,077	\$22,949
Instruction/Student FTE	\$10,841	\$9,827	\$8,426	\$9,462	\$9,611	\$10,256	\$9,779	\$17,409	\$13,001	\$27,766	\$8,964	\$7,300
Instruction (incl. support)/Student FTE	\$19,112	\$16,423	\$13,743	\$14,885	\$20,194	\$19,249	\$16,974	\$31,221	\$23,553	\$42,248	\$13,256	\$10,900
% Total E & G spent on Instruction	66.0%	64.4%	62.1%	62.4%	66.8%	82.5%	49.2%	50.7%	61.3%	55.6%	47.2%	47.5%
Undergrad Instruction/UG Student FTE	\$16,201	\$12,492	\$11,655	\$11,209	\$17,619	\$15,162	\$8,990	\$21,452	\$18,288	\$17,725	\$9,891	\$7,970
Undergraduate as % Total Instruction	65.4%	56.7%	74.9%	58.6%	76.9%	55.6%	45.9%	47.9%	59.0%	24.0%	59.8%	58.5%
Grad Instruction/Grad Student FTE	\$28,931	\$27,907	\$29,565	\$27,743	\$39,411	\$20,306	\$16,726	\$48,614	\$40,255	\$35,929	\$22,746	\$18,419
Graduate as % Total Instruction	34.6%	43.3%	25.1%	41.4%	23.1%	38.8%	9.4%	40.0%	41.0%	31.6%	32.1%	31.5%
Basic Carnegie Classification (Carnegie Foundation, 2005)	Research Universities (high research activity)	Research Universities (high research activity)	Research Universities (high research activity)	Research Universities (high research activity)	Research Universities (high research activity)	Research Universities (high research activity)	Research Universities (high research activity)	Research Universities (very high research activity)	Research Universities (very high research activity)	Research Universities (very high research activity)	Research Universities (very high research activity)	Research Universities (very high research activity)
Control (IPEDS)	Public	Public	Public	Public	Private	Private	Public	Private	Private	Public	Public	Public

Note: This table reflects the most recent data available from the Integrated Postsecondary Education Data System (IPEDS 2003), the College Board Annual Survey of Colleges (2004-05) except where indicated, Institute for Scientific Information (ISI), National Science Foundation (NSF, 2003), Carnegie Foundation (2005), and data files maintained by the State University of New York Office of Institutional Research and Analysis.

¹ Course Section Size Data for SUNY College of Environmental Science and Forestry taken from the 2003-04 College Board Annual Survey of Colleges.

² Total Faculty Headcount and Percent of Faculty who are Full-Time at Clarkson University is the total count of instructional employees (IPEDS EAP, 2003).

³ Percent of Faculty with PhD/Terminal Degree for University of Rochester taken from the 2003-04 College Board Annual Survey of Colleges.

⁴ Percent of Freshman with a H.S. GPA > 3.0 for Colorado School of Mines, Michigan Technological University, and University of Rochester taken from the 2003-04 College Board Annual Survey of Colleges.

⁵ Institute for Scientific Information (ISI), summarized by SUNY Office of Institutional Research and Analysis; publications converted to full article equivalents; note full-time faculty are instructional research faculty regardless of tenure status.

⁶ IPEDS Financial Statistics 2003-04 with additional analysis by SUNY Office of Institutional Research and Analysis; note Graduate Instruction expenditure data does not include first-professional.

3.0 Economic Impact

One of the goals of Mission Review II is to compile an accurate account of SUNY's impact on the New York State economy. To this end, System Administration has standardized employment and fiscal data across the 64-campus system and will use U.S. Bureau of Economic Analysis multipliers to calculate the total regional and state-wide impacts.

SUNY ESF is moving vigorously as an economic and educational force in environmental systems and renewable energy, fields that are predicted to have a global market of \$200 billion in the near future and to create 50,000 new jobs in Central New York by 2010. As an example, the SUNY Center for Sustainable and Renewable Energy, established in 2002 by SUNY System Administration and based at SUNY ESF, serves as a clearinghouse for research and development in renewable energy across the University. Similarly, the Center of Excellence in Environmental Systems, established in Syracuse by Governor Pataki as a partnership between industry, higher education, and government, is expected to leverage \$3 of funds for every \$1 of state investment.

The most recent economic impact study shows that SUNY ESF employs 733 people and that its activities lead to another 502 people being employed. Direct expenditures amount to \$59.5 million, with additional indirect expenditures amounting to \$64.3 million, accounting for a total economic impact of \$123.8 million (based on U.S. Bureau of Economic Analysis methodology).

4.0 Enrollment and Admissions

4.1 Enrollment growth

Goals for enrollment growth at SUNY ESF are guided by the Mission Review II process, SUNY's 5-year Enrollment Plan, the changing budgetary climate, and Vision 2020, the College's Strategic Planning endeavor. During the timeframe set by Mission Review I (i.e., from 2000-04), new undergraduate student enrollment at SUNY ESF grew by the planned 15%, or from 395 to 454 students. Over the next five years, the College plans modest growth overall of around 2% each year. As part of this plan and in order to meet the changing needs of graduate students during that time, SUNY ESF will maintain a balanced profile of academic and professional graduate degree programs and increase its graduate population at an annual rate of almost 5%. Heightened emphasis at the doctoral level will characterize future recruiting and program development.

SUNY ESF's specific enrollment projections through 2010 are shown below in Table 2.

Table 2

SUNY ESF Planned Enrollment – Fall Headcounts and Annual Average FTE

Student Group	Fall 2005 (Actual) ¹	Fall 2006 (Approved) ²	Fall 2006 (Planned)	Fall 2007 (Planned)	Fall 2008 (Planned)	Fall 2009 (Planned)	Fall 2010 (Planned)
Undergraduate							
First-time FT	260	250	250	260	260	260	270
Transfer FT	177	210	210	215	225	235	235
Continuing/Returning	911	926	926	912	939	964	987
Total FT Undergraduate	1,348	1,386	1,386	1,387	1,424	1,459	1,492
Total PT Undergraduate	250	300	300	210	210	210	210
Total Undergraduate	1,598	1,686	1,686	1,597	1,634	1,669	1,702
Graduate							
New Graduate FT	77	95	95	105	115	120	125
Continuing/Returning	216	205	205	205	210	215	220
Total FT Graduate	293	300	300	310	325	335	345
Total PT Graduate	249	305	305	310	315	320	325
Total Graduate	542	605	605	620	640	655	670
Total Headcount	2,140	2,291	2,291	2,217	2,274	2,324	2,372
AAFTE	1,743	1,713	1,713	1,784	1,805	1,846	1,887

Data maintained by the State University of New York Office of Institutional Research and Analysis

¹2005-06 AAFTE is estimated²Approved funded enrollment, Fiscal Year 2006-07 budget

Enrollment goals may be affected by external factors such as changing economic conditions, demographic shifts, and fiscal constraints. Official enrollment targets that are the basis for the University's budget model are set annually through dialogue between campuses and System Administration, and may differ somewhat from the projections shown in Table 2.

4.2 Enrollment mix

SUNY's 2004-08 Master Plan reaffirms the State University's commitment as a public university to ensuring access to the full range of populations served, and therefore emphasizes student diversity as a priority goal for Mission Review II. At SUNY ESF, the enrollment of a more ethnically and culturally diverse population has been a challenge for many years, in part because interest and academic preparation in the areas of study offered at the College by students from culturally underrepresented populations are limited. However, with increased recruitment activities in major metropolitan markets, in cooperation with the SUNY Metropolitan Recruitment Center in New York City, the College has experienced modest recent growth in this regard and will build on these efforts in the future. With respect to student gender, the proportion of male to female students has remained steady for the past five years (i.e., around

50%:50% for first-year students and 70%:30% for transfers, and the College expects these proportions to remain stable through 2010.

In terms of other factors, SUNY ESF plans to maintain the mix between freshmen and transfer students at equal proportions. As a result of Mission Review I, the College did make concerted efforts to increase the geographic diversity of its students through actively recruiting out-of-state students, resulting in an enrollment increase by these students from 9% to 12%. Continued modest growth in this student group, in concert with campus overall enrollment goals, is expected through 2010.

As a specific commitment related to enrollment mix over the next five years, SUNY ESF will:

- enhance its efforts to recruit and retain students from underserved populations.

4.3 Enrollment management plans

Attracting students from its primary market area of New York State and from outside the State requires a broad array of recruitment activities. In addition, recruiting equal numbers of first-year and transfer students to the Syracuse campus as well as of sophomore entrants to the Ranger School campus requires multiple recruitment strategies. The guiding principles in SUNY ESF's enrollment management plan are to focus on personal connections, effective communication, and excellence in customer service. The success of this plan is evidenced by the resulting enrollment growth over the past five years, and few changes are anticipated to support the modest growth expected over the next five years. Specifically, SUNY ESF will be developing improved programming for academically talented students, culturally and ethnically diverse students, and out-of-state students.

4.4 Selectivity

SUNY ESF is identified as a Group 2 campus in terms of SUNY's selectivity scheme. During the past five years, the College's emphasis has been on increasing the size of its entering classes, but over the next five years its primary focus will be on increasing enrollment by academically talented students while maintaining modest growth in class sizes. More specifically, the College aspires to attain Group 1 selectivity status, and has made that a goal for the year 2020. Towards that end, SUNY ESF has made a major investment, hiring a Vice President for Marketing and Enrollment Management. Further, ESF believes that it would be possible to attain Group 1 selectivity by 2010 if \$500,000 could be raised to provide additional merit scholarships for its high-achieving applicants.

Table 3 below provides SUNY ESF's selectivity projections through 2010, based on the assumption that the \$500,000 in additional scholarship funding is not available.

Table 3

Distribution of First-Time Full-Time Regular Admit Students by Selectivity Group

Selectivity Group	Fall 2005 (Actual)	Fall 2006 (Planned)	Fall 2007 (Planned)	Fall 2008 (Planned)	Fall 2009 (Planned)	Fall 2010 (Planned)
Group 1	42.6%	36.0%	37.0%	38.0%	39.0%	40.0%
Group 2	40.4%	40.0%	40.0%	40.0%	40.0%	40.0%
Group 3	17.0%	24.0%	23.0%	22.0%	21.0%	20.0%
Group 4	0%	0%	0%	0%	0%	0%
Group 5	0%	0%	0%	0%	0%	0%
Not Classifiable	0.4%	0%	0%	0%	0%	0%
Special Admits (EOP or Other Risk)	11.2%	10.0%	10.0%	10.0%	10.0%	10.0%

As specific commitments related to student selectivity, ESF will:

- increase its proportion of Group 1 and 2 students by 2010 to 80% of the entering freshman class, and
- enroll 90% of the entering freshman class in Groups 1 and 2 by 2020, based on its strategic planning initiative, Vision 2020.

5.0 Faculty

5.1 Faculty profile

SUNY ESF regards the recruitment of faculty who are both excellent scholars and committed teachers as an essential component of maintaining high academic standards, and generally competes for such faculty with Research I institutions. Due to recent fiscal exigencies in New York State, the College has lagged by three years in replacing a significant number of faculty retirements, but has begun to implement its strategically based seven-year Faculty and Staff Position Shift Plan. This plan sets priorities through 2010-11 for replacing and adding new faculty who will bring even greater accomplishments to its instructional, research, and outreach mission. Accordingly, SUNY ESF will use this turnover as an opportunity to recruit faculty who will rank among the nation's leaders in their respective fields aligned with the College's strategic academic directions. In order to attract this caliber of faculty, the College will continue to offer significant start-up packages to faculty prospects.

Although SUNY ESF will not be branching into totally new academic areas in the near future, new faculty recruitment will take into account program directions articulated below as well as research priorities and opportunities associated with those program directions. Overall, the College plans to increase full-time faculty by 11% or 14 positions through 2010-11, including six replacement faculty and eight new faculty members, with four of the new faculty supported through extramurally raised funds to match four positions recently funded by SUNY resources. Part-time faculty will be brought on as special initiatives allow or require. Within the context of its strategic plan, SUNY ESF does not expect to alter its faculty to student ratio from its recent range of 12:1 to 13:1.

In addition, enhancing faculty diversity has been a significant goal at SUNY ESF for the past two decades, and all faculty searches are provided supplementary resources to pursue a more diverse applicant pool. Other special efforts include multiple hires from one search, presidential waivers of searches, and extra-competitive offers with start-up packages.

5.2 Faculty development

At SUNY ESF, faculty development is aimed at fostering career growth that adds value to the individual scholar and to the College's diverse array of constituents. Needs and mechanisms in this area are identified in the ongoing planning of the College Academic Council, among other sources. Strategies for promoting faculty development on an annual basis include sabbaticals, semester or part-semester load reduction, special initiative funding, and support of faculty participation in national forums (e.g., NSF). The College also sponsors a number of events for this purpose, such as the Teaching, Learning and Technology Colloquium, the Mentoring Colloquium, and the Teaching Tools Forum as well as workshops on grant-writing and technology. Recently, SUNY ESF instituted a mentoring program within each academic unit as well as college-wide to assist new faculty in reaching their full potential as scholars and teachers.

5.3 Scholarship and research/Sponsored activity

Research at SUNY ESF generates knowledge and technology to support the prudent and sustainable use of forest and related natural resources, to preserve and improve environmental quality, and to enhance the economic vitality of the natural resource-based industries. A special priority is to conduct research that helps New York citizens make the most effective use of the State's resources and environment in economically competitive and environmentally sound ways. In addition, research areas at SUNY ESF are closely linked to its academic programs.

SUNY ESF's total research and development expenditures, as reported in the National Science Foundation/SRS Survey of Research and Development Expenditures at Universities and Colleges, have grown over the past five years at a rate of 5% to approximately \$26.7 million in 2003. Sponsored activity expenditures through the SUNY Research Foundation for the 2004 fiscal year reached \$10 million, or approximately \$85,800 per full-time faculty member, representing less than half the total research and development expenditures reported by NSF due to matching requirements of sponsors. Table 4 below presents SUNY ESF's projected sponsored research expenditures through 2010.

Table 4

Sponsored Research Expenditures (Direct + Indirect), 2004-05 Through 2009-10 (in Millions)

2004-05 (Actual)	2005-06 (Actual)	2006-07 (Planned)	2007-08 (Planned)	2008-09 (Planned)	2009-10 (Planned)
\$12.0	\$13.1	\$13.1	\$13.7	\$14.4	\$15.1

2004-05 and 2005-06 figures reported by the SUNY Research Foundation

As specific commitments in the area of sponsored activity through 2010, SUNY ESF will:

- achieve a SUNY Research Foundation research expenditure level of \$15 million by 2010;
- reach a total of \$34.1 million in R&D expenditures as defined in the NSF/SRS Survey, with federally supported research expenditures of approximately \$7.2 million; and
- maximize its external funding by fully reporting all sponsored activity through the SUNY Research Foundation, thereby enriching its research enterprise with SUNY research-match dollars.

5.4 Faculty review: tenure and promotion

Faculty annual reports include retrospective and prospective components that are reviewed by the Faculty Chair and incorporated into Faculty Unit Annual Reports. In addition, the College provides each faculty member with a statement on Faculty Roles and Responsibilities which guides career growth. In concurrence with the administration each faculty unit has developed illustrative indicators of successfully fulfilling these responsibilities while meeting the policies of the SUNY Board of Trustees. Requirements for reappointment, promotion, and continuing appointments are documented annually in an Administrative Update to Faculty, along with a calendar of key dates and activities.

As is appropriate at a research institution, SUNY ESF's promotion, reappointment, and continuing appointment procedures are characterized by high standards including external review of faculty scholarship. As part of its faculty review process, the College also uses self, peer, and student course evaluations to evaluate teaching effectiveness.

5.5 Faculty opinion and satisfaction/Faculty governance

All SUNY ESF faculty members are eligible and encouraged to participate in faculty governance. The faculty by-laws call for faculty members to elect officers who will organize and manage tasks assigned to the faculty. These tasks include initiation, development, and implementation of the College's educational program; consultation on policies and decisions relating to the appointment of the College's administrative officers and the appointment, promotion, and tenure of faculty members; and the initiation and development of research and public service programs. Faculty governance has three committees – instruction, research, and public service – that review programs and policies within their designated fields of responsibility and make recommendations that are then taken to the full faculty for approval.

The chair of faculty governance has a seat on the Academic Council, which is otherwise composed of the College's departmental chairs and deans. Issues that surface at Academic Council meetings are often referred to faculty governance for deliberation and action, and faculty members may refer issues to the Academic Council through their department chairs or through the faculty governance chair.

Several standing faculty committees exist outside the faculty governance structure, including the Provost's Advisory Committee on Institutional Effectiveness. In addition, ad hoc faculty committees are regularly formed to address specific issues. For example, the first draft of the present document was crafted by the Mission Review II Task Force, comprised mainly of faculty members. Further, the development of SUNY ESF's Strategic Plan included robust involvement by the College's faculty, and an all-campus faculty survey and multiple forums were central to the establishment of academic priorities for this plan.

At the present time, SUNY ESF's faculty governance structure is reviewing its by-laws with the intent of evolving to a campus governance organization that would include staff and student representation.

6.0 Academic Program Directions

6.1 Undergraduate programs

With respect to future program directions at SUNY ESF, a B.S. program in Bioprocess Engineering has just been approved by SUNY, and will be offered in Fall 2006. Also under development are plans for new majors in Ecological Engineering, Renewable Energy Engineering (possibly to be offered jointly with SUNY Morrisville), and Green Construction. Work is also underway to expand the College's study abroad and field studies programs to enrich the currently offered majors.

SUNY ESF has made the following commitments in order to enhance the quality and reputation of its undergraduate academic programs:

- to strengthen student-faculty interactions through improved academic mentoring;
- to further develop programs such as the newly implemented Early Awareness Initiative for entering students to provide adviser guidance and address needs of students at academic risk;
- to increase experiential learning opportunities by incorporating service learning in more courses;
- to balance the need for and use of technology with the importance and benefits of personal interaction; and
- to provide adequate scholarship dollars to ensure students' successful academic performance.

6.2 Majors/programs with national/regional distinction

Overall, SUNY ESF's undergraduate program was ranked 43rd best among national universities in the latest *U.S. News and World Report* ratings, with Binghamton University the only other SUNY institution to rank in the top 50, at 30th. *U.S. News and World Report* also ranked SUNY

ESF's Forest Engineering major as the 36th best Environmental Engineering program in the nation. Further, based on a national survey of landscape architecture firms, the monthly journal *DesignIntelligence* rated SUNY ESF's undergraduate Landscape Architecture program 9th best in the nation and 3rd best in the Northeast. Programs in Forest Resources Management, Landscape Architecture, Forest Engineering, and Paper Engineering are accredited by national professional associations.

6.3 General education

All SUNY ESF students are required to complete a group of General Education courses that have been carefully devised to provide them with opportunities to enrich their personal and intellectual development and to help them appreciate multiple perspectives on a wide range of topics while mastering the skills of effective thinking, problem solving, and communication. The General Education requirement at SUNY ESF includes completion of at least three credit hours from each of nine knowledge/skill areas, as the institution received a waiver from SUNY for the foreign language requirement.

Many of the courses taken by students in fulfillment of their General Education requirements are offered at Syracuse University. Specifically, SUNY ESF pays Syracuse University for the courses that its students take, in accordance with an "Accessory Instruction" agreement that is negotiated approximately every three years.

6.4 Graduate and professional programs and support for graduate education

Following a peak in 2002, applications and new matriculants to SUNY ESF's graduate program declined slightly. To illustrate, in 2002 the College received 374 applications and 118 new students entered the graduate program, while for 2005 there were 282 applications yielding 97 new students. This decline follows national trends, and is believed to result primarily from the strengthening job market during the period. Graduate applications were up for 2006.

Overall, campus projections call for increased growth in the graduate program over the next five years, with that growth coming from a combination of increasing capacity in high demand areas of the current program, focusing on the M.P.S. programs in high demand areas, allocating additional resources to graduate stipends, and intensified marketing efforts.

In terms of new programming, an M.S. program and a graduate certificate in Bioprocess Engineering have been approved by the College's faculty governance body and forwarded to SUNY for approval, and a proposal for an M.P.S. program in Forest Chemistry has also been submitted to SUNY. Other initiatives include a joint Ph.D. program with Syracuse University and the development of additional focused M.P.S. programs.

SUNY ESF has established a number of goals intended to improve the reputation and quality of its graduate programs. These goals include having five programs ranked within the top five of their kind nationally; increasing collaborative multidisciplinary and interdisciplinary programs on campus; strategically recruiting at least 30 exceptional new faculty members, including 14 replacements, eight new positions funded by SUNY, and eight funded by research and

endowment initiatives; increasing its graduate student population by 25% by 2010, focusing on market-based economic opportunities; increasing the number of graduate scholarships to accommodate growth in the student body, with half of the revenue coming from SUNY and half from SUNY ESF's research enterprise; increasing tuition scholarship funding and stipends, thereby enhancing recruitment of outstanding students; providing academic support services by increasing funds for library accessions and an added staff position; promoting inter-institutional academic programs with other universities in New York, including Syracuse University, SUNY Upstate Medical University, the SUNY university centers at Albany, Buffalo and Stony Brook, and Cornell University; and striving for improved ranking in the National Research Council's survey of doctoral research degree programs

With respect to graduate funding, for 2005 the total cost for graduate student stipends was \$3.25 million, and the cost for tuition waivers was \$1.72 million. Of this amount, \$930,000 was contributed by the University-wide GA/TA tuition waiver pool and more than 60% was funded directly from sponsored research. The average master's stipend for the academic year was approximately \$11,000, while the average doctoral stipend was approximately \$12,000. Given this expense, SUNY ESF will need more financial support from SUNY to achieve the goals described above.

As a specific commitment in the area of graduate programming:

- all SUNY ESF doctoral programs eligible for ranking by independent organizations will be ranked in the top quartile of their kind by 2010.

6.5 International programs

SUNY ESF has a dynamic program of international studies for both baccalaureate and graduate students, providing numerous options allowing students to expand their understanding of the global nature of environmental resource issues through coursework and experiential opportunities abroad. Faculty offer courses in countries such as Australia, Dominica, Honduras, Italy, Namibia, Mexico, and Spain, and SUNY ESF students also have access to the numerous international academic programs administered through Syracuse University's Division of Programs Abroad. Overall, 17% of the College's undergraduate student body engage in international study, ranking 15th nationally according to the 2001-02 *International Education Exchange*. Further, SUNY ESF has a diverse population of international graduate students, constituting 23% of the graduate body and many of whom are supported by the Fulbright and Latin American Scholars programs.

SUNY ESF cooperates with the SUNY Office of International Programs to attract students from foreign countries to its undergraduate and graduate programs. For example, undergraduate students from Moscow State University and SUNY ESF will benefit from exchange visits to the College's Cranberry Lake Biological Station in the Adirondacks and to Russia's Zvenigorod Station northwest of Moscow. In addition, new memoranda of educational cooperation between SUNY ESF and Attaturk and Kahramanmaras universities in eastern Turkey have been signed that facilitate graduate studies and training opportunities for Turkish students.

As specific commitments in the area of international programs, SUNY ESF will:

- establish an administrative office with half-time staff to coordinate and support services in international programs, and
- ensure that programmatic funding is shared with state and sponsored program support.

6.6 Collaborative academic programming

SUNY ESF continues to build programmatic excellence by collaborating with other institutions of higher education, notably Syracuse University (SU). At the undergraduate level, qualified SUNY ESF students may participate in minors at SU that include Entrepreneurship, Management Studies, and Marketing as well as a program in Science Teacher Certification. At the graduate level SUNY ESF students may pursue concurrent master's degrees in Public Administration, Communications, Business Administration, and Teacher Education at SU, and the College has begun discussions with SU to create a jointly registered Ph.D. program in the areas of Water Resources and Environmental Policy.

SUNY ESF continues to strengthen its academic ties to Upstate Medical University (UMU). Articulation agreements already exist for SUNY ESF students to transfer to B.S. programs at UMU in six technical and clinical fields within the health professions. Other collaborative arrangements with UMU include a 3+3 program leading to sequential B.S. and Doctor of Physical Therapy degrees and a 2+3+2 program leading to M.D./Ph.D. degrees with a focus on Environmental Medicine. Discussions have just begun to develop a joint Environmental Health track within UMU's planned Masters of Public Health degree.

Other initiatives with academic institutions in SUNY ESF's immediate vicinity include the Structural Biology, Biochemistry, and Biophysics program, offered jointly with UMU and SU, and the Central New York Biotechnology Research Center, which provides support from UMU, SU, and LeMoyne College for SUNY ESF's Bioprocess Engineering M.S. program. The College is also working with other SUNY institutions to offer joint academic programs, including an accelerated 3+2 B.S.-M.S. degree program in Environmental Geology with SUNY New Paltz. In addition, SUNY ESF is exploring the creation of a B.S. program in Renewable Energy Systems with SUNY Morrisville, and is looking into the feasibility of offering Landscape Architecture programs in conjunction with SUNY Farmingdale and SUNY Cobleskill.

SUNY ESF makes the following commitments through 2010 in the area of collaborative academic programming:

- to schedule visits by the College President and selected faculty to six key feeder institutions each year,
- to schedule visits by admissions staff to each of the more than 40 cooperating institutions each year,
- to hold an Articulation Conference for institutional liaisons and faculty every other year, and

- to continue to establish transfer articulation agreements with two-year colleges in Pennsylvania, Maryland, New Jersey, Connecticut, and Massachusetts.

6.7 Technology-enhanced learning environments

At SUNY ESF, Information Technology includes a core of data network applications including e-mail, Web-browsing through SUMMIT, file transfers, and database access through the network infrastructure. The network connects all campus locations to each other, to Syracuse University, to SUNY, and to the Internet.

With respect to student access to computing, Computing and Network Services maintains network resident and PC resident software for the College's open computing laboratories. All laboratories are open seven days a week during most of the academic year and contain PC hardware, printers, and software commonly in use by the College's academic programs. Individual academic units provide additional computing facilities on campus for specialized uses such as computer modeling, Geographic Information Systems, and CAD. For students living in the Syracuse University residence halls, all of the dormitories are wired for direct connections from student rooms to the Syracuse University campus network and the Internet.

At the present time, SUNY ESF does not offer distance learning courses. However, in Spring 2006 a recently installed T-1 line at the Adirondack Ecological Center in Newcomb, New York allowed graduate students conducting research there to participate in classes offered on the Syracuse campus for the first time.

SUNY ESF intends to make significant new technology investments over the next five years to ensure that its learning environments provide students with state-of-the-art experiences. As examples, the Baker Lab student computing laboratories will be moved and upgraded as part of the Baker Lab renovation, and a new Geographic Information System laboratory will also be installed in Baker Lab. The College will also continue to expand wireless connectivity to study areas throughout the campus, since at present it is only available in Moon Library. Further, beginning in Fall 2006, the Landscape Architecture program will require all incoming students to own a laptop computer. If this experiment is successful, the model will be expanded to other academic units.

Overall, the cost for planned upgrades and other advances needed to maintain technological currency is estimated to be approximately \$7 million over the next five years, and additional support staff will also be required for implementation. However, funding for technology in the form of SUNY Student Computing Access Funds, academic equipment funds, and personal service funds for staff have not kept pace with the needs and expectations of students and faculty.

As specific commitments in the area of technology-enhanced learning environments:

- the Office of Public Service and Outreach will begin offering Web-based courses in the next two years, and

- SUNY ESF will enroll 500 non-traditional students (including distance learning students) by 2010 and 1,000 by 2020.

6.8 Library services and support

Moon Library brings quality resources to its patrons. Between the databases, electronic journals, and Internet resources that the College catalogs within its library management system shared with Syracuse University (i.e., SUMMIT), SUNY ESF is able to provide an impressive amount of material to the desktops of its users, regardless of location. This system includes the joint Online Public Access Catalog plus staff modules for cataloging serials, circulation, and acquisitions. The library staff works, in collaboration with campus faculty, to ensure the College's collection matches the needs of the curriculum. SUNY ESF does not participate in *SUNYConnect* at this time because similar services are provided through the campus accessory instruction agreement with Syracuse University.

Moon Library staff see great potential for increasing the use of the Web for delivering service to library customers. Projects planned include creating electronic theses and dissertations, providing reserve reading material electronically, encouraging the use of Open Access Journals, establishing an institutional repository for SUNY ESF publications, and expanding traditional cataloging to include Web resources and metadata. Wireless capability has recently been installed and loaner laptops purchased to facilitate Web use for the purposes mentioned above.

There are a number of critical resources to support the library's needs that are simply beyond the financial reach of SUNY ESF at this time, including the Web of Knowledge from ISI (with a cost of more than \$200,000) and BIOSIS from Biological Abstracts (priced at more than \$30,000). The library's acquisition allocation must be increased if SUNY ESF is to provide the support and resources a doctoral-granting research institution requires. In addition, continued collaboration with the Syracuse University libraries is critical.

6.9 Assessment of academic programs

In 2002 the Provost's Advisory Committee on Effectiveness (PACE) developed a *Plan for Assessing Student Learning Outcomes in General Education* based upon the SUNY General Education Assessment Guidelines. This plan was reviewed and approved by SUNY ESF's faculty governance body, as well as by the SUNY-wide GEAR group. As reported in this plan, the SUNY ESF faculty has embraced General Education and the assessment of General Education learning outcomes, and the plan represented the collaborative effort of a highly representative group of faculty, faculty chairs, and staff.

With respect to the assessment of academic majors, academic programs at SUNY ESF are reviewed on a five- to six-year cycle. The majority are reviewed by professional societies, many of whom accredit the programs under their purview. For the other programs, including Environmental and Forest Biology, Environmental Science, and Environmental Science, the College establishes a committee of external reviewers for assessment.

As of 2005-06, the College is in complete compliance with the SUNY Assessment Initiative in terms of both program assessment and General Education assessment.

In recognition of the value of these assessment activities, SUNY ESF commits to:

- working toward the implementation of Strengthened Campus-Based Assessment following the timeline established by System Administration as well as the GEAR Group's assessment guidelines; and
- using assessment results to make changes in curricular programs and course delivery as appropriate.

6.10 Responsiveness to state needs

SUNY ESF was created in 1911 in response to a state mandate and, through education and research, the College was able to ameliorate the deforestation of New York State. Over the past 95 years, forest lands have increased nearly three-fold, from approximately 6.5 million to 18.5 million acres. Over time, the mission of the College has grown to include the broad arena of environmental science, management, and design, and the institution has conducted ground-breaking research on issues of concern to the State and region, including acid rain and air quality as well as restoration of polluted rivers and lakes. Of particular note is the College's work, in conjunction with government and corporate partners, to clean Onondaga Lake. In addition, SUNY ESF's Brownfield Center has helped revitalize urban areas blighted by industrial pollution, and another major initiative is the commercial development of bio-based fuels and bio-products, mentioned by Governor Pataki in his State of the State and budget addresses the past three years.

The College is also an active participant in several research efforts initiated by governmental leaders. For example, it is helping to advance the New York Senate's Gen*NY*sis program and the Governor's Center of Excellence program through the Central New York Biotechnology Research Center and the Syracuse Center of Excellence in Environment and Energy Systems. SUNY ESF is also deeply involved in supporting the Governor's Quality Communities Initiative. Similarly, the College is an integral partner with several state agencies, serving as the research arm of the Department of Environmental Conservation and working with the Department of State in implementing the Federal Coastal Zone Management program.

SUNY's ESF's Continuing Education Office provides additional examples of responsiveness to local and state needs, especially with respect to assisting high schools in the region. One program, "ESF in the High School," enables qualified students to begin working at the college level while still in high school and to prepare for a successful transition to college. This program has grown to twenty-four partnering high schools located from Syracuse to Rochester and north to Watertown. In another program SUNY ESF faculty and staff mentor exceptional high school teachers in delivering two SUNY ESF courses, which are then taught on the high school campuses during the normal school schedule. More recently, with a \$1.4 million grant from the National Science Foundation, SUNY ESF has embarked on a project to expand the impact of its "ESF in the High School" program through the infusion of inquiry-based learning and scientific

research into middle and high schools. This project builds upon the College's collaborations with urban, rural, and suburban schools, including each of the Syracuse City School District's high schools.

7.0 Student Outcomes

7.1 Retention and graduation rates

The six-year graduation rate for SUNY ESF undergraduates is 66%, well above the national average of 43% and the SUNY average of 59%. Efforts to improve retention at the College are numerous, with several receiving national attention. For instance, the SUNY ESF learning communities are cited by an American College Testing monograph on exemplary practices in retention, and are featured in a recent book by Anker Publishing on learning communities. Similarly, the College's service learning program is considered among the most successful in the country, particularly in science and engineering courses.

Specific retention activities at ESF include limited class sizes in introductory-level courses; a student-to-student mentoring program for first-year students and transfers; coordinated teaching of first-year Botany, Writing, and Chemistry with residence hall programming; the development of expanded academic advising handbooks for each major; and increased hands-on experience for first-year students.

Table 5 below summarizes SUNY ESF's retention and graduation projections through 2010.

Table 5

Projected Changes in Retention and Graduation Rates

Indicator	Current	2008	2010
First-Year Retention Rate	84.5% (2004)	85.0% (2007)	85.5% (2009)
Six-Year Graduation Rate	65.5% (1998)	73.0% (2002)	75.0% (2004)

Note: Dates in parentheses indicate cohort year

7.2 Transfer success

With a high retention rate and large transfer population, SUNY ESF does not experience many students transferring to other institutions. Of the 316 students who left the College between 2001 and 2004, only a third indicated that they were going to another college, with around half transferring to another SUNY institution. Personal reasons for leaving – as opposed to reasons related to the institution – were most often cited, and included finances, personal or family situations, career or education changes, and medical reasons. SUNY ESF intends to continue to

interview departing students to identify reasons related to the institution and to initiate remedial responses if these reasons rise above 10% of those leaving.

Approximately half of SUNY ESF's undergraduates arrive by way of transfer. As a result, the success of these students is of particular concern to the institution. As seen below in Table 6, 81% of transfer students entering the College in Fall 2003 were retained after the first year, indicative of new efforts to help transfer students adjust to the College. These efforts include orientation sessions conducted by faculty members for transfers during their first semester, additional assistance in advising these students to ensure they are placed in appropriate courses, and expanded tutorial assistance.

Another measure of transfer success is academic performance following transfer. On average, transfer students at SUNY ESF earn GPA's during their first semester that are 0.5-0.6 lower than their transfer GPA's. However, most students recover well and, for each of the last six graduating classes, the final cumulative GPA for transfer students has been nearly identical to their incoming cumulative GPA, just over 3.0.

Table 6 below presents overall 3- and 5-year goals for transfer student retention and graduation rates:

Table 6

Educational Outcomes for Full-time Students Transferring Into the Institution

Indicator	2004	2008	2010
First-Year Retention Rate	80.9% (2003)	83.0% (2007)	85.0% (2009)
Four-Year Graduation Rate	61.6% (2000)	64.0% (2004)	66.0% (2006)

Note: Year in parentheses denotes transfer year.

Note: Graduation rates are calculated four years post transfer.

As a specific commitment in this area, SUNY ESF will:

- achieve a first-year retention rate of 85% for transfer students by 2010, the same as for first-year students.

8.0 Student Support and Student Life

The Student Affairs division at SUNY ESF complements students' in-class learning, promotes successful transitions into college and into careers, provides stimulating co-curricular and enrichment programs, and meets health, safety, and personal security needs. In addition, an Early Awareness program identifies students with academic or personal difficulties, and a Web-

based academic plan sheet assures effective advising, as do departmental handbooks and adviser training. Living/learning environments, the College's three nationally-recognized learning communities, integrate three courses, community service, and residence hall programming for first-year students.

Health and safety efforts are ongoing on the campus, reaching both in-residence and non-resident students, and increased educational programming regarding alcohol and other drugs, tougher judicial sanctions and "first-instance" interventions have combined to make for a responsible campus culture. Similarly, educational programming regarding interpersonal relationships, diversity issues, and community standards have helped sustain a climate of respect and open dialogue.

Co-curricular programming is particularly important in SUNY ESF's intense academic atmosphere. Efforts continue to broaden students' experiences in leadership, community service, cultural enrichment, group dynamics, and project management, and it is estimated that over 75% of the student body participate in student clubs and organizations. In addition, the College's nationally-recognized service learning program has counted over 63,000 hours of community involvement through voluntary service or requirements in credit courses.

SUNY ESF utilizes a number of surveys to assess student satisfaction, including SUNY's Student Opinion Survey (SOS) and the National Study of Student Engagement (NSSE). Satisfaction is also assessed through alumni surveys and based on levels of alumni giving. On the 2003 administration of the SOS, SUNY ESF was ranked first among the five doctoral institutions on 58 items and was ranked first among all 26 SUNY four-year institutions on 11 items. Similarly, an analysis by SUNY's Institutional Research office revealed that SUNY ESF was rated as "Extremely High" across all SUNY institutions on Academic Experience, Student Harmony, Student Voice, and Overall Satisfaction. Further, the College was rated "Very High" on Campus Computing, Personal Integration, and Campus Security.

On the 2005 NSSE survey, both freshmen and seniors ranked SUNY ESF significantly above other doctoral-intensive institutions on two of the five multi-factor dimensions of the NSSE, Enriching Educational Experiences and Supportive Campus Environment. The College was also rated as above average, though not significantly so, on the other three dimensions of the NSSE (i.e., Level of Academic Challenge, Active and Collaborative Learning, and Student-Faculty Interaction).

As specific commitments related to student support and student life, SUNY ESF will:

- continue to administer surveys of student perceptions of the campus, including the NSSE, which will be a part of the SUNY-wide Strengthened Campus-Based Assessment beginning in Spring 2008;
- maintain its leadership position on the SOS; and
- be ranked significantly above average compared to national doctoral-intensive universities on all five of the NSSE multi-factor benchmarks.

9.0 Technology

The College makes every effort to ensure that faculty and students have access to the technology they need through Information Technology. At present, SUNY ESF utilizes an in-house administrative system developed by Administrative Computing that is remarkably flexible and cost-effective. As a result, SUNY ESF does not plan to join SUNY's Banner Initiative.

During the next five years, all of System Administration's Institutional Research Systems will be retired and replaced with new systems that will be more effective in supporting the transfer articulation function in the two-year sector, and will provide campus presidents access to better information for benchmarking. The new systems require that campuses prepare new file extracts for submission to System Administration, and in a few cases, provide information that was not requested in the past, but has a high value for both campuses and System Administration. In order to implement the new Institutional Research Systems,

- System Administration will provide information and guidance to plan for the transition and assist with training;
- SUNY ESF will put in place an implementation plan and allocate resources as available to meet the implementation schedule;
- SUNY ESF will ensure an uninterrupted flow of information to meet State and Federal reporting requirements; and
- SUNY ESF will establish a robust process to review the accuracy and completeness of information submitted to System Administration.

10.0 Facilities

SUNY ESF's Syracuse campus includes six academic buildings, a library, and several smaller buildings that house facilities support functions. With the exception of the Jahn Laboratory, which opened in 1997, all other academic facilities were built between 1917 and 1969. Maintaining these aging buildings is a continuing challenge for the College's Physical Plant staff.

10.1 Campus facilities plan

The new five-year SUNY Capital Plan includes sufficient funding to complete the Baker Laboratory rehabilitation project and to undertake several smaller critical maintenance projects on the Syracuse campus. When collaborating with the SUNY Construction Fund during the development of the new capital plan, the campus prioritized projects according to health and safety concerns, critical maintenance needs, and enrollment plans, and the new capital plan reflects these priorities. Understanding that critical maintenance priorities may change in aging buildings, the College's physical plant staff regularly monitors the status of its infrastructure and identifies any unanticipated repairs that are required. If necessary, the campus modifies the projects in its capital plan to accommodate such emergencies.

10.2 Educational facilities (including research)

The most significant capital project on the Syracuse campus continues to be the rehabilitation of Baker Laboratory, which is being renovated in phases while portions of the building remain in use. Phases I and II of the project were completed with funding from SUNY's first multi-year capital plan and included several large classrooms, two lecture halls, and a seminar room with distance learning capabilities as well as laboratory, office, and classroom space for the Construction Management and Wood Products Engineering programs and space for Analytical and Technical Services functions. Other major projects completed during the first multi-year capital plan were the renovation of the main building at the College's Ranger School in Wanakena, New York; a number of projects to improve handicapped accessibility; and a CAD instructional facility in Marshall Hall, providing the Landscape Architecture program with the technological capabilities required to remain competitive with peer institutions.

Completion of the third and final phase of the Baker Laboratory rehabilitation project is SUNY ESF's top priority for funding from the new five-year capital plan. The College has registered the Baker Laboratory rehabilitation with the U.S. Green Building Council with the expectation that it will become certified under the Leadership in Energy and Environmental Design for Existing Buildings pilot program. Construction of Phase III is expected to begin in 2006 and take approximately two and a half years. In addition to the permanent classrooms and laboratories created in the first two phases of the project, the completed Baker Laboratory will house an improved academic computing facility as well as new classrooms, laboratories, and faculty offices for the Environmental Resources and Forest Engineering programs.

For the future, in order to meet the goals outlined in SUNY ESF's Strategic Plan, which projects a larger student body, additional faculty and staff, new academic programs, and expanded research and service efforts, the College will need to expand its physical space. Specific objectives to be achieved by 2020 in this regard include additions to several campus buildings; surge space to facilitate the renovation of older campus facilities; a student center; a biotechnology research center to be operated in cooperation with Upstate Medical University; at least one new academic building; additional parking space and facilities; expanded campus dining facilities; larger meeting and conference facilities; and improved campus roads and walkways, designed for both safety and ease of maintenance.

At present, SUNY ESF's highest facilities priorities are listed in order, as follows:

1. A new academic/research building with approximately 95,000 square feet, at an estimated cost of \$38 million.
2. An educational outreach/technology transfer building, at an estimated cost of \$7.5 million (\$6.3 million of which has already been secured).
3. A Central New York Biotechnology Research Center, to be developed in partnership with UMU, MDA, and the Veteran's Hospital, at an estimated cost of \$30 million (\$20 million of which has already been secured).

4. The Onondaga Lake Research/Interpretive Center, estimated at \$5 million.
5. The Ron Stafford Adirondack Learning Center at the Huntington Forest in Newcomb, New York, estimated at \$2.5 million.

10.3 Residence halls

At the present time, SUNY ESF has no student housing in Syracuse over which it has direct control. Non-commuting freshmen are required to live in residence halls that belong to neighboring SU, and upperclassmen may also choose to live in SU housing. For the last several years, SU has limited the number of spaces available for new SUNY ESF students in its residence halls to 250, but will be adding dormitory space in two years, which may yield an additional 50 beds for SUNY ESF students. Still, the restricted residence hall space limits the College's ability to accept freshmen and to guarantee housing for transfers.

Although the College expects to maintain its student housing relationship with SU, SUNY ESF has begun to explore a variety of possibilities for increasing housing options for its students. Recently, the ESF College Foundation, Inc. established an affiliated not-for-profit Limited Liability Company (LLC) with the intent of purchasing houses located near the Syracuse campus and renting this off-campus housing to SUNY ESF students. Through this project the College expects to control space for 100 students in townhouse flats. All property management activities, including facilities improvements, will be handled by the LLC. Both the College and its Foundation, understanding that today's students are increasingly interested in upscale housing options, recognize that they will need to continually assess the student housing market to determine if additional actions are required.

10.4 Energy planning and management

Because energy costs are rapidly increasing and becoming a larger portion of an institution's budget, energy planning and management are a critical component of campus planning and is of interest to SUNY System Administration. SUNY ESF has taken a number of steps to reduce the campus' level of energy usage, participating in the SUNY Electricity Buying Group as well as the SUNY natural gas purchasing arrangement and collaborating with NYSERDA on a variety of energy management initiatives.

SUNY ESF also has a number of projects underway to comply with Executive Order 111 regarding power generated from renewable resources. In collaboration with the New York Power Authority, the College installed a 250 kW molten carbonate fuel cell on the Syracuse campus in 2005. In addition to its actual use in providing combined heat and power to the campus, the fuel cell will be used for instruction, demonstration, and research purposes. Grants to partially fund this project were received from NYSERDA, the Electric Power Research Institute, and the U.S. Department of Energy. The College is also moving forward on plans for a 15kW DC photovoltaic demonstration project, partially funded by another NYSERDA grant, to demonstrate the use of solar power as a safe and reliable alternative to fossil fuel-generated power.

11.0 Administrative Structure and Resource Management

One of the key points of “Rethinking SUNY” was to provide additional fiscal autonomy to the state-operated campuses. While the campus is responsible for developing and implementing an all-funds budget that addresses its unique circumstances, System Administration has a critical oversight role to ensure that the campus is a good steward of its resources, whether those resources are provided through state tax dollar support or generated through tuition or other charges. Such oversight may involve ensuring adherence to appropriate SUNY and New York State policies, procedures, statutes, rules and regulations, or determining that the campus has appropriate and sound budget and planning practices in place.

11.1 Administrative structure and effectiveness

SUNY ESF’s current leadership team includes the positions of President, Provost and Vice President for Academic Affairs, Vice President for Administration, and the Vice President for Marketing and Enrollment Management. Also reporting to the President are an Assistant to the President for Development and an Assistant to the President for Government and Community Relations. Other key administrative positions are Dean of Research Programs; Dean of Instruction and Graduate Studies; Associate Dean of Outreach, Instructional Quality and Technology; Associate Dean of Student Life and Experiential Learning; and a number of directors overseeing operations and student support functions.

The President and his Executive Cabinet, which is comprised of the vice presidents, are responsible for developing institutional plans and evaluating the effectiveness and efficiency of the College’s administrative structure, with input from the full Cabinet and other key administrators and constituency groups as appropriate.

11.2 Institutional research capability

The College’s Office of Institutional Research is directed by the Director of Information Technology and Institutional Planning, who serves on the College’s Strategic Planning Committee and the Full Cabinet. This one-person office responds to all routine data requests from SUNY System and the State Education Department as well as federal enrollment and student surveys. The College has a robust data management system designed by in-house programmers, with a reporting system that offers great flexibility for data-mining and use for short- and long-range planning and decision-making.

Specific commitments related to institutional research capability are as follows:

- to comply with all routine System data requests, with particular attention to distance learning, student goals, remedial instruction, and concurrently enrolled high school students; and
- to increase reliance on data for improving planning and making decisions.

11.3 Alignment of resource planning and academic plans

Financially, the College is on sound footing, operating on a balanced budget over the past five years and maintaining reasonable reserves in IFR accounts to protect against periods of declining financial support. However, this position has been achieved only with considerable fiscal restraint, which has inhibited the College from moving beyond survival strategies to maintain core programs. Financial realities have provided little opportunity over the last few years to align the College's financial plan with efforts to enhance academic quality.

In order to achieve a balanced budget, SUNY ESF has taken a very conservative approach toward all hiring decisions and has maintained careful oversight of utilities and other controllable expenses while searching for cost-saving opportunities across the institution. Four faculty searches were cancelled in the aftermath of 9/11, and it was only recently that the College was finally able to initiate several searches for faculty replacement positions. Given the current fiscal climate, at least 20% of the faculty separations since 9/11 will go unfilled. A multi-year plan recently developed by the provost, linking anticipated faculty hires to programmatic needs, relies on sufficient funding in order to maintain and enhance academic quality. Specifically, this plan to add 14 faculty positions by 2010 is dependent on new state funding for ten positions, with funding for the other four positions coming from development efforts.

The college community understands the need to expand available financial resources in order to achieve the ambitious program goals outlined in the Vision 2020 Strategic Plan. Estimates are that, over the next five years, SUNY ESF will need an additional \$2-3 million each year in state operating revenue to meet its enrollment, student diversity, freshman selectivity, and staffing targets. During the same period, sponsored research expenses are projected to increase 50% over current levels. Total capital needs during that time have been estimated at \$60 million, including projects that will be partially supported by grants and other fundraising initiatives.

11.4 Institutional development and fundraising

Fundraising activities at the College are coordinated by the ESF College Foundation, Inc., a not-for-profit corporation of community, alumni, and college leaders committed to helping SUNY ESF achieve its mission through resource development and management. A volunteer Board of Directors, which oversees the activities of the Foundation, recently developed a strategic plan that aligns with the College's Vision 2020 goals and targets. In addition to its fundraising activities, the Foundation manages endowment and other investments and is the primary source of scholarships to the College's students.

Recognizing that a strong fundraising program and a large endowment can increase the financial security of the College, the Vision 2020 Strategic Plan includes a target to raise the Foundation's assets from the current \$14 million to \$100 million by 2020. These funds are expected to enhance academic quality by establishing eight endowed faculty chairs, creating new student scholarships, and providing support for a variety of academic initiatives. This year the Foundation Board will begin planning for the launch of a capital campaign to provide additional funding for a variety of special college initiatives.

The fundraising goals defined in the Vision 2020 plan have been approved by SUNY as meeting SUNY ESF's commitment to the Chancellor's SUNY-Wide Fundraising Initiative. The College is dedicated to these goals, and has met each annual milestone to date. By 2007, the College will begin a Campaign for Excellence which is expected to raise \$10 million toward its 2010 goal of \$30 million in assets.

Table 7 below provides the College's specific fundraising projections through 2010.

Table 7

Institutional Advancement Revenue Projections, 2005 – 2010

2005	2006	2007	2008	2009	2010
\$374,000	\$411,400	\$452,500	\$502,300	\$562,600	\$630,100

11.5 Collaborative administrative and financial arrangements

SUNY ESF and neighboring Syracuse University have a dynamic and long-standing partnership that goes back to the founding of the College. Through a contract between the two institutions Syracuse University provides accessory instruction and a variety of educational services to SUNY ESF students. In addition, students of the two institutions have access not only to courses but also to library, health clinic, gymnasium, and other facilities on both campuses.

Further, as described earlier SUNY ESF participates in the SUNY-wide collaborative purchasing arrangements for both electricity and natural gas. Similarly, a significant number of funded cooperative research agreements exist between the College and agencies such as the New York State Department of Environmental Conservation and the New York Department of State. Locally, the executive leadership of SUNY ESF and Upstate Medical University hold quarterly meetings to discuss topics of mutual interest, often resulting in a variety of new initiatives, including joint academic programs and the successful efforts to raise funds for a Biotechnology Research Institute. Finally, Empire State Paper Research Associates, a consortium of leading pulp and paper companies throughout the world, collaborates with SUNY ESF to support the Empire State Paper Research Institute, a leading international research organization in the pulp and paper industry.

12.0 Community Relations and Service

SUNY ESF places a very strong emphasis on service to the community whether talking about Onondaga County, New York State, the United States, or the world. The College was initially created by the New York State legislature to provide service to the residents of New York State and, as described earlier, played a very strong role in increasing forested areas in the State over the past 100 years. It has also provided the science necessary to manage New York State's Adirondack Park, helped the Philippines develop its tropical hardwood industry and China to

deal with the infestation of Longhorn beetles, and developed a biophysical economic model for Costa Rica.

Today there is even a stronger emphasis on community service and service learning for the College's undergraduate and graduate student populations. In the 2005-06 academic year, ESF students provided more than 63,000 hours of community service, averaging over 40 hours per student. At present, 60 courses have a service learning component and it is expected that, by 2010, 75 courses (25% of all courses) offered by the College will have such a component.

As another example, a Saturday of Service was held in August 2004 for the 260 incoming first-year students, each of whom provided four hours of service. The activities associated with this event included the cleanup of Onondaga Creek, four city parks, Onondaga Lake Park, and a county-supported fish hatchery. In a similar commitment of service, students planted several hundred trees in October 2004 at two locations within the City of Syracuse.

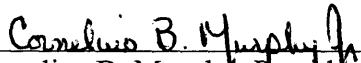
13.0 Overall Institutional Reputation

The September 2005 special issue of the *U.S. News & World Report* rated SUNY ESF's undergraduate program as the 94th Best National Doctoral Granting Institution (public and private) and the 43rd Best Public National Doctoral Granting Institution. More important, in the category of Best Value National Doctoral Granting Institutions, SUNY ESF was ranked 50th overall and 7th among public Doctoral Granting Institutions. SUNY ESF was the only SUNY institution to make the Best Values list.

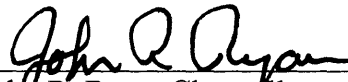
In addition, *Kiplinger's* has characterized SUNY ESF as a wonderful value if students' interests align with its specialized mission. In the 2003 Open Doors Report on International Education, the College was ranked 15th among the top National Doctoral Granting Institutions in providing an international experience, with 17.4% of its undergraduate population participating.

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This Memorandum of Understanding was developed jointly by SUNY ESF and the State University of New York System Administration to provide guidance for planning the campus' future and a framework for gauging the achievement of its goals. Recognizing that individual institutions and the State University as a whole must be able to respond to changing circumstances, both SUNY ESF and System Administration will work together to realize the goals and objectives articulated in this document.



Cornelius B. Murphy, President
SUNY ESF



John R. Ryan, Chancellor
State University of New York