

Wichita International Trade Processing Center (ITPC) Feasibility Study

Technical Memorandum 1: Wichita ITPC Technology Assessment – Stakeholder Group Interview Results and User Assessment Final Report

Submitted to

TranSystems Corporation

by



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NOTICE

Comments on this report are requested to be provided to the Study Team in written form via e-mail, fax, or mail to:

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Table of Contents

Introduction and Background.....	1
Introduction	1
Project Overview	1
Task Objective	3
Purpose of this Technical Memorandum.....	3
Methodology and Data Collection Approach	4
Methodology.....	4
User Assessment.....	4
Data Collection Approach	5
Telephone Interviews	5
Survey Instrument.....	5
Center for Economic Development and Business Research, Wichita State University	5
Principal Findings.....	6
Respondent Demographics.....	6
Business Demographics	6
Characterization of Current Freight Operations	8
Current Use of Technologies and Information Exchange in Day-to-Day Freight Operations..	9
Technologies Used for Moving Goods/Providing Services	9
Information Exchange in Moving Goods/Providing Services.....	10
Opportunities for Improved Efficiencies and Benefits from the Implementation of Technologies.....	11
Improved Efficiencies in Moving Goods/Providing Services	11
Derived Benefits in Moving Goods/Providing Services	11
Business Goals and Desired Outcomes from the Introduction of Technologies.....	12
Goals and Outcomes in Moving Goods/Providing Services.....	12
Planned Future Use of Technologies in Day-to-Day Freight Operations	13
Planned Technologies in Moving Goods/Providing Services	13
Greatest Challenges Facing Freight Transportation and How Freight-Based Technologies Fit In.....	13
Findings and Conclusions	15
Findings.....	15
Characterization of Current Freight Operations	15
Technologies Used for Moving Goods/Providing Services	15
Information Exchange in Moving Goods/Providing Services.....	15
Improved Efficiencies in Moving Goods/Providing Services	15
Derived Benefits in Moving Goods/Providing Services	16
Goals and Outcomes in Moving Goods/Providing Services.....	16
Planned Technologies in Moving Goods/Providing Services	16
Greatest Challenges Facing Freight Transportation and How Freight-Based Technologies Fit In.....	16
Conclusions.....	16

Appendix 1: Telephone Survey Instrument..... 19
Appendix 2: Telephone Interview Summaries26

Introduction and Background

Introduction

With an economy focused on manufacturing and skilled labor industries that result in numerous freight moves, a need exists to ensure efficient and timely freight movement that is critical to the current economic base in the Wichita, Kansas area. These freight movements are dependent on a strong infrastructure and advanced trade processing systems.

The City of Wichita commissioned TranSystems Corporation to conduct a Feasibility Study with support from Science International Corporation (SAIC) (combined as the study team) to perform a technology assessment of existing and emerging technologies. The intent of the Feasibility Study is to determine how Wichita's infrastructure and trade processing potential can support a Wichita International Trade Processing Center (Wichita ITPC) initiative.

Project Overview

In the past, processing of goods imported into the United States was handled mostly through ports located along coast lines, borders, rivers, and at certain air facilities. Through advancements in technology and communications and development of inland distribution points to facilitate improved delivery of goods, the need for inland ports and goods processing has grown dramatically. Additionally, the traffic congestion and security concerns evident at our nation's seaports and international border crossings further highlight the potential need for expansion of international trade processing.

Wichita offers advantages as a potential location for international trade. The city is located close to the geographic center of the United States and along the major axis of trade corridors for both highway and rail, offering equal access to Canada and Mexico and seaports along the east, west, and Gulf coasts. Wichita's location also is close to a major air and ground distribution center in Kansas City, yet far enough away to avoid any traffic congestion there.

The following Wichita ITPC Feasibility Study stated goals focus on infrastructure and trade processing advancements:

- By advancing investment in the roadway, rail, and intermodal infrastructure necessary for an International Trade Processing Center.
- By working together with business and Government leaders to advance changes in trade processing technology and systems that would allow Wichita area to serve as a virtual inland port with capabilities to process trade in a manner similar to those at traditional border crossings and deep water ports.

The Feasibility Study aims to define the Wichita ITPC concept most appropriate for Wichita area by understanding existing freight flows, technology assets, and institutional and organizational advantages, while simultaneously engaging stakeholders and data providers throughout the process. As illustrated in Figure 1, the four-phased study outlines the goals of the City of Wichita and the deliverables that accompany each phase.

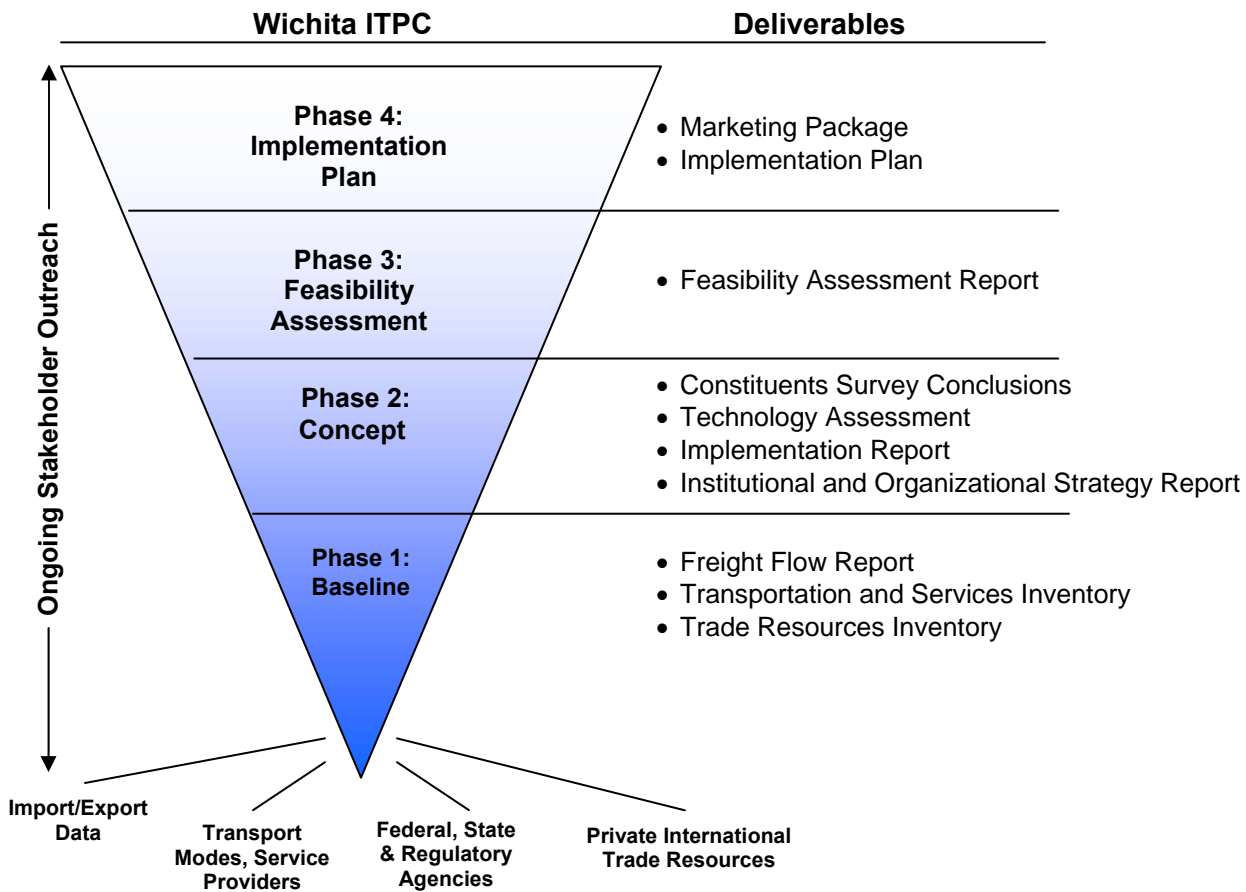


Figure 1. Overview of Wichita ITPC Feasibility Study.

The four phases include the following elements and activities:

- **Baseline:** The first phase includes a preliminary review of existing and projected freight flows; infrastructure and services; and trade resources to determine the strength of base conditions and if the Wichita ITPC concept or a derivative can be advanced.
- **Concept:** The second phase engages the Wichita ITPC constituents to determine their needs and interests; investigates potential technologies and outlines how they would be integrated; and further refines institutional and organizational strategies.
- **Feasibility Assessment:** The third phase serves as a major benchmark using the following measures to determine the Wichita ITPC's potential success: political and business interest; technological capabilities; trade service potential; and economic impact.
- **Implementation Plan:** The final phase comprises all of the previous components, plus a Marketing/Economic Development Package that will be consistent with industry expectations for private and public support of the Wichita ITPC.

Task Objective

As part of the Concept Phase of the Feasibility Study, the task objective is to conduct a user assessment with the Wichita ITPC stakeholder and freight business community. This user assessment will aid in developing a starting point for the technology assessment that is focused on the needs and goals of the potential Wichita ITPC users. The user assessment takes the form of a series of interviews conducted by telephone, focusing on the following five specific areas of import:

1. Characterization of current freight operations.
2. Current use of technologies and information exchange in day-to-day freight operations.
3. Opportunities for improved efficiencies and benefits from the implementation of technologies.
4. Business goals and desired outcomes from the introduction of technologies.
5. Planned future use of technologies in day-to-day freight operations.

The result of this task is two-fold: (1) to develop user requirements based on feedback from the Wichita ITPC Technology Assessment Stakeholder Group; and (2) to provide a basis for comparative analysis during the follow-on technology review to develop user services and system requirements.

Purpose of this Technical Memorandum

This Technical Memorandum document is the first in a series of deliverables that will be provided to the prime contractor throughout this Feasibility Study, and reports the interview results and technology findings from the Technology Assessment Stakeholder Group during the Concept Phase of the study.

More importantly, this Technical Memorandum establishes the foundation for the technology assessment, provides an overview of the methodology and data collection approach, and summarizes the stakeholder group interview results for each of five areas found to be important to these potential Wichita ITPC users.

Based on the interview results, findings and conclusions are provided to help establish the technology assessment user requirements including suggested next steps. This document concludes with appendices detailing the telephone survey instrument and summaries of each Technology Assessment Stakeholder Group member interviews.

Methodology and Data Collection Approach

Methodology

The study team developed a four-step methodology based on considerable experience in conducting freight technology assessments and evaluations over the past decade. Continual involvement of stakeholders throughout the assessment process is a key feature and ensures that the Wichita ITPC technology operational concepts developed as a result of this assessment will be specific to the needs and goals of the Wichita region. A major input to this methodology is the freight flow analysis performed during the Baseline Phase, as the technology assessment focuses on the potential application of technology to trade corridors identified in the analysis so as to maximize cost effectiveness.

Following is a description detailing the specific methodology steps and the study phase in which each step occurs. This Technical Memorandum document focuses on the first step.

- **Step 1** – User Assessment based on the needs and goals of potential Wichita ITPC users to aid in determining user requirements (Concept Phase).
- **Step 2** – Technology Review to determine technologies used or endorsed by Government, inland ports, seaports, border crossings, private carriers, and railroads, including initial user services and system requirements (Concept Phase).
- **Step 3** – Technology Assessment using detailed factors to assess various technologies and systems (Feasibility Assessment Phase).
- **Step 4** – Recommendations of technologies and systems based on Technology Assessment and Implementation Report to include presentation of operational concepts (Implementation Plan Phase).

User Assessment

The user assessment is the first step in the methodology process and assists in defining user requirements based on perceived needs and goals of potential Wichita ITPC users. The user assessment consists of a series of telephone interviews directed toward companies which participated in the independent mail-in survey conducted during the study's Baseline Phase.

Over 800 companies participated in the mail-in survey, and 96 of these companies reported that they were not opposed to follow-on contact relating to the study. From this list of interested companies, 37 reported that they performed some form of international trade with Canada and Mexico, as well as with countries in Europe, Asia, and South America. These companies, along with two others that were not involved in the mail-in survey but expressed interest in the Feasibility Study, were contacted and interviews requested. Of these 39 companies, 17 cooperated in the interview process and 15 completed the interview, expressing continued interest in the study. One interview was cut short because the interviewee had pressing business. Another interview was not completed because the interviewee did not desire to answer all of the questions. All of the companies that completed the interview have been initially identified as members of the Technology Assessment Stakeholder Group pending approval by the study team and the Wichita ITPC Steering Committee.

Data Collection Approach

The data collection approach began with two members of the study team traveling to Wichita to meet with the members of the Wichita ITPC Steering Committee. While there, the study team members: briefed the Wichita ITPC Steering Committee on the study team's role in the Study; met with the leadership of the Center for Economic Development and Business Research at Wichita State University; and initiated telephone interviews with the approved Technology Assessment Stakeholder Group members.

Telephone Interviews

The primary data collection effort was completed through telephone interviews which were conducted during August and September 2006 with high-level company management personnel. These individuals were specifically identified as being an Owner, President, Chief Executive Officer, Vice President of Operations, or General Manager.

A brief background of the Wichita ITPC Feasibility Study was given to each interviewee and included the purpose and objectives of the Study; client and contractor involvement; and the importance of the user assessment as it relates to the overall technology assessment. Most interviewees remembered participating in the mail-in survey, and therefore, were able to better focus on the interview, which enhanced the discussion.

All interviewees were assured that confidentiality regarding their personal identify, company, and responses were to be maintained at all times, and that the purpose of the user assessment was to gather empirical data and not to expose proprietary practices or undermine intellectual property. A few interviewees permitted interviews during the initial call, but most required two or three attempts or preferred to establish a future date and time for the interview. In some cases, interviewees returned calls and granted interviews based on the voicemail that was left for them or message that was left with their office assistants.

Survey Instrument

Each interview consisted of 15 questions covering background information about the interviewee and demographic information about the company, and included questions in each of the five areas of importance specified in the task objective. The interviews lasted between 20-30 minutes each, depending on the interviewee's level of interest, time availability, outside distractions, and applicability of questions to the company's freight operations in international trade. In most cases, discussion was prompted by framing questions in a manner that broke them down into subtopics. Where questions were not applicable, the interviewee simply stated this fact. The telephone survey instrument used for the interviews is presented in appendix 1.

Center for Economic Development and Business Research, Wichita State University

In addition to the telephone interviews, a study team member met with a senior staff associate at the Center for Economic Development and Business Research (CEDBR) to provide information about the technology assessment. CEDBR provided the study team member with contact information for businesses that could be potentially included in the user assessment. Additionally, the study team member requested access to CEDBR publications/information that could provide regional economic data supporting the outcome of the technology assessment.

Principal Findings

Feedback from the 15 telephone interviews from the companies comprising the Technology Assessment Stakeholder Group (stakeholder group) is delineated into the following key areas:

1. Characterization of current freight operations.
2. Current use of technologies and information exchange in day-to-day freight operations.
3. Opportunities for improved efficiencies and benefits from the implementation of technologies.
4. Business goals and desired outcomes from the introduction of technologies.
5. Planned future use of technologies in day-to-day freight operations.

The following information details the stakeholder group's demographics and principal findings. Telephone interview summaries supporting these findings are contained in appendix 2.

Respondent Demographics

Business Demographics

Background information was requested from each stakeholder interviewed to include his or her official company title, contact information, and a brief summary of role or responsibilities within the business.

Additionally, information was requested concerning company location; size of annual revenues (< \$5 million – small, \$5-\$25 million – medium, > \$25 million – large); business categorization; and international trading partners or countries and type of trade – import, export, or both. The stakeholder group involved in the telephone interviews was categorized as a manufacturer, wholesale/retail, professional service provider, or some combination of these. There were no group members categorized in the agricultural or transportation fields.

It should be noted that due to the limited size of the Technology Assessment Stakeholder Group, caution is warranted in making overall market inferences from the interview results. However, it also should be noted that the companies in the group represent a good cross-section of business categories and representative international trade for the Wichita region. Table 1 summarizes the stakeholder group's business demographics.

Table 1. Technology Assessment Stakeholder Group Business Demographics

Company	Category	Interviewee	Location	Annual Revenue	Trading Partners	Trade Type
1	Manufacturer	Owner	Within Sedgwick County	< \$5 million	Canada	Import
2	Manufacturer	VP, Operations	Outside Sedgwick County	\$5-\$25 million	Sweden, Canada, Israel	Export
3	Manufacturer	President	Outside Sedgwick County	\$5-\$25 million	Mexico, Canada	Export
					China	Import
4	Manufacturer	President	Within Sedgwick County	< \$5 million	Australia, France, Sweden, England	Export
5	Manufacturer	President	In Neighboring State	> \$25 million	Mexico, China, France	Export
6	Wholesale/Retail	President	In Neighboring State	< \$5 million	Germany, Austria, Canada	Import
7	Wholesale/Retail	Owner	Outside Sedgwick County	< \$5 million	Brazil	Import
8	Wholesale/Retail	CEO	Within Sedgwick County	< \$5 million	China, Belgium, Canada	Import
9	Wholesale/Retail	VP, Operations	In Neighboring State	> \$25 million	Mexico, Japan	Export
					China, Taiwan, South Korea	Import
10	Professional Service	President	Outside Sedgwick County	< \$5 million	Mexico, China, Taiwan	Import
11	Professional Service	VP, Operations	Within Sedgwick County	< \$5 million	South Korea, China, Spain, England,	Import
12	Professional Service	Owner	Within Sedgwick County	< \$5 million	China, India, Brazil	Export
13	Professional Service	President	Outside Sedgwick County	\$5-\$25 million	England, Bermuda, Germany	Export
14	Manufacturer/ Wholesale/Retail	General Manager	Within Sedgwick County	\$5-\$25 million	Mexico	Export
15	Wholesale/Retail/ Professional Service	Owner	Within Sedgwick County	< \$5 million	Italy, China	Import

Characterization of Current Freight Operations

Interviewees were asked to characterize their business operations regarding the movement of goods and provision of services as they relate to international trade. The question was broken down into three different areas:

- **Materials Involved** – Finished product, parts, raw materials, or a combination of these materials.
- **Mode of Transportation** – Percentage transported by sea, air, rail, or road, and application to imports, exports, or both.
- **Routes and Locations Involved** – Europe, Asia, South America, Canada, and Mexico.

The responses for materials involved varied. Almost half of the stakeholder group reported moving finished products, while less than a third reported moving raw materials or a combination of finished products, parts, or raw materials.

As might be expected, all major modes of transportation are used to move these materials through international supply chains. Several variables were cited as to the reasons why one mode is selected over another: cost; safety; customer preference; type of material being moved; size and packaging requirements; timeframes involved; available routes; available modes; and convenience.

Almost three-quarters of the stakeholder group reported moving 60 percent of their materials by road, with twice as many importing as exporting. About two-thirds reported moving 45 percent of their materials by sea, with an equal amount exporting and importing. More than one-third of the group reported moving 50 percent of their materials by rail, with twice as many importing as exporting. Less than a quarter of the group reported exporting 60 percent of their materials by air. Table 2 summarizes the characterization of the stakeholder group members' current freight operations.

Table 2. Technology Assessment Stakeholder Group Current Freight Operations

Fraction of Stakeholder Group	% of Material	Transport Mode	Export/Import Ratio
Almost 3/4	60	Road	1:2
Almost 2/3	45	Sea	1:1
More than 1/3	50	Rail	1:2
Less than 1/4	60	Air	1:0

Similar variables as to why particular modes of transportation are chosen also determine the reasons as to why one route or location is selected over another. Interviewees reported that these additional considerations may include weather, distance, and scheduling.

Almost an equal number of members within the stakeholder group trade with countries in Europe and Asia, as well as with Canada and Mexico, while only a couple of the group members trade with countries in South America. The most prevalent route used between Asia and the United States is through the Port of Los Angeles/Long Beach; the most prevalent route between Europe, South America, and the United States is through the Port of Houston. Some

materials are reported to be routed through Kansas City to and from Wichita, and some also routed directly to and from Wichita, with almost all freight movement between Kansas City and Wichita by truck and movement to and from Kansas City by a combination of truck and rail. One stakeholder has a rail spur that services his facility in the Wichita region.

Current Use of Technologies and Information Exchange in Day-to-Day Freight Operations

Technologies Used for Moving Goods/Providing Services

Interviewees were asked about what technologies their business is currently using for movement of goods and provision of services as they relate to international trade in the following areas:

- **Asset Visibility** – The ability to identify the movement and status of goods or services at desired times and locations within the supply chain for business or security reasons.
- **Information Visibility** – The type and amount of documentation on goods or services available to users of the transportation system for business or security reasons.
- **Automated Processing** – Automated processing functions for goods or services from point of origin to final destination that allow for adequate inspection while maintaining movement.
- **Supply Chain Security** – The type of security provided for goods or services in the supply chain to account for continuous chain of custody and prevention of tampering with a level of confidence acceptable to the trade community.
- **Transaction Verification** – Systems or processes in place to screen the accuracy of information on goods or services within the supply chain with a level of confidence acceptable to the trade community.

About half of the stakeholder group reported using any kind of proprietary or non-proprietary systems or technologies in moving goods and providing services throughout their international supply chains. Several stakeholders reported using no specific technology at all for the five areas defined above.

Three companies in the stakeholder group employ proprietary systems that provide varying degrees of capability in these areas. One uses an enterprise-level software system for supply chain management that includes both its distributors and customers. Another uses several separate software programs that overlap the areas above to some extent and have portions of the programs that are not fully utilized. Another uses a proprietary system that manages movement of goods by exception and alerts suppliers and logistic providers of delivery dates that are outside specified timeframes.

There appears to be no direct correlation between company size and level of sophistication regarding use of proprietary systems by members of the stakeholder group, as the companies that employ these systems are small, medium, and large, based on their annual revenues.

One company in the group has in-house software for Asset Visibility and Information Visibility, but nothing else once material leaves the company premises. Three other companies in the group use the Internet to manually track material throughout their supply chains. These are small and medium-sized companies, based on their annual revenues.

Information Exchange in Moving Goods/Providing Services

Interviewees were asked to characterize how they exchange information in processing the movement of goods and provision of services as it relates to international trade. The question was broken down into the following different information-processing elements:

- **Internet/email.**
- **Landline** – telephone.
- **Mobile** – Telephone, satellite, radio.
- **Written documentation.**
- **Private freight information services.**
- **Public freight information services.**
- **Government-sponsored programs or services.**

Again, the responses to how information is exchanged varied. Almost the entire group reported using the Internet/email to exchange information in some fashion, with half of them performing a majority of their trade business through this medium after initially establishing connectivity with trading partners through some other form of contact. The ease of attaching files and documents to emails is cited as a key advantage and provides the flexibility needed to handle most information exchange.

Similarly, again, almost the entire stakeholder group reports using a landline telephone; however, less than a quarter performs a majority of its trade business in this fashion. One company reported performing most information exchange entirely by fax; another uses the Internet exclusively.

Cellular telephone communications also are used by the stakeholder group; however, less than half perform a majority of their trade business through this medium. One company in the group uses Voice Over Internet Protocol and another, which has its own trucking fleet, communicates with its delivery drivers using a walkie-talkie feature.

A majority of the stakeholder group maintains written documentation relating to international trade: tax purposes; Government reports; company policies and regulations; invoices; purchase orders; and credit accounting.

In addition, a majority of the group also maintains computer systems for paperless administration of international trade, with some using local area networks and servers. Three companies reported using any kind of private or public freight information service, and the main reason reported is to perform due diligence on trade partners on rare occasions. One of these three companies does not use public information services purposefully because it did not want its company information residing in the public domain.

Only one company in the stakeholder group reported participating in any kind of Government-sponsored program or service, and in this case, a Website sponsored by the U.S. Department of Commerce is used to stay abreast of export control requirements.

None of the stakeholders reported participating in programs such as the Container Security Initiative (CSI) or the Customs-Trade Partnership Against Terrorism (C-TPAT).

Opportunities for Improved Efficiencies and Benefits from the Implementation of Technologies

Improved Efficiencies in Moving Goods/Providing Services

Interviewees were asked about what opportunities for improved efficiencies their business was able to realize or saw being leveraged in the future from the implementation of technologies in the movement of goods and provision of services in the following areas:

- **Cost** – Logistics, inventory, etc.
- **Schedule** – Reduced dwell times at intermodal exchanges, improved delivery or pick up scheduling with customers, etc.
- **Administration** – Reduced paperwork, improved regulation compliance, more efficient communications, etc.
- **Technical** – Improved integration of information or information flow with supply chain partners.
- **Service** – Increased attractiveness to customers, getting better or more profitable customers, holding and building market share.
- **Training** – More knowledgeable and technology-savvy employees.

More than half of the stakeholder group reported that they are not currently realizing the opportunities for improved efficiencies in every area listed above and that future use of technology could be leveraged to improve efficiencies in all areas. The one area that almost half of the stakeholder group reported as being relatively efficient is Administration, and interviewees responded that they did not envision implementation of technology in the future improving this area significantly.

More than three quarters of the stakeholder group did see opportunities for improvement in Schedule and Training areas through the implementation of future technologies. A slightly less fraction of the group felt the same way about Technical and Service areas. Half the group stated that they see opportunities for improvement in the Cost area through implementation of future technologies. There was noted interest in the use of Web-Ex and video teleconferencing for employee training and communications with supply chain partners.

Derived Benefits in Moving Goods/Providing Services

Interviewees were asked about what benefits their business is currently realizing or could foresee as being gained in the future from the implementation of technologies in the movement of goods and provision of services.

Responses to this question varied, and from some, there was no response. For the majority that did respond, some of their comments are paraphrased below:

“We are seeing benefits across the board and are looking at ways to improve supply chain management through companies like DHL.”

“A way to get my product to me faster without dealing with multiple importers.”

“An improved Wichita economy that will directly or indirectly improve my opportunity to conduct international business.”

“Better knowledge of the Internet to improve my ability to communicate with supply chain partners and improve my capacity for scheduling.”

“Transparency in the movement of goods by improving trade flow through integration of information exchange systems.”

“Less regulation and more assistance by Government.”

“More real-time decision-making capability.”

“Getting improved delivery times – I can call to get status of shipments, I just can’t get the stuff here any faster.”

“Improved market share, especially with China.”

“Improved tracking and monitoring of shipments would save me a lot of time on the phone with suppliers and customers.”

“By knowing where our products are in the supply chain, we reduce the level of risk and we can do it with the same number of people that have other IT responsibilities because we manage by exception.”

Business Goals and Desired Outcomes from the Introduction of Technologies

Goals and Outcomes in Moving Goods/Providing Services

Interviewees were asked about what would be the desired outcomes from the introduction of technologies as they relate to the movement of goods and provision of services in the following areas regarding:

- **Growth.**
- **Diversification.**
- **Competition.**

A majority of the stakeholder group is interested in the introduction of technologies that could help them grow by expanding their customer base or breaking into new markets. Half of the group is also interested in technologies that could help them diversify their product line or educate them in how to diversify. One manufacturer was interested in product diversification without having to re-tool its production process. Another company desires to maintain quality and improve material delivery times to make it more competitive. A third company desires to increase its number of supply chains while maintaining efficiency of output.

Two companies in the group were most interested in technologies that could help improve Wichita's economy by stimulating commerce and competition. This would increase the customer base and provide greater business opportunities for them.

Planned Future Use of Technologies in Day-to-Day Freight Operations

Planned Technologies in Moving Goods/Providing Services

Interviewees were asked about what technologies have been planned for or would be considered in future business use for movement of goods and provision of services as they relate to international trade. The context of this question included the same five areas listed in the technologies being used for the movement of goods/provision of services.

Only two companies in the group reported planning for future technologies to move goods and provide services. One does this as a percentage of annual sales; the other company plans are included as part of its IT staff's budget. However, over half of the stakeholders indicated that they would like to use technology in the future to improve their international trade.

Few in the group are aware of the kinds of technology that could assist them in the five service areas listed under the subsection titled *Technologies Used for Moving Goods/Providing Services*, while some indicated that they have not really thought about it. Most in the group indicated that they are interested in technology providing them a means to improve efficiency of international trade. One company would like to use cost-effective technology that allows the company to deal directly with its manufacturer instead of third-party brokers. Another company would like to see technology that allows real-time information exchange among all supply chain partners. A third company would like to use technology that improves Asset Visibility and Supply Chain Security.

Greatest Challenges Facing Freight Transportation and How Freight-Based Technologies Fit In

Interviewees were asked about what the most important issues or challenges they see developing in freight transportation in the next 5 years, and how freight-based technologies could fit in.

Once again, responses to the question varied, and from some, there was no response. For the majority that did respond, some of their comments are paraphrased below:

"The cost of energy is having a big impact on the transportation industry and we have to look at innovative ways to move freight without passing a majority of this cost on to the customer."

"Dealing with bottlenecks in the supply chain. We're working with our manufacturer to drop shipments by vessel at Ports of Embarkation (POEs) that are less congested."

"The large retailers are interested in price, not quality, and move mass amounts of materials [that] overpower smaller companies like ours. I move smaller amounts of high quality materials and am not a priority for shippers, forwarders, and importers."

“I have to look at alternatives to using covered gondola rail cars to get my materials to Wichita because they’re in short supply or aren’t available when I need them. I use flatbed trucks with tarps, but the problem here is getting full loads for those trucks out of Wichita after they’ve delivered my materials.”

“The language barrier causes us to spend additional time in moving products from overseas. Time zones are another stumbling block. Streamlining the process at border crossings and POEs would minimize the time delays which are impossible to predict.”

“Having a better understanding of foreign local markets and their trade processes and standards [would help].”

“Figuring out a way to improve efficiency at distribution points, especially on the U.S. east coast.”

“The public needs to get more involved and be less apathetic. There needs to be a better way to exchange information throughout supply chains, and security standards need to be resolved.”

“Big companies are cutting budgets and technology hasn’t improved the delivery process because companies aren’t willing to invest in technology when the standards are in a state of flux. What used to take a day now takes a week.”

“Diesel prices have skyrocketed. There are driver shortages and delays at ports. Communications seem to be harder because there’s so much information and there are dissimilar communication systems between private companies and between Government systems and the private sector.”

“Traditional domestic suppliers are having difficulty because of rising prices and are outsourcing supply functions overseas. This now makes them competitors with those companies in the industry who are managing their own international supply chains.”

Findings and Conclusions

This section of the Technical Memorandum highlights key findings from the interview results, and draws conclusions from these findings based on the study team's experience in conducting similar efforts.

Findings

The interview results in the five areas of import to potential Wichita ITPC users provided information that forms the basis for developing user requirements. The findings within each area are enumerated in the following subsections.

Characterization of Current Freight Operations

- More than 70 percent of the stakeholder group relies on the marine and highway transportation systems for international trade.
- The most prevalent routes for international trade are through southern California and Texas.
- Imports are more prevalent than exports.
- The stakeholder group trades almost equally with Canada and Mexico.

Technologies Used for Moving Goods/Providing Services

- About 50 percent of the stakeholder group is using some kind of technology to conduct international trade.
- Less than 25 percent of the stakeholders use a specific or proprietary technology to perform international trade.
- About 20 percent of the stakeholders use the Internet to track their materials in the supply chain.

Information Exchange in Moving Goods/Providing Services

- About 50 percent of the stakeholder group performs a majority of its international trade using Internet/email.
- About 20 percent of the stakeholder group uses private or public freight information services on rare occasions.
- Less than 10 percent of the stakeholder group participates in Government-sponsored programs or services.

Improved Efficiencies in Moving Goods/Providing Services

- About 80 percent of the stakeholder group sees opportunities for improved efficiencies being leveraged by future technology.

- More than 75 percent of the stakeholder group indicated that improved efficiencies in training, scheduling, and service are the areas that they see being most positively impacted by technology implementation.

Derived Benefits in Moving Goods/Providing Services

- More than 70 percent of the stakeholder group reported that there are benefits to be gained from the implementation of technologies supporting international trade.
- A common thread in stakeholder comments speaks to ways technology can improve the flow of goods and information throughout the supply chain.

Goals and Outcomes in Moving Goods/Providing Services

- About 80 percent of the stakeholder group is interested in the introduction of technologies that could help them grow and diversify their international business.

Planned Technologies in Moving Goods/Providing Services

- Over 85 percent of the stakeholder group has not planned for use of future technology.
- Over 85 percent of the stakeholder group is not aware of specific technology available to improve trade.
- About 80 percent of the stakeholder group would like to use technology in the future to improve their trade.

Greatest Challenges Facing Freight Transportation and How Freight-Based Technologies Fit In

- Over 85 percent of the stakeholder group has identified serious issues and challenges facing freight transportation in the next 5 years and does not have specific ideas on how freight-based technology might fit in. These issues and challenges include: the rising cost of energy; freight movement bottlenecks at seaports; large retailers controlling markets; empty carrier load miles; language and time zone barriers; increasing efficiency; and reduced budgets, among others.

Conclusions

From the findings of the stakeholder group, definitive conclusions can be drawn regarding their business operations and use of technology in international trade:

1. East and west sea and highway corridors are more frequently used by the stakeholder group for movement of freight.
2. Movement of freight along north and south highway and rail corridors are used equally by the stakeholder group.
3. The Internet is the most used form of information exchange by the stakeholder group for international trade.

4. The benefits of using freight services and Government programs and services are not fully understood by the stakeholder group.
5. Because of the general lack of understanding by a majority of the stakeholder group about what technology can provide, technology is not being leveraged or planned for in international trade. However, when asked specifically about aspects of their freight movement, the stakeholder group does see technology as a potential means to improve future efficiency, especially in the areas of training, scheduling, and service.
6. Technology currently available that could assist stakeholders in developing or enhancing international trade by improving their Asset and Information Visibility, Automated Processing, Supply Chain Security, and Transaction Verification is not fully understood by potential Wichita ITPC users.
7. Technology, such as that which might be offered through application of Intelligent Transportation Systems, is viewed by the stakeholder group as a way to possibly address inefficiencies by improving the flow of goods.
8. Use of technology to help educate the stakeholder group is important as a possible catalyst for the growth and diversification of their international trade.
9. The stakeholder group does not know how freight-based technologies may help solve freight transportation issues and challenges.

From these conclusions, the following main themes are apparent:

1. Stakeholders seem to understand the potential significance of the Wichita region regarding international trade because of its location along major trade corridors. What may not be as clear to the stakeholder group is how technology might be used to leverage the positive attributes of the Wichita region, while at the same time drawing on the potential benefits offered by existing load centers like Kansas City and its SmartPort Initiative, for example.
2. Current and planned use of technology has not been a major factor in improving important aspects of international trade because the stakeholders do not fully understand how technology can assist them.
3. Stakeholders are interested in understanding the potential that technology may have in helping to solve freight transportation issues and challenges and in improving the efficiency, growth, and diversity of their international trade.

In addition to these main themes there are some important points taken from the stakeholder group interviews that should be re-emphasized:

1. Only one company in the stakeholder group reported participating in any kind of Government-sponsored program or service, and in this case, a Website sponsored by the U.S. Department of Commerce is used to stay abreast of export control requirements.
2. None of the stakeholders reported participating in programs such as the Container Security Initiative (CSI) or the Customs-Trade Partnership Against Terrorism (C-TPAT).
3. Only two companies in the stakeholder group reported planning for future technologies to move goods and provide services. One does this as a percentage of annual sales; the other company plans are included as part of its IT staff's budget. However, over half of

the stakeholders indicated that they would like to use technology in the future to improve their international trade.

4. Few in the stakeholder group are aware of the kinds of technology that could assist them in the five service areas of Asset Visibility, Information Visibility, Automated Processing, Supply Chain Security, and Transaction Verification, while some indicated that they have not really thought about it. Most in the group indicated that they are interested in technology providing them a means to improve efficiency of international trade. One company would like to use cost-effective technology that allows the company to deal directly with its manufacturer instead of third-party brokers. Another company would like to see technology that allows real-time information exchange among supply chain partners. A third company would like to use technology that improves Asset Visibility and Supply Chain Security.

Collectively, these conclusions demonstrate that the majority of the stakeholder group is unaware of specific user requirements because of their lack of knowledge of what technology could provide them with regard to improving their international trade. This general lack of knowledge also demonstrates the need for substantial education on the merits of what technology could offer the stakeholder group in international trade.

Additionally, education on the benefits that Government-sponsored programs and services could offer has merit. Therefore, an education process that offers training opportunities for potential Wichita ITPC users should form the basis for user requirements.

Appendix 1: Telephone Survey Instrument

- **User Assessment Interview Guide**

Wichita International Trade Processing Center (ITPC) Feasibility Study – Technology Assessment

User Assessment Interview Guide

1. BACKGROUND

TranSystems Corporation has engaged Science Applications International Corporation (SAIC) as a subcontractor to perform a user assessment. This User Assessment Interview Guide (Guide) is based on the freight flow portion of the Baseline Conditions Report presented to the City of Wichita by TranSystems on 10 July 2006 as part of the Baseline Phase of the Wichita ITPC Feasibility Study. Answers to questions posed in this guide support the Concept Phase of the Wichita ITPC Feasibility Study, specifically, the potential application of technology to significant trade corridors so as to maximize cost effectiveness.

2. PURPOSE

The purpose of this Guide is to develop a starting point for the technology assessment that is grounded based on the needs and goals of the potential Wichita ITPC users by performing a user assessment designed to aid in establishing user requirements.

3. METHODOLOGY

The user assessment consists of a series of interviews by telephone and is directed toward businesses which participated in the independent mail-in survey and/or interview survey conducted as part of the DRAFT Baseline Conditions Report. Additionally, it is designed for those survey participants currently involved or who would like to get involved in international trade and who desire follow-up contact as determined by TranSystems and the City of Wichita. These businesses will be stratified using demographics developed for the independent mail-in survey conducted as part of the DRAFT Baseline Conditions Report. Interview questions are categorized into the following areas of importance:

- (1) Characterization of current freight operations.
- (2) Current use of technologies and information exchange in day-to-day freight operations.
- (3) Opportunities for improved efficiencies and benefits from the implementation of technologies.
- (4) Business goals and desired outcomes from the introduction of technologies.
- (5) Planned future use of technologies in day-to-day freight operations.

Within these areas of importance some interview questions focus on specific aspects of freight flow analysis, as defined below:

- **Asset Visibility** – The ability to identify the movement and status of goods or services at desired times and locations within the supply chain for business or security reasons.
- **Information Visibility** – The type and amount of documentation on goods or services available to users of the transportation system for business or security reasons.
- **Automated Processing** – Automated processing functions for goods or services from point of origin to final destination that allow for adequate inspection while maintaining movement.
- **Supply Chain Security** – The type of security provided for goods or services in the supply chain to account for continuous chain of custody and prevention of tampering with a level of confidence acceptable to the trade community.
- **Transaction Verification** – Systems or processes in place to screen the accuracy of information on goods or services within the supply chain with a level of confidence acceptable to the trade community.

4. SUPPORT

SAIC requests your support of the Wichita ITPC Feasibility Study to help identify new technologies and processes for freight transportation – to improve efficiency, levels of customer service, safety, and security. We ask for 20-30 minutes of your time and understand that some of the information we request may not apply to your business relating to the movement of goods or provision of services, and therefore, certain questions in this Guide may not be applicable.

We also understand that some of the answers you provide may be sensitive in a competitive sense. If requested, we will mask the identity and traceability of such information. Thank you for supporting this effort and participating in the interview.

Al Hovde
SAIC
Telephone: 425-334-7821
Fax: 425-347-5837
hovdea@saic.com

INTERVIEW QUESTIONNAIRE

Background Information:

1. Your title:

2. Your contact information:

3. Please summarize your role or responsibilities within the business:

Business Demographics:

4. Where is your business located?
 - a. Within Sedgwick County.

 - b. Outside Sedgwick County.

 - c. In neighboring state.

5. What range does your business annual revenues fall within?
 - a. < \$5 million.

 - b. \$5 - \$25 million.

 - c. > \$25 million.

6. How would you categorize your business?
 - a. Agricultural.

 - b. Manufacturer/Aerospace.

 - c. Transportation (logistic provider, air carrier).

 - d. Wholesale/Retail.

 - e. Professional Service Provider (consultant, banker, engineer, other).

7. What countries or entities does your business perform or would like to perform international trade with?
 - a. For exports.

 - b. For imports.

 - c. For both exports and imports.

Characterization of Current Freight Operations:

8. How does your business operate with regard to the movement of goods or provision of services?
 - a. Materials involved:

 - b. Mode(s) of transportation (breakdown of percentage by air, road, rail, sea):

 - c. Routes and locations involved:

Current Use of Technologies and Information Exchange in Day-to-Day Freight Operations:

9. What technologies is your business currently using for movement of goods or provision of services in the following areas?
 - a. Asset visibility:

 - b. Information visibility:

 - c. Automated processing:

 - d. Supply chain security:

 - e. Transaction verification:
10. How would you characterize the exchange of information you use in the process of moving goods or providing services and what types (i.e., customer orders, shipment status, customs clearance, etc.) of transactions are conducted for each mode?
 - a. Internet/email:

 - b. Land line (telephone):

 - c. Mobile (telephone, satellite, radio):

 - d. Written documentation:

 - f. Private freight information services:

- g. Public freight information services:

- h. Government-sponsored programs or services:

Opportunities for Improved Efficiencies and Benefits from the Implementation of Technologies:

11. What opportunities for improved efficiencies is your business realizing or do you see being leveraged in the future from the implementation of technologies in the movement of goods or provision of services in the following areas?
- a. Cost (logistics, inventory, etc.):

 - b. Schedule (reduced dwell times at intermodal exchanges, improved delivery or pick up scheduling with customers, etc.):

 - c. Administration (reduced paperwork, improved regulation compliance, more efficient communications, etc.):

 - d. Technical (improved integration or information flow with supply chain partners)

 - e. Service (increasing attractiveness to customers, getting better/more profitable customers, holding and building market share):

 - f. Training (more knowledgeable and technology savvy employees):
12. What benefits is your business realizing or do you see being gained in the future from the implementation of technologies in the movement of goods or provision of services?

Business Goals and Desired Outcomes from the Introduction of Technologies:

13. What are or would be the desired business outcomes from the introduction of technologies as they relate to the movement of goods or provision of services?
- a. With regard to growth:

 - b. With regard to diversification:

c. With regard to competition:

Planned Future Use of Technologies in Day-to-Day Freight Operations:

14. What technologies is your business planning to use or would like to use in the future for movement of goods or provision of services in the following areas?

a. Asset visibility:

b. Information visibility:

c. Automated processing:

d. Supply chain security:

e. Transaction verification:

15. What are the most important issues/challenges you see developing in freight transportation within the next 5 years and how do you see freight-based technologies fitting in?

Appendix 2: Telephone Interview Summaries

- **Manufacturing Company Interview #1**
- **Manufacturing Company Interview #2**
- **Manufacturing Company Interview #3**
- **Manufacturing Company Interview #4**
- **Manufacturing Company Interview #5**
- **Wholesale/Retail Company Interview #6**
- **Wholesale/Retail Company Interview #7**
- **Wholesale/Retail Company Interview #8**
- **Wholesale/Retail Company Interview #9**
- **Professional Service Company Interview #10**
- **Professional Service Company Interview #11**
- **Professional Service Company Interview #12**
- **Professional Service Company Interview #13**
- **Manufacturing/Wholesale/Retail Company Interview #14**
- **Wholesale/Retail/Professional Service Company Interview #15**

Interview Summaries

Summary for Manufacturing Company Interview #1

This is a small family-owned company located within Sedgwick County that imports raw materials, parts, and finished products from Canada. All of its trade is by truck.

The company performs a small percentage of information exchange by Internet/email and landline telephone and a majority by cellular telephone and fax. The company does not use private or public freight information services, and does not participate in Government-sponsored programs or services.

The company is in the process of developing a Website for use by its trading partners to facilitate purchase orders and marketing efforts. The company is not using any specific technology for international trade but sees technology as a means to improve the efficiency of trade functions.

Improved tracking and monitoring of shipments are two functions this company sees technology providing it in the future because it would save time spent on the telephone with suppliers and customers. The company does not have a plan to introduce technologies in the future but would be interested in those that improve the visibility and security of products in the supply chain.

The company is interested in technologies that would help to increase its customer base within 200 miles of Wichita and increase product diversification if re-tooling of the manufacturing process was not necessary.

The company is most concerned with U.S. Department of Transportation (USDOT) regulations seeming to be in a state of flux with outdated requirements and field personnel who impose regulations that are ambiguous as related to a standard. The regulations stated on the USDOT Website do not seem to match what regulators in the field are saying.

Summary for Manufacturing Company Interview #2

This is a medium-sized company located outside Sedgwick County but in Kansas that exports finished products and parts to Sweden, Canada, and Israel. The company performs about half of its trade by truck within the United States, and the other half by sea and air internationally. The company's major routes are through the Ports of Los Angeles/Long Beach and Houston.

The company performs a large percentage of its information exchange by Internet/email and uses Voice Over IP with its international customers. The only hard copy files kept are for tax purposes. The company does not use any private or public freight information services, and does not participate in any Government-sponsored programs or services.

The company uses a proprietary system with Local Area Network to monitor and track material while on company premises. Once the material leaves the premises, there are no proprietary technologies used; however, the company does plan to replace its customer service package interface on the Internet to enable distributors to access their accounts directly to view status.

The company sees technology as a means to improve the efficiency of trade functions and would like to take advantage of training opportunities for Web-Ex and teleconferencing. The

company would like to leverage technologies that could help it grow and diversify its product lines; however, it has no planned technologies in mind.

The company is most concerned about the cost of energy and how technology could work to prevent the cost being passed on to its customers.

Summary for Manufacturing Company Interview #3

This is a medium-sized company located outside Sedgwick County but in Kansas that exports finished products to Canada and Mexico, and imports finished products from China. The company performs an equal amount of trade by sea, truck, and rail for both imports and exports. The company's major routes are through the Ports of Los Angeles/Long Beach and Galveston, and has made arrangements with the manufacturer in China to perform drop shipments along established routes to improve delivery times when possible.

The company performs about 50 percent of its information exchange by landline telephone, 35 percent by Internet/email, and 15 percent face-to-face. The only hard copy files it keeps relate to company policies and regulations. The company does not use any kind of private or public freight information services, and does not participate in any Government-sponsored programs or services.

The company does employ a proprietary enterprise level software system for supply chain management that includes its customers and distributors and works very well, allowing it to connect with its partners in near real-time. The system has reduced the cost of doing business by over 96 percent. The company provides Web-Ex training for its employees, distributors, and manufacturer. The company is seeing benefits across the board and is looking at ways to improve supply chain management through companies like DHL.

The company is very interested in technologies that could assist in its growth and diversification of products and is looking at establishing manufacturing operations within the United States.

The company is most concerned about the bottlenecks at U.S. ports, and is actively pursuing ways to work around these bottlenecks with technology being a big part of the solution.

Summary for Manufacturing Company Interview #4

This is a small company located within Sedgwick County that exports finished products to Australia, France, Sweden, and England. The company performs all trade by air through Kansas City. The routes are determined by a third-party freight forwarder with emphasis on proof of delivery and customer service.

The company performs a majority of its information exchange by Internet/email with very small percentages by landline and cellular telephone. The only hard copy files it keeps are product invoices and credit card slips. On rare occasions, the company does use private freight information services for forwarding its products and to perform due diligence on customers. The company does not use public information services, and does not participate in any kind of Government-sponsored programs or services.

The company does not use any specific technologies for international trade and would like to see technology that could improve the security on credit card transactions.

The company is most concerned with foreign countries that have little communications technology infrastructure, relying heavily on wireless communications that they do not fully understand. The challenge for this company is having market presence in foreign countries where it is difficult to understand local markets because of the language barrier and the standards for international trade.

Summary for Manufacturing Company Interview #5

This is a large company located in a neighboring state that exports a majority of its parts to Mexico, but also a small amount to China and France. All trade with Mexico is by truck; trade with China and France is transported equally by truck and sea. The company uses a freight forwarder for all its trade with Mexico, where the parts are shipped to Texas and the customers pick them up there for transport to their final destination. The customers are U.S. companies in Mexico.

The company performs a majority of its information exchange by Internet/email with a smaller amount by landline telephone. The company does not keep hard copy files for international trade. The company does not use any kind of private or public freight information services, and does not participate in any kind of Government-sponsored programs or services.

The company does not use any specific technologies for international trade and sees opportunities for improved efficiencies using technology in the customer service area. However, because of the daily price fluctuations due to market conditions under NAFTA, it is doubtful that technology could improve the efficiency of administration of its international trade.

The company has not planned for future use of technology in international trade and is most concerned about language barriers, time zone changes, and streamlining the border crossing process.

Summary for Wholesale/Retail Company Interview #6

This is a small company located in a neighboring state that imports raw material from Germany, Austria, and a small amount from Canada. Half of the trade is by sea and the other half equally conducted by truck and rail. The major trade routes are conducted through the Great Lakes from Canada and through the Port of Houston from Europe.

The company performs a majority of its international trade by fax and a small amount by Internet/email and cellular telephones. The company does not use any kind of private or public freight information services, and does not participate in any kind of Government-sponsored programs or services.

The company uses importers and their associated technologies, and none of its own. The company does see opportunities for improved efficiencies through the use of technology and would like technology to assist it in getting raw materials more quickly without having to deal with multiple importers while maintaining the quality of the material.

The company would like to deal directly with the manufacturer in the future and cut out the importers, if technology could help them do that. The biggest concern is that the large retailers are interested in price, not quality, in moving mass amounts of materials and a small company is not a priority to manufacturers because, in this case, small amounts of high quality material is being moved.

Summary for Wholesale/Retail Company Interview #7

This is a small company located outside Sedgwick County but in Kansas that imports a finished product from Brazil. Half of its trade is by sea and the other half by truck. The company's only trade route is through the Port of Miami.

The company performs an equal amount of information exchange by Internet/email, landline, and cellular telephones. Most of the customer orders are by email, with product ordering to the manufacturer by landline telephone and customer relation activities by cellular telephone. Hard copy files are kept for reports required by the State and Federal Governments. The company does not use any kind of private or public freight information services, and does not participate in any kind of Government-sponsored programs or services.

The company does not use any specific technology for international trade and sees opportunities for improved efficiencies in product delivery times through the use of technology as well as in service and training. The company would like to see technology assist in opening new markets for its product and would like to be educated on how it might go about doing that.

The company does not know what technologies are available that could assist in getting their product faster, and is concerned that the big companies are cutting budgets, and whatever technologies are being used are not improving delivery times. What used to take a day now takes a week to deliver.

Summary for Wholesale/Retail Company Interview #8

This is a small company located within Sedgwick County that imports finished products from China, Belgium, and Canada. Half of the trade with China and Belgium is by sea; the other half is by truck. Half of the trade with Canada is by truck, with the other half by sea and rail. The major routes from Europe are through the Port of Houston, from China through the Port of Los Angeles/Long Beach, and from Montreal in Canada.

The company uses brokers and their associated technologies, and none of its own. However, if the company had access to the information needed and understood the cost-benefit of controlling its own supply chains, management might consider doing it.

The company does not use any specific technology for international trade and sees opportunities for improved efficiencies in most areas. The company would like to see technology assist with improving its market share, especially with China.

The company does not know enough about available technology to leverage it in growing its international trade.

Summary for Wholesale/Retail Company Interview #9

This is a large company located in a neighboring state that exports finished products to Mexico and Japan, and imports finished products from China, Taiwan, and South Korea. About half of all trade is by sea and the other half by truck or rail, whichever is most cost-effective at the time of shipment. The major routes for both imports and exports are through the Ports of Los Angeles/Long Beach and Seattle. A majority of exports to Mexico are by truck.

The company uses third-party logistic providers to move its products, but has a proprietary enterprise-level supply chain management system and a full IT staff that provides strategic

oversight. The system manages freight movement by exception and uses timeframe parameters in providing alerts on the movement of products. Management by exception allows the IT staff to perform other primary functions and provide strategic oversight without additional personnel.

The company performs information exchange through EDI, Internet/email, and fax, depending on the capabilities of its supply chain partners. Hard copy files are kept when fax is the only mode of communications. The company does not use any kind of private freight information services, and avoids public freight information services because it does not want its information residing in the public domain. The company does not participate in any kind of Government-sponsored programs or services.

The company does plan for future technologies as a percentage of the IT staff's annual budget. The company is most concerned about domestic suppliers having difficulties because of rising prices that forces these suppliers to outsource their supply functions overseas, which places this company in competition with companies that are managing their own supply chains.

Summary for Professional Service Company Interview #10

This is a small company located outside Sedgwick County but in Kansas that imports parts and finished products from China, Taiwan, and a smaller amount from Mexico. About half the trade is by sea and half by truck. The major trade routes from Asia are through the Ports of Los Angeles/Long Beach and Anchorage, with a majority of imports coming through California.

The company is very small, so most trade functions are performed by a few employees. The company performs most of its information exchange by Internet/email with very little by other means. The company reports using both hard copy and computer files equally in conducting international trade. The company does not use any kind of private or public freight information services, and does not participate in any kind of Government-sponsored programs or services.

The company does not use any specific technology for international trade because the Internet seems to support its needs. The company does see opportunities for improved efficiencies from technology, especially in the area of scheduling and possibly cost, but has not planned for the use of technology in the future. The company looks at technology on a piece-meal basis, but has not performed any kind of cost-benefit analysis to determine capital investment.

The company is interested in technology as a catalyst for future growth and product diversification. The company has not set high expectations for its customers, and therefore, does not receive timely inputs for product orders. If technology could help this aspect of the company's international trade, and if the return on investment were reasonable, management would probably invest in future technology.

Summary for Professional Service Company Interview #11

This is a small company located within Sedgwick County that imports parts and finished products from South Korea, China, England, and Spain. This company operates in the company's major trade route from Asia is through the Port of Los Angeles/Long Beach and from Europe through the Ports of New York/New Jersey and Houston, with a majority coming through Texas. All materials are shipped from coastal ports by rail to Kansas City and from there to Wichita by truck.

The company performs all information exchange by Internet/email and fax. The company keeps hard copy fax orders, and does not use any kind of private or public freight information services,

nor does it participate in any kind of Government-sponsored programs or services. The company does not participate in CT-PAT because it is not allowed to until its importers are properly sponsored. However, all of the company's customers are CT-PAT-qualified.

The company uses proprietary software with different programs for different aspects of trade. These programs provide more than what is currently needed and some of the programs' capabilities are not being used, but it is anticipated that they will be in the future. The company sees opportunities for technology improving all aspects of its international trade and would be interested in any technology that could help improve the efficiency of doing business. Though it has not planned for implementation of any specific technology, the company would invest in technology that allows it to increase its cash flow in the short term. The company wants to increase its number of trading partners and is open to importing new products.

The company is most concerned with rising diesel prices, truck driver shortages, delays at POEs, and information systems shortcomings in communication among the private and public sectors.

Summary for Professional Service Company Interview #12

This is a small company located within Sedgwick County that exports raw material to China, India, and Brazil. Half of its trade is by sea; the other half is by rail. The interviewee was not familiar with the routes the material travels throughout the supply chains.

The company performs a majority of its international trade using cellular telephone communication; however, it also uses the Internet/email to establish initial contact with customers, resolve contractual terms, and to connect the buyer and seller. Landline telephone communication is used infrequently to establish initial contact. All files are electronic and are passed between buyer and seller and not maintained by the company. The company does use private freight information services (Dunn & Bradstreet) periodically to perform due diligence. The company does not use any kind of public freight information services, but does participate in Government-sponsored services through the U.S. Department of Commerce's Website – (www.export.gov) – to investigate products countries are interested in, meet export control requirements, and request Government assistance where needed.

The company does not use any specific technology in international trade because the Internet seems to support its needs. Management sees opportunities for improved efficiencies through the use of technology to improve product delivery and information flow among supply chain partners. The company would like to see technology make the movement of goods more transparent and feels that integration of information systems and less regulation and more assistance by Government would significantly improve this transparency. The company feels that open exchange of information is the key to improving international trade and that technology could play an important role, but maybe not the most significant role.

The company would like to see the Wichita economy improve and competition increase. This type of growth would help stimulate commerce and everyone would benefit. If more people would be less apathetic and get involved, international trade would improve.

Summary for Professional Service Company Interview #13

This is a medium-sized company located outside Sedgwick County but in Kansas that exports finished products to England, Bermuda, and Germany. All of its exports are documents that it sends electronically, so no routes are used in the traditional sense of moving goods.

The company performs a majority of its international trade by landline telephone and uses the Internet/email to communicate with its agents in the field. The company does not use a cellular telephone much at all. The company does keep hard copy files of all its customer documents. The company does not use any kind of private or public freight information services, and does not participate in any kind of Government-sponsored programs or services.

The company does not use any specific technology in international trade and relies heavily on the indigenous capabilities of the Internet to provide security. The company operates a Local Area Network and has redundant firewalls through its Internet provider that it takes advantage of to increase system security.

The company sees opportunities for improved efficiencies, especially through the use of video teleconferencing and Webinars and feels that this type of technology can offer it more real-time decision making capability and more constructive meetings. The company has not, as of yet, planned for future use of this technology.

The company feels that the economic growth of Wichita will bring more business to the region, offering it more opportunities to expand its customer base.

Summary for Manufacturing/Wholesale/Retail Company Interview #14

This is a medium-sized company within Sedgwick County that exports raw materials to Mexico by truck along Interstate 35. Although it currently does not import, the company has future plans to do so with Mexico and anticipates that 80 percent of these imports will be by rail and the remainder by truck. The company receives its materials from Chicago on the Union Pacific rail lines using gondola (covered) rail cars, which prevent materials within from exposure to the elements.

The company performs a majority of its international trade by Internet/email, and also uses the landline telephone extensively for sales purposes in making initial contact with customers. The company has its own truck fleet and also uses cellular telephones to contact drivers. The company does not use any kind of private or public freight information services, and does not participate in any kind of Government-sponsored programs or services. Management would consider use of these services in the future, especially if importing becomes a part of the business.

The company does not use specific technology in international trade and would consider any technology that provides the potential for increased efficiency, especially ones that could improve the efficiency of getting rail cars to its facility (it has a rail spur) in the numbers needed, when needed, or alternatively, to a local intermodal facility.

The company is interested in technology that would help to improve Wichita's economy, especially if it helped increase the infrastructure supporting international trade – such as in the development of an intermodal facility. The company is also interested in technology that would

help it increase its number of international supply chains and diversify its product line while simultaneously improving efficiency of operations.

This company has had to arrange alternative delivery of its product from Chicago by flatbed trucks with tarps because of the limited availability of gondola rail cars. This arrangement creates more challenges – for the shipments to be cost-effective, full loads for the flatbed trucks need to be arranged after they have released their loads in Wichita.

Summary for Wholesale/Retail/Professional Service Company Interview #15

This is a small franchise company located within Sedgwick County that imports finished products from Italy and China, with half of its trade is by sea, and the other half by truck. The routes the material travels vary depending on the product and the most cost-effective means of shipment, so there is not any particular route that is prevalent over another.

The company performs 95 percent of its communications and over 50 percent of its transactions by cellular telephone, with 30 percent of its transactions by Internet/email and 15 percent by landline telephone. All local sales are initiated face-to-face. The company keeps hard copy files of all sales transactions and purchases. The company does not use any kind of private or public freight information services, and does not participate in any kind of Government-sponsored programs or services.

The company does not use specific technology in international trade, and would consider any technology that provides the potential for increased efficiency. The company would like to have a better understanding of how the Internet could be used more efficiently for communicating with supply chain partners, corporate headquarters, and in scheduling delivery of products.

The company has not planned for future technology in international trade, and is interested in how technology might help to increase its customer base and types of products. This comes more from the corporate level than the individual franchise level.

The company is most concerned with improving efficiency of the product distribution process and time delays in product orders caused by congestion at U.S. east coast ports.