Five Points Bank's Economic Impacts: A Half Century of Serving the Greater Grand Island Community



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Preface

Five Points Bank's Economic Impacts: A Half Century of Serving the Greater Grand Island Community

This analysis was prepared for Five Points Bank. Findings remain the sole property of Five Points Bank and may not be used without prior approval of this organization.

Specific Goals of the Study are to:

- Measure the economic impact of Five Points Bank operations and investment in Grand Island, Nebraska for 2020.
- Measure the economic impact of Five Points Bank operations and investment in Nebraska for 2020.
- Estimate Five Points Bank's contribution to brain gain for the Grand Island Metropolitan Statistical Area and Nebraska.
- Measure the impact of Five Points Bank on state and local tax collections for 2020
- Quantify Five Points Bank's spillover effects by industry for 2020.
- Estimate the value of Five Points Bank for the next 50 years of operations in the Grand Island Community.

Any errors or misstatements contained in this study are solely the responsibility of the author. Please address all correspondence to:

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Glossary

Definition of Terms			
Term	Definition		
Discounted	Unless stated otherwise, all financial data in this report are stated in 2020 dollars.		
Direct effects	The set of expenditures applied to the predictive model for impact analysis. For example, wages and salaries paid to Five Points Bank employees.		
Grand Island, MSA	The Grand Island Metropolitan Statistical Area (MSA) consists of the counties of Hall, Hamilton, Howard, and Merrick		
Grand Island Community	The Grand Island Community consists of the counties of Hall, Hamilton, Howard, and Merrick		
IMPLAN	Using classic input-output analysis in combination with regional specific Social Accounting Matrices and Multiplier Models, IMPLAN provides a highly accurate and adaptable model for its users to produce economic impacts for a community, county, state, or region. IMPLAN was initially created by the U.S. Forestry Service.		
Input-output analysis	A type of applied economic analysis that tracks the interdependence among various producing and consuming sectors of an economy. More specifically, it measures the relationship between a given set of demands for final goods and services and the inputs required to satisfy those demands (U.S. Bureau of Economic Analysis).		
Jobs supported	A job in IMPLAN is the annual average of monthly jobs in that industry. Thus, 1 job lasting 12 months = 2 jobs lasting 6 months, or = 3 jobs lasting 4 months. A job can be either full time or part time		
Labor income	Wages & salaries, plus self-employment income.		
Overall or sales impacts	Amount of additional sales, retail sales, wholesale expenditures, construction sales, etc. It is analogous to gross domestic product (GDP), but will include some double counting and will, thus, exceed GDP.		
Private workers	All those working, excluding state, local and federal government workers.		
Self-employment income	Income of proprietors of non-incorporated companies including attorneys, accountants, and consultants.		
Spillover impacts	Impacts on businesses and industries tied indirectly to Five Points Bank spending. For example, wholesale firms that sell to Five Points Bank vendors experience spillover impacts. (Spillover=Indirect Impacts + Induced Impacts)		
Wages & salaries	The total payroll cost of the employee paid by the employer. This includes wage and salary, all benefits (e.g., health, retirement, etc.) and employer paid payroll taxes (e.g., employer side of social security, unemployment taxes, etc.).		

Executive Summary

Five Points Bank's Economic Impacts: A Half Century of Serving the Greater Grand Island Community

Overview. Since 1971, Five Points Bank has been a major driver of economic development in the Grand Island MSA and the state of Nebraska. In 2020 alone, Five Points Bank operations contributed \$91.9 million to the Grand Island Metropolitan economy, and \$168.5 million to the Nebraska economy. Five Points Bank supported 302 jobs with wages & salaries totaling \$17.7 million, paying an average of \$58,485, which is 21 percent above the state average pay.¹

As the largest bank in the tri-city area, Five Points Bank, which employs almost seven times the average for other firms in the metropolitan financial services industry, generated an estimated \$2.1 million in state and local tax collections. Furthermore, Five Points Bank employees are major contributors to non-profit organizations in the metropolitan area via volunteer services. In 2020, Five Points Bank employees provided volunteer services to 37 organizations, with 21 bank employees serving as board members.

Detailed Impacts 2020

To the local and state economies for 2020:

- Five Points Bank generated \$91.9 million in combined, direct and spillover impacts on the Grand Island, MSA.
- Five Points Bank produced \$168.5 million in combined, direct and spillover impacts on the State of Nebraska.

To the area's labor force for 2020:

- Five Points Bank supported approximately 302 jobs with an average yearly pay of \$58,485 for the Grand Island, MSA, and 571 jobs with an average pay of \$67,196 for the State of Nebraska.
- Combining direct and spillover impacts, Five Points Bank produced wages & salaries of \$16.5 million, and \$1.2 million self-employment income for the Grand Island MSA.
- Combining direct and spillover impacts, Five Points Bank produced wages & salaries of \$35.8 million, and \$.2.5 million self-employment income for the State of Nebraska

Five Points Bank employees provided volunteer services to 37 organizations, with 21 bank employees serving as board members.

¹Impacts in businesses and industries tied indirectly to Five Points Bank spending are termed spillover impacts. For example, wholesale firms that sell to Five Points Bank vendors experience spillover impacts.

Executive Summary

To state and local tax collectons for 2020:

- It is estimated that Five Points Bank provided \$2.1 million in state and local taxes for the Grand Island MSA.
- It is estimated that Five Points Bank prouced \$4.1 million in state and local taxes for the State of Nebraska.

To a stable job base and brain gain for 2020:

- Five Points Bank has been and will continue to be a stabilizing impact on the local economy with the number of jobs provided likely to remain stable, or increase.
- Five Points Bank employment level is almost seven times that of the average Grand Island private employer, and more than ten times that of the average Nebraska private firm.
- Five Points Bank added an estimated \$46.2 million to the Grand Island community brain gain.

To Grand Island MSA economic growth:

- Absent Five Points Bank's presence, the bank revenues from this service would potentially go to another area with resultant job losses for the Grand Island MSA.
- By providing loans and other financial support services, Five Points Bank underpins the growth for farms, businesses and families in the metropolitan area.

To Metropolitan non-profit organizations for 2020:

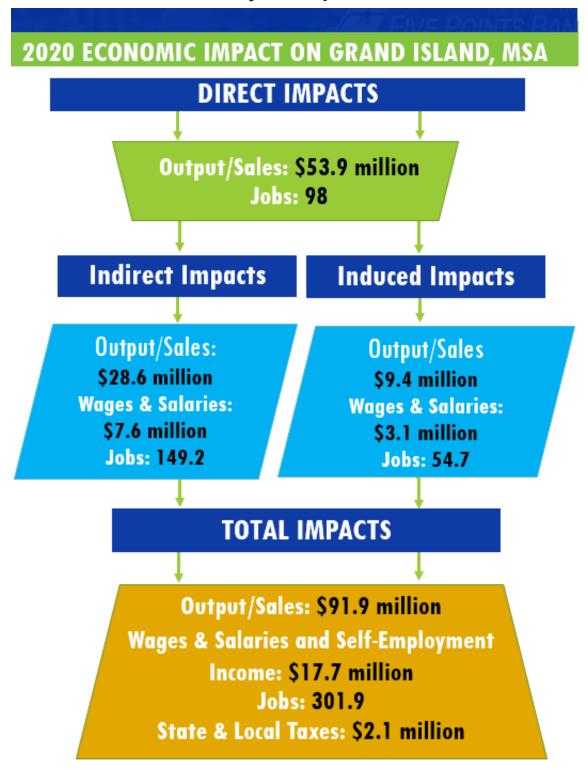
- Employees of Five Points Banks are heavily involved in the Grand Island community providing volunteer services to 37 organizations in 2020 alone.
- In 2020, 21 Five Points Bank employees served as board members for community organizations.

Other Five Points Bank 2020 impacts on the Grand Island MSA:

- Contribution to Grand Island MSA "brain gain" of \$46.2 million.
- Spillover impact of \$38.1 million.
- An impact of approximately
 - o \$5.2 million on non-bank financial institutions.
 - \$2.3 million on securities and related firms.
 - o \$1.9 million on food services establishments.
 - o \$1.1 million of telecommunications firms.

Executive Summary

Summary of Impacts - 2020



Five Points Bank's Economic Impacts: A Half Century of Serving the Greater Grand Island Community

Introduction

Five Points Bank was founded in 1972, and is now Nebraska's eleventh largest bank and is the top bank in the tri-city area, which consists of Grand Island, Hastings, and Kearney. Today, Grand Island is the third largest metropolitan area in Nebraska, exceeded in population only by the Omaha and Lincoln MSAs. Counties included in the Grand Island MSA are: Hall, Hamilton, Howard, and Merrick.²

Five Points Bank plays an essential role in supporting Grand Island's and Nebraska's economies. Fundamentally, Five Points Bank serves as an intermediary between depositors and borrowers. However, unlike other non-bank financial investment companies in the area, Five Points protects and insures customer deposits and extends credit to corporate, agriculture, and retail borrowers.

Furthermore, Five Points Bank is an essential cog in the area's economic development via the acquisition and sale of property as well as providing investment opportunities for big and small investors in the region. These investments are essential to regional and state growth by supporting investment in new operations as well as the sustenance and expansion of existing businesses, farms, and non-profit organizations in the area.

Five Points Bank also offers other types of services, such as: payments, settlements and funds transfer, foreign exchange transactions, savings and investment services, payroll services, financial advice, investments, and safe-deposit boxes.

Financial intermediaries such as Five Points
Bank channel funds from those who have savings
and investible funds to those who have more
productive uses for them. They perform financial
services that reduce the costs of moving funds
between borrowers and lenders, leading to a more
efficient allocation of resources and faster economic

growth. Thus, banks are a crucial component for a modern economy, not only in terms of economic growth, but also as a primary financier of the Grand Island economy.

Importantly, in terms of economic development, Five Points Bank is at the center of promoting business growth and recruitment for organizations such as the Chambers of Commerce and organizations that provide important public structure such as public power, police and safety protection as well as the highway and other infrastructure in the area.

A High Wage and High Human Capital Employer

Banks reward their employees with competitive salaries. The average wage at Five Points Bank is roughly 47% higher than the statewide average pay across other private sector employers in the state. Even bank workers at the lower end of the educational spectrum earn more than they would when compared to other industries requiring only a high school diploma.

Table 1 compares Five Points Bank salaries to Nebraska's average worker.

Banks reward their employees with competitive salaries. The direct average wage at Five Points Bank is roughly 47% higher than the statewide average pay across other private sector employers in the state.

²Nebraska estimated impacts of Five Points Bank include operations in Grand Island MSA as well as operations outside the metropolitan area but inside Nebraska.

Finally, Five Points Bank generously supports education, community and economic development, health and social services, as well as many other causes through their charitable and philanthropic donation, as well as volunteer services, in the Grand Island MSA and Nebraska. Community banks, such as Five Points, have a significant impact on the quality-of-life of residents and visitors. Quality-of-life (QOL) factors play a dramatic role in business and industry location decisions.

Volunteer Services Contributions

Five Points Bank supports communities and organizations through charitable donations and volunteer activities of its employees. This is a very important activity especially in light of the deep cuts to public services in recent years due to constrained state and local government budgets.

Employees of Five Points Bank are heavily involved in the Grand Island community providing volunteer services to 37 organizations in 2020 alone. Table 2 lists the organizations served by Five Points Banks in 2020. In 2020, 21 Five Points Bank employees served as board members on the organizations in Table 2, with two serving as President of the Board of Directors for their organization.

Goals of this study

Using input-output multipliers, the study will provide sales, earnings and job impacts in addition to estimating the impact of Five Points Bank on yearly state and local tax collections.

In addition to monetary impacts. Local banks improve their communities by fostering growth through the support of entrepreneurship as well as support of farming operations.

Banks directly employ a large workforce and purchase intermediate inputs and supplies needed for their operations, such as consulting services, and computer equipment. This activity generates increases in demand that ripple throughout the state's economy creating significant spillover.

Bank revenues from outside the area are more powerful than revenues of firms that deal in intra-area commerce in terms of job and income creation, since a high proportion of these revenues are "new" to the area and are not offset by reduced spending in other area industries.

Estimates of federal, state and local tax collections are provided. In addition to enhancing a community's quality-of-life, investment in community banks pays a large economic development dividend. For example, research has found that the availability of organizations such as Five Points Bank plays an important role when individuals and businesses search for places to relocate. Residents and business visitors to Five Points Bank generate another economic return to the area through the purchase of entertainment and lodging. The indirect impact of these purchases is considerable and will be estimated.

Finally, providers banks are important contributors to an area's "brain gain" via the attraction and retention of well-educated employees and workers. In addition to providing jobs for citizens, Five Points bank is an important draw for business visitors and relocations. As such, Five Points Bank is a major force for attracting out-of-area visitors including resident and visitor spending.

Table 1: Five Points Bank wages and salaries per worker compared to state average			
	Grand Island, MSA	Nebraska	
Wages, salaries and self-employment income per job	\$71,101	\$75,163	
State average wages, salaries and self-employment income per job (Source: U.S. Bureau of Labor Statistics)	\$48,250	\$48,250	
Five Points Bank average pay premium per job	47.4%	55.8%	
Source: Goss & Associates from IMPLAN Multiplier System			

	Organizations served by Five Points Bank volunteers in Grand Island area, 2020
1 	Big Brothers Big Sisters
2	College Park
3	Food Bank for the Heartland
4	Foster Parenting Nebraska
5	Gates Elementary School
6	Goodwill Industries
7	Grand Island Area Clean Community System
8	Grand Island Chamber of Commerce
9	Grand Island Citizen Advocacy
10	Grand Island Community Foundation
11	Grand Island Community Foundation Cultural Engagement Committee
12	Grand Island Community Youth Council
13	Grand Island Economic Development Corporation
14	Grand Island Kiwanis Club
15	Grand Island Library Foundation Board
16	Grand Island Public Schools Preparatory Academy
17	Grand Island Senior High
18	Grand Island Central Catholic
19	Grow Grand Island
20	Habitat for Humanity
21	Hall County Hero Flight Veterans programs
22	Heartland United Way
23	Hope Harbor
24	JBS USA, a beef processing plant, in Grand Island that employs 3,200 people
25	Junior Achievement
26	Loup/Platte Pheasants Forever Chapter
27	Lutheran Family Services
28	Multi-Cultural Coalition
29	Nebraska State Fair
30	Overland Trails Council of the Boy Scouts of America
31	Project Homeless Connect
32	Rural Enterprise Assistance Project
33	Salvation Army
34	South Central Economic Development District
35	TeamMates
36	Third City Community Clinic
37	Youth Leadership Diversity Conference

Source: Five Points Bank
Note: Contributions in this table are in addition to cash contributions

The economic impacts identified in this study are short-run in nature and represent annual, recurring events. Long run, but intangible factors, such as work force development, and knowledge enhancement are acknowledged, but no attempt is made to assign dollar values to them. Table 3 provides a baseline for the MSA and the state.

Tables, 4, 5, 6, 7 and 8 provide detailed estimated impacts. Estimates indicate that the

impacts are broadly dispersed with all of Grand Island's 21 major industry sectors experiencing economic impacts, either directly or indirectly, from Five Points Bank's continued presence.

The next section of this report provides detailed economic impacts of Five Points Bank's presence in Grand Island and in Nebraska based on the assumptions listed in Table 3.

Table 3: Assumptions used for impact assessment			
Area Descriptions			
	Grand Island, MSA	State of Nebraska	
Population (2019)	75,553	1,934,000	
Population growth, 2000-19	10.6%	15.8%	
Population per square mile (density)	47.2	23.8	
Number of households	30,529	759,176	
Persons per household	2.61	2.45	
Educational attainment (percent with High School diploma or better)	86.5%	91.4%	
Educational attainment (percent with Bachelor's degree or better)	21.0%	31.9%	
Transportation to work	17.5 minutes	18.8 minutes	
Employment (November 2020)	40,600	1,009,300	
Source: *****			



Farming in Nebraska

Detailed Estimated Impacts



Impact Details

Table 4: Five Points Bank (Direct + Spillover) impact on Grand Island MSA and Nebraska (2020 dollars)			
	Grand Island	Nebraska	
Total impact (2020)	\$91,855,239	\$168,459,096	
Wages & salaries	\$16,491,519	\$35,795,774	
Self-employment income \$1,164,987 \$2,539,423			
Jobs 301.9 570.5			
Source: Goss & Associates from IMPLAN Multiplier System			

Table 5: Total state and local fiscal in	mpact, construction activity (2019 dollars)
	Grand Island MSA

	<u> </u>		
	Grand Island, MSA		
Туре	Local	State	Total
Sales tax	\$106,295	\$518,971	\$625,266
Property tax	\$670,101	\$0	\$670,101
Individual income tax	\$0	\$346,319	\$346,319
Corporate income tax	\$0	\$184,876	\$184,876
Other taxes and fees	\$217,763	\$93,327	\$311,090
Total	\$994,159	\$1,143,492	\$2,137,651
	Nebraska		
Туре	Local	State	Total
Sales tax	\$207,723	\$1,014,175	\$1,221,898
Property tax	\$1,311,436	\$0	\$1,311,436
Individual income tax	\$0	\$745,072	\$745,072
Corporate income tax	\$0	\$330,203	\$330,203
Other taxes and fees	\$439,125	\$188,196	\$627,321
Total	\$1,958,283	\$2,277,647	\$4,235,930
Source: Cose and accepiates from IMPLAN multiplier evetem			

Source: Goss and associates from IMPLAN multiplier system

Table 6: Total impacts by industry, Grand Island & Nebraska, (2020 dollars)			
Grand Island, MSA		Nebraska	
Industry	Total Impact	Industry	Total Impact
Banksdepository institutions	\$63,033,167	Banksdepository institutions	\$105,035,269
Non-depository financial institutions	\$5,238,431	Non-depository financial institutions	\$9,988,950
Securities & related firms	\$2,334,299	Securities & related firms	\$4,377,872
Food services and drinking places	\$1,900,639	Food services and drinking places	\$3,840,811
Maintenance & repairs	\$1,423,881	Maintenance & repairs	\$2,369,658
Telecommunications	\$1,120,447	Home ownership sector	\$2,341,861
Home ownership sector	\$1,038,177	Offices of physicians, dentists, and other health practitioners	\$1,722,782
Accounting, & tax preparation	\$982,115	Services to buildings and dwellings	\$1,720,662
Civic, social, & professional	\$833,767	Real estate establishments	\$1,614,120
Offices of physicians, & dentists	\$773,835	Private hospitals	\$1,533,658
Services to buildings and dwellings	\$691,309	Telecommunications	\$1,527,897
Private hospitals	\$682,103	Management of companies and enterprises	\$1,401,363
Cable and other subscription programming	\$608,612	Insurance carriers	\$1,383,268
Real estate establishments	\$594,314	Civic, social, professional, and similar organizations	\$1,332,427
Insurance carriers	\$517,059	Accounting, tax preparation, bookkeeping, and payroll services	\$1,272,526
Other Federal Government	\$483,102	Legal services	\$1,206,803
Wholesale trade businesses	\$482,379	All other miscellaneous professional, scientific, and technical services	\$1,142,469
Automotive repair & maintenance	\$471,787	Wholesale trade businesses	\$1,052,789
Advertising and related services	\$409,470	Automotive repair and maintenance, except car washes	\$999,358
Employment services	\$373,254	Advertising and related services	\$950,609
All other sectors	\$7,863,094	All other sectors	\$21,643,942
Total	\$91,855,239	Total	\$168,459,096

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SECTION 2: IMPACT DETAILS

Table 7: Five Points Bank estimated impact on brain gain, 2020		
	Grand Island	Nebraska
Number of jobs supported	301.9	570.5
Number of persons per household	2.61	2.45
Estimated population supported	788	1,398
Contribution to brain gain (GDP) \$46,199,515 \$93,941,269		
Source: Goss and associates from IMPLAN multiplier system		

Table 8: Five Points Bank (Spillover only) impact on Grand Island MSA and Nebraska (2020 dollars)			
Grand Island Nebraska			
Total impact (2020)	\$38,051,687	\$78,519,920	
Wages & salaries	\$9,523,580	\$23,393,920	
Self-employment income	\$1,164,987	\$2,539,423	
Source: Goss and associates from IMPLAN multiplier system			



Hall County Courthouse

Appendices

Appendix A: Methodology

Revenues from outside the area are more powerful than revenues of firms that deal in intra-area commerce in terms of job and income creation, since a high proportion of these revenues are "new" to the area and are not offset by reduced spending in other area industries.

Economic impacts identified in this study are short-run in nature and represent annual, recurring events. Indicators are discussed for long-run, more intangible impacts on the regional economy such as workforce development, knowledge enhancement and access to excellent, affordable, and available financial services, but assignment of dollar values is outside the scope of this study.

In terms of long-term, but less measurable impacts, the presence of Five Points Bank increases the attractiveness of the community and encourages the startup and/or relocation of other businesses to the area.

By contributing to the area's attractiveness via access to financial services Five Points Bank influences community growth in and outside of banking. Moreover, by making the nation, region, and state more aware of Grand Island, Five Points Bank contributes to the overall growth of state and local economic activity.

Table A.1 provides an overview of the influences of Five Points Bank spending on community and economic development.

Table A.1: Impact of Five Points Bank on the Grand Island MSA			
Issue	Measurement	Community Impact	
Direct payments	Wages paid to Five Points Bank employees	Increases sense of collective identity; builds social capital; learning opportunities; creates "quality jobs"; encourages the in-migration of educated workers	
Purchase inputs/ equipment	Payments to office equipment suppliers	Encourages the startup and/or relocation of businesses to Grand Island to supply products and services	
Research funds from outside the area.	Community and state recognition; grants and contracts to institutions	Creates recognition of state's high tech/ scientific sector; builds community pride; personal interaction of diverse individuals	
Philanthropic and government support	Donated services	Bank employees provide valuable "free" services to the community	
"Brain gain"	Educated, high human capital individuals	Direct plus matching funds assist in bringing to the area and state highly educated, highly paid individuals	
Source: IMPLAN multiplier system			

Appendix B: Types of Economic Impacts, Five Points Bank

Figure B.1 depicts examples of the flow of funds into and out of Five Points Bank. As indicated, the total impact is the sum of direct (green arrows), indirect (blue arrows) and induced (red arrows) impacts minus leakages (gray arrows). Leakages represent Five Points Bank spending outside of the area. Input-output multiplier systems are used to estimate each of the impacts in Figure B.1 by industry.

Direct economic impacts. Spending by
Five Points Bank has direct economic effects on
the local economy through expenditures for goods
and services and employee salaries. The most
obvious direct expenditures are wages paid to
workers employed by Five Points Bank. In addition,
expenditures by business visitors to Five Points
Bank produce direct impacts on the region, affecting
primarily the accommodations industry. Direct
economic impacts are color coded green in Figure
B.1.

Indirect Economic Impacts. Five Points
Bank's presence produces indirect economic
effects on the area economy. For example, hotels
and lodging establishments that house business
visitors to Five Points Bank buy merchandise from
area wholesalers. Furthermore, bank expenditures
encourage the startup and expansion of other
related businesses. Five Points Bank expenditures
generate indirect effects by increasing: (a) the
number of firms drawn to a community, (b) the
volume of deposits in local financial institutions and,
(c) economic development.

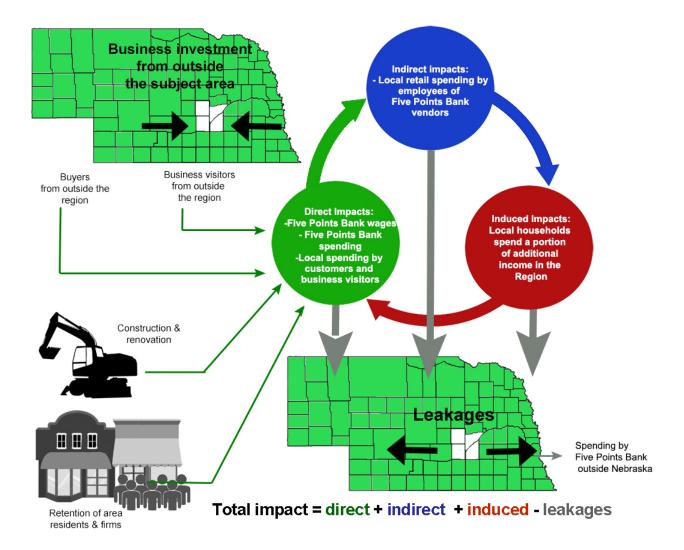
Induced Economic Impacts. Induced impacts in the region occur as the initial spending feeds back to industries in the region when workers in the area purchase additional output from local firms in a second round of spending. That is, bank spending increases overall income and population, which produces another round of increased spending adding to sales, earnings and jobs for the area.



Central City, Nebraska

TYPES OF ECONOMIC IMPACTS IMSECTION 2: IMPACT DETAILS

Figure B.1: Schematic of Five Points Bank Impacts on Grand Island MSA



Appendix C: The Multiplier Effect

When employees of Five Points Bank spend their salaries within the community, that spending filters through the local economy, causing increased overall spending greater than the initial spending. The impact of this re-spending is known as the multiplier effect. Economic impacts that take place outside the local economy, for example employee dollars spent in Des Moines or Kansas City, are called leakages and reduce the multiplier and overall impacts. They are excluded when estimating regional economic impacts.

While the direct effects of institutional spending can be measured by a straightforward methodology, the indirect and induced effects of spending must be estimated using regional multipliers. Community characteristics that affect leakages, and consequently the multiplier include:

Location. Distance to suppliers affects the willingness to purchase locally. For example, if Grand Island firms are unable to provide supplies at competitive prices, and there are alternative suppliers in Kansas City that are more price-competitive, then Five Points Bank will be more likely to spend outside the community. This results in greater leakages, lower multipliers, and smaller impacts.

Population size. A larger population provides more opportunities for companies and workers to purchase locally. Larger population areas are associated with fewer leakages and larger multipliers. Thus, in general, Five Points Bank dollars flowing into Grand Island will have larger impacts than the same level of dollars flowing into more rural areas of Nebraska.

Clustering. A community will gain more if the inputs required by local industries for production match local resources and are purchased locally. Thus, over time, as new firms are created to match the requirements of Five Points Bank, leakages will be fewer, resulting in larger multipliers and impacts. This issue is at the heart of economic development, amplifying the impacts of the clustering of financial-related firms.

As a result of Five Points Bank's location in a metropolitan area with extensive financial services operations infrastructure, financial impacts are sizeable, with those impacts growing as Five Points Bank expands.

As Five Points Bank increases in size, institutions become more proficient and focused on meeting its needs. Furthermore, suppliers unique to the financial services industry are more likely to locate in close proximity to Five Point Bank. This not only expands income and jobs in Grand Island, it increases the size of multipliers related to the banking and financial services industry.

As a result of Five Points
Bank's location in a
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operations infrastructure,
financial impacts are sizeable,
with those impacts growing as
Five Points Bank expands.

Choosing a Technique to Measure Impacts

I-O models are the most frequently used analysis tools for economic impact assessment. Many types of public and private sector decisions require an evaluation of probable regional effects. Since important impacts are often economic, this requirement has created a need for regional economic impact models. The three most common types of impact models are economic base, econometric, and input-output (I-O). Two of the three impact models have inherent disadvantages that markedly reduce their viability for estimating the impact of bank services spending on the Grand Island MSA.

Economic Base Models. Economic base models divide the economy into two sectors — the local/service sector and the export sector. The economic base multiplier is an average for all the economy making it impossible to distinguish, for example, the impact of banking from that of a new manufacturing plant.

Econometric Models. Econometric models use past data to statistically link sectors of the economy. Econometric models have two major weaknesses. First, the time series data used in constructing econometric models are often unavailable at the county and metropolitan area level, thus precluding county-level analysis. This is especially true for rural counties and for counties with small populations. Second, econometric models are costly to build and maintain.

Input-Output (I-O) Models. I-O models are the most frequently used types of analysis tools for economic impact assessment. Input-output is a simple general equilibrium approach based on an accounting system of injections and leakages. Input-Output analysis assumes that each sector purchases supplies from other sectors and then sells its output to other sectors and/or final consumers.

 Selection of industries. For which industries will impacts be estimated? The selection is generally dictated by definitions used by government agencies that collect the data. For example, most government data do not distinguish employment in a cardiac center or clinic from that in a bank. Selection of a region. Again, government agencies collect aggregate data by county, thus requiring the analysis to take place at the county level, or combination of counties. Most developers of "ready-made" multipliers use the County Business Patterns as the primary data source. For this study, the Grand Island MSA, and the State of Nebraska are the areas of analysis.

Major assumptions of the I-O model

Constant production coefficients. For example, it is assumed that "x" dollars of new revenues flowing in Grand Island will produce "y" dollars of output regardless of the scale of operations. In other words, the I-O model assumes constant returns to scale.

- Constant technological relationships between inputs and outputs. Thus I-O multipliers assume that technology remains the same between the time the multipliers are calculated and the period for which impacts are estimated.
- Old purchasing patterns are the same as new purchasing patterns. Thus, it is assumed that purchasing patterns between Five Points and its suppliers in the metropolitan area will be the same as other firms in the industry in the area.
- No supply constraints. I-O models do not take into consideration the problem of finding an adequate supply of workers to fill new jobs brought about by Five Points Bank.

Despite their weaknesses and somewhat restrictive assumptions, I-O multipliers are the tools most often used for impact analysis.

The multiplier impact (indirect and induced) resulting from the direct economic impact is estimated utilizing the IMPLAN model. The total economic impact is the sum of the direct impact and the multiplier impact. Estimates of the tax revenue impact also are derived from the total economic impact.

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Appendix E: Biography of the Principal Investigators

Ernie Goss is currently the MacAllister Chair and Professor of Economics at Creighton University in Omaha, Nebraska and Director of the Goss Institute in Denver, Colorado. He received his Ph.D. in economics from the University of Tennessee. He was a visiting scholar with the Congressional Budget Office for 2003-04. He is also a past faculty research fellow with the National Aeronautics and Space Administration (NASA). He recently testified before the U.S. Congress regarding the closure of GM and Chrysler dealerships and he continues to consult with dealerships on the financial impact of shuttering the GM dealerships and provided input to the U.S. Congress on the ethanol blenders' tax credit. In the Fall of 2005, the Nebraska Attorney General appointed Goss to head a task force examining gasoline pricing in the state.

He has published over 100 research studies focusing primarily on economic forecasting and on the statistical analysis of business and economic data. His book, <u>Changing Attitudes toward Economic Reform during the Yeltsin Era</u> was published by Praeger Press in 2003 and his book <u>Governing Fortune</u>: <u>Casino Gambling in America</u> was published by the University of Michigan Press in 2007 (www. erniegoss.com and www.outlook-economic.com).

He is editor of Economic Trends, an economics newsletter published monthly that is distributed to more than 5,000 subscribers. He is the past president of the Omaha Association of Business Economics, and the National Purchasing Management Association-Nebraska. He also serves on the Board of Directors of Mosaic, Inc.

To gauge regional economic conditions, Goss conducts a monthly survey of bank CEOs in rural areas of 10 states and a monthly survey of supply managers in 12 states. Results from the two surveys are carried in over 100 newspapers, 50-100 radio stations and scores of other media outlets each month. Recent citations appeared in the Wall Street Journal, Business Week, Forbes, and The Economist, as well as regional newspapers such as the Denver Post, the Kansas City Star, and the Minneapolis Pioneer Press.

Scott Strain is a senior research economist at Goss. & Associates. He has worked as an economist and statistician for more than 20 years providing forecasts and analysis across a wide-range of industries. Scott served as an industry economist, working in new product development regarding both quantitative and qualitative research. Scott was Senior Director of Research for an economic development agency, providing economic impact and tax incentive analysis to both private businesses and government entities. He served on the business advisory committee that worked with Nebraska state senators and the director of the state's Economic Development Department to develop the Nebraska Advantage Act - a comprehensive package of business incentives that has helped to add more than \$6 billion in new capital investment and over 13,000 new jobs in the state of Nebraska since the Act's inception in 2006.

Appendix F: Goss Consulting Contracts 2017-2020

Below are examples of impact studies completed by Goss & Associates for recent years (available online or upon request). Below are examples of impact studies completed by Goss & Associates for recent years.

- 1. 2003 2020, ongoing. <u>The College World Series and the Omaha Economy: Impacts 2003 2019</u>. Produced for College World Series, Inc.
- 2. Winter 2020. <u>Midtown Crossing: Transforming Midtown Omaha and Boosting the Overall Omaha Economy</u>. Produced for East Campus Realty. <u>Spring 2019</u>.
- 3. Winter 2019. <u>A Cost-Benefit Analysis: Options for Boone Central Middle School:Albion or Petersburg?</u> Produced for Boone Central Schools Board of Education.
- 4. Winter 2019. The Economic and Fiscal Impact of the Council Bluffs Riverfront Development (River's Edge). Produced for the Iowa West Foundation.
- 5. Winter 2019. <u>Reducing the Property Tax Burden on Nebraska Farmland: An Evaluation of the Fair Nebraska Plan.</u> Produced for Fair Nebraska.
- 6. Winter 2018. <u>The Economic Contributions of Ho-Chunk, Inc. to the Winnebago Indian Reservation, Iowa, Nebraska, South Dakota and the U.S.</u> Spring 2018. Wyoming. Produced for Ho-Chunk, Inc.
- 7. Winter 2018. The Economic Impact of the Streetcar on the City of Omaha. Produced for the City of Omaha.
- 8. Fall 2018. Nebraska's Independent Colleges and Universities: Spurring Economic Growth and Brain Gain for the State and Its Counties. Produced for Nebraska Association of Independent Colleges.
- 9. Winter 2017. <u>Rural TIF Report:Tax Increment Financing Contributions to Economic Growth in Rural Nebraska</u>. Produced for Nebraska Economic Developers Association.
- 10. Winter 2017. <u>The Economic and Fiscal Impact of the Council Bluffs Riverfront Development</u>. Produced for the Heritage Group.
- 11. Spring 2017 <u>Economies of Good: Boys Town's Economic Impact on the Omaha Area and the State of Nebraska</u>. Produced for Boys Town.
- 12. Spring 2017. <u>The Net Benefits and Costs of Prestage Farms to the Mid Iowa Region</u>, produced for Mid-Iowa Growth Partnership.
- 13. Spring 2017. The Impact of a Walkable, Workable, and Livable Midtown Omaha, produced for Turner Park North.
- 14. Summer 2017. Pet Ownership Boosts State and Local Economic Growth. Produced for PetSmart Charities.
- 15. Summer 2017. The Impact of Credit Union and Farm Credit Subsidies on the Banking Industry and Taxpayers in Nebraska. Produced for Nebraska Bankers Association and FEAI (Financial Education and Advocacy Initiative, Inc.