



SUNY High Needs Program

Request for Proposals 2014-2015

I. Introduction

Central to the *Power of SUNY* strategic plan is the State University of New York's commitment to serve as a key engine of revitalization for New York State's economy. One of the many ways in which this commitment is demonstrated is an intentional effort to link SUNY's academic programs, where possible, to specific workforce needs of the state.

The High Needs Program has supported these efforts by providing grant support to campuses for the expansion or development of professional programs that connect directly to occupations crucial to the economic vitality of New York such as engineering, engineering technology and healthcare.

Prior to 2013, the SUNY High Needs Program distributed almost \$28 million to 28 SUNY campuses, principally to support or expand nursing and engineering programs. In 2013, the High Needs Program became a competitive grant program with priority given to fields identified as in high demand via the Strategic Enrollment Planning process. The 2013-14 RFP focused on statewide high need occupations in six areas. Out of the 84 proposals received, 64 proposals from 37 campuses were awarded grants.

While many of these academic programs require significant resources to operate, with start-up and expansion requiring particularly heavy investment (equipment, faculty, accreditation), it is clear that the multiplier effect from investment in high-need areas is significant, justifying targeted, strategic investments.

II. About this Request for Proposals

In considering proposals under the 2014-15 High Needs Program RFP, SUNY will: focus on occupations in the following fields—**Engineering-Renewable Clean Energy, Healthcare, Renewable-Clean Energy, Public Health, Biomedical-Biotechnical, Information Technology, and Business/Finance**—which are detailed in Appendix A; verify the relevant academic programs for those occupations; and, evaluate a campus' ability to successfully align programs to meet state needs. Academic program reviewers within the Office of the Provost will review campus capacity for the potential high needs areas. This includes collaboration with the State University Construction Fund to consider the physical capacity at campuses for program expansion/creation in high needs areas consistent with each campus' Facilities Master Plan and also consultation with Open SUNY administrators to assess online capacity.

The High Needs Program is intended to seed expansion or development of academic programs geared toward occupations that are in high need statewide and/or regionally. The program

funding is competitive and limited to one year of support for equipment and/or faculty hires for new program development or program expansion. In line with the Chancellor's commitment to Open SUNY, priority for 2014-15 grants is given to proposals of programs that are 50% or more online. Campus proposals must demonstrate how the program will become self-sustaining after the High Needs funding ends.

SUNY works with Empire State Development and the New York State Department of Labor (NYSDOL) to identify future high needs areas in the state. Through this collaboration, SUNY identified occupations within the industries and clusters of industries important to New York as a whole and to specific regional economies. Occupations are considered high need if they are projected to have a large number of total openings, a high growth rate, or a combination of a significant number of total openings and positive growth. Again, the six statewide high needs areas that SUNY will support with this RFP are: **Engineering- Renewable Clean Energy, Healthcare, Renewable-Clean Energy, Public Health, Biomedical-Biotechnical, Information Technology, and Business/Finance** (see Appendix A for a listing of occupations in each area).

- Engineering-Renewable Clean Energy

Data from the NYSDOL predicts that New York will need approximately 2,340 engineers and engineering technologists per year to meet the needs of the State's industries. SUNY allocated almost \$2.4 million last year to relevant high needs in Engineering and Engineering Technologies. Enrollment in state-operated baccalaureate programs in engineering and engineering technology increased by over 2,500 students since fall 2006.

According to research firm Global Insight, more the 4.2 million green jobs could be created nation-wide between now and 2038. Green jobs are broadly defined as work tied to renewable energy and energy efficiency. NYSDOL cautions though that most green jobs will not be new or emerging jobs but existing jobs with an added green component, so existing program modification is most likely sufficient to address this high need area.

Within the area of engineering-renewable clean energy, the top six occupations that NYSDOL has identified as a high need occupation for New York are civil engineers, environmental engineers, electrical engineers, industrial engineers, and mechanical engineers, and heating, air conditioning, and refrigeration mechanics and installers. SUNY programs related to these occupations range from a certificate and/or associate's degree in heating, air conditioning, and refrigeration mechanics/installers, to a master's degree and/or doctoral degree in civil engineering or mechanical engineering.

- Healthcare

Data from the NYSDOL predicts that New York will need approximately 18,550 new healthcare practitioners and health technicians per year to meet the needs of the State's health care system. Over \$18 million has been allocated, in the existing high needs programs from Fall 2006-Fall 2011, to increase the number of nursing and medical technology students across the State University. Last year, the healthcare high

needs area included registered nurses, medical assistants, occupational therapists, physical therapists and surgical technologists.

While NYSDOL reports that more than twice as many nurses are minted each year as are needed, the dearth appears to be in higher degree levels of nursing so the High Needs Program grant will only accept proposals for higher levels of nursing. Other occupations that are in the high needs field of health care for this year's RFP include occupational therapists, physical therapists, physical therapy assistants, radiologic technologists/technicians, diagnostic medical sonographers, pharmacists, and medical and health services managers.

- Public Health

The area of public health is expected to grow with the increased utilization of health care services through the Affordable Health Care Act, and increased efforts to improve health outcomes. Over 6,500 community and social service occupations are needed each year in New York State. Employment prospects for health educators and community health workers are very favorable with a projected 21% growth nationally from 2012 to 2022.

The four occupations within public health that will be supported in the High Needs Program are community health workers, medical and health services managers, healthcare social workers, and health educators. SUNY offers programs related to these occupations from the associates level to the doctoral level. Examples of these programs include health care management, health services management, nursing administration, social welfare, social work, public health, and health promotion.

- Biomedical-Biotechnical

SUNY has over 200 biomedical-biotechnical academic programs at all postsecondary levels. The most recent biennial national survey of the biosciences industry by Battelle and the Biotechnology Industry Organization reports that New York State is in the top quintile for total bioscience industry employment and for the number of biosciences industry establishments. The employment prospects for biotech jobs in New York State are positive.

High needs occupations within the area of biomedical-biotechnical that may be supported by the 2014-2015 grant include biological technicians, chemical technicians, and medical/clinical laboratory technicians. Examples of existing SUNY programs in this high needs area are biological technology, chemical technology, biotechnology, medical laboratory technology, histotechnician, and cytotechnology.

- Information Technology

Cloud computing, smartphones, tablets, and easily accessible software applications makes the information technology a fast-growing area. Information technology occupations are involved in the development, management, and maintenance of computers and software to manage information.

Academic programs related to computer systems analysts, network and computer systems administrators, applications software developers, and systems software developers would align well. Academic programs at SUNY related to information technology range from undergraduate certificates to degrees at the doctorate level.

- Business/Finance

New York City is a finance capital of the world and the employment outlook for business/finance jobs is positive. Business and financial occupations are projected to grow by 13.4% in the next ten years in New York State, which translates into almost 9,000 annual average openings. Most of the jobs in this occupation group are for people with college education.

The top three occupations identified as a high need occupation for New York are accountants/auditors, market research analysts/marketing specialists, and financial analysts. SUNY academic programs related to these occupations are at the baccalaureate, masters, and doctoral levels.

Note: Campuses may submit a proposal related to an occupation not listed in Appendix A provided that the occupation is still within one of the six high needs areas. Detailed justification for including the occupation must be included in the proposal. Please contact Lisa Montiel (lisa.montiel@suny.edu) with any questions.

Guidelines for fiscal year 2014-15 refocus High Needs Programs to support campus efforts to expand or start-up academic programs in high need areas as defined above with **priority given to online programs, especially those that promote 2+2 collaborations between campuses**. Selected online programs will be included as Open SUNY+ programs and will be provided access to Open SUNY+ supports. The program funding is competitive and limited to **one year** of support for new program development or program expansion. Campus proposals must demonstrate how the program will become self-sustaining after the High Needs funding ends.

III. 2014-15 Proposal Submission Guidelines

Every SUNY college and university, including those currently receiving High Needs funding, is eligible to apply. Interested campuses must submit a proposal following the guidelines below. The number and amount of awards given as part of this competitive process will depend on the quantity, quality, and scope of the applications received. Last year, High Needs award amounts varied from \$10,000 to over \$240,000.

- The application cover page must include: campus name, detailed contact information, a proposal title stating the high needs area addressed, if the program proposed is new or an expansion of an existing program (include SED code), the amount of funding requested, and approval (sign-off) of the campus Chief Academic Officer.
- The body of the proposal must include the following five sections, each from one to three pages in length:
 1. *Objectives* - This section should include an outline of both the broad and specific objectives for which funding is requested.

2. *Need* - This section should demonstrate the local/regional/state need for the new or expanded program. This section may include information on current or projected local industries, economic development, partnerships, student recruitment/enrollment, or other local labor information.
3. *Impact* - Describe how the impact of the new or expanded program will be measured and assessed. Provide an overview of the expected impact on the campus and the community (number of students served, expectations of post graduate employment, multiplier effect).
4. *Sustainability* - Describe the plans for sustaining the new/expanded program beyond the high needs funding period into the budget allocation period that will provide on-going support consistent with nationally normed cost structures. Beyond faculty salary, other items to address are the physical capacity of the campus to operate the program, the costs to maintain equipment, and replacement of supplies. Online programs must demonstrate they have the infrastructure and policy to support quality assurance in online learning.
5. *Budget*. The final section will be a detailed budget for the entire funding period requested.

Please submit proposals via e-mail to highneeds@suny.edu by the application deadline of April 30, 2014.

Questions about this memorandum may be directed Dr. Lisa Montiel, Assistant Provost for Strategic Enrollment Management, at: lisa.montiel@suny.edu.

IV. Evaluation Process

Each application will be reviewed by an evaluation committee consisting of a combination of presidents, chief academic officers and chief business officers from each of four college sectors (doctoral degree granting institutions, comprehensive colleges, technology colleges and community colleges). Applications will be ranked according to the criteria set forth in the Application Guidelines above, based on that ranking, funding recommendations will be made to SUNY's Interim Provost.

The review committee's evaluation of funding proposals will focus both on the prospects for maintaining or enhancing a program's academic quality as well as its impact on the workforce needs of the region and/or state. Priority will be given to proposals for programs delivered fifty percent or more in an online format. Other evaluation criteria will include the campus' commitment to the targeted program, to the extent that it assures sustainability of the effort beyond the funding period, and the measurability of proposed outcomes. The availability of matching funds or other institutional financial support for a proposal will be viewed favorably, but is not a prerequisite for receiving an award. However, proposals for online programs must demonstrate ability to ensure quality in online learning. These funds will not be awarded pursuant to any financial, demographic, political, or geographic formula.

V. Reporting

At the conclusion of the year, the campus will submit a report containing, as appropriate:

- a data section describing the profile of students who have applied, been accepted, and enrolled in the high needs program, including appropriate comparison data from previous cohorts;
- a description of the number and quality of faculty hired to support enrollment;
- a description of the equipment purchased in support of the program;
- a description of related facilities planning/construction—e.g., Laboratory and Library facilities
- a narrative section describing how the funds improved the campus' ability to meet workforce needs of the region and/or state.

Appendix A¹

2014-2015 High Needs Areas and the Occupations Requiring Postsecondary Education and SUNY Degrees

High Needs Area	Occupation	SUNY Degree Levels	SUNY Degrees Conferred 2012-2013	NYS Projected 2010-2020 Annual Average Openings
Engineering - Renewable Clean Energy	Civil Engineers	Bachelor's, Master's, Doctoral	74	410
	Electrical Engineers	Bachelor's, Master's, Doctoral	99	230
	Environmental Engineers	Bachelor's, Master's	26	110
	Industrial Engineers	Bachelor's, Master's, Doctoral	66	160
	Mechanical Engineers	Bachelor's, Master's, Doctoral	113	340
	Heating, Air Conditioning, & Refrigeration Mechanics & Installers	Certificate, Associate's	179	540
Healthcare	Occupational Therapists	Bachelor's, Master's, Doctoral	60	310
	Physical Therapists	Bachelor's, Master's, Doctoral	96	600
	Physical Therapy Assistants/Aides	Certificate, Associate's	159	290
	Nursing (higher level)	Bachelor's, Master's, Doctoral	1,327	*
	Radiologic Technologists & Technicians	Certificate, Associate's	134	470
	Diagnostic Medical Sonographers	Certificate, Associate's	24	180
	Pharmacists	Bachelor's, Master's, Doctoral	97	790
Public Health	Medical & Health Services Managers	Bachelor's, Master's, Doctoral	314	910
	Healthcare Social Workers	Associate's, Bachelor's, Master's, Doctoral	98	520
	Health Educators	Associate's, Bachelor's, Master's, Doctoral	158	370
	Community Health Workers	Associate's, Bachelor's, Master's, Doctoral	219	--
Biomedical - Biotechnical	Medical & Health Services Managers	Associate's, Bachelor's, Master's, Doctoral	314	910
	Biological Technicians	Associate's	66	150
	Chemical Technicians	Certificate, Associate's, Bachelor's	2	60
Information Technology	Medical & Clinical Laboratory Technicians	Associate's	114	230
	Computer Systems Analysts	Associate's, Bachelor's, Master's, Doctoral	211	1,130
	Network & Computer Systems Administrators	Associate's, Bachelor's, Master's, Doctoral	159	770
	Software Developers, Applications	Associate's, Bachelor's, Master's, Doctoral	91	1,010
Finance	Software Developers, Systems Software	Associate's, Bachelor's, Master's, Doctoral	240	700
	Accountants & Auditors	Bachelor's, Master's, Doctoral	251	3,580
	Market Research Analysts & Marketing Specialists	Bachelor's, Master's, Doctoral	110	1,960
	Financial Analysts	Bachelor's, Master's, Doctoral	24	1,470

*All levels and types of nursing are combined into one "Registered Nurses" occupation group by the U.S. Department of Labor, therefore the number of higher level nursing cannot be defined.

-- NY Department of Labor has not defined a projection.

¹ Note: Campuses may submit a proposal related to an occupation not listed in Table 1 provided that the occupation is still within one of the six high needs areas. Detailed justification for including this occupation must be included in the proposal. Please contact Lisa Montiel (lisa.montiel@suny.edu) with any questions.