Chapter Eight
Engagement and Service
Chapter Eight: Engagement and Service

Criterion 5: Engagement and Service. As called for by its mission, the organization identifies its constituencies and serves them in ways both value.

In 1891, newly hired University of Nebraska Chancellor James Canfield traveled some 10,000 miles around the state of Nebraska, addressing the state's citizens. The following year, he logged 8,000 miles. Canfield believed the university belonged to the citizens of Nebraska and its doors were open to all. He wrote essays for the popular press, encouraged faculty and staff to accept speaking engagements and cordially welcomed visitors to campus. Canfield introduced the university to the citizens of Nebraska, setting a tone that still resonates today. We are engaged with our constituents to meet their needs. More and more, we are paying greater attention to Nebraska's priorities, especially those priorities that align with national and international priorities. Most chancellors since Canfield, and certainly current Chancellor Harvey Perlman, have traveled widely throughout the state, speaking with and, more important, listening to our stakeholders. While Nebraska is large geographically, our relatively small population (1.8 million) has resulted in a somewhat “small town” attitude regarding government and educational officials. Nebraskans are not reluctant to pick up the phone or walk into a state or university office to voice a concern. Nebraska values its friendly attitude and neighborly ways. Part of that social contract is to be responsive to requests from your friends and neighbors when you can.

In his 2004 State of the University Address, Perlman noted that research informs our teaching and also is the basis for our outreach efforts:

We believe in the integration of teaching, research and service. These missions are neither independent nor in conflict, even though they sometimes compete for our attention, our resources, and our time. ... Research informs our teaching and

The land-grant tradition creates for the University of Nebraska–Lincoln a special statewide responsibility to serve the needs of Nebraska and its citizens. In addition, many of its service aspects extend to regional, national, and international clientele. Special units such as Extended Education and Outreach, and the Cooperative Extension Division have specific responsibilities to bring the teaching and research resources of the University to a wider clientele. Through Cooperative Extension’s partnership with federal, state, and county agencies, UNL has

continued on page 210
Chapter Eight: Engagement and Service

continued from page 209

an outreach program in each county in the state. Moreover, all units of the University have a service and outreach mission. To help accomplish this mission, UNL delivers educational services through diverse ways including telecommunications methods and as a participant in the development of regional educational centers especially in those areas where it has statewide responsibilities. The University recognizes its obligation to extend the resources of the University beyond the campus and throughout the State. Serving the needs of Nebraska requires more than responding to the felt needs of the time. UNL must be visionary in its planning and must help the citizens of the state prepare for the future as well as deal with the present.

UNL Role and Mission Statement [www.unl.edu/resources/8-1]

This chapter will describe our engagement with our citizens and stakeholders, and also provide evidence of how we share university expertise with others.

Core Component 5a.
The organization learns from the constituencies it serves and analyzes its capacity to serve their needs and expectations.

UNL learns from its constituents in a variety of ways, including visits by the chancellor and Institute vice chancellor to Nebraska communities, listening sessions, advisory boards and constituent surveys.

Community Visits and Listening Sessions
Since his appointment as interim chancellor in 2000, and installation as chancellor in 2001, Harvey Perlman has visited, on average, 15 communities outside of Lincoln or Omaha annually. This rate is similar to that of his predecessors’. Often, he will visit several communities during a one- or two-day trip. Frequently, other UNL officials, particularly John Owens, vice chancellor of the Institute of Agriculture and Natural Resources, accompany him. (See Figure 8.1 Chancellor’s Community Visits Map.) The IANR vice chancellor’s constituency is slightly narrower than the stakeholder groups that the chancellor is meeting during these visits due to the unusual structure by which UNL fulfills its land-grant mission, but a highly significant one for the university.

During these visits, the chancellor and others will meet with local business or service organizations (chamber of commerce, Rotary, etc.) and other community or advisory groups. He will tour businesses, local Extension offices and schools. He will meet with local media — especially newspaper and television reporters. Each visit is customized to the communities’ desires. The choice of which communities to visit is made in consultation with local chambers, service organizations, Extension educators and Extension district directors, state senators and others. Factors such as time since previous visits, university decisions that may have impact on an area, and invitations extended to the chancellor also are considered when itineraries are made. The visits are publicized in advance, and attendance at the events varies widely based on the local population, issues of interest and timing. Particular interest has been paid in building relationships with greater Nebraska, especially Western Nebraska. Additionally, visits with area businesses have been promoted.

While the chancellor speaks at these events, he and his staff pay attention to comments and concerns voiced by those who attend. Often the questions from citizens yield valuable information. For example, in the early to mid 1990s, two issues often surfaced: parents and others...
reported their students were having difficulties understanding the accented English of some international graduate students, and parents and others reported their children were not being contacted or recruited by the university. The frequency and consistency of the messages caused concern. Consequently, a program was instituted to ensure that international teaching assistants pass written and oral English proficiency tests before assuming teaching duties. Considerable upgrading of our student recruitment technology has helped us more effectively identify and recruit students. Most recently, the chancellor’s trips have resulted in our placing student interns with local businesses.

The chancellor (as well as other university administrators and faculty) also meets with alumni groups nationwide, hosting events, typically in February and March, surrounding the university’s founding anniversary (February 15, 1869). In the past several years, he has hosted events in California, Arizona, Washington, D.C., New York City, Chicago and other venues.

The chancellor accepts as many as 100 speaking engagements each year. Many involve welcoming groups (academic and non-academic) to campus, invited talks to service/community groups, formal presentations to constituent organizations and others. The chancellor willingly accepts questions at most of his speaking engagements; his e-mail address is public and he responds to e-mail from the public in most instances in a timely manner.

Figure 8.1 UNL Chancellor's Community Visits Map

Counts and Cities in black
Year of UNL Chancellor visits in red
The Institute of Agriculture and Natural Resources also has a long-standing record of conducting community visits. These visits are used by the Institute to gather information relevant to programming and strategic planning. In 2004-05, the associate vice chancellor for the Institute conducted 25 listening sessions across Nebraska to gather information about what people value and expect from the Institute. Ten additional listening sessions were held on campus to provide the opportunity for faculty and staff to participate. Information from all 35 sessions was synthesized and reviewed by the IANR Strategic Plan Steering Committee. The information gathered is reflected in the 2005-08 addendum to the IANR strategic plan.

The sessions proved so valuable that IANR will continue to schedule four each year to monitor how well IANR is meeting the needs of citizens and to identify emerging issues that may be included in future revision of the IANR plan. UNL Extension, part of IANR, is currently using an “appreciative inquiry process” with its 83 County Extension Boards. The process empowers Extension Board members to have conversations with members of the community to gather information from Nebraskans across the state. The goal is to connect all parts of UNL Extension’s delivery system behind a common plan for future education programming.

Two key constituent groups advise and provide support for the Institute of Agriculture and Natural Resources. One is Ag Builders of Nebraska, whose principal focus is to support IANR through improving agriculturally related research, teaching, Extension and outreach. Ag Builders is dedicated to shaping, advancing and sustaining prominent teaching, research and outreach programs in all appropriate areas of agriculture and food systems for the benefit of the state of Nebraska. It also supports Family, Youth, and Community partners whose mission is to advocate for families, youth and communities in Nebraska by developing strategies that will lead to significant understanding of the programs of IANR, Extension and the College of Education and Human Sciences by decision makers.

Another strong advocacy group for IANR is Ag 40, whose mission and purpose is to provide the Institute with broad-based support, to increase its visibility, to create an environment allowing it to continue its leadership role and to promote policies that support IANR and those programs at the university that enhance the university’s partnership with Nebraska’s agriculture and natural resource interests. Both organizations play prominent roles in Nebraska.

Many deans, units and other organizations at UNL have advisory boards or groups that offer input and allow UNL entities to keep in touch with targeted constituent groups. Examples of these groups are listed in the sidebar.

The university’s commitment to undergraduate education prompts UNL to take seriously the concerns and opinions of students regarding the university’s programs and investments. Students participate in the life of the university in a
number of ways. Every college has a student advisory board composed either of appointed or elected students. Elections are held each spring to elect students to the student senate. Student government, the Association of Students of the University of Nebraska (ASUN), convenes the senate, appoints student representatives to a number of boards, such as Parking Advisory Board, Publications Board and Committee for Fees Allocation, which allocates student fees. The student president and others serve on university committees, such as search committees for key administrators; two students, one undergraduate and one graduate, sit as voting members of the Academic Planning Committee. The elected ASUN president sits as a non-voting member of the University of Nebraska Board of Regents.

The Daily Nebraskan, while published by the Board of Regents, is an independent student press. It is not associated with the College of Journalism and Mass Communications. The newspaper has published for 110 years. A professional general manager, advertising manager, adviser and a publications board generally oversee operations. Students staff KRNU radio, managed by the College of Journalism and Mass Communications. The college also publishes a lab newspaper, an Internet news site and a cable-cast news show.

**Audience/Constituent Surveys**

As would be expected, many academic and non-academic units across UNL undertake audience/constituent surveys on a periodic basis to assess needs and interests. The sections below describe several of these surveys.

**Lied Center for Performing Arts**

Staff members travel throughout the state to develop relationships in communities to determine needs and interests. Occasional audience surveys provide information from constituencies. The Lied is also a member of a 20-member consortium, the Major University Presenters, which has undertaken a two-year “Values and Impact Study” that will reveal who the core constituents are, what their needs and desires are, how the Lied is responding to them, and how to more accurately serve them.

**NET (formerly Nebraska Educational Telecommunications)**

To study the impact of NET services on Nebraskans, NET developed a data collection tool to assess service (Does NET engage and educate Nebraskans, provide value to the lives of Nebraskans, respond to the media needs of Nebraska, and adhere to ethical practices when delivering services to Nebraskans?), identity (How do Nebraskans identify us, how do we want Nebraskans to identify with NET?), importance (Is NET important to Nebraska, is NET valued, trusted, meeting needs, addressing important issues, respecting diversity?) and focus (Is NET educating, engaging, inspiring, and challenging Nebraskans, is the NET pursuit of excellence visible to Nebraskans?). The initiative began in January 2006, and surveys will be sent quarterly to a random sample of Nebraskans in the 18- to 64-year age range. The same survey can be adapted for live events and outreach projects with the addition of specially developed, event-specific survey items. Reporting will also occur on a quarterly basis, with trend lines to be developed when six data periods have been established.
Chapter Eight: Engagement and Service

University of Nebraska Alumni Association
More than 145,000 alumni are surveyed annually by e-mail with the “About the Alumni Attitude Survey.” The response rate is approximately 20 percent. During 2001-02 and 2002-03, 24 other universities also used this survey, which provided a basis for comparisons among universities. Survey questions address these areas: demographics, loyalty, overall experience, student experience and alumni experience. The Alumni Association uses the information to guide future programming. See the Virtual Resource Room to view the survey results [www.unl.edu/resources/8-3]. In addition to the e-mail survey, an Alumni Association staff member attends the quarterly meetings of each of the alumni chapters to get feedback on desired services and programs.

Student Course Evaluations
The regents, in Bylaw 5.3, state: “Each college or school shall provide a mechanism by which students have an opportunity to report their perceptions of courses and the methods by which they are being taught.” In fulfillment of that obligation, every course at the university is evaluated by students. Information provided in this way provides important direction for the redevelopment of courses and evaluation of faculty teaching effectiveness.

Career Preparation Assessment
Many colleges and units formally and informally track graduates. For instance, the College of Agricultural Sciences and Natural Resources surveys graduates five years out, asking them to respond to the importance and their preparedness on 10 learning outcomes, such as writing communication skills and problem solving skills. The College of Law surveys its graduates six months out to determine bar passage results and employment information. The College of Business Administration surveys graduates to determine their assessment of the knowledge and skills they gained through the college, career pattern since graduation and various satisfaction measures.

Career Services also conducts an annual follow-up study with graduates. Information regarding the student’s name, employer, job title and location is provided by major field of study. Salary information is collected and sorted by majors rather than by individuals. The survey also collects information relating to satisfaction measures, relationship of degree to major and information on why the student left or stayed in Nebraska. A summary of the 2004-2005 survey can be found at [www.unl.edu/resources/8-4].

Fulfillment of Core Component 5a: UNL learns from its constituents in the state through visits to communities, a multitude of advisory boards, listening sessions throughout the state, follow-up questionnaires to graduates and special surveys to gather opinions on specific topics. Students carry out an active student government operation and serve on important university committees. They also have their own newspaper and radio station that provide opportunity for comment on many topics. Regents’ bylaws require that all courses have provisions for student evaluations of their quality.
Core Component 5b.
The organization has the capacity and the commitment to engage with its identified constituencies and communities.

Every college and most programs at the university have outreach activities designed to meet a variety of purposes. The very act of gathering information for this report generated more than 40 typewritten pages of responses from the colleges outlining outreach activities for 2004-2005. Brevity begs that the list be shortened for this report and a list of selected highlights by college follows. A more complete listing of college activities can be found in the Virtual Resource Room [www.unl.edu/resources/8-5].

Hixson-Lied College of Fine and Performing Arts
The Hixson-Lied College of Fine and Performing Arts offers a continuous program of faculty and student performances, open to the public, as well as a number of showcase activities listed below:

- Nebraska Young Artist Award Program, an annual event that invites talented high school juniors to campus to learn about careers in the arts;
- The annual International Thespian Festival, which attracts 2,500 high school students and their sponsors for a week of theater-related workshops, performances and competitions;
- The annual meeting of the Nebraska Music Educators Association, attended by K-12 music teachers and students (this conference is the venue for select All-State performing groups);
- Arts Instruction for 4-H Students, a joint program with UNL Extension convened at 4-H summer camps; and
- More than 100 annual workshops, concerts, productions and seminars conducted by college faculty in all areas of the fine and performing arts.

Other fine arts units affiliated with UNL include the Lied Center for Performing Arts, the Great Plains Art Collection, the Sheldon Memorial Art Gallery and Sculpture Garden, the Nebraska Repertory Theatre and the Mary Riepma Ross Media Arts Center. Each presents a full slate of events or exhibitions annually; some also present activities outside of Lincoln. The Sheldon, for example, has for more than 20 years toured exhibitions statewide.

College of Arts and Sciences
Signature outreach program for UNL’s largest college, Arts and Sciences, include:

- Bureau of Sociological Research, which provides social research to state agencies, legislators, and policy-makers;
- Cosmic Ray Observatory Project, which involves high school teachers and students in an international project to acquire data from high-energy cosmic ray showers;
- Latino Achievement Mentoring Project, part of the Latino Research Initiative, which connects college students with Latino students in middle schools to promote pro-social behaviors;
- Mathematics outreach projects such as All Girls/All Math summer camps, the Nebraska Conference for Undergraduate Women in Sciences, and UNL Math Day, which attracts annually 1,400 students to campus;
• Nebraska Court Improvement Project, a part of the Center for Children, Families and the Law, designed to improve the functioning of the state court system in responding to child abuse and neglect cases;

• Psychological Counseling Center, part of the Clinical Psychology Training Program, which provides assessments, therapy, evaluations and forensic services; and

• Nebraska Summer Writers’ Institute, a summer workshop for creative writers.

**College of Education and Human Sciences**

The College of Education and Human Sciences has as one of its missions the preparation of teachers and educational professionals; the college currently enrolls nearly 1,400 undergraduate education majors. The college faculty’s research often bridge the divide between practice and research. Many projects aim to develop best practices for teaching and actual classroom teachers carry out the research. The bulleted paragraphs below describe five examples.

• The Nebraska Partnership for American History Education involves faculty from CEHS’s Department of Teaching, Learning and Teacher Education; the Department of History in the College of Arts and Sciences; and teachers from 16 school districts in north central and western Nebraska who have collaborated on a three-year project to advance and improve the teaching and learning of U.S. history by focusing on teacher development of knowledge and skills to teach U.S. history in exciting and engaging ways.

• The Inspiring Inquiry project involves 72 middle-school science teachers from rural districts who use inquiry methods to develop and test a biology curriculum. The teachers develop and test the curriculum during a summer field experience, then test and refine it in their own classrooms.

• Educational psychologists are testing the efficacy of a service model called “conjoint behavioral consultation,” a structured, collaborative problem-solving technique in which teachers and parents work together to identify, address and evaluate shared concerns about a child.

• Several projects in UNL's Center for At-Risk Children’s Services aim to help develop ways to enable children to succeed. The center’s research includes programs in early childhood emotional/behavior disorders, early literacy, wrap-around services, migrant education, the relationship between academics and social adjustment, and juvenile justice assessment.

• The Math in the Middle Institute Partnership aims to increase middle school math teachers’ deep knowledge of mathematics, allowing them to teach a more challenging math curriculum.

Also included among the college’s outreach programs are the:

• Buros Center for Testing, a national center that assesses the efficacy of testing;

• Nebraska Prevention Center for Alcohol and Drug Abuse;

• Barkley Memorial Center Speech-Language and Hearing Clinic, which provides a variety of services;

• Nebraska Human Resources Institute, staffed by UNL student volunteers who act as counselors in mentoring
Lincoln Public Schools pupils in leadership development activities;

- International Quilt Study Center, established to encourage and foster preservation of the art, science and history of quilting.

Additionally, faculty of the College of Education and Human Sciences who have Extension appointments in the areas of families, youth, nutrition, health, food safety, financial management and entrepreneurship also deliver several UNL Extension programs.

**College of Business Administration**

Programs in the College of Business Administration include the:

- Bureau of Business Research, an applied economic and business research entity located in the Department of Economics;
- Center for Albanian Studies, which reinforces the new academic infrastructure that trains Albania’s future business leaders and managers through the first-ever MBA program at the University of Tirana;
- Center for Economic Education, the National Center for Research in Economic Education and the Nebraska Council on Economic Education, all of which work to further research in and enhance the teaching of economics;
- Gallup Leadership Institute, a world-class program in leadership development;
- Center for Entrepreneurship, which sponsors conferences, competitions, and community outreach programs to create growth and competition in local businesses; and
- Pan Pacific Business Association, a forum for scholars, executives and government officials from Pacific-Rim countries to discuss important issues relating to a better quality of life in this region.

**College of Architecture**

All of the programs of the College of Architecture are studio- and service-based programs serving the state and region. For example, a fourth-year studio class recently completed a study for the Tractor Museum on UNL’s East Campus. More than 20 of these projects are implemented each year ranging from redevelopment efforts in tornado-devastated Hallam, Neb., to a new community center in Kimball, Neb. If communities and institutions were required to have sponsored the full value of these projects, the research value would be more than $1 million annually. Because of the service focus, these projects generate critical ideas for a full range of issues and provide a catalyst for fund drives, bond issues, professional services and implementation. Recently the college has received a W.K. Kellogg grant to explore the redevelopment of the historic Whittier Junior High School adjacent to the City Campus. Three noteworthy projects are described below:

**Community Outreach Partnership Center**

Using a $400,000 HUD grant and local matching funds, this project builds partnerships with the neighborhood associations adjacent to the campus to develop Geographical Information System and organizational support for social, educational, leadership and rehabilitation projects.
**NeighborWorks Inc.**

Project NeighborWorks is a partnership engaging the City of Lincoln, NeighborWorks Inc. and the College of Architecture. With a $1 million grant, the project sponsors GIS studies of the various historic neighborhoods by Community and Regional Planning students and the students of the Architecture Program in the design, development and construction of new affordable homes in the community. NeighborWorks Inc. of Lincoln is part of a national network to revitalize neighborhoods.

**Nebraska Lied Main Street Program**

The Main Street Program serves 10 to 12 Main Street Communities throughout the state annually in partnership with the Nebraska Historical Society, Department of Roads and the Department of Economic Development.

**College of Law**

Two community service, practice development courses in the College of Law provide litigation experience for students.

**Civil Clinic and Criminal Clinic**

Third-year law students represent actual clients involved in real cases in the Civil and Criminal Clinics. Students in criminal clinic work cases with the Lancaster County Attorney’s office. The experiences are comparable to what a new attorney might face in the first three years of practice. The College of Law has offered clinical courses for more than 20 years; the clinical programs are supervised by three full-time faculty members with extensive trial experience at the state and federal levels. The clinics operate year-round, and students may take clinic in the summer, fall or spring following the completion of their second year.

**Pro Bono Initiative**

The Pro Bono program encourages and recognizes volunteer legal service by College of Law students during their second and third years. To be recognized under this initiative, pro bono work must be uncompensated, law-related and in the public interest, including, among other things, service to the indigent, efforts to protect essential rights and liberties, law reform projects and projects to improve the legal profession or the public’s understanding of the law. The pro bono work must be approved by the dean’s office prior to completion to qualify for this initiative. Students completing 50 hours or more of qualified pro bono work during their second and or third year at the college will receive a dean’s certificate upon graduation. Each year at least one student may be recognized for outstanding pro bono service.

**College of Journalism and Mass Communications**

The College of Journalism and Mass Communications provides a wide range of outreach activities, including student work with external clients, workshops, partnerships abroad and local news services.

“Advertising Campaigns” is a capstone class that requires students to work directly with real-world clients to create advertising campaigns. These include both non-profit and for-profit clients in Nebraska and throughout the United States. Examples from a list of 80 entities include Adidas, People’s City Mission, Tobacco Free Nebraska and Apple Computers-Macintosh.

The college sponsors a number of workshops annually for high school journalism teachers and students. An annual fall conference and spring contest for high school students are coordinated by the staff and faculty and are held in the college’s building.

The college also is a partner in establishing the Graduate School of Journalism in Addis Ababa, Ethiopia, in cooperation
with Gimlekkollen School of Journalism and Communication in Norway.

The Soderlund Sales seminars are coordinated by the college and conducted annually via distance education from Andersen Hall, the college's location. Top, well-known sales professionals in the broadcast media participate in these seminars, which are directed to radio and television sales professionals in Nebraska.

Finally the college, in cooperation with TimeWarner Cable System, produces a number of programs airing weekly on TW Cable in Lincoln.

**College of Engineering**

All undergraduate degree programs in the College of Engineering contain the requirement of a capstone design project; they typically involve service-learning opportunities with local businesses or governments. During the 2005-06 academic year some of the projects that involved partnerships with government and industry were:

- Development of Foam Elimination System for Degussa Corporation's Midwest Lysine production facility in Blair, Neb.
- Park Stream Restoration Project for Taylor Park, 66th and O streets, Lincoln, Neb.
- Holmes Lake Revitalization Project for Holmes Lake, Lincoln, Neb.
- Development of a Double Pallet Jack Training Program for Pegler-Sysco, Lincoln, Neb.
- Development of an Energy Reduction Program for Pegler-Sysco, Lincoln, Neb.
- Design of a New Inventory Control System and Racking Storage Area for General Dynamics, Lincoln, Neb.
- Implementing Lean Manufacturing Principles at the Physicians Mutual Mailing Facility, Lincoln, Neb.
- Redesign of the Production Layout for KZCO Corporation, Greenwood, Neb.
- Renovation of the Christ Temple Church, an historic African American Church in Lincoln, Neb.

Additionally, the Department of Electrical Engineering participates in “Project Lead The Way,” a pre-engineering high school curriculum, with Omaha North High School. The College of Engineering sponsors a week-long engineering day camp for sixth through eighth grade pupils in cooperation with “Bright Lights,” a K-12 summer education enrichment program in Lincoln. The college sponsors “Discover Engineering,” a one-day hands-on introduction to engineering related activities for middle school students. The college annually sponsors “E-Week” Open House to showcase the college's programs, facilities and student project results to K-12 students. About 400 people attend the open house annually.

**Institute of Agriculture and Natural Resources**

Faculty in the IANR have a long tradition of service and many have dual appointments in the University of Nebraska–Lincoln Extension. UNL Extension's mission is to help Nebraskans enhance their lives through research-based education. Extension is found throughout the state in 83 county offices that serve all 93 counties, and at research and extension centers at Scottsbluff, North Platte, Norfolk and on the flagship Lincoln campus. Since its beginning, Extension has delivered research-based knowledge to people through direct teaching and publications. It still does. But today Extension also uses technology such as satellite delivery, internet video streaming and web-based curriculum modules to link people with information of value to them.
Because IANR Extension activities are so widespread and numerous, we have chosen to highlight just a few examples in the bullet-point paragraphs below:

- Water scientists help Nebraska communities comply with federal guidelines on arsenic in drinking water through development of a novel and less expensive method of arsenic removal.
- Development of research-based irrigation management strategies help farmers reduce irrigation needs by 10 percent to 15 percent, saving farmers up to $2 million annually.
- A comprehensive program to help livestock owners manage manure and comply with state and federal regulations has served more than 400 livestock producers and 165 crop, livestock and agency consultants since 2001, saving thousands of dollars, using the manure as fertilizer and protecting water quality.
- UNL Extension trains the building industry to reduce urban soil erosion around construction sites. Seminars in 2003 and 2004 in Omaha taught architects, engineers, contractors and others about storm water management requirements and best management practices such as ground cover and erosion control dams to prevent soil around construction sites from washing into surface waters. Seminars drew more than 140 people each year.
- Drought is the costliest natural disaster in the United States, with an annual impact of $6 billion to $8 billion that belies its slow, creeping nature. The University of Nebraska-based National Drought Mitigation Center has developed the Vegetation Response Drought Index, which more precisely detects drought severity and presence. The center’s widely used Drought Monitor, which differs from the vegetation drought index, is a collaboration between UNL’s center and the U.S. Department of Agriculture and National Oceanic and Atmospheric Administration.
- Two decades of University of Nebraska turf science research has transformed buffalo grass, a tough, drought-tolerant prairie grass, into an improved water-thrifty grass well-suited for lawns, golf courses, parks and other turf. Nebraska is the nation’s leader in turf buffalo grass research and improvement. Since 1990, nine turf buffalo grasses have been commercialized. Private companies grow and sell these improved buffalo grasses as seed or sod under university agreements. Royalties support ongoing buffalo grass research and these improved buffalo grass varieties create new sales potential for turf producers in Nebraska and elsewhere as demand for buffalo grasses grows. Royalties have topped $1 million.
- UNL Meat Science faculty conducted beef muscle profiling studies that led to identification of muscles that are now marketed as value-added cuts (i.e. the flat iron steak and petite tender), which has increased the value of each beef carcass by approximately $50 to $70; approximately 25 million head of beef are processed in the U.S. each year, leading to an annual impact of about $1.5 billion. In addition, 20,000 national, chain and independent restaurants serve beef value cuts.
- Poultry nutrition research at UNL resulted in production of a patented omega-3 fatty acid-enriched egg that is widely marketed today.
- UNL Extension educated producers about less costly but more effective methods of controlling grasshoppers, a growing scourge as drought conditions continue. Treatment costs in 2003 were $1.7 million less than in 2002. In 2004, this system saved nearly $950,000 in treatment costs compared to conventional methods.
- As the nation leans more on ethanol as a fuel alternative, NU agriculture scientists proved today’s ethanol has a positive energy balance – it yields more energy than is used to produce it. Today’s ethanol is about 30 percent ahead energy-wise. Turning corn into ethanol creates an important market for farmers and a renewable, cleaner-
burning alternative to fossil fuels. In Nebraska, 23 percent of all corn is used for ethanol, and that has become an important new industry for rural economies.

- Pesticide education coordinated by UNL Extension reached more than 15,000 pesticide applicators, 500 consumers, and 1,100 youth using a variety of approaches. The Pesticide Safety Education Program, begun in 1976, is UNL Extension's largest adult-education program. Participants report positive behavioral changes result from taking the course, which helps them gain required certifications and licenses to use pesticides.

- Several nutrition-education programs help educate low-income Nebraskans about basic nutrition, food safety and food management to assure their families eat healthily within tight budgets. One project, targeted toward families with young children, has served more than 85,000 families since 1969. A second project has served 22,000 families since 1994; a study showed that this project generates $2.07 in benefits for every dollar spent. Savings are a result of increased consumption of nutrients, which reduces disease risk.

- Crop management and diagnostic clinics allow university and industry agricultural specialists, researchers and professionals to provide the latest, most up-to-date information to producers. The 2005 Crop Management and Diagnostic Clinics provided education that impacted at least 39 percent of Nebraska's row crop acres.

- A field day conducted at the University of Nebraska Agricultural Research and Development Center updated farmers, crop consultants, agricultural industry professionals, policy makers, researchers and journalists on the key issues involved in research and crop management for increasing soil carbon sequestration and reducing greenhouse gas emissions in agricultural systems.

- UNL agricultural scientists and Extension faculty have identified promising alternative crops for the Nebraska Panhandle's arid high plains climate and are educating producers about them. The effort focuses on alternatives with higher value potential for growers and the region's economy. New crops being grown in the Panhandle as a result of these efforts include: proso and foxtail millet and sunflowers for birdseed; chickpeas for human food; turf and forage grass seed; and chicory. Brown mustard and canola for environmentally friendly biodiesel production are among the latest crops being studied. Birdseed crops now grow on 250,000 Panhandle acres and birdseed production is a $20 million a year industry, including several processing plants that Extension faculty helped attract to the region. Panhandle growers produce about 1,500 acres of grass seed valued at $1 million annually. The region's 900 acres of chicory, valued at $1 million annually, are processed at the nation's only chicory processing plant at Scottsbluff, which opened in 2001. Chicory is grown in Europe as a source of inulin (a prebiotic food ingredient), fructose, salad greens and flavorings. Dried chicory roots are also extensively used in the beverage industry and as a pet-food ingredient. The Panhandle now produces 10,000 acres of chickpeas, grown for human consumption, and with 80 percent of U.S. chickpeas imported, there's room to grow.

- Agriculture is Nebraska's leading industry, but with two-thirds of the state's population living in metropolitan areas, many young people know little about agriculture. Ten Nebraska public agencies and industry associations formed the Agriculture Awareness Coalition to help young people learn about agriculture's importance. Since 1996, the coalition has offered agriculture festivals where more than 6,800 children learned about agriculture's importance to food production.

- Building Nebraska Families provides education to the hard-to-employ rural clients of Nebraska's Health and Human Services System welfare-to-work program. During the past year, 356 participants received at least one educational contact. Fifty-two (14 percent) participants completed, meaning they are self-sufficient and not receiving welfare-to-work monies any longer. Their mean monthly income increased from $483.43 at
entry to $1,020.27 at exit, plus they reported a total of 638 hours in out-of-class assignments, a significant accomplishment for these families. They also report measurable increases in family management and life skills. In addition, over 1,300 people participated in a variety of parenting classes. Ninety-eight percent felt they had learned at least one new technique in parenting. Another 567 divorcing parents at eight different sites participated in “Parents Forever.” These parents learned skills to focus on the impact of divorce on children and showed a 94% increase in ability to resolve conflicts. “Kids Talk About Divorce” (attended by 158 youth) teaches age appropriate concepts for children ages 5-18. Seventy-seven of parents surveyed two to four years after the class felt the class was effective in helping their children adjust to the divorce.

NET (formerly Nebraska Educational Telecommunications)

NET is perhaps best known for its public television and radio services, with its online service playing an increasingly important role. Through this package of public broadcasting services, NET provides Nebraskans with programs ranging from breaking news and public affairs (local to international) to varied entertainment (performing arts to sports); breakthroughs in science and the mysteries of nature; and opportunities for education and life-long learning. NET serves the entire state, both on its radio and television sides, through a series of transmitter stations and translators. NET now has four digital broadcast services, including one high-definition broadcast signal, as well as datacasting. NET Television1 includes Public Broadcasting Service and award-winning, locally produced public television programming. NETV2, once available only on cable, offers live coverage of the Nebraska Unicameral, Spanish-language programming and other locally produced or acquired programs. NETV3 is a new channel dedicated exclusively to educational purposes. It features instructional programs for classrooms as well as for adults wanting to earn their GED, college degree or engage in lifelong learning opportunities. NETV-HD is the high-definition digital broadcast channel offering high-quality, crystal-clear pictures of national and locally produced programs, displayed in a wide-screen format. Nebraska Public Radio Network (NET Radio) is made up of nine stations in Lincoln, Alliance, Hastings, Bassett, Chadron, Lexington, Merriman, Norfolk and North Platte, with five translators serving the Columbus, Culbertson, Falls City, Max and Harrison areas. NET Radio broadcasts classical music, news, public affairs and talk shows. Local programming is blended with programs acquired from National Public Radio and Public Radio International. Funding for NET Radio comes from the state of Nebraska, the federal government, corporate and foundation grants and listener contributions.

University of Nebraska Athletics

Over 1 million people attended Husker athletic contests during the 2004-2005 year, according to the Athletic Department’s Annual Report. A study commissioned by the Athletics Department and conducted by the UNL Bureau of Business Research indicated that NU Athletics’ overall economic impact on the Lincoln area during 2004-05 was $114.3 million in output, including $41.2 million in worker income from 2,840 jobs and $595,000 in direct sales tax revenues. The study found the annual economic impact on the state of Nebraska was between $48 million and $155 million. While the UNL Athletic Department receives no student fees or tax dollars, it paid $1.7 million in taxes during 2004-05. Additionally, the University of Nebraska Athletic Department partners with several local and national organizations to provide powerful teams for charity. Partners include the American Red Cross, Teammates (a youth mentoring organization), Special Olympics, the Food Bank of Lincoln and Toys for Tots. Husker student athletes have a long tradition of volunteering in the community. Visits to schools to encourage children’s academic success, participation in local events like a fundraising blitz for a battered women’s shelter, sponsoring a team in a local paint-athon project, and the Read to Succeed Book drive that collected books for Title 1 Lincoln Public Elementary Schools are among student athletes’ charitable activities.
**Osher Lifelong Learning Institute**
The nationally connected Osher Lifelong Learning Institute within the College of Education and Human Sciences attracts older learners to campus. There are no tests and no assignments but each OLLI class contains a group of inquisitive learners with “wisdom leaders” to guide the question/answer discussions. Topics vary to meet the interests of a diverse group of member/learners. As one of the current 73 Osher Institutes established across the country, UNL is part of a pioneering spirit to create programs for older learners who want to acquire knowledge throughout their lifetimes.

**University of Nebraska Press**
As a publisher of exemplary scholarly and popular books for more than 60 years, the University of Nebraska Press is a distinctive member of the UNL community. Through the work of its staff and resulting publications, the Press fulfills the three primary missions of its host university: research, teaching and service. The Press actively encourages, develops, publishes and disseminates first-rate, creative literary work, memoirs and the results of national and international scholarly research in several fields. The Press facilitates teaching through its publications as well as developing projects particularly suited for undergraduate and graduate university classrooms. The Press serves the university community directly by publishing the work of many UNL faculty authors, maintaining long-term publishing associations with prominent university organizations, sponsoring campus-wide events, hosting publishing workshops and enhancing the international visibility of the university through its publicity efforts and reviews of its books. The Press’s sustained commitment to publications on the peoples, culture, and heritage of Nebraska reflect decades of service to its home state.

**University of Nebraska State Museum**
The State Museum is heavily involved in research regarding the natural history of Nebraska and in informal science education through its public exhibitions. In the fiscal year ending June 30, 2005, more than 86,000 people visited one of the museum’s three venues (see Figure 8.2).

Of this total, approximately 54,000 visitors were school-aged children. For example, the museum has an annual contract with Lincoln Public Schools under which all third- and fifth-grade students come to Morrill Hall (the exhibition hall) for special programs tied to the state’s science education standards. Programs include:

- **Dinosaurs** — Search among dinosaur fossils for clues to the ancient environments of the Great Plains region. Grades preschool-4
- **Fossils of Nebraska** — Take a trip through geologic time by investigating Nebraska’s rich fossil heritage. Grades 4-adult
- **Nebraska Ecology** — Discover how Nebraska’s community of plants, animals, and microorganisms depend on each other for survival. Grades K-3
- **People of the Buffalo** — Investigate the importance of the buffalo to Native Americans from the early 1800s to the present. Program I: Grades 4-6, Program II: Grades 7-9
- **Prairie Ecology** — Explore the diversity of prairie organisms and habitats in the Hall of Nebraska Wildlife. Grades 4-adult
- **Rocks and Minerals** — Discover how metamorphic, igneous and sedimentary rocks reveal clues about their environments. Grades 5-8
- **Water and Wetlands** — Explore wetlands and investigate their role in replenishing habitats. Grades 4-8

---

Figure 8.2 Attendance at the University of Nebraska State Museum (FY 2005)

<table>
<thead>
<tr>
<th>Venue</th>
<th>Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morrill Hall</td>
<td>59,060</td>
</tr>
<tr>
<td>Mueller Planetarium</td>
<td>18,581</td>
</tr>
<tr>
<td>Ashfall</td>
<td>8,541</td>
</tr>
<tr>
<td>Trailside</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>86,182</strong></td>
</tr>
</tbody>
</table>
Chapter Eight: Engagement and Service

---

**Student Testimonials from the Distance Education Program**

“I have thoroughly enjoyed my program at Nebraska-Lincoln. I enrolled at Lincoln for several reasons: A quality faculty that is highly credentialed, the professors take an interest in their students personally, and I can set my own hours and still have time for work and family.”

-Jeff Thelander, M.Ed. in Educational Administration, December 2004

“It gave me an opportunity to get my degree from a university with a recognizable name without relocating or traveling great distances to attend. The services of a distance program preserved the traveling time which would have otherwise taken more time away from family, community, and work in addition to the time consumed by studies themselves.”

-Chris Wasik, MBA, Summer 2004

---

- Explore Evolution — Gallery programs are under development for this new exhibit about evolution.

Planetarium programs include how stars are named; the North Star; Mars Rovers; images from the Cassini probe at Saturn; the most distant galaxies; images from the Hubble telescope; and a program about the sun for children in grades 1-4. In addition to these programs, the newly renovated Marx Discovery Center includes touchable geology exhibits and a digsite that recreates Ashfall Fossil Beds, in which children can uncover casts of the fossil rhinos found at Ashfall.

In May, 2006, Ashfall was designated a National Natural Landmark by the U.S. Department of Interior, the first such designation in more than 18 years. Ashfall Fossil Beds near Royal is the only location on earth where large numbers of fossil mammals have been found as whole, three-dimensionally preserved skeletons. A thick bed of volcanic ash contains hundreds of complete skeletons of extinct rhinos, camels, three-toed horses and many other vertebrates lying in their death poses in an ancient waterhole. The animals were killed and buried by ash from an enormous volcanic eruption nearly 12 million years ago. This site was dedicated a Nebraska State Historical Park in 1991. A subdivision of the University of Nebraska State Museum, Ashfall Fossil Beds State Historical Park is a cooperative project of the NU State Museum and the Nebraska Game and Parks Commission.

**University of Nebraska–Lincoln Libraries**

Residents of Nebraska 18 years of age and older may check out materials from the University Libraries. Tours of library buildings and presentations on the library collections are available for any interested individuals, including area high school students. The University Libraries shares library materials with citizens from all parts of Nebraska, in all legislative districts, via interlibrary loan service through Nebraska libraries. In fiscal year 2004-05, the Libraries circulated more than 21,000 items (books and journal articles) to Nebraskans (non-UNL), which includes students and faculty on other Nebraska campuses, alumni, former students, community users, gifted high school students and Friends of the UNL Libraries. In addition, the Libraries interlibrary loaned nearly 24,000 items (books and journal articles) to libraries outside of Nebraska. During that year also the Libraries circulated 2,497 items to distance education students.

**Center for Great Plains Studies**

The Center for Great Plains Studies is an interdisciplinary, intercollegiate, regional research and teaching program chartered in 1976 by the University of Nebraska Board of Regents and administered in the College of Arts and Sciences. A region with highly variable weather set against grassy, rolling land, the Great Plains stretches westward from the Missouri River at Omaha and Kansas City to the Rocky Mountains, and northward from the Texas Panhandle into the Canadian Prairie Provinces. The region invites inquiry into the relationships between the environment and the cultures brought to it by its various inhabitants, as well as the implications of these relationships for the future. The center’s purpose is to promote a greater understanding of the people, culture, history and environment of the Great Plains through a variety of research, teaching and outreach programs. The center encompasses eight divisions: the Great Plains Art Museum, three academic journals, undergraduate and graduate programs, editing projects,
research support, outreach programs, annual interdisciplinary symposia and Fellows and Associate Fellows.

**Distance Education Programming**

Distance education, now administered through the UNL Office of Extended Education and Outreach, has shown remarkable growth, both in course offerings and in enrollment.

Since 1995, enrollment in distance education programs has grown from less than 800 students to more than 5,300. Since 1998, course offerings also have increased, from less than 70 to more than 450 (see Figures 8.3 and 8.4). Among factors contributing to this growth are technology advances and improvements that made for more effective teaching and learning environments and acceptance of the technical modalities and nature of distance education courses on the part of students and faculty. Both faculty and students found they liked many aspects of distance education such as the ability to take courses at one’s own pace or during non-standard hours and the ability for faculty and students to interact through email. The need for more education continues to grow, yet many people are either place-bound due to job or family commitments, or are unable or unwilling to drive long distances to take courses. As our capability to offer distance education grew, we marketed them more, which increased enrollment. And as people learned of the courses, demand grew for other courses. Finally, evidence (formal and informal) grew that learning via distance education was as effective as traditional forms.

Please see the “Response to the Commission Statement on Distance Education” at [www.unl.edu/resources/SD-3](http://www.unl.edu/resources/SD-3) for more information on distance education at UNL, including a listing of programs offered.

[www.unl.edu/resources/SD-3](http://www.unl.edu/resources/SD-3)
UNL Advanced Scholars Program

In 2005, the university launched the Advanced Scholars program through which participating high schools can offer qualified seniors the opportunity to enroll in UNL courses for credit.

All UNL courses offered through the Advanced Scholars concurrent enrollment program are regular offerings in the colleges of UNL. They are the same courses normally taken by UNL students during their freshman year. A hallmark of the Advanced Scholars program is that teaching of the academic courses resides with the university faculty. The course syllabi, textbooks, kinds of assignments and grading practices are the same as those used by the faculty for their on-campus courses. Students who register and successfully complete Advanced Scholars courses earn UNL credit, verified by an official UNL transcript.

Course offerings will include high-demand courses meeting general education requirements. In developing courses for the program, UNL will give priority to science courses and other general education courses that are core to UNL programs.

Advanced Scholars courses are offered as online college courses and taught by UNL faculty. Therefore, they make greater demands on students’ abilities to conceptualize, understand implications and draw conclusions from their reading, research and online assignments than do most high school courses. The courses go into greater depth, often take more time and work, and challenge students to make greater accomplishments (see sidebar).
Nebraska Rural Poll
The Nebraska Rural Poll is an annual survey conducted by the Center for Applied Rural Innovation in partnership with the UNL Department of Agricultural Economics, NU Rural Initiative and the University of Nebraska Public Policy Center. Traditionally, rural Nebraskans have not had a strong voice in state policy decisions. The Nebraska Rural Poll gathers the aggregated voice of rural Nebraskans and relays its findings to state lawmakers, ensuring the rural voice is heard. The goal of the Nebraska Rural Poll is to give local and state leaders a better understanding of the issues, challenges and concerns of Nebraska’s rural citizens. The Rural Poll is an annual effort that focuses on such issues as community, government policy, well-being and work.

Core questions are included every year; over time these core questions will provide insight about trends and changes occurring in rural Nebraska. In addition, each year rural citizens and government officials form an advisory committee that identifies key issues or topics to include in the survey. Poll findings are distributed to members of the Nebraska Legislature, staff members of the state’s congressional delegation and other state and local leaders to facilitate their decision-making.

Bureau of Sociological Research
The Bureau of Sociological Research, a full-scale survey research facility affiliated with the Department of Sociology conducts the Nebraska Annual Social Indicators Survey, which has interviewed more than 1,800 Nebraskans each year since the early 1970s. In addition to providing data from this and other studies for student research, the bureau provides a setting in which interested students can gain hands-on experience in questionnaire construction, interviewing and data analysis techniques. It maintains an extensive library of sociology books and journals, which are available for student use.

Fulfillment of Core Component 5b: Befitting its status as a land-grant institution, the University of Nebraska–Lincoln is highly engaged in providing service to a wide variety of constituents. There are a number of organizations within UNL with the primary mission of engagement and service. In addition, each college produces activities that are important to the citizens of Nebraska and, in many instances, to a national or even international audience as well. These activities are closely tied to the work of the university in research and teaching.
Core Component 5c.
The organization demonstrates its responsiveness to those constituencies that depend on it for service.

Material submitted as evidence for the previously described Core Component 5b included service activities that are conducted on a continuing basis; some have been in existence for a number of decades. In discussing how we meet Core Component 5c, we describe outreach activities of UNL in response to special or immediate needs in the state. Arguably, much of the evidence presented in our discussion of Component 5b also satisfies this component. However, some work described in our discussion of 5b relates to constituencies external to Nebraska. Material in this section demonstrates UNL's response to more localized, and in some cases temporary, concerns.

Service to the Food Industry
Faculty in the Institute of Agriculture and Natural Resources, including UNL Extension faculty, have responded to particular needs of the food industry with services tailored to these needs. Some notable examples are described in sections below.

Beef Producers and Manufacturers
Scientists on the University of Nebraska–Lincoln's E. coli research team organized two Governor's Conferences on Ensuring Meat Safety in 1998 and 2003. In 1997 the largest meat recall in the nation's history involved 25 million pounds of E. coli-tainted ground beef processed in a Columbus, Neb., meat plant. The massive recall rocked the beef industry and put food safety in the government and consumer spotlight. The conferences brought together researchers, students, educators and beef and food industry representatives from across the nation. The first conference set the university's research agenda, which received start-up funding from the Nebraska Legislature, while the second provided a five-years-later glimpse into research progress. Several UNL scientists are working to reduce the incidence of deadly E. coli contaminations associated with beef. A new vaccine and a beneficial bacterial feed additive each significantly reduced E. coli O157:H7 in feedlot cattle, and using both may offer added protection, UNL research shows. Scientists wish to reduce the prevalence of this dangerous bacteria on farms and in feedlots, limiting the bacteria’s ability to enter the food chain prior to packing plants.

E. coli O157:H7 is the culprit in numerous foodborne illness outbreaks and ground beef recalls. Other scientists are studying E. coli and another contaminant, Listeria, at the molecular level to understand why some strains are more virulent than others.

UNL veterinary scientists also developed a calving system to reduce diarrheal diseases in calves on ranches in Nebraska's Sandhills. The system manages cow herds during calving season to prevent transmission of diarrhea-causing germs. The disease can affect up to 15 percent of all calves, killing many who develop it and causing huge economic losses for farmers. Prevention reduces calf mortality and also saves money that might have been spent treating sick calves.
Food Producers and Manufacturers
Established in 1983, the Food Processing Center is a multi-disciplinary resource that offers technical and business development services. This combination is rare in the food industry, and enables the center to meet the needs of its diverse clients including manufacturers, entrepreneurs, suppliers, distributors, associations, retailers and food service providers. When a project requires specialized expertise, the center calls in UNL Food Science and Technology faculty and other university faculty. The role of the Food Processing Center is to enhance value throughout the process, from idea through ongoing market support.

Assuring Biosecurity
Nebraska veterinary scientists helped federal animal health officials assess the effectiveness of foot-and-mouth disease testing tools. Nebraska scientists evaluated the effectiveness of commercial test kits used internationally to distinguish cattle vaccinated against foot-and-mouth from those infected with the disease. Such tests could be used after emergency vaccinations following an outbreak to see if cattle were exposed to the virus after vaccination. Foot-and-mouth is the world’s most economically devastating livestock disease and it’s estimated a U.S. outbreak would cost the economy billions. Federal officials will use Nebraska’s findings about test performance to improve biosecurity preparedness.

UNL Extension helped local officials in Cuming County, Nebraska’s leading beef-feedlot county and one of the nation’s top beef-producing areas, develop a biosecurity-preparedness plan. State-wide, Extension is working with the Nebraska Department of Agriculture to provide up to 60 daylong emergency response training sessions to help counties develop biosecurity response plans using the Cuming County plan as a model.

Biosecurity officials fear that a naturally occurring bacterium, Francisella tularensis, could be turned into a bioterrorist weapon. A rare, potentially deadly inhaled form of the bacterium, called Type A, worries Homeland Security officials because it kills up to 60 percent of people who become infected. UNL scientists and colleagues at the University of Nebraska Medical Center are working to better understand this organism and to learn why some subspecies cause disease while others don’t. Such differences could lead to development of new control strategies such as vaccines or antibiotics to prevent or treat tularemia.

UNL is a partner member of the University of Nebraska Center for Biosecurity, which was created in 2002 to effectively serve the state of Nebraska and the nation by addressing both human and agricultural (plant and animal) biosecurity concerns. The center, administered by the University of Nebraska Medical Center, draws on the expertise of faculty members from all four campuses in a unique educational collaboration of expert scientists and clinicians who participate in clinical
continued development of clinical, service, educational and research infrastructure; • Research regarding surveillance, protection and treatment of potential bioterrorism agents in both human and agricultural systems; • Enhancement of laboratory automation, information security, statewide information technology-based communication systems; • Use of Extension personnel across the state to support the rapid collection and analysis of data critical to early detection of possible bioterrorism events; and • Development of bioterrorism related educational programs for students, health professionals, first responders and the public.

IANR has a strong affiliation with the USDA Agricultural Research Service on research related to efficient agricultural production and a cooperative agreement with the U.S. Meat Animal Research Center at Clay Center. The Institute also has strong affiliations with several Department of Agriculture national laboratories and training centers, including the National Animal Disease Laboratories and others. See [www.unl.edu/resources/8-6] for more information.

Psychology faculty member Mario Scalora has worked with local, state and federal law enforcement agencies to develop threat assessment tools. His work looks at patterns of behaviors that may escalate from mere threat to actual terrorism. Scalora has worked with the Washington, D.C., police and the British Home Office, and the University Police, the Lincoln Police Department and the Nebraska State Patrol.

Additional units contributing to food safety and biosecurity are listed below:

- **Biological Processing Development Facility.** Uses recombinant proteins for production of vaccines for both Phase I/II clinical trials and biodefense.
- **Center for Advanced Land Management Technologies.** Offers remote sensing and Geographic Information Systems (GIS) for advanced detection and tracking of bioterroristic threats.
- **Nanoscience Program.** Aims to develop sophisticated and efficient, nano-sized devices that may detect bioterrorism agents in ultra-low concentrations, with very high speed DNA detection.
- **Institute of Agriculture and Natural Resources and Extension Division.** Developing a Livestock Emergency Disease Response System with Homeland Security grants.
- **Water Microbiology Laboratory.** Developing rapid methods for detection of pathogens to safeguard municipal water supplies against bioterrorism.

**Health and Wellness Service to Communities**

Methamphetamine use is having a devastating impact on small-town America, and it is spreading into cities and metropolitan areas. UNL Extension faculty deliver educational programs in
Nebraska communities to help citizens understand the impact that methamphetamine can have on their communities and how to recognize and respond to meth labs and meth dealers. The meth program was presented to more than 70 professional, civic, social, church, school, government and community groups reaching almost 3,000 people in 2005.

In 2004, UNL Extension was one of five state universities nationwide to launch a pilot program to educate and enroll eligible Nebraskans in the Medicare-sponsored Prescription Drug Discount Card Program. The pilot program was funded by USDA’s Cooperative State Research Extension and Education Service. The pilot project was initiated in Nebraska and other rural states with high numbers of elderly and low enrollment numbers. Extension worked with the Senior Health Insurance Information Program to promote involvement of Medicare beneficiaries in the transitional drug card program that launched in 2003. Evaluations completed by 26 of the more than 40 Extension faculty who participated in this quick-response effort as well as information collected about the program show it helped hundreds of Nebraskans understand and enroll in the drug card program from November 2004 to September 2005.

UNL Extension’s Health and Wellness Education team developed an integrated and interactive curriculum titled “ABCs for Good Health.” The project includes the “Every Woman Matters” outreach program funded by the Centers for Disease Control that targets women ages 40-64 who are uninsured or underinsured and have low to medium incomes. This program provides a pelvic exam, clinical breast exam, self-breast exam instructions, blood pressure screening, cholesterol and blood sugar check and mammograms to qualified participants. The program also has a lifestyle intervention component that has allowed Extension educators and assistants to deliver the “ABCs for Good Health” curriculum as a major part of the intervention.

Nebraska judges requested that UNL Extension develop an educational program to train more than 2,000 guardians/conservators who are appointed annually in Nebraska. The program was piloted with 115 guardians and is being expanded across the state, with a volunteer attorney attending each session to answer legal questions. As a result of this program, guardians better understand their role, including legal and financial responsibilities.

Research by food toxicologists in the internationally recognized Food Allergy Research and Resource Program has produced fast, simple, accurate tests that food processors can use to check for traces of allergenic foods on food or equipment. The tests for peanuts, eggs, almonds and milk are commercially available; others are in the works. The team also educates food manufacturers
on broad food allergy issues, including labeling laws, recalls, allergen controls and using test kits. As many as 7 million Americans have food allergies, which can cause reactions ranging from mild discomfort to death. The Nebraska-developed tests and training are helping the food industry protect allergic consumers and reduce product recalls. The 30-minute tests replace procedures that took days to complete in a laboratory. Companies that use the tests can be confident that their products contain only the ingredients listed on the label. Training sessions also pay off. Thanks to what they learned at one session, 100 industry representatives changed a manufacturing practice and estimated avoiding potential recall costs averaging $500,000 each. UNL food scientists also learned that refined soybean oil does not trigger reactions in soy-allergic individuals. This means soy-allergic people have more food choices and manufacturers can ensure product safety.

**Services from the College of Engineering**

Faculty members in the College of Engineering conduct research in a number of areas regarding road safety. Projects include development of a conductive concrete that could make icy bridges less dangerous; an ultra-high-performance concrete comparable in strength to steel that could be used in bridges, buildings and security facilities; the NU I-Girder, a system that allows bridges to have longer spans and shallower structural depth; the inverted Tee bridge system for short-span bridges; and NUDECK, a UNL-patented system for building bridge decks that makes bridge construction faster and increases the bridge’s lifespan. The latest development is NUtie, a fiber-reinforced plastic that creates stronger and more energy-efficient walls.

Civil engineers are working with the Nebraska Department of Roads to develop a microsimulation model for Nebraska’s state highway system. The model is calibrated to current traffic and road conditions to assess traffic flow characteristics, driver behavior and traffic control operations.

In summer 2006, UNL engineers began a five-year initiative to modernize bridges in the Republic of Korea, which is expected to invest $100 million to update its transportation infrastructure. A consortium of industry, government and universities will develop a plan and conduct research for the Korean project. The National Bridge Research Organization, a division of UNL’s Department of Civil Engineering, will be the liaison between U.S. and Korean researchers.

**Services from the College of Education and Human Sciences**

The College of Education and Human Sciences works closely with Nebraska’s State Department of Education on a number of projects to improve education in the state. One collaboration began in the late 1990s with involvement by the Buros Center for Testing and a new state director of assessment. Student-Centered, Teacher-Led, Assessment and Reporting System (STARS), was the title given to a statewide standards and assessment project. Buros Institute faculty created a comprehensive approach to assessing the learning of K-12 students that placed classroom teachers at the center of the assessment processes by implementing a system of classroom-based assessment that allows teachers to make decisions about the best ways to promote student learning. The
The College of Education and Human Sciences has provided personnel for the annual evaluation of STARS. In a contract with the Department of Education, college faculty have conducted qualitative and quantitative evaluations for the State Board of Education.

In 2005, the college and Department of Education co-hosted a national conference on classroom-based assessment. Nearly 700 educators attended the event that included assessment leaders from around the country. The Nebraska Model was featured as teachers, administrators and Educational Service Unit representatives described accomplishments of Nebraska students in the STARS system. Annual conferences will study and showcase standards.

Teacher education projects designed to prepare ethnic minority teachers were started by the college to make it possible for minority community members to earn teacher certification without leaving their communities; the hope is that they will become teachers in their communities or region where there are many minority students but almost no minority teachers. Two projects, both supported by federal grants, are ongoing. The Native American Career Ladder project in Macy, Neb., has graduated approximately 20 students, most of whom are now serving in educational positions working with Native American students. The Northeast Nebraska Para-educator Career Ladder Project has a number of Latino students. They are now in their junior year of classes and scheduled to graduate and become teachers in December, 2007.

**Services of the University of Nebraska Public Policy Center**

The NU Public Policy Center strives to enrich public policy efforts by facilitating, developing and making objective research available to Nebraskans. While the center is a university-wide unit, it resides institutionally within the UNL Office of the Senior Vice Chancellor for Academic Affairs. Center faculty and staff undertake the investigation of public policy issues and topics of importance to Nebraskans by coordinating policy research, linking policymakers with experts throughout the university system, raising the visibility of public policy-related research activities, and facilitating access to public policy research and expertise.

The primary focus is analytic studies that address new or ongoing public policy issues of importance to Nebraskans. Topics are suggested by policymakers and administrators from the executive, judicial and legislative branches of government, as well as by faculty, staff and students from the university system. The center also acts as a central referral source and clearinghouse to link university resources to policymakers and other Nebraska officials to short-term requests (i.e., 3 to 4 day turn-around). Among the entities with which the center works closely are the Nebraska Legislative Research Office, the Executive Board of the Legislature, the Governor’s Policy Research and Energy Office and the State Court Administrator’s Office.

The Public Policy Center was established in 1998 by the Board of Regents of the University of Nebraska to serve the entire University of Nebraska system. For a list of programs the center has worked on, please go to [www.unl.edu/resources/8-7].

**Services of the University of Nebraska–Lincoln Libraries**

The University Libraries annually hosts a meeting of the Public Resource Library Group to discuss library and technology-related topics of shared interest.
Chapter Eight: Engagement and Service

The University Libraries partnered with the University of Nebraska Rural Initiative in 2005 to provide a multi-search tool that enables Nebraskans to perform simultaneous searches across information resources. These resources include publicly available full-text databases, web sites, search engines and library catalogs. The search results are integrated into a summary that identifies the resource and number of hits (matches). From the summary, one can easily identify which resource has the most hits and is worth further investigation. The summary results include a link to click to go to the full record.

**Natural Disaster Response**

Immediately after the nearby Lancaster County town of Hallam (pop. 280) was leveled by a tornado in May 2004, UNL employees mobilized to help clean up the town and surrounding areas. More than 400 UNL employees worked for any or all of May 26-28, 2004, on clean-up or construction crews in Hallam and in the nearby town of Princeton to coordinate volunteers or serve food. Many volunteers picked up tree limbs, debris, personal items and other items deposited by the storm that blew a wide path across southeast Nebraska. Others on campus donated items to the Red Cross for the town's residents or made drinks or snacks for those heading to work in the Hallam area. Crews from several UNL departments who were well-equipped or especially trained, including Landscape Services and Utility Services, arrived in Hallam shortly after the storm to clear streets, driveways and sidewalks so other trucks and clean-up crews could get into the town. The service project was spearheaded by the Office of Business and Finance with assistance from the entire campus community; employees were released from their regular work to do the volunteer clean-up.

In addition, the University of Nebraska's Public Policy Center and the Nebraska Health and Human Services System received a grant from the Federal Emergency Management Agency and the Nebraska Emergency Management Agency's disaster aid program to assist victims of the these tornados and other spring storms in Nebraska. The grant provided $73,000 for the CARING Communities Program, which offers counseling, outreach and education.

When Nebraska's then worst-ever range fire destroyed thousands of acres of Nebraska Sandhills grassland in 1999, UNL faculty and staff helped local ranchers fight the fire and set up an emergency command post at a local UNL Extension office. Staff from UNL's Gudmundsen Sandhills Laboratory in the region used the lab's grassfire pumper truck, refilling it nearly a dozen times in the effort. In the fire's aftermath, Extension worked with a ranchers' fire relief committee that delivered 1,500 tons of hay, nearly 14,000 fence posts and 450 rolls of wire to help fire victims. Extension offered education for ranchers on beef herd health and nutrition, forage/ range management, reproduction management and other best management practices to help them recover from the fire and protect the fragile hills as grass grew back.

The Nebraska State 4-H Camp near Halsey had the unique opportunity to help out during a wildfire that struck the Nebraska National Forest at Halsey, on Jan. 15, 2006. About 200 volunteers from 19 area fire departments responded as well as federal and state crews from Nebraska and South Dakota. The fire was pushed by 42 mph winds and burned about 9,600 acres of forest ground that included over 8,300 acres of grassland and 1,300 acres of timbered areas. The Forest
Service asked to use 4-H camp facilities as a staging area and command center. The camp staff assisted by providing meals and sleeping quarters for the fire crew.

**Student Outreach Efforts**

Three different groups of UNL students have gone to the Gulf Coast since January 2006 to help with the cleanup from the 2005 hurricane damage. The first effort involved 93 students and faculty who spent Jan. 2-6, 2006, in Waveland, Miss. A second group spent Spring Break on the Gulf Coast and a third group left at the end of second semester. In 2006, UNL participated for the first time in The Big Event, a national day of service. More than 1,000 students put in a total of 5,000 person-hours on projects throughout Lincoln. This is in addition to the charitable hours donated by students who support and staff activities that raise money for a myriad of local agencies, including: the Make a Wish Foundation, the Children's Miracle Network, the Community Blood Bank, the Lincoln Food Bank, the Friendship Home (battered women's shelter), Lincoln Literacy Council and Cedars Home for Children. Students in UNL's J.D. Edwards Honors Program in Computer Science and Management have done pro bono web development work for local agencies as well. Responses to the 2004 National Survey of Student Engagement revealed that 60 percent of UNL students are active in community service or volunteer work.

**NU Directions**

NU Directions is a UNL-community coalition created in 1998 through a five-year grant from the Robert Wood Johnson Foundation to address issues regarding student alcohol use and abuse. Although administered by professional staff, student involvement is a critical component. The Responsible Beverage Service Training is an online program designed for all sellers and servers of alcohol in an effort to reduce alcohol-related problems occurring at the point of sale. To help the sellers and servers of alcoholic beverages become more active in the reduction of alcohol related problems, this program includes interactive activities, videos, self-checks, and quizzes, along with management policies and procedures, and state laws. NU Directions partnered with the Nebraska State Liquor Control Commission, Nebraska Office of Highway Safety and UNL’s Office of Extended Education and Outreach to develop this web-based seller/server education training program. The program is currently offered to all licensed establishments in Nebraska and has been adopted in Missouri and Georgia.

**Fulfillment of Core Component 5c:** UNL faculty and programs respond vigorously to important needs that arise in the state, bringing the research and teaching capabilities of the university to bear to solve important problems and to prepare people throughout the state to be more successful in their work and personal endeavors. UNL has been noted particularly for its research and engagement contributions to the food industry, especially related to health and security issues.
Core Component 5d.

Internal and external constituencies value the services the organization provides.

As shown below, UNL’s constituents find our services valuable and useful.

**NET Surveys**

NET (Nebraska Educational Telecommunications) conducts extensive market surveys that indicate Nebraskans find NET services valuable. NET audience surveys document that more than 950,000 people tune in to NET Television (Nebraska’s Public Broadcasting Service affiliate) each week and more than 88,000 people listen to NET Radio (Nebraska’s National Public Radio affiliate) each week. During the 2004-05 school year, NET’s Nebraska Studies Web site [www.unl.edu/resources/8-8](http://www.unl.edu/resources/8-8), an online history of Nebraska, was visited more than 700,000 times. In the last three years, more than 70 community service organizations have partnered with NET to answer Nebraskan’s questions about health, investing, education and social issues through the Nebraska Connects series. “Market Journal,” a television show for agriculture business decisions, has wide support among Nebraska farmers and ranchers, according to a survey taken at Husker Harvest Days in 2005. Nearly 80 percent of that group say they watched “Market Journal.”

**Surveys and Listening Sessions Conducted by the Institute of Agriculture and Natural Resources**

Earlier in this report, IANR’s “Listening Sessions” activities were described. The results of those sessions show that participants find value in IANR programs. When asked what participants value in IANR, responses included easy access, the ability to adapt, availability, credibility, varied delivery system, expertise, help, local offices and relevancy. Clients value the “link” provided to the university system through local Extension offices and there is considerable evidence that Extension, in general, is valued. Respondents indicated that they value having access to local people in the Extension offices and Research and Extension Centers. An Extension survey conducted in Douglas and Sarpy Counties (Omaha area), reveals that people who had participated in County Extension programs were either “very” [71 percent] or “somewhat satisfied” [29 percent] with the program in which they participated. Some 50.2 percent indicated that the programs and services that County Extension offers to Douglas and Sarpy county residents are “very valuable” and 40.4 percent rated them as “somewhat valuable.”

**4-H Program**

UNL Extension’s 4-H program reaches about 118,000 youth and 16,000 adult and youth volunteers annually. Nebraska leads the nation in reaching the highest percentage (20 percent) of age-eligible youth through 4-H.
Alumni Support

The percentage of alumni who donate to the university is greater for UNL than for the other universities in our peer group, as is shown in Figure 8.5.

Overall giving to the university has grown (see chapter 2) as has the university’s endowment. The market value of the University of Nebraska Foundation’s assets at the end of the 2005 fiscal year stood at a record $1.225 billion, representing a 7.2 percent increase from the previous year. [www.unl.edu/resources/8-9].

State support for the institution, which exceeds that of many states, has previously been discussed in Criterion 2 Chapter 5.

Figure 8.5 Rate of UNL Alumni Giving Compared to Peers (2000-2006)

<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Univ. of Nebraska–Lincoln</td>
<td>17%</td>
<td>19%</td>
<td>23%</td>
<td>26%</td>
<td>25%</td>
<td>23%</td>
<td>22%</td>
</tr>
<tr>
<td>University of Kansas</td>
<td>16%</td>
<td>15%</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
<td>17%</td>
<td>21%</td>
</tr>
<tr>
<td>Purdue Univ. - West Lafayette (IN)</td>
<td>16%</td>
<td>17%</td>
<td>17%</td>
<td>17%</td>
<td>17%</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>Iowa State University</td>
<td>17%</td>
<td>17%</td>
<td>17%</td>
<td>17%</td>
<td>16%</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>University of Iowa</td>
<td>12%</td>
<td>13%</td>
<td>13%</td>
<td>14%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Ohio State University - Columbus</td>
<td>14%</td>
<td>17%</td>
<td>17%</td>
<td>18%</td>
<td>17%</td>
<td>16%</td>
<td>15%</td>
</tr>
<tr>
<td>Univ. of Minnesota - Twin Cities</td>
<td>8%</td>
<td>9%</td>
<td>9%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Colorado State University</td>
<td>11%</td>
<td>10%</td>
<td>9%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>University of Colorado - Boulder</td>
<td>12%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>12%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Univ. of Illinois-Urbana- Champaign</td>
<td>23%</td>
<td>14%</td>
<td>14%</td>
<td>13%</td>
<td>12%</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Univ. of Missouri - Columbia</td>
<td>16%</td>
<td>13%</td>
<td>12%</td>
<td>11%</td>
<td>10%</td>
<td>8%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Fulfillment of Core Component 5d: Throughout this self-study, evidence of the value constituents place on the University of Nebraska–Lincoln has been provided. The high participation of Nebraskans in the teaching and service programs of the university indicates that these programs meet their needs. The financial support for the university, both through state tax and private sources, is another indicator. Dedicated participation of constituents in the multitude of advisory groups sponsored by the university is further evidence of the value they place on the university. Survey data and testimonials collected by specific programs of the university attest as well to the quality of the work of the university as perceived by our constituents.
Summative Evaluation of our Performance on Criterion 5

UNL has a long history of active outreach and engagement and of taking its land-grant mission seriously. UNL is the major higher education provider of outreach in the state and is also actively involved in providing outreach beyond the state’s borders. Some of the UNL programs, such as the Buros Institute, the University of Nebraska Press and many programs in agriculture, play highly significant roles nationally. The outreach work of UNL is closely tied to its research and teaching missions, both drawing from them and feeding into them. While UNL Extension and the Extended Education and Outreach Office play especially important roles in engagement for UNL, all colleges as well as the University Libraries, the State Museum, the Sheldon Art Gallery, the Lied Center for Performing Arts and many other organizations within UNL also are rich in outreach activities. A strength of UNL is its engagement with its constituents on topics and issues of importance to economic development, health and safety, and personal development.

In carrying out this self-study, a number of issues important to the future of engagement at UNL were identified for attention. They include the need to:

- Develop more comprehensive assessment measures of our outreach activities;
- Continue to give UNL Extension needed support as it develops more extension partnerships with UNL colleges and departments outside of the Institute for Agriculture and Natural Resources;
- Design better ways to be alert to new topics and constituent needs that require our response in these times of rapid change;
- Protect the outreach culture at UNL during a period where emphasis on research and teaching is increasing; and
- Make innovative uses of technology to deliver outreach services and increase partnerships.

The academic strategic planning process will play an important role in addressing these issues and will develop mechanisms to determine what engagement activities should be given priority for university support.