

1890s Capacity Building Program for Projects Ending in 2013: A Snapshot of Outputs and Outcomes

In 2008, the 1890s Capacity Building program administered a total of \$11,434,000 to 44 research and teaching projects at 1890 land-grant universities. Output and outcome data were analyzed for 30¹ of these projects, which ended in 2013. These 30 projects resulted in direct support² for 631 students and indirect support³ for 10, 053 students at the 18 1890 Institutions. The following chart shows how many students were directly and indirectly supported within the 2008 Farm Bill priority areas:

Table 1: The number of students directly and indirectly supported by projects addressing the 2008 Farm Bill priority areas

FARM BILL PRIORITY AREAS	Number of Students Directly Supported	Number of Students Indirectly Supported
Agricultural economics and rural communities	67	155
Agriculture systems and technology	44	107
Animal health and production and animal products	40	740
Food safety, nutrition, and health	130	1221
Plant health and production and plant products	139	3671
Renewable energy, natural resources, and environment	211	4159

These projects utilized various mechanisms (e.g., recruitment and retention efforts, curriculum design, instrumentation for teaching, etc.) to support the three primary goals of the 1890s Capacity Building program:

1. To advance cultural diversity of the food and agricultural scientific and professional work force by attracting and educating more students from underrepresented groups;
2. To strengthen linkages among the 1890 institutions, other colleges and universities, USDA, other federal agencies, and private industry; and
3. To enhance and strengthen the quality of teaching, research, and extension programs at the 1890 institutions to more readily establish them as full partners in the U.S. food and agricultural sciences higher education system.

¹ Data were gathered through a questionnaire administered to project directors by the research coordinator for 1890 institutions; 30 of the 44 (68%) project directors responded to the questionnaire.

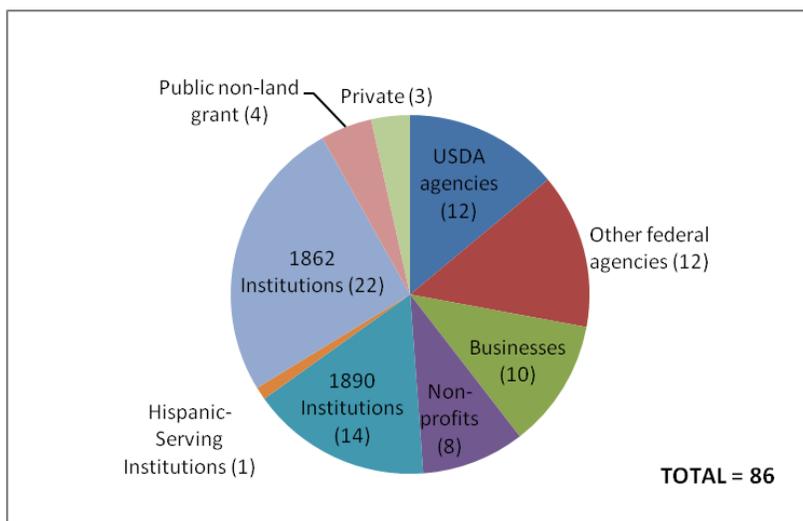
² Direct support means scholarships, fellowships, stipends, experiential learning opportunities, internships, and assistantships.

³ Indirectly served means students benefit from new curriculum, instructional materials, participate in a new degree program, or are involved in recruitment or retention activities.

PROGRAM GOAL 1: The 1890s Capacity Building program strengthens linkages among the 1890 institutions, other colleges and universities, USDA, other federal agencies, and private industry.

Twenty-five of the 30 projects established 86 partnerships between the 1890 institutions and other universities, federal agencies, businesses, etc. The following chart shows the specific types and numbers of partnerships that were established.

Chart 1: Types and number of partnerships established through capacity projects



Since 2008, these collaborations resulted in the following developments:

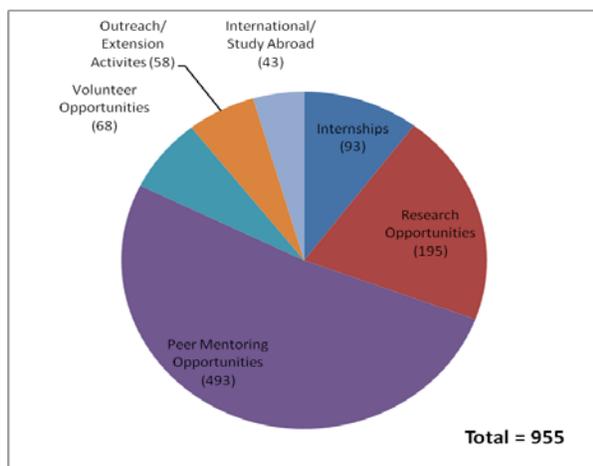
- 3 programs where students are cross-enrolled at institutions
- 1 joint degree program with another institution
- 8 instances where faculty were shared between institutions
- 6 programs utilizing e-learning or online instruction

Since 2008, 2,017 students have benefitted from the development of these collaborations.

PROGRAM GOAL 2: The 1890s Capacity Building program enhances and strengthens the quality of teaching, research, and extension programs at the 1890 institutions so that they are more fully established as partners in the U.S. food and agricultural sciences higher education system.

The program has sought to strengthen these functions through the development of experiential learning opportunities for students; the design of new or existing curriculum, courses, or programs; and the acquisition of new instrumentation for teaching. Twenty-six of the 30 projects used one of these methods to enhance the quality of teaching, research, and extension at 1890s institutions.

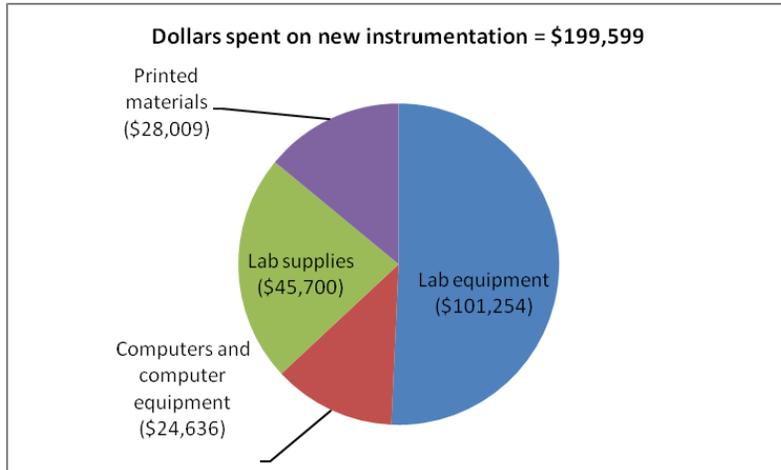
Chart 2: Types and number of experiential learning opportunities created for students



The experiential learning opportunities created for students placed them in businesses, organizations or non-profits, academic institutions, USDA agencies, other federal agencies, state and local government, and at international institutions. Since 2008, these opportunities have resulted in the following:

- 31 publications (journal or newsletter articles or other media)
- 118 student presentations (either oral or poster)
- 2 patents

Chart 3: Types and dollars spent on new instrumentation for teaching



Since 2008, 4,179 students have used the instrumentation paid for through capacity funds.

Additionally, capacity funds for projects ending in 2013 resulted in the redesign of 38 course curricula and the creation of 5 new courses. Since 2008, 328 students have used the redesigned curriculum and 278 students have enrolled in the new courses.

PROGRAM GOAL 3: The 1890s Capacity Building program also advances the cultural diversity of the food and agricultural scientific and professional work force by attracting and educating students from underrepresented groups. Since 2008, recruitment and retention efforts have resulted in the following:

- 189 underrepresented students supported through scholarships or direct student support
- 159 underrepresented students were retained through mentoring or tutoring activities
- As of 2013, 129 students graduated as a result of recruitment/retention programs
- 56 underrepresented students enrolled in food and agricultural science degree programs as a result of recruitment efforts
- 97 students are now employed in the food and agricultural sciences following graduation as a result of recruitment/retention/scholarship programs.