ST. LOUIS METROPOLITAN MARKET ASSESSMENT

Global Cities Initiative



Courtesy of the St. Louis Convention & Visitors Commission

Olin Business School, Washington University in St. Louis in cooperation with the World Trade Center – St. Louis May 12, 2015

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Tim Nowak, Executive Director, World Trade Center – St. Louis

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David Logan, Managing Partner and Chief Economist, Logan & Logan LLP

Daniel Bentle, Associate Director, Center for Experiential Learning, Olin Business School

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St. Louis Core Team

Elise Miller, Research Team Lead, MBA Candidate, May 2016, Olin Business School, Washington University in St. Louis

Emma Dong, PhD Candidate in Economics, May 2017, College of Arts & Sciences, Washington University in St. Louis

Michael Ahrens, MBA Candidate, May 2016, Olin Business School, Washington University in St. Louis

Arnab Guha Biswas, MBA Candidate, May 2016, Olin Business School, Washington University in St. Louis

John Strand, BSBA Candidate, May 2016, Economics and Human Resources, Olin Business School, Washington University in St. Louis

Kabir Samtani, BS Candidate, May 2017, Systems Engineering and Finance, School of Engineering and Applied Science, Olin Business School, Washington University in St. Louis

Executive Summary

St. Louis was recently selected to participate in the Global Cities Initiative: The Exchange (GCI), a \$10 million, five year project sponsored by The Brookings Institution and JP Morgan Chase. St. Louis joins a prestigious network of 28 cities in The Exchange. The goal of GCI is to help regional leaders in metropolitan areas across the country strengthen their local economies by becoming more competitive in the global marketplace. The World Trade Center – St. Louis and regional partners on the GCI Steering Committee are working together to develop a regional export strategy.

The Washington University research team has conducted research on St. Louis' export economy through a Market Scan, a Market Survey and multiple Local Intelligence Interviews. The research focused on identifying the strengths and weaknesses of the St. Louis Metropolitan Statistical Area (MSA) (referred to as St. Louis throughout the remainder of the document) through quantitative analysis of macroeconomic factors, coupled with qualitative insights from representatives of local companies, representing both exporting and non-exporting organizations.

Through this analysis, the team identified high potential industries for export expansion, key challenges to the current export process, and future opportunities to facilitate the export process:

- High Potential Industries for Export Expansion:
 - The Market Scan showed that while St. Louis' historical exports are primarily manufactured goods, there is high export potential in service industries as well, specifically in Financial Services, Engineering Services, and Information & Technology Services.
- Key Challenges to the Current Export Process:
 - 23% of survey respondents stated that "Knowledge of Foreign Markets" was one
 of the most significant challenges faced by their company when exporting or
 considering new export markets.
 - o In Local Intelligence Interviews, managers identified several challenges to the export process, including navigating foreign business cultures, incorporating exports into a domestic business model, and finding local talent with the appropriate skill set to manage export initiatives.
- Future Opportunities to Facilitate the Export Process:
 - 29% survey respondents selected "Reduce taxes/government overhead" as a way the federal, state, or local government could help their company begin exporting, increase exports, or export to new markets in foreign countries.
 - o In Local Intelligence Interviews, companies suggested ideas for how governmental agencies can facilitate the export process. Several themes which emerged from these conversations included launching an export-focused marketing campaign, educating companies about shipping practices, and supporting initiatives that make St. Louis a more desirable place to work and do business.

Market Scan

Exporting activities supported 44,780 jobs in St. Louis in 2013, ranking St. Louis as 23^{rd} in this category relative to the other top 100 metro areas in the United States. St. Louis' gross metropolitan product (GMP) has grown at an annualized rate of 1.93% since 2009, realizing positive GMP growth. However, the St. Louis export economy has not achieved significant growth over the past decade, lagging behind the national growth rate. St. Louis's total real exports have only grown by 1.4% from 2008-2013, ranking St. Louis as 64^{th} in the nation in terms of annualized growth rate of real exports.

Manufactured goods made up around 73% of the region's exports in 2012. In 2013, St. Louis' top five industries in terms of real export value were Aircraft Products and Parts, Motor Vehicles, Nonferrous Metal Products, Basic Chemicals, and Information Technology Royalties. St. Louis' top export markets from 2011-2013 were Canada, Mexico, China, and South Korea.

The research team identified three industries that show a high potential for export growth in St. Louis: Financial Services, Engineering Services, and Information and Technology Services. To determine which three industries demonstrate the most export potential, the team first identified 13 goods and services industries that demonstrated high export potential. These industries were selected using an index which incorporated local export data and national gross domestic product (GDP) and export data.

Next, the local export concentration (percentage share of metropolitan exports divided by percentage share of national exports) of these 13 industries was compared to the export concentration of these same industries in seven comparable United States (U.S.) cities. The seven cities were classified as comparable to St. Louis based on various measurements of economy size, employment, education levels, and business environment. The seven comparable cities identified by the team include:

- Baltimore-Columbia-Towson, MD
- Cleveland-Elyria, OH
- Denver-Aurora-Lakewood, CO
- Pittsburgh, PA
- Portland-Vancouver-Hillsboro, OR-WA
- Riverside-San Bernardino-Ontario, CA
- Tampa-St. Petersburg-Clearwater, FL

Next, the team identified specific industries in which St. Louis had a lower export concentration, lower number of total real exports, lower share of total local exports, and/or lower annualized export growth rate, compared to the same industries in the aforementioned comparable cities. These industries were considered to be opportunities for export growth. The reasoning is that the 13 industries analyzed in this step were already identified as being strong export industries for St. Louis, and, if other comparable cities which presumably have a similar export capacity to St. Louis are exporting these goods or services to a greater degree, there is an opportunity for St. Louis to export to a greater extent.

Interestingly, despite St. Louis' strong history of manufactured goods exports, the industries that showed the highest potential throughout the study were all from service sectors: Financial

Services, Engineering Services, and Information and Technology Services. The growing number of technology startups in St. Louis creates an opportunity for investment from financial services companies and for collaboration with engineering firms. Due to the interconnected nature of these three industries within the entrepreneurial ecosystem in the region, St. Louis has an opportunity to create a distinct competitive advantage by supporting these industries as an interrelated network, rather than three distinct industry clusters.

Market Survey

The team surveyed over 200 companies in St. Louis to better understand the current export capabilities in the region and the tradeoffs that managers face when deciding whether to begin or expand export operations. The survey yielded valuable insights about the challenges and opportunities identified by representatives from companies of various sizes and industries, some of which currently export and others that do not export currently.

The main reasons that representatives of exporting companies claimed that they began exporting were: direct sales opportunities (60%), a company or contact in a foreign country selected their company (56%), a prior relationship or prior experience with companies or contacts in those countries (49%), and/or due to the distributors in those countries (42%). The majority of the representatives of non-exporting companies claimed that the main reason they did not export was because their company's product/service could not be exported (65%).

When asked what the most significant challenges were when exporting, respondents were given the opportunity to select multiple answers. The challenge that the most number of respondents indicated was insufficient knowledge of foreign markets (23%). Other significant challenges included:

- Global sales contracts, contract negotiation (21%)
- Foreign import control laws, regulatory compliance, inspections, tariffs (20%)
- Transportation costs (20%)
- Foreign government regulations/policies (19%)
- U.S. export control laws, regulatory compliance, licensing, inspections, and tariffs (19%)

When asked which programs and services the federal, state or local government could provide to facilitate the export process, respondents were able to select multiple answers. The most common programs and services that were chosen include:

- Reduce taxes/government overhead (29%)
- Export-related trainings or workshops designed for small and medium sized businesses (27%)
- Streamline export related government paperwork and procedures (23%)
- Events such as trade shows and conferences designed to introduce and match new-to export businesses to prospective foreign business partners (23%)
- Expand free trade deal activity (22%)

Local Intelligence Interviews

As of May 5, 2015, the GCI team completed interviews with 13 local companies. In these interviews, the team asked company representatives questions from the Global Cities Initiative Business Interview Form, regarding general company information, regional economic development, exports, and exports service providers. Some of the companies represented have extensive export operations while others do not currently export. These interviews will continue through June 2015.

While exporting involves new risks and difficult managerial decisions, company representatives were often motivated by the large purchasing power outside the United States. Many companies indicated that they decided to export to increase their company's addressable market and obtain a higher profit margin in international markets. However, throughout the interviews, companies identified various challenges they faced when starting the export process. Certain difficulties that companies, across industries, faced when exporting included: incorporating exporting activities into a domestic business model, navigating different cultural and regulatory environments, establishing trust with foreign partners, building brand equity, and finding local managers with the appropriate skill set to manage export initiatives.

Companies were also asked to share insights about how federal, state, and local governments can help local companies export more. Three key ideas that emerged from the interviews were: launching an export-focused marketing campaign, educating companies about shipping practices, and supporting initiatives that make St. Louis a more desirable place to work and do business.

Throughout the local intelligence interviews, the team found that many companies first encountered export opportunities through outside partners or customers. Often times, companies began exporting because of a prior foreign relationship or because they were contacted directly by a foreign customer. Rather than defining a global strategy and proceeding accordingly, companies started with a domestic strategy and discovered unique ways to incorporate exports into their business model. Almost every company with which the team met stressed the importance of building relationships and spending time in the foreign markets to establish trust with partners and to better understand the cultural environments abroad.

Introduction

With the completion of the Metropolitan Export Initiative (MEI), led by The Brookings Institution, cities from around the United States (U.S.) gathered local information on the strengths and weaknesses of their metropolitan area's export economies. These findings created the ground work to compile a customized Metro Export Plan (MEP) for each city, with the goal of using the gathered market intelligence to formulate export-oriented services and strategies for local firms to engage with international markets. This includes a wide variety of focuses including finding customers, research and development partners, supply chain assistance, and others. Seeing the successful implementation of new programs and policies within these cities, the MEI continues its goal of expanding global trade and foreign investment strategies in metropolitan areas through the Global Cities Initiative (GCI).¹

The GCI, led jointly by The Brookings Institution and JPMorgan Chase, is a five-year project aimed at collaborating with the leaders of metropolitan areas around the U.S. to strengthen their regional economies and become more competitive in the global economy. Ultimately, the GCI seeks to help U.S. cities and metropolitan leaders take advantage of their global assets with new strategies concerning key indicators such as advanced manufacturing, exports, foreign direct investment, freight flow, and immigration, provide leaders with proven, actionable ideas on how to expand their global reach and use policy innovations to foster trade and growth, and create an international network of global leaders intent on deepening global trade relationships.²

As part of the GCI, The Brookings Institution and JPMorgan Chase also launched The Exchange, a four-year learning and action network that will develop and implement regional strategies to boost global trade and investment, forge partnerships between the U.S. and international metropolitan areas, and advocate for policy changes, both at the state- and national-level. The Exchange allows local leaders to take advantage of the ideas and collaborations generated by the GCI's research and forums. The result is "more globally-oriented metropolitan areas and an evolution in economic development."³

The first step to completing the GCI is to create the Export Market Assessment. The Export Market Assessment takes an in-depth look into the local metropolitan economy and evaluates its key strengths and weaknesses through historical data analysis, a survey of the local business environment, and personal one-on-one interviews with local firms. To ensure the success of the GCI's goals and programs, the St. Louis Metropolitan Statistical (MSA) (referred to as St. Louis throughout the remainder of the document) formed a GCI Steering Committee comprised of local public, private, and academic institutions to collaborate in both the direction and execution of the St. Louis Export Plan. Due to St. Louis' collaborative nature and diverse community, the core team has extensive social capital.

The Export Market Assessment is comprised of three key components: Market Scan, Market Survey, and Local Intelligence Interviews.

Market Scan

Student researchers were recruited from the Olin Business School at Washington University in St. Louis in order to conduct an extensive analysis on economic trends in St. Louis. Data

concerning the Market Scan section was gathered from the Brookings Export Nation, the Bureau of Economic Analysis, the International Trade Administration, and other databases. This data served as the basis in building the Market Survey and Local Intelligence Interview guide and in formulating St. Louis' economic narrative (key industries, major export markets, and potential growth areas).

Market Survey

Students from the Olin Business School at Washington University in St. Louis created an indepth survey customized to St. Louis. In crafting the questions for the survey, feedback and suggestions were obtained from regional organizations with expert knowledge. These organizations include the World Trade Center – St. Louis and Olin Business School at Washington University in St. Louis. These questions were reviewed by Olin Business School academics with professional survey design expertise to ensure that the questions were formatted appropriately for the purposes of the survey with the goal of getting the best responses possible for the benefit of St. Louis. Qualtrics, a web-based survey tool, was used to create and distribute the survey. In order to obtain the highest response rate possible, the team leveraged its social capital to obtain the cooperation of several large industry organizations and associations on the GCI Steering Committee. The survey received a total of 201 unique firm responses over the course of the survey period.

Local Intelligence Interviews

Students from the Olin Business School at Washington University in St. Louis, in collaboration with the World Trade Center -St. Louis, created an extensive interview guide addressing both exporters and non-exporters in St. Louis. The goal was to first inquire into individual business experiences in St. Louis pertaining to exports and then to discuss specific strengths and weaknesses of the St. Louis export and regional economy. Questions for the interviews were heavily based off of the Global Cities Initiative Business Interview Form, regarding general company information, regional economic development, exports, and export service providers.⁴ To ensure that the answers provided during the interviews were of high quality, the student researchers were trained by academic professionals at Washington University in St. Louis. The social capital of the Steering Committee was again used to gain audiences with C-level executives, ensuring that the interviewees had access to the requested information. In these interviews, the representatives from the World Trade Center – St. Louis introduced two of the trained student researchers to the companies participating in the interviews. In an interview process of about 30-45 minutes, one student researcher would conduct the interview while the other student researcher would record the answers and discussion points provided. In total, 13 companies were interviewed for the purposes of the GCI.

Market Assessment

This data-driven market assessment is the product of data gathered in the Market Scan, Market Survey, and Local Intelligence Interviews. This report details the strengths, weaknesses, and highlights of St. Louis' export economy through the analysis of the gathered data (for information regarding the data, see the below **Data Collection and Analysis** section). Historical research and grassroots interviews further revealed the metropolitan area's performance and potential. Export potential for St. Louis focuses primarily on key industries and subsectors, driven from an analysis of industry concentration against comparable metropolitan economies. The information presented here will help form the basis of the St. Louis Export Plan.

Data Collection and Analysis

This report includes quantitative and qualitative analysis to provide an overall market assessment of St. Louis. When conducting the research, the team used many sources, including data from:

- The Brookings Institution
- The Bureau of Economic Analysis
- The United States Census Bureau
- The International Trade Administration
- The Bureau of Labor Statistics
- Other industry and regional reports

Similar measures, statistics, and industry classifications vary between these sources due to differing measurement techniques and processes. Therefore, similar metrics throughout the paper may differ slightly due to the use of multiple sources. The insights as a whole, however, are similar regardless of the sources used.

Within individual analyses, the team attempted to use data from the same sources for consistency whenever possible. This includes being consistent when using nominal and real gross domestic product (GDP) and export data.

The opinions expressed are those of the research team as of May 2015 and may change as subsequent conditions vary. The information and opinions contained in this material are derived from proprietary and nonproprietary sources deemed by the research team to be reliable and are not necessarily all-inclusive. Reliance upon information in this material is at the sole discretion of the reader as new information and data is published frequently.

Rationale for Exports

Dependence of Economic Development

In a dynamic and increasingly interconnected global economy, international trade plays a crucial role in the economic development of metropolitan areas. International trade provides local producers increased access to a larger global market, and, at the same time, stronger international competition encourages the production of goods and services that a metropolitan area can produce more efficiently. This economic specialization of the metropolitan area allows for production at higher volumes and provides economies of scale to the exporting organizations, as mentioned in Paul Krugman's Trade Theory. The increase in regional production volume leads to an increase in regional employment. Also, export of goods and services introduces cash flow from outside the region into the local economy. This cash flow allows the purchase of local goods and services, thus increasing the regional consumption, income, and employment. The global competition encourages innovation, generation of new products, and sourcing of valuable technology and resources into the region. By building global relationships with trading partners, cities can drive new investments from local and global firms and pursue growth strategies.

U.S. Exports

To delve deeper into the intricacies of exports and international trade, it is essential to understand the exact definition of an export. Emilia Istrate, Jonathan Rothwell, and Bruce Katz of Metropolitan Policy Program at Brookings have defined a U.S. export as:

"A U.S. export is the sale of a good or service made in the United States to a person or business residing in a foreign country... The expenditures of foreign students studying in the United States are education exports for the United States. The payments made by people and companies from outside of the United States to U.S. companies or individuals for the right to use their patents, trademarks, or copyrights are U.S. exports of royalties. What makes something a U.S. export is not where the transaction takes place, but whether or not the buyer is outside the United States."

By the virtue of technological advancements and improved connectivity, the share of global output from trade has tripled since 1950.¹⁰ A McKinsey report projects that consumers in emerging markets will consume \$30 trillion in goods and services by 2025, up from \$12 trillion in 2010.¹¹ This proliferation of global demand presents enormous opportunity to derive economic value through exports and permeate this economic value in the local market place by creating job opportunities to meet the global demand.

Total real U.S. GDP has increased at a compound annual growth rate (CAGR) of 3.20% from 2009 to 2014. However, export intensity (calculated as export value as a percent of GDP) at a national level has leveled off after seeing a sharp increase from 10.98% in 2009 to

Increasing global integration

3X



Since 1950, the share of global output from trade has **tripled**

http://www.brookings.edu/researc h/interactives/2013/global-metrotraits-infographic

13.71% in 2011; the export intensity in 2014 was 13.46%, slightly lower than the high in 2012.¹² While the level of national GDP and exports have varied, the composition of U.S. exports has

remained fairly constant between goods, services, and royalties. According to data from the United States Census Bureau from 2000-2010, goods have consistently made up around 70.9% of national exports while services and royalties made up around 23.5% and 5.6%, respectively.¹⁴

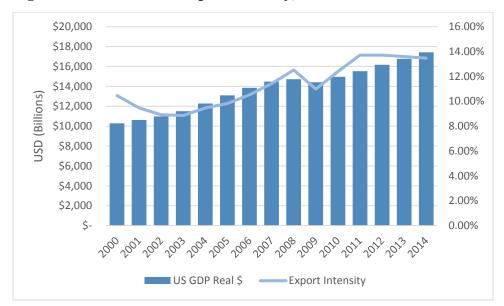
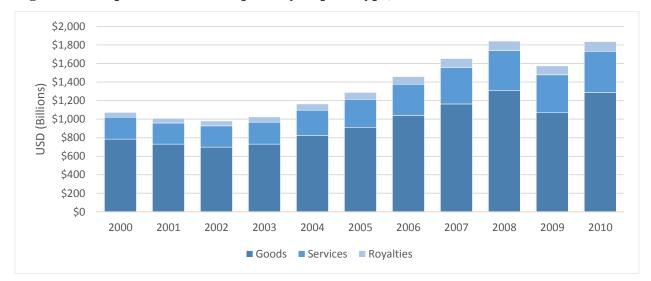


Figure 1: U.S. GDP and Export Intensity, 2000-2014





At a national level, the top two export markets for the U.S. are Canada and Mexico, likely due to their close geographic location. While exports to Mexico have been strong over the past five years with a 13.25% CAGR, it is mainly emerging markets that have shown strong export

growth over the last five years. China (12.24%), South Korea (9.24%), Brazil (10.11%), and Hong Kong (14.15%) are among the fastest growing export markets for the U.S. over the last five years. While exports to these markets grew at a slower rate or even a negative rate from 2013-2014, these markets are high priorities for exports as the U.S. and other countries move towards global integration and trade.¹⁵

Table 1: Top Ten U.S. Export Markets by Total Exports, 2014

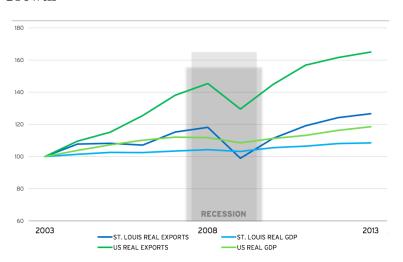
		Total Goods Exports	% Growth	5-Year Growth
	Country	2014 (USD Billion)	2013-2014	CAGR 2009-2014
1	Canada	\$ 312.00	3.90%	8.79%
2	Mexico	\$ 240.30	6.23%	13.25%
3	China	\$ 124.00	1.64%	12.24%
4	Japan	\$ 67.00	2.92%	5.53%
5	United Kingdom	\$ 53.90	13.71%	3.36%
6	Federal Republic of Germany	\$ 49.40	4.22%	2.67%
7	Korea, South	\$ 44.50	6.97%	9.24%
8	Netherlands	\$ 43.70	2.34%	6.23%
9	Brazil	\$ 42.40	-3.85%	10.11%
10	Hong Kong	\$ 40.90	-3.76%	14.15%
	Grand Total	\$ 1.018.10	34.31%	85.58%

St. Louis Exports

Exports directly supported 44,780 jobs in St. Louis in 2013, ranking St. Louis as 23rd in this category relative to the other top 100 metro areas in the United States;¹⁶ however, St. Louis' export economy has not achieved significant growth over the past decade and has lagged the national growth rate. In 2013, St.

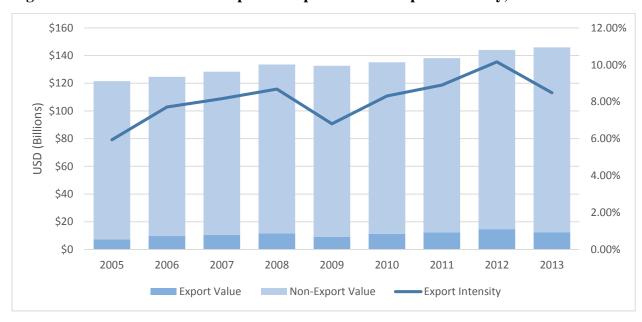
Louis' export share of GDP was 11.5%, up from 8.7 % in 2003. During the same period, St. Louis' real export grew from \$12.8 billion in 2003 to \$16.2 billion in 2013. Post-recession (from 2008 to 2013), St. Louis' real export grew by only 1.4%, and its real GDP saw a marginal 0.8% growth. This ranks St. Louis at 64th and 57th in the nation for annualized growth rate in real exports and real GDP, respectively, during 2008-2013. St. Louis must evaluate its strengths and weaknesses to focus its efforts

Figure 3: Post-Recession Real GDP and Real Export Growth



towards improving its positioning in the global market.¹⁷

Utilizing St. Louis GMP data from the Bureau of Economic Analysis¹⁸ and St. Louis export data from the International Trade Administration¹⁹ places St. Louis' export intensity slightly lower than the above analysis from Brookings. However, the patterns at a total level are consistent. St. Louis' GMP has been increasing in the post-recession at a CAGR of 1.93% from 2009-2013. While export intensity dropped from 10.16% in 2012 to 8.49% in 2013, the 2013 export intensity level was higher than 2005's level of 5.94%.



ServicesGoods

Figure 4: St. Louis GMP with Export Composition and Export Intensity, 2005-2013

Manufacturing has long been a key sector for St. Louis' exports. In 2012, manufactured products comprised 72.7% of the value of St. Louis' exports, compared to 70.9% for the U.S. as a whole.²⁰ In 2013, four of St. Louis' top five industries in terms of real export value were manufacturing-related:²¹

1. Aircraft Products & Parts: \$1,720 million (10.6% of total exports)

St. Louis

United States

Servic
es
27.3%

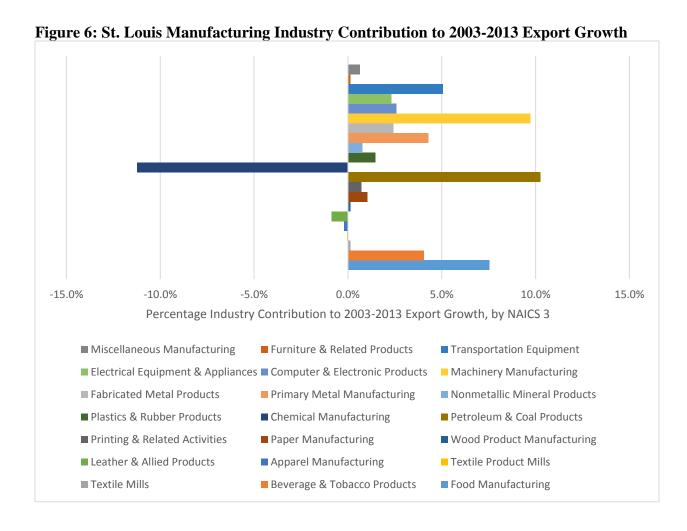
Goods
72.7%

Figure 5: St. Louis and U.S. Export Concentration

ServicesGoods

- 2. Motor Vehicles: \$1,700 million (10.5% of total exports)
- 3. Nonferrous Metal Products: \$750 million (4.6% of total exports)
- 4. Basic Chemicals: \$670 million (4.2% of total exports)
- 5. Information Technology Royalties: \$480 million (2.9% of total exports)

Manufacturing has played a pivotal role in St. Louis' export economy. Almost every manufacturing industry has had a positive contribution to St. Louis' export growth from 2003-2013.²² This positive contribution is expected to continue as St. Louis leverages its strengths in manufacturing moving forward.



Justification for St. Louis Export Development

Regional leaders have recently convened to develop a comprehensive economic development plan for St. Louis. Regional leaders demonstrate an understanding of the necessity of a globally competitive economy to St. Louis' economic prosperity and the role exports play in the creation of such an economy. Thus, a region-wide export plan will be developed in an effort to retain, expand, and attract talent, financing, and companies to maximize St. Louis' economic affluence.

This effort has been prioritized by local elected officials, business leaders, innovators, residents, and leading academic research institutions.

Competitive Global Orientation

<u>Technology</u> – Recognized as one of the fastest growing areas for total funding for technology start-ups in the U.S., St. Louis has a budding and actively growing technology hub. Capital spending for technology start-ups increased by 1,221% from November 2013 to October 2014.²³ St. Louis is becoming a thriving technology ecosystem, emphasizing the importance of being globally connected and competitive.

<u>Tourism</u> – St. Louis has a large and active tourism industry. St. Louis receives more than 21 million visitors each year from around the country and globe. These visitors annually spend almost \$4.20 billion on goods and services in St. Louis. Outside of the nation's capital, St. Louis features more free attractions than any other city in the U.S., adding to St. Louis' attractiveness to visitors.²⁴

<u>Education</u> – St. Louis features more than 9 universities and numerous research institutes that cover a variety of subjects including medical research, public health, radiology, and urban and public policy.²⁵ These institutions conduct groundbreaking research, train the region's workforce, and enable St. Louis to compete on a global level in regards to both human capital and infrastructure.

<u>Shipping Channels</u> – St. Louis is a center for transportation and shipping networks in the U.S. More than 32 million tons of freight is handled annually in St. Louis. St. Louis has access to four interstate highways, allowing freight from St. Louis to reach anywhere on the mainland U.S.

within three days. As one of the nation's leading rail centers, St. Louis features six class I rails, two regional rails, and three switching rail lines. With the Mississippi River available as another transportation network, St. Louis waterways offer more than 100 docks and terminal facilities. Finally, Lambert-St. Louis International Airport provides flights for both commercial and public transportation.²⁶

Demographics and Geography

With a 2014 estimated population of 2.8 million, St. Louis is ranked as the largest metropolitan area in Missouri and 20th in the U.S.²⁷ The St. Louis community includes a diverse range of people. African Americans make up a larger percentage of the population in St. Louis City relative to the national average.²⁸ ²⁹

With respect to geography, St. Louis is located in the heartland of the North American continent and the U.S.

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
St. Louis City Missouri United
Other States

Two or More Races

Black or African American

Asian

■ White

Figure 7: St. Louis Demographic

Breakdown

18

As the third largest inland port in the U.S., St. Louis is in a unique position with regards to shipping networks. The Mississippi River gives access to sea routes to the Caribbean and South America. Highways, railways, and airways allow St. Louis companies to easily ship goods and services to any coast and around the globe.³⁰

Employment

St. Louis is gradually recovering from the recent recession. Total employment for St. Louis is returning to pre-recession numbers. Unemployment is on par with the national average indicators, with an unemployment rate of 5.9% as of December 2014. From the second quarter to the third quarter in 2014, St. Louis was ranked 17th among all metropolitan areas in terms of unemployment change, with -0.5 percentage points. Job growth is increasing, though at a lower rate than national averages. From the second quarter to the third quarter of 2014, St. Louis was ranked 38th among all metropolitan areas in terms of total job growth, with +0.6% percentage point change. ³¹ As jobs continue to return to St. Louis, a larger workforce will be required to keep the economy at optimal efficiency.

Existing Initiatives

The Export Missouri initiative was launched by Missouri Governor Jay Nixon in 2013. This initiative strives to increase export activity within small- and medium-sized companies in Missouri. As part of the initiative, Missouri will open additional trade offices in Toronto, Hong Kong, and Singapore.

To assist companies participating in the initiative, Export Missouri offers a host of services including financial services to help small businesses participate in trade shows and missions, trade consultation to provide information on potential markets and buyers, and a web-based service to showcase companies' products and identify qualified foreign companies and distributors.³² These services offered in Export Missouri fit with the GCI's global theme and synergizes well with the growing industries in St. Louis.

The Midwest Cargo Hub Commission was established in December 2008 as a joint project between the State of Missouri, St. Louis County, and St. Louis City. Its purpose is to develop an international freight and commercial hub in St. Louis under a concept known as The Big Idea. This idea was authored by U.S. senators Christopher Bond and Claire McCaskill. Under The Big Idea, St. Louis would become an international gateway into the American Heartland through dedicated cargo flights with connections to Asia, Latin America, and other global markets and through the development of a strong economic hub of two-way trade and foreign direct investment.³³

The St. Louis Asia Trade Desk was established in January 2012 by a partnership between the World Trade Center – St. Louis and former U.S. senator Christopher Bond. The Asia Trade Desk provides specialized assistance and support to Missouri companies seeking to do business in Asian markets. This includes technical training and business seminars on how to do business in

Asia, market research and trade statistics on countries and industries, and trade missions and company introductions through high-level government channels.³⁴

The St. Louis Mosaic Project was launched in 2012 on behalf of the St. Louis Economic Development Partnership and the World Trade Center – St. Louis. Highlighting the benefits of foreign immigrants to the St. Louis economy, the Mosaic Project's goal is to transform St. Louis into the fastest growing metropolitan area for immigration by 2020 and to promote regional prosperity through immigration and innovation.³⁵

Market Scan

Metropolitan Statistical Area Economy and Performance

GMP and Population

St. Louis' nominal gross metropolitan product (GMP) has been growing at an annualized rate of 1.93% since 2009. While growth rates have varied and were even been negative in 2009, St. Louis has realized positive GMP growth. In 2013, St. Louis' GMP was \$145.96 billion, representing an increase of 5.6% since 2011. However, St. Louis' output growth has lagged behind that of the U.S. as a whole since the first quarter of 2004.

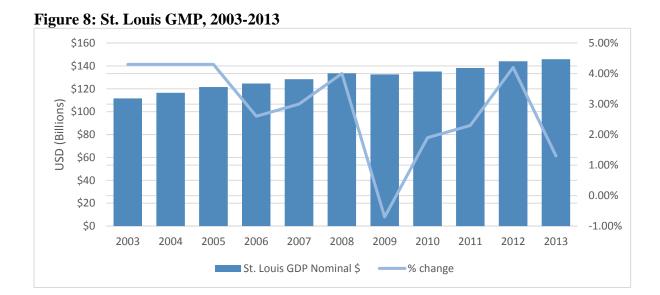
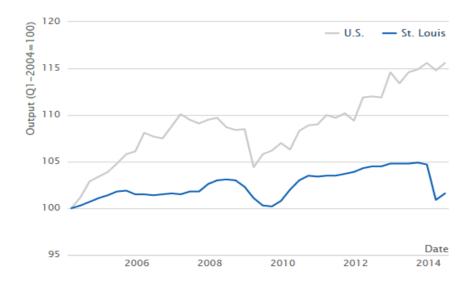


Figure 9: St. Louis and U.S. Output Growth



Since GMP data is not available at a granular level for competitive reasons, the team broke down St. Louis' GMP by high-level industry categories. Making a few minor assumptions (see **Appendix: Assumptions for St. Louis Nominal GMP Share by Industry (Figure 10) Analysis**) to fill in missing data, the team calculated the share of GMP for eight industry categories. Business and Financial Services, accounted for 38.08% of St. Louis' GMP in 2013. The next strongest contributors to St. Louis' GMP in 2013 were Local/Non-Market Services and Manufacturing, representing 26.62% and 13.64%, respectively.³⁸

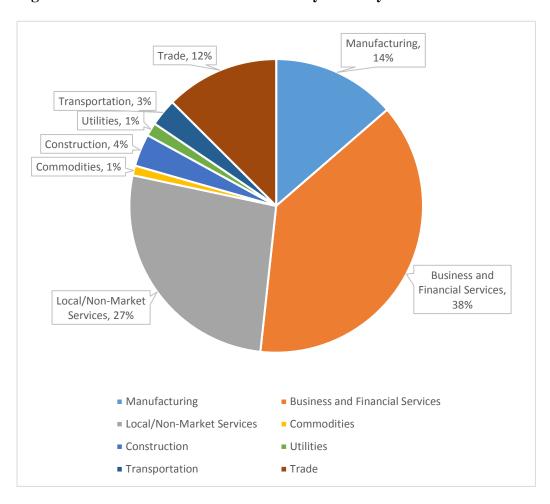


Figure 10: St. Louis Nominal GMP Share by Industry

The population in St. Louis was 2,797,310 in 2014. While St. Louis' population declined in the 1970's and 1980's, the population has been growing slowly in recent years.³⁹ From 2010 to 2014, St. Louis' population grew at a CAGR of 0.08%.⁴⁰ This fell below the national population growth rate of 0.70% to 0.80% per year over the same time period.⁴¹ While St. Louis' population has still not reached the recent high in 2009,⁴² St. Louis' population CAGR is projected to increase to 0.18% from 2014-2019.⁴³

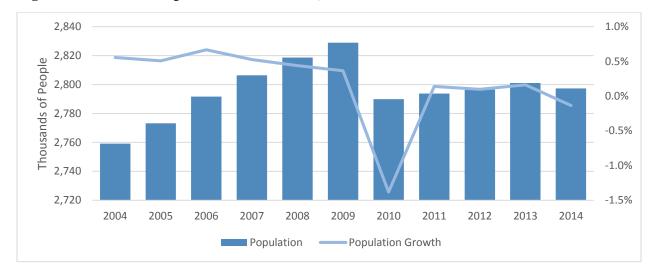


Figure 11: St. Louis Population and Growth, 2004-2014

In 2014, over half of St. Louis' population was in the labor force. The labor force of 1,423,213 people in 2014 represented a 62.9% labor force participation rate. 44 1,318,800 people were employed in St. Louis in at the end of 2014. 45 After the recession in 2008, the employment rate dropped significantly, and, although the local economy was able to pick up from 2009 to 2010, it experienced a stalled recovery in 2011 when employment decreased by over 3,000 again. 46 Preliminary estimates put employment numbers in 2015 in line with those from 2005. 47

Moreover, St. Louis' unemployment rate has closely mirrored that of the U.S. from 2005-2014. St. Louis ended 2014 with a 5.90% unemployment rate, slightly higher than that of the U.S. at 5.60%. 48



Figure 12: Unemployment Rates, 2005-2014

Employment in St. Louis is fairly dispersed across industries with no single industry accounting for more than 20% of total employment. Trade, Transportation, and Utilities is the largest industry in terms of employment, employing 18.85% of all employees in St. Louis. Education & Health Services and Professional & Business Services are second and third in terms of employment with 17.52% and 15.44% of St. Louis employment, respectively.⁴⁹

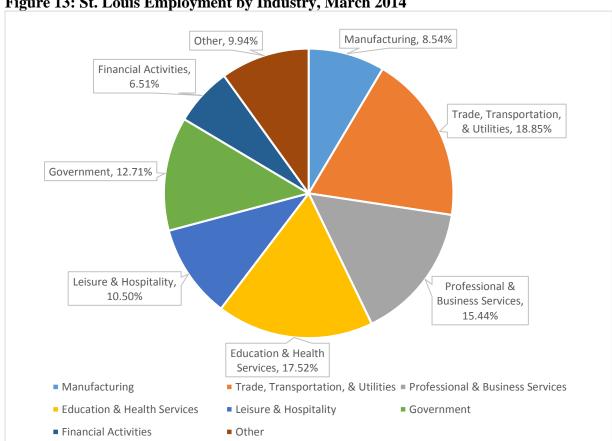


Figure 13: St. Louis Employment by Industry, March 2014

Utilizing Brooking's location quotient measure (calculated by dividing the industry's share of jobs in St. Louis by the industry's share of jobs in the U.S.), the team determined that St. Louis' workforce is highly specialized in two industries. In the second quarter of 2014, Education had a location quotient of 1.24 while Finance and Insurance had a location quotient of 1.23. Both of these industries have increased in specialization over the past four quarters, showing a positive change of 1.10% and 2.4%, respectively, and landing in the top 50% of change for St. Louis. Other notable industries with high change over the last four quarters include Real Estate and Rental and Leasing (8.10%), Construction (3.90%), Professional and Business Services (3.70%), and Leisure and Hospitality (3.30%).⁵⁰

Table 2: St. Louis Industrial Specialization

Industry	Location Quotient (2014 Q2)	Change, last four quarters
Agriculture, forestry, and hunting	0.48	1.10%
Construction	1.03	3.90%
Education	1.24	1.10%
Finance and insurance	1.23	2.40%
Government	0.75	-1.50%
Health services	1.15	-0.50%
Information	1.13	-1.90%
Leisure and hospitality	1.06	3.30%
Manufacturing	1.00	0.20%
Mining (including oil and gas)	0.23	1.80%
Other services	0.89	-0.20%
Professional and business services	1.14	3.70%
Real estate and rental and leasing	1.07	8.10%
Trade, transportation, and utilities	1.00	0.20%

Top Regional Export Industries

The top exporting industries in St. Louis consist of different types of manufacturing. Whether looking at the industries by export value in 2013, export value growth from 2012-2013, or export value added in 2013 over 2012, the vast majority of the top industries are manufacturing based. These three factors take into account not only the size of the industry's exports but also the growth of the industry's exports. This growth is accounted for not only in percentage terms but also in the raw increase so as to consider high growth rates for industries with a small export base. Multiple industries were included on all three top ten lists, including:⁵¹

- Grain and Oilseed Milling
- Other General Purpose Machinery Manufacturing
- Nonferrous Metal (except Aluminum) Production and Processing
- Animal Food Manufacturing
- Communications Equipment Manufacturing

These industries have strong exports for St. Louis and are integral for St. Louis' future in exports.



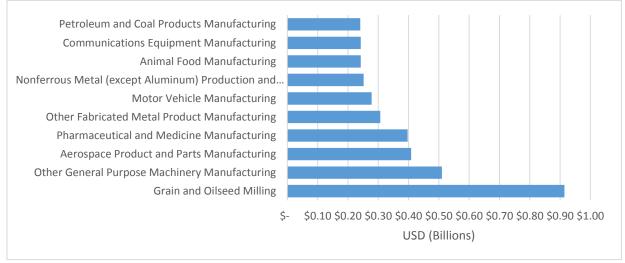
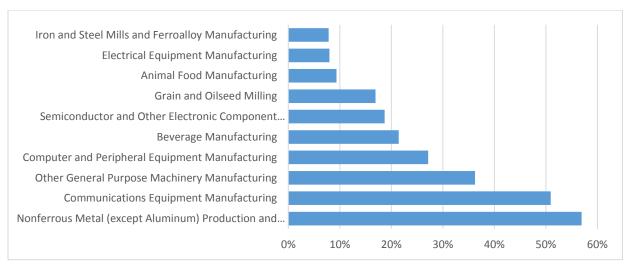
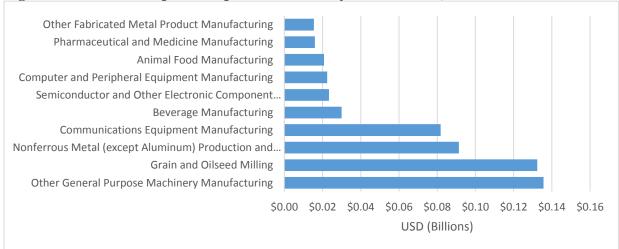


Figure 15: St. Louis Top Ten Export Industries by Export Percent Growth, 2013







Top Export Markets

St. Louis' top three export markets have been consistent from 2011-2013: Canada, Mexico, and China. After being the second largest export market in 2011 and 2012, Canada was the leading export market for St. Louis with a total value of \$1.84 billion in 2013. Mexico moved from third largest to second largest in 2013 as China sharply decreased in total export value from St. Louis. China was the leading export market in 2011 and grew 33.76% in 2012 to a total value of \$2.60 billion. However, in 2013, St. Louis' total exports to China fell 38.11% to \$1.61 billion, placing it third amongst St. Louis export markets.⁵²

South Korea has been the fourth or fifth export market for St. Louis from 2011-2013. St. Louis' exports to South Korea have been fairly consistent, ranging from \$0.56 billion in 2011 to \$0.67 billion in 2012. The last country in the top five export markets for St. Louis has varied from year to year; recent countries included on the list are Brazil, Belgium, and Singapore. 53

St. Louis' top export markets in 2013 are very similar to the top export markets for the U.S. in the same year. Canada, Mexico, and China round out the top three in both lists, and the remaining countries are usually included on both lists.

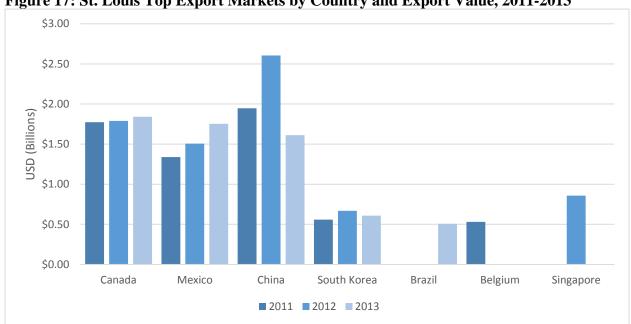


Figure 17: St. Louis Top Export Markets by Country and Export Value, 2011-2013

Comparable Cities

In order to better determine which industries show high potential for export growth in St. Louis, the team conducted a comparable city analysis. The following six metropolitan area statistics were considered in order to select the comparable cities (see Appendix: Sources and **Explanation of Comparable Cities Factors** for more information). These statistics covered

three important dimensions of an economy: economic size, human capital, and labor market structure:

- Economy size: Total metropolitan population⁵⁴, Total GMP⁵⁵, and Total metropolitan household income⁵⁶
- Employment: Employees on non-farm payrolls⁵⁷
- Education: Education index consisting of multiple statistics⁵⁸
- Business environment: Total metropolitan number of small businesses⁵⁹

After collecting the necessary data for the MSAs across the U.S., the team calculated each dimension's difference for every MSA compared to St. Louis. For each dimension, the team selected the top twelve MSAs that were most similar to St. Louis based on these absolute differences.

For each MSA that was included in any of six top twelve lists, the team counted the number of dimensions for which it was included in the top twelve lists. The MSAs that were included on the highest number of lists were determined to be the most similar to St. Louis. Seven cities were comparable on five of the six dimensions:

- Baltimore-Columbia-Towson, MD
- Cleveland-Elyria, OH
- Denver-Aurora-Lakewood, CO
- Pittsburgh, PA
- Portland-Vancouver-Hillsboro, OR-WA
- Riverside-San Bernardino-Ontario, CA
- Tampa-St. Petersburg-Clearwater, FL

The team utilized these seven most comparable cities moving forward in the analysis to determine which industries have the highest potential to increase their levels of exports and which industries may be saturated with exports and have a lower upside for export increase in St. Louis.

Top Three High-Potential Export Industries

The team used data from two separate sources for the analysis of the high-potential export industries in St. Louis: the Bureau of Economic Analysis (BEA) and The Brookings Institution. The team obtained national GDP data by industry from the BEA and export data, both at a national and regional level, by industry from Brookings. However, the BEA and Brookings use different variations of industry classifications. Both are variants of The North American Industry Classification System (NAICS), which uses a six digit code at the most detailed level to classify industries. In order to reconcile these differences, the team compared the classifications and created new definitions that reconciled the differences. ⁶⁰ The team created 31 industry classifications that highly match the NAICS level-three classifications (see **Appendix: Reconciled 31 Industries** for full list). Using these new industries, the team classified both the BEA and Brookings data for the analysis.

After reconciling separate industry classifications from the BEA and Brookings, the first step in identifying St. Louis' high potential export industries was to narrow down these 31 industries based on national and regional data for St. Louis. This provided 13 attractive industries to focus on for more detailed analysis. The team used an index including six economic factors for each industry to determine these thirteen industries (see **Appendix: Sources of High-Potential Export Industry Index Factors** for more information):

- National real GDP in 2013 this measures the total market size of the industry at a national level; the team used this number to quantify the attractiveness of the industry. 61
- National real GDP annualized growth rate from 2005 to 2013 the team included this metric to determine the momentum of the industry at a national level. 62
- <u>National real exports in 2013</u> the national level of exports shows the strategic importance of each industry in terms of trade. ⁶³
- <u>National real export annualized growth rate from 2003 to 2013</u> this shows the momentum of export growth at a national level.⁶⁴
- St. Louis Metropolitan Statistical Area real exports in 2013 the regional export data provides insight into the strength of the industry in terms of St. Louis MSA exports.⁶⁵
- St. Louis Metropolitan Statistical Area real export annualized growth rate from 2003 to 2013 this shows the momentum of export growth at a regional level. 66

The team chose these measures to remove the potential pitfalls of the individual metrics. For example, if an industry is weak in terms of exports at a national level but strong at the St. Louis level, this will be balanced out in the overall index.

The team ranked each industry on the six metrics with a rank of one denoting the highest level or growth rate. To calculate the final index, the team summed the six ranks for each industry and then ranked this sum with a rank of one denoting the lowest sum and therefore the highest potential. The team selected the top 13 industries in terms of this final index in order to include a mix of service and goods industries. The top 13 industries from this analysis were:

- Information & Technology ("Tech Sector")
- Financial Services
- Engineering Services
- Support Services
- Food, Beverage and Tobacco Products
- Transportation Equipment
- Educational & Medical Services
- Computer & Electronic Products
- Petroleum & Coal Products
- Machinery Manufacturing
- Oil & Gas Extraction
- Primary Metal Manufacturing
- Management & Legal Services

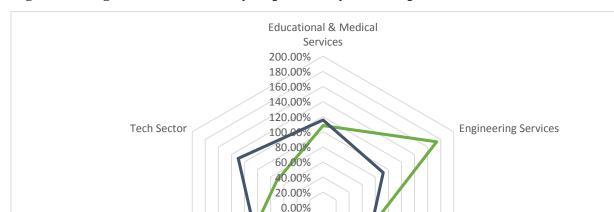
The next step in the analysis involved comparing the economic performance of these 13 industries in St. Louis with the performance in each of the seven comparable cities. Using St.

Louis' comparable cities based on economy size, education, business structure, and employment helps make the comparable analysis more meaningful and relevant. This comparison allowed the team to further determine which industries have a higher upside potential for exports in St. Louis.

In order to compare all the cities on a common metric, the team used The Brookings Institution's Industry Share of Exports (% relative to U.S.) metric. This metric is calculated by dividing an industry's share of exports in a Metro Statistical Area by that same industry's share of exports at a national level:

Industry Concentration (% relative to U.S.)
$$= \frac{Industry's \ Share \ of \ Exports \ in \ MSA}{Industry's \ Share \ of \ Exports \ in \ U.S.} * 100\%$$

Comparing the cities on this metric provided a representation of the performance of each industry's exporting activities for St. Louis when compared to similar cities. For example, in the figure below, St. Louis' industry concentrations for Educational & Medical Services, Information & Technology, Support Services, Management & Legal Services, Financial Services, and Engineering Services are compared with the Riverside-San Bernardino-Ontario, CA industry concentrations.



Management & Legal Services

Riverside-San Bernardino-Ontario, CA

Figure 18: High-Potential Industry Export Analysis Example

Support Services

Financial Services

St. Louis, MO-IL

In the Information & Technology sector, St. Louis has a higher industry export concentration than Riverside-San Bernardino-Ontario, CA. This implies that Information & Technology make up a larger share of the region's total exports in St. Louis than in Riverside-San Bernardino-Ontario, CA. However, Riverside-San Bernardino-Ontario, CA has a higher export concentration in the Management & Legal Services industry.

Using this methodology, the team can see which industries within St. Louis are strong in terms of exports, i.e., which industries have a higher export concentration in St. Louis than the identified comparable cities. The team can also spot opportunities for growth: high potential industries where St. Louis has a lower export concentration than peer metro areas.

The graph below compares the export concentration of industries that export goods: Beverage & Tobacco Products, Transportation Equipment, Petroleum & Coal Products, and Machinery Manufacturing. In general, these industries have a higher export concentration in St. Louis than in comparable cities. For this reason, these industries represent strong exporting industries in St. Louis.

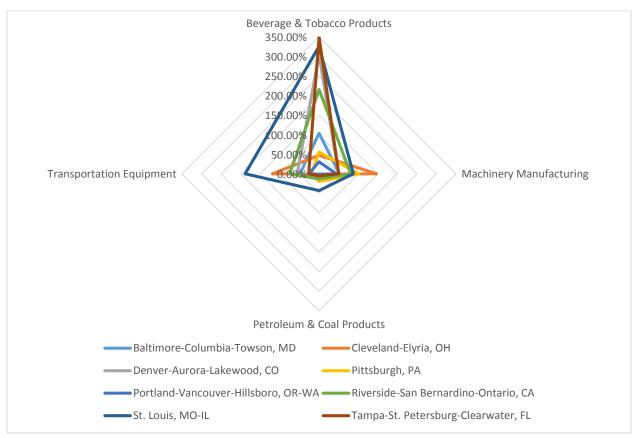


Figure 19: High-Potential Industry Export Analysis for Goods

The graph below compares the export concentration of industries that export services: Educational & Medical Services, Information & Technology, Support Services, Management & Legal Services, Financial Services, and Engineering Services. These industries, in general, have a lower export concentration in St. Louis than in comparable cities. For this reason, these industries represent opportunities for export expansion.

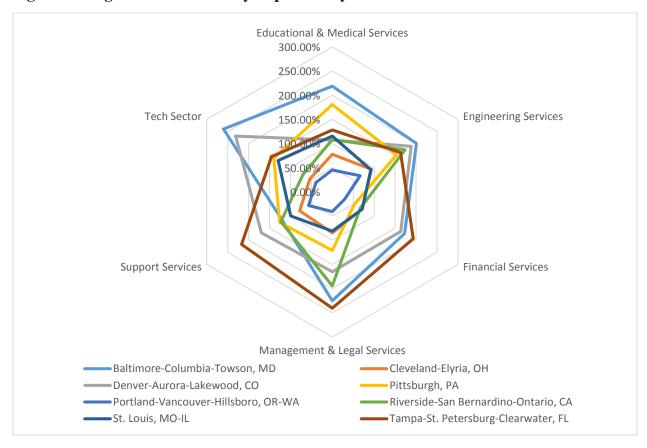


Figure 20: High-Potential Industry Export Analysis for Services

Using the above methodology, the team identified the following to be the top three high-potential exporting industries for St. Louis:

- Financial Services
- Engineering Services
- Information & Technology Services

Regional Export Economy and Analysis of Three High-Potential Export Industries

To analyze these three industries in more depth, the team compared St. Louis against the seven comparable cities on the metrics of real total exports (total nominal exports adjusted for

inflation), percent share of local exports, annualized export growth rate, and industry export concentration for each industry.⁶⁷ In order to compare each city's performance in each metric, the team used the following equation to create adjusted metrics:

$$\label{eq:adjusted_metric} \textit{Adjusted Metric for Comparable City} = \frac{\textit{Comparable City's Metric} - \textit{St.Louis' Metric}}{\textit{St.Louis' Metric}}$$

Plotting these adjusted metrics allowed the team to determine where St. Louis has opportunities in terms of exports. On the graphs in this section, the line labeled with a "0" indicates St. Louis' performance. Any comparable city's adjusted metric that lies above the "0" line represents an opportunity for St. Louis. The adjusted metrics can be found in **Appendix: Comparable Cities' Adjusted Metrics**.

Financial Services

St. Louis has become one of the most prominent financial services hubs outside New York. Since 2007, employment in the financial sector has decreased by 4% nationally.⁶⁸ In this same time, the St. Louis region has supported 10,200 new jobs in the Financial Services industry, for a 13% overall growth in employment within the industry.⁶⁹ St. Louis houses a number of well-known financial services firms such as Edward Jones, Scottrade, Stifel Nicolaus, US Bankcorp CDC, MasterCard, Citi Bank, JP Morgan, and Wells Fargo Advisors.⁷⁰ There are also a large number of boutique financial services firms in Clayton, MO, the business district of St. Louis County.

St. Louis is the third most concentrated market for investment advisors, following New York City and Boston, with over "\$2.8 trillion in assets under management or in custody with four St. Louis-headquartered investment companies." St. Louis also supports a large number of financial technology startup companies through organizations such as SixThirty, a startup accelerator which provides fintech startups with up to \$100,000 in seed funding, business training, mentoring, and access to follow on funding. To

When examining the Financial Services industry in terms of exports, the team found that St. Louis has a lower industry export concentration, real exports (total nominal exports, adjusted for inflation), industry share or exports (percentage of total local exports), and annualized export growth rate than several peer cities. In St. Louis' vibrant ecosystem, there lies tremendous opportunity to standout and create a distinct economic specialization around the Financial Services industry by increasing the industry share of export and enhancing the industry export concentration.

On the graph below, the concentration of St. Louis exports is represented by the line marked "0". For example, when comparing the real exports of regional financial services, as compared to peer cities, St. Louis has more real exports than Cleveland, Pittsburgh, Portland, and Riverside since those values fall below zero on the real export line. This graph also demonstrates opportunities for export growth, since the St. Louis Financial Services industry has a lower industry share, export concentration ratio, and annualized growth rate of real exports than Baltimore, Denver, and Tampa, cities which theoretically can support a similar amount of exports as St. Louis.



Figure 21: Financial Services Industry Export Analysis

Engineering Services

One of the most distinguished engineering firms in the St. Louis region is Boeing International Defense Systems. Of the nineteen Fortune 1000 companies headquartered in St. Louis, Boeing is the largest employer and revenue generator. Boeing is the second largest employer overall in the region, with 15,000 local employees in 2014, and revenue of approximately \$33 billion in 2013. Boeing serves as both a manufacturer of airplane parts and as an engineering service provider in the defense sector. While manufacturing, which consists of 8% of local employment, has not experienced job growth in four years, Boeing is creating new jobs. In October of 2014, Boeing announced plans to create 700 new jobs in the next few years to manufacture parts for the 777X commercial airliner.

Boeing is a strong advocate for international trade, given that 40% of the total company revenue is derived from customers outside the U.S.⁷⁷ Boeing representatives explain that international trade supports the company's growth and innovation. Tim Keating, Senior Vice President, said, "Global partners help make our own products and services better and more competitive, to the benefit of all Boeing stakeholders—customers, employees, suppliers and investors—in all parts of the world."⁷⁸

The Engineering Services industry encompasses Architectural and Engineering Services, Equipment and Installation Services, and Industrial Engineering Services. In addition to larger firms such as Boeing, small and medium sized firms such as HOK, a global architecture firm with over 1,800 employees, are included under the broader Engineering Services industry umbrella.⁷⁹

While the Engineering Services industry in St. Louis has been exporting at a level on par with the U.S. national export value, when analyzing exports within the Engineering Services sector, the team found that St. Louis has a lower industry share of exports and lower annualized export growth rate than Baltimore, Cleveland, Denver, Pittsburgh, Riverside, and Tampa. This indicates that the Engineering Services industry makes up a smaller percentage of St. Louis exports than Engineering Services in the aforementioned cities. Additionally, a smaller export growth rate indicates that the amount of local exports in the Engineering Services industry is not increasing as quickly when compared with the comparable cities. This indicates an exporting opportunity for Engineering Services within St. Louis.



Figure 22: Engineering Services Industry Export Analysis

<u>Information & Technology Services</u>

The Information & Technology Services industry, or "Tech Sector," is a St. Louis industry that is on the rise. *Fortune* highlighted St. Louis as one of the fastest growing regions for IT employment, citing the 25% increase in tech jobs and 13% increase in tech salaries in 2014 (with an average salary of \$81,000). Additionally, *CB Insights*, a venture capital database, found that St. Louis was the fastest growing city for tech startup financing, with a 1,221% increase in funding in 2014. Notable tech companies that were founded in St. Louis include Answers.com and Square.

Within the growing entrepreneurial ecosystem in St. Louis, there is a clear focus on technology startups. Cultivation Capital, the leading early-stage venture capital firm in the region makes numerous investments in tech startups through their Technology Funds I and II.⁸² Accelerator

program Capital Innovators, ranked as a top 10 accelerator program in the U.S. by *Forbes*, 83 invests capital in high-technology companies. T-Rex, a coworking space and technology incubator, has created a cohesive community for tech entrepreneurs to grow their businesses and share ideas. 84 The profitable consolidation of firms in the technology industry such as the acquisition of Answers.com by Apax partners could contribute to the creation of a stable oligopoly in the future.

Other organizations seek to increase the diversity of the technology industry workforce. Prosper Capital Accelerator only invests in women-led startups, many of which are technology-focused. In Prosper's first six investments in 2015, four companies, Bookalokal, Champio, KiteReaders, and Wondermento, were technology startups. Another organization focused on diversity in tech is St. Louis-based, nonprofit LaunchCode which was founded by Square founder Jim McKelvey. LaunchCode trains software developers and connects underemployed tech professionals with top-level employers through paid internships and full-time placements. LaunchCode has placed workers in 10 states, has a 90% conversion rate of apprenticeships to full time jobs, and has been recognized by President Barack Obama as a national model.

With a lower barrier to entry and significant growth rate, the Information & Technology Services industry is structurally attractive for new entrants. In this Information & Technology Services space, St. Louis has a larger number of real exports, a higher percentage industry share, a higher growth rate, and a higher industry concentration than several comparable cities. However, St. Louis has a significantly lower amount of real exports, percentage industry share, and export growth rate than both Baltimore and Denver. This represents an opportunity for export growth in St. Louis.



Figure 23: Information & Technology Services Industry Export Analysis

Market Survey

The team collected over 200 survey responses as of May 5, 2015. The survey was sent through the economic organizations and associations associated with the GCI Steering Committee members to all of their constituents. The team used the Brookings Sample Business Survey as a reference and tailored it to the St. Louis metropolitan area. The survey provided insights into the state of St. Louis' exporting activity and will continue to be distributed throughout June 2015.

The companies that responded to the survey were scattered throughout St. Louis and ranged in size and industry. The majority of the company representatives were based in St. Louis County and St. Charles County; however, there were a significant number of respondents in Madison County and St. Louis City as well. These figures reflect a high concentration of businesses in these counties.

Around a quarter of the companies employed over 250 people in the St. Louis region and another quarter only employed 1-10 people. The remainder of the companies were split evenly between these ranges. Among survey respondents, this reflects the diverse business community in the region.

Close to fifty percent of the companies do not export and, of those that did export, the vast majority exported goods. As indicated by the survey, most of the exported goods are from other manufacturing industries not listed in the survey. This strongly reflects St. Louis' advanced manufacturing background. Almost 50% of the companies that exported services were involved in Business, Professional and Technical services.

Table 3: Survey Respondents Exporting Goods by Industry

#	Answer	Response	%
1	Agriculture	5	8%
2	Mining	4	6%
3	Chemicals	12	19%
4	Computers and Electronics	7	11%
5	Electrical Machinery	6	10%
6	Food	6	10%
7	Machinery	13	21%

8	Medical Devices	9	15%
9	Petroleum and Coal, Related Products	6	10%
10	Plastics, Rubber	4	6%
11	Transportation Equipment	6	10%
12	Other Manufacturing (other than above)	23	37%
13	Other	20	32%

Lastly, when asked what the local government could do to help the companies export, many of companies requested workshops to educate small- to medium-sized companies on how to export. Another suggestion was hosting trade shows and conferences to introduce local companies to foreign business partners.

The four main reasons that representatives of exporting companies claimed that they exported were:

- Direct sales opportunities (60%)
- A company or contact in a foreign country selected their company (56%)
- A prior relationship or prior experience with companies or contacts in those countries (49%)
- And/or due to the distributors in those countries (42%).

These findings are significant as they reflect the overall business environment in St. Louis with regards to exports. The 60% figure representing direct sales opportunities shows that the global export market provides opportunities for local companies to grow their sales outside of the U.S.

It is important to note that such large percentages of companies began exporting because of relationships with a foreign company, customer, or distributor. During local intelligence interviews, the team found that many local companies did not create strategic export plans and proceed accordingly. Rather, companies often began exporting after becoming aware of a specific opportunity presented to them by a known partner or customer. These statistics contribute to a similar narrative.

These responses imply that a global demand, and thus an opportunity to venture into global marketplace, exists but that many St. Louis firms are not proactively taking advantage of this opportunity. Instead, they are waiting until the opportunity comes to them. There is untapped potential for many firms to export to foreign markets should they take the initiative to strategically plan exporting activities. Still, 61% exporting companies reported that exports consisted of less than 15% of their total sales.

The majority of the representatives of non-exporting companies claimed they did not export because their company's product/service could not be exported (65%). Many claimed that the nature of their business did not lend itself to exports. A closer analysis, however, found that this was rarely the case. Rather, many of these firms did not fully understand the provided definition of "export" or the types of products and services which can be exported.

Regardless of semantics, many firms face significant challenges with regards to the costs associated with exporting (transportation, tariffs, customs, etc.), paired with a lack of available financing for these projects.

When asked what the most significant challenges were when exporting, respondents were given the opportunity to give multiple answers. The challenge that the most number of respondents indicated was knowledge of foreign markets (23%). Other significant challenges included:

- Global sales contracts, contract negotiation (21%)
- Foreign import control laws, regulatory compliance, inspections, tariffs (20%)
- Transportation costs (20%)
- Foreign government regulations/policies (19%)
- U.S. export control laws, regulatory compliance, licensing, inspections, and tariffs (19%)

The spread amongst respondents was fairly even amongst the given answers. These responses highlight challenges with regard to both company operations and government policies. However, a more comprehensive knowledge of foreign markets would alleviate some of these challenges. A better understanding of the potential and risks associated with foreign markets would help the firms secure more accurate contracts and estimate transportation costs. It would also allow for a better awareness of foreign regulations and policies regarding import laws, regulatory compliance, inspections, and tariffs.

When asked if they had received export-related assistance from government or nonprofit providers, only 22% of respondents reported that they had received assistance. Of the respondents who did receive assistance, the top providers they identified were:

- The U.S. Commercial Service (60%)
- State-level agencies focused on trade or export development (52%)
- Nonprofit associations or organizations focused on trade or international business issues (52%)

Ninety-five percent of respondents rated their services from government providers as "excellent" or "good," while only 57% of respondents rated their services from nonprofit providers as "excellent" or "good." This implies that more small- and medium-sized firms could benefit from government-provided services and assistance.

When asked if they had received export financing from a government or nonprofit entity, only 13% answered "yes." Of the companies who did not receive financing, 94% indicated that they did not apply for export financing from a public/governmental entity, six percent did not qualify for export financing under stated criteria, and three percent indicated that the public entity did not have sufficient funds. This shows that the vast majority of respondents did not reach the step

of applying for export financing. Further research could elucidate why so few firms pursued this option.

When asked if they had received export related assistance from for-profit providers, only 9% of respondents had received assistance. Of the respondents who did receive assistance, 76% of respondents rated their service from for-profit providers as "excellent" or "good." Similar to government and nonprofit export services, for-profit services appear to be underutilized by St. Louis firms.

When asked which programs and services the federal, state, or local governments could provide in the future, respondents were able to select multiple answers. The most selected options for future programs and services included:

- Reduce taxes/government overhead (29%)
- Export related training workshops designed for small and medium sized businesses (27%)
- Streamline export related government paperwork and procedures (23%)
- Events such as trade shows and conferences designed to introduce and match new-to-export businesses to prospective foreign business partners (23%)
- Expand free trade deal activity (22%)

These responses imply that St. Louis firms have an interest in exporting, but they may not be sure how to best navigate the process or are inhibited by real or perceived regulatory constraints. Due to the popularity of the selecting answer choices advocating export workshops and trade shows, firms may be unaware of existing programs by export-focused organizations.

When respondents were asked to report their top current export markets, the most commonly selected countries were Canada, United Kingdom, China, Mexico, and Brazil. This aligns very well with the earlier export market analysis in the Market Scan section. Canada and Mexico are top export markets for the U.S. given their close geographic proximity. The lack of a language barrier between the United States and the United Kingdom facilitates business relationships. China and Brazil are a major foreign markets with growing economies.

When asked if they import, 29% of respondents did answer "yes." The value of imports ranged from under \$50,000 to over \$100 million. The ranges of import values can be found below. The 29% value for respondents that do import indicates foreign relationships with companies overseas. These relationships can be used to further develop export agreements between companies in St. Louis and these foreign markets.

Table 4: Importing Survey Respondents by Import Value

#	Answer	Response	%
1	Less than \$50,000	11	21%

2	\$50,001-\$100,000	4	8%
3	\$100,001-\$250,000	7	13%
4	\$250,001-\$1,000,000	4	8%
5	\$1,000,001-\$10,000,000	12	23%
6	\$10,000,001-\$25,000,000	4	8%
7	\$25,000,001-\$100,000,000	7	13%
8	More than \$100 million	4	8%
	Total	53	100%

When asked about the top five countries from which the companies import, the top markets identified were China (34 respondents), Japan (9 respondents), Mexico (9 respondents), Canada (7 respondents), and the United Kingdom, India, and Italy (each identified by 6 respondents). These respondents' answers are significant not only because they identify common importing markets for St. Louis but also because they indicate foreign markets that have significant and strong exporting economy. This in turn identifies economies significant enough to support major trade agreements with St. Louis-based companies.

The survey insights are extremely valuable because they will help the team moving forward to develop short- and long-term solutions to take advantage of St Louis' export potential. For the all of the survey's questions and responses from which the above insights were derived, see **Appendix: Survey Questions and Responses**.

Local Intelligence Interviews

As of May 5, 2015, the team completed one-on-one interviews with 13 local companies. In these interviews, the team asked company representatives questions from the Global Cities Initiative Business Interview Form, ⁸⁹ regarding general company information, regional economic development, exports, and exports service providers. Some of the companies represented have extensive export operations while others do not currently export. These interviews will continue throughout June 2015.

Challenges

During the one-on-one interviews with local St. Louis companies, the team sought to understand the challenges that exporters face and the tradeoffs companies are forced to make when starting or expanding their exports. Companies were asked questions such as "What obstacles do you face in considering exporting?" and "Do workforce issues in this region limit your ability to grow through exports?"

Throughout the interviews, the company representatives across various industries identified five main challenges: incorporating exports into a domestic business model, navigating different cultural and regulatory environments, establishing trust with foreign partners, building brand equity, and finding local managers with the appropriate skill set to manage export initiatives.

First, many companies, especially small- and medium-size companies, find it difficult to integrate exports into purely domestic strategies. Since foreign markets are ambiguous and have rules that can be complicated, many firms are reluctant to invest a large amount of resources to strategically export. Managers perceive that entering new markets will be difficult, causing exports to become a lower priority for many smaller firms.

Second, it is difficult for companies to navigate through the political, cultural, and regulatory environment of other countries. For example, one company revealed that the customs regulations in China changed several times a year and that it was frustrating to know that documents created a few months prior were rejected under new regulations. Moreover, each country has its own regulations and compliance rules. Therefore, exporting to multiple countries can seem like undertaking a discouraging and risky task many times. Navigating cultural differences can also be daunting for companies who have never worked with those cultures in the past.

One manager mentioned that he struggled not to offend Japanese partners since he does not drink tea. This shows the necessity of being more informed when forging business relationship and of developing cultural sensitivity.

Third, coordinating and establishing trust with foreign partners – brokers, distributors, and sales representatives – can be difficult. With different locations and time zones, it is difficult for domestic managers to monitor the performance effectively. Many companies had to distinguish good sales representatives through trial and error, and this can be timely and costly for a company first beginning to export.

Fourth, establishing brand equity in a new market requires a clear strategy. As with any new market, it takes time for a company to learn the best way to present its product under an

unfamiliar context. Some companies identified trade fairs and relationship building on the ground in foreign markets as ways to better understand the specific needs of each country.

Lastly, several companies identified that finding managers with the appropriate skill set to manage export initiatives was difficult within the St. Louis area. Local employers seek to recruit talented people with language skills, cultural sensitivity, and a strong understanding of the global business landscape. However, companies alluded that these applicants were difficult to find and hire in St. Louis.

Reasons for export

Another element of the team's interviews was gaining an understanding for why current exporters decided to start exporting initially. Company representatives were asked questions such as "What is driving your interest in expanding into exporting?" Managers pointed to expanding their addressable market and obtaining a larger profit margin abroad.

First, exporting increases a company's addressable market. Especially for businesses that serve a saturated domestic market, bringing their product or service abroad can help the company exploit new business opportunities. For example, medical devices that are FDA approved and considered standard in the U.S. may have opportunities in emerging markets or countries with different regulatory environments.

Second, some companies can obtain a higher profit margin in international markets. For example, companies who are technology leaders in the U.S. may have a first-mover advantage, and thus fewer competitors, abroad. Companies have the opportunity to bring cutting-edge technology to countries that currently do not have access to it.

Future ideas

The last element of the interview was intended to gain insight from managers about their ideas for the future. Interviewees were asked questions such as "Only 1% of U.S. firms export. Why do you think the U.S. figure is so low?" and "How could federal/state/local government help you to export more or begin exporting?" Three key ideas that emerged from the interviews as ways that the World Trade Center – St. Louis and other organizations can help increase exports in the region are to launch an export-focused marketing campaign, to educate companies about shipping practices, and to make St. Louis a more desirable place to work and do business.

First, a regional marketing campaign would educate companies about the economic benefits of exports, how to begin or grow export operations, and how to incorporate exports into an overall business strategy. It would also increase awareness of the services currently offered in St. Louis to help with exporting initiatives.

Second, educating companies about effective shipping practices could demystify the logistics of exporting. Being in a central location, St. Louis has access to eastern, western, and southern ports, and an educational program could teach companies about how to ship goods abroad while minimizing costs.

Finally, by supporting region-wide initiatives to make St. Louis a better place to work and play, export-focused organizations can contribute indirectly to the factors that make the St. Louis region a more desirable place for top talent to work and companies to do business. While this would likely not be the primary focus of an export-focused organization, it presents an opportunity for future partnerships.

Conclusion

The ultimate profit potential of St. Louis in terms of export and diversification through the creation of a global trade ecosystem depends on the collective strengths of the Financial Services industry, Engineering Services industry, and Information & Technology Services industry. These three industries complement each other by creating a demand for services, investments, support structure, and capacity utilization. The technological progress and value creation in each of these industries contribute to the expanding export economy of St. Louis region. The paucity of current contributions to exports in each of these industries, despite the thriving microeconomic and macroeconomic conditions, presents a momentous opportunity to significantly increase export values by leveraging existing capital and resources such as infrastructure and workforce and by creating a competitive position in the global and national market.

Key challenges that companies currently face when deciding to export include knowledge of foreign markets such cultural norms, businesses practices, and regulatory procedures, the incorporation of an export plan into a domestic strategy, and the search for appropriately skilled managers to oversee export operations. The goal of the forthcoming St. Louis Metropolitan Export Plan is to address these difficulties through targeted programs and services. Through survey responses and interviews, local managers have suggested several ideas for future programs and services that can facilitate the export process for local companies. These ideas include reduced taxes and government overhead, export-related training workshops designed for small- and medium-sized businesses, educational marketing campaigns, and trade shows designed to match exporting companies with prospective business partners.

http://www.brookings.edu/about/projects/global-cities/about

 $http://www.brookings.edu/{\sim}/media/multimedia/interactives/2013/GCXMedia/Guides/Sample \% 20 Business \% 20 Interview \% 20 Form.pdf$

- ⁵ Economist's View. (2008, October 16). *New Trade Theory and New Economic Geography*. Retrieved from Economist's View: http://economistsview.typepad.com/economistsview/2008/10/new-trade-theor.html
- ⁶ Istrate, E., Rothwell, J., & Katz, B. (2010, July). *Export Nation: How U.S. Metros Lead National Export Growth and Boost Competitiveness*. Retrieved from Brookings: http://www.brookings.edu/research/reports/2010/07/26-exports-istrate-rothwell-katz
- ⁷ Ibid.
- ⁸ Ibid.
- ⁹ Ibid.
- ¹⁰ International Monetary Fund. (2011, June 15). *Changing Patterns of Global Trade*. Retrieved from International Monetary Fund: http://www.imf.org/external/np/pp/eng/2011/061511.pdf
- ¹¹ McKinsey & Company. (2012, August). *Winning the \$30 trillion decathlon*. Retrieved from McKinsey & Company: http://www.mckinsey.com/features/30_trillion_decathlon
- ¹² Bureau of Economic Analysis. (n.d.). *Current-dollar and "real" GDP*. Retrieved from National Economic Accounts: http://bea.gov/national/index.htm
- ¹³ Bureau of Economic Analysis. (n.d.). *U.S. Trade in Goods and Services, 1992-present.* Retrieved from International Economic Accounts: http://bea.gov/international/index.htm#trade
- ¹⁴ United States Census Bureau. (2012). Foreign Commerce & Aid: Exports and Imports: 1300 U.S. International Trade in Goods and Services. Retrieved from United States Census Bureau:

http://www.census.gov/compendia/statab/cats/foreign_commerce_aid/exports_and_imports.html

- ¹⁵ United States Census Bureau. (n.d.). *Top Trading Partners*. Retrieved from United States Census Bureau: https://www.census.gov/foreign-trade/statistics/highlights/top/index.html
- ¹⁶ The Brookings Institution. (n.d.). *Profiles: St. Louis*. Retrieved from Export Nation 2013 Data Release: https://app.box.com/s/0fubpxinopswtji1xmni/7/2488176281
- ¹⁸ Bureau of Economic Analysis. (n.d.). *Regional Data: GDP and Personal Income*. Retrieved from Bureau of Economic Analysis:

http://www.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=10&isuri=1&7003=200&7035=-1&7004=naics&7005=-1&7006=41180&7036=-1&7001=2200&7002=2&7090=70&7007=2013&7093=levels

¹⁹ International Trade Administration. (2013). MSA 2013 (Full Year) Exports. Retrieved from International Trade Administration:

http://tse.export.gov/metro/MetroChartDisplay.aspx? ReportID=1 & Referrer=SelectReports.aspx & DataSource=Metro & ReportOption=Chart

- McDearman, B., Donahue, R., & Marchio, N. (2013, September 17). Export Nation 2013. Retrieved from Brookings: http://www.brookings.edu/~/media/multimedia/interactives/2013/exportnation/data/profiles/st-louis.pdf
 The Brookings Institution. (n.d.). *Profiles: St. Louis*. Retrieved from Export Nation 2013 Data Release: https://app.box.com/s/0fubpxinopswtji1xmni/7/2488176281
- ²² The Brookings Institution. (n.d.). *Metros*. Retrieved from Export Nation 2013 Data Release: https://app.box.com/s/0fubpxinopswtji1xmni
- ²³ CB Insights. (2014, November 7). *The Next Silicon Valley*. Retrieved from CB Insights: https://www.cbinsights.com/blog/next-silicon-valley-data/
- ²⁴ Explore St. Louis. (2014). *Annual Report*. Retrieved from Explore St. Louis: http://explorestlouis.com/st-louis-cvc/about-us/annual-report/
- ²⁵ *Universities in Missouri*. (n.d.). Retrieved from 4International Colleges & Universities: http://www.4icu.org/us/Missouri.htm

¹ The Brookings Institution. (n.d.). *Building the Next Economy From the Bottom-Up: The Metropolitan Export Initiative*. Retrieved from Brookings: http://www.brookings.edu/about/projects/state-metro-innovation/mei ² The Brookings Institution. (n.d.). *About the Global Cities Initiative*. Retrieved from Brookings:

³ The Brookings Institution. (n.d.). *Global Cities Initiative: The Exchange*. Retrieved from Brookings: http://www.brookings.edu/about/projects/global-cities/exchange

⁴ The Brookings Institution. (n.d.). *Metropolitan Area Export Market Assessment: Sample Business Interview Form.* Retrieved from Brookings:

- ²⁶ City-Data. (n.d.). *St. Louis: Economy*. Retrieved from City-Data.com: http://www.city-data.com/us-cities/The-Midwest/St-Louis-Economy.html
- ²⁷ St. Louis Regional Chamber. (n.d.). *Demographics*. Retrieved from St. Louis Regional Chamber: http://www.stlregionalchamber.com/regional-data/demographics
- ²⁸ United States Census Bureau. (n.d.). *State & County QuickFacts: St. Louis city, Missouri*. Retrieved from United States Census Bureau: http://quickfacts.census.gov/qfd/states/29/29510.html ²⁹ Ibid.
- ³⁰ City-Data. (n.d.). *St. Louis: Economy*. Retrieved from City-Data.com: http://www.city-data.com/us-cities/The-Midwest/St-Louis-Economy.html
- ³¹ Friedhoff, A., & Kulkarni, S. (2015, March 20). *Metro Monitor March 2015*. Retrieved from Brookings: http://www.brookings.edu/research/interactives/metromonitor#/M41180
- ³² Office of Missouri Governor Jay Nixon. (2013, September 27). *Gov. Nixon highlights new Export Missouri initiative to help Missouri businesses export abroad*. Retrieved from Office of Missouri Governor Jay Nixon: http://governor.mo.gov/news/archive/gov-nixon-highlights-new-export-missouri-initiative-help-missouri-businesses-export
- ³³ World Trade Center St. Louis. (n.d.). *Midwest Cargo Hub Commission*. Retrieved from World Trade Center St. Louis: http://www.worldtradecenter-stl.com/service/mchc.asp
- ³⁴ World Trade Center St. Louis. (n.d.). *St. Louis Asia Trade Desk*. Retrieved from World Trade Center St. Louis: http://www.worldtradecenter-stl.com/service/AsiaTradeDesk.asp
- ³⁵ St. Louis Mosaic. (n.d.). *About Us.* Retrieved from St. Louis Mosaic: http://www.stlmosaicproject.org/about-us.html
- ³⁶ Bureau of Economic Analysis. (n.d.). *Regional Data: GDP and Personal Income*. Retrieved from Bureau of Economic Analysis:
- http://www.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=10&isuri=1&7003=200&7035=-1&7004=naics&7005=-1&7006=41180&7036=-1&7001=2200&7002=2&7090=70&7007=2013&7093=levels
- ³⁷ Friedhoff, A., & Kulkarni, S. (2015, March 20). *Metro Monitor March 2015*. Retrieved from Brookings: http://www.brookings.edu/research/interactives/metromonitor#/M41180
- ³⁸ Bureau of Economic Analysis. (n.d.). *Regional Data: GDP and Personal Income*. Retrieved from Bureau of Economic Analysis:
- ³⁹ Cooke, D. A., & Gascon, C. S. (2014, April). *Metro Profile: After Stalling, Recovery Resumes in St. Louis*. Retrieved from Federal Reserve Bank of St. Louis: https://www.stlouisfed.org/publications/regional-
- economist/april-2014/after-stalling-recovery-resumes-in-st-louis
- ⁴⁰ Home Town Locator. (2014, July 1). *St. Louis, MO-IL Metropolitan Statistical Area MO Demographic Data and Boundary Map*. Retrieved from Home Town Locator:
- http://missouri.hometownlocator.com/cities/msa/msa, id, 41180.cfm
- ⁴¹ The World Bank. (n.d.). *Population growth (annual %)*. Retrieved from The World Bank: http://data.worldbank.org/indicator/SP.POP.GROW
- ⁴² Federal Reserve Bank of St. Louis. (n.d.). *Resident Population in St Louis, MO-IL (MSA)*. Retrieved from Economic Research: Federal Reserve Bank of St. Louis: http://research.stlouisfed.org/fred2/series/STLPOP#
- ⁴³ Home Town Locator. (2014, July 1). *St. Louis, MO-IL Metropolitan Statistical Area MO Demographic Data and Boundary Map*. Retrieved from Home Town Locator:
- http://missouri.hometownlocator.com/cities/msa/msa,id,41180.cfm
- ⁴⁴ Federal Reserve Bank of St. Louis. (2015, February 4). *Civilian Labor Force in St. Louis, MO-IL (MSA)*. Retrieved from Economic Research: Federal Reserve Bank of St. Louis: https://research.stlouisfed.org/fred2/series/STLLF
- ⁴⁵ Bureau of Labor Statistics. (n.d.). *Databases, Tables & Calculators by Subject*. Retrieved from Bureau of Labor Statistics: http://data.bls.gov/timeseries/SMS29411800000000001?data_tool=XGtable
- ⁴⁶ Cooke, D. A., & Gascon, C. S. (2014, April). *Metro Profile: After Stalling, Recovery Resumes in St. Louis*. Retrieved from Federal Reserve Bank of St. Louis: https://www.stlouisfed.org/publications/regional-economist/april-2014/after-stalling-recovery-resumes-in-st-louis
- ⁴⁷ Bureau of Labor Statistics. (n.d.). *Databases, Tables & Calculators by Subject*. Retrieved from Bureau of Labor Statistics: http://data.bls.gov/timeseries/SMS29411800000000001?data_tool=XGtable

⁴⁸ Federal Reserve Bank of St. Louis. (n.d.). *Civilian Unemployment Rate*. Retrieved from Economic Research: Federal Reserve Bank of St. Louis: http://research.stlouisfed.org/fred2/series/UNRATE

⁴⁹ Bureau of Labor Statistics. (n.d.). *St. Louis, Mo.-Ill., Metropolitan Area Data Tables*. Retrieved from Bureau of Labor Statistics: http://www.bls.gov/regions/mountain-

plains/data/employmentandunemploymentandwages_stlouis_table.htm

⁵⁰ Friedhoff, A., & Kulkarni, S. (2015, March 20). *Metro Monitor - March 2015*. Retrieved from Brookings: http://www.brookings.edu/research/interactives/metromonitor#/M41180

⁵¹ International Trade Administration. (n.d.). *Metropolitan Exports by NAICS4: St. Louis, MO-IL 2013 (Full Year) Exports.* Retrieved from International Trade Administration:

⁵² International Trade Administration. (n.d.). *St. Louis, MO-IL 2013 (Full Year) Exports*. Retrieved from Top Five Export Markets for the 50 Largest Metropolitan Area Exporters:

http://tse.export.gov/metro/MetroChartDisplay.aspx? ReportID=7 & Referrer=SelectReports.aspx & DataSource=Metro & ReportOption=Chart

⁵³ Ibid.

⁵⁴ United States Census Bureau. (n.d.). *Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2014 - United States -- Metropolitan and Micropolitan Statistical Area; and for Puerto Rico*. Retrieved from United States Census Bureau: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

⁵⁵ Bureau of Economic Analysis. (n.d.). *Regional Data: GDP and Personal Income*. Retrieved from Bureau of Economic Analysis:

http://www.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=10&isuri=1&7003=200&7035=-1&7004=naics&7005=-1&7006=41180&7036=-1&7001=2200&7002=2&7090=70&7007=2013&7093=levels

⁵⁶ United States Census Bureau. (n.d.). *HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2013 INFLATION-ADJUSTED DOLLARS)*. Retrieved from United States Census Bureau:

http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

⁵⁷ Bureau of Labor Statistics. (n.d.). *Table 3. Employees on nonfarm payrolls by state and metropolitan area*. Retrieved from Bureau of Labor Statistics: http://www.bls.gov/news.release/metro.t03.htm#sa_table3.f.2

⁵⁸ Rothwell, J. (2012, August 29). *Education, Job Openings, and Unemployment in Metropolitan America*. Retrieved from Brookings: http://www.brookings.edu/research/papers/2012/08/29-education-gap-rothwell#M10420

⁵⁹ U.S. Small Business Administration. (n.d.). *Firm Size Data: State & MSA data including multiple tables*. Retrieved from U.S. Small Business Administration: https://www.sba.gov/advocacy/firm-size-data

- ⁶¹ Bureau of Economic Analysis. (n.d.). *Current-dollar and "real" GDP*. Retrieved from National Economic Accounts: http://bea.gov/national/index.htm
 ⁶² Ibid.
- ⁶³ The Brookings Institution. (n.d.). *Metros*. Retrieved from Export Nation 2013 Data Release: https://app.box.com/s/0fubpxinopswtji1xmni
- ⁶⁴ Ibid.
- 65 Ibid.
- 66 Ibid.
- ⁶⁷ Ibid.
- ⁶⁸ Nicklaus, D. (2014, November 9). *Nicklaus: Financial jobs are a surprising strength for St. Louis.* Retrieved from STL Today: http://www.stltoday.com/business/columns/david-nicklaus/nicklaus-financial-jobs-are-a-surprising-strength-for-st-louis/article_521a9259-a462-5426-b809-e42f4a7548e5.html
- ⁷⁰ T-REX. (n.d.). *Capital*. Retrieved from T-REX: http://downtowntrex.com/capital/
- 71 SixThirty. (n.d.). Why St. Louis? Retrieved from SixThirty: http://www.sixthirty.co/about/why-st-louis/
- ⁷² SixThirty. (n.d.). *Home Page*. Retrieved from SixThirty: http://www.sixthirty.co/
- ⁷³ City-Data. (n.d.). *St. Louis: Economy*. Retrieved from City-Data.com: http://www.city-data.com/us-cities/The-Midwest/St-Louis-Economy.html
- ⁷⁴ Keller, K. (2014, June 1). *The List: Largest Employers*. Retrieved from St. Louis Business Journal: http://www.bizjournals.com/stlouis/subscriber-only/2014/07/25/largest-employers.html

⁷⁷ Neale, T. (2009, March). *The real deal*. Retrieved from Boeing: http://www.boeing.com/news/frontiers/archive/2009/march/mainfeature.pdf ⁷⁸ Ibid.

- ⁷⁹ HOK. (n.d.). About: Firm Overview. Retrieved from HOK: http://www.hok.com/about/
- ⁸⁰ Fisher, A. (2013, March 20). *The fastest-growing cities for tech jobs now*. Retrieved from Fortune: http://fortune.com/2013/03/20/the-fastest-growing-cities-for-tech-jobs-now/
- ⁸¹ CB Insights. (2014, November 7). *The Next Silicon Valley*. Retrieved from CB Insights: https://www.cbinsights.com/blog/next-silicon-valley-data/
- ⁸² Cultivation Capital. (n.d.). *Our Focus*. Retrieved from Cultivation Capital: http://cultivationcapital.com/our-focus/
 ⁸³ Solomon, B. (2015, March 17). *The Best Startup Accelerators Of 2015: Powering A Tech Boom*. Retrieved from

For bes: http://www.for bes.com/sites/brian solomon/2015/03/17/the-best-startup-accelerators-of-2015-powering-attech-boom/sites/brian solomon/2015/03/17/the-best-startup-accelerators-of-2015/03/17/the-best-startup-accelerators-of-2015/03/17/the-best-startup-accelerators-of-2015/03/17/the-best-startup-accelerators-of-2015/03/17/the-b

84 T-REX. (n.d.). *Home*. Retrieved from T-REX: http://downtowntrex.com/

⁸⁵ Prosper. (n.d.). *Accelerator*. Retrieved from Prosper: Women Entrepreneurs: http://www.prosperstl.com/accelerator/

⁸⁶ Prosper. (n.d.). *Companies*. Retrieved from Prosper: Women Entrepreneurs: http://www.prosperstl.com/companies-1

⁸⁷ LaunchCode. (n.d.). *Home*. Retrieved from LaunchCode: https://www.launchcode.org/

⁸⁸ The Brookings Institution. (n.d.). *Metropolitan Area Export Market Assessment: Sample Business Interview Form.* Retrieved from Brookings:

 $http://www.brookings.edu/\sim/media/multimedia/interactives/2013/GCXMedia/Guides/Sample\%20Business\%20Interview\%20Form.pdf$

89 Ibid.

⁷⁵ Gallagher, J. (2015, February 22). *St. Louis has a jobs problem*. Retrieved from STL Today: http://www.stltoday.com/business/local/st-louis-has-a-jobs-problem/article_fe9a7ae0-832c-590e-b14f-402541d7c96d.html

⁷⁶ Office of Missouri Governor Jay Nixon. (2014, October 6). *Gov. Nixon announces that Boeing will create 700 new jobs to in-source production for the 777X*. Retrieved from Office of Missouri Governor Jay Nixon: http://governor.mo.gov/news/archive/gov-nixon-announces-boeing-will-create-700-new-jobs-source-production-777x

Appendix

Assumptions for St. Louis Nominal GMP Share by Industry (Figure 10) Analysis

Since detailed GMP data by industry is not readily available at the St. Louis MSA level, the team made several assumptions to aggregate St. Louis' GMP data by industry:

- Manufacturing
 - o Includes all manufacturing industries with available data
- Business and Financial Services
 - o Includes Information, Business, and Financial Services industries
- Local/Non-Market Services
 - o Includes Education, Arts, Other, and Government industries
- Commodities
 - o Includes Agriculture and Mining
 - o Since Mining industry data was not available, the team assumed that Mining made up the same percent (0.54%) of St. Louis GMP in 2013 as Agriculture
- Utilities
 - o Includes all utilities industries with available data
- Transportation
 - o Includes all transportation industries with available data
- Trade
 - Includes Wholesale and Retail Trade industries
- Construction
 - Since Construction industry data was not available, the team assumed that Construction made up the remainder of St. Louis' GMP at 3.57%

Sources and Explanations of Comparable Cities Factors

<u>Total metropolitan population</u>: 2014 estimates of metropolitan populations from the United States Census Bureauⁱⁱ

<u>Total GMP</u>: 2013 gross domestic product by metropolitan area in current dollars from the Bureau of Economic Analysisⁱⁱⁱ

ⁱ Bureau of Economic Analysis. (n.d.). *Regional Data: GDP and Personal Income*. Retrieved from Bureau of Economic Analysis:

http://www.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=10&isuri=1&7003=200&7035=-1&7004=naics&7005=-1&7006=41180&7036=-1&7001=2200&7002=2&7090=70&7007=2013&7093=levels=12200&7002=2&7090=70&7007=2013&7093=levels=12200&7002=2&7090=70&7007=2013&7093=levels=12200&7002=2&7090=70&7007=2013&7093=levels=12200&7002=2&7090=70&7007=2013&7093=levels=12200&7002=2&7090=70&7007=2013&7093=levels=12200&7002=2&7090=70&7007=2013&7093=levels=12200&7002=2&7090=70&7007=2013&7093=levels=12200&7002=2&7090=70&7007=2013&7093=levels=12200&7002=2&7090=70&7007=2013&7093=levels=12200&7002=2&7090=70&7007=2013&7093=levels=12200&7002=2&7090=70&7007=2013&7093=levels=12200&7002=2&7090=70&7007=2013&7093=levels=12200&7002=2&7090=70&7002=2%02=2%02=2%02=2%02=2%02=

ii United States Census Bureau. (n.d.). Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2014 - United States -- Metropolitan and Micropolitan Statistical Area; and for Puerto Rico . Retrieved from United States Census Bureau: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

iii Bureau of Economic Analysis. (n.d.). *Regional Data: GDP and Personal Income*. Retrieved from Bureau of Economic Analysis:

http://www.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=10&isuri=1&7003=200&7035=-1&7004=naics&7005=-1&7006=41180&7036=-1&7001=2200&7002=2&7090=70&7007=2013&7093=levels

<u>Total metropolitan household income</u>: total metropolitan household income in 2013 inflationadjusted dollars from the United States Census Bureau^{iv}

<u>Employees on non-farm payrolls</u>: employment on non-farm payrolls from the Bureau of Labor Statistics^v

<u>Education index</u>: the team used eight different education-related factors from The Brookings Institution to determine the most comparable cities to St. Louis; for a metropolitan to be considered comparable, it's metric had to be within one standard deviation of St. Louis' metric for all eight factors; the top twelve closest cities were then selected from this smaller list based on the average years of education attained:^{vi}

- Average years of education attained by average adult age 25 and older, 2010
- Share of population aged 25 and older with less than a high school diploma, 2010
- Share of population aged 25 and older with a high school diploma, 2010
- Share of population aged 25 and older with some college, 2010
- Share of population aged 25 and older with associate's degree, 2010
- Share of population aged 25 and older with bachelor's degree, 2010
- Share of population aged 25 and older with master's degree, 2010
- Share of population aged 25 and older with PhD or professional degree, 2010

<u>Total metropolitan number of small businesses</u>: number of businesses with less than 500 employees in 2011 from the U.S. Small Business Administration^{vii}

Reconciled 31 Industries

- Agriculture
- Forestry, & Fishing
- Oil, & Gas Extraction
- Mining
- Food, Beverage and Tobacco Products
- Textile Mills and Textile Product Mills
- Apparel, Leather and Allied Products
- Wood Product Manufacturing
- Paper Manufacturing
- Printing & Related Activities
- Petroleum & Coal Products

iv United States Census Bureau. (n.d.). *HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2013 INFLATION-ADJUSTED DOLLARS*). Retrieved from United States Census Bureau:

http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

^v Bureau of Labor Statistics. (n.d.). *Table 3. Employees on nonfarm payrolls by state and metropolitan area*. Retrieved from Bureau of Labor Statistics: http://www.bls.gov/news.release/metro.t03.htm#sa_table3.f.2

vi Rothwell, J. (2012, August 29). *Education, Job Openings, and Unemployment in Metropolitan America*. Retrieved from Brookings: http://www.brookings.edu/research/papers/2012/08/29-education-gap-rothwell#M10420

vii U.S. Small Business Administration. (n.d.). *Firm Size Data: State & MSA data including multiple tables*. Retrieved from U.S. Small Business Administration: https://www.sba.gov/advocacy/firm-size-data

- Chemical Manufacturing
- Plastics & Rubber Products
- Nonmetallic Mineral Products
- Primary Metal Manufacturing
- Fabricated Metal Products
- Machinery Manufacturing
- Computer & Electronic Products
- Electrical Equipment & Appliances
- Transportation Equipment
- Furniture & Related Products
- Miscellaneous Manufacturing
- Management & Legal Services
- Support Services
- Financial Services
- Insurance Services
- Engineering Services
- Freight & Heavy Industry
- Information
- Educational & Medical Services
- Travel & Tourism

Sources of High-Potential Export Industry Index Factors

- National real GDP in 2013: data from the Bureau of Economic Analysis viii
- National real GDP annualized growth rate from 2005 to 2013: data from the Bureau of Economic Analysis ix
- National real exports in 2013: data from The Brookings Institution^x
- National real export annualized growth rate from 2003 to 2013: data from The Brookings Institution xi
- St. Louis Metropolitan Statistical Area real exports in 2013: data from The Brookings Institution xii
- St. Louis Metropolitan Statistical Area real export annualized growth rate from 2003 to 2013: data from The Brookings Institution xiii

viii Bureau of Economic Analysis. (n.d.). *Current-dollar and "real" GDP*. Retrieved from National Economic Accounts: http://bea.gov/national/index.htm

ix Ibid.

^x The Brookings Institution. (n.d.). *Metros*. Retrieved from Export Nation - 2013 Data Release: https://app.box.com/s/0fubpxinopswtji1xmni

xi Ibid.

xii Ibid.

xiii Ibid.

Comparable Cities' Adjusted Metrics

The data used to create the below adjusted metrics is from Brookings.xiv

Table 5: Comparable Cities' Adjusted Metrics: Financial Services

			Annualized	
		Share of	Export	
	Real Total	Local	Growth	Export
	Exports	Exports	Rate	Concentration
Baltimore	0.753424	1.419868	1.419868	(0.124848)
Cleveland	(0.202120)	(0.004925)	(0.004925)	(0.282106)
Denver	0.840395	1.293676	1.293676	(0.199219)
Pittsburgh	(0.447200)	(0.269165)	(0.269165)	(0.076015)
Portland	(0.318109)	(0.585045)	(0.585045)	(0.102791)
Riverside	(0.372944)	(0.064468)	(0.064468)	(0.205746)
Tampa	0.503444	1.713576	1.713576	(0.025154)

53

xiv Ibid.

Table 6: Comparable Cities' Adjusted Metrics: Engineering Services

			Annualized	
		Share of	Export	
	Real Total	Local	Growth	Export
	Exports	Exports	Rate	Concentration
Baltimore	0.581439	1.182515	1.182515	0.310549
Cleveland	(0.184954)	0.016484	0.016484	0.071055
Denver	0.642548	1.047100	1.047100	0.300883
Pittsburgh	0.262543	0.669158	0.669158	0.316641
Portland	0.188013	(0.277051)	(0.277051)	0.318899
Riverside	0.265555	0.888135	0.888135	(0.056260)
Tampa	(0.017916)	0.772569	0.772569	(0.095025)

Table 7: Comparable Cities' Adjusted Metrics: Information & Technology Services

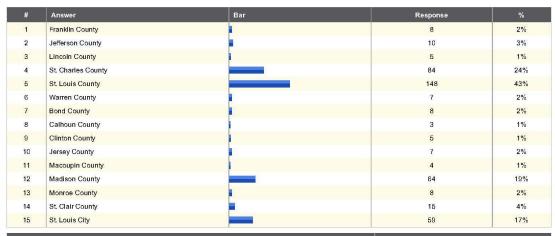
			Annualized	
		Share of	Export	
	Real Total	Local	Growth	Export
	Exports	Exports	Rate	Concentration
Baltimore	0.454868	1.007837	1.007837	0.032822
Cleveland	(0.666548)	(0.584135)	(0.584135)	(0.298177)
Denver	0.432636	0.785488	0.785488	(0.251949)
Pittsburgh	(0.183303)	0.079722	0.079722	(0.114176)
Portland	(0.502972)	(0.697540)	(0.697540)	(0.359282)
Riverside	(0.634928)	(0.455334)	(0.455334)	(0.051014)
Tampa	(0.377703)	0.123188	0.123188	(0.326934)

Survey Questions and Responses

My Report

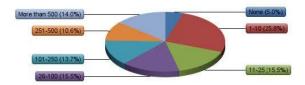
Last Modified: 05/06/2015

1. Where is your company located in the St. Louis region? (Click all that apply)



Statistic	Value
Min Value	1
Max Value	15
Total Responses	344

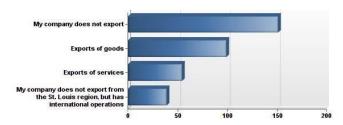
$2. \ \ \text{In 2014}$, about how many people were employed at your company in the St Louis region?



#	Answer	Bar	Response	%
1	None		16	5%
2	1-10		83	26%
3	11-25		50	16%
4	26-100		50	16%
5	101-250		44	14%
6	251-500		34	11%
7	More than 500		45	14%
	Total		322	

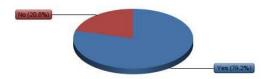
Statistic	Value
Min Value	1
Max Value	ĭ
Mean	3,95
Variance	3.46
Standard Deviation	1.86
Total Responses	322

3. Please describe your company's exporting activity from the St. Louis region – where exporting is defined as selling goods or services to an interest (including a company subsidiary or corporate parent) located outside the United States.



#	Answer	Bar	Response	%
ĩ	My company does not export		151	47%
2	Exports of goods		99	31%
3	Exports of services		54	17%
4	My company does not export from the St. Louis region, but has international operations	e e e e e e e e e e e e e e e e e e e	39	12%
Sta	tistic		Value	
Min	Value	Î	1	
Max	x Value		4	
Tota	al Responses		322	

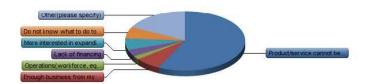
${\bf 4.}\ \ Does your company export a final product that it produced (i.e. your company is not a distributor, supplier of intermediate inputs, etc.)?$



#	Answer	Bar	Response	%
1	Yes		76	79%
2	No		20	21%
	Total		96	

Statistic	Value
Min Value	T T
Max Value	2
Mean	1.21
Variance	0.17
Standard Deviation	0.41
Total Responses	96

5. What are the reasons that your company does not export? Select all that apply



#	Answer	Bar	Response	%
1	Product/service cannot be exported		91	65%
2	Enough business from my local/state/regional market		11	8%
3	Operations(workforce, equipment, employment) are already at capacity	a .	3	2%
4	Lack of financing	=	6	4%
5	More interested in expanding within the U.S.	=	10	7%
6	Do not know what to do to export		10	7%
7	Other(please specify)		28	20%

Other(please specify)

We are a local economic development agency, but our harbor operators do handle a lot of products bound for export

We import components from China to keep American manufacturers in business. In turn, they export their products.

We are a nonprofit organization that funds art. We fund international exchanges but don't consider those programs as exports, although we export STL artiartists!

Exports to Canada, and Australia only

We export indirectly. End client may be international but direct client is located here in the U.S.

Government Agency

Bank and have no product to export

Not a strategic priority

We do not sell products - we are a non-profit social service agency providing education to low-income 0-5 year olds and their families.

We are a resturant

Our services are provided to organizations serving the local community. Our National associates operates in more than 60 countries

We are a community bank

Not in that industry

My company has been getting ready to export- new start up & hope to be exporting by 1st half 2016 to S America & S Africa- already been in both areas with trade dept Lambert is a facility and would carry exports, but we are a governmental entity and not a business per say.

We are a consulting firm.

Did not actively anticipate that we would have products for export.

We're a non-profit family foundation.

We are a bank that finances companies that export, and handle international payments, letters of credit and foreign exchange.

Export counseling services

My companyt plans to export in the next year - we are finishing a new line that will be ready at that time & with the help of the SIUE trade office we look forward to the new business opportunity and financing help the Expo bank may be able to support our plans.

We are a financial services company

Products are in development

While we are more intrested in expanding within the US, it should be noted some of our products are distributed to overseas locations via GSA & Defense Logistic Administration (DLA)

We are a non-profit organization made up of volunteers

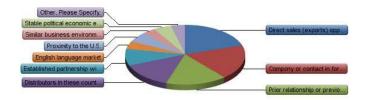
Statistic	Value
Min Value	j j
Max Value	7
Total Responses	141

$6. \ \ \text{What are your top 5 export markets (countries)?}$

200 10 000	100 VI 100 VI			
Country #1	Country #2	Country #3	Country #4	Country #5
Canada	Mexico	Brazil	Chile	China
Mexico	China	Canada	Colombia	Philippines
Mexico	Canada	Saudi Arabia	UAE	China
Mexico	Chile	Canada	Costa Rica	Brazil
Canada	Latin America	Mexico	South America	Australia/NZ
China	India			
Brazil	Taiwan			
China	Japan			
BELGIUM	UK	CANADA	BRAZIL	SWEDEN
Germany	Switzerland	China	Canada	England
Asia	Europe	Middle East	Latin America	Australia
GulfRegion	Middle East	South America	Caribbean	South Korea
Middle East	Puerto Rico	Philippines	Peru	Japan
China	Canada	Korea	Germany	Czech Republic
Canada	Mexico			
EU	Asia	Brazil		
Canada	South Africa			
Brazil	Sweden	Russia	Italy	France
Germany	Australia	United Kingdom	Canada	Belgium
france		~		
Canada				
France	Canada	Japan	Spain	Italy
Mexico	Kuwait	Domincan Republic	Poland	Greece
United Kingdom	ireland	Russia	Nigeria	Bahamas
Mexico	Canada		1000	
Canada				
Canada	Mexico			
Chile	England	Philippines	Malaysia	Costa Rica
Canada	Mexico			
Brazil	Tlawan			
Saudi Arabia	UAE	Australia	India	Korea
Canada	Denmark		0000000	
China	UK	SKA	Korea	
Canada	Mexico	UK	Austrailia	France
Germany	Netherlands	China	France	Singapore
Malaysia				
south pacific islands	Carribean Nations	Central America	Saudi Arabia	
Brazil			17.5.5.5.00.00.00.00.00.00.00.00.00.00.00.	
Canada	Ecuador	Mexico		
Canada	Turkey	Qatar	Korea	Brazil
Canada	,			
Germany	England	France	italy	Japan
Canada	Japan	Austria	UK	Germany
UK	Japan	Australia	Mexico	Brazil
Germany	India	China	United Kingdom	Brazil
China	India	Saudi Arabia	S. Korea	
Germany	730	China	United Kingdom	Korea
	Singapore			
japan	canada	france	italy	spain
China	Japan	Canada Saudi Arabia	South Korea	Mexico
Korea	Singapore	Saudi Arabia	Israel	
Germany	******	akina		
italy	canada	china	peru	I .

canada	mexico	caribbean		
Germany	Spain	Poland	Singapore	New Zealand
canada	turkey	U.K.	INDIA	
EMEA	Canada	Latin America	China	India
ndia	Iran	Nepal	Ghana	Nigeria
Spain	Canada	China	Brazil	
CANADA				
Senegal	Cote D'Ivoire	Guinea		
Panama	Honduras	Colombia	Brazil	Dominican Republic
Russia	Lebanon	Croatia		
China				
United Kingdom	Italy	Spain		
AUS	UK			
Turkey	Great Britain			
Norway	UAE	Japan	Australia	Canada
Mexico	Canada	1		
canada	Protection of the Control of the Con			
South Korea	Saudi Arabia	Canada	Mexico	Netherlands
Puerto Rico	Dominican Republic	Canada	Mexico	Brazil
Austria	Brazil	India	Canada	Argentina
UK	Japan	Spain	Italy	Poland
China	Germany	Canada	France	Italy
Canada	Jamaica	Barbados	Trinidad	Puerto Rico
China	India	Thailand	Hong Kong	Malaysia
Mexico	Israel	Canada		
England	Canada	China		
United Kingdom	India	Canada	Mexico	Brazil
Mexico	Saudi Arabia	Canada	China	UAE
China	Mexico	Canada	UK	
Korea	China	United Kingdom	Singapore	Germany
Colombia	Mexico	Panama	Peru	Chile
China	Europe	Asia	South America	
CANADA	PR	MEXICO		
EU	JP	SG	CN	BR
Mexico	Brazil	UK	Belgium	China
Canada	Mexico	U.K.	Italy	
canada	mexico	china	brazil	uk
Australia	UK	Saudi Arabia	UAE	India
uk	germany	france	3.14	
Mexico	UK	EU	Brazil	Canada
Mexico	Spain	UK	Italy	France
India	China	Kuwait	S. America	Mexico
Canada	China	10 (10 (10 (10 (10 (10 (10 (10 (10 (10 (**************************************
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Canada	Mexico			
Mexico	Hungary			
Germany	Switzerland	China	Canada	England
China	India	Mexico	Turkey	Viet Nam
	7. 1711 - 8. 1177 - 77	The state of the s	,	The state of the s
	I nis table has n	nore than 100 rows. <u>Click he</u>	ere to view all responses	
Statistic				Value
Total Responses				102

$7. \ \ \,$ What are the main reasons that your company exports to these countries? Select all that apply

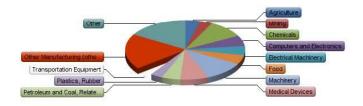


#	Answer	Bar	Response	%
1	Direct sales (exports) opportunities		62	60%
2	Company or contact in foreign country selected my company		58	56%
3	Prior relationship or previous experience with companies or contacts in these countries		50	49%
4	Distributors in these countries		43	42%
5	Established partnership with foreign company in these countries		28	27%
6	English language market		13	13%
7	Proximity to the U.S.		17	17%
8	Similar business environment to the U.S.		11	11%
9	Stable political economic environment		15	15%
10	Other. Please Specify:		12	12%

Other. Please Specify:	
That is where demand is	
Domestic National Acct proprietary product business moving overseas	
Part of U.S. Based Company	
Defense Requirements are the strongest in these countries	
Relationship to US based parent/child type connection	
Company Subsidiary	
Choice of students	
domestic companies with international work opportunities	
new customers that like our garments	
That is where the market is.	
Small companies and exports, a very small part of our business	
clients with locations in those countries	

Statistic	Value
Min Value	1
Max Value	10
Total Responses	103

$8. \ \ \mathsf{Please} \ \mathsf{specify} \ \mathsf{the} \ \mathsf{industries} \ \mathsf{of} \ \mathsf{your} \ \mathsf{exported} \ \mathsf{goods}. \ \mathsf{Select} \ \mathsf{all} \ \mathsf{that} \ \mathsf{apply}.$

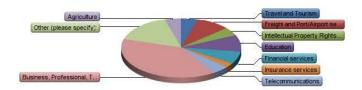


#	Answer	Bar	Response	%
1	Agriculture		5	8%
2	Mining		4	6%
3	Chemicals		12	19%
4	Computers and Electronics		7	11%
5	Electrical Machinery		6	10%
6	Food		6	10%
7	Machinery		13	21%
8	Medical Devices		9	15%
9	Petroleum and Coal, Related Products		6	10%
10	Plastics, Rubber		4	6%
11	Transportation Equipment		6	10%
12	Other Manufacturing (other than above)		23	37%
13	Other		20	32%

Other	
Metal Conditioner	
healthcare products	
Beauty	
Construction	
Defense Equipment	
Aerospace	
Apparel	
Service	
Engraving Plates	
Biological Products	
women's apparel	
Water Purification Systems	
Floor coatings	
Security & Defense,	
Power plants. Laser cutting of steel.	
Autoamated Metering Infrastructure (AMI) equipment	
Pharmaceutical, bioprocessing	
Recycle	
Waste Paper	
Statistic	Value

Statistic	Value
Min Value	1
Max Value	13
Total Responses	62

$9. \ \ \mathsf{Please} \ \mathsf{specify} \ \mathsf{the} \ \mathsf{industries} \ \mathsf{of} \ \mathsf{your} \ \mathsf{exported} \ \mathsf{services}. \ \mathsf{Select} \ \mathsf{all} \ \mathsf{that} \ \mathsf{apply}.$



#	Answer	Bar	Response	%
1	Travel and Tourism		2	6%
2	Freight and Port/Airport services		4	11%
3	Intellectual Property Rights (fees from franchise fees, trademarks, etc.)	=	2	6%
4	Education		4	11%
5	Financial services	_	3	8%
6	Insurance services	a contract of	*1	3%
7	Telecommunications	=	2	6%
8	Business, Professional, Technical services		17	47%
9	Other (please specify):		-7	19%
10	Agriculture	=	2	6%

Other (please specify):	
Agricultural Commodities	
Defense (Military) services	
retirement village	
employees	
Software	
transportation	
Product support and training	

Statistic	Value
Min Value	1
Max Value	10
Total Responses	36

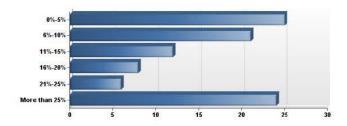
$10. \ \ \mbox{What was the value of your company's exports in 2014?}$



#	Answer	Bar	Response	%
1	Less than \$50,000		15	15%
2	\$50,001-\$100,000		11	11%
3	\$100,001-\$250,000		8	8%
4	\$250,001-\$1,000,000		15	15%
5	\$1,000,001-\$10,000,000		-17	18%
6	\$10,000,001-\$25,000,000		-11	11%
7	\$25,000,001-\$100,000,000		8	8%
8	More than \$100 million		12	12%
	Total		97	

Statistic	Value
Min Value	Ť
Max Value	8
Mean	4.37
Variance	5.19
Standard Deviation	2.28
Total Responses	97

11. Exports account for what percentage of total sales?



#	Answer	Bar	Response	%
1	0%-5%		25	26%
2	6%-10%		21	22%
3	11%-15%		12	13%
4	16%-20%		8	8%
5	21%-25%	=	6	6%
6	More than 25%		24	25%
	Total		96	

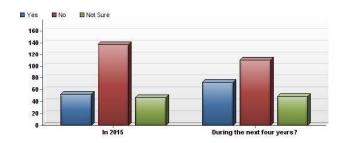
Statistic	Value
Min Value	Ť
Max Value	6
Mean	3.22
Variance	3.84
Standard Deviation	1.96
Total Responses	96

 $12. \ \ \mbox{What percentage of total export sales can be attributed to your top 5 export markets?}$

\${q:#QID6/ChoiceTextEntryValue/1}(%	\${q://QID6/ChoiceTextEntryValue/2}(%	\${q://QID6/ChoiceTextEntryValue/3}{%	\${q://QID6/ChoiceTextEntryValue/4}(%	\${q://QID6/ChoiceTextEntryValue/5}{%
of export sales)	of export sales)	of export sales)	of export sales)	of export sales)
80	10	7	3	
20	10	10	5	5
No Data	No Data	No Data	No Data	No Data
60%	15%	10%	10%	5%
50	50			
50	20			
80	20	500000		President
50%	20%	10%	10%	10%
14	14	13	6	6
50	25	10	10	5
25	25	25	15	10
16	21	6	3	2
60	10	10	10	10
95	5			
50	30	20		
90	10			
80	15	5	3	2
100				
100				
15	12	10	8	8
5%	1%	1%	1%	0.5%
55	5	15	15	10
100				
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50	50			
75	25			
50	10	10	5	5
90	10			
30	20	8	8	5
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95	3	2		
100	Suppl	No.		
35	25	20	12	8
66	7	4	2	2
20	10	5	5	1
50%	15%	10%	10%	
5	7	10	9	4
25	25	50		
1				
100				
10	80	5	5	
30	30	40		
20	20	20	20	20
50	15	10	25	
25 38	7.5	12.5	5	5
70	5		5	5
100	3	10	9	
	00	10		
10 50%	80 20%	10%	For	For
			5%	5%
60	30	10		
100	1920	2		
85	10	5		
75	25			
9	8	3	3	2
50	50			
10	200.00			
35	35	15	10	5
30	25	20	20	5
	t.			

21	19	8	8	6
18	16	14	12	5
21	16	9	6.5	6.5
65		5	15	15
65	20	5	5	5
50	10	40		
60	30	10		
21	12	18	11	9
25%	20%	10%	5%	5%
30	25	25	20	
15	15	10	10	10
5	60	30	5	
5	1	5		
60	20	10	10	
?				
2	2	20	4	3
2	2	2	2	2
.05	.05			
15				
70	30			
95	5			
14	13	13	6	6
65	20	10	3	2
unknown	unknown	unknown		
	100			

13. Does your firm have plans to export into a new country market...



#	Question	Yes	No	Not Sure	Total Responses	Mean
1	In 2015	53	137	47	237	1.97
2	During the next four years?	73	110	49	232	1.90
Statistic In 2015		İ		Ouring the next four years?	**	
Min V	alue	Ĭ		Ü		
Max V	/alue	3		3		
Mean		1.97		1.90		
Variar	пое	0.42		0.52		
Stand	ard Deviation	0.65		0.72		
Total I	Responses	237		232		

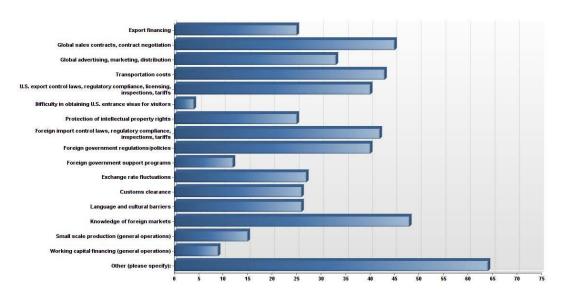
$14. \ \ \text{Please list the new markets to which you plan to export.}$

Country #1	Country #2	Country #3
Any that call	Any that call	Any that call
Panama	Honduras	Puerto Rico
Botswana	EU	China
Caribbean	Canada	Mexico
Indonesia	Panama	Malaysia
CHINA	GERMANY	FRANCE
Europe	Africa	China
Singapore	Saudi Arabia	
Turkey	Vietnam	Russia
NAFTA		
China	India	Middle-East
germany	italy	spain
Canada	China	India
UAE	CHINA	South Africa
Middle East	Eastern Europe	- County and a second s
Europe	Asia	
Paraguay	China	Peru
Canada	Mexico	1 610
Qatar	Indonesia	Eastern Europe
Colombia	Peru	Chile
	Middle East	Cilie
Asia Saudi Arabia	Russia	Name
EU EU		Norway
	Thailand	Chain
Italy	Germany	Spain
Canada	China	Korea
Taiwan	Pakistan	Philipines
Brazil India	Turkey Brazil	
		UNE
South Africa	Vietnam	UAE
Germany Could Arabia	Asia	
Saudi Arabia	Africa	
Latin America	0	Mandan
Sweden	Germany	Mexico
Various	Various	Various
China	Columbia	Bolivai
IRELAND Ohana	ENGLAND	AUSTRALIA
Ghana	Liberia	Guinea Bissau
Costa Rica Chile	Chile	Venezuela Uzbekistan
	Kazakstan	OZDERISIAII
South America	Ghana	New Zealand
Canada	Germany	
Canada	Mexico	Australia
France	China	Spain
Vietnam	Myanmar	Indonesia
China	Vietnam	United Arab Emirates
Israel	Mexico	Officed Arab Emirates
China	United Arab Emirates	Turkey
Brazil	France	Turkey
Nigeria	Ghana	Sub Sarahan Africa
Mexico		
SEAsia all		
Japan	Į.	

India	Italy	
Norway	England	
CUBA		
China	Brazil	Japan
?		
Algeria		
china		
Colombia , S America	Johanesburg, S. Africa	Mexico
Canada		
Australia	Japan	Malaysia
world		
U.K		

Statistic	Value
Total Responses	64

$15. \ \ \mbox{What are the most significant challenges faced by your company when exporting or considering new export markets? Select up to five (5).}$



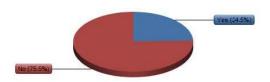
	Answer	Bar	Response	
1	Export financing		25	12%
2	Global sales contracts, contract negotiation		45	21%
3	Global advertising, marketing, distribution		33	16%
4	Transportation costs		43	20%
5	U.S. export control laws, regulatory compliance, licensing, inspections, tariffs		40	19%
6	Difficulty in obtaining U.S. entrance visas for visitors		4	2%
7	Protection of intellectual property rights		25	12%
8	Foreign import control laws, regulatory compliance, inspections, tariffs		42	20%
9	Foreign government regulations/policies		40	19%
10	Foreign government support programs	_	12	6%
11	Exchange rate fluctuations		27	13%
12	Customs clearance		26	12%
13	Language and cultural barriers		26	12%
14	Knowledge of foreign markets		48	23%
15	Small scale production (general operations)		15	7%
16	Working capital financing (general operations)		9	4%
17	Other (please specify):		64	30%

Other (please specify):	
We are local service only	
nia	
service not exportable	
Cannot export our product or service	
free trade agreements - lack thereof	
Our product and services cannot be exported	
does not export	
We do not export	
NA	
none, Government Agency	
local bank	
Product can't be exported	
N/A	
Service business	
We are a local non-profit	
We do not export	
can't export	

don't export N/A we have a service business, nothing to export not applicable N/A Resturant We are an educational institution, and restrictions on international students can be an issue at times. Services are not exportable N/A N/A N/A Not interested in exporting We are a small B&B so nothing to export We do not export at all, not possible. NOT EXPORTABLE none We are a local government n/a don't export Dairy Fresh product-short shelf life service does not apply Collections Foreign Import Duties We are a consulting firm. We are a Bank We are a high touch service industry Would only be interested in idea exchanges. finding domestic employers who need people to work in non domestic locations nothing to export Foreign exchange and foreign buyer/and bank credit risk We are a municipal government. Not applicable Finding customers NA this is an accounting firm, Misconception of the export process NA do not export My company is in the construction industry and we do not offer a product but rather personel service for construction of the building.

Statistic	Value
Min Value	1
Max Value	17
Total Responses	211

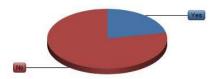
$16. \ \ \, \text{Does your company currently have locations outside the United States} \\ \text{(such as overseas subsidiaries, distribution centers, sales offices, etc.)?}$



#	Answer	Bar	Response	%
1	Yes		51	25%
2	No		157	75%
	Total		208	

Statistic	Value
Min Value	Ť Ť
Max Value	2
Mean	1.75
Variance	0.19
Standard Deviation	0.43
Total Responses	208

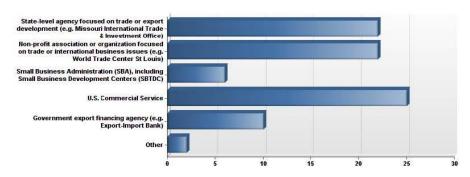
$17. \ \ \text{Have you received any export related assistance from government or non-profit providers?}$



#	Answer	Bar	Response	%
1	Yes		42	22%
2	No		150	78%
	Total		192	

Statistic	Value
Min Value	t t
Max Value	2
Mean	1.78
Variance	0.17
Standard Deviation	0.41
Total Responses	192

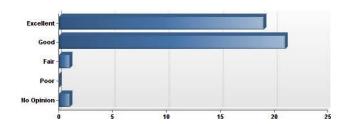
$18. \ \ \text{With which organization(s) have you consulted? Select all that apply.}$



#	Answer	Bar	Response	%
1	State-level agency focused on trade or export development (e.g. Missouri International Trade & Investment Office)		22	52%
2	Non-profit association or organization focused on trade or international business issues (e.g. World Trade Center St Louis)		22	52%
3	Small Business Administration (SBA), including Small Business Development Centers (SBTDC)		6	14%
1	U.S. Commercial Service		25	60%
5	Government export financing agency (e.g. Export-Import Bank)		10	24%
ô	Other		2	5%

Statistic	Value
Min Value	9
Max Value	6
Total Responses	42

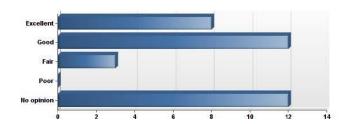
$19. \ \ \text{Please rate the export-related services you received from the government providers}.$



#	Answer	Bar	Response	%
i	Excellent		19	45%
2	Good		21	50%
3	Fair		j	2%
4	Poor		0	0%
5	No Opinion		j j	2%
	Total		42	

Statistic	Value
Min Value	1
Max Value	5
Mean	1.64
Variance	0.58
Standard Deviation	0.76
Total Responses	42

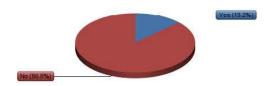
$20. \ \ \, \text{Please rate the export-related services you received from non-profit} \\ \text{providers.Rich Content Editor...Piped Text...HTML ViewNormal View}$



#	Answer	Bar	Response	%
1	Excellent		8	23%
2	Good		12	34%
3	Fair		3	9%
4	Poor		Ö	0%
5	No opinion		12	34%
	Total		35	

Statistic	Value
Min Value	1
Max Value	5
Mean	2.89
Variance	2.69
Standard Deviation	1.64
Total Responses	35

21. Have you received export financing from a government or non-profit entity?

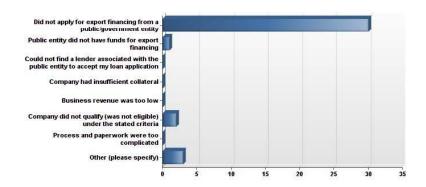


#	Answer	Bar	Response	%
-1	Yes		5	13%
2	No		33	87%
	Total		38	
Statistic				Value
Min Value				1
Max Value				2
Mean			1.87	
Variance				0.12
Standard D	rd Deviation			0.34
Total Resp				38

$22. \ \ \text{Which organization(s) provided export financing to your company?}$

Text Response	
MO DED	
ш	
EximBank	
EXIM Bank	
Statistic	Value
Total Responses	4

$23. \ \ \$ What were the reasons your company did not receive export financing? Select all that apply.

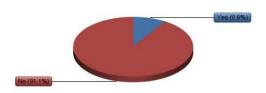


#	Answer	Bar	Response	%
1	Did not apply for export financing from a public/government entity		30	94%
2	Public entity did not have funds for export financing		1	3%
3	Could not find a lender associated with the public entity to accept my loan application		0	0%
4	Company had insufficient collateral		0	0%
5	Business revenue was too low		0	0%
6	Company did not qualify (was not eligible) under the stated criteria		2	6%
7	Process and paperwork were too complicated		0	0%
8	Other (please specify)		3	9%

Other (please specify)	
We would be looking to apply towards 3rd /4th quarter or 1st quarter 2016	
Our customers were the benficiaries of export financing support that allowed us to provide financing.	
not ready but in the future will be applying	

Statistic	Value
Min Value	1
Max Value	8
Total Responses	32

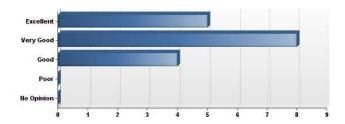
. Have you received any export-related assistance from private (for-profit) providers?



#	Answer	Bar	Response	%
1	Yes		17	9%
2	No		173	91%
	Total		190	
Statistic			1	Value
lin Value	n Value		ĺ	1
ACCUSE SERVICES				20

Statistic	Value
Min Value	Ť
Max Value	2
Mean	1.91
Variance	0.08
Standard Deviation	0.29
Total Responses	190

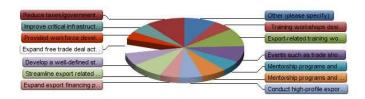
 $25. \ \ \mbox{Rate the export-related services you received from the private (for profit) providers.$



#	Answer	Bar	Response	%
1	Excellent		5	29%
2	Very Good		8	47%
3	Good		4	24%
4	Poor		0	0%
5	No Opinion		0	0%
	Total		17	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.94
Variance	0.56
Standard Deviation	0.75
Total Responses	17

26. What programs and services could the federal, state, or local government provide to help your company begin exporting, increase exports, or export to new country markets? Select all that apply.



#	Answer	Bar	Response	%
13	Other (please specify):		43	24%
14	Training workshops designed for new-to-export businesses		27	15%
15	Export-related training workshops designed for small and medium businesses		49	27%
16	Events such as trade shows and conferences designed to introduce and match new-to-export businesses to prospective foreign business partners		42	23%
17	Mentorship programs and networking opportunities for new-to-export businesses		27	15%
18	Mentorship programs and networking opportunities small and medium businesses		33	18%
19	Conduct high-profile export development trade missions to other countries in partnership with industry leaders and trade associations		30	17%
20	Expand export financing programs that get small and medium businesses and new-to-export businesses		25	14%
21	Streamline export related government paperwork and procedures		42	23%
22	Develop a well-defined state or national export promotion strategy		33	18%
23	Expand free trade deal activity		40	22%
24	Provided workforce development programs		19	11%
25	Improve critical infrastructure including ports and airports		27	15%
26	Reduce taxes/government overhead		52	29%

Other (please specify):	
Cannot export	
government knowledge of our industry in foreign markets so that trade missions, etc. would be more meaningful	
NA .	
can't export healthcare	
NA .	
none	
Product cannot be exported	
N/A	
Stupid poll should have stopped when I said I can't export my product	
don't export	
N/A	
nia	
none	
N/A	
Does not apply.	
NA.	
N/A	
NA.	
Not applicable	
N/A	
Exporting does not apply to us.	

NOT EXPORTABLE

na

N/A

We supply Indscape services

Provide grants to tradeshows

Our product does not lend itself to exporting

None - We are a consulting firm.

Not applicable

NA

Technology limitation on exporting

There is a challenge and thereby related expenses related to shipping regulated or dangerous goods that are very labor intensive to determine for our materials

Allow more immigration. We need foreigners to help us learn and sell to their home country.

service cannot be exported

nothing

We do not export personel construction services.

 $In\ my\ postion\ l\ am\ not\ certain\ my\ company\ has\ considered\ exporting\ products.\ So\ l\ am\ not\ sure\ what\ we\ would\ need.$

None that are worthwhile

No need to export our product

Does not apply

Statistic	Value
Min Value	13
Max Value	26
Total Responses	180

27. What are your top 5 active markets (countries)?

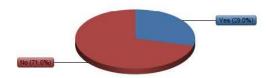
Country #1	Country #2	Country #3	Country #4	Country #5
Untied States	England	Mexico	Brazil	Saudia Arabia
USA	CHINA	GERMANY	JAPAN	SAUDI ARABIA
Senegal	Cote D'Ivoire	Guinea	Nigeria	
USA	China	Australia	Japan	Germany
Canada	United Kingdom	Germany	France	Spain
Mexico	Canada			
China	Singapore	India	Korea	Australia
United States	Guatemala	Peru	Mexico	
Madrid	China			
China	Malaysia	Canada	Sri Lanka	
US	Canada	Brazil	India	China
EU	China	Mexico	Brazil	Japan
US				
US	China	Germany	UK	Mexico
China	Mexico	Peru	Chile	Japan
Canada	New Zealand	Japan	Costa Rica	Australia
New Zealand	So. Africa	Australia	EU	
China	Vietnam			
China	United States	Germany	India	United Kingdom
Canada	Mexico	uĸ	Brazil	-
US	Mexico	Canada		
USA	Canada			
United Kingdom	Germany	France	Spain	
India	Canada	Qatar/Emerites	Malaysia	Mexico
UK	China	Mexico	Canada	Germany
UK	Austria	Switzerland	Thailand	Netherlands
US	Mexico	uĸ		
Mexico	Canada	China	Germany	Brazil
China				
United States	Mexico	China	Saudi Arabia	Canada
Belgium	Taiwan	China	Canada	

Statistic	Value
Total Responses	31

\${q:#QID34/ChoiceTextEntryValue/1}(% of total sales)	\${q:#QID34/ChoiceTextEntryValue/2}(% of total sales)	\${q://QID34/ChoiceTextEntryValue/3}(% of total sales)	\${q://QID34/ChoiceTextEntryValue/4}(% of total sales)	\${q://QID34/ChoiceTextEntryValue/5}(% of total sales)
42	23	7	5	3
15	60	10	15	100
5	5			
70	20	1	8	1
na	na	na	na	na
15	3.5	1	.5	20
80	5	10	5	1
98%				
50	10	5	5	5
50%	25%	5%	10%	10%
33	8	6	4	4
35	35	15	15	
80	20			
25	15	12	5	3
80	15	5		
99	1			
0.4%	0.1%	0.1%	0.005%	0.005%
50	10	10	20	10
100				
50	20	15	8	7
25	40	25	10	

Statistic	Value
Total Responses	21

29. Do you import?



#	Answer	Bar	Response	%
1	Yes		28	29%
2	No		142	71%
	Total		.200	
Statistic				Value
Min Value				1
Max Value	Max Value			2
Mean			1.71	
Variance		0.21		0.21
Standard Deviation 0.		0.45		
SCHOOLS SALE	onses		200	

$30. \ \ \mbox{What was the value of your company imports in 2014?}$



#	Answer	Bar	Response	%
1	Less than \$50,000		11	21%
2	\$50,001-\$100,000	_	4	8%
3	\$100,001-\$250,000		7	13%
4	\$250,001-\$1,000,000	_	4	8%
5	\$1,000,001-\$10,000,000		12	23%
6	\$10,000,001-\$25,000,000	=	4	8%
7	\$25,000,001-\$100,000,000		7	13%
8	More than \$100 million	=	4	8%
	Total		53	

Statistic	Value
Min Value	Ť
Max Value	8
Mean	4.17
Variance	5.30
Standard Deviation	2.30
Total Responses	53

$31. \ \ \mathsf{From\ where\ do\ you\ Import\ (top\ five\ countries)?}$

Country #1	Country #2	Country #3	Country #4	Country #5
Hong Kong	Denmark	Italy	China	Mexico
China	Taiwan	Italy		CASE OF CONTRACT
China	India	EU	Brazil	
England		A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	11004155415	
india	japan	korea	china	
India				
China				
China	United Kingdom			
Mexico				
Taiwan	Canada			
israel	korea			
Honduras	Mexico	Asia		
Suzhou	Ningbo	Fuzhou		
EC	Miligbo	Fuzilou		
India	Healty	Eron	China	
Germany	Italy	France	China	
Japan	Findland	UK	101.00mm/d/	
Germany	India	China	Israel	
China				
England	France			
italy	china	taiwan	korea	
China	Thailand	Vietnam	Indonesia	Malaysia
China	Mexico	Peru	Chile	Japan
Mexico	China	SE Asia	Europe	
China	Indonesia	Thailand	Bangledesh	Vietnam
Thailand	China	Canada	Japan	Colombia
Pakistan	China			
China	Taiwan	Korea	Sri Lanka	
Ecuador	Canada	Thailand	Indonesia	China
France	El Salvador	Mexico	Norway	Poland
China				
Japan	Ireland			
Mexico	China	Italy		
China	Switzerland			
China	Thailand			
Switzerland	China	Japan		
Germany	Spain	China		
china	india	UAE	brazil	greece
Italy				M.
China	Austria	Poland	Canada	Mexico
CHINA				
china	canada	japan	mexico	uk
Israel	UK	Canada	mondo	
china		Contour		
japan	china			
Japan Switzerland	China			
Japan	Canada			
China	Discours			
China 	Russia	Germany		
Taiwan	China			

Total Responses 50

$32. \ \ \, \text{Please provide some information about your company:}$

Name	Company	Email Address	Phone Number
Dennis Wilmsmeyer	America's Central Port District	dwilmsmeyer@americascentralport.com	(618) 452-8439
Norm Thomas	Pacific Rim Direct	njtjr@aol.com	314-650-3059
Kelly Drope	Intelligrated Systems	kelly.drope@intelligrated.com	
Brian Wahby	The Berrick Partnership	bwahby@berrickpartnership.com	3147629000
Michael Wagner	Bunge	michael.wagner@bunge.com	314-292-2820
Theodore Galantowicz	T-Comp LLC	ted.galant@tcomplic.com	636-236-4645
Richard Gund	The Gund Company	rcgund@thegundcompany.com	314-492-4826
Stephanie Flynn	Black Twig Comm	sflynn@blacktwigllc.com	314-255-2340
Nico Toro	Lockton	ntoro@lockton.com	314-489-5362
Richard DeYoung	Emerson	richard.deyoung@emerson.com	314-553-2270
Lysa Sayad	Cabka North America	I.sayad@cabka.com	314-731-0302
Michael Seals	Hussmann	michael.seals@hussmann.com	314-298-5769
Jane Dueker	Stinson Leonard Street	Jane.dueker@stinsonleonard.com	314-259-4500
Wilma Williams	a Fresh Start Emergency Network	afreshstart6431@gmail.com	866-761-6099
Will James	BKD. LLP	wdjames@bkd.com	314 231 5544
Jill McGuire	Regional Arts Commission	jill@strac.org	3148635811
Darion B Martin	Footlocker Inc	dbmforwork@hotmail.com	3312458575
James Elcock	MCSquare	CONTROL SECTION OF THE SECTION OF TH	3144940673
	Aziotics LLC	James@elcockproperties.com	314-863-3303
Larry Taylor MICHAEL LACKEY	TOTAL REWARDS STRATEGIES	larrytaylor@aziotics.com	314-569-8910
	NASARINANAN (NEW TERROR (NEW T	mike.lackey@trstrategies.net	314-569-6910
Ellen Krohne	Leadership Council		
Enterprise Bank and Trust	Enterprise Bank and Trust	stevealbart@gmail.com	
Joe Skorcz	Sunnen Products Co.	jskorcz@sunnen.com	314-781-2110
Bob Stanton	GTM	Bstanton@gtmusa.com	636-438-8060
Anna Crosslin	International Institute	Crosslina@listl.org	314-773-9090
Melissa Wurst	Language Solutions	melissa@langsolinc.com	3147253711
Maryann DeRienzo	Hummert International	mderienzo@hummert.com	314-506-4548
T.R. Carr	Novi Analytics Consulting	trcarr08@gmail.com	(314) 837-3486
Christie Peterson	Kent Precision Foods Group	christie.peterson@kentww.com	314-400-2507
Jim Norris	Control Device, LLC	jnorris@cdivalve.com	3147806448
Scott J Drachnik	EDC of St. Charles County	sdrachnik@edcscc.com	6362295284
Abdoulaye	Mac Water Technologies, Inc	Asambou@macwatertech.com	314-441-9414
Tina Kristoff	Alton memorial Hospital	tsk8484@bjc.org	618-463-7310
Hunter & Johnson, P.C.			6184669510
The United Methodist Village			
jamie butkovich	Wood River Drainage and Levee Dist	wrlevee@sbcglobal.net	6182547481
Matt Kotzamanis	TheBank of Edwardsville	mkotzamanis@4thebank.com	618-659-6610
Mark Speciale	Beall Manufacturing Imc.	mark.speciale@supertuf.com	
Matt Asselmeier	City of Alton, Illinois	masselmeier@alton-il.com	618-463-3532
Mary Blotna	Heneghan and Associates PC	mkblotna@heneghanassoc.com	6184986418
TheBANKofEdwardsville			
Jeff			
Melanie R	Senior Services Plus, Inc.	Melanie.M.Racki@gmail.com	913-221-8098
Ann Badasch	My just Desserts	Annsmjdx2@aol.com	618-462-5881
Dennis Grubaugh / Illinois Business Journal	Illinois Business Journal	dgrubaugh@ibjonline.com	618 977-6865
Ajay Pathak	OSF Saint Anthony's Health Center	ajay.pathak@osfhealthcare.org	6184746444
Arijana Hoormann	Scarbrough Intl	Arihoormann@scarbrough-intl.com	314-592-5301
Jay Moore	Safe Way Tire and Auto Center	jay@safewaytire.com	6367232600
Neena Frisch	TheBank of Edwarsville	nfrisch@4thebank.com	6186594140
Art Zemon	Hen's Teeth Network	art@hens-teeth.net	636-447-3030
Russ Traeger	Russ Traeger	rtraeger@precision-team.com	3144433332
Angela McDowell	Angela McDowell Counseling Services	angela@mcdowellcounseling.com	6185580296

Nine Network		dshasserre@ketc.org	314-512-9600
im Mosquera	Sentinel Consulting	jim@sentinelconsulting.biz	6368757710
Vatasha Berkel	Acom Ridge B&B, LLC	natashak45@hotmail.com	636-667-6543
OTZ			
elicia Voelkel	SNIP Alliance	fvoelkel@snipalliance.org	
odi Devonshire	Bike Stop Cafe & Outpost	bikestopcafe@gmail.com	6367249900
ludy Gann	Riverbend Head Start & Family Services	judyg@riverbendfamilies.org	618-463-5946
oAnn Milster	Silly Goose	jmilster@live.com	636.228.4041
(ent Scheffel	Lewis and Clark Community College	kscheffe@lc.edu	618-468-5000
arry Rother	Taylor Packaging Corporation	Irother@taylorpackaging.com	636-741-5235
ura January	WellSpring Resources	ljanuary@wellspringresources.co	6182082209
David Williams	Fast Lane Classic Cars, Inc.	sarah@fastlanecars.com	6369409969
oe cronin	western lawn equipment	westernequipment@aol.com	636-272-3275
Ron Jones	Burns & McDonnell Engineering	ronjones@burnsmcd.com	3146821571
udy Egelhoff	Catdaddy's Tavern	jbegel@sbcglobal.net	619-462-8090
Rich Hanneken	Hanneken Hogan & Associates, LLC	rhanneken@hannekenhogan.com	314-266-1857
Glenn	United Way of Greater St. Louis	john.glenn@stl.unitedway.org	636-939-3300
ı/a	St. Charles Municipal League		
ActSocial (Wildfire Pte. Ltd.)	claire@actsocial.com	+65.9660.1905	
Tyler Ericson	Ericson Lawn	tylerericson@ericsonlawncare.com	3148092288
leff Comotto	The Inn at Defiance	jeff@thedeflanceinn.com	636-987-2002
Scott Intagliata	Unico, Inc.	scott@unicosystem.com	+1314604905
Brandon Gray	Vantage Credit Union	bgray@vcu.com	314-264-5155
Christine Newbold	Noboleis Vineyards	cnewbold@noboleisvineyards.com	6364824500
Chris Goellner	Goellner Printing	chris.goellner@goellnerprinting.com	636.946.7088
Rick Fowler	Botanicals Unlimited Inc.	rick@loyaltylawncare.com	636 928-0522
Brian	ATS	bwood@atsstl.com	3143789886
Bob Kmetz	Prairie Farms Dairy	bkmetz@prairiefarms.com	618-452-7201
ucia Marshall PhD	Biosorb Inc	Biosorbinc@gmail.com	636-936-1400
Brad LaMantia	Whisk Products, Inc.	brad@lspind.com	815-381-6106
ohn Paul Gusewelle	GOVERNMENT STORY SALARY	12.3.1 (20.1.4.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	6362945889
	Metal Conditioner Squared	johnpaul@metalconditionersquared.com	
Margaret Greenwald	Scarab Printing Arts	marge@scarabprint.com	6369498280
Rachel Bene	Boys Hope Girls Hope St. Louis	rbene@bhgh.org	3146927477
Alike Coggins	The Boeing Company	michael.j.coggins@boeing.com	0440770004
Nice Smith	Saint Louis University	smitham@slu.edu	3149779801
Bob Roisum	Bob Evans Restaurant	unit.169@bobevans.com	6369490900
Sherry Brianza	Brianza Bella, LLC	Brianzasales@frontiernet.net	217-825-6476
Mary A Morak	Incredible Engravings, Inc	morak@engravings.com	6364414811
iric	Boeing	Eric.V.Murphy@boeing.com	1700 1200 E
. Tobey Cauffiel	Granite City Pickling	tobey@gcpw.com	4198438202
Dan O'Connell	RK Stratman Inc.	doconnell@rkstratman.com	636-332-5636
Chris Hartsell	International Sourcing Company	chris@internationalsourcingco.com	314-398-2799
îm Giddens	Progressive Recovery Inc.	tgiddens@progressive-recovery.com	314-422-3670
Melissa Sissom	AXIUS Financial	melissa.sissom@axiusfinancial.com	636-493-9600
(arl Collida	Beyond, Inc.	kcollida@beyondinc.com	636-980-2081
Grant Evans	Oscar Wilson Engines & Parts	gevans@oscar-wilson.com	636-379-7415
roy Pohlman	Component Bar Products, Inc.	troyp@compbar.com	636-939-5956
Conrad Scranton	Scutter Enterprises, LLC dba HydroCat Industries	dscranton@earthlink.net	636-272-8000

Total Responses

References

- Bureau of Economic Analysis. (n.d.). *Current-dollar and "real" GDP*. Retrieved from National Economic Accounts: http://bea.gov/national/index.htm
- Bureau of Economic Analysis. (n.d.). *Regional Data: GDP and Personal Income*. Retrieved from Bureau of Economic Analysis:

 http://www.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=10&isuri=1&7003=200&7035=-1&7004=naics&7005=-1&7006=41180&7036=-1&7001=2200&7002=2&7090=70&7007=2013&7093=levels
- Bureau of Economic Analysis. (n.d.). *U.S. Trade in Goods and Services, 1992-present.* Retrieved from International Economic Accounts: http://bea.gov/international/index.htm#trade
- Bureau of Labor Statistics. (n.d.). *Databases, Tables & Calculators by Subject*. Retrieved from Bureau of Labor Statistics: http://data.bls.gov/timeseries/SMS2941180000000001?data_tool=XGtable
- Bureau of Labor Statistics. (n.d.). *St. Louis, Mo.-Ill., Metropolitan Area Data Tables*. Retrieved from Bureau of Labor Statistics: http://www.bls.gov/regions/mountain-plains/data/employmentandunemploymentandwages_stlouis_table.htm
- Bureau of Labor Statistics. (n.d.). *Table 3. Employees on nonfarm payrolls by state and metropolitan area*. Retrieved from Bureau of Labor Statistics: http://www.bls.gov/news.release/metro.t03.htm#sa_table3.f.2
- CB Insights. (2014, November 7). *The Next Silicon Valley*. Retrieved from CB Insights: https://www.cbinsights.com/blog/next-silicon-valley-data/
- City-Data. (n.d.). *St. Louis: Economy*. Retrieved from City-Data.com: http://www.city-data.com/us-cities/The-Midwest/St-Louis-Economy.html
- Cooke, D. A., & Gascon, C. S. (2014, April). *Metro Profile: After Stalling, Recovery Resumes in St. Louis*. Retrieved from Federal Reserve Bank of St. Louis: https://www.stlouisfed.org/publications/regional-economist/april-2014/after-stalling-recovery-resumes-in-st-louis
- Cultivation Capital. (n.d.). *Our Focus*. Retrieved from Cultivation Capital: http://cultivationcapital.com/our-focus/
- Economist's View. (2008, October 16). *New Trade Theory and New Economic Geography*. Retrieved from Economist's View: http://economistsview.typepad.com/economistsview/2008/10/new-trade-theor.html
- Explore St. Louis. (2014). *Annual Report*. Retrieved from Explore St. Louis: http://explorestlouis.com/st-louis-cvc/about-us/annual-report/

- Federal Reserve Bank of St. Louis. (2015, February 4). *Civilian Labor Force in St. Louis, MO-IL (MSA)*. Retrieved from Economic Research: Federal Reserve Bank of St. Louis: https://research.stlouisfed.org/fred2/series/STLLF
- Federal Reserve Bank of St. Louis. (n.d.). *Civilian Unemployment Rate*. Retrieved from Economic Research: Federal Reserve Bank of St. Louis: http://research.stlouisfed.org/fred2/series/UNRATE
- Federal Reserve Bank of St. Louis. (n.d.). *Resident Population in St Louis, MO-IL (MSA)*. Retrieved from Economic Research: Federal Reserve Bank of St. Louis: http://research.stlouisfed.org/fred2/series/STLPOP#
- Fisher, A. (2013, March 20). *The fastest-growing cities for tech jobs now*. Retrieved from Fortune: http://fortune.com/2013/03/20/the-fastest-growing-cities-for-tech-jobs-now/
- Friedhoff, A., & Kulkarni, S. (2015, March 20). *Metro Monitor March 2015*. Retrieved from Brookings: http://www.brookings.edu/research/interactives/metromonitor#/M41180
- Gallagher, J. (2015, February 22). *St. Louis has a jobs problem*. Retrieved from STL Today: http://www.stltoday.com/business/local/st-louis-has-a-jobs-problem/article_fe9a7ae0-832c-590e-b14f-402541d7c96d.html
- HOK. (n.d.). About: Firm Overview. Retrieved from HOK: http://www.hok.com/about/
- Home Town Locator. (2014, July 1). *St. Louis, MO-IL Metropolitan Statistical Area MO Demographic Data and Boundary Map*. Retrieved from Home Town Locator: http://missouri.hometownlocator.com/cities/msa/msa,id,41180.cfm
- International Monetary Fund. (2011, June 15). *Changing Patterns of Global Trade*. Retrieved from International Monetary Fund: http://www.imf.org/external/np/pp/eng/2011/061511.pdf
- International Trade Administration. (2013). *MSA 2013 (Full Year) Exports*. Retrieved from International Trade Administration:

 http://tse.export.gov/metro/MetroChartDisplay.aspx?ReportID=1&Referrer=SelectReports.aspx&DataSource=Metro&ReportOption=Chart
- International Trade Administration. (n.d.). *Metropolitan Exports by NAICS4: St. Louis, MO-IL 2013 (Full Year) Exports*. Retrieved from International Trade Administration: http://tse.export.gov/metro/MetroChartDisplay.aspx?ReportID=16&Referrer=SelectReports.aspx&DataSource=Metro&ReportOption=Chart
- International Trade Administration. (n.d.). *St. Louis, MO-IL 2013 (Full Year) Exports*. Retrieved from Top Five Export Markets for the 50 Largest Metropolitan Area Exporters: http://tse.export.gov/metro/MetroChartDisplay.aspx?ReportID=7&Referrer=SelectReport s.aspx&DataSource=Metro&ReportOption=Chart

- Istrate, E., Rothwell, J., & Katz, B. (2010, July). *Export Nation: How U.S. Metros Lead National Export Growth and Boost Competitiveness*. Retrieved from Brookings: http://www.brookings.edu/research/reports/2010/07/26-exports-istrate-rothwell-katz
- Keller, K. (2014, June 1). *The List: Largest Employers*. Retrieved from St. Louis Business Journal: http://www.bizjournals.com/stlouis/subscriber-only/2014/07/25/largest-employers.html
- LaunchCode. (n.d.). Home. Retrieved from LaunchCode: https://www.launchcode.org/
- McDearman, B., Donahue, R., & Marchio, N. (2013, September 17). *Export Nation 2013*. Retrieved from Brookings: http://www.brookings.edu/~/media/multimedia/interactives/2013/exportnation/data/profiles/st-louis.pdf
- McKinsey & Company. (2012, August). Winning the \$30 trillion decathlon. Retrieved from McKinsey & Company: http://www.mckinsey.com/features/30_trillion_decathlon
- Neale, T. (2009, March). *The real deal*. Retrieved from Boeing: http://www.boeing.com/news/frontiers/archive/2009/march/mainfeature.pdf
- Nicklaus, D. (2014, November 9). *Nicklaus: Financial jobs are a surprising strength for St. Louis*. Retrieved from STL Today: http://www.stltoday.com/business/columns/david-nicklaus/nicklaus-financial-jobs-are-a-surprising-strength-for-st-louis/article_521a9259-a462-5426-b809-e42f4a7548e5.html
- Office of Missouri Governor Jay Nixon. (2013, September 27). *Gov. Nixon highlights new Export Missouri initiative to help Missouri businesses export abroad*. Retrieved from Office of Missouri Governor Jay Nixon: http://governor.mo.gov/news/archive/gov-nixon-highlights-new-export-missouri-initiative-help-missouri-businesses-export
- Office of Missouri Governor Jay Nixon. (2014, October 6). *Gov. Nixon announces that Boeing will create 700 new jobs to in-source production for the 777X*. Retrieved from Office of Missouri Governor Jay Nixon: http://governor.mo.gov/news/archive/gov-nixon-announces-boeing-will-create-700-new-jobs-source-production-777x
- Prosper. (n.d.). *Accelerator*. Retrieved from Prosper: Women Entrepreneurs: http://www.prosperstl.com/accelerator/
- Prosper. (n.d.). *Companies*. Retrieved from Prosper: Women Entrepreneurs: http://www.prosperstl.com/companies-1
- Rothwell, J. (2012, August 29). *Education, Job Openings, and Unemployment in Metropolitan America*. Retrieved from Brookings: http://www.brookings.edu/research/papers/2012/08/29-education-gap-rothwell#M10420
- SixThirty. (n.d.). *Home Page*. Retrieved from SixThirty: http://www.sixthirty.co/

- SixThirty. (n.d.). *Why St. Louis?* Retrieved from SixThirty: http://www.sixthirty.co/about/why-st-louis/
- Solomon, B. (2015, March 17). *The Best Startup Accelerators Of 2015: Powering A Tech Boom*. Retrieved from Forbes: http://www.forbes.com/sites/briansolomon/2015/03/17/the-best-startup-accelerators-of-2015-powering-a-tech-boom/
- St. Louis Mosaic. (n.d.). *About Us.* Retrieved from St. Louis Mosaic: http://www.stlmosaicproject.org/about-us.html
- St. Louis Regional Chamber. (n.d.). *Demographics*. Retrieved from St. Louis Regional Chamber: http://www.stlregionalchamber.com/regional-data/demographics
- St. Louis Regional Chamber. (n.d.). *Innovation & Entrepreneurship*. Retrieved from St. Louis Regional Chamber: http://www.stlregionalchamber.com/work/innovation-entrepreneurship
- The Brookings Institution. (n.d.). *About the Global Cities Initiative*. Retrieved from Brookings: http://www.brookings.edu/about/projects/global-cities/about
- The Brookings Institution. (n.d.). *Building the Next Economy From the Bottom-Up: The Metropolitan Export Initiative*. Retrieved from Brookings: http://www.brookings.edu/about/projects/state-metro-innovation/mei
- The Brookings Institution. (n.d.). *Global Cities Initiative: The Exchange*. Retrieved from Brookings: http://www.brookings.edu/about/projects/global-cities/exchange
- The Brookings Institution. (n.d.). *Metropolitan Area Export Market Assessment: Sample Business Interview Form.* Retrieved from Brookings: http://www.brookings.edu/~/media/multimedia/interactives/2013/GCXMedia/Guides/Sample%20Business%20Interview%20Form.pdf
- The Brookings Institution. (n.d.). *Metros*. Retrieved from Export Nation 2013 Data Release: https://app.box.com/s/0fubpxinopswtji1xmni
- The Brookings Institution. (n.d.). *Profiles: St. Louis*. Retrieved from Export Nation 2013 Data Release: https://app.box.com/s/0fubpxinopswtji1xmni/7/2488176281
- The World Bank. (n.d.). *Population growth (annual %)*. Retrieved from The World Bank: http://data.worldbank.org/indicator/SP.POP.GROW
- Thompson, C. (2015, January 2). *Five US tech hubs you probably didn't know about*. Retrieved from CNBC: http://www.cnbc.com/id/102303349
- T-REX. (n.d.). Capital. Retrieved from T-REX: http://downtowntrex.com/capital/
- T-REX. (n.d.). *Home*. Retrieved from T-REX: http://downtowntrex.com/

- U.S. Small Business Administration. (n.d.). *Firm Size Data: State & MSA data including multiple tables*. Retrieved from U.S. Small Business Administration: https://www.sba.gov/advocacy/firm-size-data
- United States Census Bureau. (2012). Foreign Commerce & Aid: Exports and Imports: 1300 U.S. International Trade in Goods and Services. Retrieved from United States Census Bureau:

 http://www.census.gov/compendia/statab/cats/foreign_commerce_aid/exports_and_imports.html
- United States Census Bureau. (n.d.). *Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2014 United States -- Metropolitan and Micropolitan Statistical Area; and for Puerto Rico*. Retrieved from United States Census Bureau: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk
- United States Census Bureau. (n.d.). *HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2013 INFLATION-ADJUSTED DOLLARS)*. Retrieved from United States Census Bureau: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk
- United States Census Bureau. (n.d.). *State & County QuickFacts: St. Louis city, Missouri*. Retrieved from United States Census Bureau: http://quickfacts.census.gov/qfd/states/29/29510.html
- United States Census Bureau. (n.d.). *State & County QuickFacts: USA*. Retrieved from United States Census Bureau: http://quickfacts.census.gov/qfd/states/00000.html
- United States Census Bureau. (n.d.). *Top Trading Partners*. Retrieved from United States Census Bureau: https://www.census.gov/foreign-trade/statistics/highlights/top/index.html
- *Universities in Missouri.* (n.d.). Retrieved from 4International Colleges & Universities: http://www.4icu.org/us/Missouri.htm
- World Trade Center St. Louis. (n.d.). *Midwest Cargo Hub Commission*. Retrieved from World Trade Center St. Louis: http://www.worldtradecenter-stl.com/service/mchc.asp
- World Trade Center St. Louis. (n.d.). *St. Louis Asia Trade Desk*. Retrieved from World Trade Center St. Louis: http://www.worldtradecenter-stl.com/service/AsiaTradeDesk.asp