

Social and Behavioral Sciences Research Initiative (SBSRI):

Enhancing Excellence and Building for the Future

Task Force Report

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Social and Behavioral Sciences Research Initiative

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Executive Summary

Many contemporary societal challenges have human dimensions that currently receive too little attention from researchers. Ranging from the water supply needed to produce food, sustainable energy sources and safe and convenient transportation systems, to effective health care delivery systems, each problem and its potential solutions have significant impacts on the individuals and societies involved. At this point, much of the research conducted at UNL to address these important topics cannot fully incorporate the essential human dimensions required to make the research transformative. UNL has pockets of high quality social and behavioral science research but lacks a coordinated effort to connect and strengthen those isolated research entities. A major initiative that combines our leading-edge research in the social and behavioral sciences with our world-class research in the natural, biological, agricultural and engineering sciences will catapult UNL to the forefront among top research universities.

The inauguration of a Social and Behavioral Sciences Research Initiative (SBSRI) at UNL will further enhance the university's ability to address the human dimensions of each of the aforementioned problems. In so doing, UNL will be well poised as one of the nation's leading research universities to solve societal problems and do translational research. To this end, the following mission statement has been developed in order to achieve our goals:

The mission of the Social and Behavioral Sciences Research Initiative (SBSRI) will be to promote excellence in the social and behavioral sciences to solve societal problems and disseminate the findings to scientists, the public and policy makers. SBSRI will coordinate, support and conduct research, and train future generations of social and behavioral scientists in a collaborative environment of multidisciplinary expertise and resources.

This mission will be accomplished through the establishment of a permanent and funded SBSRI entity that identifies emerging research opportunities in the social and behavioral sciences, facilitates cross-disciplinary teams of researchers to pursue research funding, and disseminates the results of that research in the academic community and more broadly in society. The required structure, specific actions and expected outcomes of this potentially transformative endeavor are as follows:

SBSRI Structure Recommendations

- Administrative and support services to facilitate research productivity and pursuit of external funds.
- Shared lab space and equipment with the goal of filling gaps, increasing efficiencies and pursuing new directions and opportunities.
- "Core" units and initiatives to develop, support, coordinate and conduct social and behavioral science research, including a Research Data Center Core, a Survey and Data Collection Core, a Design and Statistics Core, the Minority Health Disparities Initiative (MHDI) and other future cores as necessary to meet the needs of researchers.
- Partnerships with university research centers and strategic initiatives to facilitate coordination and research productivity. These centers include those that already are closely aligned with social and behavioral scientists (e.g., Center for Brain, Biology and

- Behavior; Center for Research on Youth, Families and Schools; Public Policy Center) and those that present tremendous opportunity for increased social and behavioral science involvement (e.g., National Strategic Research Institute, Nebraska Center for Energy Sciences Research, Nebraska Transportation Center, Water for Food Institute).
- Coordinated internal funding support, including contributions from ORED, colleges, and other internal units, as well as the pursuit of external funding.

Additional Recommendations

- Several activities will be implemented to build teams and develop research themes, including:
 - A social and behavioral science seminar series to bring researchers together and stimulate intellectual interaction and ideas.
 - A series of interdisciplinary retreats focused on thematic areas to serve as
 catalysts for coordinated large-scale funded research efforts. The series will begin
 with three retreats focused on emerging opportunities in research methods: 1) Big
 Data and Information Mining, 2) Distance and Mobile Technologies, and 3)
 Network Analysis. Another retreat will bring together researchers focused on
 human dimensions affecting life on the Great Plains and beyond.
 - Identification and pursuit of potential funding opportunities and sources that will
 enhance development of successful interdisciplinary teams, as, for example, the
 current NSF Sustainability Research Network project that is bringing together
 biological sciences, engineering and social sciences.
- Colleges, departments, and the Office of Academic Affairs will be encouraged to review and provide appropriately differentiated teaching loads in the social and behavioral sciences supportive of research-active faculty members and their research agendas.
- Internally funded social and behavioral science strategic research initiatives and seed grants will be continued and expanded, in coordination with ORED.
- The SBSRI steering committee will make faculty line requests directly to relevant hiring officials based on identified critical gaps and shortages in faculty expertise. Additionally, existing faculty research expertise will be identified and mobilized in funded research projects.
- Additional staff support should be hired and services added to assist social and behavioral science faculty with grant preparation and submission, and to provide specialized computer and technical support assistance for specific research designs.
- A number of actions will be utilized to enhance faculty and student development and mentoring, including:
 - Offering workshops focused on the latest data analytic techniques, data collection strategies and other ground-breaking areas that would be available to faculty and students.
 - Developing a mentoring system for early career social and behavioral science faculty by establishing committees within departments and SBSRI cores that assist early career faculty with grant writing, including pre-review of their proposals prior to submission.
 - Hosting a series of social and behavioral sciences grant writing workshops throughout the year, as well as focused summer-long grant writing training.

- Developing a comprehensive list of graduate courses in research methods and a certificate program in research methods.
- Creating competitive research awards for graduate students working on projects related to SBSRI interdisciplinary initiatives.
- Organizing trips and webinars to connect faculty with program officers at major funding agencies.

Expected Outcomes

The formation of SBSRI and implementation of the actions described above will be transformational for the university. Strengthening and expanding research endeavors in the social and behavioral sciences will have tremendous impact throughout UNL, given the ubiquitous nature of social and behavioral concerns across many research and policy domains. Increasing our understanding of human factors is critical for the translational research needed to solve the complex social, environmental, political, economic and health challenges confronting the U.S. and nations across the globe.

Given the strength of existing resources and developing initiatives and centers, we expect that implementing these recommendations will have a substantial and immediate impact. Our visibility and national research profile will be advanced by increasing the number and impact of scholarly publications, faculty awards and recognitions. Moreover, if these recommendations are fully implemented, the expected outcome is a 50% increase in social and behavioral science research expenditures over the first five years.

Social and Behavioral Sciences Research Initiative (SBSRI): Enhancing Excellence and Building for the Future

Introduction

Purpose and Initial Charge

The Social and Behavioral Sciences Research Initiative (SBSRI) began in June 2012 when Vice Chancellor for Research and Economic Development (VCRED) Prem S. Paul assembled a group of faculty from social and behavioral science departments across campus to discuss possibilities for enhancing social science research at UNL. VCRED Paul's charge at that initial meeting included several interrelated goals:

- a) enhance research excellence in the social sciences at UNL,
- b) enhance competitiveness of UNL faculty in the social sciences for extramural funding,
- c) identify gaps in faculty expertise that must be addressed to build successful teams of social science researchers, and
- d) identify infrastructure or other needs to assist social sciences faculty to be more productive and competitive for extramural funding.

The SBSRI processes and activities since that time have followed that charge. This endeavor started as the Social Science Research Initiative (SSRI). Early in the process, the task force broadened the focus to include behavioral sciences, as that would be more inclusive and is consistent with labels and practices in federal funding agencies, such as the National Institutes of Health (NIH) and the National Science Foundation (NSF), which often pair social and behavioral sciences.

Anticipating the Strategic Vision

UNL has broad strengths across the behavioral and social sciences; but these are less well coordinated than in some of our competitor institutions. Moreover, there is widespread recognition that many contemporary societal challenges involving a number of the university's signature and developing research areas – such as food, water, energy and transportation – require an understanding not only of technical issues but also of the human dimension. Thus, there is room for more integration of social with natural science thinking in these areas at UNL to advance our impact in translational research. The aim will be to develop a coordinating initiative to address these intellectual challenges and increase research productivity and funding – specifically, to increase funding from current levels by 50% over the next five years. To accomplish these aims, SBSRI will pursue three strategic objectives:

- 1. Increase the number and proportion of social and behavioral science investigators submitting proposals and receiving external funding.
- 2. Increase the rate and range of external funding success across varied federal, state and private sources.
- 3. Increase the number of social and behavioral science investigators actively engaged in cross-disciplinary teams aligned with established university research priorities as well as potential growth areas.

This report details a variety of key issues within and outside the university that are important for increasing our research productivity in the social and behavioral sciences and concludes with specific recommendations for achieving these strategic objectives.

Overview of Processes and Activities

The faculty present at the initial June 2012 meeting became the first members of the SBSRI Task Force, which grew to ten members, representing multiple departments, programs and colleges. The task force, with significant support from ORED and the Survey, Statistics and Psychometrics (SSP) Core Facility, coordinated and participated in the SBSRI efforts briefly summarized below. Information collected from these activities was used to form the conclusions and recommendations of this report.

Faculty Forum

A faculty forum entitled "Social Science Research Initiative—Big Ten Schools" was held in June 2012 and included UNL faculty, chairs and associate deans. The presentation focused on

- a) the long-term goals of the SSRI, such as enhancing research excellence in the social sciences:
- b) the expected outputs (e.g., vision and roadmap for a "big idea" for the SSRI); and
- c) gaps and priority needs in faculty expertise, infrastructure, resources and so forth.

The presentation also included a focus on SSRIs at other Big Ten schools, including examples from the University of Michigan and Pennsylvania State University. Potential next steps that were discussed included the faculty survey, faculty open forums, creation of an email listserv for communication, and development of a SSRI web site. The forum ended with a discussion of ideas, thoughts, important themes and ways to move forward.

Research Fair

SBSRI hosted events at the UNL Research Fair in November 2012 (see Appendix A for a copy of the schedule). Faculty leaders from three major social science research initiatives at Big Ten institutions were brought to campus to share information about their centers and lessons learned in developing and facilitating research. The distinguished guests included L. Rowell Huesmann, Director, Research Center for Group Dynamics, Institute for Social Research (ISR), University of Michigan; Kurt Johnson, Director, Survey Research Center of the Social Science Research Institute (SSRI), Pennsylvania State University; and Kevin Leicht, Director, Iowa Social Science Research Center (ISRC), University of Iowa. These endeavors at peer institutions varied considerably in length of operation (i.e., approximately 5 years for Iowa's ISRC, 12 years for Penn State's SSRI, and 65 years for Michigan's ISR), as well as in structure/organization, activities, funding and focus. Following the presentations about their social science research initiatives, the guests participated in a panel discussion, with questions from UNL faculty. The external guests also met with task force members and representatives of UNL administrative leadership, including VCRED Prem Paul, and Senior Vice Chancellor for Academic Affairs Ellen Weissinger.

SBSRI activities at the Research Fair concluded with breakout sessions led by members of the task force with approximately 30 UNL faculty members. Topics of discussion included

- a) infrastructure, faculty resources and support services needed to enhance research excellence and competitiveness for extramural funding;
- b) current infrastructure, resources and services at UNL that should be enhanced, as well as existing issues that are barriers to success;
- c) thematic areas of social and behavioral sciences in which UNL has expertise and critical mass in research, practice, policy or training that aligns with extramural funding or entrepreneurial opportunities;
- d) thematic areas in which to hire new faculty to enhance critical mass and competitiveness; and
- e) activities that would enhance team building around thematic areas.

Faculty Survey

An SBSRI needs assessment survey of UNL social and behavioral science faculty was conducted in fall 2012 by the Bureau of Sociological Research (BOSR). The survey items addressed research interests, research barriers and faculty resources and support services. The sample included all UNL tenured and tenure-track faculty in the social and behavioral sciences identified by UNL's Office of Institutional Research and Planning. Of the 171 faculty surveyed, 122 participated, for an overall response rate of 71.3%. A copy of the survey and a summary of the results are included in Appendix B.

Meetings with Chairs and Directors

During September 2012, co-leaders of SBSRI met with chairs and directors of 12 units whose faculty conduct social and behavioral science research. Units included Agricultural Leadership, Education, and Communication; Agricultural Economics; Communication Studies; Economics; Educational Psychology; Management; Marketing; Political Science; Psychology; School of Natural Resources; Sociology; and Survey Research and Methodology (see Appendix C for a list of meeting participants). These discussions focused on an overview of SBSRI, department priorities and future directions, research infrastructure and support needs, and faculty members who may make major research contributions to SBSRI.

Meetings with Deans

During February and March 2013, co-leaders of SBSRI met with deans and associate deans of the Colleges of Arts and Science, Business Administration, Education and Human Sciences, and Law, as well as the IANR Agricultural Research Division (see Appendix C for a list of meeting participants). Topics of discussion included an overview of SBSRI, relevant research strengths and priorities within their units, and relevant infrastructure and support needs.

Events to Discuss Potential Priorities and Themes

The SBSRI Task Force hosted and/or participated in a number of events to share information about SBSRI, collect information for planning and making recommendations to strengthen social and behavioral sciences research, and facilitate communication and coordination on specific research themes and potential priorities.

The SBSRI Task Force hosted a meeting in May 2013 to discuss social science research methods (see Appendix D for an overview). Invitees included individuals with expertise and positions of leadership in social science research methods at UNL. The 21attendees represented a variety of departments and other units, including the Bureau of Business Research; Bureau of Sociological Research; Buros Center for Testing; Center for Brain, Biology and Behavior; Children, Youth and Family Studies; Economics; Educational Psychology; Gallup Research Center; Holland Computing Center; Nebraska Center for Research on Children, Youth, Families, and Schools; Office of Qualitative and Mixed Methods Research; Office of Research and Economic Development; Political Science; Psychology; Public Policy Center; Sociology; and Survey Research and Methodology. The meeting included a brief introduction to SBSRI, an overview of the faculty needs assessment survey results, and a review of a draft inventory of UNL social science methods resources (see Appendix E for the final version). Most of the event was devoted to small group discussions led by members of the task force. Questions for discussion included:

- a) What gaps or shortages in research methods expertise do we have at UNL?
- b) How might we better coordinate and communicate among our research methods units/experts to facilitate research and training? and
- c) How can we further elevate social science research methods as an area of strength for the university?

In May 2013, about 150 faculty, graduate students, and research staff attended a luncheon meeting to learn about plans for establishing the UNL Nebraska Census Research Data Center (NCRDC). The NCRDC will be the first census research data center in the Great Plains region, and will offer significant research opportunities for researchers in the social, behavioral, health and life sciences across the region by providing a secure environment that allows access to restricted-use data collected by the U.S. Census Bureau and other federal sources. The NCRDC also will facilitate access to data collections of regional importance. The meeting included presentations by staff of the Center for Economic Studies of the U.S. Census Bureau: Shawn Klimek, Assistant Center Chief for Research, and Barbara Downs, Lead Research Data Center Administrator. (Additional details about the RDC are provided later in the report.) The discussion of the development of the NCRDC continued as part of the UNL Minority Health Disparities Initiative (MHDI) retreat the following day.

The SBSRI Task Force hosted another meeting in May 2013 to discuss opportunities for social and behavioral science research focused on the theme of good decisions for the Great Plains (see Appendix F for an overview). The 30 attendees represented a variety of departments and other units. Units included Agricultural Economics; Bureau of Business Research; Bureau of Sociological Research; Center for Great Plains Studies; Center on Children, Families and the Law; Children, Youth and Family Studies; Earth and Atmospheric Studies; Economics; Educational Psychology; Latino Research Initiative; Nebraska Transportation Center; Nebraska Center for Research on Children, Youth, Families and Schools; Nebraska Rural Initiative; Office of Research and Economic Development; Political Science; Psychology; Public Policy Center; Regional and Community Planning; School of Natural Resources; and Sociology. The meeting included a brief introduction to SBSRI, an overview of the results of the faculty needs assessment survey, a review of draft inventories of UNL social science methods resources and Great Plains/regional efforts (see Appendices E and G for the final versions). Rick Edwards,

Director of the Center for Great Plains Studies, provided a summary of Great Plains-related initiatives at UNL and other institutions. Most of the meeting was devoted to small group discussions led by members of the task force, focused on the following topics:

- a) What gaps or shortages in expertise do we have at UNL that limit our Great Plains/regional research?
- b) How might we better coordinate and communicate among our Great Plains/regional units/experts to facilitate research and training? and
- c) How can a focus on a Great Plains/regional theme be elevated as an area of strength for the university?

Other Activities

The SBSRI Task Force had the opportunity to meet with faculty leaders from Big Ten social science research centers as they were visiting campus for other events, including James Jackson, Director of the Institute for Social Research (ISR) at the University of Michigan, and David Johnson, Director of the Programming and Statistics Core at the Population Research Institute of Pennsylvania State University's Social Science Research Institute (SSRI). These meetings focused on information about the operation and funding of their centers and lessons learned for developing and facilitating research.

Throughout the process, the task force made efforts to consider the goals and activities of the relevant centers and programs at UNL and in the larger university system, some of which included requests for representation at SBSRI events, as well as focused meetings with leaders of major initiatives (e.g., Nebraska Center for Energy Sciences Research, Nebraska Transportation Center and Water for Food Institute).

Mission

The task force developed SBSRI's mission statement based on a review of consistent and recurring statements and key phrases from social science research initiatives at the Big Ten schools:

The Mission of the Social and Behavioral Sciences Research Initiative at the University of Nebraska is to promote excellence in the behavioral and social sciences in order to solve societal problems and disseminate the findings to scientists, the public, and policy makers. We shall coordinate, support, and conduct research, and train future generations of social and behavioral scientists in a collaborative environment of multidisciplinary expertise and resources.

Lessons Learned

The National Landscape

A 2012 National Research Council (NRC) report, "Using Science as Evidence in Public Policy," is a modern day landmark in the field of social science. It chronicles the era of "big social science" and traces the interactions between social science research and public policy. The report indicates that by the end of the 20th Century a multibillion-dollar policy enterprise had been developed to describe social conditions, advise policy makers on interventions, test

program designs and evaluate outcomes. The players in this endeavor included graduate programs training professionals for careers in policy, as well as think tanks and federal, state and local government agencies. While the focus of the NRC report is on the role social science research can and does play in the formation and evaluation of public policy, the report also is useful in tracing the roots and development of large scale social science research projects and their influence.

Starting with the 1966 study, "Equality of Educational Opportunity," commonly known as the Coleman Report, the era of big social science began. That report was subsequently followed by other notable studies on the design of a negative income tax, public provision of housing allowances, and the expansion of health insurance, among many other such studies. Each of these efforts brought social science to bear on important public policy issues of the day.

Initially the National Science Foundation (NSF), created in 1950, did not fund social science research, but was doing so by the 1960s. At universities, the era of big social science began with notable federally funded research programs at the University of Michigan (Institute for Social Research – ISR), University of Wisconsin (Institute for Research on Poverty – IRP), and University of Chicago (National Opinion Research Center – NORC). These university-based research centers were engaged in large-scale social science research projects related to critical policy issues. The federal government also began to make its considerable data (e.g., on labor, health, income and crime) available for analysis by academic researchers.

The influence of the social sciences grew, in part, as a result of improvements in research methods. Quantitative and qualitative methods were developed and applied to complex social science research problems, yielding insights viewed as valuable by policy makers and others. Advances in large scale data collection and dissemination facilitated the process. Most recently, the exponential growth in computing power, along with the explosion in "big data" from administrative sources, electronic media and transactions, is providing new opportunities for data mining, visualization and computational social science.

Indeed, with these developments we are in the midst of a new era of big social science, although in a new and different sense of that term. It is not so much that large-scale social science projects are being funded by the federal government; rather, the new era of big social science is based on the availability of big data, powerful computing capabilities, and new technologies enabling social scientists to press forward to entirely new frontiers. For example, developments in neuroscience and brain imaging provide whole new vistas for social scientists to explore. In addition, new data analysis and mining techniques provide the opportunity for heretofore unexplored analysis of micro-level data collected by the federal government and private sources.

The ultimate aim of research in the social and behavioral sciences is to understand how people and social institutions behave in order to solve social and behavioral problems. To do that often requires policy changes at the federal, state or local levels. In this regard, the policy focus and *telos* of social and behavioral science research also has received important recognition recently. The NRC report recommends evidence-influenced policy, arguing that in policy

making, "...far from being a sphere in which science can neatly be separated from politics, is a sphere in which they necessarily come together."

The NRC report identifies commonalities among the social sciences that give them an important place in informing and shaping public policy:

What the social sciences share is their analytic focus on the behavior, attitudes, beliefs, and practices of people and their organizations, communities, and institutions. The social sciences study social phenomena, including social phenomena conditioned and caused by or responsive to matters that are investigated in the natural sciences—earthquakes, infectious diseases, ocean currents.

We begin to see that there are two ways in which social science matters to policy. First, social science contributes to understanding conditions and consequences of concern to policy makers; second, social science has methods and theories applicable to investigating the use of science in policy.

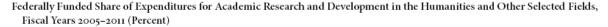
In summary, the social sciences have two responsibilities. The first is to accurately describe human behavior and social conditions, including their causes and consequences, and, when policies are implemented to change those behaviors and conditions, to assess the consequences. This responsibility is most frequently discussed as social science investigation of behavior and social conditions. But we emphasize that the responsibility extends to many policies that address natural conditions, when the policy intends, anticipates, or will be affected by changes in human behavior and social structures.

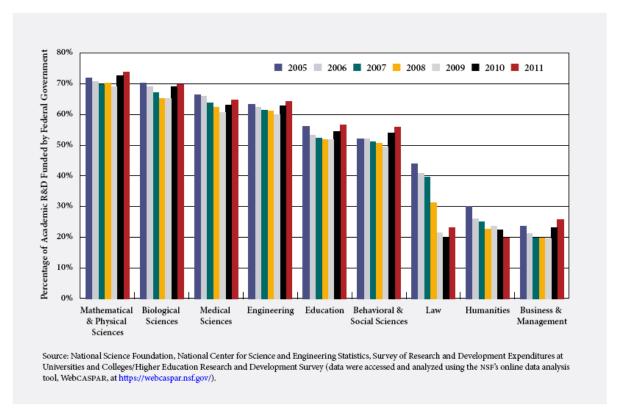
The second responsibility of the social sciences is to focus their formidable array of methods and theories on understanding how social *and* natural scientific knowledge is used as evidence in the policy process.

Consistent with this perspective, the new Office of Management and Budget (OMB) instructions to federal agencies include the directive to "demonstrate the use of evidence throughout" their FY2014 budget submissions. Increasingly, there is a need for and recognition of the critical role of evidence-based social and behavioral science in forming and financing public policy.

A newly released report by the Commission on the Humanities and Social Sciences of the American Academy of Arts & Sciences (2013) provides important context for considering a more significant role for social and behavioral science researchers at the University of Nebraska. The report, titled "The Heart of the Matter: The Humanities and Social Sciences for a Vibrant, Competitive, and Secure Nation," provides a view of federal funding across disciplines over the period 2005-2011. The vertical bars in the graph below show the percentage of academic R&D funded by the federal government. For the behavioral and social sciences, the height of the annual bars is generally in the range of 50%, which is substantially less than the percentages for mathematical and physical science, biological sciences, medical sciences, engineering and

education. Still, the percentage of federal funding for behavioral and social sciences is greater than that for law, humanities, and business and management.





Source: American Academy of Arts and Sciences (2013), p. 40.

Two implications follow from these data. First, researchers in the behavioral and social sciences should look not only to federal funding, which accounts for about half of R&D funding in their field (see figure below). Other funding sources provide an approximately equal amount of funding and should not be ignored as potential sources of support. Second, behavioral and social scientists should partner with colleagues in disciplines with higher percentages of federal funding to gain greater access to federal research support. Dr. Larry Rilett of the Nebraska Transportation Center, for example, indicates that involving social scientists in key transportation projects can improve the chances of success in obtaining funding from the Department of Transportation or the National Transportation Safety Administration. One of the top priorities for funded research relates to safety issues across all modes of transportation—an area where social and behavioral scientists have deep expertise in analyzing human behavior (e.g., distractions or fatigue while driving automobiles or trucks). Dr. Roberto Lenton of the Robert B. Daugherty Water for Food Institute believes additional social and behavioral research expertise is an essential complement to water scientists for success in pursuing funded projects from the U.S. Agency for International Development or the U.S. Department of Agriculture. Finding ways to partner and participate with teams in education, medical and biological sciences, and other fields can provide much greater access to federal funding opportunities. In fact, the report explicitly states:

The Commission therefore joins the National Academies' National Research Council and the National Science Foundation in recommending that foundations, universities, laboratories, research centers, and government agencies bring humanists and social scientists together with physical and biological scientists and engineers to address major global challenges such as the provision of clean air and water, food, health, energy, universal education, human rights, and the assurance of physical safety. (pp. 43-44)

The commission indicates that humanists and social scientists are "particularly well suited" to tackle research topics such as a) the ethical aspects of adopting new technologies, b) the social conditions informing the context of policy decisions on the environment, health and human rights, and c) the cultural differences that may either help or hinder the achievement of global security.

Peer Social Science Research Centers

A search of all Big Ten schools revealed that six institutions out of a possible 12 have a social science research institute (SSRI):

- 1. University of Michigan, Institute for Social Research
- 2. Pennsylvania State University, Social Science Research Institute
- 3. University of Iowa, Social Science Research Center
- 4. Northwestern University, Institute for Policy Research
- 5. Michigan State University, Institute for Public Policy and Social Research
- 6. Indiana University, Social Science Research Commons

Although some other Big Ten schools have various centers (e.g., Purdue University has a global policy research institute), they are not organized under an umbrella specific to social and behavioral sciences research.

In terms of structure, at three of the six Big Ten schools (Penn State, Iowa and Northwestern) the SSRI falls under the institution's office of research. Michigan's Institute for Social Research reports directly to the provost. Michigan State's institute is within the College of Social Science, and Indiana's Research Commons is within the College of Arts and Sciences.

Most SSRIs consist of three or more centers. Here is a sample list of some of the more common centers that the various Big Ten schools have within their SSRIs.

- Center for Political Studies
- Population Studies Center
- Research Center for Group Dynamics
- Survey Research Center
- Children, Youth and Families Consortium
- Social, Life and Engineering Sciences Imaging Center

- Education Policy
- Philanthropy and Nonprofit Organizations
- Politics, Institutions, and Public Policy
- Poverty, Race, and Inequality
- Social Disparities and Health
- Urban Policy and Community Development
- Center on Aging and the Life Course

Five of the six Big Ten schools with SSRIs have survey research centers within their institutes. Although the University of Iowa does not have a survey research center per se, it does have a data collection unit and offers related services.

The oldest and largest of these institutes is the University of Michigan Institute for Social Research (ISR), which was established in 1949. ISR has an annual budget of more than \$80 million and supports the research of over 250 scientists from 20 disciplines. Pennsylvania State University's SSRI, which originated 13 years ago, received approximately \$3.2 million of internal support and \$46.4 million in external funding during the 2013 fiscal year. The newest of these institutes is the Indiana University Social Science Research Commons, which has been in existence less than two years. Other Big Ten schools fall somewhere between Michigan and Indiana in terms of age.

Change also is a characteristic of these centers/institutes as new initiatives are added to address new questions that arise through societal changes. For example, Penn State's SSRI recently added a new initiative on military personnel and family research, given recent events and changes within our society. This initiative joined five existing units, including the Population Research Initiative; Children, Youth and Families Consortium; Geographic Information Analysis Core; Social, Life and Engineering Imaging Center; and the Survey Research Center. In a 2011 annual report, Penn State's SSRI noted that for every \$1 in seed grant money given to investigators across these units, approximately \$35 in external grant awards had been received.

UNL Social and Behavioral Sciences

Strengths

Research in the social and behavioral sciences at UNL is on solid footing, and a number of strengths keep these research programs moving in a positive direction.

Administrative Support. A strength that has been apparent at UNL from the very beginning is the support of VCRED Prem Paul and his office for promoting and strengthening social and behavioral science research. In addition, support and encouragement for development of SBSRI were expressed by many other members of campus administration, including deans, chairs and directors. Colleagues from other Big Ten campuses who visited UNL and discussed the SBSRI were impressed with the interest of VCRED Paul and administrative leaders in enhancing social and behavioral science research.

Big Ten/CIC Affiliation. UNL has benefited from joining the Big Ten and the Committee on Institutional Cooperation (CIC), and this positive impact extends to social and behavioral sciences, making this an exciting and fruitful time to develop the SBSRI. For instance, the Big Ten, CIC and the Ivy League recently held a traumatic brain injury (TBI) summit in July 2013. UNL's Center for Brain, Biology, and Behavior (CB3), led by Dr. Dennis Molfese, played a prominent role in developing the collaborations that led to the summit, as well as the summit itself. The collaboration of leading researchers throughout the Big Ten and beyond holds tremendous promise for all of the participants. It is expected that opportunities for developing Big Ten, multi-site, interdisciplinary endeavors like this one will continue to grow.

Campuswide Programs. Social and behavioral sciences are strongly represented and embedded in many colleges and units within UNL. For example, social and behavioral science faculty researchers are working in the Colleges of Arts and Sciences, Business and Administration, Education and Human Sciences, Law, and the IANR Agricultural Research Division. The faculty come from a variety of departments and programs, including, but not limited to: Agricultural Economics; Agricultural Leadership, Education and Communication; Child, Youth and Family Studies; Communication Studies; Educational Psychology; Economics; Political Science, Management, Marketing; Psychology; School of Natural Resources; Sociology; and Survey Research and Methodology.

A wide variety of centers, programs, facilities and initiatives at UNL address and facilitate social and behavioral science research. We are fortunate to have an abundance and variety of efforts and programs as outlined in the inventories of UNL social science methods resources and Great Plains/regional efforts (see Appendix G for brief descriptions). The following list is a sampling of these UNL-based resources:

- Bureau of Business Research (BBR)
- Bureau of Sociological Research (BOSR)
- Buros Center for Testing
- Center for Brain, Biology and Behavior (CB3)
- Center for Children, Families and the Law (CCFL)
- Center for Great Plains Studies
- Gallup Research Center (GRC)
- Holland Computing Center (HCC)
- Nebraska Center for Research on Children, Youth, Families and Schools (CYFS)
 National Center for Research on Rural Education (R²Ed)
- National Drought Mitigation Center (NDMC)
- Nebraska Evaluation and Research Center (NEAR)
- Nebraska Transportation Center (NTC)
- Nebraska Water Center
- Office of Qualitative and Mixed Methods Research (OQMMR)
- Public Policy Center (PPC)
- Survey, Statistics and Psychometrics Core Facility (SSP)

Funding History. Social and behavioral science researchers have been very successful in obtaining external funds from a variety of sources. As an example of recent activity, NUgrant data were collected to summarize all grants and contracts submitted and awarded during FY13 for 19 units with social and behavioral science researchers, including the Departments of Agricultural Economics; Agricultural Leadership Education and Communication; Anthropology; Child, Youth and Family Studies; Communication Studies; Community and Regional Planning; Economics; Educational Psychology; Management; Marketing; Political Science; Psychology; Sociology; and Survey Research and Methodology. Additional units included were the Bureau of Business Research; Buros Center for Testing; Center on Children, Families and the Law; Nebraska Center for Research on Children, Youth, Families and Schools; and the Public Policy Center. (It should be noted that these NUgrant data selected by units also includes research and collaborators outside of the social and behavioral sciences.) Across these units, a yearly average of 299.3 grants or contracts (range: 291-311) were submitted during fiscal years 2011 through 2013, for an average of \$83.2 million (range: \$73.1-\$95.6 million). In the same time period, a yearly average of 188.7 grants or contracts (range: 166-205) were awarded for an average of \$22.5 million (range: \$19.3-\$26.2 million). In total across these units, 153 investigators either submitted or received awards in the most recently completed fiscal year (FY13). Funds were obtained from many different federal, state, community and private sources, including multiple research directorates and offices within NSF, multiple institutes within NIH, the U.S. Department of Agriculture, U.S. Department of Education, U.S. DHHS Administration for Children and Families, Nebraska Department of Health and Human Services, Nebraska Children and Families Foundation, Susan Thompson Buffett Foundation, and many other sources.

A "necklace" analogy has been used to summarize the many strengths and significant potential of social and behavioral science research at UNL. We have a variety of programs, centers, and initiatives on campus that are each a "jewel," but they are not connected and often unaware of what other units are doing. Establishing and strengthening connections among these various endeavors will not only increase their impact and visibility but also will make existing units more effective and efficient in their current roles.

Barriers and Needs

A number of common barriers to and needs for research productivity were noted during the many SBSRI meetings and other activities. These need to be addressed to advance the Social and Behavioral Sciences Research Initiative.

Time for Research. The most important input in producing high quality research is time. Faculty members need adequate time in usable blocks, requiring teaching loads appropriate to the research expectations of academic units. With the UNL move to the Big Ten conference and its academic partner the CIC, research output expectations are rising. As a consequence, it is necessary for academic units to adjust teaching loads to match the expectations being applied to faculty members. Movement to Big Ten teaching loads, which are generally on the order of 2-1 (three courses per academic year), is a primary means by which research-active faculty can be provided the necessary time to pursue high-level research agendas. While standard teaching loads vary by discipline and academic unit, if UNL is to become more Big Ten-like in research output, policies to move toward Big Ten teaching loads are necessary. Another factor affecting

faculty research time is scheduling of teaching loads. To the extent possible, creating teaching schedules that preserve large blocks of open time for research also can help make the most effective use of available time. Finally, augmenting faculty time with the availability of and effective use of graduate research and teaching assistants can enhance research output.

Funding. Aside from time, the other important input required to produce high quality research is funding, which can provide research time by enabling faculty members to both buy out some teaching responsibilities and support graduate research assistants. Funding also provides the means by which to acquire other necessary inputs such as data, technical equipment, consulting services and other research inputs. Sources of funding should include a whole portfolio of options from small internal seed grants to major support for large NSF- or NIH-type grant efforts. ORED currently provides a high level of support for large grant initiatives. In the social and behavioral sciences, some colleges provide support for funded research activity, but many departments and colleges do not offer internal support. Expertise is needed to assist faculty teams in seeking, winning and administering grant-funded research projects. Much of the existing institutional support for grants at UNL is oriented to the physical, biological and other sciences. Stronger support is needed for social and behavioral science grant efforts.

Collaborators. In the contemporary research environment, high-level research products are not generally produced by individual faculty members, but by teams of complementary faculty and graduate students. This is especially true for cross-disciplinary research, which is increasingly important and more frequently funded. As a result, faculty members pursing high-quality research agendas must find appropriate collaborators and form research teams. Typically, UNL academic departments are relatively small compared to Big Ten peer departments so it is important for departments to be strategic in faculty hiring to assure that they have clusters of researchers who can form the nucleus of research teams. It is important to provide means by which individual researchers can identify collaborators in other UNL units in order to form research teams. At present, there are few effective means for doing this. Islands of high-quality research exist across disparate units at UNL, but we lack effective strategies for communicating and linking collaborators across units. Associate deans for research could play an important role in identifying and linking collaborators in various departments and units to form strong interdisciplinary research teams.

Access to Data. In order to produce cutting edge research, faculty and graduate students need access to the types of data that permit publishable analysis in top-flight journals and other outlets. Researchers must be able to either collect primary data or work with high-quality restricted-use secondary data. The former requires survey research capability and resources, including assistance with survey design, advice on appropriate survey methodology, assistance with analysis of survey data and evaluation services. The latter requires access to restricted federal data sets and other detailed micro-level data sets. In order to advance the research capabilities of UNL faculty and graduate students, substantial improvements are needed in both these areas.

Expertise. A significant barrier to conducting high-quality research at UNL is a lack of depth in these key areas of statistical expertise: field experimental research, experimental design, mixed methods, sampling and qualitative research. In addition, we need faculty persons who are

proficient in working with research data centers, neuroscience imaging, evaluation research, and social network analysis. Further, faculty persons with expertise in big data are crucial, as are more faculty members with statistical expertise who also are willing to provide consulting services on grants.

Training of Faculty and Graduate Students. A faculty person who can provide training in the latest research methods to keep faculty and graduate students abreast of ground-breaking methodological developments in their fields would prove to be highly beneficial and relate to the mission of the SBSRI. Additionally, training for both faculty and graduate students is needed in meta-analysis and grant writing, with workshops geared specifically toward the social and behavioral sciences. To stay truly competitive, UNL needs to routinely offer seminars and workshops on state-of-the-art research methods to stay current and attract the highest quality graduate students. In order to train graduate students consistently across the social and behavioral science disciplines, we need more certificate/graduate programs in these fields. Training and consistency across graduate programs also could be enhanced by developing a comprehensive list and schedule of graduate classes in research methods at UNL. Graduate student training is currently fragmented across research design, methods and statistics. This training can be successful only if we have a centralized location for graduate students to assemble and discuss their related research ideas, and learn from one another.

Administrative Staff/College Support. More resources are needed in the Office of Sponsored Programs (OSP) for budget development, grant writing and support for pre-and post-award management of grants. Related, smaller departments need a grant specialist to help move grants out the door. There also is a need for centralized administration such as SBSRI as the top organization with centers below it. An administrative person whose role is to facilitate interaction among social and behavioral science researchers is paramount and would contribute significantly to the mission of SBSRI. Other responsibilities of this administrative person would include identifying potential funding opportunities, notifying faculty, and helping them pursue grants in the social and behavioral sciences. More IT support also is critical.

Equipment. Many faculty members feel that lack of technology and research infrastructure support at UNL are significant barriers to conducting social and behavioral sciences research. Some specific equipment needs include:

- data ports and phone connections for interviewing respondents, conference calls, webinars, presentations and so forth
- large printers that can handle numerous copies
- more secure data storage facilities
- eye-tracking devices for research
- access to specialized software to collect and code behavioral data

Space. A variety of needs and concerns related to research space were identified through the various SBSRI activities. For example, 27% of faculty surveyed described lack of adequate space as a moderate to severe barrier preventing them for pursuing their research at UNL, and 69% of respondents reported that lab space needed to be strengthened.

Many noted that there is a need to grow the size of the faculty to accommodate the plans to grow the student body and expressed concern that space is not sufficient to accommodate much faculty growth (e.g., lack of faculty offices, lab space, space for graduate students, etc.). Some units are already experiencing significant difficulties in meeting space needs, and it is expected that the challenges will significantly increase. Specific issues noted included the need to increase the availability of:

- human subjects computer labs
- human subjects observation labs that include smaller rooms for interviews/assessments and rooms large enough to handle focus groups
- videoconferencing equipment for collaboration with faculty at other institutions
- shared space for specialized equipment needs (e.g., currently eye tracking devices are being used by researchers from a number of disciplines)
- space for researchers and shared resources to be in close proximity to increase collaborations and efficiencies.

There also is interest in creating a secure work space that will allow pursuit of research funding that requires high security (e.g., Department of Defense). It also was noted (by college administration and faculty) that improving and increasing the numbers of animal labs on city campus, which are essential for a number of faculty researchers in social and behavioral sciences, is a critical concern.

Some discussions during the year broached the value of a social and behavioral sciences research building to bring faculty researchers, their students and post docs, research projects and equipment into a collaborative, interdisciplinary setting. This space also would be ideal for housing service-oriented units used by faculty from across campus, such as SSP, BOSR and the RDC, and for housing multi-purpose research labs and support space. A variety of shared research facilities could be developed, including space that addresses the needs noted above. Synergies and efficiencies could be created by moving units and researchers into the same building, with increased contacts and collaborations, and shared staff, support and equipment.

Research Themes and Cores Discussed

Research Data Center. Establishment of a Census Research Data Center as an essential core facility will offer unparalleled research opportunities for UNL faculty by providing access to restricted federal data sets. Based on initial encouragement by Myron Gutmann, former head of the NSF Directorate of Social, Behavioral and Economic Sciences (SBE), and Robert Groves, former director of the Census Bureau, the SBSRI leadership team has pursued this opportunity.

With the support and encouragement of ORED, and substantial financial commitment from VCRED Paul, a UNL team of researchers started the process of pursing an RDC. Members of the team included Dr. Robert Belli of the Survey Research and Methodology Program and the Gallup Research Center, Dr. John Anderson of the Department of Economics, Dr. Eric Thompson of the Bureau of Business Research, and Ms. Mindy Anderson-Knott of the Bureau of Sociological Research. Drs. Belli, Anderson and Thompson attended the Census RDC

conference at the Chicago Federal Reserve Bank Sept. 20-21, 2013. That event provided insight into the work of RDCs around the country, as well as valuable network contacts with RDC directors and Census Bureau personnel. The team began to prepare for an RDC bid, culminating with a UNL site visit by Census and NCHS personnel on May 12-13, 2013. Very favorable feedback was received from both Census and NHS visitors regarding the preliminary plans for a UNL-based RDC. Following that visit, preparation of an NSF proposal for an RDC, a necessary step in the process of Census approval, was completed. On Aug. 15, 2013, a proposal was submitted to NSF for the Central Plains Census Research Data Center (CPCRDC). Co-PIs on the grant proposal include Drs. Belli,



Central Plains Census Research Data Center

Figure 1: Existing RDCs and the proposed location for the Central Plains Research Data Center at the University of Nebraska-Lincoln and Iowa State University.

Anderson and Thompson of UNL and Dr. Sarah Nusser of Iowa State University. Response to that submission is expected in spring 2014. If the grant is funded, we will move toward opening the CPCRDC in fall 2014.

The following rationale for the CPCRDC comes from the description of the RDC in the NSF proposal. The central plains region of the United States is home to premier research universities with innovative investigators producing unique insights relevant to the regional and national populations, places, and environments. Investigators are limited, however, by the lack of an RDC within reasonable proximity. With data access provided by an RDC, this community of researchers is highly capable of generating fundamental scientific insights to enhance the wellbeing of people and society in the face of challenges posed by changing environmental circumstances. The U.S. Census Bureau currently supports 14 RDCs beyond its headquarters, largely located in major population centers near the coasts and borders (Figure 1). Relative to the central states, the nearest data centers are in Minneapolis and Chicago, making access difficult and time consuming for researchers in this area. To address these issues, the University of Nebraska-Lincoln (UNL) has proposed to establish the CPCRDC with an initial consortium of four partner institutions, including the University of Nebraska Medical Center, Iowa State University, University of South Dakota, and University of Iowa. UNL and Iowa State University (ISU) will host separate RDC facilities for the consortium. Taken as a whole, the sizable research community associated with this consortium has extensive capacity to address emerging issues that advance the fields of economics, sociology and public health, especially as they relate to location and the environment. There also is considerable expertise in statistical and survey methods that will improve the nation's information infrastructure.

Minority Health Disparities Initiative (MHDI). In June 2012, VCRED Prem Paul assembled a group of UNL faculty to discuss enhancing minority health research on campus. Initial discussions led to the formation of a steering committee that developed the MHDI. The steering committee includes 13 representatives from multiple UNL departments and colleges, as well as ORED, SSP, the Public Policy Center (PPC), and Nebraska Department of Health and Human Services. Rick Bevins, chair of the Psychology Department, serves as the director, and Mindy Anderson-Knott, core facility manager of SSP, serves as the coordinator. The development of MHDI is facilitated by substantial financial support from ORED using Nebraska Tobacco Settlement Funds.

The development of MHDI serves as a valuable case study in demonstrating how to develop a focused research theme at UNL and build productive research collaborations across faculty and programs. During the MHDI activities and planning, the integrative theme, Access for Better Health and Well-Being, was identified as the focus of the initiative, with a goal of impacting science, practice, policy and training. Activities have included:

- a) periodic steering committee meetings for coordination and planning;
- b) establishment of a listsery and website (http://mhdi.unl.edu/);
- c) meetings between MHDI leaders and UNL department chairs and center directors to discuss the goals and activities of the initiative;
- d) an external speaker series, coordinated with departments (for a total of nine speakers to date);
- e) discussion luncheons hosted by UNL faculty (three sessions billed as "Conversations to find NU approaches to Eliminating Minority Health Disparities" have been held to date, with over 20 attendees for each luncheon);
- f) presentations and/or attendance by ten UNL representatives at minority health-related conferences or meetings; and
- g) a weekly electronic newsletter sharing announcements and updates, including events, guest speakers, funding opportunities, etc.

An important use of MHDI funds was to provide core development awards to increase minority health research among UNL investigators, thus forming and/or strengthening the links between UNL pillars of strength and closing gaps that may be construed as barriers to developing a transdisciplinary large-scale research center. These funds have supported minority health research by funding partial appointments of two postdoctoral fellows in the PPC and a research assistant professor and graduate research assistant in the Nebraska Center for Research on Children, Youth, Families and Schools (CYFS). In addition, those awards helped bring two major research centers (PPC and CYFS) into MHDI as collaborators. Funds also were used to establish a working group focused on building a collaborative telehealth network to facilitate research in minority health, as well as other topics. In addition, a research assistant professor was hired (0.5 FTE for a two-year appointment) to identify minority health funding opportunities and help researchers prepare grant proposals.

Hosting retreats has been another major activity of MHDI. An initial fall retreat in October 2012 was attended by over 60 UNL faculty, staff and students. The retreat included a poster session (26 posters were presented), followed by breakout sessions to facilitate interactions among researchers. Another retreat was held in May 2013 with 72 attendees from

UNL and several community agencies interested in minority health issues (e.g., Nebraska DHHS Office of Health Disparities and Health Equity, Nebraska Commission on Indian Affairs, Lincoln Medical Education Partnership). The multi-faceted retreat included a presentation by Peter Meyer of the National Center for Health Statistics about the variety of data available through research data centers and a keynote address by Susan Shaw of the University of Arizona titled "Addressing minority health access through community-based health literacy research." The retreat also included: Bullet sessions in which nine UNL researchers (from six departments) briefly summarized their work; Community Partnership Pong, a discussion session in which researchers could rotate among tables to learn more about the local and state agencies in attendance; and a breakout session focused on small-group discussion of potential minority health research topics. A third retreat, attended by over 80 participants, was held in February 2014 near Ashland, Neb., to encourage the development of partnerships outside Lincoln. It included two poster sessions (a total of 23 posters), twelve brief research showcase presentations by UNL and UNMC faculty, and three breakout sessions to discuss collaborative opportunities. In addition, Ming Wen of the University of Utah presented the keynote address, "Disparities in Physical Activity and Obesity in the United States: The Role of Individual and Neighborhood Factors."

During the year, MHDI leaders worked with university administration to recruit faculty researchers to UNL by creating opportunity hires that strengthen the initiative and meet specific department and campus needs. The most significant outcome in this area was hiring experienced minority health researcher Kirk Dombrowski (a participant in the speaker series), as a professor of sociology (as of fall 2013), who is helping MHDI pursue external funds. Other speakers have been noted as possible future hires.

In addition to establishing collaborations within UNL, MHDI is developing relationships with community agencies, the Joint Data Center, and the Nebraska Office of Health Disparities and Health Equity (OHDHE) to facilitate collaborative partnerships that enable UNL researchers to further their minority health efforts. As a direct result of building bridges with the OHDHE, UNL recently obtained a multi-year contract to conduct the statewide evaluation of the Nebraska Minority Health Initiative Projects, which include 17 communities implementing projects to address minority health disparities.

Based on these successful experiences, MHDI plans to continue to hold periodic retreats, an external speaker series, and the conversation series. The listserv, website and newsletter will also continue. UNL researchers will be supported for travel to visit program officers at funding agencies and attend minority health conferences. Facilitation of submission of external funding requests, with a goal of establishing a Center, will continue to be a priority.

Social Science Research Methods. The topic of research methods arose frequently during the many SBSRI meetings and other activities. Understanding and implementation of appropriate research methods are essential for conducting quality research, including pursuit of external funds. Developing and improving research methods also is important for advancing science and our ability to address complex issues. While it is clear that UNL has a variety of strengths and resources in social science research methods, it also became apparent that we lack expertise and resources in a number of areas.

Current strengths. Throughout UNL's existing programs and academic departments, there is tremendous faculty expertise across the variety of research methods used in social and behavioral sciences. The Social Science Research Methods Inventory included in Appendix E provides a summary of some of the current resources. A few examples are highlighted in the following discussion.

The Survey, Statistics and Psychometrics (SSP) Core Facility and the Bureau of Sociological Research (BOSR) work closely together and provide a variety of research methods support. SSP provides consultation and referrals on research design, survey and psychometric applications, and statistical analyses to support research initiatives. SSP is designed to work across disciplinary and institutional boundaries and to identify and facilitate research collaborations among UNL faculty. Services help researchers learn what resources are available on campus and build collaborations that strengthen grant proposals by adding expertise in related disciplines to the research project. Efforts include a successful new investigator grant development program. SSP also assists with program evaluation design at the proposal stage and collaborates with BOSR to implement quality evaluations.

BOSR provides research and support services to UNL faculty, academic departments, administrative units and students, as well as government agencies and nonprofit groups. BOSR supports all phases of research, from planning through implementation, analysis and write-up. Research design services include identifying appropriate evaluation methods, IRB protocol preparation, design and development of data collection tools, sampling design and budget estimation. BOSR offers participant recruitment and quantitative and qualitative data collection services across a variety of modalities, including telephone, mail, web, in-person and focus groups. Once data are collected, data entry, transcription, data coding, data analysis and technical report writing services also are available.

A number of other entities provide consultation and services in research design and data analysis. For example, the Nebraska Evaluation and Research (NEAR) Center provides assistance with instrument development, setting up data files, and selecting, conducting, and interpreting statistical analyses. The Statistics Help Desk provides support in planning experimental and quasi-experimental designs, and conducting power and data analyses. The Office of Qualitative and Mixed Methods Research (OQMMR) provides expertise for proposals and funded research projects, and provides support for researchers who are designing and conducting qualitative and mixed method studies. The UNL-Gallup Research Center (GRC) includes methodological expertise for survey research, such as sampling, data collection methods, questionnaire design and pretesting for attitudinal and factual questions, cross-cultural research, and statistical modeling of complex data.

Additional statistical and research design support is available within some campus research centers. The Nebraska Center for Research on Children, Youth, Families and Schools (CYFS), in existence since 2002, has become a model center on campus for advancing research and pursuing external funds. The mission of CYFS is "to advance the conduct of high quality interdisciplinary research to promote the intellectual, behavioral and social-emotional development and functioning of individuals across educational, familial and community

contexts. Central to this is enhancing our understanding of how these complex systems work dynamically to support the future of our nation." CYFS prioritizes five primary research themes, including early education and development, academic intervention and learning, social-emotional learning and development, rural education and research and evaluation methods. CYFS operates six support units: proposal development and coordination, statistics and research methodology, grant management and post-award, office management and support, web and technology support, and communications and media support. Since 2009, CYFS has housed the National Center for Research on Rural Education (R²Ed).

A number of additional centers involving social and behavioral sciences faculty have strong research methods expertise. For example, the University of Nebraska Public Policy Center (PPC) is a university-wide unit housed at UNL focusing on five areas of public policy: behavioral health services and systems, access to governmental services, information technology in health and human services, public participation in policy, and water resource policy. It provides a variety of services, including research and evaluation design and analysis; strategic planning and facilitation services; program management and integration services; grants development and management; and multimedia development and hosting. The Center on Children, Families and the Law (CCFL) conducts "interdisciplinary research, teaching, and public service on issues related to child and family policy and services" and widely disseminates its work to other scholars, policy makers, service providers and the public. CCFL provides child welfare and juvenile services training for child and family services specialists working for Nebraska DHHS and consults in various ways with human services agencies. The Bureau of Business Research (BBR) is an applied economic and business research entity. Its primary purposes include providing "relevant information and insightful data on economic conditions, in Nebraska, the Great Plains, and the nation as a general service to individuals and businesses in the state" and providing "economists with practical opportunities to conduct applied economic research and trains students of economics and business in the conduct of applied research on timely economic and business topics." Research addresses a broad group of issues that include human capital development, economic forecast, housing and real estate, demographics, fiscal policy, and economic development. The Buros Center for Testing offers three complementary functions for achieving its mission of "improving the science and practice of testing and assessment." It provides test reviews and information, psychometric consulting, and instructional and educational resources to improve assessment literacy.

The Center for Brain, Biology and Behavior (CB³), which opened in fall 2013, provides tremendous new opportunities for UNL researchers. CB³ research will integrate advances from genetics, molecular biology, neuroscience, and the social and behavioral sciences. CB³ equipment includes a new Skyra 3 Tesla Siemens functional magnetic imaging (fMRI) scanner that is fully integrated with high-density EEG/ERP brain imaging and an eye-tracking system. This integrated capability is currently unique to the UNL facility. The center also houses other neuroimaging, neuroendocrine and biomarker equipment that will be of interest to a number of social and behavioral science researchers. CB³ anticipates several new faculty hires in the next few years, bringing substantial additional faculty expertise and research programs to campus. The center plans to serve as a transdisciplinary hub for cutting-edge research and innovative graduate education, covering the spectrum of translational research that extends from basic research to applied research to social policy.

UNL also shows significant potential for growth in two nascent areas of research. First, UNL is uniquely situated to pursue research opportunities related to Department of Defense (DoD) opportunities broadly defined. While open to all U.S. university research social scientists regardless of discipline, national and state/local programs provide particularly salient opportunities to UNL social scientists. At the national level, research and funding opportunities exist (e.g., via the Minerva Research Initiative). At the local level, research and funding opportunities emerge from UNL's proximity to USSTRATCOM and the recently established National Strategic Research Institute (NSRI), which seeks to support research on consequence management that has broad applicability across the social sciences.

The Minerva Research Initiative (MRI) is a university-based social science research program initiated by the Secretary of Defense in FY09 focused on areas in the social sciences that are of strategic importance to U.S. national security policy. As such, the Minerva research effort seeks to understand "the internal military-political dynamics of repressive regimes, the vulnerabilities of regimes and institutions to various kinds of disruption and instability, the nature of crowd dynamics, group violence, community belief structures, the potential to influence public opinion and attitudes in diverse cultures, cultural effects on network security and military operations, the influence of technology on military capabilities of potential adversaries." Annual program funding is planned at \$3.4 million until 2018 and likely beyond. Three major university consortium projects end in 2014, so three new starts may be anticipated. In addition, the 2014 research focus will be "on understanding group belief formation, factors causing or influencing social change and violence, societal resilience, theories of deterrence, and new approaches to conflict and cooperation". \(^1\)

With regard to research and funding opportunities associated with the NSRI, UNL social science faculty members are already being sought to examine social issues in the context of combating weapons of mass destruction (CWMD). For example, the Defense Threat Reduction Agency (DTRA) has already expressed an interest in the capability of both NSRI and the UNL to examine concepts for countering WMD from a social science perspective. The fact of the matter is that there are numerous elements of social science implicated by the need to counter this threat. The research required to address these elements, in turn, lend themselves to the development of analytical research projects and critical dialogue. The unique association with NSRI fundamentally strengthens UNLs fulfillment of its multi-faceted institutional mission.

Big data constitutes a second area of significant growth and growth potential for research productivity. Big data is currently a system-wide priority and growing area of strength for the university, with efforts arising across a variety of areas. Current UNL activities include efforts in experimental high-energy physics and the Gut Function Initiative (GFI), with interests growing in other endeavors (e.g., MHDI, as noted earlier). The Holland Computing Center provides opportunities to analyze and store big data via Firefly, a 21 TFlop supercomputer, and other computing resources. The Computational Sciences Initiative (CSI) is a new university-wide program with the objective of establishing a center focused on informatics for complex, large

¹ Department of Defense, Fiscal Year (FY) 2014 President's Budget Submission (April 2013). R-2 PE 0601103A: University Research Initiative, Project V72: Minerva.

data on the Nebraska Innovation Campus (NIC). The CSI will conduct research, training and consulting with both academic and industry partners. The Business Analytics Initiative in the College of Business Administration will be providing graduate training in this area with a new track in the MBA program. Research, training and funding opportunities related to computational sciences help bridge computer science approaches with complex data, multi-level and predictive modeling typically done in the social and health sciences.

Finally, a university-wide initiative is under way to provide additional opportunities for advancing social and behavioral science research. The Nebraska Spatial Science Center (NSSC) is being proposed as a new entity that will be housed at UNL and developed, in part, from existing resources at UNL and satellite centers at UNO, UNK and UNMC. Spatial sciences is a new term developed to integrate a variety of areas, including geospatial information systems (GIS), geographic information sciences, remote sensing, physical and human geography, cartography and locating systems (such as global positioning systems – GPS). Departments and researchers from across the NU system will utilize this center, which plans to facilitate and conduct spatial science research, coordinate field campaigns, maintain a "well-curated" data repository, and provide valuable opportunities for education and training. It is expected that collaborative research involving spatial science expertise of the center and domain expertise in a variety of fields, including social and behavioral sciences, will bring new research opportunity.

Gaps and shortages in expertise. The need for additional faculty expertise in social science research methods was a common theme across various SBSRI activities. For example, 50% of respondents to the faculty survey indicated that support in research/design methods needs strengthening and 49% indicated a need for increased statistical analysis support. Discussions at meetings indicated concerns about both gaps (i.e., not available on campus) and shortages (i.e., not enough experts on campus) across a number of areas. Department chairs expressed concern about the methodologists in their units being stretched too thin. The need for ongoing training in the latest research methods so that researchers can keep abreast of methodological developments was also identified.

Example areas of need include sampling statisticians who specifically deal with social and behavioral sciences data, increased access to help for power analyses, and additional expertise in handling missing data, social network analysis, and maximum likelihood estimation. The growing interest in and opportunity with big data prompts a need for more expertise in data mining and linking, such as merging existing large data sets (e.g., state, national) as well as amalgamating "free data" from the internet (e.g., Twitter; Facebook). With the increased neuroscience opportunities available on campus, there is a need for experts in use of imaging methods (e.g., functional magnetic resonance imaging, fMRI) who can collaborate with social and behavioral science researchers. Additional needs identified include evaluation research (e.g., evaluating programs, organizations) and cross-cultural and cross-national expertise.

Good Decisions for the Great Plains and Beyond. The Great Plains region of the United States provides a unique laboratory in which to conduct social and behavioral science research that can influence policy and contribute to making life better for people in the region. The Great Plains region brings together a confluence of historical, ethnic, social, climactic and natural resource issues that together present great challenges for human populations and communities.

This environment provides a rich research laboratory that can enlighten and inform the development of both private and public policies, providing solutions that enrich lives and human flourishing. UNL strategic strengths in water, transportation and energy, for example, can be coupled with social and behavioral science research to both broaden and deepen our understanding of the Great Plains and the needs of its populations. Discussions among researchers at SBSRI events indicate substantial potential to develop a unique and integrative approach in this research direction.

There are currently eight great plains (GP) research centers at the federal level as well as a network of 16 academic institutions in the GP region. In addition to Nebraska, several other states in the central plains, such as Colorado, Iowa, and Kansas, currently have GP research centers. Though all of these centers focus on research related to the Great Plains, their scope and focus vary tremendously. The Northern Plains Center for Behavioral Research at the University of North Dakota, for example, is one of the first in the nation to be built with NIH funding and has a focus on vulnerable populations in the state and region including older individuals, American Indians, children, pregnant women and their families. Similarly, the Center for Great Plains Studies at UNL promotes the study of the people and the environment and works to conserve our eco-system and help human communities in this central region thrive.

Current strengths. UNL has a number of initiatives and activities with a connection to the Great Plains region. For example, the Center for Great Plains Studies at UNL has substantial expertise in Great Plains research including 200 Fellows (NU faculty and researchers) and 200 Associate Fellows who are primarily faculty at non-NU institutions. The Center for Great Plains Studies currently publishes two journals: the Great Plains Quarterly, which focuses on humanities, culture, and history; and Great Plains Research, which looks at the natural and social sciences. Other works this center has produced include the Atlas of the Great Plains and the Encyclopedia of the Great Plains. Every year the GP Center puts on an annual symposium, hosting its 39th annual symposium in 2013 at UNK on the topic of gains and losses from school consolidation in the Great Plains. The upcoming 2014 symposium is on drought in the lives, cultures and landscapes of the Great Plains in collaboration with the National Drought Mitigation Center and the Daugherty Water for Food Institute.

The Center for Great Plains Studies also hosts the Paul A. Olson seminars, a series of lectures on various topics throughout the school year—which is just one of the ways the center connects with our community and offers the potential to become a more structured venue for public presentation of SBSRI work. Recently, the center produced a print and digital map of the top 50 ecotourism sites in the Great Plains, furthering its conservation mission. The Great Plains Art Museum contains a very fine collection and exhibitions of Great Plains-related art. The GP Center also has a small teaching program, with an undergraduate major and minor, and a graduate certificate program on the Great Plains (The Great Plains Inventory is included in Appendix G and provides a summary of some of the current resources).

In addition to UNL's expertise at the Center for Great Plains Studies, a number of other faculty at UNL are conducting research on underserved populations (e.g., Latinos, rural residents, American Indians, etc.), and their work also fits within the realm of the Great Plains. One way to connect these researchers may be a joint hosting of the 2015 Great Plains Center's

symposium with the Minority Health Disparities Initiative (MHDI). This collaboration would bring together researchers with similar vested interests in improving the lives of individuals on the plains and could lead to multidisciplinary presentations, publications and grant applications. Several existing centers at UNL (e.g., Public Policy Center and Center for Children, Families and the Law), in addition to the Center for Great Plains Studies, also conduct high-quality work related to the GP, but there often is a disconnect between them as each is often unaware what the other entity is working on. This sentiment is highlighted in the following section, which focuses on gaps and shortages at UNL in the area of GP research.

Gaps and shortages. There was consensus among faculty members that although the Center for Great Plains Studies at UNL has several notable strengths with numerous faculty members conducting high-quality research in this area, the largest impediment is the difficulty of connecting people (i.e., building communities). To address this gap, a coordinator or director is needed to connect faculty doing similar types of GP research. This person also would identify grant mechanisms for the group with the ultimate goal of submitting a grant proposal.

In addition to the disconnect between faculty at UNL, other gaps and shortages center around the lack of expertise in several areas that are needed to elevate GP research, including a shortage of demographers, behavioral economists, statisticians specializing in small data samples and observational analyses, and those who conduct geospatial analysis. Other areas in which expertise is lacking include immigration, policy design and sociological practice, language translation, environmental and rural issues (e.g., those who understand community networks), transportation systems (e.g., issues for aging rural populations), as well as expertise needed in recruiting subjects and increasing research participation in diverse and rural settings.

Suggestions/recommendations. Several recommendations and suggestions were offered to assist with coordinating and communicating among GP researchers, as well as facilitating research and training of both faculty and graduate students.

In terms of bringing faculty together, it was recommended that a dedicated coordinator is needed to identify faculty with similar research interests and put them in contact. However, rather than focus on expertise alone, faculty need to connect at the "ideas" level, which could be done through a UNL workshop highlighting several topical areas and allowing faculty to provide brief summaries of their research interests or ideas to a larger group, then encouraging smaller, interested groups with a common focus to meet for further discussion. However, because it is sometimes difficult to get people to commit to these working groups, some incentives may be required. Another recommendation to begin these working groups is to offer seed money as a way to stimulate and facilitate new efforts and collaborations. The end result would be submission of a grant application with a specific focus on the GP pursued by faculty in this area with the assistance of the coordinator in identifying funding sources.

It also was recommended that GP researchers coordinate with state agencies, Nebraska Game and Parks, and so forth in order to extend our network of collaborations. Additionally, it was strongly recommended that UNL coordinate with GP initiatives at other institutions and apply for NSF money to fund such collaborations. Others recommended we start by becoming familiar with the work of GP researchers at UNL and then expand to include outside experts who

could be brought in to facilitate interdisciplinary teams. In addition to collaborating with other institutions, it also was recommended that UNL consider public-private partnerships and collaborations (e.g., Gallup) around the GP theme. Further, GP research should be linked with Water for Food, MHDI and other entities at UNL with an emphasis on geospatial aspects of research. The focus of the GP needs to go beyond the micro level and focus on macro-level issues, such as examination of global implications and comparison with other parts of the world with similar climate/density.

Further, it is important to create an awareness and way of thinking about GP research that resonates with faculty. Many UNL faculty members are doing related research but do not identify it as such; with a bit of tweaking, faculty could see the connection. UNL leadership needs to promote GP research and recognize faculty who are doing such work. If UNL can host workshops and create other opportunities for faculty to share and discuss ideas across research teams, for example through the facilities available at the Center for Great Plains Studies, and share examples of their work through this medium and/or website, participation and collaboration could potentially increase. UNL also could sponsor coffee breaks at professional meetings to give visibility to the SBSRI and GP research. Finally, there is a need to connect with other disciplines, such as the College of Dentistry and UNMC, as well as the College of Engineering, because technological innovation feeds into behavior change.

In addition to raising awareness of GP research, it was recommended that we highlight specific areas of focus such as out-migration, rural Latino populations, religion, intimate partner violence, mobility, and Native American populations in regard to access issues, which may include access to health care, schools, water and so forth. This could potentially provide another collaborative opportunity between GP researchers and MHDI or the Water for Food Institute. Implementing behavior change with these populations also is paramount and could include working with middle school children to educate them and change the future (e.g., 4-H club participation). Finally, national research opportunities should be pursued based on GP experiences that are of more general interest to NIH, NSF and other national funding agencies.

The final set of recommendations centered on training of graduate students who need a centralized location to come together and discuss related ideas. The Center for Great Plains Studies in 2013 launched its Great Plains Graduate Fellows program, offering research and travel support and work space to selected doctoral students from any campus discipline whose research involves the Great Plains. The goals are to assist students in making progress toward their degrees, encourage interest in research on the Great Plains, and link such students from different departments who otherwise might not connect. The Great Plains Graduate Fellows Commons serves as a shared meeting place. More student involvement in GP research may be possible via the addition of dissertation funds awarded to students working on GPs-related projects. Faculty also recommended developing a newsletter dedicated to social and behavioral sciences research and a website to post positions (e.g., RAs) and other expertise available (or needed) for research projects. Additionally, a workshop series is needed to bring researchers (graduate students and faculty) together to stimulate intellectual ideas and to learn from one another. Leadership is crucial and to move forward, faculty recommended we need a champion in this area.

Recommendations and Next Steps

1. Create an Ongoing UNL Social and Behavioral Sciences Research Initiative.

The Mission of the SBSRI will be to promote excellence in the social and behavioral sciences to solve societal problems and disseminate the findings to scientists, the public and policy makers. It will coordinate, support and conduct research, and train future generations of social and behavioral scientists in a collaborative environment of multidisciplinary expertise and resources.

SBSRI should be created as a research entity reporting to ORED. SBSRI will provide administrative and support services, maintain shared lab space and resources, and contain core units that conduct and support research. SBSRI will partner with research centers and initiatives to support, strengthen and synergize social and behavioral science research. The initial partners would come from existing centers and initiatives on campus, and additional partners will develop over time in response to new priorities and opportunities. SBSRI will increase both productivity and efficiency by filling gaps in services and expertise, while increasing coordination and reducing duplication of effort where possible. Successful development of SBSRI will require commitment and investment by both campus leadership and faculty.

Development of SBSRI must take into account existing campus services and entities, avoiding unnecessary duplication and increasing coordination and efficiency. For example, two units that already work closely together and largely serve social and behavioral scientists, the Survey, Statistics, and Psychometrics (SSP) core facility and the Bureau of Sociological Research (BOSR), should be subsumed within SBSRI. In other cases, coordination will be key as some of these research supports become available in ORED and existing centers. The goal would not be to duplicate or interfere with those services, but fill gaps for researchers who are not part of those centers and connect researchers with existing options where possible. The ultimate name of this SBSRI entity can be adjusted to fit with university practices and vision (e.g., *initiative* could be changed to *institute* or *consortium*).

SBSRI must be a flexible, evolutionary entity that adapts to opportunities as it proceeds. It will build on and integrate existing strengths and resources, yet also require additional investment to ensure success. Additional details on the structure and function of SBSRI are described in the following sections.

A. SBSRI will include administrative and support services.

Administrative and support services within SBSRI will be developed to facilitate research productivity and pursuit of external funds. These services may include: team building and coordination; faculty development and mentoring; proposal development and coordination; preand post-award grant support; equipment, software, and web support; and dissemination and communications support. Services will be developed and coordinated with existing service entities (e.g., in ORED and colleges) to increase availability and quality of services while avoiding duplication of effort. SBSRI will develop mechanisms for facilitating communication, including a website, listsery and electronic newsletter. SBSRI will provide support for

interdisciplinary graduate training, including coordination of also training opportunities and graduate recruitment.

B. SBSRI will include shared lab space and equipment.

SBSRI will have space to conduct and support research. Size of available space will of course dictate what can be developed. Coordinated lab spaces made available to researchers may include: human participant computer labs; small and large observation labs with video recording equipment (including labs large enough for focus groups); biomarker data collection space (e.g., for saliva samples, blood draws); and meeting space with video conferencing equipment. This research space also will be used to facilitate access to and sharing of specialized equipment (e.g., electroencephalography, eye tracking). SBSRI also should coordinate and facilitate access to specialized software (e.g., Qualtrics, Stata). Models will be explored to provide faculty, staff and student researchers with ready access to statistical software. SBSRI space and equipment will be developed and coordinated with consideration of existing campus resources, with the goal of filling gaps, increasing efficiencies and pursuing new directions and opportunities.

While some space currently is dedicated to "core" units described below, additional space will be needed as units grow and new core services are added. In addition, it would be ideal to locate the SBSRI services, lab spaces and core units together as much as possible. Space that brings researchers, equipment and resources together in close proximity promotes collaboration and synergies, and increases productivity and efficiency. Ideally, location of SBSRI space should consider proximity to social and behavioral science faculty researchers. That is admittedly a challenge, given that they can be found across both campuses. However, at the present time the greatest density of researchers is on city campus.

C. SBSRI will include "core" units and initiatives.

A major function of SBSRI will be to develop and maintain core units that develop, support, coordinate and conduct research. The structure and focus of these cores will be flexible to adapt to changes in research needs, technology, priorities and opportunities. These units will be coordinated and work closely together, as they will have shared goals, personnel and/or projects. In addition, these units will work in collaboration with existing units and centers that need and provide such services.

Research data center (RDC) core. The RDC will be a secure site for access to restricted federal data sets, allowing tremendous opportunities for research in social and behavioral sciences. In addition to maintaining the physical site, equipment and staffing needed for data access, the RDC will provide training on access and use of these federal data sets and facilitate development of research that pursues external funding using these data. An NSF grant was submitted in August 2013 to establish this unit as the Central Plains Census Research Data Center (CPCRDC), and a multi-year funding plan has been developed with support from ORED, the Institute of Agriculture and Natural Resources (IANR) Agricultural Research Division, four Colleges (Arts and Sciences; Business Administration, Education and Human Sciences, Engineering), the University of Nebraska Medical Center, and external partners (Iowa State, University of Iowa, and the University of South Dakota). Response to the submission is expected in spring 2014. The CPCRDC will provide tremendous opportunity for researchers throughout the social and behavioral sciences. Access to these data will expand research capabilities across a

variety of initiatives and endeavors impacted by human factors, such as health, education, transportation, water, food and security. It will aid investigations with national interests, as well as those with a regional focus (e.g., Great Plains). Investigators accessing data made available via the CPCRDC will be well positioned to pursue funds from a variety of agencies, including NSF's Directorate for Social, Behavioral and Economic Sciences (SBE). The breadth of research endeavors that may be aided by these data also expands the range of potential funding sources (e.g., U.S. Departments of Agriculture, Education, Energy and Transportation).

Survey and data collection core. SBSRI will develop a core unit that emphasizes collection of human participant data via surveys and other means. Services in this unit may include: survey and interview development and implementation (web, phone, mail, in person); focus group facilitation and training; transcription; program evaluation; data entry; data coding; participant recruitment, registries and databases; training in survey and data collection methods; and human participant supports (e.g., consultation on IRB protocol preparation, and sharing of model IRB protocols and standard operating procedures). These activities and services are currently supported on campus via SSP and BOSR. Integration of SSP and BOSR activities and staff into SBSRI will provide significant initial momentum and support for developing SBSRI services.

Advances in technology have increased interest and opportunity for data collection and intervention via distance and mobile technologies. Developing resources and expertise in this area will begin as a priority/focus within this core and develop into its own unit if desired as use and funding grows.

A fee-for-service model will be used to help maintain this core. However, ongoing campus financial support should be provided to help with leadership, coordination, consultation and training that is needed for success but cannot be charged to grants and contracts. Significant expertise is currently available on campus in this area and increased access to this support should be made available.

Design and statistics core. SBSRI will develop a core unit that emphasizes research design and statistics. Services in this unit may include: research design consultation; support for selection and execution of data analyses; power analyses; training in research design and statistics; and connection of researchers to experts and resources. This unit will need to be able to address (via consultation, collaboration, and referral): specialized design and statistics needs, such as mixed methods research, network analysis, and information mining (i.e., big data).

Many of these activities and services are currently supported on campus via SSP. Like the core described above, a fee-for-service model along with ongoing campus support should be used to help maintain this core. Given the significant faculty expertise available, arrangements should be made to gain faculty support for developing and leading this core.

Minority Health Disparities Initiative (MHDI). A key initiative of SBSRI, the Minority Health Disparities Initiative (MHDI), will provide functions to support social and behavioral science research relevant to minority health. MHDI will utilize weekly email announcements and a website to inform researchers of minority health funding opportunities, news and events.

Retreats, external speakers and faculty group discussions will be hosted to encourage collaborative efforts and grant development. Training and development opportunities will be provided for faculty and students, including support for participation at national conferences and mentored research experiences. In addition, promising minority health project ideas will be developed with MHDI support. MHDI is currently supported by ORED and Tobacco Settlement funds and works in collaboration with other UNL centers and initiatives, including the Public Policy Center (PPC) and Center for Children, Youth, Families and Schools (CYFS) but could also expand to include the Great Plains Studies Center and others. An MHDI national Summer Research Opportunities Program (SROP) for undergraduates is funded by UNL Graduate Studies and the Departments of Psychology and Sociology and plans are being made to pursue a Research Experiences for Undergraduates (REU) grant from NSF. MHDI is well positioned to pursue funds from the National Institute on Minority Health Disparities (NIMHD) and other NIH institutes, such as the call for Behavioral and Social Science Research on Understanding and Reducing Health Disparities (R21, R01). A variety of other sources will also be available including state (e.g., Department of Health and Human Services) and private agencies (e.g., Patient-Centered Outcomes Research Institute). An ultimate goal would be pursuit of an NIH Center of Excellence grant if a request for proposals is announced.

Future core units and initiatives. Additional core services and research initiatives will be developed as needed to address changes in the social and behavioral sciences and translational research, technological advances in research, federal funding priorities and university needs. Endeavors currently under way at a variety of levels have promise for future cores or affiliates of SBSRI. For example, a University of Nebraska system-level Nebraska Spatial Science Center is being developed that encompasses geospatial information technologies, including global positioning systems. At the local level, the Minority Health Disparities Initiative (MHDI) has prompted development of a telehealth or m-health (mobile health) core.

D. SBSRI will partner with university research centers and initiatives.

UNL is rich with centers, initiatives, programs and faculty that address social and behavioral sciences research. SBSRI needs to begin by building upon and strengthening what already exists, as it works to enhance UNL's productivity and impact in the social and behavioral sciences and beyond. Partner centers and initiatives will not be subsumed within SBSRI; they will collaborate and help develop and lead SBSRI. The Vice Chancellor of ORED, in consultation with other university administrators (e.g., SVCAA, relevant college deans and department chairs), should appoint an initial SBSRI steering committee comprised of directors of partner centers and initiatives. This steering committee and an SBSRI director (appointed from UNL faculty) will work to formalize a plan of action for next steps for SBSRI, including further development of the administrative and support services, lab spaces, equipment and core units.

SBSRI will facilitate coordination and communication among these partner units to help advance all involved. For example, the SBSRI-partner collaboration will promote: increased awareness of what each does and resources they have; coordinated examination of research needs, including gaps and shortages in expertise and equipment; coordinated requests for resources that support SBSRI partners, such as faculty lines for needed expertise and specialized equipment; and coordinated exploration and pursuit of potential funding opportunities. As an example, SBSRI and its partners would be well positioned to pursue interdisciplinary training

grants, which would be valuable for all involved. An additional benefit of being a partner with SBSRI could be "credits" toward use of SBSRI core services for pilot projects and research development. Partners also may benefit from priority access and preferential rates for space and services.

Potential UNL partners should come from existing centers and initiatives, such as the Center for Brain, Biology, and Behavior (CB3), the Nebraska Center for Research on Children, Youth, Families and Schools (CYFS), and the Substance Abuse and Violence Initiative (SAVI). Partners might also include University of Nebraska system-level centers and initiatives that include significant involvement of UNL faculty, such as the Public Policy Center, Daugherty Water for Food Institute, Rural Futures Institute and National Strategic Research Initiative. (These are offered as examples to be explored and are not exhaustive or indicative of interest or commitment.)

E. SBSRI will require coordinated internal funding support and pursuit of external funding.

Based on models of successful social science research initiatives at other institutions, ongoing internal support will be needed to help cover costs of faculty leadership for SBSRI and the cores, staff support, operating expenses and funding for research development activities and retreats (described later). Initial steps in developing plans for funding will involve appointing a director, core leaders and initial steering committee to work with ORED in developing a specific budget (e.g., 5-year plan).

ORED should identify the level of available support, including possible redirection of any existing commitments associated with endeavors that would be subsumed within SBSRI (e.g., the SSP core facility). Colleges and other units that will benefit from SBSRI should be asked for contributions to support SBSRI activities and cores. For example, this has already been done with the development of the RDC, including support from ORED, four colleges (Arts and Sciences, Business Administration, Education and Human Sciences, and Engineering), the Agricultural Research Division, and other partners. Significant faculty expertise is available and arrangements should be made to gain access to valuable faculty support for SBSRI leadership, consultation and training (e.g., via teaching release).

Faculty involved in SBSRI core units and partner centers and initiatives will be pursuing external funding, and SBSRI will increase grant submissions and success through its support and development activities. The expectation is that ORED, colleges and other units that provide support for SBSRI will see a significant return in investment, including increases in facilities and administrative costs (F&A) received. SBSRI policies for collaboration and access to services must be structured in a manner that facilitates and encourages participation (e.g., affordable cost of services, not interfering with F&A allocated to home departments/units and investigators). In addition to the variety of investigator-led research proposals that should be pursued at federal and other funding agencies, institutional and interdisciplinary training grants also will be pursued.

Opportunities for pursuing support for SBSRI exist within the larger university system, including Program of Excellence (PoE) funds and the Nebraska Research Initiative (NRI). PoE funds would be valuable for pursuing needed faculty leadership and support. SBSRI's potential

for impact on translational research across a variety of domains connects well to the NRI's focus on providing a research base "to enhance economic growth in business and industry, agriculture, social services and health care." Avenues for exploring funding for SBSRI will include foundations and corporate and private donors.

The following specific recommendations should ideally be implemented as a package with the aid of the SBSRI structure described above. However, even if the SBSRI structure cannot be created, these recommendations should still be pursued via other means (e.g., via ORED, college, and departmental efforts).

2. Building Teams and Developing Additional Themes

Inaugurate a high profile SBSRI seminar series to bring UNL researchers together and stimulate intellectual interaction and ideas, with regular presentations by UNL faculty and visiting national and international experts in the social and behavioral sciences.

Pursue new research themes by initiating a series of focused interdisciplinary retreats to build on the bases established by the SBSRI topical discussions, including social and behavioral science research methods and good decisions for the Great Plains and to serve as catalysts for coordinated large-scale funded research efforts. Three retreats, offered as initial examples, will focus on the pursuit of emerging opportunities in research methods, focusing on research methodology areas of promise:

- 1. Big data and information mining, areas in which UNL has growing faculty interest and expertise across several disparate initiatives (e.g., the Computational Sciences Initiative across UNL, the Business Analytics Initiative in the College of Business Administration, the Minority Health Disparities Initiative, increased access to data via the RDC, and access to geospatial information systems in the proposed systemwide Nebraska Spatial Science Center).
- 2. Distance and mobile technologies for research, areas in which UNL researchers across initiatives and colleges have demonstrated interest in pioneering and using new data collection methods (e.g., mHealth core being developed in Minority Health Disparities Initiative, research within the Substance Abuse and Violence Initiative).
- 3. Network analysis, an area in which researchers in several departments across colleges have developed expertise; applications of these methods are gaining increasing currency across social and behavioral science fields.

Another focused retreat will build on the Good Decisions for the Great Plains and Beyond theme, and include topics such as big data and data mining research applications. It will bring existing UNL researchers and data sets on climate, water, rural poll, transportation, and other resources (e.g., the RDC, geospatial information systems) together to investigate human dimensions of life on the plains and beyond.

Pursue potential funding opportunities and sources that will enhance development of successful interdisciplinary teams (including those developed via retreats identified in 2b). Priority should be placed on federal funding in areas where UNL social and behavioral science researchers have expertise (see Appendix H for example federal funding opportunities). A number of relevant funding opportunities exist at NSF, including programs within the

Directorate for Social, Behavioral and Economic Sciences (SBE). Many opportunities also exist at NIH, including programs within the Office of Behavioral and Social Sciences Research (OBSSR). Additional federal funding opportunities to pursue include the U.S. Departments of Defense, Education, Energy, Education, Agriculture and Transportation, the Agency for International Development, and the National Highway Traffic Safety Administration.

3. Time for Research

Encourage colleges and departments to provide appropriately differentiated teaching loads supportive of highly research active faculty members and their research agendas. New hires in research-oriented faculty positions should be given initial teaching loads to match Big Ten teaching loads, typically three courses per academic year in most social science disciplines. A common strategy is to provide the reduced teaching load for the first three years. Those reduced teaching loads should be reviewed systematically. Existing research-active faculty should have the opportunity to buy out some teaching responsibilities with funded research projects. Departments should give consideration to scheduling teaching loads for research active faculty in order to provide substantial blocks of time for research.

Encourage the Senior Vice Chancellor for Academic Affairs to conduct a comprehensive review of teaching buyout rates for research to examine and revise the currently existing wide variation in rates across units on campus.

Encourage colleges and departments to allocate additional resources to provide graduate assistants for research active faculty members in order to facilitate time for research.

4. Internal Funding

Continue and expand ORED internally funded strategic research initiatives, including funding for key initiatives identified via interdisciplinary faculty retreats (described in 2b). Models for this recommendation are the successful cases where ORED startup funding has resulted in successful initiatives such as RDC, MHDI, Systems Biology of Social Behavior (SB²) and the Substance Abuse and Violence Initiative (SAVI).

Continue and expand seed grants for faculty-led research teams developing social and behavioral science research grant ideas and proposals.

5. Expertise

Determine critical gaps and shortages in faculty expertise (e.g., research methods, statistical analysis, and big data). The SBSRI steering committee will then make faculty line requests directly to relevant hiring officials (e.g., deans for a within-college hire; SVCAA for a cross-college hire). SBSRI may assist in identifying and facilitating cluster hires in crucial research areas. It is expected that some positions would be open tenure homes, where the faculty member could be placed based on fit. The university's goals for growth, including adding tenure-track faculty, provide an excellent opportunity to make strategic research hires that also address academic needs.

Encourage colleges and departments to provide compensation, such as teaching release time, in exchange for consulting services needed from faculty who are in high demand due to their research expertise.

6. Additional Administrative and Staff Supports

Hire additional staff support (in ORED, colleges and/or SBSRI) with backgrounds in social and behavioral sciences to help faculty identify funding opportunities to pursue and prepare and submit grant applications (e.g., proposal development coordinator/specialist).

Hire additional computer support specialists to assist with specific research designs (e.g., "mobile technologies") in research proposals and who can build the programs and interfaces needed for technologically advanced data collection.

Create an archive of previously funded grant applications made freely available to faculty pursuing external funding.

7. Faculty and Student Development and Mentoring

Develop workshops that focus on the latest data analytic techniques, data collection strategies and other ground-breaking areas that would be available to faculty and students. These workshops also would assist with recruitment of top notch graduate students to UNL. SBSRI will identify critical areas of need and partner with funding agencies such as NSF when possible to support these workshops (e.g., interdisciplinary methods symposium with experts from around the country).

Create a mentoring system for junior faculty to be paired with faculty with records of grant success who will review their grant work. Pre-tenure faculty doing interdisciplinary work will be paired with senior faculty mentors who can also provide guidance on promotion and tenure expectations.

Establish committees within departments and SBSRI cores to assist junior faculty with grant writing, including the pre-review of proposals prior to submission.

Offer a series of grant-writing workshops throughout the year that are specific to the social and behavioral sciences and focused on target audiences (e.g., NIH K01 Awards for faculty, NIH F31 pre-doctoral fellowship awards for students).

Offer a summer-long program for new faculty investigators, which will include a structured series of weekly meetings to provide grant-writing training specific to the social and behavioral sciences.

Develop a comprehensive list of graduate courses in research methods taught across campuses and create a certificate program in research methods to draw graduate students from various

fields, making them highly marketable. This would also help with the recruitment of star graduate students to UNL.

Create competitive research awards (e.g., dissertation funding) for graduate students working on projects related to SBSRI interdisciplinary topical initiatives (e.g., those developed via faculty retreats identified in 2b).

Pursue interdisciplinary training grant opportunities, such as the NSF Research Traineeship Program (NRT), which is replacing the Integrative Graduate and Research Traineeship Program (IGERT).

Expected Outcomes

The university's influential report, "A 2020 Vision: The Future of Research and Graduate Education at UNL" (Future Nebraska Task Force, 2000), focused on the importance of excellence in research and scholarship for becoming one of the nation's best public universities. As noted in the 2020 Vision, "Research and scholarship are central to all of the missions of a university, and must be emphasized by those that aspire to the highest levels, as UNL does" (p. 4). The recommendations in this SBSRI report expand that vision for advancing UNL, through a focus on enhancing research in the social and behavioral sciences.

Strengthening and expanding research endeavors in the social and behavioral sciences will have tremendous impact throughout UNL, given the ubiquitous nature of social and behavioral concerns across many research and policy domains. Increasing our understanding of human factors is critical for the translational research needed to solve the complex social, environmental, political, economic, and health challenges confronting the U.S. and nations across the globe.

Establishing a permanent and funded SBSRI entity will be transformational for the university. Some of our Big Ten peers have achieved significant success from creating major social science research entities on their campuses. UNL is extremely well positioned for similar success, as we have a number of key elements in place, substantial faculty strength, and much untapped opportunity for enhancing successful multidisciplinary collaborations.

We have a variety of successful centers, initiatives and programs on campus across many content areas and disciplines that will be further strengthened by implementing these recommendations. It is expected that increased communication and multidisciplinary collaborations will provide existing centers with additional opportunities and expertise, and emerging initiatives will have increased support and resources for becoming major centers. We will see increased collaborations within the social and behavioral sciences, as well as increased connection of social and behavioral science researchers with scholars in other fields that will aid in high impact, translational research. These advances will occur across the wide range of scholarly domains represented at UNL, including agriculture and natural resources, education, engineering, law and policy, life sciences and much more.

Given the strength of existing resources (e.g., BOSR, SSP) and developing initiatives and centers (e.g., RDC, MHDI), we expect that implementing these recommendations and creating the proposed SBSRI entity will have a substantial and immediate impact, including increasing our visibility and national research profile. While many of these recommendations are focused on research, the expectation is that they will significantly impact other missions of the university as well. Increasing the research productivity and profile of UNL and the social and behavioral sciences will positively impact graduate and undergraduate education as well as the outreach and service missions of the university.

Implementing these SBSRI recommendations will significantly advance UNL, including the social and behavioral sciences, in a number of measurable ways. Outcomes will be measured by examining achievement of the various proposals recommended in this report. For example, we expect to see the development of SBSRI support services and cores, including the Research Data Center, and increased opportunity for and faculty engagement in interdisciplinary research activities. Advances in longer-term outcomes for the social and behavioral sciences, such as increases in the amount and impact of scholarly publications, faculty awards and recognitions, and increases in research expenditures will be demonstrated by examining existing databases (e.g., publications, citations, and awards via Academic Analytics; external funding via NUgrant). Mirroring the aspirational goals of ORED's Research and Economic Development Growth Initiative (REDGI), we expect a 50% increase in research expenditures in the social and behavioral sciences over the first 5 years. Of course, success must ultimately be judged in consideration of the current context, such as university support of social and behavioral sciences and the availability of and competition for external funding. It is recommended that initial, detailed reviews of SBSRI progress and outcomes be conducted in the third and fifth years, followed by regular five-year reviews thereafter.

References

American Academy of Arts and Sciences. 2013. *The Heart of the Matter: The Humanities and Social Sciences for a Vibrant, Competitive, and Secure Nation*. Cambridge, MA: American Academy of Arts and Sciences.

National Research Council. 2012. *Using Science as Evidence in Public Policy*. Washington, DC: National Academies Press.

Appendix A Research Fair Schedule of SBSRI Activities, November 7, 2012

10:00 Enhancing Research Excellence in Social and Behavioral Sciences (202 Gaughan Center) Welcome & Introductions (VCRED Prem Paul)

Overview (SBSRI Co-Leaders)

Three External Speakers

- Dr. Kurt Johnson (Director, Survey Research Center; Pennsylvania State University)
 - The Challenge of Providing Research Services in the Changing World of the Social and Behavioral Sciences
- Dr. Kevin Leicht (Director, Iowa Social Science Research Center; University of Iowa)
 - o Creating, Nurturing and Growing the Iowa Social Science Research Center
- Dr. L. Rowell Huesmann (Director, Research Center for Group Dynamics, Institute for Social Research, University of Michigan)
 - The University of Michigan's Institute for Social Research: 65 Years of Social Science in the Public Interest
- 12:00 Panel Discussion with the External Speakers (Heritage Room)

Lunch for Faculty (n = 100)

Wrap Up and Closing Remarks

- 1:00 Lunch for Three External Speakers, SBSRI Task Force members, SVCAA Ellen Weissinger, and VCRED Prem Paul
- 1:00 Breakout Sessions for Faculty (3 rooms for 25 people/room; Regency A, B, C)

Needs for Infrastructure/Faculty Resources/Support Services (30 minutes):

- a. What infrastructure/resource/support items discussed by the external speakers are needed at UNL to enhance competitiveness for extramural funding for research in social and behavioral sciences?
- b. What current infrastructure/resource/service issues at UNL are barriers to success in achieving research excellence in social and behavioral sciences?
- c. What aspect(s) of current UNL infrastructure/resources/services should be enhanced to achieve research excellence in social and behavioral science?

Themes (30 minutes):

- d. In what thematic areas of social and behavioral sciences does UNL have expertise and critical mass in research, practice, policy, or training that aligns with extramural funding or entrepreneurial opportunities?
- e. In what thematic areas should new faculty be hired to enhance critical mass and competitiveness for extramural funding for research, practice, policy, or training in the social and behavioral sciences?
- f. What activities would enhance team building around thematic areas within social and behavioral sciences research, practice, policy, or training at UNL?

Appendix B Faculty Needs Assessment Survey and Summary Report

Social and Behavioral Science Research Initiative Needs Assessment

Prepared: November 2012

The contents of this report conform to our highest standards for data collection and reporting. If you should have any questions or concerns regarding the information reported within, please contact us

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Project Overview

This report presents a summary of the University of Nebraska-Lincoln (UNL) Social and Behavioral Science Research Initiative (SBSRI) Needs Assessment. The SBSRI Needs Assessment was combined with the UNL Office of Proposal Development's (OPD) survey to capture/inventory existing programs for broadening participation of underrepresented groups. The surveys were combined to be cost effective, respectful of participant time, and to reduce participant burden through skip patterns. The SBSRI survey items addressed research interests, research barriers, and faculty resources and support services, while OPD items addressed types of diversity-focused outreach that are currently taking place at UNL, as well the barriers faced, and interest in pursuing this form of outreach. (The final survey is available in the full survey report.)

Any questions regarding this report or the data collected can be directed to the Bureau of Sociological Research (BOSR) at UNL by calling (402) 472-3672 or by sending an email to bosr@unl.edu.

Sample

The sample included all UNL tenure and tenure-track faculty in the social and behavioral sciences as provided by UNL's Institutional Research and Planning office. This consisted of faculty from the following departments: Agricultural Economics; Agricultural Leadership, Education, and Communication; Anthropology; Children, Youth and Family Studies; Communication Studies; Community and Regional Planning; Economics; Educational Psychology; Geography; Management; Marketing; Political Science; Psychology; Sociology; and Survey Research and Methodology. All tenure and tenure-track faculty from these departments were included in the sample with the exception of 9 Management faculty who were not considered relevant for the survey by the SBSRI co-leaders. In total, 172 faculty were included in the sample.

Survey Administration

A multi-mode approach was utilized for the survey administration. The survey administration began on September 26, 2012 with a campus mailed pre-notification letter from Dr. Prem Paul, Vice Chancellor for Research and Economic Development. This letter, which included an Office of Research and Economic Development (ORED) pen as an incentive, explained that the BOSR would be contacting them to complete the survey. A few days after the letters were delivered, the BOSR sent email invitations on behalf of Dr. Paul with the web based URL and access code for the survey. During the week of October 15th, a reminder letter and paper version of the survey was mailed using campus mail to all faculty who had not completed the survey online. Relevant department chairs were then emailed on October 30th by the BOSR on behalf of Dr. Paul asking them to encourage their faculty to complete the survey. The final contact was then made on November 2nd with a final email reminder and a data collection end date. Survey administration was closed on November 26, 2012.

Response Rates

Of the 172 faculty in the original sample, one was identified as no longer being at UNL and was therefore removed from the sample. Of the remaining 171 faculty, 122 participated in the

survey, resulting in an overall response rate of 71.3%. The breakdown of response rates by department is provided in Table 1.

Table 1: Department Response Rates

Table 1. Department Response Rates	Sent	Completed	Response Rate
Agricultural Economics	16	14	87.5%
Agricultural Leadership, Education and Communication	8	6	75.0%
Anthropology	7	5	71.4%
Children, Youth and Family Studies	16	11	68.8%
Communication Studies	8	5	62.5%
Economics	15	8	53.3%
Educational Psychology	21	14	66.7%
Management	7	5	71.4%
Marketing	7	5	71.4%
Political Science	16	9	56.3%
Psychology	26	21	80.8%
Sociology	13	9	69.2%
Departments with 5 or Fewer Faculty (Community and Regional Planning, Geography SNR, Survey Research and Methodology)	11	10	90.9%
TOTAL	171	122	71.3%

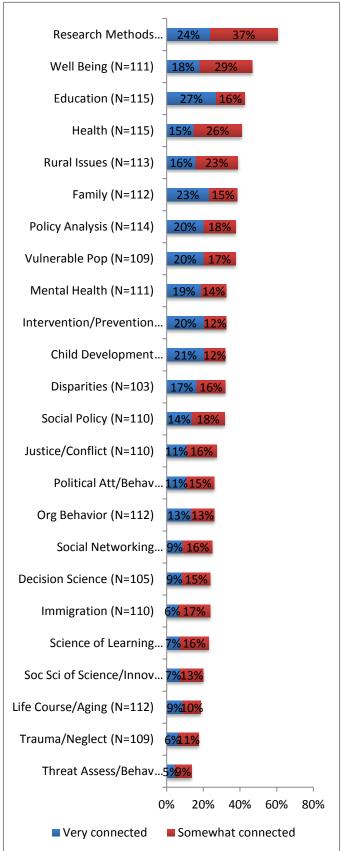
Findings

Below are overall summaries from each section. Additional details are available in the full survey report.

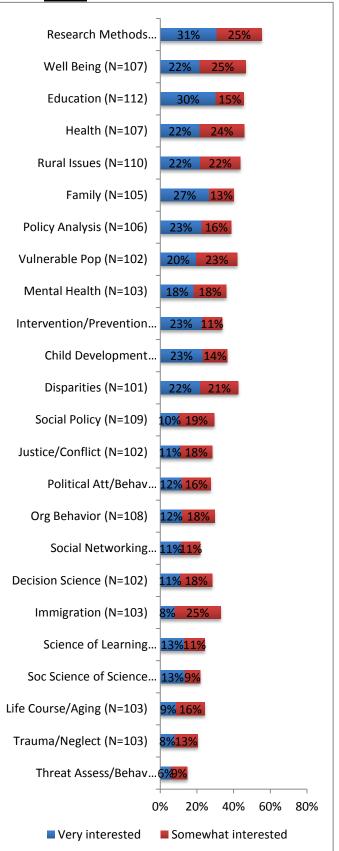
Areas of Research

Respondents reported a connection to a wide range of thematic areas. As Graph 1 shows, research methods is the area that most respondents felt their current research is very or somewhat connected to, with 61% reporting this. Research methods remains as the most connected when faculty were asked about connection to research areas they are interested in pursuing in the next five years (55%). Well-being, education, and health are the next most commonly selected areas.

Graph 1: Proportion of faculty reporting <u>current</u> research connection to area.



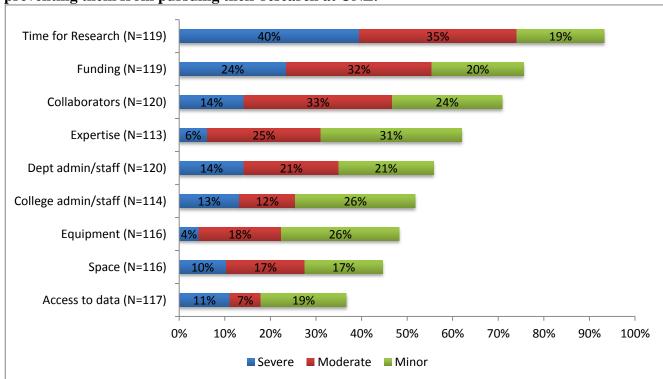
Graph 2: Proportion of faculty reporting <u>future</u> research connection to area.



Research Barriers

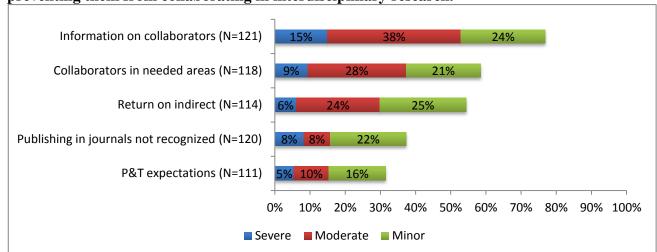
Several barriers were identified in preventing faculty from pursuing their research at UNL (see Graph 3). The primary barrier reported was a lack of time for research, which was reported by 40% of respondents as a severe barrier. A lack of funding was the next most commonly reported barrier, with almost one quarter of respondents (24%) perceiving it as a severe barrier.

Graph 3: Proportion of faculty reporting each area as a severe, moderate, or minor barrier preventing them from pursuing their research at UNL.



Interdisciplinary Research Barriers

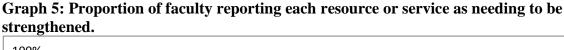
Barriers that were identified as specific to preventing faculty from collaborating in interdisciplinary research are shown in Graph 4. A lack of information on potential collaborators in other disciplines (15%) and a lack of collaborators with expertise in needed areas (9%) were most often reported as severe interdisciplinary barriers.

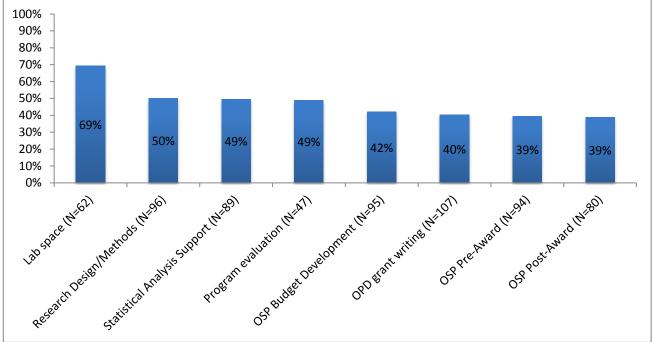


Graph 4: Proportion of faculty reporting each area as a severe, moderate, or minor barrier preventing them from collaborating in interdisciplinary research.

Faculty Resources or Support Services

Respondents were asked to report their perceptions of adequacy for a list of faculty resources and support services. As Graph 5 shows, lab space was the only resource that over half of respondents reported as needing to be strengthened (69%), but all other resources and services that were asked about were also reported as needing to be strengthened by a fairly substantial proportion, ranging from 39% to 50%.

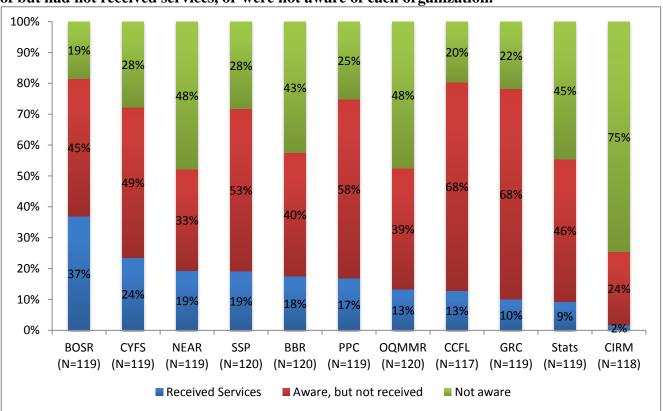




Faculty Resources or Support Services

A list of UNL organizations was provided to assess awareness and utilization. A range of utilization and awareness was found among the list of organizations (see Graph 6). The most often utilized organization was the Bureau of Sociological Research (37%), followed by the Center for Children, Youth, Families and Schools (24%).

Graph 6: Proportion of faculty reporting whether they have received services, were aware of but had not received services, or were not aware of each organization.



Appendix C Meetings with Chairs, Directors, and Deans

Meetings with Chairs and Directors – August and September, 2012

Tala Awada, Director School of Natural Resources

Dwayne Ball, Chair Department of Marketing

Mark Balschweid, Chair Department of Agricultural Leadership, Education & Communication

Bob Belli, Director Survey Research and Methodology Program

Rick Bevins, Chair Department of Psychology

Dawn Braithwaite, Chair Department of Communication Studies

Gwen Combs, Chair Department of Management

Ralph De Ayala, Chair Department of Educational Psychology

Scott Fuess, Chair Department of Economics

Julia McQuillan, Chair Department of Sociology

Elizabeth Theiss-Morse, Chair Department of Political Science

Larry Van Tassell, Chair Department of Agricultural Economics

Meetings with Deans – February and March 2013

Archie Clutter, Dean Deb Hamernik and David Jackson, Associate Deans IANR Agricultural Research Division

Marjorie Kostelnik, Dean Jon Pedersen, Associate Dean for Research College of Education and Human Sciences

David Manderscheid, Dean Greg Snow, Associate Dean for Research College of Arts and Sciences

Donde Plowman, Dean Gordie Karels, Associate Dean for Graduate Programs and Research College of Business Administration

Susan Poser, Dean Richard Moberly, Associate Dean College of Law

Appendix D Social Science Research Methods Meeting May 10, 2013

Agenda:

- 1. Introduction to SBSRI
 - A. History and mission
 - B. Overview of activities
- 2. Brief overview of Faculty Survey results
- 3. Draft inventory of UNL Social Science Methods Resources
- 4. Topics for group discussion
 - A. What gaps or shortages in research methods expertise do we have at UNL?
 - B. How might we better coordinate and communicate among our research methods units/experts to facilitate research and training?
 - C. How can we further elevate social science research methods as one of the areas of strength for the university?

Participants:

John Anderson, Economics

Mindy Anderson-Knott, Survey, Statistics, and Psychometrics (SSP) Core Facility

Bob Belli, Psychology and Survey Research and Methodology (SRAM)

Ralph DeAyala, Educational Psychology

Carolyn Edwards, Psychology and Child, Youth and Family Studies

Cal Garbin, Psychology

Amanda Garrett, Educational Psychology and Office of Qualitative and Mixed Methods Research

David Hansen, Psychology

Jessica Jonson, Buros Center for Testing

Julia McQuillan, Sociology and SSP

Dennis Molfese, Psychology and Center for Brain, Biology and Behavior (CB3)

Kristen Olson, Sociology and SRAM

Prem Paul, Vice Chancellor of Research and Economic Development

Nancy Shank, Public Policy Center

Sue Sheridan, Educational Psychology and Nebraska Center for Research on Children, Youth, Families and Schools (CYFS)

Eric Thompson, Economics and Bureau of Business Research

Kim Tyler, Sociology

Helen Raikes, Child, Youth and Family Studies

David Swanson, Holland Computing Center

Jolene Smyth, Sociology, SRAM, and Bureau of Sociological Research

Appendix E Inventory of UNL Social Science Research Methods Resources

Bureau of Business Research

http://www.bbr.unl.edu/

The Bureau of Business Research provides faculty, graduate students and undergraduate students in business and the social sciences with opportunities to conduct funded, scholarly research on a broad group of issues that include human capital development, economic forecast, housing and real estate, demographics, fiscal policy, and economic development.

Bureau of Sociological Research

http://bosr.unl.edu/

The Bureau of Sociological Research (BOSR) provides social and behavioral science research and support services to UNL faculty, academic departments, administrative units, students, governmental agencies, and nonprofit groups. BOSR staff actively work with researchers to design, implement, and successfully complete social science research and evaluation projects. Research and evaluation design services include identifying appropriate research and/or evaluation methods, IRB preparation, design and development of data collection tools, sampling design, and budget estimation. The BOSR offers study recruitment services, and takes the data collection burden off the researcher by administering telephone, mail, and web surveys and conducting interviews and focus groups. Once data are collected, BOSR staff process data by providing data entry, transcription, data coding, data analysis and technical report writing. BOSR is a fee-for-service organization, but staff is available for pre-proposal consultation.

Buros Center for Testing

http://buros.org/

Buros offers three complementary functions for improving the science and practice of testing and assessment. The three functions provide: (1) Test Reviews & Information - authoritative reference materials that contain descriptions and candidly critical evaluations of commercially available tests, essential to the evaluation, selection, and use of tests, (2) Psychometric Consulting - evaluation, training, and consulting services for proprietary testing programs, (3) Assessment Literacy - instructional and educational resources that improve the ability of individuals to use tests and assessments more effectively and responsibly.

Center for Brain, Biology, and Behavior

http://www.unl.edu/dbrainlab/mri.html

The University of Nebraska Center for Brain, Biology and Behavior (CB³) is proposed as a broadly based interdisciplinary research Center whose three ultimate goals are to: (1) establish an international reputation as a pioneering, premier, world-class, interdisciplinary Center investigating the interface between social, biological, behavioral, engineering and neurological issues; (2) provide state-of-the-art imaging equipment to faculty and students, as well as training in its application to mainstream behavior, social and biological issues; and (3) create a transdisciplinary hub for cutting-edge research and innovative graduate education focusing on an unfilled niche encompassing the spectrum of translational research that extends from basic research to applied research to social policy.

Center for Children, Families and the Law

http://ccfl.unl.edu/

CCFL is a home for interdisciplinary research, teaching, and public service on issues related to child and family policy and services. The knowledge of child and family issues generated and synthesized by the Center faculty is widely disseminated to educate policy makers, scholars, service providers, and the general public. Much of CCFL's work focuses on children involved with the child welfare or juvenile justice systems.

Gallup Research Center and Survey Research Methodology Program

http://sram.unl.edu/

The UNL-Gallup Research Center (GRC) and the Survey Research and Methodology Program (SRAM) are closely connected units specializing in survey methodology. Researchers in the GRC focus on improving survey methods to produce the highest quality data. GRC researchers specialize in sampling, data collection methods, nonresponse, questionnaire design, pretesting, cross-cultural research, and statistical modeling of complex data. The GRC is not a service unit (e.g., we do not offer data collection services). GRC researchers should be collaboratively approached as co-investigators on fundable research ideas that require survey methodology expertise. SRAM faculty engage in graduate training; SRAM offers MS and Ph.D. degrees, MS and Ph.D. minors, and a certificate. Graduate training in survey methods provides students with theoretical and practical insights into the science of surveys, including how to draw samples, design and administer questionnaires, and analyze survey data. Our unique training is useful for any individual –faculty, student, or working professional –who wants to understand or improve the quality of the survey data that they collect or analyze.

Holland Computing Center

http://hcc.unl.edu/

HCC provides various services to researchers associated with any campus of the University of Nebraska system. Firefly, a 21 TFlop supercomputer located in the PKI facility, is used by scientists and engineers to study topics such as nanoscale chemistry, subatomic physics, meteorology, crashworthiness, and artificial intelligence. Other resources with specific roles include Tusker for shared memory processing; Red for LHC grid computing.

Office of Proposal Development

http://research.unl.edu/proposaldevelopment/home/

Staff in the Office of Proposal Development (OPD) partner with University of Nebraska-Lincoln (UNL) faculty, staff, and administrators to develop competitive external grant proposals. The OPD team enhances overall proposal quality by ensuring applicants meet sponsor guidelines and by improving the content, organization, and visual appeal of proposal packages. Services include: (i) idea development and proposal planning, (ii) funding source identification, and (iii) assistant with proposal preparation. OPD staff are available to review the narrative components of grant proposals; manage large-scale multi-institutional, interdisciplinary projects, assisting with program and proposal development and supporting collaboration among internal and external partners; advise on the development of biographical sketches, current and pending support forms, and other supplementary documentation to maximize effectiveness and continuity and to ensure compliance with sponsor guidelines; provide graphic design support for proposals and other research-related materials to create easy-to-read, visually appealing illustrations that conform to proposal preparation requirements; and coordinate expert review of grant proposals to provide investigators with subject matter review and to provide an experience similar to that of a proposal review panel.

Nebraska Center for Research on Children, Youth, Families and Schools http://cyfs.unl.edu/

The mission of the Nebraska Center for Research on Children, Youth, Families and Schools (CYFS) is to advance the conduct of high quality interdisciplinary research to promote the intellectual, behavioral, and social-emotional development and functioning of individuals across educational, familial, and community contexts. CYFS' goals are focused on (a) contributing to the development, dissemination, and integration of scientific knowledge across research and applied settings; (b) building the capacity of NU researchers in the areas of children, youth, families and schools; and (c) supporting and enhancing the scope, quality and impact of grant-supported interdisciplinary research. CYFS provides a "one-stop shop" for researchers as they engage in the process of conceptualizing, organizing, developing, submitting,

executing, and disseminating grant-supported research. Topically, the research conducted by CYFS faculty and graduate student affiliates extend the areas of early education and development; psychosocial and behavioral health, development and learning; academic interventions and learning; rural education research; and research and evaluation methods. Additionally, a range of research topics are covered under its broad umbrella. Through its support units (core supports) and rich research culture, CYFS provides extensive infrastructure and personal attention to ensure the highest quality research experience for faculty and graduate student affiliates. Through formal and informal means, CYFS provides opportunities for researchers to hone their skills related to research development, design, and execution. Speaker series, interdisciplinary collaborative research meetings, consultations, and in-house research programs allow for targeted advancement of individual and team capacity. Tangible and concrete supports related to grant writing include individualized and personal assistance for the identification of funding sources, concept formation, proposal development, design and statistical methods, budget preparation, clerical and mechanical organization, document securement, and final grant submission through CYFS. Funded CYFS grants receive extensive *post-award support* for project administration, including direct support for the management of finances and personnel, assurance of required documentation, database development, consultation and conduct of statistical analyses, project website development, project-specific communications and dissemination activities, and a host of other necessary as well as extended benefits. These supports are organized through very active core support units including Proposal Development and Coordination, Statistics and Research Methodology, Grant Management, Office Management, Communications and Media, and Web and Technology. Individuals interested in learning more about CYFS, acquiring assistance through its various support mechanisms or becoming a faculty affiliate should contact Dr. Susan Sheridan at ssheridan 2@unl.edu.

Nebraska Evaluation and Research Center

http://cehs.unl.edu/near/

The Nebraska Evaluation and Research (NEAR) Center offers consultation to promote sound statistical and research practice. The NEAR Center provides assistance with setting up data files, instrument development, choosing appropriate statistical analysis, conducting statistical analysis, generating output, and interpreting analysis.

Office of Qualitative and Mixed Methods Research

http://cehs.unl.edu/edpsych/research/ogmmr/index.shtml

The objectives of the Office of Qualitative and Mixed Methods Research are to promote the use of qualitative and mixed methods research, provide expertise for proposals and funded research projects, and provide support for researchers who are designing and conducting qualitative and mixed method studies.

Public Policy Center

http://ppc.unl.edu/

The University of Nebraska Public Policy Center is a research and engagement unit that works with researchers throughout the University of Nebraska system to explore a wide variety of public policy areas. The Center is largely grant-funded and actively partners with others to identify funding opportunities, develop grant and contract proposals, and conduct research. Since 1998, Center researchers have developed a large network of local, state, and federal policy clients, contacts, and collaborators. Center grants and contracts range from local, short-term projects to those that are multi-year and national in scope. In some cases, the Center takes a lead role and in others serves a complementary role. The Center is adept at developing high-quality proposals, managing client relationships, and administering the financial and programmatic aspects of grants and contracts. Center researchers bring substantive expertise to a variety of public policy areas including: climate and energy, community building, courts and justice, disabilities, disaster planning and response, electronic health records, health care and public health, homeland security, information and referral, information technology, mental health, public participation, substance abuse and addictions, threat assessment, trust and confidence, and water resources

management. The Center has experience applying a wide array of policy approaches including: academic research, collaborative research, communications, conferences and seminars, consultation, data analysis, facilitation, program evaluation, project management, stakeholder engagement, and strategic planning. The Center often seeks out partnerships with, and welcomes inquiries from, fellow academic researchers.

Statistics Help Desk

http://statistics.unl.edu/resources/helpdesk/index.shtml

The Statistics Department provides statistical consulting, i.e., helps researchers with experimental and quasi-experimental design, power analysis, data analysis and interpretation of results. Areas of strength include bioinformatics, biological statistics, statistics relevant to the social and behavioral sciences, including survey sampling, spacial statistics, and other fields. The Statistics Department website lists the names of people who should be contacted for the consulting. The Statistics Help Desk is run by Statistics students who are enrolled in the consulting course. The Help Desk provides statistics help to UNL students and faculty.

Survey, Statistics, and Psychometrics Core Facility

http://ssp.unl.edu/

The Survey, Statistics and Psychometrics (SSP) Core Facility promotes and enhances the quality of social and behavioral science research at UNL. The SSP provides consultation and referrals on survey research, statistical, and psychometric applications to support research initiatives. The SSP is designed to work across disciplinary and institutional boundaries. SSP services are available to all UNL faculty, staff and students with support from the Office of Research and Economic Development, while most referral units are fee-for service. It helps identify, support, and promote interdisciplinary research collaborations among faculty at the University of Nebraska-Lincoln and offers referrals to other units and researchers in other disciplines. These services help researchers learn what resources are available on campus and build collaborations that strengthen grant proposals by adding expertise in related disciplines to the research project. SSP also provides program evaluation design at the proposal stage, and collaborates with the Bureau of Sociological Research to conduct quality evaluations.

Appendix F Good Decisions for Great Plains Meeting May 21, 2013

Agenda:

- 1. Introduction to SBSRI
- A. History and mission
 - B. Overview of activities
- 2. Brief overview of Faculty Survey results
 - 3. Draft inventories of UNL Social Science Methods Resources and Great Plains/Regional efforts.
- 4. Great Plains Initiatives
- 5. Topics for group discussion
 - A. What gaps or shortages in expertise do we have at UNL that limit our Great Plains/Regional research?
 - B. How might we better coordinate and communicate among our Great Plains/Regional units/experts to facilitate research and training?
 - C. How can a focus on a Great Plains/Regional theme be elevated as one of the areas of strength for the university?

Participants:

John Anderson, Economics

Mindy Anderson-Knott, Survey, Statistics, and Psychometrics (SSP) Core Facility

Tala Awada, Natural Resources

Deborah Bathke, Natural Resources

Rodrigo Cantarero, Regional and Community Planning, Latino Research Initiative

Peter Calow, Office of Research and Economic Development

Jeff Chambers, Center on Children, Families and the Law

Rochelle Dalla, Child, Youth and Family Studies

Ralph DeAyala, Educational Psychology

Mark DeKraii, Public Policy Center

Rick Edwards, Center for Great Plains Studies

Carolyn Edwards, Psychology and Child, Youth and Family Studies

Konstantinos Giannakas, Agricultural Economics

Mark Gustafson, Nebraska Rural Initiative

David Hansen, Psychology

Suat Irmak, Biosystems Engineering and Water Center

Bruce Johnson, Agricultural Economics

Lisa Knoche, Nebraska Center for Research on Children, Youth, Families and Schools (CYFS)

Julia McQuillan, Sociology and SSP

Tim Nelson, Psychology

Prem Paul, Vice Chancellor of Research and Economic Development

Lisa Pytlik-Zillig, Public Policy Center

Larry Rilett, Civil Engineering and Nebraska Transportation Center

Nancy Shank, Public Policy Center

Kevin Smith, Political Science

Jeff Stevens, Psychology and Center for Environmental Cognition and Education

Eric Thompson, Economics and Bureau of Business Research

Kim Tyler, Sociology

Larry Van Tassell, Agricultural Economics

Regina Werum, Office of Research and Economic Development

Appendix G Inventory of UNL "Good Decisions for the Great Plains" Resources

Bureau of Business Research

http://www.bbr.unl.edu/

The Bureau of Business Research provides faculty, graduate students and undergraduate students in business and the social sciences with opportunities to conduct funded, scholarly research on a broad group of issues that include human capital development, economic forecast, housing and real estate, demographics, fiscal policy, and economic development.

Bureau of Sociological Research and the Nebraska Annual Social Indicator Survey

http://bosr.unl.edu/

The Bureau of Sociological Research (BOSR) supports all aspects of quality social science research applications. The BOSR provides assistance with research design, data collection, processing, analyses, and presentation. The Nebraska Annual Social Indicators Survey (NASIS) is an omnibus survey of quality of life in the state of Nebraska administered to a representative sample of Nebraskans. This survey is a product of the BOSR working in collaboration with state agencies and other educational and research organizations. The data are used by a wide range of organizations for policy and program planning, and by faculty and students of the University of Nebraska for research. NASIS provides government and non-profit agencies and academic researchers a cost-effective means of obtaining data from a survey conducted with the highest scientific standards of social research.

Center for Agricultural & Food Industrial Organization (CAFIO) Policy Research Group http://cafio.unl.edu/

Founded June 1, 2001, the Center for Agricultural & Food Industrial Organization (CAFIO) is a Webbased center dedicated to impartial economic analysis of the structure, conduct, and performance of the agricultural and food industry. Its global mission is to bring together scholars from around the world who share an interest in the analysis of horizontal and vertical relationships within the food supply chain and their implications for competition and welfare. Its local mission is to conduct and disseminate timely economic analysis of agricultural and food industrial issues of critical importance to farmers and ranchers in Nebraska, train students and other professionals in agricultural and food industrial organization, and serve as a point of contact between research faculty and the public at large.

Center for Children, Families and the Law

http://ccfl.unl.edu/

CCFL is a home for interdisciplinary research, teaching, and public service on issues related to child and family policy and services. The knowledge of child and family issues generated and synthesized by the Center faculty is widely disseminated to educate policy makers, scholars, service providers, and the general public. Much of CCFL's work focuses on children involved with the child welfare or juvenile justice systems.

Center for Environmental Cognition and Education

http://cece.unl.edu/

The Center for Environmental Cognition and Education (CECE) is a community of social scientists, natural scientists, and educational specialists investigating biological and social factors that affect how people learn about Earth and ecological systems with their human dimensions. This center helps citizens make informed environmental decisions in the face of uncertainty, risk, and change.

Center for Great Plains Studies

http://www.unl.edu/plains/welcome

The Center for Great Plains Studies, established in 1976 at the University of Nebraska, is a regional, interdisciplinary research and teaching program. The Center's mission is fostering study and understanding of the people and environment of Great Plains. Much of its work is accomplished by its nearly four hundred Fellows, Associate Fellows, and Graduate Fellows whose scholarly and scientific research projects explore the history and nature of the relationships among the region's natural resources, ecology, human communities, and diverse cultures, including in particular learning how to sustain a healthy environment with thriving human communities. The Center operates the Great Plains Art Museum, the Plains Humanities Alliance, undergraduate and graduate programs, various scholarly projects, and outreach programs; it publishes *Great Plains Quarterly* and *Great Plains Research*; it presents public lectures and interdisciplinary symposia.

Latino Research Initiative

http://unlcms.unl.edu/latino-research-initiative/intro.html

The Latino Research Initiative (LRI) is an interdisciplinary group interested in a wide variety of Latino related issues. Members (faculty and students) are from a number of colleges and academic departments/program including the following disciplines: Anthropology, Geography, Community and Regional Planning, English, Ethnic Studies, Child, Youth and Family Studies, History, Teaching, Learning and Teacher Education, Latino and Latin American Studies, Psychology, and Sociology (as well as community members). The goals of the LRI are to: (a) engage in culturally sensitive and competent research and programming; (b) contribute to the limited knowledge base related to the needs of the Latino community; and (c) develop, implement, and evaluate programming for the Latino community.

Mid-America Transportation Center

http://matc.unl.edu/

Since 2006, the Mid-America Transportation Center (MATC) has been designated the nation's Region VII University Transportation Center by the United States Department of Transportation Research and Innovative Technology Administration. MATC is a seven-member consortium of the top universities in Iowa, Kansas, Missouri and Nebraska. MATC's theme is to improve transportation safety and minimize the risks associated with the nation's expanding multi-modal freight transportation network. The Center currently sponsors over 130 multidisciplinary research projects and grants incorporating 113 leading academic researchers and nearly 600 graduate and undergraduate students. It has also developed and supported a number of workforce development and technology transfer initiatives that have impacted thousands of students, educators, and professionals across the nation to date. For more about MATC's mission and programs, please visit the MATC website at http://matc.unl.edu/.

National Drought Mitigation Center

http://drought.unl.edu/

The National Drought Mitigation Center (NDMC) helps people and institutions develop and implement measures to reduce societal vulnerability to drought, stressing preparedness and risk management rather than crisis management. The NDMC, established in 1995, is based in the School of Natural Resources at the University of Nebraska-Lincoln. The NDMC's activities include our constantly growing web site; drought monitoring, including participation in the preparation of the U.S. Drought Monitor and maintenance of the web site; developing the U.S. Drought Impact Reporter; a suite of web-based drought management decision-making tools; drought planning and mitigation; drought policy; advising policy makers; collaborative research; K-12 outreach; workshops for federal, state, and foreign governments and international organizations; organizing and conducting seminars, workshops, and conferences; and providing data to and answering questions for the media and the general public. The NDMC is also active in numerous international projects, including participation in the March 2013 High-Level Meeting on National Drought Policy hosted by the World Meteorological Organization and sponsored by several additional UN organizations.

Nebraska Center for Research on Children, Youth, Families and Schools and National Center for Research on Rural Education

http://cyfs.unl.edu/

The mission of the Nebraska Center for Research on Children, Youth, Families and Schools (CYFS) is to advance the conduct of high quality interdisciplinary research to promote the intellectual, behavioral, and social-emotional development and functioning of individuals across educational, familial, and community contexts. CYFS' goals are focused on (a) contributing to the development, dissemination, and integration of scientific knowledge across research and applied settings; (b) building the capacity of NU researchers in the areas of children, youth, families and schools; and (c) supporting and enhancing the scope, quality and impact of grant-supported interdisciplinary research. CYFS provides a "one-stop shop" for researchers as they engage in the process of conceptualizing, organizing, developing, submitting, executing, and disseminating grant-supported research. Topically, the research conducted by CYFS faculty and graduate student affiliates extend the areas of early education and development; psychosocial and behavioral health, development and learning; academic interventions and learning; rural education research; and research and evaluation methods. Additionally, a range of research topics are covered under its broad umbrella. Through its support units (core supports) and rich research culture, CYFS provides extensive infrastructure and personal attention to ensure the highest quality research experience for faculty and graduate student affiliates. Through formal and informal means, CYFS provides opportunities for researchers to hone their skills related to research development, design, and execution. Speaker series, interdisciplinary collaborative research meetings, consultations, and in-house research programs allow for targeted advancement of individual and team capacity. Tangible and concrete supports related to grant writing include individualized and personal assistance for the identification of funding sources, concept formation, proposal development, design and statistical methods, budget preparation, clerical and mechanical organization, document securement, and final grant submission through CYFS. Funded CYFS grants receive extensive post-award support for project administration, including direct support for the management of finances and personnel, assurance of required documentation, database development, consultation and conduct of statistical analyses, project website development, project-specific communications and dissemination activities, and a host of other necessary as well as extended benefits. These supports are organized through very active core support units including Proposal Development and Coordination, Statistics and Research Methodology, Grant Management, Office Management, Communications and Media, and Web and Technology. Individuals interested in learning more about CYFS, acquiring assistance through its various support mechanisms or becoming a faculty affiliate should contact Dr. Susan Sheridan at ssheridan 2@unl.edu.

Nebraska Rural Poll

http://ruralpoll.unl.edu/

Traditionally, rural Nebraskans have not had a strong voice in state policy decisions. For 18 years, The Nebraska Rural Poll has gathered the aggregated voice of rural Nebraskans and relayed 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, food, animal welfare, immigration, well-being and work.

Nebraska Transportation Center (NTC)

http://ntc.unl.edu/

The Nebraska Transportation Center (NTC) serves as the umbrella organization for all transportation research in the University of Nebraska system. NTC is dedicated to encouraging multi-disciplinary research to provide a safer, more efficient state and national transportation system. NTC's 91 faculty affiliates are some of the nation's leading academic experts in transportation engineering and related disciplines. The Center partners with industry leaders and government agencies from a wide range of disciplines to accomplish its goals at the state, regional, and national levels. This includes a strong

alliance with the Nebraska Department of Roads (NDOR). Since its inception, NTC has sponsored approximately 455 research projects, with 180 projects currently active. For more information on NTC and its mission, research, or programs, please visit the NTC website at http://ntc.unl.edu/.

Nebraska Water Center

http://watercenter.unl.edu/

The UNL Nebraska Water Center coordinates, implements and facilitates water and water-related research, extension, teaching and outreach programming within the University of Nebraska system as a part of NU's Institute of Agriculture and Natural Resources and UNL's School of Natural Resources. The Nebraska Water Center has been a fixture at UNL for more than 40 years, being established as the Nebraska Water Resources Research Institute by Congressional mandate in 1964. It is one of a network of more than 54 water resources research institutes at Land Grant Universities nationwide. For more information about this network, go to the National Institute for Water Resources.

Office of Proposal Development

http://research.unl.edu/proposaldevelopment/home/

Staff in the Office of Proposal Development (OPD) partner with University of Nebraska-Lincoln (UNL) faculty, staff, and administrators to develop competitive external grant proposals. The OPD team enhances overall proposal quality by ensuring applicants meet sponsor guidelines and by improving the content, organization, and visual appeal of proposal packages. Services include: (i) idea development and proposal planning, (ii) funding source identification, and (iii) assistant with proposal preparation. OPD staff are available to review the narrative components of grant proposals; manage large-scale multi-institutional, interdisciplinary projects, assisting with program and proposal development and supporting collaboration among internal and external partners; advise on the development of biographical sketches, current and pending support forms, and other supplementary documentation to maximize effectiveness and continuity and to ensure compliance with sponsor guidelines; provide graphic design support for proposals and other research-related materials to create easy-to-read, visually appealing illustrations that conform to proposal preparation requirements; and coordinate expert review of grant proposals to provide investigators with subject matter review and to provide an experience similar to that of a proposal review panel.

Public Policy Center (PPC)

http://ppc.unl.edu/

The University of Nebraska Public Policy Center is a research and engagement unit that works with researchers throughout the University of Nebraska system to explore a wide variety of public policy areas. The Center is largely grant-funded and actively partners with others to identify funding opportunities, develop grant and contract proposals, and conduct research. Since 1998, Center researchers have developed a large network of local, state, and federal policy clients, contacts, and collaborators. Center grants and contracts range from local, short-term projects to those that are multi-year and national in scope. In some cases, the Center takes a lead role and in others serves a complementary role. The Center is adept at developing high-quality proposals, managing client relationships, and administering the financial and programmatic aspects of grants and contracts. Center researchers bring substantive expertise to a variety of public policy areas including: climate and energy, community building, courts and justice, disabilities, disaster planning and response, electronic health records, health care and public health, homeland security, information and referral, information technology, mental health, public participation, substance abuse and addictions, threat assessment, trust and confidence, and water resources management. The Center has experience applying a wide array of policy approaches including: academic research, collaborative research, communications, conferences and seminars, consultation, data analysis, facilitation, program evaluation, project management, stakeholder engagement, and strategic planning. The Center often seeks out partnerships with, and welcomes inquiries from, fellow academic researchers.

Rural Futures Institute

http://ruralfutures.nebraska.edu/

Building upon the strengths and assets in rural Nebraska, the Great Plains, and globally, the RFI, through a culture of innovation and entrepreneurship, will mobilize the resources and talents of the University of Nebraska and its partners, including community partners, to create knowledge and action that supports rural people and places to achieve unique paths to their desired futures.

University of Nebraska Press

http://www.nebraskapress.unl.edu/catalog/CategoryInfo.aspx?cid=152

We primarily publish nonfiction books and scholarly journals, along with a few titles per season in contemporary and regional prose and poetry. On occasion, we reprint previously published fiction of established reputation, and we have several programs to publish literary works in translation. Through our paperback imprint, Bison Books, we publish reprints of classic books of myriad genres. Our primary mission, defined by the University through the Press Advisory Board of faculty members working in concert with the Press, is to find, evaluate, and publish in the best fashion possible, serious works of nonfiction.

Water for Food Institute

http://waterforfood.nebraska.edu/

The Water for Food Institute was established in April 2010 with a \$50 million founding gift commitment from the Robert B. Daugherty Charitable Foundation to the University of Nebraska. The WFI conducts research, policy analysis and educational programs on the efficiency and sustainability of water use in agriculture, the quantity and quality of water resources, and the human issues that affect the water decision-making process. Because these issues have been long been, and continue to be, the focus of University of Nebraska research, the knowledge and capabilities developed in Nebraska can be shared and applied internationally. Nebraska can learn, in turn, from its regional, national and global partners.

Appendix H Example Federal Funding Opportunities

Example NSF opportunities to pursue include:

- Science, Engineering and Education for Sustainability (SEES).
- Interdisciplinary Behavioral and Social Science Research (IBSS).
- Integrated NSF Support Promoting Interdisciplinary Research and Education (INSPIRE).
- Cyberinfrastructure Framework for 21st Century Science, Engineering and Education (CIF21).
- Cognitive Science and Cognitive Neuroscience.
- Science of Learning.
- Research at the Interface of Biology, Mathematics, and Physical Sciences and Engineering (BIOMaPS).
- Secure and Trustworthy Cyberspace (SaTC).
- The NSF Research Traineeship Program (NRT), which is replacing the Integrative Graduate and Research Traineeship Program (IGERT).
- A number of relevant funding opportunities exist within the Directorate for Social, Behavioral and Economic Sciences (SBE) addressing a wide variety of research areas, such as sustainability, big data, learning, cognitive science and neuroscience.

Example NIH opportunities to pursue include:

- Modeling Social Behavior (R01).
- Systems Science and Health in the Behavioral and Social Sciences (R21, R01).
- Big Data to Knowledge (BD2K) initiative which has a variety of opportunities, including Centers of Excellence for Big Data Computing in the Biomedical Sciences (U54).
- Behavioral and Social Science Research on Understanding and Reducing Health Disparities (R21, R01).
- NIMHD Social, Behavioral, Health Services, and Policy Research on Minority Health and Health Disparities (R01).
- Dissemination and Implementation Research in Health (R03, R21, R01).
- Research on Ethical Issues in Biomedical, Social and Behavioral Research (R03, R21, R01).
- Behavioral and Integrative Treatment Development Program (R03, R34, R01).
- Short Courses on Innovative Methodologies in the Behavioral and Social Sciences (R25).
- Healthy Habits: Timing for Developing Sustainable Healthy Behaviors in Children and Adolescents (R03, R21, R01).
- Centers of Biomedical Research Excellence (COBRE) (P20).
- A number of relevant opportunities exist within the NIH Office of Behavioral and Social Sciences
 Research. OBSSR is committed to the development of new methodologies in four areas: Community
 Based Participatory Research, mHealth, Systems Science, and Mixed Methods Research. The NIH
 OBSSR book Best Practices for Mixed Methods Research in the Health Sciences (2011) was authored
 by UNL's John Creswell and colleagues.

Example Department of Defense opportunities to pursue include:

- The Minvera Initiative, often called simply "Minerva" is a university-based social science research program initiated by the Secretary of Defense in FY09 focused on areas that are of strategic importance to U.S. national security policy. Minerva "seeks to build deeper understanding of the social, cultural, and political dynamics that shape regions of strategic interest around the world." Annual program funding is planned at \$3.4 million through to 2018 and likely beyond.
- The University of Nebraska's National Strategic Research Institute (NSRI) has opportunities for social science faculty who have specific interest and capability to examine social issues in the context of combating weapons of mass destruction (CWMD).