

BENCHMARKS
College of Agricultural, Human, and Natural Resource Sciences
October 1, 2006

Summary

1. Number of (a) certified undergraduate majors enrolled in the agricultural and natural resource sciences, and (b) high-achieving undergraduates in the College of Agricultural, Human, and Natural Resource Sciences (CAHNRS).
2. Number of student credit hours from service courses for non-majors.
3. Undergraduates and high-school student participation in programs of research/scholarship.
4. Number of graduate students enrolled in CAHNRS degree programs and/or supported on extramural grants.
5. Ratio of doctoral:masters graduate students enrolled in CAHNRS degree programs.
6. Federal and other extramural funds for sponsored research and other scholarship.
7. Constituency and public support for research and extension.
8. Foster inquiry, learning, and the application of research through outreach and technology transfer.
9. Interdisciplinary and multidisciplinary research and scholarship.
10. International projects and collaborations.
11. Scholarly publications and juried designs.
12. Diversity of faculty, staff, and students.
13. Gift and endowment funding.

1.

Benchmark: Number of (a) certified undergraduate majors enrolled in the agricultural and natural resource sciences, and (b) high-achieving undergraduates in the College of Agricultural, Human, and Natural Resource Sciences (CAHNRS).

Targets: (a) Increase the number of certified undergraduate majors in the agricultural and natural resource science degree programs by 20 percent over the next five years.

(b) Freshmen and transfer students entering into CAHNRS will have scholastic abilities above the university average based upon their SAT scores and high school GPA.

Impact: Reversal of trend of declining undergraduates in the agricultural and natural resource sciences; higher quality graduates entering the agricultural, human and natural resource sciences.

Tools: Offer new interdisciplinary degree programs (e.g., B.S. in Agricultural and Food Systems); restructure existing degree programs; increase student recruitment; increase number of scholarships for high-achieving students.

Data: Student Data Warehouse (10th day, Fall Semester).

2.

Benchmark: Number of student credit hours from service courses for non-majors.

Target: Increase in the number of non-majors in General Education Requirement courses (GERs) offered within CAHNRS by 10 percent in each year for the next five years.

Impact: More students exposed to and provided with greater academic breadth in the agricultural, human, and natural resource sciences and the application of these sciences; takes advantage of the faculty strength and capacity in CAHNRS for service courses in addressing University over-enrollment.

Tools: Increase number and enrollment of General Education Requirement courses (GERs) offered by the College.

Data: WSU 10th day enrollment data (Registrar's Office)

3.

Benchmark: Undergraduates and high-school student participation in programs of research/scholarship.

Targets: Increase by 25 percent of the next five years, the number of:

(a) Faculty members with one or more WSU undergraduates or high-school students partnering/participating in their program of research/scholarship.

(b) WSU undergraduates employed by faculty, department or center programs of research and scholarship as summer and part-time employees or through internships, community service-learning.

Impact: Increased opportunity for recruitment of high-achieving high-school students as majors in CAHNRS, and of undergraduates into graduate school; greater appreciation for science/scholarship among CAHNRS baccalaureates; potential to identify with and choose a life-time career; greater student experience working in teams; greater leadership and community experience/opportunities for students.

Tools: Maintain/enhance departmental and center expectations to provide high-school and undergraduate students with research and extension experience; budget time-slips funds for undergraduates in research proposals; develop peer reviewed competitions for student-submitted proposals; work more closely with Honors College; review/improve/adopt existing models of CAHNRS academic units.

Data: Enrollment data (research experience, special problems, and internship courses), payroll data, input from academic units, and WORQS.

4.

Benchmark: Number of graduate students enrolled in CAHNRS degree programs and/or supported on extramural grants.

Target: Over the next five years, increase the:

(a) Number of graduate students enrolled in CAHNRS degree programs by 25 percent.

(b) Total number of WSU graduate students advised by CAHNRS faculty by 15%.

(c) Total number of WSU graduate students supported by ARC faculty on extramural grant budgets by 10 percent.

Impact: Greater scholarship/research output, including infusion of new ideas and greater potential for new discoveries/innovations; greater opportunity for well-qualified students to prepare for careers under mentorship of world-class faculty; increased graduate student enrollment as percentage of total student enrollment at Washington State University.

Tools: Increase grant support for graduate students; develop and adopt faculty reward and unit allocation that recognizes success in graduate education; provide/improve facilities and incentives for graduate students at off-campus Research and Extension Centers.

Data: Student Data Warehouse (10th day, Fall Semester); WORQS; ARC database.

5.

Benchmark: Ratio of doctoral:masters graduate students enrolled in CAHNRS degree programs.

Target: (a) Achieve a ratio of 1:1 over the next five years in CAHNRS graduate degree programs, with a ratio of at least 1.5 for programs with Ph.D and M.S. degrees.

(b) Increase the number of Ph.D. students graduated per year from WSU whose graduate committee is chaired by CAHNRS or ARC faculty members by 15%.

Impact: Increase research and scholarship in the College; supports University goal to significantly increase the proportion of graduate students as doctoral students.

Increases the number of Ph.D. graduates produced with mentorship from CAHNRS and ARC faculty, irrespective of the degree program. Enhances the impact of the ARC on WSU graduate education more broadly, contributing to the WSU goal of producing more Ph.D. graduates.

Tools: Provide more cost sharing and competitively awarded support for graduate students using ARC financial resources as incentives.

Data: WORQS and Graduate School enrollment data (Student Data Warehouse).

6.

Benchmark: Federal and other extramural funds for sponsored research and other scholarship.

Target: Achieve an annual increase of five percent per year in:

(a) Total competitive grant expenditures.

(b) Federal competitive grant expenditures (NSF, USDA-NRI, US-DOE, etc).

Impact: Provides funding for students and postdoctoral fellows; peer review of research proposals provides valuable feedback to the investigator for improvement of their science and other scholarship; leverages state and federal hard-dollar resources; generates additional F&A.

Tools: Provide opportunities for interaction with federal, philanthropic, and other program managers; recognize and reward success in the competitive grant arena at the unit level.

Data: WSU Data Warehouse.

7.

Benchmark: Constituency and public support for research and extension.

Target: Increase constituency and public awareness of and support for the application of science and technology with direct relevance/importance to a community, industry, commodity, government agency, or other stakeholder group.

Impact: Greater visibility of and public support for CAHNRS/WSU Extension/ARC research programs in the context of the land-grant mission of WSU; increased commodity and legislative support for research and outreach.

Tools: Increase “marketing” of research programs, especially applied research; develop new models/methods for communication with stakeholder groups; increase partnerships with industry representatives that facilitate interaction with farmers, ranchers, commodity groups, communities, and industries; work with Washington commodity groups to gain more support for research that benefits them.

Data: Industry and legislative support for CAHNRS programs (WSU Foundation and CAHNRS budget data).

8.

Benchmark: Foster inquiry, learning, and the application of research through outreach and technology transfer.

Target: Increase by 10 percent per year over the next five years the number of:

(a) Extension publications authored by CAHNRS faculty.

(b) Workshops and presentations conducted by CAHNRS faculty.

(c) Popular press articles authored by or featuring CAHNRS faculty.

Impact: Increased contribution of research to improving the economic well-being and quality of life of citizens of Washington, the nation, and the world.

Tools: Enhance communications resources; additional Extension FTE in CAHNRS units; formation of research/extension teams.

Data: WORQS reports and Extension Publication Office.

9.

Benchmark: Interdisciplinary and multidisciplinary research and scholarship.

Target: Majority of faculty members become active participants in an interdisciplinary or multidisciplinary project and receive grant funding to support their participation.

Impact: More research that addresses complex problems facing the citizens of Washington, the nation, and the world; more competitive for the growing share of federal, philanthropic, and other funds targeted to multiple investigator/interdisciplinary research and scholarship.

Tools: Seed grants, staff support, or other incentives provided by ARC and WSU Extension in support of team building; faculty advancement that recognizes/rewards success in leadership of and participation in multidisciplinary, integrated, systems-driven, research-extension project teams, and scholarship.

Data: Office of Grant and Research Development grant expenditure database, ARC project database, and WORQS.

10.

Benchmark: International projects and collaborations.

Target: Increase by 10 percent per year the number of:

- (a) CAHNRS majors participating in faculty led study abroad tours.
- (b) Students engaged in formal exchange programs
- (c) Faculty engaged in research, teaching and extension programs with foreign universities.
- (d) Foreign university professors and scientists hosted by CAHNRS departments and centers.

Impact: Land-grant mission of Washington State University continued/advanced as a global mission; WSU programs enhanced through faculty and student exchanges with partnering countries; new resources in support of CAHNRS/WSU Extension research, teach, and outreach.

Tools: Administrative support of international activities; enhanced collaboration with Office of International Programs; hiring of international faculty.

Data: WORQS, Office of International Programs, input from academic units.

11.

Benchmark: Scholarly publications and juried designs.

Target: Increase the number of peer-reviewed scholarly products (refereed journal articles and juried designs) produced by CAHNRS and ARC faculty by 10 percent per year for 5 years.

Impact: Improve the visibility of research and scholarship at WSU, thereby attracting more extramural support, graduate students, and post doctoral fellows.

Tools: Increased emphasis of peer-reviewed scholarship in annual review and tenure and promotion processes;

Data: WORQS (compiled by CAHNRS Office of Research/ARC).

12.

Benchmark: Diversity of faculty, staff, and students.

Target: Improve gender diversity of faculty (percentage of female faculty in tenure-track positions) and ethnic diversity of faculty, staff and students (percentage of minority faculty, staff, and students), each by 10 to 20 percent of current levels over the next five years.

Impact: Provide more career and promotion opportunities for women faculty members in units where men currently outnumber women disproportionately; provide more educational and career opportunities for Washington's ethnic minorities interested in agricultural, human, and natural resources sciences; provide increased access to education and employment opportunities for Hispanic and Native American citizens in eastern Washington; perform in accordance with the WSU goal of trust and respect.

Tools: More active recruitment and mentoring of faculty from under-represented groups; allocation of additional resources to recruitment of minority students.

Data: Provost's Decision Support System.

13.

Benchmark: Gift and endowment funding.

Target: Increase total giving to CAHNRS by 50 percent in the next five years.

Impact: Increased undergraduate enrollment while easing the financial burden on students due to increased cost of tuition; greater stability of funding for long-term research projects; endowed chairs to attract more world class faculty.

Tools: Invest in additional major gift officers; engage faculty and administrators in gift cultivation activities; execution of CAHNRS Foundation Campaign plan.

Data: WSU Foundation Annual Reports.