

THE STATUS OF THE OKLAHOMA FOOD AND  
AGRICULTURAL INDUSTRY IN  
A COMPETITIVE GLOBAL  
ENVIRONMENT

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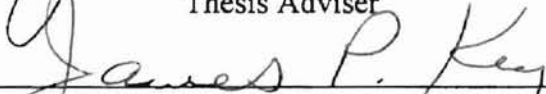
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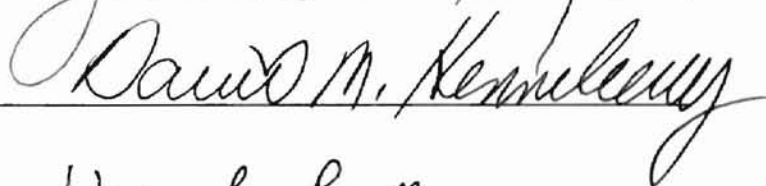
Submitted to the Faculty of the  
Graduate College of the  
Oklahoma State University  
in partial fulfillment of  
the requirements for  
the Degree of  
MASTER OF SCIENCE  
May, 1999

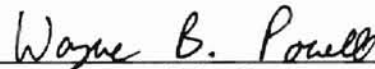
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## ACKNOWLEDGEMENTS

I would like to recognize and thank several people for their dedication, support and constant reminders to finish this study.

A lifetime of thank you goes to our Lord Jesus Christ for his grace and presence in my life.

Many thanks goes to Dr. James White for your patience, friendship, guidance and honesty before and throughout this study. I am lucky and honored to call you my advisor and friend.

Thank you to the man I thought I would never find, Brent Kirby, you alone were my shining light at the end to get this finished.

A special thanks goes to my parents, Raymond and Debbie Spencer, for always believing in me and stressing the importance of finishing this study. And to my sister, Christine Tucker, for your understanding on those weekends when I couldn't come home. I love you Courtney, Brittany and Anthony.

Additional thanks to Dr. David Henneberry, Dr. Larry Sanders, Dr. Mike Woods, Dr. James Key and Dan Hubert for giving me the opportunity to work on this study and being in the right places at the right time.

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## CHAPTER I

### INTRODUCTION

According to Stabler's (1998), *Industry Week* article:

In January of 1994, the North American Free Trade Agreement (NAFTA) created the largest single free trade market in the world containing well over 360 million consumers. By dropping the trade barriers between Mexico, the United States and Canada, the forward thinking governments of these nations opened the door to possibilities that then, could only be imagined (p. 42).

Furthermore, Stabler's (1998) article focused on Mexican and Canadian trade with Oklahoma and neighboring states.

In 1996, nearly one-third of all goods imported to and exported from the U.S. were traded with Canada and Mexico, and the total trade with these countries was in excess of \$421 billion. Total exports to Mexico from the states of Texas, Oklahoma, Kansas, Missouri, Iowa and Michigan stood at \$32 billion by the close of 1996. Total exports to Canada from the same six states were in excess of \$30.5 billion. It is interesting to note that well over 50 percent of the United States' exports to Mexico during 1996 were from these six centrally located states. In addition, well over 23 percent of all U.S. exports to Canada came from the same six states (p. 42).

Today's economy is no longer the domestic economy of our forefathers. In order to compete in today's business climate you must broaden your horizons and seek markets outside the United States. Consumers are worldwide and so are the markets that serve them. U.S. companies can no longer survive just serving U.S. consumers. How do U.S. petroleum pipeline manufacturer's stay in business considering the U.S. oil boom

occurred in the 1930's, 40's and 50's? They serve an international market, the domestic market that once existed is no more. According to Baker (1996), in the mid-1930's Grandma Cornelia Marshall began selling her homemade pies to local communities. Today Grandma Cornelia's pies are known as Bama Pies and are made in Tulsa, Oklahoma for McDonald's restaurants in the U.S. and 21 countries abroad. It is international markets and global firms that help sustain our domestic economic growth. Market growth means more jobs to generate more products to distribute to more consumers (Stabler, 1998).

As international trade begins to play a major role in the U.S. economy, each state's economy fulfills a substantial part of that role. Some states are big players in the trading game while others are either slow to follow or participate on a smaller scale. What determines a state's level of participation in the trading game? Industry, resources, economic status, geographical location, education as well as many other factors help to determine the global trading status of a state. Regardless of trading status, it is important for the state's economic survival to encourage technological advancement and growth resulting from international trade among neighboring states and the nation as a whole if it is to maintain or establish a competitive economy. Observation, today, indicates we live in a competitive global economy, therefore, we have no choice but to improve our competitive edge.

#### Statement of the Problem

The essentiality for Oklahoma's food and agricultural industry to be a competitive member of our global economy has raised questions about our competitiveness.

Interstate 35 runs through Oklahoma, making it a prime location to be a competitive exporter to our NAFTA partners. However, with U.S. exports to the NAFTA partners continuing to increase annually the amount of traffic congestion at the borders increase. This increase could result in Oklahoma companies losing interest in exporting due to long waits at the borders only to be denied right of passage due to packaging, labeling and other small detailed mistakes. In addition, industries pay for their products to be transported to the buyer in Mexico or Canada and the products set at the border for days waiting to pass NAFTA regulations and they arrive late or perish before reaching their destination. With talks of a NAFTA corridor possibly opening on Interstate 35 to relieve congestion at the borders, it is important to determine if the proposed trade route will have an effect on Oklahoma's food and agricultural industry's decision to export. It is equally important to assess their current position in the export market, if any, and what types of export information and assistance industries are aware of and using to help make them more competitive exporters.

#### Rationale for the Study

Oklahoma is not the only state that Interstate 35 runs through. Five other state's house parts of the interstate that runs from Mexico to Canada, making it the prime route traveled by exporting industries. A proposed NAFTA trade corridor on I-35 could increase the competitive edge of whichever state it was located in. In order to entice legislators to consider Oklahoma for the proposed corridor we must first determine Oklahoma's competitiveness as an exporting state and determine the perceived effect that a corridor would have on food and agricultural industries in Oklahoma.

## Purpose of the Study

The purpose of this study was to assess the status of the food and agricultural industry in a competitive global economy, as perceived by Oklahoma food and agriculture product processors.

## Objectives

In order to accomplish the purpose of this study, the following objectives were established:

- 1) To determine current exporting status of selected food processors and agricultural producers in Oklahoma;
- 2) To determine the destination of exports from Oklahoma's food and agricultural industry;
- 3) To determine the role export's had on company sales of Oklahoma food and agriculture exporters;
- 4) To define the reasons why Oklahoma food and agriculture industries are not exporting;
- 5) To describe the perceived effects of a NAFTA corridor on Interstate 35 influencing food processors and agriculture producers decision in exporting;
- 6) To determine the sources of export information and assistance being utilized by Oklahoma food and agriculture industries;
- 7) To determine the export educational needs as perceived by Oklahoma food and agriculture product exporters;

- 8) To determine the importance of available export services as perceived by Oklahoma food and agriculture product exporters; and
- 9) To determine the value of selected export programs and services as perceived by Oklahoma food and agriculture industries.

### Scope of the Study

The scope of this study consisted of established food and agricultural product producers and processors in the state of Oklahoma.

### Definitions

The following terms are defined as they apply to this study:

Global Economy – the management of the resources of the world, esp. with a view to its productivity.

International Trade – the trade of goods and services among two or more countries in the world.

Trade or NAFTA Corridor – a trade or NAFTA center located in the U.S. that will allow U.S. exporters to pass NAFTA and country customs while still in the U.S.

Trade Route – a stretch of highways and interstates that connect Mexico, U.S. and Canada.

Trade Show – a business event, usually taking place in various different countries, that allow producers and manufacturers to show off their goods and services to prospect buyers from another country.

## CHAPTER II

### REVIEW OF LITERATURE

#### Introduction

The purpose of this chapter was to provide a background of Oklahoma's economy and current exporting status in comparison with the U.S. and its neighboring states.

In order to accomplish the intent of this study, the literature review was divided into five major categories impacting Oklahoma's export trade competitiveness and a summary for the purposes of organization and clarity: 1) Oklahoma's Economy, 2) Oklahoma's International Trade, 3) Oklahoma's Agriculture, 4) Proposed Trade Route, 5) Oklahoma's Export Future, and 6) a Summary.

#### Oklahoma's Competitiveness

To better compare Oklahoma's exporting competitiveness with its neighboring states we must study Oklahoma's economic, international and agricultural performance in conjunction with these states and the global economy.

## Oklahoma's Economy

In the past few years Oklahoma's economy has seen it's share of "highlights" and "lowlights". According to the Oklahoma Department of Commerce Good News/Bad News on-line article (ODOC, 1995),

Oklahoma's employment growth beginning in 1989, outpaced the nation every year except 1994 and 1997. In addition, the unemployment rate continues to be below national levels with a 1996 rate of 4.1% as compared to the 5.4% recorded nationally. However, compared to it's neighboring states (Arkansas, Colorado, Kansas, Louisiana, Missouri, New Mexico and Texas) Oklahoma ranks sixth out of eight with an 11.26% change in employment growth from 1993 -1997.

The number of new business incorporations in Oklahoma grew 4.1% in 1996 and posted the best annual performance in the past decade. However, through the first seven months of 1997 the total number of bankruptcies recorded in Oklahoma was up 29% from year ago levels. (p. 1)

In addition, the Oklahoma Department of Commerce's Economic Report for the State (1997) stated; Oklahoma's employment-to-population ratio is at an historic high, it remains relatively low when compared to surrounding states. At 41 percent, the ratio of employment-to-population in Oklahoma is the second lowest in our eight state region, with surrounding state ratios ranging from as low as 40.5 percent up to 49.6 percent (p.4).

According to the Texas Department of Economic Development (1998), Oklahoma's manufacturing industry employs over 185,000 people making Oklahoma 13<sup>th</sup> in the nation and 4<sup>th</sup> in region for net manufacturing jobs created in the 1990's. In addition, data printed by the Oklahoma Department of Commerce (ODOC) shows the Food and Kindred Products industry employs 10 percent of the total Oklahoma manufacturing jobs (ODOC, 1997). Despite the employment numbers, these employees continue to have an average manufacturing wage of 0.44 cents below the national manufacturing wage of approximately \$12.99 per hour (ODOC, 1997).

## Oklahoma's International Trade

The Oklahoma Department of Commerce (ODOC) Economic Report for the State (1997) reported that in 1995 Oklahoma exports of manufactured goods increased less than \$5 thousand over the same time period in 1994. This 0.2 percent increase was well below the national average of 12.8 percent. The Food and Kindred Products sector export sales fell 9.88 percent during this same time period. Experts say much of Oklahoma's declining performance was related to a decline in export sales to Canada and Mexico. From 1993 to 1995, exports from Oklahoma to Canada declined 19 percent, while U.S. exports to Canada over this same period increased 26 percent. In addition, Oklahoma exports to Mexico were down 35 percent while national levels decreased only 9 percent. Excluding Canada and Mexico, Oklahoma manufactured exports increased 10.4 percent showing positive growth potential in the EC (European Community), the ASEAN region, and Taiwan. As for the rest of the states in the region, Missouri, Arkansas, Louisiana, Texas and Kansas all reported decreased state export sales to Mexico from 1994 – 1995.

Despite the downward shift in exports from 1993 to 1995, ODOC (1997) reported Oklahoma's export sector rebounded in 1996. Manufactured exports from the state increased 7.2 percent in 1996. Furthermore, data through the first half of 1997 suggested exports of manufactured goods were up some 17 percent from 1996 levels for the same period. The sector posting the most notable improvement during this robust increase was the Food and Kindred Products sector.



According to the ODOC's Top 50 Export Markets (1996), Oklahoma's top three export markets went to Canada (\$570,947), Japan (\$194,869) and Mexico (\$178,690). Oklahoma's total 1996 state exports to the world reached a little over 2.5 million dollars. Although 1996 showed a major increase in exports for the state, Oklahoma still held only 0.41 percent of the total export market for the U.S. Oklahoma's neighbors topped out with Texas holding 7.75 percent of the U.S. export market and bottomed out with New Mexico claiming only 0.15 percent of the total export market.

### Oklahoma Agriculture

With 17.1 percent of the state's employment in farm and farm related jobs, Oklahoma's agriculture plays a significant role in the state's economy. Oklahoma is predominately known for its black faced cattle and hard red winter wheat. According to the Oklahoma Fact Sheet printed by the Economic Research Service (1998), in 1997, cattle ranked as the state's number one agricultural commodity with 45.9 percent of the state total farm receipts and 5.5 percent of U.S. total value. Hard red winter wheat was not far behind it with 11.9 percent of the state's total and 5.8 percent of the U.S. total. The third ranking agricultural commodity for Oklahoma in 1997 was hogs with 9.6 percent of the state's total and 3.2 percent of the U.S. total. Growth in Oklahoma's swine industry has taken off like a rocket in the past few years. According to Rayfield (1995), from 1991 to 1994, hog production numbers increased over 210 percent. In addition, since 1994 the numbers have continued to increase, making Oklahoma a competitive pork producing state (Rayfield, 1995). In December of 1996 Oklahoma ranked 10<sup>th</sup> in the nation for swine inventory with more than 1.3 million hogs and pigs.

Oklahoma Department of Commerce (1998) data revealed the top five agriculture exports for 1997 included: Wheat and products (\$162.8 mil), Poultry and products (\$55.6 mil), Feed grains and products (\$45.9 mil), Soybeans and products (\$28.8 mil) and Live animals and meat except poultry (\$18.8 mil). Oklahoma ranks 10<sup>th</sup>, 15<sup>th</sup>, 18<sup>th</sup>, 26<sup>th</sup>, and 30<sup>th</sup> respectively in the U.S. for export of these five commodities according to USDA and Economic Research Service (1998). On the production scale, Oklahoma ranked as the number two state in production of hard red winter wheat for 1997 with 178.2 million bushels, the sixth most productive wheat harvest on record.

In 1995 net farm income in the state dipped below \$400 million for the first time in some ten years. There was a slight improvement in 1996, but net income remained below \$400 million. Much of the decline in income over this period was related to cattle prices. Between 1994 and 1996 cattle prices fell by approximately 30% (ODOC, 1997).

The Oklahoma Department of Commerce (ODOC) reported this statement in its *1997 Economic Report for the State*. Oklahoma producers were feeling the crunch from the fallen cattle prices but "Oh, what a time to be a wheat producer". While 1996 cattle prices were at their lowest point in ten years, \$52.80/cwt, wheat prices were at a record high with an annual average of \$4.92 per bushel. As 1997 began to show some relief on the cattle prices (\$68.33/cwt), wheat prices began to fall. Despite the teeter-totter effect on cattle and wheat prices, net farm income did increase in 1997. Oklahoma producers took home a little above \$1.1 billion dollars. Due to extreme drought conditions and low commodity prices in 1998, cattle and wheat prices dropped immensely leaving producers at the mercy of emergency government relief funds and free hay programs. By mid November, Oklahoma's average winter wheat prices had dropped to \$2.85/bu and fat cattle had fallen to \$58.30/cwt.

## Proposed Trade Route

With a majority of the Oklahoma and the U.S. agricultural and food processing exports going to Canada and Mexico it is only reasonable to insure safety and efficiency in the transporting of these products to their final destination. Export goods transported by truck may sit at the border crossings for days waiting to pass customs. This type of delay a serious backup at the port entry and substantial financial losses for exporting companies whose products are being delayed and then refused due to packaging or labeling restrictions. Realizing the importance of trade and the transportation route taken by most products entering Canada and Mexico, a group of enterprising government officials, civic leaders, business executives and a Texas judge formed the North American Superhighway Coalition (NASCO) in the spring of 1994. The coalition began as a means to coordinate efforts to gain Congressional approval of an International Trade Corridor System (ITC) which would...

- Increased research to ensure that technology is used in dealing with increased traffic demands;
- Creation of International trade processing centers (Continental Gateways) to streamline trade flow;
- Creation of a "clean corridor" to reduce congestion and improve air quality; and,
- Encouragement of links among local, state and provincial economies along the corridor (p.42-44).

According to an Industry Week (Stabler, 1998) article:

The surface transportation backbone of this tri-national trade market is a highway network which includes U.S. Interstate highway 35 as the central spine, along with Interstate highway 29 and other connecting corridors of international significance. These connecting trade routes include Interstate 69, 74, 80 and 94, the Pan American highway in Mexico and the Trans Canadian Highway.

Interstate-35 runs 1585 miles from the intermodal port of Duluth, through Saint Paul and Minneapolis, Des Moines, Kansas City, Wichita, Oklahoma City, Dallas and Fort Worth, Austin, San Antonio and on to Laredo on the U.S./Mexican border. Its direct connection to Interstate 29 out of Kansas City, and its interstate connections to Detroit/Windsor and Port Huron on the Great Lakes, make this route the most efficient Interstate highway corridor linking Canada, the United States and Mexico (p. 44).

To decrease air pollution, the Coalition has partnered with the U.S. Department of Energy, the U.S. Postal Service and the Texas General Land Office in supporting alternative transportation fuels along Interstate 35. These organizations are working to establish fueling centers along the corridor to reduce pollution. In addition, the commercial vehicle inspection and enforcement facilities of each state along the route will be integrated with the region's advanced traffic management and information systems to support improved corridor operations. Vehicles will be evaluated along the trade corridor for compliance with state and federal regulations. Those in compliance will be given priority to bypass all other state inspection facilities (Stabler, 1998).

How will this trade corridor effect Oklahoma? Interstate-35 runs 250 miles north and south within the state's border. Companies having direct access to the trade route and a proposed Oklahoma inspection center could save exporters thousands of dollars in transportation cost.

According to an article in Industry Week magazine (Stabler, 1998) Oklahoma is...

Located at the center of the country and having one of the lowest cost of living and corporate tax burdens in the country. Oklahoma is ideally positioned to attract transportation-sensitive industries.

Interstate-35 cuts north and south through the state and intersects Interstate 40, one of the nation's major east/west trade routes, in Oklahoma City, creating a direct Interstate link to the Great Lakes port regions in Illinois and Michigan (p. 52).

The state has taken a leadership role in enacting laws which will aid the state in capitalizing on its location. Oklahoma State Senate Majority Whip Keith Leftwich sponsored legislation to authorize and direct the Oklahoma Department of Transportation to enter into negotiation with other states in the U.S., Mexico and Canada to make available state-owned right of way along the 250 miles of Interstate 35 within the state. The right of way is being used to facilitate the laying of a fiber-optic spine along the route. "We would like to see a real-time intelligent highway system," said Oklahoma Transportation Secretary Neal McCaleb. "We currently have several lighted (active) strands capable of providing real-time information on the movement of trucks, their cargo, schedules and destinations," McCaleb added.

An effort is underway by a group of developers in Purcell, Oklahoma to create an inland trade center near Wayne, Oklahoma, utilizing the fiber-optic spine for information gathering and data transmission. The 260 acre industrial park and transportation center may very well become a central hub of NAFTA trade activity (p. 52).

#### Oklahoma's Export Future

Oklahoma's export future lies in the hands of owners, operators and managers of Oklahoma's food processing and agricultural industry. The decision to export is solely their own. State and federal agencies as well as public and private organizations can only educate and provide export assistance to Oklahoma's industry owners in hopes that they will become part of the global economy.

The Oklahoma Department of Commerce (1996) serves as Oklahoma's lead state agency for economic development. The Department promotes Oklahoma's economic development in two major

areas; business assistance and community development. This assistance involves working closely with local communities and chambers of commerce, existing industries and domestic and international business prospects. To achieve this assistance, the Department works with Oklahoma Futures, the state's 23-member economic development board of advisors. The Oklahoma Department of Commerce operates offices in Oklahoma City, Tulsa and California and contracts for representation of the state in several foreign countries including; Singapore, Korea, Germany and Mexico (p. 1).

The Department's annual work plan is organized along business lines. These include:

- Marketing and Sales: Marketing and securing business investment in Oklahoma. This line of business includes the Business Development Division, Corporate Sites Division, International Trade and Investment Division and the Tulsa Division.
- Business Financing: Providing financial resources to new and existing Oklahoma businesses. The line includes the following; Business Development Division, Community Affairs and Development Division and the Tulsa Division.
- Business Services: Providing services to Oklahoma businesses (e.g., packaging, business plan development, modernization services, etc.). Included in this line are the Business Development Division and the Education and New Initiatives Division.
- Global Trade: Assisting Oklahoma businesses to export to foreign countries. The divisions found in this line are the International Trade and Investment Division and the Tulsa Division.

- Community Investment: Enabling Oklahoma Communities to improve their competitiveness. The Community Affairs and Development Division and the Education Services and New Initiatives Division are found in this line of the Department.
- Information Services: Providing information and data to help customers make sound decisions. The following divisions are found in this line; Business Development Division, Education Services and New Initiatives Division, Research and Planning Division, Communication/Media Division and the International Trade and Investment Division (p. 1-9).

The Oklahoma Department of Agriculture (ODA) has an Market Development Division that works directly with producers and food processing firms to provide services and expand markets. The Market Development Division of ODA (1997) assists with both international and domestic markets. The International Market Development coordinators specialize in assisting buyers and sellers with information and technical advice concerning both exports and imports. By working with ODA's International Trade staff, companies can access:

- A network of USDA's Foreign Agricultural Service (FAS) specialists located in Washington DC,
- A network of FAS managed Agricultural Trade Offices worldwide,
- The Southern United States Trade Association (SUSTA), a state regional trade association, of which the state is a member,
- Oklahoma Department of Agriculture sponsored seminars and conferences on various international trade activities,

- Participation in Oklahoma Department of Agriculture sponsored pavilions at targeted international trade shows and other international trade events (p. 3).

The Oklahoma International Trade and Investment Division and Oklahoma Export Assistance Center (1998) is dedicated to increasing the quality and quantity of Oklahoma jobs by increasing global awareness among Oklahomans, assisting Oklahoma companies to initiate and expand exports. Encouraging and assisting Oklahoma companies to grow and invest in international trade has a direct impact on the state's economy. Their services according to the internet article included:

- Agent/Distributor Search (ADS): Identifying agents, distributors and representatives in a particular country.
- Commercial Service International Contacts (CSIC) and Commercial News USA (CNUSA): Worldwide magazine promotion of U.S. products and services, disseminated to screened agents, distributors, buyers and end-users.
- Capital Resources Assistance: Helps existing companies to locate sources of funding for export transactions.
- Country Directories of International Contacts (CDIC): Provides contact and product information on over 70,000 firms abroad interested in U.S. products.
- Customized Market Analysis (CMI): Provides firms with information on marketing and foreign representation for specific products or services in selected countries.
- Conferences, seminars and workshops providing information and explanation on the details of export marketing, financing, shipping, documentation, insurance, foreign trade laws, etc.



- Gold Key Service: Market strategy assistance, orientation briefings, potential partner introductions, and interpreters for meetings and follow-up planning for Oklahoma firms planning to visit a country.
- European Trade Program: Provides trade leads, displays catalogs at Europe trade events and advertises in European trade publications.
- Individual Counseling
- International Investment Assistance: Provides one-stop assistance to international companies considering investment or expansion in the U.S.
- International Buyer Program: Recruits foreign buyers and distributors to attend U.S. trade shows and coordinates introductions with exhibiting U.S. firms.
- International Company Profiles: Provides background information on the reputation and reliability of a prospective trading partner.
- International Market Insights: Provides short profiles of specific foreign market conditions or opportunities.
- Industry Sector Analysis: Complete analysis reports of a selected industry sector in a particular country (p. 1-2).

Additional services provided by the Oklahoma International Trade and Investment Division and Oklahoma Export Assistance Center include: Welcoming and hosting International visitors and protocol; Japan External Trade Organization; Identification of companies interested in Joint Venture; Matchmaker Trade Delegations; Multi-State/Catalog Exhibitions; Oklahoma International Business Faxgram; Oklahoma Export Center; Oklahoma Sister State and Cities Program; Oklahoma international trade

bulletin; trade leads; trade show report; trade shows; fairs and exhibitions (p.3,5). Oklahoma's international marketing offices are located in Singapore, Belgium, Korea, Mexico and Vietnam.

Despite the increase in assistance available to Oklahoma's food processing and agricultural industry, still many companies apparently are not interested in exporting. In 1992 the Oklahoma Department of Commerce (Gorin, 1993) conducted the Oklahoma Business and Industry Survey. This survey looked at Oklahoma industries by SIC code and size of establishment to determine whether or not these industries were exporting their products.

The survey identified that 37.7% of all respondents (264 out of 701) claimed exports for their company. Only 22% of the companies with 20 or fewer employees reported exports. Another 36.4% of respondents with between 21 and 50 employees reported exports. Conversely, some 60% of companies with 50 to 249 workers identified having sales beyond U.S. borders, and more than three-quarters of the companies with at least 250 employees reported some amount of foreign sales (p. 1-2).

In the food and kindred products industry (SIC code 20), 27.3 percent of respondent companies reported exporting their products to a foreign market. Only 6.5 percent of the 20 SIC companies with 20 or fewer employees reported exports. An additional 26.3 percent companies with 21 to 50 employee's reported exporting products manufactured by their firms and half of the companies employing 51 to 250 workers said they were exporting too. The highest percentage of food and kindred product companies exporting came from the 251 to 500 employee sector with 66.7 percent (p. 1).

The 1992 survey also asked the Oklahoma businesses if they were interested in developing new products and the following results occurred.

The survey identified that 72% of all respondents (505 out of 701) claimed interest in new product development for their company. Only

62% of the companies with 20 or fewer employees reported such interest. Another 76.1% of respondents with between 21 and 50 employees reported interest in developing new products. Conversely, some 80% to 85% of companies with 50 to 249 workers identified having interest in new product development, and more than 90% of the companies with at least 250 employees reported interest (p. 1).

In the food and kindred product industry (SIC code 20), 72.7 percent of respondent companies reported an interest in new product development. In regard to company employment levels, 61.3 percent of companies employing 20 or fewer workers were interested. Over 63 percent of the companies with 21 to 50 workers and all of the companies employing 51 to 100 workers were interested in new products. Furthermore, 90 percent of the firms hiring 101 to 250 workers indicated an interest while 66.7 percent of the companies with 251 to 500 workers liked the idea of new products.

Byford and Henneberry (1993), a grain buyer for Cargill and Professor of Agricultural Economics at Oklahoma State University respectively, conducted a survey concerning the export decisions of food processing firms in Kansas, Missouri, and Oklahoma. Byford and Henneberry (1993) found that 17.6 percent of the total number of returned survey's were from firms involved in exporting while an overwhelming 82.4 percent of the respondents had never exported products. The study revealed that only 9.2 percent of the respondent firms from Oklahoma were involved in exporting. This percentage was well below Missouri and Kansas, with 26.5 percent and 12.4 percent involved respectively (p. 248).

Of the non-exporting firms that responded to Byford and Henneberry's (1993) survey, 60.2 percent indicated that they have never considered exporting a possibility for their firm, or that they are not interested in exporting. One quarter of the respondents said that they had considered exporting in the past, but for unidentified reasons had only

explored domestic markets. Only 14.6 percent of the non-exporting respondents indicated they were currently considering exporting as an option. When the non-exporters were asked why they didn't export, the primary concern was about the perishable nature of their product. The second most common reason why the firms did not export was that they simply are not interested in international sales. Byford and Henneberry's (1993) study disclosed as many as 8.6 percent of the non-exporting firms indicated they had received an order from abroad that they decided not to fill.

Byford and Henneberry's (1993) study also revealed 60.2 percent of the non-exporting respondents had no plans to start exporting in the future, 25.2 percent had considered it in the past while 14.6 percent of the non-exporting respondents are currently considering plans to export in the future. Regardless of their future export plans, over half of all of non-exporting respondents were unaware that state export programs exist. Two general conclusions cited in the *Agribusiness* article by Byford and Henneberry (1993) revealed...

The first is that, despite slight differences in firm size, age of primary product, population of metropolitan area, or other demographic firm characteristics that influence firm behavior, a significant factor in the export decision is the attitude of upper level managers who make export decisions. The second conclusion is in regard to export promotions programs. The kind of services offered are in line with the assistance exporters indicated they like, but these services do not seem to address many of the obstacles that are widely experienced by exporters. They also do little to bring most non-exporting firms into foreign markets, because the motivational barriers that prevent the majority of these companies from international sales are not directly affected by export promotion programs (p. 263).

Byford and Henneberry (1993) were not the only individuals to notice the lack of enthusiasm for exporting among Oklahoma businesses. In a recent article concerning

trade along Interstate 35 published in *Oklahoma Living* (Alford, 1998), Linda Richardson, an international trade expert, stated:

I think in general, Oklahoma companies, especially small businesses, have not capitalized on trading opportunities. There are still certain kinds of documentation and transportation challenges to be resolved, and proper planning can keep exporting from being more expensive for smaller companies. There is export assistance available - I think it may just be a matter of arming companies with the information they need to make that first export decision (p. 16).

So what does all of this mean for Oklahoma's future? While exports are related to production, the following is a summary of Oklahoma Bureau of Economic Analysis Research Service (OBERS) 1995 Gross State Product (GSP) provided the following projections for Oklahoma and its neighboring states as well as the U.S.

According to OBERS (1995), Oklahoma gross state product growth from 1992 to 2000 will be 1.6 percentage points lower than the U.S. average, with 18.8 percent versus 20.5 percent. Oklahoma's agricultural production is expected to grow by 22.6 percent between 1992 and 2000, while non-farm production is projected to gain 18.7 percent. This projected growth for Oklahoma surpasses the U.S. farm product growth by 12.3 percent. However, Oklahoma's non-farm growth will not measure up to the U.S. non-farm growth at 20.6 percent. This is good for the agricultural sector. In addition, the Agricultural Services, Forestry, Fishing & Other Industries are projected to grow 12.3 percentage points faster in Oklahoma (57.7%) than in the U.S. (45.4%) as a whole during 1992 to 2000. What about the Food and Kindred Products Industry, Oklahoma is projected to gain 25.6 percent while the U.S. will be declining 25.1 percent (p. 1-5).

Compared to its neighboring states, according to the Bureau of Economic Analysis (1995) predictions of gross state product percentage change from 1992 to 2005.

Oklahoma is ranked third with 37 percent growth while Colorado (40%), New Mexico (40%), Texas (38%) rank above and Louisiana (19%), Missouri (15%), Arkansas (14.7%) and Kansas (11.2%) rank below. As for the Agricultural Services, Forestry and Fishing Industry states in the region ranked from highest to lowest were as follows: New Mexico (97%), Oklahoma (96%), Colorado, (95.5%), Kansas (89.1%), Arkansas (82.1%), Texas (82%), Missouri (77.5%) and Louisiana (73.8%). In the area of Food and Kindred Products, Oklahoma and New Mexico are tied for the lead with 33 percent growth from 1992 to 2005. The rest of the states follow accordingly; Arkansas (32.8%), Kansas (32.5%), Colorado (25.1%), Missouri (22%), Texas (20%) and Louisiana (18.5%) (p. 1).

#### Summary

This chapter has provided background information concerning the following five major categories 1) Oklahoma's Economy, 2) Oklahoma's International Trade, 3) Oklahoma Agriculture, 4) Proposed Trade Route and 5) Oklahoma's Export Future.

While the Oklahoma economy seems to be on the rise in comparison to the nation, Oklahoma continues to trail behind when compared to its neighboring states. Although the Food and Kindred Products industry has strong numbers in employment, 10 percent of the total Oklahoma manufacturing jobs, the average manufacturing wage is below the national average manufacturing wage. These declining effects may have been due to the decrease in state manufactured exports to Canada and Mexico during 1993 to 1995. However, with Oklahoma's manufacturing industry rebounding in 1996 and 1997 a better future may be shaping up for manufacturing employees.

Even though manufacturing in Oklahoma was showing signs of decreasing production in comparison to surrounding states, Oklahoma agriculture was moving in a

more positive direction. Increasing production of hard red winter wheat, pork and beef were major production indicators during the mid to late '90's. Oklahoma ranks third, ninth and fourth nationally concerning these respective commodities, while, farm income and commodity prices were moving in the opposite direction. With cattle and wheat prices at all-time lows, producers were feeling the crunch in both production costs and low commodity prices.

There may be a light at the end of this tunnel, with talks of a 'trade route' opening in the U.S. to allow exporters to pass trade and border customs before reaching country borders. The proposed trade route would travel 250 miles through Oklahoma allowing food processors and agricultural producers to regain their markets through exports. However, past interest among Oklahoma food and agricultural product exporters has not been as high as its neighboring states. Despite the endless amount of export assistance available to industries and producers, the first step towards international exposure of their products must come from the producers and processors of food and agricultural products.

## CHAPTER III

### METHODOLOGY

The purpose of this chapter was to describe the methods and procedures used to conduct the study. The purpose of this study was to assess the status of the food and agricultural industry in a competitive global economy, as perceived by Oklahoma food and agriculture product processors.

In order to accomplish the purpose it was necessary to determine a population and develop an instrument, which would obtain the information needed to fulfill the study objectives. A procedure for data collection was established and methods to analyze the data were selected.

#### Objectives of the Study

In order to accomplish the purpose of the study, the following objectives were established with regard to the study population:

- 1) To determine current exporting status of selected food processors and agricultural producers in Oklahoma;
- 2) To determine the destination of exports from Oklahoma's food and agricultural industry;
- 3) To determine the role export's had on company sales of Oklahoma food and agriculture exporters;



- 4) To define the reasons why Oklahoma food and agriculture industries are not exporting;
- 5) To describe the perceived effects of a NAFTA corridor on Interstate 35 influencing food processors and agriculture producers decision in exporting;
- 6) To determine the sources of export information and assistance being utilized by Oklahoma food and agriculture industries;
- 7) To determine the export educational needs as perceived by Oklahoma food and agriculture product exporters;
- 8) To determine the importance of available export services as perceived by Oklahoma food and agriculture product exporters; and
- 9) To determine the value of selected export programs and services as perceived by Oklahoma food and agriculture industries.

#### Institutional Review Board (IRB)

Federal regulations and Oklahoma State University policy require review and approval of all research studies that involve human subjects before investigators can begin their research. The Oklahoma State University Office of University Research Services (IRB) conducts this review to protect the rights and welfare of human subjects involved in biomedical and behavioral research. In compliance with the aforementioned policy, this study received the proper surveillance and was granted permission to proceed. This research was assigned the following research project number: AG-98-012. A copy of the IRB approval form was presented in Appendix A.

## Population

The population for this study consisted of 546 Oklahoma food and agricultural product processors and producers. The population was randomly selected from the Oklahoma Department of Agriculture's (ODA) 1995 Oklahoma Food and Agricultural Industry Directory, ODA's 1997 Oklahoma Agricultural Products Export Directory, and the company list provided by the Oklahoma Department of Agriculture and Oklahoma food and agricultural companies listed in the yellow pages of the Internet.

Of the 546 questionnaires mailed, 52 were returned completed indicating a 9.5 percent response rate. The 52 respondents participating in this study were a self selected sample of the total population of potential respondents.

## Development of the Instrument

Various methods of data collection were considered and the mailed questionnaire was determined to be the most appropriate to satisfy the objectives of the study. The large geographic area made personal interviews and phone surveys unfeasible and too time consuming to incorporate in this study. In developing the instrument to satisfy the objectives of the study, the first step was to review and evaluate instruments used in related studies. Those specifically reviewed included those developed by Byford and Henneberry (1993).

Upon the completion of the review of selected questionnaires, the researcher and members of the graduate committee compiled and revised questions addressing nine major issues. The questions relative to Oklahoma's competitive status in a global environment addressed current exporting status, export destinations, company sales

attributed by exports, reasons for not exporting, influence to export, export information/assistance, and perceived educational needs, importance of export services, and value of export programs and services.

Graduate research committee members from the Departments of Agricultural Education, Communications, and 4-H Youth Development and Agricultural Economics in the College of Agricultural Sciences and Natural Resources at Oklahoma State University reviewed the initial set of questions.

Throughout the process of designing and developing the instrument, the length of the survey was of concern. The instrument was designed to require about ten minutes of the processor/producer's time to provide the needed information. It was also determined by the researcher and thesis adviser to send the questionnaire in booklet form, which added to the ease of reviewing on the part of the potential respondents. It was a major concern during the development of the instrument that it be easily read and include relevant questions, as well as, not imposing time constraints on the respondents.

The twelve item mail questionnaire consisted of nine parts: 1) demographic characteristics, 2) destination of exports, 3) the role export's play in company sales, 4) reasons for not exporting, 5) perceived effects of a NAFTA corridor on Interstate 35 influencing their decision in exporting, 6) sources of export information and assistance, 7) perceived educational needs, 8) importance of available export services, and 9) perceived value of selected export programs and services. The survey consisted of forced response type questions. The twelve forced response items addressed "yes" or "no", selecting the appropriate response, and rank order questions/statements. Nominal,

interval, ordinal and a four-point “Likert-type” scale were the scales utilized in acquiring potential responses.

Question one of the instrument included a single forced answer item designed to gather demographic information concerning the current export status of food processors and producers. The information was collected using forced response items that utilized a combination of both nominal scale and interval scale. Question two of the instrument pertained to exporter’s only and included three questions, which were designed to determine the destination of exports and the percentage of exports to our NAFTA partners. These questions were all forced response items, with all three questions utilizing an interval scale. In addition to question two, items three, four and five pertained only to exporters. Item five involved the use of an interval scale, which was designed to determine the percentage of company sales derived from exports. Question six involved a single forced response item which asked respondents to rank order one to six specific reasons why they chose no to export. The remaining sections of the questionnaire were designed to gather information from both exporters and non-exporters. Item seven was employed to ascertain the perceived effects of I-35 becoming a “NAFTA corridor” and whether or not it would influence the respondents’ decision to export. Item eight asked the potential respondents to indicate the sources of information and assistance their firms used for exporting. Question nine involved the use of an ordinal scale asking the study participants to rank their responses one to eleven according to their perceived educational need for entry into or expansion in export markets. The instructions associated with item ten directed potential respondents to rank a list of export services one to six regarding the perceived importance of the specific service to their

company. This question was developed to determine which existing export services were considered important to firms entering or already involved in international markets. Question eleven employed a nominal scale to determine whether or not potential respondents perceived their firms' willingness to pay for exporting services. Item twelve addressed the perceived value of selected export and educational services among potential respondents. A four-point "Likert-type" scale was used to ascertain the respondents' perceived value. The categories of value were "Extremely Valuable", "Valuable", "Some Value" and "No Value".

#### Collection of Data

The questionnaire was duplicated in booklet form and a packet distributed through the U.S. Mail during November 1997 to Oklahoma food processors and agricultural producers. The packet included a cover letter explaining the purpose of the research and the intent of the study, the questionnaire, and a postage-paid envelope for the return of the completed survey. The surveys were coded for the purposes of conducting follow-up mailing. The respondents were advised of their voluntary responses and the strict confidentiality regarding any or all of their responses to the survey as well as all findings being reported in the aggregate..

Thirteen surveys were re-mailed in a second mailing due to incorrect addresses. No follow-up was conducted, since this was a time sensitive study and part of a six state study forr the International Trade Extension to Rural Communities of the Mid-Continent (INTERCOM). The cut off date for responses was determined to be February 15, 1998.

## Analysis of Data

The study population of food processors and agricultural producers all had the opportunity to participate in the study; therefore, descriptive statistics were used to analyze these data. According to Krejcie and Morgan (1970), "Descriptive statistics are numbers which are used to describe information or data, or those techniques used to calculate those numbers" (p. 172). Descriptive statistics were utilized to analyze the data collected from the questionnaire.

Frequency distributions, percentages, means, standard deviations and overall ranks were the statistics used in this study to describe the responses of the study participants.

All data were analyzed by the Department of Agricultural Economics' Computer Center at Oklahoma State University, 408 Agriculture Hall, under the specific direction of Mr. Preston Rash.

To report and describe the data acquired in question twelve of the survey, categories/levels of perceived value were derived via a "Likert-type" scale. Therefore, numerical values were assigned and real limits were established as shown in Table I.

TABLE I

A DISTRIBUTION OF THE NUMERICAL VALUES ASSIGNED AND REAL LIMITS ESTABLISHED BY CATEGORIES/LEVELS OF PERCEIVED VALUE

Categories/Levels of Value	Numerical Value Assigned	Real Limits
Extremely Valuable	4	3.50 – 4.00
Valuable	3	2.50 – 3.49
Some Value	2	1.50 – 2.49
No Value	1	1.00 – 1.49

## CHAPTER IV

### Presentation and Analysis of Data

The purpose of this study was to assess the status of the food and agricultural industry as perceived by food processors and agricultural producers in Oklahoma as they relate to Oklahoma's competitiveness in a global economy.

Data were collected during the Fall of 1997 and the Spring of 1998. Fifty-two (9.5 percent) food processors and agricultural producers responded to the survey. The objective of this chapter was to present data in a graphic and succinct manner which were used to determine the current status of Oklahoma's food and agricultural product processing in a competitive global environment.

### Population

The population for this study consisted of 546 Oklahoma food processors and agricultural producers. The population was selected from the Oklahoma Department of Agriculture's (ODA) 1995 Oklahoma Food and Agricultural Industry Directory, ODA's 1997 Oklahoma Agricultural Products Export Directory, and the company list provided by the Oklahoma Department of Agriculture and Oklahoma food and agricultural companies listed in the yellow pages on the Internet. The 52 (9.5 percent) respondents in this study were a self selected sample, which were derived from the total 546 Oklahoma food processors and agricultural producers.

## Demographic Characteristics

The data shown in Table II revealed that over 67 percent of Oklahoma food processors and agricultural producers were not exporting their products, while 32.6 percent were exporting. These data also indicated that only 5.8 percent of the non-exporters were currently working on developing an export market for their product. In addition, over half of the exporters had been exporting their products for more than ten years.

TABLE II  
A DISTRIBUTION OF RESPONDENTS BY EXPORT STATUS

Export Status	N=52	Percentage (%)
My company does not export	32	61.5
My company does not currently export but is working on developing an export market	3	5.8
Under 1 year	2	3.8
1-5 years	2	3.8
5-10 years	4	7.7
More than 10 years	9	17.3
Total	52	100.0

## Destination of Exports

Table III was constructed to provide a summary of the export destination of products among current exporting firms and food processors and agricultural producers which indicated an interest in becoming exporters. Respondents were asked if they were exporting to either of the United States' NAFTA partners, Mexico and Canada, both or



neither. According to their responses, forty percent of the processors and producers were currently or will be exporting their products to both Mexico and Canada. Ten percent were not exporting or planning to export to either country, and an additional ten percent of processor and producers were uncertain as to the destination of their exports.

TABLE III

A DISTRIBUTION OF FOOD AND PRODUCT EXPORTS BY COUNTRY OF DESTINATION

Country Destination	N=20	Percentage (%)
Export to Mexico	5	25
Export to Canada	3	15
Export to Mexico and Canada	8	40
Do not export to either country	2	10
Uncertain	2	10
Total	20	100

The data in Table IV revealed that half of the “Under one year” exporting processors and producers export their products to both Mexico and Canada while the other half did not export to either country. Fifty percent of the processors and producers who indicated one to five years and six to ten years of involvement in the export market reported their products were primarily destined for to Canadian markets while the other half of the exporters disclosed that their products were going to both Canada and Mexico. In addition, 44.4 percent of the goods produced by processors and producers that have more than 10 years experience in the export market were being exported primarily to Mexico. In the over ten-year export group, more than 33 percent indicated their products

were going to both Canada and Mexico. However, one (11.1 percent) participant in the more than ten-year export group was uncertain with regard to his products destination, while one (11.1 percent) producer/processor disclosed his products were going to a market other than Mexico or Canada.

TABLE IV

A SUMMARY OF RESPONDENTS LENGTH OF INVOLVEMENT IN THE EXPORT MARKET BY EXPORT DESTINATION

Export Destination	Number of Years in Export Market							
	<u>≤ 1</u>		<u>1 - 5</u>		<u>6 - 10</u>		<u>≥ 10</u>	
	N=2	(%)	N=2	(%)	N=4	(%)	N=9	(%)
Mexico	0	0	0	0	0	0	4	44.4
Canada	0	0	1	50	2	50	0	0
Both Mexico & Canada	1	50	1	50	2	50	3	33.3
Neither Mexico or Canada	1	50	0	0	0	0	1	11.1
Uncertain	0	0	0	0	0	0	1	11.1
Total	2	100	2	100	4	100	9	100

Table V was developed to provide additional information about the destination of exports. This section of the questionnaire pertained only to food processors and agricultural producers who were currently exporting. When asked the percentage of their exports going to Mexico and Canada; 70.6 percent of the 17 exporting processors and producers stated 25 percent or less of their products were exported to Mexico. In addition, eleven of the seventeen (64.7 percent) exporting respondents indicated 25 percent or less of their goods were exported to Canada. No respondent reported exporting more than 25 percent of their goods to either Mexico or Canada. Of the 17

exporting respondents; two reported they were not exporting to either Mexico or Canada, four revealed they exported to Mexico, three reported their products being exported to Canada and one was uncertain as to where their exports were marketed. The remaining seven respondents reported exporting to both Mexico and Canada.

TABLE V

A SUMMARY OF THE RESPONDENTS' PORTION OF TOTAL REVENUES  
DERIVED FROM EXPORT SALES TO MEXICO AND CANADA BY  
PERCENTAGE OF EXPORTS

Percentage of Exports	Exports to Mexico		Exports to Canada	
	N=17	Percentage	N=17	Percentage
25 Percent or Less	12	70.6	11	64.7
Not Applicable	5	29.4	6	35.3
Total	17	100.0	17	100.0

Export Influence On Company Sales

The data shown in Table VI described the influence exports have on reported company sales by the number of years in the export market. All of the food processors and agriculture producers that had been in the export market for under one year and one to five years reported 25 percent or less of their total company sales coming from the export market. In addition, one half of the food processors and agriculture producers who had been exporting for six to ten years also reported 25 percent or less of their total sales coming from exports. Furthermore, about one-fourth of the six to ten year exporter group reported 26-50 percent of their total sales were from exports annually, while revealing 51 to 75 percent of their total sales in the last quarter were primarily from export markets.

Surprisingly, over 88 percent of the food processors and agriculture producers who had been exporting for more than ten years reported 25 percent or less of their total sales being derived from exports, while only one (11.1%) firm reported 76-100 percent of their total sales originated from export markets.

TABLE VI

A DISTRIBUTION OF FOOD PROCESSORS AND AGRICULTURE PRODUCERS REGARDING TOTAL SALES DERIVED FROM EXPORTS BY NUMBER OF YEARS IN THE EXPORT MARKET

Number of Years in Export Market	Percent of Total Sales from Exports							
	25% or Less		26 to 50%		51 to 75%		76 to 100%	
	N	%	N	%	N	%	N	%
Less Than One Year	2	11.8						
One to Five Years	2	11.8						
Six to Ten Years	2	11.8	1	5.9	1	5.9		
More Than Ten Years	8	47.1					1	5.9
Total	14	82.4	1	5.9	1	5.9	1	5.9

Non-Exporting Factors

The data revealed in Table VII reported the distribution of factors that discourage exporting as perceived by non-exporting food processors and agricultural producers. Item six on the survey instrument asked potential respondents to rank the factors which discouraged exporting from one to six. The factor with the highest overall ranking which seemed to discourage non-exporters most from entering the export market was the “financial cost of developing a market”. “Lack of information about entering the export market” was ranked second, while “not interested in exporting” ranked third. The lowest ranked factors of discouragement indicated were responses to “other” which included; “bagels do not export well and we are at maximum capacity with exporting”, “lack of

market”, “political b.s.”, “perishable product”, “protected franchised territory for distribution of product”, “the nature of our business, fund raising, would not be compatible”, “variations in electrical current provided”, “cost of transportation”, and “not enough product to supply local market”.

TABLE VII

A SUMMARY OF NON-EXPORTING RESPONDENTS' PERCEIVED RANKS OF FACTORS DISCOURAGING  
PARTICIPATION IN EXPORT MARKETS BY SELECTED FACTORS

Selected Factor	<u>Highest Rank</u>								<u>Lowest Rank</u>				<u>Total Responded</u>		<u>Mean Score</u>	<u>Mean Rank</u>
	1		2		3		4		5		6		N	%		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
Lack of information on entering the export market	3	8.6	7	20	4	11.4	1	2.9	1	2.9	19	54.3	35	100	4.34	2
Financial Cost of developing a market	8	22.9	2	5.7	6	17.1	2	5.7	0	0.0	17	48.6	35	100	4.00	1
Lack of information on foreign market needs	4	11.4	2	5.7	4	11.4	5	14.3	1	2.9	19	54.3	35	100	4.54	4
Concerns on receiving payment, exchange rates, etc.	3	8.6	2	5.7	3	8.6	5	14.3	2	5.7	20	57.1	35	100	4.74	5
Not interested in exporting	10	28.6	0	0.0	0	0.0	1	2.9	5	14.3	19	54.3	35	100	4.37	3
Other	6	17.1	2	5.7	0	0.0	0	0.0	0	0.0	27	77.1	35	100	4.91	6

## Influence On Exports

The data presented in Table VIII represented the information gathered to fulfill the second objective of the study, to determine the influence of a proposed "NAFTA corridor" on I-35 would have on Oklahoma's food and agricultural industry's processors and producers to either export or increase exports of their products. Over seventeen percent of the 44 respondents to this question reported that a designated NAFTA corridor would influence them to increase their exports to our NAFTA partners. Ten percent of the non-exporters stated it would influence them to begin exporting and over 32 percent of the respondents indicated they would not be influenced on their decision to export while the remaining respondents were uncertain of any influence.

TABLE VII

A SUMMARY OF THE RESPONDENTS PERCEPTIONS REGARDING THE EFFECTS OF A TRADE CORRIDOR'S INFLUENCE ON EXPORT DECISIONS BY FACTORS OF INFLUENCE

Factors of Influence	N=46	Percentage (%)
Influence to increase exports	8	17.4
Influence to begin exporting	5	10.9
No influence on export decision	15	32.6
Uncertain	18	39.1
Total	46	100.0

## Export Services

Table IX was constructed to provide a summary of the sources of export information and assistance being used by food processors and agricultural producers.

The question in the survey was open to exporters and non-exporters who have ever sought or received any information and/or assistance on exporting. Respondents were asked to mark all of the sources from which they have acquired information and/or assistance. Thirty-one respondents replied, indicating they had utilized sixty-six marked sources. The list of sources included state and federal agencies as well as private organizations. Twenty (30.3%) of the respondents expressed the most popular source of export information and assistance for them was the Oklahoma Department of Agriculture, while nine (13.6%) food processors and agriculture producers stated the Oklahoma Department of Commerce was their choice for export assistance, making ODOC the second most popular choice overall. In addition, seven (10.6%) respondents revealed the U. S. Department of Commerce was their preference for export assistance and information. No respondent indicated seeking any information from the County Commissioners Office. While most state and federal export information sources were highly sought after, other sources did not attract many inquiries. Only two (3.0%) study participants indicated using the Small Business Development Center, Tulsa World Trade Association and the Center for International Trade & Development as sources for information and assistance.

TABLE IX

A SUMMARY OF THE RESPONDENTS' USE OF SELECTED SOURCES OF EXPORT INFORMATION AND ASSISTANCE BY SOURCE

Source of Information	N=66	Percentage (%)
Oklahoma Department of Agriculture (ODA)	20	30.3
Oklahoma Department of Commerce	9	13.6
U. S. Department of Commerce	7	10.6



TABLE IX (Continued)

Export Info. and Assistance Sources	N=66	Percentage (%)
U. S. Department of Agriculture's Foreign Ag Serv	5	7.6
Oklahoma City International Trade Association	4	6.1
Other	4	6.1
County Extension Office	3	4.5
Local Chamber of Commerce	3	4.5
Web Sites	3	4.5
Tulsa World Trade Association	2	3.0
Small Business Development Center	2	3.0
Center for International Trade & Development	2	3.0
U. S. Small Business Administration	1	1.5
Oklahoma District Export Council	1	1.5
County Commissioners Office	0	0.0
Total Responses	66	100.0

In order to assist Oklahoma food processors and agricultural producers with beginning or expanding into export markets, it was important to understand the areas in which they need assistance. The data shown in Table X represents the processors and producers perceived educational needs for entry or expansion into the export market. Respondents were asked to rank eleven export topics according to their perceived needs, with one being the area in which they perceived the greatest need for training/education and eleven the lowest. The training need which attracted the most interest and ranked as the most important educational among study respondents was "Small Business Opportunities in Exporting" followed by "Overseas Contacts with Foreign Markets." "Getting Started in Exporting" and "NAFTA Export Regulations" tied for third overall, while "How to Expand Your Export Markets" and "Financing International Trade Development" were ranked fourth and fifth respectively. While most respondents focused their educational needs around assistance needed for initial involvement in

exporting, some respondents did have legitimate concerns about “Cultural Information” and “Language Training.” However, these two educational needs ranked toward the bottom with an overall ranks of eight and nine respectively.

**TABLE X**  
**A SUMMARY OF THE RESPONDENTS' RANKINGS OF PERCEIVED EDUCATIONAL NEEDS FOR ENTRY OR EXPANSION INTO THE EXPORT MARKET BY SELECTED TRAINING TOPIC**

Selected Training	Highest Rank						Lowest Rank						Mean Score	Overall Rank
	1	2	3	4	5	6	7	8	9	10	11			
Language Training													7.09	6
	N	1	1	2	3	3	0	0	0	0	18			
	%	3.0	3.0	6.1	9.1	9.1	0	0	15.2	0	0	54.5		
Cultural Information													8.79	9
	N	2	1	1	1	1	1	5	3	0	0	19		
	%	6.1	3.0	3.0	3.0	3.0	3.0	15.2	9.1	0	0	57.6		
Getting Started in Exporting													5.58	3
	N	9	4	2	1	1	1	2	3	1	0	9		
	%	27.3	12.1	6.1	3.0	3.0	3.0	6.1	9.1	3.0	0	27.3		
Small Business Opportunity													5.30	1
	N	7	6	3	2	1	1	3	1	0	0	9		
	%	21.2	18.2	9.1	6.1	3.0	3.0	9.1	3.0	0	0	27.3		
Trade Show Schedules & Information													7.79	8
	N	3	0	0	4	1	4	1	6	0	0	14		
	%	9.1	0	0	12.1	3.0	12.1	3.0	18.2	0	0	42.4		
Financing Int'l Trade													6.30	4
	N	4	2	2	4	2	6	2	1	0	0	10		
	%	12.1	6.1	6.1	12.1	6.1	18.2	6.1	3.0	0	0	30.3		

TABLE X (Continued)

Export Topic	Highest Rank										Lowest Rank	Mean Score	Overall Rank
	1	2	3	4	5	6	7	8	9	10			
Overseas Contacts												5.36	2
	N	7	4	5	3	0	1	2	2	0	0	9	
	%	21.2	12.1	15.2	9.1	0	3.0	6.1	6.1	0	0	27.3	
Expanding Your Export Market												6.76	5
	N	3	0	3	4	5	2	3	2	0	0	11	
	%	9.1	0	9.1	12.1	15.2	6.1	9.1	6.1	0	0	33.3	
NAFTA Export Regulations												5.58	3
	N	6	4	3	4	2	3	0	1	0	1	9	
	%	18.2	12.1	9.1	12.1	6.1	9.1	0	3.0	0	3.0	27.3	
Packaging & Transportation of goods												7.21	7
	N	4	1	0	3	5	2	3	1	0	0	14	
	%	12.1	3.0	0	9.1	15.2	6.1	9.1	3.0	0	0	42.4	
Other												10.30	10
	N	1	0	1	0	0	1	0	0	0	0	30	
	%	3.0	0	3.0	0	0	3.0	0	0	0	0	90.9	

Export service providers offer a variety of services to companies/firms entering or expanding international markets. Item ten on the survey was designed to determine which services were considered a priority to food processors and agricultural producers. Respondents were provided with a list of services currently available, and were asked to prioritize the list from one to six, with one being most important to their company. The data in Table XI showed the respondents ranked the "Information and Technical Assistance" service as the most important to them, while "Supply and Demand Networking" ranked second overall and "Food Safety and Environmental Analytical Services" ranked last.

TABLE XI

A SUMMARY OF RESPONDENTS' RANKINGS OF CURRENT SERVICE PRIORITIES  
BY SELECTED EXPORT SERVICES PROVIDED

Export Services Provided	Highest Rank								Lowest Rank				Total Responded		Mean Score	Mean Rank
	1		2		3		4		5		6		N	%		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
Training and Mentoring	7	21.9	4	12.5	5	15.6	4	12.5	4	12.5	6	25	32	100	3.19	3
Education and Internships	1	3.1	3	9.4	4	12.5	8	25	5	15.6	11	34.4	32	100	4.44	5
Food Safety and Environmental Analytical	1	3.1	2	6.3	4	12.5	7	21.9	6	18.8	12	37.5	32	100	4.59	6
Information and Technical Assistance	14	43.8	5	15.6	7	21.9	1	3.1	1	3.1	4	12.5	32	100	2.44	1
Supply and Demand Networking	9	28.1	8	25	5	15.6	1	3.1	5	15.6	4	12.5	32	100	2.91	2
International Extension and Trade	0	0	6	18.8	7	21.9	5	15.6	4	12.5	10	31.3	32	100	4.16	4

The data in Table XII indicated whether or not the respondents were willing to pay for the exporting services/assistance. Only two (4.9%) respondents expressed a willingness to pay for services rendered, while 34.1 percent were not willing to pay. However, 23 (56.1%) of the respondents stated it depended on the fee and service offered, and two (4.9%) were uncertain.

TABLE XII

A SUMMARY OF WHETHER OR NOT RESPONDENTS WERE WILLING TO PAY FOR INTERNATIONAL EXPORT SERVICES BY SELECTED RESPONSE

Selected Response	N=41	Percentage (%)
Yes	2	4.9
No	14	34.1
Depends on the fee and service offered	23	56.1
Uncertain	2	4.9

The last question of the survey asked respondents who were willing to pay for export services and educational programming to place a value on a list of services/educational programming for which their company/firm would be willing to pay. Respondents were given a selected list of ten service/educational programming topics to rate on a "Likert-type" scale using the following categories of value: "Extremely Valuable," "Valuable," "Some Value," "No Value." The strongest level of value indicated in this section was for, "Overseas contacts with foreign markets." Overall, a mean score of 2.92 among the food processors and agricultural producers who responded reflected the perception that "Overseas Contacts with Foreign Markets" was a "Valuable" service. Exactly 72 percent of the processors and producers either found this particular

service/educational programming to be “valuable” or “extremely valuable.” However, twelve percent of the respondents found “no value” regarding “Overseas Contacts with Foreign Markets”.

The next highest level of value indicated among the respondents was “Small Business Opportunities in Exporting.” This topic also received an “Valuable” rating as determined by the overall mean score of 2.83. Over 65 percent of respondents found the topic to be “Valuable” or “Extremely Valuable” while only 8.7 percent said it was of “No Value”.

The third, fourth and fifth rated topics, “NAFTA Export Regulations,” “Financing International Trade Development” and “Getting Started in Exporting” were all found “Valuable” with mean scores of 2.79, 2.75 and 2.74 respectively. “Language Training” was rated as “Some Value” with a mean score of 2.41. The topic having the lowest rating was “Trade Show Schedules and Information” with a mean score of 2.23.

TABLE XIII

A SUMMARY OF THE RESPONDENTS' PERCEIVED VALUE OF EDUCATIONAL PROGRAMMING FOR WHICH YOUR FIRM WAS WILLING TO PAY BY SELECTED EXPORT SERVICE PROVIDED

Selected Export Service(s)	Distribution of Respondents by Degree of Value								Total N	Total %	Mean Score	Category of Value	Standard Deviation
	Extremely Valuable		Valuable		Some Value		No Value						
	N	%	N	%	N	%	N	%					
Overseas Contacts with Foreign Markets	8	32.0	10	40.0	4	16.0	3	12.0	25	100.0	2.92	Valuable	8.45
Small Business Opportunities in Exporting	6	26.1	9	39.1	6	26.1	2	8.7	23	100.0	2.83	Valuable	7.43
NAFTA Export Regulations	7	29.2	9	37.5	4	16.7	4	16.7	24	100.0	2.79	Valuable	7.66
Financing International Trade Development	7	29.2	8	33.3	5	20.8	4	16.7	24	100.0	2.75	Valuable	7.34
Getting Started in Exporting	8	34.8	5	21.7	6	26.1	4	17.4	23	100.0	2.74	Valuable	7.33
How to Expand Your Export Market	6	26.1	7	30.4	6	26.1	4	17.4	23	100.0	2.65	Valuable	6.64
Packaging and Transportation of Products	6	27.3	6	27.3	6	27.3	4	18.2	22	100.0	2.64	Valuable	6.42
Cultural Information	2	9.1	10	45.5	8	36.4	2	9.1	22	100.0	2.55	Valuable	7.01
Language Training	2	9.1	9	40.9	7	31.8	4	18.2	22	100.0	2.41	Some Value	6.31
Trade Show Schedules and Information	2	9.1	5	22.7	11	50.0	4	18.2	22	100.0	2.23	Some Value	5.56

## CHAPTER V

### Summary, Conclusions, and Recommendations

#### Summary

##### Introduction

The purpose of this chapter was to present a summary of the study which included the rationale, purpose, objectives, design and conduct of the study and the major findings. Also presented were conclusions and recommendations, which were based upon analysis and summarization of data collected and upon observations and impressions resulting from the design and conduct of the study.

##### Purpose of the Study

The purpose of this study was to assess the status of the food and agricultural industry in a competitive global economy, as perceived by Oklahoma food and agriculture product processors.

##### Rationale for the Study

Oklahoma is not the only state that Interstate 35 runs through. Five other state's house parts of the interstate that runs from Mexico to Canada, making it the prime route traveled by exporting industries. A proposed NAFTA trade corridor on I-35 could



increase the competitive edge of whichever state it was located in. In order to entice legislators to consider Oklahoma for the proposed corridor we must first determine Oklahoma's competitiveness as an exporting state and determine the perceived effect that a corridor would have on food and agricultural industries in Oklahoma.

### Objectives

In order to accomplish the purpose of this study, the investigation was directed toward achieving specific research objectives with regard to the study population:

- 1) To determine current exporting status of selected food processors and agricultural producers in Oklahoma;
- 2) To determine the destination of exports from Oklahoma's food and agricultural industry;
- 3) To determine the role export's had on company sales of Oklahoma food and agriculture exporters;
- 4) To define the reasons why Oklahoma food and agriculture industries are not exporting;
- 5) To describe the perceived effects of a NAFTA corridor on Interstate 35 influencing food processors and agriculture producers decision in exporting;
- 6) To determine the sources of export information and assistance being utilized by Oklahoma food and agriculture industries;
- 7) To determine the export educational needs as perceived by Oklahoma food and agriculture product exporters;

- 8) To determine the importance of available export services as perceived by Oklahoma food and agriculture product exporters; and
- 9) To determine the value of selected export programs and services as perceived by Oklahoma food and agriculture industries.

#### Design and Conduct of the Study

Various methods of data collection were considered and the mail questionnaire was determined to be the most appropriate to satisfy the objectives of the study. The large geographic area made personal interviews and phone surveys unfeasible and too time consuming to incorporate in this study.

A twelve item questionnaire was developed and mailed to 546 Oklahoma food processors and agricultural producers. The population was selected from the Oklahoma Department of Agriculture's (ODA) 1995 Oklahoma Food and Agricultural Industry Directory, ODA's 1997 Oklahoma Agricultural Products Export Directory and the company list provided by the Oklahoma Department of Agriculture and Oklahoma food and agricultural companies listed in the yellow pages on the Internet.

The first question on the survey instrument was developed to obtain demographic information about the 546 processors and producers. The forced response question utilized a combination of a nominal and interval scale. Items two, three and four of the questionnaire pertained to exporters only and included three questions, which were designed to determine the destination of exports and the percentage of exports went to U.S. NAFTA partners. These questions were all forced response, with one question utilizing a nominal scale, while two used an interval scale. In addition, the third part

pertained only to exporters. Item five in this section contained one forced response interval scale question which was designed to determine the percentage of company sales derived from exports. Item six included a single forced response question which asked the non-exporting respondents to rank order the selected reasons from one to six regarding why they chose not to become involved in the export market.

The remaining portion of the questionnaire was developed to gather information from both exporters and non-exporters. Item seven, a single forced response question was used to determine the perceived effects of a NAFTA corridor on Interstate-35 influencing the respondents' decision to export. To determine the sources of export information and assistance being used by processors and producers; item eight asked the respondents to indicate all the selected sources of information and assistance listed. An ordinal scale was utilized for item nine which required the respondents to rank their answers according to perceived educational for entry into or expansion of export markets. Food processors and agricultural producers were asked to rank order the selected items one to eleven. Item ten asked the respondents to rank order, one to six, a list of export services concerning their perceived importance to the respective firm or company. This question was developed to determine which existing export services were considered important to companies entering or already in the international market. The final portion of the instrument included two questions, one of which was utilized to determine whether not firms were willing to pay for export educational services, while item twelve addressed the perceived value of selected export programs and services. The four categories of value involved in the use of the four-point "Likert-type" scale were: 4) "Extremely Valuable", 3) "Valuable", 2) "Some Value", and 1) "No Value".

The survey instrument was mailed to members of the population which included 546 food processors and agricultural producers in the state of Oklahoma, during November 1997. No follow-up was conducted because a portion of the study was time sensitive information used in The Fund For Rural America proposal referred as an initiative for International Trade Extension to Rural Communities of the Mid-Continent (INTERCOM). A total of 52 surveys (9.5 %) were returned completed.

All questionnaires were returned to the researcher. Following the determination by the author's graduate committee that the maximum number of responses had been received, the data were then delivered to the department of Agricultural Economics' Computer Center at Oklahoma State University for analysis.

Since the respondents were a self-selected sample of the study population of 546 food processors and agricultural producers in Oklahoma and all had the opportunity to participate in the study; descriptive statistics were used to analyze the data. Frequency distributions, percentages, mean scores, standard deviations, and overall ranks were the statistics used to describe the data.

### Major Findings of the Study

Demographic Information The respondents to the study included current exporters, soon to be exporters and non-exporters. According to Figure 1, the majority of the 52 respondents (67.3 percent) were not involved in international trade. However, almost six percent of the over 67 percent were currently working to develop an export market for their product(s). A distribution of exporters by the number of years in the export market was shown in Figure 2. More than half (17.3 percent) of the current exporters have been in the export market for more than ten years, while half as many (7.7

percent) of the remaining exporters have been involved in an international market for six to ten years.

Destination of Exports The data reflected in Figure 3 was derived only from those respondents currently involved in exporting and/or soon to be involved in exporting. The figure shows 80 percent of respondents were exporting their products to one or both of our NAFTA partners, Mexico and Canada. However, ten percent of respondents do not export to either Mexico or Canada, and ten percent are uncertain as to where their exports were going.

Figures 4, 5, 6, and 7 reported additional in-depth information regarding destinations of exports by the number of years firms had been in the export market. Figure 4 data represents the processors and producers that indicated "Less an 1 year" in an international market. Half of the respondents in this category were exporting food and agricultural products to Mexico and Canada while the other half are not exporting to either country. Respondents that have been in the export market for one to five years were represented in Figure 5. Fifty percent of the one to five year exporters trade with Canada and the other fifty- percent were trading with both Mexico and Canada. The data in Figure 6 should look identical to the data shown in Figure 5 since half of the six to ten year exporters were shipping food and agricultural products to Canada and the additional half were trading with both Mexico and Canada. Figure 7 had some surprising data. A little over 11 percent of the food processor and agriculture producer respondents who had been exporting for more than ten years do not know where their products were going. In addition, slightly over 11 percent were not exporting to either Mexico or Canada.

However, over 44 percent of the “More than 10 years” respondent group was exporting to Mexico, while more than 33 percent were exporting to both Mexico and Canada.

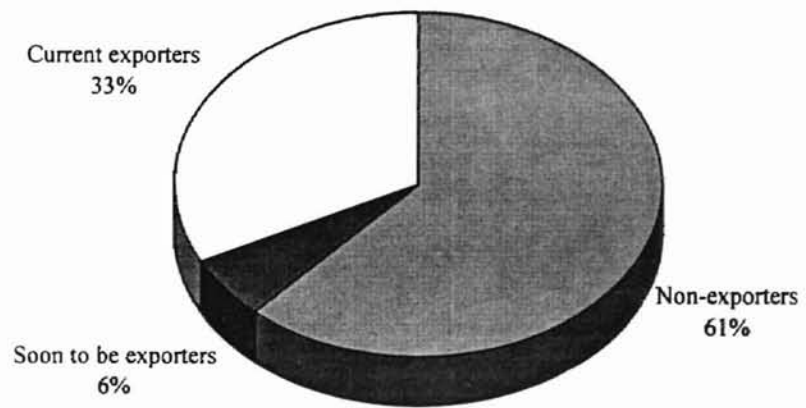


Figure 1. A Summary of Respondents by Export Status

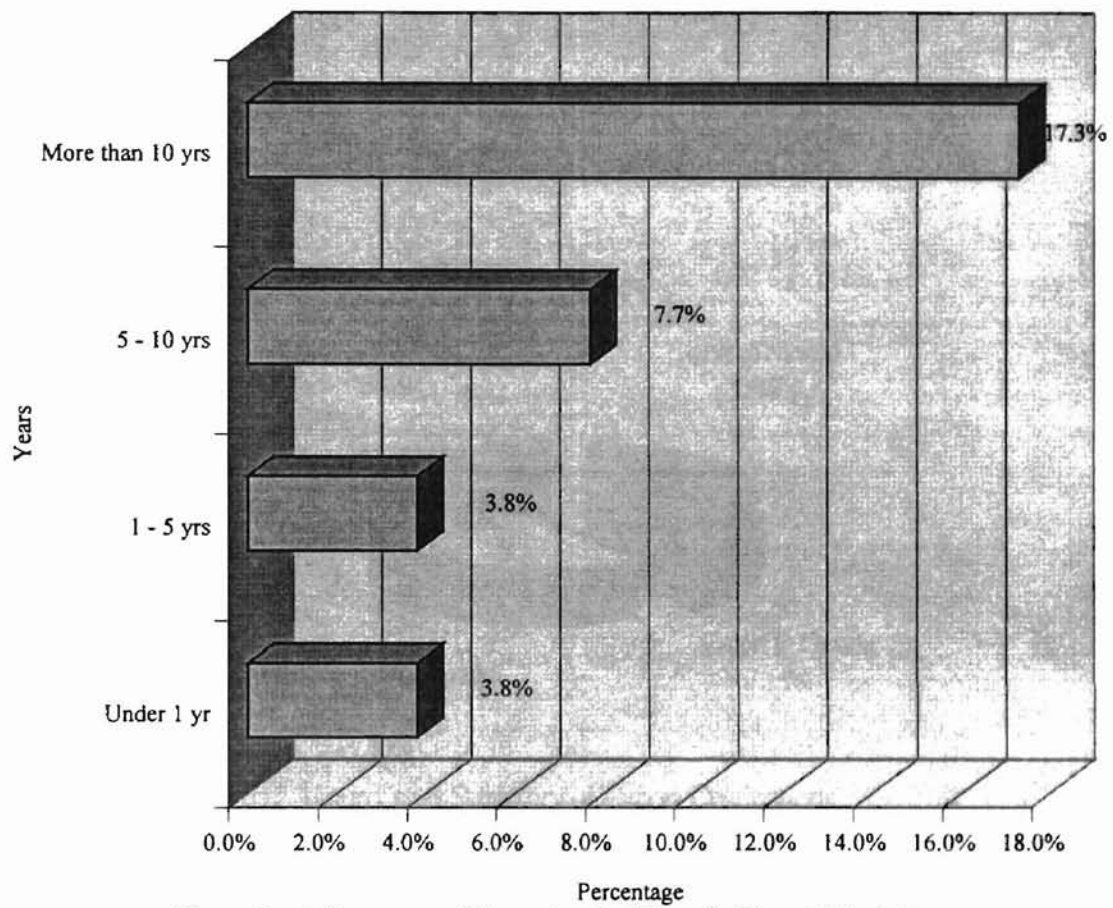


Figure 2. A Summary of Exporters by Years in Export Market



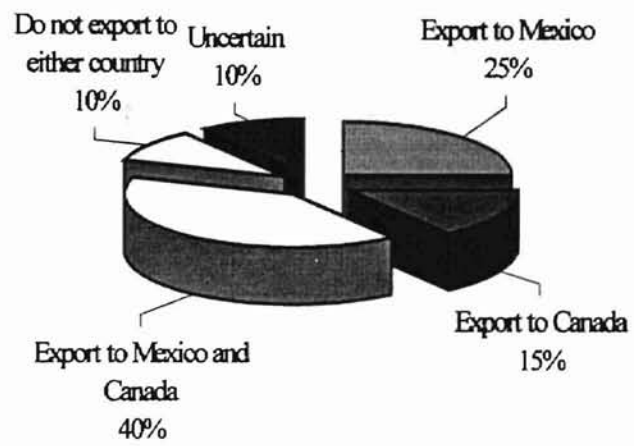


Figure 3. A Summary of Export Destinations

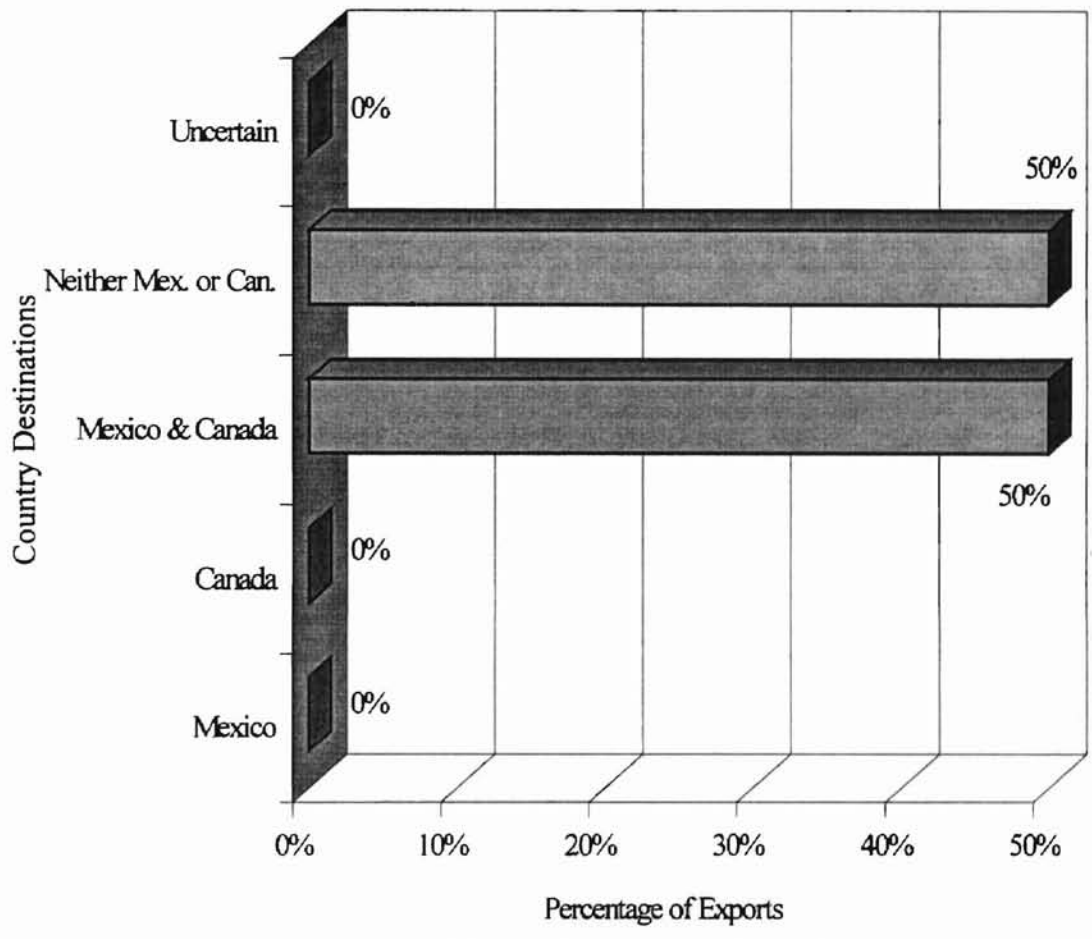


Figure 4. Less Than 1 Year Exporter's Destinations

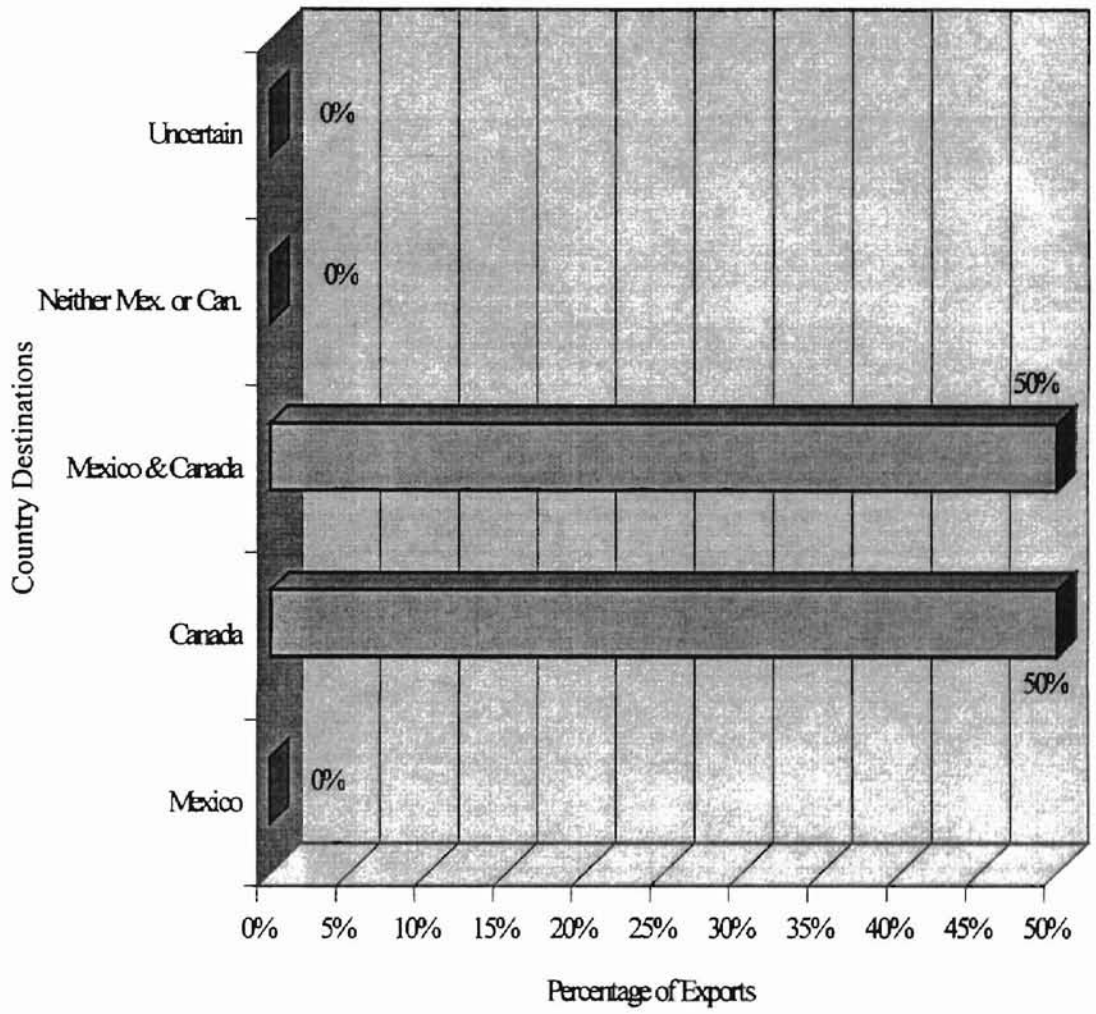


Figure 5. 1 - 5 Year Exporter's Destinations

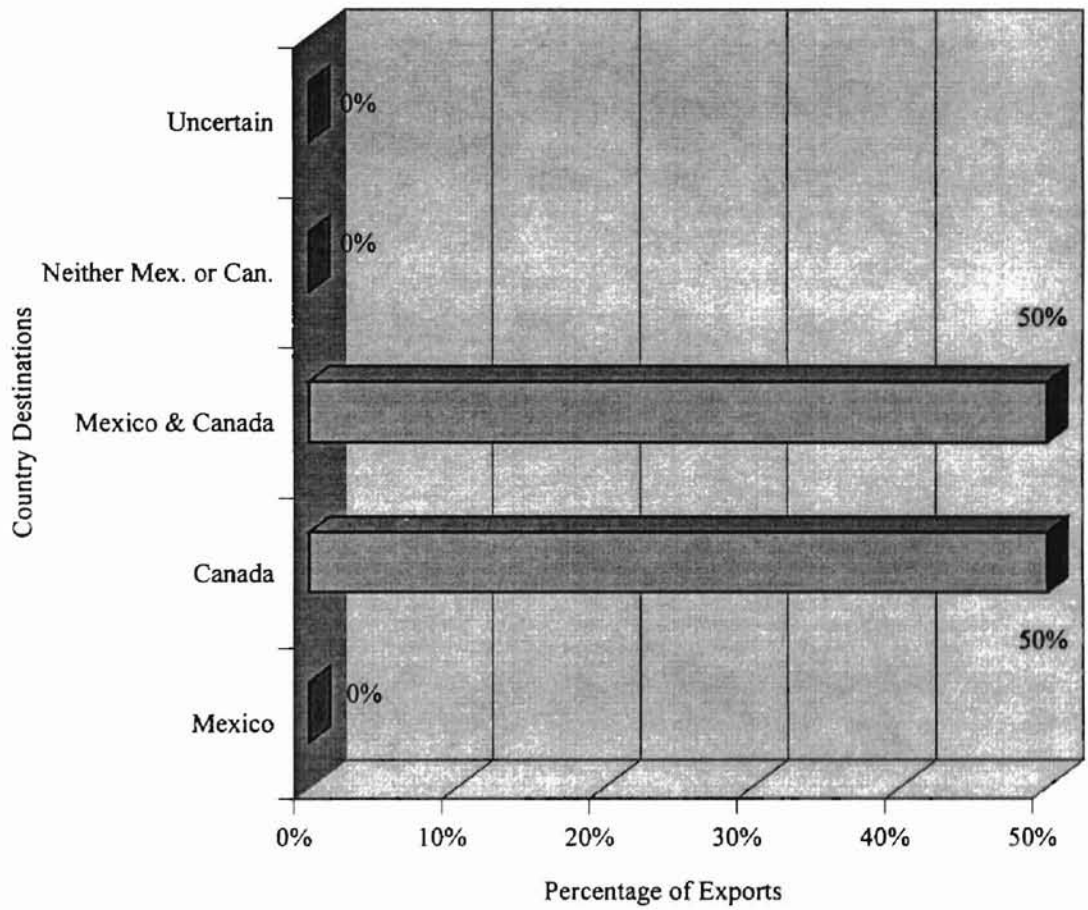


Figure 6. 6-10 Year Exporter's Destinations

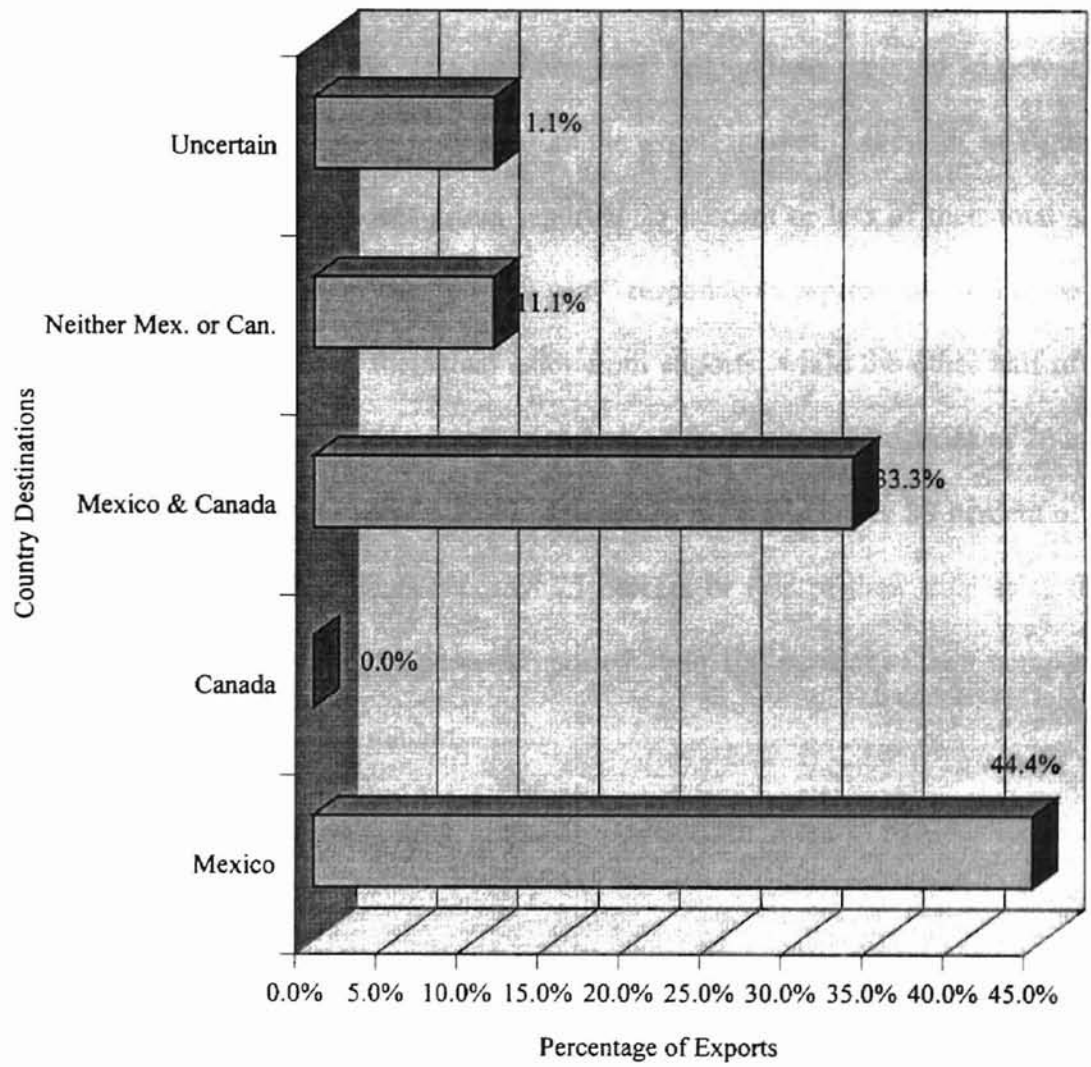


Figure 7. More Than 10 Year Exporter's Destinations

Exports Influence on Company Sales Exporting respondents were asked how much of their company's total sales came from the export market. Figures 8, 9, 10 and 11 showed a summary of those results reported by the number of years in the export market. Figure 8 data represents the respondents involved in an export market for less than one year. According to Figure 8, all of the "less than one year" respondents reported 25 percent or less of their total sales were being derived from the export market. Likewise, in Figure 9, all of the "1 – 5 year" respondent group reported 25 percent or less of their total sales coming from exports. Half of the "6 – 10 year" respondents represented in Figure 10, reported 25 percent or less of their total sales from exports, while the other half of the respondents were equally divided in total sales derived from export categories of 26 to 50 percent and 51 to 75 percent respectively. As seen in Figure 11, over 88 percent of the "more than 10 years" respondents reported 25 percent or less of their total sales from exporting, while the remaining 11 percent reported 76 to 100 percent of their company's total sales coming from export markets.

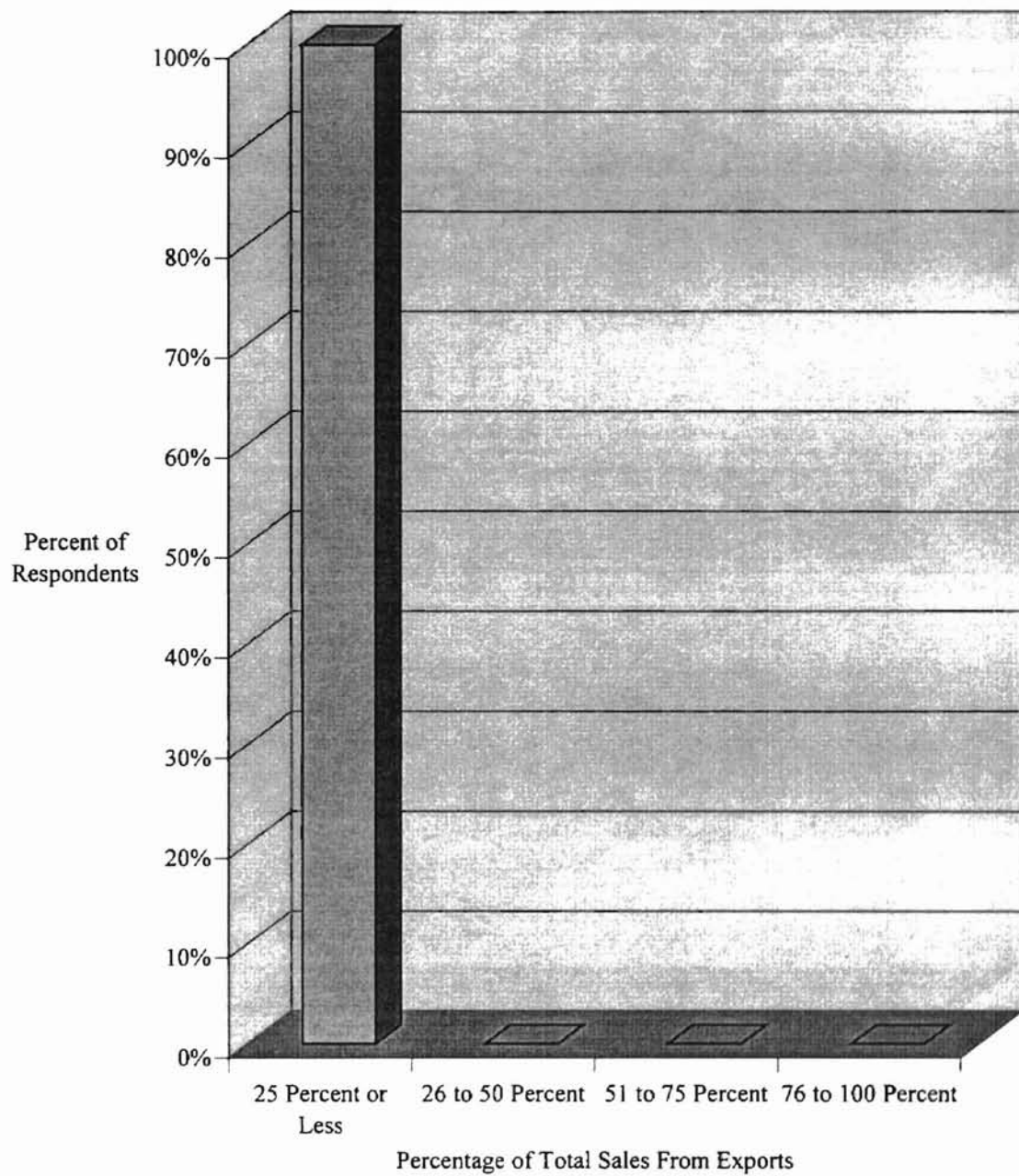


Figure 8. Summary of "Under 1 Year" Exporting Companies Total Sales From Exports

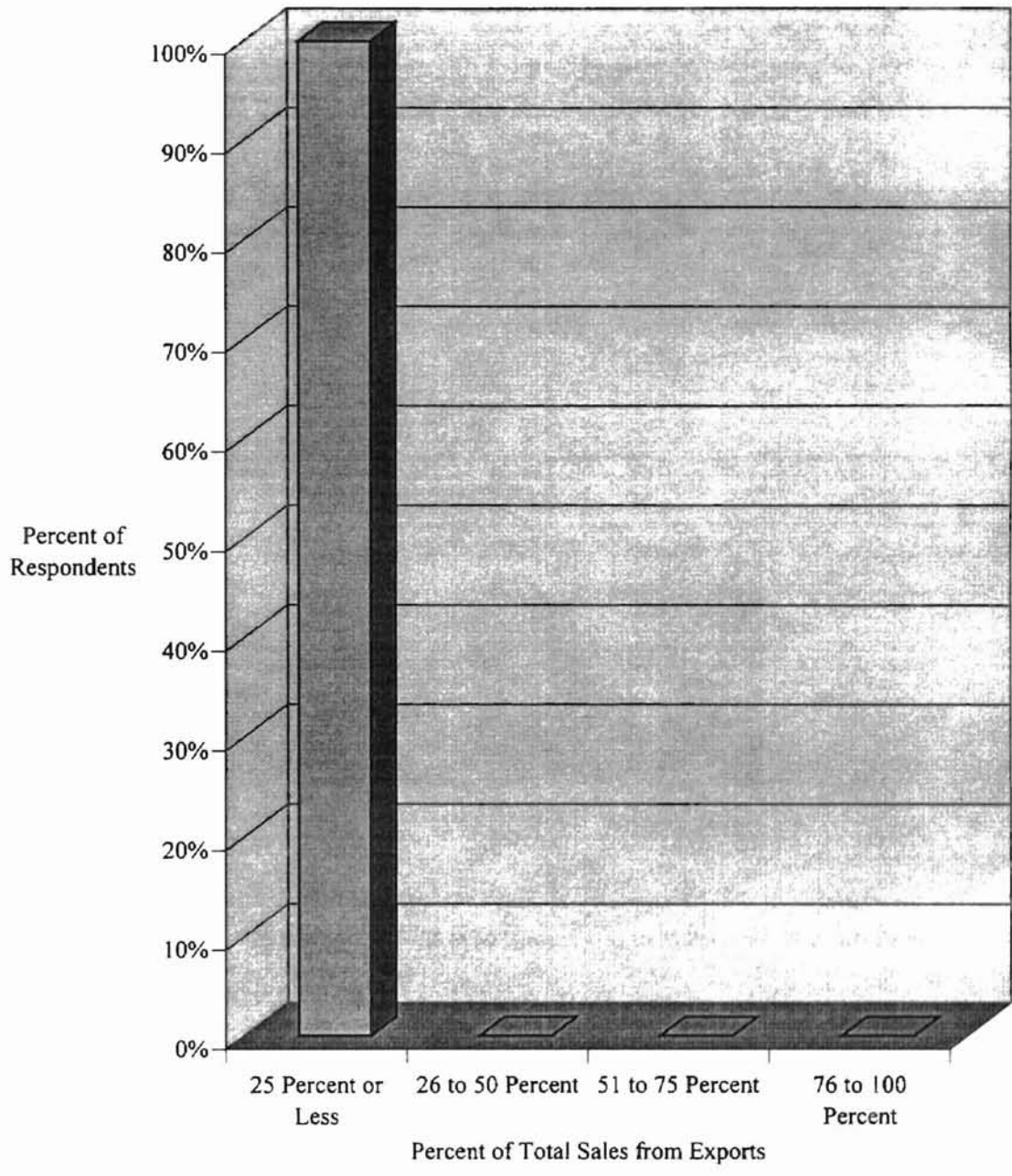


Figure 9. A Summary of "1 - 5 Years" Exporting Companies Total Sales from Exports



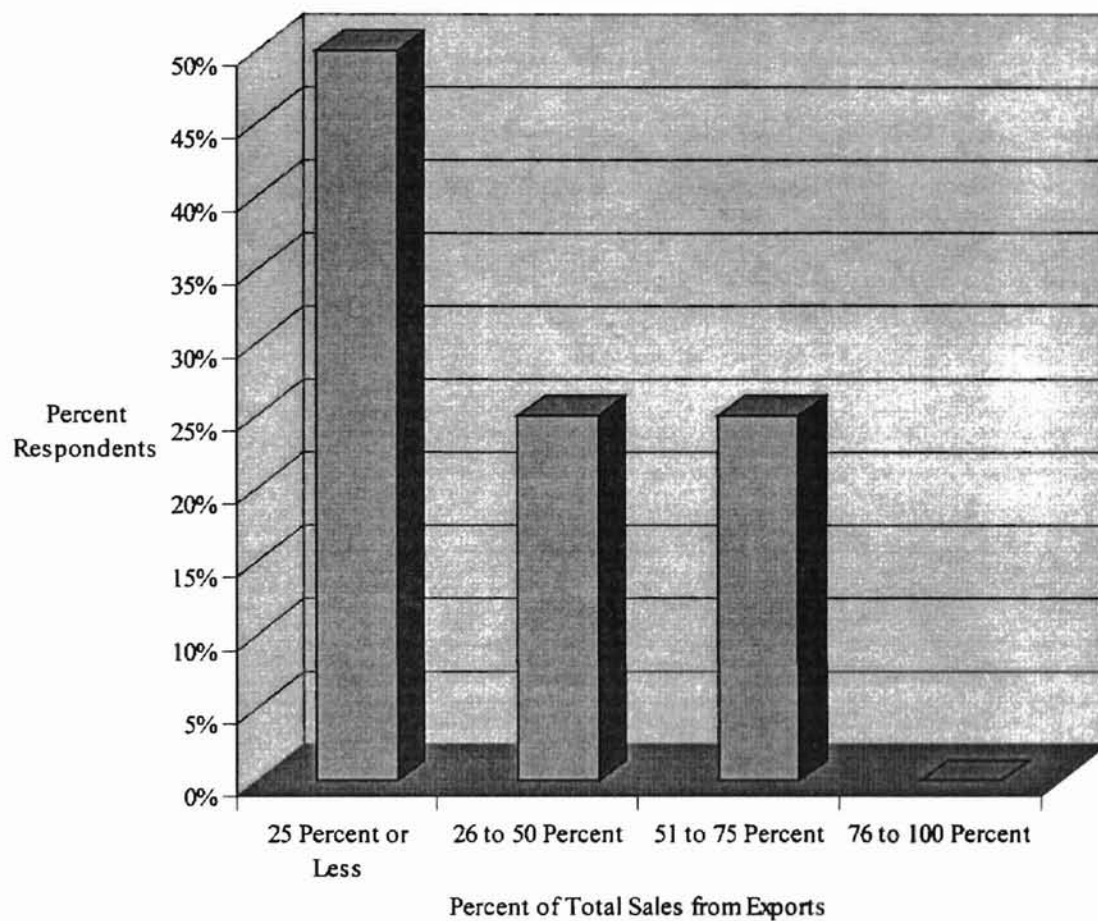


Figure 10. A Summary of "6 - 10 Years" Exporting Companies Total Sales from Exports

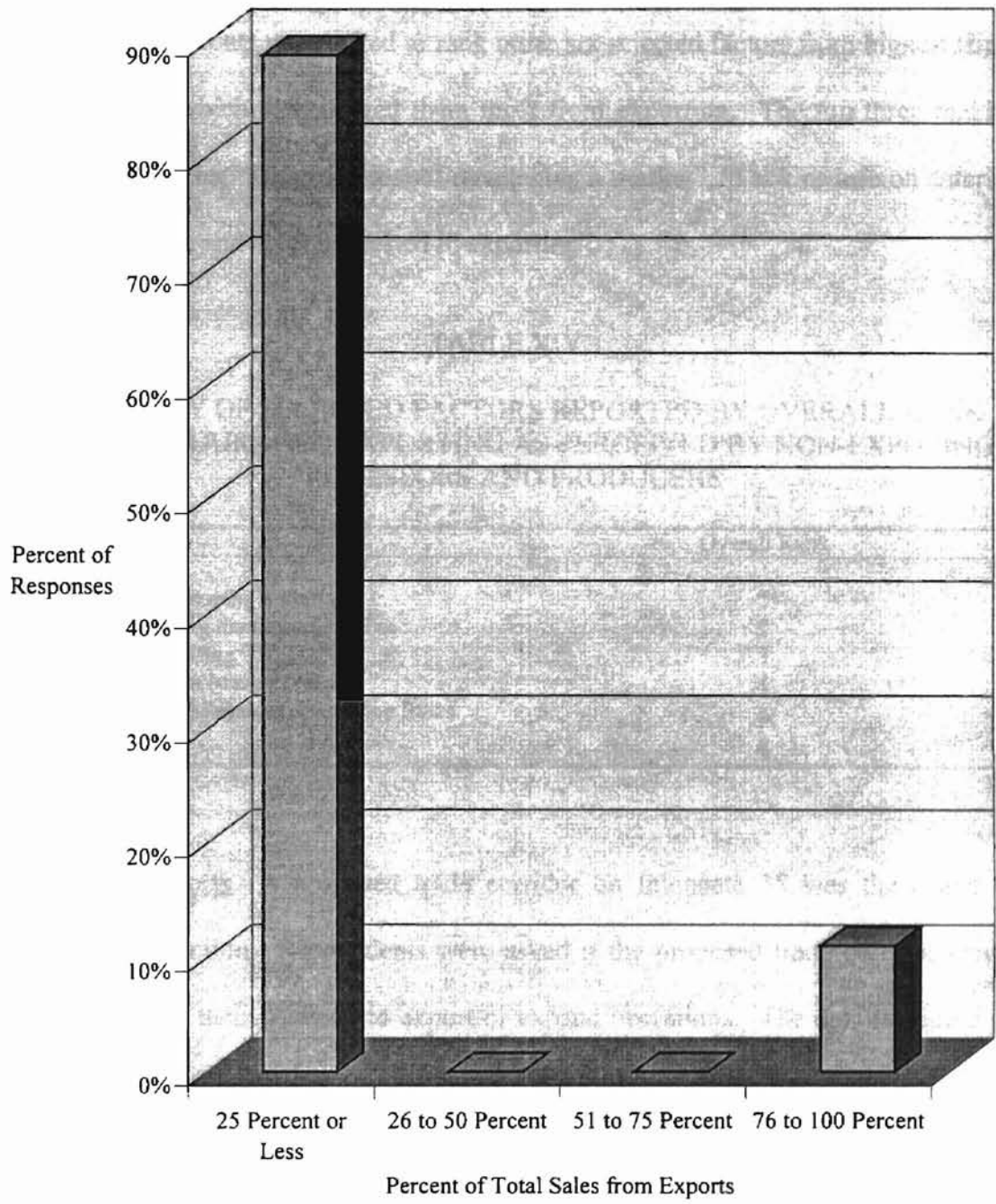


Figure 11. A Summary of "More than 10 Years" Exporting Companies Total Sales from Exports

Non-Exporting Factors The summary shown in Table XIV reports the factors which discourage exporting as perceived by non-exporting food processors and agricultural producers. Respondents were asked to rank order six selected factors from highest (first) to lowest (sixth) which discouraged them most from exporting. The top three ranking factors reported were; “Financial cost of developing a market”, “Lack of info on entering the export market”, and “Not interested in exporting”.

TABLE XIV

A SUMMARY OF SELECTED FACTORS REPORTED BY OVERALL RANK WHICH DISCOURAGED EXPORTING AS PERCEIVED BY NON-EXPORTING PROCESSORS AND PRODUCERS

Selected Factor	Overall Rank
Financial Cost of Developing a Market	1
Lack of Info on Entering the Export Market	2
Not Interested in Exporting	3
Lack of Info on Foreign Market Needs	4
Concerns on Receiving Payment, Exchange Rates	5
Other	6

Influence On Exports A proposed trade corridor on Interstate 35 was the center of concern for this section. Respondents were asked if the proposed trade corridor would have any effect on their decision to export or expand operations. The data in Figure 12 showed that over 28 percent of respondents said that the trade corridor would have some influence on their current exporting status. Over 32 percent of the respondents reported if the corridor were currently present it would have no influence on their exporting decisions, while 39 percent were uncertain of any influence.

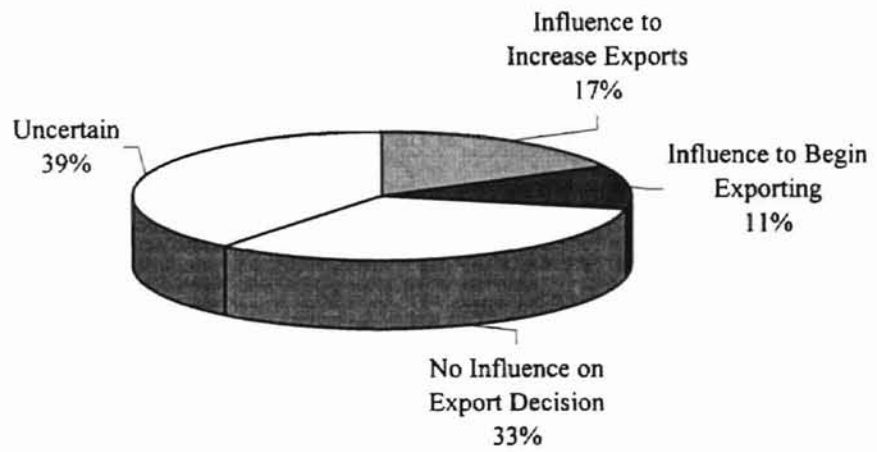


Figure 12. A Summary of Perceived Effects of a Trade Corridor on Export Decisions

Export Services The data shown in Figure 13 represented a list of sources that producers and processors are turning to for export information and assistance. The data was reported by the percentage of respondents that said they used each source. The source that most processors and producers turned to for information was the Oklahoma Department of Agriculture. In addition, the Oklahoma Department of Commerce, U. S. Department of Commerce and the U. S. Department of Agriculture's Foreign Ag Service were also identified as highly used sources of information and assistance.

In order to assist Oklahoma food processors and agricultural producers with plans for entry or expansion into the export market, it was important to understand their needs for educational programming. The data shown in Table XV represented the processors and producers perceived overall ranked educational programming needs for entry or expansion into the export market. Respondents were asked to rank eleven export topics according to their perceived needs. The three topics receiving the highest overall rankings were (1) "Small Business Opportunity," (2) "Overseas Contacts," and (3) "Getting Started in Exporting."

TABLE XV

A SUMMARY OF THE RESPONDENTS PERCEIVED EXPORT EDUCATIONAL NEEDS RANKED BY EXPORT TOPIC

Export Topic	Overall Rank
Small Business Opportunity	1
Overseas Contacts	2
Getting Started in Exporting	3
NAFTA Export Regulations	3
Expanding Your Export Market	4
Financing International Trade & Development	5
Packaging & Transportation of Goods	6
Trade Show Schedules & Information	7
Cultural Information	8
Language Training	9
Other	10

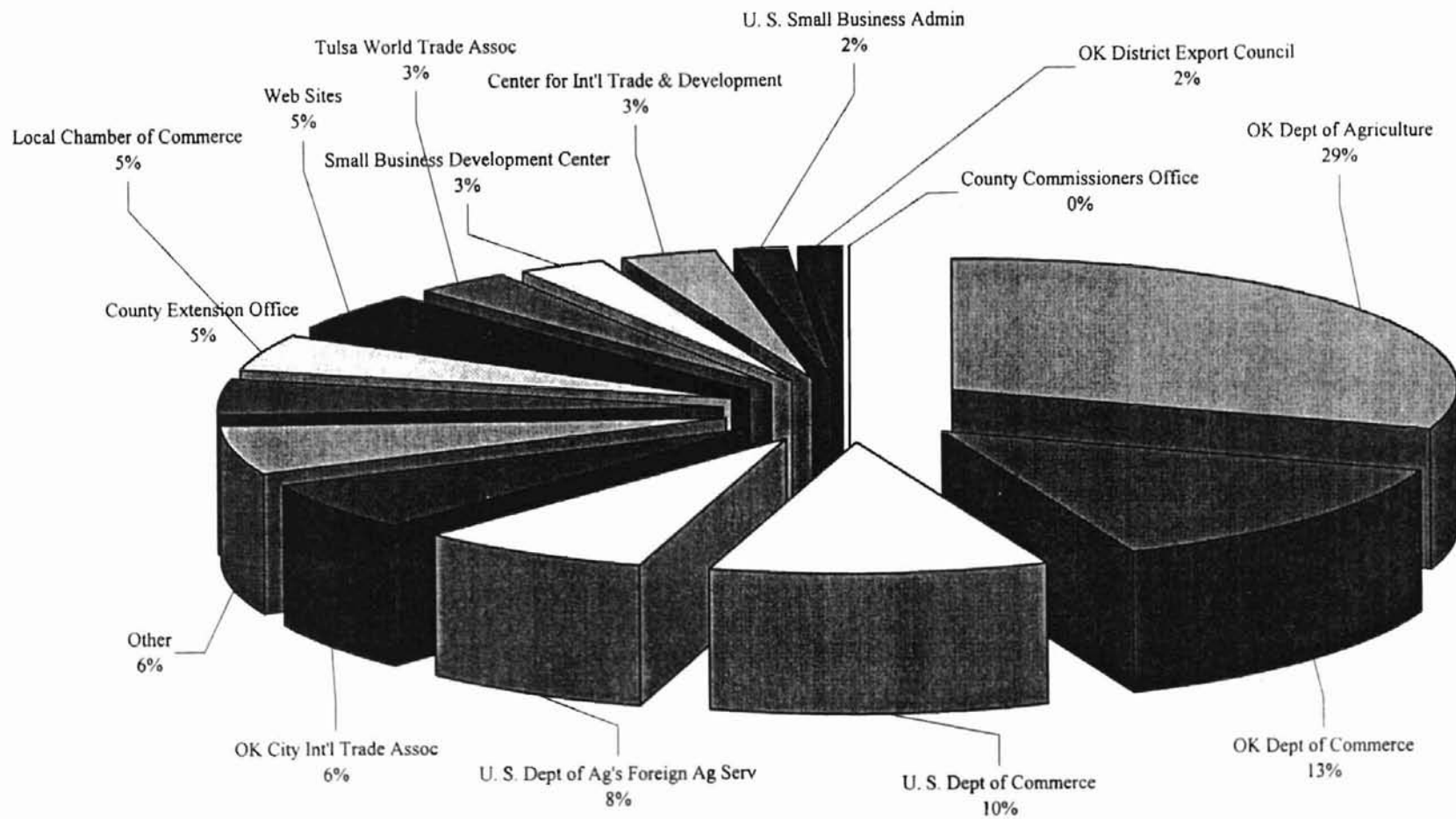


Figure 13. A Summary of Sources Used for Export Information and Assistance

The data shown in Figure 14 represented the respondents' willingness to pay for the international export services. Five percent of respondents were willing to pay for export services while 34 percent were not. In addition, 56 percent of respondents said it depended on the fee and service offered and the remaining five- percent were uncertain of their willingness to pay. The data in Table XVI reported each export service and perceived overall degree of value determined by the mean scores. The degrees of value were 4 = Extremely Valuable, 3 = Valuable, 2 = Some Value, and 1 = No Value.

TABLE XVI

A SUMMARY OF THE RESPONDENTS' PERCEIVED VALUE RELATIVE TO MEAN SCORES BY SELECTED TOPICS ASSOCIATED WITH EXPORT SERVICES

Export Services	Perceived Value	Mean Score
Overseas Contacts with Foreign Markets	Valuable	2.92
Small Business Opportunities in Exporting	Valuable	2.83
NAFTA Export Regulations	Valuable	2.79
Financing International Trade and Development	Valuable	2.75
Getting Started in Exporting	Valuable	2.74
How to Expand Your Export Market	Valuable	2.65
Packaging and Transportation of Products	Valuable	2.64
Cultural Information	Valuable	2.55
Language Training	Some Value	2.41
Trade Show Schedules and Information	Some Value	2.23

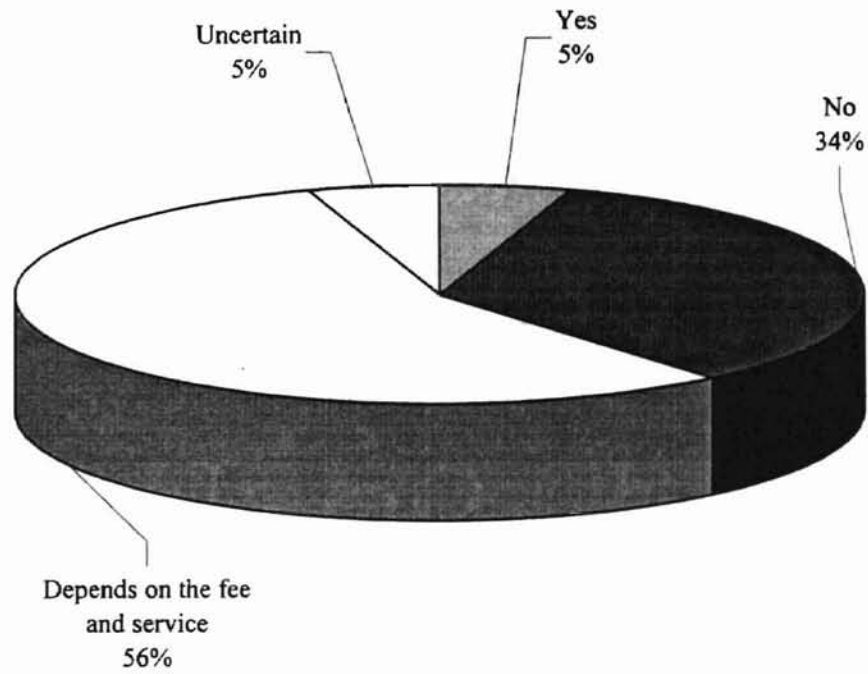


Figure 14. A Summary of Willingness to Pay for International Export Services



## Conclusions

Examination and analysis of the major findings provided the opportunity for the author to draw the following conclusions:

(1) Typically, the Oklahoma food processors and agricultural producers in this study did not export their products. However, food processors and agriculture producers who export have been doing so for an extended amount of time.

(2) It was apparent that the respondents who claimed to be exporting or currently developing an export market were exporting products to either Mexico, Canada or both countries.

(3) Export sales typically made up less than one-fourth of the total sales for Oklahoma food processors and agriculture producers in this study who were involved in exporting.

(4) Apparently, non-exporter respondents choose to stay out of the export market primarily due to the financial cost of developing a market and lack of information on entering the export market.

(5) Few Oklahoma food processors and agricultural producers in this study indicated a willingness to increase or begin exporting their products if a trade corridor on Interstate 35 was opened. Furthermore, it was apparent that the typical processor and producer in this study was uncertain or did not see the proposed trade corridor as an influence on their decision to export.

(6) It was obvious that the Oklahoma Department of Agriculture (ODA), Oklahoma Department of Commerce (ODOC), U. S. Department of Commerce

(USDOC), and the U. S. Department of Agriculture's Foreign Agriculture Service (FAS) were popular sources of assistance and information among the respondents in this study.

(7) It seemed apparent that small business opportunity, overseas contacts with foreign markets, getting started in exporting, expanding your export market, and financing international trade and development were the most critical educational needs among the Oklahoma food processors and agricultural producers involved in this study.

(8) Furthermore, it was rather apparent that information and technical assistance, supply and demand networking, and training and mentoring were important export service areas for food processors and agricultural producers in this study to receive training and/or counseling.

(9) Depending on the fee and service offered, it might be possible to get the responding processors and producers to pay for export services.

(10) Based on the findings of this study, it was apparent that the respondents had little doubt about the value of the selected export services made available by service providers in this study.

(11) It was apparent, based on the findings that many food processors and agriculture producers in this study were unaware of "how" and "why" to be involved in export marketing.

#### Recommendations

The following recommendations were made as a result of the major findings and conclusions of this study:

(1) It is recommended that state and federal export service providers continue to offer export information and assistance. Furthermore, it would be beneficial for the

service providers to consider the results of this study and similiar studies like this one when developing export programs and information workshops.

(2) State and federal export service providers should work closer with the Oklahoma Cooperative Extension Service (OCES) to educate companies concerning the benefits of exporting.

(3) Based on the major findings concerning destination of exports and perceived influence of a trade corridor; processors and producers were exporting their products to Mexico and/or Canada but did not understand the opportunities a trade corridor could provide for their company; therefore, it was recommended that NAFTA regulations and the importance of trade corridor development be a primary area of emphasis for future educational efforts.

(4) Considering the study's findings regarding the influence of export sales on total company revenues, it is imperative that educational workshops focus on "expanding your presence in an export market" and "expanding your company's profit from exports."

(5) As a result of the findings, it was readily apparent that the processor and producer participants in this study had little awareness of the export programs available to them; therefore, it was recommended that export service providers re-evaluate the advertising and marketing strategies for their respective audiences

#### Recommendations for Further Research

It was the author's opinion that further study concerning Oklahoma's competitiveness in a global economy should be addressed.

(1) It would be beneficial to conduct a study of the marketing and advertising strategies/techniques of export service providers in Oklahoma.

(2) Additional study should be directed toward identifying the most effective methods of delivering educational programming and assistance to processors and producers in respect to export marketing issues.

(3) Service providers should direct further study toward veteran food processors and agricultural producers to determine their perceived benefits and advantages of export marketing. In addition to determine their initial export fears/concerns versus their actual export problems.

(4) A comparison of Oklahoma's INTERCOM major findings/results should be made with that of Texas and Kansas. If the cultural export influence flows up-ward, the comparison of results and findings should help to influence Oklahoma's future steps in becoming more globally competitive.

#### Implications of the Study

To fully understand the implications of this study, it is important to take a look at the fast pace of international growth occurring and how it will affect Oklahoma in the upcoming years. The growing popularity and influence of Mexican culture into the United States can be prominently detected south of the Oklahoma/Texas border. Texas corporations and industries have enhanced economically by preparing and accepting the Mexican influence that is continually migrating throughout the state. Today; Dallas, Fort Worth and San Antonio airports make announcements in English and in Spanish. In addition, many radio stations and television stations broadcast only in Spanish. The wave

of cultural influence in Texas has effected the economy, food preferences and exports for the state. While Oklahoma's annual exports were in the million dollars, Texas was in the three digits billion dollars for exports. Geographically, Oklahoma is next in line to receive the cultural wave that has influenced and boosted the Texas economy. How Oklahoma chooses to receive the cultural influence that is rapidly moving up-ward from Mexico, will play a large role on whether or not the state's economy grows from the experience. This study clearly shows that Oklahoma export service providers have a significant role to play in the preparation and development of a stronger Oklahoma economy. Oklahoma food processors and agricultural producers have clearly stated their perceived educational needs regarding export information and programming and the reasons why they chose to not be involved in exporting. Many of the needs and concerns listed by the firms are actually minimal issues when considering the overall picture of exporting. Producers and processors are primarily concerned about issues that are easily overcome in the export industry. Service providers should focus on the "scared" issues at hand to ease the producers and processors minds and then address the more advanced issues that may pose a problem.

## A Selected Bibliography

- Alford, T. (1998, April). 'River of Trade' rising slowly, Rural investors along I-35 eager for the flood. *Oklahoma Living; The Town and Country Advocate*, 48 (6), 16-17.
- Baker, D. (1996, June 24). Tulsa, Oklahoma is Full of Surprises; Global Vision, Strong Roots Help To Make World-Class Connections. *Nation's Cities Weekly*, 19 (25), 9,14.
- Bloyd, B. (1998). Average Prices Received By Farmers, Oklahoma and United States, November 1998, With Comparisons. *Oklahoma Farm Statistics*, 18 (17), 2.
- Bureau of Economic Analysis. (no date). *Gross State Product Projections for New Mexico* [Online]. USDA, Washington, DC: Author. Retrieved January 8, 1999 from the World Wide Web: <http://www.bea.doc.gov/gsp/project/nm.prn>
- Bureau of Economic Analysis. (no date). *Gross State Product Projections for Oklahoma*. [Online]. USDA, Washington, DC: Author. Retrieved January 8, 1999 from the World Wide Web: <http://www.bea.doc.gov/gsp/project/ok.prn>
- Bureau of Economic Analysis. (no date). *Gross State Product Projections for Arkansas*. [Online]. USDA, Washington, DC: Author. Retrieved January 8, 1999 from the World Wide Web: <http://www.bea.doc.gov/gsp/project/ar.prn>
- Bureau of Economic Analysis. (no date). *Gross State Product Projections for Kansas*. [Online]. USDA, Washington, DC: Author. Retrieved January 8, 1999 from the World Wide Web: <http://www.bea.doc.gov/gsp/project/ks.prn>
- Bureau of Economic Analysis. (no date). *Gross State Product Projections for Colorado*. [Online]. USDA, Washington, DC: Author. Retrieved January 8, 1999 from the World Wide Web: <http://www.bea.doc.gov/gsp/project/co.prn>
- Bureau of Economic Analysis. (no date). *Gross State Product Projections for Missouri*. [Online]. USDA, Washington, DC: Author. Retrieved January 8, 1999 from the World Wide Web: <http://www.bea.doc.gov/gsp/project/mo.prn>
- Bureau of Economic Analysis. (no date). *Gross State Product Projections for Texas* [Online]. USDA, Washington, DC: Author. Retrieved January 8, 1999 from the World Wide Web: <http://www.bea.doc.gov/gsp/project/tx.prn>

- Bureau of Economic Analysis. (no date). *Gross State Product Projections for Louisiana* [Online]. USDA, Washington, DC: Author. Retrieved January 8, 1999 from the World Wide Web: <http://www.bea.doc.gov/gsp/project/la.prn>
- Byford, L. & Henneberry, D. (1996). Export Decisions of Food Processing Firms in Kansas, Missouri, and Oklahoma. *Agribusiness*, 12 (3), 247-264.
- Davis, L. (1992, July 13). U.S. Jobs Supported By Merchandise Exports to Mexico. *Business America*, 7-9.
- Denton, J. (1997, November 9). NAFTA Helps State Export, Commerce Official Says Trade Has Grown. *The Sunday Oklahoman*, 2.
- Economic Research Service. (1998, December 14). *Oklahoma Fact Sheet* [Online]. USDA, Washington, DC: Author. Retrieved January 5, 1999 from the World Wide Web: <http://www.econ.ag.gov/facts>
- Economic Research Service. (1998, December 14). *Texas Fact Sheet* [Online]. USDA, Washington, DC: Author. Retrieved January 5, 1999 from the World Wide Web: <http://www.econ.ag.gov/facts>
- Economic Research Service. (1998, December 14). *Arkansas Fact Sheet* [Online]. USDA, Washington, DC: Author. Retrieved January 5, 1999 from the World Wide Web: <http://www.econ.ag.gov/facts>
- Economic Research Service. (1998, December 14). *Kansas Fact Sheet* [Online]. USDA, Washington, DC: Author. Retrieved January 5, 1999 from the World Wide Web: <http://www.econ.ag.gov/facts>
- Economic Research Service. (1998, December 14). *Missouri Fact Sheet* [Online]. USDA, Washington, DC: Author. Retrieved January 5, 1999 from the World Wide Web: <http://www.econ.ag.gov/facts>
- Economic Research Service. (1998, December 14). *Louisiana Fact Sheet* [Online]. USDA, Washington, DC: Author. Retrieved January 5, 1999 from the World Wide Web: <http://www.econ.ag.gov/facts>
- Economic Research Service. (1998, December 14). *New Mexico Fact Sheet* [Online]. USDA, Washington, DC: Author. Retrieved January 5, 1999 from the World Wide Web: <http://www.econ.ag.gov/facts>
- Economic Research Service. (1998, December 14). *Colorado Fact Sheet* [Online]. USDA, Washington, DC: Author. Retrieved January 5, 1999 from the World Wide Web: <http://www.econ.ag.gov/facts>

- Gorin, Dan. (1993, May 3). *Percent of Oklahoma Firms Exporting, by SIC Code & Employment Range* [Online]. Oklahoma Department of Commerce. Retrieved January 6, 1999 from the World Wide Web: <http://www.odoc.state.ok.us>
- Gorin, Dan. (1993, May 3). *Percent of Oklahoma Firms Interested in New Product Development, by SIC Code & Employment Range* [Online]. Oklahoma Department of Commerce. Retrieved January 6, 1999 from the World Wide Web: <http://www.odoc.state.ok.us>
- Krejcie, R. V., and Morgan, D. W. (1970). *Educational and Psychological Measurement*, 30, 172.
- Lucht, G. and Zinkand, D. (1997). *NAFTA opens ag markets* [Online]. *Iowa Farmer Today*. Retrieved June 26, 1998 from the World Wide Web: <http://www.iowafarmer.com/agnews/nafta.htm>
- May, B. (1996, August 12). New ideas travel on trade corridor. *The Journal Record*, 94 (98), 1,5.
- May, B. (1998, January 21). Study looks down the road at I-35 future. *The Journal Record*, 95 (206), 1,4.
- Oklahoma Department of Agriculture. (1997, July 14). *Oklahoma Agricultural Market Development Services Division* [Online]. Oklahoma Department of Agriculture: Author. Retrieved February 15, 1998 from the World Wide Web: <http://www.oklaosf.state.ok.us/~okag/agmktg.html>
- Oklahoma Department of Commerce. (1995, July 13). *Good News/Bad News* [Online]. Oklahoma Department of Commerce: Author. Retrieved January 6, 1999 from the World Wide Web: <http://www.odoc.state.ok.us/oknet>
- Oklahoma Department of Commerce. (1997, December 1). *Economic Report for the State* [Online]. Oklahoma Department of Commerce: Author. Retrieved January 5, 1999 from the World Wide Web: <http://www.odoc.state.ok.us>
- Oklahoma Department of Commerce. (1997, July 29). *Manufacturing Wage Data for Oklahoma & Regional States* [Online]. Oklahoma Department of Commerce: Author. Retrieved January 6, 1999 from the World Wide Web: <http://www.odoc.state.ok.us/oknet>
- Oklahoma Department of Commerce. (1997, October 31). *Manufacturing Employment in Oklahoma at the 2-Digit SIC Level* [Online]. Oklahoma Department of Commerce: Author. Retrieved January 6, 1999 from the World Wide Web: <http://www.odoc.state.ok.us/oknet>



- Oklahoma Department of Commerce. (1996). *Oklahoma: Top 50 Export Markets, 1996* [Online]. U.S. Bureau of the Census, Exporter Location Series: Author. Retrieved January 5, 1999 from the World Wide Web: <http://www.odoc.state.ok.us>
- Oklahoma Department of Commerce. (1998, July 2). *Top Five Agricultural Commodities in Oklahoma, 1996* [Online]. Economic Research Service, USDA: Author. Retrieved January 6, 1999 from the World Wide Web: <http://www.odoc.state.ok.us/oknet>
- Oklahoma Department of Commerce. (no date). *Oklahoma Department of Commerce* [Online]. Retrieved March 26, 1998 from the World Wide Web: <http://www.oklaosf.state.ok.us/osfdocs/budget/bb96-160.html>
- Oklahoma International Trade and Investment Division & Oklahoma Export Assistance Center. (no date). *Oklahoma International Trade & Investment* [Online]. Oklahoma Department of Commerce: Author. Retrieved March 26, 1998 from the World Wide Web: <http://www.odoc.state.ok.us/homepage/internat.nsf/pages/welcome3>
- Rayfield, F. (1995). Selected Social and Environmental Issues of the Changing Swine Industry as Perceived by Oklahoma Producers. *Oklahoma State University Dissertation*, 11-19.
- Stabler, C. (1998, January 19). Interstate 35, The Road Well Traveled. *Industry Week*, 247, (2), 41-52.
- Texas Department of Economic Development. (1998, December 21). *Net Manufacturing Jobs Created in the 1990s* [Online]. U.S. Bureau of Labor Statistics: Author. Retrieved January 7, 1999 from the World Wide Web: <http://www.bidc.state.tx.us/overview/04MFGjobscreated.htm>

APPENDIX A  
ADDITIONAL COMMENTS AND SUGGESTIONS BY RESPONDENTS

The following is a reprint of the additional comments and suggestions/observations made by the respondents on the questionnaire.

“Department of Agriculture and the Department of Commerce have been very helpful to us.”

“My business would be very small potatoes – We make herbal vinegars and seasonings but it is a small part of our business.”

“This is like flying blind – who wants what? How much? Our breed association (Santa Gertrudis Breeders International) sort of promotes international trade, but the only beneficiaries are the old-line, big-name, big-money South Texans. Our Oklahoma Cattle are very bit as good, and although our herds may not be as big, we could co-op some packages for export. We need help from OSU and ODAG to extend the export market in our direction. Our cattle are particularly suited to Central and South America, but I believe would be hardy enough for Canada. But since we are not in the South Texas “in-crowd” our breed association caters to, we haven’t had any international trade. We did have lookers from Indonesia, thanks to Haidar Haidary.

We’re interested in your response to this. Some breeders shoot strictly for the headlining, sale-topping lots, but that’s not the real world. We’d rather sell a set of heifers that would be a foundation for someone. And we have them. Oklahoma needs to play a role in the global agriculture village, and we’re tired of sucking the elitist South Texas hind teat!”

“Very glad you are trying to offer this service in Oklahoma. Small companies do not have the resources to do this on their own.”

“We are a new family run small business supplying farmed venison to the OKC area restaurants and individuals. We don’t have enough meat to export.”

“Too small to produce loads to export. Beef slaughter not feasible in the state of Oklahoma – just check to slaughter numbers. 1975 – 1997, 600,000?? – 11,000 est, 2500?? – 44 head per day slaughter in the state. Why??”

“No interested”

“I am a retail store and carry approx. 140 Made in Oklahoma Products. I also have over 180 spices and blends of dried herbs, 37 coffees, 37 teas. I do not qualify for this survey.”

“Our business is very small and local. Health and age puts a limit on expanding.”

APPENDIX B  
COVER LETTER



Oklahoma Cooperative Extension Service  
Division of Agricultural Sciences and Natural Resources  
Oklahoma State University

November 20, 1997

Dear Food and Agricultural Industry CEO's:

We are in the process of conducting a descriptive study concerning the competitiveness of the U.S. food and agricultural industry in an increasingly competitive global environment. Oklahoma food industry purveyors and food industry processor-distributors in the five other states along the I-35 corridor will be asked to provide input for the study. Your participation will be vitally important to the economic development of the state. Since food industry leaders like yourselves in Minnesota, Iowa, Missouri, Kansas and Texas will be involved in this study; we could not afford to not be involved. Therefore, we are asking you to share your insight and experience concerning the food and agricultural industry and how you perceive it impacting your operation(s). Your individual responses will be kept strictly confidential; only one person will have access to the completed surveys and they will be destroyed upon completion of the study. In addition, your responses will only be reported in the aggregate.

Again, we are asking you to assist us in making Oklahoma's part in this six-state study a model for others to follow. If this is going to provide economic benefits, we definitely want to be in position to design the outcomes of this venture in favor of Oklahoma Food and Agricultural Industry firms. Please take about 15 minutes to share your perceptions. A postage paid, pre-addressed envelope is provided for your convenience in returning the survey. If you have questions please feel free to call Maryann Williams at (405) 744-6155 or Dr. White (405) 744-8143 or Dr. Sanders (405) 744-9834.

Thank you in advance for sharing your input and ideas.

A handwritten signature in cursive script, appearing to read 'Maryann K. Williams'.

Maryann K. Williams  
Graduate Student

Larry D. Sanders  
Committee Chairman

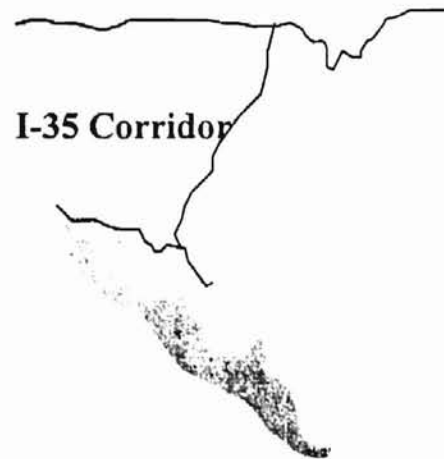
James D. White  
Faculty Member

cc. Raymond E. Campbell  
David M. Henneberry  
James E. Osborn  
Michael D. Woods

APPENDIX C  
SURVEY INSTRUMENT



# Oklahoma Food Processors Export Survey



Departments of Agriculture Economics  
&  
Agriculture Education, Communications, and  
4-H Youth Development



## Oklahoma Food Processors Export Survey

The purpose of this study is to determine the exporting informational needs of Oklahoma companies. This study is also the preliminary step to determining if a NAFTA corridor along I-35 would prove to be valuable to Oklahoma companies. Thank you for participating in this study. To help us analyze this data quickly, we ask that you please return this survey by December 1, 1997.

**1. How long has your company been exporting?**

- My company does not export
- My company does not currently export but is working on developing an export market.
- Under 1 year
- 1 - 5 years
- 6 - 10 years
- More than 10 years

**2. If you are an exporting company or soon to be exporting, does your company export/or plan to export to Mexico and/or Canada?**

- Export to Mexico
- Export to Canada
- Export to Mexico and Canada
- Do not export to either country
- Uncertain

(Questions 3,4,and 5 pertain to exporting companies only.)

**3. What percentage of your exports go to Mexico ?**

- 25 percent or Less
- 26 to 50 percent
- 51 to 75 percent
- 76 to 100 percent

**4. What percentage of your exports go to Canada?**

- 25 percent or Less
- 26 to 50 percent
- 51 to 75 percent
- 76 to 100 percent

**5. What percent of your total sales come from export markets?**

- 25 percent or Less
- 26 to 50 percent
- 51 to 75 percent
- 76 to 100 percent

**6. If you are a non-exporting company what factors have discouraged your company from becoming involved in the export market?**

(Please rank the factors from 1 to 6, with 1 being the highest factor.)

- \_\_\_\_\_ Lack of information about entering the export market
- \_\_\_\_\_ Financial cost of developing a market
- \_\_\_\_\_ Lack of information about foreign market needs
- \_\_\_\_\_ Concerns about receiving payment, exchange rates, etc.
- \_\_\_\_\_ Not interested in exporting
- \_\_\_\_\_ Other \_\_\_\_\_

## Oklahoma Food Processors Export Survey

7. If a NAFTA corridor was opened along I-35 in Oklahoma, allowing your company's exports bound for Mexico and/or Canada to pass NAFTA regulations and/or country customs inspections in Oklahoma instead of country borders; would a corridor of this nature influence your company to increase exports or begin exporting to our NAFTA partners?

- Influence to increase exports to NAFTA partners
- Influence to begin exporting to NAFTA partners
- No influence on current exports or exporting decision
- Uncertain

8. Please mark an (X) by the following sources that your company uses in acquiring information and/or assistance for exporting.

- County Extension Office
- County Commissioners' Office
- Oklahoma Department of Agriculture
- U.S. Small Business Administration
- Oklahoma Department of Commerce
- Tulsa World Trade Association
- Oklahoma City International Trade Association
- Oklahoma District Export Council
- U.S. Department of Commerce
- Small Business Development Center
- Center for International Trade & Development
- U.S. Department of Agriculture's Foreign Agriculture Service
- Local Chamber of Commerce
- Web Sites
- Other \_\_\_\_\_

9. What are your company's perceived educational needs for entry or expansion in the exporting market? (Please rank the following from 1 to 11, with 1 being the highest of need.)

- \_\_\_ Language Training
- \_\_\_ Cultural Information
- \_\_\_ Getting Started in Exporting
- \_\_\_ Small Business Opportunities in Exporting
- \_\_\_ Trade Show Schedules and Information
- \_\_\_ Financing International Trade Development
- \_\_\_ Overseas Contacts with Foreign Markets
- \_\_\_ How to Expand Your Export Markets
- \_\_\_ NAFTA Export Regulations
- \_\_\_ Packaging and Transportation of Products
- \_\_\_ Other \_\_\_\_\_

10. The following is a list of services currently offered to companies entering or already in the international market. Please prioritize the combined list of services, ranking from 1 to 6, with 1 being most important to your company.

- \_\_\_ Training and Mentoring
- \_\_\_ Food Safety and Environmental Analytical Services
- \_\_\_ Education and Internships
- \_\_\_ Information and Technical Assistance
- \_\_\_ Supply and Demand Networking
- \_\_\_ International Extension and Trade

11. Would your company be willing to pay for the international exporting services noted in question 10?

- Yes
- No
- Depends on the fee and service offered
- Uncertain

## Oklahoma Food Processors Export Survey

**12. If your company is willing to pay for “international exporting” services/educational programming; for which of the following is your company willing to pay and what value do you perceive each item to have?**

**(KEY: EV-extremely valuable, V-valuable, SV-some value, NV-no value)**

	EV	V	SV	NV
Language Training	4	3	2	1
Cultural Information	4	3	2	1
Getting Started Exporting	4	3	2	1
Small Business Opportunities in Exporting	4	3	2	1
Trade Show Schedules and Information	4	3	2	1
Financing International Trade Development	4	3	2	1
Overseas contacts with Foreign Markets	4	3	2	1
How to Expand Export Markets	4	3	2	1
NAFTA Export Regulations	4	3	2	1
Packaging and Transportation of Products	4	3	2	1

**Additional Comments and Suggestions/Observations:**

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APPENDIX D  
INSTITUTIONAL REVIEW BOARD APPROVAL FORM

OKLAHOMA STATE UNIVERSITY  
INSTITUTIONAL REVIEW BOARD  
HUMAN SUBJECTS REVIEW

Date: 11-25-97

IRB#: AG-98-012

**Proposal Title:** THE STATUS OF THE OKLAHOMA FOOD AND AGRICULTURAL INDUSTRY IN  
A COMPETITIVE GLOBAL ENVIRONMENT

**Principal Investigator(s):** David M. Henneberry, James D. White, Maryann K. Williams

**Reviewed and Processed as:** Exempt

**Approval Status Recommended by Reviewer(s):** Approved

ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT  
NEXT MEETING, AS WELL AS ARE SUBJECT TO MONITORING AT ANY TIME DURING THE  
APPROVAL PERIOD.

APPROVAL STATUS PERIOD VALID FOR DATA COLLECTION FOR A ONE CALENDAR YEAR  
PERIOD AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE  
SUBMITTED FOR BOARD APPROVAL.

ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

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**Comments, Modifications/Conditions for Approval or Disapproval are as follows:**

Signature: 

Chair of Institutional Review Board

cc: Maryann K. Williams

Date: November 25, 1997

VITA

Maryann K. Williams

Candidate for the Degree of

Master of Science

Thesis: THE STATUS OF THE OKLAHOMA FOOD AND AGRICULTURAL  
INDUSTRY IN A COMPETITIVE GLOBAL ENVIRONMENT

Major Field: Agricultural Education

Area of Specialization: Cooperative Extension and Agricultural Economics

Biographical:

Personal Data: Born in Bartlesville, Oklahoma, June 29, 1975, the daughter of  
Raymond L. Spencer and Debbie D. Spencer.

Education: Graduated from Dewey High School, Dewey, Oklahoma, May, 1992;  
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Oklahoma A & M Jr. College, Miami, Oklahoma; received Bachelor of  
Science in Agronomy with a specialization in Soil Science, December,  
1996, from Oklahoma State University, Stillwater, Oklahoma; completed  
the requirements for the Master of Science degree in Agricultural  
Education at Oklahoma State University in May 1999.

Professional Experience: Collingwood Grain Crop-Timizer Summer Crop  
Consultant, Oakley, Kansas, 1995; Undergraduate Teaching Assistant,  
Department of Agronomy, Oklahoma State University, 1996; Oklahoma  
Cooperative Extension Summer Intern, Washington County and Grady  
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Visiting Lecturer/Recruiter, Department of Biosystems and Agricultural  
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