# **Business Services & Information Technology**



LINCOLN PARTNERSHIP FOR ECONOMIC DEVELOPMENT 1128 LINCOLN MALL LINCOLN, NE 68508 402.436.2350 WWW.SELECTLINCOLN,ORG A PROFILE OF LINCOLN'S BUSINESS SERVICES AND INFORMATION TECHNOLOGY INDUSTRY CLUSTER



Final Report, 2019

Prepared for the Lincoln Partnership for Economic Development

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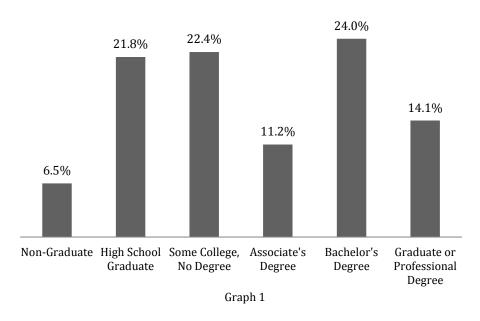
#### Introduction

This fast growing business services and information technology sectors are well matched to the Lincoln, Nebraska economy. Business services is comprised of consulting, data processing, data centers, and accounting and payroll services. Information technology encompasses computer programming services, prepackaged software, information retrieval services, website hosting, website development, 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 335,000, is well positioned to cultivate this industry through its **highly educated workforce**<sup>1</sup>, **existing business services and information technology presence**, **extensive university research** and **outstanding quality of life**.

# Education Attainment, Age 25 and Over Lincoln Metropolitan Area, 2017



Lincoln offers the convenience and cost-of-living of a small city 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

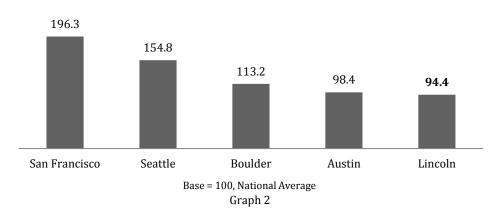
<sup>&</sup>lt;sup>1</sup> U.S. Census Bureau, 2017 American Community Survey (1-year Estimates), Table S1501.

follow, Lincoln has significant costs 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**

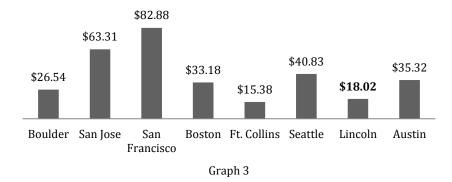
Lincoln's cost of living compares favorably with the top technology-oriented metropolitan areas.<sup>2</sup>

### Cost of Living Composite Index, 2018



In addition to Lincoln's exceptional amenities and educated workforce, Lincoln has among the lowest commercial office space costs among peer metropolitan areas.<sup>3</sup>

# Annual Rent per Square Foot: Office Property Asking Rent Q4 2018/Q1 2019

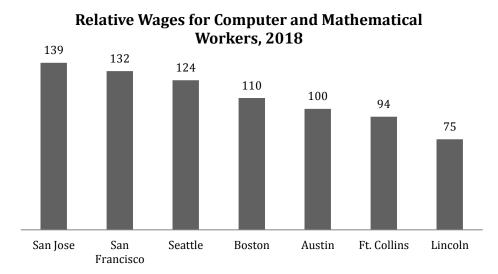


 $<sup>^2</sup>$  Council for Community and Economic Research, "Cost of Living Index 2018 Annual Average." Published January 2019; Boulder estimate is based on Denver's COLI data.

University of Nebraska, Bureau of Business Research report, prepared for the **Lincoln Partnership for Economic Development**; http://www.selectlincoln.org/; June 28, 2019

<sup>&</sup>lt;sup>3</sup> Source: Boulder: NAI Shames-Makovsky, The Denver Compass, Spring 2019 (Q1); Fort Collins: CBRE Research, Northern Colorado By The Numbers, Year End 2018 (Q4); San Francisco and San Jose: CBRE, San Francisco Bay Area Office MarketView, Q1 2019; Boston: NAI Hunneman, Metro Boston Office Report Q1 2018; Seattle: NAI Puget Sound, Office, Industrial and Retail Market Report Puget Sound Region, Washington, Q1 2019; Lincoln: NAI FMA Realty; Market Report, 2nd Half 2018; Austin: NAI Partners, Austin Office Quarterly Market Report, Q1 2019

Lincoln also ranks lowest with regard to relative wage costs.<sup>4</sup> 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 office space and employment.



Base = 100, National Average

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 natural gas, and typical industrial electric bill service rates.

University of Nebraska, Bureau of Business Research report, prepared for the **Lincoln Partnership for Economic Development**; http://www.selectlincoln.org/; June 28, 2019

<sup>&</sup>lt;sup>4</sup> U.S. Bureau of Labor Statistics, Occupation Employment Statistics, http://www.bls.gov/oes/, accessed June 24, 2019.

Business Services and Information Technology - Average Annual Salary, Lincoln MSA, Q1 2019							
		Annual Salary					
Occupation	Entry	Median	Experienced				
TOTAL ALL OCCUPATIONS	\$23,550	\$37,960	\$58,419				
MANAGEMENT OCCUPATIONS	\$48,243	\$81,836	\$121,570				
Computer and Information Systems Managers	\$83,925	\$102,585	\$134,444				
BUSINESS AND FINANCIAL OPERATIONS OCCUPATIONS	\$36,007	\$57,191	\$75,375				
Financial analysts	\$48,449	\$65,391	\$77,893				
Management Analysts	\$47,664	\$67,763	\$85,876				
Market Research Analysts and Marketing Specialists	\$31,980	\$47,592	\$57,997				
COMPUTER AND MATHEMATICAL OCCUPATIONS	\$41,365	\$64,384	\$82,570				
Computer Programmers	\$49,073	\$62,845	\$78,715				
Computer Systems Analysts	\$51,537	\$72,702	\$87,287				
Database Administrators	\$39,199	\$65,633	\$83,643				
Network and Computer Systems Administrators	\$44,978	\$68,433	\$89,425				
Software Developers, Applications	\$53,833	\$75,702	\$88,170				
Software Developers, Systems Software	\$65,515	\$91,529	\$104,361				
OFFICE AND ADMINISTRATIVE SUPPORT OCCUPATIONS	\$23,621	\$32,605	\$41,350				
Computer Operators	\$30,303	\$54,625	\$57,347				
Data Entry Keyers	\$25,863	\$28,598	\$31,138				
Source: Occupation Employment and Wage Rates, https://neworks.nebraska.gov/, accessed June 24, 2019							

Table 1

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 2018 (State Average)	Right-to- Work State?	Avg. Price Typical Commercial I Industrial Gas/ Service Rates in Effe Thousand Cubic January 1, 2019 (Cit Feet 2018 40kW, 500k		es in Effect,	Top State Corporate Income[1] Tax Rate 2019			
Lincoln	0.90%	Yes	\$4.53	\$1,057	\$14,953	7.81%			
Boston	2.05%	No	\$9.90	\$3,147	\$39,065	8.00%			
Boulder	1.59%	No	\$5.46	NA	NA	4.63%			
Ft. Collins	1.59%	No	\$5.46	NA	NA	4.63%			
San Francisco	4.23%	No	\$6.91	\$2,859	\$31,289	8.84%			
San Jose	4.23%	No	\$6.91	NA	NA	8.84%			
Seattle	1.01%	No	\$7.41	\$1,404	\$13,408	0.00%			
Austin	2.19%	Yes	\$3.39	\$1,341	\$15,442	0.00%			

#### [1] Tax may be eligible for use of credits earned in state incentive program.

#### Sources:

A. U.S. Department of Labor Office of Unemployment Insurance Division of Fiscal and Actuarial Services (March 2019), Tax Measures Report 2018: https://oui.doleta.gov/unemploy/sig\_measure.asp

B. 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 Study 2019 Study, Average Price/KWH:

https://www.les.com/pdf/rates/rate-survey.pdf

E. Tax Foundation, State Corporate Income Tax Rates and Brackets for 2019: https://taxfoundation.org/state-corporate-rates-brackets-2019/

Table 2

#### **Education Resources**

Lincoln's Business Services and Information Technology sectors benefit 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, Nebraska Wesleyan University, Purdue University Global, 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 2017-2018 school year, the colleges and universities in Lincoln graduated approximately **1,375 students with bachelor's degrees** in majors related to this sector, approximately **325 with associate's degrees**, and nearly **400 with post-graduate degrees**.

Cancondia danne dinnica di	Nebrush	pern Global &	Southers Co.	O. Committee	nion Colleges	LINE	Total		
Accounting	4	16	6	14				135	175
Actuarial Science	-	10						80	80
Business Administration and Management, General		78	11		54	166	26	243	578
Business/Commerce, General	23			40	44				107
Business/Managerial Economics								50	50
Computer Engineering, General								38	38
Computer and Info. Sciences and Support Services	2	6	3		9	80	5	73	178
Electrical and Electronics Engineering								69	69
Elec., Electronic and Comm. Eng. Tech./Technician						77			77
Finance, General								159	159
HR Management/Personnel Administration, General		32							32
International Business/Trade/Commerce				4				10	14
Marketing/Marketing Management, General	1			4				146	151
Total	30	132	20	62	107	323	31	1003	1708
A: Associates Degrees; B: Associates and Bachelors Degrees									
Source: http://nces.ed.gov/collegenavigator/									

Table 3

Post Graduate Degrees (M.A. & Ph.D.) Awarded	Concordia University	Doane University	Purdue University Global	Nebraska Wesleyan University	UNL	Total		
Accounting					42	42		
Actuarial Science					9	9		
Business Admin. and Management, General					120	120		
Bus. Mgmt. Mkt. & Related Support Svcs., Other					23	23		
Computer and Information Sciences, General			2		31	33		
Electrical and Electronics Engineering					15	15		
Management Science, General	59	54		43		156		
Marketing Research					3	3		
Telecommunications Technology/Technician					4	4		
Total	59	54	2	43	247	405		
Source: http://nces.ed.gov/collegenavigator/								

Table 4

#### **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: <a href="http://raikes.unl.edu/">http://raikes.unl.edu/</a>

#### 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 approximately 120 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: https://business.unl.edu/

#### **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: <a href="http://cse.unl.edu/">http://cse.unl.edu/</a>

#### 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: <a href="http://www.calmit.unl.edu/">http://www.calmit.unl.edu/</a>

#### **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: <a href="http://hcc.unl.edu/">http://hcc.unl.edu/</a>

#### 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: <a href="http://innovate.unl.edu/">http://innovate.unl.edu/</a>

#### **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 Fiserv, Dell Perot Systems, 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**

**NTT Data** 

https://us.nttdata.com/en/ Local employment: 500-999

Don't Panic Labs

https://dontpaniclabs.com/ Local employment: 10-19

#### **Fisery**

www.fiserv.com

Local employment: 500-999

#### **IBM**

https://www.ibm.com/talent-management

Local employment: 250-499

### **Leadership Resources**

www.lrsuccess.com

Local employment: 10-19

#### Nebraska Global

www.nebraskaglobal.com Local employment: 10-19

#### **Talent Plus Inc.**

www.talentplus.com

Local employment: 100-249

#### Sandhills Publishing

www.sandhills.com

Local employment: 250-499

# Computer Integrated Systems Design & Networking

All Needs Computer Consulting Svc, Inc.

www.ancms.com

Local employment: 5-9

#### **Binary Net**

http://www.binary.net Local employment: 5-9

#### **Central Data Storage**

https://www.centraldatastorage.com/

Local employment: 1-5

#### Five Nines Technology Group

www.gonines.com

Local employment: 50-99

#### Isoft Data Systems Inc.

www.Isoftdata.com

Local employment: 10-19

#### Mesa Corp

www.Mesacorp.com

Local employment: 10-19

#### Nebraska Link

www.nebraskalink.com Local employment: 20-49

# **Computer Software Development & Custom Programming Services**

**Agilx Software Development** 

www.agilx.com

Local employment: 10-19

**A B Consulting Company** 

www.abconsultingcompany.com

Local employment: 1-4

**Alderson Consulting Group Inc.** 

www.aldersonconsultinggroup.com

Local employment: 1-4

**Alexander Open Systems** 

www.aos5.com

Local employment: 5-9

**Automated Systems Inc** 

www.asiweb.com

Local employment: 50-99

**Centrix Solutions Inc. a Q2 Company** 

www.centrixsolutions.com

Local employment: 5-9

Codercraft Inc.

www.codercraft.com Local employment: 1-4

**Creative Thinking Corp** 

 $\underline{www.creative thinking in c.com}$ 

Local employment: 20-49

Digitech Systems, Inc.

www.dsiflow.com

Local employment: 10-19

**Drec Enterprises** 

www.drecsoftware.com

Local employment: 5-9

Hudl, Inc.

www.hudl.com

Local employment: 250-499

**Hyland Software Inc** 

www.onbase.com

Local employment: 10-19

**Information Analytics Inc** 

www.4w.com

Local employment: 10-19

**Proteus** 

https://www.proteus.co/ Local employment: 20-49

Intralot, Inc.

www.intralot.com

Local employment: 20-49

Micro Images, Inc.

www.microimages.com

Local employment: 20-49

Midwest Microsystems, LLC

www.midwestmicro.com

Local employment: 5-9

Nanonation Net, Inc.

www.nanonation.net

Local employment: 20-49

Pen-Link, Ltd.

www.penlink.com

Local employment: 50-99

Salt Creek Software, Inc.

www.saltcreek.com

Local employment: 1-4

Tailored Software Svc., Inc.

www.tssi.com

Local employment: 1-4

The Ganzel Group Communications, Inc.

www.ganzelgroup.com

Local employment: 1-4