

## NEBRASKA INFORMATION TECHNOLOGY COMMISSION

Tuesday, November 8, 2005, 1:30 p.m.

Videoconference Sites:

Executive Building-Videoconference Room 103, 521 South 14th Street, Lincoln, Nebraska  
Kearney Public Library-Information Center, 2nd Floor, 2020 1st Avenue, Kearney, Nebraska  
Regional West Medical Center, Monument Room, 4021 Avenue B, Scottsbluff, Nebraska

### PROPOSED AGENDA

#### Meeting Documents:

Click the links in the agenda  
or [click here](#) for all documents (675 KB, 99 Pages).

- 1:30 p.m. Call to Order, Notice of Meeting and Roll Call -- Lt. Governor Rick Sheehy  
Introduction of new NITC Commissioner, [Dr. Janie Park](#)
- 1:35 p.m. **Approval of September 23, 2005 NITC Minutes\*** – Lt. Governor Sheehy
- 1:40 p.m. Public Comment
- 1:45 p.m. Informational Updates
- [Statewide Technology Plan 2005-06](#)
  - NITC Briefing, November 18<sup>th</sup> - Transportation/Telecommunications and Appropriations Legislative Committees
  - LR 105 - Interim study is to examine rural economic development programs
  - NITC - Directive for restoration timeline and priority
  - Nebraska Fusion '05 E-government Conference, November 15, 2005
  - LB 645 Broadband Task Force
  - Legislation: Information Technology Services
  - LB689 Distance Education Enhancement Task Force
  - Center for Health Transformation-Connectivity Conference: Accelerating Transformation through Health IT, Remarks from Lieutenant Governor
- 2:15 p.m. Reports and Action Items from the Councils and Technical Panel
- A. Community Council Report
    1. **Membership\***
    2. **Recommendation and Approval:**  
**Technology Innovation Grants for Economic Revitalization (TIGER)\***
    3. I.T. Planning and Mini Grant Program Update
  - B. Education Council Report
    1. Special Recognition
  - C. State Government Council Report
    1. Best of the Web
  - D. Technical Panel Report
    1. Deficit Requests
- 3:00 p.m. New Business
- A. Upcoming Terms of NITC Commissioners
- 3:15 p.m. Adjournment
- Next NITC Meeting Date to be scheduled in late January

**(Bolded \* indicates action items.)**

Meeting notice and agenda was posted to the NITC and Public Meeting Calendar Web sites on Wednesday, November 2, 2005.

# Curriculum Vitae

## Janie C. Park

### Work Address:

Chadron State College  
1000 Main Street  
Chadron, NE 69337  
Phone: (308) 432-6201  
FAX: (308) 432-6296  
jpark@csc.edu

### Home Address:

6122 Hwy 20  
Chadron, NE 69337  
Husband: Thomas R. Park

### Education

Doctor of Philosophy in Cell and Molecular Biology, 1982  
Florida Institute of Technology, Melbourne, Florida

Master of Science in Cell and Molecular Biology, 1979  
Florida Institute of Technology, Melbourne, Florida

Bachelor of Science in Nursing, 1968  
Baylor University, Waco, Texas

### Professional Experience

August 2005 – Present

#### President

#### Chadron State College

Chadron State College offers a full range of baccalaureate programs and is committed to graduate education through the master's degree. The Carnegie Foundation classifies Chadron State College (CSC) as a *Master's Colleges and Universities I*, a designation that acknowledges the range of CSC's instructional programs. The College has nearly 2500 graduate and undergraduate students and serves a 38,000 square mile state assigned service region in western Nebraska.

Chadron State College is accredited by the **Higher Learning Commission**, the post-secondary division of the North Central Association of Colleges and Schools. The College maintains the following specialized accreditation: the Department of Business and Economics Programs are accredited by the **Association of Collegiate Business Schools and Programs (ACBSP)**; the undergraduate social work program, is accredited by the **Council on Social Work Education**; the teacher-preparation programs are accredited by the **National Council for Accreditation in Teacher Education (NCATE)**; the music program is certified by the National Association of Music Merchants (**NAMM Affiliated Music Business Institutions (NAMBI)**); the Chadron State College Child

Development Center (CDC) is accredited by the **National Association for the Education of Young Children (NAEYC)**; the Tutoring Center, part of the campus's academic success initiative, has been accredited by the **College Reading and Learning Association (CRLA)**.

**July 1996 – August 2005**

**Provost and Academic Vice Chancellor  
Professor of Biological Sciences  
Montana State University-Billings**

Montana State University Billings has nearly 5,000 students and 190 faculty in six colleges including Allied Health Professions, Arts and Sciences, Business, Education and Human Services, Professional Studies and Lifelong Learning, and Technology. For a period of three years from 1997 to 1999 the Division of Student Affairs reported me as Provost. My current responsibilities include:

- Academic vision, direction and evaluation; academic policy, implementing new academic programs and innovative delivery modes, including online and interactive TV, evening college, short sessions, and summer session
- Academic and organizational management of six colleges, the Honors Program and academic support services including the Library, Graduate Studies and Research, distance delivery and telecommunications, continuing education and training and several University Centers
- Fiscal management of the Academic Affairs \$20 million dollar budget which represents 63% of the University's Education and General Fund; resource allocation and reallocation to achieve University strategic initiatives and goals; fiscal stewardship and accountability; faculty and staff hiring, all aspects of academic operations
- Academic liaison officer (ALO) for our regional accreditation commission, the Northwest Commission on Colleges and Universities; responsible for institutional self study and evaluation
- Implement and track academic assessment; faculty and staff evaluations; program evaluations
- Liaison for Academic Affairs with the Office of the Commissioner of Higher Education, the Board of Regents, and the other units of the Montana University System; present academic issues for Montana State University-Billings before the Montana Board of Regents
- Serve on the Collective Bargaining Team for two faculty unions at the senior campus and the College of Technology

- Advocate for student academic concerns
- Community and statewide public relations and alumni relations; advocate for the University
- Fundraising
- Represent the University in the absence of the Chancellor.

### **Additional Professional Experience**

#### **Advanced Leadership and Management Education: July-August 2004**

Harvard Institute for Educational Management, Class of 2004

#### **American Democracy Project: June 2004**

Invited participant in the American Democracy Project Wingspread Conference, Creating Civically-Engaged Campuses, sponsored by the American Association of State Colleges and Universities, *The New York Times*, and the Johnson Foundation; June 2004; Wingspread, Racine, WI; Statement of Purpose: to create a guide for presidents, chancellors, and other senior institutional leaders on how to reorient their institutions to focus on civic engagement outcomes for students.

**Accreditation Evaluation Committee member and on-site evaluator** for the Northwest Commission on Colleges and Universities

### **Community Service**

Chadron Rotary International Member (current)  
 Billings Rotary International Board of Directors Member (current)  
 Building a Healthy Community Task Force Member (current)  
 Greater Yellowstone Business and Education Council Steering Committee (current)  
 Celebrate Billings Leadership Forum Member (current)  
 Leadership Billings Alumni Association Member (current)  
 Billings Town and Gown Steering Committee Member (past)  
 Billings Symphony Board of Directors Member (past)  
 Youth Dynamics, Inc. Board of Directors Member (past)  
 St. Vincent Hospital Board of Directors Member (past)

### **July 1993 - July 1996**

#### **Dean, College of Arts and Sciences**

#### **Professor of Biological Sciences**

#### **Montana State University-Billings**

Responsibilities: Eighty-four full-time and 30 part-time faculty in addition to 12 staff comprising ten departments in the College of Arts and Sciences. Chair, Chancellor Search Committee, 1994; Chair, MSU system-wide regional Health Care Task Force; Chair, MSU-Billings/Community Fine Arts Task Force; co-organizer, Deaconess

Research Institute/MSU-Billings Regional Science Fair; MSU-Billings Collaborative Bargaining Team member.

**January 1990 -June 1993**

**Associate Dean  
College of Science and Liberal Arts  
Florida Institute of Technology**

Prior to 1990 the sciences and humanities disciplines were under the College of Engineering at Florida Institute of Technology. In 1990 these disciplines were drawn together to form a new college, the College of Science and Liberal Arts. Dr. Gordon Nelson was hired to be the first dean of the new college and I successfully competed for the position of Associate Dean. Together we developed the strategic plan for the new college and began to implement programs and research to distinguish the new college within the University. Today the College of Science and Liberal Arts is on par with the College of Engineering in prestige and in research grants and contracts.

**September 1989 - June 1993**

**Associate Professor of Biological Science, Florida Institute of Technology**  
**Research Interests:** Molecular composition and age-related changes in synaptic elements of peripheral neurons; biomarkers of aging; neuronal degeneration in the organs of hearing and balance; dietary effects on neuronal degeneration.  
**Directorships:** Research Director, Electron Microscopy Services component of the Joint Center for Advanced Therapy and Biomedical Research of Florida Institute of Technology and Holmes Regional Medical Center (1991-1993); Research Director; Center for Interdisciplinary Research in Aging (1988-1990)

**September 1986 - June 1993**

**Chair, Pre-professional/Pre-medical Program  
Florida Institute of Technology**

**September 1984 -August 1989**

**Assistant Professor of Biological Sciences  
Florida Institute of Technology**

**September 1982 - August 1984**

**Instructor of Biological Sciences  
Florida Institute of Technology**

**Graduate courses taught:**

Cell Physiology, Histological Techniques for Light Microscopy, Histology

**Undergraduate courses taught:**

Immunology, General Biology for non-majors, General Biochemistry I, General Biochemistry II, Molecular Biology, Experimental Biochemistry (laboratory I, II), Experimental Molecular Biology (laboratory), Cell Biology, Experimental Cell Biology (laboratory), General Biology I, General Biology II, General Biology III, Experimental Biology (laboratory I, II, III)

**Graduate Students** - Scott Hubel (MS - 1986), Albert D. Woods (MS - 1986), Veronica A. Fedor (MS - 1987), William T. McLamb (MS - 1989), Bruce S. Aaron (MS - 1991)

**Post Doctoral Biological Science Education**

Energy Dispersive X-ray Microanalysis Workshop, University of Florida, 1985  
Morphometry and Stereology, Marine Biological Laboratory, Woods Hole, MA, 1985  
Cryotechniques for Electron Microscopy, RMC, Inc., 1987

**Professional Honors**

Invited speaker, International Society for Developmental Neuroscience,  
July 1986, Queretaro, Mexico.

**September 1977 - June 1982**

**Graduate Student Teaching Assistant**  
**Florida Institute of Technology**

**September 1969 - August 1977**

Break in career to stay home with two young sons, Christopher and Eric, until they were both in elementary school

**July 1968 - August 1969**

**Registered Nurse**  
**Holmes Regional Medical Center, Melbourne, Florida**

**Past and Current Memberships in Professional Organizations**

Florida Society for Electron Microscopy, President (1990-91)  
President Elect (1989)  
Vice President (1983)  
Board of Directors (1983 - 1993)  
Local Arrangements Committee (1991)  
Meeting Registration Chair (1990-present)  
Session Chair, Annual Meeting (1989, 1990, 1991, 1992)  
Association for Research in Otolaryngology  
Membership Committee Chair (1993-1997)

Membership Committee (1991-1997)  
Microscopy Society of America  
Southeast Electron Microscopy  
Sessions Chair, Annual Meeting (1991, 1992)  
Society for Neuroscience  
Sigma Xi Scientific Research Society  
Council of Colleges of Arts and Sciences  
Session Chair, Annual Meeting (1995)  
Rocky Mountain Deans' Association  
Annual Meeting Organizer 1995  
Council Arts and Sciences of Urban Universities (1993-1996)  
American Association of State Colleges and Universities (current)

**Grants Awarded (Principle Investigator)**

Sigma Xi Grant in Aid: The use of the chick embryo for testing drugs potentially damaging to the fetal ear, 1980, \$150.

National Institutes of Health (NIA): Age-related changes in the vestibular labyrinth of the mouse, 1985-1988, \$202,000.

F.I.T. Seed Money Grant: Neural degeneration and autoimmune disease, 1988, \$3,800.

Space Research Institute: The astronaut's age, a stress factor to be considered in long-term space flight, 1988, \$26,485.

Holmes Regional Medical Center: Injectable, iodized oil for iodine deficiency: is it safe to administer during pregnancy and lactation, 1989, \$4,994, with L.V. Oberkotter, and F. Freedman.

Holmes Regional Medical Center: The use of electron microscopy and polymerase chain reaction for the identification and diagnosis of tumors, 1991, \$14,940, Renewal 1992 to present, \$15,344, with J. Reilova and G. M. Cohen.

National Institutes of Health (NIDCD): Synaptic vesicle isolation from frog saccular hair cells, 1991-1993, \$41,336.

Gift from J. Reilova, M.D.: Polymerase chain reaction for diagnosis of human papilloma virus - a pilot study, 1992. \$1,000.

Electron Microscopy Society of America: Grant for Student Travel Awards for the annual meeting of the Florida Society for Electron Microscopy, 1991, \$500.

Hearing Research Foundation: Isolation of synaptic vesicles from rat cochlea, \$14,957 (1993). Refunded for second year \$14,995 (1994).

Holmes Regional Medical Center: A clinical trial in the use of polymerase chain reaction in pre-neoplastic lesions and the continuation of electron microscopy for the evaluation and diagnosis of tumors, \$18,313.

#### **Grants Awarded (Co-Principal Investigator)**

American Hearing Research Foundation: Why do spiral ganglia degenerate but not Scarpa's ganglia in C57BL/6 mice? 1990, \$9,779.

High Technology and Industry Council: Construction of a submicron resolution proton microprobe for biomedical application, 1990, \$50,000.

#### **Publications**

##### **Book Chapter**

Cohen, G.M. and Park, J.C. 1988. The developing and senescent inner ear: selected topics and models. In: *Critical Reviews Neurobiology* (A.A. Paparo, ed.). CRC Press, Inc., Boca Raton, FL. 4(2):179-199.

##### **Peer-reviewed Manuscripts:**

McLamb, W.T. and Park, J.C. 1992. Cholinesterase activity in vestibular organs of young and old mice. *Hearing Research* 58(2):193-199.

Park, J.C., Cook, K.C., and Verde, E.A. 1990. Dietary restriction slows the abnormally rapid loss of spiral ganglion neurons in C57BL/6 mice. *Hearing Research*. 48:275-280.

Cohen, G.M., Park, J.C., and Grasso, J.S. 1990. Comparison of demyelination and neural degeneration in spiral and Scarpa's ganglia. *Journal of Electron Microscopy Techniques*. 15:165-172.

Hubel, S.B. and Park, J.C. 1989. Volume fraction and ultrastructure of age pigment in the saccular epithelium of old mice. *Hearing Research*. 37:171-178.

Woods, A.D. and Park, J.C. 1987. Persistence of synaptic bodies in saccular hair cells of senescent mice. *Acta Otolaryngology*. 104:193-201.

Park, J.C., Hubel, S.B., and Woods, A.D. 1987. Morphometric analysis and fine structure of the vestibular epithelium of aged C57BL/6NNia mice. *Hearing Research*. 28:87-96.

Cohen, G.M. and Park, J.C. 1985. Impairment of the chick's grip and balance by streptomycin. A preliminary study. *Otorhinolaryngology* 47:236-241.

Otto, J.V., Park, J.C., Fermin, C.D., and Cohen, G.M. 1984. A new method for improved fixation of the chick's inner ear. *Fla. Scientist*. 47(4):253-258.

Park, J. C. and Cohen, G.M. 1984. Glutaraldehyde fixatives for preserving the Chick's inner ear. *Acta Otolaryngology*. 98:72-76.

Park, J.C. and Cohen, G.M. 1984. Further observations on vestibular ototoxicity in the chick: effect of streptomycin on the ampullary sensory epithelium. *Am. J. Otolaryngology*. 5:387-389.

Park, J.C. and Cohen, G.M. 1982. Vestibular ototoxicity in the chick: effect of streptomycin on equilibrium and on ampullary dark cells. *Am. J. or Otolaryngology*. 3:117-127.

**Published Abstracts:**

Park, J.C., Fedor-Duys, V., 1994. Isolation of synaptic vesicles from rodent brain and inner ear sensory tissues using novel paramagnetic bead technology. Seventeenth Midwinter Res. meet. Assoc. Res. Otolaryngology. Abstr. 544.

Park, J.C., Cook, K.C., Cohen, G.M., and Reilova, J. 1992. Granular cell tumor: Electron microscopy, ploidy and proliferation activity observations in four cases. *Proceedings Southeast Electron Microscopy Society Abstr.* P33:6.

Park, J.C. and Cook, K.C. 1992 Synaptophysin immunoreactivity in the inner ear of aging C57BL/6 mice. Fifteenth Midwinter Res. Meet. Assoc. Res. Otolaryngology. Abstr. 447.

Cook, K.C. and Park, J.C. 1991 Cytochrome c oxidase activity in the aging mouse vestibular and auditory ganglia of the inner ear. *J. of EM Techniques*. 19(3):384.

Park, J.C. and McLamb, W.T. 1991 Cholinesterase activity in the vestibular end organs and vestibular ganglion in young and old mice. *J. of EM Techniques*. 19:385.

Park, J.C., Cook, K.C., and Freedman, F. 1990 Inner ear development in the offspring of rats treated with iodized oil. *J. of EM Techniques*.

Cook, K.C., Beh, K.M., Coles, T.L. and Park, J.C. 1990 Demonstration of cytochrome oxidase in the cerebellum of the C57BL/6J mouse. *J. of EM Techniques*.

Park, J.C. 1990. Effects of diet-restriction on age-related spiral ganglion cell loss in the C57BL/6NNia mouse. Thirteenth Midwinter Res. Meet. Assoc. Res. Otolaryngology.

Abstr. 476.

Park, J.C. 1989. Age-related sub-cellular changes in the saccular epithelium of C57BL/6 mice. Twelfth Midwinter Res. Meet. Assoc. Res. Otolaryngology. Abstr. 387,pp. 318.

Park, J.C, Fedor, V.A., and Wilson, D.A. 1988. The vestibular ganglion of senescent mice: a quantitative and ultrastructural examination. Eleventh Midwinter Res. Meet. Assoc. Res. Otolaryngology. Abstr. 65.

Park, J.C. and Fedor, V.A. 1987. Age-related changes in the vestibular ganglion of C57BL/6 mice. Soc. Neurosci. Abstr. 350.13.

Park, J.C., Hubel, S.B., and Woods, A.D. 1986. Age-related changes in the vestibular neuroepithelium of senescent mice. International Journal of Developmental Neuroscience. 4(suppl):S17.

Park, J.C. and Woods, A.D. 1986. Persistence of presynaptic bodies in saccular hair cells of aged C57BL/6NNia mice. Soc. for Neurosci. Abstr. 214.2.

Park, J.C., Hubel, A.D., Aaron, B.S., and Lewis, T.W. 1986. Age pigment accumulation in the vestibular epithelium of senescent mice. Ninth Midwinter Res. Meet. Assoc. Res. In Otolaryngology. Abstr. pp. 126.

Park, J.C., Emmert, B.G., Black, B.E., and Aaron, B.S. 1985. Effects of aging on the vestibular sensory epithelium of the C57BL/6J mouse. Eighth Midwinter Res. Meet. Assoc. Res. Otolaryngology. Abstr. pp. 97.

Park, J.C. and Cohen, G.M. 1984. Postural stability in the chick: impairment by streptomycin and gentamicin. Seventh Midwinter Res. Meet. Assoc. Res. Otolaryngology. Abstr. pp 48.

Park, J.C. 1984. Age-related changes in the vestibular labyrinth of the mouse. Proceedings Southeast Electron Microscopy Society Abstr. pp. 64.

Huntsinger, R.J., Cohen, G.M., and Park, J.C. 1983. A comparative study of the cells in the semicircular canal end organs (cristae ampullares) in young and old C57BL/6J mice. Florida Academy of Sciences, Florida Scientist. 46(suppl. 1):42.

Park, J.C., Otto, J.V., and Cohen, G.M. 1983. A technique for improved fixation of the inner ear of young chicks. Sixth Midwinter Res. Meet. Assoc. Res. Otolaryngology. Abstr. pp. 43.

Winegar, R.A. and Park, J.C. 1983. Histochemistry of carbohydrates and proteins in the toad sacculae. Florida Academy of Sciences, Florida Scientist. 46(suppl. 1):25.

Park, J.C. and Cohen, G.M. 1983. Fixative composition for optimum preservation of the chick's inner ear. Proceedings Southeast Electron Microscopy Society. Abstr. pp. 11.

Park, J.C., Culliney, B., and Cohen, G.M. 1982. Comparative actions of gentamicin and streptomycin in the chick. Fifth Midwinter Res. Meet. Assoc. Res. Otolaryngology. Abstr. pp. 62.

Park, J.C. and Cohen, G.M. 1981. Vestibular ototoxicity in the chick caused by streptomycin. Effects on equilibrium and ampullary structure. Fourth Midwinter Res. Meet. Assoc. Res. Otolaryngology. Abstr. pp. 62.

Cohen, G.M., Park, J.C., and Culliney, B. 1981. Side-effects of gentamicin: damage to the balance portion of the inner ear. Paper presented at the 67th Annual Meeting of the Southeastern Branch of the ADM, Jacksonville, FL.

Park, J.C. and Cohen, G.M. 1980. Vestibulotoxicity in the chick caused by streptomycin. Soc. Neurosci. Abstr. 6:223.

Park, J.C. 1979. Ultrastructural studies of mouse splenic lymphocyte cultures simulated with concanavalin A. Proceedings Southeastern Electron Microscopy Society. Abstr. pp. 28.

### **Doctoral Dissertation**

Antibiotic induced cellular changes in the inner ear organs of balance in chicks; balance behavior changes in chicks following administration of ototoxic drugs, 1982.

### **Master's Thesis**

Specific lymphocyte blast transformation induced by influenza A., 1979.

### **Conference Paper**

Coffman, S., Archer, M., Coffman, V., and Park, J. (1996) Using other voices: developing effective alliances to advocate Theatre. American Theatre Educators Conference, New York.

### **References:**

Chancellor Ron Sexton  
Montana State University – Billings  
1500 University Drive  
Billings, MT 59101-0252  
Phone: 406-657-2011

Dr. Gordon Nelson, Dean  
College of Science  
Florida Institute of Technology  
150 W. University Blvd.

Melbourne, FL 32901-6975  
Phone: 321-674-8000

Dr. Sheila Stearns  
Commissioner of Higher Education  
P.O. Box 203101  
Helena, MT 59620-3101  
Phone: 406-444-6570

## **NEBRASKA INFORMATION TECHNOLOGY COMMISSION**

Friday, September 23, 2005, 1:00 p.m.  
Southeast Community College Division of Continuing Studies  
301 South 68<sup>th</sup> Street Place, Lincoln, Nebraska  
**PROPOSED MINUTES**

### **MEMBERS PRESENT:**

**Lieutenant Governor Rick Sheehy, Chair**

**Greg Adams**, Mayor, City of York

**Dr. Doug Christensen**, Nebraska Department of Education

**L. Merill Bryan**, Senior Vice President & Chief Information Officer, Union Pacific (Retired)

**Senator Phil Erdman**, Ex-officio Liaison (Scottsbluff Site)

**Dr. Doug Kristensen**, Chancellor, University of Nebraska-Kearney

**Trev Peterson**, Attorney, Knudsen, Berkheimer, Richardson, and Endacott, LLP

**MEMBERS ABSENT:** Linda Aerni, Chief Executive Officer, Community Internet Systems; and Dr. Eric Brown, Manager, KRVN Radio

### **CALL TO ORDER, NOTICE OF MEETING AND ROLL CALL**

Lieutenant Governor Sheehy called the meeting to order at 1:40 p.m. There were seven members present at the time of roll call. A quorum of six-voting members was present to conduct official business. The meeting notice was posted to the Nebraska Public Meeting Calendar on August 31, 2005. The meeting agenda was posted to the NITC Web site on September 15, 2005. Chancellor Doug Kristensen was welcomed as a newly appointed NITC Commissioner.

### **APPROVAL OF JUNE 2005 NITC MEETING MINUTES**

Commissioner Christensen moved to approve the [June 14, 2005 minutes](#) as presented. Commissioner Peterson seconded. Roll call vote: Adams-Yes, Bryan-Yes, Christensen-Yes, Kristensen-Abstained, Sheehy-Yes, and Peterson-Yes. Results: Yes-5, No-0, Abstained-1. Motion was carried by majority vote.

### **PUBLIC COMMENT**

Mr. Roger Hahn commented that all but about 27 Nebraska towns now have local broadband Internet services. The largest community that does not yet have local broadband access is Bee, with a population of 232. Most communities without local broadband Internet access have populations in the range of 50 to 100.

### **[DAS INFORMATION TECHNOLOGY SERVICES ANNUAL REPORT](#)**

Brenda Decker, Chief Information Officer

Ms. Decker presented the first annual report of the new restructured operational I.T. organizations. Sections of the report are as follows: Mission Statement and Statutory References, Update from the CIO, Nebraska Information Technology Commission, Enterprise Computing, Intergovernmental Data Services, IT Financial Solutions, Network Services, Planning and Project Management, Technology Support Services, and Shared Services. The report will be posted to the NITC Web site.

### **MEETING SYNOPSIS OF AUGUST 9, 2005 JOINT MEETING WITH THE NITC ADVISORY COUNCILS**

Steve Henderson, I.T. Administrator, Planning and Project Management

Lt. Governor Sheehy thanked all those who attended the August 9<sup>th</sup> joint meeting of the NITC Advisory Groups and asked Steve Henderson to provide a [meeting synopsis](#).

Mr. Henderson stated that the August 9<sup>th</sup> meeting was an unprecedented opportunity for all of the NITC advisory councils to meet. A brainstorming session produced five collaborative action items that the councils will work on collaboratively:

- Stimulate job creation and economic development, including the development of a skilled technical workforce.
- Examine policy implications of the use of shared network assets.

- Make it easier to access information resources in Nebraska through a knowledge management system.
- Use high bandwidth flexible use circuits as community aggregation points and create a statewide, high bandwidth digital content delivery system using satellite, terrestrial and wireless technology.
- Improve disaster recovery and business continuity procedures

Lt. Governor Sheehy has sent letters thanking the attendees and encouraging them to participate in the work groups. The Statewide Technology Plan Part I is an action item today on the NITC agenda. If approved, action plans will need to be identified and developed. If persons are interested and have not signed up for a work group, they are to contact Lori Lopez Urdiales.

## **STATEWIDE TECHNOLOGY PLANS 2005-06 – PART I**

Ms. Decker commented that staff researched other state's technology plans. Nebraska's is different in that it included accomplishments. Commissioners provided feedback on the plan's content.

Discussions occurred regarding the purpose of the Statewide Technology Plan, the NITC goals and strategic initiatives, prioritization of I.T. budget requests, the passage of LB 689, and the NITC's visibility and role in I.T. budget requests and legislation.

Commissioners recommended that communication efforts to the Legislature be enhanced. Other suggestions included:

- Briefings to the following legislative committees: Education, Appropriations, and Transportation & Telecommunications.
- Briefings to the other statewide commissions and boards addressing similar issues.

**Commission Christensen moved to approve the [Statewide Technology Plan 2005-06 Part I](#). Commissioner Adams seconded. Roll call vote: Bryan-Yes, Christensen-Yes, Adams-Yes, Peterson-Yes, Sheehy-Yes, and Kristensen-Yes. Roll call vote: Yes-6, No-0. Motion was carried by unanimous vote.**

## **STRATEGIC INITIATIVES – SECURITY & BUSINESS RESUMPTION NITC DIRECTIVE FOR RESTORATION TIMELINE & PRIORITY**

Since the hurricane incidents, the need and awareness of security and business redemption has come to the forefront. This must be addressed by state government.

**Commissioner Bryan moved to direct the State Government Council to explore the issues and make recommendation to the NITC regarding restoration timelines and priorities. Commissioner Peterson seconded. Roll call vote: Kristensen-Yes, Adams-Yes, Sheehy-Yes, Bryan-Yes, Peterson-Yes, and Christensen-Yes. Results: Yes-6, No-0. Motion was carried by unanimous vote.**

## **REPORTS & ACTION ITEMS – COMMUNITY COUNCIL**

Anne Byers, Community I.T. Manager

*Membership.* Carol Brandl, one of the members representing Telehealth, has resigned from the Community Council to focus on the expansion of the telehealth network. Brandon Kelliher, IS Operations Manager for Great Plains Regional Medical Center in North Platte, has been nominated by the Community Council to fill her vacancy.

**Commissioner Adams move to approve the Community Council's nomination of [Brandon Kelliher](#) as one of telehealth representatives. Commissioner Peterson seconded. Roll call vote: Sheehy-Yes, Bryan-Yes, Peterson-Yes, Christensen-(not present at time of vote), Kristensen-Yes, and Adams-Yes. Results: Yes-5, No-0. Motion was carried by majority vote.**

*TIGER Grants:* Another funding cycle was approved at the last NITC meeting. The deadline for applications to be submitted was September 1, 2005. Eleven grant applications were received. Applications are currently being reviewed by reviewers approved by the Technical Panel.

*I.T. Planning and Mini Grant Program Update.* There were six communities participating in the last funding cycle. They are currently completing their projects.

## REPORTS & ACTION ITEMS – EDUCATION COUNCIL

Tom Rolfes, Education I.T. Manager

The Education Council has met twice since the last NITC meeting. On May 20<sup>th</sup>, the council met at Millard Public Schools. On August 9<sup>th</sup>, 18 council members and alternates attended the Joint meeting. Many members have signed up for work groups.

*Membership.* The Education Council recognized Mr. Mike Pate for his service to the NITC and the State of Nebraska since July 2003. Mr. Linster has appointed Mr. John Dunning of Wayne State College as his alternate. Mr. Dunning was present. The Education Council would like to recommend Linda Richards, representing Boards of Education, to replace the vacancy left by Mike Pate. Mr. Kent Gydesen, Lexington Public schools, will be her alternate. Ms. Richards was present.

**Commissioner Peterson moved to approve the Education Council's nomination of Linda Richards to serve on the council representing Boards of Education. Commissioner Kristensen seconded. Roll call vote: Adams-Yes, Bryan-Yes, Christensen-Yes, Kristensen-Yes, Sheehy-Yes, and Peterson-Yes. Results: Yes-6, No-0. Motion was carried by unanimous vote.**

## REPORTS & ACTION ITEMS – STATE GOVERNMENT COUNCIL

Rick Becker, Government I.T. Manager

The State Government Council has held one regular meeting since last NITC meeting. Topics being addressed by the council include: URL standard analysis, procurement issues for IT purchases, and the inclusion of GIS as a shared services. Nebraska's ranking improved this year in the Brown University I.T. 2005 Survey. Nebraska went from 47<sup>th</sup> in 2004 to 23<sup>rd</sup> in 2005 for improvement in online services and initiating a security statement.

## REPORTS & ACTION ITEMS – TECHNICAL PANEL

Walter Weir, Chair

The Technical Panel has held three meetings since last NITC meeting. Technical project reviews have been completed. Mr. Henderson was thanked for moderating the August 9<sup>th</sup> Joint meeting. The Technical Panel has two recommendations for the NITC.

*Standards & Guidelines – GIS Metadata Standard.* Metadata is data about data. The purposes of this standard is to preserve the public's investment in geospatial data, to save public resources by avoiding unnecessary duplication of expensive geospatial data acquisition, to minimize errors through inappropriate application of geospatial data, and to facilitate harmonious trans-agency public policy decision-making and implementation through the use of shared geospatial data.

**Commissioner Adams moved to approve the [GIS Metadata Standard](#) as recommended by the Technical Panel. Commissioner Christensen seconded. Roll call vote: Christensen-Yes, Kristensen-Yes, Bryan-Yes, Sheehy-Yes, Adams-Yes, and Peterson-Yes. Results: Yes-6, No-0. Motion was carried by unanimous vote.**

*Revised Technical Panel Charter.* Panel members raised the question regarding nominations and decisions for membership of members who are not in statute. The following statement was added to the charter:

### 6.3 Member Recommendations and Approval

Recommendations for membership on the Technical Panel will be considered from the agency represented for members in sections 6.2.1 through 6.2.3; from the CIO of the University of Nebraska and the CIO of the State of Nebraska the member listed in section 6.2.6; and from the Education Council of the NITC for the member listed in section 6.2.7. All members of the Technical Panel must be approved by the Commission.

**Commissioner Byran moved to approve the [revised Technical Panel Charter](#). Commissioner Adams seconded. Roll call vote: Peterson-Yes, Sheehy-Yes, Kristensen-Yes, Christensen-Yes, Bryan-Yes, and Adams-Yes. Results: Yes-6, No-0. Motion was carried by unanimous vote.**

## EDUCATION COUNCIL – ACCOMPLISHMENTS AND UPDATE LB 689 DISTANCE EDUCATION TASK FORCE UPDATE & DISCUSSION

Dr. Juck Huck and Alan Wibbels, Co-Chairs

Dr. Huck stated that the Education Council's attendance today was the largest it has ever been. Council members introduced themselves. A [written statement from the Education Council](#) was presented to the Commissioners that also served as a lead into the LB 689 discussions. Several members present also serve on the LB 689 Distance Learning Education Enhancement Task Force.

Some of the overall concerns and comments focused on the following:

- Adequate bandwidth provides for the electronic collection of data and transmission of classroom instruction.
- Financial support and funding. Education can support part of costs but need financial assistance from the state.
  - Explore aggregation and subsidization of costs
  - Assistance from the Public Service Commission and the Nebraska Universal Service Fund similar to what was done for the Telehealth Network
  - Options and utilization of e-rate
  - Cost of school districts to get to the backbone can be costly.
- Preservation of rural Nebraska is vital and necessary. The State of Nebraska must be committed to prosper rural Nebraska and to have the technology in order to enhance economic development. Governor Heineman has passed the Grow Nebraska Entrepreneurship Project legislation.
- Rural Nebraska. The rural needs are different in different parts of the state and cannot be lumped together.

It would cost approximately \$3.30 per public K-12 and Higher Education student/per year to fund the backbone transport across the state; equal to about \$1.27 million/year; \$2.3 million for 6 strategically located large-scale aggregation routers on Network Nebraska plus an additional \$337,000/year for maintenance.

Ms. Decker stated that the technology and means are there to correct the technical and bandwidth issues, but there is a cost. The bigger issue is how and who will pay the costs. Senator Raikes has stated that there will be no new funding. No firm decisions have been made by the Task Force but they do see Network Nebraska as a viable network.

Ms. Decker encouraged members as private citizens to use the legislative process and express their concerns to their senators.

## **NEW BUSINESS**

Ms. Decker announced that the NITC, along with Government Technology Magazine, will be hosting a Government I.T. Conference on November 15, 2005 at the Embassy Suites in Lincoln. This year's conference will involve state as well as local government agencies. Commissioners were invited to attend.

Nebraska is participating in a panel discussion on October 19, 2005 at an Electronic Medical Records Conference in Washington, D.C. Nebraska is recognized as a national leader in this area.

## **ADJOURNMENT AND NEXT MEETING DATE**

The next meeting of the Nebraska Information Technology Commission will be held on Tuesday, November 8, 2005, 1:30 p.m. The location will be determined at a later time.

**Commissioner Peterson moved to adjourn. Commissioner Adams seconded. Roll call vote: Adams-Yes, Bryan-Yes, Christensen-Yes, Kristensen-Yes, Sheehy-Yes, and Peterson-Yes. Results: Yes-6, No-0. Motion was carried by unanimous vote.**

The meeting was adjourned at 3:40 p.m.

Meeting minutes were taken by Lori Lopez Urdiales and reviewed by staff of the Office of the CIO/NITC.

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# Digital Nebraska

Envisioning Our Future

Nebraska's Statewide Technology Plan

2005-2006

Version 1.0

Nebraska Information Technology Commission





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**September 2005  
State of Nebraska  
Nebraska Information Technology Commission  
521 S. 14<sup>th</sup> Street, Suite 301  
Lincoln, NE 68508-2707  
(402) 471-3560**

Nebraska's Statewide Technology Plan  
is available from the NITC Web site:  
<http://www.nitc.state.ne.us>

# Foreword



Dave Heineman  
Governor

STATE OF NEBRASKA

DEPARTMENT OF ADMINISTRATIVE SERVICES  
Lori McClurg

September 23, 2005

My Fellow Nebraskans:

Information technology is becoming increasingly pervasive in nearly every aspect of our lives. The widespread use of information technology in business has led to unprecedented gains in productivity. State government must also use information technology to increase efficiency and to deliver services seamlessly to Nebraskans.

Recognizing the importance of information technology, the Legislature created the Nebraska Information Technology Commission in 1998 and charged it with developing an annual statewide technology plan. *Digital Nebraska: Envisioning Our Future* presents a vision for the use of technology in education, health care, economic development and all levels of government. The plan also outlines eight strategic initiatives on which to focus the State's efforts and resources.

I would like to thank the NITC Commissioners, members of the NITC's advisory groups, and the NITC staff for their contributions to the statewide technology plan.

Rick Sheehy  
Lieutenant Governor

Sincerely,

A handwritten signature in cursive script that reads "Rick Sheehy".

Rick Sheehy  
Lieutenant Governor  
and Chair, Nebraska Information Technology Commission



Nebraska Information Technology Commission  
Lieutenant Governor Rick Sheehy, Chair

State Capitol, Room 2315 • P.O. Box 94863 • Lincoln, Nebraska 68509-4863 • Home Page://www.nitc.state.ne.us  
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# Commissioners and Staff

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## Commissioners

**Lieutenant Governor Rick Sheehy**, Chair

**Greg Adams**, Mayor of York

**Linda Aerni**, Chief Executive Officer, Community Internet Systems

**Dr. Eric Brown**, Station Manager, KRVN-AM

**L. Merrill Bryan, Jr.**, Senior Vice President & Chief Information Officer, Union Pacific (retired)

**Dr. Doug Christensen**, Commissioner of Education, Nebraska Department of Education

**Trev E. Peterson**, Attorney, Knudsen, Berkheimer, Richardson & Endacott, LLP

**Doug Kristensen**, Chancellor, University of Nebraska - Kearney

**Senator Philip Erdman**, Nebraska Legislature, Bayard, Nebraska

## Staff

**Brenda Decker**, Chief Information Officer

**Steve Henderson**, IT Administrator, Planning and Project Management

**Rick Becker**, Government Information Technology Manager

**Anne Byers**, Community Information Technology Manager

**Tom Rolfes**, Education Information Technology Manager

**Lori Lopez Urdiales**, Administrative Assistant

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*The Nebraska Information Technology Commission (NITC) was established by the Legislature in 1998 to provide advice, strategic direction, and accountability on information technology investments in the state.*

# Executive Summary

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*Digital Nebraska: Envisioning Our Future* sets forth the vision and goals for the use of information technology in Nebraska, building upon Nebraska's numerous successes.

The Nebraska Information Technology Commission (NITC) was established by the Legislature in 1998 to provide advice, strategic direction, and accountability on information technology investments in the state. *Digital Nebraska: Envisioning Our Future* is the 6<sup>th</sup> statewide technology plan, in accordance with Section 86-516's directive to "annually update a statewide technology plan." The statewide technology plan will include set of action items that will guide the work of the Nebraska Information Technology Commission (NITC) and its advisory groups. The updated version of the plan will be made available in early 2006. The development of a statewide technology plan is the primary mechanism by which the NITC addresses its goal of promoting effective planning, management and accountability regarding the state's investments in information technology.

The NITC has identified four additional goals: supporting the development of a robust telecommunications infrastructure; supporting community and economic development; promoting the efficient delivery of government and educational services; and ensuring security and business continuity. In order to materially advance the Commission's vision and statewide goals, the NITC has identified eight strategic initiatives. These strategic initiatives are projects that are ready to be implemented, or that require an enterprise approach, involvement by the NITC and cooperation of multiple entities for their success. By emphasizing selected strategic initiatives, the NITC hopes to encourage funding of these initiatives and to encourage state agencies to work together to advance these initiatives. A brief description of each initiative, listed as supporting the NITC goals, follows:

## **Supporting the Development of a Robust Telecommunications Infrastructure**

**Nebraska Statewide Telehealth Network.** The Nebraska Statewide Telehealth Network will improve access to health care, continuing medical education, bioterrorism training, and bioterrorism alerts by connecting all rural and critical access hospitals with regional hospitals, public health departments, state public health laboratories, and the State of Nebraska. By the end of 2005, most of the telecommunications lines will be installed. The Nebraska Statewide Telehealth Network is a collaborative effort led by the Nebraska Hospital Association.

**Network Nebraska.** In order to develop a broadband, scalable telecommunications infrastructure that optimizes the quality of service to every public entity in the state of Nebraska, the Division of Communications and the University of Nebraska engaged in a collaborative partnership that used existing resources to aggregate disparate networks into a multipurpose core backbone extending from Norfolk, Omaha, Lincoln, Grand Island, Kearney and North Platte to the Panhandle. The next phase of this initiative is to formalize business relationships and agreements

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and to enhance rural bandwidth through aggregation. Potential benefits of Network Nebraska include lower network costs, greater efficiency, interoperability of systems providing video courses and conferencing, increased collaboration among educational entities, new educational opportunities, and better use of public investments.

**Statewide Synchronous Video Network.** The 400+ interactive video facilities in Nebraska currently utilize a variety of video standards and bandwidth speeds that prevent interconnection between sub-networks. The Statewide Synchronous Video Network, as envisioned, would use compatible audio and video standards to enable any classroom or facility to connect with any other classroom or facility or to connect with multiple sites simultaneously. Benefits include greater sharing of educational courses and resources; more efficient use of available resources; one-to-many videoconferencing capabilities for alerts and emergency situations; and collaborative development across various service agencies.

## Supporting Community and Economic Development

**Community IT Planning and Development.** In order to foster community and economic development in Nebraska communities through the effective use of information technology, the NITC Community Council has partnered with the University of Nebraska Cooperative Extension and Rural Initiative to form the Technologies Across Nebraska partnership. Technologies Across Nebraska has helped 21 communities develop local plans to utilize technology to enhance development opportunities. Technologies Across Nebraska's quarterly newsletter, *TANGents*, reaches over 1,000 individuals with an interest in technology-related development.

## Promoting the Efficient Delivery of Government and Educational Services

**Digital Education.** The primary objective of the Digital Education Initiative is to promote the effective and efficient integration of technology into the instructional, learning, and administrative processes and to utilize technology to deliver enhanced digital educational opportunities to students at all levels throughout Nebraska on an equitable and affordable basis.

**State Government Efficiency.** The State Government Council will address multiple items improving efficiency in state government, including shared services; standards and guidelines; and the project review process. The council has identified and is working to implement seven "shared services" for state government agencies. Also, the council will continue to develop standards and guidelines to better coordinate state agency technology efforts. Finally, the council will review and recommend improvements to the IT project review process. Benefits of these activities include lower costs, easier interoperability among systems, greater data sharing, and improved services.

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**Digital  
Nebraska:  
Envisioning  
Our Future**  
*sets forth the  
vision and  
goals for the  
use of  
information  
technology in  
Nebraska,  
building upon  
Nebraska's  
numerous  
successes.*



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**E-Government.** Through the use of technology, state agencies can enhance information sharing, service delivery, and constituency and client participation. Benefits include improved services for citizens and businesses, and increased efficiency and effectiveness for agencies.

**Security and Business Resumption.** This initiative will define and clarify policies, standards and guidelines, and responsibilities related to the security of the State's information technology resources. Benefits include lower costs by addressing security from an enterprise perspective, cost avoidance, and protecting the public trust.

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# Introduction

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*“Technology can provide a link that further unites our state—a link that bridges our vast prairies and sandhills. Technology has revolutionized farming, it is helping to bring health care services to the smallest of our communities, and it has opened new doors of learning in our schools. We must build on the superb progress that has been made.”*

—Governor Dave Heineman, State of the State Address, January 26, 2005

Information technology is making information and services more readily available to Nebraskans across the state. Through the Nebraska Statewide Telehealth Network, doctors and nurses at St. Elizabeth Regional Medical Center can set up videoconferences with the families and doctors of infants with special medical needs who reside outside of the Lincoln area. From the convenience of their offices, banks, title companies, and law firms can search court records through Nebraska.gov. Legislative staff can easily monitor legislative activity using the BillTracker service, another Nebraska.gov service, freeing up resources to better meet constituent needs. Through Technologies Across Nebraska’s IT Planning and Mini Grant program, communities are examining how to better utilize technology. After soliciting citizen input, Cuming County has redesigned its Web site to better meet constituent needs. The Nemaha County Development Association, with assistance from the Nebraska Public Service Commission and Technologies Across Nebraska, has partnered with JAGWireless to bring broadband service to Nemaha County. South Sioux City is using a high tech camera system to deter vandals. Both K-12 and higher education are using Web-based e-learning products to enhance learning. Aggregation of telecommunications services is reducing costs for entities in Wayne and for the ESUs participating in Project 42.

Building upon these and other successes, *Digital Nebraska: Envisioning Our Future* sets forth the vision and goals for the use of information technology in Nebraska. An updated version of the plan including a set of action items will be made available in early 2006.

The Nebraska Information Technology Commission (NITC) was established by the Legislature in 1998 to provide advice, strategic direction, and accountability on information technology investments in the state. *Digital Nebraska: Envisioning Our Future* is the 6<sup>th</sup> statewide technology plan.

To achieve its mandate, the NITC relies on coordination and collaboration to influence a wide range of information technology issues. The NITC has neither operational authority nor enforcement powers for implementing its policy directives. The NITC has adhered to the legislative directive in Section 86-513 to “coordinate the state’s investment in information technology in an efficient and expeditious manner.”

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*“Technology can provide a link that further unites our state—a link that bridges our vast prairies and sandhills.”*

—Governor Dave Heineman



*South Sioux City has implemented four high tech graffiti/vandalism deterrent systems at repeat graffiti problem areas in the city.*

## High tech system deters vandals

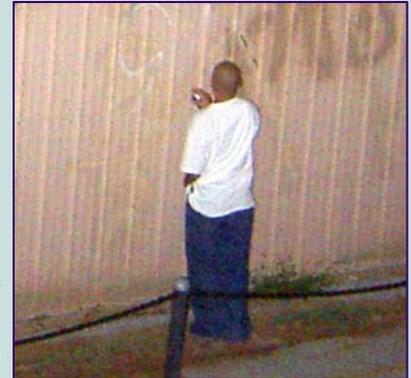
*By Lance Martin, City of South Sioux City*

**S**outh Sioux City is using technology to send this message to would-be vandals: "Stop! This is private property. It is illegal to spray graffiti. Your picture has just been taken and will be used to prosecute you. Leave the area now!"

South Sioux City has implemented four high tech graffiti/vandalism deterrent systems at repeat graffiti problem areas in the city. The system consists of a high quality 5 mega-pixel digital camera, a motion sensor, a remote control and a high powered flash mechanism. The systems are solar powered and don't require any wiring whatsoever making them quick and simple to deploy. The system can be armed so that they are on 24x7 or they can be set to come on at night and shut off in the morning.

The system is mounted to a building or telephone pole and is "aimed" at a building or location where the problem is occurring. When the system is armed and a would-be perpetrator walks within the area of the motion detector sensor, the system activates taking a digital photograph of the area while playing a recording. The recording is customizable. The system can be set to take up to four pictures per event. It is best to set the system to take at least two pictures. After the flash goes off and the recorded message plays, most individuals look up at the camera to see what is going on. The second picture then often catches the individual looking directly at the camera.

The system is a proactive approach to solving the problem of graffiti and vandalism. Very seldom does an individual continue on with the intended graffiti or vandalism after their picture has been taken. The natural reaction in almost all cases is to flee the scene without the crime being committed. The camera system has already caught one perpetrator in the act, spray paint can in hand and also fleeing the scene in his vehicle.



**A would-be vandal caught in the act by South Sioux City's graffiti deterrent system. Photo courtesy of South Sioux City**

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# Vision and Goals

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The vision of the NITC is to improve the quality of life of all Nebraskans by promoting the use of information technology in education, health care, economic development and all levels of government. To achieve this vision, the NITC has identified five goals:

- Support the development of a robust statewide telecommunications infrastructure that is scalable, reliable, and efficient;
- Support the use of information technology to enhance community and economic development;
- Promote the use of information technology to improve the efficiency and delivery of governmental and educational services, including homeland security;
- Ensure the security of the State's data and network resources and the continuity of business operations.
- Promote effective planning, management and accountability regarding the state's investments in information technology.

In order to further these goals, the NITC has identified 8 key initiatives on which to focus. The eight strategic initiatives directly support the first four goals listed.

Although no strategic initiatives are listed for the fifth goal of promoting effective planning, management and accountability regarding the state's investments in information technology, much work is also being done in this area. The development this statewide technology plan is perhaps the most visible evidence of planning for the effective use of information technology. Other activities which support effective planning, management and accountability include the development of standards and guidelines and the review of technology-related budget requests.

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*The vision of the NITC is to improve the quality of life of all Nebraskans by promoting the use of information technology in education, health care, economic development and all levels of government.*



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*“Blackboard sends education beyond the classroom and into the dorm room, the late-night struggle over unintelligible classical texts and the Wi-Fi coffee shop five miles down the road.”*

—Ivan Lovegren,  
*Daily Nebraskan*

## eLearning at University of Nebraska extends education beyond classroom

Since the year 2000, the University of Nebraska has used Blackboard, a suite of web-based elearning products, for deployment at all four campuses. Blackboard now serves as the official academic portal for both students and faculty at UNK, UNL, UN Medical Center, and UNO.

When a student logs into Blackboard, each of the courses they are currently enrolled in is automatically displayed. They can easily access all of the information and resources their instructors have provided relative to each course. They are able to take diagnostic quizzes or graded evaluations and immediately see their results. Students who would not participate in classroom discussions often actively participate in online discussions and chat sessions. Blackboard also supports the formation of communities of learning. Students can also personalize their Blackboard "home page" to include other web-based applications and resources (e.g. links to reference libraries, news services, etc).

At this time approximately 90% of all UN students are enrolled in at least one course that utilizes Blackboard, almost 65% of all faculty actively utilize Blackboard for the classes they teach, and Blackboard is used in well over 50% of all courses taught at the University. Blackboard provides a rich, dynamic, and engaging learning environment that encourages participation and collaboration at levels otherwise thought impossible.

As guest columnist for the UNL newspaper Daily Nebraskan, senior Ivan Lovegren said, “Blackboard sends education beyond the classroom and into the dorm room, the late-night struggle over unintelligible classical texts and the Wi-Fi coffee shop five miles down the road. It provides a system of immediate connection and information. Networking these benefits among students and scholars pursuing a common goal of understanding and knowledge means all professors at UNL should seek to utilize the Blackboard Learning System.”

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# Role of Advisory Groups

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The NITC conducts the majority of its work through three advisory groups and the Technical Panel.

**Community Council.** The Community Council has twenty members from each of its three focus areas (rural and community information technology development, local governments and libraries, and telehealth), resource providers, and other groups as deemed appropriate by the Community Council and the NITC. The Community Council focuses on the role of information technology in community and economic development. It seeks to foster the collaborative and innovative use of technology through partnerships between public and private sectors, to improve teleliteracy, and to support community and economic development for Nebraska citizens.

**Education Council.** The Education Council has sixteen members, eight representing the K-12 sector, eight representing the postsecondary sector, and four liaisons as representatives of the Department of Education, the Coordinating Commission for Postsecondary Education, the Department of Administrative Services, and the Nebraska Educational Telecommunications Commission. The Education Council works on common areas of interest in the use of information technology across all sectors of education from elementary through postsecondary levels and including public and private institutions. The Education Council advises the NITC on education information technology needs, goals, and policy. The Council identifies, coordinates, and prioritizes matters pertaining to information technology for a more strategic and cost-effective approach to developing the state's education information technology infrastructure.

**State Government Council.** The State Government Council has 24 members representing state agencies and two members with experience in managing major information technology systems chosen from the private sector. The mission of the State Government Council is to provide direction and oversight for state government information technology vision, goals, and policy. It promotes collaboration on technology issues among state agencies.

**Technical Panel.** The Technical Panel is a statutory body, which provides technical analysis and recommendations to the Commission. The Technical Panel is codified at Neb. Rev. Stat. § 86-521. It consists of seven members approved by the Commission. The mission of the Technical Panel is to assist in the development of a statewide technical infrastructure that will be scalable, reliable, and efficient, including a shared statewide telecommunications network. It provides technical analysis of projects and recommends technical standards and guidelines.

Each of the councils and the Technical Panel has a charter, adopted by the NITC, which establishes the council membership, responsibilities, and meeting procedures. Charters, proceedings, and other information are available on the NITC Web site.

**Joint Advisory Group Efforts.** On August 9, 2005, members of the NITC's advisory groups met to identify collaborative action items which support the NITC's

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*The NITC conducts most of its work through three advisory groups and the Technical Panel.*



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strategic initiatives. These action item ideas are being further developed and will be considered for inclusion as action items in the statewide technology plan.

**Other Coordinating Entities.** The NITC also recognizes the important contributions of other information technology coordinating entities, such as the Criminal Justice Information Systems (CJIS) Advisory Committee, and the Geographic Information Systems (GIS) Steering Committee. The CJIS Advisory Committee includes representatives of state and local agencies involved in all aspects of criminal justice. It conducts strategic planning and sponsors automation and data sharing projects. Further information about the CJIS Advisory Committee is available at <http://www.cjis.state.ne.us/>. The Legislature established the GIS Steering Committee in 1991 (Sections 81-2601 through 81-2605), in an effort to coordinate the implementation of GIS technology by state and local governments in Nebraska. Membership on the GIS Steering Committee includes local, state, and federal representatives. Further information about the GIS Steering Committee is available at <http://www.calmit.unl.edu/gis/>.

The NITC encourages other information technology coordinating entities to collaborate with the NITC and its advisory councils.

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# Strategic Initiatives

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The NITC has identified eight strategic initiatives, which address the NITC's goals of supporting the development of a robust telecommunications infrastructure; supporting community and economic development; promoting the efficient delivery of government and educational services; and ensuring the security of data and network resources and the continuity of business operations. These initiatives would materially advance the vision and statewide goals as identified by the NITC. By emphasizing selected strategic initiatives, the NITC hopes to encourage funding of these initiatives and to encourage state agencies to work together to advance these initiatives. The eight strategic initiatives, listed as supporting the NITC goals, are:

## Supporting the Development of a Robust Telecommunications Infrastructure

**Nebraska Statewide Telehealth Network.** The Nebraska Statewide Telehealth Network will improve access to health care, continuing medical education, and bioterrorism training and alerts by connecting all rural and critical access hospitals with regional hospitals, public health departments, state public health laboratories, and the State of Nebraska. As of July 1, 2005, most of the telecommunications lines have been installed, completing phase one of network development. Phase two will address issues such as training, maintenance, scheduling, operations, and governance. The Nebraska Statewide Telehealth Network is a collaborative effort led by the Nebraska Hospital Association.

**Network Nebraska.** The primary objective of Network Nebraska is to develop a broadband, scalable telecommunications infrastructure that optimizes the quality of service to every public entity in the state of Nebraska. The Division of Communications and the University of Nebraska engaged in a collaborative partnership that used existing resources to aggregate disparate networks into a multipurpose core backbone extending from Norfolk, Omaha, Lincoln, Grand Island, Kearney and North Platte to the Panhandle. Potential benefits of Network Nebraska include lower network costs, greater efficiency, interoperability of systems providing video courses and conferencing, increased collaboration among educational entities, new educational opportunities, and better use of public investments.

**Statewide Synchronous Video Network.** The primary objective of this initiative is to establish an Internet Protocol-based network that will interconnect all existing and future distance learning and videoconferencing facilities in the State of Nebraska. The 400+ interactive video facilities in Nebraska currently utilize a variety of video standards and bandwidth speeds that prevent interconnection between sub-networks. The Statewide Synchronous Video Network, as envisioned, would use compatible audio and video standards to enable any classroom or facility to connect with any other classroom or facility or to connect with multiple sites simultaneously. Benefits include greater sharing of educational courses and resources; more efficient use of available resources; one-to-many videoconferencing capabilities for alerts and emergency situations; and collaborative development across various service agencies.

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*The NITC has identified eight strategic initiatives, which address the NITC's goals.*



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## Supporting Community and Economic Development

**Community IT Planning and Development.** The primary objective of this initiative is to foster community and economic development in Nebraska communities through the effective use of information technology. The NITC Community Council has partnered with the University of Nebraska Cooperative Extension and Rural Initiative to form the Technologies Across Nebraska partnership. Technologies Across Nebraska is a partnership of over 40 organizations working to help communities utilize information technology to enhance development opportunities. Technologies Across Nebraska has helped 21 communities develop local plans to utilize technology to enhance development opportunities. Technologies Across Nebraska's quarterly newsletter, *TANgents*, reaches over 1,000 individuals with an interest in technology-related development.

### Promoting the Efficient Delivery of Government and Educational Services

**Digital Education.** The primary objective of the Digital Education Initiative is to promote the effective and efficient integration of technology into the instructional, learning, and administrative processes and to utilize technology to deliver enhanced digital educational opportunities to students at all levels throughout Nebraska on an equitable and affordable basis.

**State Government Efficiency.** The State Government Council will address multiple items improving efficiency in state government, including shared services; standards and guidelines; and the project review process. The council has identified and is working to implement seven "shared services" for state government agencies. Also, the council will continue to develop standards and guidelines to better coordinate state agency technology efforts. Finally, the council will review and recommend improvements to the IT project review process. Benefits of these activities include lower costs, easier interoperability among systems, greater data sharing, and improved services.

**E-Government.** Through the use of technology, state agencies can enhance information sharing, service delivery, and constituency and client participation. Benefits include improved services for citizens and businesses, and increased efficiency and effectiveness for agencies.

### Ensuring the Security of Data and Network Resources and the Continuity of Business Operations

**Security and Business Resumption.** This initiative will define and clarify policies, standards and guidelines, and responsibilities related to the security of the State's information technology resources. Benefits include lower costs by addressing security from an enterprise perspective, cost avoidance, and protecting the public trust.

Each strategic initiative is discussed in greater detail in the following section.

## SNDLC pioneers the Digital Frontier

The Southeast Nebraska Distance Learning Consortium (SNDLC), involving schools from Educational Service Units 3, 4, 5, and 6, has been pioneering the digital frontier for Nebraska teachers and students. It is fitting that the effort includes connections to the Homestead National Monument of America at Beatrice, site of the nation's first homestead in 1862. Today, nearly a century and a half later, digital pioneering is expanding learning opportunities through Internet 1 connections to such places as

- Little Rock Central High School National Historic Site in Arkansas
- Cabrillo National Monument in California,
- Nicodemus National Historic Site in Kansas,
- Henry Doorly Zoo and Homestead National Monument of America in Nebraska
- Badlands National Park, Minuteman Missile National Historic Site and Mount Rushmore National Memorial in South Dakota
- Arches National Park, Canyonlands National Park and Hovenweep National Monument in Utah.



**SNDLC students ask questions of staff from the Homestead National Monument in Beatrice. Photo courtesy of SNDLC**

Educators at each of these sites work with classroom teachers to provide standards-based enrichment experiences that are directly tied to what is being taught in the classroom. Distance-learning technology allows two-way live interaction between the presenter and the students; they can hear, see and talk to each other in real time. Today's students can share the rich history of our country without leaving the classroom, and can interact with students from other states as they discover and share the unique differences that exist in our world today. Best of all, Nebraska teachers and students are setting the stage for students from all over the world to explore the resources of America, as well as those of Nebraska.

*Today's students can share the rich history of our country without leaving the classroom.*

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# Nebraska Statewide Telehealth Network

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## Objective

The Nebraska Statewide Telehealth Network will improve access to health care, continuing medical education, and bioterrorism training and alerts by connecting all rural and critical access hospitals with regional hospitals, public health departments, state public health laboratories, and the State of Nebraska.

## Description

The Nebraska Statewide Telehealth Network is an interactive video and data network that provides integration among the hospitals, public health departments, public health laboratories and other entities across the entire State of Nebraska. The major functions of the Network are to improve quality and access to care, particularly in rural Nebraska, to provide patient, provider and community education and to provide another communication source in the event of a natural, man-made or terrorist emergency.

The Nebraska Statewide Telehealth Network is a collaborative effort led by the Nebraska Hospital Association. Partners include:

- Nebraska Hospital Association
- Nebraska hospitals
- Nebraska Public Health Departments
- University of Nebraska Medical Center
- Universal Service Administrative Company
- University of Nebraska System
- Nebraska Information Network
- Nebraska telecommunications companies
- Central Nebraska Area Health Education Center
- Northern Nebraska Area Health Education Center
- Nebraska Panhandle Area Health Education Center
- Nebraska Medical Association
- Nebraska State Government
  - Lieutenant Governor's Office

- 
- Nebraska Public Service Commission
  - Nebraska Division of Communications
  - Nebraska Health and Human Services System
    - Bioterrorism Preparedness and Response Section
    - Office of Rural Health
  - Nebraska Information Technology Commission
  - Nebraska Office of the Chief Information Officer
  - Nebraska Department of Education
  - Nebraska Educational Telecommunications Commission

By the end of 2005, most of the telecommunications lines will be installed, completing phase one of network development. Phase two will address issues such as training, maintenance, scheduling, operations, and governance. A partnership with the Nebraska Medical Association has been formed to promote use of the network among physicians. The Telehealth Network Education Subcommittee is working to create a listing of educational offerings provided over the network.

The successful implementation of the Nebraska Statewide Telehealth Network may also help lay the foundation for the development of a statewide electronic health record system and the adoption of health information technology. President Bush has made the adoption of health information technology including electronic health records a national priority.

## Benefits

A telehealth network which connects all hospitals, providing access to consultations with medical specialists, continuing medical education, and bioterrorism training and alerts is critical to the provision of health care in rural areas of the state. There is a lack of specialist services in rural areas, particularly mental health services. Telemedicine has proven to be an effective way to provide consultations with specialists. Currently mental health consultations and teleradiology are the two most common types of specialist services provided via telemedicine. Rural health care providers also have fewer opportunities for continuing medical education in their community and must often drive several hours to attend training. Continuing medical education is currently being provided via telehealth in Nebraska and has proven to be an effective and efficient method of delivery. It is also critical that all hospitals are connected to a telehealth network in order to prepare health care providers to respond quickly to bioterrorism threats and other public health risks.

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*The Nebraska Statewide Telehealth Network will provide access to consultations with medical specialists, continuing medical education, and bioterrorism training.*

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The widespread adoption of health information technology (including electronic health records) is expected to reduce health care costs for employers, reduce costs and increase efficiencies for third party payers, and to improve the quality of health care.

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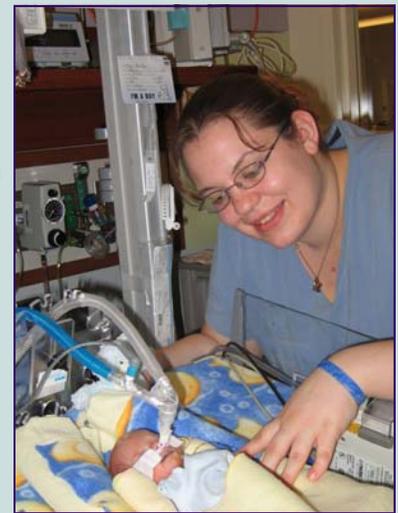
*Through the Nebraska Statewide Telehealth Network, Jessica was able to arrange support services for the family; family members in North Platte were able to see Trey and to visit with Jessica; and Trey's neonatologists at Saint Elizabeth and his physicians in North Platte were able to discuss his medical needs and care.*

## Nebraska Statewide Telehealth Network eases baby Trey's transition back home

**B**orn four months early and weighing only 13.9 ounces, Trey Keifer is a medical miracle. He is the tiniest baby to ever survive at Saint Elizabeth Regional Medical Center. His mother, Jessica, was airlifted from North Platte to Lincoln where an emergency Caesarean section was performed to save her life and hopefully that of her unborn son. Both lives were saved to the amazement of the medical teams.

During Trey's four-month stay in the Saint Elizabeth newborn intensive care unit, videoconferences were set up between Saint Elizabeth and Great Plains Regional Medical Center in North Platte using the Nebraska Statewide Telehealth Network. Through videoconferencing, Jessica was able to arrange support services for the family; family members in North Platte were able to see Trey and to visit with Jessica; and Trey's neonatologists at Saint Elizabeth and his physicians in North Platte were able to discuss his medical needs and care.

Impressed with how well videoconferencing has eased Trey's transition back home to North Platte, doctors and nurses at Saint Elizabeth now plan to regularly set up videoconferences with the families and doctors of infants with special medical needs who reside outside of the Lincoln area.



**Jessica Keifer smiles at her son, Trey. Photo courtesy of St. Elizabeth Regional Medical Center**

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# Network Nebraska

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## Objective

The primary objective of this initiative is to develop a broadband, scalable telecommunications infrastructure that optimizes the quality of service to every public entity in the State of Nebraska. The Division of Communications and the University of Nebraska engaged in a collaborative partnership that used existing resources to aggregate disparate networks into a multipurpose core backbone extending from Norfolk, Omaha, Lincoln, Grand Island, Kearney, and North Platte to the Panhandle. The next phase of this initiative is to formalize business relationships and agreements and to enhance rural bandwidth through local aggregation.

## Description

The major components of this initiative include:

- Development of a scalable, reliable, and secure telecommunications infrastructure that enables any type of eligible entity (i.e., local and state government, K-12 and higher education, health care institutions) to purchase the amount of service that the entities need, when they need it, on an annual basis;
- Establishment of a catalog of value-added applications that enables eligible entities to pick and choose services that are pertinent to them (e.g., Internet1, Internet2, and videoconferencing);
- Implementation of a network operations center that offers a helpdesk, network diagnostics, and engineering assistance in order to ensure acceptable qualities of service;
- Establishment of a billing or accounting center to accept service orders, extend service agreements, provide consolidated billing, and to maintain customer accounts.

## Benefits

Through aggregation of demand, adoption of common standards, and collaboration with network services and applications, participants can achieve many benefits, including:

- Lower network costs;
- Greater efficiency for participating entities;
- Interoperability of systems providing video courses and conferencing;
- Increased collaboration among all K-20 educational entities;
- New educational opportunities;

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*Through aggregation of demand, adoption of common standards, and collaboration with network services and applications, Network Nebraska participants can achieve many benefits.*



- Competitiveness with surrounding states; and
- Better use of public investments.

## Wayne's last mile aggregation provides better services at lower costs

*By Dennis Linster, Wayne State College*

In November 2002, Wayne City Administrator Lowell Johnson and Wayne State College CIO Dennis Linster presented a proposal to the NITC Technical Panel for approval of a plan to aggregate all of the tax-supported IP-based telecommunication services in Wayne, Nebraska and centrally distribute those services to the tax-supported entities. The initial plan included hosting the telecommunications services for Wayne city offices and NorthStar Regional Services at Wayne State College through a wireless connection. The NITC Technical Panel endorsed the plan as feasible and a promising example of Tier II aggregations among municipalities. The project was named the "Last Mile Project" by their technical team.

Wayne State College had several characteristics that made it a logical service consolidator. The President of the college lent support for this undertaking. The college had a network operating center that was open 24 x 7 and a very high-quality staff to ensure the success of the project. And, the City of Wayne was eager to make this project happen. The technical team chose a wireless transport solution to facilitate a connection between campus and the main city office building. Wireless technology was also used to connect the seven remaining city buildings to the main city office. The city and college technical staffs worked in partnership to make these connections functional. In February 2003 the connection was completed, and it has been working flawlessly since. After more than two years of rain, sleet, snow, high



**Wireless antenna and tower arrays connect Wayne municipal public entities with the Wayne State College campus. Photos courtesy of Wayne State College**

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winds, fog, virus outbreaks, and even power outages, the wireless connection performed very reliably. In 2004, NorthStar Regional Services and Wayne Public Schools were also connected by wireless. NorthStar Regional Services provides community-based services to people with developmental disabilities.

As a Tier II aggregation site, Wayne State College has been able to aggregate public entities' municipal Internet demand with their own and then contract with Network Nebraska for Internet service. The combination has not only improved the quality of service for the involved partners but also lowered costs.

Linster comments about the 'Last Mile Project', "It is evident that the collaboration of support is something that was seriously needed in our community, and likely is needed in other communities as well. Along with the collaboration of support, we have aggregated the services and expanded the opportunities of all partners technically. This is nothing short of a win-win scenario in which the taxpayers are the real winners. Better services, lower costs."

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*"This is nothing short of a win-win scenario in which the taxpayers are the real winners. Better services, lower costs."*

—Dennis Linster

## **Project 42 joins Network Nebraska, gains bandwidth and reduces costs**

*By Alan Wibbels, ESU 10*

Project 42—a consortium formed by ESUs 10, 11, 15, and 16—serves 163 school districts in 33 counties and covers approximately 32,000 square miles. Over 10,000 faculty and staff have e-mail accounts provided by the consortium and 50,000 students currently use the network to access the Internet and web-based services available both at the ESUs and around the world.

Prior to joining *Network Nebraska*, Project 42's Internet access costs were approximately \$500 per megabit of bandwidth per month (\$10,000 per month for 20 megabit) before the e-rate discount. By moving to the state network, the cost per megabit has dropped to \$150 per megabit per month and Project 42 has been able to expand the bandwidth to 30 megabit. As a result, Project 42 is able to deliver greater bandwidth and experience a savings of \$5,500 per month!

Project 42 anticipates continued reduction in costs as more customers join *Network*



*By moving to the state network, the cost per megabit has dropped to \$150 per megabit per month.*

*Nebraska.* Obviously the cost for transport across the state will not be free. However, as more customers share the cost of the transport and the state uses its aggregated purchasing power to buy greater amounts of Internet access, all participants should realize reduced costs per megabit of bandwidth.

In addition to basic Internet services, *Network Nebraska* provides K-12 schools with the opportunity to participate in Internet 2 services and activities as outlined on the Internet 2 (I2) initiative web site (<http://k20.internet2.edu/about/goals.html>). Project 42 has used the high-speed I2 access to download large data files and to create interactive connections with students across the United States. Examples of interactive projects include:

- Sixth graders from Bertrand connected with a senior high class in Texas for a lesson on cotton and its many uses.
- Second grade students from Pleasanton connected with second graders in two communities in Texas and New York to share information about their hometowns and cultural differences.
- Several schools in Project 42 interacted with Mr. Cox, a World War II veteran in Texas, who had survived the sinking of the USS Indianapolis by the Japanese in the South Pacific. Students had the opportunity to hear the story first hand and to interact with him.
- A number of connections have been established with the Lewis and Clark Expedition project for the purpose of training teachers how to use Internet2.



**Then Lt. Governor Dave Heineman, UNL Assistant Vice Chancellor Kent Hendrickson, UNK Chancellor Doug Kristensen, and ESU 10 Systems Engineer Ron Cone “turned on” access to Internet 2 by Nebraska schools. July 2004 photo courtesy of ESU 10**

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# Statewide Synchronous Video Network

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## Objective

The primary objective of this initiative is to establish an Internet Protocol-based network that will interconnect all existing and future distance learning and videoconferencing facilities in the State of Nebraska. Nebraska currently has approximately 300 high school distance learning classrooms, 30 higher education distance learning classrooms, over 50 state agency videoconferencing rooms, and (soon-to-be) over 60 videoconferencing facilities for telehealth in local and regional hospitals. More growth and proliferation of distance learning and videoconferencing equipment and sites is expected in the near future. These 400+ interactive video facilities currently utilize a variety of video standards and bandwidth speeds that prevent interconnection between sub-networks. The Statewide Synchronous Video Network, as envisioned, would use compatible audio and video standards to enable any classroom or facility to connect with any other classroom or facility or to connect with multiple sites simultaneously.

## Description

The major components of this initiative include:

- A single, interconnected synchronous video network with various levels of authorization and traffic prioritization;
- An event clearinghouse and scheduling system that would allow registration for interactive video events;
- Development of a network bandwidth management system or network operations center that assures pre-determined qualities of service, depending upon the type of video traffic.

## Benefits

Interactive videoconferencing and distance learning developed rapidly across Nebraska in the 1990's. Prior to recognized video standards or a coordinating body, entities were free to adopt any equipment, standard, or system that met their needs. Little thought was paid to interconnectivity or compatibility. Consequently, Nebraska became a state of disparate, redundant systems that prevented multi-jurisdictional collaboration or maximization of educational opportunities outside of a particular geographic boundary or system.

The enterprise benefits of an interconnected video system include:

- Greater sharing of educational courses, events, and training across sub-network boundaries, irrespective of geography;

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*The Statewide Synchronous Video Network would use compatible audio and video standards to enable any classroom or facility to connect with any other classroom or facility or to connect with multiple sites.*



- More efficient use of available resources—more classrooms and sites are available within less distance of the user at more convenient times;
- One-to-many videoconferencing capabilities for news alerts, bioterrorism alerts, or other emergency uses;
- Collaborative development across various service agencies (i.e., medical services to schools, and adult and continuing education opportunities).

*Numerous schools have taken part in similar NASA programs, live discussions with Nebraska native Astronaut Clayton Anderson, and also the Edgerton Explorit Center's own unique programming.*

## Edgerton Explorit Center connects to NASA

In December of 2003, the Edgerton Explorit Center (EEC) in Aurora launched its Distance Learning Program by connecting students at the EEC with educators from NASA's Johnson Space Center. Since this time, numerous schools have taken part in similar NASA programs, live discussions with Nebraska native Astronaut Clayton Anderson and also the EEC's own unique programming, which includes "Seeing Through the Eyes of Discovery", "Virtual Dissection" and "Supercold Chemistry". Programs are specifically designed to meet the needs of educators and the Nebraska Department of Education Science Standards.

The EEC Distance Learning Room has the capabilities to connect with almost every school in the state via a direct scheduled connection, through the internet by dialing an IP address or via a transferred satellite connection. School groups, summer camps, scout excursions, business meetings, and educational planning sessions have been conducted with groups from across the state and beyond. The classroom is equipped with a digital microscope camera, document camera, electronic white board, retractable ceiling video screens, and work desks/chairs with microphones.

In January of 2005, the EEC added experiences that were truly interactive. Students who log onto the EEC website during a distance learning event are able to control demonstration equipment from their classroom. This follows directly from Doc Edgerton's philosophy that we all learn best by getting our hands on things.



**Members of the first Edgerton Elite Science Camp videoconference with NASA astronaut and Nebraska native Clayton Anderson from the Edgerton Explorit Center's distance learning room. Photo courtesy of Edgerton Explorit Center**

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# Community IT Planning & Development

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## Objective

The primary objective of this initiative is to foster community and economic development in Nebraska communities through the effective use of information technology.

## Description

The NITC Community Council has partnered with the University of Nebraska Cooperative Extension and Rural Initiative to form the Technologies Across Nebraska partnership. Technologies Across Nebraska is a partnership of over 40 organizations working to help communities utilize information technology to enhance development opportunities. Technologies Across Nebraska facilitates technology-related development by building partnerships, leveraging resources, and strengthening community capacity.

For the past three years, Technologies Across Nebraska has helped 21 communities develop local plans to utilize technology to enhance development opportunities through the IT Planning and Mini Grant program. Through the program, participating communities and regional groups receive a \$2,500 mini grant and assistance from the Nebraska Rural Initiative's Communities of the Future Team and the Nebraska Information Technology Commission. The *Community IT Assessment and Planning Workbook* helps simplify the assessment and planning process for communities. The impact of the program has been significant. Edgar received a \$250,000 Community Development Block Grant to build a community center which will include a technology center. Crawford now has a community technology learning center and wireless broadband service thanks to a \$154,000 grant from the USDA Rural Utilities Service. In Keya Paha, Brown, and Rock Counties, the region now has more class offerings, two community Web sites, and a new technology retail store. In West Point a videoconferencing system has been installed for use by area businesses.

Technologies Across Nebraska's quarterly newsletter, *TANgents*, reaches over 1,000 individuals with an interest in technology-related development. Articles from *TANgents* have been reprinted by several organizations including *Government Technology*. Readers find *TANgents* a valuable source of information. One reader commented, "*TANgents* plays an important role in keeping Nebraskans aware of development and new opportunities to improve IT options for rural citizens in the State. I hope you will continue to provide this service." A recent survey of readers found that 89% felt reading *TANgents* has helped them learn about available resources; and 79% indicated that reading *TANgents* has helped them better understand the importance of IT-related community and economic development.

Technologies Across Nebraska, in partnership with the Rural Development Com-

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*The NITC Community Council has partnered with the University of Nebraska Cooperative Extension and Rural Initiative to form the Technologies Across Nebraska partnership.*



mission, has also examined e-commerce use by Nebraska businesses and e-commerce training in the state. Nebraska firms appear to be adopting e-commerce at a slower rate than firms nationwide. A 2004 survey of Nebraska businesses found that only 31% of small businesses had a Web site. In comparison, 45% of small businesses nationwide had a Web site in 2001.

## Benefits

The potential benefits of information technology to communities, businesses, health care, local government, education, and citizens are numerous:

- Communities can use the Internet to publicize community events, communicate with former residents, and advertise available commercial sites.
- Businesses can use information technology to decrease costs, increase sales, and provide better customer service.
- Local governments can use information technology to more efficiently deliver services and provide information to citizens.
- Students can take advanced placement courses or study a foreign language through distance learning.
- Through telemedicine, patients can receive medical care from specialists and doctors can participate in continuing medical education without leaving their rural communities.
- Citizens can easily access the minutes and agendas of local governments, update their skills through continuing education, and share photos with distant family members.
- The effective use of information technology can improve a community's quality of life and can enhance economic development efforts.

*Nearly all residents and businesses in Nemaha County will soon have broadband available to them.*

## NCDA, JAGWireless partner to bring broadband to Nemaha County

Thanks to the efforts of the Nemaha County Development Association (NCDA), nearly all residents and businesses in Nemaha County will soon have broadband available to them. The Nemaha County Development Association had talked to a number of service providers about providing broadband service over the past 5 years. NCDA's first effort involved collecting the names of Auburn residents and businesses interested in subscribing to DSL and presenting the list to the local telephone company. Satisfied that there was sufficient demand in Auburn, the telephone company began providing DSL.

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Over the years NCDA continued its efforts to work with providers . In 2004, NCDA began discussions with JAGWireless to provide service to rural Nemaha County. Funding and assistance through Technologies Across Nebraska's IT Planning and Mini Grant and the Nebraska Public Service Commission's Nebraska Internet Enhancement Fund aided NCDA in their efforts. JAGWireless put up a Web site with information about their planned wireless broadband service. NCDA publicized the site and encouraged residences and businesses interested in subscribing to register at the Web site. JAGWireless broadband service is expected to be available in Nemaha County in early 2006.

## Cuming County redesigns Web site to meet constituent needs

With assistance from a Technologies Across Nebraska IT Planning Mini Grant, Cuming County Clerk Bonnie Vogltance solicited citizen input on e-government services.

"We wanted to make the Cuming County Web site more user-friendly and to find out what specific items residents would want to find and use," said Patty Schinstock, who is working as a consultant to Cuming County on their Web site redesign. "Participants included mayors, county supervisors, school officials, village board members, and residents."

There was widespread agreement that the Cuming County Web site should be used to promote economic development and tourism and should link to community pages. Communities also realized that it was important for them to keep their sites updated. Additional economic development links, a community calendar, and a search option will be added to the redesigned Cuming County Web site. Seasonal pictures will be featured on the site, helping to publicize local events and depicting county life. A list of frequently asked questions (FAQs) will be developed for each office. Fillable forms will also be made available. Nebraska.gov is working with Cuming County on the redesign and plans to have the new site by this fall.

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*"We wanted to make the Cuming County Web site more user-friendly and to find out what specific items residents would want to find and use."*

*—Patty Schinstock*

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# Digital Education

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## Objective

The primary objective of the Digital Education Initiative is to promote the effective and efficient integration of technology into the instructional, learning, and administrative processes and to utilize technology to deliver enhanced digital educational opportunities to students at all levels throughout Nebraska on an equitable and affordable basis.

This initiative will involve the coordination and promotion of several major systems and applications that heretofore have either been developed mostly at the local level or have not been replicated statewide.

The initiative will be dependent upon adequate Internet connectivity and transport bandwidth for learners, instructors, administrators, and for educational attendance sites. A minimum acceptable level of classroom technology will have to be established for the initiative to be successful.

## Description

The Digital Education Initiative will recognize that many standalone and disparate software applications are needing to undergo integration and convergence so that an instructor can: 1) research digital content, 2) construct a lesson or unit on a computer in a series of virtual or face-to-face or videoconferencing activities using rich multimedia, 3) assess the learners electronically, and then 4) move the student data to a database or data warehouse, 5) export relevant achievement and attendance data to a web-based student information system so parents, or the students themselves, can view it from home; 6) export data to a statewide student information system; and then finally 7) make “real-time” instructional decisions based upon the recently documented progress of the learners.

The primary components of the Digital Education Initiative would include:

- A statewide telecommunications network capable of transporting voice, video, and data between and among all education entities [see Network Nebraska];
- Ample bandwidth for local and regional transport to accommodate present and future education technology applications [see Statewide Synchronous Video Network];
- Distance insensitive Internet pricing for all Nebraska education entities;
- Development of a statewide eLearning environment so that every teacher and every learner has access to a web-based, digital curriculum;
- Development of a statewide digital resource library so that any teacher or learner will be able to retrieve digital media for use in instructional and student projects;

- 
- Synchronous videoconferencing interconnections between all schools and colleges [see Statewide Synchronous Video Network];
  - The means to coordinate and facilitate essential education opportunities for all students through a statewide student information system; and
  - Regional PreK-20 education cooperatives that vertically articulate educational programs and opportunities.

## Benefits

Establishing a Digital Education Initiative is critical to Nebraska's future. Internet has gone from a "nice to have" educational application of the 1990's to the "must have" mission critical application of the 2000's. So much of what teachers, students, and administrators do today is tied to Internet-based information and communication. Nebraska's ranking of 6.5 students per Internet-connected computer in the classroom seems to compare favorably with the U.S. average of 8.0 students per Internet-connected computer. (Technology Counts 2005 Report) However, it still makes it challenging for students to complete their digital assignments when they are expected to share six or seven students to a computer.

The benefits of the Digital Education Initiative would include:

- Greater technical capacity for schools and colleges to meet the increasing demands of a more diverse customer base;
- More equitable Internet access for Nebraska schools and colleges that is not dependent upon distance-sensitive pricing;
- A comprehensive Web-based approach to curriculum mapping and organization and automation of student assessment data gathering and depiction;
- The availability of rich, digital media to the desktop that is indexed to Nebraska standards, catalogued, and searchable by the educator or student;
- A more systematic approach to synchronous video distance learning that enables Nebraska schools and colleges to exchange more courses, staff development and training, and ad hoc learning opportunities.

Each of the components of the Digital Education Initiative are vital to future student success in Nebraska. The components are especially pertinent in that these applications and services provide the foundation for capacity building in our schools and colleges.

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*The Digital Education Initiative will promote the effective and efficient integration of technology into the instructional, learning, and administrative processes and to utilize technology to deliver enhanced digital educational opportunities to students.*



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*"It is not unusual for students to post five to 20 messages on the discussion board the evening before a major exam!"*

*—Brenda Zabel*

## Westside High School enhances learning through Blackboard support

A key technology component of the Zoology and Physiology courses at Westside High School is their online support site created using Blackboard.com. Two years ago science teacher Brenda Zabel initiated the course Web site that is expanded and updated each year. Announcements, important documents, assignments, pdf versions of PowerPoint presentations, videos, lecture notes, and practice assessments support every aspect of the courses.



**Nebraska's 2005 Teacher of the Year Brenda Zabel assisting a student as she accesses the Zoology course Web site.**

Video tutorials on a streaming server let students replicate and review the lab activities they've done while in the classroom. Posted assignments can be printed and completed in a traditional way, or they can be completed electronically, thus allowing students to pace their own work, collaborate with others, and revise as often as they wish before pressing the SEND button. A discussion board provides "virtual office hours." Students may electronically post comments and questions, and classmates and teacher can respond to their postings wherever they are.

"It is not unusual for students to post five to 20 messages on the discussion board the evening before a major exam!" said Zabel. Students also contribute weblinks to outside resources they find while doing independent research. Instructors and students both benefit from these digital resources. Because all these support materials are web-based, students may access them 24 hours a day, seven days a week, and anywhere they have Internet access.

# State Government Efficiency

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## Objective

The State Government Council will address multiple items improving efficiency in state government, including shared services; standards and guidelines; and the project review process. The council has identified and is working to implement seven “shared services” for state government agencies. Also, the council will continue to develop standards and guidelines to better coordinate state agency technology efforts. Finally, the council will review and recommend improvements to the IT project review process.

## Description

The primary components of this initiative are:

- **Shared Services.** The State Government Council has identified a number of potential shared services. The council chose seven shared services for further study and implementation at this time. Interested agencies are meeting to further develop these services.
  - Blackberry
  - Business Continuity / Disaster Recovery
  - Directory Services
  - E-mail
  - Enterprise Maintenance / Purchase Agreements
  - Field Support Services
  - SAN (Storage Area Network)
- **Standards and Guidelines.** The State Government Council, working with the Technical Panel, will continue to develop standards and guidelines to better coordinate state agency technology efforts.
- **IT Project Review Process.** The State Government Council and Technical Panel will review and recommend improvement to the IT project review process. This process is primarily used in the review of IT projects as part of the state budget process.

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*The State Government Council will address multiple items improving efficiency in state government, including shared services; standards and guidelines; and the project review process.*

## Benefits

Benefits of this initiative include lower costs, easier interoperability among systems, greater data sharing, higher reliability, and improved services.



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*“The ability to transmit our bid electronically saves us the time and cost of traveling to Lincoln to work on and submit the bid. We like the system.”*

—Nancy Jahn

## Department of Roads Internet bidding saves contractors time, money

The Nebraska Department of Roads’ (NDOR) first Internet bidding was held November 4, 2004, with 19 contractors participating, according to Liz Wunderlich, NDOR Contracts Manager. Contractors are now able to submit their bid via the Internet using the Bid Express (BidX) Internet bidding service. This method of bidding alleviates the contractors from having to submit paper bids, bid bond forms and a computer diskette on letting day.

Nancy Jahn, Western Engineering Company, Inc., Harlan, Iowa, said they were familiar with BidExpress as they had used it in Iowa for the past two years. She said their estimators like the ease of the system. “Estimators know immediately if the bid is submitted correctly,” she said. “It allows them to make last minute changes in our bid and transmit those changes quickly and easily.”

Jahn said BidExpress also saves them time and money. “The ability to transmit our bid electronically saves us the time and cost of traveling to Lincoln to work on and submit the bid. We like the system.”

John Christensen, Christensen Bros., Inc., Cherokee, IA, said they had used the system in Iowa for about five years and the system worked really well for them. He said it saved a four-hour drive to Lincoln and working late hours in a hotel the night before the bid letting. “Now I can just send it over the computer and go to bed,” he said. “Also, it is real easy to change the bid at the last minute, with a couple of presses of the computer keyboard. It is much more efficient and eliminates mistakes.”

Julie Budnick, Werner Construction, Inc., of Hastings, agreed that the system was much more efficient overall. She said more can be accomplished in less time and with the use of less resources and equipment.

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# E-Government

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## Objective

The State Government Council will continue to implement action items that further the use of e-government to improve services and increase the efficiency and effectiveness of agencies. The e-government principles guiding the council are:

- E-government should be considered a continuous process of using technology to serve citizens and improve agency operations;
- Internet technologies create new opportunities for major change, including self-service, integration of information and services, and elimination of time, distance and availability of staff as constraints to providing information and services;
- Agencies have responsibility for performing statutory functions, which means that agency directors must retain ownership of data, responsibility over the use of information technology, and prioritization of projects within the agency to achieve the greatest benefit;
- Cooperation is critical to achieving the goals of e-government, in order to integrate information and services and allow the easy exchange of information;
- An enterprise approach is essential to e-government, including the topics of accessibility for disabled persons, architecture, directories, funding, portal, privacy, security, and other issues; and
- E-government is defined as the use of technology to enhance information sharing, service delivery, constituency and client participation, and governance by transforming internal and external relationships.

## Description

The three goals for e-government are:

- **Government-to-Citizen and Government-to-Business.** Anyone needing to do business with state government will be able to go to the state's Web site, easily find the information or service they need, and if they desire, complete all appropriate transactions electronically. Areas to be addressed include citizen portal enhancement; business portal enhancements; education portal; and forms automation.
- **Government-to-Government.** State agencies will improve services and increase the efficiency and effectiveness of government operations through collaboration, communication, and data sharing between government agencies at all levels.

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*Internet technologies create new opportunities for major change, including self-service, integration of information and services, and elimination of time, distance and availability of staff as constraints to providing information and services.*



- **Government-to-Employee and Internal Operations.** Agencies will examine internal operations to determine cost-effective e-government applications and solutions. The purpose of these efforts is to improve efficiency and effectiveness by replacing manual operations with automated techniques.

## Benefits

The primary benefits from the use of e-government are:

- Improved services for citizens and businesses.
- Increased efficiency and effectiveness for agencies.

*BillTracker allows our office to put additional resources toward meeting constituent needs in our district because we've significantly reduced the time we spend wading through daily legislative updates.*



## BillTracker allows legislative offices to devote resources to constituent services

Each year, hundreds of legislative bills, amendments and resolutions are introduced in the Nebraska Legislature. Tracking legislative activity in a paper-based environment drains resources from the offices of elected officials, agency staff, businesses, statewide associations and others interested in the legislative process.

A partnership between the Nebraska Legislature and Nebraska.gov led to the introduction of the BillTracker service in 2005. The system allows users to establish profiles to monitor legislative activity and receive automated e-mail updates each day. According to one legislative staff member, "BillTracker allows our office to put additional resources toward meeting constituent needs in our district because we've significantly reduced the time we spend wading through daily legislative updates."



## **Banks, title companies and law firms obtain records from their offices using JUSTICE**

**I**n rural Nebraska, businesses such as banks, title companies and law firms often serve a clientele that extends across multiple counties. In the course of doing business, it is often necessary to obtain court records from multiple counties. Until recently, this required a visit to each individual courthouse, requiring personnel resources and the associated time and expense.

With the introduction of JUSTICE court records searches in early 2004, these businesses can now obtain court records statewide (185 of 186 county and district courts) online. From the convenience of their offices, these businesses can search and retrieve the records they need without the time and expense of visiting each individual county.

*From the convenience of their offices, these businesses can search and retrieve the records they need without the time and expense of visiting each individual county.*

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# Security and Business Resumption

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## Objective

This initiative will define and clarify policies, standards and guidelines, and responsibilities related to the security of the state's information technology resources. Information security will serve statutory goals pertaining to government operations and public records. These include:

- Insure continuity of government operations (Article III, Section 29 of the Nebraska Constitution; Nebraska Revised Statutes Sections 28-901 and 84-1201);
- Protect safety and integrity of public records (Nebraska Revised Sections 28-911, 29-2391, and 84-1201);
- Prevent unauthorized access to public records (Nebraska Revised Statutes Sections 29-319, 81-1117.02, and 84-712.02);
- Insure proper use of communications facilities (Nebraska Revised Statutes Section 81-1117.02); and
- Protect privacy of citizens (Nebraska Revised Statutes Section 84, Article 7).

## Description

Major activities include:

- Developing an overall security strategy, including policies, security awareness, and security infrastructure improvements;
- Network security standards and guidelines;
- Education and training;
- Authentication (directory services project);
- Disaster recovery for information technology systems (as part of a broader business continuity planning);
- Compliance with federal privacy and security mandates;
- Security assessments.

## Benefits

Benefits will include lower costs by addressing security from an enterprise perspective, cost avoidance, and protecting the public trust.

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## Portable system can be deployed for emergency communications

In 2004 the State's Division of Communications received federal grant money for the purchase of telecommunications equipment. The goal of the Division of Communications was to design a self-contained telecommunications system that could be deployed anywhere in the state at a moment's



notice. Criteria was developed in order to make the system as flexible as possible, and meet telecommunication needs in a variety of circumstances. Once the criteria was laid out a system was designed, purchased, and built with the following capabilities:

- 24 analog trunks for connectivity to the public telephone network
- 24 digital trunks for connectivity to the public telephone network
- 6 Motorola bag phones with analog adapters that serve as PBX trunks
- 32 analog telephone extension ports w/telephone sets
- 8 wireless ports w/wireless handsets capable of operating within 1square mile of system
- 7 multi-line digital telephone sets
- 1 multi-line attendant console
- 4 port voicemail system
- 8 IP telephone ports w/telephone sets capable of operating anywhere on the state network
- Equipment capable of delivering three 30 mile wireless broadband connections for connectivity to an available IP network or Internet
- CISCO routers and switches for workstation and laptop connectivity
- 3 portable gasoline generators capable of operating entire system for extended periods of time

The telephone system and its components are rack mounted in a 3'x3'x5' box with wheels. All other auxiliary components and telephone sets are packed in durable wheeled plastic containers. The entire system is self-contained and able to be palletized for easy transport.

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*With federal funding, the State has designed and purchased a self-contained communications system that could be deployed anywhere in the state at a moment's notice.*

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# Advisory Group Members

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## Community Council

**Robert. E. Sweeney, Chair**, Aim Institute

**Chris Anderson**, City of Central City

**K.C. Belitz**, Columbus Area Chamber of Commerce

**Len Benson**, Faith Regional Health Systems

**Dr. Jerry Easterday**, Nebraska Health and Human Services System

**Norene Fitzgerald**, York County Development Corporation

**Donna Hammack**, St. Elizabeth Hospital Foundation

**Lance Hedquist**, City of South Sioux City

**John Jordison**, Great Plains Communications

**Roger Keetle**, Nebraska Hospital Association

**Brandon Kelliher**, Great Plains Regional Medical Center\*

**Lynn Manhart**, Central City Public Library

**Georgia Masters Keightley**, City of Crawford

**Michael Nolan**, City of Norfolk

**Ted Smith**, Norfolk Public Library

**Max Thacker**, University of Nebraska Medical Center

**Jerry Vap**, Public Service Commission

**Mary Wernke**, Letter Perfect Communications

**Steve Williams**, Department of Economic Development

*\* pending approval by NITC on Sept. 23*

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## **Education Council**

**Dr. Jack Huck, Co-Chair**, Southeast Community College

**Alan Wibbels, Co-Chair**, ESU 10

**Arnold Bateman**, University of Nebraska-Lincoln

**Brenda Decker**, Department of Administrative Services

**Clark Chandler**, Nebraska Wesleyan University

**Dr. Michael Chipps**, Mid-Plains Community College

**Dr. Terry Haack**, Elkhorn High School

**Dr. Marshall Hill**, Coordinating Commission for Postsecondary Education

**Yvette Holly**, University of Nebraska Medical Center

**Jeff Johnson**, Centennial Public Schools

**Mike Kozak**, Nebraska Department of Education

**Joe LeDuc**, Catholic Diocese of Lincoln

**Chuck Lenosky**, Creighton University

**Dennis Linster**, Wayne State College

**Dr. Rich Molettiere**, Omaha North High School

**Michael Pate**, Millard Public Schools

**Dr. Ed Rastovski**, Wahoo Public Schools

**Al Schneider**, ESU 5

**Michael Winkle**, Nebraska Educational Telecommunications Commission



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## State Government Council

**Brenda Decker, Chair**, Chief Information Officer

**Bob Beecham**, Department of Education

**Dennis Burling**, Department of Environmental Quality

**Mike Calvert**, Legislative Fiscal Office

**Tom Conroy**, DAS—IM Services

**John Craig**, Department of Roads

**Mary Jane Egr**, Department of Revenue

**Pat Flanagan**, Private Sector

**John Gale**, Secretary of State of Nebraska

**Rex Gittins**, Department of Natural Resources

**Dorest Harvey**, Private Sector

**Lauren Hill**, Governor's Policy Research Office

**Butch Lecuona**, Department of Labor

**Lori McClurg**, Department of Administrative Services

**Scott McFall**, Nebraska State Patrol

**Glenn Morton**, Workers' Compensation Court

**Dick Nelson**, Health & Human Services—Finance and Support

**Beverly Neth**, Department of Motor Vehicles

**Gerry Oligmueller**, DAS—Budget Division

**Jayne Scofield**, DAS—Division of Communications

**Rod Wagner**, Library Commission

**Janice Walker**, Supreme Court



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## Technical Panel

**Walter Weir, Chair**, University of Nebraska Computer Services Network

**Michael Beach**, Nebraska Educational Telecommunications

**Brenda Decker**, State of Nebraska

**Christy Horn**, University of Nebraska—Lincoln

**Kirk Langer**, Lincoln Public Schools



# Digital Nebraska

Envisioning Our Future

Nebraska's Statewide Technology Plan

2005-2006

Nebraska Information Technology Commission

[www.nitc.state.ne.us](http://www.nitc.state.ne.us)

**October 27, 2005**

**To:** NITC Commissioners  
**From:** Anne Byers  
**Subject:** Nomination of Linda Fettig

The Rural Development Commission has been represented on the Community Council since its inception. At their Oct. 24 meeting, the Community Council approved the nomination of Linda Fettig, Executive Director of the Nebraska Rural Development Commission to serve on the Community Council, replacing the position formerly held by the former director, Lisa Dominisse.

Ms. Fettig's bio follows:

## **Linda Fettig**

Linda Fettig was named director of the Nebraska Rural Development Commission (RDC) in October 2005. She has been with the Nebraska Department of Economic Development since 1993 as a field representative working with rural communities in central Nebraska. Previously, she served as director of the Putnam County Foundation, a grassroots community and economic development organization, Main Street coordinator, and engineering assistant with a consulting engineering firm specializing in assisting rural communities.

Fettig is a member of the Nebraska Development Network, the Nebraska Economic Developer's Association, and CREATE2, Nebraska entrepreneurial development team. She also co-chairs the Nebraska Development Network Central Region, and is a member, past secretary, vice president and president of the Nebraska Chapter of the International Community Development Association.

She has a master's degree in Leadership Development from Bellevue University, Bellevue, Neb., bachelor's degree in Community Development with a minor in Business Administration from Graceland College in Lamoni, Iowa, a management certificate from Indian Hills Community College, and is a graduate of the Economic Development Institute.

Fettig and her husband, Hank, have two daughters and three grandchildren.

October 26, 2005

To: NITC Commissioners  
From: Anne Byers  
Subject: Technology Innovation Grants for Economic Revitalization (TIGER) mini grant funding recommendations

At their Oct. 24 meeting, the Community Council recommended fully funding five proposed projects. Each application was reviewed by three reviewers. The five projects recommended for full funding had the five highest average review scores. If these projects were funded, approximately \$2,600 would be left over from the \$20,000 available. The Community Council also recommended partially funding the sixth ranking project in order to expend the remaining \$2,600.

A list of recommended projects is below:

<b>Applicant</b>	<b>Project</b>	<b>Average Review Score</b>	<b>Amount Requested</b>	<b>Recommended Funding</b>	<b>Running Total</b>
Hartington Public Library	Expanding Technology Horizons	87	\$2,119.04	\$2,119	\$2,119
Atkinson Public Library	Hometown Competitiveness: Entrepreneurial Training	87	\$3,598.00	\$3,598	\$5,717
Wayne Public Library	Computer Course Development	86	\$1,680.00	\$1,680	\$7,397
City of Aurora	IT Businesses: Assessment, Marketing, Recruitment	86	\$5,000.00	\$5,000	\$12,397
UNL Extension in Burt Co.	Oakland Business Portal	84	\$5,000.00	\$5,000	\$17,397
Kearney Visitors Bureau, Buffalo Co.	Implementation of InfoTrac Software	82	\$5,000.00	\$2,6000	\$19,997

A summary of the reviews of all applications is included in the meeting materials.

## TIGER 2005 Review Summaries

<b>Applicant</b>	<b>Project</b>	<b>Average</b>	<b>Amount Requested</b>
Hartington Public Library	Expanding Technology Horizons	87	\$2,119.04
Atkinson Public Library	Hometown Competitiveness: Entrepreneurial Training	87	\$3,598.00
Wayne Public Library	Computer Course Development	86	\$1,680.00
City of Aurora	IT Businesses: Assessment, Marketing, Recruitment	86	\$5,000.00
UNL Extension in Burt Co.	Oakland Business Portal	84	\$5,000.00
Kearney Visitors Bureau, Buffalo Co.	Implementation of InfoTrac Software	82	\$5,000.00
Nemaha County Development Alliance	IT Training Modules for EDGE Program	81	\$2,312.50
Lied Imperial Public Library	ETA (Entrepreneur Technology Access)	77	\$2,200.00
Village of Hyannis	Village of Hyannis Web Site	72	\$4,888.00
City of Holdrege	Technology to Market Business Opportunities	71	\$3,000.00
City of Valentine	Community Technology Program	70	\$5,000.00
<b>TOTAL</b>			<b>\$39,797.54</b>

**Project Title:** Expanding Technology Horizons

**Submitting Entity:** Hartington Public Library

**Grant Amount Requested:** \$2,119.04

**Evaluation Score:** 87

**Executive Summary:** The Hartington Public Library serves in providing computer classes and workshops to expand educational and business opportunities in our area. The goal of our project is to replace one half of the aging computers in our public library's technology lab in order to continue to meet with the needs of our current patrons, as well as to serve new patrons. We have established a replacement schedule for our hardware and software in the tech lab, this grant would help us fund the first phase of our update, by purchasing four new computers with Pentium 4 processors with CD-RW drives.

**Reviewer Comments:** This is a good project. The partnerships between the library, University of Nebraska Extension, and Hartington Economic Development are one of the project's strengths. One reviewer expressed concerns about sustainability. The application states that the library board has included a line item in the annual budget to address technology replacement needs. However, details are missing on exactly how many PCs will be replaced each year. The evaluation plan could also be strengthened.

**Technology Requested:** 4 computers

**Technical Concerns:** none

**Project Title:** Hometown Competitiveness: Entrepreneurial Training Program

**Submitting Entity:** Atkinson Public Library

**Grant Amount Requested:** \$3,598

**Evaluation Score:** 87

**Executive Summary:** With small rural communities losing businesses and families, local economic development leaders and the Atkinson Public Library are working together to offer business development classes to anyone within Holt County and the surrounding area to encourage the starting, expansions, and management of small businesses. Computer classes would include business feasibility, developing a solid business plan, efficient business management, effective marketing through Web site development, creating brochures, fliers, etc., and marketing strategies for the small business. The students would in turn use this information to establish a business, or increase their present business viability, using the computer and Web. In order to operate a successful business in the 21<sup>st</sup> Century, owners must be skilled in applicable computer technology.

Working in conjunction with economic development this project is designed to bring jobs and residents to this rural area. With a new library facility ready for use in January, these classes could be a reality at the Atkinson Public Library. In order to accommodate the number of students expected, the information technology needed includes two new computers with Microsoft Office, as well as, salaries for library staff who will serve as instructors.

**Reviewer Comments:** It is great to see a library involved in economic development. A little more detail could have been provided in the application especially about how the classes are being designed and how the project will be sustained. The application states that the program will result in 10 new jobs being brought to the community. This is perhaps overly optimistic. The evaluation plan is very strong.

**Technology Requested:** 2 computers

**Technical Concerns:** none

**Project Title:** Computer Course Development

**Submitting Entity:** Wayne Public Library

**Grant Amount Requested:** \$1,680.00

**Evaluation Score:** 86

**Executive Summary:** As a public library providing service to the entire Wayne County we are a central provider of life-long learning for our residents. In response to patron requests, we intend to develop computer coursework to aid in improving office skills and on-line job searching techniques . Through the grant we will create four 2-hour courses (excel, powerpoint, internet searching, e-mail). The project will also include teaching each course twice to work out any kinks. After the project is complete, the developed courses will fold into our current computer offerings, and will continue to be taught by city staff or qualified volunteers. As with all the library programs, these classes will be free and open to the public.

**Comments:** This is a well-written application. The proposed project is sound and has a high probability of success. However, the project probably won't generate a big economic development impact.

**Technology Requested:** none

**Technical Concerns:** none

**Project Title:**

Information Technology Businesses: Assessment, Marketing and Recruitment

**Submitting Entity:** City of Aurora**Grant Amount Requested:** \$5,000**Evaluation Score:** 86

**Executive Summary:** The City of Aurora has a unique opportunity to enhance economic development in Aurora and the area surrounding Hamilton County through the Aurora Technology Center. The Aurora Technology Center, operated under the direction of the Hamilton County Information Technology Corporation (HCITC), serves as a focal point for the incubation of information technology related companies. What has been missing for a number of years is a comprehensive analysis of the information technology needs of area businesses. Once needs are determined, targeted recruitment of companies providing specific services utilized by area business can help to bring new information technology companies to the area creating a symbiotic benefit to all businesses and economic development to the area.

This project proposes to develop and administer an assessment instrument to determine the information technology needs of area businesses and begin a recruitment process to bring those businesses that provide those needs to the local area. This project has gathered the interest of the Aurora Area Chamber & Development Corporation with verbal commitment to provide sustainability following completion of the TIGER grant funding. In order to augment the recruitment process, the project proposes to revamp the marketing material of the Aurora Technology Center. Currently the Center's website is sorely out of date and needs restructuring along with the brochures used for marketing. The TIGER grant will help to launch a long-term sustainable approach to the recruitment of information technology based companies to central Nebraska.

**Comments:** This is a very well written application and the proposed project is sound. The proposed project has the potential for significant economic development benefits. One reviewer expressed concern about spending money to "develop" another survey instrument. A reviewer also suggested that they have an outside resource evaluate their marketing and Web site efforts as part of the project evaluation. No funding is included for training. The coordinator might need some economic development sessions.

**Technology Requested:** Web development services**Technical Concerns:** none

**Project Title:** Oakland Business Portal

**Submitting Entity:** UN-L Extension in Burt County

**Grant Amount Requested:** \$5,000

**Evaluation Score:** 84

**Executive Summary:** This project entails building a business portal for home-based and small businesses to use for advertising and marketing good and services produced in the Oakland (NE) area. The goal is to initially offer a free Web presence to spur growth in local businesses. As these businesses grow and their needs change, so will their Web sites. The business portal will be sustained by having businesses owners pay for modifications, upgrades and more sophisticated back-end applications as needed.

The business portal will include a user-friendly content management system, so that business owners can update and add content to their own Web sites. Training will be provided to help business owners understand the need for a Web presence and how it can benefit them. They will also get help in developing content and graphics for their Web sites. The grant funds the development of the business portal including the content management system, databases and Web page templates.

**Reviewer Comments:** The proposed project seems like a good, innovative idea and addresses one of the issues with small businesses and Web sites—making web site development and e-commerce easy for businesses. The sustainability of this type of project is always problematic. The individuals who maintain the system will be critical to ongoing success. Any drop-off in enthusiasm, or staff turnover, could paralyze the program. It won't be easy to keep the program running at a high level, but probably worth the try. The budget requests grant funding for 24 months of Web hosting. The award period is for one-year only. The budget will have to be revised.

**Technology Requested:** Macromedia Dreamweaver Studio MX, Web hosting, contractual services for Web design and programming

**Technical Concerns:** none

**Project Title:** Implementation of InfoTrac Software

**Submitting Entity:** Kearney Visitors Bureau, c/o Buffalo County

**Grant Amount Requested:** \$5,000

**Evaluation Score:** 82

**Executive Summary:** The Buffalo County special events and convention business is currently tracked through a very limited account management database which was custom-made in 2001 by a Kearney computer consulting firm. Account management and tracking software is an integral part of the Kearney Visitors Bureau's daily operation and is necessary to keep accurate and current records of the conventions and special events that bring significant revenue to Buffalo County. The database in use at this time currently houses more than 1,100 accounts. It was not designed to grow as quickly as Buffalo County's special events, convention business, and tourism draw has in the last four years. We have outgrown the original program and need to update it in order to fuel the growth this industry has created in Buffalo County.

To maintain the economic growth Buffalo County has seen in the last few years, and to stay at the forefront of the evolving convention business while capitalizing on tourism in Nebraska and our region, an account management database designed specifically for the Convention & Visitors Bureau industry is a necessity. The TIGER grant will fund the purchase of the InfoTrac software which will allow us to move forward by providing more efficient tracking of the tourism, convention, and special events business Kearney receives. At this time, we are unable to provide any estimated historical revenue which a particular event or convention brings to Kearney and Buffalo County. With the information from InfoTrac at our fingertips we can anticipate, prepare, and adjust to deliver the best services possible and take advantage of opportunities we might otherwise have missed.

**Comments:** The project is well-defined and the application is well-written. The software would probably be used regularly and would benefit the applicants. One reviewer expressed concerns that the potential benefits from this project are marginal, as this is only a measurement tool which may help but only incrementally. The reviewer also expressed concern that the applicant likely has funding available from its own sources.

**Technology Requested:** InfoTrac Software

**Technical Concerns:** Reviewers did not express any technical concerns. However, this type of software installation carries some risk. The Technical Panel expressed concerns about whether the organization has a disaster recovery and business resumption plan.

**Project Title:** IT Training Modules for EDGE program

**Submitting Entity:** Nemaha County Development Alliance

**Grant Amount Requested:** \$2,312.50

**Evaluation Score:** 81

**Executive Summary:** The Nemaha County Development Alliance (NCDA) has been a leader in small business development and support for entrepreneurship in Southeastern Nebraska for the past eight years. The centerpiece of our support system is the EDGE (Educating, Developing and Growing Entrepreneurs) Program, a training course sponsored by the University of Nebraska's Center for Applied Rural Innovation. The curriculum for the 14-week EDGE course addresses practically every aspect of small business development, including initial market research, product marketing, financial management, and legal structures. One important element of small business development that is limited in the EDGE curriculum, however, is how information technologies can be used to enhance all phases of business operations and reach new markets beyond local and regional borders. With Nemaha County's universal wireless Internet system becoming operational in early 2006, all businesses, regardless of location, will have broadband access. This technology and accompanying training in its use presents a great opportunity for new and existing businesses to extend their capabilities and participate in the global commercial community. In addition, our progress in reaching these goals might serve as a model for other rural Nebraska communities.

The purpose of the proposed project is to develop training modules on the use of information technology to use with the existing EDGE program that is now taught in 5 Southeast Nebraska counties. Rather than developing a specific course that would duplicate Electronic Main Street or other e-commerce courses, these modules could be used in all aspects of the EDGE curriculum but would also stand alone as a business training tool. The result will be business plans that take maximum advantage of all of the benefits and resources offered through information technologies from initial product and market research to daily operations, tailored to the specific characteristics of each individual business. Adding this dimension to our rural businesses environment should have the dual economic impacts of stimulating new Internet-based businesses and making southeast Nebraska's overall business community more robust and competitive.

**Reviewer Comments:** While the grant doesn't use technology directly, it could result in an increase in technology usage in the county as a result of the education provided. The benefits of this application are potentially significant. Certainly the project should be sustainable once completed. One reviewer felt that the EDGE program is a very successful program and liked the idea of developing a course module on the use of technology for the program. Another reviewer expressed concerns that the project could be duplicative of existing programs.

**Technology Requested:** none

**Technical Concerns:** none

**Project Title:** ETA (Entrepreneur Technology Access)

**Submitting Entity:** Lied Imperial Public Library

**Grant Amount Requested:** \$2200.00

**Evaluation Score:** 77

**Executive Summary:** Library will purchase and install the digital networkable copier/scanner/fax, the staff will learn to operate the equipment and then train patrons to use the equipment. Training workshops will be offered to patrons/entrepreneurs as well as one on one assistance during regular business hours.

**Reviewer Comments:** This project demonstrates local support through the cash match provided through the city budget. The connection between the purchase of this piece of equipment and the economic impact is a bit vague. Several questions on the application are not addressed at all or only minimally addressed. One reviewer expressed concerns that although businesses and individuals do occasionally need to scan, scanning is a pretty low-level technology. The reviewer would rather see the grant funds support projects employing a high level of technology.

**Technology Requested:** Konica Minolta di 2010f copier with scan kit

**Technical Concerns:** none

**Project Title:** Village of Hyannis Web Site

**Submitting Entity:** Village of Hyannis

**Grant Amount Requested:** \$4888.00

**Evaluation Score:** 72

**Executive Summary:** The project is intended to build and execute an outstanding functional web site for the Village of Hyannis. The site is intended to coordinate with village signage to provide visible web presence and raise awareness for municipal and civic activity, all village and area businesses, entrepreneurs, organizations, churches, and activities. The grant will fund purchase of hardware, software and minimal labor to implement the site. The project will also be sponsored by the Village of Hyannis and volunteers and be coordinated with Nebraska Public Power District, Nebraska Economic Development, and Consolidated Telephone Company.

**Reviewer Comments:** This is a pretty good application. There should probably be a stronger emphasis on training residents and businesses. It is good to have NPPD and telephone company on board. Village maintenance is also positive.

**Technology Requested:** laptop computer, color printer, projection unit and screen, Microsoft Windows XP Professional, Adobe Acrobat Reader 6.0, Macromedia Dreamweaver Studio MX with Flash Professional, Norton Antivirus

**Technical Concerns:** none

**Project Title:** Technology to Market Business Opportunities and Quality of Life in the South Platte

**Submitting Entity:** City of Holdrege

**Grant Amount Requested:** \$3,000

**Evaluation Score:** 71

**Executive Summary:** Web-based technology provides a self-help opportunity for South Platte communities to attract economic development. The ***Business Beyond the Farm*** website sends the message that small towns in the South Platte thrive, entrepreneurial businesses prosper, schools educate, and rural Nebraska communities offer attractive amenities and quality of life. TIGER will provide training materials, mileage dollars and equipment to train designated contacts in twenty-three (23) South Platte communities how to use web-based technology to market the assets of their community on the ***Business Beyond the Farm*** website and to build small world networks.

The City of Holdrege and ***Business Beyond the Farm*** request \$3,000 from TIGER grant to purchase a mobile presentation projector and develop and deliver training to designated contacts in twenty-three (23) communities in the South Platte.

**Comments:**

The concept of the Business Beyond the Farm project and the information presented on the Web site is good. The Web site and project have generated publicity in national media. The project is regional in scope and reasonable to implement and continue. The application doesn't do a very good job describing some of the larger benefits of the overall program—like attracting new residents to the South Platte region of Nebraska. This is a better project than the score indicates. Some questions raised by reviewers include: Who will own the projector? Will the City of Holdrege own the project or will Business Beyond the Farm own it? Who will fund ongoing support?

**Technology Requested:** projection unit

**Technical Concerns:** none

**Project Title:** Community Technology Program

**Submitting Entity:** City of Valentine

**Grant Amount Requested:** \$5,000

**Evaluation Score:** 70

**Executive Summary:** The Cherry County Economic Development Board is the product of a new, Inter-local agreement between the City of Valentine and Cherry County. This Board, formed on Monday, August 29, 2005, is the first of its kind in Cherry County or Valentine, and is poised to pursue opportunities that will enhance economic development within Valentine and the County. The Board will depend on the work of a director, who will execute, explore, report, and network to achieve the mission, goals, and objectives of the Board. This director will require computer hardware and internet connectivity to conduct these activities. The purchase of this hardware, related software, and internet access, forms the basis of this funding request. Expected outcomes include: completion of a community survey by September 30, 2005; production and city council approval of the resulting economic and strategic plan by October 30, 2005; conduct public education regarding economic development and LB 840 specifically by January 30, 2006; and, passage of a city sales tax ballot initiative including LB 840 authority of using a portion of city sales tax funds for economic development (by March 1, 2006). This project will provide the critical impetus for launching the city and county into an era of unprecedented economic prosperity.

**Reviewer Comments:** It is really impressive that an organization formed in August 29 was able to submit an application by Sept. 1. The application is well written. The applicant asks for funding for computer equipment for the economic development board. The activities proposed are worthwhile. However, the proposed projects have little to do with technology-related development. One reviewer commented that it was hard to imagine anything that would help more in terms of economic development than assisting in the establishment of the economic development board for a region. Other reviewers commented that a computer is a normal operating expense, and there's nothing innovative about what is being proposed. This should be a normal operational expense. One reviewer expressed concerns that this application should be disqualified for not meeting the cash match requirement. The application lists \$38,921 in matching funds that have nothing to do with the purchase of the computer. The reviewer calculated the actual matching funds as 0.5% of the requested amount.

**Technology Requested:** laptop computer, 2 desktop computers, LCD projector, color inkjet printer/fax, B/W laser jet printer/scanner/fax/copier, wireless firewall router

**Technical Concerns:** none

**Nebraska Information Technology Commission**

**Project Proposal Form**

**New or Additional State Funding Requests  
for Information Technology Projects**

**FY2005-07 Biennium  
(2006 Deficit Budget Requests)**

<b>Project Title</b>	<b>Statewide K-12 Technology Infrastructure Upgrade to Flexible Use IP-based Network</b>
<b>Agency/Entity</b>	<b>Department of Education</b>

**Project Proposal Form**  
 FY2005-07 Biennium (2006 Deficit Budget Requests)

**About this form...**

The Nebraska Information Technology Commission (“NITC”) is required by statute to “make recommendations on technology investments to the Governor and the Legislature, including a prioritized list of projects, reviewed by the technical panel, for which new or additional funding is requested.” In order to perform this review, the NITC and DAS-Budget Division require agencies/entities to complete this form when requesting new or additional funding for technology projects. For more information, see the document entitled “Guidance on Information Technology Related Budget Requests” available at <http://www.nitc.state.ne.us/forms/>.

Electronic versions of this form are available at <http://www.nitc.state.ne.us/forms/>.

For questions or comments about this form, contact the Office of the CIO/NITC at:

Mail: Office of the CIO/NITC  
 521 S 14th Street, Suite 301  
 Lincoln, NE 68508  
 Phone: (402) 471-3560  
 Fax: (402) 471-4608  
 E-mail: [info@cio.state.ne.us](mailto:info@cio.state.ne.us)

**Submission of Form**

Completed forms must be submitted by the same date budget requests are required to be submitted to the DAS Budget Division. Completed project proposal forms must be submitted via e-mail to [info@cio.state.ne.us](mailto:info@cio.state.ne.us). The project proposal form should be submitted as an attachment in one of these formats: Microsoft Word; WordPerfect; Adobe PDF; or Rich Text Format. Receipt of the form by the Office of the CIO will be confirmed by e-mail. If an agency is unable to submit the application as described, contact the Office of the CIO prior to the deadline, to make other arrangements for submitting a project proposal form.

**Section I: General Information**

Project Title	Statewide K-12 Technology Infrastructure Upgrade to Flexible Use IP-based Network
Agency (or entity)	Nebraska Department of Education

Contact Information for this Project:

Name	Dr. Doug Christensen
Address	301 Centennial Mall South, 6 <sup>th</sup> Floor
City, State, Zip	Lincoln, NE 68509
Telephone	402-471-5020
E-mail Address	<a href="mailto:doug.christensen@nde.ne.gov">doug.christensen@nde.ne.gov</a>

**Project Proposal Form**  
**FY2005-07 Biennium (2006 Deficit Budget Requests)**

## Section II: Executive Summary

### Description:

Many of the schools are connected to their Distance Learning Consortium of schools with very large DS3 (45 megabit, high bandwidth) circuits that are dedicated solely to two-way audio and video use within the Consortium. Practically all schools have a dedicated T1 or 1.5 megabit circuit along side for Internet access. The proposed IP-based upgrade would not only update the obsolete equipment (switch/routers and co-decs) but would allow flexible use of the DS3 (high bandwidth) circuits for two-way audio and video use, increased bandwidth for internet use, and expansion for future technology applications. This upgrade would eliminate the need for the separate dedicated T1 circuit for Internet use and enable statewide connectivity between and among schools as a result of connecting to Network Nebraska.

### Justification:

The Distance Learning equipment in many of the high schools is obsolete and no longer made or supported by the manufacturers. In addition, contracts between Nebraska schools and Telecommunications Service Providers are progressively nearing expiration of 10-year contract terms. The earliest Distance Learning contracts are due to expire in 2006 with other schools' contracts progressively expiring through 2012. There is a need to upgrade equipment and renew contracts with Telecommunications Providers.

On the educational side, the upgrade would enable schools connecting with Network Nebraska to have statewide connectivity allowing increased opportunities for distance learning course sharing as opposed to the current limitation of course sharing between schools in a regional area consortium. On the Internet side, the upgrade would enable schools connecting with Network Nebraska to have much needed additional bandwidth for access to enhanced learning resources (i.e. streaming digital media, etc.) as well as additional advanced connectivity services such as Internet 2.

## Section III: Goals, Objectives, and Projected Outcomes (15 Points)

1. Describe the project, including:
  - Specific goals and objectives;
  - Expected beneficiaries of the project; and
  - Expected outcomes.

### Goals

The overall goal of the Statewide K-12 Technology Infrastructure Upgrade to Flexible Use IP-based Network Project is to use technology to create equitable opportunities for an essential education for all students. The technology elements would concentrate on providing the necessary transport of curriculum, staffing, and support services essential for all Nebraska schools in the 21<sup>st</sup> Century.

The resulting K-12 technologies would support teaching and learning through hardware and software that: Transmit and access information and data, Integrate digital technologies into the teaching and learning process, Provide access to multiple technology platforms; and have physical facilities that adequately accommodate the school's technology systems, including distance learning.

The first objective of the project is to provide infrastructure and telecommunications support so that schools can purchase Internet access on an equitable per unit basis without regard to distance-sensitive transport costs. (See line 10 of Excel file embedded at Section VIII 15, Phase 1 of 3 yr plan)

**Project Proposal Form**  
**FY2005-07 Biennium (2006 Deficit Budget Requests)**

The second objective of the project is to assist in the conversion of the present distance learning network to a high bandwidth, wide area, IP-based topology that allows educators to make maximum use of the flexibly provisioned circuits in order to provide for future emerging technology applications. The interactive video conferencing that results from this conversion would be much lower in bandwidth, addressable, and able to be interconnected with other systems both within and outside the State. (See lines 14, 17, and 18 of Excel file embedded at Section VIII 15, Phase 1 of 3 yr plan)

**Beneficiaries**

The expected beneficiaries of this project are the students, teachers and citizens of Nebraska. By enhancing our telecommunications potential, the state public school system and resulting educational opportunities will be an attractive economic development tool for Nebraska. More students will graduate better prepared for the workforce or a postsecondary education. Smaller rural schools will remain viable, thereby enhancing the quality of life and opportunities for agriculture and small business for greater Nebraska.

The successful implementation of this initiative would literally make possible an educational environment utilizing online applications where learning could occur at any time, at any place, through any path and at any pace. From the smallest rural school to the most challenged urban center, the technology would provide a conduit for equitable educational opportunities. Advanced placement classes, remediation for Limited English Proficiency students, college credit courses, alternative education modules for home-bound learners are all within the realm of these delivery mechanisms.

**Outcomes**

- A. School districts, Educational Service Units, or data aggregation sites will be able to purchase Internet access at the same cost per unit, with an offset for transport fees in order to insure that distance does not preclude participation. (See lines 8, 9, 12, and 13 of Excel file embedded at Section VIII 15, Phase 1 of 3 yr plan)
- B. Over 160 high school distance learning circuits will be converted from commercial video data services to IP-based, high bandwidth circuits, capable of delivering a variety of technology applications. (See line 8, 9, 12, and 13 of Excel file embedded at Section VIII 15, Phase 1 of 3 yr plan)
- C. All JPEG-based distance-learning classrooms would be converted to H.26X video compression protocol and capable of interconnecting with every other IP-based video facility within and outside the State. (See lines 14, 17, and 18 of Excel file embedded at Section VIII 15, Phase 1 of 3 yr plan)
- D. A statewide scheduling and asset management system would be created to monitor the usage of distance learning facilities and allow external users to identify open facilities and send a request to the local scheduler. (See line 15 of Excel file embedded at Section VIII 15, Phase 1 of 3 yr plan)
- E. A web-based event clearinghouse would be created to promote and advertise educational programming and training opportunities. (See line 15 of Excel file embedded at Section VIII 15, Phase 1 of 3 yr plan)

- 2. Describe the measurement and assessment methods that will verify that the project outcomes have been achieved.

The strategic plans for Statewide K-12 Technology Infrastructure Upgrade to Flexible Use IP-based Network Initiative will provide accountability by tracking progress on each of the strategic outcomes. In addition, NDE will develop metrics and gather data to document the use and benefits of incorporating these technologies into the classroom. Ultimately, the increased number of educational opportunities and instructional resources will translate into increased student progress, achievement, and more equitable learning opportunities for students across the State. The resulting networking infrastructure should be sufficient to serve schools for the next seven years.

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3. Describe the project's relationship to your agency comprehensive information technology plan. The Statewide K-12 Technology Infrastructure Upgrade to a Flexible Use IP-based Network initiative, although not mentioned specifically in the NDE Technology Plan, does serve the purposes and eventual applications listed in the Technology Plan. The Nebraska Student Records System and Redesign of the School Personnel and Curriculum System will rely heavily on robust, high-speed infrastructure to and from every school. NDE's continual training requirements and travel for its many divisions will be made manageable by using these online systems and IP-based videoconferencing sites as a result of increased bandwidth capacity.

**Section IV: Project Justification / Business Case (25 Points)**

4. Provide the project justification in terms of tangible benefits (i.e. economic return on investment) and/or intangible benefits (e.g. additional services for customers).

Since 1992, various entities within the State of Nebraska have spent an estimated 20 million dollars on interactive video capture and display equipment, fiber connectivity, and engineering design charges to provide for distance learning and videoconferencing. Considered cutting edge technology in the early years of operation, this investment resulted in over 300 high-quality, videoconferencing classrooms using multiple, incompatible video protocols spread over numerous separate political subdivisions. These service regions were established when groups of school districts partnered together to set up inter-local agreements in order to receive grant funds, enter into contracts and hire staff to exchange high school and college classes. Other smaller videoconferencing networks were set up by other state agencies and hospitals but were not interoperable with the school and college sites.

The technology in many of these distance-learning networks is obsolete and no longer supported by the manufacturer. Service contracts with telecommunications providers to support the technology will expire over the next two to eight years. The estimated cost to upgrade these systems and just maintain the existing distance learning functionality is \$55 million. Without the network system upgrade, schools would be forced to revert back to pre-1996 infrastructure. The resulting bandwidth would be unable to support even the most minimal school-wide Internet access and would be unable to scale for future educational needs.

The current distance learning networks utilize telecommunications circuits with very large bandwidth (DS3 or 45megabit connections) that are dedicated almost solely to video use. Data circuits for accessing the Internet are often limited to a single T-1 (1.5megabit) circuit. The proposed IP-based upgrade plan would greatly increase the efficiency of video transmissions and free up significant capacity for other uses, such as Internet1, Internet2, video on demand, web-based courses, web-based applications, and data transfer. The number and type of technology applications carried by the high bandwidth circuits would be determined by the education sector rather than the provider sector. Implemented statewide, this would put Nebraska's schools in the forefront of the nation in terms of high-speed access.

Through aggregation of demand, adoption of common standards, and collaboration with network services and applications, participants can achieve many benefits, including:

- Lower network costs;
- Greater efficiency for participating entities;
- Interoperability of systems providing video courses and conferencing;
- Increased collaboration among all PreK-16 educational entities;
- New educational opportunities;
- Competitiveness with surrounding states; and

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- Better use of public investments.
5. Describe other solutions that were evaluated, including their strengths and weaknesses, and why they were rejected. Explain the implications of doing nothing and why this option is not acceptable.

Each of the NITC Strategic Initiatives cited in this project proposal introduce technology options or educational advantages that would not be possible under the present system.

Networking

Old system: K-12 districts individually negotiate their own Internet and transport contracts. This approach was rejected for lack of efficiency and effectiveness.

Network Nebraska: K-12 districts and other public entities are able to purchase Internet and transport off the State contract, thereby reducing telecommunication costs.

Synchronous Video

Old system: 297 high schools, having spent millions of dollars for implementation and network buy-down costs, divided themselves up into 12 distance learning consortia, ranging in size from six to 70 schools, and using up to four different video standards, and were unable to exchange courses across different technologies. This approach was rejected because it lacked interconnectivity.

Statewide Synchronous Video: Any entity with an IP-based classroom or videoconferencing cart will be able to "dial-up" and connect to any other entity also using IP-based videoconferencing. This includes 95% of the high schools, most of the higher education entities, hospitals, and informal education entities, as well as colleges and schools on Internet2 across the United States.

6. If the project is the result of a state or federal mandate, please specify the mandate being addressed.

The State Board of Education passed the following resolution on December 5, 2003, calling for the establishment of requirements in order to accomplish an Essential Education.

WHEREAS, the State Board of Education:

- Recognizes that the State Board of Education, the Legislature, and the Governor have always held public education to be one of the highest priorities of this State.
- Believes that access to an essential education is a constitutional right of every child.
- Believes that providing an essential education for every child is the responsibility of the policymakers and citizens of Nebraska.
- Believes that schools should be defined, organized and financed so as to create the capacity to provide an essential education.

The State Board of Education goals also include: "Coordinate the promotion and support of appropriate uses of technology with educational service units (ESUs) and other providers to implement statewide training and professional development based on 21<sup>st</sup> Century vision for the appropriate uses of technology" and to "Support the implementation of a continuous transition for students, PreK-16".

**Section V: Technical Impact (20 Points)**

7. Describe how the project enhances, changes or replaces present technology systems, or implements a new technology system. Describe the technical elements of the project, including hardware, software, and communications requirements. Describe the strengths and weaknesses of the proposed solution.

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The Statewide K-12 Technology Infrastructure Upgrade to a Flexible Use IP-based Network project, proposes to upgrade the existing Video/Data circuits to 164 high schools to flexible use, 45mbps circuits, capable of handling many different applications simultaneously in a high bandwidth, wide area networking topology. This will require installation of a router at every school as well as larger aggregation routers at central office provider facilities, serving regions of schools.

New CoDecs, capable of H.263 or H.264 video compression protocols, will replace the JPEG-series Codecs, no longer supported by the manufacturer.

The described technology implementation vastly improves the flexibility and availability of digital content resources for Nebraska students.

8. Address the following issues with respect to the proposed technology:

- Describe the reliability, security and scalability (future needs for growth or adaptation) of the technology.

The technology chosen conforms to all industry security specifications and provides a scalable platform for future enhancements to accommodate both additional numbers of learners as well as unanticipated technology applications. The wide area networking component is expected to serve education for seven years.

- Address conformity with applicable NITC technical standards and guidelines (available at <http://www.nitc.state.ne.us/standards/>) and generally accepted industry standards.

The technology chosen conforms with all applicable NITC technical standards and guidelines, especially the most recent Audio and Video Standards for Distance Learning and Videoconferencing.

- Address the compatibility with existing institutional and/or statewide infrastructure.

The technology chosen will be completely compatible with Network Nebraska and future Internet Protocol environments.

**Section VI: Preliminary Plan for Implementation (10 Points)**

9. Describe the preliminary plans for implementing the project. Identify project sponsor(s) and examine stakeholder acceptance. Describe the project team, including their roles, responsibilities, and experience.

**Network Nebraska.** The general timeframe for implementation of Network Nebraska and its associated educational applications for PreK-12 depends upon the rate at which PreK-12 customers leave their existing Internet service providers for Network Nebraska. For example, aggregations of school districts and ESUs are in the middle of Internet1 service contracts with private providers and are generally not able to consider other contracts until their existing contract terms expire. The 2005-2006 Network Nebraska customer base is two major data aggregations of about 165 school districts (33%), including Lincoln Public Schools.

**Statewide Synchronous Video Network.** The basic video and data transport contracts for the distance learning consortia begin to expire in July 2006 with 48 schools expiring the first year. Network upgrade costs and equipment just to maintain distance learning and Internet access for 164 schools are estimated at \$55,000,000 over a seven-year contract which will be met in part through local ongoing costs, e-Rate project reimbursement, Federal grants, provider capital investments, and

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the Nebraska Universal Service Fund. Additional funds will be needed to complete the network replacement. Later contract expirations will be accelerated to compress the implementation of the network and the retirement of the obsolete JPEG video equipment.

10. List the major milestones and/or deliverables and provide a timeline for completing each.

Network Nebraska upgrades to local 45mbps circuits and associated hardware: The last half of Summer 2006 and Summer 2007

Statewide Synchronous Video Upgrade to 164 high schools; The last half of Summer 2006 and Summer 2007

11. Describe the training and staff development requirements.

The staff development needs will be met by ESU professional development personnel.

12. Describe the ongoing support requirements.

The overall project will require ongoing telecommunications costs as well as many miscellaneous service contracts on the codecs, routers, and a scheduling system.

**Section VII: Risk Assessment (10 Points)**

13. Describe possible barriers and risks related to the project and the relative importance of each.

Barriers and risks to this project include local constituent consensus, provider pricing of network services at an affordable level, and potential implementation delays due to equipment backorders and the capacity of the provider companies to make large-scale upgrades and equipment replacements during the summer when schools are not in session.

14. Identify strategies which have been developed to minimize risks.

The Nebraska Information Technology Commission has conducted numerous stakeholder meetings and discussions and have conducted numerous work group and task groups to arrive at the aforementioned project components and support mechanisms. Nebraska Department of Education and NITC staff will be allocated to oversee implementation of the project components and to maintain accountability of every dollar invested.

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**Section VIII: Financial Analysis and Budget (20 Points)**

15. Financial Information

\*Click the Excel icon to open the financial information worksheet\*



Microsoft Excel  
Worksheet

16. Provide a detailed description of the budget items listed above. Include:

- An itemized list of hardware and software.

This information is detailed in the excel worksheet in 15.

- If new FTE positions are included in the request, please provide a breakdown by position, including separate totals for salary and fringe benefits.

Not applicable.

- Provide any on-going operation and replacement costs not included above, including funding source if known.

See item descriptions and annotated comments in Excel file embedded at Section VIII, 15.

- Provide a breakdown of all non-state funding sources and funds provided per source.

17. Please indicate where the funding requested for this project can be found in the agency budget request, including program numbers.

Forthcoming information.

<b>Estimated Costs for Implementation of Distance Learning Enhancement (First Phase of 3 yr Plan)</b>			
<i>Italics indicates possible LB 689 funding or less than the highest priority for funding. Underlined is highest priority.</i>			
<b>Schools in ESUs 13,15,16 area</b>		<b>67 sites</b>	
<b>Item</b>	<b>FY06 (ends 6-30-06)</b>	<b>FY07 (7-1-06/6-30-07)</b>	<b>Comment</b>
<b>1. High Capacity, scalable infrastructure</b>			
<u>Network Nebraska Backbone Transport</u>	\$0	<u>\$540,000</u>	*Backbone transport from Scottsbluff to Lincoln
<u>Regional Aggregation Circuit Costs</u>	\$0	<u>\$125,000</u>	*OC-3s or OC-12s within Scottsbluff, North Platte
<u>Buydown of Local Circuits (\$25K/site)</u>		<u>\$1,675,000</u>	<u>Contracts for regions</u>
<b>2. IP-based network for interconnection</b>			
<u>Regional Aggregation Routers</u>		<u>\$639,600</u>	**Regional Aggregation Routers for Scottsbluff, North Platte
<u>Regional Network Operations Centers</u>		<u>\$80,000</u>	*RNOC facilities at Scottsbluff, North Platte
<i>Building switch/routers</i>		<u>\$489,100</u>	<i>Switch/routers at 67 sites</i>
<u>Scheduling Software</u>		<u>\$702,000</u>	**K-12 portion of statewide scheduling software
<b>3. Upgrades of telecom equipment</b>			
<i>Building Codec Replacement</i>		<u>\$1,206,000</u>	<i>CoDec upgrades for 67 sites</i>
<i>LAN Upgrades and video classroom eqpt</i>		<u>\$1,067,000</u>	<i>LAN upgrades and video classroom eqpt as needed</i>
<b>High Priority State Investments sub total</b>	<b><u>\$0</u></b>	<b><u>\$3,761,600</u></b>	
<b>Possible LB 689 funding sub total</b>	<b><u>\$0</u></b>	<b><u>\$2,762,100</u></b>	
<b>Total Maximum Project Cost</b>	<b><u>\$0</u></b>	<b><u>\$6,523,700</u></b>	
			*Ongoing costs
			**Includes some ongoing costs

**Nebraska Information Technology Commission**

**Project Proposal Form**

**New or Additional State Funding Requests  
for Information Technology Projects**

**FY2005-07 Biennium  
(2006 Deficit Budget Requests)**

<b>Project Title</b>	<b>E-Grant System Re-Write</b>
<b>Agency/Entity</b>	<b>Arts Council</b>

**Project Proposal Form**  
 FY2005-07 Biennium (2006 Deficit Budget Requests)

**About this form...**

The Nebraska Information Technology Commission (“NITC”) is required by statute to “make recommendations on technology investments to the Governor and the Legislature, including a prioritized list of projects, reviewed by the technical panel, for which new or additional funding is requested.” In order to perform this review, the NITC and DAS-Budget Division require agencies/entities to complete this form when requesting new or additional funding for technology projects. For more information, see the document entitled “Guidance on Information Technology Related Budget Requests” available at <http://www.nitc.state.ne.us/forms/>.

Electronic versions of this form are available at <http://www.nitc.state.ne.us/forms/>.

For questions or comments about this form, contact the Office of the CIO/NITC at:

Mail: Office of the CIO/NITC  
 521 S 14th Street, Suite 301  
 Lincoln, NE 68508  
 Phone: (402) 471-3560  
 Fax: (402) 471-4608  
 E-mail: [info@cio.state.ne.us](mailto:info@cio.state.ne.us)

**Submission of Form**

Completed forms must be submitted by the same date budget requests are required to be submitted to the DAS Budget Division. Completed project proposal forms must be submitted via e-mail to [info@cio.state.ne.us](mailto:info@cio.state.ne.us). The project proposal form should be submitted as an attachment in one of these formats: Microsoft Word; WordPerfect; Adobe PDF; or Rich Text Format. Receipt of the form by the Office of the CIO will be confirmed by e-mail. If an agency is unable to submit the application as described, contact the Office of the CIO prior to the deadline, to make other arrangements for submitting a project proposal form.

**Section I: General Information**

Project Title	E-Grant System Re-Write
Agency (or entity)	Arts Council

Contact Information for this Project:

Name	Kathleen Kuszak
Address	1004 Farnam, Plaza Level
City, State, Zip	Omaha, NE 68102
Telephone	402-595-2195
E-mail Address	<a href="mailto:kkuszak@nebraskaartscouncil.org">kkuszak@nebraskaartscouncil.org</a>

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## **Section II: Executive Summary**

In 2003, the Nebraska Arts Council (NAC) contracted with Nebraska On-Line to produce an e-grant system designed to eliminate the paper grant application. Awarding grants to Nebraska nonprofit organizations for cultural activities is a major function of the NAC, and approximately 70% of the agency's budget, which includes administrative costs, is devoted to this function. The NAC processes between 300-400 grants annually and in FY04, allocated \$1.3 million for support of cultural activities statewide.

The e-grant system was developed at a cost of \$25,000 with an annual \$5,000 maintenance fee. It became operational in February, 2004. Since its inception, the system has been plagued by bugs. Unfortunately for the NAC, Nebraska On-Line (now Nebraska.gov) became increasingly unable to address basic repair issues. During the hiatus until new management took control in October, the e-grant system came close to being unusable, therefore, the NAC began assessing options to repair or replace the system.

A recent assessment by the new management team at Nebraska.gov has concluded that a total re-write of the system will be necessary. The system was apparently built without a style sheet, code map outline, or other administrative documentation, which makes efficient repair and maintenance difficult, and a review of the code base has determined that the system is inherently unstable, thus when one set of bugs is repaired, others will take their place. The veracity of this assessment has already been demonstrated – new bugs appear weekly as other problems are repaired. The cost of undertaking this project is estimated at \$108,000. An email from Nebraska.gov, outlining the cost estimates and justifications is also supplied as an attachment.

## **Section III: Goals, Objectives, and Projected Outcomes (15 Points)**

### **1. Describe the project**

The goals of the project are:

- Establish a stable operating base for the existing e-granting system
- Maintain the existing features of the current system, but eliminate the bugs that cause the features to cease operation or function incorrectly
- Establish a professional working relationship with Nebraska.gov, including clear chain of command communication, complete explanation of services, and written estimates, work orders and authorizations.

Expected beneficiaries of the project are:

- Nebraska nonprofit organizations, schools, religious organizations and divisions of government that apply for financial support from the NAC
- NAC employees that process grant applications

Expected outcomes:

- Grant applicants will no longer experience aggravating delays in writing and submitting proposals to the NAC
- NAC staff will become more efficient because less time will be wasted tracking down why the system isn't functioning properly
- A valuable software system will be stabilized and function within acceptable error limits indefinitely.

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**2. Describe the measurement and assessment methods that will verify that the project outcomes have been achieved.**

The NAC maintains an operations log for staff to keep track of problems that occur in the egrant system. The log helps determine whether the problem is operator-caused or system-caused. For operator-caused errors, the NAC has a procedural memo that outlines how to provide the operator with technical assistance on using the egrant system. Operator error is generally less than 10%. Currently, 100% of all applications submitted experience some form of system error.

With a system re-write, the base line for error will be set at 5%, which the NAC feels is reasonable for a web-based system. The methodology will be as follows: errors will be logged as per current practice, and totals for system error will be calculated on a weekly basis. If the number exceeds 5% of the total, a work order will be issued to Nebraska.gov for a fix.

The NAC also regularly surveys constituents on its programs and services using a web-based survey program called Zoomerang. E-grant satisfaction is monitored by a series of questions concerning ease of use, problems encountered, etc.

**3. Describe the project's relationship to your agency's comprehensive information technology plan.**

Developing and using informational technology is a cornerstone of the Nebraska Arts Council's current 2004-2006 Strategic Plan. Developing and using an egrant system was a major goal. Currently, less than 50% of state arts agencies use e-granting, and Nebraska is one of only a few states in our region that use it.

In addition, the NAC has accomplished other technology goals in the plan. The NAC distributes all informational announcements, press releases and targeted constituent communications along with a monthly news digest electronically. Our new office at 10<sup>th</sup> & Farnam contains a state of the art integrated computer, audio/visual and viewing system, which enables the staff to review and work on projects live and save directly to the agency's document server.

The NAC is also charting goals for the next strategic plan. The conference room has been wired to accommodate direct connections to the Internet from multiple laptop computers, as we envision that when finances allow, grant review panels will be able to access grant proposals on line and review them on laptops rather than from paper copies.

**Section IV: Project Justification / Business Case (25 Points)**

**4. Provide the project justification in terms of tangible benefits and/or intangible benefits.**

Currently, up to 40% of the Grants Manager's day and up to 20% of each program manager's day is spent adjusting to problems inherent in the current e-grant system configuration. This time should be spent addressing other objectives and priorities. As a service-oriented agency, the needs of the constituent are primary, so there is no question that the situation as it now stands must be maintained. The level of frustration experienced by constituents is mounting, however, because there is not a permanent resolution to the system's problems. This in turn lowers staff morale and productivity. It also lessens the effectiveness of the agency, which

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prides itself on maintaining a very low ratio of administrative cost to program cost (23% to 77%). By boosting the reliability of the system, these issues will be lessened dramatically.

**5. Describe other solutions that were evaluated, including their strengths and weaknesses, and why they were rejected. Explain the implications of doing nothing and why this option is not acceptable.**

The NAC is currently saddled with a system that is not working correctly. We are faced with two options: contract with another vendor and install a new system or work with the current system by implementing an overhaul. Several vendors of egrant systems have been contacted and evaluated. In one case, the vendor told the NAC that the NAC's current system was superior in terms of features, and that if the internal code problems could be rectified, it would be foolish to purchase a new system. Further, each vendor also recommends that the services of an independent consultant be retained to facilitate the process, which involves "building" on the basic system carried by each vendor.

In evaluating these two options, the NAC has come to the following conclusions:

- The look and features of the current system are ideal for the NAC and its constituents. In order to duplicate these items in a new system, a consultant would have to be engaged to facilitate the process, thus adding unnecessary costs.
- The NAC has invested significant resources in training constituents on using the current system. By re-tooling the existing system, re-training will be unnecessary.
- The NAC has invested over eighteen months in developing the current system, and would like to re-coup at least something from the process.
- Nebraska.gov is under new management, and based on several conversations with the new general manager, the NAC is confident that this vendor can accomplish the task in a professional and competent manner as outlined in the goals stated above. Additionally, Nebraska.gov is a local vendor, which facilitates communication.
- While the cost estimate for re-writing the system is triple what the original system development cost, it appears that it is more accurate and in-line with other vendors. In retrospect, we apparently "got what we paid for."

**6. If the project is the result of a state or federal mandate, please specify the mandate being addressed.**

Not applicable.

**Section V: Technical Impact (20 Points)**

**7. Describe how the project enhances, changes or replaces present technology systems, or implements a new technology system. Describe the technical elements of the project, including hardware, software, and communications requirements. Describe the strengths and weaknesses of the proposed solution.**

The e-grant system re-write will enhance the current system. It will involve contracting with a vendor to utilize the skills of a programmer that will systematically go through the existing operating code and re-write it to become more stable and less prone to bugs. At the same time, the system will be cross checked for security. No changes in the program's appearance will be necessary.

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**8. Address the following issues with respect to the proposed technology.**

Reliability, security and scalability:

The re-write will make the system reliable, and ensure its security. The system should be useable for at least ten years, and possibly beyond through upgrades.

Conformity with applicable NITC standards:

The system currently meets applicable standards. Further, the current system meets Federal requirements for certain data reporting procedures.

Compatibility with existing institutional and/or statewide infrastructure:

The system was designed to be compatible with other software and hardware used by the NAC.

**Section VI: Preliminary Plan for Implementation (10 Points)**

**9. Describe the preliminary plans for implementing the project. Identify project sponsor(s) and examine stakeholder acceptance. Describe the project team, including their roles, responsibilities, and experience.**

The project will be developed in parallel with the existing system. In other words, the existing system will be "patched up" to continue functioning while the code re-write is being accomplished. Nebraska.gov will assign a project manager who will allocate programmer resources. It is anticipated that six months will be required to undertake the re-write, using one full time employee.

The NAC will compile a task force consisting of Kathleen Kuszak, Director of Administration, Kristin Hardin, Grants Manager, and Martin Skomal, Director of Programs to work on the project. Since the NAC is too small (ten employees) to have a dedicated I.T. employee, the basic I.T. functions of the agency are shared between these individuals. Two have had some technical training in programmer functions and web development and the Grants Manager is the front line person in dealing with the system. She maintains the problem logs and works with the current system on a daily basis. All three were involved in the initial system development and are adept at trouble shooting and finding solutions.

The NAC Task Force will be responsible for reviewing all work and authorizing implementation.

**10. List the major milestones and/or deliverables and provide a timeline for completing each.**

January 1, 2006	Renew or extend existing service contract (which will authorize continued service to current system)
January – March 2006	Perform patches & repairs as needed on current system (no charge).
July 1	Execute contract for re-write services
July 15 – Dec. 15	Undertake system re-write
Dec. 15 – Jan. 15, 2007	Undergo final system testing

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January 20                      New system goes live

March 1                         First grant deadline with new system

**11. Describe the training and staff development requirements**

Staff training will be negligible, because current functions will not be changed.

**12. Describe the ongoing support requirements**

Nebraska.gov will maintain the system as part of the state's portal.

**Section VII: Risk Assessment (10 Points)**

**13. Describe possible barriers and risks related to the project and the relative importance of each.**

The biggest concern is that the system is so badly constructed that the cost of re-writing will go over budget to a significant degree. A second concern would be that the time needed to do the re-write has been underestimated. The NAC needs to have the system operational prior to our spring grant deadline (March 1, 2007).

Otherwise, the project seems like the most risk-free of the options considered.

**14. Identify strategies which have been developed to minimize risks.**

During the first few months of the project, the NAC will reduce agency administrative costs by 15% in case additional funds are necessary to complete the project. If the re-write cannot be accomplished within the proposed timeframe, the old system will have to be used for the spring, 2007 deadline.

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**Section VIII: Financial Analysis and Budget (20 Points)**

15. Financial Information

Financial and budget information can be provided in either of the following ways:

- (1) If the information is available in some other format, either cut and paste the information into this document or transmit the information with this form; or
- (2) Provide the information by completing the spreadsheet provided below.

**Instructions:** Double click on the Microsoft Excel icon below. An imbedded Excel spreadsheet will be launched. Input the appropriate financial information. Close the spreadsheet. The information you entered will automatically be saved with this document. If you want to review or revise the financial information, repeat the process just described.



Excel Spreadsheet  
(Double-click)

16. Provide a detailed description of the budget items listed above. Include:

- An itemized list of hardware and software.

N/A

- If new FTE positions are included in the request, please provide a breakdown by position, including separate totals for salary and fringe benefits.

N/A

- Provide any on-going operation and replacement costs not included above, including funding source if known.

N/A

- Provide a breakdown of all non-state funding sources and funds provided per source.

N/A

17. Please indicate where the funding requested for this project can be found in the agency budget request, including program numbers.

**This request can be found with the Deficit Request submitted to the Budget Office on October 31, 2005. File = 6932605.doc and 6932605.exl, both files are included with this proposal.**

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Project Proposal Form  
Section VIII: Financial Analysis and Budget

(Revise dates as necessary for your request.)

	Estimated Prior Expended	Request for FY2005-06 (Year 1)	Request for FY2006-07 (Year 2)	Request for FY2007-08 (Year 3)	Request for FY2008-09 (Year 4)	Future	Total
1. Personnel Costs							\$ -
2. Contractual Services							
2.1 Design							\$ -
2.2 Programming			\$ 36,000.00				\$ 36,000.00
2.3 Project Management			\$ 72,000.00				\$ 72,000.00
2.4 Other							\$ -
3. Supplies and Materials							\$ -
4. Telecommunications							\$ -
5. Training							\$ -
6. Travel							\$ -
7. Other Operating Costs							\$ -
8. Capital Expenditures							
8.1 Hardware							\$ -
8.2 Software							\$ -
8.3 Network							\$ -
8.4 Other							\$ -
<b>TOTAL COSTS</b>	\$ -	\$ -	\$ 108,000.00	\$ -	\$ -	\$ -	\$ 108,000.00
General Funds			\$ 108,000.00				\$ 108,000.00
Cash Funds							\$ -
Federal Funds							\$ -
Revolving Funds							\$ -
Other Funds							\$ -
<b>TOTAL FUNDS</b>	\$ -	\$ -	\$ 108,000.00	\$ -	\$ -	\$ -	\$ 108,000.00

From: Brian [brian@nebraska.gov]

Sent: Friday, October 28, 2005 11:40 AM

To: [swise@nebraskacouncil.org](mailto:swise@nebraskacouncil.org); [kkuszak@nebraskacouncil.org](mailto:kkuszak@nebraskacouncil.org)

Cc: [travor@nebraska.gov](mailto:travor@nebraska.gov); [trent@nicusa.com](mailto:trent@nicusa.com)

Subject: Arts Council E-Granting System

Per our discussion last week we have had some internal conversations in response to your request for information on possible next steps. We have met internally to discuss this issue in greater detail.

Our discussions revolved around four primary areas that were discussed during our joint meeting last week:

- 1.) Lack of documentation; both business rules for the E-granting system and application requirements
- 2.) Stability of the current code base (bugs)
- 3.) Past level of resource investment
- 4.) Future level of resource investment that would be required.

As you know we have recently encountered some significant changes at the portal with specific regard to change of management. As a result of this change our efforts are heavily focused on creating a portal environment that will allow Nebraska Interactive to successfully launch and maintain complicated online e-commerce and e-government applications using best practices and implementing a sound project management methodology.

You indicated that leading up to our meeting you had been toying with the idea of using an outside source to re-write the system but that you would prefer to stay with the portal to save the effort involved in starting a new project to re-create the system. Due to the complexity of this application, lack of documentation and sheer number of outstanding issues we feel that the best and only option that will allow us to move forward in the right direction is to solve the list of known issues in an effort to stabilize the current system prior to moving forward with any new enhancements or minor changes to the system that introduce new breaking points.

We have struggled with how to proceed past the point of known issues. We are not currently comfortable with the code base in place. We are essentially looking at starting back at ground zero prior to moving forward with any changes. We feel that doing this will provide the stability and level of customer service from the portal that both you and your constituents deserve.

As the General Manager of Nebraska Interactive I am charged with using our resources wisely and effectively and in a way that the portal best serves the purpose of the network. I am concerned with our ability to apply the level of resource allocation that will be required to completely redesign and document the system. Since this project's inception we have invested an estimated 3000 hours of development time. Since we have established that some of this time is due to lack of process and documentation we feel that moving forward with a complete rewrite will require the following resources:

1. 3 Months (480 hrs) – Project Management. While this is not full time on this project the required allocation will be significant. These 3 months of work would be spread out over a period of 6 – 9 months for the project.
2. 6 Months (960 hrs) – Development. This is a single full time employee.

Originally we had done the project for a \$25,000 fixed cost and later established a \$5000 per year maintenance fee. We have invested an estimated \$225,000 in resource allocation (figured at \$75/hr for 18 months or 3000 hours).

Given the estimate that has been provided billed at \$75/hr for both development and project management the total cost of the rewrite would be estimated \$108,000. This would of course be subject to significant change depending upon scope creep and any unforeseen issues.

I would like to caveat this by saying that we are in the middle of doing research in an effort to set a cost per hour for development and project management so this evaluation could further change the numbers presented.

As stated before we are more than willing to continue to work with you to maintain the existing system and fix the known issues but are not comfortable modifying the system. We understand that this may be a significant dollar figure for your council. We would encourage you to continue to look at any potential cost effective alternatives and would be willing to help by serving in a consulting role should you choose to seek other alternatives.

Please let me know your thoughts and/or questions regarding our proposal.

\*\*\*\*\*

Brian Stevenson  
General Manager  
Nebraska Interactive, LLC.  
<http://www.Nebraska.gov>  
402.471.6582 (Phone)  
402.202.6765 (Cell)  
402.471.7817 (Fax)  
[brian@nebraska.gov](mailto:brian@nebraska.gov) (email)

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Nebraska.gov

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# Program Adjustment Narrative

State of Nebraska – Administrative Services – Budget Division

	CODE	DESCRIPTION
AGENCY	069	Nebraska Arts Council
PROGRAM	326	Promotion of the Arts
REQUEST	5	Nebraska.gov

Provide the following information: A) Description of Request; B) Rationale for Request; C) Impact of Request; and, D) Statutory Change if Required.

A) Description of Request

Rewrite E grant system. \$108,000

B) Rationale for Request

In 2003, the Nebraska Arts Council (NAC) contracted with Nebraska On-Line to produce an e-grant system designed to eliminate the paper grant application. Awarding grants to Nebraska nonprofit organizations for cultural activities is a major function of the NAC, and approximately 70% of the agency’s budget, which includes administrative costs, is devoted to this function. The NAC processes between 300-400 grants annually and in FY04, allocated \$1.3 million for support of cultural activities statewide.

The e-grant system was developed at a cost of \$25,000 with an annual \$5,000 maintenance fee. It became operational in February, 2004. Since its inception, the system has been plagued by bugs. Unfortunately for the NAC, Nebraska On-Line (now Nebraska.gov) became increasingly unable to address basic repair issues. During the hiatus until new management took control in October, the e-grant system came close to being unusable, therefore, the NAC began assessing options to repair or replace the system.

A recent assessment by the new management team at Nebraska.gov has concluded that a total re-write of the system will be necessary. The system was apparently built without a style sheet, code map outline, or other administrative documentation, which makes efficient repair and maintenance difficult, and a review of the code base has determined that the system is inherently instable, thus when one set of bugs is repaired, others will take their place. The veracity of this assessment has already been demonstrated – new bugs appear weekly as other problems are repaired. The cost of undertaking this project is estimated at \$108,000. An email from Nebraska.gov, outlining the cost estimates and justifications is also supplied as an attachment.

C) Impact of the Request

The goals of the project are: 1) Establish a stable operating base for the existing e-granting system 2) Maintain the existing features of the current system, but eliminate the bugs that cause the features to cease operation or function incorrectly; 3) Establish a professional working relationship with Nebraska.gov, including clear chain of command communication, complete explanation of services, and written estimates, work orders and authorizations.

D) Statutory Change, if Required

N/A

**Form Number 520**

**Program Adjustment Request**

State of Nebraska - Administrative Services - Budget Division

PAGE NUMBER

CODE & DESCRIPTION

AGENCY

69 Nebraska Arts Council

PROGRAM

326 Promotion of the Arts

REQUEST

5 Nebraska.gov

EXPENDITURE ACCOUNT	APPROPRIATIONS		ADJUSTMENTS	
	2005-2006	2006-2007	2005-2006	2006-2007
Permanent F.T.E. Positions				
511100 Permanent Salaries - Wages	388,835	401,475		
511200 Temporary Salaries - Wages				
511600 Per Diem Payments				
511900 Supplemental (One-time payments)				
All Other Salaries				
<b>Sub-Total Salaries</b>	<b>388,835</b>	<b>401,475</b>	<b>0</b>	<b>0</b>
515100 Retirement Plans Expense	25,301	25,301		
515200 OASDI Expense	29,551	30,713		
515400 Life and Accident Insurance Expense	185	185		
515500 Health Insurance Expense	44,261	46,176		
All Other Personal Services	4,541	4,541		
<b>Sub-Total Benefits</b>	<b>103,839</b>	<b>106,916</b>	<b>0</b>	<b>0</b>
510000 Personal Services	492,674	508,391	0	0
520000 Operating Expenses	41,850	42,721		
521100 Postage	7,696	7,696		
521200 Communications	16,477	16,477		
521500 Printing	10,775	10,775		
522100 Dues & Subscriptions	13,776	13,776		
524200 Rent	69,675	69,675		
542100 Contractual Agreements	17,028	17,028		108,000
570000 Travel Expenses	21,090	22,739		
580000 Capital Outlay	0	0		
590000 Government Aid	0	0		
<b>Total Expense</b>	<b>691,041</b>	<b>709,278</b>	<b>0</b>	<b>108,000</b>
Means of Financing				
General Fund	548,361	566,598		108,000
Cash Fund	10,000	10,000		
Federal Fund	132,680	132,680		
Revolving Fund				
<b>Total Funding</b>	<b>691,041</b>	<b>709,278</b>	<b>0</b>	<b>108,000</b>

Note: In the blank lines under Operating Expenses, itemize individual line items that comprise a significant portion of the Total Operating Expenses.

# Nebraska Information Technology Commission

## Commissioners

November 8, 2005

<b>Summary of NITC Membership Statute (§86-515 attached)</b>
--

1. Nine Members
  - a. One member representing elementary and secondary education
  - b. One member representing postsecondary education
  - c. The Governor or his or her designee
  - d. One member representing communities
  - e. Five members representing the general public who have experience in developing strategic plans and making high-level business decisions
2. Governor or designee serves as chair
3. Members appointed by the Governor with approval of the Legislature. Members server terms of four years, except that two members initially appointed to represent the general public appointed for a term of two years. Members limited to two consecutive terms. Each member servers until appointment and qualification of successor. In case of a vacancy occurring prior to the expiration of the term of a member, the appointment shall be made only for the remainder of the term.

<b>Current Commissioners</b>
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Commissioner	Representing	Current Term Ends	Comment
Rick Sheehy	Governor	No term	
Dr. Douglas Christensen	Elementary/Secondary Ed.	4/2/2006	2 <sup>nd</sup> term, cannot be reappointed
Dr. Doug Kristensen	Postsecondary Education	4/2/2006	1 <sup>st</sup> term (finishing remainder of Smith's term), can be reappointed
Greg Adams	Communities	4/2/2006	2 <sup>nd</sup> term, cannot be reappointed
Eric Brown	General Public	4/2/2006	2 <sup>nd</sup> term, cannot be reappointed
L. Merrill Bryan	General Public	4/2/2006	2 <sup>nd</sup> term, cannot be reappointed
Linda Aerni	General Public	4/2/2006	1 <sup>st</sup> term, can be reappointed
Trev Peterson	General Public (staggered term)	4/2/2006*	1 <sup>st</sup> term, can be reappointed
Dr. Janie Park	General Public (staggered term)	4/2/2008	1 <sup>st</sup> term (finishing remainder of Heider's term), can be reappointed
Philip Erdman	Legislature		Unofficial legislative liaison

\* Trev Peterson was appointed in March 2002 to fill the vacancy created by the resignation of Pamela VanLandingham. His initial appointment should have been for the remainder of VanLandingham's term which ended on 4/2/2004. Instead, his appointment papers indicate his term ends on 4/2/2006.

## State of Nebraska Statutes

### Section 86-515

#### *Nebraska Information Technology Commission; created; members; expenses; executive director.*

(1) The Nebraska Information Technology Commission is created. The commission shall consist of nine members, including (a) one member representing elementary and secondary education, (b) one member representing postsecondary education, (c) the Governor or his or her designee, (d) one member representing communities, and (e) five members representing the general public who have experience in developing strategic plans and making high-level business decisions.

(2) The Governor or a designee of the Governor shall serve as chairperson of the commission.

(3) The members of the commission shall be appointed by the Governor with the approval of a majority of the Legislature. Members of the commission shall serve for terms of four years, except that two members initially appointed to represent the general public shall be appointed for a term of two years. Members shall be limited to two consecutive terms. The Governor or his or her designee shall serve on the commission for his or her term. Each member shall serve until the appointment and qualification of his or her successor. In case of a vacancy occurring prior to the expiration of the term of a member, the appointment shall be made only for the remainder of the term.

(4) Members shall be reimbursed for their actual and necessary expenses as provided in sections 81-1174 to 81-1177.

(5) The commission may employ or designate an executive director to provide administrative and operational support for the commission. The Department of Administrative Services and Nebraska Educational Telecommunications Commission shall assist with administrative and operational support for the Nebraska Information Technology Commission as necessary to carry out its duties.

#### **Source:**

Laws 1998, LB 924, § 5  
R.S.1943, (1999), § 86-1505  
Laws 2002, LB 1105, § 285