

Business Services & Information Technology



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A PROFILE OF LINCOLN'S
BUSINESS SERVICES AND
INFORMATION TECHNOLOGY
INDUSTRY CLUSTER



A Profile of Lincoln’s Business Services and Information Technology Cluster

A Bureau of Business Research Report
From the University of Nebraska—Lincoln

**A Profile of Lincoln’s
Business Services and Information Technology Industry Cluster**

Final Report, 2017

**Prepared for the
Lincoln Partnership for Economic Development**

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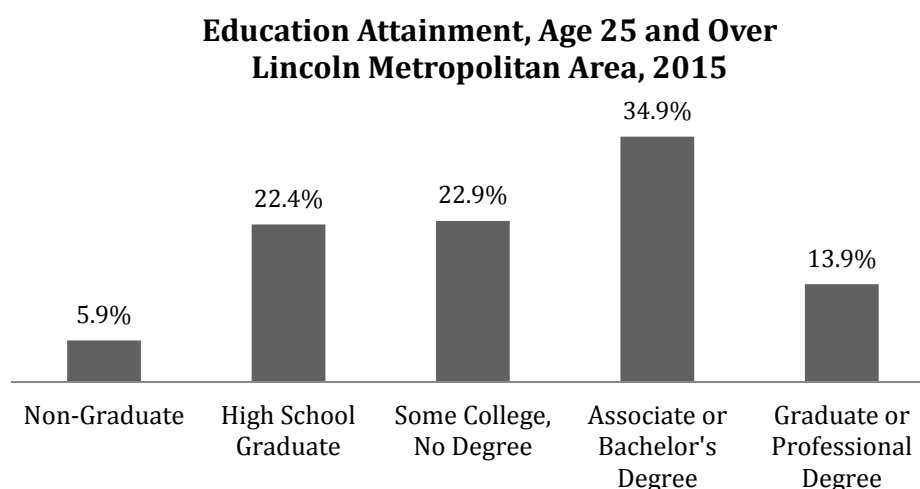
Introduction

A Profile of Lincoln's Business Services and Information Technology Cluster

This fast growing business services and information technology sectors are well matched to the Lincoln, Nebraska economy. Business services is comprised of financial and insurance services, business services such as consulting and web development, back-office support operations including record-keeping duties, accounting and payroll services, and even customer support, and processing facilities, including data centers. The information technology sector encompasses computer programming services, prepackaged software, data processing, information retrieval services, website hosting, internet search, computer systems design, and telecommunications. Such industries benefit from Lincoln's highly educated workforce, low labor costs, low cost of living, low traffic congestion costs, and business-friendly environment.

Why Lincoln?

Lincoln, a centrally-located metropolitan area of 330,000, is well positioned to cultivate this industry through its **highly educated workforce¹, existing business services and information technology presence, extensive university research and outstanding quality of life.**



Graph 1

Lincoln offers the ambiance of a friendly small town and the amenities, attractions and entertainment opportunities of a major metropolitan area. Lincoln is both the **state capital and home to the flagship campus of the University of Nebraska**; as a result it provides a greater range of offerings than might be expected in a community of its size. Efficient transportation, a stable business environment, advanced health-care technology and an excellent educational system are just a few of the reasons why **Lincoln ranks highly in livability studies**. As described in the pages that follow, Lincoln has significant cost advantages in terms of cost-of-living, wages, space costs, and other business costs. The University of Nebraska-Lincoln provides research services and advanced computing facilities and features the **Jeffrey S. Raikes School of Computer Science and Management**. Further, colleges from throughout the region graduate students in relevant majors for business services and information technology businesses. There is also a large, established set of businesses in Lincoln within the business services and information technology industry cluster.

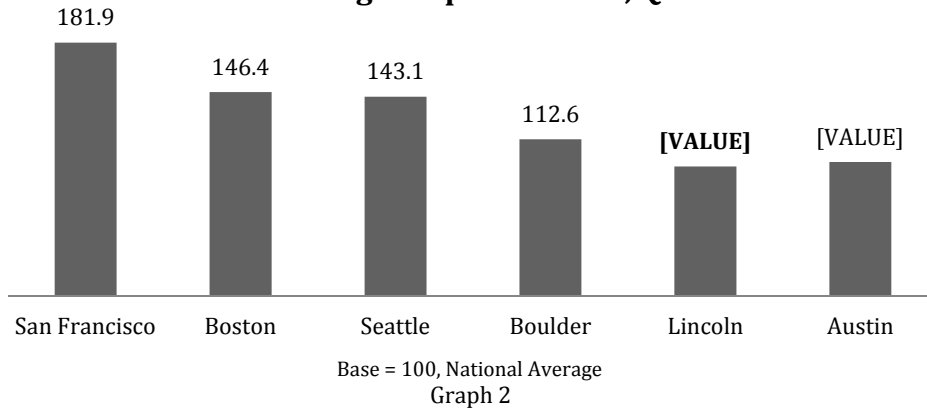
Cost Comparisons

Lincoln's cost of living compares favorably with the top technology-oriented metropolitan areas nationwide.²

¹ U.S. Census Bureau, 2015 American Community Survey (1-year Estimates), Table S1501.

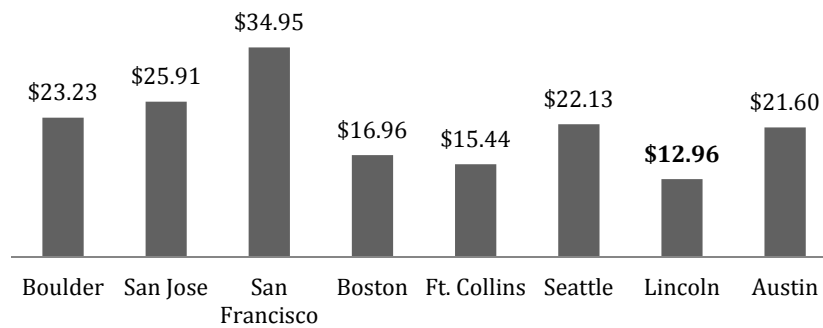
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Cost of Living Composite Index, Q3 2016



In addition to Lincoln's exceptional amenities and educated workforce, Lincoln has the lowest commercial space costs among peer metropolitan areas.³ These particular rent costs refer to office space well suited to the business services and information technology industry.

Annual Rent per Square Foot: Office Property Asking Rent June 2016



Graph 3

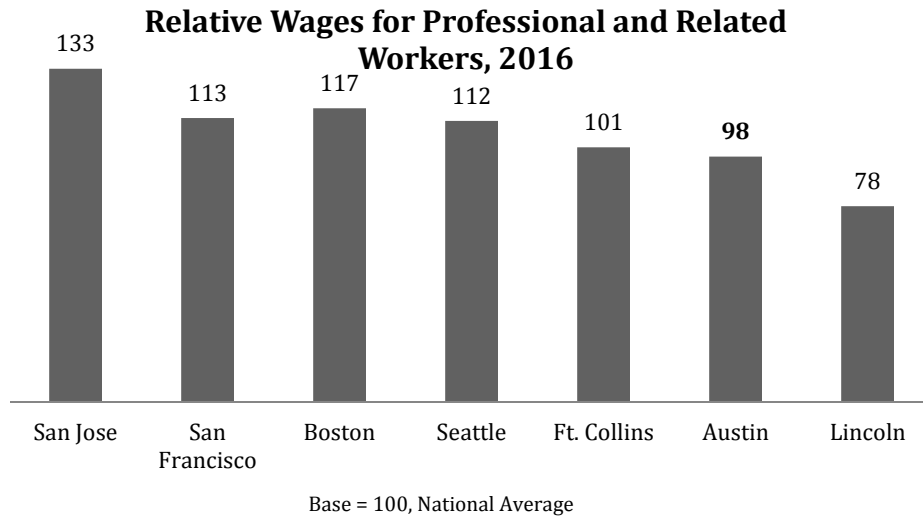
Lincoln also ranks lowest with regard to relative wage costs.⁴ This completes a perfect combination of unique amenities, low cost of living, and an attractive business environment through a highly educated workforce, and low costs of commercial space and employment.

² Council for Community and Economic Research, "(previously Accra) Cost of Living Index Q1 2017." Published May 2017; Boulder estimate is based on Denver's COLI data.

³ LoopNet Real Estate Research, <http://www.loopnet.com>, accessed June 22, 2017.

⁴ U.S. Bureau of Labor Statistics, Occupation Employment Statistics, <http://www.bls.gov/oes/>, accessed June 22, 2017.

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Graph 4

We provide detailed salary information on several business services and information technology occupations on the next page. Average unemployment insurance tax rate on taxable wages, average price for industrial gas per thousand cubic feet, industrial electric service typical industrial bill, and top state corporate income tax rate can be found on page 5. Lincoln is among the three lowest cost metro areas among comparison cities for average unemployment insurance tax rate, price for industrial gas, and typical industrial electric bill service rates.

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Business Services and IT - Average Annual Salary, Lincoln MSA, Q1 2017

Occupation	Annual Salary		
	Entry	Median	Experienced
TOTAL ALL OCCUPATIONS	\$22,310	\$36,498	\$56,762
MANAGEMENT OCCUPATIONS	\$52,468	\$85,843	\$126,177
Computer and Information Systems Managers	\$77,486	\$104,617	\$133,042
BUSINESS AND FINANCIAL OPERATIONS OCCUPATIONS	\$35,225	\$56,087	\$75,363
Financial analysts	\$45,599	\$65,525	\$87,779
Management Analysts	\$45,827	\$65,457	\$81,938
Market Research Analysts and Marketing Specialists	\$28,587	\$49,951	\$67,355
COMPUTER AND MATHEMATICAL OCCUPATIONS	\$38,255	\$62,024	\$77,167
Computer Programmers	\$44,949	\$72,463	\$86,071
Computer Systems Analysts	\$40,837	\$59,296	\$74,763
Database Administrators	\$41,022	\$65,304	\$81,854
Network and Computer Systems Administrators	\$45,009	\$65,773	\$81,644
Software Developers, Applications	\$51,239	\$71,941	\$84,638
Software Developers, Systems Software	\$48,434	\$72,719	\$85,564
OFFICE AND ADMINISTRATIVE SUPPORT OCCUPATIONS	\$22,669	\$32,289	\$40,873
Computer Operators	\$27,995	\$39,620	\$48,890
Data Entry Keyers	\$26,767	\$31,559	\$35,158

Source: Occupation Employment and Wage Rates, <https://networks.nebraska.gov/>, accessed June 22, 2017

Table 1

A Profile of Lincoln's Business Services and Information Technology Cluster

Selected Business Costs for Business Services and Information Technology Industry						
(Three Lowest Cost Metro Areas Listed in Bold)						
Metropolitan Area[1]	Average Unemployment Insurance Tax Rate on Taxable Wages 2015 (State Average)	Right-to-Work State?	Avg. Price Industrial Gas/Thousand Cubic Feet 2015 (State Avg.)	Typical Commercial Bill, Service Rates in Effect, January 1, 2016 (City)		Top State Corporate Income[2] Tax Rate 2017
				40kW, 14mWh	500kW, 150mWh	
Lincoln	1.26%	Yes	\$4.56	\$1,057	\$14,362	7.81%
Boston	2.71%	No	\$9.22	\$2,736	\$29,436	8.00%
Boulder	2.26%	No	\$5.74	NA	NA	4.63%
Ft. Collins	2.26%	No	\$5.74	NA	NA	4.63%
San Francisco	4.88%	No	\$6.41	\$2,620	\$28,906	8.84%
San Jose	4.88%	No	\$6.41	NA	NA	8.84%
Seattle	1.50%	No	\$8.91	\$1,002	\$11,285	0.00%
Austin	2.39%	Yes	\$2.89	\$1,411	\$15,663	0.00%

[1] For metropolitan areas located in multiple states (Boston), the state averages from the state where the metropolitan areas' economic activity is concentrated are utilized (Massachusetts).

[2] Tax may be eligible for use of credits earned in state incentive program, Texas and Washington have gross receipt taxes rather than corporate income taxes

Sources:
A. U.S. Department of Labor Office of Unemployment Insurance Division of Fiscal and Actuarial Services (2016), Significant Measures of State Unemployment Insurance Tax Systems, Average Tax Rate, <http://workforcesecurity.doleta.gov/unemploy/pdf/sigmeasuitaxsys15.pdf>
B. National Right to Work Legal Defense Foundation, Right to Work States, <http://www.nrtw.org/right-to-work-states>
C. US Energy Information Administration, Natural Gas, for Average Industrial Price, http://www.eia.gov/dnav/ng/ng_sum_lsum_a_EPG0_PIN_DMcf_a.htm
D. Lincoln Electric System, National Electric Rate Survey 2016, Average Price/KWH, <http://www.les.com/pdf/rates/rate-survey.pdf>
E. Tax Foundation, 2017, Facts & Figures: How Does Your State Compare?, <https://files.taxfoundation.org/20170320110931/TF-Facts-Figures-2017-3-20-2017.pdf>

Table 2

A Profile of Lincoln's Business Services and Information Technology Cluster

Education Resources

Lincoln's Business Services and Information Technology sector benefits from the vast array of programs that support the development of a specialized workforce for this industry.

The University of Nebraska-Lincoln (UNL), Concordia University, Nebraska Wesleyan University and Doane University all provide business management, administration and accounting programs. Other area colleges provide business management programs. In addition to which there are a number of programs and other institutions tailored to the information technology needs of the sector. While UNL is certainly the backbone of information technology research and education in Lincoln, there are many institutions that offer 2-year and 4-year degree programs in this field: **Concordia College, Doane University, Kaplan University, Nebraska Wesleyan University, Southeast Community College, and Union College**. Lincoln is also home to numerous other private institutions that offer certification programs in IT, two of these are the **New Horizons Computer Learning Center** and **Easel Solutions**.

During the 2015-2016 school year, the colleges and universities in Lincoln graduated approximately **1,250 students with bachelor's degrees** in majors related to this sector, approximately **275 with associate's degrees**, and nearly **300 with post-graduate degrees**.

Bachelor's Degrees Awarded	Concordia University		Doane University		Kaplan Uni. B		Nebraska Wesleyan Univ.		Peru State College		Southeast Comm. College A		Union College		UNL		Total	
Accounting	8	29	9	6													108	160
Actuarial Science																	72	72
Business Administration and Management, General		83	10		48	141	16										234	532
Business/Commerce, General	35			47	52													134
Business/Managerial Economics																	37	37
Computer Engineering, General																	49	49
Computer and Info. Sciences and Support Services	2	5	6		8	58	8										51	138
Electrical and Electronics Engineering																	67	67
Elec., Electronic and Comm. Eng. Tech./Technician													68					68
Finance, General																	101	101
HR Management/Personnel Administration, General		43																43
International Business/Trade/Commerce					2											1	14	17
Marketing/Marketing Management, General	1			2													116	119
Total	46	160	25	57	108	267	25	849	1537									

A: Associates Degrees; B: Associates and Bachelors Degrees; C: Certificate Program.
Source: <http://nces.ed.gov/collegenavigator/>

Table 3

A Profile of Lincoln's Business Services and Information Technology Cluster

Post Graduate Degrees (M.A. & Ph.D.) Awarded	<i>Concordia University</i>	<i>Doane University</i>	<i>Kaplan University</i>	<i>Nebraska Wesleyan University</i>	<i>UNL</i>	Total
Accounting			2		36	38
Actuarial Science					5	5
Business Admin. and Management, General					89	89
Bus. Mgmt. Mkt. & Related Support Svcs., Other					12	12
Computer and Information Sciences, General			3		18	21
Electrical and Electronics Engineering					12	12
Management Science, General	18	48	2	41		109
Marketing Research					6	6
Telecommunications Technology/Technician					4	4
Total	18				182	296
Source: http://nces.ed.gov/collegenavigator/						

Table 4

A Profile of Lincoln's Business Services and Information Technology Cluster

Research and Industry Services

The business services and information technology sectors also benefit from research programs at the **University of Nebraska-Lincoln** (UNL). UNL's extensive business services and information technology research program and infrastructure include:

Jeffrey S. Raikes School of Computer Science and Management

An innovative integration of computer science and management education, including a 2-year applied software design studio. The Jeffrey S. Raikes School develops leaders for a technology driven world. It is the recognized leader in interdisciplinary computer science and business management education for high ability and highly motivated students. The Raikes School is unique in that it is the premier program bringing together the domain of computer science and information technology with business, thereby developing leaders and entrepreneurs for the increasingly information technology-driven business world.

The Design Studio is the capstone learning experience of the Jeffrey S. Raikes School. In Design Studio, student teams partner with sponsoring businesses and government agencies to develop real-world, software-based solutions meeting their client's needs. Students gain project management, teamwork, and leadership skills essential in today's professional world. Design Studio gives students and clients the ability to interact and create innovative software based solution, while benefiting from the support of Raikes School faculty and facilities.

For more information, see the source of this passage: <http://raikes.unl.edu/>

University of Nebraska-Lincoln College of Business (CB)

The College of Business is among the small percentage of the schools offering undergraduate or graduate programs in business administration that are accredited under the high standards set by the Association to Advance Collegiate Schools of Business (AACSB). The college fosters intellectual curiosity, business insight, and effective leadership through high quality instruction, research, and service to students, the citizens of Nebraska, and national and international communities.

The CB is the second largest college on the University of Nebraska-Lincoln campus with approximately 4,000 students attending classes with 118 full-time equivalent faculty members. The undergraduate program offers ten majors; accounting, actuarial science, agribusiness, business administration, economics, finance, international business, management, marketing, and supply chain management. Masters and doctoral degrees are offered by the five departments; accounting, economics, finance, management and marketing.

The College retains close ties with professional and business leaders. Executives from all around the world come into the classrooms to speak to students and student organizations. Companies visit the college regularly to meet with faculty, attend job fairs, and forge closer ties with the College. Many student organizations are closely affiliated with professional and business organizations in the community. The College is also home to the Center for Entrepreneurship, which was named best in the nation by the U.S. Association for Small Business and Entrepreneurship.

For more information, see the source of this passage: <http://cba.unl.edu/>

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Department of Computer Science & Engineering

Graduates from this UNL department are highly capable, creative individuals whose skills allow them to work seamlessly across a broad spectrum of careers. The department conducts state-of-the-art research in software engineering, informatics, and systems. The faculty receives funding from a variety of sources including: National Science Foundation (NSF), U.S. Department of Agriculture, Army Research Office, Airforce Office of Scientific Research, NASA, National Institute of Health, Microsoft, and Intel.

The department also hosts a number of research labs and facilities that form an important hub for information-technology R&D in the state of Nebraska:

The Abacus Distributed Storage Lab, aims to design and develop distributed and parallel storage systems with high scalability, performance, reliability and availability.

The **Constraint Systems Lab** investigations cover both theoretic and practical aspects of Constraint Processing, a sub-area of Artificial Intelligence. Constraint Processing provides powerful tools for modeling and solving effectively a wide variety of combinatorial problems spanning over Computer Science, Engineering, and Management.

Cyber-Physical Network, networks that are aware of, can adapt to, and change their environment. The focus areas are: cross-layer communications, real-time networking, underground sensor networks, mobile sensor networks, and cognitive radio networks.

For more information, see the source of this passage: <http://cse.unl.edu/>

Center for Applied Land Management Information Technology (CALMIT)

The people and partners of CALMIT combine interdisciplinary expertise in advanced land management information technologies to conduct research and instruction of the highest quality in remote sensing, geographic information systems (GIS) and related technologies. CALMIT is leveraging advanced spatial technologies and methods to harness the vast amounts of remote sensing imagery and other spatial data.

For more information, see the source of this passage: <http://www.calmit.unl.edu/>

Holland Computing Center (HCC)

HCC provides various services to researchers associated with any campus of the University of Nebraska system. The HCC houses and manages a number of supercomputers serving a broad range of functions. Crane has 7232 Intel Xeon cores in 452 nodes with 64GB RAM per node. Tusker consists of 106 AMD Interlagos-based nodes (6784 cores) interconnected with Mellanox QDR Infiniband. Sandhills has 1440 AMD cores housed in 42 nodes with 128GB per node and 2 nodes with 256GB per node. RED is a 337 node production-model LINUX cluster. HCC's cloud computing cluster based on Openstack.

For more information, see the source of this passage: <http://hcc.unl.edu/>

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Nebraska Innovation Campus (NIC)

Nebraska Innovation Campus (NIC) is a research campus designed to facilitate new and in-depth partnerships between the University of Nebraska-Lincoln (UNL) and private sector businesses. NIC is located adjacent to UNL, strategically providing access to research faculty, facilities and students. At full build-out, NIC will be a 2.2 million square foot campus with uniquely designed buildings and amenities that encourage people to create and transform ideas into global innovation. NIC aspires to be the most sustainable research and technology campus in the U.S.

For more information about NIC visit: <http://innovate.unl.edu/>

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Lincoln's Business Services and Information Technology Sector

Lincoln's Business Services and Information Technology sectors comprise a broad range of companies including major establishments such as Ameritas, Assurity Life Insurance, Fiserv, Sandhills Publishing, and State Farm Insurance. Many of these establishments are listed below in order to provide a sense of the breadth of the industry in Lincoln.

Note: Please check with companies for most accurate employment data.

Business Services

Archival

www.archival.com

Business Computer Consultants Inc.

www.bccine.com

CapStone Technologies LLC

www.captechno.com

Centrix Solutions (a Q2 Company)

www.centrixsolutions.com

DBI Inc.

www.dbindt.com

Humanex Ventures

www.humanexventures.com

IBM (Kenexa)

www.kenexa.com

Infogressive

www.infogressive.com

Leadership Resources

www.lrsuccess.com

MWI Direct

www.midwestwebinc.com

National Research Corporation

www.nrhealth.com

Nebraska Air Quality Specialties

www.naqs.com

Nebraska Global

www.nebraskaglobal.com

Nelnet Inc.

www.nelnet.com

Nebraska Global

www.nebraskaglobal.com

Sandhills Publishing

www.sandhills.com

Talent Plus Inc.

www.talentplus.com

Wiese Research Associates

www.wraresearch.com

Insurance Carriers & Services

Ameritas Life Insurance Co.

www.ameritas.com

Allied Strategy

www.alliedstrategy.com

Assurity Life Insurance Co.

www.assurity.com

Blue Cross Blue Shield of Nebraska

www.nebraskablue.com

Continental Western Group

www.cwgins.com

FACTS Management Company

www.factsmgmt.com

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Farm Bureau Life Insurance

www.fbfs.com

State Farm Insurance

www.statefarm.com

Farmers Mutual Insurance Company

www.fmne.com

State Farm Insurance

www.statefarm.com

INSPRO Insurance

www.insproins.com

UNICO Group

www.unicogroup.com

Computer Integrated Systems Design & Networking

All Needs Computer Consulting Svc, Inc.

www.ancms.com

Isoft Data Systems Inc.

www.Isoftdata.com

Binary Net

<http://www.binary.net>

Mesa Corp

www.Mesacorp.com

Five Nines Technology Group

www.gonines.com

Nebraska Link

www.nebraskalink.com

Computer Software Development & Custom Programming Services

A B Consulting Company

www.abconsultingcompany.com

Creative Thinking Corp.

www.creativethinkinginc.com

Acton Limited

www.actonlimited.org

Datastor Inc.

<http://www.datastorinc.com/>

Agilx Software Development

www.agilx.com

Digitech Systems, LLC.

www.dsiflow.com

Alexander Open Systems

www.aos5.com

Drec Enterprises

www.drecsoftware.com

Automated Systems Inc.

www.asiweb.com

Don't Panic Labs

www.dontpaniclabs.com

Binary.Net

<https://www.binary.net/>

Easel Solutions

www.easelsolutions.com

Bizco Technologies

<http://www.bizco.com/>

Firespring

www.firespring.com

Codercraft Inc.

www.codercraft.com

Fiserv

www.fiserv.com

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Five Nines Technology Group

www.gonines.com

GC Image LLC

<http://www.gcimage.com/>

GIS Workshop

<http://gisworkshop.com/about/>

Honest Policy

<https://www.honestpolicy.com/>

Hudl, Inc.

www.hudl.com

Hyland Software Inc.

<https://www.hyland.com/>

Infinite Systems

www.infinitesys.com

Information Analytics Inc.

www.4w.com

Interact Incorporated Software Services

www.interact-intranet.com

Interactive Info Research

www.i2rd.com

Intralot, Inc.

www.intralot.com

ISoft

<https://www.isoftdata.com/>

Kidwell

www.kidwellinc.com

Laird Technologies

www.lairdtech.com

Micro Images, Inc.

www.microimages.com

Midwest Microsystems, LLC

www.midwestmicro.com

Nanonation Net, Inc.

www.nanonation.net

Nebraska Electronic Transfer Systems, Inc.

www.netseft.com

Nebraska Interactive

www.egov.com

Pen-Link, Ltd.

www.penlink.com

Phoenix Web Group

<https://phoenixwebgroup.com/>

Pro-Solutions Inc.

www.pro-solution.com

Proteus

www.proteusinc.net

Quick Connect

www.quickconnect.com

Salt Creek Software, Inc.

www.saltcreek.com

Schrock Innovations

<https://www.schrockinnovations.com/>

SDMS Inc.

www.sdmsinc.com

Sirius

www.siriuscom.com

Superior Data Storage

www.superiordatastorage.com

Tailored Software Service Inc.

www.tssi.com

Tech Soft Solutions, LLC

www.techsoftsol.com

The Ganzel Group Communications, Inc.

www.ganzelgroup.com

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Unanimous

www.beunanimous.com

Z3 Technology

www.z3technology.com